

SVR Series

Veilux H.264 Digital Video Recorder

Website: www.veilux.net Phone # 1-800-510-6528

VEILUX USER'S MANUAL

SVR Series

Release Version

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Chapter 1. Installation

Contents of the box

The following parts are included in the box.

Digital Video Recorder 1 unitCD (Manual & Program) 1 piece

Remote Controller
 AC/DC adapter
 1 unit (Including AAA battery x 2)
 piece (12V/5A, 110Vac/220Vac)

AC power cord
 1 piece (220V or 110V)

Screws

HDD screw
 DVD-R/W screws
 kit / 4 pieces (M3x6)

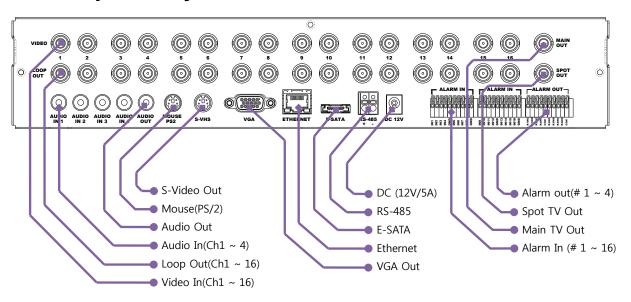
Choosing a location for installation

The unit is designed for desk mount. The following precautions must be taken during installation.

- Openings in the case are ventilation purpose. To prevent overheating, these ventilation holes should not be blocked or covered.
- Ensure there is 2" gap on either side of the unit.
- When stacking units, ensure there is at least 1" gap between each unit.
- Ensure the unit is not located in an area where it is likely to be subjected to mechanical shocks.
- The unit should be located in an area with low humidity and a minimum of dust.
- If the unit is to be installed in a closed assembly, the maximum operating temperature
 Must not exceed 104°F(40°C)
- Ensure there is reliable earthling of the mains outlet when fitted to supply connections, other than direct connection, to the branch circuit.
- It is recommended that an uninterruptable power source be connected to the unit in case of power failure, to ensure continuous operation of the unit.

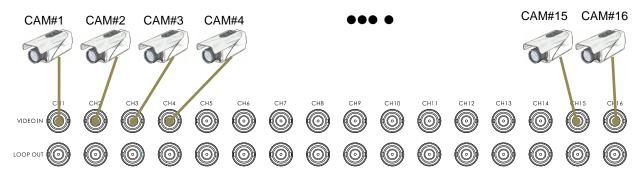
Installation

❖ Rear panel layout

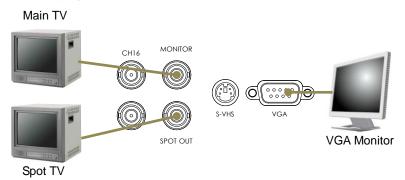


❖ Basic connections

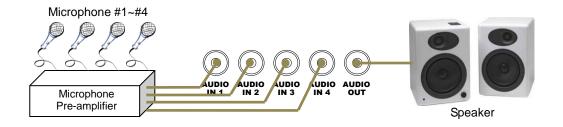
1. Connect Cameras



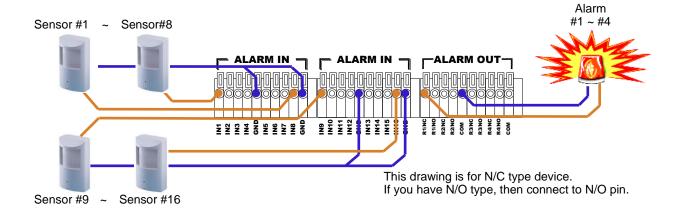
2. Connect display devices



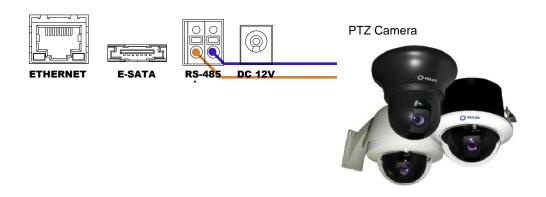
❖ Connect audio devices



❖ Connect alarms



Connect RS-485 PTZ camera (optional)



❖ Connect to network



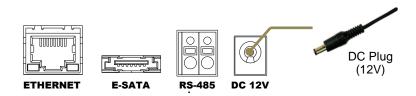
Connect a mouse (optional)

The unit support hot plug-in & play.

So, you can attach the mouse later, during system is running.



❖ Connect power



Time adjustment

TIME STAMP IS A VERY IMPORTANT REFERENCE FOR RECORDING AND SEARCHING. PLEASE, SET CLOCK CORRECTLY AFTER READ THIS SECTION.

Step 1. Set GMT/Location

Since DST rule is different location by location, you must set your correct location.

Please, set correct GMT/Location in Admin::DateTime menu.

- ◆ Refer to "Daylight Saving Time" section in Chapter 2.
- ◆ Refer to "Admin::DateTime" menu in Chapter 5.

Step 2. Initial time synchronization in Admin menu (Optional)

If the unit can access network time server, it is recommended strongly to synchronize the time with the network time server before start, in Service menu.

Because, if the time difference is big, then time synchronization is failed in recording mode. You can do this job in Admin::DateTime menu.

Refer to Admin::DateTime menu in Chapter 5.

Step 3. Time adjustment

If you can't do step 2., the you need to adjust the time by your hand.

Refer to Admin::DateTime menu in Chapter 5.

Step 4. Periodical time synchronization (Optional)

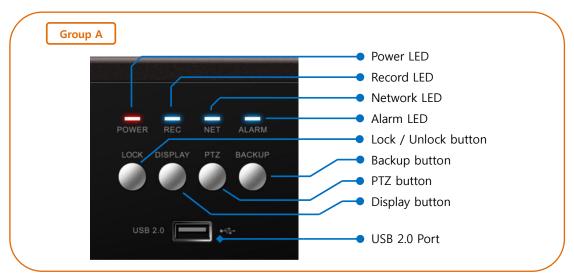
You can configure the unit to synchronize the time periodically with network time server.

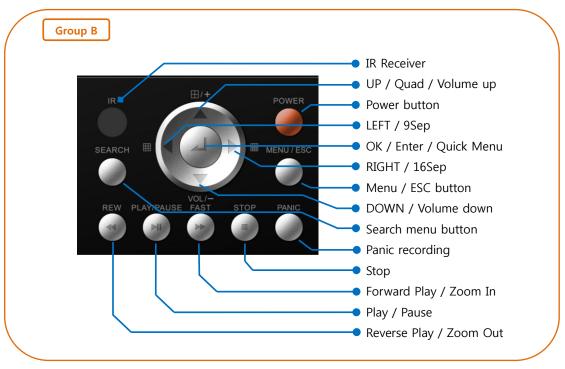
Refer to System::TimeSync. menu in Chapter 4.

Chapter 2. Pre-acknowledgement

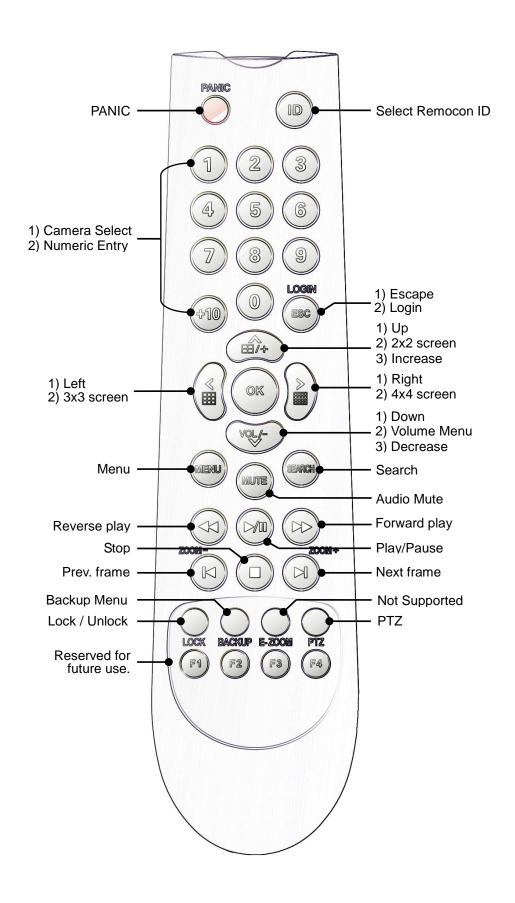
Front Panel







Infrared remote controller





🏿 TIP Multiple unit with single remote controller

You can control multiple unit using single remote controller.

Each unit has its own Remocon ID, you can change/verify it in System::Info menu.

Ensure that each unit has different Remocon ID.

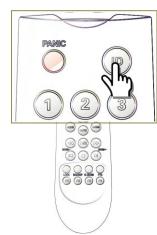
Please, follow below procedure to set a target unit among multiple unit.

Step 1. Press ID button in remote controller.

If the unit in live view mode, "Remocon ID" message box will be shown.

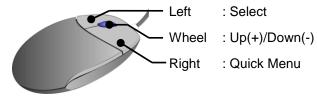
Step 2. Press two digit of the target unit's Remocon ID.

Pressed digit will be shown in "Remocon ID" message box. If you want to cancel the job, press ESC button.



Mouse operations

The unit support PS/2 wheel mouse, and hot-plug and play is supported.

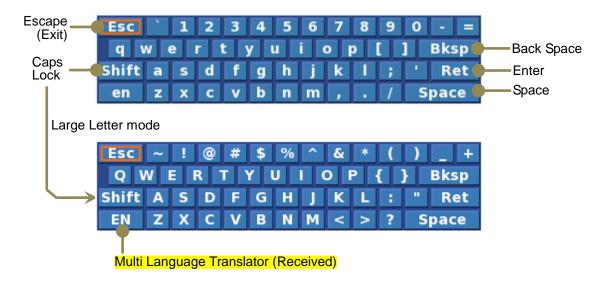


Note 1. Mouse is not supplied as a accessory.

- 2. Support wheel mouse only.
- 3. Double click does not supported.

Virtual keyboard

In some menus, virtual keyboard served for text entry.



Login



Default password for all account is "11111111" (eight digit of '1').

When you try to access some function, the unit will shows a login window, and you have to login with proper permission to access the unit.

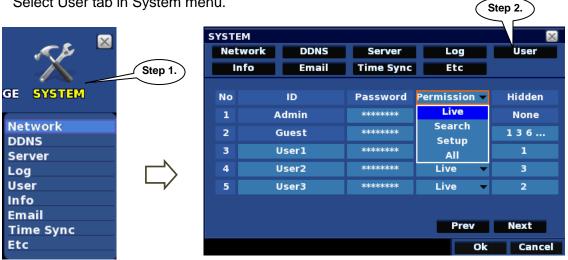


User management

Entering to User menu

Press Menu button, and select System menu.

Select User tab in System menu.



ID

You can rename from User1 to User15 using virtual keyboard, other ID are pre-fixed.

Password

You can change the password, mind that you must delete old password using backspace key of the virtual keyboard. $1 \sim 8$ digits are possible as a password.

Permission

4 permission levels are available from User1 to User18, other user's permissions are pre-fixed.

Live : Right for live view only.

Search : Right for live view and Search.

Setup : Right for live view and Setup.

ΑII : Right for live view, Search and Setup.

Hidden

Administrator can assign different right to live view for each user.

In other words, all user could be assigned different "Hidden Camera" settings.

Daylight Saving Time (DST)

The unit is embedding world DST rules, and it always enabled.



DST vs. Location

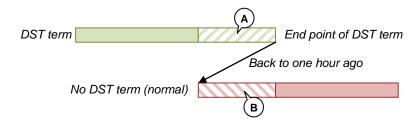
DST rule is totally depends on your location.

Please, set correct GMT/Location in "Service::DateTime" menu.

"Service::DateTime" means DateTime menu in Service menu.

Effects of daylight

Time returns to one hour ago at the end of DST, this means one hour recording data has same time stamp. The overlapped zone (B) could be handled optionally. Refer to each menu descriptions in Chaptr 3. and Cpater 4..



Playback : The unit playback zone (A) and zone (B) both continuously.

Calendar Search : You can address exact time point in zone (B).

Event Search : You can limit search range to zone (B).

Backup : You can limit backup range to zone (B).

Updating DST rule

Once your location's DST rule is changed, then you need to upgrade firmware. Otherwise, last DST rule or no rule will be applied.

If you can not upgrade firmware, we recommend to do followings;

Backup : Do backup prior to adjust system clock backward.

Otherwise, the overlapped data (zone (B) will be destroyed.

Clock adjustment : Adjust system clock in Service::DateTime menu.

Shutdown (Auto power off)

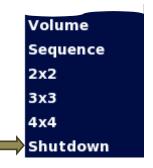
Since the HDD contents could be damaged when HDD power is removed during access the HDD, it is strongly recommended to follow shutdown procedures.

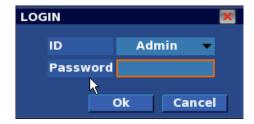
Step 1. Shutdown in menu

The unit prepares to shutdown when you choose Shutdown in Quick menu.

Then appear login message box.

Enter 'Admin' password.





Step 2. Auto power off

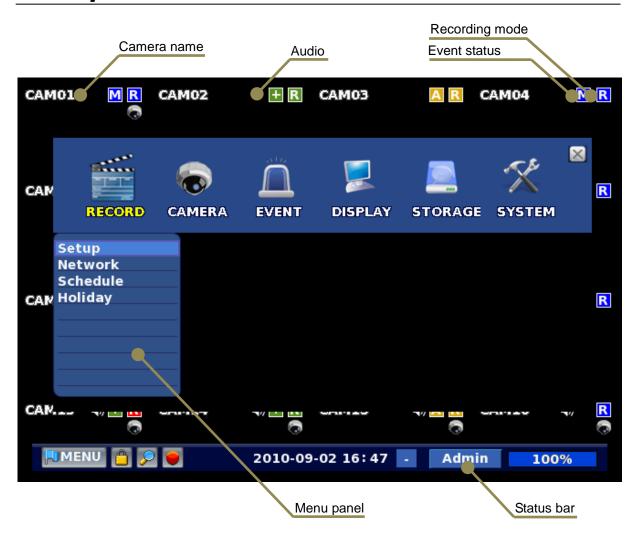
The following appears "Do you want a shutdown?" message.

If you choose "Yes" then system is powered down



Chapter 3. Operation

View panel



Camera pane

You can show/hide the below items in Display::Screen menu.

- Camera name
 It shows camera name which is configured in Camera::Setup menu.

3. Recording mode

It shows recording mode which is configured in Record:Schedule menu.

- R Normal mode
- R Motion mode
- Rlarm mode
- R Alarm + Motion mode

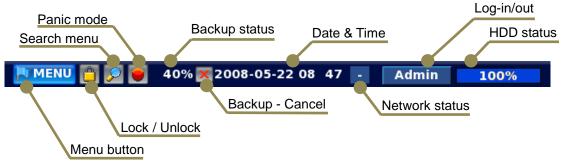
4. Event status

It shows when some event was detected and recording is started.

There is no status in Normal mode.

- Motion event
- Alarm event
- Motion and Alarm event (Both events are detected at same time)

Status bar



1. Menu button



Click this button to access Menu panel.

2. Lock/Unlock

Click this button to Lock/Unlock mouse and front panel button operations.



Also, you able to locked through Quick menu.



3. Search Menu



Click this button to enter into Search menu.

4. Panic mode

Start to record immediately at any condition when press this button.

Login is required to stop Panic mode.



5. Backup status 40%

It indicates that backup is in progress and its progressive rate in percentage.

6. Date & Time 2008-07-24 12:40

It shows current date & time in "YYYY-MM-DD HH:MM" format.



Atomic clock available through public network time server on internet.

See System::Time Sync. Menu in chapter 4. to use atomic clock.

7. Network status -

It shows count of network connection such as Web viewer and CMS.

"-" means that network is disconnected.

8. Log-in/out Admin

It has two functions as below.

- Log-in/out button
 Click to log-in(or log-out) to(from) the unit.
- 2) User information

It shows log-in user name.

See System::User menu in Chapter 4. for user management.



Auto-hiding of status bar & Playback control bar

In the auto-hide mode, the status bar and playback control bar are shown/hidden automatically. You can change the mode in Display::Screen menu.

- 1) Shown
 - When move mouse pointer to bottom area of the screen.
 - When press Menu button in front panel or remote controller.
- 2) Hidden

It is hidden when above "Shown" condition is removed, and Show time is passed.

Panic mode (emergency recording)

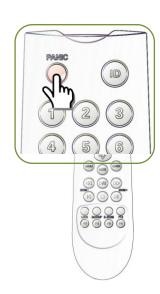
The unit support Panic mode for instant recording in emergency situation.

You can start Panic mode whenever you want.

For stopping Panic mode, you need to log-in with "Setup" permission account.

 Start Panic mode with front panel & remote controller Press PANIC button.





Start Panic mode with mouse Click PANIC icon.



Live Monitoring

❖ Single-screen display

You can watch a single camera in full screen mode.

 Front panel 'DISPLAY' button when you click the continue button camera number increases in full screen mode.

Remote controller Press a number button you want to watch.







Select a channel over than 10

Follow below procedures to select form ch11 to ch16.

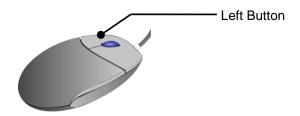
Step 1) Press "+10" button.

Step 2) Press "1".

In this case channel 11 will be selected.

2. Mouse

- Step 1) Move pointer to a pane you want to watch in single screen.
- Step 2) Click Left button.

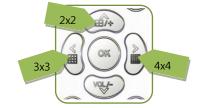


❖ Multi screen display

The unit support multi screen display mode such as 2x2, 3x3 and 4x4 divisions.

1. Front panel & Remote controller

2x2 division : Press Up button
 3x3 division : Press Left button
 4x4 division : Press Right button

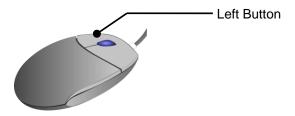






2. Mouse

Click Left button at any location on the screen.

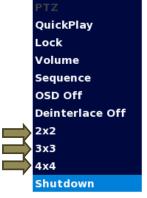


2. Quick menu

Click Right button at appear the quick menu. One more click it same division that change

the next screen.

2x2 division : Click 2x2
 3x3 division : Click 3x3
 4x4 division : Click 4x4



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Audio volume control

There are two ways to control audio volume and muting.



1. Using Volume button

Press "VOL." button, then Volume control menu will be shown.

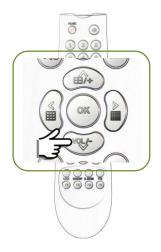
Volume up : Press Up(+) button

Volume down : Press Down(-) button

Mute : Move focus to "Mute" using Left/Right buttons,

and press OK button.



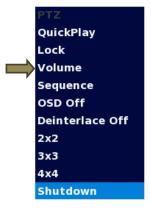


2. Using Quick Menu

- 1) Click mouse Right button at any location, then Quick menu appears.
- 2) Press "OK" button in front panel or remote controller, then Quick menu appears.

Select Volume menu and press "OK" or click Left button of the mouse, then Volume control

menu appears.



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PTZ (Pan / Tilt / Zoom) (Single screen mode only)

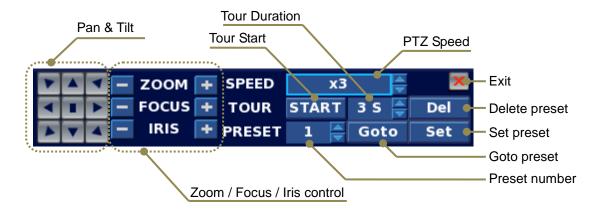
This facility works in following conditions;

- PTZ camera is connected to the desired channel.
- Model and Setting are correct in Camera::PTZ menu.
- RS-485 bus is working properly.
- 1. Entering into PTZ mode
 - 1.1 Press PTZ button in remote controller.
 - 1.2 Use Quick menu.





- 2. PTZ control panels
 - 2.1 On screen control panel (GUI)

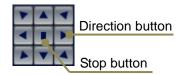


2.2 Key board control(Optional)

3. Pan & Tilt

It is same manner you use GUI or remote controller.

- Choose a desired direction button you want to move.
- To stop moving, press Stop button.



4. Preset

4.1 Set a new preset point

- Step 1) Move to a desired point you want to store as a preset using direction buttons.
- Step 2) Assign an any preset number.
- Step 3) Press "Set" button.



4.2 View a preset point

- Step 1) Choose an any preset number you want to watch.
- Step 2) Press "Goto" button.



4.3 Delete a preset point

- Step 1) Choose an any preset number you want to delete.
- Step 2) Press "Del" button.



Search & Playback

Two playback tools are served as below;

1) Quick Play : Instant playback in live mode, start from 10 minutes ago.

2) Search menu

There are two search options;

- Calendar search : Specific date & time is used as a playback start point.

- Event Search : Motion or alarm event point is used as a playback start point.

❖ Playback Control

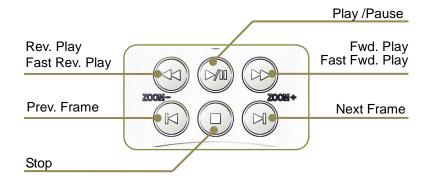
You can control playback using 3 control tools Front panel, Remote controller and GUI.

Function	Front Panel	Remote Controller	GUI (Mouse)	Remark	
Fwd. Play	E FAST	•		Quick play	
Rev. Play	REW F	•			
Pause	PLAY/PAUSE	Q-PLAY		Keep playback speed.	
Stop	STOP	•		Playback speed returns to x1.	
Next Frame	-	ZOOM+	*	Dlovbook from by from	
Prev. Frame	-	ZOOM-	×	Playback frame by frame.	
Fast Fwd. Play	E FAST	•		Playback speed is changed from x1 to x64 when press play button.	
Fast Rev. Play	REW F	•	•		

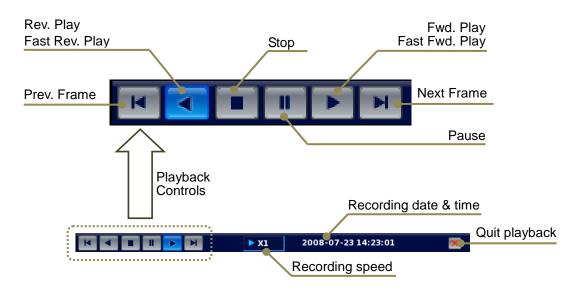
1. Front panel



2. Remote Controller



3. GUI



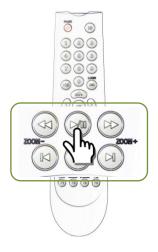
Quick play

Quick play offers convenient playback in live view mode, it starts to play from 10 minutes ago.

Press Q-PLAY button in front panel or remote controller.

The unit is switched into playback mode immediately with "QuickPlay" pop-up message box.





Choose "QuickPlay" in Quick menu.



❖ Sequence & screen separate

Sequence offers rotation screen by single screen mode, 2by2 screen mode or 3by3 screen mode. If you want changed duration time where the setting duration time in display menu.

Click the sequence will appear "Seq" icon on right top by live screen.

More clicked the sequence will disappear "Seq" icon and rotation stop.

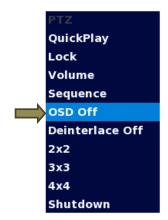


❖ OSD On/Off

OSD Off offers the onscreen OSD is all disappear.

Then OSD Off item changed OSD on.

When you click the OSD On the OSD is appear.



❖ Deinterlace On/Off

Deinterlace Off offers the Deinterlace mode off.

Then Deinterlace Off item changed Deinterlace On.

When you click the "Deinterlace On" the Deinterlace mode on.



- Blank -

Entering to search menu

1. Front panel & Remote controller

Press SEARCH button in front panel or remote controller, then a menu panel will be shown.





2. GUI (Mouse)

Click Search icon in the status bar.



❖ Calendar Search

Calendar search mode is a default mode.

If you are in Event mode, then choose "Calendar" tab to switch to Calendar mode.

Step 1. Choosing a date

You can choose one of red colored date.

Black colored date has no recording data.



Step 2. Choosing a hour

Recording map will be shown in a hour unit. The color on the map is indicating recording mode as below.

Red : Normal Recording

Blue : Motion event



Yellow : Alarm in event

Green : Two events at same time - Alarm in event & Motion event

You can start to playback by pressing "Start" button or back to step 1. By pressing "Back". For choosing a minute, press "OK" in the recording map.

Step 3. Choosing a minute & Play

Recording map will be shown in a minute unit. You can start to playback by pressing "Start" button or back to step 1. By pressing "Back". Pressing "OK" in the recording map also start to play.



Step 4. Playback Control & Return to search menu

See "Playback Control" section above for playback control.



Return to search menu

There are two ways to return to search menu from playback mode.

- 1) Press "ESC" in front panel or remote controller
- 2) Click x icon on playback control bar to quit playback mode.



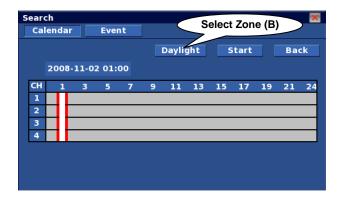
Daylight in calendar search mode

Please, read "Daylight Saving Time(DST)" section first.

Daylight button will be shown if the selected date is including zone (A) and (B).

This button is useful when addressing start point in Zone(B).

The recording map will be updated when you press Daylight button.



❖ Event Search

Step 1. Select "Event" if you are in Calendar mode.

Step 2. Select desired channel to search.

Step 3. Set start date & time to search.

Step 4. Set stop date & time to search.

Step 5. Check event type to search.

Step 6. Click Search, then event list will be shown.

Step 7. Choose a one of event you want to play.





Daylight in event search mode

When this option is checked, searches range is limited to zone (B). At this point, zone (B) must be exist within you selected rage in Step 6 & 7.

- Blank -

Backup

You can backup recording data to USB storages or built-in optical storage.

❖ Backup device

- Built-in CD/DVD (option)
- USB Flash / HDD / CD / DVD (Support USB 2.0 devices only.)

❖ Backup file type

Native DB(Database)

This type is an unique format for video recording.

You can play this format using Backup viewer only.

Native DB does not support individual channel backup.

AVI

This type is a industrial standard AVI file.

Refer that some media player does not support H.264 AVI file.

It is recommended to use MPlayer for audio playback.

MPlayer : Visit http://www.mplayerhq.hu to download.

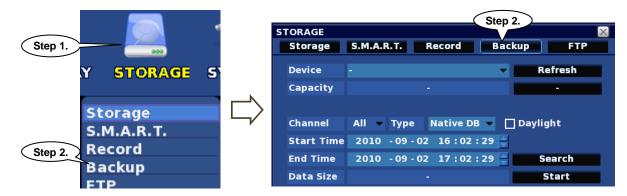
Try GOM player if you need other free player, but it does not support audio decoding.

GOM Player : Visit http://www.gomlab.com/eng/ to download.

It supports English, Chinese, Japanese and Korean.

Entering to backup menu

- Step 1. Press Menu button, and select Storage menu.
- Step 2. Select Backup tab in Storage menu or select Backup in storage list menu.



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❖ Backup

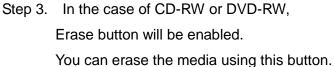
- Step 1. Try "Refresh" if the backup storage is not shown in the Device list.
- Step 2. Choose a backup device in the list.

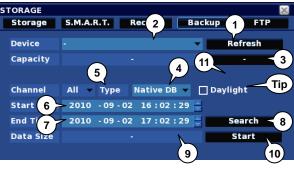
 Available capacity will be shown.

 "Total:4.5 GB(8 MB)" means that

 Total media catacity is 4.5GB,

 and remained capacity is 8MB.







- Step 4. Choose a backup file type between "Native DB" and "AVI".
- Step 5. In the case of AVI type, you can select specific channel to backup.
- Step 6 & 7. Set start/End date & time to backup.
- Step 8. Click Search button to search available backup data.
- Step 9. Total backup file size is shown in this column.
- Step 10. Click "Start" to start to backup.
- Step 11. Click "Open" to CD-RW or DVD-RW tray open.
- Step 12. Choose a backup mode between background mode and normal.

Note that the backup time is same between two backup mode.

Choose YES for background mode.

Then, the unit eturns to live view mode, and backup will be started.

In this mode, backup status is shown in Status bar.

Backup status in background backup mode

| MENU | 40% × 2008-05-22 08 47 - Admin 100%

Choose NO to start to backup immediately.

CD or DVD were choosed, then "Burning..." message will be shown.

Otherwise, "Writing..." message will be shown.



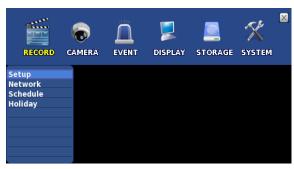


Daylight in backup

When this option is checked, the unit searches recording data in zone (B). At this point, zone (B) must be exist within you selected rage in Step 6 & 7.

Chapter 4. Configuration

Press or click Menu button in front panel or status bar to open menu panel.





Menu naming rule

For example, "Record :: Setup" is indicating

Setup menu in Record menu.

(Record menu is a root menu, and Setup menu is a sub-menu)

Summary

- Record
 - Image size settings / Frame rate settings / Schedule edit / Holiday settings
- Camera
 - Camera naming / Audio on/Off / Color control
- Event
 - Alarm In & Out settings / Email report settings / Buzzer settings
- Display
 - Camera pane layout control / Status bar control
 - Spot output settings
- Storage
 - Storage view / Formatting / S.M.A.R.T. view / Writing settings / Backup
- System
 - Network & Server settings
 - Log view & save to USB storage
 - User management
 - View DVR information : Remocon ID, F/W & Kernel version, MAC address
 - Gateway to Service menu
 - Time synchronization
 - Email settings

Record Settings

❖ Record :: Setup

Size

Move to Size column, and press OK, then available image size will be shown. Note that all channels are using same image size.



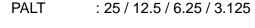
• NTSC : 704x480(D1) / 704x240(HD1) / 352x240(CIF)

PAL : 704x576(D1) / 704x288(HD1) / 352x288(CIF)

fps (recording frame rate)

Available frame rate are listed by image size.

• NTSC : 30 / 15 / 7.5 / 3.75 / 1.88





D1 real time recording

The system which sees supports D1 / 120 frames

You can record D1 size image in real time frame, if you do using 4 channels.

This concept is same in the case of HD1 and CIF.

Quality

High quality means shorter recording time, because the compression file size is getting biger and biger when you choose more good qiality. 5 quality levels are available.

Best / High / Medium / Low / Lowest

Pre (Pre alarm duration)

Pre alarm duration is fixed as two options: None and 5 seconds.

Post (post alarm duration)

Six post alarm duration times are available: None / 3 / 5 / 10 / 20 / 30 sec

❖ Record :: Network

Size

Image size is dependent on the record size



NTSC : 704x480(D1) / 704x240(HD1) / 352x240(CIF)

PAL : 704x576(D1) / 704x288(HD1) / 352x288(CIF)

Fps (network transmission frame rate)

Available network transmission frame rate are listed by image size.

• NTSC : 30 / 15 / 7.5 / 3.75 / 1.88

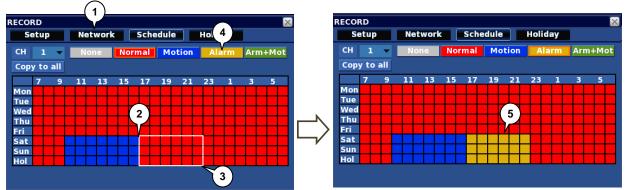
• PALT : 25 / 12.5 / 6.25 / 3.125

Quality

High quality means shorter recording time, because the compression file size is getting biger and biger when you choose more good qiality. 5 quality levels are available.

Best / High / Medium / Low / Lowest

❖ Record :: Schedule



Recording Mode

Normal : Red, Record continuously.

Motion : Blue, Start recording by motion event.

See Camera::Motion menu to configure motion event.

Alarm : Yellow, Start recording by alarm event.

See Event::Alarm In menu to configure alarm event.

Alm+Mot : Green, Start recording by motion event or alarm event.

Scheduling

Step 1. Select Schedule tab to switch to Schedule menu.

Step 2. Select start point to assign.

You can select any day of week, any hour and holiday.

See Recording::Holiday to assign holiday.

Step 3. Select stop point.

Step 4. Select a recording mode.

(Alarm is select in the example.)

Step 5. Desired zone is changed into yellow color (alarm mode).

❖ Record :: Holiday

You can assign your holidays for 2 years.



Add a new holiday

Select a date and press OK, the date will be change into red, holiday.

Delete a holiday

Select a desired holiday and press OK, the holiday will be changed into black, working day.

Delete all holiday

Press "Clear All" button to delete all holidays of two years assigned by user.

Camera Settings

❖ Camera :: Setup





Name

You can change the camera name using virtual keyboard.

Press OK to show virtual keyboard.

Enable

Enable or disabling the channel.

Note that Ch. 1 should be turned on always.

Audio

Check this option if you attach a microphone to the channel.

Sat / Con / Bri

You can adjust color settings using this menu.



❖ Camera :: Motion



Enable

It enables motion event.

Region

Motion detection cells are consist of 15x15 cells.

You can enable or disable each cells.

• Full : All cells are enabled.

User : You can configure each cells.

Sensitivity

Five levels of motion detection sensitivity available, from step 1 to step 5.

❖ Camera :: PTZ



ID

It is a RS-485 device address.

You must set a address if PTZ camera is attached.

Available range is from 1 to 255.

You can change the PTZ camera ID using virtual keyboard.

Press OK to show virtual keyboard.

Model

You can choose a PTZ camera model or protocols.

Settings

You can configure RS-485 communication settings.



[Settings]

❖ Camera :: Keyboard

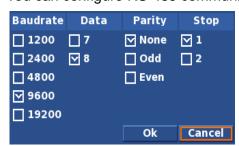


Model

You can choose a keyboard model when you connected by keyboard.

Settings

You can configure RS-485 communication settings.



Event Settings

❖ Event :: Alarm In



Type

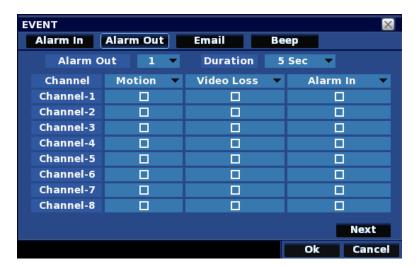
You can configure a alarm device's output polarity.

N/C : Normal CloseN/O : Normal Open

Link Camera

The linked camera starts to recording when alarm in event is detected.

Event :: Alarm Out



Alarm Out No

Set the alarm out no. you want to configure.

Duration

You can set alarm output durations up to 30 sec..

None / 3 / 5 / 10 / 20 / 30 seconds

Motion

Alarm output will be turned on when motion event is detected.

Video Loss

Alarm output will be turned on when video loss event is detected.

Alarm In

Alarm output will be turned on when the camera is started to record by alarm in event. It is reflecting "Link Camera" settings in Event::Alarm In menu.

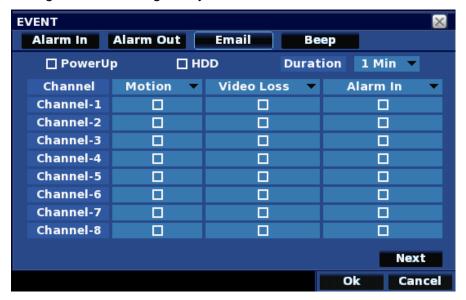
For example,

- Settings
 - Camera-1 is linked to Alarm In #1 and Alarm In #2 in Event::Alarm In menu.
 - Alarm In of Camera-1 is checked in Event::Alarm Out menu.
- Action

Alarm out is turned on when Alarm #1 or(and) Alarm #2 event is activated.

❖ Event :: Email

Configure email settings in System::Email menu to use this service.



PowerUp

Email is sent when power is turned on.

HDD

Email is sent when HDD event occurs.

Motion

Email is sent when motion event is detected.

Video Loss

Email is sent when video loss event is detected.

Alarm In

Email is sent when the camera is started to record by alarm in event. It is reflecting "Link Camera" settings in Event::Alarm in menu.

Event :: Beep



PowerUp

Buzzer beeps when power is turned on.

HDD

Email is sent when HDD event occurs.

Duration

You can set alarm output durations up to 30 sec..

None / 3 / 5 / 10 / 20 / 30 seconds

Motion

Email is sent when motion event is detected.

Video Loss

Email is sent when video loss event is detected.

Alarm In

Email is sent when the camera is started to record by alarm in event. It is reflecting "Link Camera" settings in Event::Alarm in menu.

Display Settings

Display :: Settings



Camera name

It shows a camera name on the camera pane.

Record mode

It shows record mode and status on the camera pane.

Audio record icon

It shows audio record icon on the camera pane.

Status bar auto-hide

Status bar will be hidden automatically if this option is enabled.

To watch status bar, Move the mouse pointer to bottom of the screen or press OK or Menu in front panel or remote controller. You can set show-time of the status bar from 1 to 10 seconds.

This configuration is applied to playback control bar also.

To watch playback control bar, move the mouse pointer to bottom of the screen or press playback control button in front panel or remote controller.

Sequence

In check item main screen rotation enable and the set duration time.

Press combo box to show virtual keyboard.

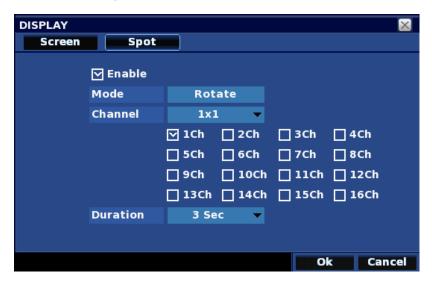
Alpha blending

Menu box will be similar transparency if this option is enabled.

In Alpha blending mode, you can choose a value

Opaque/ Low / Medium / High.

Display :: Spot



Enable

It enables spot operations.

Mode

There are two mode, Fixed and Rotate.

Channel

In Fixed mode, you need to choose a channel you want to watch.

Duration

In Rotate mode, you can choose a duration.

• 3 / 5/ 10 / 20 / 30 seconds.

Storage Settings

Storage :: Storage



Enable

It enables HDD temperature limit event.

Refresh

It updates storage information. It is useful when you attach USB storage.

Device / Capacity

It shows storage types and its capacity.

Internal SATA storage is shown as SATA-{number} device.

Format

This button is enabled when USB storage is attached.

You can format the storage using this button.

S.M.A.R.T. (Self Monitoring Analysis and Reporting Technology)

It shows HDD health using S.M.A.R.T. .

Temperature

It shows current HDD temperature using S.M.A.R.T. .

Storage :: S.M.A.R.T.



- Use S.M.A.R.T information for reference purpose only.
 It does not indicating exact HDD conditions.
- 2. Some old or new HDD could shows correct S.M.A.R.T. information.



ID

It is an index of S.M.A.R.T. register.

Attribute

It is an attribute of the HDD.

Value

It is a current monitoring status.

Worst

It is a smallest value of the attributes.

Threshold

It is a limitation which it is assigned by HDD manufacturer.

If the value close or lower than this value, then the HDD may has some problem.

Storage :: Record



Record Duration

You can configure record time as below;

- Continuously
- 30 / 60 / 90 days
- User Define

Write Mode

There are two modes;

Overwrite : Old data on the HDD will be erased when the HDD is full.

Suspend : Recording is stopped when the HDD is full.

Early Warning

HDD event will be issued if remained HDD capacity is less than this limit. From 5% to 30% are available.

Storage :: Backup



◆ Refer to "Backup" section in Chapter 3. Operation.

System Settings

❖ System :: Network



DHCP

Check this option if you do not using fixed IP.

The unit request an IP as soon as you save and exit the menu.

You can verify the IP address and other network configurations in this menu after a few minutes.

If the network condition is good, then the unit can get IP address within couple of seconds.

If you do not using DHCP, you have to fill all information out by yourself.

Please, ask details about the network information to your ISP or network administrator.

❖ System :: DDNS



DDNS

Check this option to enable Dynamic DNS function, you can choose one of two DDNS.

1) DNIP.NET : Public DDNS (Registration is required.)

2) MY-DDNS.COM : Closed DDNS (Registration is not required, Exclusive for this DVR)

MY-DDNS.COM

This exclusive DDNS is very easy to use. Just assign a domain name and apply it.

- Step 1) Check DDNS option box.
- Step 2) Choose MY-DDNS.COM
- Step 3) Enter a name in Domain[my-ddns.com] column.
- Step 4) Click Apply button, then a success message box will be shown.



DYNDNS

This DDNS is a public DDNS, and registration is essential.

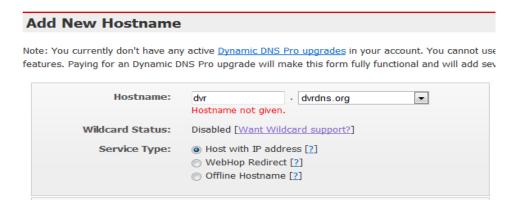
Step 1) Registration(sign-up) on the web.

Currently, we support DNIP.NET free service.

You need to sign-up at www.dyndns.com to get an ID and password.

Refer that you need to configure "port forwarding" if you are using a router.

Visit http://www.dyndns.com/ for details.



TTL value is 60 seconds. Edit TTL.

Use auto detected IP address 218.54.186.86.

Tes, let me configure Email routing. [?]

Add To Cart

[DYNDNS sign-up screen]

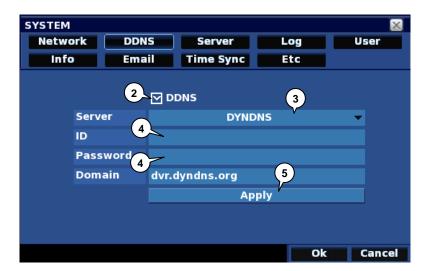
Step 2) Check DDNS option box.

IP Address:

Mail Routing:

- Step 3) Choose DYNDNS
- Step 4) Enter an ID and password that you registered at www.dyndns.com
- Step 5) Click Apply button, then a success message box will be shown.

218.54.186.86



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❖ System :: Server

Network settings of the unit are shown in this menu.



TCP / UDP / HTTP port

These port is fixed to 5000, 5100 and 8080,

it is used for CMS and Web viewer service.

Max. Connect

This value is a limit of total number of network connections for live viewing.

System could be unstable if the connection is too much.

Max. Search

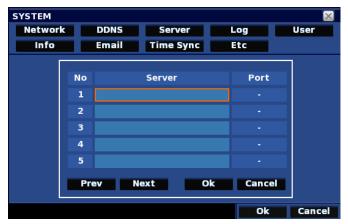
This value is a limit of total number of network connections for search.

Since search requires too much system resource, it could be a cause of unstable operation.

Event Server

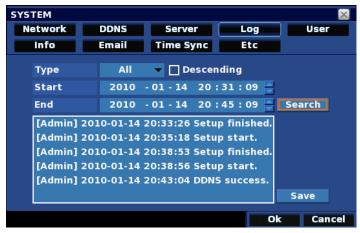
Press "Event server" button appear server list box.

The server list is received server from event data by CMS host.



❖ System :: Log

You can verify history of the system operation in this log menu.



Type

You can choose a type of history such as System, Setup, Search and etc...

Start / End

You can set search range using this column.

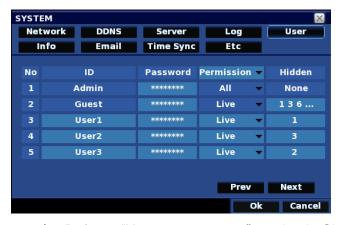
Search

Start to search log as soon as press Search button.

Save

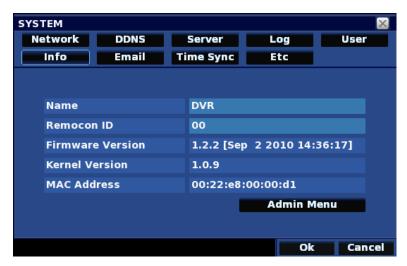
You can save the log data using USB storage. File name is fixed to "log.txt".

* System :: User



Refer to "User management" section in Chapter 2. Pre-acknowledgement.

❖ System :: Info



Name

Name on network (CMS).

Remocon ID

Identification for IR remote controller.

See "Infrared remote controller" in

Chapter 2. Pre-acknowledgement.

Firmware Version

Firmware version information.

Kernel Version

Kernel version information.

MAC address

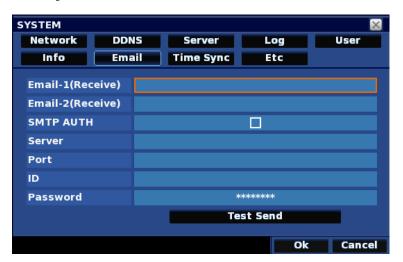
Identification of the unit on network, it must be unique to prevent conflict on the network.

Service Menu

You can switch to Service Menu through this button.

See Chapter 5. Service menu for details.

❖ System :: Email



Email-1 (Receive)

Primary receiver's email address.

Email-2 (Receive)

Secondary receiver's email address.

SMTP Auth

Use to SMTP Authentication.

Server

IP address or URL of SMTP server for sending.

ID

Sender email account of the SMTP server.

Passowrd

Password of the sender account.

TestSend

Test Mail will be sent as soon as press the button.

❖ System :: Time Sync.

Time Sync.

When checked, the unit starts to synchronize system clock with network time server using NTP. NTP serevr offers most reliable atomic clock.



NTP Server

The unit will look for near network time server if you use "pool.ntp.org" .

You can use other network time server if the default server setting has some problem.

Port(UDP)

It is a NTP port fixed by network time server.

Period(Hour)

The unit synchronize the clock periodically, you can set its period in hour unit.

Server Time

It shows the time offered by network time server when press Get button.

Get

The unit try to get a time from network time server.

Server Time will be updated if there is no problem.

Apply

Change current system time using network time server, this is "Time Synchronization".



Failure of time synchronization

If time difference is too big, then it shows failure message.

In this case, you need to try Time Sync. In Service::DateTime menu.

If system time is faster than network time server's time, then it is recommended to backup recent data. Otherwise, it will be erased.

❖ System :: Etc



Key Beep

Buzzer beeps when front panel button or remote controller button is pressed.

Temperature Unit

You can choose temperature display unit between celsius degree and fahrenheit degree.

Auto-Logout

It enables auto-logout operations.

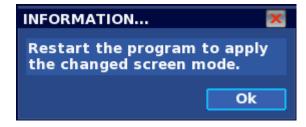
In auto-logout operations, you can adjust a duration using virtual keyboard.

It's duration adjustable to one to sixty minute by one minute unit.

VideoMode

You can choose video mode between NTSC and PAL.

If you change the video mode, a warning window appears



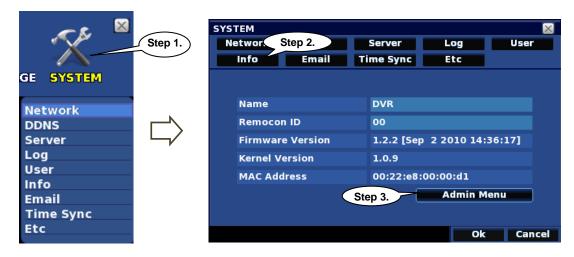
VideoLoss Record

If you enable this item to record the video loss.

Chapter 5. Admin Menu

Enterin to service menu

You can enter to service menu through System::Info menu.



❖ Admin :: Upgrade



You can upgrade kernel and firmware using USB storage at same time or separately.

- Step 1. Choose USB storage which is containing Upgrade file. Press "Refresh" button if there is no USB storage device.
- Step 2. Press "Refresh" button.

 The unit will start to scan USB storage, and show its version.
- Step 3. Press "Upgrade" button to start to upgrade.

 Upgrade will takes a couple of minutes.

❖ Admin :: Config



You can export or import unit's configuration using USB storage.

Factory default : Return to factory default settings.

Export : Copy this unit's configuration file to USB storage.

You can find "Config.dat" in the USB storage.

Import : Copy configuration file from USB storage.

Admin :: Format



Since recording is stopped in Service menu, you can format any data disk. Press Format button on the GUI.

❖ Admin :: DateTime



Time Sync.

You can adjust system clock using this menu.

Standard time will be shown as below when you press "Synchronization" button.



Press "Sync." To adjust system clock to standard time which is read from network time server.

Current Time

It shows current system clock, and you can adjust it by manual.

Press "Apply" to change system clock after adjustment.

GMT/Location

Assign correct location where the unit is installed.

Since this information is a reference of daylight saving rule, it must be correct.

* Admin :: Etc



Language

You can choose your local language or other language you want to use.

Delete Log

You can click a delete button then delete log file.

Mac

You can change the Mac address then you get Mac address.

Appendix 1. Menu tree

Record			
Se	Setup		
	Image Size		
	Fps (Recording Speed)		
	Image Quality		
	Pre Alarm		
	Post Alarm		
Ne	twork		
	Fps (Network speed)		
	Image Quality		
Sc	hedule		
	None		
	Normal		
	Motion		
	Alarm		
	Alarm+Motion		
Ho	liday		
	Today		
	Clear All		

Di	Display		
	Screen		
		Camera Name	
		Record Mode	
		Audio Record Icon	
Status bar auto-hide		Status bar auto-hide	
		Status bar show time	
	Sp	ot	
		Enable	
		Mode	
		Channel	
Duration		Duration	

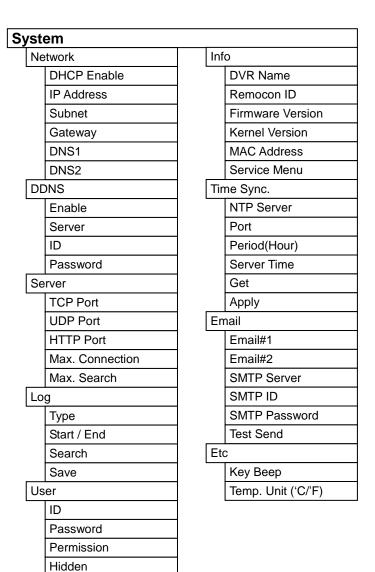
Camera		
Setup		
	Camera Name	
	Camera Enable	
	Audio Enable	
	Saturation	
	Contrast	
	Bright	
Мс	otion	
	Enable	
	Region	
	Sensitivity	
PT	Z	
	ID	
	Model	
	Setting	
Keyboard		
	Keyboard Model	
	Setting	
	DVR Number	

Storage			
Storage			
	Device		
	Capacity		
	Туре		
	Format		
	S.M.A.R.T. Health		
	Temperature		
S.	M.A.R.T.		
Re	ecord		
	Record Duration		
	Write Mode		
	Early warning enable		
	Early warning level(%)		
Ва	nckup		
	Device		
	Capacity		
	Channel		
	Туре		
	Daylight Saving		
	Start		
	End		
	Data Size		
	[Continue]		

Event			
Alarm In			
	Туре		
	Linked Camera		
Ala	arm Out		
	Alarm Out No		
	Duration		
	Motion		
	Video Loss		
	Alarm In		
En	nail		
	Power Up		
	HDD		
	Motion		
	Video Loss		
	Alarm In		
Ве	ep		
	Power Up		
HDD			
	Duration		
	Motion		
	Video Loss		
	Alarm In		

St	Storage				
	FT	P			
Address		Address			
		ID			
Ī		Password			
		Port			
		Schedule			

[Continued]



dmin			
	Upgrade		
	Device		
	Kernel Version		
	F/W Version		
С	urrent Version		
	Kernel Version		
	F/W Version		
U	pgrade		
Confi	g		
D	evice		
Fa	actory Default		
E	xport		
In	nport		
Form	at		
Date	Гіте		
Ti	me Sync.		
С	Current Time		
	GMT / Location		
Etc			
-	Languag		
	Delete Log		
G	Get Mac Address		

Quick Menu (Live View)

Quick Menu Zoom PTZ Quick Play Lock Volume Sequence OSD on Deinterlace on 2x2 3x3 4x4 Shutdown

Quick Menu(Search View)

Q	Quick Menu		
	Volume		
	OSD on		
	Deinterlace on		
	2x2		
	3x3		
	4x4		

Appendix 2. Factory default settings

* F/W Version : 1.1.2 [MAY 7, 2010]

* Password : 11111111 (Eight digit of '1')

■ R E C O R D

Parameter	Default	Range
Setup		
Image Size		
NTSC	352x240	704x480 / 704x240 / 352x240
PAL	352x288	704x576 / 704x288 / 352x288
Frame Rate (NTSC)		
704x480		
704x240	30 fps	30 / 15 / 7.5 / 3.75 / 1.88
352x240	·	
Frame Rate (PAL)		
704x576		
704x288	25 fps	25 / 12.5 / 6.25 / 3.13 / 1.56
352x288		
Quality	Best	Best / High / Medium / Low / Lowest
Pre-Alarm	5 sec	None / 5 sec.
Post-Alarm	5 sec	None / 3 / 5 / 10 / 20 / 30 sec.
Network		
Image Size		
NTSC	352x240	704x480 / 704x240 / 352x240
PAL	352x288	704x576 / 704x288 / 352x288
Frame Rate (NTSC)		
352x240	30 fps	30 / 15 / 7.5 / 3.75 / 1.88
Frame Rate (PAL)		
352x288	25 fps	25 / 12.5 / 6.25 / 3.13 / 1.56
Quality	Best	Best / High / Medium / Low / Lowest
Schedule		
Mode	Normal	None / Normal / Alarm / Motion / Alm+Mot
		(Default = Normal recording for 24 hours/7days)
Holiday		
Settings	-	No Holiday
3-		, and the second

■ CAMERA

Parameter	Default	Range
Setup		
Name	"CAMnn"	Max. 12 character
Enable	Checked	Checked / Unchecked
Audio	Unchecked	Checked / Unchecked
Saturation	58	0 ~ 100
Contrast	44	0 ~ 100
Brightness	50	0 ~ 100
Motion		
Enable	Checked	Checked / Unchecked
Region	Full	Full / User
Sensitivity	Step 1 (Hi)	Step 1 (Hi) ~ Step 5 (Lo)
PTZ		
ID 001 ~ 255		001 ~ 255
Model	None	Various
Setting	9600 8-N-1	Baud: 1200 / 2400 / 4800 / 9600 / 19200 bps Data: 7 / 8 bit, Parity: None/Odd/Even Stop: 1 / 2 bit

■ EVENT

Parameter	Default	Range
Alarm In		
Type	N/C	N/C or N/O
Link Camera	1:1	1 ~ 16
Alarm Out		
Duration	5 sec	None / 3 / 5 / 10 / 20 / 30sec
Motion	Unchecked	Checked / Unchecked
Video Loss	Unchecked	Checked / Unchecked
Alarm In	Unchecked	Checked / Unchecked
Email		
Power Up	Unchecked	Checked / Unchecked
HDD	Unchecked	Checked / Unchecked
Motion	Unchecked	Checked / Unchecked
Video Loss	Unchecked	Checked / Unchecked
Alarm In	Unchecked	Checked / Unchecked
Beep		
Duration	5 sec	None / 3 / 5 / 10 / 20 / 30sec
Power Up	Unchecked	Checked / Unchecked
HDD	Unchecked	Checked / Unchecked
Motion	Unchecked	Checked / Unchecked
Video Loss	Unchecked	Checked / Unchecked
Alarm In	Unchecked	Checked / Unchecked

■ DISPLAY

Parameter	Default	Range
Screen		
Camera name	Checked	Checked / Unchecked
Record mode	Checked	Checked / Unchecked
Audio record icon	Checked	Checked / Unchecked
Status bar autohide	Unchecked	Checked / Unchecked
Show	None	1/3/5/10 sec
Alpha Blending	Unchecked	Checked / Unchecked
Show	Medium	Opaque / Low / Medium / High
Spot		
Enable	Unchecked	Checked / Unchecked
Mode	Fixed	Fixed / Rotate
Channel	1	1 ~ 16
Duration	3 sec	3/5/10/20/30

■ STORAGE

Parameter	Default	Range
Record		
Record Duration	Continuously	Continuously / 30 / 60 / 90 Days / User define (1 ~ 365 Days)
Write mode	Overwrite	Overwrite / Suspend
Early Warning	Checked	Checked / Unchecked
Early Warning Level	5%	5 / 10 / 20 / 30% (Remained Capacity)

■ SYSTEM

Deservator	D-tlı	D
Parameter	Default	Range
Network		
DHCP	Unchecked	Checked / Unchecked
IP	192.168.0.100	-
Subnet	255.255.255.0	-
Gateway	192.168.0.1	-
DNS1	168.126.63.1	-
DNS2	168.126.63.2	-
DDNS		
DDNS	Unchecked	Checked / Unchecked
Server	Offichecked	Checked / Officiecked
Jerver L ID	-	Max. 20 character
Password	<u>-</u>	Max. 20 character
Domain	-	Max. 20 character
<u> </u>	-	IVIAX. 20 CHARACLEI
Server		
TCP Port	5000	0 ~ 65535
UDP Port	5100	0 ~ 65535
HTTP Port	8080	0 ~ 65535
Max. Connect	6	1 ~ 20 (TBD)
Max. Search	1	1 ~ 2 (TBD)
User		
Admin	All	All
Guest	Live	-
User1 ~ User18	Search	Max. 10 character, Live / Search / Setup / All
Password	"11111111"	Max. 8 digit, Accept alphabet and number, Case sensitive
Hidden Camera	None	1 ~ 4
Info	D)/D	Mary 40 also assets as
Name	DVR	Max. 16 characters
Remocon ID	0	0 ~ 99
Email		
Email-1(Receive)	-	Max. 30 characters
Email-1(Receive)	-	Max. 30 characters
SMTP (send)		
Server	-	Max. 25 characters
ID	-	Max. 25 characters
Password	-	Max. 40 characters
Time Sync.		
Time Sync.	Unchecked	Checked / Unchecked
NTP Server	pool.ntp.org	Min. 25 character
Port(UDP)	123	1 ~ 65535
Period	3 Hour	1 ~ 24 Hour
•	O I IOUI	I ** ZT HOUI
Etc		
Key Beep	Checked	Checked / Unchecked
Temperature Unit	Celsius	Celsius / Fahrenheit
Auto-Logout	Unchecked	Checked / Unchecked
Period(Min)	5 Minute	5 ~ 60 Minute
VideoMode	NTSC	NTSC / PAL
VideoLoss Record	Unchecked	Checked / Unchecked

⁻ End of document -