CONFIGURATION GUIDE

IntelliVue Patient Monitor

MP2/5/20/30/40/50/60/70/80/90
MP5T/X2

For monitor release G.0 with software revision G.0x.xx

Patient Monitoring

PHILIPS

PHILIPS

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Who is this Guide for?

This book is for anyone making permanent changes to the configuration of an IntelliVue Patient Monitor. You must understand English, be familiar with the monitor and its Instructions for Use, know how to make changes to measurements and settings in monitoring mode, and understand the clinical implications of any changes you make.

WARNING   Before starting monitoring, check that the configuration meets your requirements, especially patient category, alarm limits and paced setting.

WARNING   Changing the configuration may alter the way the monitor performs when monitoring patients. Do not change anything unless you are aware of the possible consequences, especially if you are monitoring a patient whilst in configuration mode.

Which Monitor Models is this Guide for?

The descriptions and configuration settings in this configuration guide are valid for IntelliVue Patient Monitors MP2, MP5, MP20/30, MP40/50, MP60/70, MP80/90, and the IntelliVue X2 Multi-Measurement Module (when used as a standalone monitor), release G.0 with software G.0x.xx. This guide can not be used for other monitor models or IntelliVue monitors with other software releases.

Not all information contained in this guide applies to all monitor models. If a certain section applies only to certain models, this is indicated next to the section heading.

For example, if a certain section does not apply to the MP2 and X2, or - in other words - only applies to monitor models MP5, MP20/30, MP40/50, MP60/70, and MP80/90, it would be indicated like this:

MP5-90 only   **\<Section Heading\>**

What is Configuration Mode?

The monitor ships with preset configurations that are suitable for common monitoring situations. To develop and store your own configurations you must switch to the monitors configuration mode. Configuration mode is a password-protected operating mode that lets expert users make permanent changes to the monitor configuration. It is an extension of monitoring mode; it contains all of the settings available in monitoring mode plus some settings that are accessible only in configuration mode.

For example, when you access the Setup SpO$_2$ menu in monitoring mode, you will only be able to see and change these settings.
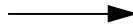
In configuration mode, these additional settings become visible.
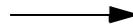
Setup SpO$_2$		
High Limit	:	100
Low Limit	:	90
Desat Limit	:	80
Alarms	:	On
SpO2	:	On
Pulse (Sp0$_2$)		
Label	:	SpO$_2$
Set Perf Ref.		
QRS Volume	:	1
Tone Modulation	:	Yes
Tone Mod. Type	:	Enhanced
Perfusion	:	On
Average	:	10 sec
High Alarm Delay	:	10 sec
Low Alarm Delay	:	10 sec
Desat Delay	:	20 sec
NBP Alarm Suppr.	:	On
Extd. Auto OnOff	:	Disabled
Color	:	Cyan

In monitoring mode, you can change settings, but cannot permanently store the changes to the monitor configuration.In configuration mode, you can change and permanently store settings to the monitor configuration.

Who Can Change the Monitor Configuration?

Only people authorized to do so by their institution should make changes in configuration mode. They require the configuration mode password.

Understanding Profiles and Settings

The IntelliVue patient monitor is highly configurable. To manage its various settings, settings are grouped into six main categories:

- Profiles

- Screens

- Monitor settings

- Measurement settings

- Global settings

- Hardware settings

All settings except hardware settings can be changed in configuration mode. Hardware settings can be changed in service mode only (with some exceptions).

Profiles

Profiles are named combinations of the following "building blocks":

- Patient category

- Paced status

- (Display) Screen

- Measurement Settings block

- Monitor Settings block.

A monitor can have up to 20 different Profiles. When you load a Profile, the configured combination of building blocks becomes active. This provides a powerful method to easily adapt the monitor to specific clinical scenarios or users, or switch back and forth between different configurations depending on specific phases within a case.

```
                    Profiles
Profile            :   Profile Adult

Patient Category   :   Adult

Paced              :   Yes

Display            :   6 Waves A

Measmnt. Settings  :   Measmt. Adult

Monitor Settings   :   Monitor A
```

Consider this example: You are in the ER. Your monitor is configured for an adult patient. Your next patient is a 5-year old child. By switching to a predefined pediatric ER Profile, you can have appropriate measurement settings (such as alarm limits), patient category and so forth very easily, instead of having to alter measurements and limits individually. In this example, your monitor's Profiles can be based on the age and condition of your patient, but there are of course other use models.

This graphic illustrates the concept of Profiles and their building blocks in the IntelliVue Patient Monitor.
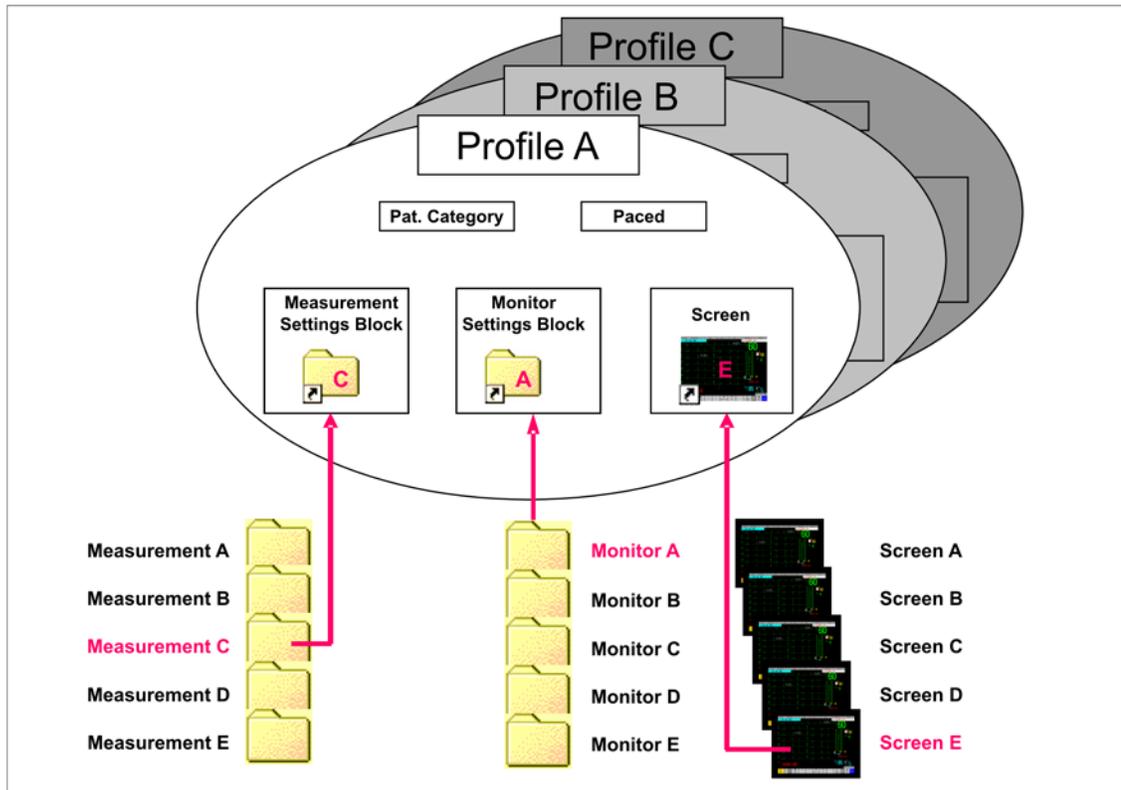
Notice that settings blocks and screens are only **linked** to a Profile. This indicates that storing a changed Profile saves the combination of building blocks, but not individual monitor settings, measurement settings, or Screens. Changes that you have made to measurement or monitor settings, or screens can only be stored in the appropriate type of settings block or Screen. For details, see "Modifying an Existing Settings Block" on page 11.

Patient Category

For each profile, a patient category is defined. This patient category becomes active when you load the Profile. It determines

– the algorithm the monitor uses to process and calculate some measurements (for example arrhythmia),

– the safety limits that apply for some measurements (for example NBP), and

– the alarm limit ranges for all measurements.

Note that a change of the patient category does not change any alarm limits to fit this category.

Paced

For each profile, the paced status is defined. The defined paced status becomes active when you load the Profile. The paced setting determines whether the monitor shows pacemaker pulses or not. When **Paced** is set to **No**, pace pulses are filtered and therefore do not show in the ECG wave. For paced patients, **Paced** must be set to **Yes**.

Display Screens

A Screen defines the overall selection, size and position of measurement waves, numerics and SmartKeys on the monitor display. A monitor can have a maximum of 20 preconfigured Screens, optimized for common monitoring scenarios. Examples of different Screens include the **Big Numerics**, the **12-lead ECG**, and the **Horizon** Screen. For a complete list of Screens supplied with your monitor model, see the section "Screen Overview" on page 215.

For each Profile, a Screen is defined. This Screen becomes the active Screen when you load the Profile. If you are using two or three main displays, for each main display a different Screen can be configured.

Measurement Settings

Measurement settings are settings specific to each measurement, for example alarm limits, measurement color, or measurement unit. For a complete list of measurement settings, see the section "Measurement Settings" on page 29.

A monitor can have a maximum of 10 blocks of measurement settings. Each block includes the complete list of measurement settings available. You can configure individual measurement settings differently for each settings block. By configuring different settings blocks, you can provide customized combinations of measurement settings for different profiles.

A typical example are the measurement settings blocks provided in the factory default configurations (documented in this guide). The measurement settings blocks **Measmt. Adult**, and **Measmt. Pedi**, for example, differ mainly by the alarm limits which are configured differently for different patient ages. When you switch to a different Profile, for example from **Profile Adult** to **Profile Pedi**, the measurement settings block defined for that Profile becomes active.

Monitor Settings

Monitor settings define general aspects of how the monitor works, and include settings that affect more than one measurement, such as alarm volume, report settings, or display brightness. For a complete list of monitor settings, see the section "Monitor Settings" on page 84.

A monitor can have a maximum of 10 blocks of monitor settings. Each block includes the complete list of monitor settings available. You can configure individual monitor settings differently for each settings block. By configuring different settings blocks, you can provide customized combinations of monitor settings for different profiles.

For example, you could generate a monitor settings block, in which the monitor's display brightness is lowered and the alarm volume is softened, and call it "Night". When you then assign this block to a new Profile and name it accordingly, for example "Profile Night", you can easily switch between day and night settings.

Global Settings

Global settings are typically set once at monitor installation by service personnel and include settings such as **Altitude**, **Line Frequency**, or **Label Set**. Global settings are not part of a Profile. They can be changed in configuration mode only and are automatically stored in the monitor's configuration with each change. For a complete list of Global Settings, see the section "Global Settings" on page 147.

Hardware Settings

Most hardware settings can only be changed in service mode. They are typically set once at monitor installation by service personnel, and include settings, such as **Keyboard** layout, the configuration of the monitor interfaces, or video settings, such as **Display Type**, **Display Size**, and **Display**

`Resolution`. Like global settings, hardware settings are independent of Profiles, and any changes you make to the hardware settings configuration are automatically stored, there is no need to save them in an extra step. For a complete list of Hardware Settings, see the section "Hardware Settings" on page 176, or refer to the Service Guide of your monitor model, provided on the Documentation DVD supplied with your monitor.

Entering and Leaving Configuration Mode

Switching between monitoring and configuration mode does not affect the active settings. You can even continue to monitor patients while in configuration mode. The password for configuration mode is given in the monitor's service documentation.

To enter configuration mode:

1   In the `Main Setup` menu, select `Operating Modes`.

2   Select `Config` and enter the password.

The monitor displays `Config` at the right hand side of the status line and in the center of the Screen while you are in configuration mode.

Before you leave configuration mode, always be sure to store any changes you made. You must store changes made to each Settings Block and to each Profile, individually. As it may be difficult to remember whether the settings you changed belong to a Monitor Settings block or a Measurement Settings block, we recommend that you store each block before you leave configuration mode.

WARNING   If you are handing over the monitor to the end-users directly after configuration, make sure that it is in Monitoring mode.

To leave configuration mode either:

♦   In the `Main Setup` menu, select `Operating Modes` and then select the operating mode you require or

♦   Switch the monitor off, then switch it on again.

–   If you switch the monitor off and then on again after less than one minute, it returns in monitoring mode with the same settings ("hotstart").

–   If you leave the monitor switched off for more than one minute, the Profiles and settings loaded when you switch back on are determined by the `Automat. Default` setting. See "Global Settings" on page 147.

About the IntelliVue Support Tool

The IntelliVue Support Tool is a PC-based software application that is designed to help configuring IntelliVue monitors and to manage IntelliVue Monitor configurations.

Using the Support Tool, you can, for example, read in (clone) a configuration from an IntelliVue monitor to a PC, modify this configuration offline on the PC, and then store (clone) the changed version back to the monitor. With the Support Tool you can clone configurations to more than one monitor at a time. You can also use the Support Tool to make backups of your configurations, or generate configuration reports. The configuration files generated by the Support Tool are stored in a format that can be e-mailed.

What Can I Configure with the Support Tool?

You can configure everything you can configure on the monitor, **except** that you cannot change individual monitor and measurement settings.

In addition to the configuration on the monitor, the Support Tool allows, for example:

- Changing the order of items in the lists of Screens, measurement or monitor settings blocks.

- Unlocking Profiles, Screens and settings blocks.

- Making realtime waves, or screen trends overlap on the Screen.

- Importing Screens into a configuration, and copying Screens between configurations.

- Importing SmartKey configurations into a configuration.

- Copying monitor settings, measurement settings, and global settings between config files.

- Importing, creating and modifying drug calculator configurations.

For a complete description of the Support Tool functionality, refer to the Support Tool Instructions for Use, provided with the Support Tool.

How Can I Get a Support Tool License Key?

To use the Support Tool, you must have a license key. To get a license key, you must complete a special training. Please contact your local Philips Customer Response Center for further details.

The Support Tool functionality your license key permits you to use, depends on your function (e.g. Biomed / CE / Configuration Expert) and your level of training.

License keys are issued to individuals and they **may not be shared**. The Support Tool tracks the use of each license key: you will be held responsible for any configuration changes made using your license key.

Configuring Profiles and Settings Blocks

Getting Started

To start configuring your monitor, access Profiles by selecting either:

- the **Profiles** screen element from the monitor's Info Line, or

- the Profiles SmartKey   , or

- **Profiles** from th**e Main Setup** menu.

The configuration pop-up keys will appear to let you carry out configuration tasks.

Using the Configuration Pop-up Keys

In configuration mode, the pop-up keys allow you to:

activate a Profile or settings block

create a new Profile or settings block based on the current one

rename the selected Profile or settings block

| Load | Store | New | Delete | Rename | Set Default |

save active settings into the selected settings block, or settings blocks into the selected Profile.

delete the selected Profile or settings block

make the current Profile the default Profile

Select the **Confirm** pop-up key to apply your changes.

Modifying an Existing Profile

You can change the settings within an existing Profile. The monitor remembers any changes made when you switch between monitoring mode and configuration mode. All changes can be permanently stored in configuration mode, as described in the following sections.

Be aware that if you don't store changes they will be reset to the monitor's stored configuration when you

- change from configuration or monitoring mode to service or demonstration mode,

- load Profiles or Settings Blocks, or

- switch off the monitor for more than one minute (if the Global Setting **Automat. Default** is set to **Yes**).

Changing the Combination of Settings Blocks in an Existing Profile

To permanently save a different combination of settings blocks into an existing Profile:

1   Select the Profile you want to change and select the **Load** pop-up key to activate it.

2   Change the patient category and paced status if necessary.

3   Load the settings blocks you want to have into the activated Profile one after the other by selecting them in the Profiles menu and then selecting the **Load** pop-up key. These settings become active immediately in the monitor, but the asterisk beside the Profile name in the Profiles menu shows that the newly loaded blocks are not yet stored as part of the Profile.

4   Select the Profile again.

5   Select the **Store** pop-up key.

This example shows the changing of a Profile. The existing Profile 1 was built from a combination of Screen A + Monitor Settings Block A + Measurement Settings Block A.

The new Profile 2 is built from a combination of Screen B + Monitor Settings Block D + Measurement Settings Block C. This is now the active Profile, because it is loaded into the monitor's active memory.
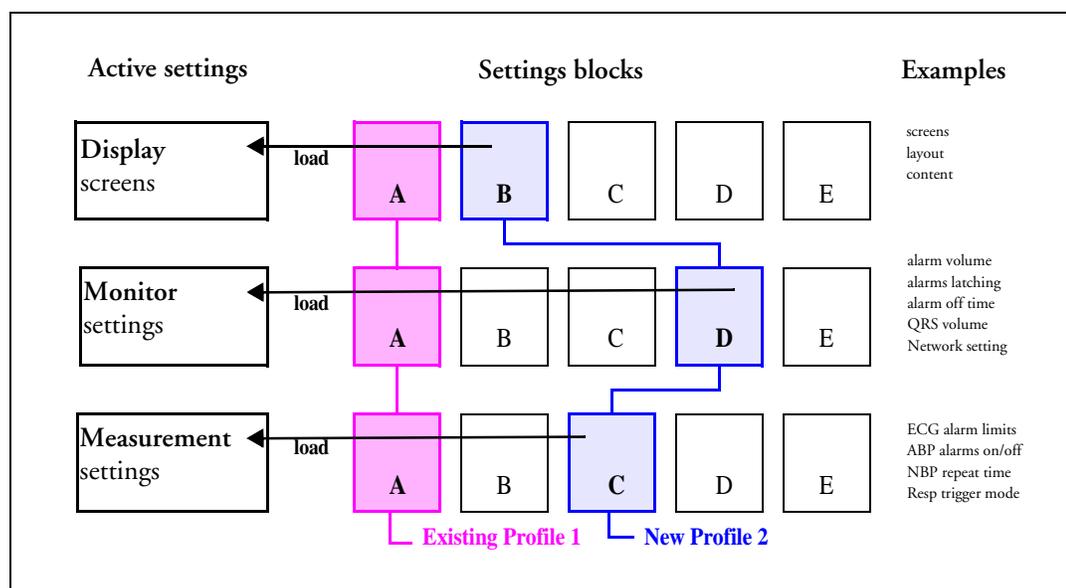
Modifying an Existing Settings Block

To change settings in an existing settings block:

1   Select the settings block you want to change and select the **Load** pop-up key to activate it.

2   Make the changes to the individual measurements or monitor settings.

3   Select the **Store** pop-up key to overwrite the existing settings. Changes to a settings block affect all Profiles in which this block is used.

Creating New Profiles

Follow these steps to create a new Profile **ICU B** based on the Profile **ICU A** and add it to the list of Profiles stored in the monitor. As creating a Profile requires you to activate different settings, you should not do this while monitoring a patient. Each new name you assign to Profiles or Settings Blocks must be unique, otherwise you have two items with the same name and you will not be able to distinguish them.

Existing Profile: Profile to be created:

Profiles			Profiles		
Profile	:	ICU A	Profile	:	ICU B
Patient Category	:	Adult	Patient Category	:	Pedi
Paced	:	No	Paced	:	No
Display	:	6 Waves A	Display	:	6 Waves B
Measmnt. Settings	:	Measmt. A	Measmnt. Settings	:	Measmt. B
Monitor Settings	:	Monitor A	Monitor Settings	:	Monitor B

1   Choose a Profile similar to the one you want to create from the list of Profiles available in the monitor. To preview the combination of settings blocks contained in any Profile, in the **Profiles** menu, select that Profile from the list. The **Profiles** menu (which is grayed-out) changes to indicate the contents of the selected Profile. To view the settings blocks of the active Profile, select **Current**.

2   Select **Load** to activate this Profile.

3   Create a new Profile that references the same settings as the active Profile:

   a.   In the **Profiles** menu, select **Profile**.

   b.   Select the pop-up key **New**.

   c.   Use the on-screen keyboard to type a meaningful name for the new Profile, in this case **ICU B**. If you do not name the Profile, the monitor will assign a default name. You can rename the Profile later.

   d.   Select **Enter**.

   e.   Select **Load** to activate the new Profile.

4   Create new settings blocks for the new Profile.

   a.   In the **Profiles** menu, select **Monitor Settings**.

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b.   Select the pop-up key **New**.

c.   Use the on-screen keyboard to type the name of the new settings block, in this case **Monitor B.**
If you do not name the Settings Block, the monitor will assign a default name. You can rename the
Settings Block later.

d.   Select **Enter**. You have now created a new settings block containing the same monitor settings as
the block **Monitor A**.

e.   Repeat this procedure to create a new measurement settings block.

You have now prepared the structure of the Profile you are creating.

5   Select the required **Patient Category** for the new Profile. In the Profiles menu, select either
Adult, **Pedi**, or **Neo**, or select **As Is** to retain the patient category active at the time this Profile is
activated. Note that if you configure **Patient Category** in the default Profile to **As Is**, the
monitor starts after a coldstart with **Patient Category** set to **Neo**. A coldstart will be caused,
for example, after changing the monitor's database configuration, see "Monitor Database
Configuration" on page 184.

6   Select the required **Paced** mode for the new Profile. In the Profiles menu, select **Yes** for paced
patients, **No** for non-paced patients, or **As Is** to retain the paced status active at the time this Profile
is activated. Note that if you configure **Paced** in the default Profile to **As Is**, the monitor starts
after a coldstart with **Paced** set to **Yes**. A coldstart will be caused, for example, after changing the
monitor's database configuration, see "Monitor Database Configuration" on page 184.

7   Select a Screen for the new Profile.

a.   In the Profiles menu, select **Display**

b.   Select the Screen you require from the pop-up list of available Screens.

c.   Select **Load** to confirm your choice.

d.   If the monitor has more than one main display, repeat these steps for the additional displays.

NOTE   If you are using an XDS Remote Display as second or third main display, the default Screen for this
display must be configured in the XDS Application software. It cannot be stored as part of the Profile
configuration of the IntelliVue monitor. For more detail, refer to the Installation and Configuration
Guide for the XDS Application.

8   Adjust monitor and measurement settings as required.

9   Store the changed settings to the settings blocks. In the **Profiles** menu, select
Measmnt. Settings, and then select **Store** and then **Confirm** to apply your changes.
Repeat this for **Monitor Settings.**   There is no undo function.

10 Store the finished Profile. In the **Profiles** menu, select **Profile** and then select **Store** and
then **Confirm** to apply your changes. There is no undo function.

CAUTION   When changing settings, you are strongly advised to create new settings blocks, rather than storing changes
to the existing ones. Similarly, when changing a Profile, you are strongly advised to create a new Profile,
rather than storing changes to an existing one. Once you store changes to a settings block or Profile, there
is no way to undo these changes, unless you have saved a backup using the Support Tool. Settings blocks
may be used in more than one Profile. If you edit a settings block it will change in the other Profiles in
which it is used.

Deleting a Settings Block or Profile

You cannot delete a locked settings block, or one that is used in any Profile. You must remove it from the Profile or delete the Profile first.

1   From the **Profiles** menu, select the block or Profile you want to delete.

2   Select the **Delete** pop-up key.

Renaming a Settings Block or Profile

If you rename a settings block that is used in other Profiles, the name changes in the other Profiles too.

1   From the **Profiles** menu, select the block or Profile you want to rename.

2   Select **Rename**.

3   Use the on-screen keyboard to type the new name, then select **Enter** to apply the change.

Changing the Monitor's Default Profile

Every monitor has one default Profile. This is marked with a black diamond.The monitor loads the default Profile:

- when returning to monitoring mode after leaving demonstration Mode (but not after leaving configuration or service mode).

- after discharging a patient.

- after being switched off for more than 60 seconds (only if **Automat. Default** is set to **Yes**).
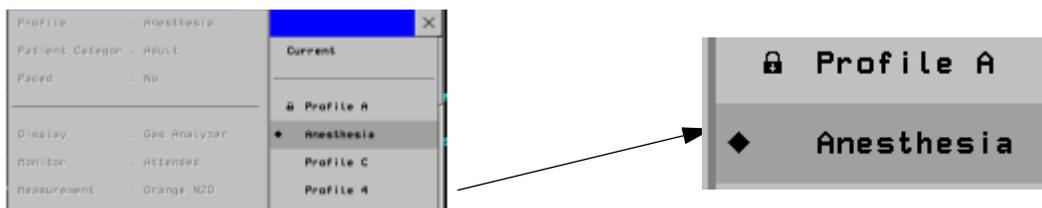
To change the default Profile:

1   In the **Profiles** menu, select the Profile you want to set as default.

2   From the pop-up keys select **Set Default**. The "default diamond" jumps to this Profile to indicate that it is now this monitor's default Profile. This setting takes effect immediately, you do not have to switch the monitor off and on again.

Unlocking a Settings Block or Profile

Profiles and settings blocks can be locked to prevent them from being modified or deleted. This ensures that a minimum configuration is always available. A locked Profile or settings block is identified (in configuration mode only) by a lock symbol.

You cannot unlock Profiles or settings blocks in the monitor's configuration mode. To lock or unlock Profiles or settings blocks you need to use the IntelliVue Support Tool.

Configuring a Second / Third Main Display

To distinguish between individual main displays, the displays are numbered on the Screen. The number is shown next to the Screen Name field.
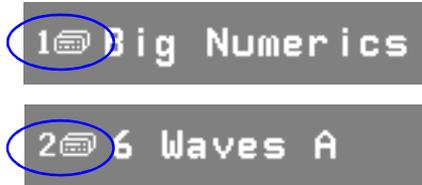
A second main display can be used with

• an MP90 with a Dual CPU, or

• an MP2/X2, MP5, MP60/70, MP80, or MP90 with a single CPU, when using an XDS Remote Display as the third display.

Display 1 is always the built-in display or the display connected to the first CPU of the Dual CPU MP90 monitor. **Display 2** is the display connected to second CPU of the Dual CPU MP90 monitor or the XDS Remote Display.

Profiles	
Profile :	ICU B
Patient Category :	Adult
Paced :	Yes
Display 1 :	6 Waves B
Display 2 :	12 Lead ECG
Measmnt. Settings :	Measmt. B
Monitor Settings :	Monitor B

A third main display can be used with

• a D80 Intelligent Display connected to a Dual CPU MP90 monitor, or

• an MP90 with a Dual CPU, when using an XDS Remote Display as the third display.

Display 1 is always the display connected to the first CPU of the MP90 monitor. **Display 2** is the display connected to second CPU, and **Display 3** is the display connected to either the D80 or the XDS Remote Display.

```
┌─────────────────────────────────────┐
│              Profiles               │
├─────────────────────────────────────┤
│ Profile          :   ICU B          │
│                                     │
│ Patient Category :   Adult          │
│                                     │
│ Paced            :   Yes            │
├─────────────────────────────────────┤
│ Display 1        :   6 Waves B      │
│                                     │
│ Display 2        :   12 Lead ECG    │
│                                     │
│ Display 3        :   Big Numerics   │
│                                     │
│ Measmnt. Settings :  Measmt. B      │
│                                     │
│ Monitor Settings :   Monitor B      │
└─────────────────────────────────────┘
```

Loading a Screen on a Second / Third Display

To load a Screen onto the second or third main display,

- on the second/third display, enter the **Change Screen** menu and select a Screen from the list of available Screens, or

- on any display, enter the **Profiles** menu, select **Display 2** (or **Display 3**) and select a Screen from the list of available Screens (not possible on the main display of MP2 and X2 monitors).

NOTE   If you are using an IntelliVue monitor with the XDS Remote Display as either the second or third display, the selection of Screens available for the XDS Remote Display can be different from the Screen selection for the other displays.

Changing Elements on a Second / Third Display

To change elements on the second or third main display:

1   Load the Screen that you want to modify onto the second/third display.

2   Make the required changes to the Screen.

3   Store the Screen. To do this, enter the monitor's configuration mode, select **Profiles** -> **Display 2** (or **Display 3**), then select the **Store** pop-up key.

NOTE   Any change to a Screen will mark that Screen modified. In the **Change Screen** menu, the modified Screen is shown linked to the original Screen and marked with an asterisk (*).

If you load the same Screen onto more than one display, then modify them differently, and then store one of the Screens, the modified Screen on the other displays will still be available. The stored Screen will be available on all displays except on the XDS Remote Display.

Changes made to a Screen viewed on an XDS Remote Display will be stored on the PC connected to the XDS Remote Display and will not be part of the monitor configuration, see "Configuring Screens on an XDS Remote Display" on page 18.

Configuring Screens

During monitoring, you can change the content of most of the Screen elements, for example you can exchange a Resp wave for a Pressure wave. These changes can be permanently stored as part of the Screen settings in configuration mode.

You can also use the IntelliVue Support Tool to configure Screens offline on a personal computer and then upload them as part of a configuration file to one or more patient monitors. To use the IntelliVue Support Tool for Screen configuration, you must have a support tool and a support tool license key that entitles you to use the Screen configuration functionality. See "About the IntelliVue Support Tool" on page 6 and the Support Tool Instructions for Use.

Understanding Screen Settings

Screen settings are stored in the Screen. Changing a Screen setting modifies the Screen. This is indicated by an asterisk (*) in front of the Screen name. In the Change Screen menu, modified Screens are shown linked to their parent Screens.
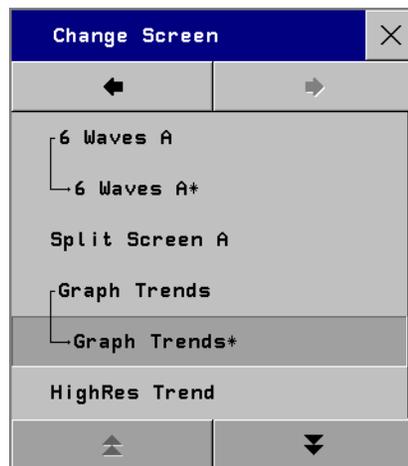
Screen settings include:

- the basic layout of a Screen, i.e. the selection, size, and position of any Screen element visible on the Screen. The Screen layout cannot be modified in the monitor's configuration mode.

- the content of each Screen element, i.e. the information displayed in each Screen element.

- the selection and sequence of SmartKeys available on a Screen.

- special settings that determine the behavior of certain Screen elements, such as Screen trends, realtime waves, embedded trend windows, or embedded Other Bed Overview windows.

Modifying an Existing Screen

To change an existing Screen:

1 Load the Screen and make the changes to the Screen.

2 In configuration mode, select **Profiles** -> **Display** (or **Display 2**, or **Display 3**).

3 In the list of Screens, the modified Screen is shown linked to the original Screen and marked with an asterisk (*). Select the **Store** pop-up key to overwrite the existing Screen. Changes to the Screen affect all Profiles in which this Screen is used.

NOTE Changes made to a Screen viewed on an XDS Remote Display will be stored on the PC connected to the XDS Remote Display and will not be part of the monitor configuration, see "Configuring Screens on an XDS Remote Display" on page 18.

Creating New Screens

1 Load a Screen similar to the one you want to create from the list of Screens available in the monitor.

2 Create a new Screen based on the active Screen:

   a. In the **Profiles** menu, select **Display** (or **Display 2**, or **Display 3**).

   b. Select the pop-up key **New**.

   c. Use the on-screen keyboard to type a meaningful name for the new Screen. If you do not name the Screen, the monitor will assign a default name. You can rename it later.

   d. Select **Enter**.

3 Change the content of the Screen as required.

4 Store the finished Screen:

   a. In the **Profiles** menu, select **Display** (or **Display 2**, or **Display 3**).

   b. Select the pop-up key **Store** and then **Confirm** to apply your changes. There is no undo function.

NOTE Changes made to a Screen viewed on an XDS Remote Display will be stored on the PC connected to the XDS Remote Display and will not be part of the monitor configuration, see "Configuring Screens on an XDS Remote Display" on page 18.

Configuring Screens on an XDS Remote Display

For certain IntelliVue monitor models, the XDS Remote Display (IntelliVue XDS solution) can be used as second or third main display.

When you make changes to a Screen that is viewed on an XDS Remote Display, be aware of the following implications:

• The changes are stored on the XDS Remote Display and not on the monitor.

• The changed Screen is not part of the monitor configuration and can therefore not be cloned to another monitor using the IntelliVue Support Tool.

• The changed Screen can be modified with the Screen Editor of the IntelliVue Support Tool.

For more details regarding the configuration of the XDS Remote Display, refer to the Installation and Configuration Guide for the XDS Application.

Changing the Content of Screen Elements

Changing the Content of a Wave Element

To change the content of a wave element on a Screen,

1   Select the wave you want to change.

2   From the wave menu that appears, select **Change Wave** and then select the wave you want to be displayed.

Changing the Content of a Numeric Element

To change the content of a numeric element on a Screen,

1   Select the numeric you want to change. You can only change numerics that are not directly associated with (aligned to) a wave.

2   From the Setup menu that appears, select **Change Numeric** and then select the numeric you want to be displayed.

Changing the Content of a Screen Trend Element

To change the content of a screen trend element on a Screen,

1   Select the screen trend you want to change.

2   From the trend menu that appears, select **Change Trend** and then select the screen trend you want to be displayed.

Changing the Content of a High Resolution Trend Element

MP5-90 only   To change the content of a HiRes Trend element on a Screen,

1   Select the HiRes Trend you want to change.

2   From the menu that appears, select the HiRes trend you want to be displayed.

Depending on the H option (see "Understanding H and M Options" on page 27) and C option of your monitor, the following parameters are available for selection:

	H10 / H40	H20	H30	Comments
btbHR	X	X	X	These 4 parameters are included in the OxyCRG option (C08)
Any SpO$_2$	X	X	X	
Resp	X	X	X	MP5: tcpO$_2$ not available.
tcpO$_2$		X		

	H10 / H40	H20	H30	Comments
Pulse	X	X	X	MP20 -90 monitors only
Any Perf	X	X	X	
tcpCO$_2$	X	X		
CO$_2$	X	X	X	
ABP	X	X	X	
PAP	X		X	
CVP	X	X	X	
ICP	X	X	X	
CPP	X	X	X	
BIS	X	X	X	
CCO	X	X	X	
AWP	X	X	X	
Any Agent			X	
Delta SpO$_2$		X		
inO$_2$	X		X	

Displaying Timers on the Main Screen

MP5-90 only If you want to have a timer displayed on the Main Screen, you can substitute it for a numeric which is not directly associated with a wave.

To display a timer on the Main Screen,

1 Select the numeric you want to substitute.

2 Select **Change Numeric**.

3 Select **Any Timer**. The monitor automatically uses the timer label with the highest priority that is not displayed on the Screen yet. See "Configuring Timers" on page 139.

Be aware of the following restrictions:

• If limited space is available, some elements displayed in the Timers window may not be displayed. The minimum information displayed is the elapsed or remaining time.

• The maximum number of timers that can be displayed on the Main Screen depends on your monitor model:
  – MP60-90: four timers
  – MP40-50: three timers
  – MP20-30: two timers
  – MP5/MP5T: one timer
  – MP2/X2: no timer

• Any timer label can only be used once per Screen.

Displaying a Clock on the Main Screen

MP5-90 only If you want to have a clock displayed on the Main Screen, you can substitute it for a numeric which is not directly associated with a wave.

To display a clock on the Main Screen,

1 Select the numeric you want to substitute.

2 Select **Change Numeric**.

3 Select **Clock**.

Be aware of the following restrictions:

• Only one clock can be displayed per Screen

• If limited space is available, the label "Clock" may not be displayed. The minimum information displayed is the time.

Displaying a ProtocolWatch Status Indicator on the Main Screen

MP5-90 only If you want to have a ProtocolWatch status indicator displayed on the Main Screen, you can substitute it for a numeric which is not directly associated with a wave.

To display a ProtocolWatch status indicator on the Main Screen,

1 Select the numeric you want to substitute.

2 Select **Change Numeric**.

3 Select **PW Status**.

Only one ProtocolWatch status indicator can be displayed per Screen.

Changing the Size and Position of Screen Elements

You cannot change the size and position of Screen elements. This is a configuration service that is provided, at a charge, by Philips, for monitors with option C20.

Configuring SmartKeys

There are two ways to configure SmartKeys:

• Configuring a different list of SmartKeys for each Screen (not possible for MP2/X2)

• Configuring a global list of SmartKeys that applies for all Screens

Configuring a Different List of SmartKeys for Each Screen

MP5-90 only The selection and order of SmartKeys that are specific to a Screen are stored as part of the Screen, i.e. as a Screen setting. This can be configured on the monitor (in configuration mode) or by using the Support Tool Screen Editor. The following describes how to configure SmartKeys on the monitor. For a detailed description on how to use the Support Tool Screen Editor, see the Support Tool Instructions for Use.

To change the selection of SmartKeys displayed,

1 Select **Main Screen**, then select the left double arrow key to scroll back one page of SmartKeys.

2 Select the SmartKey **SmartKeys** to open a menu that lists all SmartKeys currently configured for that Screen. From the pop-up key line, select **Add** to open a second menu that contains all available SmartKeys.

3 From the second menu, select the desired SmartKey. This adds the new key to the bottom of the list of configured SmartKeys (on the left). The maximum number of SmartKeys per Screen is **30** for the MP60/70/80/90, and **24** for the MP40/50, MP20/30, and MP5.

To delete a SmartKey from the list of configured SmartKeys,

♦ select it in the list, then select the pop-up key **Delete**.

To move a SmartKey to a different position,

♦ Use the **Sort Up** and **Sort Down** pop-up keys. The number of SmartKeys visible at a time depends on the monitor's display resolution:

SVGA: 6

XGA: 7

SXGA: 9

WXGA: 9

WXGA+: 10

WSXGA: 11

Configuring a Global List of SmartKeys for All Screens

The global list of SmartKeys is stored as a unique monitor setting in the monitor configuration. See the section "Configuring User Interface Settings - Keys" on page 143 for details on how to configure the global SmartKey list.

Individual SmartKey configurations for each Screen override the global SmartKey configuration. The global SmartKey list will therefore only be visible when you load a Screen that has no SmartKeys configured to it.

If you want to use the global SmartKeys for all Screens on a monitor, you must delete all individual SmartKeys from all Screens in the configuration.

Configuring Special Screen Settings

Configuring the Wave Channel Speed

To change this setting, select the measurement wave on the Screen to open the related Wave menu.

Change Speed This setting determines the wave speed of the related wave channel.
If set to **Global**, the speed of the wave channel follows the monitor setting **Global Speed** (or **RespiratorySpeed**, or **EEG Speed**) as described under "Configuring User Interface Settings" on page 110.
If set to any of the fixed speeds **(6.25**, **12.5**, **25**, **50 mm/sec**), the speed of that wave channel follows its own distinct setting and is not affected by any changes of the **Global Speed**. The wave channel speed is independent of the wave (label) depicted in the channel. If you change the wave, the new wave will retain the set channel speed.

Configuring Screen Trends

To change the following settings, select the screen trend on the Screen to open the related Trend menu.

Change TrendTime This setting determines in a screen trend. If set to **Global**, the trend time in the screen trend channel follows the monitor setting **Screen Trend Time** as described under "Configuring Screen Trend Settings" on page 91. If set to any of the fixed times **(30min**, **1h**, **2h**, **4h**, **8h**, **12h**), the screen trend time follows its own distinct time setting and is not affected by any changes of the global **Screen Trend Time**.

Change View The screen trend presentation can be configured to **Tabular**, **Graphical**, **Horizon**, or **Histogram**. The **Tabular** view can only be used with aperiodic measurements, such as NBP, C.O., C.I., PAWP. If you configure the view of an NBP trend, for example, to **Tabular**, and during monitoring the user changes the trend to a periodic measurement, such as ABP, the view automatically switches to **Graphical**.

ShowHorizon Trend The horizon view is made up of 4 elements:

1 a horizon, drawn in white, as a reference baseline to help you visualize changes in the patient's condition.

2 a graphical trend, displaying patient data for the set TrendTime.

3 a trend indicator arrow, indicating how the patient trend has developed in the last ten minutes.

4 a deviation bar, showing how the currently measured value deviates from the stored baseline.

If you set **ShowHorizon Trend** to **Yes**, all 4 elements of the horizon view are shown. If you set it to **No**, the graphical trend information (2) is not displayed in the trend channel.

Configuring an Embedded Trend Window

To change the following settings, select the embedded Trend window on the Screen to open the related pop-up key line. Note that the following settings are Screen settings and therefore do not affect the behavior of the normal (not embedded) Vital Signs and Graph Trend windows.

Select Interval This setting defines the trend interval that will be used in the embedded trend window when the corresponding Screen (with the embedded trend window) is opened.

Graph Trend / Vital Signs This setting defines the view (Graphical Trends or Vital Signs table) of the embedded trend window when the corresponding Screen is opened. The view can be changed at any time.

Select Group This setting defines the trend group that is displayed in the embedded trend window when the corresponding Screen is opened.

The following setting applies for embedded **Graph Trend windows only**. To change the setting, select the embedded Graph Trend window on the Screen, then select one of the segments on the left side of the window to open the segment menu.

No. of Segments This setting defines the number of trend segments displayed in the embedded Graph Trends window when the Screen is opened.

Configuring an Embedded CSA Window

MP40-90 only To change the following settings, select the embedded CSA window on the Screen to open the related pop-up key line. Note that the following settings are Screen settings and therefore do not affect the behavior of the normal (not embedded) CSA window.

On/Off SEF defines whether the SEF trend line is displayed in the embedded CSA window when the corresponding Screen is loaded.

On/Off MDF defines whether the MDF trend line is displayed in the embedded CSA window when the corresponding Screen is loaded.

On/Off PPF defines whether the PPF trend line is displayed in the embedded CSA window when the corresponding Screen is loaded.

Buffer defines which of the three preconfigured buffers is used when the Screen with the embedded CSA window is loaded.

On/Off Clipping Set **Clipping** to **On** to improve the 3-D presentation of the embedded CSA and make it more "readable". When set to **On**, peaks in the spectral lines are artificially clipped at a certain height (see "CSA Window Configuration Implications" on page 98). If **Clipping** is **Off**, peaks can be displayed over the full window height which may result in a more cluttered presentation.
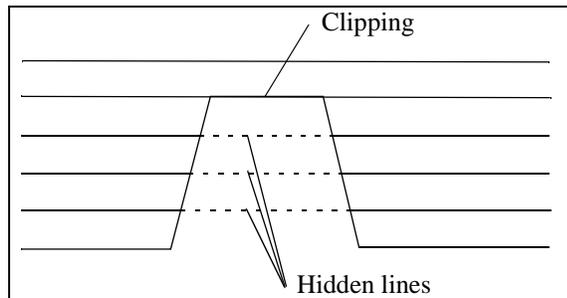
Frequency Scale defines the bandwidth displayed in the embedded CSA.

Configuring an Embedded Other Bed Window

MP5-90 only For Screens with an embedded Other Bed window, you can configure which bed is displayed in the Other Bed window each time the Screen is loaded.

To configure the embedded Other Bed window,

1 select the Other Bed window on the Screen

2 select the pop-up key **My Care Group**. This opens the Care Group menu where you can choose between the following settings:

– **Bed <xx> (Bed ID)**

   If you select a specific Bed ID, the monitor displays the associated bed every time the Screen is loaded. If this bed is unavailable, the message "No data from bed" is shown in the embedded window.

– **Any Bed**

   Select **Any Bed** if you want the monitor to display the first bed shown in the care group list. If this bed is removed from the care group, the new first bed in the care group is automatically displayed. The setting **Any Bed** might be unavailable if it has been disabled for this Screen using the Support Tool.

– **Blank (Factory Default)**

   This is the factory default setting used on the "Other Bed" Screen that is part of the Support Tool Screen library. If an embedded Other Bed window is configured to **Blank**, the window is empty when the Screen is loaded.

At any time during monitoring, the user can select the Other Bed window and temporarily change the current setting.

Configuration Settings Appendix

About Configuration Settings

The IntelliVue Patient Monitor is pre-configured with factory default settings when it is shipped. This section documents the factory default settings and lists the configuration implications that need to be considered when changing settings from their default.

The configuration implications are only provided in this guide. You must read this document before you modify monitor configurations.

The settings documented here are valid for IntelliVue Patient Monitors release F.0 with software F.0x.xx.

Documenting Monitor Configurations

If you change settings from their default, this document will no longer reflect your configuration.

A Philips representative or trained biomedical engineer can generate a detailed report of the changed monitor configuration using the IntelliVue Support Tool. Make sure you review the description of this functionality in the Support Tool Instructions for Use before you interpret the content of this report.

Understanding Configuration Implications

When you permanently change any element of the configuration, you must consider the effect of the new configuration on both patient and application behavior. For additional information on the context of the configuration settings, see your monitors Instructions for Use. Always ensure that the monitor users are aware of the configuration settings.

Using the Configuration Tables

The "breadcrumb trail" at the top of each table indicates which Settings Block the settings are grouped under. For example, "**Measurement Setting: Main Setup -> Measurements -> ECG**" means that the ECG settings in the table below the heading are part of the Measurement Settings Block. This is also the path you should follow to access the settings in the table: in this example, to configure ECG settings, in the **Main Setup** menu, select **Measurements** and then select **ECG**.

How to read the configuration tables

The following is a (modified) example of a configuration table, as you will find it in the sections of this manual.

Factory Defaults														
Item Name	Oper. Mode		MP20 - MP90 (H10/20/40)			MP5 - MP90 (H30)			MP20 (M20/M21) MP5 (H10/20/40) MP2/X2			MP5T MP5 (B10/B11/B14)			MP2/X2
	C	M	Profile Adult	Profile Pedi	Profile Neo	Profile Adult	Profile Pedi	Profile Neo	Profile Adult	Profile Pedi	Profile Neo	Profile Adult	Profile Pedi	Profile Neo	Profile Outdoor
Alarms from	x	x	Sys.												
Sys. High	x	x	160	120	90	180									*160*
Sys. Low	x	x	90	70	40	70									*90*
Alarms	x	x	On												
Repetition Time	x	x	15 min			3 min			10 min			10 min			*15 min*
Mode	x	x	Auto		Manual							Manual			*Auto*
Done Tone	x		Off			On			*Off*						
NBP Time	x		not applicable, this setting is stored in the Monitor Settings Block: see "Configuring User Interface Settings" on page 110.												

Item Name The leftmost column in each table lists the individual configuration items. The names and order of these items correspond to those of the menu items in the related setup menu in the monitor.

Oper. Mode These two columns indicate in which operating mode the setting is available/visible. If both columns are marked with an "x", the setting is available in both modes. If only one column is marked, the setting is available in the corresponding mode only. Abbreviations used for the operating modes in this guide are: **C** for Configuration mode, **M** for Monitoring mode, **S** for Service mode.

Monitor Models (Options) This section lists the actual factory default settings for each configuration item. Some factory default settings may differ between different monitor models or H (application area) options. If this is the case, this section will be divided into subsections. In the above example, you see the following subsections:

- MP20 - MP90 with options H10, H20, or H40 (i.e. all except H30),

- MP5 - MP90 with option H30

- MP20 with model option M20 or M21, MP5 with options H10, H20, or H40, and MP2/X2

- MP5T and MP5 with options B10, B11, or B14

- MP2/X2 (Profile Outdoor only)

Some settings are only entered once per table row with the table entry extended to cover all columns. In our example, you can see this for the settings **Alarms from** and **Alarms**. These settings are the same across all monitor models, options, and profiles and are therefore only entered once in the table, in the leftmost column.

Profile Adult / Profile Pedi / Profile Neo / Profile Outdoor All IntelliVue monitor models are shipped with different profiles to accommodate different monitoring environments and patient categories. Therefore, the default values for some settings differ between different profiles. In the example table above, you can see this for the settings **Sys. High**, **Sys Low**, and **Auto/Manual** for which the subsections are divided into different columns representing the different profiles. The column headings correspond to the names of the profiles in the monitor, for example **Profile Adult**, or **Profile Outdoor**.

To keep the tables as readable as possible, the following rules apply:

– If the same default value applies to **more than one profile in the same subsection**, the table entry will be extended to cover all profiles that apply, and the value will be listed in the leftmost column only (see **Repetition Time** or **Auto/Manual**).

– If the same default value applies to **the same profile in different subsections**, it is only listed in the leftmost subsection. For example, the default for **Sys. High** in **Profile Pedi** in MP5 through MP90 monitors with option H30 (second subsection from the left) is the same as it is in **Profile Pedi** in MP20 through MP90 monitors with options H10/20/40 (leftmost subsection). It is therefore only listed in the leftmost subsection and the corresponding table entry in the column **Profile Pedi** for MP20 through MP90 monitors with option H30 is left empty.

not applicable Whenever you see a statement in the settings tables starting with "**not applicable**" (as in **NBP Time**), this can mean two things (the exact reason will always be given in the context):

• the setting appears as a menu item in the related Setup menu, but is actually stored in a different context. For example, the **NBP Time** setting appears in the Setup NBP menu. However, it is not stored as an NBP measurement setting, but as a monitor setting in the User Interface menu.

• the setting appears as a menu item in the related Setup menu, but cannot be stored in the monitor configuration. For example, the setting **C.O.** in the Cardiac Output Setup menu (see "C.O. Configuration Implications" on page 56) defines the On/Off status of the C.O. measurement, i.e. whether the Cardiac Output measurement is switched On or Off. However, the C.O. measurement (as most other measurements in the IntelliVue monitor) can only be switched On if a C.O. transducer is connected to the monitor. Therefore this setting cannot be permanently stored in the monitors configuration.

Understanding H and M Options

Application Area Options	
H10	General/Intensive Care
H20	Neonatal
H30	Anesthesia
H40	Cardiac Care

MP20 Model Options	
M20	MP20 Junior
M21[1]	MP20L

1.MP20 option M21 is available in the US only.

Profile Settings

`Profile Settings: Main Setup -> Profiles`

Factory default settings for Profiles depend on the monitor model, as well as the monitor's H and A option. For detailed information on all factory-provided default Profiles, see the section "Configuration Overview", starting on page 194.

The monitor does not need a Profile to start monitoring. If, in the case of an error, no configuration is loaded, or if a loaded configuration is corrupt, the monitor will be operational and use the factory defaults documented in the configuration tables of this guide. The **`Paced`** status will be set to **`Yes`** and the **`Patient Category`** will be set to **`Neo`**. An appropriate configuration should then be loaded onto the monitor using the IntelliVue Support Tool.

The default Profile is used after discharging a patient, leaving demonstration, or when the monitor is switched off for more than 60 seconds (if the global setting **`Automat. Default`** is set to **`Yes`**).

Measurement Settings

This section lists all the settings grouped in the Measurement Settings Block. They define how the monitor measures and displays patient data. Read any information on configuration implications at the end of each section before you make any configuration changes.

Measurement Settings			
	Page		Page
ECG	30	CO_2 (Capnometry)	62
ECG/Pulse Alarms	33	awRR (from Capnometry)	63
System Pulse	35	Resp (Impedance Respiration)	64
Arrhythmia	36	Spirometry	65
ST Analysis	39	RRspir (Respiration from Spirometry)	67
QT Analysis	41	EEG	67
SpO_2	42	EEG Montages	69
Delta SpO_2	45	BIS	71
NBP	46	Temperature	72
Invasive Pressure	47	Predictive Temperature	74
CPP	53	Delta Temp	75
PPV	54	VueLink	75
C.O.	55	IntelliBridge	76
CCO	56	Gas Analyzer	76
SVR	57	CO_2 (from Gas Analyzer)	81
SO_2	58	awRR (from Gas Analyzer)	82
$Sp-vO_2$	59	MAC	83
tcGas	60		

Configuring ECG

```
Measurement Settings: Main Setup -> Measurements -> ECG
```

Factory Defaults									
Item Name	**Oper. Mode**		**MP5 - MP90 (H10/20/40)** **MP5T** **MP2/X2**			**MP5 - MP90 (H30)**			**MP2/X2**
	C	**M**	**Profile Adult**	**Profile Pedi**	**Profile Neo**	**Profile Adult**	**Profile Pedi**	**Profile Neo**	**Profile Outdoor**
High Limit	x	x	not applicable, see "Configuring ECG/Pulse Alarms" on page 33.						
Low Limit	x	x							
ECG/Arrhy Alarms	x	x							
AlarmSrc (ECG/AR)	x	x							
ECG	x	x	On						
Paced	x	x	not applicable, the paced status is stored as in a Profile, see "Profile Settings" on page 28						
QRS Volume	x	x	not applicable, this setting is stored in the Monitor Settings Block, see "Configuring User Interface Settings" on page 110						
Primary Lead	x	x	II						
Secondary Lead	x	x	V (V1)						
Va Lead	x	x	V2						
Vb Lead	x	x	V5						
Analysis Mode	x	x	Multi Lead						
Lead Placement	x	x	Standard						
Mod.LeadPlacment	x	x	Off						
Filter	x	x	Monitor			*Filter*			*Monitor*
SyncPulse Sensit.	x	x	Medium (MP2/X2, MP5 only)						
SyncPulse Marker	x	x	On (MP2/X2, MP5 only)						
Auto Filter	x		not applicable, these settings are stored in the Monitor Settings Block, see "ECG Application Configuration" on page 99						
Fix PacerAmplit	x								
Default ECG Size	x								
Color	x		Green						White
Asystole Threshold	x	x	4.0 sec	3.0 sec					*4.0 sec*
Δ ExtrTachy	x		not applicable, see "Configuring ECG/Pulse Alarms" on page 33						
Tachy Clamp	x								
Δ ExtrBrady	x								
Brady Clamp	x								
ECG Al. OFF Inop	x		Cyan						
Fallback	x		On						
Alarms Off	x		not applicable, see "Configuring ECG/Pulse Alarms" on page 33						
AlarmSource Sel.	x								
PulseAlarms Tele	x								

ECG Configuration Implications

ECG This setting lets you switch the ECG measurement **On** or **Off**. If ECG is switched **Off**, the monitor will change to Pulse as alarm source, if a Pulse is available. One exception to this rule can arise when you have a telemetry device paired with your monitor. If **PulseAlarms Tele** (see "Configuring ECG/Pulse Alarms" on page 33) is configured to **Disabled**, the monitor does not fall back to the System Pulse as alarm source.

Primary Lead / Secondary Lead / Analysis Mode The monitor uses the primary and secondary lead to compute HR and to analyze and detect cardiac arrhythmias. They are also available for recordings and for display on the Information Center. The **Secondary Lead** setting is used only if **Analysis Mode** is configured to **Multi Lead** (instead of **Single Lead**) arrhythmia analysis. It determines which additional lead will be used for arrhythmia analysis.

Va Lead / Vb Lead If you are using a 6-lead ECG cable, the two chest leads can be positioned at any two of the V1 to V6 positions. The **Va Lead** / **Vb Lead** settings tell the monitor which positions you have used so that the chest leads will be correctly labeled on the monitor and in printouts. If the Global setting **ECG Cable Color** is set to **IEC**, these settings are labeled **Ca Lead** and **Cb Lead**.

Lead Placement Set this setting to **EASI** if you are using EASI lead placement. This tells the monitor that you are using EASI lead placement. The label "EASI" will be shown beside the 1mV calibration bar on the ECG wave on the display, and "EASI" is marked on any recorder strips and printouts.

Mod.LeadPlacment When **Mod.LeadPlacment** is set to **On**, 12 Lead ECG Reports will be labelled 12 Lead ECG Report (Mason-Likar), and captured 12-lead ECGs will be labelled Mason-Likar to the right of the bandwidth annotation at the Information Center. When **Mod. LeadPlacment** is set to **Off**, 12 Lead ECG Reports will be labelled 12 Lead ECG Report, and captured 12-lead ECGs will not be annotated at the Information Center.

Filter The **Filter** setting defines how ECG waves are smoothed.

- **Monitor**: The **Monitor** filter results in an ECG bandwidth of 0.5 - 40 Hz for the Adult, and 0.5 - 55Hz for the Pedi and Neo patient category. Use under normal measurement conditions.

- **Extended Monitoring**: This setting is only available for the Pedi and Neo patient category. Using this filter results in an ECG bandwidth of 0.5 – 150 Hz. Use for pediatric and neonatal patients when diagnostic quality is required but low frequency interference or a wandering baseline may be expected. The upper edge frequency is the same as the **Diag** setting and the lower edge frequency is the same as the Monitor setting.

- **Filter**: Using this filter reduces interference to the signal and results in an ECG bandwidth of 0.5 – 20 Hz for all patient categories. It should be used if the signal is distorted by high frequency or low frequency interference. High frequency interference usually results in large amplitude spikes making the ECG signal look irregular. Low frequency interference usually leads to a wandering or rough baseline. In the operating room, the Filter reduces artifacts and interference from electrosurgical units. Under normal measurement conditions, selecting **Filter** may suppress the QRS complexes too much and thus interfere with the clinical evaluation of the ECG displayed on the monitor. This does not affect the ECG analysis performed by the monitor. If **AutoFilter** ("ECG Application Configuration" on page 99) is set to **On**, the filter setting will automatically be set to **Filter** if electromagnetic interference is detected.

- **Diag** (Diagnostic): The setting **Diag** selects the highest available ECG bandwidth which is 0.05 to 150 Hz for all patient categories. Use when diagnostic quality is required. The unfiltered ECG wave is displayed so that changes such as R-wave notching or discrete elevation or depression of the ST segments are visible.

SyncPulse Sensit / SyncPulse Marker These settings are only available in MP2/X2 and MP5 monitors. In the MP5 it is only available if an MIB/RS232 interface is installed and the driver **ECG Sync Pulse** is configured for one of the MIB ports (see the MP5 Service Guide for detailed setup information). If these requirements are met, the monitor outputs a SyncPulse via the MIB/RS232 interface (MP5) or the ECG Sync Pulse Output Connector (MP2/X2) which can be used to synchronize external medical devices (such as CT scanners) to the patient's ECG. Both settings are available in monitoring mode and configuration mode.

- Set **SyncPulse Marker** to **On** to display SyncPulse markers in the ECG wave on the monitor Screen.

- **SyncPulse Sensit** lets you change the sensitivity of the Sync Pulse detection. If **SyncPulse Marker** is switched **On**, and not every QRS complex in the ECG wave on the monitor is marked with a Sync Pulse marker, you should increase the sensitivity (**Medium** or **High**) until you see a marker for each QRS complex. If you see Sync Pulse markers in areas of the ECG wave other than the QRS complexes, lower the sensitivity (**Medium** or **Low**).

Asystole Threshold This setting lets you adjust the time period between the point where the monitor cannot detect a QRS complex and the indication of an asystole alarm. It also affects the way the enhanced asystole detection behaves, see "General Global Settings Configuration Implications" on page 148.

Color The color setting defines the color for ECG, Arrhythmia, ST, and QT. The color setting for Pulse is taken from the system pulse source.

ECG AL. Off Inop If ECG alarms are off or Pulse is selected as active alarm source, the INOP ECG/ARRH ALARM OFF is shown permanently. If you do not want this INOP to appear, you must set **ECG AL. Off Inop** to **Off**. If you want the ECG/ARRH ALARM OFF INOP to be automatically escalated to a yellow alarm after a fixed time, configure it to one of the available choices: **Yellow @2h**, **Yellow @4h**, **Yellow @6h**, or **Yellow @8h**.

Fallback If **Fallback** is configured **On** and there is a LEAD OFF INOP in the primary lead (and in the secondary lead, if you are using multi-lead monitoring) for longer than 10 seconds, and if another lead is available, this available lead automatically becomes the primary lead. This is known as lead fallback. When the Leads Off condition is corrected, the leads are automatically switched back.

Configuring ECG/Pulse Alarms

```
Measurement Settings:

Main Setup -> Measurements -> ECG -> AlarmSrc(ECG/AR), or

Main Setup -> Measurements -> Pulse -> AlarmSrc(ECG/AR)
```

Factory Defaults												
Item Name	**Oper. Mode**		**MP20 - MP90 (H10/20/40)**			**MP5 - MP90 (H30)**			**MP20 (M20/M21) MP5 (H10/20/40) MP5T MP2/X2**			**MP2/X2**
	C	**M**	**Profile Adult**	**Profile Pedi**	**Profile Neo**	**Profile Adult**	**Profile Pedi**	**Profile Neo**	**Profile Adult**	**Profile Pedi**	**Profile Neo**	**Profile Outdoor**
Alarms Source	x	x	ECG/Arrhythm			Auto			Auto			Auto
ECG/Arrhy Alarms	x	x	On									
Pulse Alarms	x	x	Off									
High Limit	x	x	120	160	200							*120*
Low Limit	x	x	50	75	100							*50*
Δ ExtrTachy	x		20									
Tachy Clamp	x		200	220	240							*200*
Δ ExtrBrady	x		20									
Brady Clamp	x		40		50	*40*	60	80				*40*
Alarms Off	x		Enabled									
AlarmSource Sel.	x		Enabled									
PulseAlarms Tele	x		Enabled									

ECG/Pulse Alarms Configuration Implications

Alarms Source In most cases the heart rate and Pulse numerics are identical. In order to avoid simultaneous alarms on heart rate and Pulse, the monitor uses either ECG **or** Pulse as its active alarm source. The **Alarm Source** setting lets you choose **ECG**, **Pulse** or **Auto** as the source of heart-related rate alarms.

- **ECG/Arrhythm**: Select **ECG/Arrhythm** if you want the heart rate from the ECG to be the alarm source.
  Even with **Alarm Source** set to **ECG/Arrhythm**, if you switch the ECG measurement off, the monitor will automatically use Pulse as alarm source, provided a pulse source is switched on and available.
  Pulse: If you select **Pulse** as the active alarm source, the monitor will prompt you to confirm your choice. Be aware that if you select **Pulse**, all arrhythmia and ECG HR alarms are switched off.

- **Auto**: If the **Alarm Source** is set to **Auto**, the monitor will use the heart rate from the ECG measurement as alarm source whenever the ECG measurement is switched on and at least one ECG lead can be measured without an INOP condition.
  The monitor will automatically switch to **Pulse** as the alarm source if:

    – a valid ECG lead can no longer be measured

    and

    – a Pulse source is switched on and available.

The monitor then uses the pulse rate from the measurement currently active as system pulse. While **Pulse** is the alarm source, all arrhythmia and ECG HR alarms are switched off. If an ECG lead becomes available again, the monitor automatically uses **ECG/Arrhythm** as alarm source.

NOTE   If the ECG measurement is switched off, the monitor will always change to **Pulse** as alarm source, if a Pulse source is available. One exception to this rule can arise when you have a telemetry device paired with your monitor. The monitor ECG is then deactivated but the monitor may be configured to allow only ECG as the active alarm source (see setting **AlarmSource Sel.**). In this case the monitor will not switch to **Pulse** as alarm source and Pulse will not be available as a selection in the ECG/Pulse Alarms menu.

WARNING   Selecting **Pulse** as the active alarm source for HR/Pulse switches off most arrhythmia alarms (see the Instructions for Use), including Asystole, Vfib and Vtach alarms, and the heart rate alarms. This is indicated by the crossed-out alarm symbol beside the ECG heart rate numeric and the message ECG/ARRH ALARM OFF, if configured (see "ECG Configuration Implications" on page 31).

High and low pulse rate and extreme bradycardia and extreme tachycardia alarms from Pulse are active.

ECG/Arrhy Alarms   This setting is only available if **Alarm Source** is set to **ECG/Arrhythm** or **Auto**. Be aware that with **Alarm Source** set to **ECG/Arrhythm**, if you switch **ECG/Arrhy Alarms** off, all Pulse alarms are switched off as well.

Pulse Alarms   This setting is only available if **AlarmSource** is set to **Pulse** *and* a pulse signal is currently measured. Be aware that with **Alarm Source** set to **Pulse**, if you switch **Pulse Alarms** off, all ECG and Arrhythmia alarms are switched off as well.

High Limit/Low Limit   ECG and Pulse share the same alarm limits. These alarm limits apply to the currently selected alarm source, either ECG/Arrhythm or Pulse. Note that if you change the High/Low alarm limits in the ECG/Pulse Alarms menu, this will also change the High/Low alarm limits in the Setup Pulse menu and Setup ECG menu and vice versa.

Δ **ExtrTachy, Δ ExtrBrady**   Extreme bradycardia and extreme tachycardia alarms are based on the ECG/Pulse limit alarms. Use the Δ **ExtrTachy** and Δ **ExtrBrady** setting to define the difference between the heart rate limit and the extreme limit. For example, if the heart rate high limit is 120 bpm and the difference is 20 bpm then the extreme tachycardia limit is 140.
ECG and Pulse share the same alarm limits. The Δ **ExtrTachy** and Δ **ExtrBrady** settings apply to the currently selected alarm source, either ECG or Pulse. If you change the Δ **ExtrTachy** or Δ **ExtrBrady** setting in the ECG/Pulse Alarms menu, this will also change the Δ **ExtrTachy** or Δ **ExtrBrady** setting in the Setup Pulse menu and Setup ECG menu and vice versa.

`Tachy Clamp, Brady Clamp` The Brady and Tachy clamp allows you to configure a safety threshold for the extreme bradycardia and tachycardia alarm limits. For example, if the low heart rate limit is 50 bpm and the Δ `ExtrBrady` setting is 20 bpm (50 bpm - 20 bpm = 30) with a Brady clamp set at 40, the resulting extreme bradycardia limit would be 40 bpm (instead of 30 bpm). If the clinician sets the ECG alarm limit above or below the limit clamps for an individual patient, the limit clamps become the extreme brady or extreme tachy alarm (these are red alarms). Be sure to set the clamps beyond the configured ECG limits.

ECG and Pulse share the same alarm limits. The Tachy `Clamp` and `Brady Clamp` settings apply to the currently selected alarm source, either ECG or Pulse. If you change the `Tachy Clamp` or `Brady Clamp` setting in the ECG/Pulse Alarms menu, this will also change the `Tachy Clamp` or `Brady Clamp` setting in the Setup Pulse menu and Setup ECG menu and vice versa.

`Alarms Off` If this setting is configured to `Disabled`, the user cannot switch off ECG alarms in monitoring mode. Note that changing the `Alarms Off` setting in the ECG/Pulse Alarms menu, also changes the `Alarms Off` setting in the Setup Pulse menu and Setup ECG menu and vice versa.

`AlarmSource Sel.` If you do not want the `Alarm Source` setting to be available in monitoring mode, you must set `AlarmSource Sel.` to `Disabled`. Note that if you change the `AlarmSource Sel.` setting in the ECG/Pulse Alarms menu, this will also change the `AlarmSource Sel.` setting in the Setup Pulse menu and Setup ECG menu and vice versa.

`PulseAlarms Tele` This setting affects the monitor's behavior only while it is paired with a telemetry transmitter. In paired mode, if the Tele transmitter delivers a valid ECG, the monitor automatically deactivates the internal ECG and displays the ECG from the telemetry transmitter. With the internal ECG deactivated, and `PulseAlarms Tele` configured to `Enabled`, the monitor automatically falls back to the monitor's System Pulse as alarming source if a System Pulse is available. With `PulseAlarms Tele` configured to `Disabled`, the monitor does not fall back to the System Pulse as alarm source. In this case no ECG/Pulse alarms from the bedside monitor are active. When the monitor ECG becomes available again, or the telemetry transmitter is unpaired, the monitor automatically activates the internal ECG and the configured ECG/Pulse alarms are active again. Note that if you change the `PulseAlarms Tele` setting in the ECG/Pulse Alarms menu, this will also change the `PulseAlarms Tele` setting in the Setup Pulse menu and Setup ECG menu and vice versa.

Configuring the System Pulse

`Measurement Settings: Main Setup -> Measurements -> Pulse`

Factory Defaults									
Item Name	Oper. Mode		MP5 - MP90 (H10/20/40) MP5T MP2/X2			MP5 - MP90 (H30)			MP2/X2
	C	M	Profile Adult	Profile Pedi	Profile Neo	Profile Adult	Profile Pedi	Profile Neo	Profile Outdoor
High Limit	x	x	not applicable, see "Configuring ECG/Pulse Alarms" on page 33.						
Low Limit	x	x							
Pulse Alarms	x	x							
AlarmSrc (ECG/AR)	x	x							
System Pulse	x	x	SpO$_2$			Auto			SpO2
QRS Volume	x	x	not applicable, see "Configuring User Interface Settings" on page 110.						

Factory Defaults									
Item Name	**Oper. Mode**		**MP5 - MP90 (H10/20/40) MP5T MP2/X2**			**MP5 - MP90 (H30)**			**MP2/X2**
	C	**M**	**Profile Adult**	**Profile Pedi**	**Profile Neo**	**Profile Adult**	**Profile Pedi**	**Profile Neo**	**Profile Outdoor**
Δ ExtrTachy	x		not applicable, see "Configuring ECG/Pulse Alarms" on page 33.						
Tachy Clamp	x								
Δ ExtrBrady	x								
Brady Clamp	x								
Alarms Off	x								
AlarmSource Sel.	x								
PulseAlarms Tele	x								

System Pulse Configuration Implications

System Pulse The **System Pulse** setting allows you to configure the measurement source for the System Pulse.

The pulse rate chosen as system pulse:

- is monitored as system pulse and generates alarms when you select **Pulse** as the active **Alarm Source**
- is sent via the network to the Information Center, if available
- is trended in the HighRes Trends and stored in the monitor's databases.

The choices are **SpO_2, SpO_2pr, SpO_2po, SpO_2 r, SpO_2 l, %SpO_2T, P, ABP, ART, Ao, PAP, UAP, FAP, BAP,** and **Auto**. If you select **Auto**, the monitor automatically chooses a pulse rate to be used as system pulse. It looks through the list from top to bottom and activates the first pulse rate that is switched on and available.

Configuring Arrhythmia

Measurement Settings: Main Setup -> Measurements -> Arrhythmia

Factory Defaults									
Item Name	**Oper. Mode**		**MP5 - MP90 (H10/20/40) MP5T MP2/X2**			**MP5 - MP90 (H30)**			**MP2/X2**
	C	**M**	**Profile Adult**	**Profile Pedi**	**Profile Neo**	**Profile Adult**	**Profile Pedi**	**Profile Neo**	**Profile Outdoor**
Arrhythmia	x	x	On		Off	Off			*On*
Asystol. Threshold	x	x	not applicable, see "Configuring ECG" on page 30.						
Pause Threshold	x	x	2.0 sec		1.5 sec				*2.0 sec*
VTach HR	x	x	100	120	150				*100*
VTach Run	x	x	5						

Factory Defaults									
Item Name	Oper. Mode		MP5 - MP90 (H10/20/40) MP5T MP2/X2			MP5 - MP90 (H30)			MP2/X2
	C	M	Profile Adult	Profile Pedi	Profile Neo	Profile Adult	Profile Pedi	Profile Neo	Profile Outdoor
Vent Rhythm	x	x	14						
SVT HR	x	x	180	200	210				*180*
SVT Run	x	x	5						
PVCs/min	x	x	10	5	5				*10*
Non-Sustain	x	x	On						
Vent Rhythm	x	x	On						
Run PVCs	x	x	On						
Pair PVCs	x	x	On			Off			*On*
R-On-T PVCs	x	x	On			Off			*On*
V.Bigeminy	x	x	On			Off			*On*
V.Trigeminy	x	x	On			Off			*On*
PVCs/min	x	x	On			Off			*On*
Multif.PVCs	x	x	On			Off			*On*
Pacer N.Cap	x	x	On						
Pacer N.Pac	x	x	On						
Pause	x	x	On			Off			*On*
Missed Beat	x	x	On			Off			*On*
SVT	x	x	On						
Afib	x	x	On			Off			*On*
IrregularHR	x	x	On			Off			*On*
HR Alarms	x		Short Yellow						
Analysis Mode	x	x	not applicable, see "Configuring ECG" on page 30						
TimeOut 1st	x		3 min						
TimeOut 2nd	x		10 min						
ArrhyOff Message	x		not applicable, this setting is stored in the Monitor Settings Block, see "Configuring User Interface Settings" on page 110						
SOME ECG... Inop	x		On			Off			*On*

Arrhythmia Configuration Implications

Pause This setting lets you adjust the time period between the point where the monitor cannot detect a QRS complex and the indication of a Pause alarm.

HR Alarms With **Arrhythmia** switched **On**, high and low heart rate alarms were traditionally part of the yellow arrhythmia alarm chain and were therefore signaled as short yellow alarms. The setting **HR Alarms** lets you configure high and low heart rate alarms to be treated as normal (long) yellow alarms. Be aware that when you configure **HR Alarms** to **Yellow**, high and low heart rate alarms are not subject to arrhythmia timeouts and arrhythmia alarm chaining.

`Timeout 1st, TimeOut 2nd` The timeout period for first level yellow alarms can be configured for between 0 and 5 minutes. The timeout period for second level yellow alarms can be configured for between 0 and 15 minutes.

`SOME ECG... Inop` If users want to be notified whenever the On/Off settings for ECG/Arrhythmia alarms differ from the current Profile, you must configure `Some ECG... Inop` to `On` (short for Some ECG Alarms Off INOP message). If this message is configured `Off`, it is important for the clinician to check the on/off status of the alarms.

Arrhythmia Alarms

PVC alarms that combine runs of PVCs and rate are chained together and the configuration of one effects the configuration of others.

VTach	To set the Ventricular tachycardia alarm, you must configure both the Vtach run limit, and the Vtach heart rate limit. Both criteria must be met to cause an alarm.
Run = > 5	
HR = > 100	

Non Sustain VTach	Non-sustained ventricular tachycardia cannot be configured. The criteria for this alarm is based on the Vtach settings. It must be a run less than the Vtach run limit but the heart rate limit must be the same as Vtach.
Run < 5	
HR = > 100	

Vent Rhythm	Ventricular Rhythm can be configured for the number of PVCs in a run (Ventricular limit) but the heart rate limit is automatically set to be less than the Vtach heart rate.
Run = > 14	
HR < 100	

Run of PVCs	A Run of PVCs must be more than two but less than the Ventricular Rhythm
Run > 5 < 14	
HR < 100	

Pair of PVCs	a Pair of PVCs is by definition two PVCs in a run.
Run = 2	

Configuring Arrhythmia Alarm Recordings

(See "Configuring Alarm Recordings" on page 88) Arrhythmia recordings are affected by the settings `Record HR` and `Record PVC`, as some arrhythmia alarms have both a HR component and a PVC component. To receive all arrhythmia alarm recordings, you must configure both these alarms on. If PVC alarm recording is off but HR alarm recording is on, these PVC alarms are not recorded:

Non-Sustain Vtach; Vtach; Ventricular Rhythm; Run of PVCs; Pair of PVCs; R on T PVC; V Bigeminy; V Trigeminy; PVC/min; MultiFocal PVC.

Arrhythmia and Visible and Audible Alarm Latching

(Main Setup -> Alarms -> Alarm Settings; see "Configuring Alarms" on page 85) Alarm visual and audio latching settings can affect the arrhythmia alarm sounds. Visual and Audible Latching should be set to `Red` or `Red and Yellow` if `Arrhythmia` is `On`.

Configuring ST Analysis

ST segment monitoring is intended for use with adult patients only and is not clinically validated for use with neonatal and pediatric patients. For this reason, the recommended - and default - setting for ST monitoring in neonatal and pediatric modes is **ST Analysis: Off**.

Lead-Independent Settings

`Measurement Settings: Main Setup -> Measurements -> ST Analysis`

Factory Defaults								
Item Name	Oper. Mode		MP2 - MP90 X2			MP5T		
	C	M	Profile Adult Profile Outdoor	Profile Pedi	Profile Neo	Profile Adult	Profile Pedi	Profile Neo
ST Analysis	x	x	On	Off		Off		
ST Alarm Mode	x	x	Single ST					
Alarms	x	x	On					
ST-Index	x	x	On	Off		On		
Show ST In Wave	x		not applicable, this setting is stored in the Monitor Settings Block: see "Configuring User Interface Settings" on page 110					
ISO Point	x		-80 ms	-68 ms	-56 ms			
J Point[1]	x		48 ms	---	---			
ST Point[2]	x		---	80 ms	60 ms			
ST Uses	x		J+60	ST Point	ST Point			

1. Setting only available when ST Uses is set to J+60 or J+80.
2. Setting only available when ST Uses is set to ST Point.

ST Alarm Mode If you set **ST Alarm Mode** to **Multi**, the monitor will announce an ST alarm, only if more than one ST lead is violating its alarm limit. For each mode, **Multi** and **Single**, a different set of ST alarm limits can be configured.

ST Analysis This setting lets you switch ST Analysis **On** or **Off**.

ST-Index This setting lets you switch the ST-Index numeric **On** or **Off** for display. The ST index numeric (STindx) is the sum of the absolute values for the ST leads V2, V5, aVF. Because it is based on absolute values, it is always a positive number. If you haven't selected one of the leads V2, V5, and aVF for ST analysis, the STindx numeric will display a question mark "?".

ST Uses If **ST Uses** is set to **J+60** or **J+80**, the position of the ST Point is set relative to the J Point. Change the ST Point by positioning the J Point up to 380ms after the peak of the R-wave. If **ST Uses** is set to **ST Point**, the ST Point can be set directly and independently of the J Point position. The **ST Point** can be positioned up to 460ms after the peak of the R-wave. Note that switching between the settings does not move the J Point position.

Lead I, II, III, aVR, aVL, aVF, V, V$_{1-6}$, MCL Settings

`Measurement Settings: Main Setup -> Measurements -> ST Analysis`

Factory Defaults					
Item Name	Oper. Mode		MP2 - MP90 MP5T X2		
	C	M	Profile Adult Profile Outdoor	Profile Pedi	Profile Neo
ST$_{(Label)}$	x	x	On	Off	
For Alarm Mode = Single-ST					
ST$_{(Label)}$ High	x	x	+2.0 mm		
ST$_{(Label)}$ Low	x	x	-2.0 mm		
For Alarm Mode = Multi-ST					
ST$_{(Label)}$ High	x	x	+1.0 mm		
ST$_{(Label)}$ Low	x	x	-1.0 mm		

Selecting Leads for ST Analysis

You select which leads to use for ST analysis in the **Setup ST Analysis** menu.

To select a lead for ST Analysis,

1   Select **Main Setup** -> **Measurements** -> **ST Analysis** to enter the Setup ST Analysis menu.

2   Select **Setup ST Leads** to open the Setup ST Leads menu. All leads currently chosen for ST monitoring are listed here.

3   Select the **Add** key. This opens the Choices pop-up window.

4   Choose a lead from the list. This closes the Choices window and adds the selected lead to the list of chosen leads.

To disable ST monitoring for a lead,

1   In the Setup ST Leads menu, choose a lead from the list.

2   Select the **Delete** key. This removes this lead from the list of chosen leads.

The order in which ST leads are listed in the Setup ST Leads menu determines the order in which ST leads are displayed on the monitor screen.

To change the order in which ST leads are displayed,

1   In the Setup ST Leads menu, choose a lead from the list.

2   Select the **Sort Up** or **Sort Down** key to move the lead up or down in the list.

Changing ST Alarm Limits

The monitor can detect alarms on each ST lead separately, so you can set high and low ST alarm limits individually for each ST lead. You can also set separate alarm limits for single-lead and multi-lead ST monitoring.

Configuring QT Analysis

`Measurement Settings: Main Setup -> Measurements -> QT Analysis`

Factory Defaults					
Item Name	**Oper. Mode**		**MP2 - MP90** **MP5T** **X2**		
	C	**M**	**Profile Adult** **Profile Outdoor**	**Profile Pedi**	**Profile Neo**
QT Lead	x	x	All		
QTc High Limit	x	x	500	480	460
ΔQTc High Limit	x	x	60		
QTc High Alarm	x	x	On		
ΔQTc High Alarm	x	x	On		
QT Analysis	x	x	Off		
QTc Formula	x		Bazett		

QT Analysis Configuration Implications

QT Lead For QT Monitoring you can select one of the following **QT Lead** modes:

- **All**: all available leads (I, II, III, V, MCL, V1 - V6) are used to produce a global QT measurement. For EASI lead placement, directly acquired AI, AS and ES leads are used.

- **Primary**: the primary lead will be used for QT measurement. If the original primary lead becomes unavailable or is changed, QT measurement will continue with the new primary lead.

- **I,II,III,MCL,V,V1-V6**: a single lead selected from all available leads (except the augmented leads) will be used for QT measurement. QT measurement will stop if the selected lead becomes unavailable.

QT Analysis This setting lets you switch QT Analysis **On** or **Off**.

QTc Formula This setting lets you change the correction formula used to correct the measured QT interval for the patients heart rate.

The QT interval has an inverse relationship to heart rate. Faster heart rates shorten the QT interval and slower heart rates prolong the QT interval. Researchers have generated correction formulas to normalize the effects of heart rate. Heart rate corrected QT interval is abbreviated as "QTc".

Several commonly used heart rate correction formulas are available. In clinical practice, the most commonly used formula is the Bazett formula. The setting **QTc Formula** let you configure either the **Bazett** or **Fridericia** formula. The differences are shown here:

Correction Method	Formula
Bazett	QTc = QT / (RR)1/2
Fridericia	QTc = QT / (RR)1/3

For more detail about the QT/QTc measurement and correction formulas, refer to the IntelliVue Instructions for Use, as well as the Application Note "QT/QTc Interval Monitoring". Both documents are available on the IntelliVue Documentation DVD.

Configuring SpO$_2$

The configuration settings for SpO$_2$ can be set individually for each label - SpO$_2$, SpO$_2$pr, SpO$_2$po, SpO$_2$ r, SpO$_2$ l, and %SpO$_2$T.

NOTE The label %SpO$_2$T is only available on monitors that are currently connected to a telemetry device.

SpO$_2$, SpO$_2$pr, SpO$_2$po, SpO$_2$ r, SpO$_2$ l, and %SpO$_2$T Settings

`Measurement Settings: Main Setup -> Measurements -> <SpO`$_2$` Label>`

Factory Defaults							
Item Name	**Oper. Mode**		**MP2 - MP90 MP5T X2**				**MP2/X2**
	C	**M**	**Profile Adult**	**Profile Pedi**	**Profile Neo**		**Profile Outdoor**
High Limit	x	x	100		95		*100*
Low Limit	x	x	90		85		*90*
Desat Limit	x	x	80		80		*80*
Alarms	x	x	On				
SpO$_2$ *(or other label)*	x	x	not applicable, the SpO$_2$ On/Off state is not a setting, see "SpO2 Configuration Implications" on page 43.				
Mode[1]	x	x	Continuous				
Pulse <SpO$_2$ Label>	x	x	not applicable, see "Configuring Pulse from SpO2" on page 44.				
QRS Volume	x	x	not applicable, these settings are stored in the Monitor Settings Block: see "Configuring User Interface Settings" on page 110.				
Tone Modulation	x	x					
Tone Mod. Type	x						
Perfusion	x		On				
Signal Quality[2]	x		On				
Average	x		10 sec				
Average in Mon.	x		No				
High Alarm Delay	x		10 sec				
Low Alarm Delay	x		10 sec				
Desat Delay	x		20 sec				
NBP Alarm Suppr.	x		On				
Extd. Auto OnOff	x		Disabled				
Color	x		Cyan				White

1. Setting is only available for the label %SpO$_2$T and on monitors that are currently connected to a telemetry device via a Short Range Radio (SRR) connection.
2. Setting is only applicable for monitors with FAST SpO$_2$ (Option A01) and OxiMax compatible SpO$_2$ (Option A02).

SpO$_2$ Configuration Implications

<SpO$_2$ Label> The **On/Off** state of the SpO$_2$ measurement cannot be preconfigured. SpO$_2$ is automatically switched **On** when an SpO$_2$ sensor is connected to the monitor.

Mode This setting is only applicable for monitors that have a Short Range Radio (SRR) interface installed. It is only available for the label %SpO$_2$T. Configure **Mode** to **Manual** to allow %SpO$_2$T measurements from the telemetry device to be made on request and not continuously, helping to save the telemetry device's battery power when it is connected to a monitor via a short-range radio link.
To ensure there is no gap in SpO$_2$ measurements when moving from standard telemetry transmission to short range radio transmission, the SpO$_2$ mode will be automatically switched to **Continuous** in this situation unless **Manual** mode is set in both the telemetry device and the monitor.

Perfusion If **Perfusion** is switched **Off**, Perfusion is not measured and the Perf numeric disappears from the Screen. Note that you will only see the Perfusion numeric on the Screen if **Perfusion** is switched **On**, and a Perf numeric is configured on the Screen.

Signal Quality Set **Signal Quality** to **Off**, if you don't want the signal quality indicator to be displayed next to the SpO$_2$ numeric on the Screen. Note that this setting is only applicable for monitors with FAST SpO$_2$ (Option A01) and OxiMax compatible SpO$_2$ (Option A02).

Average The SpO$_2$ numeric represents an average value calculated from several SpO$_2$ values. **Average** lets you adjust the averaging time between **5**, **10**, and **20** seconds. It represents the approximate time period used for the calculation. The exact averaging algorithm depends on the SpO$_2$ technology (option) used and on the signal conditions. The longer the averaging time, the longer the time needed until the SpO$_2$ value reflects the physiological event. Fast averaging is useful for situations where an extremely fast measurement is required or few artifacts are expected. Use slow averaging where you expect the number of artifacts to be relatively high.

Average in Mon. This setting determines whether the setting **Average** can be changed in Monitoring mode. Set **Average in Mon.** to **Yes** to enable the user to change the averaging time in Monitoring mode.

High/Low/Desat Alarm Delay The alarm delay defines the amount of time that the averaged SpO$_2$ value needs to be above or below the corresponding alarm limits before an alarm is activated.

NBP Alarm Suppr. This setting has an effect only when using SpO$_2$ options FAST-SpO$_2$ or OxiMax-compatible SpO$_2$. Set **NBP Alarm Suppr.** to **On** to suppress INOPs that would otherwise be generated when you measure NBP on the same limb as SpO$_2$. If **NBP Alarm Suppr.** is configured to **On**, the monitor automatically remembers the SpO$_2$ value measured before cuff inflation and suppresses any SpO$_2$ INOPs while the cuff is inflated.

Extd. Auto On/Off The default for this setting is **Disabled**. If **Enabled**, the SpO$_2$ measurement will be automatically switched **Off** when the SpO$_2$ sensor comes off the patient's finger **and** at least one of the following criteria is met:

- the resulting **SpO2 Sensor Off** INOP is silenced,

- alarms are paused or switched off. This also applies if alarms are remotely suspended from a connected Information Center,

- both the SpO$_2$ alarm and the Pulse(SpO$_2$) alarms are switched off.

If the sensor is reapplied, the SpO$_2$ measurement is automatically turned **On**.

Note that the setting `Extd. Auto On/Off` has no effect if the label $\%SpO_2T$ is used, and the telemetry device is connected to the monitor via a short range radio connection.

WARNING   Never set `Extd. Auto On/Off` to `Enabled` if continuous SpO_2 monitoring is intended, because the SpO_2 measurement may be inadvertently turned off, when

- the SpO_2 sensor is off the patient's finger and the user silences other alarms, or

- all alarms are off when the sensor comes off the finger, or

- the Pulse (SpO_2) and the SpO_2 alarms are switched off when the sensor comes off the finger, or

- the user switches all alarms off while the sensor is off the finger, or

- the user switches off the Pulse (SpO_2) and the SpO_2 alarms, while the sensor is off the finger.

CAUTION   Consider the implications when you configure `Extd. Auto On/Off` differently for different Measurement Settings Blocks and Profiles.

Configuring Pulse from SpO$_2$

```
Measurement Settings:
Main Setup -> Measurements -> <SpO2 Label> -> Pulse (<SpO2 Label>)
```

Factory Defaults					
Item Name	**Oper. Mode**		**MP2 - MP90** **MP5T** **X2**		
	C	**M**	**Profile Adult**	**Profile Pedi**	**Profile Neo**
High Limit	x	x	not applicable, see "Configuring ECG/Pulse Alarms" on page 33.		
Low Limit	x	x			
Pulse Alarms	x	x			
AlarmSrc (ECG)	x	x			
Pulse (<SpO₂ Label>)	x	x	On		
System Pulse	x	x	not applicable, see "Configuring the System Pulse" on page 35.		
QRS Volume	x	x	not applicable, see "Configuring User Interface Settings" on page 110.		
Δ ExtrTachy	x		not applicable, see "Configuring ECG/Pulse Alarms" on page 33.		
Tachy Clamp	x				
Δ ExtrBrady	x				
Brady Clamp	x				
Alarms Off	x				
AlarmSource Sel.	x				
PulseAlarms Tele	x				

Pulse from SpO$_2$ Configuration Implications

`Pulse (<SpO`$_2$` Label>)` This setting lets you switch the Pulse from the related SpO$_2$ label **On** or **Off**. If you switch **Off** a Pulse that is currently selected as the source for the System Pulse (see "Configuring the System Pulse" on page 35), the monitor will use the next available Pulse from the list of possible pulse sources as system pulse.

Configuring ΔSpO$_2$ (Oxygen Saturation Difference)

MP40-90 only Δ SpO$_2$ is a derived measurement.

`Measurement Settings: Main Setup -> Measurements -> ΔSpO2`

Factory Defaults					
Item Name	Oper. Mode		MP40 - MP90		
	C	M	Profile Adult	Profile Pedi	Profile Neo
First SpO$_2$	x	x	SpO$_2$		
Second SpO$_2$	x	x	SpO$_2$ r		
Δ SpO$_2$	x	x	Off		
Measurement	x		Enabled		
Color	x		Green		

ΔSpO$_2$ Configuration Implications

`First SpO`$_2$`/Second SpO`$_2$ This setting is only available when **Measurement** is **Enabled**. The formula used to calculate the Δ SpO$_2$ value is: Δ SpO$_2$ = First SpO$_2$ - Second SpO$_2$. Possible sources are: `SpO`$_2$`, SpO`$_2$`pr, SpO`$_2$`po, SpO`$_2$` r, SpO`$_2$` l`.

`Measurement/ΔSpO`$_2$ Set **Measurement** to **Enabled**, if you want the monitor to automatically switch the Δ SpO$_2$ measurement **On** when both configured SpO$_2$ sources are available. The user can still switch **Off** Δ SpO$_2$ in monitoring mode.
Set **Measurement** to **Disabled**, if you want the Δ SpO$_2$ measurement to be permanently disabled, which means that in monitoring mode it will not be possible to switch Δ SpO$_2$ **On**.

Configuring NBP (Non-Invasive Blood Pressure)

```
Measurement Settings: Main Setup -> Measurements -> NBP
```

Factory Defaults															
Item Name	Oper. Mode		MP20 - MP90 (H10/20/40)			MP5 - MP90 (H30)			MP20 (M20/M21) MP5 (H10/20/40) MP2/X2			MP5T MP5 (B10/B11/B14)			MP2/X2
	C	M	Profile Adult	Profile Pedi	Profile Neo	Profile Adult	Profile Pedi	Profile Neo	Profile Adult	Profile Pedi	Profile Neo	Profile Adult	Profile Pedi	Profile Neo	Profile Outdoor
Alarms from	x	x	Sys.												
Sys. High	x	x	160	120	90	180									*160*
Sys. Low	x	x	90	70	40	70									*90*
Dia. High	x	x	90	70	60										*90*
Dia. Low	x	x	50	40	20										*50*
Mean High	x	x	110	90	70										*110*
Mean Low	x	x	60	50	24	65									*60*
Alarms	x	x	On												
NBP	x	x	On												
Repetition Time	x	x	15 min			3 min			10 min			10 min			10 min
Auto/Manual	x	x	Auto		Manual							Manual			*Auto*
Sequence A[1]	x	x	4 Times		5 Times										
every[1]	x	x	5 min		15 min										
Sequence B[1]	x	x	4 Times		5 Times										
every[1]	x	x	10 min		15 min										
Sequence C[1]	x	x	4 Times		5 Times										
every[1]	x	x	15 min		15 min										
Sequence D[1]	x	x	4 Times		5 Times										
every[1]	x	x	30 min		15 min										
Pulse(NBP)	x	x	On												
Unit	x		mmHg												
Done Tone	x		Off			On									*Off*
Start Time	x		Synchronized			Not Synchron.									*Synchronized*
VP Pressure	x		60 mmHg	40 mmHg	30 mmHg										*60 mmHg*
Reference	x		Auscultatory	In-vasive											*Ausculta-tory*
NBP Time	x		not applicable, this setting is stored in the Monitor Settings Block: see "Configuring User Interface Settings" on page 110.												
Color	x		Red			Magenta									White

1.Settings are only visible when Auto/Manual is set to 'Sequence'.

NBP Configuration Implications

Sequence A (B/C/D), every These settings are only visible if **Auto/Manual** is set to **Sequence** and you select **Setup Sequence** in the Setup NBP menu. You can then define up to four measurement cycles which will run consecutively. For each cycle you can set the number of measurements and the interval between them. If you want to run less than four cycles in a sequence, set the number of measurements for one or more cycles to **Off**.

Pulse(NBP) This lets you enable (**On**) or disable (**Off**) display of the Pulse numeric derived from the NBP measurement. If the NBP numeric area on the monitor screen is configured large enough, the Pulse(NBP) numeric will be displayed next to the NBP label in the NBP segment.

Start Time If you set **Start Time** to **Synchronized**, the monitor will time the second measurement in a series to coincide with the next easy-to-document time. For example, if you start the first measurement at 08:23, and the **Repetition Time** is set to 10 minutes, the monitor will automatically perform the next measurement at 8:30, then 8:40 and so on.

Done Tone Set **Done Tone** to **On** if you want to hear a short prompt tone and see a prompt message at completion of each NBP measurement.

VP Pressure This setting determines the cuff pressure used during a Veni Puncture inflation. The cuff deflates automatically after a set time (adult/pediatric: 170 seconds, neonatal: 85 seconds) if it is not manually deflated beforehand.

Reference The NBP measurement reference method can be **Auscultatory** or **Invasive**. **Invasive** delivers NBP values that very closely approximate values measured intra-arterially. **Auscultatory** delivers NBP values that very closely approximate values measured using the manual cuff method. The two references can exhibit a difference of 20 to 30 mmHg in patients with elevated pressures, with the auscultatory reference registering the lower values. Note that when **Patient Category** is set to **Neo**, the setting **Reference** is not shown. For the Neo patient category, the **Reference** used will always be **Invasive**. For further information, see the Application Note on NBP supplied on the monitor documentation DVD.

Configuring Invasive Pressure

Not MP5T When an MMS is connected to the monitor for the first time, it uses the default Pressure label **ABP**. When a Measurement Extension Module is connected for the first time, the Pressure label used for the combined Pressure/Temp connector is **CVP**, the label used for the single Pressure connector is **PAP**; plug-in Pressure modules use the label **P**. If you then change the pressure label in monitoring mode, each device will remember the new label the next time they are reconnected.

The configuration settings for Invasive Pressure can be set individually for each Pressure label. The selection of labels depends on the configured **Label Set**, see "Global Settings" on page 147.

P[1], ABP, ART, Ao, UAP, FAP, BAP, P1, P2, P3, P4 Settings

Measurement Settings: Main Setup -> Measurements -> <Press Label>

Factory Defaults									
Item Name	**Oper. Mode**		**MP5 - MP90 (H10/20/40) MP2/X2**			**MP5 - MP90 (H30)**			**MP2/X2**
	C	**M**	**Profile Adult**	**Profile Pedi**	**Profile Neo**	**Profile Adult**	**Profile Pedi**	**Profile Neo**	**Profile Outdoor**
Alarms from	x	x	Systolic						
Sys. High	x	x	160	120	90	180			160
Sys. Low	x	x	90	70	55	70			90
Dia. High	x	x	90	70	60				90
Dia. Low	x	x	50	40	20				50
Mean High	x	x	110	90	70				110
Mean Low	x	x	70	50	36				70
Alarms	x	x	On						
ABP *(or other label)*	x	x	not applicable, the Pressure On/Off state is not a setting, see "Invasive Pressure Configuration Implications" on page 51.						
Pulse (<Press Label>)	x	x	not applicable, see "Configuring Pulse from Invasive Pressure" on page 53.						
Scale	x	x	150	100	100				150
Mean Only	x	x	No						
Filter	x		12 Hz						
Mercury Cal	x		Yes						
Artifact Suppr.	x		60 sec						
Unit	x		mmHg						
Color	x		Red						White
Extreme Alarms	x		Disabled						
Δ Extreme High	x		15	10	5				15
Δ Extreme Low	x		15	10	5				15
Sys. High Clamp	x		190	140	105				190
Sys. Low Clamp	x		80	60	45	65			80
Dia. High Clamp	x		100	80	75				100
Dia. Low Clamp	x		45	35	15				45
Mean High Clamp	x		125	100	75				125
Mean Low Clamp	x		65	45	30				65

1. The label P will be interpreted as P1 by the IntelliVue Information Center. It is therefore not recommended to use P and P1 simultaneously on the IntelliVue monitor when connected to an IntelliVue Information Center.

CVP, RAP, LAP, UVP Settings

`Measurement Settings: Main Setup -> Measurements -> <Press Label>`

Factory Defaults									
Item Name	Oper. Mode		MP5 - MP90 (H10/20/40) MP2/X2			MP5 - MP90 (H30)			MP2/X2
	C	M	Profile Adult	Profile Pedi	Profile Neo	Profile Adult	Profile Pedi	Profile Neo	Profile Outdoor
Alarms from	x	x	Mean						
Sys. High	x	x	14	10	10				*14*
Sys. Low	x	x	6	2	2				*6*
Dia. High	x	x	6	2	2				*6*
Dia. Low	x	x	-4	-4	-4				*-4*
Mean High	x	x	10	4	4				*10*
Mean Low	x	x	0	0	0				*0*
Alarms	x	x	On						
CVP *(or other label)*	x	x	not applicable, the Pressure On/Off state is not a setting, see "Invasive Pressure Configuration Implications" on page 51.						
Scale	x	x	30						
Mean Only	x	x	Yes						
Filter	x		12 Hz						
Mercury Cal	x		Yes						
Artifact Suppr.	x		60 sec						
Unit	x		mmHg						
Color	x		Cyan			Blue			White
Extreme Alarms	x		Disabled						
Δ Extreme High	x		5	5	5				*5*
Δ Extreme Low	x		5	5	5				*5*
Sys. High Clamp	x		20	15	15				*20*
Sys. Low Clamp	x		0	0	0				*0*
Dia. High Clamp	x		10	5	5				*10*
Dia. Low Clamp	x		-5	-5	-5				*-5*
Mean High Clamp	x		15	10	10				*15*
Mean Low Clamp	x		-5	-5	-5				*-5*

PAP Settings

`Measurement Settings: Main Setup -> Measurements -> PAP`

Factory Defaults						
Item Name	Oper. Mode		MP2 - MP90 X2			MP2/X2
	C	M	Profile Adult	Profile Pedi	Profile Neo	Profile Outdoor
Alarms from	x	x	Diastolic			
Sys. High	x	x	34	60	60	*34*
Sys. Low	x	x	10	24	24	*10*
Dia. High	x	x	16	4	4	*16*
Dia. Low	x	x	0	-4	-4	*0*
Mean High	x	x	20	26	26	*20*
Mean Low	x	x	0	12	12	*0*
Alarms	x	x	On			
PAP	x	x	not applicable, the Pressure On/Off state is not a setting, see "Invasive Pressure Configuration Implications" on page 51.			
Scale	x	x	30			
Mean Only	x	x	No			
Filter	x		12 Hz			
Mercury Cal.	x		Yes			
Artifact Suppr.	x		60 sec			
Unit	x		mmHg			
Color	x		Yellow			White
Extreme Alarms	x		Disabled			
Δ Extreme High	x		5	5	5	*5*
Δ Extreme Low	x		5	5	5	*5*
Sys. High Clamp	x		45	65	65	*45*
Sys. Low Clamp	x		5	15	15	*5*
Dia. High Clamp	x		20	5	5	*20*
Dia. Low Clamp	x		-5	-5	-5	*-5*
Mean High Clamp	x		25	35	35	*25*
Mean Low Clamp	x		-5	5	5	*-5*

ICP, IC1, IC2 Settings

`Measurement Settings: Main Setup -> Measurements -> <Press Label>`

Factory Defaults							
Item Name	**Oper. Mode**		**MP2 - MP90 X2**				**MP2/X2**
	C	**M**	**Profile Adult**	**Profile Pedi**	**Profile Neo**		**Profile Outdoor**
Alarms from	x	x	Mean				
Sys. High	x	x	14	10	10		*14*
Sys. Low	x	x	6	2	2		*6*
Dia. High	x	x	6	2	2		*6*
Dia. Low	x	x	-4	-4	-4		*-4*
Mean High	x	x	10	4	4		*10*
Mean Low	x	x	0	0	0		*0*
Alarms	x	x	On				
ICP *(or other label)*	x	x	not applicable, the Pressure On/Off state is not a setting, see "Invasive Pressure Configuration Implications" on page 51.				
Scale	x	x	30				
Mean Only	x	x	Yes				
Filter	x		12 Hz				
Mercury Cal	x		Yes				
Artifact Suppr.	x		60 sec				
Unit	x		mmHg				
Color	x		Magenta				White
Extreme Alarms	x		Disabled				
Δ Extreme High	x		10	10	10		*10*
Δ Extreme Low	x		10	10	10		*10*
Sys. High Clamp	x		20	15	15		*20*
Sys. Low Clamp	x		0	0	0		*0*
Dia. High Clamp	x		10	5	5		*10*
Dia. Low Clamp	x		-5	-5	-5		*-5*
Mean High Clamp	x		15	10	10		*15*
Mean Low Clamp	x		-5	-5	-5		*-5*

Invasive Pressure Configuration Implications

`Alarms From` lets you choose the pressure alarm source. You can monitor for alarm conditions in systolic, diastolic and mean pressure, either singly or in parallel.

`<Pressure Label>` The `On/Off` state of a Pressure label cannot be preconfigured. A pressure label is automatically switched `On` when a pressure transducer is connected to a pressure socket on the monitor.

`Mean Only` If you configure `Mean Only` to `Yes`, only the mean pressure numeric will be displayed.

Filter This setting lets you apply a **12 Hz** or a **40 Hz** filter to the pressure signal. Use the **12 Hz** filter when the pressure transducer is connected to the intra-arterial catheter via a fluid filled tubing system (pressure line). The **12 Hz** filter reduces resonant effects that can be introduced by the tubing system. The **40 Hz** filter should only be selected when using special pressure transducers, such as catheter-tip pressure transducers, or transducers that are directly connected to the intra-arterial catheter without the need for a fluid filled tubing system.

Mercury Cal This setting determines whether the menu entries **Cal. Press** and **Cal. Factor** are shown in the pressure's setup menu. If you want users to be able to perform a mercury calibration while in monitoring mode, set **Mercury Cal** to **Yes.** For detailed information about performing a mercury calibration, see the monitor Instructions for Use.

Artifact Suppr. Some clinical procedures may affect blood pressure, for example, a flush procedure or a blood sample. The setting **Artifact Suppr.** lets you suppress the monitor's normal response (alarming) to these non-physiological artifacts for a specified duration (**30**, **60**, or **90** seconds, or **Off**). During artifact suppression, the monitor shows the INOP message "<Pressure Label> ARTIFACT", and a question mark is shown beside the pressure numerics. Pressure alarms and the "<Pressure Label> Non-Pulsatile" INOP are suppressed during the configured period.

Extreme Alarms This setting let you enable or disable the extreme pressure alarms.

Δ Extreme High/Low Extreme High and Low pressure alarms are based on the pressure limit alarms. Use the Δ **Extreme High** and Δ **Extreme Low** setting to define the difference between the pressure limit and the corresponding extreme limit. For example, if the High Limit for a pressure is 160 mmHg and Δ **Extreme High** is 15 mmHg, the resulting Extreme High limit is 175 mmHg. Note that the Δ **Extreme High** and Δ **Extreme Low** settings are the same for all pressure alarm sources: systolic, diastolic, and mean.

Sys.High/Low Clamp The **Sys.High Clamp** and **Sys.Low Clamp** allow you to configure a safety threshold for the Extreme Low and Extreme High <u>systolic</u> pressure alarms. For example, if the High Limit for the systolic pressure is 180 mmHg and the Δ **Extreme High** setting is 15 mmHg (180 + 15 = 195) with a **Sys. High Clamp** set at 190, the resulting extreme high systolic pressure alarm would be signalled at 190 instead of 195 mmHg. If the clinician sets the high or low systolic pressure alarm limits above or below the limit clamps, the normal yellow alarm limits become extreme pressure limits and a red alarm is signalled when the limit is violated. Be sure to set the clamps beyond the configured pressure limits.

Dia.High/Low Clamp The **Dia.High Clamp** and **Dia.Low Clamp** allow you to configure a safety threshold for the Extreme Low and Extreme High <u>diastolic</u> pressure alarms. For example, if the Low Limit for the diastolic pressure is 60 mmHg and the Δ **Extreme Low** setting is 15 mmHg (60 - 15 = 45) with a **Dia.Low Clamp** set at 50, the resulting extreme low diastolic pressure alarm would be signalled at 50 instead of 45 mmHg. If the clinician sets the high or low diastolic pressure alarm limits above or below the limit clamps, the normal yellow alarm limits become extreme pressure limits and a red alarm is signalled when the limit is violated. Be sure to set the clamps beyond the configured pressure limits.

Mean High/Low Clamp The **Mean High Clamp** and **Mean Low Clamp** allow you to configure a safety threshold for the Extreme Low and Extreme High <u>mean</u> pressure alarms. For example, if the High Limit for the mean pressure is 120 mmHg and the Δ **Extreme High** setting is 15 mmHg (120 + 15 = 135) with a **Mean High Clamp** set at 125, the resulting extreme high mean pressure alarm would be signalled at 125 instead of 135 mmHg. If the clinician sets the high or low mean pressure alarm limits above or below the limit clamps, the normal yellow alarm limits become extreme pressure limits and

a red alarm is signalled when the limit is violated. Be sure to set the clamps beyond the configured pressure limits.

Configuring Pulse from Invasive Pressure

```
  Not  Measurement Settings:
 MP5T  Main Setup -> Measurements -> <Press Label> -> Pulse (<Press Label>)
```

Factory Defaults					
Item Name	**Oper. Mode**		**MP2 - MP90 X2**		
	C	**M**	**Profile Adult**	**Profile Pedi**	**Profile Neo**
High Limit	x	x	not applicable, see "Configuring ECG/Pulse Alarms" on page 33.		
Low Limit	x	x			
Pulse Alarms	x	x			
AlarmSrc (ECG)	x	x			
Pulse (<Press Label>)	x	x	On		
System Pulse	x	x	not applicable, see "Configuring the System Pulse" on page 35.		
QRS Volume	x	x	not applicable, see "Configuring User Interface Settings" on page 110.		
Δ ExtrTachy	x		not applicable, see "Configuring ECG/Pulse Alarms" on page 33.		
Tachy Clamp	x				
Δ ExtrBrady	x				
Brady Clamp	x				
Alarms Off	x				
AlarmSource Sel.	x				
PulseAlarms Tele	x				

Pulse from Invasive Pressure Configuration Implications

Pulse (<Press Label>) This setting lets you switch the Pulse from the related Invasive Pressure label **On** or **Off**. If you switch **Off** a Pulse that is currently selected as the source for the System Pulse (see "Configuring the System Pulse" on page 35), the monitor will use the next available Pulse from the list of possible pulse sources as system pulse.

Configuring CPP (Cerebral Perfusion Pressure)

Measurement Settings: Main Setup -> Measurements -> CPP

CPP is a derived measurement. The measurement unit used for the CPP calculation depends on the unit setting for arterial source and ICP.

Factory Defaults									
Item Name	Oper. Mode		MP2 - MP90 X2			MP5T MP5 (B10/B11/B14)			MP2/X2
	C	M	Profile Adult	Profile Pedi	Profile Neo	Profile Adult	Profile Pedi	Profile Neo	Profile Outdoor
High Limit	x	x	130	100	90				*130*
Low Limit	x	x	50	40	30				*50*
Alarms	x	x	On						
CPP	x	x	Off			Disabled			*Off*
Measurement	x		Enabled						
Arterial Source	x	x	ABPm						
Scale	x		105 mmHg						
Color		x	Magenta						White

CPP Configuration Implications

CPP / Measurement Set **Measurement** to **Enabled**, if you want the monitor to automatically switch the CPP measurement **On** when both the ICP and the set arterial source are available. The user can still switch **Off** CPP in monitoring mode.
Set **Measurement** to **Disabled**, if you want the CPP measurement to be permanently disabled, which means that in monitoring mode it will not be possible to switch CPP **On**.

Arterial Source This setting is only available when **Measurement** is **Enabled**. The formula used to calculate CPP is: CPP = Arterial Source - ICP. Possible sources are: ABPm, ARTm, AoM, FAPm, BAPm

Configuring PPV (Pulse Pressure Variation)

MP5-90 only **Measurement Settings: Main Setup -> Measurements -> PPV**

PPV is a derived measurement. Pulse Pressure Variation can be calculated in two different ways on this monitor - directly from the pressure measurement or in conjunction with the continuous cardiac output (CCO) measurement. Note that PPV settings made here do not apply to the PPV calculated by the continuous cardiac output measurement. Only one PPV can be active at a time. See "Configuring CCO (Continuous Cardiac Output)" on page 56.

Factory Defaults					
Item Name	Oper. Mode		MP5 - MP90		
	C	M	Profile Adult	Profile Pedi	Profile Neo
Arterial Source	x	x	ABP		
PPV	x	x	Off		
Measurement	x		Disabled		

PPV Configuration Implications

PPV / Measurement If you set **Measurement** to **Enabled**, the user can switch the PPV measurement **On** in monitoring mode, provided the set arterial source is available. If **Enabled**, the derived PPV may generate a label conflict with the PPV calculated by the CCO measurement, see "CCO Configuration Implications" on page 57.
If set to **Disabled**, the PPV measurement is permanently disabled, which means that in monitoring mode it will not be possible to switch PPV **On**.

Arterial Source This setting is only available when **Measurement** is **Enabled**. Possible sources are: P, ABP, ART, AO, FAP, BAP. The formula used to calculate PPV is:

$$\text{PPV} = \frac{\sum\limits_{i=1...4} \text{PP}_{max}[i] - \sum\limits_{i=1...4} \text{PP}_{min}[i]}{\sum\limits_{i=1...4} \text{PP}_{mean}[i]} = 2 \times \frac{\sum\limits_{i=1...4} \text{PP}_{max}[i] - \sum\limits_{i=1...4} \text{PP}_{min}[i]}{\sum\limits_{i=1...4} \text{PP}_{max}[i] + \sum\limits_{i=1...4} \text{PP}_{min}[i]}$$

Configuring C.O. (Cardiac Output)

Not MP5 `Measurement Settings: Main Setup -> Measurements -> C.O.`

Factory Defaults								
Item Name	Oper. Mode		MP20 - MP90 (H10/20/40)			MP20 - MP90 (H30)		
	C	M	Profile Adult	Profile Pedi	Profile Neo	Profile Adult	Profile Pedi	Profile Neo
Method	x	x	not applicable, this is not a setting, see "C.O. Configuration Implications"					
Measuring Mode	x	x	Standard					
Auto-Calibration[1]	x		On					
RL Shunt[1/2]	x		Off					
C.O.	x	x	not applicable, the C.O. On/Off state is not a setting, see "C.O. Configuration Implications".					
Tblood High Limit	x	x	39.0 °C					
Tblood Low Limit	x	x	36.0 °C					
Alarms	x	x	On					
Temperature Unit	x		°C					
Color	x		Green			Yellow		

1.Setting only available if Transpulmonary method is selected.
2.Setting not available in the U.S.A or in clinical environments under FDA control.

C.O. Configuration Implications

Method This lets you choose the C.O. method to configure the settings for each method. If a cardiac output catheter is connected, the correct method is automatically detected from the catheter type connected and cannot be manually changed.
If you use the **Transpulmonary** method, and the PPV derived from an arterial source is **Enabled** (see "Configuring PPV (Pulse Pressure Variation)" on page 54), a label conflict with the PPV derived from the continuous cardiac output measurement may be generated.

Measuring Mode This setting lets you change the C.O. measurement mode. If set to **Auto**, the clinician will be able to quickly perform a series of injections without further interaction with the monitor. After the clinician has initially started the C.O. measurement, for example by selecting the pop-up key **Start C.O.**, the monitor will prompt the clinician when the measurement is ready for the next injection, and the injection can be performed. If no injection is detected within 30 seconds (Right-Heart method) or 90 seconds (Transpulmonary method), the user is prompted again. If set to **Standard**, the clinician has to select the pop-up key **Start C.O.** again for each new injection.

Auto-Calibration This setting is only available if **Method** is set to **Transpulmonary**. Set this to **Off** if you do not want to automatically trigger a CCO calibration every time you save the C.O. value. This results in two separate pop-up keys in the Cardiac Output Procedure window: one labeled **Save C.O.**, the other labeled **Cal CCO**. If **Auto-Calibration** is set to **On**, both functions are combined and only one pop-up key will be available: **Save C.O.&Cal CCO**.

RL Shunt This setting is only available if **Method** is set to **Transpulmonary**. Set **RL Shunt** to **On** to enable Right-Left Shunt detection. This setting is not available in the U.S.A or in clinical environments under FDA control.

C.O. The **On/Off** state of the Cardiac Output measurement cannot be preconfigured. Cardiac Output is automatically switched **On** when a C.O. transducer is connected to the monitor. In configuration mode, **C.O.** can be manually switched **On**, even if no catheter is connected.

Configuring CCO (Continuous Cardiac Output)

Not MP5 Measurement Settings: Main Setup -> Measurements -> CCO

Factory Defaults									
Item Name	**Oper. Mode**		**MP20 - MP90**			**X2**			
	C	**M**	**Profile Adult**	**Profile Pedi**	**Profile Neo**	**Profile Adult**	**Profile Pedi**	**Profile Neo**	**Profile Outdoor**
Settings common to CCO and CCI									
Alarms From	x	x	CCO						
CCO From	x	x	ABP						
PPV From CCO	x		Off						
CCO	x	x	not applicable, the CCO On/Off state is not a setting, see "CCO Configuration Implications" on page 57.						
Color	x		Green						White
CCO settings									
CCO High Limit	x	x	8.5 l/min	3.7 l/min	1.3 l/min				*8.5 l/min*

Factory Defaults									
Item Name	Oper. Mode		MP20 - MP90			X2			
	C	M	Profile Adult	Profile Pedi	Profile Neo	Profile Adult	Profile Pedi	Profile Neo	Profile Outdoor
CCO Low Limit	x	x	4.0 l/min	2.6 l/min	0.3 l/min				*4.0 l/min*
Alarms	x	x	On						
CCI settings									
CCI High Limit	x	x	4.3 l/min/m^2	3.7 l/min/m^2	5.2 l/min/m^2				*4.3 l/min/m^2*
CCI Low Limit	x	x	2.0 l/min/m^2	2.6 l/min/m^2	1.2 l/min/m^2				*2.0 l/min/m^2*
Alarms	x	x	On						

CCO Configuration Implications

Alarms From To set CCO alarms to be triggered by the indexed CCO value, set **Alarms From** to **CCI**.

The **CCO From** setting defines the arterial pressure source for CCO. The following pressure labels can be used as pressure source for the CCO: ABP, Ao, ART, UAP (plus FAP and BAP if **Full** is selected as the **Label Set**, see "Global Settings" on page 147).

PPV From CCO This setting lets you switch the PPV calculated from the CCO measurement **On** or **Off**. Pulse Pressure Variation can be calculated in two different ways on this monitor - in conjunction with the continuous cardiac output measurement, or directly from the invasive pressure measurement. Note that this setting does not apply to the PPV calculated from the pressure measurement.

CCO The **On/Off** state of the CCO measurement cannot be preconfigured. CCO is automatically switched **On** when an appropriate C.O. transducer is connected to the monitor.

Configuring SVR (Systemic Vascular Resistance)

MP20-90 only

```
Measurement Settings: Main Setup -> Measurements -> SVR
```

SVR is a derived measurement.

Factory Defaults					
Item Name	Oper. Mode		MP20 - MP90		
	C	M	Profile Adult	Profile Pedi	Profile Neo
Label	x	x	SVR		
Arterial Source	x	x	ABPm		
Set CVP	x	x	0 mmHg		
SVR	x	x	Off		
Measurement	x		Enabled		
Color	x		green		

SVR Configuration Implications

Label This setting is only available when **Measurement** is **Enabled**. It lets you select whether the SVR or the SVRI (indexed SVR) is displayed. It is not possible to display both values at one time.

Arterial Source This setting is only available when **Measurement** is **Enabled**. Possible sources are: ABPm, ARTm, AoM, UAPm, FAPm, BAPm. The formula used to calculate SVR is:

$$\text{SVR} = 79{,}96 \cdot \frac{(\text{Arterial Source}_{mean} - \text{CVP}_{mean})}{\text{CCO}}$$

Set CVP This setting is only available when **Measurement** is **Enabled**. It defines a value to be used in place of CVP to calculate the SVR if no measured CVP is available. It can be set between 0 and 16 mmHg.

SVR / Measurement If **Measurement** is set to **Enabled**, the monitor automatically switches the SVR measurement **On** when the set arterial source is available. The user can still switch **Off** SVR in monitoring mode.
Set **Measurement** to **Disabled**, if you want the SVR measurement to be permanently disabled, which means that in monitoring mode it will not be possible to switch SVR **On**.
Note that the settings made here do not affect the SVR calculated in the Hemo Calcs window.

Configuring SO$_2$ (Intravascular Oxygen Saturation)

The configuration settings for SO$_2$ can be set individually for each label - SO$_2$, SvO$_2$, and ScvO$_2$.

SO$_2$, SvO$_2$, and ScvO$_2$ Settings

MP40-90 only   `Measurement Settings: Main Setup -> Measurements -> <SO`$_2$` Label>`

Factory Defaults					
Item Name	Oper. Mode		M1011A: MP40 - MP90 M1021A: MP60 - MP90		
	C	M	Profile Adult	Profile Pedi	Profile Neo
High Limit	x	x	80%		
Low Limit	x	x	SvO$_2$: 60% SO$_2$/ScvO$_2$: 70%		
Alarms	x	x	On		
SO$_2$	x	x	not applicable, the SO$_2$ On/Off state is not a setting, see "SO2 Configuration Implications".		
Light Intensity	x		On		
Catheter Factor[1]	x	x	not applicable, this is not a setting, see "SO2 Configuration Implications".		
Hb/Hct Entry[1]	x	x	Hct[%]		
Hct [%]l[1]	x	x	not applicable, this is not a setting, see "SO2 Configuration Implications".		
Calibration Value	x	x	not applicable, this is not a setting, see "SO2 Configuration Implications".		
Color	x		Yellow		

1. Setting available for the M1011A SO$_2$ module only.

SO$_2$ Configuration Implications

<SO$_2$ Label> The **On/Off** state of the SO$_2$ measurement cannot be preconfigured. SO$_2$ is automatically switched **On** when an SO$_2$ transducer is connected to the monitor.

Light Intensity Set this to **Off** if you do not want the Light Intensity Indicator to be displayed next to the SO$_2$ numeric.

Catheter Factor Depending on the probe/catheter in use, you may need to enter a catheter correction factor. The appropriate correction factor is indicated in the 'Accessories' chapter of the IntelliVue Instructions for Use or in the catheter documentation. The **Catheter Factor** can only be entered during an in-vivo calibration and is stored in the Optical Module. Note that this is not a measurement setting that can be permanently stored in the monitor configuration.

Hb/Hct Entry This setting determines the lab value that should be used for the in-vivo calibration. Available choices are **Hct[%]**, **Hb[g/dl]**, or **Hb[mmol/l]**.

Hct(or **Hb**) Depending on the configuration of the setting **Hb/HCT Entry**, this lets you enter either the Hct or the Hb value obtained from the laboratory analysis. **Hct**(or **Hb**) can only be entered during an in-vivo calibration and is stored in the Optical Module. Note that this is not a measurement setting that can be permanently stored in the monitor configuration.

Calibration Value This shows the calibration value resulting from the last in-vivo calibration. It is stored in the Optical Module and is not a measurement setting that can be permanently stored in the monitor configuration.

Configuring Sp-vO$_2$ (Oxygen Extraction)

MP40-90 only **Measurement Settings: Main Setup -> Measurements -> Sp-vO$_2$**

Sp-vO$_2$ is a derived measurement. Oxygen extraction is the difference between the measured SpO$_2$ and SvO$_2$ values. To calculate the Sp-vO$_2$, the monitor needs an SO$_2$ source (must be labeled SvO$_2$) and an SpO$_2$ source which can be set to any of the available SpO$_2$ labels except %SpO$_2$T.

Factory Defaults					
Item Name	Oper. Mode		MP60 - MP90		
	C	M	Profile Adult	Profile Pedi	Profile Neo
SpO$_2$ Source	x	x	SpO$_2$		
Sp - vO$_2$	x	x	Off		
Measurement	x		Enabled		
Color	x		Green		

Sp-vO$_2$ Configuration Implications

SpO$_2$ Source This setting is only available when **Measurement** is **Enabled**. The formula used to calculate Oxygen Extraction is: Sp-vO$_2$ = SpO$_2$ Source - SvO$_2$. **SpO$_2$ Source** determines the SpO$_2$ source used for the calculation. Possible sources are: SpO$_2$, SpO$_2$pr, SpO$_2$po, SpO$_2$ r, SpO$_2$ l.

Sp-vO$_2$ / Measurement If Measurement is set to Enabled, the monitor automatically switches the Sp-vO$_2$ measurement On when the set SpO$_2$ source and the SvO$_2$ value are available. The user can still switch Off Sp-vO$_2$ in monitoring mode.

Set Measurement to Disabled, if you want the Sp-vO$_2$ measurement to be permanently disabled, which means that in monitoring mode it will not be possible to switch Sp-vO$_2$ On.

Configuring tcGas (transcutaneous Gas)

MP40-90 only   Measurement Settings: Main Setup -> Measurements -> tcGas

Factory Defaults					
Item Name	**Oper. Mode**		**MP40 - MP90**		
	C	**M**	**Profile Adult**	**Profile Pedi**	**Profile Neo**
TcpO$_2$ High Limit	x	x	80 mmHg		
TcpO$_2$ Low Limit	x	x	50 mmHg		
TcpO$_2$ Alarms	x	x	On		
TcpCO$_2$ HighLimit	x	x	50 mmHg		
TcpCO$_2$ Low Limit	x	x	30 mmHg		
TcpCO$_2$ Alarms	x	x	On		
TcpO$_2$	x	x	not applicable, the TcpO$_2$ On/Off state is not a setting, see "TcGas Configuration Implications" on page 60.		
TcpCO$_2$	x	x	not applicable, the TcpCO$_2$ On/Off state is not a setting, see "TcGas Configuration Implications" on page 60.		
Site Time	x	x	4.0 hrs		
Site Timer	x		Enabled		
Ambient Pressure	x	x	not applicable, Ambient Pressure is not a setting, see "TcGas Configuration Implications" on page 60.		
HeatPowerDisplay	x	x	not applicable, HeatPowerDisplay is not a setting, see "TcGas Configuration Implications" on page 60.		
Disable Timer	x		Not Allowed		
Heat Switch Off	x		No		
Transducer Temp.	x	x	43.0 °C		
CO$_2$ Correction	x		On		
MetabolismFactor	x		8 mmHg		
TcGas Unit	x		mmHg		
Temperature Unit	x		^{0}C		
TcpO$_2$ Color	x		Blue		
TcpCO$_2$ Color	x		Green		

TcGas Configuration Implications

Prolonged continuous monitoring may increase the risk of undesirable changes in skin characteristics, such as irritation, reddening, blistering or burns. If the site timer is disabled, the transducer will heat indefinitely while on a patient.

TcpO$_2$/TcpCO$_2$ The On/Off state of the TcpO$_2$/TcpCO$_2$ measurement cannot be preconfigured. TcGas measurements are automatically switched **On** when a tcGas transducer is connected to the monitor.

Site Time This setting defines the period after which the clinician is reminded by the monitor to change the sensor site. When the time expires, the monitor sounds a tone and displays a change site INOP. Depending on how **Heat Switch Off** is configured, the monitor either switches off the transducer heating or continues monitoring. Choose the time you want the transducer to remain on the measurement site. The optimum time depends on the transducer temperature and your patient's skin sensitivity.

Site Timer This setting is only available if **Disable Timer** is configured to **Allowed**. To disable the site timer, set **Site Timer** to **Disabled**.

Ambient Pressure is not a setting that can be stored in the configuration. It uses the Global Setting **Altitude** (see "Global Settings" on page 147) to determine the default **Ambient Pressure**. **Ambient Pressure** can be adjusted in both Monitoring and Configuration mode. The monitor remembers this pressure setting until a new one is entered.

HeatPowerDisplay is not a setting that can be stored in the configuration, it automatically defaults to **Absolute**. When a tcGas transducer is connected, **HeatPowerDisplay** lets you change the way the heating power of the tcGas sensor is displayed. Choices are **Absolute** and **Relative**. For more detail, see the IntelliVue Instructions for Use.

Disable Timer If **Disable Timer** is set to **Allowed**, the user can disable the site timer in monitoring mode so that the Change Site reminder message is not shown.

Heat Switch Off If **Heat Switch Off** is set to **Yes**, the transducer heater is automatically switched off when the site time period has elapsed. If **Heat Switch Off** is set to **No**, the transducer will remain at operating temperature while it is attached to the patient, and tcGas monitoring will not be interrupted when the site time period is over.

Transducer Temp. Lets you select the temperature to heat the patient's skin under the tcGas transducer. This temperature should be selected according to the patient's age, weight and physical condition, and in accordance with the hospital policy. Usually, a higher transducer temperature gives a better correlation and a quicker response time. However, higher temperatures also increase the risk of skin burns. Most physicians prefer a temperature between 42°C (107° F) and 44°C (111° F), and a site time of four hours or less. Usually, the higher the transducer temperature, the less the site time should be. Whenever you change the temperature setting, the monitor forces you to make a new calibration.

CO$_2$ Correction / MetabolismFactor Transcutaneous pCO$_2$ values tend to be higher than arterial values due to the metabolic processes of the skin and the effect of heating on the blood under the transducer.
The transducer temperature causes an increase in partial CO$_2$ pressure. If **CO$_2$ Correction** is set to **On**, the monitor automatically corrects the measured tcpCO$_2$ for this increase.
CO$_2$ production in the epidermis increases the CO$_2$ value. If **CO$_2$ Correction** is set to **On**, this metabolic effect is corrected according to the value configured for **MetabolismFactor**. The monitor automatically deducts the set value from the measured tcpCO$_2$ value.

Configuring CO$_2$ (Capnometry)

CO$_2$ can be measured by an anesthetic gas analyzer (AGM, G1, or G5), measurement extension modules (Microstream, Sidestream, or Mainstream), or the integrated CO$_2$ measurement in the MP5. The settings listed in this section do not apply to CO$_2$ measured by an anesthetic gas analyzer.

Most settings apply to all supported CO$_2$ extensions. Where a setting only applies to a particular device, this is indicated.

The algorithm with which the CO$_2$ measurement is calculated, changes according to the configured altitude setting. Make sure that the correct altitude setting is entered before the CO$_2$ measurement is used. **Altitude** can be configured as a Global Setting, see "Configuring General Global Settings" on page 147.

Measurement Settings: Main Setup -> Measurements -> CO$_2$

Factory Defaults									
Item Name	Oper. Mode		MP5 - MP90 (H10/20/40), MP2/X2			MP5 - MP90 (H30)			MP2/X2
	C	M	Profile Adult	Profile Pedi	Profile Neo	Profile Adult	Profile Pedi	Profile Neo	Profile Outdoor
etCO$_2$ High	x	x	50			60			*50*
etCO$_2$ Low	x	x	30			25			*30*
imCO$_2$ High	x	x	4						
CO$_2$ Alarms	x	x	On						
CO$_2$	x	x	not applicable, the CO$_2$ On/Off state is not a setting, see "CO2 Configuration Implications" on page 62						
imCO$_2$	x		On			Off			*On*
N$_2$O Corr.[1]	x	x	Off						
Oxygen Corr.[2]	x	x	16%						
Gas Corr.[2]	x	x	Off						
Agent Corr.[2]	x	x	0%						
Scale	x	x	40 mmHg			50 mmHg			*40 mmHg*
Unit	x		mmHg						
Color	x		Yellow			White			White
Max Hold	x		Off						
HumidtyCorr	x		BTPS						

1. Setting available for M3015A, M3016A and MP5 with Microstream CO$_2$ only.
2. Setting available for M3014A only.

CO$_2$ Configuration Implications

CO$_2$ The **On/Off** state of the CO$_2$ measurement cannot be preconfigured. CO$_2$ is automatically switched **On** when a CO$_2$transducer is connected to the monitor.

imCO$_2$ This setting lets you switch the inspired minimum CO$_2$ (imCO$_2$) numeric **On** or **Off**. The imCO$_2$ value is the smallest CO$_2$ concentration measured during inspiration. This helps you to detect unphysiological CO$_2$ concentrations in the inspired gas.

The **imCO₂ High** limit defines the alarm limit for the imCO₂ numeric.

N2O Corr. This settings lets you correct the CO_2 reading for proportions of N_2O. If N_2O is present in the ventilation gas mixture, you must turn this on. If this setting is not available in the **Setup CO₂** menu, the CO_2 measurement in your Measurement Extension Module does not require N_2O correction or it is setup with **Gas Corr.** (see below).

Gas Corr. This settings allows correction of CO_2 reading for proportions of Helium or N_2O. If Helium or N_2O is present in the ventilation gas mixture, you must make the appropriate selection. If this setting is not available in the **Setup CO₂** menu, the CO_2 measurement in your Measurement Extension Module does not require N_2O or Helium correction, or the N_2O correction is setup with **N2O Corr.** (see above).

Agent Corr. This setting lets you correct the CO_2 reading for proportions of the following anesthetic agents: Halothane, Enflurane. Isoflurane, Sevoflurane, Desflurane. Corrections can be applied between 0.0% and 20.0%. If any of the specified anesthetic agents is present in the ventilation gas mixture, you must select the appropriate concentration.

Oxygen Corr. This settings lets you correct the CO_2 reading for proportions of O_2 in the gas mixture. If this setting is not available in the **Setup CO₂** menu, the CO_2 measurement in your Measurement Extension Module does not require O_2 correction.

Max Hold If **Max Hold** is configured to **10 sec** or **20 sec**, the etCO₂ numeric shows the highest CO_2 value measured within the previous 10 or 20 seconds. If set to **Off** the etCO₂ numeric shows breath-to-breath value.

HumidtyCorr This setting determines the method used to correct the influence of water vapor in the patient's breath on the CO_2 reading. The options are Body Temperature Pressure Saturated (**BTPS**) or Standard Temperature Pressure Dry (**STPD**). Setting **HumidtyCorr** to **BTPS** takes the partial pressure contributed by the water vapor into consideration and therefore results in lower CO_2 readings when compared to **STPD**. For an exact definition and the formula used, see the section on "Measurement Specifications" in the "Installation and Specifications" chapter of the monitor's Instructions for Use.

Configuring awRR from CO₂ (Airway Respiration Rate)

Measurement Settings: Main Setup -> Measurements -> awRR

AwRR can be derived from the CO_2 measured by an anesthetic gas analyzer (AGM, G1, or G5), or by any of the CO_2 measurement extension modules (Microstream, Sidestream, or Mainstream), or by the integrated CO_2 measurement in the MP5. The settings listed in this section do **not** apply for the awRR derived from an anesthetic gas analyzer.

Factory Defaults					
Item Name	Oper. Mode		MP2 - MP90 X2		
	C	M	Profile Adult	Profile Pedi	Profile Neo
High Limit	x	x	30		100

Factory Defaults					
Item Name	Oper. Mode		MP2 - MP90 X2		
	C	M	Profile Adult	Profile Pedi	Profile Neo
Low Limit	x	x	8		30
Apnea Time	x	x	20 sec		
Alarms	x	x	On		
awRR	x	x	On		

awRR Configuration Implications

Apnea Time The apnea alarm is a high priority red alarm used to detect apneas. The **Apnea Time** defines the time period between the point where the monitor cannot detect any respiration activity and the indication of the apnea alarm.

awRR This setting lets you switch the awRR measurement from CO_2 **On** or **Off**.

Configuring Resp (Impedance Respiration)

`Measurement Settings: Main Setup -> Measurements -> Resp`

Factory Defaults									
Item Name	Oper. Mode		MP5 - MP90 (H10/20/40) MP2/X2			MP5 - MP90 (H30)			MP2/X2
	C	M	Profile Adult	Profile Pedi	Profile Neo	Profile Adult	Profile Pedi	Profile Neo	Profile Outdoor
High Limit	x	x	30		100				*30*
Low Limit	x	x	8		30				*8*
Apnea Time	x	x	20 sec						
Alarms	x	x	On						
Resp	x	x	On			Off			*On*
Detection	x	x	Auto						
Color	x		Yellow			White			White

Resp Configuration Implications

Apnea Time The apnea alarm is a high priority red alarm used to detect apneas. The **Apnea Time** defines the time period between the point where the monitor cannot detect any respiration activity and the indication of the apnea alarm.

Resp This setting lets you switch the Resp measurement **On** or **Off**. If **Resp** is switched **Off**, the small current applied to the Resp electrodes to enable the impedance measurement is switched off.

Detection The respiration detection level can be configured to be set either automatically or manually. For further information, see the section on "Changing Resp Detection Modes" in the monitor's Instructions for Use.

Configuring Spirometry

MP40-90 only   `Measurement Settings: Main Setup -> Measurements -> Spirometry`

Factory Defaults					
Item Name	Oper. Mode		MP40 - MP90		
	C	M	Profile Adult	Profile Pedi	Profile Neo
No Al. til Breath	x		On		
Color	x		White		

Spirometry Configuration Implications

`No Al. til Breath` If set to set **On**, the monitor suppresses alarms from the Spirometry module until it detects that a patient has been connected to the module (when breathing is detected).

Spirometry AWF (Airway Flow) Settings

`Measurement Settings: Main Setup -> Measurements -> Spirometry -> AWF`

Factory Defaults					
Item Name	Oper. Mode		MP40 - MP90		
	C	M	Profile Adult	Profile Pedi	Profile Neo
Scale	x	x	150 l/min	100 l/min	20 l/min
Color	x		White		

Spirometry AWP (Airway Pressure) Settings

`Measurement Settings: Main Setup -> Measurements -> Spirometry -> AWP`

Factory Defaults					
Item Name	Oper. Mode		MP40 - MP90		
	C	M	Profile Adult	Profile Pedi	Profile Neo
PIP High	x	x	40 cmH2O	25 cmH2O	20 cmH2O
PIP Alarms	x	x	On		
PEEP High	x	x	25 cmH2O		
PEEP Low	x	x	0 cmH2O		
PEEP Alarms	x	x	On		
Scale	x	x	40 cmH2O	40 cmH2O	20 cmH2O
Color	x		White		

Spirometry AWV (Airway Volume) Settings

`Measurement Settings: Main Setup -> Measurements ->`
`Spirometry -> AWV`

Factory Defaults					
Item Name	**Oper. Mode**		**MP40 - MP90**		
	C	**M**	**Profile Adult**	**Profile Pedi**	**Profile Neo**
MVexp High	x	x	8.0 l/min	4.0 l/min	0.8 l/min
MVexp Low	x	x	4.0 l/min	2.5 l/min	0.4 l/min
MVexp Alarms	x	x	On		
MV	x	x	exp + in		
TV	x	x	exp + in		
Scale	x	x	800 ml	200 ml	50 ml
Color	x		White		

Spirometry Configuration Implications

MV This setting lets you choose the measured components for minute volume (inspiratory, expiratory, inspiratory + expiratory or off). If set to **Off**, there will be no alarming for minute volume.

TV This setting lets you choose the measured components for tidal volume (inspiratory, expiratory, inspiratory + expiratory or off). If set to **Off**, there will be no alarming for tidal volume.

Spirometry Gas Compensation Settings

`Measurement Settings: Main Setup -> Measurements ->`
`Spirometry -> Gas Compensation`

Factory Defaults					
Item Name	**Oper. Mode**		**MP40 - MP90**		
	C	**M**	**Profile Adult**	**Profile Pedi**	**Profile Neo**
Mode	x	x	Manual		
Balance Gas	x	x	N_2		
Inspired O_2	x	x	30%		
Inspired Agent	x	x	0.0%		
Inspired Temp	x	x	25 ^0C		
Unit	x		^0C		

Spirometry Configuration Implications

Mode Use this setting to choose the gas compensation mode. Select **Manual** to manually enter gas concentrations or **Gas Analyzer** to derive gas concentrations from the Philips gas analyzer.

Note: Gas concentrations from the gas analyzer are only available for Philips gas analyzers, not for devices connected via a Vuelink or IntelliBridge plug-in module. If gas concentrations from the gas analyzer are selected but not all data is available, the missing data is taken from manually entered values. In case of invalid data or no data at all, the INOP message SPIRO GAS COMPENS? is displayed.

`Balance Gas` This setting lets you select the type of balance gas used. Choices are N_2, and N_2O.

`Inspired O`$_2$` / Inspired Agent / Inspired Temp` These settings can be adjusted to match the concentration of inspired O_2 and anesthetic agent, as well as the temperature of the inspired gas.

Configuring RRspir (Respiration from Spirometry)

MP40-90 only `Measurement Settings: Main Setup -> Measurements -> Spirometry -> RRspir`

Factory Defaults					
Item Name	**Oper. Mode**		**MP40 - MP90**		
	C	**M**	**Profile Adult**	**Profile Pedi**	**Profile Neo**
High Limit	x	x	30 rpm		60 rpm
Low Limit	x	x	8 rpm		30 rpm
Apnea Time	x	x	20 sec		
RRspir Alarms	x	x	On		
RRspir	x	x	On		

RRspir Configuration Implications

`Apnea Time` The apnea alarm is a high priority red alarm used to detect apneas. The `Apnea Time` defines the time period between the point where the monitor cannot detect any respiration activity and the indication of the apnea alarm.

`RRspir` This setting lets you switch the RRspir measurement `On` or `Off`.

Configuring EEG

MP40-90 only `Measurement Settings: Main Setup -> Measurements -> EEG`

Factory Defaults					
Item Name	**Oper. Mode**		**MP40 - MP90**		
	C	**M**	**Profile Adult**	**Profile Pedi**	**Profile Neo**
TP	x	x	On		
SEF	x	x	On		
MDF	x	x	Off		
PPF	x	x	Off		
Delta	x	x	Off		

Factory Defaults					
Item Name	Oper. Mode		MP40 - MP90		
	C	M	Profile Adult	Profile Pedi	Profile Neo
Theta	x	x	Off		
Alpha	x	x	Off		
Beta	x	x	Off		
SEF Threshold	x		90%		
Numeric Average	x		8 sec		
Wave Scale	x	x	100uV		
Show Gridlines	x		No		
Low Filter	x	x	0.5 Hz		
High Filter	x	x	30 Hz		
Buffer A	x		not applicable, this setting is stored in the Monitor Settings Block: see "Configuring CSA Buffers" on page 145.		
Buffer B	x				
Buffer C	x				
Smoothing CSA	x		On		
Impedance Limit	x	x	5 kOhm		
Color	x		Yellow		
EEG	x	x	not applicable, the EEG On/Off state is not a setting, see "EEG Configuration Implications".		

EEG Configuration Implications

TP   This setting lets you switch the **TP** numeric **On** or **Off**. The **TP** (Total Power) numeric indicates the power in the measured frequency band.

SEF   lets you switch the **SEF** numeric **On** or **Off**. The **SEF** (Spectral Edge Frequency) is the frequency below which a configurable percentage (set by the **SEF Threshold**) of the Total Power is measured.

MDF   lets you switch the **MDF** numeric **On** or **Off**. The **MDF** (Mean Dominant Frequency) is the mean value of the frequency which dominates the measured EEG.

PPF   lets you switch the **PPF** numeric **On** or **Off**. The PPF (Peak Power Frequency) is the frequency with the highest measured amplitude.

Delta   lets you switch the **Delta** numeric **On** or **Off**. The **Delta** numeric is the percentage of total power in the Delta wave frequency band (0.5 to 4 Hz).

Theta   lets you switch the **Theta** numeric **On** or **Off**. The **Theta** numeric is the percentage of total power in the Theta wave frequency band (4 to 8 Hz).

Alpha   lets you switch the **Alpha** numeric **On** or **Off**. The **Alpha** numeric is the percentage of total power in the Alpha wave frequency band (8 to 13 Hz)

Beta   lets you switch the **Beta** numeric **On** or **Off**. The **Beta** numeric is the percentage of total power in the Beta wave frequency band (13 to 30 Hz).

SEF Threshold defines the percentage of the TP for which the SEF is calculated.

Numeric Average lets you define the averaging time used for all EEG numerics.

Wave Scale / Show Gridlines

- When **Show Gridlines** is set to **No**, you can choose from the available **Wave Scale** values. Scaling information is displayed as a size bar beside the EEG wave.

- When **Show Gridlines** is set to **Yes**, scales are defined as a range, such as $\pm\,50\,\mu$V or $\pm\,250\,\mu$V. Gridlines and the current wave scale values are shown with the EEG wave.

Note that this only changes the visual appearance of the wave. It does not affect the signal analyzed by the monitor or printed in reports or recordings.

Low Filter / High Filter Set the low and high pass filters to screen out undesirable interference from the raw EEG wave display.

Smoothing CSA This setting defines whether smoothing of the CSA lines is **On** or **Off**.

Impedance Limit Allows you to set the **Impedance Limit** for all electrodes simultaneously. If the limit is exceeded during monitoring, an INOP will appear and the graphic impedance indicator will change.

EEG The On/Off state of the EEG measurement cannot be preconfigured. EEG measurements are automatically switched **On** when an EEG transducer is connected to the monitor.

Configuring EEG Montages

MP40-90 only **Measurement Settings: Main Setup -> Measurements -> EEG -> Show Montage**

1 In the **Setup EEG** menu, select **Show Montage** to enter the **EEG Impedance/Montage** window.

2 From the drop-down list, select the name of the montage you want to configure.

3 Select **Change Electrds** and follow the instructions given in the window.

4 Confirm when finished.

5 For each other montage, repeat steps 2 to 4.

Renaming EEG Montages

1 In the **Setup EEG** menu, select **Show Montage** to enter the **EEG Impedance/Montage** window.

2 Select the pop-up key **Change Name** and use the on-screen keyboard to enter the new name.

3 Select **Enter** to save your changes.

Factory Defaults					
Item Name	**Oper. Mode**		**MP40 - MP90**		
	C	**M**	**Profile Adult**	**Profile Pedi**	**Profile Neo**
Select Montage	x	x	Montage A		
Montage A					
Electrode 1+	x		FP1		
Electrode 1-	x		T3		
Electrode 2+	x		Fp2		
Electrode 2-	x		T4		
Montage B					
Electrode 1+	x		O1		
Electrode 1-	x		T3		
Electrode 2+	x		O2		
Electrode 2-	x		T4		
Montage C					
Electrode 1+	x		F3		
Electrode 1-	x		C3		
Electrode 2+	x		F4		
Electrode 2-	x		C4		
Montage D					
Electrode 1+	x		C3		
Electrode 1-	x		P3		
Electrode 2+	x		C4		
Electrode 2-	x		P4		
Montage E					
Electrode 1+	x		Fp1		
Electrode 1-	x		T5		
Electrode 2+	x		Fp2		
Electrode 2-	x		T6		

EEG Montages Configuration Implications

Select Montage Lets you select the default montage the monitor uses when the EEG measurement is started.

Configuring BIS (Bispectral Index)

MP20-90 only   `Measurement Settings: Main Setup -> Measurements -> BIS`

Factory Defaults							
Item Name	Oper. Mode		MP20 - MP90 (H10/20/40)			MP20 - MP90 (H30)		
	C	M	Profile Adult	Profile Pedi	Profile Neo	Profile Adult	Profile Pedi	Profile Neo
SQI	x		On					
EMG	x		On					
SR	x		On					
Bursts[1]	x		On			Off		
SEF	x		Off					
TP	x		Off					
Scale	x		100uV					
Show Gridlines	x		No					
Filters	x		On					
Low Filter	x		2 Hz					
High Filter	x		70 Hz					
Notch Filter	x		On					
High Limit	x		70					
Low Limit	x		20					
Alarms	x		On					
Cont. Imp. Check	x		not applicable, this is not a setting, see "BIS Configuration Implications"					
Smoothing Rate	x		30 sec			15 sec		
Color	x		Yellow			Magenta		
BIS	x	x	not applicable, the BIS On/Off state is not a setting, see "BIS Configuration Implications".					

1.Numeric available with BISx module only.

BIS Configuration Implications

EMG This setting lets you switch the **EMG** numeric **On** or **Off**. The **EMG** (Electromyographic Activity) numeric reflects the electrical power of muscle activity and high frequency artifacts.

SR lets you switch the **SR** numeric **On** or **Off**. The **SR** (Suppression Ratio) is the percentage of time over the last 63-second period during which the EEG is considered to be in a suppressed state.

Bursts lets you switch the **Bursts** numeric **On** or **Off**. To configure this setting, you must disconnect the BIS/BISx Engine from the BIS module. The **Bursts** numeric helps you quantify suppression by measuring the number of EEG bursts per minute, where an EEG burst is defined as a period of activity followed and preceded by inactivity (at least 0.5 second).

SEF lets you switch the **SEF** numeric **On** or **Off**. The **SEF** (Spectral Edge Frequency) is the frequency below which 95% of the Total Power is measured.

TP lets you switch the **TP** numeric **On** or **Off**. The **TP** (Total Power) numeric indicates the power in the frequency band 0.5 to 30 Hz. The useful range is 30 - 100 dB.

Scales / Gridlines When **Gridlines** are switched **Off**, you can choose from the available scale values: 50 µV, 100 µV, 200 µV, and 500 µV. Scaling information is displayed as a vertical bar on the EEG wave together with its height equivalent in µV.
When **Gridlines** are switched **On**, scales are defined as a range, either ± 25 µV, ± 50 µV, ± 100 µV, or ± 250 µV. Scaling information is shown in the form of gridlines.

Low Filter / High Filter / Notch Filter These settings let you apply filters to the raw EEG wave. The **Low Filter** and the **High Filter** screen out undesirable interference from the raw EEG wave display. The **Notch Filter** removes line frequency interference. Filter settings affect the EEG wave and the SEF and TP values, but they do not affect the BIS, EMG, SR, and SQI values.

Cont. Imp. Check This setting can be temporarily changed in monitoring mode, but the changes cannot be permanently stored in config mode. The default is **On**. The current setting is kept in the monitor's buffered memory and retained for a max of 60 sec after the monitor is switched off. If the monitor is switched off for more than 60 sec, **Cont. Imp. Check** will be reset to **On**.

Smoothing Rate This setting lets you define how the monitor averages the BIS value. Set this to **15 Sec** to increase responsiveness to changes in the patient's state. If set to **30 Sec**, the BIS trend will be smoother with decreased variability and sensitivity to artifacts.

BIS The On/Off state of the BIS measurement cannot be preconfigured. BIS measurements are automatically switched On when an BIS transducer is connected to the monitor.

Configuring Temperature

When an MMS is connected to the monitor for the first time, it uses the default Temperature label **Temp**.

When a Measurement Extension Module is connected for the first time, the Temp label used for the combined Pressure/Temp connector is **Trect**, the label used for the single Temp connector is **Tskin**; plug-in Temperature modules use the label **Temp**. If you then change the Temp label, the information will be automatically stored and each device will remember the new label the next time they are reconnected.

The configuration settings for Temperature can be set individually for each Temp label. The selection of labels depends on the configured **Label Set**, see "Configuring General Global Settings" on page 147.

Temp, Trect, Tcore, Tskin, Tesoph, Tnaso, Tart, Tven, Tvesic, Ttymp, Tcereb, Tamb, T1, T2, T3, T4 Settings

`Measurement Settings: Main Setup -> Measurements -> <Temp Label>`

Factory Defaults									
Item Name	Oper. Mode		MP5 - MP90 (H10/20/40) MP2/X2			MP5 - MP90 (H30)			MP2/X2
	C	M	Profile Adult	Profile Pedi	Profile Neo	Profile Adult	Profile Pedi	Profile Neo	Profile Outdoor
High Limit	x	x	39						
Low Limit	x	x	36			35			36
Alarms	x	x	On						
Temp *(or other label)*	x	x	not applicable, the Temp On/Off state is not a setting, see "Temp Configuration Implications" on page 73.						
Unit	x		^{0}C						
Range	x		35...43						
Color	x		Green			Light Green			White

See "Configuring C.O. (Cardiac Output)" on page 55 for Tblood settings. Tinj has no settings. Taway is sourced from a VueLink or IntelliBridge plug-in module, therefore no settings can be changed.

Temp Configuration Implications

`<Temp Label>` The `On/Off` state of the Temp measurement cannot be preconfigured. The Temp measurement is automatically switched `On` when a Temp probe is connected to a Temp socket on the monitor.

`Unit` Lets you select the temperature unit for the temperature label.

`Range` This setting defines the measurement range for the temperature label. Available choices are `1...45`, `11...45`, and `35...43`.
The configured `Range` is used for the horizon screen trend application. When a temperature is viewed as horizon trend,

- the high end of the `Range` defines the maximum temperature that can be selected in the related Screen Trend menu under `Set High Horizon`,

- the low end of the `Range` defines the minimum temperature that can be selected in the related Screen Trend menu under `Set Low Horizon`.

Configuring Predictive Temp

MP5/
MP5T
only

pToral, pTaxil, pTrect Settings

`Measurement Settings: Main Setup -> Measurements -> <pTemp Label>`

Factory Defaults					
Item Name	Oper. Mode		MP5 / MP5T		
	C	M	Profile Adult	Profile Pedi	Profile Neo
Label	x	x	not applicable, the 'Label' is not a setting, see "Predictive Temp Configuration Implications".		
Value Lifetime	x	x	1 h		
Mode	x	x	not applicable, 'the Mode' is not a setting, see "Predictive Temp Configuration Implications".		
Prompt Tones	x		On		
Unit	x		°C		
Color	x		Yellow		
Preferred Label	x		pToral		
pToral *(or other label)*	x	x	not applicable, the Predictive Temp On/Off state is not a setting, see "Predictive Temp Configuration Implications".		

Predictive Temp Configuration Implications

Label Lets you select the label you want to configure. This is not a setting and cannot be preconfigured.

Value Lifetime Lets you configure the life time of a predicted temp value. After the configured life time, a predictively measured Temp value disappears from the monitor screen, as well as from the screen of a connected Information Center. This setting applies to all predictive temp labels.

Mode Lets you switch between **Continuous** and **Predictive** measurement mode. This switch only applies when monitoring, it is not a setting and cannot be preconfigured. See the IntelliVue Instructions for Use for more detail.

Prompt Tones Set this to **On** if you want the monitor to indicate when it is ready for a new measurement and when a measurement is finished by a prompt message and a prompt tone.

Unit Lets you select the temperature unit.

Preferred Label Lets you configure which predictive temp label the monitor will use when one of the following circumstances occurs:

• an oral or axillary probe is connected after a rectal probe has been used before,

• the patient is discharged,

• a coldstart is performed.

<PTemp Label> The **On/Off** state of the predictive temp measurement cannot be preconfigured. It is automatically switched **On** when a predictive temp sensor is connected to the monitor.

Configuring ΔTemp (Temperature Difference)

`Measurement Settings: Main Setup -> Measurements -> ΔTemp`

ΔTemp is a derived measurement.

Item Name	Oper. Mode		MP2 - MP90 X2			MP5T MP5 (B10/B11/B14)			MP2/X2
	C	M	Profile Adult	Profile Pedi	Profile Neo	Profile Adult	Profile Pedi	Profile Neo	Profile Outdoor
First Temp	x	x	Trect						
Second Temp	x	x	Tblood						
ΔTemp	x	x	Off						
Measurement	x		Enabled			Disabled			*Enabled*
Color	x		Green						White

ΔTemp Configuration Implications

First Temp/Second Temp This setting is only available when **Measurement** is **Enabled**. It lets you select two temperature labels to calculate the temperature difference. Note that none of Predictive Temp labels can be selected for the ΔTemp calculation.
The formula used to calculate ΔTemp is: ΔTemp = First Temp - Second Temp.

ΔTemp / Measurement If Measurement is set to **Enabled**, the monitor automatically switches the ΔTemp measurement **On** when both configured Temp sources are available. The user can still switch **Off** ΔTemp in monitoring mode.
Set **Measurement** to **Disabled**, if you want the ΔTemp measurement to be permanently disabled, which means that in monitoring mode it will not be possible to switch ΔTemp **On**.

Configuring VueLink

MP40-90 only `Measurement Setting: Main Setup -> Measurements -> VueLink X (or Device Name)`

Factory Defaults								
Item Name	Oper. Mode		MP40 - MP90 (H10/20/40)			MP40 - MP90 (H30)		
	C	M	Profile Adult	Profile Pedi	Profile Neo	Profile Adult	Profile Pedi	Profile Neo
Device Alarms	x		Accepted			Ignored		
Default Color	x		Green					

VueLink Configuration Implications

`Device Alarms` The VueLink module itself generates INOPs, but does not generate alarms. If the external device's alarms are on, the module transmits these to the monitor. `Device Alarms` lets you select whether these alarms are indicated on the monitor (`Accepted`) or `Ignored`.
Note that the setting `Device Alarms` is not cloned between monitors. If you clone configurations between IntelliVue monitors with VueLink plug-in modules, you must check that these settings are correct and adjust them according to customer specifications, if needed.

`Default Color` The default color is the color used for any numerics that are not linked to a particular wave, and for any waves for which no color is specifically configured. Note that this setting is not cloned between monitors. If you clone configurations between IntelliVue monitors with VueLink plug-in modules, you must check that these settings are correct and adjust them according to customer specifications, if needed.

`<Other Settings>` All other VueLink settings are specific to the individual driver. They are stored in the VueLink module and cannot be stored in the monitor configuration. See the documentation supplied with the VueLink module for configuration information.

Configuring IntelliBridge

MP40-90 only The default settings for the IntelliBridge (EC10) plug-in module and their configuration implications are specific to individual IntelliBridge drivers. They are stored in the IntelliBridge EC10 module and cannot be stored in the monitor configuration. See the documentation supplied with the IntelliBridge EC10 module and the related IntelliBridge Device Driver Instructions for Use.

Configuring the Gas Analyzer

MP5-90 option H30 only ### General Gas Analyzer Settings

`Measurement Settings: Main Setup -> GM (AGM)`

All gas analyzer settings are available on monitors with option H30 only. The MP5 does not support the AGM (M1026A/B).

Factory Defaults					
Item Name	**Oper. Mode**		**MP5 - MP90 (H30)**		
	C	**M**	**Profile Adult**	**Profile Pedi**	**Profile Neo**
Agent[1]	x	x	ISO		
CO_2	x	x	not a setting, see "Configuring CO2 from Gas Analyzer" on page 81		
awRR	x	x	not a setting, see "Configuring awRR from Gas Analyzer (Airway Respiration Rate)" on page 82		
O_2	x	x	not a setting, see "O2 Settings" on page 77		
N_2O	x	x	not a setting, see "N2O (Nitrous Oxide) Settings" on page 78		
ISO[1]	x	x	not a setting, see "ISO (Isofluran) Settings" on page 79		
AGT[2]	x	x	not a setting, see "AGT / AGT1 / AGT2 Settings" on page 78		
AGT1[3]	x	x	not a setting, see "AGT / AGT1 / AGT2 Settings" on page 78		
AGT2[3]	x	x	not a setting, see "AGT / AGT1 / AGT2 Settings" on page 78		

Factory Defaults					
Item Name	Oper. Mode		MP5 - MP90 (H30)		
	C	M	Profile Adult	Profile Pedi	Profile Neo
MAC	x	x	not a setting, see "Configuring MAC (Minimum Alveolar Concentration)" on page 83		
No Al. til Breath	x		On		
AutoStandbyAfter	x		120		
Setup Agent[1/3]	x		not a setting, see "General Gas Analyzer Configuration Implications" on page 77		

1.Setting only available when using a G1 (M1013A).
2.Setting only available when using an AGM (M1026A/B).
3.Setting only available when using a G5 (M1019A).

General Gas Analyzer Configuration Implications

Agent This setting is available when using the M1013A IntelliVue G1 only. It lets you select the agent that will be analyzed by the M1013A.

Setup Agent This operation is available when using the M1013A IntelliVue G1 and the M1019A IntelliVue G5 only. To configure the individual settings for each anesthetic gas for the IntelliVue G1 and G5, select **Setup Agent**, and then in the Setup Agent menu, select the agent and adjust the settings as needed.

No Al. til Breath If set to set **On**, the monitor suppresses alarms from the Gas Analyzer until it detects that a patient has been connected to the gas analyzer (when breathing is detected).

AutoStandbyAfter This setting defines the time after which the gas analyzer automatically goes into Standby when no breath is detected. During Standby, the gas analyzer's gas sample intake pump and other internal components are automatically switched off to increase the lifetime of the device. The message GM (or AGM) STANDBY is shown on the monitor.

O_2 Settings

Measurement Settings: Main Setup -> GM (or AGM) -> O_2

Factory Defaults					
Item Name	Oper. Mode		MP5 - MP90 (H30)		
	C	M	Profile Adult	Profile Pedi	Profile Neo
inO$_2$ High	x	x	100%		
inO$_2$ Low	x	x	18%		
inO$_2$ Alarms	x	x	On		
O$_2$	x	x	et + in		
Scale	x	x	100		
Unit	x		%		
Color	x		Green		

N$_2$O (Nitrous Oxide) Settings

`Measurement Settings: Main Setup -> GM (or AGM)-> N`$_2$`O`

Factory Defaults					
Item Name	**Oper. Mode**		**MP5 - MP90 (H30)**		
	C	**M**	**Profile Adult**	**Profile Pedi**	**Profile Neo**
inN$_2$O High	x	x	80%		
inN$_2$O Alarm	x	x	On		
N$_2$O	x	x	et + in		
Scale	x	x	60		
Unit	x		%		
Color	x		Blue		

AGT / AGT1 / AGT2 Settings

`Measurement Settings: Main Setup -> GM (or AGM) -> AGT (AGT1, AGT2)`

Factory Defaults					
Item Name	**Oper. Mode**		**MP5 - MP90 (H30)**		
	C	**M**	**Profile Adult**	**Profile Pedi**	**Profile Neo**
Agent Channel	x	x	et + in		
Agent Id[1]	x	x	Automatic		

1. Setting only available when using an AGM (M1026A/B).

AGT / AGT1 / AGT2 Configuration Implications

`Agent Channel` This setting lets you define which numerics are displayed with any anesthetic agent waveform on the screen.

- **`et`** displays the endtidal numerics,
- **`in`** displays the inspiratory numerics,
- **`et+in`** displays both endtidal and inspiratory numerics.
- **`Off`** switches off the anesthetic gas measurement. No waveforms or numerics will be shown for anesthetic gases, and no alarms will be generated.

`Agent Id` This setting is available for the M1026A/B AGM only. Setting **`Agent Id`** to **`Manual`** requires that the user manually chooses the correct anesthetic agent during monitoring. If set to **`Automatic`**, the gas analyzer automatically identifies the predominant anesthetic agent in the breathing circuit. To configure the individual settings for each anesthetic gas for the M1026A/B AGM, you must first set **`Agent ID`** to **`Manual`**. This allows you to select the individual gases. If you use **`Manual`** agent identification, the agent that was selected last will become the default agent. If you want to use **`Automatic`** agent identification, make sure to switch Agent ID back to **`Automatic`** when you are done.

HAL (Halothan) Settings

```
Main Setup -> GM -> Setup Agent -> HAL

Main Setup -> AGM -> HAL
```

Factory Defaults					
Item Name	**Oper. Mode**		**MP5 - MP90 (H30)**		
	C	**M**	**Profile Adult**	**Profile Pedi**	**Profile Neo**
inHAL High	x	x	2.0%		
inHAL Low	x	x	0.0%		
inHAL Alarms	x	x	On		
etHAL High	x	x	1.6%		
etHAL Low	x	x	0.0%		
etHAL Alarms	x	x	On		
Scale	x	x	2.0		
Unit	x		%		
Color	x		Red		

ISO (Isofluran) Settings

```
Measurement Settings:

Main Setup -> GM -> Setup Agent -> ISO

Main Setup -> AGM -> ISO
```

Factory Defaults					
Item Name	**Oper. Mode**		**MP5 - MP90 (H30)**		
	C	**M**	**Profile Adult**	**Profile Pedi**	**Profile Neo**
inISO High	x	x	3.0%		
inISO Low	x	x	0.0%		
inISO Alarms	x	x	On		
etISO High	x	x	2.5%		
etISO Low	x	x	0.0%		
etISO Alarms	x	x	On		
Scale	x	x	3.0		
Unit	x		%		
Color	x		Magenta		

ENF (Enfluran) Settings

`Measurement Settings:`

`Main Setup -> GM -> Setup Agent -> ENF`

`Main Setup -> AGM -> ENF`

Factory Defaults					
Item Name	**Oper. Mode**		**MP5 - MP90 (H30)**		
	C	**M**	**Profile Adult**	**Profile Pedi**	**Profile Neo**
inENF High	x	x	4.0%		
inENF Low	x	x	0.0%		
inENF Alarms	x	x	On		
etENF High	x	x	3.3%		
etENF Low	x	x	0.0%		
etENF Alarms	x	x	On		
Scale	x	x	4.0		
Unit	x		%		
Color	x		Orange		

SEV (Sevofluran) Settings

`Measurement Settings:`

`Main Setup -> GM -> Setup Agent -> SEV`

`Main Setup -> AGM -> SEV`

Factory Defaults					
Item Name	**Oper. Mode**		**MP5 - MP90 (H30)**		
	C	**M**	**Profile Adult**	**Profile Pedi**	**Profile Neo**
inSEV High	x	x	6.0%		
inSEV Low	x	x	0.0%		
inSEV Alarms	x	x	On		
etSEV High	x	x	5.0%		
etSEV Low	x	x	0.0%		
etSEV Alarms	x	x	On		
Scale	x	x	6.0		
Unit	x		%		
Color	x		Yellow		

DES (Desfluran) Settings

```
Measurement Settings:

Main Setup -> GM -> Setup Agent -> DES

Main Setup -> AGM -> DES
```

Factory Defaults					
Item Name	**Oper. Mode**		**MP5 - MP90 (H30)**		
	C	**M**	**Profile Adult**	**Profile Pedi**	**Profile Neo**
inDES High	x	x	15.0%		
inDES Low	x	x	0.0%		
inDES Alarms	x	x	On		
etDES High	x	x	10.0%		
etDES Low	x	x	0.0%		
etDES Alarms	x	x	On		
Scale	x	x	15.0		
Unit	x		%		
Color	x		Cyan		

Configuring CO_2 from Gas Analyzer

MP5-90 only
```
Measurement Settings: Main Setup -> GM (or AGM) -> CO2
```
CO_2 can be measured by an anesthetic gas analyzer (AGM, G1, or G5), measurement extension modules (Microstream, Sidestream, or Mainstream), or the integrated CO_2 measurement in the MP5. The settings listed in this section only apply to CO_2 measured by an anesthetic gas analyzer.

Factory Defaults					
Item Name	**Oper. Mode**		**MP5 - MP90 (H30)**		
	C	**M**	**Profile Adult**	**Profile Pedi**	**Profile Neo**
etCO$_2$ High	x	x	60 mmHg		
etCO$_2$ Low	x	x	25 mmHg		
etCO$_2$ Alarms	x	x	On		
imCO$_2$ High	x	x	4 mmHg		
imCO$_2$ Alarm	x	x	Off		
CO$_2$	x	x	et + im		
Scale	x	x	50 mmHg		
Unit	x		mmHg		
Color	x		White		
Humidity Corr.	x		Wet		

Gas Analyzer CO$_2$ Configuration Implications

`Humidity Corr.` This setting determines the method used to correct the influence of water vapor in the patient's breath on the CO$_2$ reading. The options are `Wet` or `Dry`. Setting `HumidtyCorr` to `Wet` takes the partial pressure contributed by the water vapor into consideration and therefore results in lower CO$_2$ readings when compared to `DRY`. For an exact definition and the formula used, see the section on "Measurement Specifications" in the "Installation and Specifications" chapter of the Gas Analyzer Instructions for Use.

Configuring awRR from Gas Analyzer (Airway Respiration Rate)

MP5-90 only   `Measurement Settings: Main Setup -> GM (or AGM) -> awRR`

AwRR can be derived from the CO$_2$ measured by an anesthetic gas analyzer (AGM, G1, or G5), or by any of the CO$_2$ measurement extension modules (Microstream, Sidestream, or Mainstream), or by the integrated CO$_2$ measurement in the MP5. The settings listed in this section only apply for the awRR derived from an anesthetic gas analyzer.

Factory Defaults					
Item Name	**Oper. Mode**		**MP5 - MP90 (H30)**		
	C	**M**	**Profile Adult**	**Profile Pedi**	**Profile Neo**
High Limit	x	x	40 rpm		60 rpm
Low Limit	x	x	8 rpm		30 rpm
Apnea Time	x	x	40 sec		
Alarms	x	x	On		
awRR	x	x	On		

awRR Configuration Implications

`Apnea Time` The apnea alarm is a high priority red alarm used to detect apneas. The `Apnea Time` defines the time period between the point where the monitor cannot detect any respiration activity and the indication of the apnea alarm.

`awRR` This setting lets you switch the awRR measurement from the Gas Analyzer `On` or `Off`.

Configuring MAC (Minimum Alveolar Concentration)

MP5-90 only   `Measurement Settings: Main Setup -> GM (or AGM) -> MAC`

Factory Defaults					
Item Name	Oper. Mode		MP5 - MP90 (H30)		
	C	M	Profile Adult	Profile Pedi	Profile Neo
MAC	x	x	Off		
MACawk[1]	x	x	Off		
Correction[1]	x		Off		
Color	x		White		

1. Setting not available in the U.S.A. or in clinical environments under FDA control. MAC correction is switched off and MACawk value is not available.

MAC Configuration Implications

The **MAC** (Minimum Alveolar Concentration) value of an anesthetic gas or agent denotes the concentration at which 50% of a population of anesthetized patients do not respond with movement to a painful stimulus. The **MACawk** (MAC awake) represents the concentration at which 50% of a population of anesthetized patients responds to verbal command.

MAC Determines whether the MAC numeric is displayed or not.

Correction The IntelliVue monitor offers three methods of MAC calculation:

- Uncorrected MAC (Off)

- Ambient Pressure corrected MAC

  (not available in the U.S.A or in clinical environments under FDA control.)

- Enhanced MAC Correction

  (not available in the U.S.A. or in clinical environments under FDA control)

If **Correction** is set to **Off**, the uncorrected MAC is calculated, i.e the MAC value is not corrected for ambient pressure, age, temperature or any other individual factors influencing the effect of volatile anesthetic agents.
If **Correction** is set to **Amb. Pressure**, the MAC is corrected for the ambient pressure measured during the last zero calibration.
If **Correction** is set to **Enhanced**, the MAC value is corrected for the patient's age and temperature, and the ambient pressure measured during the last zero calibration.
The age is derived from the **Date Of Birth** entry in the Patient Demographics window.
The temperature is taken from the currently measured value for one of the following temperature labels: **Tcore**, or **Tblood.**

MACawk Determines whether the MAC awake numeric is displayed or not. The **MACawk** numeric can only be calculated if **Correction** is configured to **Enhanced**.

Monitor Settings

This section lists all the settings grouped in the Monitor Settings Block. Read any information on configuration implications at the end of the relevant tables before you make any configuration changes.

Understanding Monitor Settings

What sets monitor settings apart from measurement settings is that they are not specific to one measurement. Monitor settings affect the general behavior of the monitor.
Alarm settings are a good example to help you understand the difference between monitor and measurement settings: general alarm settings, such as Alarm Volume or the Alarms Off time are monitor settings. They determine the monitor's general alarming behavior. Individual alarm limits that can be set individually for each measurement are measurement settings. They only affect the selected measurement.

The IntelliVue patient monitor uses two categories of monitor settings: normal and unique monitor settings. **Normal** monitor settings can be configured differently for different monitor settings blocks (e.g. Monitor A, Monitor B). **Unique** monitor settings cannot be configured differently. They are the same in each monitor settings block and are automatically included in all monitor settings blocks when you store them to one block.

The following table provides an overview of normal vs. unique monitor settings:

Monitor Settings			
Normal	**Page**	**Unique**	**Page**
Alarms	85	Trend Groups	119
Alarm Recordings	88	Trend Priorities	122
Auto Alarm Limits	89	Trend Scales / Trend Units	123
INOP Severity	90	Event Surveillance	126
Screen Trend Settings	91	Event Annotations	133
Horizon Trend Settings	92	ProtocolWatch	134
Global Trend Style	93	Recordings (except Vital Signs & Alarm Rec.)	135
Trend Windows	93	Timers	139
Trend Recordings	95	Global SmartKeys, Function Keys	143
ST Map	95	CSA Buffers	145
C.O. Window	96	Drug Calculator	146
Wedge Window	97		
Loops Window	97		
CSA Window	98		
ECG Application	99		
Calculations (except Drug Calc.)	100		
Reports	101		
Other Report Settings	105		
Auto Reports	106		
ECG Reports	108		
CSA Reports	108		
Trend Reports	109		
User Interface (except Keys)	110		
Network	115		

Configuring Alarms

```
Monitor Setting: Main Setup -> Alarms -> Alarm Settings
```

Factory Defaults					
Item Name	**Oper. Mode**		**MP5 - MP90 (H10/20/40) MP2/X2**	**MP5 - MP90 (H30)**	**MP2/X2**
	C	**M**	**Profile Adult Profile Pedi Profile Neo**	**Profile Adult Profile Pedi Profile Neo**	**Profile Outdoor**
Alarm Volume	x	x	5		7
Alarms Off	x		2 min		
Pause Al. 5Min	x		Enabled		
Pause Al. 10Min	x		Enabled		
Auto Alarms Off	x		Disabled		
AlarmOffReminder	x		Off		
Visual Latching	x		Red&Yell	Red Only	*Red&Yell*
Audible Latching	x		Red&Yell	Off	*Red&Yell*
Alarm Reminder	x		On		
Reminder Time	x		3 min		
Alarm Sounds	x		Traditional		
RedAlarmInterval	x		10 sec		
Yel. Al. Interval	x		20 sec		
Alarm Low	x		4	2	*4*
Red Alarm Volume	x		AlarmVol+2		
Yell. Alarm Volume	x		AlarmVol+0		
Inop Volume	x		AlarmVol+0		
AutoIncrease Vol.	x		2 Steps		
IncreaseVolDelay	x		20 sec		
Keep Blinking	x		No		
Relay1 Sensitiv.	x		R & Y & I		
Relay2 Sensitiv.	x		Red &Yell		
Relay3 Sensitiv.	x		Red		
CyanRelayLatency	x		5 sec		
Yel. RelayLatency	x		2 sec		
Alarm Text	x		Standard		
NoCentrMonMinVol	x		4		
LED Brightness	x		High		

Alarm Settings Configuration Implications

`Alarm Volume` Use this setting to define the base volume of the red and yellow audible alarm indicators and the INOP tones.

`Alarms Off` Use this setting to determine how long the monitor's alarm capabilities will be switched off when the user selects the **`Alarms Off`** or **`Pause Alarms`** key. Possible choices are: **`1min`**, **`2min`**, **`3min`**, **`Infinite`**. Be aware that if you configure **`Alarms Off`** to **`Infinite`**, all of the monitor's alarming capabilities will be permanently switched off when the user selects the **`Alarms Off`** key. It is not recommended to configure **`Alarms Off`** to **`Infinite`** in monitors that can be used as companion devices to a host monitor, such as the X2 or MP5.

`Pause Al. 5 Min / Pause Al. 10 Min` If these settings are enabled, the user can extend the alarm pause to 5/10 minutes. If **`Alarms Off`** is set to **`Infinite`**, these settings are automatically disabled.

`Alarm Low` Use this setting to define a minimum value for the alarm volume. The alarm volume cannot be set lower than this value.

`Red Alarm Volume / Yell. AlarmVolume/Inop Volume` Use these settings to set the alarm volume level for each alarm type relative to the (base) volume selected under **`Alarm Volume`**. Available choices are: **`AlarmVol+1`**, **`AlarmVol+2`**, **`AlarmVol+3.`**

`Auto Alarms Off` This setting can be used to switch off the monitor's alarming capabilities if no vital parameters are left with alarms switched On. The recommended value for this settings is **`Disabled`**.

WARNING If you configure the setting **`Auto Alarms Off`** to **`Enabled`**, the monitor will automatically switch off its alarming capabilities if the user turns Off the individual alarms for all **vital parameters** (see below) that are currently activated and switched On.

The following measurements are considered **vital parameters**:

- ECG/Pulse
- RR/awRR
- All invasive blood pressure (for example ABP, ART, CVP, PAP)
- SpO_2
- $etCO_2$

`AlarmOffReminder` If this setting is enabled, the monitor issues a short reminder tone every three minutes when all alarms have been switched off (by selecting the **`Alarms Off/Pause Alarms`** SmartKey), or if the alarms for the following measurements have been switched off individually: ECG/Pulse, RR/awRR, all invasive blood pressures, SpO_2, $etCO_2$.

`Visual Latching / Audible Latching` The visual and audible latching settings can affect the arrhythmia alarm sounds. Both **`Visual Latching`** and **`Audible Latching`** should be set to **`Red`** or **`Red and Yellow`** if arrhythmia is on.

If the monitor is connected to an Information Center, both **`Visual Latching`** and **`Audible Latching`** should be set to **`Red&Yell`** to enable alarms to be silenced at the Information Center.

Alarm Reminder   Use this setting to define how alarm indications behave if alarm conditions remain active after they have been acknowledged:

– **On**: After the configured **Reminder Time**, the alarm tone is repeated for a limited time (6 seconds).

– **ReAlarm**: After the **Reminder Time** the alarm tone is repeated continuously (this is the same as a new alarm).

– **Off**: No Alarm Reminder is issued.

Reminder Time   Use this setting to define the interval between acknowledging an alarm and issuing an alarm reminder. The choices available are 1, 2, or 3 minutes.

Alarm Sounds   Use this setting to change the alarm sound of the monitor to suit the alarm standards valid in your hospital.

– **Traditional**: The traditional ("Carenet") sounds used in previous HP/Agilent/Philips patient monitor generations.

– **ISO**: A new set of alarm sounds that complies with the ISO/IEC Standard 9703-2.

RedAlarmInterval / Yel. Al. Interval   Use this setting to define the interval between alarm sounds (ISO alarm sounds only). The choices available are 5, 10, or 15 seconds for red alarms, and 10, 20,or 30 seconds for yellow alarms.

Auto Increase Vol   Use this setting to define how the alarm volume of unacknowledged alarms behaves.

– **1 Step**: After the time defined by **Increase Volume Delay**, the alarm volume is increased by one volume step.

– **2 Step**: After the time defined by **Increase Volume Delay**, the alarm volume is increased by two volume steps.

– **Off**: The Alarm Volume of unacknowledged alarms does not change.

Increase Volume Delay   Use this setting to define the interval after which the alarm volume increases in steps.

Keep Blinking   Use this setting to specify whether the numerics that are in an active alarm condition keep flashing even if all alarms are off or paused, or if individual alarms are switched off.

(Nurse Call) RelayX Sensitivity   The **RelayX Sensitivity** setting defines the alarm or INOP conditions that will trigger an alarm on nurse call relay. Only serious INOPs (that are indicated with an INOP tone at the monitor) are indicated on the nurse call relay. The nurse call relay follows the status of the monitor alarms, e.g. when the alarms are switched off at the monitor, no alarms will be indicated on the nurse call relay.

When you use a nurse call relay that is connected to the traditional nurse call connector (phone jack), only **Relay 1 Sensitivity** must be specified.

INOPRelayLatency / Yel.RelayLatency   Use this setting to define how long a yellow alarm or INOP condition must be active before an alarm is issued on any device connected to the alarm relay. These settings are valid for all serious INOP conditions/all yellow alarms respectively.

Alarm Text   Use this setting to define how alarm messages are presented on the monitor screen:

– **Standard**: Alarm texts are displayed in text form, for example ** **Spo2 LOW**

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– **Extended**: Alarm texts are displayed as numeric values, for example, ** **Spo2 94 < 96**, where the second number shows the current alarm limit, and the first number shows the maximum amount by which this limit was exceeded.

NoCentrMonMinVol If your monitor is connected to an IntelliVue Information Center, and the connection is interrupted, the INOP message **No Central Monit.** will appear, accompanied by an INOP tone. To help ensure that this INOP, and any other active alarm, is not overlooked, the INOP and alarm tones may be configured to have a minimum volume. In this case, INOP and alarm tones will sound even if the monitor alarm volume is set to zero.

LED Brightness lets you configure the brightness of the alarm lamps. Three choices are available: **High**, **Medium**, and **Low**.

Alarm Behavior (For Assistance Publique in France only)

To achieve the behavior required by the Assistance Publique in France, you must configure the settings listed below to the values given in the table:

Item Name	French Alarm Behavior	Comment
Alarm Source	ECG	See "Configuring ECG/Pulse Alarms" on page 33.
Alarm Source Selection	Disabled	
Alarms Off	Disabled, by setting to 1 or 2 or 3 min (not infinite)	See "Configuring Alarms" on page 85.
Pause Al. 5Min	Disabled	
Pause Al. 10Min	Disabled	
Auto Alarms Off	Enabled	
Alarm OffRemind.	On	
Visual Latching	Red&Yell	
Audible Latching	Red&Yell	
Alarm Reminder	ReAlarm or On	
Alarm Rem. Time	1 or 2 or 3 min	
Alarm Low	>= 1	
Keep Blinking	Yes	

Configuring Alarm Recordings

Monitor Setting: Main Setup -> Alarms -> Alarm Recording

Factory Defaults				
Item Name	Oper. Mode		MP5 - MP90 (H10/20/40) MP5T MP2/X2	MP5 - MP90 (H30)
	C	M		
HR	x	x	Off	Red Only
PVC	x	x	Off	Red Only
ST	x	x	Off	
QT	x	x	Off	
SpO$_2$	x	x	Off	

Factory Defaults				
Item Name	**Oper. Mode**		**MP5 - MP90 (H10/20/40)** **MP5T**	**MP5 - MP90 (H30)**
	C	**M**	**MP2/X2**	
Pulse	x	x	Off	
Press	x	x	Off	
NBP	x	x	Off	
CCO	x	x	Off	
CO_2	x	x	Off	
awRR	x	x	Off	
O_2	x	x	Off	
Resp	x	x	Off	
tcGas	x	x	Off	
Temp	x	x	Off	
$N_2 0$	x	x	Off	
Agent	x	x	Off	
VueLnk	x	x	Off	

Alarm Recording Settings Configuration Implications

<Measurement> If you set a **<Measurement>** to **Red Only**, an alarm recording will automatically be triggered when the measurement enters a red alarm condition. If you set it to **Red&Yell**, both yellow and red alarms will trigger an alarm recording for that measurement.

Configuring Auto Alarm Limits

Monitor Setting: Main Setup -> Alarms -> Setup AutoLimits

Factory Defaults			
Item Name	**Oper. Mode**		**MP2 - MP90** **MP5T**
	C	**M**	**X2**
All	x		Enabled
HR	x		Enabled
ST	x		Enabled
SpO_2	x		Enabled
Pulse	x		Enabled
Press	x		Enabled
NBP	x		Enabled
CO_2	x		Enabled
awRR	x		Enabled
O_2	x		Enabled
RR	x		Enabled

Factory Defaults			
Item Name	**Oper. Mode**		**MP2 - MP90** **MP5T**
	C	**M**	**X2**
tcGas	x		Enabled
Temp	x		Enabled
N_2	x		Enabled
N_2O	x		Enabled
Agent	x		Enabled

Alarm AutoLimits Settings Configuration Implications

All Set this to **Disabled** if you do not want the user to be able to apply AutoLimits to all enabled measurements at once by using the **All Lim. Narrow** or **All Lim. Wide** pop-up keys in the Alarm Limits window.

<Measurement> If you set a **<Measurement>** to **Disabled**, AutoLimits cannot be applied to this measurement.

Configuring INOP Severity

Monitor Setting: Main Setup -> Alarms -> Inop Severity

Factory Defaults					
Item Name	**Oper. Mode**		**MP20 - MP90**	**MP5, MP5T**	**MP2/X2**
	C	**M**			
ECG Leads Off	x		Cyan		
Replace TeleBatt	x		Cyan		
Tele Disconnect.	x		Cyan		
Cuff Overpress	x		Cyan		
Cuff NotDeflated	x		Cyan		
Occlusion	x		Cyan		

INOP Severity Settings Configuration Implications

ECG Leads Off Set **ECG Leads Off** to **Yellow** or **Red** if you want the "ECG Leads Off" INOP to be signaled as a yellow or red INOP. This INOP alerts the clinician when not all required leads for ECG monitoring are attached to the patient. If, after a discharge, no ECG has been measured yet, the INOP severity will be **Cyan** regardless of the configuration. Once a valid ECG has been received, the severity will behave as configured.

Replace TeleBatt Set **Replace TeleBatt** to **Yellow** or **Red** if you want the "Replace Battery T" INOP to be signaled as a yellow or red INOP. This INOP alerts the clinician when a telemetry device is directly connected (via cable or short-range radio connection) to a monitor and the battery in the telemetry device is almost empty and must be replaced. Note that if a telemetry device is paired with a monitor without a direct connection, the severity of the "Replace Battery T" INOP is controlled by the Information Center.

Tele Disconnect. Set **Tele Disconnect.** to **Yellow** or **Red** if you want the "Tele Disconnect." INOP to be signaled as a yellow or red INOP. This INOP alerts the clinician when the connection between the monitor and the telemetry device is interrupted.

Cuff Overpress Set **Cuff Overpress** to **Yellow** or **Red** if you want the "Cuff Overpress" INOP to be signaled as a yellow or red INOP. This INOP alerts the clinician when the NBP cuff pressure exceeds the overpressure safety limits.

Cuff NotDeflated Set **Cuff NotDeflated** to **Yellow** or **Red** if you want the "Cuff NotDeflated" INOP to be signaled as a yellow or red INOP. This INOP alerts the clinician when the NBP cuff pressure has exceeded 15mmHg (2kPa) for more than 3 minutes for Adult or pediatric patients, or the cuff pressure has exceeded 5mmHg (0.7kPa) for more than 90 seconds (for neonatal patients).

Occlusion Set **Occlusion** to **Yellow** or **Red** if you want the INOPs "CO_2 Occclusion" and "<Gas Analyzer> Occclusion" to be signaled as a yellow or red INOP. These INOPs alert the clinician when the sample line or exhaust line tubing is blocked.

Configuring Screen Trend Settings

Monitor Setting: Main Setup -> Trends

Factory Defaults			
Item Name	**Oper. Mode**		**MP2 - MP90** **MP5T**
	C	**M**	**X2**
ScreenTrend Time	x	x	30 min
HorizonArrowTime	x	x	10 min

Screen Trend Configuration Implications

ScreenTrend Time Use this setting to set the Screen Trend Time for all graphical and horizon screen trends. Choices are: **30min**, **1h**, **2h**, **4h**, **8h**, or **12h**.
This is the Global screen trend time. This setting can be overridden by the **Change TrendTime** configuration (see "Configuring Screen Trends" on page 22) which lets the user set a different ScreenTrend Time for a particular screen trend channel or a group of aligned screen trends.

HorizonArrowTime This setting determines the time period used for calculating the direction of the Horizon Trend Indicator, which shows how the patient trend has developed in the set time period. Choices are: **10min**, **5min**, or **2min**.

Configuring Horizon Trend Settings

The horizon view presents trend information superimposed over a defined baseline or base range. This helps you visualize changes in your patient's condition since the baseline/base range was set.

The position of the horizon baseline and the scale used when a certain measurement is first displayed in horizon trend view, is defined by the settings **Horizon High**, **Horizon Low**, **Scale Delta** and **Unit**. The defaults for **Horizon High**, **Horizon Low**, and **Scale Delta** are based on clinical considerations, the default for **Unit** follows the measurement unit defined for the corresponding measurement label. These default are stored invisibly in the IntelliVue patient monitor software. The user can adapt **Horizon High**, **Horizon Low**, and **Scale Delta** during monitoring.

If you are not satisfied with the default settings, you can modify the defaults for up to 25 measurement labels.

To modify Horizon Trend default settings,

1   In configuration mode, select **Main Setup** -> **Trends** -> **Horizon Settings**.

2   Select the pop-up key **Add** to bring up the Setup Measurement menu.

3   Select **Label** and choose the measurement label for which you want to define changed default Horizon Trend Settings. A maximum of 25 labels can be added.

4   Adjust each setting as required, and close the menu.

Monitor Setting: Main Setup -> Trends -> Horizon Settings

Factory Defaults			
Item Name	Oper. Mode		MP2 - MP90 MP5T
	C	M	X2
Label	x		\<none>
Horizon High	x		\<none>
Horizon Low	x		\<none>
Scale Delta	x		\<none>
Unit	x		\<none>

Horizon Trend Configuration Implications

Unit Choose the measurement unit that you will use to define the values for **Horizon High**, **Horizon Low** and **Scale Delta**.

Horizon High/Low Set **Horizon High** to select the upper horizon value. Set **Horizon Low** to select the lower horizon value. If the high and low horizon values are the same, the horizon is a baseline, if the values are different, the horizon is a range.

Scale Delta defines the distance between the horizon and the upper and lower scale limits. Note that the upper and lower scale limits may also be restricted by the measurement ranges defined for a label.

Make sure the values for **Horizon High/Low** and **Scale Delta** match the **Unit** you enter. Be aware that the master unit of a label is defined in its measurement setup menu. For example, for the label **Temp** this would be the Setup Temp menu (Main Setup -> Measurements -> Temp).

If for a label, the unit defined in the Horizon Settings > Setup Measurement menu differs from the master unit defined in the related measurement setup menu, the values defined for **Horizon High/Low** and **Scale Delta** will be automatically converted when you close the Horizon Settings -> Setup Measurement menu to match the unit defined in the measurement setup menu.

Example: In the Horizon Settings window, you add the label "Temp". You set the **Unit** to $^\circ$**C**, and **Horizon High** and **Horizon Low** to **35.0**$^\circ$C. If you then change the **Unit** in the Setup Temp menu to $^\circ$**F**, the **Horizon High/Low** will be automatically converted to the equivalent of 35 $^\circ$C in Fahrenheit which would be **95.0**$^\circ$F.

Configuring Global Trend Style

Monitor Setting: Main Setup -> Trends

Factory Defaults				
Item Name	**Oper. Mode**		**MP2 - MP90** **MP5T** **X2**	
	C	**M**		
Global Style	x	x	Band	

Global Trend Style Configuration Implications

Global Style The **Global Style** setting affects the presentation of measurements with compound (multiple) values (for example ABP or CO_2) in the Graphical Trends window and on screen trends. If you set this to **Band**, the area between the trend lines, for example, between the systolic and diastolic pressures, is filled with color. If you set it to **Line**, the trends are displayed as separate continuous lines.

This setting applies to the graphical trends displayed in the GraphTrends window and the screen trends. This setting can be overridden for individual parameters displayed in the GraphTrends window by changing the **Style** setting for these parameters to **Band** or **Line** in the Trend Group Parameters menu (see "Configuring Trend Groups" on page 119).

Configuring Trend Windows

Vital Signs Window

Monitor Setting: Main Setup -> Trends -> Setup VitalSigns

Factory Defaults					
Item Name	**Oper. Mode**		**MP20 - MP90 (H10/20/40)**	**MP5 - MP90 (H30)**	**MP20 (#M20 /#M21)** **MP5 (H10/20/40)** **MP5T** **MP2/X2**
	C	**M**			
Trend Group	x	x	Standard		
Interval	x	x	30 min	5 min	10 min
Show Unit	x		Off		
Color	x		On		

Graphical Trends Window

Monitor Setting: Main Setup -> Trends -> SetupGraphTrends

Factory Defaults					
Item Name	Oper. Mode		MP20 - MP90 (H10/20/40)	MP5 - MP90 (H30)	MP20 (#M20 /#M21) MP5 (H10/20/40) MP5T MP2/X2
	C	M			
TrendGroup	x	x	Standard		
Interval	x	x	30 min	5 min	10 min

Trend Window Settings Configuration Implications

Trend Group Use this setting to define the default trend group that is displayed each time a trend window is opened.

Interval Use this setting to define the default time interval (resolution of the trend data) that is displayed each time a trend window is opened.

Show Units (Vital Signs window only) If **Show Units** is configured to **On**, the measurements in the Vital Signs window are shown together with their units.

Color (Vital Signs window only) If **Color** is configured to **On**, the measurements in the Vital Signs window are displayed in their individual parameter colors. If set to **Off**, all measurements are displayed in white.

Histogram Window

Not MP2/X2   **Monitor Setting: Main Setup -> Trends -> Setup Histogram**

Factory Defaults			
Item Name	Oper. Mode		MP5 - MP90
	C	M	
Data Source	x	x	Realtime SpO$_2$ 1
Period	x	x	12 h

Histogram Window Settings Configuration Implications

Data Source Use this setting to configure which data source is displayed each time the histogram window is opened.

- If you are monitoring two SpO$_2$ sources and select **Realtime SpO$_2$ 1**, the realtime numerics from the SpO$_2$ label with the higher priority will be used as the source for the histogram.
- If you are monitoring two SpO$_2$ sources and select **Realtime SpO$_2$ 2**, the realtime numerics from the SpO$_2$ label with the lower priority will be used as the source for the histogram.

- Select **Trended Data** to select a data source from the trend database.

Period Use this setting to define the default time period that is displayed each time a histogram window is opened. Choices are **30 min**, **1h**, **2h**, **4 h**, **8 h**, **12h**, and **24 h.**

Configuring Vital Signs Recording

MP5-90 only **Monitor Setting: Main Setup -> Recordings -> Vital Signs**

Factory Defaults				
Item Name	Oper. Mode		MP20 - MP90 MP5 (H30)	MP20 (M20/M21) MP5 (H10/20/40) MP5T
	C	M		
End Case Record.	x	x	Off	On
Trend Group	x	x	All	
Period	x	x	6 hours	3 hours
Interval	x	x	30 min	10 min
Show Unit	x		Off	

Vital Signs Recording Configuration Implications

End Case Record. Set this to **On** if you want the Vital Sign recording be triggered when a patient is discharged using the End Case function.

Trend Group. Use this setting to define the default trend group that is recorded each time a Vital Signs recording is triggered.

Period. Use this setting to define the period of time for which trend data should be printed on the recording. Available choices are: **1**, **2**, **3**, **6**, **12**, **24**, **48**, and **72 hours**.

Interval. Use this setting to determine the default time interval (resolution of the trend data) that is recorded each time a Vital Signs recording is triggered. Available choices are: **12 sec**, **1 min**, **5 min**, **10 min**, **15 min**, **30 min**, **1 hours**, **2 hours**, **3 hours**.

Show Units. If **Show Units** is configured to **On**, the measurements in the Vital Signs recording are printed together with their units.

Configuring ST Map

Main Setup -> ST Map

Factory Defaults			
Item Name	Oper. Mode		MP2 - MP90 MP5T X2
	C	M	
Interval	x	x	5 min
Scale	x	x	2 mm

ST Map Settings Configuration Implications

Interval From the ST Map window, use the pop-up key **Select Interval** to configure the time interval between the trended ST map samples when using ST Map in Trend View. The interval ranges from 12 seconds to 30 minutes.

Scale In the ST Map window, switch to Trend View and use the **Size Up** / **Size Down** keys to define the scale that the monitor uses in the ST Map application. Available choices are **1mm**, **2mm**, **3mm**, **5mm**, **10mm**, and **15mm**.

Configuring the C.O. Window

MP20-90 only This lets you configure the measurement parameters shown in the results table of the C.O. procedure window.

Monitor Setting: Main Setup -> Cardiac Output -> Table Contents

1   To configure the C.O. window settings, you must either have a C.O. transducer connected or manually switch the C.O. measurement **On**. You can do this by turning **C.O. On** in the C.O. Setup menu. Make sure that while you are configuring without a connected C.O. transducer, you do not pause, switch off or silence alarms.

2   Select **Main Setup > Cardiac Output** to open the Cardiac Output window.

3   Select the pop-up key **Table Contents** to enter the **Table Contents** menu. The left column displays the parameters that are already switched on. The right column contains other available parameters.

4   Select a parameter in the right column and select the left arrow key to move the selected parameter to the left column. The maximum number of entries that can be moved to the left varies depending on the monitor model and display resolution.

5   Close the menu when you are finished.

Factory Defaults			
Item Name	Oper. Mode		MP20 - MP90
	C	M	
C.O.	x	x	On
C.I.	x	x	On
ITBV	x	x	Off
ITBVI	x	x	On
EVLW	x	x	Off
EVLWI	x	x	On
GEDV	x	x	Off
GEDVI	x	x	Off
ETVI	x	x	On
CFI	x	x	On
Tblood	x	x	Off
Tinj	x	x	On
InjVol	x	x	On

Factory Defaults			
Item Name	Oper. Mode		MP20 - MP90
	C	M	
CathCt	x	x	On
CompCt	x	x	On
PVPI[1]	x	x	Off
GEF[1]	x	x	Off
RLShnt[1]	x	x	Off

1.Setting not available in the U.S.A or in clinical environments under FDA control.

Configuring the Wedge Window

MP20-90 only `Monitor Setting: Main Setup -> Wedge`

Factory Defaults				
Item Name	Oper. Mode		MP20 - MP90 (H10/20/40)	MP20 - MP90 (H30)
	C	M		
Reference Wave 1	x	x	Primary Lead	
Reference Wave 2	x	x	Resp	CO_2
Wave Speed	x	x	25 mm/sec	
PAWP Color	x		Green	Yellow

Configuring the Loops Window

MP40-90 only `Monitor Setting: Main Setup -> Loops`

Factory Defaults			
Item Name	Oper. Mode		MP40 - MP90
	C	M	
Loop Type	x	x	Press/Volume

Configuring the CSA Window

CSA Window Configuration

`Monitor Setting: Main Setup -> Measurements -> EEG ->`
`Setup CSA Window`

Factory Defaults			
Item Name	Oper. Mode		MP40 - MP90
	C	M	
Buffer	x	x	A (2 Sec)
Trend SEF	x	x	On
Trend MDF	x	x	Off
Trend PPF	x	x	Off
Clipping	x		On
Frequency Scale	x		0...30 Hz

CSA Window Configuration Implications

Buffer defines which of the three preconfigured buffers (see "Configuring CSA Buffers" on page 145) is used in the CSA window. This setting can also be changed in monitoring mode. Note that the default buffer interval for CSAs viewed in the CSA window is optimized for a quick update of CSA information.

Trend SEF / Trend MDF / Trend PPF defines which of the trend lines (SEF, MDF, PPF) are displayed in the CSA window. These settings can also be changed in monitoring mode.

Clipping Set **Clipping** to **On** to improve the 3-D presentation of the CSA and make it more "readable". When set to **On**, peaks in the spectral lines are artificially clipped at a certain height (see graphic). If **Clipping** is **Off**, peaks can be displayed over the full window height which may result in a more cluttered presentation.
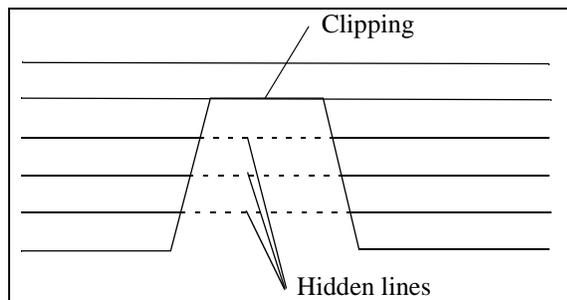
Frequency Scale defines the bandwidth displayed in the CSA. Note that the calculation is always done on the full bandwidth.

Configuring ECG Application

ECG Application Configuration

`Monitor Setting: Main Setup -> Measurement -> ECG`

Factory Defaults				
Item Name	**Oper. Mode**		**MP5 - MP90 (H10/20/40)** **MP2/X2**	**MP5 - MP90 (H30)**
	C	**M**	**MP5T**	
AutoFilter	x		Off	On
Fix Pacer Amplit	x		Off	
Default ECG Size	x		Size x1	Size x2

ECG Application Configuration Implications

`Auto Filter`   If the `AutoFilter` setting is configured to `On` the monitor will automatically switch to the setting `Filter` if electromagnetic interference is detected.

`Default ECG Size` This setting lets you preconfigure the default size with which all ECG waves are drawn on the Screen. The Choices are `x0.5`, `x1`, `x2`, `x4`, `AutoSize`. If you select `AutoSize`, the monitor chooses the optimal adjustment factor for all the ECG waves so that they use the space available to them as efficiently as possible. Use the 1 mV calibration bar as an indicator of the actual signal strength.

`Fix Pacer Amplit` Set this to `On` to configure the pacer spikes to have a fixed size, for ease of identification on the monitor Screen. The spikes are then shown in the background as a dotted line. The length of the dotted line is fixed to the height of the wave channel and is independent of the actual pacer amplitude. Set it to `Off` to display the pacer spikes as a solid line in their original height and the pace pulse markers next to the pacer spikes.

ON   OFF
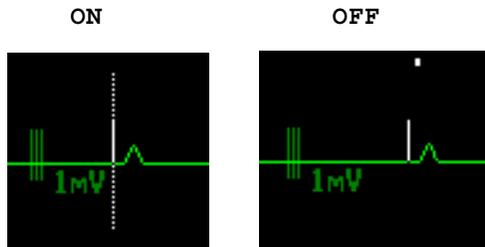
Configuring Calculations

`Monitor Setting: Main Setup -> Calculations`

Factory Defaults			
Item Name	**Oper. Mode**		**MP20 - MP90**
	C	**M**	
Calc. Time Ref.	x		C.O. Time
Height Unit	x		not applicable, these settings are stored as Global Settings, see "Global Settings" on page 147.
Weight Unit	x		
BSA Form. Adult	x		Dubois
BSA Form. Pedi	x		Dubois
BSA Form. Neo	x		Boyd
Hemo Press Unit	x		mmHg
Gas Press Unit	x		mmHg
Hb Unit	x		g/dl
Hemo Calcs	x		On
Oxy Calcs	x		On
Vent Calcs	x		Off

Calculations Configuration Implications

`Calc. Time Ref.` (relevant for Hemo Calcs only) The calculation time reference determines the timestamp of all measurement values that are used for a hemodynamic calculation except the C.O. value. Select `C.O. Time` if you want to use the values measured at exactly the time of the most recently saved C.O. measurement.
Select `Current Time` if you want to use the currently measured values (i.e. the values measured at the time you entered the Calculations window). The most recent available C.O. value is used for the calculation. Be aware that if `Calc. Time Ref.` is set to `Current Time`, and the calculation is performed significantly later then the C.O. value has been saved, the difference in timestamps may reduce the clinical validity of the calculation results.

`BSA Form. Adult/Pedi/Neo` Defines the formula used to calculate the body surface area. The choices are `Dubois` and `Boyd`.

`Hemo Press Unit` Defines the unit used for hemodynamic pressures in the calculation window. The choices are `mmHg` and `kPa`.

`Gas Press Unit` Defines the unit used for gas pressures in the calculation window. The choices are `mmHg` and `kPa`.

`Hb Unit` Defines the unit used for hemoglobin in the calculation window. The choices are `g/dl` and `mmol/l`.

`Hemo Calcs` Set `Hemo Calcs` to `On` to make the `Hemo Calcs` menu entry available in the Calculations menu in monitoring mode.

Oxy Calcs Set **Oxy Calcs** to **On** to make the **Oxy Calcs** menu entry available in the Calculations menu in monitoring mode.

Vent Calcs Set **Vent Calcs** to **On** to make the **Vent Calcs** menu entry available in the Calculations menu in monitoring mode.

Configuring Reports

Not
MP5T

`Monitor Setting: Main Setup -> Reports -> Setup Reports -> Report`

For some report types, some of the settings are not shown. This means that they cannot be changed.

Factory Defaults			
Item Name	**Oper. Mode**		**MP2 - MP90** **X2**
	C	**M**	
Realtime Rep			
Report Type	x	x	VisibleWaves
Report Size	x	x	Unspecified
Orientation	x	x	Unspecified
Target Device	x	x	Unspecified
VitalsReport			
Report Type	x	x	Vital Signs
Report Size	x	x	Unspecified
Orientation	x	x	Unspecified
Target Device	x	x	Unspecified
Graph Report			
Report Type	x	x	Graph Trend
Report Size	x	x	Unspecified
Orientation	x	x	Unspecified
Target Device	x	x	Unspecified
EventEpisode			
Report Type	x	x	Episode
Report Size	x	x	Unspecified
Orientation	x	x	Unspecified
Target Device	x	x	Unspecified
Event Review			
Report Type	x	x	Review
Report Size	x	x	Unspecified
Orientation	x	x	Unspecified
Target Device	x	x	Unspecified

Factory Defaults			
Item Name	**Oper. Mode**		**MP2 - MP90** **X2**
	C	**M**	
ECG Report A			
Report Type	x	x	ECG3X4
Report Size	x	x	Unspecified
Orientation	x	x	Unspecified
Target Device	x	x	Unspecified
ECG Report B			
Report Type	x	x	ECG12x1
Report Size	x	x	Ledger
Orientation	x	x	Unspecified
Target Device	x	x	Unspecified
ST Map Rep.			
Report Type	x	x	ST Map
Report Size	x	x	Unspecified
Orientation	x	x	Unspecified
Target Device	x	x	Unspecified
ECG QT Rep.			
Report Type	x	x	ECG QT Rep.
Report Size	x	x	Unspecified
Orientation	x	x	Unspecified
Target Device	x	x	Unspecified
EEG Report			
Report Type	x	x	EEG Report
Report Size	x	x	Unspecified
Orientation	x	x	Unspecified
Target Device	x	x	Unspecified
C.O. Report			
Target Device	x	x	Unspecified
Wedge Report			
Target Device	x	x	Unspecified
ProtWatchRep			
Report Type	x	x	Protocol 1
Report Size	x	x	Unspecified
Orientation	x	x	Unspecified
Target Device	x	x	Unspecified
Alarm Limits			
Report Type	x	x	Alarm Limits

Factory Defaults			
Item Name	**Oper. Mode**		**MP2 - MP90** **X2**
	C	**M**	
Report Size	x	x	Unspecified
Orientation	x	x	Unspecified
Target Device	x	x	Unspecified
Calc. Report			
Target Device	x	x	Unspecified
Calc. Review			
Target Device	x	x	Unspecified
Loops Report			
Target Device	x	x	Unspecified
Drug Calc			
Target Device	x	x	Unspecified
Histogram			
Report Type	x	x	Histogram
Report Size	x	x	Unspecified
Orientation	x	x	Unspecified
Target Device	x	x	Unspecified
System Report			
Report Type	x	x	Test Report
Report Size	x	x	Unspecified
Orientation	x	x	Unspecified
Target Device	x	x	Unspecified
User Report A			
Report Type	x	x	None
Report Size	x	x	Unspecified
Orientation	x	x	Unspecified
Target Device	x	x	Unspecified
User Report B			
Report Type	x	x	None
Report Size	x	x	Unspecified
Orientation	x	x	Unspecified
Target Device	x	x	Unspecified

For information on configuring ECG reports, see "Configuring ECG Reports" on page 108.

For information on configuring CSA reports, see "CSA Reports Configuration" on page 108.

For information on configuring Trend reports, see "Configuring Trend Reports" on page 109.

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Reports Configuration Implications

Each time a report is triggered, the monitor looks through the list of printers in the order they appear in the **Setup Printers** menu and prints the report on the first enabled printer that meets the requirements of the triggered report.

Report Type Lets you select a template for the report. The selection of templates listed depends on the report selected. The following templates are available:

- **VisibleWaves**: all waves currently visible, in the order they appear on the screen.
- **All Waves**: all measured waves.
- **RT Waves**: all currently measured realtime waves, according to the monitor's priority list.
- **HiRes Waves**: all measured HiRes waves.
- **OxyCRG Waves**: the OxyCRG/Neonatal Event Review waves.
- **Vital Signs**: trend information in tabular form.
- **Graph Trend**: trend information in graphic form.
- **Histogram**: trend information in form of a histogram.
- **Episode**: a single patient event episode.
- **Review**: an overview of patient events.
- **Event Rev All**:
- **ECG3X4, ECG6X2, ECG12X1, ECG4X2, ECG8X1, ECG12X1(2P)**: Different formats of ECG reports.
- **ST Map**: ST Map report.
- **ECG QT**: QT report.
- **EEG Report**: EEG report.
- **Protocol 1 / 2 / 3**: ProtocolWatch reports.
- **Alarm Limits**: a list of all currently set alarm limits.
- **Battery Stat**: Battery Status report.

Report Size Lets you choose the paper size to be used for the report. The selection of sizes listed depends on the report type selected: **Unspecified**, **Universal**, **A4**, **Letter**, **LrgUniversal**, **A3**, or **Ledger**.

- If set to **Unspecified**, the report prints on the first available printer in the list of printers which is enabled and which has a paper size appropriate for the chosen template.

- If set to **Universal**, the report prints on the first available printer in the list of printers which is enabled and which offers the paper size A4 or US letter.

- If set to **LrgUniversal**, the report prints on the first available printer in the list of printers which is enabled and which offers the paper size A3 or ledger.

Orientation lets you set the orientation of the report printout. The selection of orientations listed depends on the report type and report size selected:

- **Unspecified**: the report uses the default orientation for the chosen report type.

- **Landscape**: the report uses landscape orientation.

- **Portrait**: the report uses portrait orientation.

Target Device Lets you choose which printer the print job will be sent to:

- If set to **Unspecified**, the report prints on the first printer in the list of printers which is enabled and which has a paper size appropriate for the chosen template. If no printer is available when the report is triggered, the report is sent to the print database from where it will be automatically printed, when an appropriate printer becomes available.

- If set to **Local 1 / 2**, the report will be sent to the corresponding local printer. If the printer is not available when the report is triggered, the report is not printed, and the information is lost.

- If set to **Remote 1 / 2 /3**, the report will be sent to the corresponding remote printer. If the printer is not available when the report is triggered, the report is not printed, and the information is lost.

- If set to **Database**, the report will be sent to the print database (provided this is enabled, see "Print Database" on page 186). The print database is a special section of the monitor database which acts as a buffer for print jobs. Reports stored in the print database will not be cleared by a discharge or by a power cycle. Reports stored in the print database will be handled depending on how the setting **Auto Prnt Dbs** is set, see "Configuring Other Report Settings".

Configuring Other Report Settings

Not MP5T **Monitor Setting: Main Setup -> Reports**

Factory Defaults			
Item Name	**Oper. Mode**		**MP2 - MP90** **X2**
	C	**M**	
Auto Print Dbs	x		Always
Addressograph	x		None

Other Report Settings Configuration Implications

Auto Prnt Dbs This setting determines how the monitor handles reports stored in the print database.

- If **Auto Prnt Dbs** is set to **Always**, print jobs stored in the print database are automatically printed when a printer with a paper size matching the template of the report becomes available.

- Set **Auto Prnt Dbs** to **Never** if you do not want the monitor to automatically send reports stored in the print database to a matching printer. This enables the clinician to print only selected reports stored in the print database.

- Set **Auto Prnt Dbs** to **Host Only** if you connect an X2 or MP5 to a host monitor (companion mode) and want to prevent reports stored in the print database of the companion monitor being sent to a matching printer. This ensures that reports triggered on the companion while disconnected from the host and the network (for example during transport) are not automatically printed when the companion is connected to a host monitor. If **Auto Prnt Dbs** is set to **Host Only** reports triggered on the host monitor are still sent to a matching printer.

Addressograph This lets you configure an addressograph field at the top of the report. Choices are **Left** side, **Right** side, or **None**. An addressograph field is an empty field which has a width of 60mm, its height depends on the report. This enables the clinician to label the report with their own patient data. If you configure **Addressograph** to **Left** or **Right**, only the first character of the patient's middle name (middle initial) may be shown on the report.

Configuring Auto Reports

Not MP5T **Monitor Setting: Main Setup -> Reports -> Auto Reports**

Factory Defaults				
Item Name	**Oper. Mode**		**MP5 - MP90 (H10/20/40)** **MP2/X2**	**MP5 - MP90 (H30)**
	C	**M**		
Auto Report A				
Report	x	x	None	
End Case Report	x	x	On	Off
Scheduled Rep.	x	x	On	
Start Hour	x	x	7	
Start Minute	x	x	0	
Rep. Freq.(Hr)	x	x	24	
Rep. Freq.(Min)	x	x	0	
Auto Report B				
Report	x	x	None	
End Case Report	x	x	On	Off
Scheduled Rep.	x	x	On	
Start Hour	x	x	7	
Start Minute	x	x	0	
Rep. Freq.(Hr)	x	x	24	
Rep. Freq.(Min)	x	x	0	
Auto Report C				
Report	x	x	None	
End Case Report	x	x	On	Off
Scheduled Rep.	x	x	On	
Start Hour	x	x	7	
Start Minute	x	x	0	
Rep. Freq.(Hr)	x	x	24	
Rep. Freq.(Min)	x	x	0	
Auto Report D				
Report	x	x	None	
End Case Report	x	x	On	Off
Scheduled Rep.	x	x	On	

Factory Defaults				
Item Name	Oper. Mode		MP5 - MP90 (H10/20/40) MP2/X2	MP5 - MP90 (H30)
	C	M		
Start Hour	x	x	7	
Start Minute	x	x	0	
Rep. Freq.(Hr)	x	x	24	
Rep. Freq.(Min)	x	x	0	

Auto Reports Configuration Implications

Auto Reports print automatically when a specified trigger occurs. There are two types of Auto Reports:

- **Scheduled reports** can be set up to print at predefined intervals, starting at a predefined time of day. The start time you set applies for every following day. For example, if you set a start time of 07:00 and a repeat time of six hours, the first report will print at 07:00 every day, the next at 13:00 and so on.

- **End Case Reports** print when a patient is discharged using the monitor's End Case function. An Auto Report can include both a Scheduled Report and an End Case report.

Setting up an End Case Report

1 Select **Main Setup** -> **Reports** -> **Auto Reports**

2 Select one of the four available **Auto Report** "slots" (**A**, **B**, **C**, or **D**)

3 Select **Report**, then select the type of report you want to be printed when a patient is discharged using the End Case function, for example "VitalsReport".

4 Set **End Case Report** to **On**.

5 Set **Scheduled Rep.** to **Off**, if do not want the monitor to trigger a Vital Signs Report at predefined intervals.

6 If needed, set up the VitalsReport or whatever type of report you used for the EndCase Report.

7 If you want more than one report to be printed when using End Case on a patient, repeat steps 2 through 6, selecting a different **Auto Report** (**A**, **B**, **C**, or **D**) and allocating it a different report type.

Configuring ECG Reports

Not MP5T **ECG Reports Configuration**

`Monitor Setting: Main Setup -> Reports -> ECG Reports`

Factory Defaults			
Item Name	**Oper. Mode**		**MP2 - MP90** X2
	C	**M**	
ReportLead Layout	x		Internat
ECG Gain	x	x	10 mm/mV
Speed	x	x	25 mm/sec
Annotation	x	x	Off

ECG Reports Configuration Implications

`Report Lead Layout` The layout of the report can be configured to either `International` or `Cabrera`.

`ECG Gain` This lets you set a defined ECG Gain to determine how ECG waves will appear on the ECG report printouts.

`Speed` Allows you to set the ECG wave speed used on the printout.

`Annotation` Set `Annotation` to `On` if the printed ECG wave should be annotated with beat labels. Pace pulse marks are automatically printed beside the wave for paced patients.

Configuring CSA Reports

MP40-90 only **CSA Reports Configuration**

`Monitor Setting: Main Setup -> Reports -> CSA on EEG Rep.`

Factory Defaults			
Item Name	**Oper. Mode**		**MP40 - MP90**
	C	**M**	
Buffer	x	x	C (120 Sec)
Trend SEF	x	x	On
Trend MDF	x	x	Off
Trend PPF	x	x	Off
Clipping	x		On
Frequency Scale	x		0...30 Hz

CSA Reports Configuration Implications

Buffer defines which of the three preconfigured buffers (see "Configuring CSA Buffers" on page 145) is used on a CSA report. This setting can also be changed in monitoring mode. Note that the default buffer interval for CSA reports is intended to provide an overview of longer term CSA trends.

Trend SEF / MDF / PPF defines which of the available trend lines (SEF, MDF, PPF) are printed on the CSA report. This setting can also be changed in monitoring mode.

Clipping Set **Clipping** to **On** to improve the 3-D presentation of the CSA and make it more "readable". When set to **On**, peaks in a spectral line are artificially clipped at a certain height (see graphic under "Configuring CSA Buffers" on page 145). If **Clipping** is **Off**, peaks can reach as high as the window allows which may result in a more cluttered presentation.

Frequency Scale defines the bandwidth used for the CSA report.

Configuring Trend Reports

Not MP5T
Vital Signs Report

`Monitor Setting: Main Setup -> Reports -> Vital Signs Rep.`

Factory Defaults				
Item Name	**Oper. Mode**		**MP20 - MP90** **MP5 (H30)**	**MP20 (M20/M21)** **MP5 (H10/20/40)** **MP2/X2**
	C	**M**		
TrendGroup	x	x	All	
Period	x	x	6 hours	3 hours
Interval	x	x	30 min	10 min
Show Units	x		Off	

Graphical Trend Report

Not MP5T
`Monitor Setting: Main Setup -> Reports -> Graph Trend Rep.`

Factory Defaults				
Item Name	**Oper. Mode**		**MP20 - MP90** **MP5 (H30)**	**MP20 (M20/M21)** **MP5 (H10/20/40)** **MP2/X2**
	C	**M**		
TrendGroup	x	x	All	
Period	x	x	6 hours	3 hours
Automatic Period	x	x	Off	

Trend Report Settings Configuration Implications

Trend Group Use this setting to define the default trend group that is printed each time a trend report is triggered.

Interval (Vital Signs Report only) Use this setting to determine the default time interval (resolution of the trend data) that is printed each time a trend report is triggered.

Show Units (Vital Signs Report only) If **Show Units** is configured to **On**, the measurements in the Vital Signs report are printed together with their units.

Period Use this setting to define the period of time for which trend data should be printed on the report. If **Automatic Period** is configured to **On**, all trend data for the current patient will be printed, irrespective which trend period is selected.

Automatic Period (Graphical Trend Report only) When **Automatic Period** is set to **Off**, the **Period** setting defines the period of trend information printed on Graphic Trend Reports. When **Automatic Period** is **On**, the **Period** setting is ignored and the Graphic Trend Report shows trend information for the entire period stored in the trend database. The time is shown on the report's horizontal axis, which always extends across one page, and the measurement trends are printed below each other on the vertical axis.

Configuring User Interface Settings

Monitor Setting: Main Setup -> User Interface

Factory Defaults							
Item Name		**Oper. Mode**		**MP20-MP90 (H10/20/40)**	**MP5-MP90 (H30)**	**MP20 (M20/M21) MP5 (H10/20/40) MP5T**	**MP2/X2**	**MP2/X2**
		C	**M**	**Profile Adult Profile Pedi Profile Neo**	**Profile Adult Profile Pedi Profile Neo**	**Profile Adult Profile Pedi Profile Neo**	**Profile Adult Profile Pedi Profile Neo**	**Profile Outdoor**
General	QRS Volume	x	x	1	3	*1*	*1*	3
	QRS Low	x		0				
	QRS Type	x		not applicable, this setting is stored as a global setting, see "Global Settings" on page 147.				
	Prompt Volume	x		8	4	*8*		10
	Tone Modulation	x	x	Yes				
	Tone Mod. Type	x		Enhanced				
	Global Speed	x	x	25mm/s				
	RespiratorySpeed	x	x	6.25mm/s				
	EEG Speed	x	x	25 mm/s				
	Touch ToneVolume	x		1				3
	Touch Enable[1]			Yes				
	MMS Keys[2]	x		Enabled			not applicable	
	ArrhyOff Message	x		Yes	No	*Yes*		
	Meas. Selection	x		Window				
	Meas. Deactivate	x		Manual				
	Timer Volume	x		4				6
	OtherBed Colors	x		not applicable, this setting is stored as a network setting: see "Configuring Network Settings" on page 115.				

Factory Defaults							
Item Name		**Oper. Mode**		**MP20-MP90 (H10/20/40)**	**MP5-MP90 (H30)**	**MP20 (M20/M21) MP5 (H10/20/40) MP5T**	**MP2/X2**	**MP2/X2**
		C	**M**	**Profile Adult Profile Pedi Profile Neo**	**Profile Adult Profile Pedi Profile Neo**	**Profile Adult Profile Pedi Profile Neo**	**Profile Adult Profile Pedi Profile Neo**	**Profile Outdoor**
	Global SmartKeys	x		not applicable, these settings are stored as unique monitor settings: see "Configuring User Interface Settings - Keys" on page 143.				
	Oper. 1 Fn Keys	x						
	Oper. 2 Fn Keys	x						
Companion	Operating[3]	x		Enabled		not applicable		
	Display[3]	x		Curr. Screen		not applicable		
Display 1	Brightness[4]	x	x	Optimum				10
	Standby Brightn.[4]	x		Optimum				
	TransportBrightn[5]	x		Optimum				10
	Menu LineSpacing[2]	x		Wide			not applicable	
	Display Units	x		No				
	Alarm Limits	x		Yes	No	*Yes*		
	Auto Fill Waves	x	x	Yes	No	*Yes*		
	Show ST In Wave	x		No	Yes	*No*		
	NBP Time	x		Meas Time				
	Wave Style	x		Line	Filled			
	Wave Line Style	x		Thin	Medium			
Display 2[6]	Menu LineSpacing[2]	x		Wide			not applicable	
	Display Units	x		No				
	Alarm Limits	x		Yes	No	Yes		
	Auto Fill Waves	x	x	Yes	No	Yes		
	Show ST In Wave	x		No	Yes	No		
	Hide Alarm Info[7]	x		No				
	Hide Keys[7]	x		No				
	NBP Time	x		Meas Time				
	Wave Style	x		Line	Filled	Line		
	Wave Line Style	x		Thin	Medium	Thin		
Display 3[8]	Menu LineSpacing	x		Wide		not applicable, only up to two displays supported		
	Display Units	x		No				
	Alarm Limits	x		Yes	No			
	Auto Fill Waves	x	x	Yes	No			
	Show ST In Wave	x		No	Yes			
	Hide Alarm Info[7]	x		No				
	Hide Keys[7]	x		No				
	NBP Time	x		Meas Time				
	Wave Style	x		Line	Filled			
	Wave Line Style	x		Thin	Medium			

1.Setting can be changed in service mode only.
2.Setting not available in MP2/X2 monitors.
3.Setting not available in MP2/X2 and MP5 monitors.
4.Setting only affects monitors that have a built-in display.
5.Setting only available in monitors that can be operated on battery power.
6.Setting only applicable for monitors with two main displays.
7.Setting not applicable if display is the XDS Remote Display.
8.Setting only applicable for monitors with three main displays.

User Interface Configuration Implications

`QRS Volume` Sets the default volume of the QRS tone. The QRS tone is derived from either the ECG or Pulse, depending on which is currently selected as the alarm source.

`QRS Low` Defines the minimum QRS tone volume that can be selected by the user while in monitoring mode.

`Prompt Volume` Defines the volume of the tone the monitor emits to draw the user's attention to a prompt message shown in the monitor's prompt/status line.

`Tone Modulation` if you set `Tone Modulation` to `Yes`, the pitch of the SpO_2 tone will change with the measured signal strength. If you are using two SpO_2 sensors simultaneously, you can determine which sensor will serve as the source for the tone modulation pitch, by selecting the corresponding SpO_2 label as the System Pulse source. For example, if you measure SpO_2l and SpO_2r and want SpO_2r to be the source for the tone modulation, in the Setup Pulse menu, set `System Pulse` to `SpO₂r`.

`Tone Modulation Type` This setting lets you choose between `Standard` and `Enhanced`. `Standard` is the regular Nellcor behavior. The difference in frequency per % saturation change is small which might make it difficult to hear smaller changes. `Enhanced` results in a larger (and therefore more obvious) frequency decrease for each drop in SpO_2 level. Due to the larger steps, when the saturation drops below 70%, the absolute frequency may become so low that the perceived volume will be low and it will be hard to hear a frequency change per % saturation.

`Global Speed` The `Global Speed` setting defines the speed of all non-respiratory and non-EEG waves on the Screen. The `Global Speed` setting can be overridden by fixed wave channel speeds. See "Configuring the Wave Channel Speed" on page 22.

`RespiratorySpeed` The `Respiratory Speed` setting defines the speed of all respiratory waves (CO_2, Resp. anesthetic agents and O_2) on the Screen. The `RespiratorySpeed` setting can be overridden by fixed wave channel speeds. See "Configuring the Wave Channel Speed" on page 22.

`EEG Speed` The `EEG Speed` setting defines the speed of all EEG waves (including BIS) on the Screen. The `EEG Speed` setting can be overridden by fixed wave channel speeds. See "Configuring the Wave Channel Speed" on page 22.

`Touch Tone Volume` The `Touch Tone Volume` setting defines the volume of the tone you hear every time you select a field on the monitor screen. You may want to set this to 0 if you want to operate the monitor in a quiet environment.

`MMS Keys` To prevent users from using the hardkeys on the Multi-Measurement Module, set `MMS Keys` to `Disabled`. This setting is not available in the MP2 and X2.

ArrhyOff Message If arrhythmia analysis is switched off, the message "Arrhythmia Off" is permanently displayed beside the first ECG wave on both the bedside monitor and on the Information Center. If you do not want this message to appear, you must set **ArrhyOff Message** to **Off**.

Meas. Selection. The **Meas. Selection** setting defines the behavior of the monitor if a measurement label conflict occurs.

- Set this to **Indicator** to make the measurement selection icon with question marks your only indicator of the label conflict.

- Set it to **Window** to pop up the Measurement Selection window indicating the label conflict.

- Set it to **Auto Select.** to let the monitor resolve the conflict automatically by assigning a new, generic label to the newly connected measurement device. Be aware that this behavior only applies to the following **plug-in module** measurements:
  - SpO$_2$
  - Invasive Pressure
  - Temperature

  Auto Select. does not work on any MMS or X2 measurements.

Meas. Deactivate This setting defines the monitor's behavior when you connect a measurement device (MMS, X2, or plug-in module) to the monitor, **and**

- a measurement label of the newly connected device duplicates the label of an already connected measurement device, **and**

- the already connected device is switched off.

If **Meas. Deactivate** is set to **Manual**, the monitor deactivates the **newly** connected measurement, due to the label conflict.

If **Meas. Deactivate** is set to **Auto**, the monitor deactivates the **previously** connected measurement device and activates the newly connected device.

Timer Volume determines the volume of the notification tone for all timers.

Companion - Operating This setting is only available on host monitors that can support the X2 or MP5 as a multi-measurement module (companion mode). It determines whether the companion monitor (X2 or MP5) can still be operated, when it is connected to a host monitor. If **Enabled**, functions you can operate on an X2 or MP5 are restricted to measurements originating in that device. If **Disabled**, no operation is possible.

Companion - Display This setting is only available on host monitors that can support the X2 or MP5 as a multi-measurement module (companion mode). It determines which Screen is shown on the companion monitor (X2 or MP5), when it is connected to a host monitor. Choices are:

- **Curr. Screen**: shows the Screen that was active before connecting to the host.

- **Blank Screen**: shows a special companion mode standby Screen.

Brightness Defines the default brightness for monitoring. This setting is not applicable for an MP80/90 monitor (external display). For **Brightness**, the choice **Optimum** is equivalent to **8**.

Standby Brightness Lets you choose a brightness setting for when the monitor is in Standby. This setting is not applicable for an MP80/90 monitor (external display). For **Standby Brightness**, the choice **Optimum** is equivalent to **1**.

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`Transport Brightness` This setting is only available on the MP2 - MP50. It defines the display brightness when the monitor is running on battery power. For `Transport Brightness`, the choice `Optimum` is equivalent to `4`.

User Interface - Display Settings Configuration Implications

`Menu LineSpacing` Use this to change the line spacing for all menus. `Wide` provides more room between menu entries and is the recommended setting for touchscreen use. `Narrow` lets you see more menu entries on one menu page and is recommended when using mouse or SpeedPoint/Navigation Point as the primary input device.

`Display Units` If `Display Units` is set to `Yes`, the measurement units are displayed next to the measurement numerics, provided that there is enough space.

`Alarm Limits` If `Alarm Limits` is set to `Yes`, the alarm limits are displayed next to the measurement numerics, provided that there is enough space.

`Auto Fill Waves` If `Auto Fill Waves` is set to `Yes`, the monitor automatically assigns available waves that would otherwise not be displayed, to wave channels for which the preconfigured waves are currently not available. Set `Auto Fill Waves` to `No`, if you do not want waves other than the ones preconfigured to automatically appear on the Screen.

An example: assume you are viewing a 4 wave Screen with the following wave channel configuration (top to bottom): ECG, Any SpO_2, Any Press, CO_2. With `Auto Fill Waves` set to `Yes`, if you were currently not measuring CO_2 but a 2nd Invasive Pressure, the monitor would automatically assign the 2nd Invasive Pressure to the 4th wave channel. With `Auto Fill Waves` set to `No`, the 4th wave channel would be empty.

`Show ST In Wave` If `Show ST in Wave` is set to `Yes`, the current ST value will be shown next to each ECG wave.

`Hide Alarm Info` This setting only applies to monitors with two or three main displays (**excluding** the XDS Remote Display). It is only available for `Display 2` and `Display 3`. If you set it to `Yes`, for example for `Display 3`, this display will no longer show any alarm related information, such as alarm messages, alarm limits next to the numerics, and Alarm off symbols. Flashing numerics will also be deactivated on this display.
Note that this setting has no effect on the XDS Remote Display. The monitor will behave as if the setting was set to `No`.

`Hide Keys` This setting only applies to monitors with two or three main displays (**excluding** the XDS Remote Display). It is only available for `Display 2` and `Display 3`. If you set it to `Yes`, for example for `Display 3`, the Operating Area, including permanent keys, SmartKeys, and the Measurement Selection key will be deactivated and invisible on this display.
Note that this setting has no effect on the XDS Remote Display. The monitor will behave as if the setting was set to `No`.

`NBP Time` If `NBP Time` is set to `Meas Time`, the time shown beside the NBP numeric will show the timestamp of the most recent NBP measurement. If set to `Next Meas`, and NBP mode is set to Auto, the time until the next automatic measurement is shown, along with a graphic representation of the remaining time.

`Wave Style` This setting lets you change the presentation of certain respiratory waveforms (CO_2, AWF, AWP, and AWV). If you set this to `Filled`, the area underneath the waves is filled with color. If you set it to `Line`, the waves are displayed in the standard way, as continuous lines.

`Wave Line Style` This setting lets you configure the thickness of all waves and HiRes Trends on display 1 (2,3). For better visibility over a distance you might want to use `Medium` or `Thick`. The choices are: `Thin`, `Medium`, `Thick`, `Extra Thick`.

Display-Related Configuration Implications for Monitors which are connected to an XDS Remote Display

• In an MP2/X2, MP5, MP60/70, MP80, or MP90 (with single CPU), the XDS Remote Display will be the second main display. The XDS Remote Display will use the settings made for `Display 2`. Note that the User Interface settings `Hide Alarm Info` and `Hide Keys` made for `Display 2` will have no effect on the XDS Remote Display. The monitor will behave as if the settings are set to `No`.

• In an MP90 with dual CPU, the XDS Remote Display will be the third main display. The XDS Remote Display will use the settings made for `Display 3`. Note that the User Interface settings `Hide Alarm Info` and `Hide Keys` made for `Display 3` will have no effect on the XDS Remote Display. The monitor will behave as if the settings are set to `No`.

NOTE If you clone a configuration that was made for a Dual CPU MP90 with an XDS Remote Display as the third main display to a smaller monitor with an XDS Remote Display as the second main display, the configuration settings made on the MP90 for `Display 2` will on the smaller monitor be used for the XDS Remote Display.

Configuring Network Settings

`Monitor Setting: Main Setup -> Network`

Factory Defaults				
Item Name	Oper. Mode		MP5 - MP90 (H10/20/40) MP2/X2	MP5 - MP90 (H30)
	C	M		
Auto Window	x	x	not applicable, see "Network Configuration Implications"	
Auto Window Type	x		PatWindow	Off
Auto Window Disp[1]	x		Display 1	
CareGroup Status	x		On	
Caregroup	x		Standard	
CentralMonitorng	x		Mandatory	Optional
Tele Screen	x		on ECG	
Return To	x		Previous	
Other BedColors[2]	x		Enabled	
Remote Controls	x		not applicable, this settings is stored as a global setting, see "Global Settings" on page 147	
CaregroupToneVol	x		8	4
Caregroup Tone	x		Standard	
RF Access Code[3]	x		1	

1.Setting available for MP90 with more than one main display only.
2.Setting not available for MP2/X2.
3.Setting available for MP2, MP5, MP20/30 and MP40/50 only. Setting is a global setting.

Network Configuration Implications

`Auto Window` This is not a configurable setting. It can be used during monitoring to temporarily disable automatic notification of alarm conditions at the other beds in the Care Group. To configure the automatic notification to disabled, set `Auto Window Type` to `Off`.

`Auto Window Type` If you want to prevent automatic notification of alarm conditions at the other beds in the Care Group, configure `Auto Window Type` to `Off`. If you want notification at the monitor of alarm conditions at other beds in the Care Group, configure either:

- `Care Group`, to make the My Care Group window pop up.

- `Alarming Beds`, to make the Alarming Beds window pop up, that shows all beds in the associated care group that currently have unsilenced alarms.

- `Pat.Window`, to make the Other Patient Window for the alarming bedside pop up.

Note that if the Information Center is configured to unit-based care groups and `Auto Window Type` is configured to `Pat.Window`, the monitor may automatically fall back to `Alarming Beds`.

Auto Window can be temporarily disabled in monitoring mode. To do this, select the network symbol on the monitor's information line, then select `Auto Window` and toggle to `Disabled`. Remember to re-enable the Auto Window as soon as possible.

`Auto Window Disp` This setting applies only to monitors with multiple main displays. It defines on which of the connected displays the automatic pop-up window configured under `Auto Window Type` is shown. If the configured display is not available, the monitor automatically uses `Display 1`.

`CareGroup Status` If you are asked to hide the Care Group Overview Bar on all Screens, set the `CareGroup Status` to `Off`.

`Caregroup` This setting lets you change the way care groups are defined.

- Set this to `Standard` if you want the beds in your care group to be defined by the care group setup at the IntelliVue Information Center. Depending on your revision of the Information Center, the following care group models are supported:
  - Bed-Based CareGroups: lets you assign a maximum number of 12 patients from a clinical unit to a care group.
  - Unit-Based CareGroup (IIC Rev. G and higher): assigns all beds on all Information Centers assigned to a clinical unit to one large care group (up to 64 patients monitored by up to 4 Information Centers).

  For more detail, please refer to the IntelliVue Information Center Instructions for Use.

- Set it to `My Central` if you need to assign more than 12 beds, but not more than 16 beds to a care group. This care group model is typically used in facilities with only one IntelliVue Information Center (IIC). "My Central" care groups include all beds (up to 16) from a directly connected IIC, but cannot combine beds from different IICs. The selection of beds in a "My Central" care group is static and cannot be configured.
  Be aware that in order to be included in the My Central care group, beds need to be assigned to a care group at the Information Center. Also, at the IIC, configure "Overview Auto-Alarm" and "Overview Prompt-Tone" for all Care Groups to the same settings. This ensures that all beds in the "My Central" Care Group exhibit the same alarm behavior.

Central Monitorng If **CentralMonitorng** is set to **Mandatory**, and the monitor was not connected to an Information Center when switched on, or loses its connection to the Central during monitoring, it will generate the INOP message "No Central Monit.", accompanied by an INOP tone. If **CentralMonitorng** is set to **Optional**, the monitor generates the same INOP, but only when the monitor loses the connection during monitoring. The INOP will not be generated if the monitor is not connected to an Information Center when it is switched on. This setting is intended for standalone monitors.

Tele Screen Set **Tele Screen** to **On Pair** if you want the monitor to automatically switch to a Screen with a Telemetry Data Overview screen element embedded when the user "pairs" the monitor with a telemetry device. If there is more than one of these special Screens available, the monitor uses the first Screen in the Screen list. If **Tele Screen** is set to **On ECG**, the change to the Tele Screen happens if the monitor is paired with the tele transmitter **and** a valid ECG signal from the Tele transmitter is available. Set **Tele Screen** to **Off**, to switch off the automatism completely.
The availability of this function depends on the Information Center revision the monitor is connected to. See your Information Center Instructions for Use for further details.

Return To This setting determines which Screen the monitor loads when it is unpaired from the telemetry device or when, while paired, the ECG is sourced from the bedside.

- **Previous** loads the Screen that was active before the Telemetry Screen was loaded.

- **Default** loads the Screen defined for the default profile.

- **Off** does not automatically switch the Screen.

OtherBed Colors This determines whether the measurement information from another bed is shown in the colors assigned at the Information Center or in monochrome (green on black).
The availability of this function depends on the Information Center revision the monitor is connected to. See your Information Center Instructions for Use for further details.

Caregroup Tone A new alarm that occurs in any of the beds assigned to the monitor's care group can be announced with a tone. The **Caregroup Tone** setting lets you toggle between a **Standard** and **Enhanced** tone. The **Enhanced** tone is a more prominent tone to draw attention to the screen. The **Caregroup Tone** will only be generated if an alarm exceeds the Auto Alarm Severity level configured at the Information Center. The volume of the **Caregroup Tone** is determined by the **CaregroupToneVol** setting (see below). Note that the **Caregroup Tone** can be completely disabled at the Information Center.

CaregroupToneVol This setting defines the volume of the caregroup tone. It can be set in a range between 0 and 10. If you set **CaregroupToneVol** to **0**, this is indicated by a crossed speaker symbol in any embedded Other Bed window. For more information on care groups and Other Bed windows, see the Monitor and Information Center Instructions for Use.

RF Access Code This setting is not a monitor setting, it is a **global** setting. It is available with IntelliVue MP2, MP5, MP20/30 and MP40/50 monitors only. It is needed to establish communication of the IntelliVue Instrument Telemetry transceiver with the access points of the wireless network. The IntelliVue Instrument Telemetry transceiver only communicates with an access point that is configured to the same RF Access Code.

Unique Monitor Settings

Some Monitor settings are unique settings. This means that they are the same in every Profile and they are automatically included in each monitor settings block when you store them. See "Understanding Monitor Settings" on page 84 for more detail.

The following table provides an overview of normal vs. unique monitor settings:

Monitor Settings			
Normal	**Page**	**Unique**	**Page**
Alarms	85	Trend Groups	119
Alarm Recordings	88	Trend Priorities	122
Auto Alarm Limits	89	Trend Scales / Trend Units	123
INOP Severity	90	Event Surveillance	126
Screen Trend Settings	91	Event Annotations	133
Horizon Trend Settings	92	ProtocolWatch	134
Global Trend Style	93	Recordings (except Vital Signs & Alarm Rec.)	135
Trend Windows	93	Timers	139
Trend Recordings	95	Global SmartKeys, Function Keys	143
ST Map	95	CSA Buffers	145
C.O. Window	96	Drug Calculator	146
Wedge Window	97		
Loops Window	97		
CSA Window	98		
ECG Application	99		
Calculations (except Drug Calc.)	100		
Reports	101		
Other Report Settings	105		
Auto Reports	106		
ECG Reports	108		
CSA Reports	108		
Trend Reports	109		
User Interface (except Keys)	110		
Network	115		

Configuring Trend Groups

`Unique Monitor Setting: Main Setup -> Trends -> Trend Groups`

Factory Defaults						
#	Oper. Mode	MP2 - MP90 MP5T X2				
	C	M	Name	Parameters	Scale	Style
1	x	x	All	All parameters	Global	Global
2	x	x	Standard	HR, SpO_2, SpO_2pr, SpO_2po, SpO_2 r, SpO_2 l	Global	Global
				NBP	Global	Global
				CO_2, RR, awRR	Global	Global
				Any Press	Global	Global
				Any Temp	Global	Global
2	x	x	Cardiac	HR, PVC	Global	Global
				STindx, ST, Any QT	Global	Global
4	x	x	Hemo	HR	Global	Global
				ABP, Pulse(ABP)	Global	Global
				ART, Pulse(ART)	Global	Global
				Ao, Pulse(Ao)	Global	Global
				PAP, Pulse(PAP)	Global	Global
				CVP	Global	Global
				RAP	Global	Global
				LAP	Global	Global
				ICP	Global	Global
				UAP, Pulse(UAP)	Global	Global
				UVP	Global	Global
				P, Pulse(P)	Global	Global
				PAWP, CPP	Global	Global
				C.O., C.I., CCO, CCI	Global	Global
				ITBV, ITBVI, EVLW, EVLWI	Global	Global
				Tblood	Global	Global
5	x	x	Resp	CO_2	Global	Global
				awRR	Global	Global
				O_2	Global	Global
				RR	Global	Global

Factory Defaults						
#	Oper. Mode		MP2 - MP90 MP5T X2			
	C	M	Name	Parameters	Scale	Style
6	x	x	Spirometry	PIP, PEEP	Global	Global
				TVexp	Global	Global
				TVin	Global	Global
				MVexp	Global	Global
				MVin	Global	Global
				RRspir	Global	Global
				COMP	Global	Global
				Raw	Global	Global
7	x	x	Neuro	BIS, TP, SEF, SQI (BIS), EMG, SR	Global	Global
				TP1, TP2	Global	Global
				SEF1, SEF2	Global	Global
				MDF1, MDF2	Global	Global
				PPF1, PPF2	Global	Global
				Delta1, Delta2	Global	Global
				Theta1, Theta2	Global	Global
				Alpha1, Alpha2	Global	Global
				Beta1, Beta2	Global	Global
8	x	x	Temp	AnyTemp, Any DiffTemp	Global	Global
9	x	x	Gases	CO_2	Global	Global
				awRR	Global	Global
				O_2	Global	Global
				N_2O	Global	Global
				ISO	Global	Global
				SEV	Global	Global
				ENF	Global	Global
				HAL	Global	Global
				DES	Global	Global
				MAC	Global	Global

Factory Defaults						
#	Oper. Mode		MP2 - MP90 MP5T X2			
	C	M	Name	Parameters	Scale	Style
10	x	x	External Device	CO_2	Global	Global
				awRR	Global	Global
				O_2, FIO_2, PIP	Global	Global
				TV	Global	Global
				MINVOL	Global	Global
				SpMV	Global	Global
				PEEP	Global	Global
				pH	Global	Global
				PCO_2, PcO_2	Global	Global
				PO_2	Global	Global
				MnAwP	Global	Global
				RRaw	Global	Global

Trend Groups Configuration Implications

The measurements grouped in trend groups define the trends displayed together in the Vital Signs or Graphics Trends windows and printed in trends reports and recordings. The trend group **All** contains all available measurements, you can change its name, but not the order or selection of parameters as they appear when this group is selected.

Sort Up / Sort Down Lets you change both the sequence of trend groups, and the sequence of the trended measurement parameters within a group.

Add Separatr Lets you add line separators. Trended parameters listed between line separators are displayed overlapping in one trend segment.

Scale Lets you change the scales for the trended parameters. If set to **Global**, the Graphical Trends window and the Graph Trends Report use the scales as defined in the general Trend Scales configuration, see "Configuring Trend Scales / Trend Units" on page 123.

Style Lets you change how trended parameters are presented in the Graphical Trends window and on the Graph Trends Report. Select **Line** to display the trends as a continuous line. For measurements with compound values (for example, the systolic and diastolic pressures), select **Band** to fill the area between trend lines with color. If set to **Global**, the trend windows and reports use the style as defined in the Global Style configuration, see "Configuring Global Trend Style" on page 93.

Configuring Trend Priorities

`Unique Monitor Setting: Main Setup -> Trends -> Trend Priority`

Factory Defaults				
Item Name	**Oper. Mode**		**MP2 - MP90 (H10/20/40)** **MP5T**	**MP5 - MP90 (H30)**
	C	**M**	**X2**	
Priority	x	x	HR	HR
			PVC	PVC
			SpO_2	SpO_2
			SpO_2 l	SpO_2 l
			SpO_2 r	SpO_2 r
			Any Press	Any Press
			CPP	CPP
			CCO	CCO
			CCI	CCI
			CO_2	CO_2
			awRR	awRR
			RR	RR
				Any Agent
				BIS
				EMG
				SQI

Trend Priority Configuration Implications

The monitor stores trend information for up to 32 monitored measurements, depending on the installed database option and the configuration of the trend database (see "Trend Database" on page 185). If you are monitoring more measurements than can be trended, the monitor determines which measurements are trended acording to an internal priority list.

The **Trend Priority** configuration overrides this internal measurement priority. It allows you to set your own priority for trended measurements. The **Trend Priority** shows the trended measurements in order of their priority - the measurement with the highest priority is at the top of the list. Any additional measurement that is monitored, but not listed in the **Trend Priority** menu, is assigned a priority according to the internal priority list.

Note that the monitor provides a second trend database exclusively reserved for aperiodic parameters. Aperiodic parameters are parameters that are measured intermittently, such as NBP, C.O., C.I., PAWP (Wedge), manually entered measurements, or lab results from external devices obtained from the VueLink or IntelliBridge plug-in module. Aperiodic parameters do not count towards the max. number of trended parameters allowed by the trend database configuration and therefore do not have to be considered when configuring the **Trend Priority**.

To add measurements to the priority list,

♦   select the pop-up key **Add** and choose from the pop-up list of available measurements.

To delete measurements,

♦   select the measurement that should be deleted, and select the pop-up key **Delete.**

To change the priority order,

♦   use the **Sort Up** and **Sort Down** pop-up keys.

Configuring Trend Scales / Trend Units

`Unique Monitor Setting: Main Setup -> Trends -> Parameter Scales`

Factory Defaults					
Item Name	**Oper. Mode**	**Unit**	**MP2 - MP90** **MP5T** **X2**		
	C	**M**		**Profile Adult**	**Profile Pedi**	**Profile Neo**
HR	x	x	bpm	30...180		30...210
PVC	x	x	/min	0...20		
Any ST	x	x	mm	-2.5...+2.5		
STindx	x	x	mm	0.0...5.0		
QTc	x	x	msec	350..450		375..425
ΔQTc	x	x	msec	-40..40		-20..20
QT	x	x	msec	300..500		
QT-HR	x	x	bpm	50..130	60..140	80..160
Any Pulse	x	x	bpm	30...180		30...210
SpO$_2$	x	x	%	80...100		
ΔSpO$_2$	x	x	%	0...50		
Perf	x	x		0.0...10.0		0.0...5.0
NBP	x	x	mmHg	30...200	20...150	10...100
	x	x	kPa	4.0...28.0	2.0...20.0	1.0...14.0
ABP, ART, Ao, UAP, BAP, FAP, P, P1, P2, P3, P4,	x	x	mmHg	0...200	0...150	0...100
	x	x	kPa	0.0...28.0	0.0...20.0	0.0...14.0
PAP	x	x	mmHg	0...60	0...40	0...30
	x	x	kPa	0.0...8.0	0.0...6.0	0.0...4.0
CVP, RAP, LAP, UVP	x	x	mmHg	0...30		
	x	x	kPa	0.0...4.0		
ICP, IC1, IC2	x	x	mmHg	0...60		
	x	x	kPa	0.0...8.0		
PAWP	x	x	mmHg	0...30		
	x	x	kPa	0.0...4.0		
CPP	x	x	mmHg	0...100		
	x	x	kPa	0.0...14.0		
PPV	x	x	%	0...20		

Factory Defaults					
Item Name	**Oper. Mode**	**Unit**	**MP2 - MP90** **MP5T** **X2**		
	C | **M**		**Profile Adult**	**Profile Pedi**	**Profile Neo**
CO,CCO	x | x	l/min	0.0...12.0	0.0...6.0	0.0...3.0
CI, CCI	x | x	l/min/m2	0.0...6.0		
SV	x | x	ml	1...200		
SI	x | x	ml/m2	1...100		
SVV	x | x	%	0...20		
dPmax	x | x		200...2000		
ITBV	x | x	ml	500...3000		
ITBVI	x | x	ml/m2	500...1300		
EVLW	x | x	ml	0...2500		
EVLWI	x | x	ml/kg	0.0...20.0		
GEDV	x | x	ml	400...2400		
GEDVI	x | x	ml/m2	400...1000		
CFI	x | x		1.0...15.0		
PVPI	x | x		0.0...5.0		
GEF	x | x	%	10...40		
SvO_2, $ScvO_2$, SO_2	x | x	%	40...80		
LI	x | x		0...59		
$Sp\text{-}vO_2$	x | x	%	-40...40		
$tcpO_2$	x | x	kPa	4.0...20.0		
	x | x	mmHg	30...150		
$tcpCO_2$	x | x	kPa	1.0...11.0		
	x | x	mmHg	10...80		
CO_2	x | x	kPa	0.0...8.0		0.0...11.0
	x | x	mmhg	0...60		0...80
awRR	x | x	rpm	0...60		0...110
O_2	x | x	%	0...100		
	x | x	mmHg	0...800		
	x | x	kPa	0...100		
FiO_2	x | x		0.00...1.00		
	x | x	%	0...100		
RR	x | x	rpm	0...60		0...110
PIP	x | x	mmHg	0...60		
MnAwp	x | x	mmHg	0...30		
TV	x | x	ml	0...1000	0...500	0...100
MINVOL	x | x	liter	0.0...10.0	0.0...6.0	0.0...3.0
SpMV	x | x	liter	0.0...10.0	0.0...6.0	0.0...3.0
PEEP	x | x	mmHg	0...15		

Factory Defaults

Item Name	Oper. Mode		Unit	MP2 - MP90 MP5T X2		
	C	M		Profile Adult	Profile Pedi	Profile Neo
BIS	x	x		0...100		
SQI (BIS)	x	x	%	0...100		
EMG	x	x	dB	0...60		
TP	x	x	dB	40...80		
TP1, TP2	x	x	nW	0.00...1.00		
SR	x	x	%	0...100		
Bursts	x	x	/min	0...30.0		
SEF	x	x	Hz	15.0...30.0		
SEF1,SEF2	x	x	Hz	0.0...30.0		
MDF1, MDF2	x	x	Hz	0.0...30.0		
PPF1, PPF2	x	x	Hz	0.0...30.0		
Alpha1, Alpha2	x	x	%	0.0...100.0		
Beta1, Beta2	x	x	%	0.0...100.0		
Delta1, Delta2	x	x	%	0.0...100.0		
Theta1,Theta2	x	x	%	0.0...100.0		
Any Temp	x	x	°F	95.0...110.0		
	x	x	°C	35.0...43.0		
Tblood	x	x	°F	80.0...110.0		
	x	x	°C	28.0...43.0		
Any DiffTemp	x	x	°F	-12.0...12.0		
	x	x	°C	-6.0...6.0		
N_2O	x	x	%	0...100		
	x	x	kPa	0...100		
	x	x	mmHg	0...800		
ISO	x	x	%	0.0...4.0		
	x	x	kPa	0.0...4.0		
	x	x	mmHg	0...30		
SEV	x	x	%	0.0...6.0		
	x	x	kPa	0.0...6.0		
	x	x	mmHg	0...50		
ENF	x	x	%	0.0...6.0		
	x	x	kPa	0.0...6.0		
	x	x	mmHg	0...50		
HAL	x	x	%	0.0...3.0		
	x	x	kPa	0.0...3.0		
	x	x	mmHg	0...25		

Factory Defaults					
Item Name	Oper. Mode	Unit	MP2 - MP90 MP5T X2		
	C | M		Profile Adult	Profile Pedi	Profile Neo
DES	x | x	%	0...20		
	x | x	kPa	0...20		
	x | x	mmHg	0...160		
SVR	x | x	DS/cm^5	400...2400		
SVRI	x | x	DSm^2/cm^5	800...4800		
pH	x | x		7.0...7.8		
PCO$_2$	x | x	mmHg	25...50	25...60	25...80
PO$_2$	x | x	mmHg	40...160		
RRaw	x | x	rpm	0...60		0...110
PcO$_2$	x | x	mmHg	25...50	25...60	25...80

Trend Scales/Units Configuration Implications

These settings apply to the graphical trends displayed in the GraphTrends window and the screen trends. They can be overridden for individual parameters displayed in the GraphTrends window by changing the **Scale** setting for these parameters from **Global** to a specific value in the Trend Group Parameter menu (see "Configuring Trend Groups" on page 119).

Configuring Event Surveillance

MP5-90 only   `Unique Monitor Setting: Main Setup -> Event Surveill. -> Setup Events`

Levels of Event Surveillance

The appearance of the events windows and menus and the settings you can configure for events depends on the event surveillance option purchased for the monitor: basic event surveillance (BES), advanced event surveillance (AES), or neonatal event review (NER). This table lists the differences between the options:

Event Functionality	Basic Event Surveillance (BES) Option C06	Advanced Event Surveillance (AES) Option C07	Neonatal Event Review (NER) Option C04
Available for monitor models	MP5 - MP90	MP60 - MP90	MP5 - MP90
Event groups	1	6	NER
Measurements per group	3	4	3 (plus 1 for episode recording)
Triggers per measurement	1	2	1
Trigger types	Simple ("at least one")	Combined ("at least two")	Simple ("at least one")
Annotation	no	yes	yes

Event Functionality	Basic Event Surveillance (BES) Option C06	Advanced Event Surveillance (AES) Option C07	Neonatal Event Review (NER) Option C04
Available for monitor models	MP5 - MP90	MP60 - MP90	MP5 - MP90
Types of event episode	Average Trend Realtime Wave	High Resolution Trend Average Trend Realtime Wave	High Resolution Trend
Event views	Graphic Event Review window, Graphic Event Episode window	Summary view, graphic and tabular Event Review window, graphic and tabular Event Episode window	Graphic and tabular Event Review window, Graphic and tabular Event Episode window
Database capability	25 events for 24 hours	25 events for 24 hours 25 events for 8 hours 50 events for 8 hours 50 events for 24 hours	25 events for 24 hours 25 events for 8 hours 50 events for 8 hours 50 events for 24 hours
Event Notification	no	yes	no

Select one of the listed Event Groups to start configuring it. Then either select each item and select the correct setting, or select **Guided Setup** to move automatically from each setting to the next.

Factory Defaults					
Item Name	**Oper. Mode**		**MP5 - MP90**		
	C	**M**			
Group 1					
Group Name	x		Standard		
Group Type	x		Standard		
Activated[1]	x	x	Yes		
Notification Type	x		None		
Episode Type	x	x	Average Trend (20min)		
Pre/Post Time	x	x	-10/+10 min		
Trigger Condition	x		At Least One Param.		
Parameters	x		HR(Pulse), SpO$_2$, Resp		
Param. 1: Trigger Type	x	x	HR(Pulse)	All ***/** Alarms	
Param. 2: Trigger Type	x	x	SpO$_2$	All ***/** Alarms	
Param. 3: Trigger Type	x	x	Resp	All ***/** Alarms	
Param. 4: Trigger Type	x	x	Blank		

1.As a factory default, group 1 is activated in monitors with options H10, H30, or H40. In monitors with option H20, group 1 is deactivated.

Factory Defaults					
Item Name	Oper. Mode		MP60 - MP90		
	C	**M**			
Group 2					
Group Name	x		Neuro		
Group Type	x		Standard		
Activated	x	x	No		
Notification Type	x		None		
Episode Type	x	x	Average Trend (20min)		
Pre/Post Time	x	x	-10/+10 min		
Trigger Condition	x		At Least One Param.		
Parameters	x		HR(Pulse), ABP, CPP, BIS		
Param. 1: Trigger Type	x	x	HR(Pulse)	All ***/** Alarms	
Param. 2: Trigger Type	x	x	ABP	All **HIGH Alarms	
				All **LOW Alarms	
Param. 3: Trigger Type	x	x	CPP	** Mean LOW	
Param. 4: Trigger Type	x	x	BIS		

Factory Defaults					
Item Name	Oper. Mode		MP60 - MP90		
	C	**M**			
Group 3					
Group Name	x		Hemo		
Group Type	x		Standard		
Activated	x	x	No		
Notification Type	x		None		
Episode Type	x	x	Average Trend (20min)		
Pre/Post Time	x	x	-10/+10 min		
Trigger Condition	x		At Least One Param.		
Parameters	x		HR(Pulse), SpO_2, ABP, CVP		
Param. 1: Trigger Type	x	x	HR(Pulse)	All ***/** Alarms	
Param. 2: Trigger Type	x	x	SpO_2	All ***/** Alarms	

Param. 3: Trigger Type	x	x	ABP	All **HIGH Alarms	
				All ** LOW Alarm	
Param. 4: Trigger Type	x	x	CVP	***/** All Mean	

Factory Defaults			
Item Name	**Oper. Mode**		**MP60 - MP90**
	C	**M**	
Group 4			
Group Name	x		Ventil.
Group Type	x		Standard
Activated	x	x	No
Notification Type	x		None
Episode Type	x	x	HighResTrend (4min)
Pre/Post Time	x	x	-2/+2 min
Trigger Condition	x		At Least One Param.
Parameters	x		HR(Pulse), SpO_2, Resp, $etCO_2$
Param. 1: Trigger Type	x	x	HR(Pulse)	*** EXTR TACHY	
				*** EXTR BRADY	
Param. 2: Trigger Type	x	x	SpO_2	All ***/** Alarms	
Param. 3: Trigger Type	x	x	Resp	All ***/** Alarms	
Param. 4: Trigger Type	x	x	$etCO_2$	All ***/** Alarms	

Factory Defaults			
Item Name	**Oper. Mode**		**MP60 - MP90**
	C	**M**	
Group 5			
Group Name	x		Arrhy/ST
Group Type	x		Standard
Activated	x	x	No
Notification Type	x		None
Episode Type	x	x	RealtimeWaves (15sec)
Pre/Post Time	x	x	-5/+10 sec
Trigger Condition	x		At Least One Param.
Parameters	x		HR(Pulse), PVC, All ST Leads

Param. 1: Trigger Type	x	x	HR(Pulse)	*** EXTR TACHY	
				*** EXTR BRADY	
Param. 2: Trigger Type	x	x	PVC	All ***/** Alarms	
Param. 3: Trigger Type	x	x	All STLeads	** HIGH	
				** LOW	
Param. 4: Trigger Type	x	x			

Factory Defaults					
Item Name	**Oper. Mode**		**MP5 - MP90**		
	C	**M**			
Group 6					
Group Name			NER		
Group Type	x		NER		
Activated[1]	x	x	Yes		
Notification Type			None		
Episode Type	x	x	High Res.Trend (4 min)		
Pre/PostTime	x	x	-2/+2 min		
Trigger Condition			At Least One Param.		
Parameters			HR, SpO$_2$, Resp		
Param. 1: Trigger Type	x	x	HR	*** EXTR BRADY	
Param. 2: Trigger Type	x	x	SpO$_2$	*** DESAT	
Param. 3: Trigger Type	x	x	Resp	*** APNEA	
Param. 4: Trigger Type	x	x			

1.As a factory default, group 6 is activated in monitors with option H20. In monitors with option H10, H30, or H40, group 6 is deactivated.

Event Settings Configuration Implications

Events are electronic records of episodes in the patients' condition. They can be used to drive alert notification to assist compliance to any protocol that is being used by the clinician.

Group Name This setting lets you change the name of each event group, except of the Neonatal Event Review (NER) group, which has fixed settings.

Group Type This setting lets you change the type of event group from **Standard** to **NER** and vice versa. Selecting **NER** as **Group Type** for an event group, automatically changes all settings for this group to the predefined NER group settings. Only one event group can be assigned as the NER group. If there is already an NER event group, changing the **Group Type** for another group to **NER**, changes the **Group Type** of the exisiting NER group to **Standard**.

Activated This setting defines whether an event group is currently active, that is it detects events according to its configuration. If the status is **Deactivated** event surveillance is effectively switched off. With Advanced Event Surveillance (AES, Option #C07) up to six event groups may be active at any given time. With Basic Event Surveillance (BES, Option #C06) or with Neonatal Event Review (NER, Option #C04) only one event group is available.

Notification Type This setting is available in Advanced Event Surveillance only. It defines the type of notification that is issued when an event is detected. For each event group, the appropriate notification can be selected depending on the severity of condition.

- Set **Notification Type** to **None** to receive no notification at all. Any captured event will still be stored and can be reviewed in the Event Episode or Event Review window.

- Set it to **Screen Prompt** to get a status message with a prompt tone.

- Set it to *** Alarm**, **** Alarm**, or ***** Alarm** to receive an alarm notification that will be independent from the alarm settings for each measurement. To prevent dual alarming, these options are only available if **Trigger Condition** is set to **At Least Two Param.** or higher. These event alarms are handled exactly like measurement alarms; they can be silenced and are also suspended when all alarms are suspended. You should only use alarm notification for events which are comparable in severity to standard measurement alarms to avoid potential confusion due to too many alarms.

- **** Alarm (PopUp)**, ***** Alarm (PopUp)**: if you select **** Alarm (PopUp)** or ***** Alarm (PopUp)**, the Event Episode window will automatically open on the Main Screen in addition to the normal alarm notifications when an event is detected.

Episode Type This setting lets you define the level of detail captured in an event episode for up to four measurements. The higher the data resolution, the shorter the period that the monitor can store in its memory. The choices are:

- **Realtime Wave (15sec)** - available in BES and AES (#C06, #C07)

- **HighRes Trend (4min)** - available in AES (#C07) and NER (#C04)

- **Average Trend (20min)** - available in BES and AES (#C06, #C07)

In addition to the wave or trend data, the following data is always stored with each event:

  - Numeric vital signs for all (up to 1030) measurements monitored.
  - Any alarm conditions active when the event episode was triggered.
  - Annotations connected with the event.

Pre/Post Time When an event occurs, information for a predefined duration is stored. This is the event episode. It includes information from a defined period before the trigger, called the event **Pre-time.** The episode time after the event is called the event **Post-time**. If a further event occurs during the event post-time it changes a single event to a combined event (combi-event). Manually-triggered event episodes document patient information from the time leading up to the event trigger; they do not have a post-time. The following table lists the available choices for each Event Episode Type:

Event Episode Type	Pre-time	Post-time
Average Trend 20 minutes, five samples per minute	2 minutes	18 minutes
	4 minutes	16 minutes
	6 minutes	14 minutes
	8 minutes	12 minutes
	10 minutes	10 minutes
	12 minutes	8 minutes
	14 minutes	6 minutes
	16 minutes	4 minutes
	18 minutes	2 minutes
HighRes Trend Four minutes, four samples per second.	1 minute	3 minutes
	2 minutes	2 minutes
	3 minutes	1 minute
Realtime Wave 15 seconds at 12.5 mm/s	5 seconds	10 seconds
	10 seconds	5 seconds

Parameters Up to four measurement parameters (three with BES and NER) can be included in each event group. For each parameter you can define two trigger conditions (one in BES and NER). If at least one of these conditions is met this parameter counts towards the number of events that can start an event capture.

The following categories of trigger conditions are available:

- **Patient alarms:** this means that an event is triggered when either a specific patient alarm, such as *****EXTREME TACHY**, or all patient alarms of a set severity for a certain measurement occur. An example for this last type of condition would be **All *** HR Alarms**. No events of this kind are triggered if alarms are switched off. Changing alarm limits changes the event trigger definitions.

- **User-defined limit violations:** allow you to define event triggers that are independent of alarm limits. You must set a threshold value and a threshold time for the trigger. If you set the trigger threshold time to 10 seconds, the monitor triggers an event if the threshold is violated for more than 10 seconds. Example: "HR higher than 120 bpm for 10sec (and longer)"

- **User-defined value deviations:** If you set user-defined deviation triggers, you can define event triggers that are independent of specific limits and based instead on deviations from the current values. You must set a deviation and a period of time in which the deviation occurs. There are three types of deviation available: **ANY** deviation, **UP** deviation where only changes in a positive direction are detected and **DOWN** deviation where only changes in a negative direction are detected. The deviation can be defined either in relative terms as a percentage, for example 10%, or as an absolute value, such as 10 bpm. Examples:
  - $etCO_2$: UP Deviation of 300% within 5 minutes.
  - RESP: ANY Deviation of 8 rpm within 5 minutes.

- **On-measurement triggers:** this means that an event is triggered when an aperiodic measurement (such as NBP) or a procedure (such as Cardiac Output) is finished.

Trigger Condition If more than one trigger is available for the measurements in the event group, the trigger condition may be **At Least One Param.**, **At Least Two Param.**, **At Least Three Par.** or **All Four Parameter**.

- If the trigger is **At Least One Param.**, the monitor starts an event capture if a trigger occurs in any of this event group's measurements.

- If the trigger is **At Least Three Par.**, the monitor captures events when three or more trigger thresholds from this event group's measurements are violated.

- With **Enhanced Condition** you can not only select a minimum number of triggers to trigger an event, but define which specific measurement triggers these must be. For example, **At Least Two Param.** will cause an event to be captured if a trigger occurs in any two of this event group's measurements - with Enhanced Condition you can select for example that only when triggers are in **HR** and **SpO$_2$** an event will be captured.

Configuring Event Annotations

MP5-90 Unique Monitor Setting: **Main Setup -> Event Surveill. -> Setup Events**
only **-> Event Annotation**

Factory Defaults				
Item Name	**Oper. Mode**		**MP5 - MP90**	
	C	**M**		
Annotations (Text / Group)			Text	Group
Annotation 1	x		No Intervention	All Groups
Annotation 2	x		Mild Stimulation	All Groups
Annotation 3	x		Moderate Stimulation	All Groups
Annotation 4	x		Vigorous Stimulation	All Groups
Annotation 5	x		Awake	Standard
Annotation 6	x		Sleeping	Standard
Annotation 7	x		Gagging/Emesis	Standard
Annotation 8	x		Feeding	Standard
Annotation 9	x		Stressful Procedure	Standard
Annotation 10	x		Skin Color: Pink	NER
Annotation 11	x		Skin Color: Dusky	NER
Annotation 12	x		Skin Color: Cyanotic	NER
Annotation 13	x		Skin Color: Mottled	NER
Annotation 14	x		Skin Color: Jaundice	NER
Annotation 15	x		Annotation 15	No Group
Annotation 16	x		Annotation 16	No Group
Annotation 17	x		Annotation 17	No Group
Annotation 18	x		Annotation 18	No Group
Annotation 19	x		Annotation 19	No Group
Annotation 20	x		Annotation 20	No Group

When you configure additional annotations, you can choose whether they appear with one particular Event Group or with all Event Groups. **No Group** indicates that the annotation is not yet linked to appear with any Event Group.

Configuring ProtocolWatch

MP5-90 only `Unique Monitor Setting: Main Setup -> ProtocolWatch`

Factory Defaults			
Item Name	**Oper. Mode**		**MP5 - MP90**
	C	**M**	
CVP Threshold[1]	x		100 mmHg
CVP Thresh. Unit[1]	x		mmHg
Protocol[1]	x	x	Off
StartUp Time	x		0 min
Shift Duration	x		8 hours
AutoScreenChange	x		Yes
Standby Time	x		7 days
Drotrecogin Alfa	x		Yes
LowDose Steroids	x		Yes

1.Settings is a normal monitor setting, not a unique monitor setting.

ProtocolWatch Application Configuration Implications

ProtocolWatch (PW) is a clinical decision support tool. It allows you to run a clinical protocol which can monitor developments in the patient's condition. ProtocolWatch notifies you when certain conditions or combinations of conditions occur and it documents developments in a log which can be printed. For detailed information on how to use this application, see the monitor's Instructions for Use.

CVP Threshold This setting is a normal monitor setting. It lets you define the maximum CVP value the monitor will automatically enter into a protocol when CVP is continuously measured. Use this setting to prevent false high CVP values from being entered into a protocol when the CVP is continuously measured.

CVP Thresh. Unit This setting is a normal monitor setting. It lets you change the unit used for the **CVP Threshold**.

Protocol This setting is a nomal monitor setting. It lets you preselect the protocol you want to run. Selecting the **Protocol** also determines which protocol-specific configuration settings are displayed (see below) and can be configured. At this point, only the **SSC Sepsis** protocol is available. If you select **Off**, no protocol will be preselected. Note that **Protocol** can always be changed by the clinician during monitoring.

SSC Sepsis Protocol Configuration Implications

The following settings are only available when **Protocol** is set to **SSC Sepsis**.

StartUp Time If the SSC Sepsis protocol is active, and the patient category is Adult, and the monitor detects a valid HR or Pulse for the duration of the configured **StartUp Time**, the monitor automatically enters the Severe Sepsis Screening phase. If **StartUp Time** is set to **0 min**, the screening will start between about 3 minutes after the monitor detects a valid Pulse or HR.

Shift Duration This setting lets you adjust the frequency of ProtocolWatch tasks that should be conducted once per shift to the units shift duration. Choices are **8 hrs** or **12 hrs**.

AutoScreenChange Set this to **Yes**, if you want the monitor to prompt you to change the active Screen to the Sepsis Screen when entering the Sepsis Resuscitation and Sepsis Management phase.

Standby Time After completion of the Sepsis Management phase, a sepsis standby phase begins which allows time for further patient stabilization and recovery. During this phase Severe Sepsis Screening is suspended. **Standby Time** lets you adjust the length of the standby phase between 1 and 7 days.

Drotrecogin Alfa Set this to **Yes** if you want the recommendation for Drotrecogin Alfa to appear during the SSC Sepsis Management phase.

LowDose Steroids Set this to **Yes** if you want the recommendation for Low Dose Steroids to appear during the SSC Sepsis Management phase.

Configuring Recordings

Unique Monitor Setting: Main Setup -> Recordings

Factory Defaults					
Item Name	Oper. Mode C	M	MP20 - MP90 MP5 (H30)	MP20 (M20/M21) MP5 (H10/20/40) MP5T	MP2/X2
General					
Central Config	x	x	No		
ECG Gain	x	x	10 mm/mV		
Delayed Recording					
Recording Name	x		Recordng		
Recorder	x	x	Local		Central 2-Ch
Channel 1	x	x	Primary Lead		
Channel 2	x	x	ABP		
Channel 3	x	x	Blank		
Channel 4[1]	x	x	Blank		
Overlap	x	x	Off		
Speed	x	x	25 mm/s		
Delay Time	x		15 sec		
Run Time	x		20 sec		
Alarm Recording					
Recorder	x	x	Local		Central 2-Ch
Channel 1	x	x	Primary Lead		
Channel 2	x	x	Alarm Par		
Channel 3	x	x	Blank		
Overlap	x	x	Off		
Speed	x	x	25 mm/s		

Factory Defaults					
Item Name	**Oper. Mode**		**MP20 - MP90** **MP5 (H30)**	**MP20 (M20/M21)** **MP5 (H10/20/40)** **MP5T**	**MP2/X2**
	C	**M**			
Delay Time	x		15 sec		
Run Time	x		20 sec		
Realtime A					
Recording Name	x		Recordng		
Recorder	x	x	Local		Central 2-Ch
Channel 1	x	x	Primary Lead		
Channel 2	x	x	ABP	Blank	ABP
Channel 3	x	x	Blank		
Channel 4[1]	x	x	Blank		
Overlap	x	x	Off		
Speed	x	x	25 mm/s		
Run Time	x		Continuous		
Realtime B					
Recording Name	x		Recordng		
Recorder	x	x	Local		Central 2-Ch
Channel 1	x	x	Primary Lead		
Channel 2	x	x	ABP		
Channel 3	x	x	Pleth		
Channel 4[1]	x	x	Blank		
Overlap	x	x	Channel 2+3		Off
Speed	x	x	25 mm/s		
Run Time	x		Continuous		
Realtime C[2]					
Recording Name	x		Recordng	not applicable, MP20/30, MP5, MP5T, and MP2/X2 do not support Realtime C recordings.	
Recorder	x	x	Local		
Channel 1	x	x	Primary Lead		
Channel 2	x	x	ABP		
Channel 3	x	x	Pleth		
Channel 4[1]	x	x			
Overlap	x	x	Channel 1+2+3		
Speed	x	x	25 mm/s		
Run Time	x		Continuous		

Factory Defaults					
Item Name	**Oper. Mode**		**MP20 - MP90 MP5 (H30)**	**MP20 (M20/M21) MP5 (H10/20/40) MP5T**	**MP2/X2**
	C	**M**			
HiResTrend[3]					
Recording Name	x		Recordng		not applicable, the MP2/X2 does not support HiRes Trend recordings.
Recorder	x	x	Local		
Channel 1	x	x	btbHR		
Channel 2	x	x	SpO2		
Channel 3	x	x	Resp		
Overlap	x	x	Off		
Speed	x	x	2 cm/min		
Delay Time	x		6 min		
Run Time	x		Continuous		

1. Setting only available if a four-channel recorder is available and selected.
2. Realtime C recordings not available on MP2, MP5, and MP20/30 monitors.
3. HiRes Trend recordings not available on MP2 monitors.

For information on configuring Vital Signs Recordings, see "Configuring Vital Signs Recording" on page 95.

Recordings Configuration Implications

ECG Gain This defines how every recorded ECG wave, irrespective of template or recording type, will appear on the recorder strip. This does not affect the displayed ECG wave, or printed ECG reports. Set **ECG Gain** to **Auto** to use the same scale as the ECG wave on the monitor screen.

Central Config This setting defines for a central recording whether the layout of the recording (waves, speed, overlap, etc.) is defined by the bedside or the Information Center.
Select **No** to use the layout defined in the monitor, select **Yes** to use the layout defined in the Information Center.
When a telemetry device is paired with a bedside monitor, the ECG waveforms available at the Information Center are provided by the telemetry device. If the recorder is set to **Central**, and **Central Config** is set to **Yes**, the waveforms recorded will be the telemetry ECG waveforms, Pleth from telemetry if available and then any other waveforms from the bedside (except ECG). If the recorder is set to **Central**, and **Central Config** is set to **No**, the bedside monitor will send the request for the recording based on its configuration. If none of the waves are available at the Information Center, it will record the waves based on the layout defined in the Information Center. For example, if the requested recording is configured to be **Primary ECG** (bedside ECG) and **ABP** and there is no ABP waveform available, the recording will be the paired telemetry ECG waveforms.

Recorder choose which recorder the recording will print to. Choices are **Local**, **Central 2-Ch.**, **Central 4-Ch.**

If you configure a **Local** recorder, and no local recorder is available, the monitor will automatically send the recording to a central recorder, if available.

For alarm recordings the additional choice **Printer** is available. If you select **Printer**, all other settings disappear and the alarm recording will be printed as a realtime report, following the settings configured for Realtime Reports, see "Configuring Reports" on page 101. You can use this choice if you need to generate Alarm Recordings on monitors that have no local recorder, such as the MP2 or X2, especially in circumstances when the monitor has no connection to a central recorder, for example during transport.

Channel 1 - 4 defines which waveform to record in each channel. **Channel 4** will only be available when the **Central 4-Ch** recorder has been selected. If the wave assigned to a recording channel in a particular template is not available when a recording is triggered, the channel is left blank on the recording strip. The pop-up list of available (currently monitored) waves differs according to the recording type:

– Realtime, delayed and alarm recordings: the list shows all the currently available waves.

– High-resolution recordings: the list shows all the available high-resolution waves

In addition to the currently available waves, you can choose from several other settings which make an automatic allocation when the recording starts:

– **Alarm Par** will always record the measurement in alarm in the chosen recorder channel

– **Primary Lead** will always record the current primary lead in the chosen recorder channel

– **Secondary Lead** will always record the current secondary lead in the chosen recorder channel

– **Agent** will always record the currently selected anesthetic agent.

For high-resolution recordings only the **Agent** setting is available.

Overlap defines whether the recorded waveforms will be printed overlapping or beside each other.

Speed lets you define the recording print speed.

Delay Time Some recordings start documenting on the recorder strip from a pre-set time before the recording is started. This interval is called the "Delay Time" and can be set to 10 or 15 seconds for Delayed and Alarm recordings and to 1 - 6 minutes for HiResTrnd recordings.

Runtime defines how long this type of recording is configured to run. Continuous recordings run indefinitely.

Configuring Timers

MP5-90 only `Unique Monitor Setting: Main Setup -> Timers -> Setup <Timer Label>`

Factory Defaults				
#	**Item Name**	**Oper. Mode**		**MP5 - MP90**
		C	**M**	
1	Label	x	x	Timer A
	Run Time	x	x	1 min
	Type	x		Basic
	Direction	x	x	Up
	Notification	x		No Sound
	Auto Window	x		No
	Color	x		White
	Timer Volume	x	x	not applicable, this setting is stored as a monitor setting, see "Configuring User Interface Settings" on page 110.
2	Label	x	x	Timer B
	Run Time	x	x	5 min
	Type	x		Basic
	Direction	x	x	Down
	Notification	x		No Sound
	Auto Window	x		No
	Color	x		White
	Timer Volume	x	x	not applicable, this setting is stored as a monitor setting, see "Configuring User Interface Settings" on page 110.
3	Label	x	x	Timer C
	Run Time	x	x	10 min
	Type	x		Basic
	Direction	x	x	Up
	Notification	x		No Sound
	Auto Window	x		No
	Color	x		White
	Timer Volume	x	x	not applicable, this setting is stored as a monitor setting, see "Configuring User Interface Settings" on page 110.
4	Label	x	x	Timer D
	Run Time	x	x	15 min
	Type	x		Basic
	Direction	x	x	Down
	Notification	x		No Sound
	Auto Window	x		No
	Color	x		White
	Timer Volume	x	x	not applicable, this setting is stored as a monitor setting, see "Configuring User Interface Settings" on page 110.

Factory Defaults				
#	Item Name	Oper. Mode		MP5 - MP90
		C	M	
5	Label	x	x	Bypass
	Run Time	x	x	30 min
	Type	x		Basic
	Direction	x	x	Down
	Notification	x		No Sound
	Auto Window	x		No
	Color	x		White
	Timer Volume	x	x	not applicable, this setting is stored as a monitor setting, see "Configuring User Interface Settings" on page 110.
6	Label	x	x	Clamp
	Run Time	x	x	10 min
	Type	x		Basic
	Direction	x	x	Down
	Notification	x		No Sound
	Auto Window	x		No
	Color	x		White
	Timer Volume	x	x	not applicable, this setting is stored as a monitor setting, see "Configuring User Interface Settings" on page 110.
7	Label	x	x	Code
	Type	x		No Limit
	Color	x		White
	Timer Volume	x	x	not applicable, this setting is stored as a monitor setting, see "Configuring User Interface Settings" on page 110.
8	Label	x	x	Case
	Type	x		No Limit
	Color	x		White
	Timer Volume	x	x	not applicable, this setting is stored as a monitor setting, see "Configuring User Interface Settings" on page 110.
9	Label	x	x	Docu
	Run Time	x	x	60 min
	Type	x		Cyclic
	Direction	x	x	Up
	Notification	x		No Sound
	Auto Window	x		No
	Color	x		White
	Timer Volume	x	x	not applicable, this setting is stored as a monitor setting, see "Configuring User Interface Settings" on page 110.
10	Label	x	x	Tournq (Tourniquet)
	Run Time	x	x	2 hours
	Type	x		Basic

Factory Defaults				
#	Item Name	Oper. Mode		MP5 - MP90
		C	M	
	Direction	x	x	Down
	Notification	x		No Sound
	Auto Window	x		No
	Color	x		White
	Timer Volume	x	x	not applicable, this setting is stored as a monitor setting, see "Configuring User Interface Settings" on page 110.
11	Label	x	x	Infus
	Run Time	x	x	30 min
	Type	x		Basic
	Direction	x	x	Down
	Notification	x		No Sound
	Auto Window	x		No
	Color	x		White
	Timer Volume	x	x	not applicable, this setting is stored as a monitor setting, see "Configuring User Interface Settings" on page 110.
12	Label	x	x	PreOxy (Preoxygenation)
	Run Time	x	x	5 min
	Type	x		Basic
	Direction	x	x	Down
	Notification	x		No Sound
	Auto Window	x		No
	Color	x		White
	Timer Volume	x	x	not applicable, this setting is stored as a monitor setting, see "Configuring User Interface Settings" on page 110.
13	Label	x	x	NST (Non-Stress Test)
	Run Time	x	x	20 min
	Type	x		Basic
	Direction	x	x	Up
	Notification	x		Sound
	Auto Window	x		No
	Color	x		Blue
	Timer Volume	x	x	not applicable, this setting is stored as a monitor setting, see "Configuring User Interface Settings" on page 110.

Timer Configuration Implications

Timer Label When you assign a label to a timer, the monitor automatically applies the settings preconfigured for this label to the timer. You can then change these settings. The timer label itself cannot be customized.

The IntelliVue MP60/70/80/90 can run a maximum of four timers at the same time (MP40/50: three timers, MP20/30: two timers, MP5: one timer). The selection and priority of the timers can be configured in the Timers window. For details, see "Configuring Timer Selection and Order" on page 160.

Run Time The run time can be set between 1 minute and 96 hours. **No Limit** timers have no run time. This setting can also be changed in monitoring mode.

Type This setting defines the timer type. It can also be changed in monitoring mode. The following timer types are available:

- A **Basic** timer has a single, defined run time. The progress is shown in the progress bar.

- An **Enhanced** timer is like a **Basic** timer, but the progress bar shows progress beyond the end of the run time.

- A **Cyclic** timer is like a **Basic** timer but restarts automatically when the run time is expired.

- A **No Limit** timer has no run time or progress bar and shows the time elapsed since the timer was started.

Direction Timers can count up or down, showing elapsed time or remaining time. No Limit timers automatically count up. This setting can be also changed in monitoring mode.

Notification When any timer expires (except a No Limit timer), its color changes to red and a message appears in the monitor status line on the Main Screen. The setting **Notification** lets you configure an alarm or a single tone as additional means of notification:

- Select **Alarm** to receive an INOP alarm when the timer expires.

- Select **Sound** to hear a single tone when the timer expires.

- Select **No Sound** for no additional notification.

Auto Window This setting lets you configure whether a window automatically pops up when the timer expires. Choice are **Yes** or **No**.

Color lets you configure the color for a timer. This setting only has an effect on timers that are displayed on the Main Screen (i.e. timers that are embedded on a Screen). The timers displayed in the Timers window are always shown in gray color.

Timer Volume This setting is stored as a normal Monitor setting, see "Configuring User Interface Settings" on page 110.

Configuring Timer Selection and Order

The selection and order of timers as they appear in the Timers menu are stored as Global settings, see "Configuring Timer Selection and Order" on page 160.

Configuring User Interface Settings - Keys

Global SmartKeys

`Unique Monitor Setting: Main Setup -> User Interface`

Factory Defaults					
Item Name	Oper. Mode		MP20 - MP90	MP20 (M20/M21) MP5 MP5T	MP2/X2
	C	M			
Global SmartKeys	x		Start/Stop (NBP)	Start/Stop (NBP)	Start/Stop (NBP)
			Stop All (NBP)	Repeat Time (NBP)	Measmt. Select.
			Repeat Time (NBP)	Delayed Record	Admit/Dischrge
			Zero Press	Vitals Trend	AlarmLimits
			RT Record	Default Profile	Vitals Trend
			Delayed Record	End Case	Profiles
			Standby	<none>	Alarm Volume
			Wedge	<none>	QRS Volume
			C.O. / CCO	<none>	Monitor Standby
			Calcs	<none>	Stop All (NBP)
			VeniPuncture	<none>	NBP STAT
			Adjust Size	<none>	VeniPuncture (NBP)
			Annot. Arrhy	<none>	Repeat Time (NBP)
			RelearnArrhy	<none>	Zero Press
			Vitals Trend	<none>	Adjust Size
			Graph Trend	<none>	Brightness
			Event Summary	<none>	Graph Trend
			Remote Applics	<none>	Main Setup
			External Device	<none>	<none>
			PrintReports	<none>	<none>
			End Case	<none>	<none>
			AlarmLimits	<none>	<none>
			Alarm Volume	<none>	<none>
			QRS Volume	<none>	<none>
			Brightness	<none>	<none>

Global SmartKeys Configuration Implications

Global SmartKeys. This lets you define the selection and sequence of the global SmartKeys. Global SmartKeys become effective (visible) when you activate a Screen that has no SmartKeys defined on it.

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The number of SmartKeys visible at a time depends on the monitor's display resolution and the resolution of the Screen:

SVGA: 6

XGA: 7

SXGA: 9

WXGA: 9

WXGA+: 10

WSXGA: 11

Changing the Selection and Sequence of Global SmartKeys

To change the selection of the Global SmartKeys,

1   Select `Main Setup -> User Interface -> Global SmartKeys`.

2   From the pop-up key line, select `Add` to open the `Choices` menu that contains all available SmartKeys.

3   From the `Choices` menu, select the desired SmartKey. This adds the new key to the bottom of the list of configured SmartKeys (on the left).

To delete a SmartKey from the list of configured SmartKeys,

♦   select it in the list, then select the pop-up key `Delete`.

To move a SmartKey to a different position,

♦   use the `Sort Up` and `Sort Down` pop-up keys.

Function Keys

MP20-90 only   `Unique Monitor Setting: Main Setup -> User Interface`

Factory Defaults				
Item Name	**Oper. Mode**		**MP20 - MP90**	
	C	**M**		
Oper. 1 Fn. Keys	x		F1	<none>
			F2	<none>
			F3	<none>
			F4	<none>
			F5	<none>
			F6	<none>
			F7	<none>
			F8	<none>
			F9	<none>
			F10	<none>
			F11	<none>
			F12	<none>

Factory Defaults				
Item Name	**Oper. Mode**		**MP20 - MP90**	
	C	**M**		
Oper. 2 Fn. Keys[1]	x		F1	<none>
			F2	<none>
			F3	<none>
			F4	<none>
			F5	<none>
			F6	<none>
			F7	<none>
			F8	<none>
			F9	<none>
			F10	<none>
			F11	<none>
			F12	<none>

1.Setting only available on MP90s with more than one CPU.

Function Key Configuration Implications

Be aware that after upgrading a monitor from any software revision prior to E.0, no functions will be assigned to the function keys.

`Oper. 1 Fn. Keys.` This setting lets you assign specific SmartKey functions to the 5 function keys (F1 - F5) on a connected Remote SpeedPoint and the 12 function keys (F1 - F12) on an attached PS/2 keyboard.

`Oper. 2 Fn Keys.` This setting is only available for MP90 monitors with more than one CPU board. If you have configured the MP90 for two operators, this setting lets you assign specific SmartKey functions to the 5 function keys (F1 - F5) on the Remote SpeedPoint assigned to **Operator 2**, and the 12 function keys (F1 - F12) on a PS/2 keyboard assigned to **Operator 2**.

Configuring CSA Buffers

MP40-90 only `Unique Monitor Setting: Main Setup -> Measurements -> EEG`

Factory Defaults				
Item Name	**Oper. Mode**		**MP40 - MP90**	
	C	**M**		
Buffer A	x		2 sec	
Buffer B	x		30 sec	
Buffer C	x		120 sec	

CSA Buffer Configuration Implications

These CSA buffer settings apply for CSAs viewed on screen and for CSA reports.

Buffer A / Buffer B / Buffer C A buffer defines the interval between the spectral lines displayed in the CSA. The smaller the interval, the more often the CSA is updated, and the shorter the time span covered by the CSA display. **Buffer A**, **Buffer B**, and **Buffer C** give you three preconfigured choices which are then available for configuration of the CSA window and CSA reports.

Configuring the Drug Calculator

Unique Monitor Setting

Configuration of the drug calculator cannot be done in the monitor's configuration mode, it can only be done with the Support Tool. When the Drug Calculator is delivered from the factory, the only drug in the Drug Calculator drug list is the generic drug "Any Drug".

Philips does **not** accept responsibility for any drug configuration created using the Support Tool. Before the drug list is used on a patient monitor, a signed copy of it must be approved by a hospital representative.

Up to 75 drugs (including the generic drug **ANY DRUG**) can be configured for all three patient categories. Configuration includes

- Amount and Volume

- Dose

- Rate

- Units

- Minimum/maximum ranges and start values

- Titration Table settings, such as Dose and Rate increments

- Whether the Rule of 6 may be used weight-based drugs in the neonatal and pediatric patient category.

WARNING When you clone a configuration to a monitor, the associated drug list is automatically cloned with the configuration. Therefore, before cloning a configuration to a monitor, you must always check

- whether there is a drug list in the configuration

- whether this configuration is correct for the hospital unit you are working in

- that you have a Drug Calculator Offline Configuration Report on file, signed by a hospital representative, with the same CRC number as the drug list in the configuration.

For detailed information on configuring the drug calculator, see the chapter "Using the Drug Calculator Configuration Editor" in the Support Tool Instructions for Use.

Global Settings

This section lists all global settings. Just like unique monitor settings (see "Understanding Monitor Settings" on page 84), global settings are set once per monitor and are independent of the Profiles and Settings Blocks. The difference is that any changes you may configure are automatically stored, there is no need to save them.

Read any information on Configuration Implications at the end of the sections before you make any configuration changes.

Configuring General Global Settings

Global Setting: Main Setup -> Global Settings

Factory Defaults								
Item Name	**Oper. Mode**		**MP20 - MP90 (H10/20/40)**	**MP20 - MP90 (H30)**	**MP5 (H30)**	**MP5 (H10/20/40)**	**MP5T**	**MP2 / X2**
	C	**M**						
Default Profile	x		The factory default Profile depends on the monitor model and H option. See the section Configuration Overview starting on page 194.					
Altitude (m)	x		0					
Line Frequency[1]	x		60Hz					
QRS Type	x		QRS Tone					
ECG Cable Color[1]	x		AAMI					
Asystole Detect.	x		Standard					
Pat. Sel. Default	x		Cont Monitor	Ask User	not applicable, settings are not available for MP2/X2 and MP5.			
MMS Sett. Upload	x		No	Yes				
MMS Trend Upload	x		No	Yes				
MMS PW Sync	x		No	Yes				
AskUser Reminder	x		Off					
QuickAdmit Field	x		MRN					
QuickAdmitDischg	x		Ask User					
Height Unit[1]	x		in					
Weight Unit[1]	x		lb	kg	kg	*lb*		
Automat. Default	x		Yes					
Ask For New Pat	x		See "Configuring Ask for New Patient Settings" on page 157					
Demograph. Fields			See "Configuring Demographic Fields Settings" on page 158					
Tele Discharge[2]	x		not applicable, setting is not available for MP20-90	Off			OnDisc onnect	Off
TransportProfile	x		not applicable, this setting is not available for MP20-90	As Is				
Remote Controls	x		Enabled					
Silence Key	x		Checkmark (MP60-90 only)	not applicable				
Arrhy Text	x		* Alarm					
ConfirmAlarmsOff		x	No					

Factory Defaults								
Item Name	Oper. Mode		MP20 - MP90 (H10/20/40)	MP20 - MP90 (H30)	MP5 (H30)	MP5 (H10/20/40)	MP5T	MP2 / X2
	C	M						
Power Loss Sound	x		not applicable, setting is not available for MP2-90		Enabled			not applicable
Label Set	x		Restricted					
LAN Data Export	x		All					
TeleUnassign[3]	x		not applicable, setting is not available for MP20-90		1 min			
TAAP[2.]	x		not applicable, setting is not available for MP20-90		Enabled			MP2: Enabled X2: Disabled
Remote Display		x	See "Configuring Remote Display Settings" on page 159					

1. For new monitors shipped from the factory, the defaults for these settings are set for the country to which the monitor is shipped, see "Configuring Country-Specific Settings" on page 164.
2. Setting only available for monitors that have a telemetry device (TAAP) connector or a short range radio interface installed.
3. Setting only available for monitors that have a short range radio interface installed.

General Global Settings Configuration Implications

Default Profile To set the default Profile, select Profiles in the Monitor Info Line, select Profile in the Profiles window, then select the Profile you want to set as default Profile from the pop-up list. Select the **Set Default** softkey. This change takes effect immediately and you do not need to save it. Use the table in the section "Profile Settings" on page 28 to document the default Profile.

Altitude Some measurements use the configured altitude setting to derive a typical ambient pressure which is used in the calculation of partial pressure values. To ensure correct measurement values, the altitude setting must be correctly set.

Line Frequency Use the **Line Frequency** setting to configure the correct line frequency for the AC Power, either 50 Hz or 60 Hz. If the Line Frequency is incorrectly set, this may affect the ECG signal quality.

QRS Type Select **QRS Tone** or **QRS Tick**. If **Tone Modulation** is set to **Yes**, the **QRS Type** automatically switches to **QRS Tone**. For both types, the frequency and rhythm information is derived from either the ECG or Pulse, depending on which is currently selected as the alarm source.

ECG Cable Color This setting determines the labels the monitor uses when it refers to individual ECG electrodes, such as in a LEAD Off INOP message that will be issued when an individual ECG electrode has fallen off. If **ECG Cable Color** is set to **AAMI**, the monitor uses the labels **RA**, **LA**, **LL**, **RL**, **V**, and **V1** through **V6**. If set to **IEC**, it uses **RA**, **LA**, **LL**, **RL**, and **C1** through **C6**.

Asystole Detect. Set **Asystole Detect.** to **Enhanced** to improve alarming on asystole under certain conditions. In enhanced mode, an asystole alarm will be suppressed for up to nine seconds (= Asystole Threshold + 5 sec.) if a valid beat-to-beat Pulse is detected from an active pulsatile invasive Pressure measurement.

Pat.Sel.Default This setting defines how the monitor behaves when there is a patient identification mismatch between the MMS and the monitor. If you set this to **Cont Monitor** or **Continue MMS**, the monitor resolves the mismatch automatically. To require user confirmation before the mismatch is resolved, set this to **Ask User**. For more detail, please refer to the monitor's Instructions for Use.

AskUser Reminder This setting lets you specify a time after which the clinician will be reminded of an unresolved patient identification mismatch. If the user ignores a patient identification mismatch by closing the Patient Selection window, the monitor will automatically pop up the Patient Selection window on the Main Screen after the configured time (**5min**, **10min**, **15min**, or **30min**). To disable this behavior, set **AskUser Reminder** to **Off**.

MMS Sett.Upload If set to **Yes**, the active settings from the MMS measurements will be uploaded to the monitor when you connect an MMS to a monitor and one of the following conditions applies:

- the patient in the MMS and the patient in the monitor are the same, i.e. no patient identification mismatch occurs.

- the patient in the MMS and the patient in the monitor are different, and **Pat.Sel.Default** is configured to **Continue MMS**.

- the patient in the MMS and the patient in the monitor are different, and **Pat.Sel.Default** is configured to **Ask User**, and the clinician resolves the patient identification mismatch by selecting **Same Patient** or **Cont MMS**.

Note: if **Pat.Sel.Default** is set to **Cont Monitor**, **MMS Sett.Upload** is automatically set to **No** and cannot be changed.

MMS Trend Upload If set to **Yes**, the trend data from the MMS measurements will be uploaded to the monitor when you connect an MMS to a monitor and one of the following conditions applies:

- the patient in the MMS and the patient in the monitor are the same, i.e. no patient identification mismatch occurs.

- the patient in the MMS and the patient in the monitor are different, and **Pat.Sel.Default** is configured to **Continue MMS**.

- the patient in the MMS and the patient in the monitor are different, and **Pat.Sel.Default** is configured to **Ask User**, and the clinician resolves the patient identification mismatch by selecting **Same Patient** or **Cont MMS**.

Note: iff **Pat.Sel.Default** is set to **Cont Monitor**, **MMS Trend Upload** is automatically set to **No** and cannot be changed.

MMS PW Sync If set to **Yes**, the ProtocolWatch information stored in the MMS (PW data, PW state, PW logs and active protocol) will be uploaded to the monitor when you connect an MMS to a monitor and one of the following conditions applies:

- the patient in the MMS and the patient in the monitor are the same, i.e. no patient identification mismatch occurs.

- the patient in the MMS and the patient in the monitor are different, and **Pat.Sel.Default** is configured to **Continue MMS**.

- the patient in the MMS and the patient in the monitor are different, and **Pat.Sel.Default** is configured to **Ask User**, and the clinician resolves the patient identification mismatch by selecting **Same Patient** or **Cont MMS**.

Note: if `Pat.Sel.Default` is set to `Cont Monitor`, `MMS PW Sync` is automatically set to `No` and cannot be changed.

NOTE   It is not possible to transfer SSC Sepsis Protocol data from a monitor with release F.0 software to another monitor with release G.0 software (or higher) and vice versa.

`QuickAdmit Field` This setting defines which data field is used when performing a Quick Admit procedure. Choices are `MRN` and `Last Name`. If you are using a barcode reader to enter the Quick Admit data, make sure that the setting made here corresponds to the information provided by the barcode. If `Quick Admit Field` is set to `MRN`, and the monitor is connected to an Information Center, the monitor enters "---" into the Last Name field to enable admission at the Information Center.

`QuickAdmitDischg` When a Quick Admit is initiated, the monitor compares the information entered into the Quick Admit Field (see above) with the information that is currently stored for that field. If the information is different, the monitor optionally discharges the previous patient, depending on how the `QuickAdmitDischg` setting is configured:

- If set to `Ask User`, the monitor asks the user whether they want to discharge the previous patient.
- If set to `Yes`, the monitor automatically discharges the previous patient.
- If set to `No`, the monitor overwrites the data in the Quick Admit Field with the new data, but does not discharge the patient.

`Tele Discharge` This setting is only available in monitors with a telemetry device (TAAP) connector or a short range radio interface. It determines the automatic discharge behavior of the monitor **only** when it is used in a mode where it:

- has no connection to a host monitor (companion mode),
- has no connection to an Information Center, and
- a telemetry transceiver is directly connected via cable or short range radio link to the monitor.

The available configuration choices are:

- `OnDisconnect` The monitor automatically discharges the patient from the monitor when the telemetry **transceiver is disconnected or unassigned** from the monitor.
  Be aware that if you then measure NBP or Pred. Temp with the monitor before you connect a new transceiver, only the measurement readings with the latest timestamp will be uploaded to the Information Center when you connect the new transceiver.

- `OnDevChange` The monitor automatically discharges the patient from the monitor when a **different transceiver is connected or assigned** to the monitor. The transceivers are distinguished by their telemetry labels. If you connect the transceiver to the monitor via a short range radio link, assigning a different transceiver automatically unassigns the previous transceiver.
  With `Tele Discharge` configured to `OnDevChange`, be aware of the following: if you want to measure NBP or Pred. Temp for a patient and want to upload this data via the transceiver to the Information Center, always connect the transceiver to the monitor **before** you make the measurements, otherwise the measurement data will be erased by the discharge when you connect the new transceiver.

- `Off` This setting is not recommended if you want to use the monitor for spot-checking. With `Tele Discharge` set to `Off`, the monitor does not perform an automatic discharge.
  If you disconnect a transceiver and then measure NBP or Pred. Temp with the monitor, the latest measurement readings will be uploaded to the Information Center when you connect a new transceiver.

`Height Unit/Weight Unit` define the unit used when entering the height / weight of the patient. Choices are `in` or `cm` for height and `lb` or `kg` for weight. Be aware that these settings can be overwritten by the Region settings applied during an Upgrade or Cloning procedure with the IntelliVue Support Tool.

`Automat. Default`

– If `Automat. Default` is set to `Yes`, and the monitor is switched off for more than one minute, the default Profile is reloaded in the monitor. Any unstored changes made to the Settings Blocks and Profiles are lost.

– If `Automat. Default` is set to `No`, and the monitor is switched off for more than one minute, the active settings from the most recent session are retained. Automatic Default does not affect the monitor behavior when you discharge a patient. After discharge, the default Profile is always restored.

If the monitor is switched off and then on again in less than one minute, all active settings are retained, irrespective of the `Automat. Default` setting.

`TransportProfile` (MP5, X2 only) This setting is only available on monitors that can be connected to a host monitor and work in companion mode. It defines which settings become active in the monitor when the monitor is disconnected from the host monitor, for example to be used in a transport situation.

– If set to `As Is`, the active settings from the host monitor are used, no user interaction is required.

– If set to `Def. Profile`, settings are reset to the default profile defined in the monitor. The user needs to confirm this action.

– If set to `Ask User`, the monitor will prompt the user to select a profile from the list of configured profiles.

`Remote Controls` Some functions of the IntelliVue bedside monitor, such as silencing alarms, Starting/Stopping NBP measurements, arrhythmia settings, and HR alarm limits can be remotely controlled from an Information Center. For a complete list of functions that can be remotely controlled, please refer to your Information Center Instructions for Use. Set `Remote Controls` to `Disabled` if you do not want to allow users to control these functions from the Information Center.

For remote controls to work, they must be **Enabled** at the monitor **and** at the Information Center. If you disable them at the bedside monitor, the user at the Information Center may not be notified of this change. The controls at the Information Center may appear to work, but they will not change anything at the monitor.

`Silence Key` This setting is applicable for the MP60/MP70 and MP90 only. It lets you change the symbol shown on the Silence SmartKey. The Silence hardkey on early versions of the IntelliVue patient monitor and on the Remote SpeedPoint is labelled with a loudspeaker. If your equipment is labelled with the loudspeaker, you might want to set this to "Loudspeaker".

`Arrhy Text` This setting defines whether short arrhythmia alarm messages are displayed as one star (*) or two star (**) alarms. If you are using an IntelliVue Information Center you might want to set this to one star (*) for consistency.

`ConfirmAlarmsOff` This setting determines whether pausing alarms or switching alarms off has to be confirmed by the user before it becomes effective. If `ConfirmAlarmsOff` is configured to `Yes`, a pop-up key line will appear asking to confirm that alarms should be paused (or switched off).

⚠ Pause Alarms	Pause Alarms		
	Select Confirm to pause alarms.	Confirm	Cancel

Power Loss Sound (MP5 only) Lets you defines whether the power loss sound in the MP5 is **Enabled** or **Disabled**. If **Enabled**, a sound will be generated whenever the main power is lost or the power cord is disconnected while the monitor is running.

Label Set The **Full** label set provides extra labels for Pressure and Temp.

- The **Restricted** label set offers the following labels:
  - Pressure: P, ABP, ART, Ao, PAP, CVP, RAP, LAP, ICP, UAP, UVP
  - Temp: Temp, Trect, Tcore, Tskin, Tesoph, Tnaso, Tart, Tven

- The **Full** label set offers the following additional labels:
  - Pressure: FAP, BAP, IC1, IC2, P1, P2, P3, P4
  - Temp: Tvesic, Ttymp, Tcereb, Tamb, T1, T2, T3, T4

Note: If you connect an MMS or FMS from a monitor using the **Full** label set to an IntelliVue monitor using a **Restricted** label set or an M3/M4 monitor, any additional labels switch to labels available in the target monitor. This may cause a label conflict with other monitored measurements. If you connect a monitor using the **Full** label set to an Information Center with certain software revisions, this may affect the availability of measurement information from the additional labels on the Information Center. See the Information Center documentation for information on label set compatibility.

LAN Data Export If the network (LAN) interface is not used for a connection to an Information Center, it can be used for MIB data export. If the monitor is connected to an Information Center, the MIB data export is automatically disabled for the LAN interface (the serial interface can still be used). The setting **LAN Data Export** lets you configure how much of the MIB data export information is sent via the LAN interface:

- **All**: full functionality, all available MIB data export information is sent.

- **Anonymous**: restricted functionality, no patient demographics information is included.

- **Off**: MIB data export is disabled for the LAN interface.

TAAP This setting is only available in monitors that have either a telemetry device (TAAP) connector or a short range radio interface installed. It determines whether the monitor supports connecting a telemetry device directly with a cable (TAAP connection), or assigning a telemetry device to the monitor via a direct short range radio link (wireless TAAP connection).

Set **TAAP** to **Enabled** if you want the monitor to support a TAAP or WTAAP connection.

Set **TAAP** to **Disabled**, if you want to disable the monitors's capability to support a TAAP/WTAAP connection. **TAAP** must be configured to **Disabled**, if you want to use the monitor as a companion to a host monitor (MP20-90).

For more detailed information on configuring the IntelliVue monitor for use in a telemetry environment, refer to the section "Configuring for Different Telemetry Use Models" on page 153.

TeleUnassign This setting is only available in monitors that have a short range radio interface installed. It determines whether the monitor will automatically break the assignment to a telemetry device connected via a short range radio connection under certain circumstances.

- If configured to **1 min**, the monitor will automatically unassign a telemetry device from the monitor when the monitor
  - is switched off for longer than 1 minute, **or**
  - is placed in Standby mode for longer than 1 minute while having no connection to the IntelliVue Information Center and the telemetry device.

• If configured to **Never**, the monitor will not automatically break the assignment.

Configuring for Different Telemetry Use Models

Five different variations requiring different configurations are possible:

1. Tele Transceiver Paired with a Networked Monitor - No Direct Connection

This use model involves pairing a telemetry transceiver to an IntelliVue bedside monitor which is connected to an IntelliVue Information Center. In this use model, no direct connection between the telemetry transceiver and the monitor occurs.

Results:

• Data from the telemetry transceiver is displayed at the Information Center in the same patient sector as the monitor data.

• Data from the telemetry transceiver is displayed (with a delay) on the bedside monitor in the Telemetry Data window.

Restrictions:

• When paired to a telemetry transceiver, the monitor cannot be connected to the IntelliVue Information Center via 1.4/2.4 Smart Hopping Wireless Solution (IntelliVue Telemetry System, ITS).

Configuration:

Required Configuration on Monitor	
Set 'TAAP' to[1]	not important, can be set to Enabled or Disabled
Assign Equipment Label	Yes
Required Hardware on Monitor	
SRR Interface or TAAP Connector[1]	not important
IIT[2] Interface[1]	not important
Required Configuration at Information Center	
Declare monitor as	Monitor

1.Applicable for MP2/X2/MP5 only.
2.IntelliVue Instrument Telemetry

2. Tele Transceiver Paired with a Networked MP2/X2 or MP5 - Direct Connection

This use model involves directly connecting a telemetry transceiver to an MP2/X2 or MP5 which is connected to an IntelliVue Information Center. The direct connection can be established either via a TAAP cable (MP5 only), or by assigning the telemetry transceiver to the MP2/X2 or MP5 via a short range radio link.

Results:

• If configured, the monitor and the telemetry device are automatically paired at the Information Center when the direct connection is established.

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- Data from the telemetry transceiver is displayed at the Information Center in the same patient sector as the X2/MP2/MP5 data.

- Data from the telemetry transceiver is displayed on the monitor. The ECG waves and numerics appear in place of the monitor's own ECG, and SpO2T is displayed as an additional measurement (if available).

Restrictions:

- The X2/MP5 cannot be connected to a host monitor (Companion Mode)

Configuration:

Required Configuration on X2/MP5	
Set 'TAAP' to	Enabled
Assign Equipment Label	Yes
Required Hardware on X2/MP5	
SRR Interface or TAAP Connector	Yes
IIT Interface	No
Required Configuration at Information Center	
Declare X2/MP5 as	Monitor

3. Tele Transceiver Directly Connected to an MP5T, or Non-Networked MP5, or MP2/X2

This use model involves directly connecting a telemetry transceiver to an MP5T (or X2 or MP5) which is **not** connected to an IntelliVue Information Center. The direct connection can be established either via a TAAP cable (MP5/MP5T only), or by assigning the telemetry transceiver to the X2 or MP5/MP5T via a short range radio link.

Results:

- Data from the telemetry transceiver is displayed on the monitor. The ECG waves and numerics appear in place of the monitor's own ECG, and SpO_2T is displayed as an additional measurement (if available).

- Selected data from the monitor is sent via the telemetry network (ITS) to the IntelliVue Information Center. Refer to the IntelliVue Instructions for Use for more detail.

Restrictions:

- The X2/MP5 cannot be connected to a host monitor (Companion Mode).

Configuration:

Required Configuration on MP5T (MP2/X2/MP5)	
Set 'TAAP' to	Enabled
Assign Equipment Label	not important
Required Hardware on MP5T (MP2/X2/MP5)	
SRR Interface or TAAP Connector	Yes
IIT Interface	No
Required Configuration at Information Center	
Declare MP2/X2/MP5 as	not important

4. X2 or MP5 Declared as Tele Device and Paired with a Larger Monitor - Direct Connection

This use model involves directly connecting an X2 or MP5 that is declared as a Telemetry Device at the Information Center to a larger monitor which is connected to an IntelliVue Information Center. The direct connection can be established either via a TAAP cable (MSL connection), or by directly attaching the X2 to the MMS mount of a larger monitor.

Results:

- If configured, the monitor and the telemetry device (X2/MP5) are automatically paired at the Information Center when the direct connection is established.

- Data from the telemetry device (X2/MP5) is displayed at the Information Center in the same patient sector as the larger monitor data.

- When connected, the X2/MP5 is acting as companion to the larger host monitor.

- When disconnected, the devices remain paired and the X2/MP5 data appears in the telemetry data window.

Restrictions:

- A telemetry transceiver cannot be used with the X2/MP5

Configuration: .

Required Configuration on X2/MP5	
Set 'TAAP' to	Disabled
Assign Equipment Label	Yes
Required Hardware on X2/MP5	
SRR Interface or TAAP Connector	No
IIT Interface	Yes
Required Configuration at Information Center	
Declare X2/MP5 as	Telemetry Device

5. Tele Transceiver Directly Connected to an X2 or MP5 which is Connected as a Companion to a Larger Host Monitor

It is possible to combine three devices in order get data from a telemetry transceiver directly onto one of the larger monitors (MP20 - MP90). For this use model, the telemetry transceiver must be directly connected to an X2 or MP5 (either via SRR link or via TAAP connector). The X2/MP5 can then be connected as a companion to a larger host monitor (Companion Mode).

Results:

- When connected (via TAAP) or assigned (via SRR) to the X2 or MP5, the telemetry transceiver is automatically paired with the host monitor.

- If the monitor and telemetry transceiver are paired before the tele transceiver is assigned to the X2 or MP5, the short range radio connection will be automatically established.

- Data from the telemetry transceiver is displayed on the host monitor. The ECG waves and numerics appear in place of the monitor's own ECG, and SpO_2T is displayed as an additional measurement.

Restrictions:

- The X2/MP5 **must** have no equipment label.

- The X2/MP5 cannot be connected to an IntelliVue Information Center.

Configuration:

Required Configuration on X2/MP5	
Set 'TAAP' to	not important, can be set to Enabled or Disabled
Assign Equipment Label	No
Required Hardware on X2/MP5	
SRR Interface or TAAP Connector	Yes
IIT Interface	No
Required Configuration at Information Center	
Declare X2/MP5 as	not applicable, since X2/MP5 has no equipment label
Declare host monitor as	Monitor

Configuring Ask for New Patient Settings

`Global Setting: Main Setup -> Global Settings -> Ask For New Pat`

Factory Defaults			
Item Name	**Oper. Mode**		**MP2 - MP90** **MP5T**
	C	**M**	**X2**
Power Off	x		Never
Standby	x		Never
No Basic Vitals	x		Never
Ask Paced Mode	x		No

Ask for New Patient Configuration Implications

`Power Off` can be configured to a specific time (`1min`, `10min`, `30min`, `1h`, `3h`, or `8h`) or to `Never`. If the monitor is switched on, after being switched off for longer than the specified time, it will ask the user whether a new patient is now being monitored. The user can then select `Yes` to discharge the current patient and to begin monitoring a new patient or `No` to continue monitoring with the current patient data and settings.

`Standby` can be configured to a specific time (`1min`, `10min`, `30min`, `1h`, `3h`, or `8h`) or to `Never`. If monitoring is resumed, after the monitor was in Standby for longer than the specified time, it will ask the user whether a new patient is now being monitored. The user can then select `Yes` to discharge the current patient and to begin monitoring a new patient or `No` to continue monitoring with the current patient data and settings.

`No Basic Vitals` can be configured to a specific time (`1min`, `10min`, `30min`, `1h`, `3h`, or `8h`) or to `Never`. If no basic vitals (HR, RR, Pulse, SpO_2, NBP) have been measured for the specified time, the monitor will ask the user whether a new patient is now being monitored. The user can then select `Yes` to discharge the current patient and to begin monitoring a new patient or `No` to continue monitoring with the current patient data and settings.

`Ask Paced Mode` can be configured to `Yes` or `No`. If you set it to `Yes` and the clinician selects `Yes` when asked whether this is a new patient, the monitor will prompt the clinician to enter the patients paced mode.

Configuration Recommendations when using an X2 or MP5 with a Telemetry Label

You can declare an X2 or MP5 as a telemetry device at the Information Center (assigning a telemetry label). This causes the X2 or MP5 to be treated as as a telemetry device, including the ability to be paired with a host monitor (MP20-MP90). If you plan to use an X2/MP5 with a telemetry label and connect it to / disconnect it from a host monitor, you should configure the following global settings:

Recommended Configuration			
Global Settings		**On host monitor (MP20-90)**	**On X2 / MP5**
Pat. Sel. Default		Ask User	not applicable
AskUser Reminder		5 min	5 min
Ask for New Patient	Power Off	10 min	10 min
	Standby	10 min	10 min
	No Basic Vitals	10 min	10 min

Configuring Demographic Fields Settings

`Global Setting: Main Setup -> Global Settings -> Demograph. Fields`

Factory Defaults			
Item Name	**Oper. Mode**		**MP2 - MP90** **MP5T**
	C	**M**	**X2**
Middle Name	x		Off
Lifetime Id	x		On
Encounter Id	x		Off
Lifetime Id Lbl	x		MRN
Encounter Id Lbl	x		Encounter Id

Demographic Fields Configuration Implications

These settings determine which fields appear in the Patient Demographics window.

Middle Name Configure **Middle Name** to **On**, if you want to be able to enter the patient's middle name in the Patient Demographics window.

Lifetime Id Configure **Lifetime Id** to **On**, if you want to be able to enter a Lifetime Id in the Patient Demographics window. How the Lifetime Id field is actually labeled, depends on the configuration made under **Lifetime Id Lbl**.

Encounter Id Configure **Encounter Id** to **On**, if you want to be able to enter a Encounter Id in the Patient Demographics window. How the Encounter Id field is actually labeled, depends on the configuration made under **Encounter Id Lbl**.

`Lifetime Id Lbl` Use this seting to select how the Lifetime Id field should be labeled in the Patient Demographics window. Possible choices are: **`MRN`**, **`Record Number`**, **`Lifetime Id`**, **`Patient Id`**, **`Serial Number`**, and **`SSN`**. Make sure the same lifetime id label is used consistently across the entire enterprise.

`Encounter Id Lbl` Use this seting to select how the Encounter Id field should be labeled in the Patient Demographics window. Possible choices are: **`Encounter Id`**, **`Visit Id`**, **`Account Number`**, **`Charge Number`**, **`Case Id`**, and **`Subject Number`**. Make sure the same encounter id label is used consistently across the entire enterprise.

NOTE It is strongly recommended that the required demographic fields are configured consistently on the IntelliVue Information Center and the IntelliVue Patient monitor. When connected to an Information Center, the configuration of the demographic fields in the monitor will be permanently overwritten by the configuration of the Information Center.

Configuring Remote Display Settings

MP2/X2, MP5, MP60-90 only

`Global Setting: Main Setup -> Global Settings -> Remote Display`

Factory Defaults			
Item Name	**Oper. Mode**		**MP60 - MP90** **MP2/X2**
	C	**M**	**MP5**
Access Rights	x		Operating
Password	x		0000
Standby Image	x		Boot Image

Remote Display Configuration Implications

These settings manage aspects of the connection of an IntelliVue monitor to the XDS Remote Display.

`Access Rights` This settig determines how the XDS Remote Display can access the IntelliVue monitor. The following choices are available:

- **`None`**: a connected XDS Remote Display can neither display information from the IntelliVue monitor, nor remotely operate it.

- **`Viewing`**: a connected XDS Remote Display can display information from the IntelliVue monitor, but not remotely operate it.

- **`Operating`**: a connected XDS Remote Display can both display information from the IntelliVue monitor and remotely operate it.

`Password` To get access to the IntelliVue monitor from an XDS Remote Display, the same password must be configured in both devices. The maximum length of the password is 16 characters. To reset the password, overwrite it in both the monitor and the XDS software.

`Standby Image` This setting lets you change the presentation of the standby screen on the XDS Remote Display. The following choices are available:

- **`Boot Image`**: the Standby screen shows the basic (black background) boot image.

- **`Moving Image`**: the Standby screen shows a black screen with an image moving across the screen, similar to a screensaver.

- **`Blank`**: the Standby screen shows a black screen.

Configuring Timer Selection and Order

`Global Setting: Main Setup -> Timers`

The selection and order of timers as they appear in the Timers menu are stored as Global settings.

Factory Defaults							
Item Name	**Oper. Mode**		**MP60/70 MP80 MP90**	**MP40/50**	**MP20/30**	**MP5 MP5T**	**MP2 X2**
	C	**M**					
<Timer 1>	x		Timer A				not applicable
<Timer 2>	x		Timer B			not applicable	
<Timer 3>	x		Timer C		not applicable		
<Timer 4>	x		Timer D	not applicable			

Timer Selection and Order Configuration Implications

The maximum number of timers that can be simultaneously displayed on the IntelliVue monitor depends on your monitor model. The IntelliVue MP60/70/80/90 can run a maximum of four timers, the MP40/50 can run three timers, the MP20/30 two timers, the MP5 one timer. The MP2/X2 does not provide a timer function.

The selection and order of timers is important when you change a numeric on the Main Screen into a timer:

- The **selection** determines which timer labels are actually available to choose from.

- The **order** determines which timer label is used when you change a numeric into an Any Timer. The monitor automatically uses the label that is located highest in the Timers window, provided that is not displayed on the Main Screen yet.

To change the selection and order of timers in the Timers menu,

1 Select **`Main Setup -> Timers`** to open the Timers menu.

2 Select the timer label that you want to change.

3 From the pop-up key line, select **`Setup <Timer X>`** to open the Setup menu for this timer label.

4 Select **`Label`** and change it to a different label. Notice that the monitor automatically applies the settings preconfigured for this label to the timer.

Configuring Manual Data Entry

MP5-90 only   `Global Setting: Main Setup -> Enter MeasValues -> Setup Meas.`

Factory Defaults			
Item Name	**Oper. Mode**		**MP5 - MP90**
	C	**M**	
Labels for General Use			
Label	x		**T1**
Unit	x		°C
Color	x		Green
Interval	x		4h
Msmnt	x	x	Off
Label	x		**CVP**
Unit	x		mmHg
Color	x		Red
Interval	x		1 h
Msmnt	x	x	Off
Format	x	x	Mean
Label	x		**Glu**
Unit	x		mmol/l
Color	x		Green
Interval	x		4 h
Msmnt	x	x	Off
Label	x		**Hct**
Unit	x		%PCV
Color	x		Green
Interval	x		24 h
Msmnt	x	x	Off
Label	x		**Hb**
Unit	x		g/dl
Color	x		Green
Interval	x		24 h
Msmnt	x	x	Off
Labels reserved for ProtocolWatch			
Label[1]			T1[3]
Unit[1]			°C
Color	x		Green
Interval[2]	x		4 h
Msmnt	x	x	Off
Format[1]			not applicable, temperature labels don't have different formats

Factory Defaults			
Item Name	**Oper. Mode**		**MP5 - MP90**
	C	**M**	
Label[1]			**SpRR**
Unit[1]			rpm
Color	x		Green
Interval[2]	x		2 h
Msmnt	x	x	Off
Format[1]			not applicable, this label does not have different formats
Label[1]			**Lact**
Unit[1]			mmol/l
Color	x		Green
Interval[2]	x		2 h
Msmnt	x	x	Off
Format[1]	x	x	not applicable, this label does not have different formats
Label[1]			**ScvO$_2$**
Unit[1]			%
Color	x		Green
Interval[2]	x		1 h
Msmnt	x	x	Off
Format[1]	x	x	not applicable, this label does not have different formats
Label[1]			**SvO$_2$**
Unit[1]			%
Color	x		Green
Interval[2]	x		1 h
Msmnt	x	x	Off
Format[1]			not applicable, this label does not have different formats
Label[1]			**Glu[3]**
Unit[1]			mmol/l
Color	x		Green
Interval[2]	x		4 h
Msmnt	x	x	Off
Format[1]			not applicable, this label does not have different formats
Label[1]			**CVP[3]**
Unit[1]			mmHg
Color	x		Red
Interval[2]	x		1 h
Msmnt	x	x	Off
Format[1]			Sys&Dia&Mean

1.For ProtocolWatch labels, Label, Unit, and Format cannot be modified.
2.For ProtocolWatch labels, the choices for Interval are restricted to the times used in the ProtocolWatch application.
3.This label is not visible in the ProtocolWatch section, if it is also configured as a general label.

Manual Data Entry Configuration Implications

You can manually enter measurement values into the monitor that have been measured with other equipment or manually, for example, manual temperatures, or lab values. The monitor is shipped with a number of measurements preconfigured for manual entry (see table above).

A maximum of 20 measurements can be configured, 13 for general purposes, the remaining seven are reserved for the ProtocolWatch application. These will only be shown in the Enter Measurement Values menu if the ProtocolWatch option is installed on the monitor and the ProtocolWatch application is active. If you add a measurement to the general section with the same label as a measurement reserved for the ProtocolWatch application, the label will disappear from the ProtocolWatch section. This has no negative effect on the ProtocolWatch application. For details on configuring the ProtocolWatch application, see the section "Configuring ProtocolWatch" on page 134.

To add more measurements for manual entry,

1 In configuration mode, select **Main Setup** -> **Enter MeasValues** to open the
   Enter Measurement Values window. The measurements that are currently configured for manual data
   entry are displayed.

2 Select the pop-up key **Setup Meas.** to open the Setup Measurement Values window, then select
   the pop-up key **Add**.

3 In the Setup Measurement submenu, select **Label** and choose the required measurement label from
   the pop-up list.

4 Select the **Unit** and **Color** that should be used for the chosen label.

5 Select **Interval** to define the time after which a manually entered value becomes invalid (no value
   is then displayed). Values can be entered up to two hours after they have been measured or up to the
   measurement interval, if this is shorter.

6 Select **Msmnt** to define whether the selected measurement will be **On** or **Off**. The On/Off state can
   be changed by the user in Monitoring mode.

7 If available, select **Format** to define an input format. For pressures, for example, you can configure
   whether the user should enter all pressure values (**Sys&Dia&Mean**) or only the **Mean** pressure. The
   Format can be changed by the user in Monitoring mode.

Configuring Country-Specific Settings

`Global Setting: Main Setup -> Global Settings`

Some settings are made in the factory to match the typical requirements in a specific country. Line frequency, units for weight and height, and ECG cable colors (AAMI or IEC) have been set to appropriate values. If you suspect that these settings may not match your institution's requirements, check the settings and change them if necessary.

The settings are listed here for all countries alphabetically.

Factory Defaults - By Country				
Country	**All Monitor Models**			
	Line Frequency	**Weight Unit**	**Height Unit**	**ECG Cable Color**
Afghanistan	50	kg	cm	AAMI
Åland Islands	50	kg	cm	IEC
Albania	50	kg	cm	IEC
Algeria	50	kg	cm	IEC
American Samoa	60	lb	in	AAMI
Andorra	60	lb	in	AAMI
Angola	50	kg	cm	IEC
Anguilla	60	lb	in	AAMI
Antarctica	60	lb	in	AAMI
Antigua and Barbuda	50	kg	cm	AAMI
Argentina	50	kg	cm	AAMI
Armenia	50	kg	cm	IEC
Aruba	60	kg	cm	AAMI
Australia	50	kg	cm	AAMI
Austria	50	kg	cm	IEC
Azerbaijan	50	kg	cm	IEC
Bahamas, The	60	kg	cm	AAMI
Bahrain	50	kg	cm	AAMI
Bangladesh	60	lb	in	AAMI
Barbados	50	kg	cm	AAMI
Belarus	50	kg	cm	IEC
Belgium	50	kg	cm	IEC
Belize	60	lb	in	AAMI
Benin	60	lb	in	AAMI
Bermuda	60	kg	cm	AAMI
Bhutan	60	lb	in	AAMI
Bolivia	50	kg	cm	AAMI
Bosnia and Herzegovina	50	kg	cm	IEC

Botswana	50	kg	cm	IEC
Bouvet Island	60	lb	in	AAMI
Brazil	60	kg	cm	AAMI
British Indian Ocean Territory	60	lb	in	AAMI
Brunei Darussalam	50	kg	cm	AAMI
Brunei	50	kg	cm	IEC
Bulgaria	50	kg	cm	IEC
Burkina Faso	50	kg	cm	IEC
Burundi	50	kg	cm	IEC
Cambodia	50	kg	cm	IEC
Cameroon	50	kg	cm	IEC
Canada	60	kg	cm	AAMI
Cape Verde	60	lb	in	AAMI
Cayman Islands	60	kg	cm	AAMI
Central African Republic	50	kg	cm	IEC
Chad	60	lb	in	AAMI
Chile	50	kg	cm	AAMI
China	50	kg	cm	IEC
Christmas Islands	60	lb	in	AAMI
Cocos Keeling Islands	60	lb	in	AAMI
Colombia	60	kg	cm	AAMI
Comoros	60	lb	in	AAMI
Congo	50	kg	cm	IEC
Congo, Democratic Republic of the	50	kg	cm	IEC
Cook Islands	60	lb	in	AAMI
Costa Rica	60	kg	cm	AAMI
Côte d'Ivoire	50	kg	cm	IEC
Croatia	50	kg	cm	IEC
Cuba	60	kg	cm	IEC
Cyprus	50	kg	cm	IEC
Czech Republic	50	kg	cm	IEC
Denmark	60	lb	in	AAMI
Djibouti	50	kg	cm	IEC
Dominica	50	kg	cm	AAMI
Dominican Republic	60	kg	cm	AAMI
Ecuador	60	kg	cm	AAMI
Egypt	50	kg	cm	IEC
El Salvador	60	kg	cm	AAMI
Equatorial Guinea	50	kg	cm	IEC
Eritrea	50	kg	cm	IEC

Estonia	50	kg	cm	IEC
Ethiopia	50	kg	cm	IEC
Falkland Islands, Malvinas	60	lb	in	AAMI
Faroe Islands	60	lb	in	AAMI
Fiji	60	lb	in	AAMI
Finland	50	kg	cm	IEC
France	50	kg	cm	IEC
French Guiana	50	kg	cm	IEC
French Polynesia	60	lb	in	AAMI
French Southern Territories	60	lb	in	AAMI
Gabon	50	kg	cm	IEC
Gambia, The	50	kg	cm	IEC
Georgia	60	lb	in	AAMI
Germany	50	kg	cm	IEC
Ghana	50	kg	cm	IEC
Gibraltar	60	lb	in	AAMI
Greece	50	kg	cm	IEC
Greenland	60	lb	in	AAMI
Grenada	50	kg	cm	AAMI
Guadeloupe	50	kg	cm	IEC
Guam	60	lb	in	AAMI
Guatemala	60	kg	cm	AAMI
Guernsey	50	kg	cm	IEC
Guinea	60	lb	in	AAMI
Guinea-Bissau	60	lb	in	AAMI
Guyana	60	kg	cm	AAMI
Haiti	60	kg	cm	AAMI
Heard Island and McDonald Islands	60	lb	in	AAMI
Holy See, Vatican City State	60	lb	in	AAMI
Honduras	60	kg	cm	AAMI
Hong Kong	50	kg	cm	IEC
Hungary	50	kg	cm	IEC
Iceland	50	kg	cm	IEC
India	50	kg	cm	IEC
Indonesia	50	kg	cm	IEC
Iran, Islamic Republic of	50	kg	cm	AAMI
Iraq	50	kg	cm	AAMI
Ireland	50	kg	cm	IEC
Isle of Man	50	kg	cm	IEC
Israel	50	kg	cm	IEC

Italy	50	kg	cm	IEC
Jamaica	50	kg	cm	AAMI
Japan	60	kg	cm	IEC
Jersey	50	kg	cm	IEC
Jordan	50	kg	cm	AAMI
Kazakhstan	50	kg	cm	IEC
Kenya	50	kg	cm	IEC
Kiribati	60	lb	in	AAMI
Korea, Democratic People's Republic of	60	lb	in	AAMI
Korea, Republic of	60	kg	cm	AAMI
Kuweit	50	kg	cm	AAMI
Kyrgyzstan	60	lb	in	AAMI
Lao People's Democratic Republics	50	kg	cm	IEC
Latvia	50	kg	cm	IEC
Lebanon	50	kg	cm	AAMI
Lesotho	50	kg	cm	IEC
Liberia	50	kg	cm	IEC
Libyan Arab. Jamahiriya	60	lb	in	AAMI
Liechtenstein	60	lb	in	AAMI
Lithuania	50	kg	cm	IEC
Luxembourg	50	kg	cm	IEC
Macao	60	lb	in	AAMI
Macedonia, The former Yugoslav. Rep. of	50	kg	cm	IEC
Madagascar	50	kg	cm	IEC
Malawi	50	kg	cm	IEC
Malaysia	50	kg	cm	IEC
Maldives	60	lb	in	AAMI
Mali	50	kg	cm	IEC
Malta	50	kg	cm	IEC
Marshall Islands	60	lb	in	AAMI
Martinique	60	kg	cm	IEC
Mauritania	50	kg	cm	IEC
Mauritius	60	lb	in	AAMI
Mayotte	60	lb	in	AAMI
Mexico	60	kg	cm	AAMI
Micronesia, Fed. States of	60	lb	in	AAMI
Moldova, Republic of	60	lb	in	AAMI
Monaco	60	lb	in	AAMI
Mongolia	60	lb	in	AAMI
Montenegro	50	kg	cm	IEC

Montserrat	50	kg	cm	AAMI
Morocco	50	kg	cm	IEC
Mozambique	50	kg	cm	IEC
Myanmar	60	lb	in	AAMI
Namibia	50	kg	cm	IEC
Nauru	60	lb	in	AAMI
Nepal	60	lb	in	AAMI
Netherlands	50	kg	cm	IEC
Netherlands Antilles	50	kg	cm	AAMI
New Caledonia	60	lb	in	AAMI
New Zealand	50	kg	cm	AAMI
Nicaragua	60	kg	in	AAMI
Niger	50	kg	cm	IEC
Nigeria	50	kg	cm	IEC
Niue	60	lb	in	AAMI
Norfolk Islands	60	lb	in	AAMI
Northern Mariana Islands	60	lb	in	AAMI
Norway	50	kg	cm	IEC
Oman	50	kg	cm	AAMI
Pakistan	50	kg	cm	IEC
Palau	60	lb	in	AAMI
Palestinian Territory	50	kg	cm	AAMI
Panama	60	lb	in	AAMI
Papua New Guinea	60	lb	in	AAMI
Paraguay	50	kg	cm	AAMI
Peru	60	kg	cm	AAMI
Philippines	60	kg	cm	AAMI
Pitcairn	60	lb	in	AAMI
Poland	50	kg	cm	IEC
Portugal	50	kg	cm	IEC
Puerto Rico	60	lb	in	AAMI
Qatar	50	kg	cm	AAMI
Reunion	60	lb	in	AAMI
Romania	50	kg	cm	IEC
Russian Federation	50	kg	cm	IEC
Rwanda	50	kg	cm	IEC
Saint Helena	60	lb	in	AAMI
Saint Kitts and Nevis	60	kg	cm	AAMI
Saint Lucia	50	kg	cm	AAMI
Saint Pierre and Miquelon	60	lb	in	AAMI

Saint Vincent and the Grenadines	50	kg	cm	AAMI
Samoa	60	lb	in	AAMI
San Marino	60	lb	in	AAMI
Sao Tome and Principe	60	lb	in	AAMI
Saudi Arabia	50	kg	cm	AAMI
Senegal	50	kg	cm	IEC
Serbia	50	kg	cm	IEC
Serbia & Montenegro	50	kg	cm	IEC
Seychelles	60	lb	in	AAMI
Sierra Leone	50	kg	cm	IEC
Singapore	50	kg	cm	IEC
Slovakia	50	kg	cm	IEC
Slovenia	50	kg	cm	IEC
Solomon Islands	60	lb	in	AAMI
Somalia	50	kg	cm	IEC
South Africa	60	lb	in	AAMI
South Georgia and the South Sandwich Islands	60	lb	in	AAMI
Spain	50	kg	cm	IEC
Sri Lanka	60	lb	in	AAMI
Sudan	50	kg	cm	IEC
Suriname	60	kg	cm	AAMI
Svalbard and Jan Mayen	60	lb	in	AAMI
Swaziland	60	lb	in	AAMI
Sweden	50	kg	cm	IEC
Switzerland	50	kg	cm	IEC
Syrian Arab Rep	50	kg	cm	AAMI
Taiwan, Province of China	60	kg	cm	AAMI
Tajikistan	60	lb	in	AAMI
Tanzania, United Republic of	60	lb	in	AAMI
Thailand	50	kg	cm	AAMI
Timor-Leste	60	lb	in	AAMI
Togo	60	lb	in	AAMI
Tokelau	60	lb	in	AAMI
Tonga	60	lb	in	AAMI
Trinidad and Tobago	60	lb	in	AAMI
Tunisia	50	kg	cm	IEC
Turkey	50	kg	cm	IEC
Turkmenistan	60	lb	in	AAMI
Turks and Caicos Islands	60	kg	cm	AAMI

Tuvalu	60	lb	in	AAMI
Uganda	60	lb	in	AAMI
Ukraine	60	lb	in	AAMI
UK	50	kg	cm	IEC
United Arab Emirates	50	kg	cm	AAMI
United Kingdom	50	kg	cm	IEC
United States	60	lb	in	AAMI
United States (Weight kg)	60	kg	in	AAMI
United States (Height cm, Weight kg)	60	kg	cm	AAMI
United States Minor Outlying Islands	60	lb	in	AAMI
Uruguay	50	kg	cm	AAMI
Uzbekistan	60	lb	in	AAMI
Vanuatu	60	lb	in	AAMI
Venezuela	60	lb	in	AAMI
Viet Nam	50	kg	cm	IEC
Virgin Islands (British)	50	kg	cm	AAMI
Virgin Islands (US)	60	lb	in	AAMI
Wallis and Futuna Islands	60	lb	in	AAMI
Western Sahara	50	kg	cm	IEC
Yemen	50	kg	cm	AAMI
Zambia	60	lb	in	AAMI
Zimbabwe	60	lb	in	AAMI

Configuring Printers

`Global Setting: Main Setup -> Reports -> Setup Printers`

Factory Defaults					
Item Name	**Oper. Mode**			**MP20 - MP90**	**MP2/X2** **MP5 / MP5T**
	C	**S**	**M**		
Printer: Local 1[1]					
Chg Printer Name	x	x		Local 1	not applicable, the MP2/X2 and MP5/ MPT do not support local printing
Port	x	x		not applicable, this is not a setting, see "Printer Configuration Implications" on page 172	
Config Printer[2]		x		Manual	
Printer Status	x	x	x	Disabled	
Paper Size	x	x		Letter	
Resolution	x	x		300 dpi	
Color Support	x	x		Monochrome	
Duplex Option	x	x		Simplex	
Printer: Local 2[1]					
Chg Printer Name	x	x		Local 2	not applicable, the MP2/X2 and MP5/ MP5T do not support local printing
Port	x	x		not applicable, this is not a setting, see "Printer Configuration Implications" on page 172	
Config Printer[2]		x		Manual	
Printer Status	x	x	x	Disabled	
Paper Size	x	x		Letter	
Resolution	x	x		300 dpi	
Color Support	x	x		Monochrome	
Duplex Option	x	x		Simplex	
Printer: Remote 1					
Chg Printer Name	x	x		Remote 1	
Port	x	x		not applicable, this is not a setting, see "Printer Configuration Implications" on page 172	
Config Printer[2]		x		Auto	
Printer Status	x	x	x	Enabled	
Paper Size	x	x		Letter	
Resolution	x	x		300 dpi	
Color Support	x	x		Monochrome	
Duplex Option	x	x		Simplex	
Printer: Remote 2					
Chg Printer Name	x	x		Remote 2	
Port	x	x		not applicable, this is not a setting, see "Printer Configuration Implications" on page 172	
Config Printer[2]		x		Auto	
Printer Status	x	x	x	Enabled	

Factory Defaults					
Item Name	**Oper. Mode**			**MP20 - MP90**	**MP2/X2** **MP5 / MP5T**
	C	**S**	**M**		
Paper Size	x	x		Letter	
Resolution	x	x		300 dpi	
Color Support	x	x		Monochrome	
Duplex Option	x	x		Simplex	
Printer: Remote 3					
Chg Printer Name	x	x		Remote 3	
Port	x	x		not applicable, this is not a setting, see "Printer Configuration Implications" on page 172	
Config Printer[2]		x		Auto	
Printer Status	x	x	x	Enabled	
Paper Size	x	x		Letter	
Resolution	x	x		300 dpi	
Color Support	x	x		Monochrome	
Duplex Option	x	x		Simplex	
Printer: Database					
Chg Printer Name	x	x		Database	
Port	x	x		not applicable, this is not a setting, see "Printer Configuration Implications" on page 172	
Config Printer[2]		x		Manual	
Printer Status	x	x	x	Enabled	
Paper Size	x	x		Letter	

1. Local printers will only be shown in the list of printers if a Parallel Printer Interface is installed.
2. Setting can only be changed in service mode.

Printer Configuration Implications

Printer This is not a setting, it lets you select the printer you want to configure. The printer **Database** is not a physical printer, it refers to the print database. This is a special section of the monitor database which acts as a buffer for print jobs. Print jobs stored in the print database are automatically printed when a print device with a paper size matching the template of the report is available. Reports stored in the print database will not be cleared by a discharge or by a power cycle. To be able to use the print database, it must be enabled, see "Print Database" on page 186.

Chg Printer Name Lets you change the printer name. If the monitor is connected to an Information Center, the name of the printer is determined by the Information Center and cannot be changed at the monitor.

Port This is not a setting. **Port** lets you view the printer port to which the selected printer is assigned. Available printer ports are **Local 1**, **Local 2**, **Remote 1**, **Remote 2**, **Remote 3**, and **Database**. Several printers can be mapped to the same printer port. For example, both **Local 1** and **Local 2** could be mapped to the same local printer to allow printing from different paper trays of one printer.

Port **Local 1** has the highest priority, port **Database** has the lowest priority. If you print a report for which no specific printer has been assigned (**Target Device** = **Unspecified**, see "Configuring Reports" on page 101), the monitor tries to print on port **Local 1** first. If this is not possible, because the printer is not available or there is a mismatch between the configured report size and the actual printer paper size, the monitor tries to send the report to the printer connected to port **Local 2**, followed by **Remote 1**, and so on. If the monitor has no connection to a printer, the report will be stored in the print database, from which it will be printed as soon as a connection to an appropriate printer is available.

Config Printer This setting is available in Service mode only. It lets you define whether the printer is automatically or manually configured. **Auto**matic printer configuration is only available for remote printers, i.e. printers that are connected to the Information Center. For local printers and printing to the database, this setting is automatically set to **Manual**.
When **Config Printer** is set to **Auto**, printer settings for paper size, resolution, color support and duplex option sent from an Information Center or other source override the settings configured at the monitor. They will be unavailable ("grayed out") at the monitor. When **Config Printer** is set to **Manual**, the printer settings from the monitor override printer settings from an Information Center or other source.

Printer Status This lets you enable or disable the selected printer.
If **Port** is one of the remote ports, and **Config Printer** is set to **Auto**, and printing on this port is not possible, **Printer Status** is automatically **Disabled** and can not be changed.

Paper Size This lets you configure the printer paper size. Possible choices are: **A4**, **Letter**, **A3** or **Ledger** (11x17 inches). This setting is not available if **Config Printer** is configured to **Auto**.

Resolution The printer resolution can be set to **300 dpi**, **600 dpi** or **1200 dpi**. The horizontal and vertical resolutions are assumed to be identical. This setting is not available if **Config Printer** is configured to **Auto** or if **Printer Status** is **Disabled**.

Color Support This lets you configure whether the printer supports color. It can be set to **Monochrome** or **8 Colors**. This setting is not available if **Config Printer** is configured to **Auto** or if **Printer Status** is **Disabled**.

Duplex Option This lets you configure **Simplex** or **Duplex** printing. If the printer does not support duplex printing, this setting is ignored. This setting is not available if **Config Printer** is configured to **Auto** or if **Printer Status** is **Disabled**.

Printer Configuration Examples

Configuring a Locally Connected Printer

These steps show you how to carry out a typical configuration for a monitor connected to a local printer.

1   In the **Setup Printers** menu, select the first printer in the list (**Port** is set to **Local 1)**.

2   Set **Printer Status** to **Enabled**. **Disabled** means that no reports will be printed on the printer. If this menu entry is grayed out, it means that no printer of this type is connected to the specified port. Make sure that all other printers in the list are set to **Disabled**.

3   Select **Chg Printer Name** and then use the pop-up keyboard to enter a name for the printer you are currently configuring. Maximum length is 12.

4   Select **Paper Size** and set the paper size for reports printed on this printer.

5   Select **Resolution** and set the resolution at which reports should be printed.

6   Select `Color Support` to toggle to `Monochrome` for black and white printers or `8 Colors` for color printers. If your printer is not a color printer and you set this to color, reports will not print correctly.

7   Select `Duplex Option` to toggle to `Duplex` if the connected printer can print double-sided reports, or `Simplex` for single-sided print-outs.

Only one local printer can be connected to each monitor. You can use the second local port to print reports from a second paper tray, if required.

1   Select the second printer in the list, and make sure `Port` is set to `Local 2` and `Printer Status` is set to `Enabled`.

2   Assign different names to the two paper trays, for example `Bed4_USLettr` and `Bed4_Ledger`.

3   Configure the other printer settings as required for the second paper tray.

Configuring a Centrally Connected Printer

These steps show you how to carry out a typical configuration for a monitor connected to a central printer.

1   In the `Setup Printers` menu, select the third printer in the list and make sure that `Port` is set to `Remote 1`.

2   Set `Printer Status` to `Enabled`. `Disabled` means that no reports will be printed on the printer. If this menu entry is grayed out, it means that no printer of this type is connected to the specified port. Make sure that all other printers in the list are set to `Disabled`.

3   If the printer name is not sent from the Information Center, select `Chg Printer Name` and then use the pop-up keyboard to enter a name for the printer you are currently configuring. Maximum length is 12. If the printer name is defined at the Information Center, Chg Printer Name will be unavailable ("grayed out").

(The settings described in steps 4 to 7 are only available if the service mode setting `Config Printer` is set to `Manual`).

4   Select `Paper Size` and set the paper size for reports printed on this printer.

5   Select `Resolution` and set the resolution at which reports should be printed.

6   Select `Color Support` to toggle between `Monochrome` for black and white printers or `8 Colors` for color printers.

The IntelliVue Information Center currently does not support color printers. If a black and white printer is connected to your Information Center and you set `Color Support` for a remote printer to `8 Colors`, reports will not print correctly.

7   Select `Duplex Option` to toggle to `Duplex` if the connected printer can print double-sided reports, or `Simplex` for single-sided print-outs.

If only one remote printer is connected to the monitor, you can use the second and third remote printer ports to print from different paper trays on the printer. The service mode setting `Config Printer` must be set to Manual for this.

1   To print reports from the second paper tray, select the fourth printer in the list, make sure `Port` is set to `Remote 2`, and `Printer Status` is set to `Enabled`.

2   To print reports from the third paper tray, select the fifth printer in the list, make sure `Port` is set to `Remote 3`, and `Printer Status` is set to `Enabled`.

3   Configure the other printer settings as required for each paper tray.

Configuring one Locally and One Centrally Connected Printer

This is a typical configuration for a monitor connected to one local and one central printer.

1   To configure the local printer, in the **Setup Printers** menu, select the first printer in the list and make sure that **Port** is set to **Local 1**. Set **Printer Status** to **Enabled**. Change the printer name if required and configure the correct settings for the locally connected printer as described above.

2   To configure the central printer, in the **Setup Printers** menu, select the third printer in the list and make sure that **Port** is set to **Remote 1**. Set **Printer Status** to **Enabled**. Change the printer name if required and configure the settings for the centrally connected printer as described above.

3   Make sure that all other printers in the list are set to **Disabled**.

Configuring a Monitor to Capture Alarm Events in the Print Database during Transport

You may want to use this feature on transport monitors which have no recorder.

1   Under **Databases** > **Database Config**, make sure that **Print Database** is set to **Small** or **Large**. Any change must be confirmed to take effect. This will cause the monitor to reboot.

2   Under **Alarms** > **Alarm Recording**, select all alarms that should trigger a capture (eg HR Red Only, PVC Red Only, etc.).

3   Under **Recordings** > **Setup Recordings**, select **Alarm**, and change the **Recorder** to **Printer**. This causes any alarm recording to be sent as a Realtime Report to a connected printer. If during transport no printer is connected to the monitor, the Realtime Report will be stored in the print database (if configured appropriately, see next steps)

4   Under **Reports** > **Setup Reports**, select **Realtime Rep** as the **Report**.

   a.   Configure the **Target Device** to either **Unspecified** (factory default) or **Database**.

   b.   Configure the Report Size to either Universal or Unspecified. In both cases, the report will be printed on a printer which has either US Letter or A4 format.

5   Under **Reports** > **Setup Printers**, select **Database** as the **Printer**, and configure the **Paper Size** to either **Letter** or **A4**, depending on your prefered paper format.

6   Under **Reports**, select **AutoPrint Dbs** and set it to the desired behavior. For details, refer to "Other Report Settings Configuration Implications" on page 105.

7   Store the changes.

Printing a Test Report

To verify your printer configuration it is strongly recommended that you print a test report.

To print a test report,

select **Main Setup -> Reports -> Setup Printers -> Print Test Rep.**

Hardware Settings

This section lists all hardware settings. Just like unique monitor settings and global settings, hardware settings are set once per monitor and are the same in every Profile. Any changes you make to the hardware settings configuration are automatically stored, there is no need to save them in an extra step.

Hardware settings must be entered for each monitor individually, they are stored in the monitor, and cannot be cloned using the IntelliVue Support Tool.

Most hardware settings can be changed in service mode only. For detailed configuration implications on these settings, please refer to the Service Guide provided on the Documentation DVD shipped with your monitor.

`Hardware Setting: Main Setup -> Hardware`

Factory Defaults							
Item Name	**Oper. Mode**			**MP90**	**MP20 -MP80**	**MP5**	**MP2/X2**
	C	**S**	**M**				
Multiple Display[1]		x		See "Configuring Multiple Display Settings" on page 177	not applicable		
Video[2]		x		See "Configuring Video Settings" on page 178		not applicable	
Standby Image	x	x		Boot Image			
Interfaces		x		See "Configuring Interfaces and Input Device Settings" on page 180			not applicable
Keyboard		x		US			
Data Export[3]	x	x		Fix 115200			
Data Export[3]	x	x		Fix 115200			
SRR[4]		x		not applicable		On	
SRR Channel[4]		x		not applicable		See "Configuring SRR Channels" on page 181	

1. Entry available on MP90 monitors with multiple main displays only.
2. Entry available on MP40/50, MP60/70, and MP80/90 monitors only.
3. Setting available on monitors with a LAN or MIB/RS232 interface only.
4. Setting available on monitors with a short range radio interface only.

`Video` Video settings are available in **service mode only** and allow technical personnel to set the correct resolution for the connected display(s). For detailed configuration implications, refer to the IntelliVue Service Guide and "Configuring Video Settings" on page 178.

`Standby Image` This setting lets you change the presentation of the standby screen. Choices for the first display are **`Fixed Image`** or **`Moving Image`**. For the 2nd and 3rd independent display, two additional choices are available: **`Blank`** and **`Video Off`**.

- **`Boot Image`**: the Standby screen shows the boot image configured under Video settings, see "Configuring Video Settings" on page 178.

- **`Moving Image`**: the Standby screen shows a black screen with an image moving across the screen, similar to a screensaver.

- **`Blank`**: the Standby screen shows a black screen, the display is not shut off.

• **`Video Off`**: the video signal and display are turned off.

`Interfaces` Interface settings can be changed in **service mode only**. Supported interface board configurations are listed in the section "Installation Instructions" of the IntelliVue Service Guide.

`Keyboard` This setting is available in **service mode only** and allows technical personnel to select the language of the keyboard that is connected to the P/S2 interface connector. For detailed configuration implications, refer to the IntelliVue Service Guide.

`Data Export` The two **`Data Export`** settings let you determine the port speeds (baud rate) for up to two MIB/RS232 data output ports. The first setting determines the speed of the port labeled **`DtOut1`**, the second (lower) setting determines the speed of the port labeled **`DtOut2`**. The two data output ports can be located on the same or on two separate MIB/RS232 interfaces. For details on assigning data output ports to the MIB/RS232 ports, refer to "Configuring Interfaces and Input Device Settings" on page 180.

`SRR` This setting is available for monitors with a short range radio interface only. Configure **`SRR`** to **`Off`**, if you want to switch off the short range radio capabilities of the monitor.

Configuring Multiple Display Settings

MP90 only   Multiple Display settings are available for MP90 monitors with multiple main displays only.

`Hardware Setting: Main Setup -> Hardware -> Multiple Display`

Factory Defaults				
Item Name	**Oper. Mode**			**MP90**
	C	**S**	**M**	
Display Layout		x		Horizontal
Display 1		x		Operator 1
Display 2		x		Operator 1
Display 3		x		Operator 1
Oper. 1 Windows		x		Same Display
Oper. 2 Windows		x		Same Display
FMS 1 Keys	x	x		Display 1
FMS 2 Keys	x	x		Display 1
GM Keys	x	x		Display 1
Meas Sel.Window	x	x		Display 1
ADT Window	x	x		Display 1
Timer Window	x	x		Display 1
ProtWatch Window	x	x		Display 1
Event Surv. Window	x	x		Display 1

Multiple Display Configuration Implications

`Display Layout` This setting can be changed in **service mode only**. For detailed configuration implications, refer to the MP80/MP90 IntelliVue Service Guide.

`Display 1 / Display 2 / Display 3` These settings can be changed in **service mode only**. For detailed configuration implications, refer to the MP80/MP90 IntelliVue Service Guide.

`Oper. 1 Windows / Oper. 2 Windows` These settings can be changed in **service mode only**. For detailed configuration implications, refer to the MP80/MP90 IntelliVue Service Guide.

`FMS 1 Keys` defines on which display a setup menu or application window appears when any of the hard keys on a plug-in module in FMS 1 is pressed. If the configured display is not available, the monitor automatically uses Display 1.

`FMS 2 Keys` defines on which display a setup menu or application window appears when any of the hard keys on a plug-in module in FMS 2 is pressed. If the configured display is not available, the monitor automatically uses Display 1.

`GM Keys` defines on which display the gas monitor setup menu appears when the Setup Airway Gases key on the gas monitor front panel is pressed. If the configured display is not available, the monitor automatically uses Display 1.

`Meas. Sel.Window` defines on which display the Measurement Selection window pops up if `Meas. Selection` (see "Configuring User Interface Settings" on page 110) is configured to `Window`, and a label conflict occurs, and no other menu/window is open at the same time. If the configured display is not available, the monitor automatically uses Display 1.

`ADT Window` defines on which display the Patient Demographics window pops up, if a patient identification mismatch occurs and no other menu/window is open at the same time. If the configured display is not available, the monitor automatically uses Display 1.

`Timer Window` defines on which display the Timers window pops up when a timer expires and the `Auto Window` setting for that timer is set to `Yes` (see "Configuring Timers" on page 139), and no other menu/window is open at the same time. If the configured display is not available, the monitor automatically uses Display 1.

`ProtWatch Window` defines on which display the ProtocolWatch window pops up when the protocol currently running requires a user response. If the configured display is not available, the monitor automatically uses Display 1.

`Event Surv. Window` defines on which display the Event Episode window pops up when an event occurs and the `Notification Type` of an event group is configured to `** Alarm (PopUp)` or `***Alarm (PopUp)`. If the configured display is not available, the monitor automatically uses Display 1.

Configuring Video Settings

Video settings can be changed in **service mode only** and allow technical personnel to set the correct resolution, type, and size for connected display(s). For detailed configuration implications on these settings, please refer to the latest IntelliVue Patient Monitor Service Guide.

```
Hardware Setting: Main Setup -> Hardware -> Video
```

Factory Defaults									
Item Name	\ C	Oper.\ Mode\ S	\ M	MP90	MP60/70	MP40/50	MP20/30	MP5	MP2/X2
Standby/Boot		x		Classic			not applicable		
Display 1 - Resolution		x		XGA (1024 x 768)		*SVGA[1]*			
Display 1 - Display Type		x		LCD		*LCD[1]*			
Display 1 - Size		x		15" (305x230mm)		*12.1"[1]*			
Display 2 - Resolution[2]		x		XGA (1024 x 768)	not applicable				
Display 2 - Display Type[2]		x		LCD					
Display 2 - Size[2]		x		15"					
Display 3 - Resolution[3]		x		XGA (1024 x 768)					
Display 3 - Display Type[3]		x		LCD					
Display 3 - Size[3]		x		15"					

1. Setting can only be viewed, but not changed.
2. Setting only affects dual CPU MP90 monitors.
3. Setting only affects dual CPU MP90 monitors with a connected D80 Intelligent Display.

Video Settings Configuration Implications

Standby/Boot This setting can be changed in **service mode only**. It lets you change the presentation of the Standby/Boot Screen from the **Classic** look (photo of nurse and child in the background) to the **Basic** (black background) look.

Resolution This setting can be changed in **service mode only**. It only affects MP90 monitors with more than one CPU and allows you to set the correct display resolution for external display. If you are using a display with a single fixed (native) resolution (such as LCD or Flat Panel displays), the optimal display quality can only be reached if the configured **Resolution** matches the native resolution of the display. Available choices range from **640x480(VGA)** to **1280x1024(SXGA)**.

Display Type This setting can be changed in **service mode only**. It only affects MP90 monitors with more than one CPU and lets you set the correct display type for an external display. Available choices are **LCD** and **CRT**. The **Display Type** setting effects the available choices for the setting **Size** (see below). This is necessary because the size measurement of a CRT display encompasses the full face of the picture tube, including the part hidden by the bezel, whereas on LCD displays, only the viewable screen is measured.

Size This setting can be changed in **service mode only**. It only affects MP90 monitors with more than one CPU and lets you set the correct size of the external display. **Size** refers to the width of the display measured diagonally from one corner to the opposite corner of the viewable screen. The available choices depend on the choice made for the setting **Display Type** and range from **10.4"(210x160mm)** to **60"(1330x750mm)**. It is important to configure the **Size** correctly to enable the monitor to calculate the correct sweep speed of measurement waves across the screen.

Example: you are using a 22" LCD display with a horizontal dimension of 490mm, but leave the **Size** at the factory default value which is 15", equaling a horizontal dimension of 300mm. An ECG wave with a wave speed set to 25mm/sec would normally need 19.6 sec to be drawn across a screen that is 490mm wide. With **Size** incorrectly set to 15" (300mm), the ECG wave will only need 12 sec. This is 1.6 times faster than it actually should be, resulting in an effective wave speed of about 41 mm/s.

The **Size** setting also affects the distance between menu entries in setup menus. If you want to optimize monitor operation for use with a touchscreen, make sure that both **Size** and **Menu Line Spacing** (see "Configuring User Interface Settings" on page 110) are set correctly.

Configuring Interfaces and Input Device Settings

MP20-90 Only Interfaces and Input Device settings can be changed in **service mode only** and allow technical personnel to configure the behavior of connected interface boards and input devices. For detailed configuration implications, please refer to the latest IntelliVue Service Guide.

`Hardware Setting: Main Setup -> Hardware -> Interfaces`

Factory Defaults						
Interface	**Driver**		**Oper. Mode**			**Setting**
			C	**S**	**M**	
Remote Device IF	SpeedPoint			x		Same Display[1]
	Mouse/Keyb			x		Same Display[1]
	Keyb/Mouse			x		Same Display[1]
Input Device IF	Mouse/Keyb			x		Same Display[1]
	Keyb/Mouse			x		Same Display[1]
MIB/RS232	Touch 1			x		Same Display[1]
	Touch 2			x		Same Display[1]
	GM			x		n/a
	DtOut1			x		n/a
	DtOut2			x		n/a

1. Setting available on MP90 monitors with multiple main displays only.

Configuring SRR Channels

X2/MP2/
MP5
only

Hardware Setting: Main Setup -> Hardware -> SRR Channel

SRR channel settings only apply for monitors that have a short range radio interface installed. They must be set to match the hospital's wireless infrastructure. SRR channel settings are hardware settings and will be set by service personnel at installation.

Factory Defaults				
Item Name	**Oper. Mode**			**X2/MP2/MP5**
	C	**S**	**M**	
Channel	x	x		11

SRR Channel Settings Configuration Implications

Channel   Use this setting to configure the SRR channel the monitor should use. SRR provides a total of 16 channels in the ISM (2.4 GHz) band. The ISM band is not exclusively reserved for SRR applications. It is also used by, for example, the 2.4 GHz Wireless LAN (WLAN), the 2.4 GHz IntelliVue Telemetry network, Bluetooth devices, and cordless phones using the 2.4GHz ISM band. Depending on the hospital's existing wireless infrastructure, a number of SRR channels might already be occupied by other wireless applications.

For detailed instructions on setting up SRR channels in a new or existing wireless infrastructure, refer to the IntelliVue Service Guide and contact a Philips service representative.

Configuring Wireless LAN Settings

MP2-90
only

Hardware Setting: Main Setup -> Network -> Setup WLAN

Wireless LAN settings only apply for monitors that have a Wireless LAN interface installed. They must be set to match the hospital's wireless infrastructure (access point, wireless switch, etc.). Wireless LAN Settings are hardware settings and will typically be set by service personnel at installation.

Note: Unlike other hardware settings, Wireless LAN settings need to be manually stored to make them effective. Use the **Store** entry in the Setup Wireless LAN menu to do so.

Wireless LAN settings can also be configured using the IntelliVue Support Tool.

Factory Defaults				
Item Name	**Oper. Mode**			**MP2 - MP90**
	C	**S**	**M**	
Country[1]		x		1000
IP Address[1]		x		0.0.0.0
Mode	x	x		none
SSID	x	x		BMWLANICN
Security Mode	x	x		WPA(PSK)

Factory Defaults				
Item Name	Oper. Mode			MP2 - MP90
	C	S	M	
WPA Password[2]	x	x		BMWLANICNPSK
WEP Key Size[3]	x	x		104
WEP Key[3]	x	x		BMWLANICNWEP1
WEP Key Index[3]	x	x		1

1.Setting available in service mode only.
2.Setting available only if Security mode is set to WPA.
3.Setting available only if Security mode is set to WEP.

WLAN Configuration Implications

Country This setting is available in **service mode only**. The recommended value is **1000**. If set to this value, the monitor automatically adjusts the regulatory domain to match the configuration of the infrastructure.

IP Address This setting is available in **service mode only**. See the IntelliVue Service Guide for details.

Mode This lets you select the WLAN IEEE 802.11 mode that the hospital is using, such as **802.11Ah, 802.11G** or **802.11bg**.

SSID (Service Set ID) This is a security setting and will typically be configured by service personnel at installation.

Security Mode Another security setting that will typically be configured by service personnel at installation. It is recommended to use **WPA-PSK**.

WPA Password   A security setting that will typically be configured by service personnel at installation. It is available only if **Security Mode** is set to **WPA**. The four stars (****) that you see in the menu are a placeholder for the actual password. They do not indicate that the password is only four characters in length.

WEP Key   A security setting that will typically be configured by service personnel at installation. It is available only if **Security Mode** is set to **WEP**. The four stars (****) that you see in the menu are a placeholder for the actual password. They do not indicate that the password is only four characters in length.

WEP Key Size/WEP Key Index   Security settings that will typically be configured by service personnel at installation. These settings are available only if **Security Mode** is set to **WEP**.

Configuring Bed Information Settings

`Hardware Setting: Main Setup -> Bed Information`

Item Name	Oper. Mode			MP2 - MP90 MP5T X2
	C	S	M	
Equipment Label	x	x		<empty>
Hospital Label	x	x		<empty>
IP Address		x		0.0.0.0
Subnet Mask		x		0.0.0.0
Default Gateway		x		0.0.0.0
IGMP		x		Off
CI Mode		x		Broadcast
CI Address		x		0.0.0.0
CI TTL		x		1

Bed Information Configuration Implications

Equipment Label The equipment label must be entered for each individual monitor. It is stored with the monitor, it is **not cloned**. If the monitor is connected to an Information Center, the equipment label on the bedside monitor is the equivalent of the monitor label on the Information Center. These labels must match exactly. The maximum length for the equipment label is 16 characters; Note that as the IntelliVue Information Center will display only up to 12 characters, if your monitor will be connected to an Information Center, you should use labels not longer than 12 characters.

Hospital Label The hospital label must be entered for each individual monitor. It is stored with the monitor, it is **not cloned**. Note that as an Information Center will display only up to 12 characters, if your monitor will be connected to an Information Center, you should use labels not longer than 12 characters. The maximum length for the hospital label is 30 characters.

IP Address This setting will typically be configured by service personnel at installation. See the IntelliVue Service Guide for details.

Subnet Mask This setting will typically be configured by service personnel at installation. See the IntelliVue Service Guide for details.

Default Gateway This setting will typically be configured by service personnel at installation. See the IntelliVue Service Guide for details.

IGMP This setting will typically be configured by service personnel at installation. See the IntelliVue Service Guide for details.

CI Mode This setting will typically be configured by service personnel at installation. See the IntelliVue Service Guide for details.

CI Address This setting will typically be configured by service personnel at installation. See the IntelliVue Service Guide for details.

CI TTL This setting will typically be configured by service personnel at installation. See the IntelliVue Service Guide for details.

Monitor Database Configuration

Main Setup -> Databases -> Database Config

The monitor's database is divided into sections that store events, trends, calculations, and print information separately. In config mode, you can configure the size of the trends, events, and print sections to suit your monitoring needs. The calculations database always stores up to 50 calculations, this configuration cannot be changed. The overall database size is defined by the purchased database option.

1 Select **Main Setup** -> **Databases -> Database Config** to enter the **Database Configurations** menu.

2 To configure the database,

 a. you can use the pop-up keys to change the overall database configuration,

 – Select the **Select Smallest** pop-up key to select the configuration that takes up least database space. This setting applies across all database sections.

 – Select the **Select Default** pop-up key to return to the default configuration.

 – Select the **Select Active** pop-up key to return to the configuration that was loaded prior to your changes. This cancels any changes you have made.

 OR

 b. you can use the menu items to change individual sections of the database.

 Trends: in the **Database Configurations** menu, the currently active database configuration is shown, for example, the entry **32P 4h@12s 24h@1min 48h@5min** tells you that the trends section of the database contains trend information on 32 measurement parameters from the past 4 hours at a resolution of 12 seconds, from the past 24 hours at a resolution of 1 minute, and from the past 48 hours at a resolution of 5 minutes.
 To change the setting, select the database section you wish to change, then select the required configuration from the list of available settings.

 Event Surveillance: In the **Database Configurations** menu, select **Event Surveillance**, then select the event database configuration you require from the list of available configurations.

 Print Database: In the **Database Configurations** menu, select **Print Database**, then select the database configuration you require from the list of available configurations.

3 Select the **Store Config** pop-up key to store your changes. You will be prompted to confirm this action. Selecting **Confirm** stores your changes.

CAUTION Selecting the **Store Config** pop-up key causes a coldstart, i.e. it discharges the patient, resets all settings to the default profile, and erases all information in the database. The monitor will automatically be switched off and then on again.

Trend Database

This table illustrates the default trend database configurations for the different H and database options:

Default Trend Database Configurations									
Database Option	**MP2 - MP90, MP5T, X2**								
	H10 / H40			**H20**			**H30**		
	No. of Parameters	**Period**	**Resolution**	**No. of Parameters**	**Period**	**Resolution**	**No. of Parameters**	**Period**	**Resolution**
Standard Database	16	4 h	12 sec	12	9 h	12 sec	16	5 h	12 sec
	16	24 h	1 min	12	24 h	1 min	16	24 h	1 min
	16	48 h	5 min	12	24 h	5 min	16	24 h	5 min
Extended Database (Option C03)	32	4 h	12 sec	24	9 h	12 sec	32	5 h	12 sec
	32	24 h	1 min	24	24 h	1 min	32	24 h	1 min
	32	48 h	5 min	24	24 h	5 min	32	24 h	5 min

Additional Configurations for the Standard Database

Option H20

- 16 Parameters 4h@12s, 24h@1min, 48h@5min

Option H30

- 16 Parameters 4h@12s, 24h@1min, 48h@5min

Additional Configurations for the Extended Database Option (C03)

MP60-90 only

Option H10/H40

- 32 Parameters 2h@12s, 32h@1min, 48h@5min
- 24 Parameters 48h@1min, 72h@5min

Option H20

- 24 Parameters 12h@12s, 12h@1min, 12h@5min
- 12 Parameters 24h@12s, 24h @1min, 24h @5min

Option H30

- 32 Parameters 9h@12s, 9h@1min, 9h@5min
- 24 Parameters 12h@12s, 12h@1min, 12h@5min

Aperiodic Trend Database

The IntelliVue patient monitor provides a second trend database exclusively reserved for aperiodic parameters. Aperiodic parameters are parameters that are measured intermittently, such as NBP, C.O., C.I., PAWP (Wedge), manually entered measurements, or lab results from external devices obtained from the VueLink or IntelliBridge plug-in module.

The aperiodic database can store a maximum of 200 individual measurements, with NBP measurements not counting towards that total number.

Note that the information stored in the aperiodic database does not contribute to the maximum number of parameters as defined by the monitor's database option (Standard or #C03). This means that aperiodic parameters do not count towards the max. number of trended parameters allowed and therefore do not have to be considered when configuring the Trend Priorities, see "Configuring Trend Priorities" on page 122.

Event Surveillance Database

This table illustrates the default event database configurations available with different event options:

	Option C06, Basic Event Surveillance	Option C07, Advanced Event Surveillance	Option C04, Neonatal Event Review (NER)
Database capability	None	None	None
	25 events for 24 hours	25 events for 24 hours	25 events for 24 hours
		25 events for 8 hours	25 events for 8 hours
		50 events for 8 hours	50 events for 8 hours
		50 events for 24 hours	50 events for 24 hours

Print Database

Default Print Database Configurations		
Options	MP20 - MP90	MP2/X2 MP5
Database capability	Small	Large

Report types differ considerably in their storage space requirements. ECG Reports, for example, are large reports and require much space, whereas VitalsReports are much smaller. Therefore, it cannot be clearly specified how many reports can be stored in the print database.

With **Print Database** set to **Small**, it can, for example, store about five 3x4 ECG Reports, but only one 12x1 ECG Report.

The **Large** database is only recommended for monitors used in transport. It is about four times larger than the **Small** database and can store more reports accordingly. Note that the **Large** database might not be available for selection if the Event Surveillance database and the Trend database are configured to large sizes.

To disable the **Print Database**, set it to **None**.

H Option-Specific Settings

Depending on the H option installed on the monitor, the following settings may be affected regardless of the configuration file loaded onto the monitor:

- Default trend database option and available trend database options, see "Trend Database" on page 185.

- Supported HighResolution Waves, see "Changing the Content of a High Resolution Trend Element" on page 19.

- Support for gas analyzer: only H30 supports the use of a gas analyzer with the IntelliVue monitor.

- Activated Event Groups, see "Configuring Event Surveillance" on page 126.

- Monitor name on Boot/Standby Screen:
  - H10: The Philips Critical Care Patient Monitor ...
  - H20: The Philips Neonatal Patient Monitor ...
  - H30: The Philips Anesthesia Patient Monitor ...
  - H40: The Philips Critical/Cardiac Care Patient Monitor ...

Release-Specific Information

G.0 Configuration Changes

For IntelliVue patient monitor Release G.0, the initial configuration settings were modified compared to Release F.0. These changes are documented below. The table lists new settings, settings which have been renamed, and settings for which the defaults have been changed.

The changes are listed based on the monitor model and option. No 'x' indicates that the change does not apply for the related model/option between F.0 and G.0.

New or renamed settings in G.0 / Settings with changed defaults in G.0 (Text in brackets shows F.0 setting/default)		Type of change	MP20 - 90				MP20	MP5	MP2/ X2
			H10	H20	H30	H40	#M20 #M21	All H Options	
ECG	ECG Al. Off Inop (ALL ECG IN.)	Setting Renamed	x	x	x	x	x	x	x
ECG/Pulse Alarms	ECG/Arrhy Alarms (ECG Alarms)	Setting Renamed	x	x	x	x	x	x	x
Arrhythmia	Afib	New Setting	x	x	x	x	x	x	x
	HR Alarms	New Setting	x	x	x	x	x	x	x
	SOME ECG... Inop (SOME ECG IN)	Setting Renamed	x	x	x	x	x	x	x
SpO$_2$	SpO$_2$pr, SpO$_2$po	New Labels	x	x	x	x	x	x	x
	Mode	New Setting	x	x	x	x	x	x	x
	Signal Quality	New Setting	x	x	x	x	x	x	x
	Average in Mon.	New Setting	x	x	x	x	x	x	x
Invasive Pressure (all labels)	Extreme Alarms: Disabled (Enabled)	Default Changed	x	x	x	x	x	x	x
SO$_2$ / SvO$_2$ / ScvO$_2$	Label	New Setting	x	x	x	x			
SO$_2$/ScvO$_2$	High Limit	New Setting	x	x	x	x			
	Low Limit	New Setting	x	x	x	x			
	Alarms	New Setting	x	x	x	x			
	Light Intensity	New Setting	x	x	x	x			
	Hb/Hct Entry	New Setting	x	x	x	x			
	Color	New Setting	x	x	x	x			
Resp	Detection (Auto/Manual)	Setting Renamed	x	x	x	x	x	x	x
INOP Severity	Replace TeleBatt BattReplace Tele)	Setting Renamed	x	x	x	x	x	x	x
	Tele Disconnect.	New Setting	x	x	x	x	x	x	x
	Occlusion	New Setting	x	x	x	x	x	x	x

New or renamed settings in G.0 / Settings with changed defaults in G.0 (Text in brackets shows F.0 setting/default)		Type of change	MP20 - 90				MP20	MP5	MP2/ X2
			H10	H20	H30	H40	#M20 #M21	All H Options	
Histogram Window	Data Source	New Setting	x	x	x	x	x	x	
	Period	New Setting	x	x	x	x	x	x	
ECG QT Report	Report Type	New Setting	x	x	x	x	x	x	x
	Report Size	New Setting	x	x	x	x	x	x	x
	Orientation	New Setting	x	x	x	x	x	x	x
	Target Device	New Setting	x	x	x	x	x	x	x
Histogram Report	Report Type	New Setting	x	x	x	x	x	x	
	Report Size	New Setting	x	x	x	x	x	x	
	Orientation	New Setting	x	x	x	x	x	x	
	Target Device	New Setting	x	x	x	x	x	x	
Reports	Auto Print Dbs	New Setting	x	x	x	x	x	x	x
Trend Groups: Standard	HR, SpO_2, **SpO_2pr**, **SpO_2po**, SpO_2 r, SpO_2 l / NBP / CO_2, RR, awRR / Any Press / Any Temp (HR, SpO_2, SpO_2 l, SpO_2 r / NBP / CO_2, RR, awRR / Any Press / Any Temp)	Default Changed	x	x	x	x	x	x	x
Trend Groups	External Device (VueLnk)	Setting Renamed	x	x	x	x	x	x	x
Trend Groups: External Device	CO_2, awRR, O_2, FiO_2, PIP, TV, MINVOL, SpMV, PEEP, pH, PCO_2, PcO_2, PO_2, **MnAwP**, RRaw (CO_2, awRR, O_2, FiO_2, PIP, TV, MINVOL, **MV (ext)**, SpMV, PEEP, pH, PCO_2, PcO_2, PO_2, **Pmean (ext)**, RRaw, **Ppeak**)	Default Changed							
Parameter Scales	SpO_2 (SpO_2, SpO_2 r, SpO_2 l)	Default Changed	x	x	x	x	x	x	x
	Perf (Perf, Perf l, Perf r)	Default Changed	x	x	x	x	x	x	x
	$ScvO_2$	New Setting	x	x	x	x	x	x	x
	SO_2	New Setting	x	x	x	x	x	x	x
	MnAwp	New Setting	x	x	x	x	x	x	x
	(MV ext)	Setting Deleted	x	x	x	x	x	x	x
	(Pmean ext)	Setting Deleted	x	x	x	x	x	x	x
	(Ppeak)	Setting Deleted	x	x	x	x	x	x	x

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New or renamed settings in G.0 Settings with changed defaults in G.0 (Text in brackets shows F.0 setting/default)		Type of change	MP20 - 90				MP20	MP5	MP2/ X2
			H10	**H20**	**H30**	**H40**	**#M20 #M21**	**All H Options**	
Event Surveillance	Group Type	New Setting	x	x	x	x	x	x	
Protocol Watch	CVP Threshold	New Setting	x	x	x	x	x	x	
	CVP Thresh. Unit	New Setting	x	x	x	x	x	x	
Global SmartKeys	External Device (VueLink)	Setting Renamed	x	x	x	x			
General Global Settings	Tele Discharge	Setting Enabled for Monitor Model							x
	ConfirmAlarmsOff	New Setting	x	x	x	x	x	x	x
	TeleUnassign	New Setting						x	x
	TAAP	New Setting						x	x
Global Settings: Demograph. Fields	Middle Name	New Setting	x	x	x	x	x	x	x
	Lifetime Id	New Setting	x	x	x	x	x	x	x
	Encounter Id	New Setting	x	x	x	x	x	x	x
	Lifetime Id Lbl	New Setting	x	x	x	x	x	x	x
	Encounter Id Lbl	New Setting	x	x	x	x	x	x	x
Global Settings: Remote Display	Access Rights	New Setting	x	x	x	x			x
	Password	New Setting	x	x	x	x			x
	Standby Image	New Setting	x	x	x	x			x
Manual Data Entry: Labels for General Use	T1, CVP, Glu, Hct, Hb (Tskin, Trect, CVP)	Default Changed	x	x	x	x	x	x	x
Hardware	Data Export *(2nd)*	New Setting	x	x	x	x	x	x	x
	SRR	New Setting						x	x
Hardware: Multiple Display	Event Surv. Window	New Setting	x	x	x	x			
Hardware: SRR Channel	Channel	New Setting						x	x
Bed Information	IGMP	New Setting	x	x	x	x	x	x	x
	CI Mode	New Setting	x	x	x	x	x	x	x
	CI Address	New Setting	x	x	x	x	x	x	x
	CI TTL	New Setting	x	x	x	x	x	x	x

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Screen & Profile Overview

This appendix documents the Screens and Profiles configured for each monitor model in the factory. If you make changes to Screens or Profiles, this document will no longer reflect the factory default configuration. You then must create you own reference by storing printouts and/or electronic images of the Screens you design.

In the **Configuration Overview** section starting on page 194, the factory default Profiles supplied with each possible combination of options are listed.

The **Screen Overview** section starting on page 215 gives an overview of all initial and demo configuration Screen names for this monitor release. To view or print bitmaps of all Screens supplied with a specific initial or demo configuration, on the Documentation DVD supplied with your IntelliVue monitor, navigate to the folder **Documentation\G.0\Configuration Guide\Screen Configurations** and open/print the pdf document that has the same name as the required configuration file.

The initial configuration of your monitor may vary slightly depending on your geography and on the options purchased. The Screens documented here may be subject to slight changes.

About the Screen Configurations

When a Screen is created using the Support Tool, the information in the Screen is saved in two formats:

- **.rds**: this format contains Screen information and can only be read by the Support Tool

- **.png**: a bitmap image is created for each Screen. Each Screen field is labelled to tell you which waves, numerics, SmartKeys, and special elements such as screen trends or ST snippets have been configured onto the Screens, and a date stamp tells you when the Screen was last modified.

Application Areas

The H Option purchased with the monitor defines the clinical application area for which the Screens are designed.

- Option H10 Screens are designed for general purposes
- Option H20 Screens are designed for neonatal application areas
- Option H30 Screens are designed for anesthesia application areas
- Option H40 Screens are designed for cardiac care application areas.

Wave Options

The A Option purchased with the monitor defines the number of waves that can be shown on any Screen. With A12, up to twelve waves can be shown on a Screen, with A06, up to six waves can be shown, and so on.

Using the Screen Library

This Appendix lists the Screens that are supplied with the initial monitor configurations and the Screens available in the demo configuration file. The demo configuration includes Screens that feature, for example:

- **Screen Trends**, allowing you to display trend segments embedded in the Screen. These could be entitled e.g.: G-08W-3Press-Split-ScreenTrend-xga-Rev004.rds.

- **ST Snippets**, allowing you to display the current ST snippets superimposed over the baseline snippet permanently on the Screen. These could be entitled e.g.: C-05W-2Press-03ST-snippets-xga-Rev003.rds.

- **Visitors Screen**, allowing you to hide all waves and numerics for the duration of visiting time. This could be entitled e.g.: G-visitor-screen01-xga-Rev005.rds

- **Example of SXGA Screen**. This could be entitled: G-12W-1x3ovl-2x2ovl-1split-sxga-Rev004.rds

Other Screens that are not included in the config files provided by the factory can be found in the screen library of the Support Tool.

Sample Screen Image (.bmp)
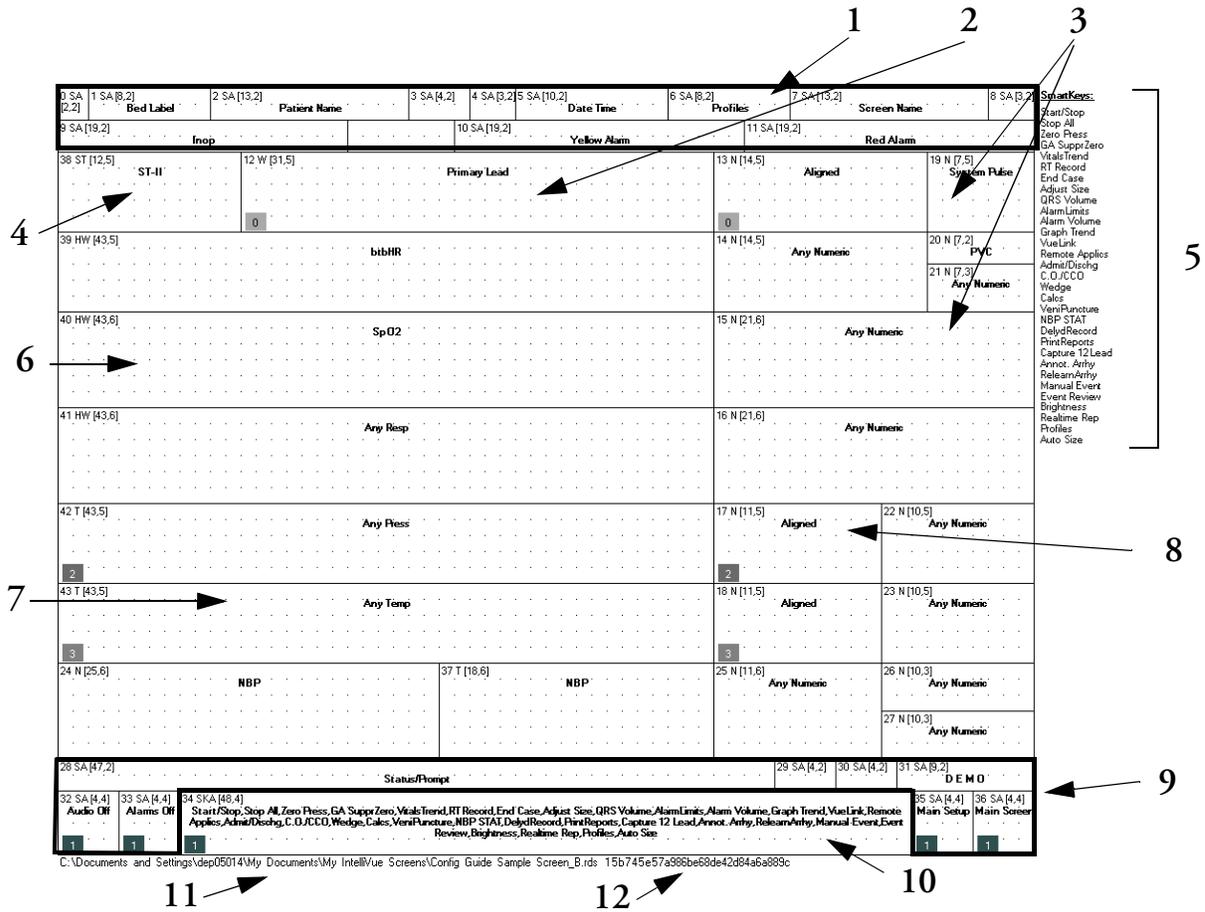
	Element, abbreviation	Contains.
1	Fixed Area	alarm message fields, patient information, etc. Cannot be modified with the Support Tool.
2	Wave field, W	wave label, e.g. "Primary Lead".
3	Numeric fields, N	numeric label e.g. "aligned" for numerics automatically assigned with the adjacent wave.
4	ST snippet, ST	ST label, e.g. "ST II".
5	SmartKey list	list of SmartKeys in the order they will appear on Screen from left to right.
6	High Res Trends, HW	high resolution trends label, e.g. "btbHR".
7	Screen trends, T	Screen trend label, e.g. Temp.
8	Alignment Groups	numbers in gray shaded boxes indicate different alignment groups
9	Fixed Area	Permanent Keys, current operating mode, monitor status prompts. Cannot be modified with Support Tool.
10	Smart Key area, SKA	SmartKeys in the order listed at **5**.
11	Filename and path	the Screen filename and the path on the harddrive where the Screen was stored. The .rds format contains the Screen itself, the .bmp format contains the reference image.
12	Checksum	Unique identifier for the Screen

MP60/MP70/MP80/MP90 Configuration Overview

Option H10

The H10 initial configuration filename is **H10 Axx, XGA, MP60-90, initial, G.0x.xx, Rev xxx.cfg**.

Profiles								
Profile Name	Default	Locked	Patient Cat.	Paced Mode	Display 1	Display 2 (MP90 only)	Monitor Settings Block	Meas. Settings Block
Adult	yes	yes	Adult	Paced	Screen A	Screen A	Monitor A	Measmt. Adult
Pedi	no	yes	Pedi	Non-Paced	Screen A	Screen A	Monitor A	Measmt. Pedi
Neo	no	yes	Neo	Non-Paced	Screen A	Screen A	Monitor A	Measmt. Neo

Monitor Settings Blocks	
Name	Locked
Monitor A	yes

Measurement Settings Blocks	
Name	Locked
Measmt. Adult	yes
Measmt. Pedi	yes
Measmt. Neo	yes

Screens							
A12	Locked	A08	Locked	A06	Locked	A04	Locked
Service A	no	Service A	no	Service A	no	Service A	no
Screen A	no	Screen A	no	Screen A	no	Screen A	no
Screen B	no	Screen B	no	Screen B	no	Screen B	no
Screen C	no	Screen C	no	Screen C	no	ProtocolWatch	no
Screen D	no	Screen D	no	Screen D	no	Horizon	no
Screen E	no	Screen E	no	Screen E	no	Big Numerics	no
Screen F	no	Screen F	no	ProtocolWatch	no	EEG CSA	no
ProtocolWatch	no	ProtocolWatch	no	Horizon	no	12 Lead ECG	no
Horizon	no	Horizon	no	Big Numerics	no	Visitors	no
Big Numerics	no	Big Numerics	no	EEG CSA	no		
12 Lead ECG	no	12 Lead ECG	no	12 Lead ECG	no		
Visitors	no	Visitors	no	Visitors	no		

Option H20

The H20 initial configuration filename is **H20 Axx, XGA, MP60-90, initial, G.0x.xx, Rev xxx.cfg**.

Profiles								
Profile Name	Default	Locked	Patient Cat.	Paced Mode	Display 1	Display 2 (MP90 only)	Monitor Settings Block	Meas. Settings Block
Neo	yes	yes	Neo	Non-Paced	A12: OxyCRG A	A12: OxyCRG A	Monitor A	Measmt. Neo
Pedi	no	yes	Pedi	Non-Paced	A08: OxyCRG A A06: OxyCRG A A04: OxyCRG	A08: OxyCRG A A06: OxyCRG A A04: OxyCRG	Monitor A	Measmt. Pedi

Monitor Settings Blocks	
Name	Locked
Monitor A	yes

Measurement Settings Blocks	
Name	Locked
Measmt. Neo	yes
Measmt. Pedi	yes

Screens							
A12	Locked	A08	Locked	A06	Locked	A04	Locked
Service A	no	Service A	no	Service A	no	Service A	no
OxyCRG A	no	OxyCRG A	no	OxyCRG A	no	OxyCRG	no
OxyCRG B	no	OxyCRG B	no	OxyCRG B	no	Screen A	no
OxyCRG C	no	Screen A	no	Screen A	no	Screen B	no
Screen A	no	Screen B	no	Screen B	no	ProtocolWatch	no
Screen B	no	Screen C	no	Screen C	no	Horizon	no
Screen C	no	Screen D	no	Screen D	no	Big Numerics	no
ProtocolWatch	no	ProtocolWatch	no	ProtocolWatch	no	EEG CSA	no
Horizon	no	Horizon	no	Horizon	no	12 Lead ECG	no
Big Numerics	no	Big Numerics	no	Big Numerics	no	Visitors	no
12 Lead ECG	no	12 Lead ECG	no	12 Lead ECG	no		
Visitors	no	Visitors	no	Visitors	no		

Option H30

The H30 initial configuration filename is **H30 Axx, XGA, MP60-90, initial, G.0x.xx, Rev xxx.cfg**.

Profiles								
Profile Name	**Default**	**Locked**	**Patient Cat.**	**Paced Mode**	**Display 1**	**Display 2 (MP90 only)**	**Monitor Settings Block**	**Meas. Settings Block**
Adult	yes	yes	Adult	Paced	Screen A	A12: Screen E	Monitor A	Measmt. Adult
Pedi	no	yes	Pedi	Non-Paced	Screen A	A08: Screen D	Monitor A	Measmt. Pedi
Neo	no	yes	Neo	Non-Paced	Screen A	A06: Screen B A04: Screen B	Monitor A	Measmt. Neo

Monitor Settings Blocks	
Name	**Locked**
Monitor A	yes

Measurement Settings Blocks	
Name	**Locked**
Measmt. Adult	yes
Measmt. Pedi	yes
Measmt. Neo	yes

Screens							
A12	**Locked**	**A08**	**Locked**	**A06**	**Locked**	**A04**	**Locked**
Service A	no	Service A	no	Service A	no	Service A	no
Screen A	no	Screen A	no	Screen A	no	Screen A	no
Screen B	no	Screen B	no	Screen B	no	Screen B	no
Screen C	no	Screen C	no	Screen C	no	Screen C	no
Screen D	no	Screen D	no	Screen D	no	ProtocolWatch	no
Screen E	no	Screen E	no	Screen E	no	Horizon	no
Screen F	no	Screen F	no	Screen F	no	Big Numerics	no
ProtocolWatch	no	ProtocolWatch	no	ProtocolWatch	no	EEG CSA	no
Horizon	no	Horizon	no	Horizon	no	12 Lead ECG	no
Big Numerics	no	Big Numerics	no	Big Numerics	no	Visitors	no
12 Lead ECG	no	12 Lead ECG	no	12 Lead ECG	no		
Visitors	no	Visitors	no	Visitors	no		

Option H40

The H40 initial configuration filename is **H40 Axx, XGA, MP60-90, initial, G.0x.xx, Rev xxx.cfg**.

Profiles								
Profile Name	Default	Locked	Patient Cat.	Paced Mode	Display 1	Display 2 (MP90 only)	Monitor Settings Block	Meas. Settings Block
Adult	yes	yes	Adult	Paced	Screen A	12 Lead ECG	Monitor A	Measmt. Adult
Pedi	no	yes	Pedi	Non-Paced	Screen A	12 Lead ECG	Monitor A	Measmt. Pedi
Neo	no	yes	Neo	Non-Paced	Screen A	12 Lead ECG	Monitor A	Measmt. Neo

Monitor Settings Blocks	
Name	Locked
Monitor A	yes

Measurement Settings Blocks	
Name	Locked
Measmt. Adult	yes
Measmt. Pedi	yes
Measmt. Neo	yes

Screens							
A12	Locked	A08	Locked	A06	Locked	A04	Locked
Service A	no	Service A	no	Service A	no	Service A	no
Screen A	no	Screen A	no	Screen A	no	Screen A	no
Screen B	no	Screen B	no	Screen B	no	Screen B	no
Screen C	no	Screen C	no	Screen C	no	ProtocolWatch	no
Screen D	no	Screen D	no	Screen D	no	Horizon	no
Screen E	no	Screen E	no	Screen E	no	Big Numerics	no
Screen F	no	Screen F	no	ProtocolWatch	no	EEG CSA	no
ProtocolWatch	no	ProtocolWatch	no	Horizon	no	12 Lead ECG	no
Horizon	no	Horizon	no	Big Numerics	no	Visitors	no
Big Numerics	no	Big Numerics	no	EEG CSA	no		
12 Lead ECG	no	12 Lead ECG	no	12 Lead ECG	no		
Visitors	no	Visitors	no	Visitors	no		

MP40/MP50 Configuration Overview

Option H10

The H10 initial configuration filename is **H10 Axx, SVGA, MP40-50, initial, G.0x.xx, Rev xxx.cfg**.

Profiles							
Profile Name	Default	Locked	Patient Cat.	Paced Mode	Display	Monitor Settings Block	Meas. Settings Block
Adult	yes	yes	Adult	Paced	Screen A	Monitor A	Measmt. Adult
Pedi	no	yes	Pedi	Non-Paced	Screen A	Monitor A	Measmt. Pedi
Neo	no	yes	Neo	Non-Paced	Screen A	Monitor A	Measmt. Neo

Monitor Settings Blocks	
Name	Locked
Monitor A	yes

Measurement Settings Blocks	
Name	Locked
Measmt. Adult	yes
Measmt. Pedi	yes
Measmt. Neo	yes

Screens					
A08	Locked	A06	Locked	A04	Locked
Service A	no	Service A	no	Service A	no
Screen A	no	Screen A	no	Screen A	no
Screen B	no	Screen B	no	Screen B	no
Screen C	no	Screen C	no	Screen C	no
Screen D	no	Screen D	no	Screen D	no
Screen E	no	Screen E	no	Screen E	no
Screen F	no	Screen F	no	Screen F	no
Screen G	no	Screen G	no	Screen G	no
ProtocolWatch	no	ProtocolWatch	no	ProtocolWatch	no
Horizon	no	Horizon	no	Horizon	no
Big Numerics	no	Big Numerics	no	Big Numerics	no
12 Lead ECG	no	12 Lead ECG	no	12 Lead ECG	no
Visitors	no	Visitors	no	Visitors	no

Option H20

The H20 initial configuration filename is **H20 Axx, SVGA, MP40-50, initial, G.0x.xx, Rev xxx.cfg**.

Profiles							
Profile Name	**Default**	**Locked**	**Patient Cat.**	**Paced Mode**	**Display**	**Monitor Settings Block**	**Meas. Settings Block**
Neo	yes	yes	Neo	Non-Paced	A08: OxyCRG A	Monitor A	Measmt. Neo
Pedi	no	yes	Pedi	Non-Paced	A06: OxyCRG A A04: OxyCRG	Monitor A	Measmt. Pedi

Monitor Settings Blocks	
Name	**Locked**
Monitor A	yes

Measurement Settings Blocks	
Name	**Locked**
Measmt. Neo	yes
Measmt. Pedi	yes

Screens					
A08	**Locked**	**A06**	**Locked**	**A04**	**Locked**
Service A	no	Service A	no	Service A	no
OxyCRG A	no	OxyCRG A	no	OxyCRG	no
OxyCRG B	no	OxyCRG B	no	Screen A	no
Screen A	no	Screen A	no	Screen B	no
Screen B	no	Screen B	no	Screen C	no
Screen C	no	Screen C	no	Screen D	no
Screen D	no	Screen D	no	Screen E	no
Screen E	no	Screen E	no	Screen F	no
ProtocolWatch	no	ProtocolWatch	no	ProtocolWatch	no
Horizon	no	Horizon	no	Horizon	no
Big Numerics	no	Big Numerics	no	Big Numerics	no
12 Lead ECG	no	12 Lead ECG	no	12 Lead ECG	no
Visitors	no	Visitors	no	Visitors	no

Option H30

The H30 initial configuration filename is **H30 Axx, SVGA, MP40-50, initial, G.0x.xx, Rev xxx.cfg**.

Profiles							
Profile Name	**Default**	**Locked**	**Patient Cat.**	**Paced Mode**	**Display**	**Monitor Settings Block**	**Meas. Settings Block**
Adult	yes	yes	Adult	Paced	Screen A	Monitor A	Measmt. Adult
Pedi	no	yes	Pedi	Non-Paced	Screen A	Monitor A	Measmt. Pedi
Neo	no	yes	Neo	Non-Paced	Screen A	Monitor A	Measmt. Neo

Monitor Settings Blocks	
Name	**Locked**
Monitor A	yes

Measurement Settings Blocks	
Name	**Locked**
Measmt. Adult	yes
Measmt. Pedi	yes
Measmt. Neo	yes

Screens					
A08	**Locked**	**A06**	**Locked**	**A04**	**Locked**
Service A	no	Service A	no	Service A	no
Screen A	no	Screen A	no	Screen A	no
Screen B	no	Screen B	no	Screen B	no
Screen C	no	Screen C	no	Screen C	no
Screen D	no	Screen D	no	Screen D	no
Screen E	no	Screen E	no	Screen E	no
Screen F	no	Screen F	no	Screen F	no
Screen G	no	Screen G	no	Screen G	no
ProtocolWatch	no	ProtocolWatch	no	ProtocolWatch	no
Horizon	no	Horizon	no	Horizon	no
Big Numerics	no	Big Numerics	no	Big Numerics	no
12 Lead ECG	no	12 Lead ECG	no	12 Lead ECG	no
Visitors	no	Visitors	no	Visitors	no

Option H40

The H40 initial configuration filename is **H40 Axx, SVGA, MP40-50, initial, G.0x.xx, Rev xxx.cfg**.

Profiles							
Profile Name	**Default**	**Locked**	**Patient Cat.**	**Paced Mode**	**Display**	**Monitor Settings Block**	**Meas. Settings Block**
Adult	yes	yes	Adult	Paced	Screen A	Monitor A	Measmt. Adult
Pedi	no	yes	Pedi	Non-Paced	Screen A	Monitor A	Measmt. Pedi
Neo	no	yes	Neo	Non-Paced	Screen A	Monitor A	Measmt. Neo

Monitor Settings Blocks	
Name	**Locked**
Monitor A	yes

Measurement Settings Blocks	
Name	**Locked**
Measmt. Adult	yes
Measmt. Pedi	yes
Measmt. Neo	yes

Screens					
A08	**Locked**	**A06**	**Locked**	**A04**	**Locked**
Service A	no	Service A	no	Service A	no
Screen A	no	Screen A	no	Screen A	no
Screen B	no	Screen B	no	Screen B	no
Screen C	no	Screen C	no	Screen C	no
Screen D	no	Screen D	no	Screen D	no
Screen E	no	Screen E	no	Screen E	no
Screen F	no	Screen F	no	Screen F	no
Screen G	no	Screen G	no	Screen G	no
ProtocolWatch	no	ProtocolWatch	no	ProtocolWatch	no
Horizon	no	Horizon	no	Horizon	no
Big Numerics	no	Big Numerics	no	Big Numerics	no
12 Lead ECG	no	12 Lead ECG	no	12 Lead ECG	no
Visitors	no	Visitors	no	Visitors	no

MP20/MP30 Configuration Overview

For an overview of the configurations supplied with the models MP20 Junior and MP20L, see "MP20 Junior & MP20L Configuration Overview" on page 206.

Option H10

The H10 initial configuration filename is **H10 Axx, SVGA, MP20-30, initial, G.0x.xx, Rev xxx.cfg**.

Profiles							
Profile Name	**Default**	**Locked**	**Patient Cat.**	**Paced Mode**	**Display**	**Monitor Settings Block**	**Meas. Settings Block**
Adult	yes	yes	Adult	Paced	Screen A	Monitor A	Measmt. Adult
Pedi	no	yes	Pedi	Non-Paced	Screen A	Monitor A	Measmt. Pedi
Neo	no	yes	Neo	Non-Paced	Screen A	Monitor A	Measmt. Neo

Monitor Settings Blocks	
Name	**Locked**
Monitor A	yes

Measurement Settings Blocks	
Name	**Locked**
Measmt. Adult	yes
Measmt. Pedi	yes
Measmt. Neo	yes

Screens					
A06	**Locked**	**A04**	**Locked**	**A03**	**Locked**
Service A	no	Service A	no	Service A	no
Screen A	no	Screen A	no	Screen A	no
Screen B	no	Screen B	no	Screen B	no
Screen C	no	Screen C	no	Screen C	no
Screen D	no	Screen D	no	Screen D	no
Screen E	no	Screen E	no	Screen E	no
Screen F	no	Screen F	no	Screen F	no
Screen G	no	Screen G	no	Screen G	no
Horizon	no	Horizon	no	Horizon	no
Big Numerics	no	Big Numerics	no	Big Numerics	no
12 Lead ECG	no	12 Lead ECG	no	12 Lead ECG	no
Visitors	no	Visitors	no	Visitors	no

Option H20

The H20 initial configuration filename is **H20 Axx, SVGA, MP20-30, initial, G.0x.xx, Rev xxx.cfg**.

Profiles							
Profile Name	**Default**	**Locked**	**Patient Cat.**	**Paced Mode**	**Display**	**Monitor Settings Block**	**Meas. Settings Block**
Pedi	no	yes	Pedi	Non-Paced	A06: OxyCRG A	Monitor A	Measmt. Pedi
Neo	no	yes	Neo	Non-Paced	A04: OxyCRG A03: CRG	Monitor A	Measmt. Neo

Monitor Settings Blocks	
Name	**Locked**
Monitor A	yes

Measurement Settings Blocks	
Name	**Locked**
Measmt. Pedi	yes
Measmt. Neo	yes

Screens					
A06	**Locked**	**A04**	**Locked**	**A03**	**Locked**
Service A	no	Service A	no	Service A	no
OxyCRG A	no	OxyCRG	no	CRG	no
OxyCRG B	no	Screen A	no	Screen A	no
Screen A	no	Screen B	no	Screen B	no
Screen B	no	Screen C	no	Screen C	no
Screen C	no	Screen D	no	Screen D	no
Screen D	no	Screen E	no	Screen E	no
Screen E	no	Screen F	no	Screen F	no
Horizon	no	Horizon	no	Horizon	no
Big Numerics	no	Big Numerics	no	Big Numerics	no
12 Lead ECG	no	12 Lead ECG	no	12 Lead ECG	no
Visitors	no	Visitors	no	Visitors	no

Option H30

The H30 initial configuration filename is **H30 Axx, SVGA, MP20-30, initial, G.0x.xx, Rev xxx.cfg**.

Profiles							
Profile Name	Default	Locked	Patient Cat.	Paced Mode	Display	Monitor Settings Block	Meas. Settings Block
Adult	yes	yes	Adult	Paced	Screen A	Monitor A	Measmt. Adult
Pedi	no	yes	Pedi	Non-Paced	Screen A	Monitor A	Measmt. Pedi
Neo	no	yes	Neo	Non-Paced	Screen A	Monitor A	Measmt. Neo

Monitor Settings Blocks	
Name	Locked
Monitor A	yes

Measurement Settings Blocks	
Name	Locked
Measmt. Adult	yes
Measmt. Pedi	yes
Measmt. Neo	yes

Screens					
A06	Locked	A04	Locked	A03	Locked
Service A	no	Service A	no	Service A	no
Screen A	no	Screen A	no	Screen A	no
Screen B	no	Screen B	no	Screen B	no
Screen C	no	Screen C	no	Screen C	no
Screen D	no	Screen D	no	Screen D	no
Screen E	no	Screen E	no	Screen E	no
Screen F	no	Screen F	no	Screen F	no
Screen G	no	Screen G	no	Screen G	no
Horizon	no	Horizon	no	Horizon	no
Big Numerics	no	Big Numerics	no	Big Numerics	no
12 Lead ECG	no	12 Lead ECG	no	12 Lead ECG	no
Visitors	no	Visitors	no	Visitors	no

Option H40

The H40 initial configuration filename is **H40 Axx, SVGA, MP20-30, initial, G.0x.xx, Rev xxx.cfg.**

Profiles							
Profile Name	Default	Locked	Patient Cat.	Paced Mode	Display	Monitor Settings Block	Meas. Settings Block
Adult	yes	yes	Adult	Paced	Screen A	Monitor A	Measmt. Adult
Pedi	no	yes	Pedi	Non-Paced	Screen A	Monitor A	Measmt. Pedi
Neo	no	yes	Neo	Non-Paced	Screen A	Monitor A	Measmt. Neo

Monitor Settings Blocks	
Name	Locked
Monitor A	yes

Measurement Settings Blocks	
Name	Locked
Measmt. Adult	yes
Measmt. Pedi	yes
Measmt. Neo	yes

Screens					
A06	Locked	A04	Locked	A03	Locked
Service A	no	Service A	no	Service A	no
Screen A	no	Screen A	no	Screen A	no
Screen B	no	Screen B	no	Screen B	no
Screen C	no	Screen C	no	Screen C	no
Screen D	no	Screen D	no	Screen D	no
Screen E	no	Screen E	no	Screen E	no
Screen F	no	Screen F	no	Screen F	no
Screen G	no	Screen G	no	Screen G	no
Horizon	no	Horizon	no	Horizon	no
Big Numerics	no	Big Numerics	no	Big Numerics	no
12 Lead ECG	no	12 Lead ECG	no	12 Lead ECG	no
Visitors	no	Visitors	no	Visitors	no

MP20 Junior & MP20L Configuration Overview

MP20L is available in the US only.

Option H10

The H10 initial configuration filename is:

- for the MP20 Junior: **H10 A03 M20, SVGA, MP20, initial, G.0x.xx, Rev xxx.cfg.**

- for the MP20L: **H10 A03 M21, SVGA, MP20, initial, G.0x.xx, Rev xxx.cfg.**

Profiles							
Profile Name	**Default**	**Locked**	**Patient Cat.**	**Paced Mode**	**Display**	**Monitor Settings Block**	**Meas. Settings Block**
Adult	yes	yes	Adult	Paced	Screen A	Monitor A	Measmt. Adult
Pedi	no	yes	Pedi	Non-Paced	Screen A	Monitor A	Measmt. Pedi
Neo	no	yes	Neo	Non-Paced	Screen A	Monitor A	Measmt. Neo

Monitor Settings Blocks	
Name	**Locked**
Monitor A	yes

Measurement Settings Blocks	
Name	**Locked**
Measmt. Adult	yes
Measmt. Pedi	yes
Measmt. Neo	yes

Screens: MP20 Junior (#M20)		**MP20L (#M21)**	
A03	**Locked**	**A03**	**Locked**
Service A	no	Service A	no
Screen A	no	Screen A	no
Screen B	no	Screen B	no
Big Numerics	no	Big Numerics	no
Screen C	no		
Screen D	no		
Screen E	no		
Screen F	no		
Screen G	no		
12 Lead ECG	no		

Option H20 (MP20 Junior only)

The H20 initial configuration filename for the MP20 Junior is:

H20 A03 M20, SVGA, MP20, initial, G.0x.xx, Rev xxx.cfg.

Profiles							
Profile Name	**Default**	**Locked**	**Patient Cat.**	**Paced Mode**	**Display**	**Monitor Settings Block**	**Meas. Settings Block**
Pedi	no	yes	Pedi	Non-Paced	A03: Screen A	Monitor A	Measmt. Pedi
Neo	no	yes	Neo	Non-Paced		Monitor A	Measmt. Neo

Monitor Settings Blocks	
Name	**Locked**
Monitor A	yes

Measurement Settings Blocks	
Name	**Locked**
Measmt. Pedi	yes
Measmt. Neo	yes

Screens	
A03	**Locked**
Service A	no
Screen A	no
Screen B	no
Big Numerics	no
Screen C	no
Screen D	no
Screen E	no
Screen F	no
Screen G	no
12 Lead ECG	no

MP5 Configuration Overview

Option H10

The H10 initial configuration filename is **H10 Axx, SVGA, MP5, initial, G.0x.xx, Rev xxx.cfg.**

Profiles							
Profile Name	**Default**	**Locked**	**Patient Cat.**	**Paced Mode**	**Display**	**Monitor Settings Block**	**Meas. Settings Block**
Adult	yes	yes	Adult	Paced	3 Waves	Monitor A	Measmt. Adult
Pedi	no	yes	Pedi	Non-Paced	3 Waves	Monitor A	Measmt. Pedi
Neo	no	yes	Neo	Non-Paced	3 Waves	Monitor A	Measmt. Neo

Monitor Settings Blocks	
Name	**Locked**
Monitor A	yes

Measurement Settings Blocks	
Name	**Locked**
Measmt. Adult	yes
Measmt. Pedi	yes
Measmt. Neo	yes

Screens			
A04	**Locked**	**A03**	**Locked**
Service A	no	Service A	no
1 Wave	no	1 Wave	no
2 Waves	no	2 Waves	no
3 Waves	no	3 Waves	no
4 Waves	no	Vital Signs	no
Vital Signs	no	Split Screen	no
Split Screen A	no	Other Bed	no
Split Screen B	no	12 Lead ECG	no
Other Bed	no		
12 Lead ECG	no		

Option H10/B10

The H10/B10 initial configuration filename is
H10 A03, B10, SVGA, MP5, initial, G.0x.xx, Rev xxx.cfg.

Profiles							
Profile Name	**Default**	**Locked**	**Patient Cat.**	**Paced Mode**	**Display**	**Monitor Settings Block**	**Meas. Settings Block**
Pedi	no	yes	Pedi	Non-Paced	3 Waves	Monitor A	Measmt. Pedi
Neo	no	yes	Neo	Non-Paced	3 Waves	Monitor A	Measmt. Neo

Monitor Settings Blocks	
Name	**Locked**
Monitor A	yes

Measurement Settings Blocks	
Name	**Locked**
Measmt. Adult	yes
Measmt. Pedi	yes
Measmt. Neo	yes

Screens	
A03	**Locked**
Service A	no
Big Numerics	no
1 Wave	no
Horizon	no
Vital Signs A	no
Vital Signs B	no
Other Bed	no
Visitors	no

Option H10/B11

The H10/B11 initial configuration filename is
H10 A03, B11, SVGA, MP5, initial, G.0x.xx, Rev xxx.cfg.

Profiles							
Profile Name	Default	Locked	Patient Cat.	Paced Mode	Display	Monitor Settings Block	Meas. Settings Block
Pedi	no	yes	Pedi	Non-Paced	3 Waves	Monitor A	Measmt. Pedi
Neo	no	yes	Neo	Non-Paced	3 Waves	Monitor A	Measmt. Neo

Monitor Settings Blocks	
Name	Locked
Monitor A	yes

Measurement Settings Blocks	
Name	Locked
Measmt. Adult	yes
Measmt. Pedi	yes
Measmt. Neo	yes

Screens	
A03	Locked
Service A	no
Big Numerics	no
1 Wave	no
Horizon	no
Vital Signs A	no
Vital Signs B	no
Other Bed	no
Visitors	no

Option H10/B14

The H10/B14 initial configuration filename is
H10 A03, B14, SVGA, MP5, initial, G.0x.xx, Rev xxx.cfg.

Profiles							
Profile Name	Default	Locked	Patient Cat.	Paced Mode	Display	Monitor Settings Block	Meas. Settings Block
Pedi	no	yes	Pedi	Non-Paced	3 Waves	Monitor A	Measmt. Pedi
Neo	no	yes	Neo	Non-Paced	3 Waves	Monitor A	Measmt. Neo

Monitor Settings Blocks	
Name	Locked
Monitor A	yes

Measurement Settings Blocks	
Name	Locked
Measmt. Adult	yes
Measmt. Pedi	yes
Measmt. Neo	yes

Screens	
A03	Locked
Service A	no
Big Numerics	no
1 Wave A	no
1 Wave B	no
2 Waves	no
Horizon	no
Vital Signs A	no
Vital Signs B	no
Other Bed	no
Visitors	no

Option H20

The H20 initial configuration filename is **H20 Axx, SVGA, MP5, initial, G.0x.xx, Rev xxx.cfg.**

Profiles							
Profile Name	Default	Locked	Patient Cat.	Paced Mode	Display	Monitor Settings Block	Meas. Settings Block
Pedi	no	yes	Pedi	Non-Paced	3 Waves	Monitor A	Measmt. Pedi
Neo	no	yes	Neo	Non-Paced	3 Waves	Monitor A	Measmt. Neo

Monitor Settings Blocks	
Name	Locked
Monitor A	yes

Measurement Settings Blocks	
Name	Locked
Measmt. Adult	yes
Measmt. Pedi	yes
Measmt. Neo	yes

Screens			
A04	Locked	A03	Locked
Service A	no	Service A	no
1 Wave	no	1 Wave	no
2 Waves	no	2 Waves	no
3 Waves	no	3 Waves	no
4 Waves	no	CRG	no
OxyCRG	no	Vital Signs	no
Vital Signs	no	Split Screen	no
Split Screen A	no	Other Bed	no
Split Screen B	no		
Other Bed	no		

MP5T Configuration Overview

Option H10

The initial configuration filename is **H10 A03, SVGA, MP5T, initial, G.0x.xx, Rev xxx.cfg.**

Profiles							
Profile Name	Default	Locked	Patient Cat.	Paced Mode	Display	Monitor Settings Block	Meas. Settings Block
Adult	yes	yes	Adult	Paced	3 Waves	Monitor A	Measmt. Adult
Pedi	no	yes	Pedi	Non-Paced	3 Waves	Monitor A	Measmt. Pedi
Neo	no	yes	Neo	Non-Paced	3 Waves	Monitor A	Measmt. Neo

Monitor Settings Blocks	
Name	Locked
Monitor A	yes

Measurement Settings Blocks	
Name	Locked
Measmt. Adult	yes
Measmt. Pedi	yes
Measmt. Neo	yes

Screens	Locked
Service A	no
1 Wave	no
2 Waves	no
3 Waves	no
Vital Signs	no
ST Map	no
12 Lead ECG	no

MP2/X2 Configuration Overview

The initial configuration filename for the MP2 is **MP2, QVGA, initial, G.0x.xx, Rev xxx.cfg**

The initial configuration filename for the X2 is **X2, QVGA, initial, G.0x.xx, Rev xxx.cfg**

Profiles							
Profile Name	**Default**	**Locked**	**Patient Cat.**	**Paced Mode**	**Display**	**Monitor Settings Block**	**Meas. Settings Block**
Adult	yes	yes	Adult	Paced	1 Wave A	Monitor A	Measmt. Adult
Pedi	no	yes	Pedi	Non-Paced	1 Wave A	Monitor A	Measmt. Pedi
Neo	no	yes	Neo	Non-Paced	1 Wave A	Monitor A	Measmt. Neo
Outdoor	no	no	Adult	Paced	1 Wave A	Outdoor	Outdoor

Monitor Settings Blocks	
Name	**Locked**
Monitor A	yes
Outdoor	no

Measurement Settings Blocks	
Name	**Locked**
Measmt. Adult	yes
Measmt. Pedi	yes
Measmt. Neo	yes
Outdoor	no

Screens	Locked
Service A	
Big Numerics	no
10 Numerics	no
Vital Signs A	no
1 Wave A	no
1 Wave B	no
1 Big Wave	no
Vital Signs B	no
2 Waves A	no
2 Waves B	no
3 Waves	no
Vital Signs	no
Horizon	no
ST Map	no
12 Lead ECG	no
Visitors	no

Screen Overview

The tables starting on the next page list the file names of all Screens supplied with the initial and demo configurations for IntelliVue patient monitor release G.0. There is a section for each of the monitor models. For some of the models, you will find a list of Demo Screens available when using the demo configuration file in a monitor. These Screens are also part of the Support Tool Screen Library.

To view or print bitmaps of all Screens supplied with a specific initial or demo configuration, on the Documentation DVD supplied with your IntelliVue monitor, navigate to the folder **Documentation\G.0\Configuration Guide\Screen Configurations\MPxx-MPxx** and open/print the pdf document that has the same name as the required configuration file. For example if you want to print all Screens contained in the initial G.0 configuration for an MP70 with application area option H10 and wave option A08, you would open the "H10 A08, XGA, MP60-90, initial, G.0x.xx, Rev xxx.pdf".

Screen Overview -Table of Contents

MP60/MP70/MP80/MP90 Screen Overview

MP60-90 Option H10 Screens

Name	File
H10 A12, XGA, MP90	
Service A	S-01W-01HighRes-service_A-xga
Screen A	G-12W-5Press-1x4ovl-1split01-xga
Screen B	G-08W-3Press-xga
Screen C	G-08W-3Press-1x3ovl-xga
Screen D	G-08W-3Press-2x2ovl-xga
Screen E	G-06W-2Press-xga
Screen F	G-06W-2Press-1x3ovl-xga
Protocol Watch	G-04W-PW-SSC-01-xga
Horizon	G-06W-Hor06Tr-01-xga
Big Numerics	G-03W-bigNumerics-xga
12 Lead ECG	C-13W-12Lead-Ovv-Split-ST-snippets-STmap-01-xga
Visitors	G-00W-visitor-screen01-xga

Name	File
H10 A08, XGA, MP60-90	
Service A	S-01W-01HighRes-service_A-xga
Screen A	G-08W-3Press-xga
Screen B	G-08W-3Press-1x3ovl-xga
Screen C	G-08W-3Press-2x2ovl-xga
Screen D	G-06W-2Press-xga
Screen E	G-06W-2Press-1x3ovl-xga
Screen F	G-04W-2Press-xga
Protocol Watch	G-04W-PW-SSC-01-xga
Horizon	G-06W-Hor06Tr-01-xga
Big Numerics	G-03W-bigNumerics-xga
12 Lead ECG	C-13W-12Lead-Ovv-Split-ST-snippets-STmap-01-xga
Visitors	G-00W-visitor-screen01-xga

Name	File
H10 A06, XGA, MP60-90	
Service A	S-01W-01HighRes-service_A-xga
Screen A	G-06W-2Press-xga
Screen B	G-06W-2Press-1x2ovl-xga
Screen C	G-06W-2Press-1x3ovl-xga
Screen D	G-04W-2Press-xga
Screen E	G-04W-2Press-1x2ovl-xga
Protocol Watch	G-04W-1Tr-PW-SSC-01-xga
Horizon	G-06W-Hor06Tr-01-xga
Big Numerics	G-03W-bigNumerics-xga
EEG CSA	G-05W-CSA-xga
12 Lead ECG	C-13W-12Lead-Ovv-Split-ST-snippets-STmap-01-xga
Visitors	G-00W-visitor-screen01-xga

MP60-90 Option H10 Screens (continued)

H10 A04, XGA, MP60-90	
Name	**File**
Service A	S-01W-01HighRes-service_A-xga
Screen A	G-04W-2Press-xga
Screen B	G-04W-2Press-1x2ovl-xga
Protocol Watch	G-04W-1Tr-PW-SSC-01-xga
Horizon	G-04W-Hor06Tr-01-xga
Big Numerics	G-03W-bigNumerics-xga
EEG CSA	G-04W-CSA-xga
12 Lead ECG	C-13W-12Lead-Ovv-Split-ST-snippets-STmap-01-xga
Visitors	G-00W-visitor-screen01-xga

MP60-90 Option H20 Screens

H20 A12, XGA, MP90	
Name	**File**
Service A	S-01W-01HighRes-service_A-xga
Oxy CRG A	N-07W-04HighRes-3split01-xga
Oxy CRG B	N-03W-03HighRes-2Press-xga
Oxy CRG C	N-03W-04HighRes-Events-xga
Screen A	G-08W-3Press-xga
Screen B	G-08W-3Press-1x3ovl-xga
Screen C	G-06W-2Press-xga
Protocol Watch	G-04W-PW-SSC-01-xga
Horizon	G-06W-Hor06Tr-01-xga
Big Numerics	G-03W-bigNumerics-xga
12 Lead ECG	C-13W-12Lead-Ovv-Split-ST-snippets-STmap-01-xga
Visitors	G-00W-visitor-screen01-xga

H20 A08, XGA, MP60-90	
Service A	S-01W-01HighRes-service_A-xga
Oxy CRG A	N-03W-03HighRes-2Press-xga
Oxy CRG B	N-03W-04HighRes-Events-xga
Screen A	G-08W-3Press-xga
Screen B	G-08W-3Press-1x3ovl-xga
Screen C	G-06W-2Press-xga
Screen D	G-04W-2Press-xga
Protocol Watch	G-04W-PW-SSC-01-xga
Horizon	G-06W-Hor06Tr-01-xga
Big Numerics	G-03W-bigNumerics-xga
12 Lead ECG	C-13W-12Lead-Ovv-Split-ST-snippets-STmap-01-xga
Visitors	G-00W-visitor-screen01-xga

H20 A06, XGA, MP60-90	
Service A	S-01W-01HighRes-service_A-xga
Oxy CRG A	N-02W-03HighRes-1Press-xga
Oxy CRG B	N-03W-03HighRes-2Press-xga
Screen A	G-06W-2Press-xga
Screen B	G-06W-2Press-1x3ovl-xga
Screen C	G-04W-2Press-xga
Screen D	G-04W-2Press-1x2ovl-xga
Protocol Watch	G-04W-1Tr-PW-SSC-01-xga
Horizon	G-06W-Hor06Tr-01-xga
Big Numerics	G-03W-bigNumerics-xga
12 Lead ECG	C-13W-12Lead-Ovv-Split-ST-snippets-STmap-01-xga
Visitors	G-00W-visitor-screen01-xga

MP60-90 Option H20 Screens (continued)

H20 A04, XGA, MP60-90	
Name	**File**
Service A	S-01W-01HighRes-service_A-xga
OxyCRG	N-01W-03HighRes-xga
Screen A	G-04W-2Press-xga
Screen B	G-04W-2Press-1x2ovl-xga
Protocol Watch	G-04W-1Tr-PW-SSC-01-xga
Horizon	G-04W-Hor06Tr-01-xga
Big Numerics	G-03W-bigNumerics-xga
EEG CSA	G-04W-CSA-xga
12 Lead ECG	C-13W-12Lead-Ovv-Split-ST-snippets-STmap-01-xga
Visitors	G-00W-visitor-screen01-xga

MP60-90 Option H30 Screens

H30 A12, XGA, MP90	
Name	**File**
Service A	S-01W-01HighRes-service_A-xga
Screen A	A-11W-5Press-1x4ovl-2split01-1Tr-BIS-xga
Screen B	A-07W-1Tr-BIS-01-xga
Screen C	A-08W-3Press-1x3ovl-xga
Screen D	A-08W-3Press-2x2ovl-xga
Screen E	A-06W-2Press-xga
Screen F	A-06W-2Press-1x3ovl-xga
Protocol Watch	G-04W-PW-SSC-01-xga
Horizon	A-06W-Hor06Tr-01-xga
Big Numerics	A-03W-BigN-BIS01-xga
12 Lead ECG	A-13W-12Lead-Split-ST-snippets-STmap-01-xga
Visitors	G-00W-visitor-screen01-xga

H30 A08, XGA, MP60-90	
Service A	S-01W-01HighRes-service_A-xga
Screen A	A-07W-1Tr-BIS-01-xga
Screen B	A-08W-3Press-1x3ovl-xga
Screen C	A-08W-3Press-2x2ovl-xga
Screen D	A-06W-2Press-xga
Screen E	A-06W-2Press-1x3ovl-xga
Screen F	A-04W-2Press-xga
Protocol Watch	G-04W-PW-SSC-01-xga
Horizon	A-06W-Hor06Tr-01-xga
Big Numerics	A-03W-BigN-BIS01-xga
12 Lead ECG	A-13W-12Lead-Split-ST-snippets-STmap-01-xga
Visitors	G-00W-visitor-screen01-xga

H30 A06, XGA, MP60-90	
Service A	S-01W-01HighRes-service_A-xga
Screen A	A-04W-1Tr-BIS-01-xga
Screen B	A-06W-2Press-1-xga
Screen C	A-06W-2Press-1x2ovl-xga
Screen D	A-06W-2Press-1x3ovl-xga
Screen E	A-04W-2Press-xga
Screen F	A-04W-2Press-1x2ovl-xga
Protocol Watch	G-04W-1Tr-PW-SSC-01-xga
Horizon	A-06W-Hor06Tr-01-xga
Big Numerics	A-03W-BigN-BIS01-xga
12 Lead ECG	A-13W-12Lead-Split-ST-snippets-STmap-01-xga
Visitors	G-00W-visitor-screen01-xga

MP60-90 Option H30 Screens (continued)

H30 A04, XGA, MP60-90	
Name	**File**
Service A	S-01W-01HighRes-service_A-xga
Screen A	A-04W-BIS01-xga
Screen B	A-04W-2Press-1-xga
Screen C	A-04W-2Press-1x2ovl-1-xga
Protocol Watch	G-04W-1Tr-PW-SSC-01-xga
Horizon	A-04W-Hor06Tr-01-xga
Big Numerics	A-03W-BigN-BIS01-xga
EEG CSA	A-04W-CSA-xga
12 Lead ECG	A-13W-12Lead-Split-ST-snippets-STmap-01-xga
Visitors	G-00W-visitor-screen01-xga

MP60-90 Option H40 Screens

H40 A12, XGA, MP90	
Name	**File**
Service A	S-01W-01HighRes-service_A-xga
Screen A	C-12W-5Press-1x4ovl-1split01-xga
Screen B	C-08W-3Press-xga
Screen C	C-08W-3Press-1x3ovl-xga
Screen D	C-08W-3Press-2x2ovl-xga
Screen E	C-06W-2Press-xga
Screen F	C-06W-2Press-1x3ovl-xga
Protocol Watch	G-04W-PW-SSC-01-xga
Horizon	C-06W-Hor06Tr-01-xga
Big Numerics	G-03W-bigNumerics-xga
12 Lead ECG	C-13W-12Lead-Ovv-Split-ST-snippets-STmap-01-xga
Visitors	G-00W-visitor-screen01-xga

H40 A08, XGA, MP60-90	
Service A	S-01W-01HighRes-service_A-xga
Screen A	C-08W-3Press-xga
Screen B	C-08W-3Press-1x3ovl-xga
Screen C	C-08W-3Press-2x2ovl-xga
Screen D	C-06W-2Press-xga
Screen E	C-06W-2Press-1x3ovl-xga
Screen F	C-04W-2Press-xga
Protocol Watch	G-04W-PW-SSC-01-xga
Horizon	C-06W-Hor06Tr-01-xga
Big Numerics	G-03W-bigNumerics-xga
12 Lead ECG	C-13W-12Lead-Ovv-Split-ST-snippets-STmap-01-xga
Visitors	G-00W-visitor-screen01-xga

H40 A06, XGA, MP60-90	
Service A	S-01W-01HighRes-service_A-xga
Screen A	C-06W-2Press-xga
Screen B	C-06W-2Press-1x2ovl-xga
Screen C	C-06W-2Press-1x3ovl-xga
Screen D	C-04W-2Press-xga
Screen E	C-04W-2Press-1x2ovl-xga
Protocol Watch	G-04W-1Tr-PW-SSC-01-xga
Horizon	C-06W-Hor06Tr-01-xga
Big Numerics	G-03W-bigNumerics-xga
EEG CSA	C-05W-CSA-xga
12 Lead ECG	C-13W-12Lead-Ovv-Split-ST-snippets-STmap-01-xga
Visitors	G-00W-visitor-screen01-xga

MP60-90 Option H40 Screens (continued)

H40 A04, XGA, MP60-90	
Name	**File**
Service A	S-01W-01HighRes-service_A-xga
Screen A	C-04W-2Press-xga
Screen B	C-04W-2Press-1x2ovl-xga
Protocol Watch	G-04W-1Tr-PW-SSC-01-xga
Horizon	C-04W-Hor06Tr-01-xga
Big Numerics	G-03W-bigNumerics-xga
EEG CSA	C-04W-CSA-xga
12 Lead ECG	C-13W-12Lead-Ovv-Split-ST-snippets-STmap-01-xga
Visitors	G-00W-visitor-screen01-xga

MP60-90 Demo Configuration Screens

DEMO, XGA, MP60-90	
Name	**File**
Service A	S-01W-01HighRes-service_A-xga
Big Numerics	G-03W-bigNumerics-02-xga
4 Waves A	G-04W-2Press-xga
6 Waves A	A-06W-1Tr-2Press-xga
Overlapping	G-08W-3Press-2x2ovl-xga
Split Screen	G-08W-3Press-Split-ScreenTrend-xga
Graph Trends	G-00W-8Tr-only-01-xga
HighResTrend	N-03W-04HighRes-3Press-EventSum-xga
Vital Signs A	G-05W-2Tr-TrA-01-xga
Horizon	A-06W-Hor06Tr-01-xga
Protocol Watch	G-04W-1Tr-PW-SSC-01-xga
2 Other Beds	G-04W-2Ovv02W-01-xga
Telemetry	G-01W-Tele02W-02-xga
Loops	G-06W-Loops-SpiroData-01-xga
Cardiac Output	A-04W-cardiacOut-xga
Wedge	A-06W-wedge1-xga
VueLink	A-07W-2Press-1x2ovl-VueLink-1Tr-xga
12 Lead ECG	C-13W-12Lead-Ovv-Split-ST-snippets-STmap-01-xga
ST Segments	C-05W-2Press-03ST-snippets-xga
Remote Applic.	G-01W-PT-01-xga
Visitors	G-00W-visitor-screen01-xga

DEMO, SXGA, MP90	
Name	**File**
Service A	S-01W-01HighRes-service_A-xga
Overlapping	G-08W-3Press-2x2ovl-xga
Split Screen	G-08W-3Press-Tr-left-split-xga
Graph Trends	G-00W-8Tr-only-01-xga
HighResTrend	N-03W-04HighRes-3Press-EventSum-xga
Vital Signs	G-05W-2Tr-TrA-01-xga
Horizon	G-08W-Hor06Tr-01-sxga
Protocol Watch	G-04W-PW-SSC-01-xga
Other Bed	G-06W-1Ovv02W-1Tr-01-xga
4 Other Beds	G-03W-4Ovv02W-Tr-left-split-sxga
Telemetry	G-01W-Tele02W-02-xga
Loops	G-06W-Loops-SpiroData-01-xga
Cardiac Output	A-04W-cardiacOut-xga
Wedge	A-06W-wedge1-xga
VueLink	A-07W-2Press-1x2ovl-VueLink-1Tr-xga
12 Lead ECG	C-13W-12Lead-Ovv-Split-ST-snippets-STmap-01-xga
Remote Applic A	G-01W-PT-01-xga
Remote Applic B	G-00W-PT-Full-2nd-01-xga
Wide Screen	G-08W-TrA-wide-10Tr-01-xga
Tall Screen	G-07W-tall-02W-Loops-TrA-sxga
12 Waves	G-12W-1x3ovl-2x2ovl-1split-sxga

MP40/MP50 Screen Overview

MP40/50 Option H10 Screens

H10 A08, SVGA, MP40-50	
Name	**File**
Service A	S-02W-nbp-diag-svga
Screen A	G-08W-3Press-01-svga
Screen B	G-06W-2Press-01-svga
Screen C	G-06W-2Press-1x2ovl-01-svga
Screen D	G-06W-2Press-split-Tr-01-svga
Screen E	G-04W-1Press-01-svga
Screen F	G-04W-1Press-1Tr-02-svga
Screen G	G-04W-1Press-split-Tr-01-svga
Protocol Watch	G-03W-1Tr-PW-SSC-01-svga
Horizon	G-04W-Hor06Tr-01-svga
Big Numerics	G-03W-bigNumerics-01-svga
12 Lead ECG	C-13W-12Lead-STmap-01-svga
Visitors	G-00W-visitor-screen-01-svga

H10 A06, SVGA, MP40-50	
Service A	S-02W-nbp-diag-svga
Screen A	G-06W-2Press-01-svga
Screen B	G-06W-2Press-1x2ovl-01-svga
Screen C	G-06W-2Press-split-Tr-01-svga
Screen D	G-04W-1Press-01-svga
Screen E	G-04W-1Press-1Tr-02-svga
Screen F	G-04W-1Press-split-Tr-01-svga
Screen G	G-03W-1Tr-02-svga
Protocol Watch	G-03W-1Tr-PW-SSC-01-svga
Horizon	G-04W-Hor06Tr-01-svga
Big Numerics	G-03W-bigNumerics-01-svga
12 Lead ECG	C-13W-12Lead-STmap-01-svga
Visitors	G-00W-visitor-screen-01-svga

H10 A04, SVGA, MP40-50	
Service A	S-02W-nbp-diag-svga
Screen A	G-04W-1Press-01-svga
Screen B	G-04W-1Press-1Tr-02-svga
Screen C	G-04W-2Press-1x2ovl-01-svga
Screen D	G-04W-1Press-split-Tr-01-svga
Screen E	G-03W-01-svga
Screen F	G-03W-1Tr-02-svga
Screen G	G-03W-split-Tr-01-svga
Protocol Watch	G-03W-1Tr-PW-SSC-01-svga
Horizon	G-03W-Hor05Tr-01-svga
Big Numerics	G-03W-bigNumerics-01-svga
12 Lead ECG	C-13W-12Lead-STmap-01-svga
Visitors	G-00W-visitor-screen-01-svga

MP40/50 Option H20 Screens

H20 A08, SVGA, MP40-50	
Name	**File**
Service A	S-02W-nbp-diag-svga
OxyCRG A	N-03W-03HW-event-01-svga
OxyCRG B	N-01W-03HW-event-01-svga
Screen A	G-08W-3Press-01-svga
Screen B	G-06W-2Press-01-svga
Screen C	G-06W-2Press-1x2ovl-01-svga
Screen D	G-04W-1Press-01-svga
Screen E	G-04W-1Press-1Tr-02-svga
Protocol Watch	G-03W-1Tr-PW-SSC-01-svga
Horizon	G-04W-Hor06Tr-01-svga
Big Numerics	G-03W-bigNumerics-01-svga
12 Lead ECG	C-13W-12Lead-STmap-01-svga
Visitors	G-00W-visitor-screen-01-svga

H20 A06, SVGA, MP40-50	
Service A	S-02W-nbp-diag-svga
OxyCRG A	N-03W-03HW-event-01-svga
OxyCRG B	N-01W-03HW-event-01-svga
Screen A	G-06W-2Press-01-svga
Screen B	G-06W-2Press-1x2ovl-01-svga
Screen C	G-04W-1Press-01-svga
Screen D	G-04W-1Press-1Tr-02-svga
Screen E	G-03W-1Tr-02-svga
Protocol Watch	G-03W-1Tr-PW-SSC-01-svga
Horizon	G-04W-Hor06Tr-01-svga
Big Numerics	G-03W-bigNumerics-01-svga
12 Lead ECG	C-13W-12Lead-STmap-01-svga
Visitors	G-00W-visitor-screen-01-svga

H20 A04, SVGA, MP40-50	
Service A	S-02W-nbp-diag-svga
OxyCRG	N-01W-03HW-event-01-svga
Screen A	G-04W-1Press-01-svga
Screen B	G-04W-1Press-1Tr-02-svga
Screen C	G-04W-2Press-1x2ovl-01-svga
Screen D	G-03W-01-svga
Screen E	G-03W-1Tr-02-svga
Screen F	G-03W-split-Tr-01-svga
Protocol Watch	G-03W-1Tr-PW-SSC-01-svga
Horizon	G-03W-Hor05Tr-01-svga
Big Numerics	G-03W-bigNumerics-01-svga
12 Lead ECG	C-13W-12Lead-STmap-01-svga
Visitors	G-00W-visitor-screen-01-svga

MP40/50 Option H30 Screens

H30 A08, SVGA, MP40-50	
Name	**File**
Service A	S-02W-nbp-diag-svga
Screen A	A-08W-3Press-01-svga
Screen B	A-05W-2Press-1Tr-BIS-01-svga
Screen C	A-06W-2Press-01-svga
Screen D	A-06W-2Press-1Tr-01-svga
Screen E	A-06W-2Press-1x2ovl-01-svga
Screen F	A-06W-2Press-split-Tr-01-svga
Screen G	A-04W-1Press-1Tr-02-svga
Protocol Watch	G-03W-1Tr-PW-SSC-01-svga
Horizon	A-04W-Hor06Tr-01-svga
Big Numerics	A-03W-bigNumerics-01-svga
12 Lead ECG	A-13W-12Lead-STmap-01-svga
Visitors	G-00W-visitor-screen-01-svga

H30 A06, SVGA, MP40-50	
Service A	S-02W-nbp-diag-svga
Screen A	A-05W-2Press-1Tr-BIS-01-svga
Screen B	A-06W-2Press-01-svga
Screen C	A-06W-2Press-1Tr-01-svga
Screen D	A-06W-2Press-1x2ovl-01-svga
Screen E	A-06W-2Press-split-Tr-01-svga
Screen F	A-04W-1Press-1Tr-02-svga
Screen G	A-04W-1Press-02-svga
Protocol Watch	G-03W-1Tr-PW-SSC-01-svga
Horizon	A-04W-Hor06Tr-01-svga
Big Numerics	A-03W-bigNumerics-01-svga
12 Lead ECG	A-13W-12Lead-STmap-01-svga
Visitors	G-00W-visitor-screen-01-svga

H30 A04, SVGA, MP40-50	
Service A	S-02W-nbp-diag-svga
Screen A	A-04W-1Press-1TrBIS-01-svga
Screen B	A-04W-1Press-1Tr-02-svga
Screen C	A-04W-1Press-02-svga
Screen D	A-04W-2Press-1x2ovl-02-svga
Screen E	A-04W-1Press-split-Tr-02-svga
Screen F	A-03W-01-svga
Screen G	A-03W-1Tr-01-svga
Protocol Watch	G-03W-1Tr-PW-SSC-01-svga
Horizon	A-03W-Hor05Tr-01-svga
Big Numerics	A-03W-bigNumerics-01-svga
12 Lead ECG	A-13W-12Lead-STmap-01-svga
Visitors	G-00W-visitor-screen-01-svga

MP40/50 Option H40 Screens

H40 A08, SVGA, MP40-50	
Name	**File**
Service A	S-02W-nbp-diag-svga
Screen A	C-08W-3Press-01-svga
Screen B	C-06W-2Press-01-svga
Screen C	C-06W-2Press-1x2ovl-01-svga
Screen D	C-06W-2Press-split-Tr-01-svga
Screen E	C-05W-03ST-snippets-01-svga
Screen F	C-04W-1Press-1Tr-02-svga
Screen G	C-04W-1Press-split-Tr-01-svga
Protocol Watch	G-03W-1Tr-PW-SSC-01-svga
Horizon	C-04W-Hor06Tr-01-svga
Big Numerics	G-03W-bigNumerics-01-svga
12 Lead ECG	C-13W-12Lead-STmap-01-svga
Visitors	G-00W-visitor-screen-01-svga

H40 A06, SVGA, MP40-50	
Service A	S-02W-nbp-diag-svga
Screen A	C-06W-2Press-01-svga
Screen B	C-06W-2Press-1x2ovl-01-svga
Screen C	C-06W-2Press-split-Tr-01-svga
Screen D	C-05W-03ST-snippets-01-svga
Screen E	C-04W-1Press-01-svga
Screen F	C-04W-1Press-1Tr-02-svga
Screen G	C-04W-1Press-split-Tr-01-svga
Protocol Watch	G-03W-1Tr-PW-SSC-01-svga
Horizon	C-04W-Hor06Tr-01-svga
Big Numerics	G-03W-bigNumerics-01-svga
12 Lead ECG	C-13W-12Lead-STmap-01-svga
Visitors	G-00W-visitor-screen-01-svga

H40 A04, SVGA, MP40-50	
Service A	S-02W-nbp-diag-svga
Screen A	C-04W-1Press-01-svga
Screen B	C-04W-1Press-1Tr-02-svga
Screen C	C-04W-2Press-1x2ovl-01-svga
Screen D	C-04W-1Press-split-Tr-01-svga
Screen E	C-03W-03ST-snippets-01-svga
Screen F	C-03W-1Tr-02-svga
Screen G	C-03W-split-Tr-01-svga
Protocol Watch	G-03W-1Tr-PW-SSC-01-svga
Horizon	C-03W-Hor05Tr-01-svga
Big Numerics	G-03W-bigNumerics-01-svga
12 Lead ECG	C-13W-12Lead-STmap-01-svga
Visitors	G-00W-visitor-screen-01-svga

MP40/50 Demo Configuration Screens

DEMO, SVGA, MP40-50	
Name	**File**
Service A	S-02W-nbp-diag-svga
Big Numerics	G-03W-bigNumerics-02-svga
4 Waves A	G-04W-1Press-1Tr-02-svga
5 Waves A	A-05W-2Press-1Tr-BIS-01-svga
6 Waves A	G-06W-2Press-01-svga
Split Screen A	G-06W-2Press-split-Tr-01-svga
HighResTrend	N-01W-03HW-event-01-svga
Vital Signs A	G-04W-TrA-01-svga
Protocol Watch	G-03W-1Tr-PW-SSC-01-svga
Horizon	A-03W-Hor05Tr-01-svga
Other Bed	G-03W-1Ovv01W-01-svga
Telemetry	G-01W-Tele02W-01-svga
Loops	G-04W-2TrBIS-Loops-01-svga
Demo A	G-03W-Loops-Spiro-01-svga
Cardiac Output	G-04W-2Press-cardiac-out-01-svga
Wedge	G-03W-1Press-wedge-01-svga
VueLink	G-03W-1Press-vuelink-01-svga
12 Lead ECG	C-13W-12Lead-STmap-01-svga
ST Segments	C-05W-03ST-snippets-01-svga
Remote Applic.	G-02W-PT-01-svga
Visitors	G-00W-visitor-screen-01-svga

MP20/MP30 Screen Overview

MP20/30 Option H10 Screens

H10 A06, SVGA, MP20-30	
Name	**File**
Service A	S-02W-nbp-diag-svga
Screen A	G-06W-2Press-01-svga
Screen B	G-06W-2Press-1x2ovl-01-svga
Screen C	G-06W-2Press-split-Tr-01-svga
Screen D	G-04W-1Press-01-svga
Screen E	G-04W-1Press-1Tr-02-svga
Screen F	G-04W-1Press-split-Tr-01-svga
Screen G	G-03W-1Tr-02-svga
Horizon	G-04W-Hor06Tr-01-svga
Big Numerics	G-03W-bigNumerics-01-svga
12 Lead ECG	C-13W-12Lead-STmap-01-svga
Visitors	G-00W-visitor-screen-01-svga

H10 A04, SVGA, MP20-30	
Service A	S-02W-nbp-diag-svga
Screen A	G-04W-1Press-01-svga
Screen B	G-04W-1Press-1Tr-02-svga
Screen C	G-04W-2Press-1x2ovl-01-svga
Screen D	G-04W-1Press-split-Tr-01-svga
Screen E	G-03W-01-svga
Screen F	G-03W-1Tr-02-svga
Screen G	G-03W-split-Tr-01-svga
Horizon	G-03W-Hor05Tr-01-svga
Big Numerics	G-03W-bigNumerics-01-svga
12 Lead ECG	C-13W-12Lead-STmap-01-svga
Visitors	G-00W-visitor-screen-01-svga

H10 A03, SVGA, MP20-30	
Service A	S-02W-nbp-diag-svga
Screen A	G-03W-01-svga
Screen B	G-03W-02-svga
Screen C	G-03W-1Tr-02-svga
Screen D	G-03W-1x2ovl-01-svga
Screen E	G-03W-split-Tr-01-svga
Screen F	G-02W-ovv-1Tr-01-svga
Screen G	G-02W-ovv-01-svga
Horizon	G-03W-Hor05Tr-01-svga
Big Numerics	G-03W-bigNumerics-01-svga
12 Lead ECG	C-13W-12Lead-STmap-01-svga
Visitors	G-00W-visitor-screen-01-svga

MP20/30 Option H20 Screens

H20 A06, SVGA, MP20-30	
Name	**File**
Service A	S-02W-nbp-diag-svga
OxyCRG A	N-03W-03HW-event-01-svga
OxyCRG B	N-01W-03HW-event-01-svga
Screen A	G-06W-2Press-01-svga
Screen B	G-06W-2Press-1x2ovl-01-svga
Screen C	G-04W-1Press-01-svga
Screen D	G-04W-1Press-1Tr-02-svga
Screen E	G-03W-1Tr-02-svga
Horizon	G-04W-Hor06Tr-01-svga-Rev004
Big Numerics	G-03W-bigNumerics-01-svga
12 Lead ECG	C-13W-12Lead-STmap-01-svga
Visitors	G-00W-visitor-screen-01-svga

H20 A04, SVGA, MP20-30	
Service A	S-02W-nbp-diag-svga
OxyCRG	N-01W-03HW-event-01-svga
Screen A	G-04W-1Press-01-svga
Screen B	G-04W-1Press-1Tr-02-svga
Screen C	G-04W-2Press-1x2ovl-01-svga
Screen D	G-04W-1Press-split-Tr-01-svga
Screen E	G-03W-01-svga
Screen F	G-03W-1Tr-02-svga
Horizon	G-03W-Hor05Tr-01-svga
Big Numerics	G-03W-bigNumerics-01-svga
12 Lead ECG	C-13W-12Lead-STmap-01-svga
Visitors	G-00W-visitor-screen-01-svga

H20 A03, SVGA, MP20-30	
Service A	S-02W-nbp-diag-svga
CRG	N-01W-02HW-event-01-svga
Screen A	G-03W-01-svga
Screen B	G-03W-02-svga
Screen C	G-03W-1Tr-02-svga
Screen D	G-03W-1x2ovl-01-svga
Screen E	G-03W-split-Tr-01-svga
Screen F	G-02W-ovv-1Tr-01-svga
Horizon	G-03W-Hor05Tr-01-svga
Big Numerics	G-03W-bigNumerics-01-svga
12 Lead ECG	C-13W-12Lead-STmap-01-svga
Visitors	G-00W-visitor-screen-01-svga

MP20/30Option H30 Screens

H30 A06, SVGA, MP20-30	
Name	**File**
Service A	S-02W-nbp-diag-svga
Screen A	A-05W-2Press-1Tr-BIS-01-svga
Screen B	A-06W-2Press-01-svga
Screen C	A-06W-2Press-1Tr-01-svga
Screen D	A-06W-2Press-1x2ovl-01-svga
Screen E	A-06W-2Press-split-Tr-01-svga
Screen F	A-04W-1Press-1Tr-02-svga
Screen G	A-04W-1Press-02-svga
Horizon	A-04W-Hor06Tr-01-svga
Big Numerics	A-03W-bigNumerics-01-svga
12 Lead ECG	A-13W-12Lead-STmap-01-svga
Visitors	G-00W-visitor-screen-01-svga

H30 A04, SVGA, MP20-30	
Service A	S-02W-nbp-diag-svga
Screen A	A-04W-1Press-02-svga
Screen B	A-04W-1Press-1Tr-02-svga
Screen C	A-04W-2Press-1x2ovl-02-svga
Screen D	A-04W-1Press-split-Tr-02-svga
Screen E	A-03W-01-svga
Screen F	A-03W-1Tr-02-svga
Screen G	A-03W-split-Tr-01-svga
Horizon	A-03W-Hor05Tr-01-svga
Big Numerics	A-03W-bigNumerics-02-svga
12 Lead ECG	A-13W-12Lead-STmap-01-svga
Visitors	G-00W-visitor-screen-01-svga

H30 A03, SVGA, MP20-30	
Service A	S-02W-nbp-diag-svga
Screen A	A-03W-02-svga
Screen B	A-03W-01-svga
Screen C	A-03W-1Tr-02-svga
Screen D	A-03W-1x2ovl-01-svga
Screen E	A-03W-split-Tr-01-svga
Screen F	A-02W-01-svga
Screen G	A-02W-1Tr-01-svga
Horizon	A-03W-Hor05Tr-01-svga
Big Numerics	A-03W-bigNumerics-02-svga
12 Lead ECG	A-13W-12Lead-STmap-01-svga
Visitors	G-00W-visitor-screen-01-svga

MP20/30 Option H40 Screens

H40 A06, SVGA, MP20-30	
Name	**File**
Service A	S-02W-nbp-diag-svga
Screen A	C-06W-2Press-01-svga
Screen B	C-06W-2Press-1x2ovl-01-svga
Screen C	C-06W-2Press-split-Tr-01-svga
Screen D	C-05W-03ST-snippets-01-svga
Screen E	C-04W-1Press-01-svga
Screen F	C-04W-1Press-1Tr-02-svga
Screen G	C-04W-1Press-split-Tr-01-svga
Horizon	C-04W-Hor06Tr-01-svga
Big Numerics	G-03W-bigNumerics-01-svga
12 Lead ECG	C-13W-12Lead-STmap-01-svga
Visitors	G-00W-visitor-screen-01-svga

H40 A04, SVGA, MP20-30	
Service A	S-02W-nbp-diag-svga
Screen A	C-04W-1Press-01-svga
Screen B	C-04W-1Press-1Tr-02-svga
Screen C	C-04W-2Press-1x2ovl-01-svga
Screen D	C-04W-1Press-split-Tr-01-svga
Screen E	C-03W-03ST-snippets-01-svga
Screen F	C-03W-1Tr-02-svga
Screen G	C-03W-split-Tr-01-svga
Horizon	C-03W-Hor05Tr-01-svga
Big Numerics	G-03W-bigNumerics-01-svga
12 Lead ECG	C-13W-12Lead-STmap-01-svga
Visitors	G-00W-visitor-screen-01-svga

H40 A03, SVGA, MP20-30	
Service A	S-02W-nbp-diag-svga
Screen A	C-03W-01-svga
Screen B	C-03W-02-svga
Screen C	C-03W-1Tr-02-svga
Screen D	G-03W-1x2ovl-01-svga
Screen E	C-03W-split-Tr-01-svga
Screen F	C-02W-ovv-1Tr-01-svga
Screen G	C-02W-ovv-01-svga
Horizon	C-03W-Hor05Tr-01-svga
Big Numerics	G-03W-bigNumerics-01-svga
12 Lead ECG	C-13W-12Lead-STmap-01-svga
Visitors	G-00W-visitor-screen-01-svga

MP20/30Demo Configuration Screens

DEMO, SVGA, MP20-30	
Name	**File**
Service A	S-02W-nbp-diag-svga
Big Numerics	G-03W-bigNumerics-02-svga
2 Waves A	G-02W-ovv-01-svga
2 Waves B	G-02W-ovv-1Tr-01-svga
3 Waves A	G-03W-01-svga
3 Waves B	G-03W-1Tr-02-svga
4 Waves A	G-04W-1Press-01-svga
4 Waves B	G-04W-1Press-1Tr-02-svga
Split Screen A	G-04W-1Press-split-Tr-01-svga
Split Screen B	G-06W-2Press-split-Tr-left-01-svga
HighResTrend	N-01W-03HW-event-01-svga
Vital Signs A	G-04W-TrA-01-svga
Horizon	A-03W-Hor05Tr-01-svga
Other Bed	G-03W-1Ovv01W-01-svga
Telemetry	G-01W-Tele02W-01-svga
Cardiac Output	G-03W-1Press-cardiac-out-01-svga
Wedge	G-01W-wedge-01-svga
12 Lead ECG	C-13W-12Lead-STmap-01-svga
ST Segments	C-03W-03ST-snippets-01-svga
Demo A	C-04W-1Press-Hor06Tr-svga
Visitors	G-00W-visitor-screen-01-svga

MP20 Junior (M20) & MP20L (M21) Screen Overview

Note that the MP20L is available in the US only.

MP20 M20/M21 Option H10 Screens

H10 A03 M20, SVGA, MP20	
Name	**File**
Service A	S-02W-nbp-diag-svga
Screen A	G-03W-1Tr-22-svga
Screen B	G-02W-ovv-1Tr-21-svga
Big Numerics	G-03W-bigNumerics-24-svga
Screen C	G-02W-ovv-21-svga
Screen D	G-03W-21-svga
Screen E	G-03W-22-svga
Screen F	G-03W-1x2ovl-21-svga
Screen G	G-03W-split-Tr-21-svga
12 Lead ECG	C-13W-12Lead-23-svga

H10 A03 M21, SVGA, MP20	
Service A	S-02W-nbp-diag-svga
Screen A	G-03W-1Tr-22-svga
Screen B	G-02W-ovv-1Tr-21-svga
Big Numerics	G-03W-bigNumerics-24-svga

MP20 M20 Option H20 Screens

H20 A03 M20, SVGA, MP20	
Name	**File**
Service A	S-02W-nbp-diag-svga
Screen A	G-03W-1Tr-22-svga
Screen B	G-02W-ovv-1Tr-21-svga
Big Numerics	G-03W-bigNumerics-24-svga
Screen C	G-02W-ovv-21-svga
Screen D	G-03W-21-svga
Screen E	G-03W-22-svga
Screen F	G-03W-1x2ovl-21-svga
Screen G	G-03W-split-Tr-21-svga
12 Lead ECG	C-13W-12Lead-23-svga

MP5 Screen Overview

MP5 Option H10 Screens

H10 A04, SVGA, MP5	
Name	**File**
Service A	S-02W-nbp-diag-svga
1 Wave	G-01W-1Tr-51-svga
2 Waves	G-02W-1Tr-51-svga
3 Waves	G-03W-1Tr-51-svga
4 Waves	G-04W-1Tr-51-svga
Vital Signs	G-01W-TrA-51-svga
Split Screen A	G-03W-split-Tr-1Tr-51-svga
Split Screen B	G-04W-split-Tr-1Tr-51-svga
Other Bed	G-03W-1Ovv01W-52-svga
12 Lead ECG	C-13W-12Lead-STmap-51-svga

H10 A03, SVGA, MP5	
Service A	S-02W-nbp-diag-svga
1 Wave	G-01W-1Tr-51-svga
2 Waves	G-02W-1Tr-51-svga
3 Waves	G-03W-1Tr-51-svga
Vital Signs	G-01W-TrA-51-svga
Split Screen	G-03W-split-Tr-1Tr-51-svga
Other Bed	G-02W-1Ovv01W-51-svga
12 Lead ECG	C-13W-12Lead-STmap-51-svga

MP5 Option H20 Screens

H20 A04, SVGA, MP5	
Name	**File**
Service A	S-02W-nbp-diag-svga
1 Wave	G-01W-1Tr-51-svga
2 Waves	G-02W-1Tr-51-svga
3 Waves	G-03W-1Tr-51-svga
4 Waves	G-04W-1Tr-51-svga
OxyCRG	N-01W-03HW-51-svga
Vital Signs	G-01W-TrA-51-svga
Split Screen A	G-03W-split-Tr-1Tr-51-svga
Split Screen B	G-04W-split-Tr-1Tr-51-svga
Other Bed	G-03W-1Ovv01W-52-svga

H20 A03, SVGA, MP5	
Service A	S-02W-nbp-diag-svga
1 Wave	G-01W-1Tr-51-svga
2 Waves	G-02W-1Tr-51-svga
3 Waves	G-03W-1Tr-51-svga
CRG	N-01W-02HW-51-svga
Vital Signs	G-01W-TrA-51-svga
Split Screen	G-03W-split-Tr-1Tr-51-svga
Other Bed	G-02W-1Ovv01W-51-svga

MP5 Option H30 Screens

H30 A04, SVGA, MP5	
Name	**File**
Service A	S-02W-nbp-diag-svga
1 Wave	G-01W-1Tr-51-svga
2 Waves	A-02W-GM-1Tr-51-svga
3 Waves	G-03W-1Tr-51-svga
4 Waves A	G-04W-1Tr-51-svga
4 Waves B	A-04W-GM-51-svga
Vital Signs	G-01W-TrA-51-svga
Split Screen A	G-03W-split-Tr-1Tr-51-svga
Split Screen B	G-04W-split-Tr-1Tr-51-svga
Other Bed	G-03W-1Ovv01W-52-svga

H30 A03, SVGA, MP5	
Service A	S-02W-nbp-diag-svga
1 Wave	G-01W-1Tr-51-svga
2 Waves	A-02W-GM-1Tr-51-svga
3 Waves A	G-03W-1Tr-51-svga
3 Waves B	A-03W-GM-51-svga
Vital Signs	G-01W-TrA-51-svga
Split Screen	G-03W-split-Tr-1Tr-51-svga
Other Bed	G-02W-1Ovv01W-51-svga

MP5 Option H40 Screens

H40 A04, SVGA, MP5	
Name	**File**
Service A	S-02W-nbp-diag-svga
1 Wave	G-01W-1Tr-51-svga
2 Waves	G-02W-1Tr-51-svga
3 Waves	G-03W-1Tr-51-svga
4 Waves	G-04W-1Tr-51-svga
ST MAP	C-04W-ST-Map-1Tr-51-svga
Vital Signs	G-01W-TrA-51-svga
Split Screen A	G-03W-split-Tr-1Tr-51-svga
Split Screen B	G-04W-split-Tr-1Tr-51-svga
Other Bed	C-03W-1Ovv01W-51-svga
Telemetry	G-01W-Tele02W-51-svga
12 Lead ECG	C-13W-12Lead-STmap-51-svga

H40 A03, SVGA, MP5	
Service A	S-02W-nbp-diag-svga
1 Wave	G-01W-1Tr-51-svga
2 Waves	G-02W-1Tr-51-svga
3 Waves	G-03W-1Tr-51-svga
ST MAP	C-03W-ST-Map-1Tr-51-svga
Vital Signs	G-01W-TrA-51-svga
Split Screen	G-03W-split-Tr-1Tr-51-svga
Other Bed	C-02W-1Ovv01W-51-svga
Telemetry	G-01W-Tele02W-51-svga
12 Lead ECG	C-13W-12Lead-STmap-51-svga

MP5 Demo Configuration Screens

DEMO, SVGA, MP5	
Name	**File**
Service A	S-02W-nbp-diag-svga
1 Wave	G-01W-1Tr-51-svga
2 Waves	G-02W-1Tr-51-svga
3 Waves	G-03W-1Tr-51-svga
4 Waves	G-04W-1Tr-51-svga
Vital Signs	G-01W-TrA-51-svga
Split Screen A	G-03W-split-Tr-1Tr-51-svga
Split Screen B	G-04W-split-Tr-1Tr-51-svga
Other Bed	C-03W-1Ovv01W-51-svga
12 Lead ECG	C-13W-12Lead-STmap-51-svga
Visitors	G-00W-visitor-screen-01-svga
Big Numerics	G-03W-bigNumerics-55-svga
3 Waves A	A-03W-GM-51-svga
4 Waves A	A-04W-GM-51-svga
Overlapping	G-04W-2Press-1x2ovl-51-svga
ST MAP	C-04W-ST-Map-1Tr-51-svga
Horizon	G-04W-Hor06Tr-51-svga
OxyCRG	N-01W-03HW-51-svga
Telemetry	G-01W-Tele02W-51-svga

MP5 Options B10/B11/B14 Screen Overview

MP5 with Options B10/B11/B14 Screens

H10 A03, B10, SVGA, MP5	
Name	**File**
Service A	S-02W-nbp-diag-svga
Big Numerics	G-00W-1Tr-60-svga
1 Wave	G-01W-1Tr-60-svga
Horizon	G-01W-1Tr-Hor03Tr-60-svga
Vital Signs A	G-00W-TrA-60-svga
Vital Signs B	G-01W-TrA-60-svga
Other Bed	G-01W-1Tr-1Ovv01W-60-svga
Visitors	G-00W-visitor-screen-01-svga

H10 A03, B11, SVGA, MP5	
Name	**File**
Service A	S-02W-nbp-diag-svga
Big Numerics	G-00W-1Tr-61-svga
1 Wave	G-01W-1Tr-60-svga
Horizon	G-01W-1Tr-Hor04Tr-61-svga
Vital Signs A	G-00W-TrA-60-svga
Vital Signs B	G-01W-TrA-60-svga
Other Bed	G-01W-1Tr-1Ovv01W-60-svga
Visitors	G-00W-visitor-screen-01-svga

H10 A03, B14, SVGA, MP5	
Name	**File**
Service A	S-02W-nbp-diag-svga
Big Numerics	G-00W-1Tr-64-svga
1 Wave A	G-01W-1Tr-60-svga
1 Wave B	G-01W-1Tr-64-svga
2 Waves	G-02W-1Tr-64-svga
Horizon	G-01W-1Tr-Hor04Tr-64-svga
Vital Signs A	G-00W-TrA-60-svga
Vital Signs B	G-01W-TrA-60-svga
Other Bed	G-01W-1Tr-1Ovv01W-60-svga
Visitors	G-00W-visitor-screen-01-svga

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MP5T Screen Overview

H10 A03, SVGA, MP5T	
Name	**File**
Service A	S-02W-nbp-diag-svga
1 Wave	G-01W-1Tr-51-svga
2 Waves	G-02W-1Tr-51-svga
3 Waves	G-03W-1Tr-52-svga
Vital Signs	G-01W-TrA-51-svga
ST MAP	C-03W-ST-Map-1Tr-51-svga
12 Lead ECG	C-13W-12Lead-STmap-51-svga

MP2 Screen Overview

MP2, QVGA	
Name	**File**
Service A	S-01W-04N-qvga
Big Numerics	G-00W-06N-02-qvga
10 Numerics	G-00W-10N-01-qvga
Vital Signs A	G-00W-03N-1TrT-01-qvga
1 Wave A	G-01W-03N-01-qvga
1 Wave B	G-01W-07N-01-qvga
1 Big Wave	G-01W-big-05N-01-qvga
Vital Signs B	G-01W-05N-1TrT-01-qvga
2 Waves A	G-02W-04N-01-qvga
2 Waves B	G-02W-08N-01-qvga
3 Waves	G-03W-05N-01-qvga
Vital Signs	G-00W-03N-TrA-01-qvga
Horizon	G-00W-03N-1TrH-01-qvga
ST MAP	C-01W-03N-ST-Map-01-qvga
12 Lead ECG	C-13W-12Lead-01-qvga
Visitors	G-00W-Visitors-01-qvga

MP2, Tele, QVGA	
Name	**File**
Service A	S-01W-04N-qvga
Big Numerics	G-00W-06N-02-qvga
10 Numerics	G-00W-10N-01-qvga
Vital Signs A	G-00W-03N-1TrT-01-qvga
1 Wave A	G-01W-03N-01-qvga
1 Wave B	G-01W-07N-01-qvga
1 Big Wave	G-01W-big-05N-01-qvga
Vital Signs B	G-01W-05N-1TrT-01-qvga
2 Waves A	G-02W-04N-01-qvga
2 Waves B	G-02W-08N-01-qvga
3 Waves	G-03W-05N-01-qvga
Vital Signs	G-00W-03N-TrA-01-qvga
Horizon	G-00W-03N-1TrH-01-qvga
Telemetry	G-00W-Tele01W-01-qvga
ST MAP	C-01W-03N-ST-Map-01-qvga
12 Lead ECG	C-13W-12Lead-01-qvga
Visitors	G-00W-Visitors-01-qvga

X2 Screen Overview

X2, QVGA	
Name	File
Service A	S-01W-04N-qvga
Big Numerics	G-00W-06N-02-qvga
10 Numerics	G-00W-10N-01-qvga
Vital Signs A	G-00W-03N-1TrT-01-qvga
1 Wave A	G-01W-03N-01-qvga
1 Wave B	G-01W-07N-01-qvga
1 Big Wave	G-01W-big-05N-01-qvga
Vital Signs B	G-01W-05N-1TrT-01-qvga
2 Waves A	G-02W-04N-01-qvga
2 Waves B	G-02W-08N-01-qvga
3 Waves	G-03W-05N-01-qvga
Vital Signs	G-00W-03N-TrA-01-qvga
Horizon	G-00W-03N-1TrH-01-qvga
ST MAP	C-01W-03N-ST-Map-01-qvga
12 Lead ECG	C-13W-12Lead-01-qvga
Visitors	G-00W-Visitors-01-qvga

X2, Tele, QVGA	
Name	File
Service A	S-01W-04N-qvga
Big Numerics	G-00W-06N-02-qvga
10 Numerics	G-00W-10N-01-qvga
Vital Signs A	G-00W-03N-1TrT-01-qvga
1 Wave A	G-01W-03N-01-qvga
1 Wave B	G-01W-07N-01-qvga
1 Big Wave	G-01W-big-05N-01-qvga
Vital Signs B	G-01W-05N-1TrT-01-qvga
2 Waves A	G-02W-04N-01-qvga
2 Waves B	G-02W-08N-01-qvga
3 Waves	G-03W-05N-01-qvga
Vital Signs	G-00W-03N-TrA-01-qvga
Horizon	G-00W-03N-1TrH-01-qvga
Telemetry	G-00W-Tele01W-01-qvga
ST MAP	C-01W-03N-ST-Map-01-qvga
12 Lead ECG	C-13W-12Lead-01-qvga
Visitors	G-00W-Visitors-01-qvga