

H.264 Network Digital Video Recorder

**GEN IV
TECHNOLOGY**



RTA QUICK START GUIDE

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INTRODUCTION

Thank you for purchasing the GenIV H.264 Network DVR. Please read this quick start manual carefully to ensure proper use of the equipment and to utilize the benefits of H.264.

This manual provides the user with a quick reference for DVR setup and operation. For complete details on operations and features, please refer to the Full User Guide. This quick start manual was written for DVR firmware revision V1.6, build 070506. DVR firmware revision can be found under the Menu → Utilities → System Info menu.

The contents of this quick start guide are subject to change without prior notice.

PRODUCT DESCRIPTION

Front Panel Description

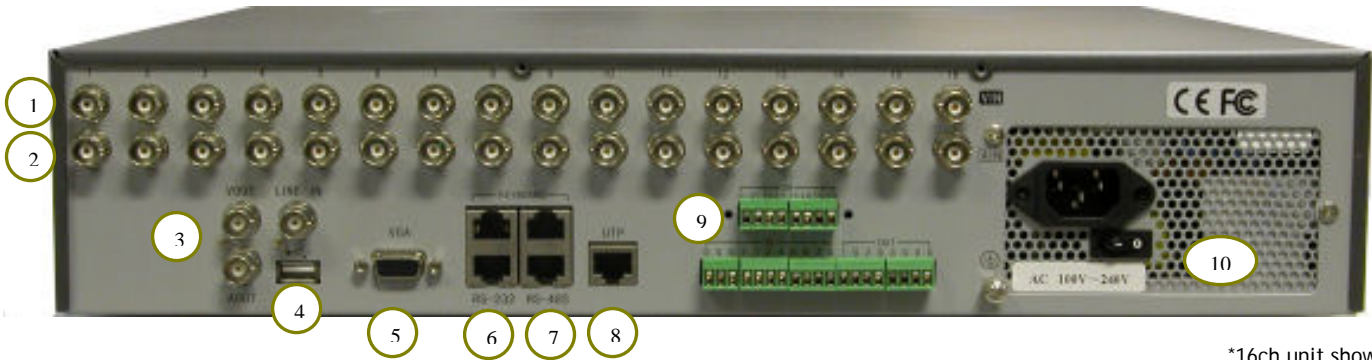


Feature	Name	Description
1	DVD-RW	Access the DVD-RW drive by gently pressing on the access door
2	Indicator Lamps	<p>READY: DVR is ready for use</p> <p>STATUS: Green indicates IR remote is active and in use</p> <p>ALARM: Red indicates an alarm has been triggered</p> <p>MODEM: Green indicates dialup connection successful and active</p> <p>HDD: Red indicates reading/writing to the hard drive</p> <p>LINK: Green indicates network is up</p> <p>Tx/RX: Green flashing indicates network activity</p>
3	Function Keys	<p>MENU: -Access the On Screen menu -In Playback, hides status bar</p> <p>ESC: Cancels action / returns to previous screen</p> <p>EDIT: -During character field edits, this deletes the current character -Selects ✓ or × to enable/disable options -Edits character and numeric fields within the menu</p> <p>PLAY: -Enters playback/search mode -In playback, enables/disables audio</p> <p>REC: -Enters 24/7 manual record mode -In Playback, enables Digital Zoom</p> <p>PTZ: Enters PTZ control mode</p> <p>PREV: -Switches between the live display views (single, quad, etc.) -Returns to live/preview mode</p> <p>A: -Switch between Number, Lower Case, Upper Case, and Symbol -During live mode, display or hides the channel status indicators</p>

		<p>INFO: Zoom in while in PTZ mode</p> <p>VOIP: -Zoom out in PTZ mode</p>
4	Control Keys	<p>Used for navigating and editing options within the menus.</p> <p>Menu: use ← / → to select, ↑ / ↓ to edit</p> <p>PTZ: Use for PTZ direction control</p> <p>Playback: Use for playback speed control</p> <p>ENTER KEY: -Menu Confirmation -Selects ✓ or × to enable/disable options -Pause playback</p>
5	Channel State Lamps	<p>Shows status for each channel</p> <p>Green: Channel is recording</p> <p>Red: Channel is being accessed remotely</p> <p>Orange: Channel is being accessed remotely and recording</p> <p>Flashing: Channel has hard drive error</p>
6	IR	IR receiver for IR remote controller
7	Power	Power switch with indicator lamp. Green indicates power on, red indicates power off, no lamp indicates no power is being supplied.

PRODUCT DESCRIPTION

Rear Panel Description



*16ch unit shown

Feature	Name	Description
1	Video Input	1-16 camera inputs. Connect camera site equipment.
2	Audio Input	1-16 audio inputs. Connect audio site equipment. Corresponds to video inputs 1-16 respectively.
3	Video/Audio Output	VOUT: Connect monitor. Outputs video and menu. AOUT: Connect Amplified Speaker. Outputs audio. LINE IN: Connect external Microphone for voice function
4	USB	USB 1.1 for USB flash memory stick, USB HDD, USB CDRW/DVDRW, USB Mouse
5	VGA Interface	VGA Display. Allows VGA (PC) monitors to be used as the main display.
6	RS-232	Connects supported RS-232 devices such as modems/ATM
7	RS-485	RS-485 for PTZ Control. Pin 1 RS-485+, Pin 2 RS-485-
8	Network Interface	10/100 Ethernet interface. Used for networking and remote access functions.
9	Alarms	4/8/16 External Alarm Inputs. 2/4 Alarm Relay Output.
10	Power	Power switch. Input 100V-240VAC

HDD and DVD-RW Installation

This unit supports up to 8 internal IDE hard disk drives (HDD). 4 hard drives can be used along with a DVD writer or 8 hard drives can be used without the DVD writer.

1. The unit supports four IDE interfaces. Each IDE interface can have one Master device and one Slave device attached. Consult your HDD and DVD-RW documentation to determine the jumper settings to enable Master/Slave settings for your drive.
2. Mount the DVD-RW to the bracket and set for Master. Use the supplied ribbon cable to attach to IDE1. Install the hard drive and set for Master and use the supplied ribbon cable to attach to IDE2. A second drive can be added as SLAVE to IDE2. Additional drives can be added using the remainder IDE interfaces. Plug in all power connections to all devices using the available power connectors. See Fig. 2 and Fig. 3.
3. Power on the DVR. During the boot sequence a ✓ will be placed over detected devices. See Fig. 1.
4. Format ALL the hard drives under the Menu → Utilities → Hard Disk menu.

Fig.1



IDE 1	IDE 1	IDE 2	IDE 2
Master	Slave	Master	Slave

Fig.2

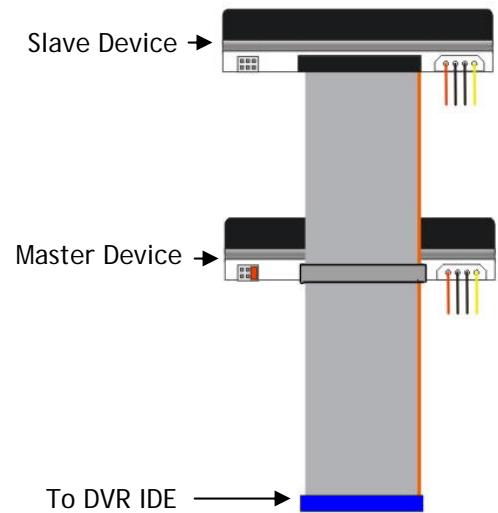
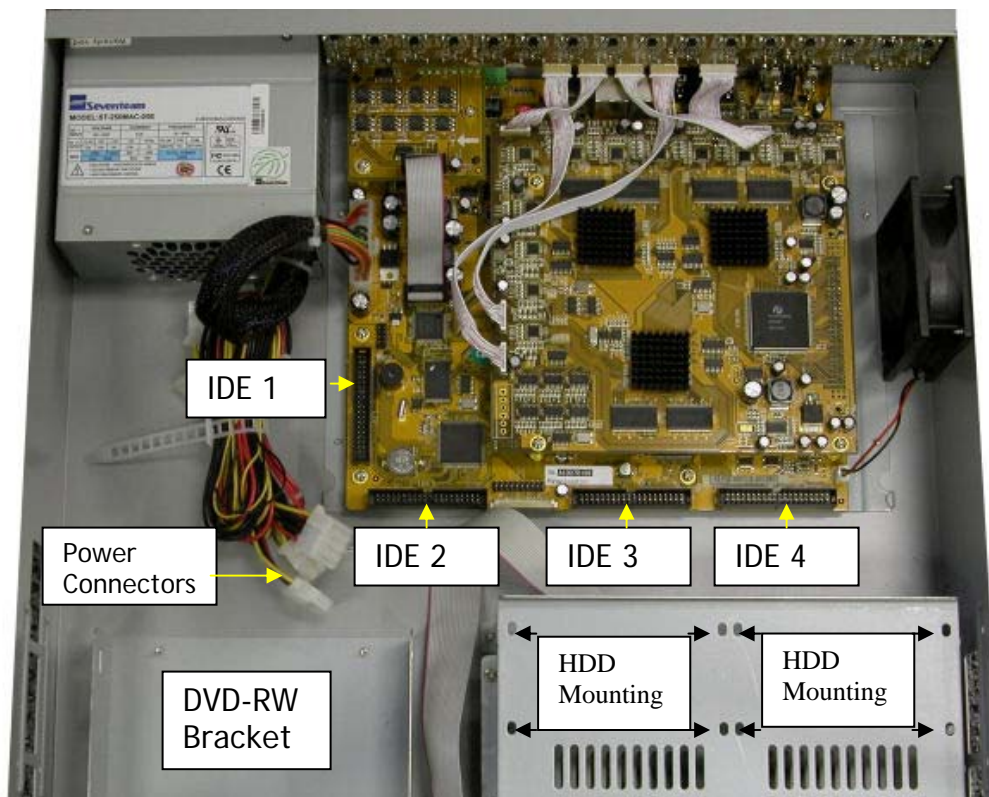



Fig.3



Initial Setup

All operations in this guide will be accessed using the IR remote controller. The functions of each key on the remote are the same as those on the front panel of the DVR. See pages 4 and 5 for descriptions and use of the function keys (Menu, Play, Rec, etc.).

To enable the IR remote controller:

1. Aim the remote towards the front of the DVR
2. Press  , 8, 8 , Enter
3. The Status indicator on the front panel of the DVR should be green; indicating the IR remote is active.

Basic Navigation: Within the menu use ← / → to move/select, ↑ / ↓ to edit

Default DVR Login Password: 12345

The DVR currently defaults with no recording options set. In addition, each channel and each day of the week is independently configured. Be sure when initially setting or modifying recording parameters, to copy parameters to all channels and copy all parameters to all days if needed. See page for more details on setting recording parameters.

View

The preview (live) view displays date/time, camera name, and status indicators for each channel.

-To change the view from single, 4-split, 9-split, 12-split, 16-split press the PREV key.

-To Select a channel press the 2-digit channel number. For example, to select camera 1 press "0" then "1".

-To manually cycle through the channel inputs, press the EDIT key

Status Indicators

-There are record and alarm status indicators for each channel located on the bottom of the preview screen. The status cycles between record and alarm. The indicators can be hidden by pressing the A KEY. The color descriptions are listed below:

REC STATUS:

Icon	Color	Description
	White	Not Recording - No Video Detected
	Yellow	Not Recording - Video Detected
	Pink	Recording - Manual Record
	Green	Recording - Schedule Record
	Blue	Recording - Motion Record
	Red	Recording - External Alarm Record

ALARM STATUS:

Icon	Color	Description
	White	Video Loss
	Yellow	View Tampering Alarm Triggered
	Pink	Motion & External Alarm Triggered
	Green	No Motion Detected / No Alarm
	Blue	Motion Detected
	Red	External Alarm Triggered

EXAMPLES

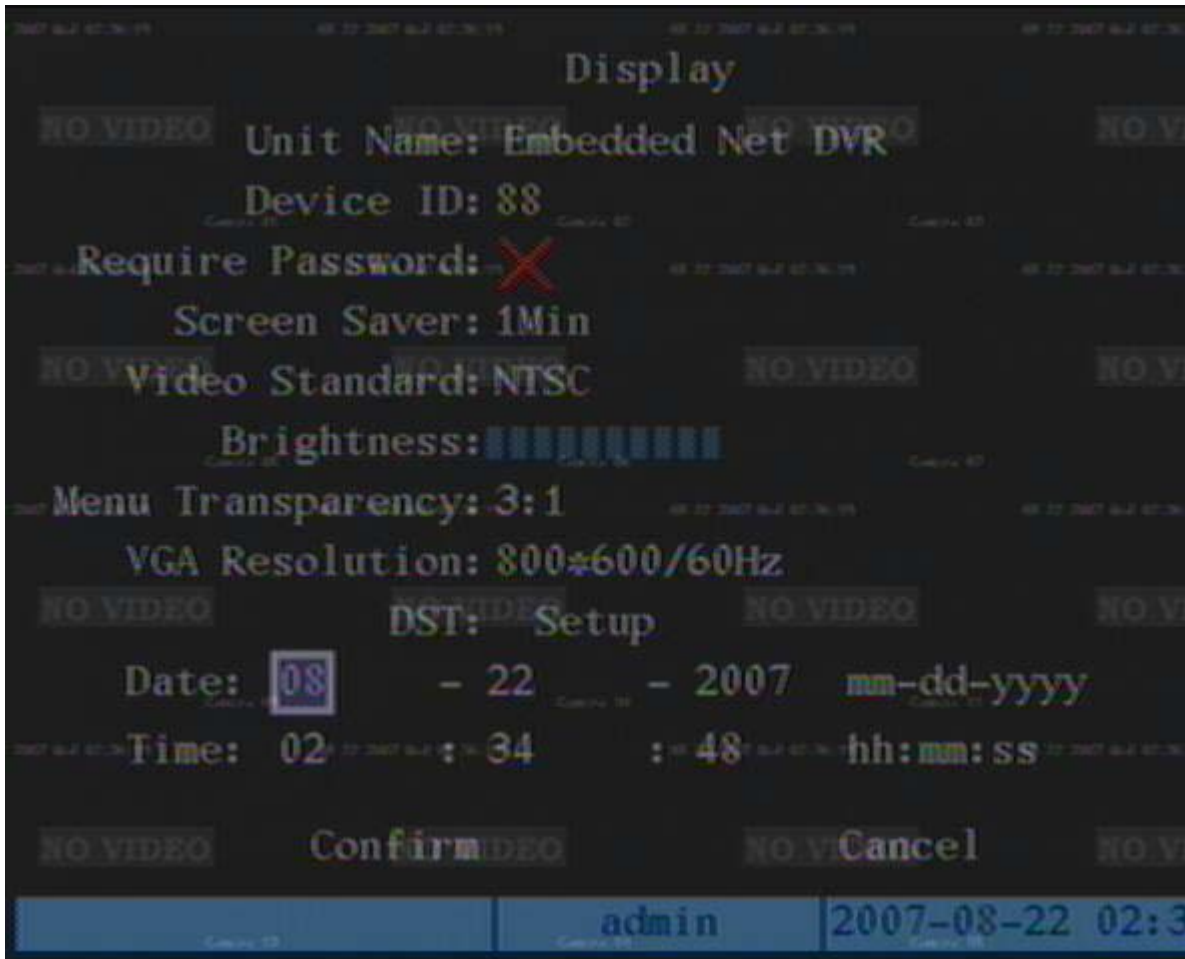
Rec Icon	Alarm Icon	Description
		Green/Green. Typical with correct Schedule Record setup. Schedule Recording is active and no alarm or motion triggered.
		Blue/Blue. Typical with correct Motion Record setup when motion is present. Motion Recording is active and motion is being detected.
		Yellow/Green. Typical with correct Motion Record setup when no motion is present. Not recording, no motion being detected.
		Green/Blue. Typical with incorrect Motion Record setup. Schedule Recording active (not motion), motion being detected. Needs Schedule set to Motion Detect.
		Pink/Green. Manual Recording is active and no alarm or motion triggered



TIME/DATE SETUP

Time/Date Setup

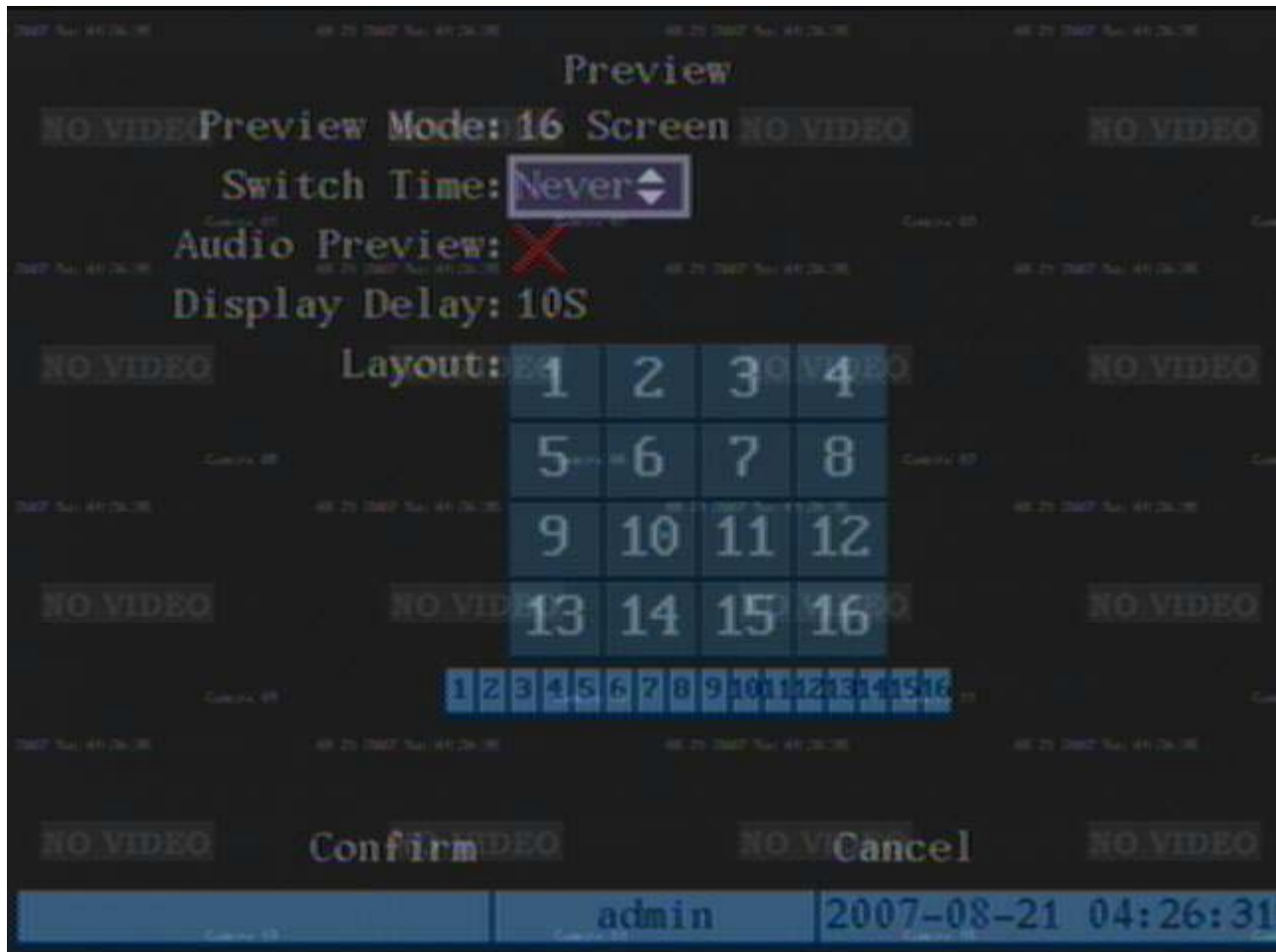
Set the time/date by entering the Menu → Display. Use the → key to navigate to the Date/Time fields, edit the fields, and Confirm the changes.



SEQUENCE SETUP

Sequence Setup

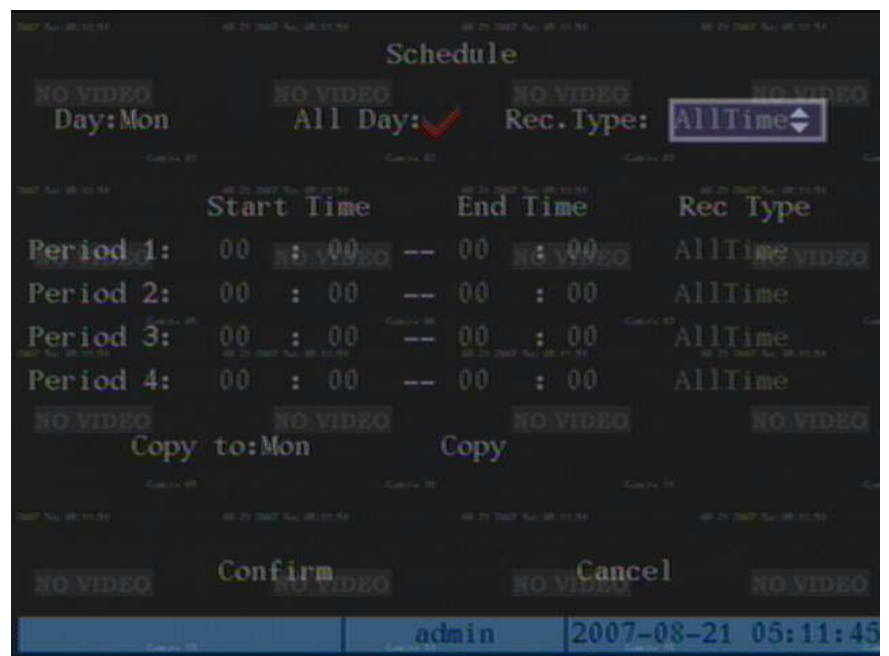
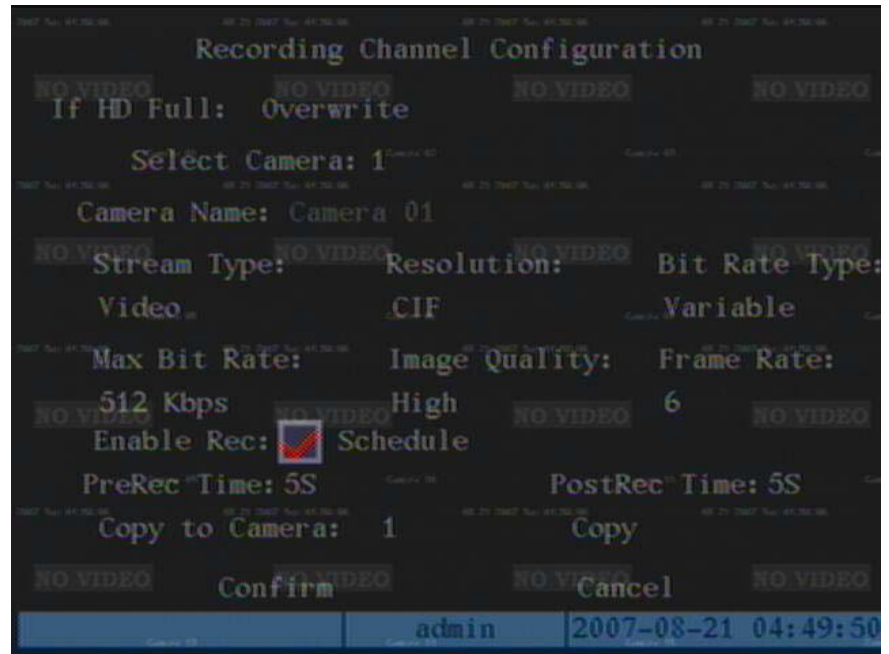
The DVR enables sequencing by default. To modify the delay or disable sequencing enter the Menu → Preview. Use the → key to navigate to the "Switch Time" field and select the appropriate delay. Select "Never" to disable sequencing.



Schedule Record

The DVR supports many recording methods and parameters. For this example, we will set the DVR to record all channels 24/7 at 6 frames/sec. Since each day and each channel is independently configured, we will ensure we have copied our schedule to ALL days and have copied our record options to ALL channels.

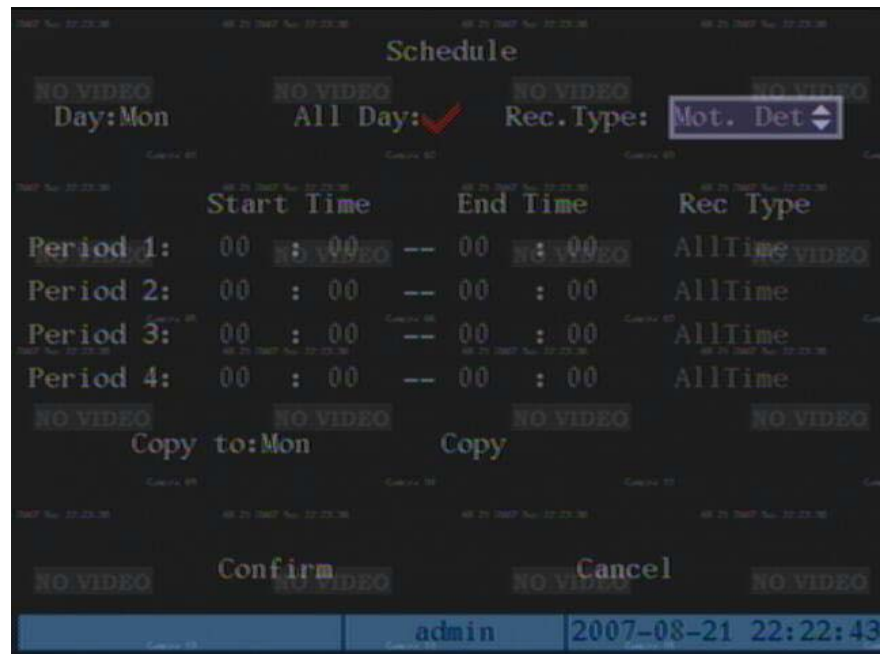
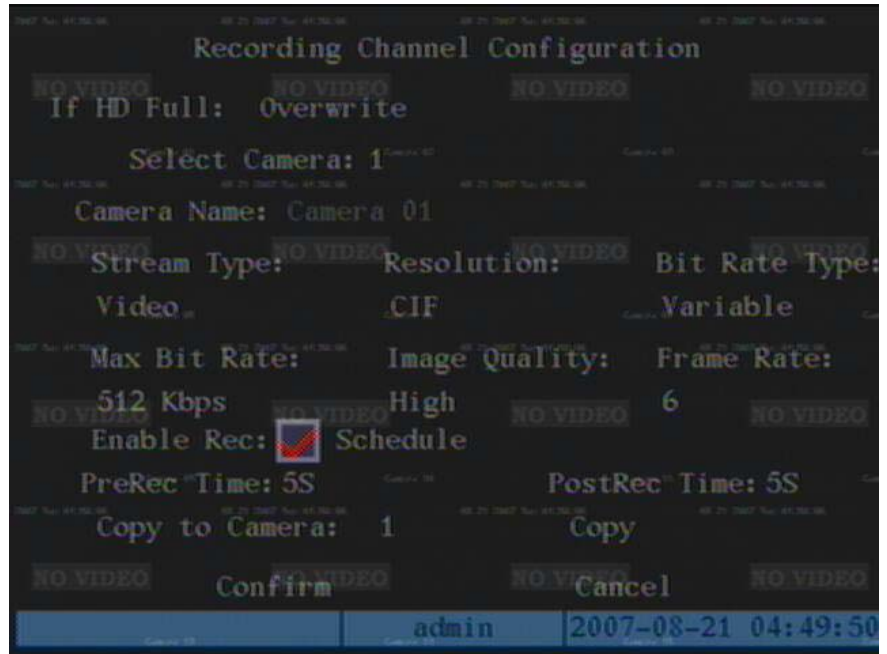
1. Enter the Menu → Recording submenu
2. Use the → key to navigate to the Frame Rate setting to select a frame rate of "6"
3. Use the → key to navigate to the Enable Rec option and press the ENTER key to enable the feature, indicated by the ✓ icon.
4. Use the → key to navigate to the Schedule option and press ENTER to access the Schedule submenu.
5. Use the → key to navigate to the All Day option and press ENTER to enable the feature, indicated by the ✓ icon.
6. Navigate to the Rec.Type option and select "AllTime". This sets the schedule to record the entire day by a 24 hour time schedule.
7. Navigate to the Copy to option and select "ALL"
8. Navigate to the Copy option and press ENTER to copy the schedule to ALL days.
9. Navigate to Confirm and press ENTER to save the settings.
10. Back on the Recording submenu, navigate to the Copy to Camera option and select "ALL".
11. Navigate to the Copy option and press ENTER to copy the Recording parameters to ALL channels.
12. Navigate to Confirm and press ENTER to save the settings.



Motion Record

The DVR supports many recording methods and parameters. For this example, we will set the DVR to record motion only 24/7 at 6 frames/sec. Since each day and each channel is independently configured, we will ensure we have copied our schedule to ALL days and have copied our record options to ALL channels. See the following page for the completion of motion setup.

1. Enter the Menu → Recording submenu
2. Use the → key to navigate to the Frame Rate setting to select a frame rate of "6"
3. Use the → key to navigate to the Enable Rec option and press the ENTER key to enable the feature, indicated by the ✓ icon.
4. Use the → key to navigate to the Schedule option and press ENTER to access the Schedule submenu.
5. Use the → key to navigate to the All Day option and press ENTER to enable the feature, indicated by the ✓ icon.
6. Navigate to the Rec.Type option and select "Mot. Det". This sets the schedule to record the entire day by motion detection only.
7. Navigate to the Copy to option and select "ALL"
8. Navigate to the Copy option and press ENTER to copy the schedule to ALL days.
9. Navigate to Confirm and press ENTER to save the settings.
10. Back on the Recording submenu, navigate to the Copy to Camera option and select "ALL".
11. Navigate to the Copy option and press ENTER to copy the Recording parameters to ALL channels.
12. Navigate to Confirm and press ENTER to save the settings.
13. Follow the directions on the next page to enable the motion mask and sensitivity for all channels.

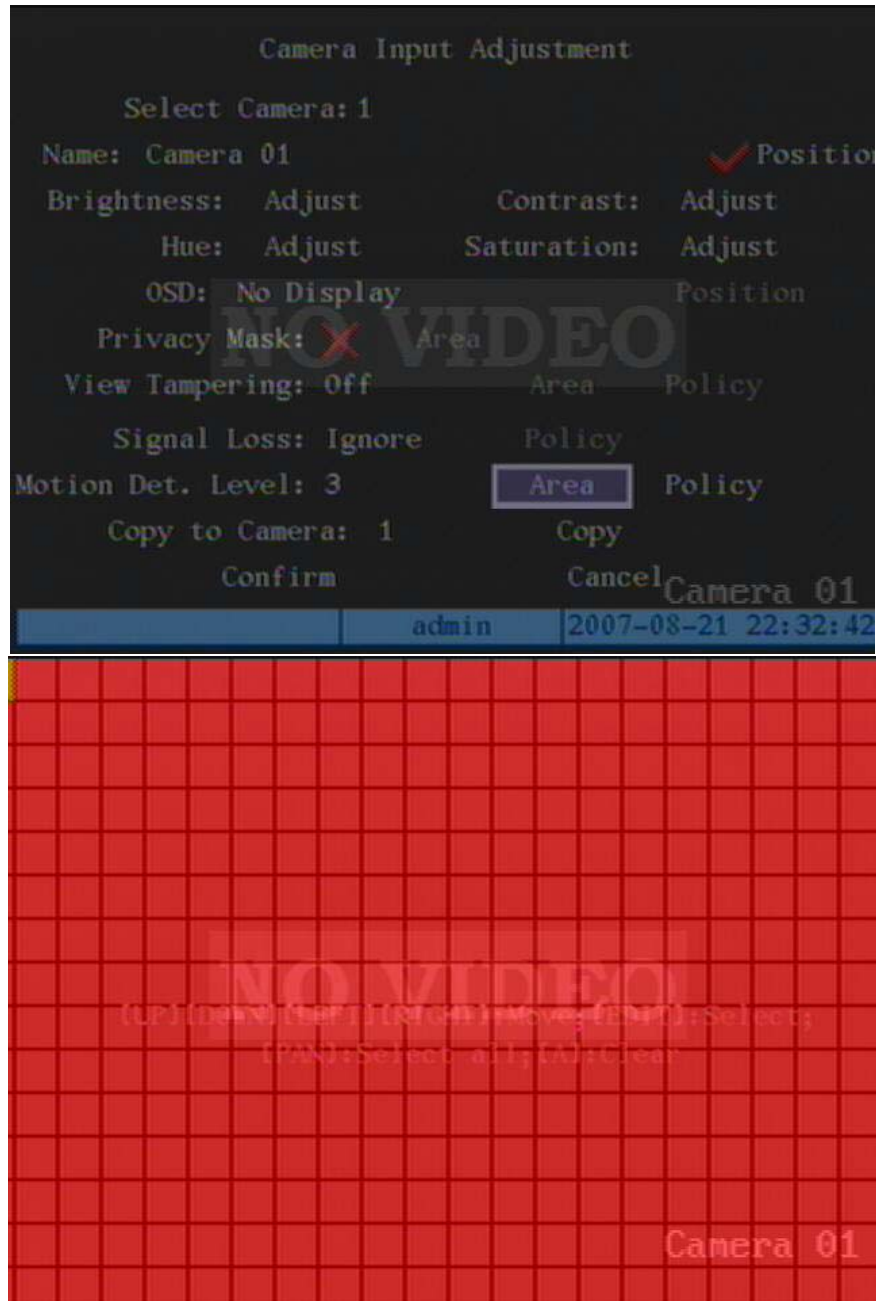


Motion Record Cont.

Now that the schedule and recording options are set for 24/7 motion recording, we will enable the motion detection area and sensitivity for all channels.

14. Enter the Menu → Image submenu
15. Use the → key to navigate to the Motion Det. Level setting to select a sensitivity of "3". Higher the number, the more sensitive.
16. Use the → key to navigate to the Area option and press ENTER to access the Area submenu. Here we will set the motion detection area.
17. Press the PTZ key to enable the entire area for motion detection. Red indicates a motion detection area, Blue indicates an area where motion will be ignored. You can use the EDIT key to individually enable and set areas if needed. Press the ENTER key to save your settings and return to the previous menu.
18. Navigate to the Copy to Camera option and select "ALL".
19. Navigate to the Copy option and press ENTER to copy the Image parameters to ALL channels.
20. Repeat steps 16 & 17 for all channels, as the area setting does not copy. Select the remaining channels, one by one using the Select Camera option in the Image Submenu option.
21. Navigate to Confirm and press ENTER to save the settings.

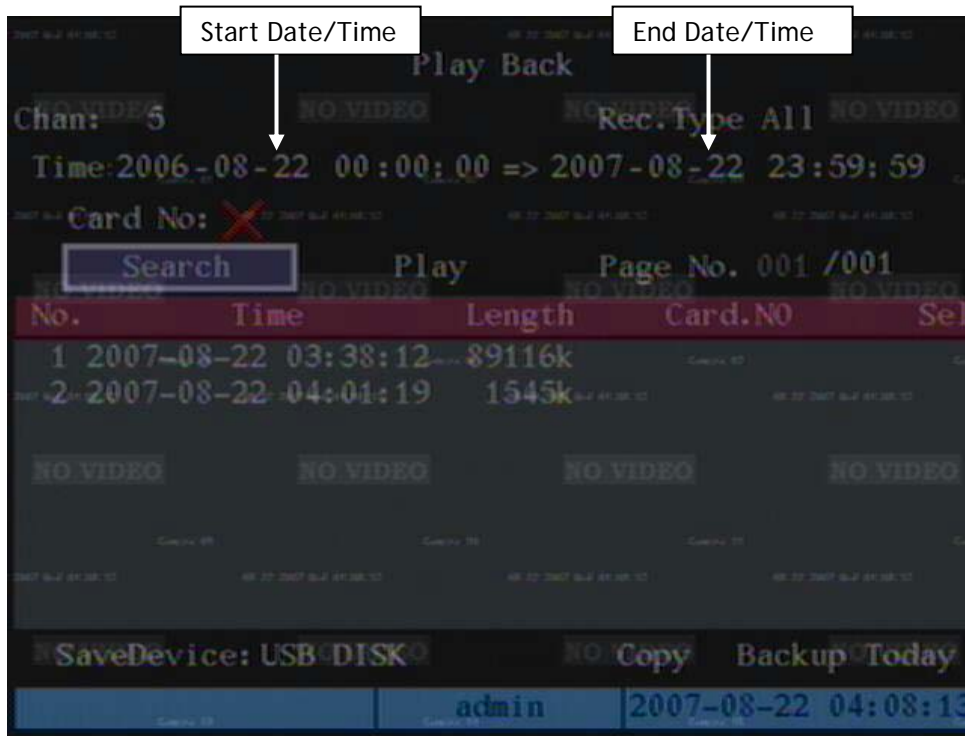
NOTE: The motion detect AREA settings will not copy. This setting has to be configured for all cameras manually.



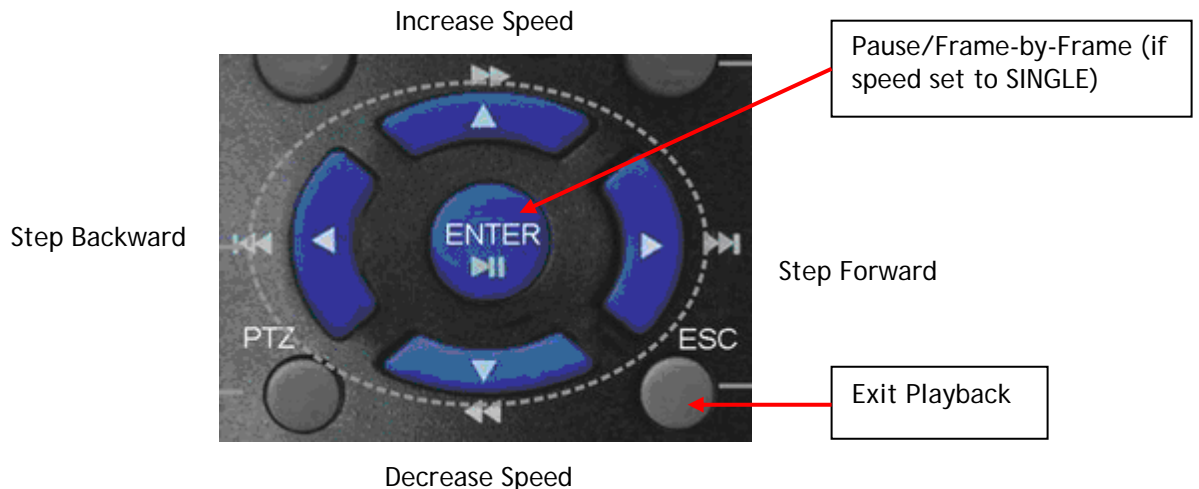
Playback/Search

The DVR supports many types of searching methods, but for this instance we will search all files based on a specified time interval.

1. Press the PLAY key to enter the Playback/Search menu.
2. Select the channel to search under the Chan field
3. Select a Rec.Type of "ALL"
4. Input the time interval you wish to search or playback.
5. Select the "Search" option to pull a list of files or select "Play" to playback all files from the specified time interval
6. If Search was selected, use the → key to navigate to the file list to select a file for playback.



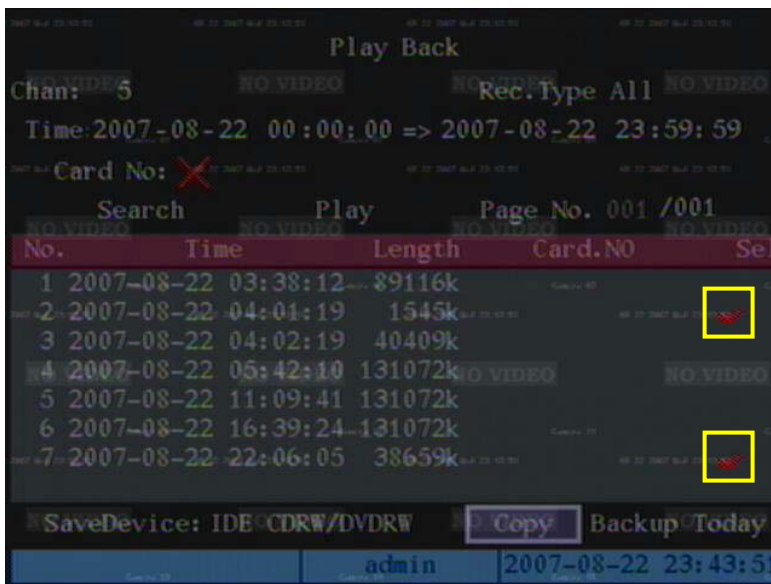
During Playback, you are able to navigate the video using the controls below.



CD/USB BACKUP

The DVR supports many methods for backup, for this instance we will choose to backup by file.

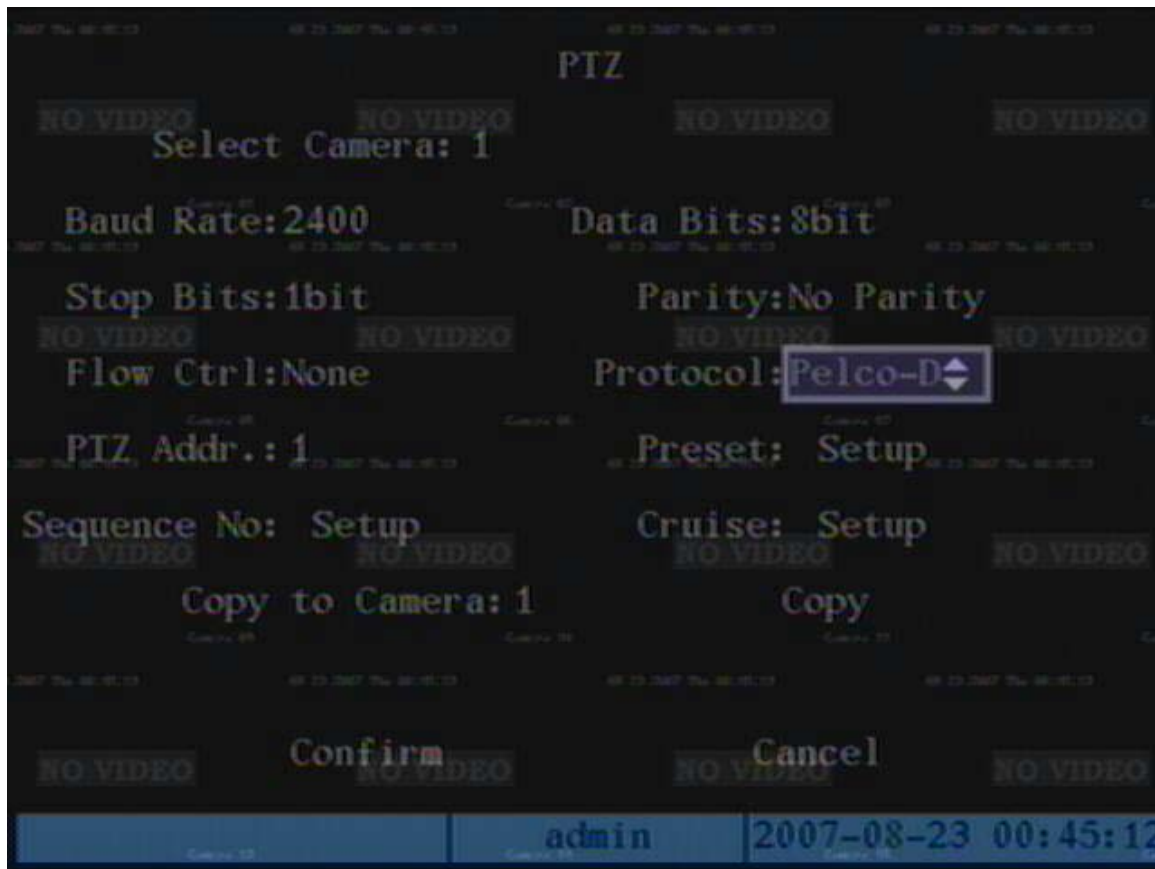
1. Press the PLAY key to enter the Playback/Search menu.
2. Select the channel to search under the Chan field
3. Select a Rec.Type of "ALL"
4. Input the time interval you wish to search for backup.
5. Select the "Search" option to pull a list of files.
6. Use the → key to navigate to the file list to select a file for backup.
7. Press the EDIT key to mark the file for backup, indicated by the ✓ icon. Select several files if required, keeping in mind the capacity of your backup media.
8. Use the → key to navigate to the SaveDevice and select "SATA CDRW/DVDRW" for backup to the DVD writer or choose "USB Disk" to backup to a USB flash drive.
9. Navigate to the Copy option and press ENTER. The files will be copied to the selected media.
10. The Fileplayer.exe program is required to playback the video files from the backup. This program can be found on the CD shipped with the unit.



PTZ Setup

To allow PTZ control via the DVR or remote client software you must follow the below instructions.

1. Checklist for PTZ control:
 - a. Obtain your PTZ's protocol setting (Pelco-D, Pelco-P, etc.)_____
 - b. Obtain your PTZ's buad rate setting (2400, 9600, etc.)_____
 - c. Obtain your PTZ's Address ID (1, 2, 3, etc)_____
 - d. PTZ RS-485- connected to DVR RS-485 T-
 - e. PTZ RS-485+ connected to DVR RS-485 T+
2. Enter the Menu → PTZ submenu
3. Select the Camera channel you wish to configure
4. Use the → key to navigate to the **Baud Rate** field and select your value
5. Use the → key to navigate to the **Protocol** field and select your value
6. Use the → key to navigate to the **PTZ Addr** field, Press EDIT and select your value
7. Use the → key to navigate to **Confirm** and press ENTER to save your settings
8. Setup is now complete. Follow the instructions on the following page for use and control.



PTZ Control

Now that the DVR is configured to control your PTZ, we will use the IR remote controller to perform basic control functions of the PTZ.

1. During live display, select the PTZ camera by pressing the two digit number on the IR remote controller. Ex: PTZ located on channel 2, press "0", "2"
2. Press the PTZ key and use the directional keys for pan/tilt and the IRIS/FOCUS/ZOOM keys for the corresponding function.
3. Press the ESC key to exit.



Network Setup

To use the web server feature and allow remote access into the unit via client software or Internet Explorer you must configure the appropriate network parameters.

1. Enter the Menu → Network submenu
2. Use the → key to navigate to the IP field, Press EDIT, and enter an IP for the DVR
3. Use the → key to navigate to the Mask field, Press EDIT, and enter the appropriate subnet mask
4. Use the → key to navigate to the Gateway field, Press EDIT, and enter the appropriate default gateway
5. All other parameters are for advanced setup and not required for typical use.
6. Use the → key to navigate to the Confirm field and press ENTER to save your settings.

NOTE: For further details on how to determine the correct IP address, Mask, and Gateway, as well as for details on how to remotely access the unit, please consult the Network Quick Start Guide and Client Software Manual

