Instruction Manual

Digital Video Recorder

Backup Viewer

Model: DV1630, PAC161558

INDEX

Chapter 1. Installation	
System Requirements	3
Installation	3
Chapter 2. Operation	
Run BackupViewer	5
BackupViewer screen	6
Open Backup file	7
Playback control	8
Screen layout control	9
Screen capture	9
AVI backup	Q

Chapter 1. Installation

System Requirements

CPU : Intel Pentium4, 2.0GHz or Higher

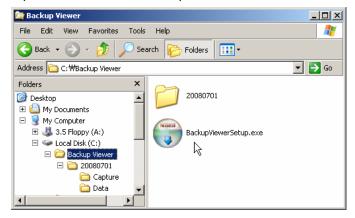
RAM: 256MB or higher

VGA : 1024x768, 24bit or 32bit color

Installation

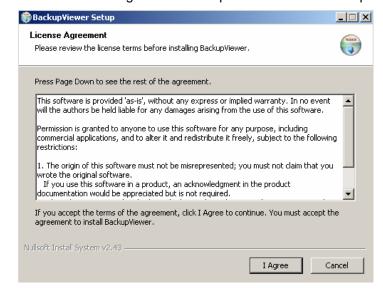
Step 1. Execute setup program

Open the folder where setup file is located and double click the setup file to start.



Step 2. License Agreement

Click the "I Agree" button to proceed to the next step.



Step 3. Select language

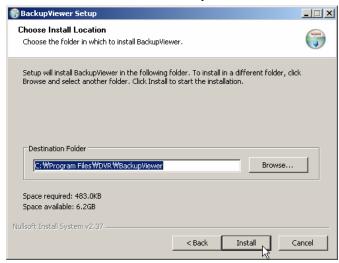
Choose the language for installation and click "OK" to proceed to the next step.



Step 4. Choose Destination & Start to install

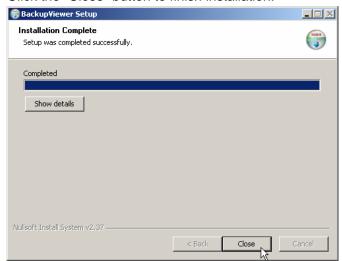
Choose the destination folder you want to install and click the "Install" button.

Installation will start as soon as you click "Install".



Step 5. Finish

Click the "Close" button to finish installation.



Chapter 2. Operation

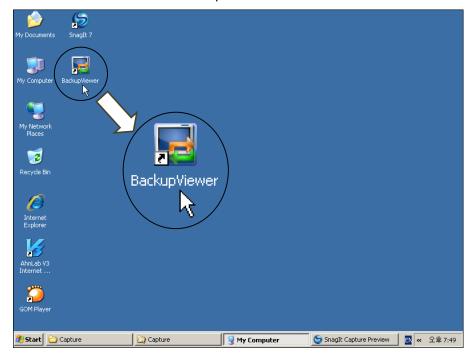
Run BackupViewer

There are two options to run BackupViewer; choose the option you prefer.

1st Option: BackupViewer icon on your desktop

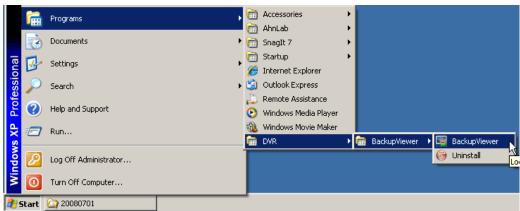
You can find BackupViewer icon on your Windows® desktop screen.

Double-click this icon to start Backup Viewer.

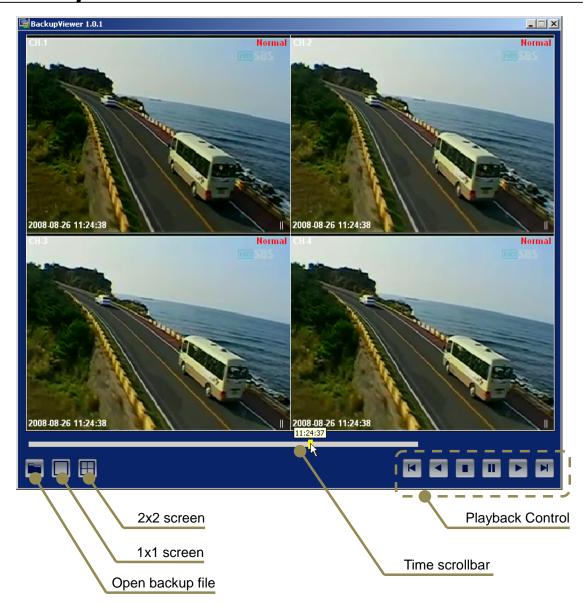


2nd Option: BackupViewer on Start menu

You can find BackupViewer through Start>Program>DVR>BackupViewer menu.



BackupViewer screen



Open a backup file

1st Option: using the "Open" icon

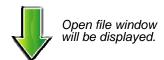
Click the "Open" icon on the bottom-left side of the screen.



2nd Option: Using the menu panel

Right click on mouse button to open a menu panel.



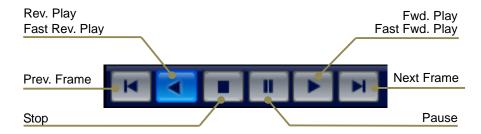




Choose a backup file, and click the "Open" button.

Playback control

Playback control buttons

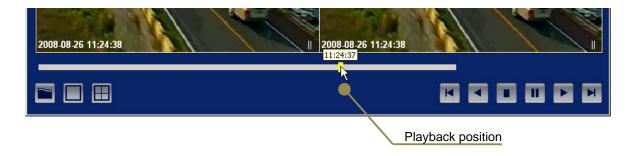


Playback position display and control

This scroll bar is indicating your current playback position in the backup file.

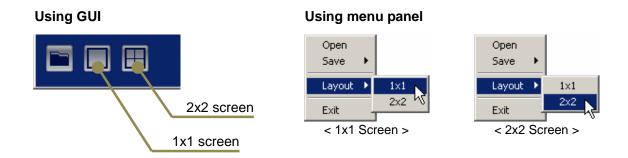
In addition, you can jump into a specific position to playback by dragging the scroll bar.

- Step 1) Move mouse pointer on the scroll bar (yellow rectangle).
- Step 2) Left click and hold the mouse button, and drag the curser to desired playback position. Playback time will appear above the scroll bar.
- Step 3) Release left mouse button and playback will be start.



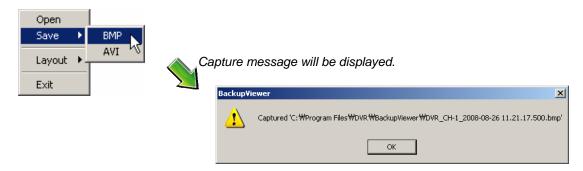
Screen layout control

You can change the screen layout using GUI or menu panel.



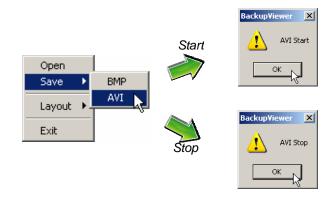
Screen capture

Right click mouse button to open a menu pane at 1x1 screen mode, and choose "BMP" menu to capture. A still image is captured in BMP format on BackupViewer folder.



AVI backup

Right click mouse button to open a menu pane at 1x1 screen mode, and choose "AVI" menu to start or stop AVI backup. A video clip will be created in AVI format on BackupViewer folder.



Page 9 of 9

Digital Video Recorder

CMS (Central Monitoring Software)

Model: DV1630, PAC161558

INDEX

Chapter 1 Installation	
System Requirements	3
Installation	3
Chapter 2 Operation	
Run CMS software	5
CMS Software login	6
CMS Main screen	6
Register DVR	7
Connect/Disconnect DVR	8
Live	9
Search	11
Е-Мар	12
PTZ	14
Alarm In/Out	15
Event	15
Back-up	16
DVR Setup	17
DVR Upgrade	18
CMS Options & Version	18
Screen Capture	20

Chapter 1 Installation

System Requirements

CPU : Intel Pentium4, 2.4GHz or Higher

RAM: 512MB or higher

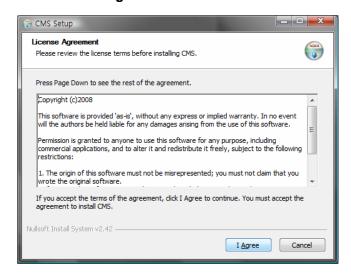
VGA: 1280x1024, 24bit or 32bit color or higher

Installation

Step 1. Run [CMSSetup.exe].

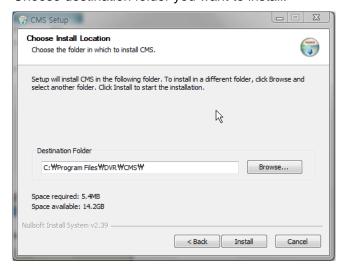


Step 2. Click the "I Agree" button.

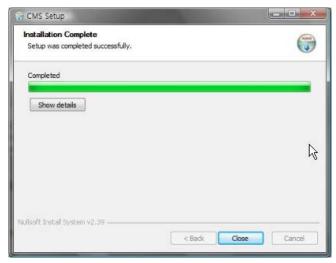


Step 3. Click the "Install" button.

Choose destination folder you want to install.



Step 4. Click "Close" when Installation is complete.



Chapter 2. Operation

Run CMS software

There are two options to run the CMS software; choose the option you prefer.

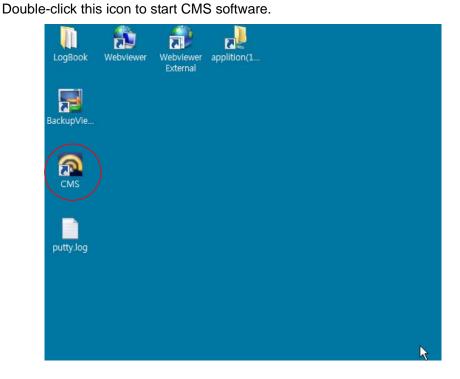


Windows Vista/7 User

User should run CMS software with Administrator authority in Windows Vista/7. (Right-click the mouse button on the CMS icon and select "Run as administrator")

1st Option: CMS icon on desktop

You can find an icon of the CMS on your Windows® desktop screen.



2nd Option: CMS software on Start menu

You can find CMS through Start>Program>DVR>CMS menu.

CMS software login

When you begin CMS/ login window will appear at the first.

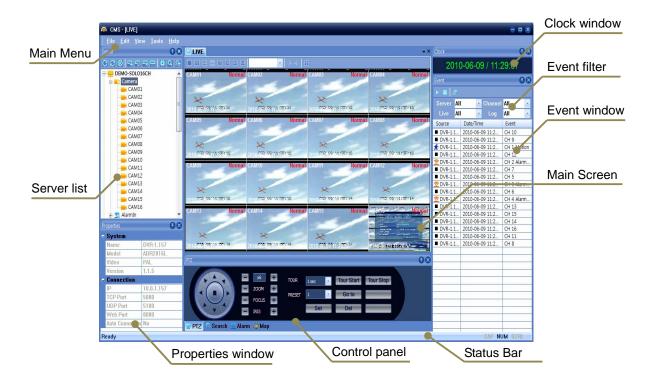
Input password then click the Login.



Default Password is "1111"

If the "Remember password" is checked, your password will be pre-filled next time you run the CMS Software.

CMS Main screen



Page 6 of 20

Register DVR

There are two options for Server registration.

1st Option: Auto Registration

This option is available when DVR and CMS are in same network.

- 1. Click the Scan button [] in Server list window. The below window will appear.
- 2. Click "Scan" button.



- 3. Double click the list.
- 4. Input the values below.



5. Click "OK" when information entered.

2nd Option: Manual registration

- 1. Click the Add icon [] in Server list window. The below window will appear.
- 2. Input the values below.



3. Click "OK" when information is entered.

Connect/Disconnect DVR

Connect

Click the Connect icon [] to connect the registered DVR.
 The DVR icon is changed from blue to yellow.



Disconnect



Live

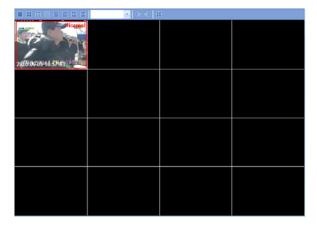
Camera view

Drag a camera icon [CAM01] like the below. The selected camera is displayed on view panel.



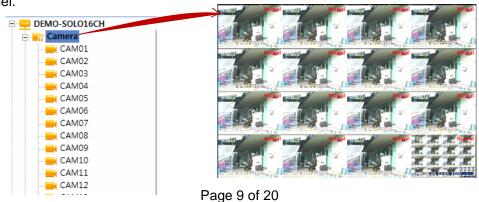
Stop searching at 1 channel search

Right-click mouse button on the searching channel in red and select [Live -> Stop] from the menu.

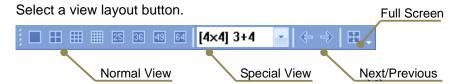


DVR view

Drag a group icon [as shown below. The selected cameras are displayed in on view panel.



View Layout

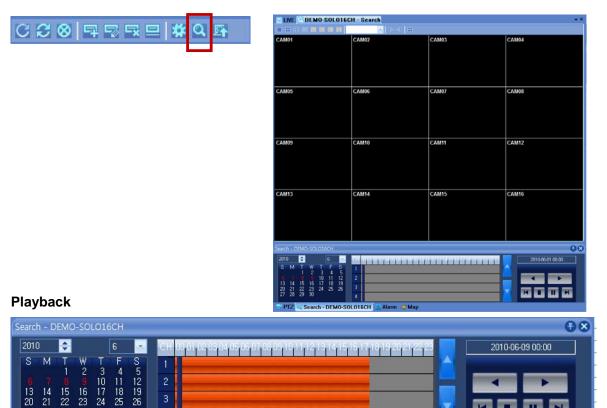


- Normal view: 1, 4, 9, 16, 25, 36, 49, 64
- Special view: [3x3] 1+5, [4x4] 1+12, [4x4] 2+8, [4x4] 3+4, [5x5] 1+9, [5x5] 4+9
- Next / Previous : Shows the next or previous cameras in the selected view layout.
- Full screen : Shows the view layout as full screen without GUI.

Search

Search Mode

- 1. Select a DVR.
- 2. Click the Search icon [<a>\bigsig \] and the control panel is changed to search mode as below.



Time map

Playback control

1. Select a date from the calendar. (Dates with recorded data are marked in red)

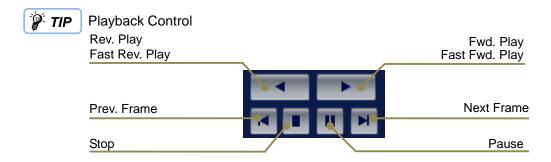
Alarm @ Man

2. Select a time from time map.

Search - DEMO-SOLO16CH

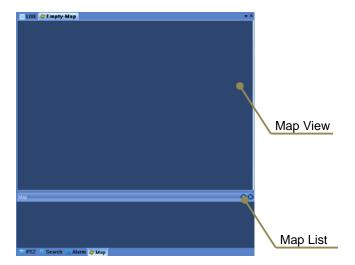
Calendar

3. Search the recorded images with playback control.



E-Map

Select the Map option from the View menu, The "Empty-Map" Tab is displayed.

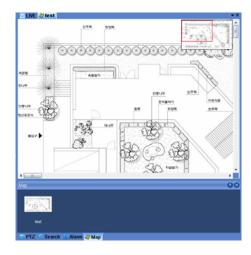


Add Map

- 1. Right-click mouse button on Map view.
- 2. Select a New Map from the menu.

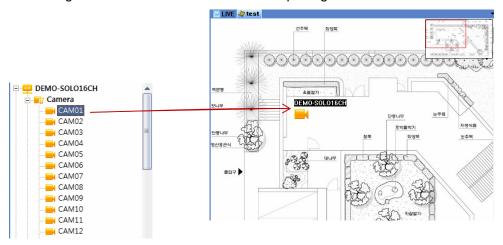


- 3. Input the map name in "Name" field.
- 5. Click "OK".



Camera/AlarmIn/AlarmOut registration

User can drag a camera/alarm in/alarm out to map image as shown below.



Camera view & Alarm In/Out control

Double-clicked the camera on map; the camera image will be displayed.

If you double-click alarm in/out on map, the user can control the alarm in/out.



Map Save

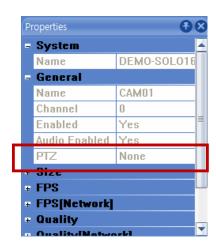
User can right-click the mouse button on the "Map view" and save the map by selecting "Save Map Group".

Map load

User can right-click the mouse button on map view and load the map by selecting "Load Map Group".

PTZ

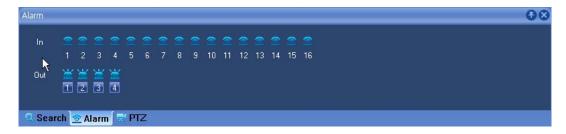
User can use PTZ control by selecting the camera with PTZ on view panel. (The selected camera is marked in red.)





Alarm In/Out

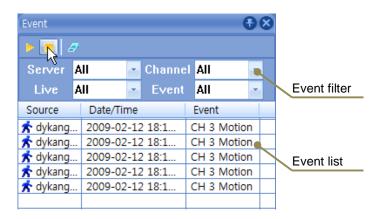
User can control alarm in/out in the Alarm tab of Control window.



If Alarm In/Out is working, the color is changed to orange.

Event

Event window displays all events of the connected DVRs on the Server list.



Event show

Click the Event Start Icon [] on the DVR to display the event working status on the event list.

Event hide

Click the Event Stop icon [] to hide the event working status on the event list.

Event delete

Event Search

User can search a specific event by using the event filter like Server, Channel, Live, and Log.

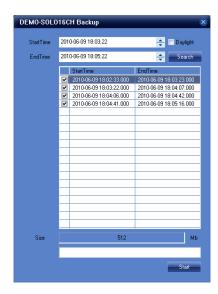
Event Save

User can save the selected event by right-clicking the mouse button on that event.

From the pop-up menu, select "Save". (CSV file format is open on Excel)

Backup

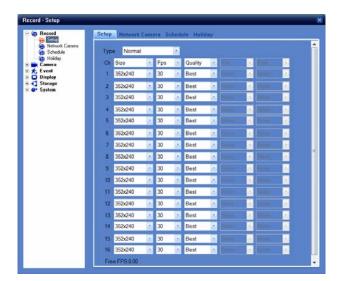
User can backup the recorded data of DVR by right-clicking the mouse button on the connected DVR on Server list window. From the pop-up menu, select "Backup".





For remote backup, we recommend to stop Live/Search because system performance may fail.

DVR Setup





Click the exit button(X) of window to exit the setup window. The below message is displayed.



DVR Upgrade



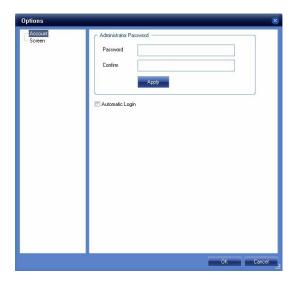
Find the path by clicking the icon [im] for Kernel or Firmware upgrade and click the "Start" button. After upgrade, the connection is disconnected.

CMS Options & Version

User can set user id, password and view layout of CMS.

Administrator Password

Click Menu Option – Account. You must use the same password and input in Password and Confirm fields.

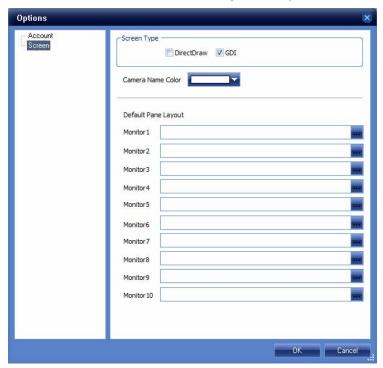




Please check "Automagic Login" for CMS auto login.

View layout

Click the Screen selection to view Layout Setup.



Screen Type: "DirectDraw" is to use the Direct Draw of MS Direct X. It displays images with full performance of the graphic card; it is also good for image quality and speed.

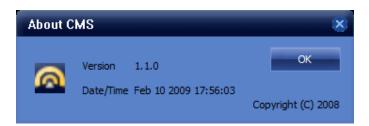
"GDI" is to use GDI technique of MS. It is slower than DirectDraw but has good compatibility and stability.

Camera Name Color: Change the backgrould color of the camera name on view panel.

Default Panel Layout: User can select a view layout for each monitor when multi monitors are used.

Version: Displays CMS version information.

Click Menu / Help / About for version information.



Screen capture

BMP Capture

- 1. Select the Camera on the view panel.
- 2. Right-Click the mouse button on the camera.
- 3. Select Save / BMP from the pop-up menu.
- 4. The still image is saved on a path as shown below.





Default Directory is c:\Progrram Files\DVR\CMS.

Default Filename is DVR name_CH _ year-mm-dd-hh-mm-ss.bmp.

AVI file Capture

- 1. Select the camera on view panel.
- 2. Right-Click on the selected camera.
- 3. Select Save / AVI from pop-up menu.
- 4. Click "OK". The AVI file is saved.





Default Directory is c:\Progrram Files\DVR\CMS.

Default Filename is DVR name_CH _ year-mm-dd-hh-mm-ss.avi.

Instruction Manual

Digital Video Recorder

Model: DV1630, PAC161558

INDEX

Chapter 1 Installation	
Contents of the box	5
Choosing a location for installation	5
Installation	6
Rear panel layout	6
Basic connections	
Connect audio devices (optional)	7
Connect alarms (optional)	7
Connect RS-485 PTZ camera (optional)	7
Connect to network (optional)	8
Connect a mouse (optional)	8
Connect power	8
Time adjustment	9
Front panel Infrared remote controller Mouse operations	11
Virtual keyboard	
Login_	
User management	
Daylight Savings time (DST)	
Shutdown (Auto power off)	
Chapter 3 Operation	
View panel	17
Camera panel	17
Status bar	18
Panic mode (emergency recording)	20
Live monitoring	21
Single-screen display	21

Multi-screen display	
Audio volume control	
PTZ (Pan / Tilt / Zoom)	
Search & Playback	
Playback control	26
Quick play	28
On Screen Display (OSD) on/off	29
Entering to Search Mode	30
Calendar search	30
Event search	32
Backup	33
Backup device	33
Backup file type	33
Entering to backup menu	33
Backup	34
Chapter 4 Setup	
Summary	35
Record Settings	36
Record - Setup	36
Record - Network	37
Record - Schedule	38
Record - Holiday	39
Camera Settings	
Camera - Setup	40
Camera - Motion	
Camera - PTZ	
Event Settings	43
Event - Alarm In	
Event - Alarm Out	
Event - Email	
Event - Beep	
Display Settings	
Display - Screen	47

Appendix 2	How to Obtain Factory Service	69
Appendix 2	Limited 1Year Warranty	69
Appendix 2	Factory default setting	66
Appendix 1	Menu tree	64
Service - Elu		03
	nie	02 63
_	ne	
_	ation	
	ration	
•	e Menue	
Chapter 5 Servi		
Oystem - Ltc		00
	no	
	nc	
-		
-		
· -		
-		
-		
•		
-		
_		
	R.T	
	_	
		49
Display - Spot		48

Chapter 1 - Installation Box Contents

The following parts are included in the box.

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

Remote Controller
 1 unit (Including AAA battery x 2)
 AC/DC adapter
 1 piece (12V/4A, 110Vac/220Vac)

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

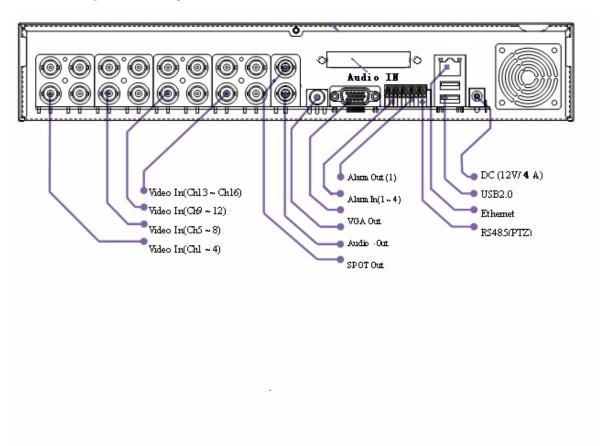
Screws for HDD1 set

Choosing a location for installation

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

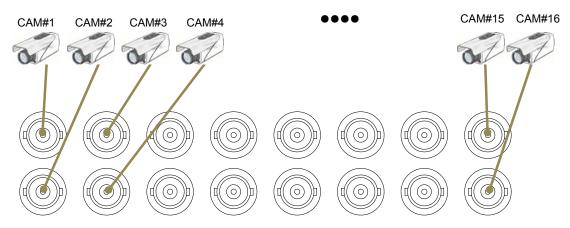
- Openings in the case are for ventilation purpose. To prevent overheating, these ventilation openings should not be blocked or covered.
- Ensure that there is 2" gap on either side of the unit.
- When stacking units, ensure there is at least 1" gap between each unit.
- Ensure the unit is not located in an area where it is likely to be subject 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.

❖ Rear panel layout

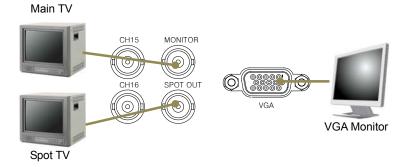


❖ Basic connections

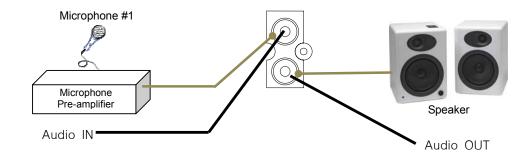
1. Connect Cameras



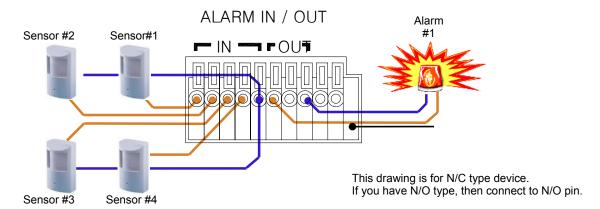
2. Connect display devices

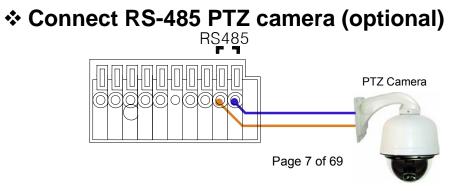


Connect audio devices



❖ Connect alarms





❖ Connect to network



Connect a mouse (optional)

The unit support hot plug-in & play.

Therefore, you can attach the mouse later, while the system is running.



❖ Connect power



Time adjustment

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

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 are unable to do step 2, then you need to adjust the time manually.

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.

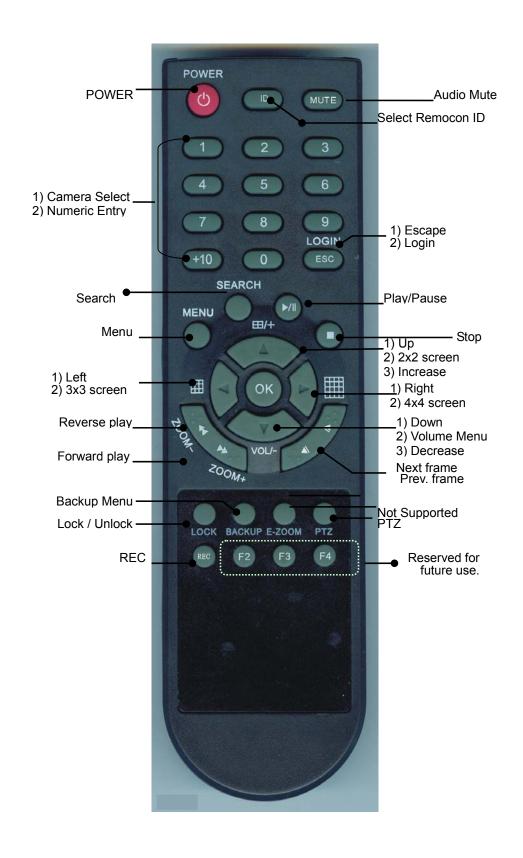
Chapter 2. Pre-acknowledgement

Front Panel



key	name	Descriptions				
Power LED	POWER	Power indicator light indicates that DVR has power (including the shutdown state)				
Record LED	REC	Shows status of recording				
Network LED	NETWORK	Shows status of network				
HDD-FULL LED	HDD-FULL	Shows status of HDD-FULL				
POWER BUTTON	POWER	Shows status of power				
Menu BUTTON	MENU	Press to open the main menu.				
Esc BUTTON	ESC	Press to close the main menu				
DISPLAY BUTTON	DISPLAY	Press to DISPLAY				
REC BUTTON	REC	Press to RECORD				
PLAY BUTTON	PLAY/PAUSE	Press to freeze playback to one frame, then press again to advance frame-by-frame				
STOP BUTTON		Press to stop playback				
DIRECTIONG BUTTON	▲. ▼. ∢. ▶	Press to move cursor up, down, left, and right				
Reverse	44	Press to reverse playback speed by 1/2, 1/4, 1/8				
FAST play	**	Press to increase forward playback speed 2X, 4X, 8X				
ENTER BUTTON	ENTER	In menus, press to confirm selections				

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 units.

Step 1. Press ID button in remote controller.

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

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 supports PS/2 wheel mouse; hot-plug and play is supported.

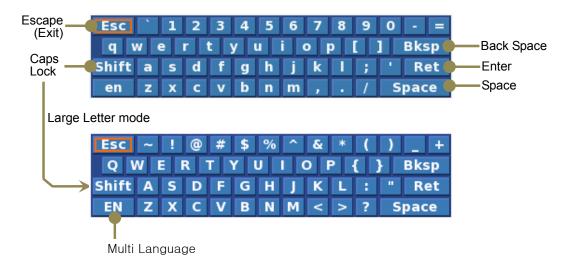
Left : Select Wheel : Up (+)/Down(-) Right : Quick Menu

Note

- 1. Mouse is not supplied as an accessory.
- 2. Support wheel mouse only.
- 3. Double click is not supported.

Virtual keyboard

In some menus, virtual keyboard served for text entry.



Login



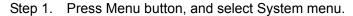
Default password for all account is "11111111" (eight digit of '1').

When you try to access some functions, the unit will display login window, and you have to login with proper permission to access the unit.

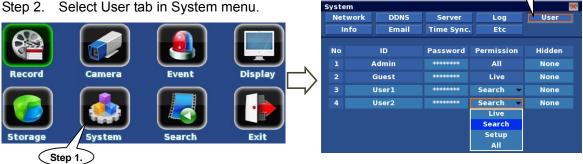


User management

Entering User menu







Step 2.

ID

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

Password

You can change the password, but be advised that you must delete old password using the backspace key of the virtual keyboard. 1 ~ 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.

: Right for live view, Search and Setup. ΑII

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 is always enabled.



DST vs. Location

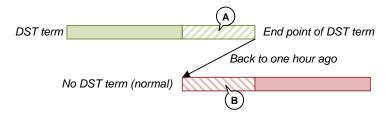
DST rule totally depends on your location.

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



Playback : The unit playback zone (A) and zone (B) are 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, the last DST rule or no rule will be applied.

If you cannot upgrade firmware, we recommend to do followings;

Backup : Do backup prior to adjusting system clock backward.

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

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

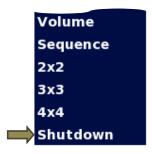
Shutdown (Auto power off)

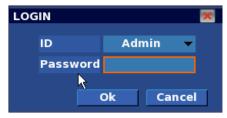
Since the HDD contents could be damaged when HDD power is removed while accessing the HDD, it is strongly recommended to follow shutdown procedures.

Step 1. Shutdown in menu

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

Then login message box appears Enter 'Admin' password.





Step 2. Auto power off

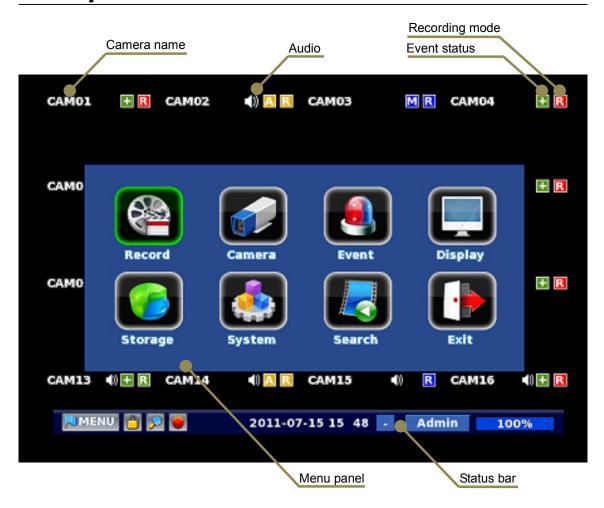
The following appears "Do you want a shutdown?" message.

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 CAMO1
 It shows camera name which is configured in Camera::Setup menu.
- 2. Audio (It shows when you enable the audio function in Camera::Setup menu.

3. Recording mode

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

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

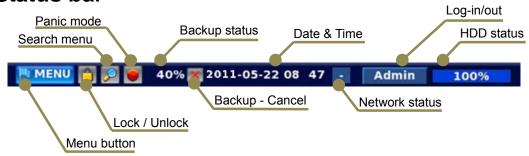
4. Event status

It shows when some events are detected and recording has 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 MENU

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.



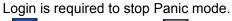
3. Search Menu



Click this button to enter into Search menu.

4. Panic mode

When you press this button it starts to record immediately at any condition.



Panic mode

5. Backup status 40% 🔀

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

6. Date & Time 2011-05-22 08 47

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



Auto clock available through public network time server on internet.

See System::Time Sync. Menu in chapter 4. to use auto 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 mouse pointer is moved to bottom area of the screen.
 - When Menu button is pressed in front of 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 supports Panic mode for instant recordings in emergency situations.

You can start Panic mode whenever you want.

To stop Panic mode, you need to log-in with "Setup" permission account.

 Start Panic mode with remote controller Press REC button.



Start Panic mode with mouse Click PANIC icon.



Live Monitoring

❖ Single-screen display

You can watch a single camera in full screen mode.

1. Front panel 'SCREEN' button when you click the continue button.

Camera number increases in full screen mode.

Remote controller Press a number button that you want to watch.





Selecting channels over 10

Follow below procedures to select from ch11 to ch16.

Step 1) Press "+10" button.

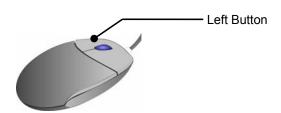
Step 2) Press "1".

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.



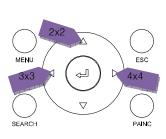
❖ Multi screen display

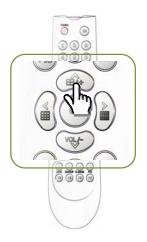
The unit support multi screen display mode such as 2x2, 3x3 and 4x4 divisions.

1. Front panel & Remote controller

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

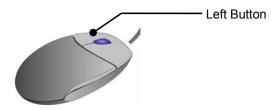






2. Mouse

Click Left button at any location on the screen.



2. Quick menu

Click Right button and the quick menu appear.

2x2 division : Click 2x2

• 3x3 division : Click 3x3

4x4 division : Click 4x4



Page 22 of 69

❖ Audio volume control

There are two ways to control audio volume and muting.



1. Using Volume button

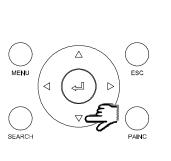
Press "VOL" button, then Volume control menu will be shown.

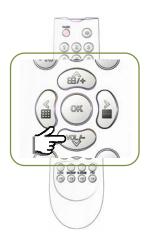
Volume up : Press Up (+) button

Volume down : Press Down (-) button

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

and press OK button.





2. Using Quick Menu

- 1) Right click on mouse button, and 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.

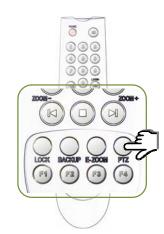


PTZ (Pan / Tilt / Zoom) (Single screen mode only)

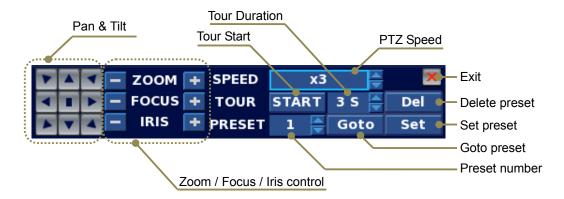
This facility works in following conditions;

- 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)

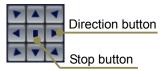


2.2 Key board control(Optional)

3. Pan & Tilt

It is same manner you use GUI or remote controller.

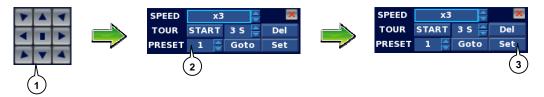
- Choose a desired direction button you want to move.
- To stop moving, press Stop button.



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.

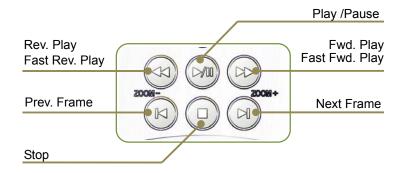
- Event Search : Motion or alarm event point is used as a playback start point.

❖ Playback Control

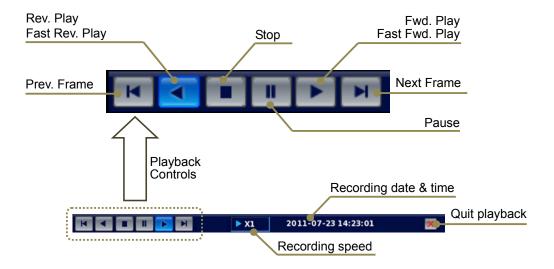
You can control playback using 3 control tools Front panel, Remote controller and GUI.

Function	Front Panel	Remote Controller	GUI (Mouse)	Remark	
Fwd. Play	-	•		Quick play	
Rev. Play	-	•			
Pause	-	Q-PLAY		Keep playback speed.	
Stop	-	•		Playback speed returns to x1.	
Next Frame	-	ZOOM+	▶	Playback frame by frame.	
Prev. Frame	-	ZOOM-	*		
Fast Fwd. Play	-	\odot		Playback speed is changed from x1 to x64 when press play button.	
Fast Rev. Play	-	•		NOT WHEN PIESS Play Dutton.	

1. Remote Controller



2. GUI

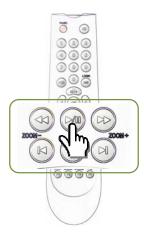


Quick play

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, 2x2 screen mode or 3x3 screen mode. If you want duration time changed where the setting duration time in display menu.

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

Clicking the sequence again 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 will appear.



❖ De-interlace On/Off

Deinterlace Off offers the Deinterlace mode off.

When Deinterlace Off item changes to Deinterlace On.

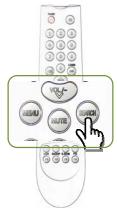
When you click the "Deinterlace On" the Deinterlace mode on.



Entering to search menu

1. Front panel & Remote controller

Press SEARCH button on remote controller, then a menu panel will be displayed.



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 dates.

Black colored dates have no recording data.



Step 2. Choosing an hour

Recording map will be shown in an 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". To choose 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 will 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.



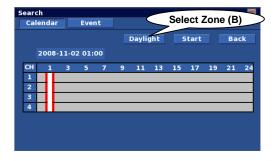
Daylight in calendar search mode

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, event list will be displayed.
- Step 7. Choose one event that 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 exist within your selected range in Step 6 & 7.

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 a 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 an industrial standard AVI file.

Be advised that some media players do 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 another 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 Backup Menu

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



❖ 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 capacity is 4.5GB,

 and remaining capacity is 8MB.
- Step 3. In the case of CD-RW or DVD-RW,

 Erase button will be enabled.

 You can erase the media using this button.
- 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" on CD-RW or DVD-RW tray to open.
- Step 12. Choose a backup mode between background mode and normal.

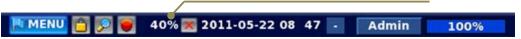
Note that the backup time is same between two backup modes.

Choose YES for background mode.

The unit will return to live view mode, and backup will start.

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

Backup status in background backup mode



Choose NO to start to backup immediately.

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

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



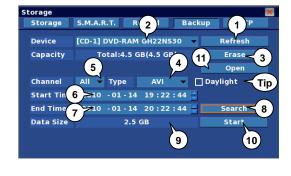


[Other storage]



Daylight in backup

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





Chapter 4. Setup

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
 PAL : 25 / 12.5 / 6.25 / 3.125



D1 real time recording

You can record D1 (704x480) size image in real time (120Frames/sec) when 4 cameras are connected to the system.

Quality

High quality means shorter recording time, because the compression file size is getting bigger and bigger when you choose more high quality levels. 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.

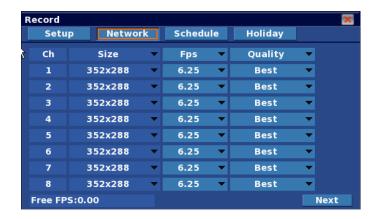
Post (post alarm duration)

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 rates are listed by image size.

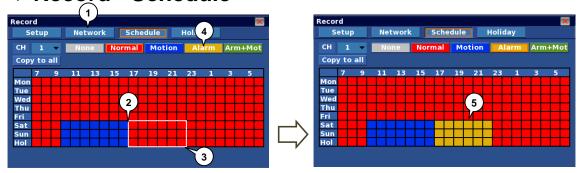
NTSC : 30 / 15 / 7.5 / 3.75 / 1.88
 PALT : 25 / 12.5 / 6.25 / 3.125

Quality

High quality means shorter recording time, because the compression file size is getting bigger and bigger when you choose more high quality levels. 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 the week, any hour, and holiday.

See Recording::Holiday to assign holiday.

Step 3. Select stop point.

Step 4. Select a recording mode.

(Alarm is selected 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 change into red, holiday.

Delete a holiday

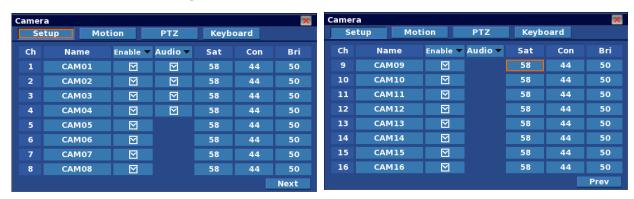
Select a desired holiday and press OK, the holiday will change into black, working day.

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.

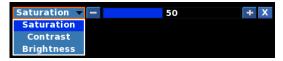
Note that Ch. 1 should be turned on always.

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 consist of 15x15 cells.

You can enable or disable each cell.

Full : All cells are enabled.

User : You can configure each cell.

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

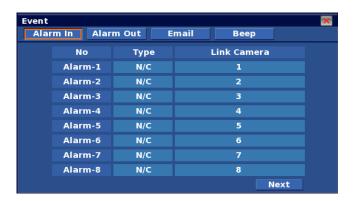
You can configure RS-485 communication settings.



[Settings]

Event Settings

* Event - Alarm In



Type

You can configure the alarm device's output polarity.

N/C : Normal CloseN/O : Normal Open

Link Camera

The linked camera starts to record-when alarm event is detected.

Event - Alarm Out



Alarm Out Number?

Set the alarm out number you want to configure.

Duration

You can set alarm output durations up to 30 seconds.

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

Motion

If box checked, Alarm output will be turned on when motion event is detected on the selected channels

Video Loss

If box checked, Alarm output will be turned on when video loss event is detected on the selected channels

Alarm In

If box checked, Alarm output will be turned on when the camera records by alarm during event. It is reflecting "Link Camera" settings in the 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 #1and/or Alarm #2 event is activated.

* Event - Email

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



Power Up

If box checked, Email is sent when power is turned on.

HDD

If box checked, Email is sent when HDD event occurs.

Motion

If box checked, Email is sent when motion event is detected on the selected channels.

Video Loss

If box checked, Email is sent when video loss event is detected on the selected channels.

Alarm In

If box checked, Email is sent when the camera records by alarm during event. It is reflecting "Link Camera" settings in the Event - Alarm in menu.

Event - Beep



Power Up

If box checked, buzzer beeps when power is turned on.

HDD

If box checked, 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

If box checked, Email is sent when motion event is detected, on the channels selected.

Video Loss

If box checked, Email is sent when video loss event is detected, on the channels selected.

Alarm In

If box checked, Email is sent when the camera records by alarm during event. It is reflecting "Link Camera" settings in the 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, you can do one of the following: move the mouse pointer to bottom of the screen; press OK, use the menu in the front panel, or use the remote controller. You can set show-time of the status bar from 1 to 10 seconds.

This configuration is applied to the playback control bar also.

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

Sequence

If checked it will enable main screen rotation. You will be able to set a duration time.

Press combo box to show virtual keyboard.

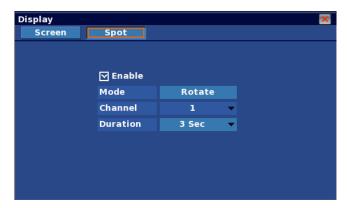
Alpha blending

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

Clicking the box enables spot operations.

Mode

There are two mode options: 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 option from the list below:

• 3 / 5/ 10 / 20 / 30 seconds.

Storage Settings

Storage - Storage



Temperature Limit

HDD event occurs when HDD temperature exceeds this limit.

Enable

Clicking the checkbox 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.

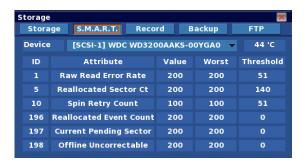
Temperature

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 indicate exact HDD conditions.
- 2. Some old or new HDD could show correct S.M.A.R.T. information.



Device

It shows the storage information.

ID

It is an index of the 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 is close to or lower than the threshold value, then the HDD may has some problems.

Storage - Record



Record Duration

You can configure Record time using the options below:

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

Write Mode

There are two mode options.

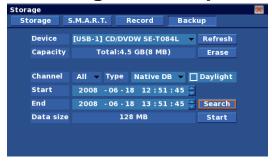
Overwrite: Old data on the HDD will be erased when the HDD is full.

Suspend: Recording is stopped when the HDD is full.

Early Warning

HDD warning will be issued if remaining HDD capacity is less than the selected limit. From 5% to 30% are available.

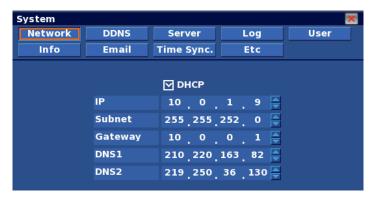
Storage - Backup



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

System Settings

❖ System - Network



DHCP

Check this option if you will not using fixed IP.

The unit requests 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, the unit can get IP address within a couple of seconds.

If you are not using DHCP, you have to fill all information manually.

Obtain details about the Network information from your ISP or network administrator.

System - DDNS



DDNS

Check this box to enable Dynamic DNS function. You can choose from one of two DDNS options.

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. Simply assign a domain name and click Apply.

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



DYNDNS

This is a public DDNS, registration is essential.

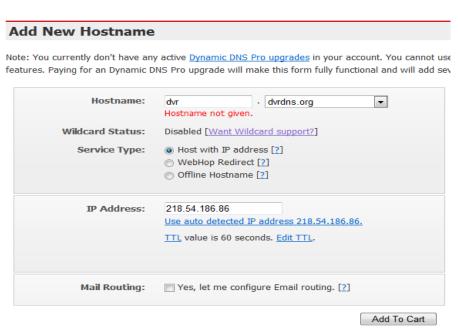
Step 1) Register (sign-up) on the web.

Currently, we support DNIP.NET, a free service.

You will need to sign-up at www.dyndns.com to get a User ID and password.

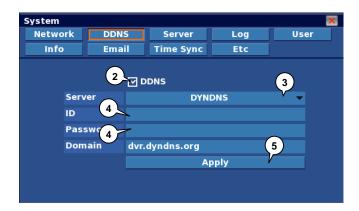
You will need to configure "port forwarding" if you are using a router.

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



[DYNDNS sign-up screen]

- Step 2) Check the DDNS option box.
- Step 3) Choose DYNDNS
- Step 4) Enter the User ID and password that you registered with at www.dyndns.com
- Step 5) Click the Apply button, a Success Message box will be shown.



System - Server

Unit Network Settings are shown in this menu.



TCP / UDP / HTTP port

These ports are fixed to 5000, 5100 and 8080; this is used for CMS and Web viewer service.

Max. Connect

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

System could be unstable if the number of connections is higher.

Max. Search

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

Because searching requires excessive system resources, a higher search value could cause unstable operation.

Event Server

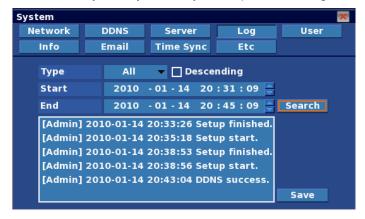
Press "Event server" button, the Server list box will appear.

The server list shows received server information from event data by CMS host.



System - Log

You can verify history of the system operation using the Log Menu.



Type

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

Start / End

You can set the Search Range using this Drop Down Menu.

Search

Search will begin as soon as the Search button is clicked.

Save

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

System - User



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

System - Info



Name

Name on network (CMS).

Remocon ID

Identification for InfraRed (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 the network; it must be unique to prevent conflict on the network.

Service Menu/ Admin 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 for SMTP Authentication.

Server

IP address or URL of SMTP server for sending emails

ID

Sender email account of the SMTP server.

Passowrd

Password of the sender account.

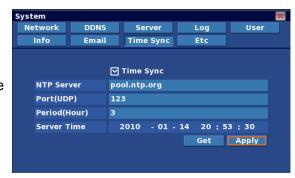
TestSend

Test Mail button will send a test email as soon as it is pressed.

❖ System - Time Sync.

Time Sync.

When the box is checked, the unit starts to synchronize the System clock with Network time server using NTP. NTP server offers the 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 an NTP Server port fixed by network time server.

Period (Hour)

The unit synchronizes the clock periodically; you can set the Period in hour units.

Server Time

It shows the time offered by Network Time Server when you press the Get button.

Get

When the Get button is clicked, the unit will try to get a time from the Network Time Server. Server Time will be updated if there is no problem.

Apply

Once you have found and made the changes, click on the Apply buttong to complete the changes made to current system time using Network Time Server in the "Time Synchronization" tab.



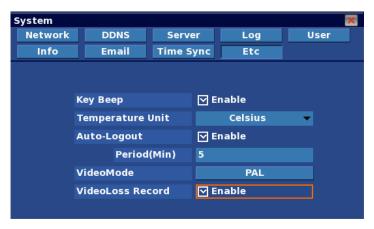
Failure of time synchronization

If time difference is significant, Failure Message will appear.

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

If system time is faster than the 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.

You have the option to enable or disable this feature.

Temperature Unit

You can choose the Temperature display unit between Celsius degree and Fahrenheit degree.

Auto-Logout

It enables Auto-Logout operations.

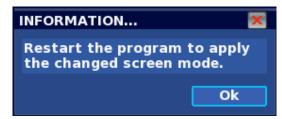
In Auto-Logout operations, you can adjust the duration using the virtual keyboard.

Duration is adjustable from one to sixty minutes; by one minute units.

VideoMode

You can choose between two Video Modes: NTSC and PAL.

If you change the video mode, a warning window appears; Click OK.



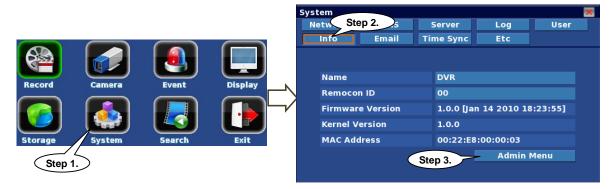
VideoLoss Record

Video Loss will be recorded if you click on the **Enable** check box.

Chapter 5. Admin Menu

Entering the Service Menu

You can enter the Service Menu through System/Info/ Admin Menu.



❖ Admin - Upgrade



You can upgrade Kernel and Firmware using USB storage at same time or separately.

- Step 1: Choose the USB storage that contains the Upgrade file. Press the "Refresh" button if there is no USB storage device.
- Step 2: Press the "Refresh" button.

 The unit will start to scan USB storage and show it's version.
- Step 3: Press the "Upgrade" button to start the Upgrade.

 Upgrade will take 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, you can format any data disk in the Service menu. Press Format button on the GUI.

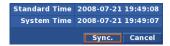
❖ Admin – DateTime



Time Sync.

You can adjust the System clock using the "Time Sync." menu.

Standard Time will appear as shown below when you press the "Sync" button.



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

Current Time

System shows current system clock, which can be adjusted manually. Press "Apply" to accept changes to the system clock after adjustment.

GMT/Location

Assign correct location where the unit is installed.

Since this information is a reference for the daylight savings rule this must be correct.

* Admin - Etc



Language

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

Delete Log

Click the Delete button to delete the 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	etwork		
	Fps (Network speed)		
	Image Quality		
Schedule			
	None		
	Normal		
	Motion		
Alarm			
	Alarm+Motion		
Ho	oliday		
	Today		
	Clear All		

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

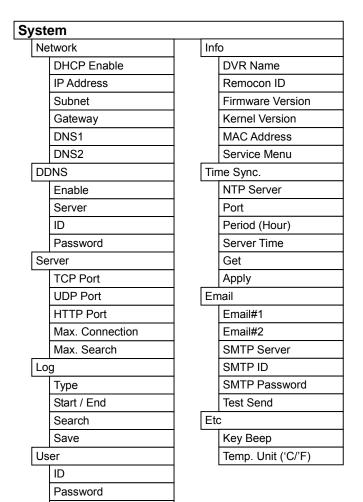
Camera		
Setup		
	Camera Name	
	Camera Enable	
	Audio Enable	
	Saturation	
	Contrast	
	Bright	
Мо	otion	
	Enable	
	Region	
	Sensitivity	
PT	Z	
	ID	
	Model	
	Setting	
Keyboard		
	Keyboard Model	
	Setting	
	DVR Number	

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

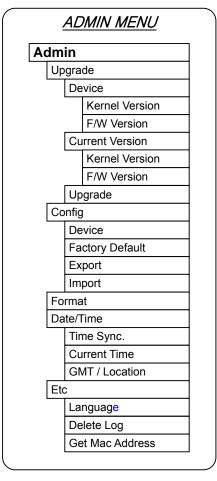
Event				
Ala	Alarm In			
	Туре			
	Linked Camera			
Ala	arm Out			
	Alarm Out No			
	Duration			
	Motion			
	Video Loss			
	Alarm In			
En	nail			
Power Up				
	HDD			
	Motion			
	Video Loss			
	Alarm In			
Ве	ep			
	Power Up			
	HDD			
	Duration			
	Motion			
	Video Loss			
	Alarm In			

St	Storage				
	FT	P			
		Address			
		ID			
		Password			
		Port			
		Schedule			

[Continued]



Permission Hidden



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)

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

Appendix 2. Factory default settings

* Firmware (F/W) Version: 1.1.0 [Jan 15, 2010]

* Password: 11111111 (Type # '1' Eight times)

■ R E C O R D

Parameter	Default	Range
Setup		
Image Size		
NTSC	360x240	704x480 / 704x240 / 352x240
PAL	360x288	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	360x240	704x480 / 704x240 / 352x240
PAL	360x288	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

■ 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 ~ 016	001 ~ 255
Model	None	Various
		Baud: 1200 / 2400 / 4800 / 9600 / 19200 bps
Setting	9600 8-N-1	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
Веер		
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

Parameter	Default	Range		
•		<u> </u>		
Network DHCP	Unobooked	Charled / Unabarled		
	Unchecked	Checked / Unchecked		
IP Subnet	192.168.0.100 255.255.255.0	_		
		_		
Gateway DNS1	192.168.0.1	_		
DNS1	168.126.63.1 168.126.63.2	-		
.	100.120.03.2	<u> </u>		
DDNS				
DDNS	Unchecked	Checked / Unchecked		
Server	-	_		
ID	-	Max. 20 character		
Password	_	Max. 20 character		
Domain	-	Max. 20 character		
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	All		
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		
•	None	1 7		
Info				
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 ~ 69333		
	5501			
Etc	0			
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 -

Appendix 3. Limited 1 Year Warranty

This warranty gives the original purchaser specific legal rights and you may also have other rights, which may vary from state to state. If our products do not function because of any defect in material or workmanship, we will repair it for free for 1 year on parts and labor from the date of original purchase. This warranty does not cover modification, abuse, incidental or consequential damages unless the state of owner's residence specially prohibits limitations on incidental or consequential damages.

Appendix 4. How to obtain Factory Service

- Original purchaser must fill out the warranty card and mail it to the factory with the model number, serial number and the date of purchase.
- We will repair or replace, and return the system to the owner under this limited warranty.
- Please pack the system carefully and securely using the original packing materials, and send it prepaid and insured to: 13073 E. 166th St, Cerritos, CA 90703.
- Please include a check for \$25.00 to cover the cost of return postage and handling. If the system is returned within the warranty period, please include a proof of purchase. If the system is out of warranty, you will receive an estimate of the repair cost for your approval before repair work will be started.

Manual of Mobile Viewer

Our Mobile Viewer solution is an independent Operating System (OS). It can be easily connected to a DVR via the Internet Browser of any Mobile OS. Supported Mobile Operating Systems are listed below:

- Safari for iPhone
- Browser for Android
- Internet Explorer for Windows Mobile
- Browser for Symbian

1. Safari for iPhone



Touch the Safari icon.

Touch the Address Bar.



Enter the DVR's address or the Host name with web server port and "/m/"as below.

Example 1: http://65.60.84.40:8080/m/
Example 2: http://joseph.dyndns.org:8080/m/





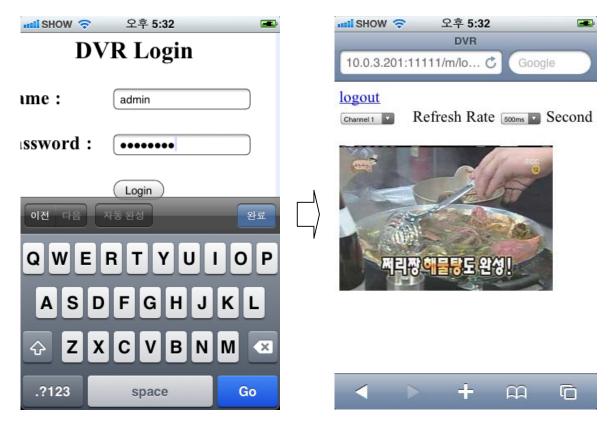


- -Enter DVR's user name and password.
- -Default login box is too small; you can zoom in with two fingers.

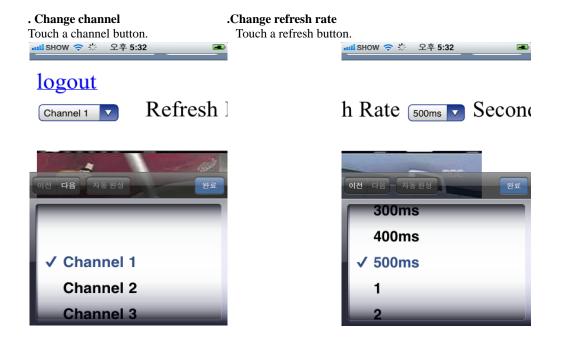








Once you finished inputting username and password, press the Login button.



Instruction Manual

Digital Video Recorder Web Viewer

Model: DV1630, PAC1558

INDEX

Chapter 1. General	
Access over the Internet	3
Chapter 2. Settings & Connections	
Internet Explorer 7	4
Internet Explorer 6	7
Chapter 3. Basic operations	
Automatic disconnection	10
Web viewer screen	10
Log-in	11
Mode control	11
Layout control	12
PTZ controls	12
Quit / Log-out	12
Chapter 4. Search operations	
Search	13
Playback controls	

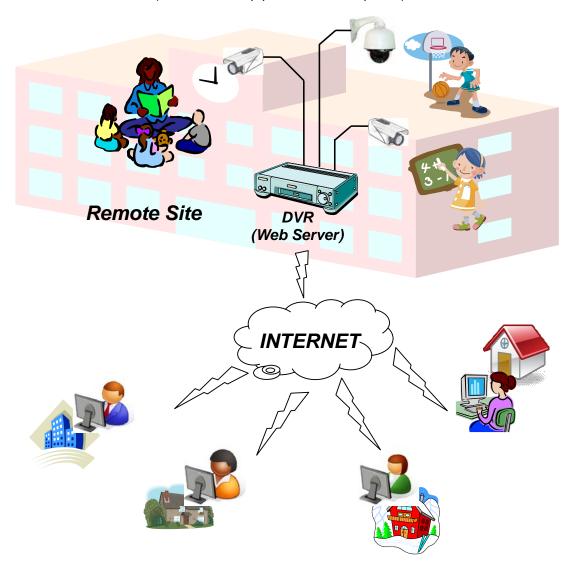
Chapter 1. General

Access over the Internet

Authorized users can access the DVR through the internet anywhere and at anytime.

DVR serves the following three features for web viewer users.

- Live view
- Search & Playback (Search permission is required.)
- PTZ camera control (Search or Setup permission is required.)



Chapter 2. Settings & Connections

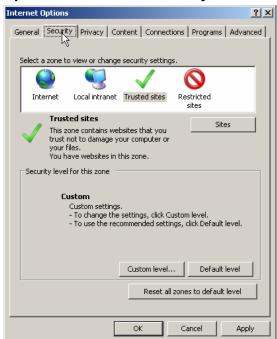
Internet Explorer 7



Step 1. Go to the Tools Menu and select "Internet Options".



Step 2. Move to the "Security" tab.

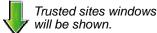


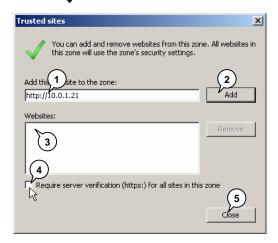
Step 3. Select "Trusted sites" zone to view section.



Step 4. Add a DVR to Trusted sites.



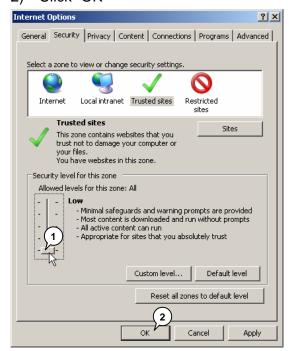




- 1) Type DVR IP address/URL directly.
- 2) Click "Add" button.
- 3) A new address will be added to here.
- 4) Uncheck server verification option.
- 5) Click "Close".

Step 5. Set security level to Low.

- * See Step 8. If you want to set the level to "Medium" or "Medium-low".
- 1) Select "Low" security level for Trusted site.
- 2) Click "OK"



Step 6. Connect to DVR

- 1) Enter an address including port number "8080". (Ex. "http://10.0.1.21:8080")
- 2) Click "Go" or tap Enter key.



Step 7. Install an ActiveX control

Security warning message will be shown as below.

Select "Install" to access DVR.



Step 8. For advanced users

If you want to set the security level to "Medium" or "Medium-low" in Step 5., change the following ActiveX options:

1) Automatic prompting for ActiveX controls : Enable 2) Binary and script behaviors : Enable 3) Download unsigned ActiveX controls : Prompt Initialize and script ActiveX controls not marked as safe...: Prompt Automatic prompting for ActiveX controls Download unsigned ActiveX controls O Disable O Disable O Enable Enable 🥡 Binary and schি\$t behaviors Prompt Initialize and script ActiveX controls not marked as safe for Administrator approved O Disable O Disable C Enable Enable

Prompt,

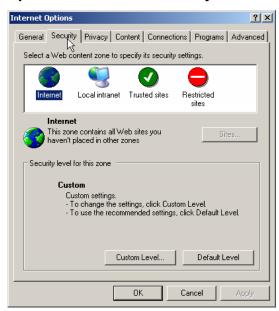
Internet Explorer 6



Step 1. Go to the Tools Menu and select "Internet Options".



Step 2. Move to the "Security" Tab.



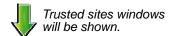
Step 3. Select "Trusted sites" zone to view section.

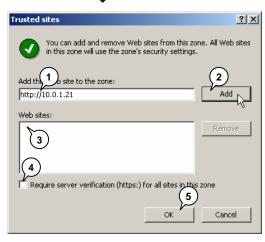


Step 4. Add a DVR to Trusted site.

Click "Sites..." button



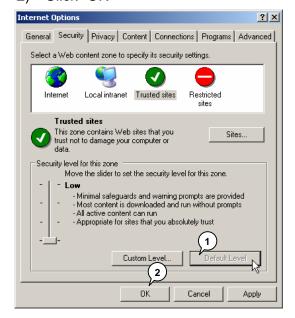




- 1) Type DVR IP address/URL directly.
- 2) Click "Add" button.
- 3) A new address will be added to here.
- 4) Uncheck server verification option.
- 5) Click "OK".

Step 5. Set to the default security level.

- * See Step 8. If you want to set the level to "Medium" or "Medium-low".
- 1) Click "Default Level" to set Low Security level for trusted site.
- 2) Click "OK"



Step 6. Connect to DVR

- 1) Enter an address including port number "8080". (Ex. "http://10.0.1.21:8080")
- 2) Click "Go" or tap Enter key.



Step 7. Install an ActiveX control

Security warning message will be shown as below.

Select "Install" to access the DVR.

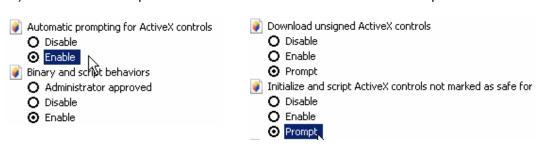


Step 8. For advanced users

If you want to set the security level to "Medium" or "Medium-low" in Step 5., change following ActiveX options, please.

Automatic prompting for ActiveX controls : Enable
 Binary and script behaviors : Enable
 Download unsigned ActiveX controls : Prompt

4) Initialize and script ActiveX controls not marked as safe...: Prompt



Chapter 3. Basic operations

Automatic disconnection

DVR denies or disconnects when it is handling a critical task such as following:

- DVR is updating system configurations.
- DVR enters to search mode.
- DVR starts to backup.

Try later when the Web Viewer shows any of these messages.

Web viewer screen



Status Display

"LIVE" : Live Mode

"> x1" to "> x16" : Forward playback mode (x1 - x16 means playback speed)
"< x1" to "< x16" : Reverse playback mode (x1 - x16 means playback speed)

Log-in

Step 1. Enter an ID & Password

It must be same ID & Password as the one used to register on the server.



Step 2. Enter a port number (5000)

Do not change this number.

Step 3. Click the Login button to log-in.

You can find that mode display is changed from "Disconnected" to "Live mode".



Permission

Administrator can assign different permission set-up for each user.

Permission granted to Admin and Guest is fixed to All and LIVE.

Refer to System / User menu on user's manual.

Permission	Layout Control	Search & Playback	PTZ Controls	Remark
Live	0	X	X	Guest
Search	0	0	0	
Setup	0	0	0	
All	0	0	0	Admin

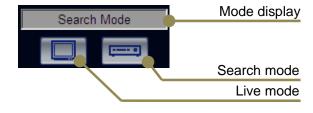
Mode control

Web Viewer supports the following two modes:

1) Live Mode

Click Live mode button.

Server will transmit live video streams and audio streams in real time.



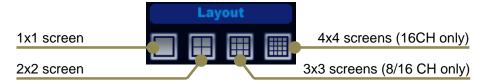
2) Search mode

Click Search mode button.

Calendar search tool and playback controls are supported.

Layout control

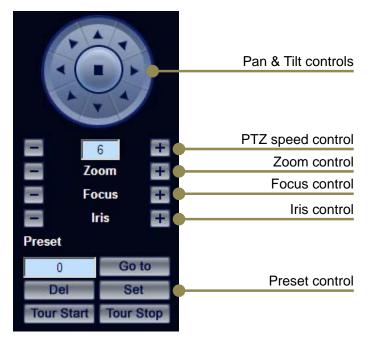
You can select a layout between single and split during either mode control.



PTZ controls

You need "Search", "Setup" or "All" permission to use PTZ controls.

Must change the layout to 1x1 screen mode prior to using PTZ controls.



Quit / Log-out

Click the "Quit" icon to log-out.

Mode will be displayed as "Disconnected".



Chapter 4. Search Operations

You can search video data, which is stored on the remote site's DVR, through web viewer.

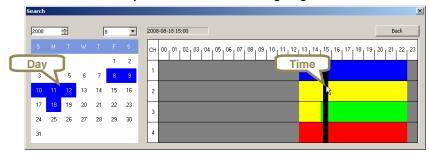
Search

Step 1. Click Search mode button



Step 2. Choose a specific Day & Hour.

Available days are shown in blue high-light on the calendar; choose a specific day.



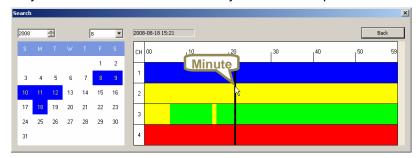
TIP Recording Mode color

Search map is shown with recording mode color described below.

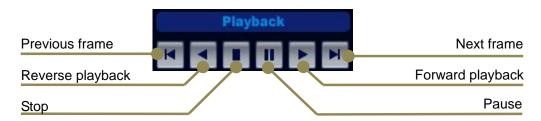
Blue: Recording data by motion event
Yellow: Recording data by alarm in event
Green: Recording data by motion+alarm event
Red: Normal recording data or Panic recording data

Step 4. Choose specific Minute

Playback will be started as soon as you click on a specific minute on the search map.



Playback Controls



Fast playback control

Web Viewer supports multiple playback speeds (x1, x2, x4, x8 and x16).

The speed is changed when the playback button is clicked during playback.