Important safety instructions

WARNINGS & PRECAUTIONS

■ Ensure that your domestic mains supply voltage matches the voltage indicated on the identification label located at the back of the set.

■ The monitor components are sensitive to heat. The maximum ambient temperature should not exceed 35° Celsius.

■ Do not cover the vents at the back of the monitor. Leave sufficient space around it to allow adequate ventilation.

■ Install the monitor away from any source of dust or heat (radiator, etc.). Do not expose it to direct sunlight.

■ Moisture in rooms where the monitor is installed should not exceed 85% humidity. If you have to use the monitor outdoors, do not expose it to rain or splashing water.

■ Moving the monitor from a cold place to a warm one can cause condensation on the screen (and on some inside components). Let the condensation evaporate before switching the monitor on again.

■ During thunderstorms, we recommend that you disconnect the set from the mains and aerial so that it is not affected by electrical or electromagnetic surges that could damage it. For this reason, keep the mains and aerial sockets accessible so they can be disconnected if needed.

■ Unplug the set immediately if you notice it giving off a smell of burning or smoke. You must never, under any circumstances, open the set yourself, as you risk an electric shock in doing so.

■ If you intend to be away for a long period, switch the set off at the on/off switch located on the rear panel.

■ Even when off, some components remain in contact with the mains electricity supply. To completely isolate the set you must remove the plug from the mains supply socket.

■ This product is fitted with a 3-pin grounded plug, which will only fit into a grounded power outlet. This is a safety feature. Do not alter the plug, as this would defeat the safety feature.

■ Avoid any intrusion of liquid or small metallic objects inside the monitor. If such an incident were to occur, immediately disconnect the monitor from the mains supply and refer servicing to qualified service personnel.

■ Use the screen saver when using a computer.

■ Switch the monitor to standby mode when you do not use it.

■ The top of the monitor is usually very hot due to the high temperature of exhaust air released through the ventilation openings. Do not place your hands or face close to these openings to avoid burns or personal injuries. Do not place any object close to the ventilation openings to avoid any damage to the object or to the monitor itself.

■ Make sure that all cables are disconnected before moving the monitor, to avoid damaging the cables and thus cause fire or electric shock danger.

Important safety instructions

Installation

- Install the monitor in a properly ventilated room.
- Do not install this product on an unstable cart, stand or table.
- Do not place it on a bed, sofa, rug, or other similar surfaces.
- Do not install the monitor in an enclosed area unless proper ventilation is provided.
- Do not rest objects on the power cord and avoid placing power cord near high traffic areas.
- Do not overload wall outlets and extension cords as this can result in a risk of fire or electric shock.
- To reduce the risk of screen burning, do not display still images for extended periods of time. Examples of still images include still computer and video game images, logos, pictures, text and images displayed in 4x3 format.
- When displaying tables, graphics, etc.
  - Decrease the contrast and brightness of the picture as much as possible.
  - Display pictures presenting many colours and grading of colours (photographs).
  - Adjust contrast to obtain the least noticeable transition between dark and light areas (white characters on a black background).
- If the picture displayed is in any way abnormal, turn off the set using the main power switch located at the back and disconnect it from the electric outlet.
- This monitor must be installed and used in compliance with this notice. It should not be used for other purposes, including industrial purposes.
- Screen burns are not covered by the warranty.

THOMSON is not liable if the product is not used in accordance with this manual.

In our endeavour to improve the quality of our products we reserve the right to modify their features. The information in this manual is therefore likely to change and is not contractually binding.

Care and maintenance

- Always disconnect the monitor from the mains supply before any cleaning operation. Clean the screen with a glass-cleaning product. Never use abrasive products.
- Clean the front and cabinet using a soft cloth impregnated with a neutral detergent. Using solvents, abrasive or alcohol-based products could damage the monitor.
- Regularly dust the air vents located at the back.

Trademarks

- VGA is a trademark of IBM Corporation.
- Macintosh is a registered trademark of Apple Computer Corporation.
- SVGA is a registered trademark of the Video Electronics Standard Association.
- All other trademarks are the properties of their respective owners.

Compliance with CE standards

The CE label on this product indicates that it complies with the 89/336/EEC directive on electromagnetic compatibility and safety rules as defined in the 73/23/EEC and 93/68/EEC low voltage directives. This product is protected against interferences from other electronic devices, provided that these devices comply with the standards in force. Sporadic interferences may happen nevertheless.

HELPLINE **THOMSON**

You can contact THOMSON by dialling: **0845 601 3093**
(for Great Britain, all calls will be charged at local rate)

www.thomson-europe.com

Table of contents

Package contents

Remote control with batteries
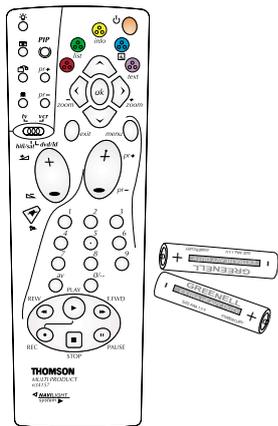
Plasma monitor

User manual

Power cord

Optional accessory
You can purchase from your local sales representative an optional wall mount under the following reference:
- Wall mount (ACC913)

Understanding your monitor

Front view
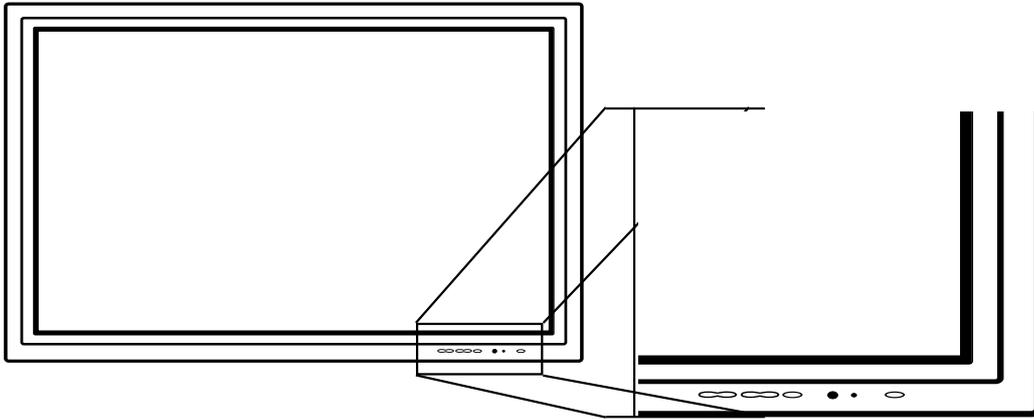
Power (standby) button
Use this button to turn the monitor on from standby mode.

Status indicator

■ **Off**
When the monitor is connected to the mains, the main power switch on the rear panel is on the OFF position, the indicator is off.

■ **Orange**
When the monitor is connected to the mains and the main power switch is on the ON position, but the power button on the front panel is off, the indicator is orange.

■ **Green**
When the set is on, the indicator is green.

Menu
Use these buttons to access the monitor menus.

Volume adjustment buttons
Use these buttons to adjust volume. They can also be used for adjustment in menus.

Rear view

Video connectors

COMPONENT VIDEO/AUDIO IN

AUDIO OUT

ANT

SCART INPUT

Y   P$_B$/ C$_B$ P$_R$/ C$_R$ L   R   L

S-VIDEO   L   R   R

VIDEO IN   AUDIO IN

DVI
RGB

100 ~ 240 V
50/60 Hz

Main power switch

RGB / Computer related connectors

RGB IN   RGB OUT   DVI IN   RS-232
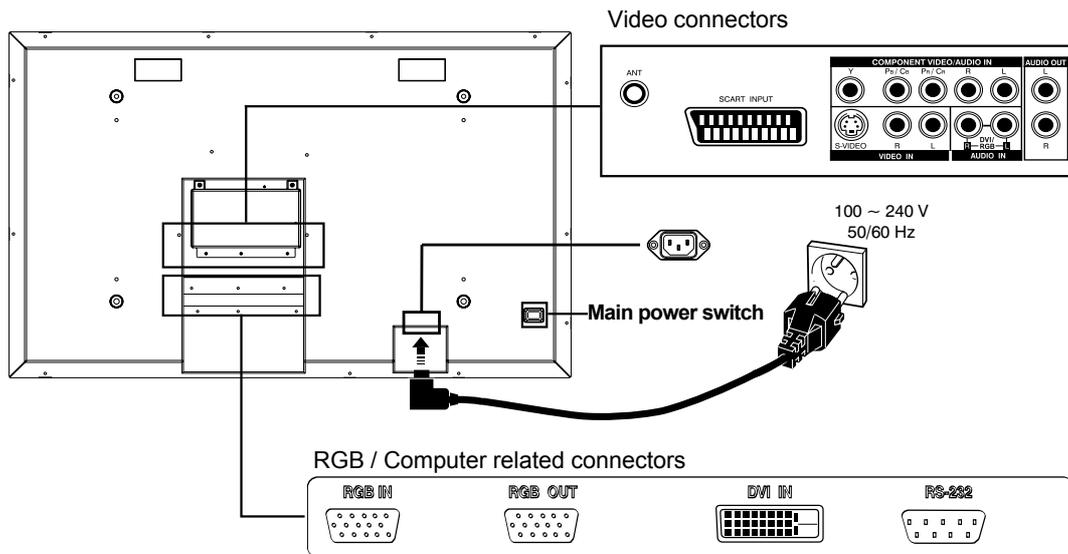
Note: The RS-232 socket is for factory tests only.

Remote control

Most of your plasma monitor functions are available via the menus that appear on the screen. The remote control supplied with your set can be used to navigate through the menus and to configure all the general settings.

(red) To access the sleep timer.

(green) Inactive

(yellow) To access status information.

Inactive

Standby.

To enable the PIP function.

PIP

(blue) Inactive

Inactive

(purple) To access Teletext.

To swap the main picture with the PIP picture.

(up and down buttons): To select the options in menus.

To change position of the PIP on screen.

(left and right buttons): To adjust settings, change values, switch certain functions on and off, and use the zoom function.

To change channels within the PIP function.

To control the volume.

To confirm a selection.

To switch the sound off and back on again.

To access the OVER-VIEW menu.

To close menus.

To change channels.

(av): To select an appliance connected to an AV socket (Scart or cinch sockets).

(numeric buttons): To select a channel by entering its number, or to enter numeric values in menus.

Note:
The coloured buttons are also used for operating Teletext.

IMPORTANT
If the batteries in your remote control are run down, you can use the buttons on the front of the set, as they have the same functions as those of the remote control.

Using the remote control for other equipment

The remote control supplied with your set can be used for other equipment, such as videorecorders, DVD players, satellite receivers or hi-fi systems. This page provides information concerning the remote control's use with these other types of equipment.

	Video recorder	DVD player	Satellite receiver	Hi-fi system
tv ... *vcr* / *hifi/sat* *dvd/ld*	Set the switch to *vcr*	Set the switch to *dvd/ld*	Set the switch to *hifi/sat*	Set the switch to *hifi/sat*
⏻	On/Standby	On/Standby	On/Standby	On/Standby
menu	To display the main menu	To display the main menu	To display the main menu	
⌄⌃	Vertical scrolling in menus	Vertical scrolling in menus	Vertical scrolling in menus	
◁ ▷	Horizontal scrolling in menus	Horizontal scrolling in menus	Horizontal scrolling in menus	
ok	To confirm an action	To confirm an action	To confirm an action	
exit	To close a menu	To close a menu	To close a menu	
1-9, 0	To directly access channels or enter numeric values	To enter numeric values or select options in menus	To directly access channels or enter numeric values	To select a radio station using its number
+ / −	To change channels		To change channels	To change stations
av	To select AV input			
REW	Rewind	Rewind		
PLAY	Play	Play		
F.FWD	Fast forward	Fast forward		
STOP	Stop	Stop		
PAUSE	Pause	Pause		
REC	Record			
🔇				To switch the sound off and back on again
⊿ / ◺				To set the volume level

Programming the remote control
1 Set the selection switch to the unit you wish to use the remote control with.
2 Hold the *menu* button down and enter one of the 3-digit codes corresponding to the make of you unit (the code list can be found at the end of this document).
3 Release the *menu* button.
4 Set your unit (VCR, DVD, HiFi, etc) in standby mode by pressing the standby button on the remote control. If this does not work, try another code.

Depending on the age or type of some products, certain functions may not be available.
Some codes may cover more functions than others. Test the functions that you can control and if necessary, try other codes.

Note the code or codes that are the most suitable here.

VCR		
DVD/LD		
HIFI/SAT		

When you **change the batteries** in the remote control, remember to **reprogram** it.

Switching on

Follow the instructions on this page to switch on the TV set and the remote control.
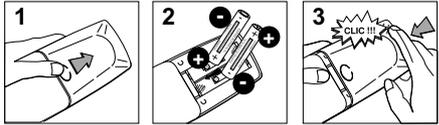
1 Install two LR06 or AA batteries in the remote control.
Precautions on using batteries:
– Only use the battery types specified.
– Make sure you use the correct polarity.
– Do not mix new and used batteries.
– Do not use rechargeable batteries.
– Do not expose batteries to excessive heat, throw them on the fire, recharge them or try to open them, as this could cause them to leak or explode.
– Remove the batteries from the remote control if you are not using it for a long period of time (several weeks).

100 ~ 240 V 50/60 Hz
Main socket in continental Europe

2 Connect the TV set to a mains socket.
The set should only be connected to an AC supply.
It must not be connected to a DC supply. If the plug is detached from the cord, do not, under any circumstances, connect it to a mains socket, as there is a risk of electric shock.
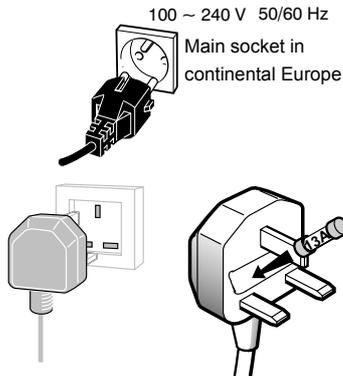
Equipment for the UK is supplied with a mains cable fitted with a moulded plug. This plug contains safety components and must not be replaced by one sold by general retailers. It is fitted with a fuse that protects your television. If your set has stopped working, the fuse may have blown. If it has, replace it with an identical ASTA or BSI certified (BSI 362) 13-amp fuse.

3 Connect the outside aerial or cable network to the antenna connector (labelled ANT) on the rear panel of the monitor.
The aerial socket can be used for connecting an external aerial or other equipment fitted with a modulator (video recorder, satellite receiver, etc.).
We recommend that you do not connect other equipment (video recorder, satellite receiver, etc.) to your TV set to begin with, so as not to complicate the set-up procedure with this additional equipment. Connect them when you have finished setting up the channels.
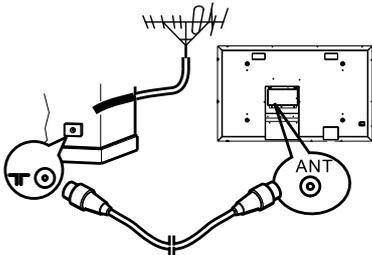
4 Switch the TV set on by putting the main power switch located at the back on the ON position, then pressing the power button on the front panel.
The first time you switch on the TV set, the language selection menu appears.

Please respect the environment and the relevant regulations. Before you dispose of batteries or accumulators, ask your dealer whether they require special recycling and if he is able to take them back.
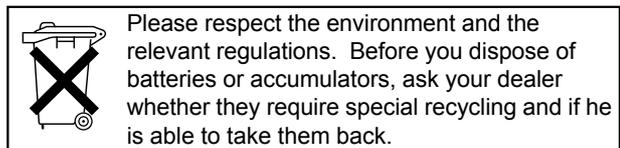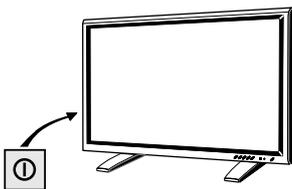
Initial set-up

The initial set-up involves setting all the parameters required to be able to search and store all the channels you can receive in your area. Make sure that the TV set is switched on and follow steps 1 to 4. When you first switch the TV set on, the language selection menu appears (1). If this does not happen, refer to the Manual installation section to find out how to carry out an automatic search.

English
Français
Deutsch
Italiano
Español

▲ ▼ - ok

1 Choose which language you want the menus to appear in using the ⌢ or ⌣ button. Press *ok* to confirm.

COUNTRY

Return
U.K.
Eire
France
Germany
Italy
Spain
Belgium
Switzerland
Austria
Other
Select your country and press OK.

2 A list of countries appears. Select the relevant country using the ⌢ and ⌣ buttons. If your country is not listed, select **Other**. Press *ok* to confirm.

Note: This is the country you are in, or the country whose channels you want to receive if you live near its borders.

AUTO INSTALLATION

Return
Start   ◄ ► . . .

To start auto installation, Press OK

AUTO INSTALLATION

Return
Start   ◄ ► Searching
Standard   FR
Frequency   150.75 Mhz
Stations found 05

3 The **AUTO INSTALLATION** menu appears. The **Start** line is selected. Press *ok* to launch the auto installation.
Once the auto installation has started, additional information displays (standard currently scanned, frequency, and number of channels found).
The automatic set-up process can take several minutes.
Channels are arranged in a pre-set order, depending on the country selected.
If you press the *exit* button before the end of the process, the channels already found are stored.

Initial set-up

```
ORGANIZER

Return
Select PR              ◄ ► 02
Swap with PR:              --
Change name              BBC2
Delete PR                  05

Select programme with
PR-/+ or </> or 0 to 9 keys.
```

4 Organising channels

At the end of the auto installation process, the **ORGANIZER** menu appears to allow you to modify the order of channels, to name or rename channels, or delete channels stored twice or with poor reception quality.

Use a TV programme magazine and the channel logos to identify the various channels.

*Note: The **ORGANIZER** menu is also accessible from the **INSTALLATION** menu.*

If you do not want to reorganise the channels, press *exit* to close the menu.

When the **ORGANIZER** menu opens, the current channels number is displayed on the **Select PR** line.

● Organising channels: on the **Select PR** line, display the number of the channel you want to move using the ◁ and ▷ buttons or the numeric buttons. The channel is displayed on TV.

● Select the **Swap with PR**: option, enter the number you want to assign to this channel and press *ok* to confirm. A message appears indicating that the channels are swapped.

● Changing a channel name: on the **Select PR** line, display the number of the channel whose name is to change using the ◁ and ▷ buttons or the numeric buttons. Select the **Change name** option. Select the character to be changed using the ◁ and ▷ buttons. Scroll through the alphabet using the ⌃ and ⌄ buttons. When you have changed one character, move the cursor to the next one using the ◁ and ▷ buttons and repeat the procedure. The maximum length for a channel name is 6 characters.

press *ok* to confirm the name.

● Deleting a channel: on the **Select PR** line, display the number of the channel to be deleted using the ◁ and ▷ buttons or the numeric buttons. Select **Delet PR**, and press *ok*. Confirm with *ok*. A message appears indicating that the channel has been deleted.

● Press *exit* to close the menu. Select **Return** to return to the **INSTALLATION** menu.

To launch a new auto installation after the initial set-up (to set up channels after moving house, for instance), display the **OVERVIEW** menu and select **Installation**. In the **INSTALLATION** menu, select **Auto installation**. The country selection screen appears, allowing you to launch an automatic installation.

This process deletes all channels previously stored.

Manual installation

OVERVIEW
Exit
Picture
Sound
Preferences
Installation

INSTALLATION
Return
Manual installation
Auto installation
Organizer

MANUAL INSTALLATION
Return
Standard   EURO
Frequency   150.75 MHz
Name   BBC2
Fine-tuning   i
Store on PR: 02
Decoder   ☑
Text   1

You may want to make a manual installation, in case, some channels have not been stored during the initial set-up. Setting up channels manually requires every setting to be entered, one at a time. To carry out a manual installation, display the **OVERVIEW** menu using the *menu* button and select the **Installation** option. Press *ok* to confirm. In the **INSTALLATION** menu, select **Manual installation** and press *ok* to confirm.

The information displayed pertains to the current channel.

The **Standard** line is highlighted.

To search for channels, do the following:

1 On the **Standard** line, select the standard for your country. The following standards are available: **FR** for France and Luxemburg, **UK** for United Kingdom and Eire, **DK** for Eastern Europe and the Middle East, and **EURO** for Western Europe.

2 Select the **Frequency** line, enter a frequency or use the ◁ and ▷ buttons to start a search.
   The available frequencies depend on the selected standard.

3 Once a channel is found, if it is recognised, its name is automatically detected and displayed on the **Name** line.
   This line is only informative and cannot be selected.

4 You can tune the channel manually using the **Fine-tuning** function.

5 If the channel is encoded and you want to connect a decoder to the AV socket, select the **Decoder** line and check the box using the ◁ or ▷ button.

6 Select the **Text** line, and using the ◁ and ▷ buttons, select the character set to be used for Teletext:
   1: Western Europe
   2: Eastern Europe
   3: Russian, Bulgarian
   4: Greek
   5: Arabic
   6: Ukrainian
   7: Byelorussian
Note: The Teletext character set is stored per channel.

You can now store the settings for this channel. To do so, select the **Store on PR:** line, enter the number you want to assign to the channel (e.g. 01 for BBC1), press *ok* to confirm.

Press *exit* to close the menu.

*Note: The **INSTALLATION** menu is only available in video mode (TV channels or AV programmes).*

Switching the set on and off

To switch the TV set on, put the main power switch located at the rear on the ON position, then press the power button located on the front panel. When the set is on, the indicator on the front is green.
Standby mode: press the power button on the front panel.
When the TV set is in standby mode, the indicator on the front is orange.
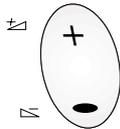
Volume

Volume control: use the buttons on the front panel or the remote control to increase and decrease the volume.
Sound mute: press the ⊅ button on the remote control to temporarily mute the sound.
To restore it, press the ⊅ button again or use the volume+ button.

Displaying status information

In TV mode, press the yellow *info* button on the remote control to display the number and name of the channel you are watching, the zoom format, the type of sound, and the remaining time if the sleep timer is on.
The number and name of the channel are displayed whenever you turn on the TV set or change channels.
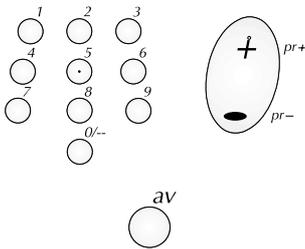
Accessing TV channels

Using the numeric buttons: for channels 1 to 9, press the corresponding button. For two-digit channels, first press the 0/-- button, then the channel number (e.g. type 012 for channel 12).
Using the *pr+/pr-* buttons: scan through the programmes. AV programmes are not accessible.

Accessing AV programmes

Press the *av* button to display the last selected AV programme and scan through the other AV programmes.

Adjusting the picture

Picture menu in TV mode

```
PICTURE

Return
Brightness        ◄ ►  _____ i _____
Contrast               _____ i _____
Colour                 _____ i _____
Sharpness              _____ i _____
Tint                   _____ i _____
Tone              Cold
Auto format       ☑
Noise reduction   Low
```
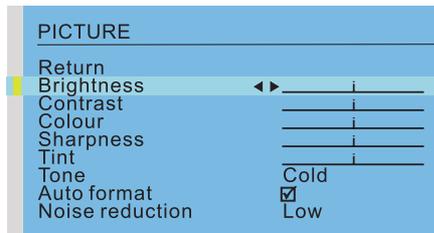
Display the **OVERVIEW** menu using the *menu* button. Select **Picture** and press *ok* to confirm. The **PICTURE** menu appears.
The contents of this menu depends on the signal.

In TV mode:

Adjust the **Brightness**, **Contrast**, **Colour** and **Sharpness** settings as required.
The **Tint** option is only available when a NTSC signal is detected. It is used for adjusting the picture's tint.
To adjust the colour temperature, select the **Tone** option and select a setting using the ◁ and ▷ buttons.

Check the box for the **Auto format** option so that the appropriate format is automatically applied to the picture.

Note: if you are watching an AV programme through AV2 or Component Y/C$_R$/C$_B$, this function is not available.

Use the **Noise reduction** function to improve the quality of the picture in the case of poor reception. Use the ◁ and ▷ buttons to select one of the options.

Picture menu in PC mode

```
PICTURE

Return
Brightness        ◄ ►  _____ i _____
Contrast               _____ i _____
Tone              Neutral
V-Size                 _____ i _____
V-Position             _____ i _____
H-Size                 _____ i _____
H-Position             _____ i _____
Phase                  _____ i _____
```
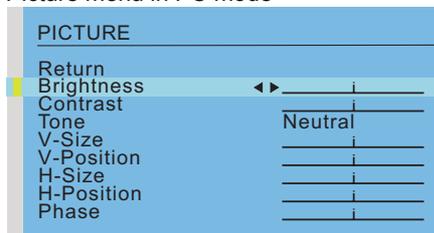
In PC mode:

Adjust the **Brightness** and **Contrast** settings as required.
To adjust the colour temperature, select the **Tone** option and select a setting using the ◁ and ▷ buttons.
Use the **V-Size** option to change the vertical size of the picture. Using the ◁ and ▷ buttons, move the cursor to the right to enlarge the picture, or to the left to reduce it.
Use the **V-position** to move the picture vertically. Using the ◁ and ▷ buttons, move the cursor to the right to shift the picutre up, or to the left to shift it down.
Use the **H-Size** option to change the horizontal size of the picture. Using the ◁ and ▷ buttons, move the cursor to the right to enlarge the picture, or to the left to reduce it.
Use the **H-position** to move the picture horizontally. Using the ◁ and ▷ buttons, move the cursor to the right to shift the picture to the right, or to the left to shift it to the left.
The **Phase** option allows you to finetune the set in order to perfectly synchronize it with the video signal source.

Press the *exit* button to close the menu. Select **Return** to return to the **OVERVIEW** menu.

Adjusting the sound

Display the **OVERVIEW** menu using the *menu* button. Select **Sound** and press *ok* to confirm. The **SOUND** menu appears, which offers the following settings:

The **Sound type** option allows to select the relevant sound type. Use the ◁ and ▷ buttons to make a selection.

The available options depend on the programme you are watching.

Broadcast	Options
Mono	Mono, Automatic
Stereo	Mono, Stereo
Bilingual	Sound 1, Sound 2
NICAM bilingual	Sound 1, Sound 2, Sound 3
AV1 or AV2	Stereo, Sound 1, Sound 2

Adjust the **Bass** and **Treble** levels as required.

Use the **Balance** option to balance the sound between the left and right speakers.

The internal speakers are activated by default. To deactivate, uncheck the box on the **Intern. Speaker** line using the *ok* button.

The **Audio output** option allows you to set the audio output of external speakers. When **Fixed** is selected, the **Bass**, **Treble** and **Balance** functions, and the volume controls are deactivated for the external speakers.

The audio output is set to **Fixed** by default. Use the ◁ and ▷ buttons to change the setting.

Press *exit* to close the menu.

```
Sound
Return
Sound type          ◀ ▶Stereo
Bass                         i
Treble                       i
Balance                      i
Intern. Speaker          ☑
Audio output          Fixed
```
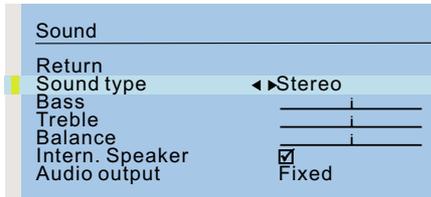
Picture in picture (PIP)

PIP

The PIP area on the remote control is used for the PIP functions. These functions allow to view two programmes (one TV channel and one AV programme, or two AV programmes) at the same time in various ways.

Press the *PIP* button to scroll the various display modes:
PIP: a TV channel or AV programme is displayed in a frame in a corner of the screen.
PAP: the screen is divided vertically in two and the second programme is displayed on the right side. Sound comes from the main programme, on the left.
PAP (4/3): the images are displayed in 4x3 format. Black bars are added on the upper and lower parts of the screen.
PAP (16/9): the images are displayed in 16x9 format. Black bars are added on the upper and lower parts of the screen.
Off: the function is deactivated.
Note: The PIP function is only available in TV mode and with devices connected to the SCART, S-video, and Component 1H Y/Cb/Cr sockets.

pr+

pr−

Use the *PIPpr+/PIPpr-* buttons to change the PIP programme.

Use the *pr+/pr-* buttons to change the main programme.

Use the *swap* button to swap the main programme and the PIP programme.

Use the *mosaic* button to change the position of the PIP on the screen (upper right, upper left, bottom left or bottom right).

Note: This function is only available if you selected the PIP mode.

Press the *exit* button to return to previous mode.

Sleep timer

This function allows you to set an automatic shut-off time, from 0 to 4 hours, with 15-minute steps.

Press the *red* button on the remote control to activate the sleep timer function.

3 : 45 ◄ ►

A symbol appears on screen in front of the sleep time.

- : - - ◄ ►

If no timer has been set, then -:-- is displayed. Use the ◁ / ▷ buttons to decrease/increase the duration.

Once the timer is set, pressing the *red* button displays the remaining time before shut-off. You can use the ◁ and ▷ buttons to change the setting.

When the timer count down reaches 0, the TV goes automatically into standby and the timer resets to -:--.

Zoom

The following different formats are available using the ◁ and ▷ buttons, in TV mode.

4/3: picture in centred 4x3 format.
zoom : picture in centred letterbox 16x9 format.
zoom ▲ : picture in 16x9 format with subtitles.
Cinerama: picture in widescreen 4x3 format.
16/9: picture in widescreen 16x9 format.

In PC mode, only 4/3 and 16/9 formats are available.

Customizing your TV set

You can set preferences for some features such as the language or appearance of the menus.

Display the **OVERVIEW** menu using the *menu* button. Select the **Preferences** option and press *ok* to confirm.

The corresponding menu appears with the following options:

Eco mode: when this function is enabled,
In video mode: the set goes automatically into standby mode after 10 minutes without video.
In PC mode: the PC power management function will be activated.
Check the box using the *ok* button to enable the functions.
This function is activated by default.

Menu language: select the language you want the menus to be displayed in. The menu is immediately updated according to your selection.

Menu brightness: change the setting using the ◁ and ▷ buttons.

AV1 input: use the ◁ and ▷ buttons to select the type of video signal transmitted by the equipment connected to the AV1 socket.
The **Video** option is selected by default.
*Note: Select **RGB** if no picture is displayed when you connect equipement such as a games console.*

Press *exit* to close the menu. Select **Return** to return to the **OVERVIEW** menu.

PREFERENCES

Return
Eco mode   ◄ ► ☑
Menu language   English
Menu brightness
AV1 input   Video

Using the Teletext

The Teletext service is available in many countries under a variety of names (TOP Text, Fastext, FLOF test, Videotext). It is provided as a free service by some television broadcasters. This service provides a real wealth of information, available at any time, on weather, sporting results, news, games, etc. The information is presented in pages or organised in topics specified in colour on the screen and you can access this information by simply pressing the buttons of the same colour on the remote control.

To access the Teletext, press the (purple) *text* button on the remote control. Teletext opens on the last page selected, or on the index page (100) if you have changed channels or put the set into standby.
To display another page, use the *pr+/pr-* buttons to access the next and previous pages, or enter its number using the numeric buttons. The page/subpage number appears:
– in green when the page has not been found yet.
– in white when the page has been found.

A teletext page contains a header line with page and subpage number, and broadcaster information (date and time, channel number, etc.).

The navigation bar at the bottom of the screen displays coloured blocks with page numbers giving direct access to the corresponding pages by simply pressing the relevant buttons on the remote control. Press the *menu* button to access the navigation bar, which offers the following functions:

STOP: freezes the current page, preventing update and subpage display. To select this function, press the *red* button on the remote control. To cancel, press the *red* button again.

???(REVEAL): to reveal a hidden answer (for example, in games), select ??? using the *green* button on the remote control. To cancel, press the *green* button again.

ZOOM: press the *yellow* button once to zoom in on the top part of the screen, twice to zoom in on the bottom part of the screen, and three times to return to normal display.

PAT: press the *blue* button on the remote control to display Teletext in the right half of the screen, press again to return to normal display.

Teletext offers some other useful functions:

Newsflash
When a newsflash is detected, **PAT** is replaced by **N**. Press the *blue* button to display the newsflash. In the case of an update, Teletext is automatically enabled and displays the new information.
To display the header and the navigation bar again, press any button (except *exit*, the ⧄ button or the volume adjustment buttons) on the remote control.
This function is cancelled when you change channels or put the set into standby.
To return to TV mode, press *exit*.

Using the Teletext

Subtitles

Some channels provide subtitles for some of their programmes through Teletext. The numbers of the relevant pages are specified on the Teletext index page.

To display the subtitles, enter the number of the relevant page. Once it is found, the subtitles appear in the TV picture. The header and the navigation bar disappear after a couple of seconds. To display them again, press any button (except *exit*, the 📺 button or the volume adjustment buttons) on the remote control.

To return to TV mode, press *exit*.

Alarm page

In some countries (Spain, Benelux, etc.), you can set a time to display certain Teletext pages (alarm pages).

To do this, display the relevant alarm page and press the ◁ and ▷ buttons to enter subpage mode. Enter the time instead of the subpage number (e.g. 1705 for 17:05) and press *exit*. The page will disappear and will appear again at the set time, as long as you do not change channels or switch off the set beforehand.

Fastext

If Fastext is available, direct access to previous and subsequent pages is replaced with coloured bars (red, green, yellow and blue) which provide links to the topics you can access by pressing the corresponding buttons on the remote control.

Press the *menu* button to access these direct links, press it again to display the navigation bar.

Temporary change of the character set

You can temporarily change the character set. To do so, display the navigation bar using the *menu* button, then press the *ok* button to display the number of the current character set in place of **???**.

Scroll the list of character sets using the *green* button. Press the *ok* button to display the **???** function again.

The character set will reset to the one selected in the **MANUAL INSTALLATION** menu:

–   when the set is turned off or put into standby,
–   when you change channels.

In Teletext mode, volume controls remain available, but the relevant symbols do not display.

Connecting other equipment

Connecting a DVD player
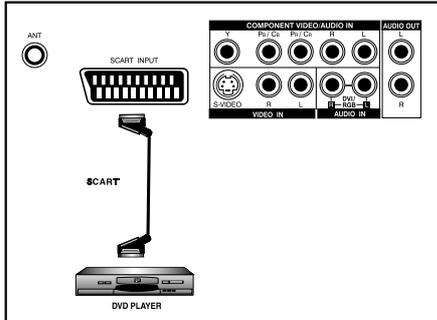
Using SCART (AV) socket input

1. Connect the SCART socket on the DVD player to the SCART socket on the rear panel of the set.
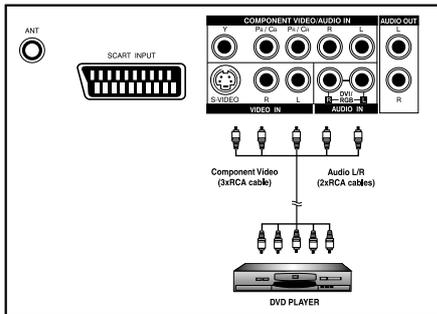
Using component video input

1. Connect the green (Y), red (P_R/C_R), and blue (P_B/C_B) cinch sockets on the DVD player to the corresponding cinch sockets on the rear panel of the set.
2. Connect the red (R) and white (L) audio cinch sockets on the DVD player to the R and L audio-in cinch sockets located next to the P_R/C_R cinch socket, on the rear panel.
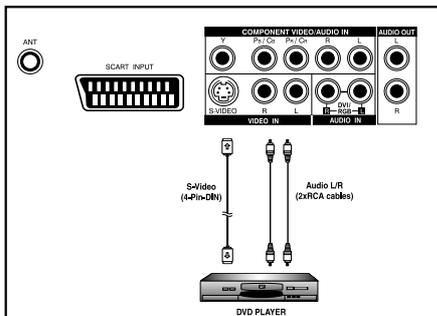
Using S-video input

1. Connect the S-video (4-pin DIN) socket on the DVD player to the "S-VIDEO" socket on the rear panel of the set.
2. Connect the red (R) and white (L) audio cinch sockets on the DVD player to the R and L audio-in cinch sockets located next to the S-VIDEO socket on the rear panel of the set.

Connecting other equipment
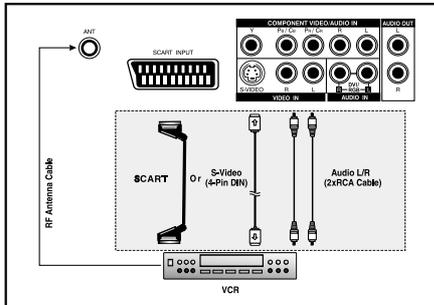
Connecting a videorecorder

Using SCART (AV) socket input

This connection gives the best picture and sound quality.

1. Connect the SCART socket on the videorecorder to the SCART socket on the rear panel of the set.
2. Connect the videorecorder to the antenna wall socket or cable box.

Using S-video input

1. Connect the S-video (4-pin DIN) socket on the videorecorder to the "S-VIDEO" socket on the rear panel of the set.
2. Connect the red (R) and white (L) audio cinch socket on the videorecorder to the R and L audio-in cinch sockets located next to the S-VIDEO socket.
3. Connect the videorecorder to the antenna wall socket or cable box.

Using TV input

1. Connect the antenna out socket on the videorecorder to the corresponding socket (ANT) on the rear panel of the set.
2. Connect the videorecorder to the antenna wall socket or cable box.

Connecting other equipment
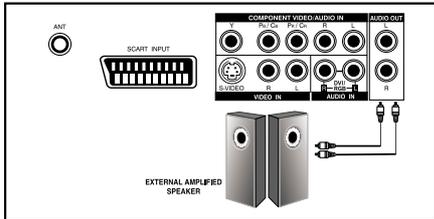
Connecting external amplified speakers

Connect the red (R) and white (L) audio out sockets located to the right of the connector panel of set respectively to the right and left amplified speakers.
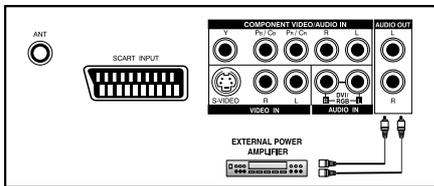
Connecting an amplifier

Connect the red (R) and white (L) audio out sockets located to the right of the connector panel to the amplifier's L and R inputs.

Note:
The AUDIO OUT cinch sockets can be set to either **Fixed** *or* **Variable** *audio output levels. Please refer to page 14 for additional explanation on this feature.*

Connecting other equipment

Connecting a PC

Using RGB input
1. Connect the 15-pin RGB connector on the PC to the RGB IN connector located at the rear of the set.
2. Connect the audio sockets on the PC to the R and L cinch audio in DVI/RGB sockets on the rear panel of the set.

Using DVI input
1. If your PC is equipped with a DVI (Digital Visual Interface), connect its DVI connector to the DVI IN connector located on the rear panel of the set.
2. Connect the audio sockets on the PC to the R and L cinch audio in DVI/RGB sockets on the rear panel of the set.

Notes:
- If your PC only has a 3.5 mm jack, you will need to use a jack-to-cinch converter cable for the audio connection.
- The RGB OUT connector on the plasma monitor allows you to connect another RGB monitor. It will display the same signal as the RGB IN signal source.
- The physcial display resolution is a maximum of 640x480 dots when aspect ratio is set to "4x3", and 852x480 dots when set to "16x9". If the PC's display resolution exceeds these maximum values, the monitor will have to artificially eliminate dots in order to fit within the physical dot capability of the display; therefore, it is possible that the monitor may not be able to show details with adequate clarity.
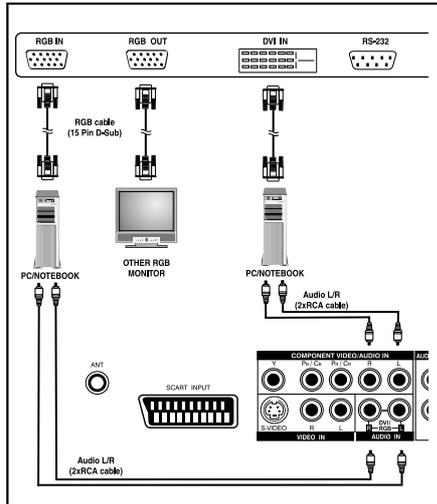
Signal frequency information

In PC mode, you can press the yellow *info* button to access the display mode of the monitor.
M. xx appears on screen. Please refer to the table below to get detailed information about the various display modes.

VGA M. 05
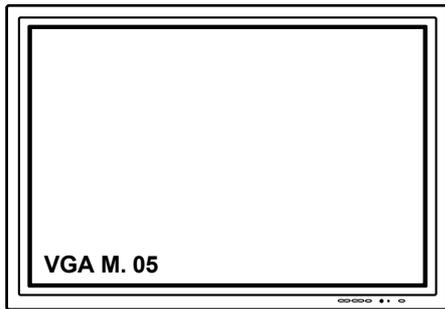
Mode	Horizontal	Vertical	Format	Refresh rate
1	31.469	59.940	640×480 (VGA)	60
2	37.861	72.809	640×480 (VGA)	72
3	37.500	75.000	640×480 (VGA)	75
4	43.269	85.008	640×480 (VGA)	85
5	35.156	56.250	800x600 (SVGA)	56
6	37.879	60.317	800x600 (SVGA)	60
7	48.077	72.188	800x600 (SVGA)	72
8	46.875	75.000	800x600 (SVGA)	75
9	53.674	85.061	800x600 (SVGA)	85
10	48.364	60.004	1024x768 (XGA)	60
11	56.476	70.069	1024x768 (XGA)	70
12	60.023	75.029	1024x768 (XGA)	75
13	68.677	84.997	1024x768 (XGA)	85
14	63.981	60.020	1280x1024 (SXGA)	60
15*	79.976	75.025	1280x1024 (SXGA)	75
16*	91.146	85.024	1280x1024 (SXGA)	85
18	31.469	70.087	720x400 (DOS)	70
19	31.469	50.030	640x480 (VGA)	50
20*	45.000	60.000	1280x720p (HDTV)	60
21*	33.750	60.000	1920x1080i (HDTV)	60
22	31.469	70.087	640x350 (VGA)	70
23	31.413	59.835	852x480 (WVGA)	60
24	35.000	66.667	640x480 (Apple)	67
25	49.725	74.550	832x624 (Apple)	75
26	68.681	75.062	1152x870 (Apple)	75

Notes:
Modes 15, 16, 20, and 21 are not available with DVI input.
Modes 24, 25 and 26 are for use with Apple Macintosh computers.

Troubleshooting

The following table lists possible problems and methods for remedy. Please refer to this table prior to contacting a service representative.

Symptom	Possible Cause	Remedy
No picture is displayed.	1. The power cord is disconnected. 2. The main power switch on the rear panel is on the OFF position. 3. The selected input has no connection. 4. The monitor is in standby mode in RGB mode.	1. Plug in the power cord. 2. Put the main power switch on the ON position. 3. Connect the selected device to the monitor. 4. Press any key on your keyboard.
Poor picture or poor sound.	1. Electrical appliances, cars, motorcycles or fluorescent lights may be nearby.	1. Move the monitor to another location to reduce interference.
Color is abnormal.	1. The signal cable is not connected properly.	1. Make sure that the signal cable is attached firmly to the rear panel of the monitor.
Picture is distorted.	1. The signal cable is not connected properly. 2. The input signal is not supported by the monitor.	1. Make sure that the signal cable is attached firmly. 2. Check that the video signal source is supported by the monitor (refer to the specifications section).
Image doesn't fill up the full size of the screen.	1. If under RGB mode, the H-Size and V-Size settings are incorrectly set.	1. Use the H-Size and V-Size options in the **PICTURE** menu to adjust the size of the picture.
Sound with no picture.	1. The signal cable is not connected properly.	1. Make sure that both video and sound inputs are correctly connected.
Picture with no sound.	1. The signal cable is not connected properly. 2. Volume is turned all the way down. 3. The sound is muted.	1. Make sure that both video inputs and sound inputs are correctly connected. 2. Use the volume adjustment buttons to adjust sound. 3. Switch MUTE off using the MUTE button on the remote control.
The remote control buttons do not work.	1. The remote control batteries are flat, or incorrectly installed. 2. The position of the selection switch does not correspond to the selected selected input.	1. Change the batteries. Please note that you must then reprogram the remote control. 2 Put the selection switch on the correct position.
Some picture elements do not light up.	1. Some pixels of the plasma display may not turn on.	1. This monitor was manufactured using an extremely high level of technology; however, sometimes some pixels of the monitor may not display. This is not a malfuction.
After-Images can be seen on the monitor after it has been powered off. (Examples of still pictures include logos, video games, computer images, and images displayed in 4:3 format)	1. A still picture was displayed for an extended period of time.	1. Do not allow a still image to be displayed for an extended period of time as this can cause a permanent after-image to remain on the screen.

Specifications

Display Panel
Screen size	42 inches
Aspect ratio	16:9 wide
Resolution	852 x 480
Pixel pitch	1.08 mm x 1.08 mm
Luminance	1000 cd/m²

Power Source
Input voltage	100 ~ 240 Vac , 50 / 60 Hz
Input current	4.5 A
Inrush current	60 A p-p/20 ms max.
Power consumption	390 W max (at 110 V ac/color bar pattern)
Standby & Power Save	5 W max (at 110 V ac)

Connection
Connector Types	Scart socket
	Cinch sockets for $Y/C_B/C_R$ and $Y/P_B/P_R$
	4-pin S-video socket
	9-pin RS232 socket
	15-pin RGB socket
	24-pin DVI socket

Video/S-Video Signal
Type	Analog
Polarity	Positive
Amplitude	Video 1Vp-p , (with sync) S-Video: Y=1Vp-p C=0.286Vp-p
Frequency	H: 15.734 kHz V: 60 Hz (NTSC)
	H: 15.625 kHz V: 50 Hz (PAL)
Input impedance	75 ohms

$Y/C_B/C_R$ or $Y/P_B/P_R$ Signal
Type	Analog
Polarity	Positive
Amplitude	Y: 1Vp-p (with sync)
	C_B/C_R: 0.7 Vp-p
	P_B/P_R: 0.7 Vp-p

Frequency
$Y/C_B/C_R$
$Y/P_B/P_R$: HDTV

H: 15.734 kHz	V: 60 Hz (NTSC)
H: 15.625 kHz	V: 50 Hz (PAL)
H: 31 kHz	V: 60 Hz (480p)
H: 31.25 kHz	V: 50 Hz (576p)
H: 45 kHz	V: 60 Hz (720p)
H: 37.5 kHz	V: 50 Hz (720p)
H: 33 kHz	V: 60 Hz (1080i)
H: 28.125 kHz	V: 50 Hz (1080i)

RGB Signal
Type	TTL
Polarity	Positive or Negative
Amplitude	RGB: 0.7Vp-p
Frequency	H: support to 31~91 kHz
	V: support to 50~85 Hz

DVI Signal
Type	Digital
Polarity	Positive or Negative
Frequency	H: support to 31~63 kHz
	V: support to 50~85 Hz

Audio Signal   Analog 500 mV rms / more than 22 kohm

Specifications

Pin assignments for D-SUB connector (in / loop out)

Pin	Signal Assignment	Pin	Signal Assignment	Pin	Signal Assignment
1	RED	6	RED GND	11	GND
2	GREEN	7	GREEN GND	12	SDA
3	BLUE	8	BLUE GND	13	H-SYNC
4	GND	9	NC	14	V-SYNC
5	GND	10	GND	15	SCL

Pin assignments for 24-pin DVI connector (digital only)

Pin	Signal Assignment	Pin	Signal Assignment	Pin	Signal Assignment
1	TMDS Data 2-	9	TMDS Data 1-	17	TMDS Data 0-
2	TMDS Data 2+	10	TMDS Data 1+	18	TMDS Data 0+
3	TMDS Data 2/4 Shield	11	TMDS Data 1/3 Shield	19	TMDS Data 0/5 Shield
4	TMDS Data 4-	12	TMDS Data 3-	20	TMDS Data 5-
5	TMDS Data 4+	13	TMDS Data 3+	21	TMDS Data 5+
6	DDC Clock	14	+5V Power	22	TMDS Clock Shield
7	DDC Data	15	Ground (For +5V)	23	TMDS Clock +
8	No Connect	16	Hot Plug Detect	24	TMDS Clock -

RGB/DVI

Mode No.	Resolution	Refresh Rate (Hz)	Horizontal Frequency (kHz)	Vertical Frequency (Hz)	V-Sync Polariy (TTL)	H-Sync Polarity (TTL)	Dot rate (MHz)
1	640(VGA)×480	60	31.469	59.940	-	-	25.175
2	640(VGA)×480	72	37.861	72.809	-	-	31.500
3	640(VGA)×480	75	37.500	75.000	-	-	31.500
4	640(VGA)×480	85	43.269	85.008	-	-	36.000
5	800(SVGA)×600	56	35.156	56.250	+	+	36.000
6	800(SVGA)×600	60	37.879	60.317	+	+	40.000
7	800(SVGA)×600	72	48.077	72.188	+	+	50.000
8	800(SVGA)×600	75	46.875	75.000	+	+	49.500
9	800(SVGA)×600	85	53.674	85.061	+	+	56.250
10	1024(XGA)×768	60	48.364	60.004	-	-	65.000
11	1024(XGA)×768	70	56.476	70.069	-	-	75.000
12	1024(XGA)×768	75	60.023	75.029	+	+	78.750
13	1024(XGA)×768	85	68.677	84.997	+	+	94.500
14	1280(SXGA)×1024	60	63.981	60.020	+	+	108.00
15*	1280(SXGA)×1024	75	79.976	75.025	+	+	135.00
16*	1280(SXGA)×1024	85	91.146	85.024	+	+	157.50
18	720(DOS)×400	70	31.469	70.087	+	-	28.322
19	640(VGA)×480	50	31.469	50.030	-	-	25.175
20*	1280(HDTV)×720p	60	45.000	60.000	+	+	74.250
21*	1920(HDTV)×1080i	60(i)	33.750	60.000	+	+	74.250
22	640(VGA)×350	70	31.469	70.087	-	+	25.175
23	852(WGA)×480	60	31.413	59.835	-	-	30.000

* These modes are not supported in DVI mode.

Specifications

RGB/DVI for Apple standard

Mode No.	Resolution	Refresh Rate (Hz)	Horizontal Resolution (kHz)	Vertical Resolution (Hz)	V-Sync Polarity (TTL)	H-Sync Polarity (TTL)	Dot rate (MHz)
24	640 × 480	67	35.000	66.667	-	-	30.240
25	832 x 624	75	49.725	74.550	-	-	57.283
26	1152 x 870	75	68.681	75.062	-	-	100.00

Y/P$_B$/P$_R$ for Component

Mode	Resolution	Refresh Rate
1	640 × 480p	60 Hz
2	1920 ×1080i	60 Hz
3	1280 × 720p	60 Hz
4	720 × 576p	50 Hz
5	1920 ×1080i	50 Hz
6	1280 × 720p	50 Hz

Maximum Resolution   Up to 1280 x 1024

Dimensions

	Without stand	With stand
Width	1040 mm	1040 mm
Height	648 mm	690 mm
Depth	95 mm	287.5 mm

Package Dimensions

Width	1230 mm
Height	960 mm
Depth	470 mm

Weight

Net weight	31.2 kg (without stand), 35 kg (with stand)
Gross weight	46 kg

Operating

Temperature	0~40°C
Relative humidity	20~80%
Pressure	800~1114 hpa

Non-Operating

Temperature	-20~60°C
Relative humidity	20~90%
Pressure	600~1114 hpa
Vibration	X/Y/Z, 0.5G/10~55 Hz (sweep), 10 minutes

Acoustics

(IHF A-weighted 1 meter) 40 dB max.

Sound

Residual hum (at volume max)	500µW Max.
Practical max audio output (at 10% THD max.)	1.0vp-p 1 kHz input 5W +5W Max. /12 ohm
Sound distortion (at 250 mw 1 kHz)	1% Max.
Audio output (input at 1.4V$_{P-P}$)	>=1.0 V$_{P-P}$

Specifications

Reliability Requirement
The MTBF is 20,000 hrs under operation 25 ± 5° C (Half luminosity, motion picture)

Emission Requirement
The product meets the EMI limits in all screen modes as qualified by FCC class B part 15.

Power Management

Mode	H-sync	V-sync	Video	Power dissipation
Normal	Pulse	Pulse	Active	Normal power
Stand-by	No pulse	No pulse	No video	Power off
Power saving	Pulse	No pulse	blanked	Less than 5 watts
	No pulse	Pulse		

This Plasma display is Energy star compliant when used with a computer equipped with DPMS.

Specifications

Preset Timing Chart
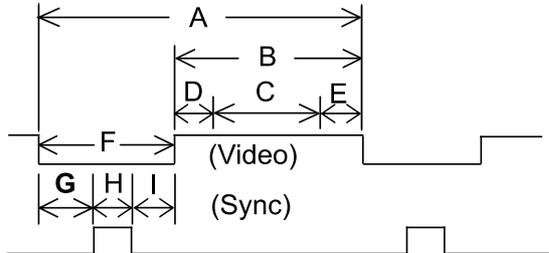
Item Description:
A   Total time
B   Active display area including borders
C   Active display area excluding borders
D   Left/Top border
E   Right/bottom border
F   Blanking time
G   Front porch
H   Sync-width
I   Back porch

Mode No	1	2	3	4	5	6	7	8	9	
H Resolution	640	640	640	640	800	800	800	800	800	
V Resolution	480	480	480	480	600	600	600	600	600	
Refresh Rate	60	72	75	85	56	60	72	75	85	Hz
Pixel	25.175	31.500	31.500	36.000	36.000	40.000	50.000	49.500	56.250	MHz
Horizontal visible	640	640	640	640	800	800	800	800	800	Dots
Horizontal total	800	832	840	832	1024	1056	1040	1056	1048	Dots
Horizontal front porch	16	24	16	56	24	40	56	16	32	Dots
Horizontal sync	96	40	64	56	72	128	120	80	64	Dots
Horizontal back porch	48	128	120	80	128	88	64	160	152	Dots
Horiz blanking time	160	192	200	192	224	256	240	256	248	Dots
Vertical visible	480	480	480	480	600	600	600	600	600	Lines
Vertical total	525	520	500	509	625	628	666	625	631	Lines
Vertical front porch	10	9	1	1	1	1	37	1	1	Lines
Vertical sync	2	3	3	3	2	4	6	3	3	Lines
Vertical back porch	33	28	16	25	22	23	23	21	27	Lines
Vertical blanking time	45	40	20	29	25	28	66	25	31	Lines
Horizontal frequency	31.469	37.861	37.500	43.269	35.156	37.879	48.077	46.875	53.674	kHz
Vertical frequency	59.940	72.809	75.000	85.008	56.250	60.317	72.188	75.000	85.061	Hz
Vertical sync polarity	-	-	-	-	+	+	+	+	+	TTL
Horiz sync polarity	-	-	-	-	+	+	+	+	+	TTL

Specifications

Mode No	10	11	12	13	14	15	16	18	19	
H Resolution	1024	1024	1024	1024	1280	1280	1280	720	640	
V Resolution	768	768	768	768	1024	1024	1024	400	480	
Refresh Rate	60	70	75	85	60	75	85	70	50	Hz
Pixel	65.000	75.000	78.750	94.500	108.000	135.000	157.500	28.322	25.175	MHz
Horizontal visible	1024	1024	1024	1024	1280	1280	1280	720	640	Dots
Horizontal total	1344	1328	1312	1376	1688	1688	1728	900	800	Dots
Horizontal front porch	24	24	16	48	48	16	64	18	16	Dots
Horizontal sync	136	136	96	96	112	144	160	108	96	Dots
Horizontal back porch	160	144	176	208	248	248	224	54	48	Dots
Horiz blanking time	320	304	288	352	408	408	448	180	160	Dots
Vertical visible	768	768	768	768	1024	1024	1024	400	480	Lines
Vertical total	806	806	800	808	1066	1066	1072	449	629	Lines
Vertical front porch	3	3	1	1	1	1	1	12	62	Lines
Vertical sync	6	6	3	3	3	3	3	2	2	Lines
Vertical back porch	29	29	28	36	38	38	44	35	85	Lines
Vertical blanking time	38	38	32	40	42	42	48	49	149	Lines
Horizontal frequency	48.364	56.476	60.023	68.677	63.981	79.976	91.146	31.469	31.469	kHz
Vertical frequency	60.004	70.069	75.029	84.997	60.020	75.025	85.024	70.087	50.030	Hz
Vertical sync polarity	-	-	+	+	+	+	+	+	-	TTL
Horiz sync polarity	-	-	+	+	+	+	+	-	-	TTL

Mode No	20	21	22	23	24	25	26	
H Resolution	1280	1920	640	852	640	832	1152	
V Resolution	720p	1080i	350	480	480	624	870	
Refresh Rate	60	60i	70	60	67	75	75	Hz
Pixel	74.250	74.250	25.175	30.000	30.240	57.283	100.000	MHz
Horizontal visible	1280	1920	640	852	640	832	1152	Dots
Horizontal total	1650	2200	800	955	864	1152	1456	Dots
Horizontal front porch	110	88	16	19	64	32	32	Dots
Horizontal sync	40	44	96	48	64	64	128	Dots
Horizontal back porch	220	148	48	36	96	224	144	Dots
Horiz blanking time	370	280	160	103	224	320	304	Dots
Vertical visible	720	540	350	480	480	624	870	Lines
Vertical total	750	562.5	449	525	525	667	915	Lines
Vertical front porch	5	3	37	10	3	1	3	Lines
Vertical sync	5	5	2	2	3	3	3	Lines
Vertical back porch	20	15	60	33	39	39	39	Lines
Vertical blanking time	30	23	99	45	45	43	45	Lines
Horizontal frequency	45.000	33.750	31.469	31.413	35.000	49.725	68.681	kHz
Vertical frequency	60.000	60.000	70.087	59.835	66.667	74.550	75.062	Hz
Vertical sync polarity	+	+	-	-	-	-	-	TTL
Horiz sync polarity	+	+	+	-	-	-	-	TTL

Wall mount installation (optional)

Package Content

An optional wall mount (ACC 913) is available. Contact your local retailer for more information.

Left module

A

Right module
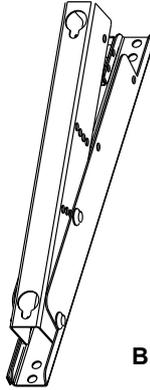
B

Horizontal supports

C

D
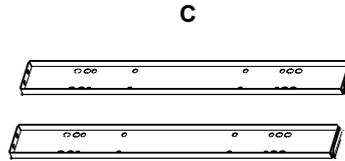
Screws for assembling wall mount (8)
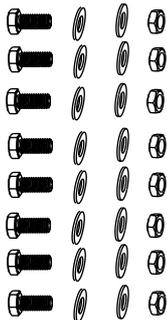
E

Screws for installing onto wooden wall (8)
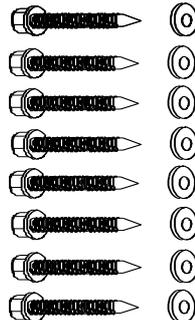
F

Screws for installing onto cement wall (8)
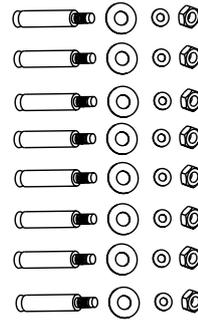
G

Wall mount installation (optional)

Installation steps

Step 1.
Attach the horizontal supports (C and D) to the left and right modules (A and B) using the appropriate screws (E).
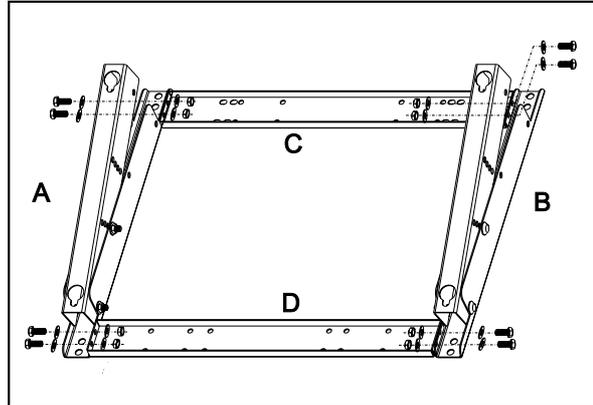
Step 2.
Install the wall mount bracket onto the wall.

Note:
This package includes two different sets of screws - one for mounting on a cement wall and one for a wooden wall. Please consult with a qualified installer to make sure that this wall mount and plasma monitor can be installed.
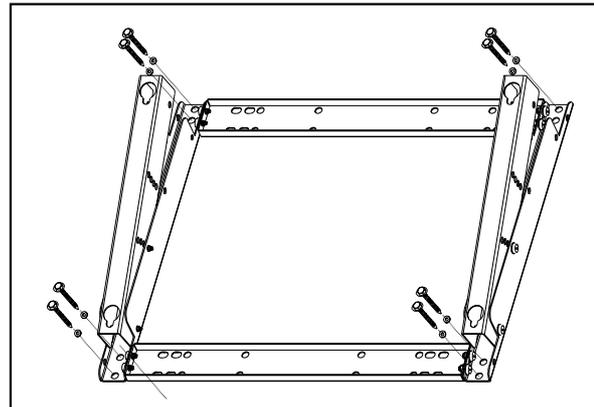
You can change the mounting direction and inclination angle (0, 5, 10, 15 degrees) by adjusting the screw position on the wall mount.
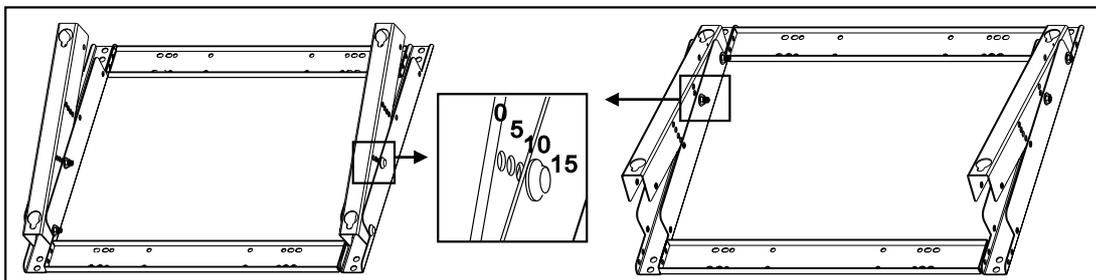
Wall mount installation (optional)

Step 3.
Remove the table-top stand, install the monitor onto the wall mount bracket.
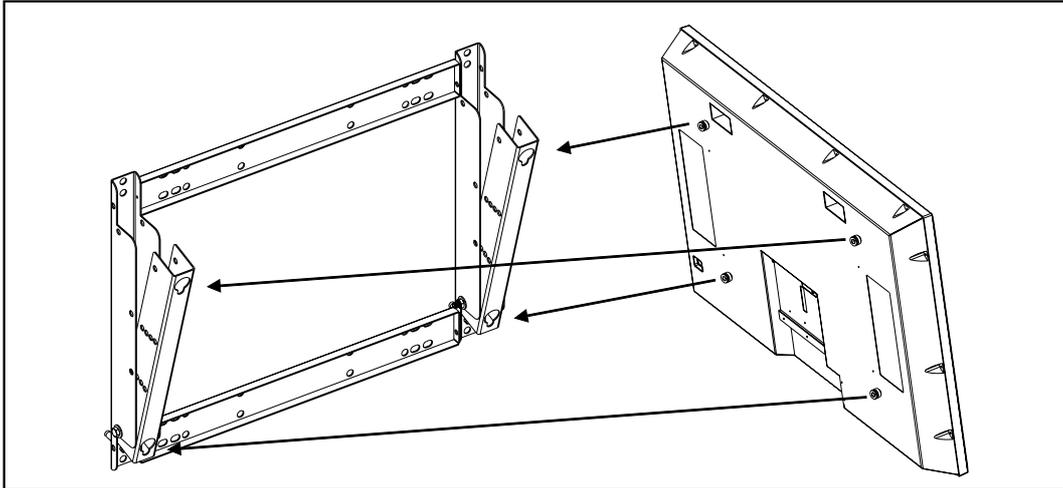
Note:
This wall mount is an optional accessory, please contact your local sales agent for more information.
This type of equipment is to be installed by qualified installers, please contact with authorized dealer for installation.
Please make sure that the wall can support this wall mount and plasma monitor which can weigh over 120 kg.