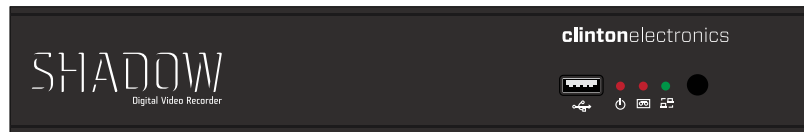


clintonelectronics

DVR User Manual

For DVRs: Shadow, EX, FXR, & HY16



Actual product may vary slightly from the images shown in this manual.
Clinton reserves the right, without notification, to make changes in product design & specification.

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WARNING & COMPLIANCE

BEFORE ATTEMPTING TO OPERATE THIS PRODUCT, PLEASE READ THE USER'S MANUAL CAREFULLY

	CAUTION RISK OF ELECTRIC SHOCK DO NOT OPEN	
CAUTION : TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK), NO USER SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL		



The lightning flash with an arrowhead symbol, within an equilateral triangle is intended to alert the user to the presence of uninsulated dangerous voltage within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.



The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

INFORMATION - This equipment has been tested and found to comply with limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

WARNING - Changes or modifications not expressly approved by the manufacturer could void the user's authority to operate the equipment.

CAUTION : To prevent electric shock and risk of fire hazards:
Do NOT use power sources other than that specified.
Do NOT expose this appliance to rain or moisture.

This installation should be made by a qualified service person and should conform to all local codes.



FCC Compliant (USA)

This device has been tested and found to comply with the limits of Class A computing device pursuant to part 15 of the FCC rules.



UL Listed

UL Listing means that UL has tested representative samples of the product and determined that it meets UL's requirements. These requirements are based primarily on UL's published and nationally recognized Standards for Safety.



CE (Europe)

By affixing the CE marking, the manufacturer assures that the item meets all the essential requirements of all applicable EU directives.



RoHS

This directive restricts the use of six hazardous materials in the manufacture of various type of electronic and electrical equipment.



PSE (Japan)

The purpose of the Electrical Appliance and Material Safety Law is to prevent hazards and disturbances resulting from electrical appliances.

IMPORTANT SAFEGUARDS

1. Read Instructions

All the safety and operating instructions should be read before the appliance is operated.

2. Retain Instructions

The safety and operating instructions should be retained for future reference.

3. Cleaning

Unplug this equipment from the wall outlet before cleaning it. Do not use liquid aerosol cleaners. Use a damp soft cloth for cleaning.

4. Attachments

Never add any attachments and/or equipment without the approval of the manufacturer as such additions may result in the risk of fire, electric shock or other personal injury.

5. Water and/or Moisture

Do not use this equipment near water or in contact with water.

6. Accessories

Do not place this equipment on an unstable cart, stand or table. The equipment may fall, causing serious injury to a child or adult, and serious damage to the equipment. Wall or shelf mounting should follow the manufacturer's instructions, and should use a mounting kit approved by the manufacturer.

7. Power Sources

This equipment should be operated only from the type of power source indicated on the marking label. If you are not sure of the type of power, please consult your equipment dealer or local power company.

8. Power Cords

Operator or installer must remove power and communications connections before handling the equipment.

9. Lightning

For added protection for this equipment during a lightning storm, or when it is left unattended and unused for long periods of time, unplug it from the wall outlet and disconnect the cable system. This will prevent damage to the equipment due to lightning and power-line surges.

10. Overloading

Do not overload wall outlets and extension cords as this can result in the risk of fire or electric shock.

11. Objects and Liquids

Never push objects of any kind through openings of this equipment as they may touch dangerous voltage points or short out parts that could result in a fire or electric shock. Never spill liquid of any kind on the equipment.

12. Servicing

Do not attempt to service this equipment yourself. Refer all servicing to qualified service personnel.

13. Damage Requiring Service

Unplug this equipment from the wall outlet and refer servicing to qualified service personnel under the following conditions:

- A. When the power-supply cord or the plug has been damaged.
- B. If liquid is spilled, or objects have fallen into the equipment.

C. If the equipment has been exposed to rain or water.

D. If the equipment does not operate normally by following the operating instructions, adjust only those controls that are covered by the operating instructions as an improper adjustment of other controls may result in damage and will often require extensive work by a qualified technician to restore the equipment to its normal operation.

E. If the equipment has been dropped, or the cabinet damaged.

F. When the equipment exhibits a distinct change in performance — this indicates a need for service.

14. Replacement Parts

When replacement parts are required, be sure the service technician has used replacement parts specified by the manufacturer or that have the same characteristics as the original part. Unauthorized substitutions may result in fire, electric shock or other hazards.

15. Safety Check

Upon completion of any service or repairs to this equipment, ask the service technician to perform safety checks to determine that the equipment is in proper operating condition.

16. Field Installation

This installation should be made by a qualified service person and should conform to all local codes.

17. Correct Batteries

Warning: Risk of explosion if battery is replaced by an incorrect type. Dispose of used batteries according to the instructions.

18. Tmra

A manufacturer's maximum recommended ambient temperature (Tmra) for the equipment must be specified so that the customer and installer may determine a suitable maximum operating environment for the equipment.

19. Elevated Operating Ambient Temperature

If installed in a closed or multi-unit rack assembly, the operating ambient temperature of the rack environment may be greater than room ambient. Therefore, consideration should be given to installing the equipment in an environment compatible with the manufacturer's maximum rated ambient temperature (Tmra).

20. Reduced Air Flow

Installation of the equipment in the rack should be such that the amount of airflow required for safe operation of the equipment is not compromised.

21. Mechanical Loading

Mounting of the equipment in the rack should be such that a hazardous condition is not caused by uneven mechanical loading.

22. Circuit Overloading

Consideration should be given to connection of the equipment to supply circuit and the effect that overloading of circuits might have on over current protection and supply wiring. Appropriate consideration of equipment nameplate ratings should be used when addressing this concern.

23. Reliable Earthing (Grounding)

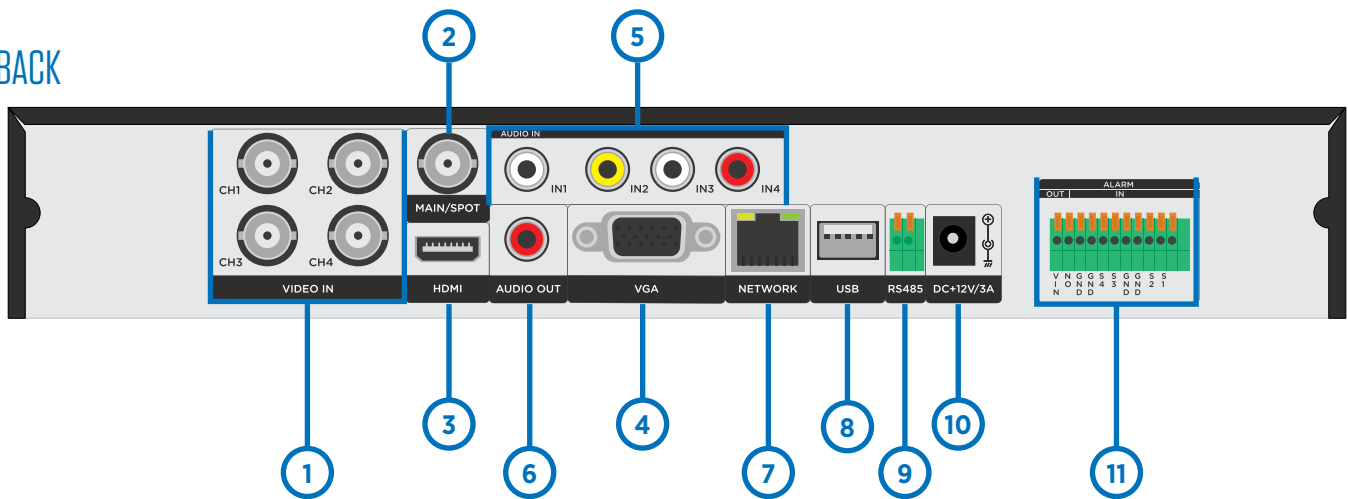
Reliable grounding of rack mounted equipment should be maintained. Particular attention should be given to supply connections other than direct connections to the branch circuit (e.g., use of power strips).

FRONT



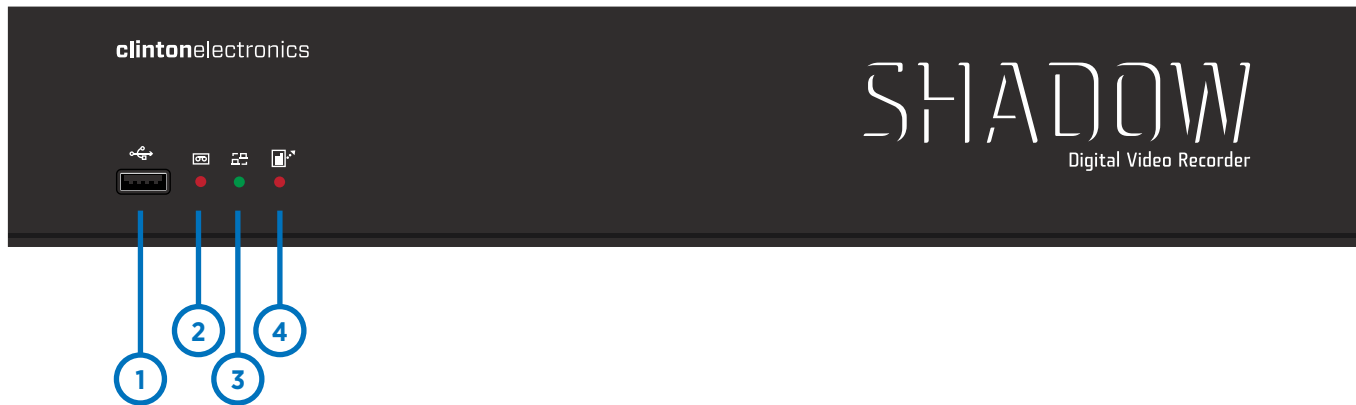
1. USB Port - for Firmware Update and/or Video Backup
2. Power Indicator LED
3. Recording Indicator LED
4. Network Indicator LED
5. IR Sensor for Remote

BACK



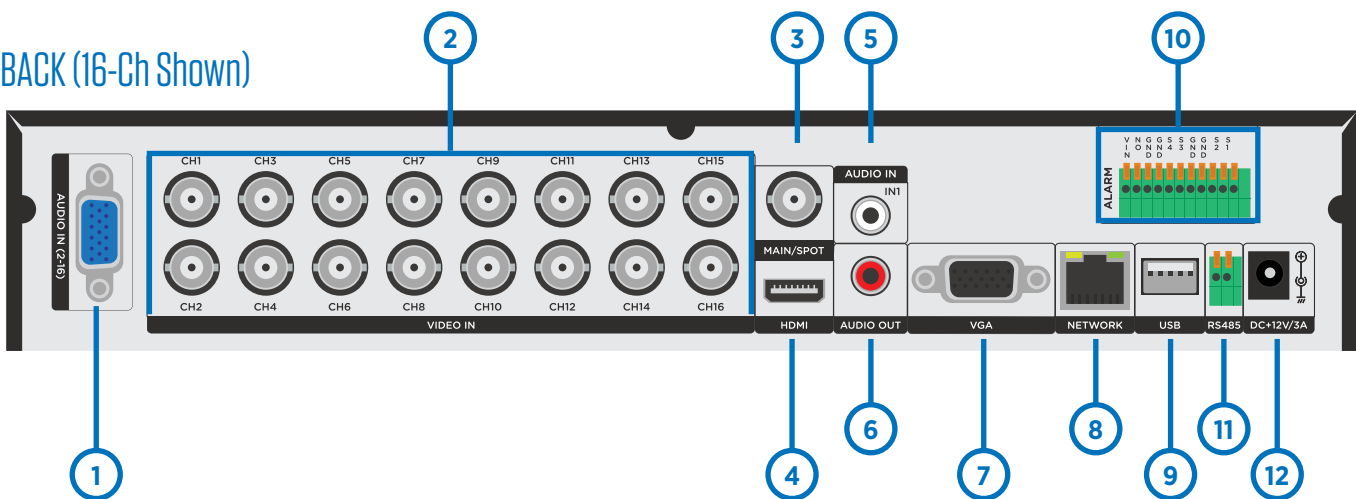
1. BNC Camera Inputs
2. BNC Video Output - MAIN or SPOT
**MAIN or SPOT configured in DVR Settings*
3. HDMI Video Output - MAIN
4. VGA Video Output - MAIN
5. RCA Audio Inputs
6. RCA Audio Output
7. RJ45 Network Connection
8. USB Port - Mouse
9. RS485
10. DC12V Power Input
11. Alarm Inputs/Outputs

FRONT



1. USB Ports:
Firmware Update and/or Video Backup
2. Recording Indicator LED
3. Network Indicator LED
4. IR Sensor for Remote

BACK (16-Ch Shown)



1. Audio Input (Channels 2-16, uses RCA to Multi-Pin Plug Adapter)
2. BNC Camera Inputs
3. BNC Video Output - MAIN or SPOT
**MAIN or SPOT configured in DVR Settings*
4. HDMI Video Output - MAIN
5. RCA Audio Input (Channel 1)
6. RCA Audio Output
7. VGA Video Output - MAIN
8. RJ45 Network Connection
9. USB Port - for Mouse
10. Alarm Connection
11. RS485
12. DC12V/3A

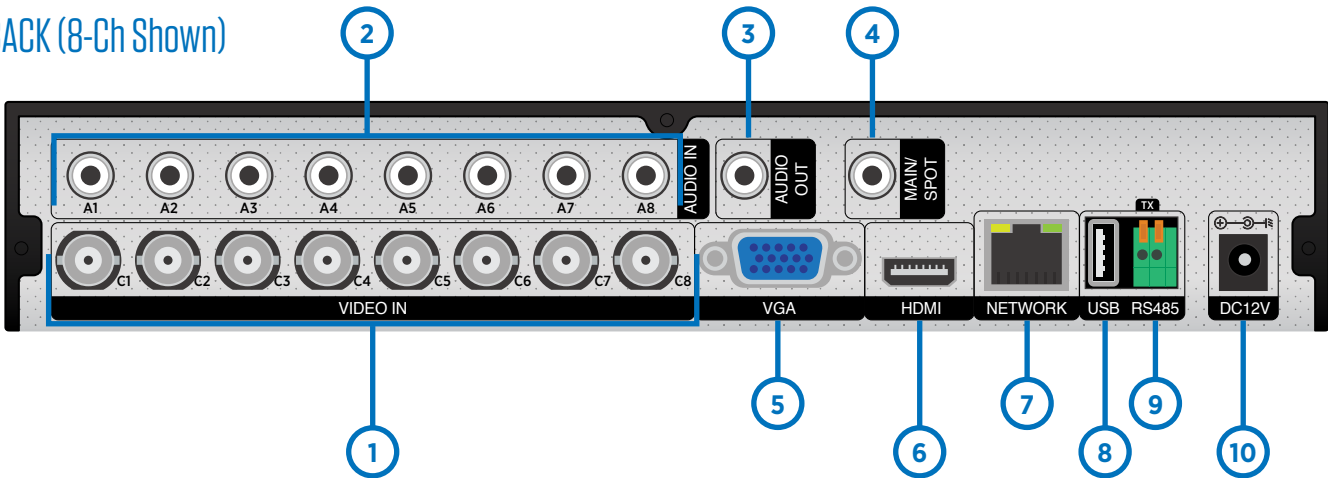
HARDWARE OVERVIEW: EX Series 4/8-Ch

FRONT



- | | |
|----------------------------|--------------------------|
| 1. USB Port | 4. Network Indicator LED |
| 2. IR Sensor for Remote | 5. Power Indicator LED |
| 3. Recording Indicator LED | |

BACK (8-Ch Shown)



- | | |
|--|--|
| 1. BNC Camera Inputs : EX-SDI 2.0, EX-SDI, or HD-SDI (1080p / 2mp) | 6. HDMI Main Video Output : 1920 x 1080p max |
| 2. RCA Audio Inputs | 7. RJ45 Network Connection |
| 3. RCA Audio Output | 8. USB Port |
| 4. RCA Video Main/Spot Monitor Output* : CVBS signal | 9. RS485 (+/-) Connections |
| 5. VGA Main Video Output | 10. DC12V Power Input |

NOTE:

- For use with 2MP EX-SDI / HD-SDI cameras only. Analog or HD Analog cameras will not function with this DVR.
- MAIN / SPOT Monitor configured in DVR Settings

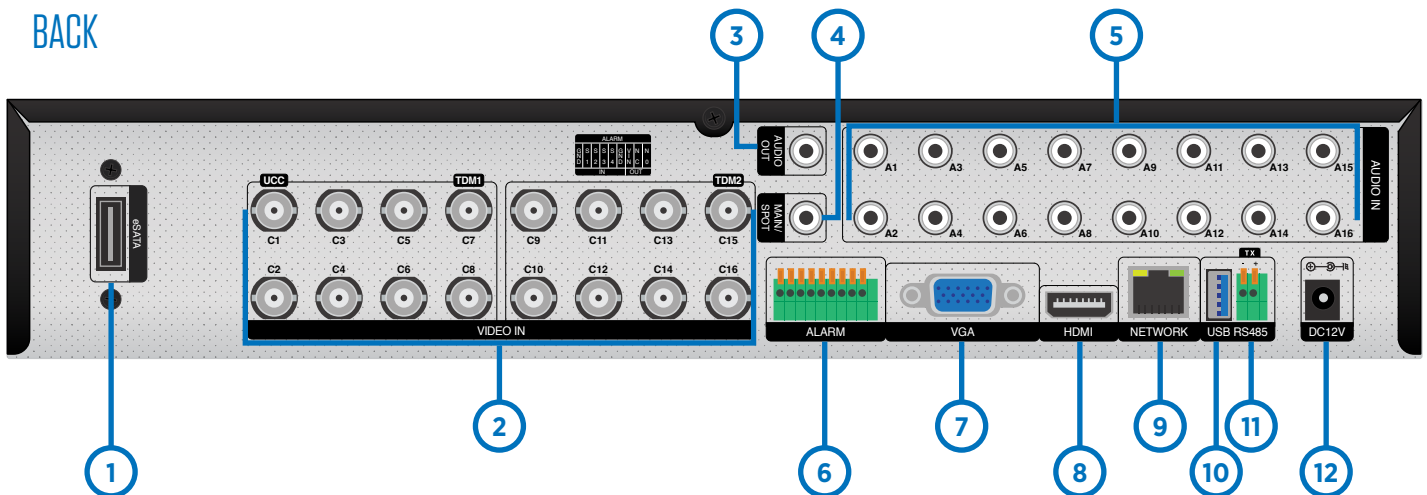
HARDWARE OVERVIEW: EX Series 16-Ch

FRONT



- 1. USB Port
- 2. Recording Indicator LED
- 3. Network Indicator LED
- 4. IR Sensor for Remote

BACK



- 1. eSATA Port (for external HDDs)
- 2. BNC Camera Inputs : EX-SDI 2.0, EX-SDI, or HD-SDI (1080p / 2mp)
– CH1: UCC
- 3. RCA Audio Output
- 4. RCA Video Main/Spot Monitor Output : CVBS signal
- 5. RCA Audio Inputs
- 6. Alarm Input (+/-) Connections
- 7. VGA Main Video Output
- 8. HDMI Main Video Output : 1920 x 1080p max
- 9. RJ45 Network Connection
- 10. USB Port
- 11. RS485 (+/-) Connections
- 12. DC12V Power Input

NOTE:

- For use with 2MP EX-SDI / HD-SDI cameras only. Analog or HD Analog cameras will not function with this DVR.
- UCC on CH1 (Up the Coax Control) requires an EX-SDI 2.0 camera equipped with UCC function. UCC allows camera adjustments (zoom in/out & adjust settings) to be made remotely through DVR when connected to CH1.
- MAIN / SPOT Monitor configured in DVR Settings

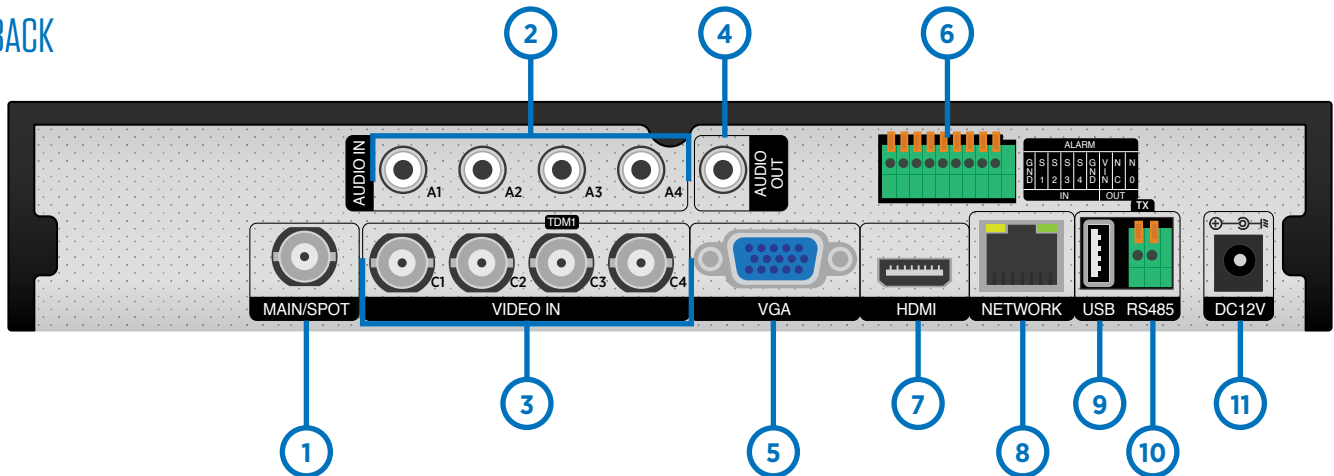
HARDWARE OVERVIEW: FXR Series 4-Ch

FRONT



- 1. USB Port
- 2. IR Sensor for Remote
- 3. Recording Indicator LED
- 4. Network Indicator LED
- 5. Power Indicator LED

BACK



- 1. RCA Video Main/Spot Monitor Output : CVBS signal
- 2. RCA Audio Inputs
- 3. BNC Camera Inputs : 4MP EX-SDI, 2MP EX-SDI, HD-SDI, HD Analog, & Analog (4MP / 2MP / analog)
- 4. RCA Audio Output
- 5. VGA Main Video Output
- 6. Alarm Input/Output (+/-) Connections
- 7. HDMI Main Video Output : 3840 x 2160 (4K) max
- 8. RJ45 Network Connection
- 9. USB Port
- 10. RS485 (+/-) Connections
- 11. DC12V Power Input

NOTE:

- **UCC supported on all channels.** UCC (Up the Coax Control) requires an EX-SDI 2.0 camera equipped with UCC function. UCC allows camera adjustments (zoom in/out & adjust settings) to be made remotely through DVR.
- MAIN / SPOT Monitor configured in DVR Settings

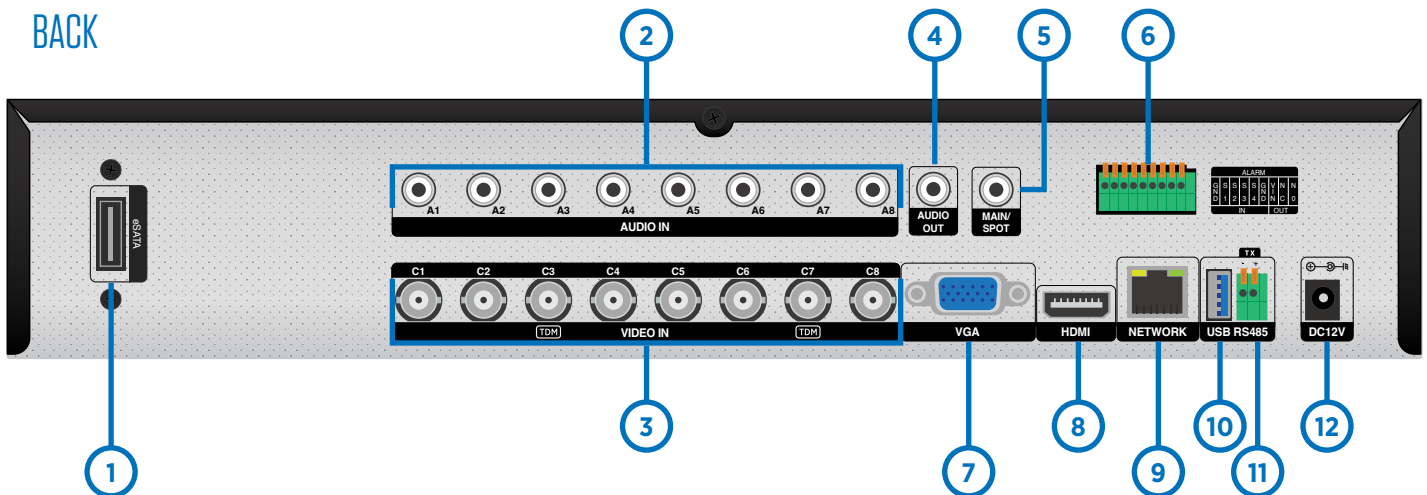
HARDWARE OVERVIEW: FXR Series 8-Ch

FRONT



1. USB Port
2. Recording Indicator LED
3. Network Indicator LED
4. IR Sensor for Remote

BACK



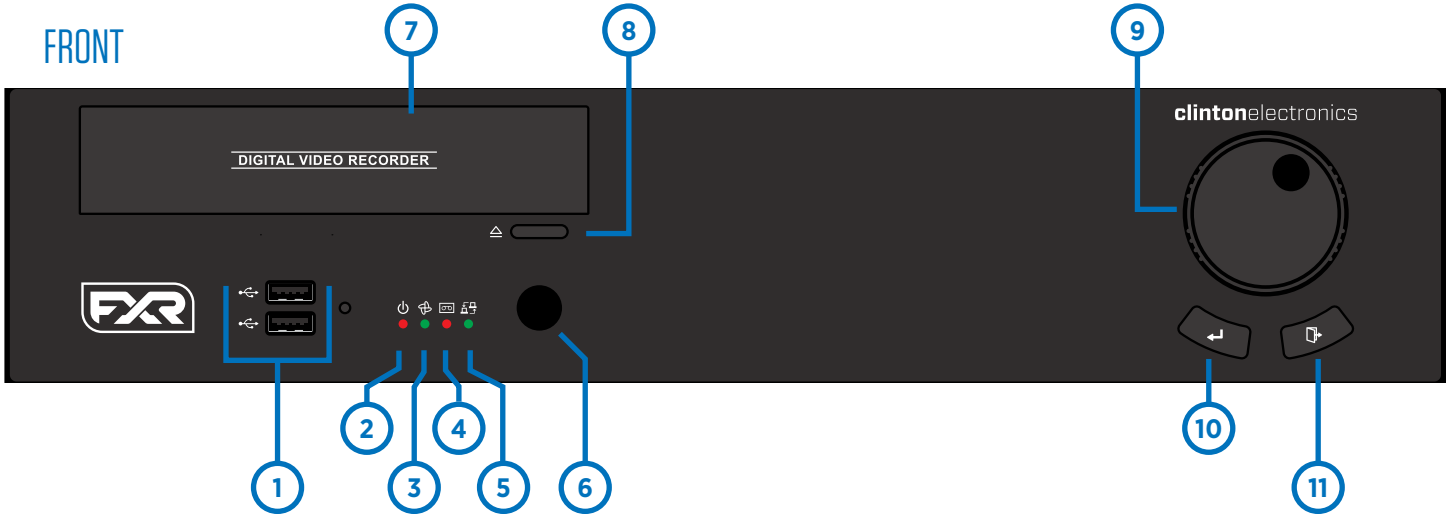
1. eSATA Port (for external HDDs)
2. RCA Audio Inputs
3. BNC Camera Inputs : 4MP EX-SDI, 2MP EX-SDI, or HD-SDI
4. RCA Audio Output
5. RCA Video Main/Spot Monitor Output : CVBS signal
6. Alarm Input/Output (+/-) Connections
7. VGA Main Video Output
8. HDMI Main Video Output : 3840 x 2160 (4K) max
9. RJ45 Network Connection
10. USB Port
11. RS485 (+/-) Connections
12. DC12V Power Input

NOTE:

- For use with 4MP & 2MP EX-SDI / HD-SDI cameras only. Analog or HD Analog cameras will not function with this DVR.
- UCC supported on all channels. UCC (Up the Coax Control) requires an EX-SDI 2.0 camera equipped with UCC function. UCC allows camera adjustments (zoom in/out & adjust settings) to be made remotely through DVR.
- MAIN / SPOT Monitor configured in DVR Settings

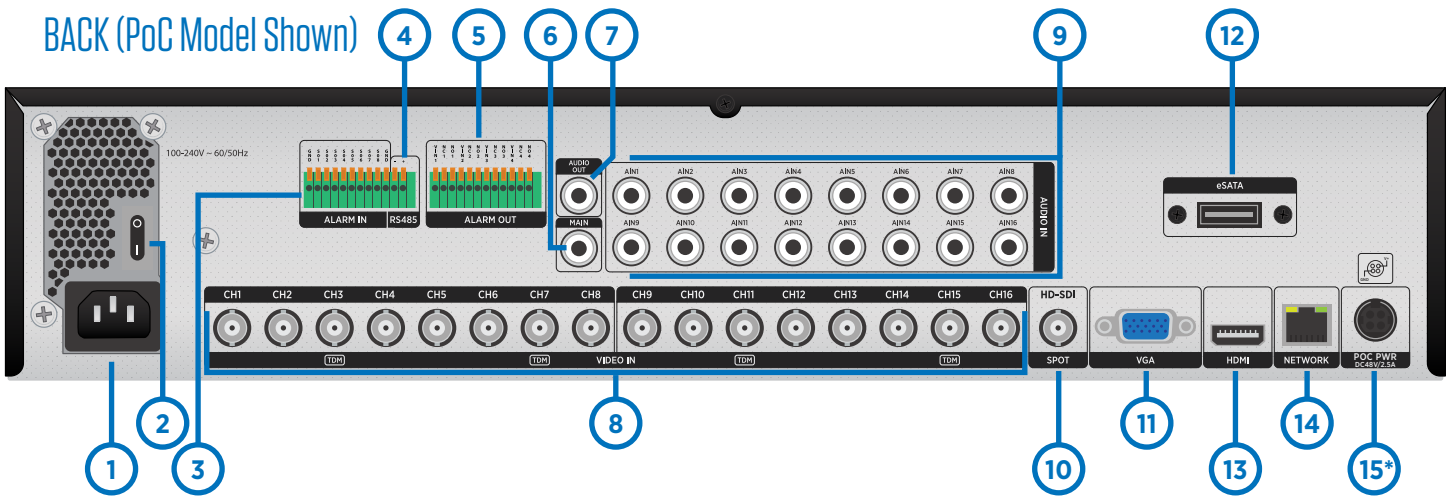
HARDWARE OVERVIEW: FXR Series 16-CH

FRONT



1. USB Ports: Top - Firmware Update and/or Video Backup, Bottom - for Mouse
2. Power Indicator LED
3. Internal Fan Indicator LED
4. Recording Indicator LED
5. Network Indicator LED
6. IR Sensor for Remote
7. CD-R/DVD-R Disc Drive
8. Disc Drive Eject Button
9. Jog Wheel
10. Enter
11. Back

BACK (PoC Model Shown)



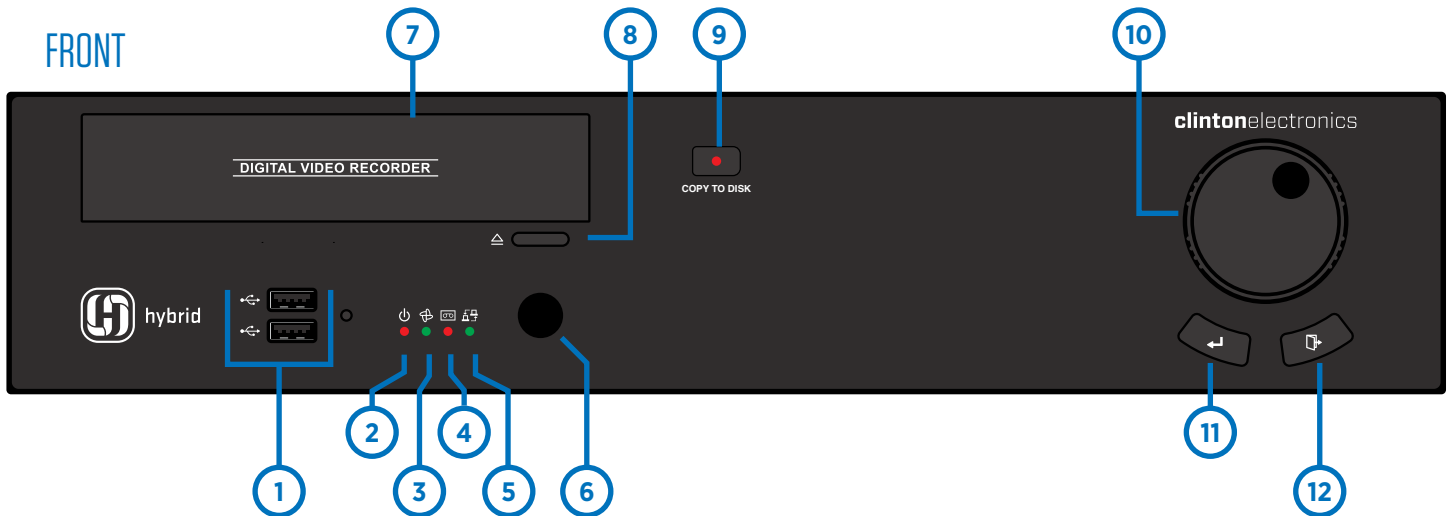
1. AC100-220V Power Input
2. Power ON/OFF Switch
3. Alarm Input Connections
4. RS485 (-/+) Connections
5. Alarm Output Connections
6. RCA Main Monitor Output : CVBS (640 x 480)
7. RCA Audio Output
8. BNC Camera Inputs : 4MP EX-SDI, 2MP EX-SDI, or HD-SDI
9. RCA Audio Inputs
10. HD-SDI Spot Monitor CH1-16 Output : 1920 x 1080
11. VGA Video Out - MAIN
12. eSATA Port (for external HDDs)
13. HDMI Main Video Output : 3840 x 2160 (4K) max
14. RJ45 Network Connection
- *15. DC48V Power Input for PoC cameras (CE-FXPOC16 only)

NOTE:

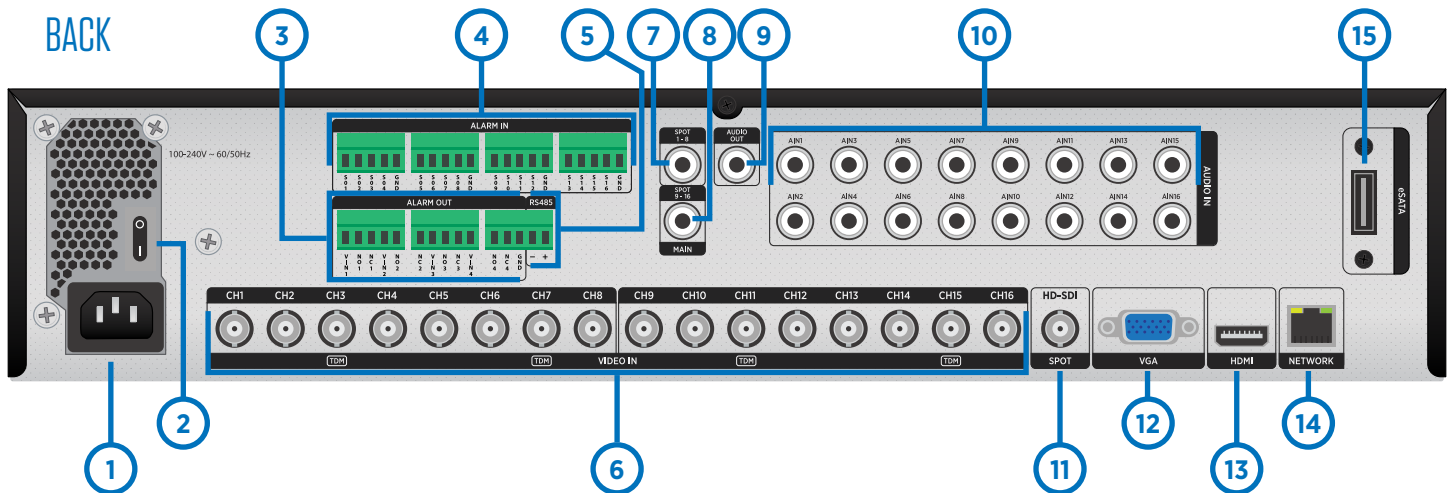
- For use with 4MP & 2MP EX-SDI / HD-SDI cameras only. Analog or HD Analog cameras will not function with this DVR.
- UCC supported on all channels. UCC (Up the Coax Control) requires an EX-SDI 2.0 camera equipped with UCC function. UCC allows camera adjustments (zoom in/out & adjust settings) to be made remotely through DVR.
- MAIN / SPOT Monitor configured in DVR Settings. HD-SDI SPOT can not be configured as Main Monitor.

HARDWARE OVERVIEW: Hybrid Series 16-CH

2019 4MP Version



1. USB Ports: Top - Firmware Update and/or Video Backup, Bottom - for Mouse
2. Power Indicator LED
3. Internal Fan Indicator LED
4. Recording Indicator LED
5. Network Indicator LED
6. IR Sensor for Remote
7. CD-R/DVD-R Disc Drive
8. Disc Drive Eject Button
9. Copy to Disc Button (Automatically saves most recently recorded video to pre-loaded CD/DVD-RW)
10. Jog Wheel
11. Enter
12. Back



1. AC100-220V Power Input
2. Power ON/OFF Switch
3. Alarm Output Connections
4. Alarm Input Connections
5. RS485 (-/+) Connections
6. BNC Camera Inputs : 4MP EX-SDI, 2MP EX-SDI, HD-SDI, HD Analog, & Analog (4MP / 2MP / analog)
7. RCA Spot Monitor CH1-8 Output : CVBS (640 x 480)
8. RCA Video Main/Spot Monitor CH9-16 Output : CVBS (640 x 480)
9. RCA Audio Output
10. RCA Audio Inputs
11. HD-SDI Spot Monitor CH1-16 Output : 1920 x 1080
12. VGA Video Out - MAIN
13. HDMI Main Video Output : 3840 x 2160 (4K) max
14. RJ45 Network Connection
15. eSATA Port (for external HDDs)

NOTE:

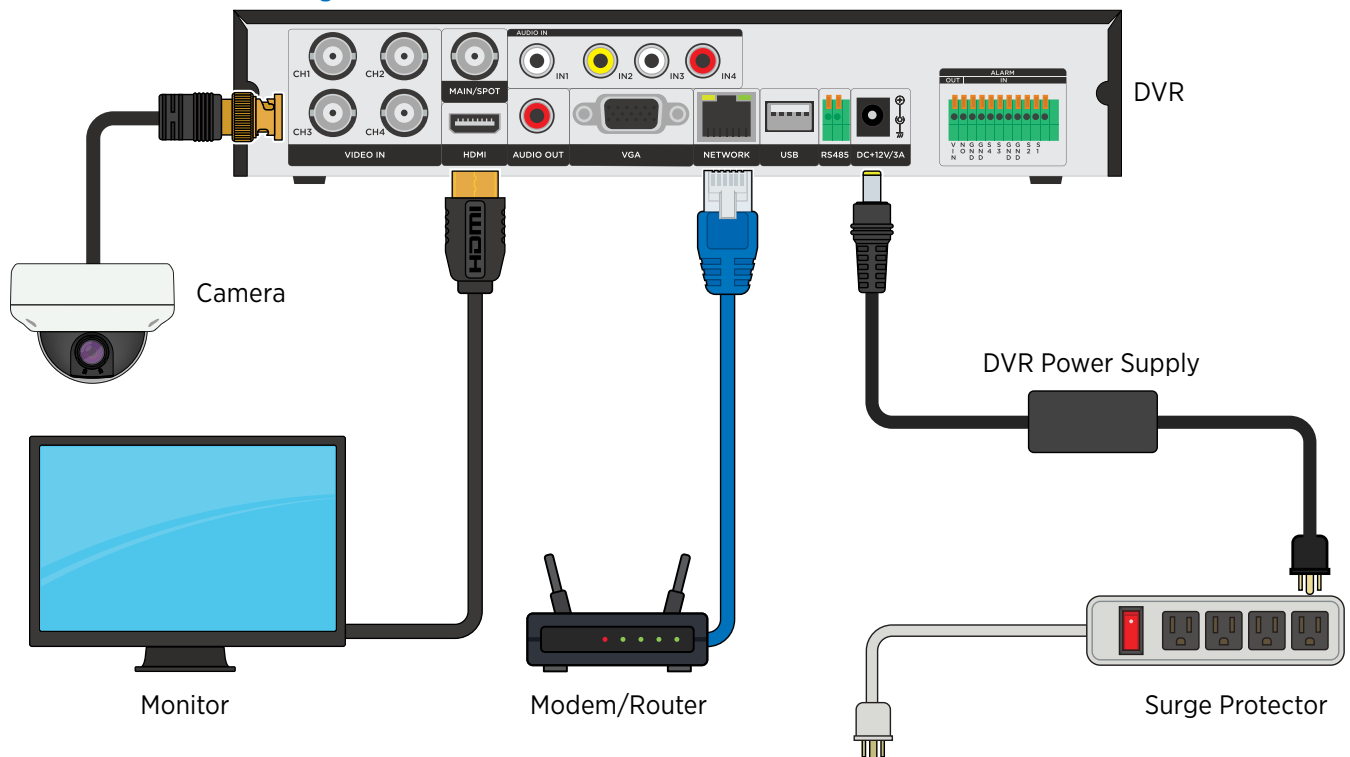
- **UCC supported on all channels.** UCC (Up the Coax Control) requires an EX-SDI 2.0 camera equipped with UCC function. UCC allows camera adjustments (zoom in/out & adjust settings) to be made remotely through DVR.
- MAIN / SPOT 9-16 Monitor configured in DVR Settings. SPOT 1-8 & HD-SDI SPOT can not be configured as Main Monitor.

CONNECTING YOUR DVR

1. Connect coaxial cable from cameras to the desired channel on the back of the DVR.
2. Plug in an ethernet/CAT5 cable to the Network port on the back of the DVR. **If planning to network the DVR*
3. Connect any RS485, Alarm or Audio connections.
4. Choose the desired main monitor connection; VGA / BNC / HDMI.
5. Plug the power cord into the back of the DVR.
6. Plug the cord from the power supply into an appropriate surge protector.
7. If your DVR has a Power ON/OFF switch - turn the DVR on. DVRs without a power switch will power ON automatically once the power has been connected.

Clinton DVRs come pre-configured to automatically record video.

Basic DVR Connection Diagram



Ensure there is adequate ventilation around the DVR and do not cover or block the fan and/cooling vents. The DVR can over-heat if these are blocked.



Do not install the DVR into an environment that is exposed extreme temperatures; attic/walk-in freezer. Do not install the DVR on top or near equipment that generates heat.

NOTICE

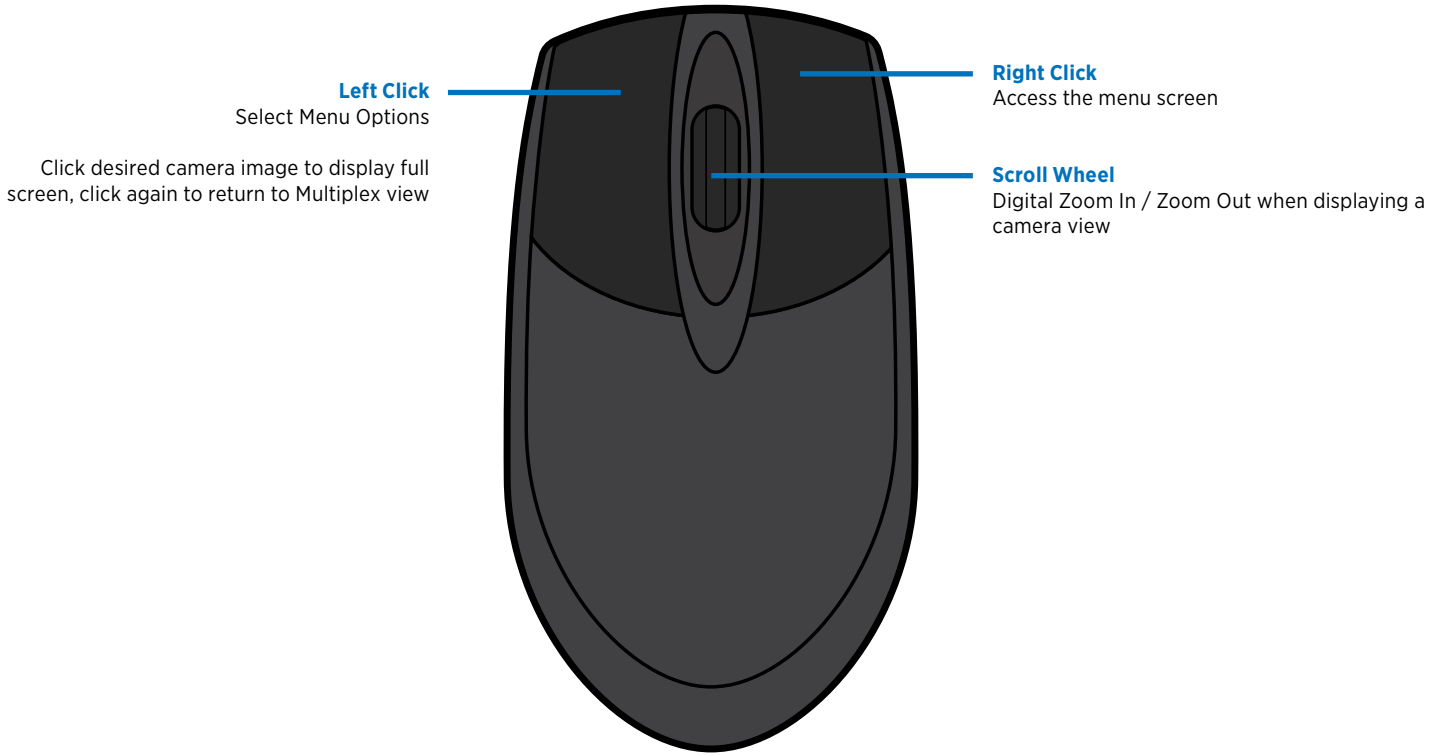


It is strongly recommended to plug the DVR power supply into a surge protector.

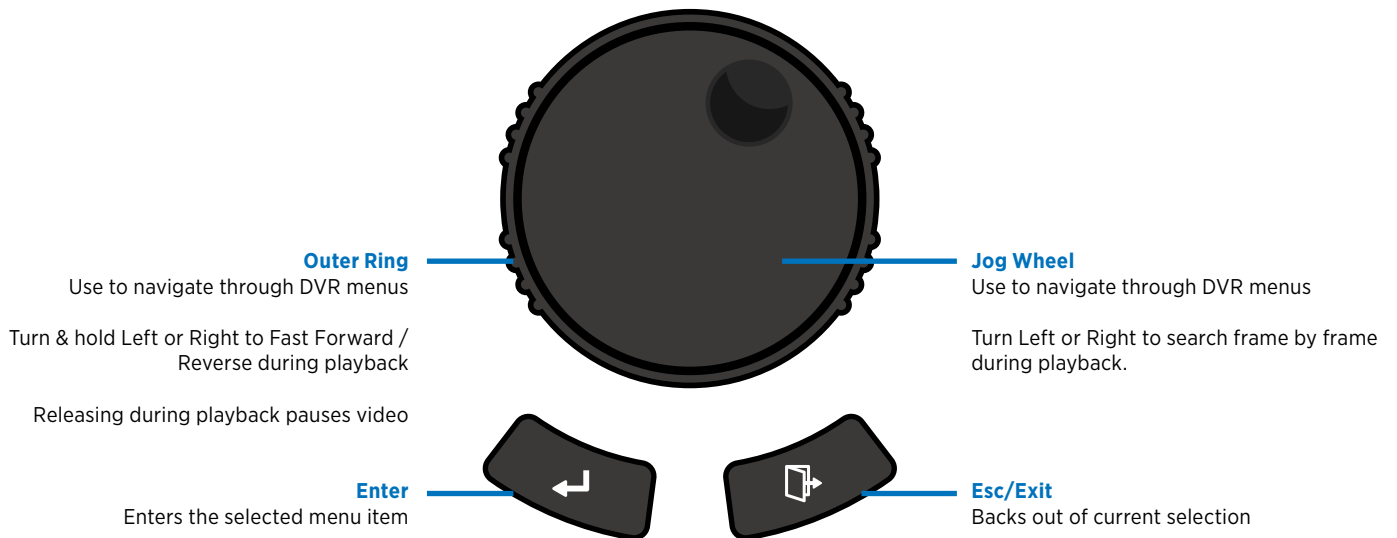
A surge protector will help protect the DVR from damage caused by unwanted surges/spikes in voltage and lightning.

MOUSE & JOG WHEEL OVERVIEW

Image may vary from actual mouse supplied with the DVR.

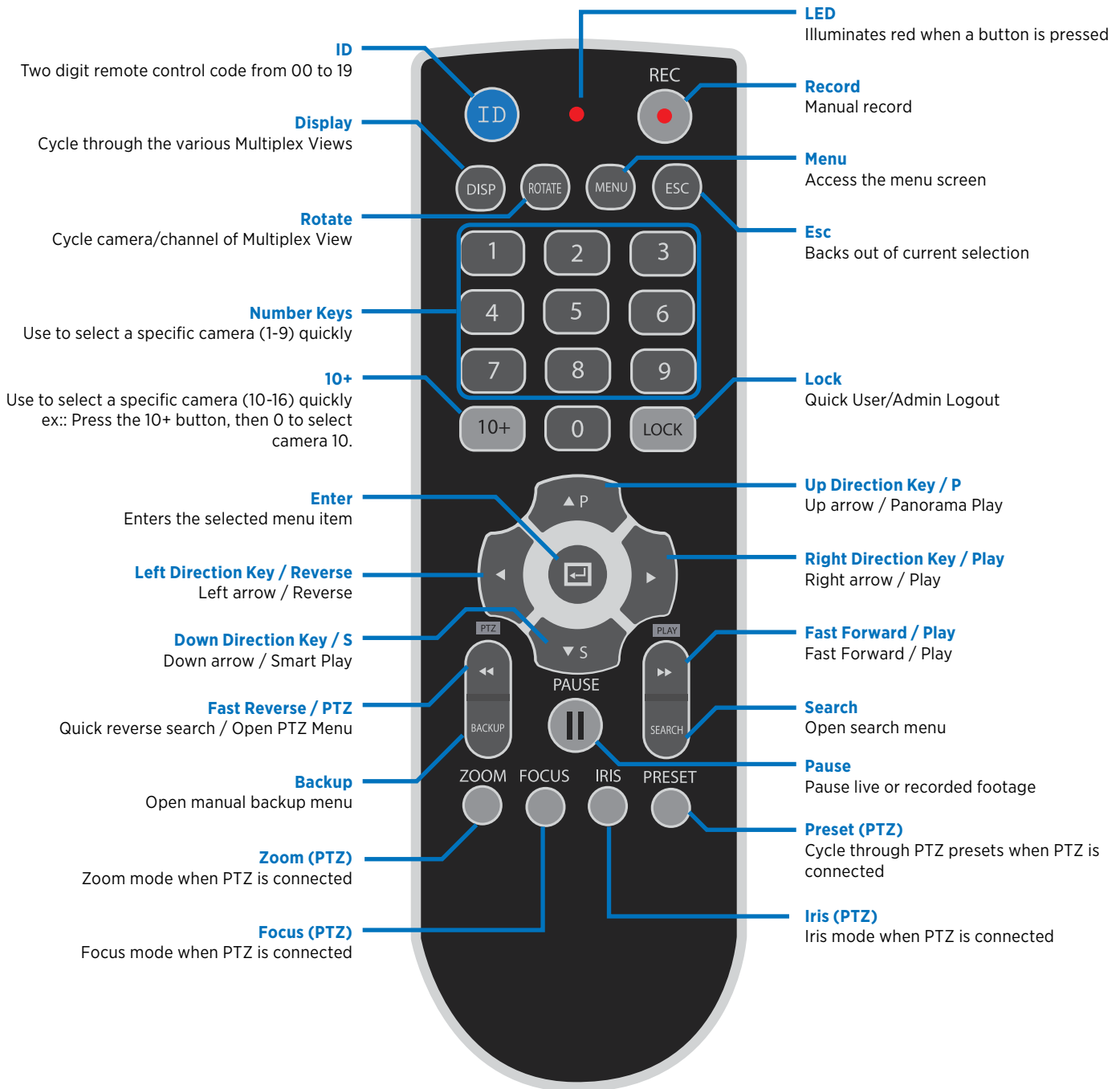


Use the Jog Wheel when a Mouse or Remote is not available. The Jog Wheel is currently available only on the CE-FXR16 & CE-HY16 model DVRs.



REMOTE CONTROL OVERVIEW

Use the buttons on the remote to quickly jump to DVR menu options, change camera views and more. One remote can control up to 20 DVRs.



ID
Two digit remote control code from 00 to 19 (Default code is 00). Hold down ID and press two digits, ex: 01, to change ID to 1. ID code should match DVR ID (Unit Address). The DVR ID can be found/changed in the General/System menu. A single remote control can be used to control up to 20 DVRs.

Pressing 1024768 + ENTER on the number pad will reset the screen resolution.

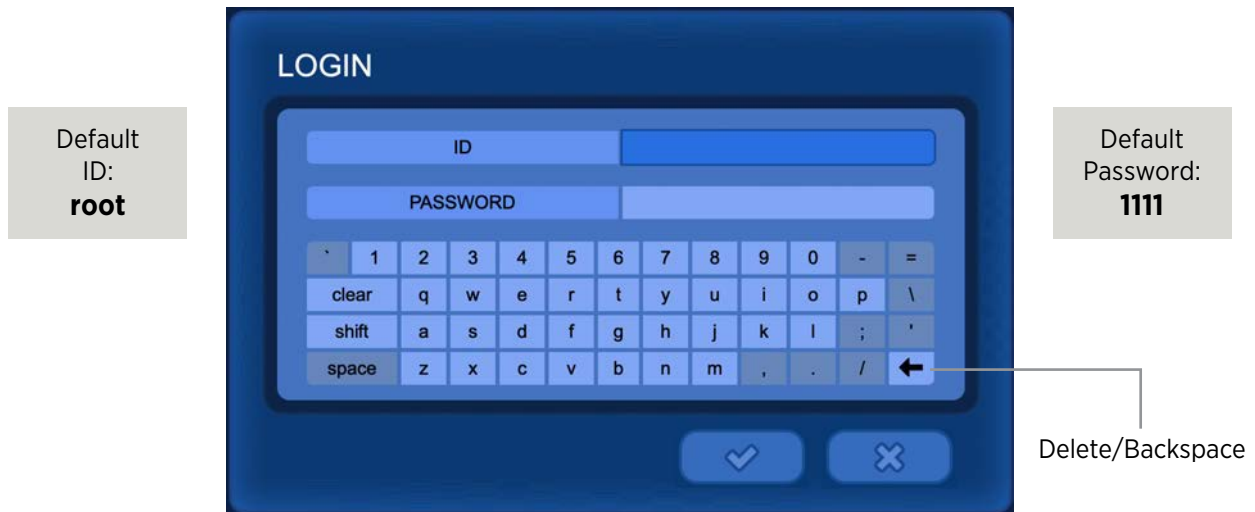
LOGIN & LOGOUT

Login Box

A user ID and Password is required to access any DVR settings or controls.

The default ID is “root” and the default password is “1111”.

Click the ✓ [Check Mark] with the mouse cursor or press the ENTER button on the remote to proceed.

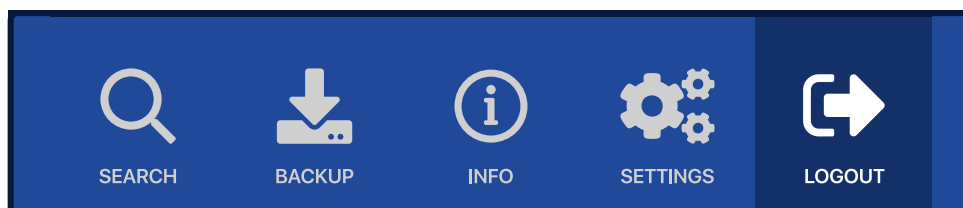


To edit User ID and Password information, please refer to SETUP/ACCOUNT.

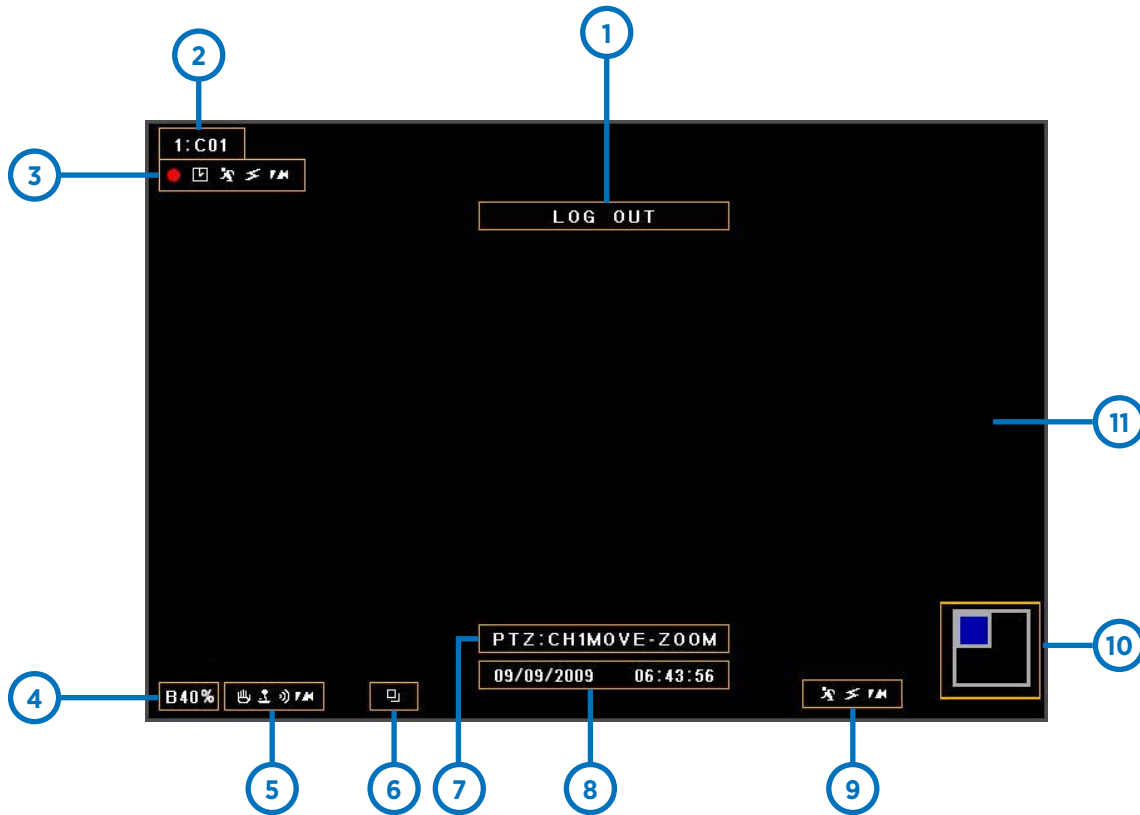
It is strongly recommended to change the default ADMIN password.
Please refer to the Account section on page 32 for more details.

Logout

Select the Log-Out icon (at the top of the screen) to exit from your account. After a certain period of inactivity, the DVR will automatically log out the user. The automatic log out (Menu Timeout) can be adjusted in Setup Menu > General > System > Menu Timeout.



LIVE VIEW SCREEN LAYOUT



1. Execution Information Message

2. Camera Name

3. Record Status Icons

4. Backup Progress Status %

5. Current Channel Information Icons

6. Sequence Icon: When screen image is cycled continuously

7. PTZ Control Information





8. Current Date and Time

9. Current Event Information





10. Zoom 2x / 4x Location

11. Live Screen Area

Record Status Icons:

-  Record Icon: Shows when recording is active.
-  Time Icon: Shows when time (schedule) record mode is active.
-  Motion Icon: Shows when motion occurs.
-  Sensor Icon: Shows when the external sensor is triggered.

Current Channel Information Icons:

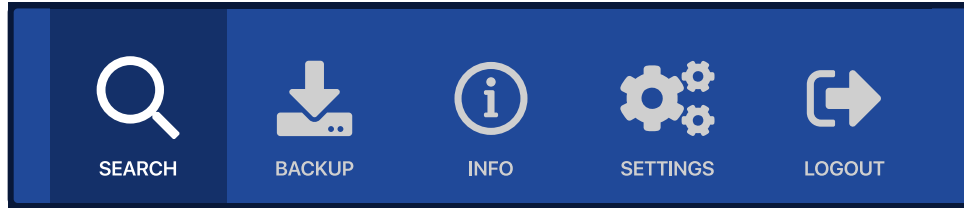
-  Video-Loss Icon: Shows when no video input is sensed.
-  Audio Icon: Shows when audio occurs within the live screen.
-  Freeze Icon: Shows when live view is paused.
-  PTZ Icon: Shows when in PTZ mode

If the Record Icon is BLUE, the DVR is in the Search/Playback mode.

MENU ICONS EXPLAINED

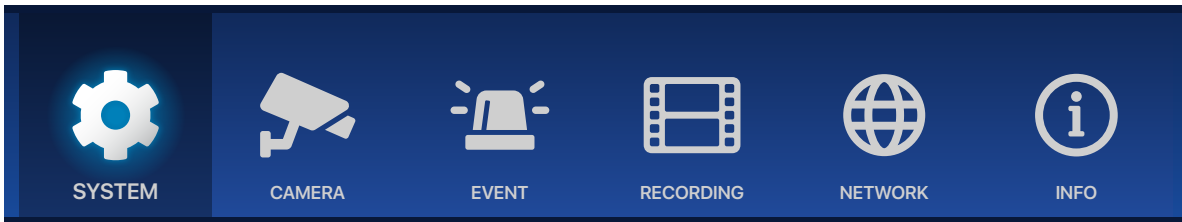
Top Menu

In the live screen, press the UP button on the remote control, or move the mouse cursor over the top area of the screen. The top menu will automatically appear.



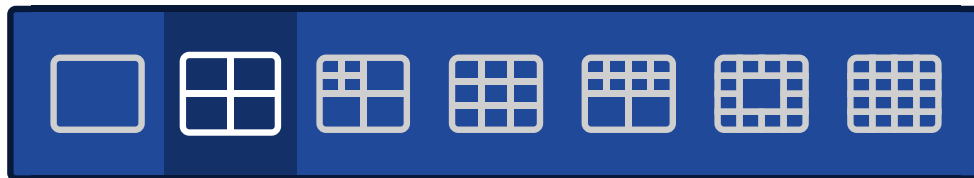
Main Menu (Middle)

Press the MENU button on the remote control, or right click with the mouse - then choose Main Menu.



Bottom Menu - Live View

In the live screen, press the DOWN button on the remote control, or move the mouse cursor over the bottom area of the screen. The bottom menu will automatically appear.



Full Screen Quad Screen 4-Mini 3-Large 9 Cameras 8-Mini 2-Large 12-Mini 1-Large 16 Cameras

Selecting one of these menu options will change the Multiplex View (the way the live camera views are arranged).

Depending on the model of DVR, not all Multiplex View options will be available. Example, a 4 Channel DVR will not be able to display 16 camera views.

MULTIPLEX VIEWS

From the bottom menu, select one of the options to change the way the camera images are arranged, or press the DISP (Display) button on the remote control.

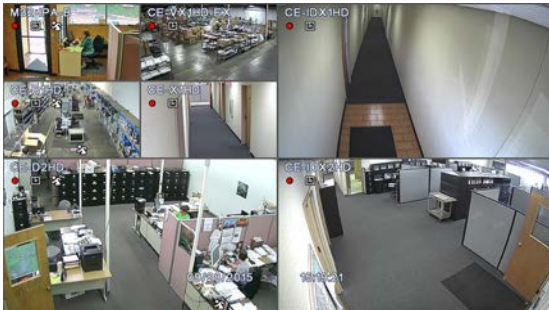
To change the order of the cameras of displayed in the chosen Multiplex View (from the bottom menu), click the same icon again or press ROTATE on the remote control.



Full Screen



Quad Screen



4-Mini / 3-Large



9 Cameras



8-Mini / 2-Large



12-Mini / 1-Large



16 Cameras

Press DISP to
change Multiplex
View

Press ROTATE to
change camera
order

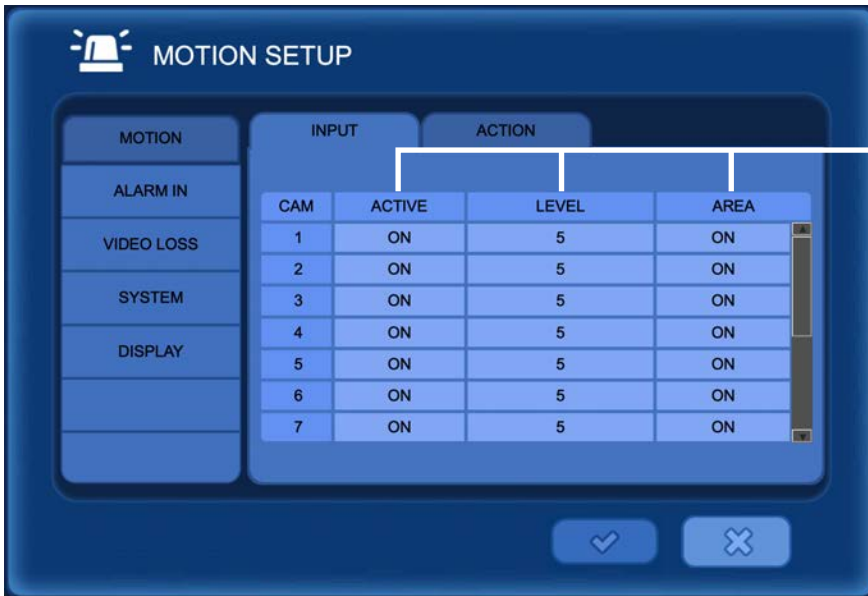


MENU SCREENS EXPLAINED

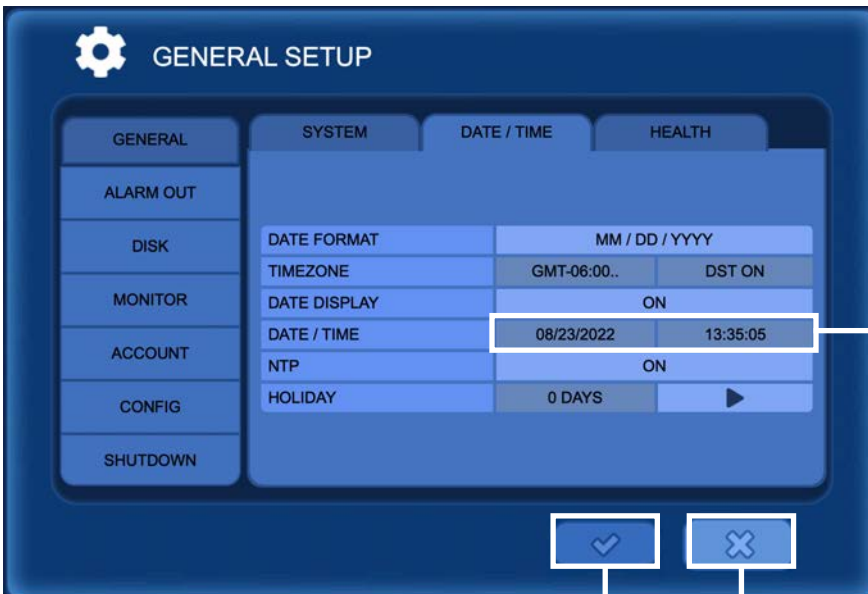
Some menu screens have the ability to apply settings to every camera/channel simultaneously rather than individually. This saves time if each camera/channel setting is desired to be the same. When a **+** is found at the top of the column; **ACTIVE +** / **LEVEL +** / **AREA +**, clicking on the item will open a menu screen that will apply those settings to every camera in the column.

Some menu options are not editable and are indicated by having a darker color background.

Click the **✓** [Check Mark] button to confirm changes made. Click the **X** button or let the menu screen timeout to cancel any changes made to the DVR.



Click an item with a **+** to apply settings to every camera.



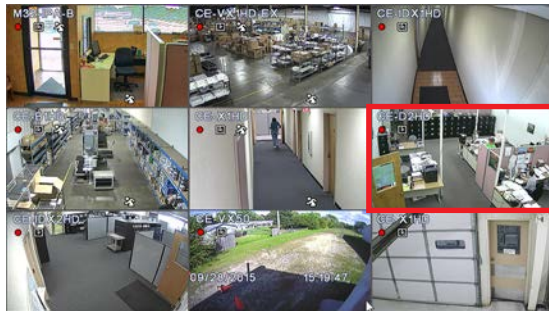
Darker colored boxes are not editable.

Click to confirm changes

Click to cancel changes

CAMEO MENU

In the live screen, right-click on the camera to adjust the settings. With the remote control, press the ENTER button to bring up the pink-frame channel selector. Press the ENTER button again to bring up the menu for the selected channel. From this menu the adjustment menu can be accessed for the selected camera channel.

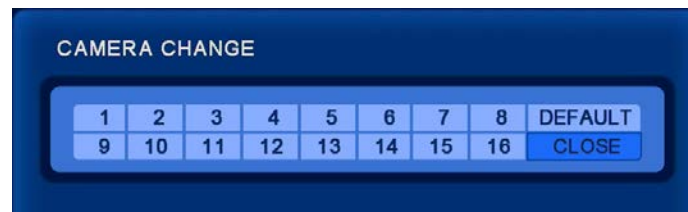


Right
Click





Adjustment: Click the arrows to cycle through cameras. **This feature is only available on certain models.*


Cameo Change: Swap the position of the selected camera with the position of another camera.



- Right click on the desired new location of the camera, select CAMEO CHANGE.
- Next select the existing camera you wish to move.
- To move the cameras back to their original positions, right click, select CAMEO CHANGE, then select DEFAULT.

Playback: Playback the last recording from the selected camera.

Freeze: Freezes the live screen. A  icon will be present within the channel's frame when image is in freeze mode. To unfreeze, select **FREEZE** again under the menu. Cameras will unfreeze when cameras are swapped positions, cameras are attached or detached from the DVR, or other actions are executed. (The  icon may remain on screen when this happens- To remove, select **FREEZE** again from the menu).

Freeze All: Freezes all live camera images. A  icon will be present when image is in freeze mode. To unfreeze, select **FREEZE ALL** again under the menu.


Sequence: Cycle through live screen channels.

Cameo Sequence: Cycle through live attached camera channels. *Note: All screens except the 16 Camera screen will sequence any channel selected with cameras not shown on screen, if more cameras are connected than are shown on the screen.*

Page Sequence: Cycle through all channels (regardless of camera signal). *Note: 1, 4, 9 camera screens only. Not available on 4Ch Shadow.*

CAMEO MENU > PTZ / UCC Control

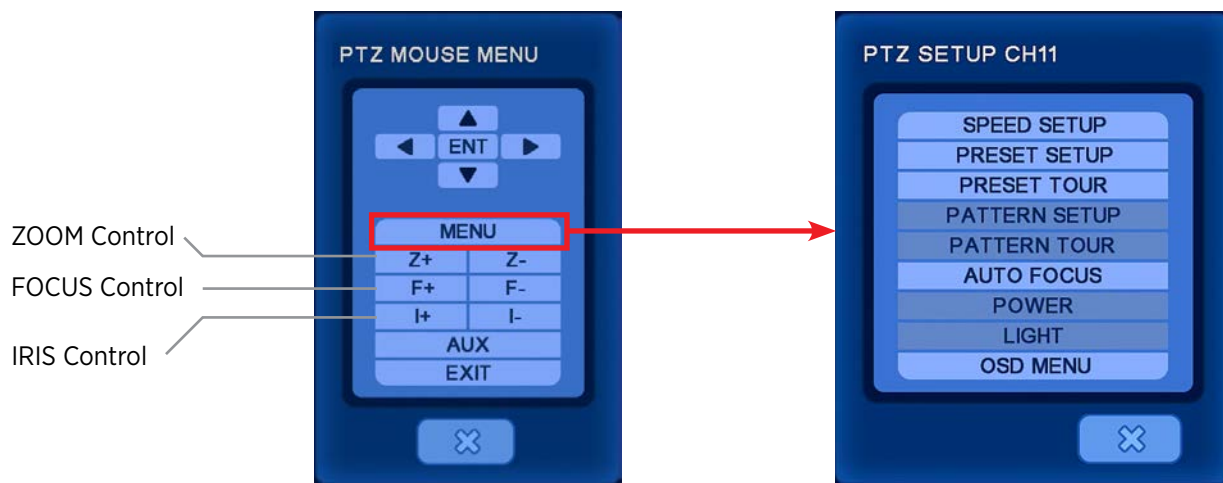
PTZ/UCC: Select to control an attached PTZ or EX-SDI 2.0 camera. A PTZ camera must be connected in order to access this menu item. EX-SDI 2.0 UCC control not available on every model DVR.

After selecting PTZ from the Cameo Menu - The PTZ icon  will appear in the lower left corner of the screen when within PTZ mode. The following will appear on the bottom center of the screen after selecting PTZ from the main menu.

PTZ:CH1MOVE-ZOOM

Using Mouse:

Right clicking the mouse button will bring up the following control screen for Menu, Zoom, Focus, and Iris controls. Left click on the buttons to adjust your PTZ camera.



Using Remote Control:

Press the enter button when the PTZ selection is highlighted on the camera menu.

Menu: In PTZ mode, press the Menu button to bring up additional PTZ controls such as Preset Setup, Auto Focus, etc.

Pan & Tilt: In PTZ mode, press the arrow buttons.

Zoom: In PTZ mode, press the following: Zoom In- Fast Reverse Button Zoom Out- Fast Forward Button

Focus: In PTZ mode, press the Focus button, then the following: Wide- Fast Reverse Button / Tele- Fast Forward Button

Iris: In PTZ mode, press the Iris button, then the following: Open- Fast Reverse Button Close- Fast Forward Button

Refer page 36 for information about setting up PTZ/UCC cameras.

CAMEO MENU

Cameo Menu / PTZ / MENU

Speed Setup: Set the PTZ camera speed (1 to 8).

Preset Setup: Set the preset position. If the position setup is saved, the PTZ camera will be directed to the set position by preset number.

Preset Tour: 6 different preset lists can be created. If the created preset lists are set to "ON", the PTZ will run the preset tour.

Pattern Setup: Pattern can be created by movement, zoom, focus, and iris. After pressing the BEGIN button, adjust the PTZ camera's position or zoom and press the END button. All directions (up, down, left, and right), zoom and iris settings are recorded. If using Clinton PTZs; set to Pelco Protocol to make this function available.

Pattern Tour: The PTZ camera moves according to the saved pattern.

Auto Focus: Turn On/Off auto focus. This feature is not available when using Clinton PTZ cameras.

Power: Turn On/Off power. This feature is not available when using Clinton PTZ cameras.

Light: Turn On/Off light. This feature is not available when using Clinton PTZ cameras.

OSD Menu: Turn On/Off OSD.

ZOOM: After clicking on Zoom, a red box will appear in the middle of the screen. With the mouse - Left click and hold down the mouse button to draw a zoom selection box. The selection will be highlighted in blue. Releasing the left mouse button will zoom to the selected area. The position of the zoomed selection is indicated on the PIP window in the lower right corner of the screen.



A small zoom selection will zoom to 4X.

A larger zoom selection will zoom to 2X.



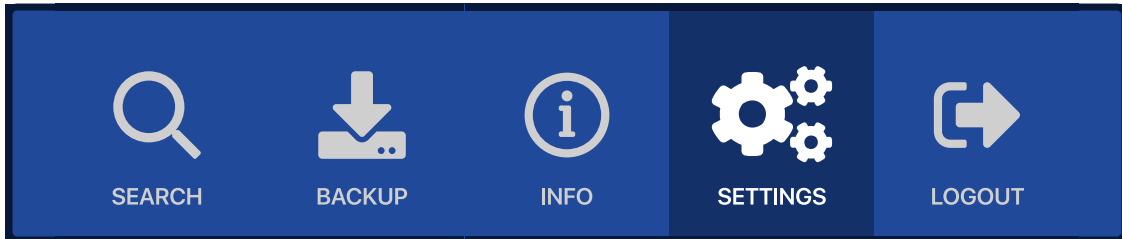
The YELLOW box in the PIP window shows where the zoomed area is in relation to the overall camera image.

AUDIO ON: Turn the audio on for the selected channel. This will only be used when an audio device is attached to the associated channel.

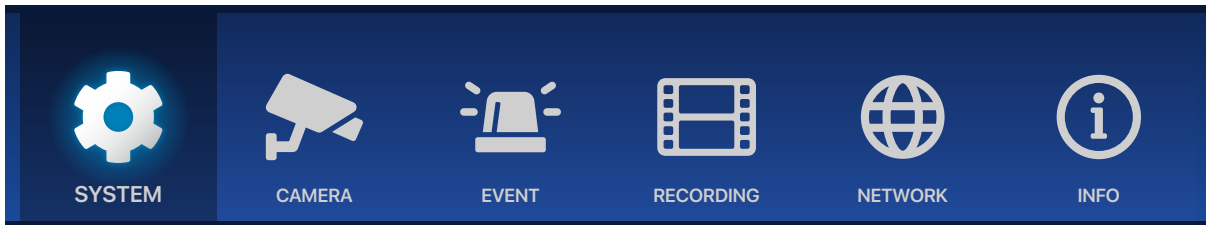
SYSTEM MENU

The SETUP menu can be accessed by pressing MENU on the remote control; by moving the mouse cursor to the top of the screen, clicking on the Settings icon, then clicking on the Setup icon; or by right clicking with the mouse, then selecting Main Menu.

Top Menu

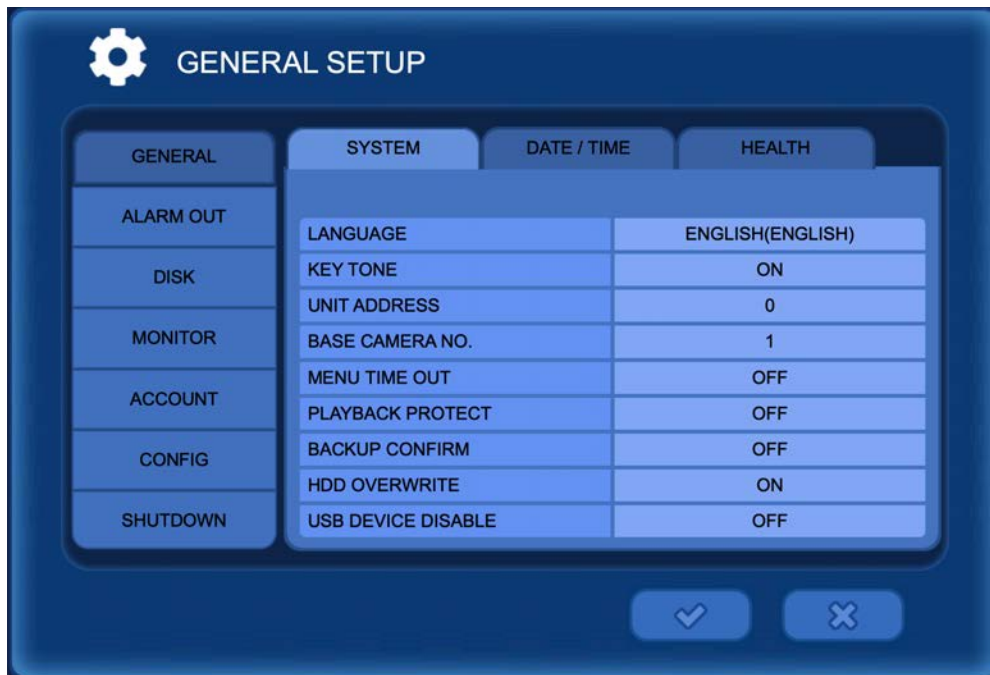


Main Menu (Middle)



Press MENU to display the main menu screen

SYSTEM MENU > General > System



LANGUAGE: Select the language: English, German, French, Spanish, Japanese, Chinese, Italian, Russian, Dutch, Korean, Czech, Portuguese, Slovakia, Taiwan, or Turkey.

KEY TONE: Turn On/Off the buzzer key tone.

UNIT ADDRESS: Set the DVR's ID number- This ID can be used when multiple DVRs are in the same location to control the DVRs individually with a single remote control. The DVR ID code must match the ID code from the remote.

BASE CAMERA NO: Set the beginning number of a camera. This can be useful to determine which camera is shown on-screen when multiple DVRs are being used.

Example: If set to "17", the first camera number will be 17. If 16 cameras are attached, the camera numbers will range from 17 to 32.

MENU TIMEOUT: Set the length of time the menu will show on-screen before it disappears.

PLAYBACK PROTECT: Prohibit the playback of past video. (Select from 0-99 days)

Example: If set to 3 days, the DVR will only save 3 days worth of data before it is overwritten.

BACKUP CONFIRM: Enable this setting to require the Admin login before you can backup.

HDD OVERWRITE: Select On/Off to overwrite recorded video when the Hard Drive is full.

USB DEVICE DISABLE: Select On to disable backup to external USB drive.

If HDD Overwrite is set to OFF, recording will stop when the HDD is full.

SYSTEM MENU > General > Date / Time



These areas are non-editable if NTP syncing is ON.

DATE FORMAT: Select the date format from the following: (YY/MM/DD) (MM/DD/YY) (DD/MM/YY)

TIME ZONE: Select the time zone and daylight savings time. DST will be automatically set to OFF if time zone which does not use DST is selected.

DATE DISPLAY: Select ON for the date & time to be shown on the live view screen.

DATE / TIME: Change the date and time. Note: This information will be automatically synced when connected to the internet. See NTP setting below.

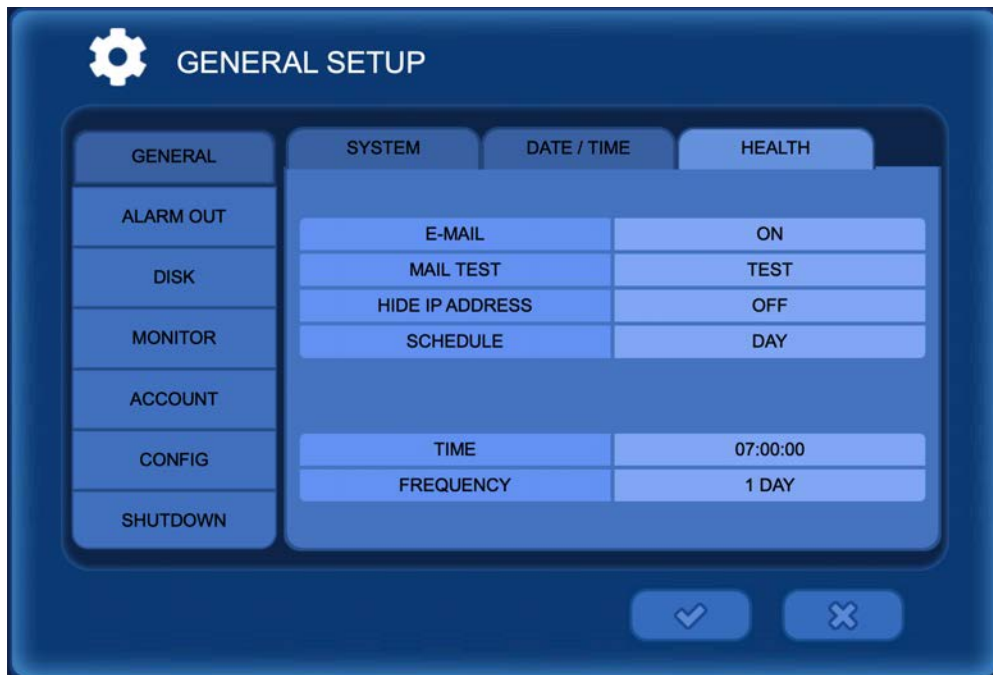
NTP: Select the usage of the NTP (Network Time Protocol). With NTP the DVR is synchronized with NTP server and will automatically obtain the correct time. The default server is [pool.ntp.org]. The user can input an alternate server if desired.

Auto Sync: Synchronize automatically every day. Note: Before this option can be selected “Sync Now” must be selected first.

Sync Now: Synchronize immediately.

HOLIDAY: Add or Delete a holiday. Holiday recording parameters can be chosen in the “Schedule Record” menu.

SYSTEM MENU > General > Health



Health check will preform a test of camera connections, and will email the selected recipients a list of errors, and status of the device.

EMAIL: On / Off

MAIL TEST: Sends a test email to the email address entered in the Network/E-Mail menu (from the Main Menu).

HIDE IP ADDRESS: When On, the DVR's IP Address will be hidden in the Health Check Email.

SCHEDULE: Day / Weekend / Month.

TIME: Time to preform check.

FREQUENCY: Select the frequency the health check will activate. 1-365 days / Day of the week / 1-31

SYSTEM MENU > Alarm Out



ALARM OUT: Column shows alarm outputs listed 1-4.

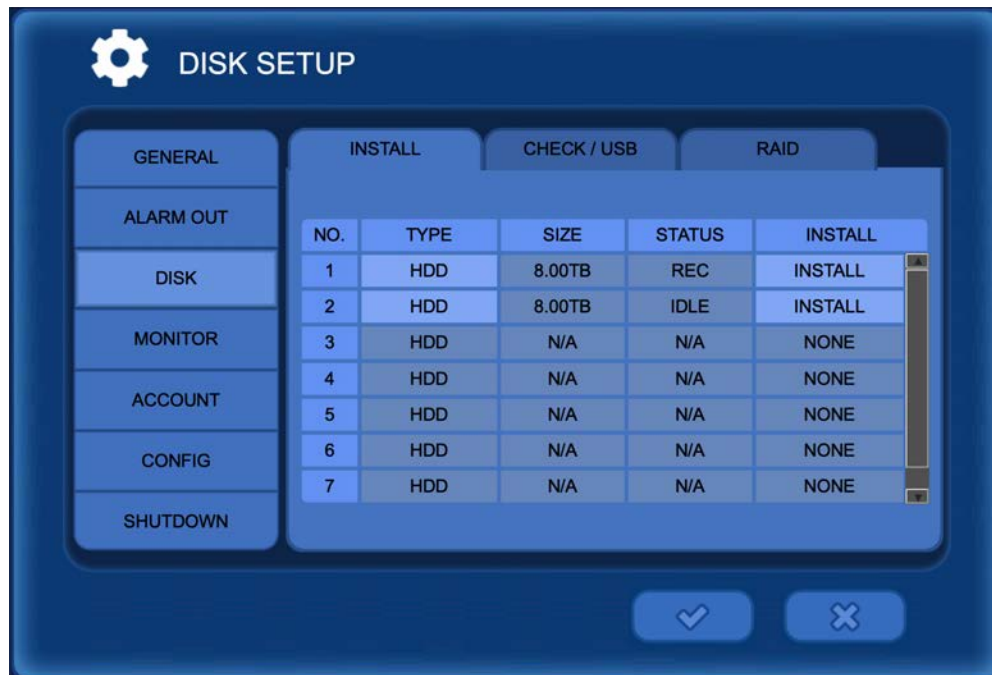
SIGNAL+: Select On/Off to enable or disable the corresponding alarm channel.

ALARM SET: Selecting SET will activate the connected alarm device for each output set to “ON”.

ALARM CLEAR: Selecting CLEAR will cancel the alarm for the activated device in the “Alarm Set Test”.

Alarm Inputs will vary depending on DVR model.

SYSTEM MENU > Disk > Install



The install menu will display as a list of numbers which correspond to the type of device, the size of the device, and the status for each device. Selecting a highlighted type will display the information on the drive which includes the Vendor, Model number, Serial Number, and Status of the device.

INSTALL: Select to install a new device for the first time. This selection may be used to reformat an already installed device. Doing so will erase all currently stored data on the device.

ERASE: Erases the data on a re-writable disk.

SYSTEM MENU > Disk > Check / USB




EARLIEST RECORD: Shows the earliest recorded data information.

LATEST RECORD: Shows the most current recorded data information.

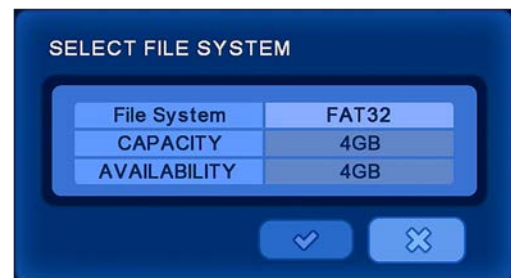
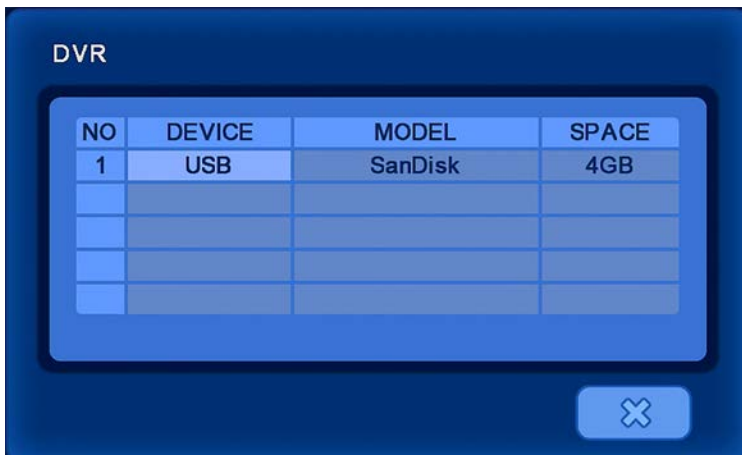
DISK CHECK: Check the data from the earliest recorded data to the latest. This checks for errors in the HDD. Clicking START will open a progress window to show the percentage of the Disk Check completion. Once this process has been started it must run until 100% completion.

NOTICE Performing Disk Check can take up to 30 minutes or more to complete depending on HDD size & how much recorded video is on the HDD.



Once started the Disk Check can not be canceled.

USB FORMAT: Select to format an inserted USB device. It is necessary for the USB device to be formatted to FAT32 before backing up video to USB device. *NOTE: Formatting the USB will erase all data on the device.*



Click the desired device. Make sure the USB will be formatted to FAT32 in the File System options.

SYSTEM MENU > Disk > RAID



This feature is only available on the FXR8/FXR16, & Hybrid (HY16) DVRs. Clinton DVRs that are pre-built with RAID come set at RAID Level 1.

RAID: Displays RAID level.

RAID 0 - Splits data evenly between 2 HDDs. If one HDD fails, the data will be lost- there is no copy of the data. RAID 0 build time is typically around 5 minutes.

RAID 1 - Mirrors/copies the same data to 2 HDDs. If one HDD fails, the second HDD will still have recorded data. RAID 1 build time will range from 24-48 hours.

DISK: Displays disk status of installed HDDs.

STATUS: Displays RAID build status during setup and installed status after setup.

RATE: Display the progress during RAID setup.

NOTICE



- A minimum of 2 hard drives must be installed for RAID.
- The RAID HDD should be the same model and same size (i.e. 1 TB, 2 TB, etc..) as primary Hard Drive.
- Reboot time is longer than normal boot time when initializing RAID. (About 5 minutes)

WARNING!



- When RAID is built, all previous HDD information will be deleted. Backup needed data before starting RAID setup.
- Disk errors can occur if RAID HDD brand or model is different from primary HDD.

SYSTEM MENU > Monitor



RESOLUTION: Select the resolution for the connected MAIN monitor. The DVR will restart after selecting a different resolution. Selecting a higher resolution than the monitor is capable of can cause no image to be displayed and a SYNC OUT OF RANGE MESSAGE.

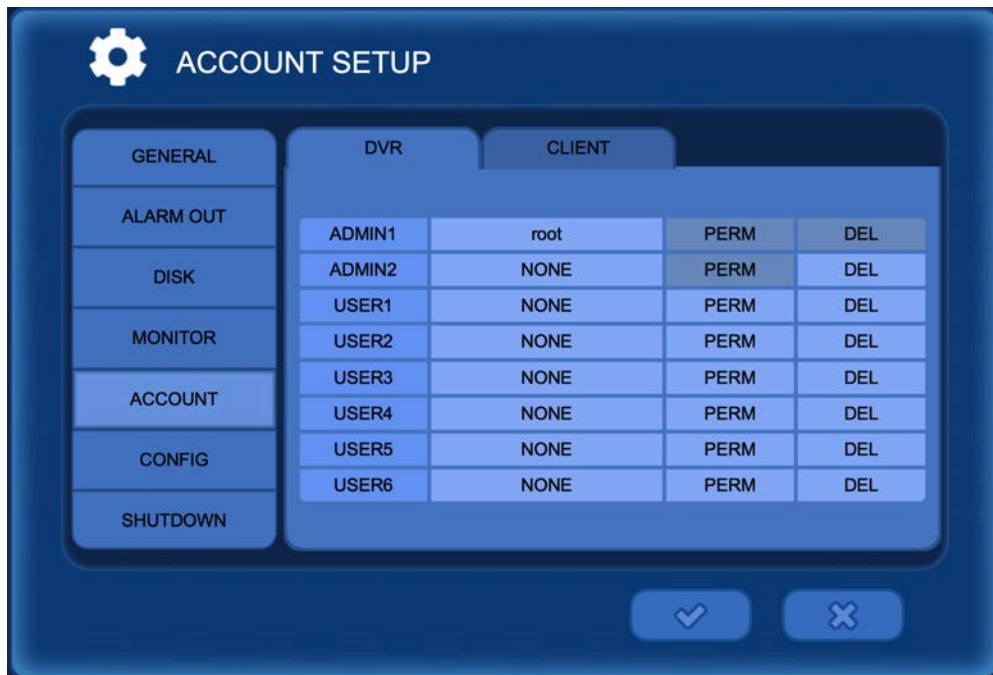
Selecting SWITCH or AUTO from the options will automatically select the best resolution for the monitor.

BORDER COLOR: Change the border color of the camera Multiplex views.

ALPHA BLENDING: Adjust the transparency of the DVR's On Screen Display Menu.

- If a "SYNC OUT OF RANGE" message is displayed on the monitor, the selected resolution is too high for the monitor.
- Press **1024768** then **ENTER** on the remote control to reset the output monitor resolution to 1024x768 resolution.
- Press **123123123** then **ENTER** on the remote to select the next lowest resolution.
- 4K resolution (3840x2160) will only display on HDMI monitors, it will not display on VGA monitors.

SYSTEM MENU > Account



Select the DVR tab to configure login settings at the DVR. Select the Client tab to configure login settings for network access (AVMS Software or CVMS App).

ADMIN: Administrators (up to 2 Admin) will have complete access to all DVR features.

USER: General users will have restricted access. They will not have access to DVR settings.

PERM: Give permission to USER accounts to allow access to Playback video, Backup video and PTZ control. Client level Users have an additional permission for viewing live video.

DEL: Delete the selected USER account. The ADMIN1 account can not be deleted.

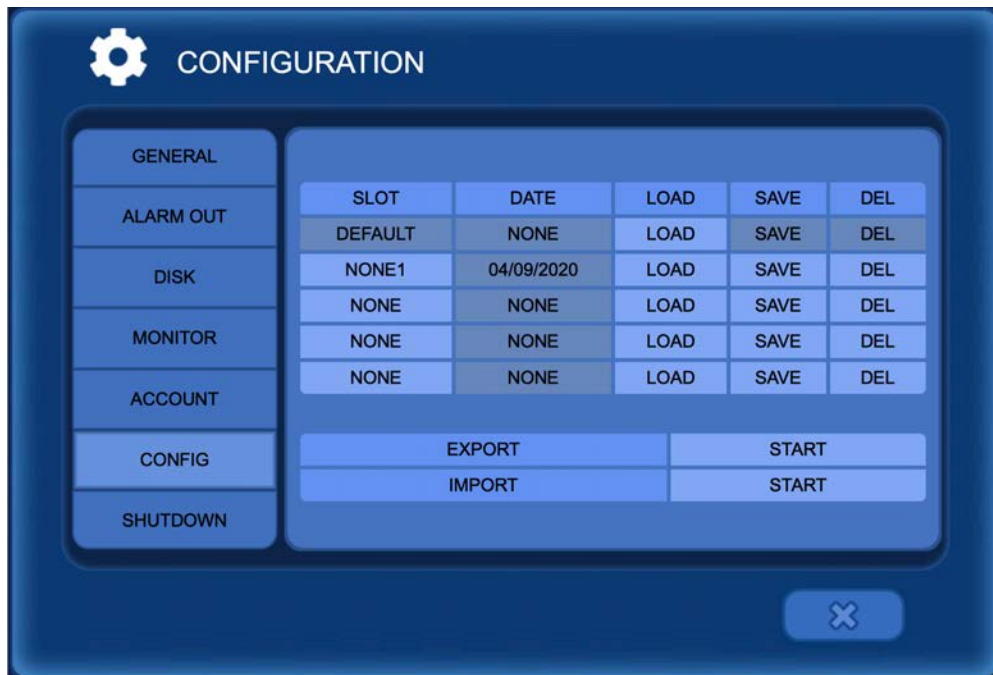


ADD/EDIT USER: Click the desired user to add or edit account information. If editing an ADMIN account, first enter the current ADMIN ID and Password.

1. Assign a new ID; must have 4 or more characters, and use more than 1 character.
2. Assign a new Password; must use 8 or more characters, must use Uppercase & Lowercase letters, include a number, and a symbol. ex: Password1\$
3. Confirm the new Password.
4. Click the Checkmark button to save.

- It is strongly recommended to change the default ADMIN password.
- The initial ADMIN1 user name & password can be modified, but can not be deleted.
- If/when connecting to the DVR using ONVIF discovery, use the credentials found on the RTSP Server menu— see page 53 for more information.

SYSTEM MENU > Config



Setting up a configuration allows all the settings to be saved to the DVR. After the DVR setup has been completed, the settings can be saved as a configuration. If something is changed in the future the original configuration can be restored. Another DVR(s) can be quickly setup with the same settings by exporting the configuration to a CD or USB drive, and then importing to another DVR.

SLOT: Label the slot to load or save configuration.

DATE: Displays the date the configuration was saved.

LOAD: Load the saved configuration.

SAVE: Save the current configuration.

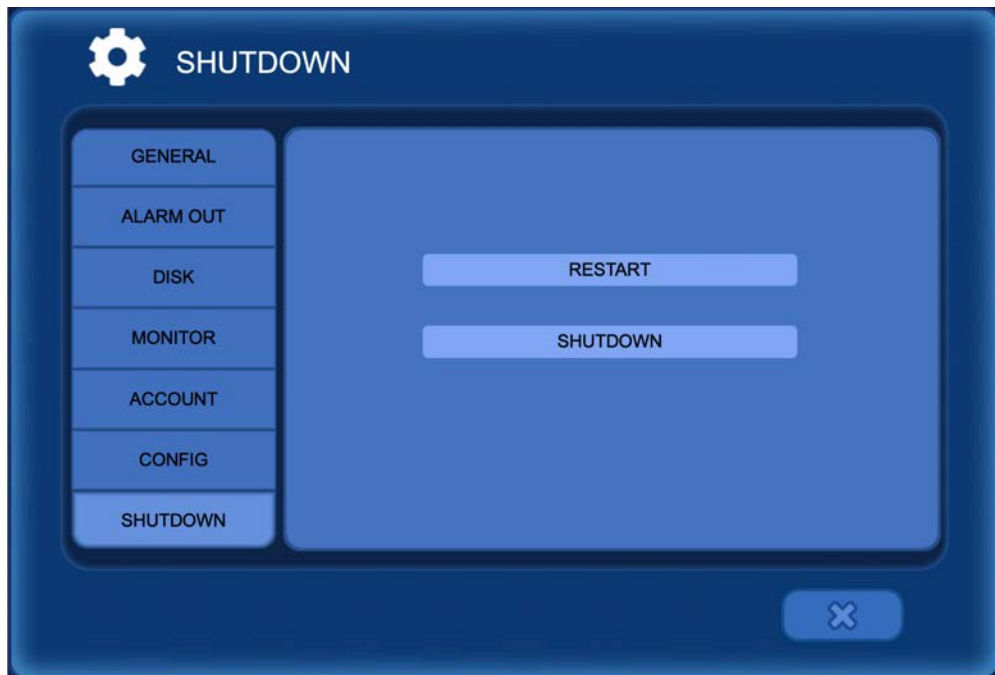
DEL: Delete the configuration data on the Slot.

EXPORT: Export the current configuration to USB device or DVD.

IMPORT: Import the configuration data from USB device or DVD to the DVR. Camera, recording, system, and/or network settings can be imported.

- Configuration settings only import to the same series DVR. ex: you can't save settings from a CE-EX4 then upload to a CE-FXR16.

SETUP MENU > Shutdown



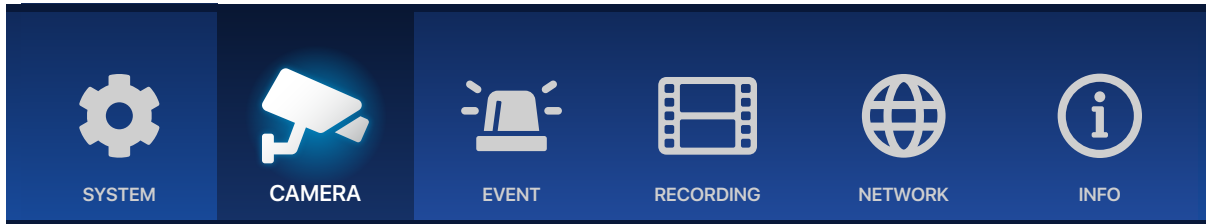
RESTART: Restart the DVR. This is typically done to prepare the DVR for a firmware update.

SHUTDOWN: Shutdown the DVR. This is the recommended way to safely power off the DVR. Flipping the power switch on the back of the DVR or disconnecting the power while the DVR is ON may result in damage to the hard drive.

CAMERA MENU > Camera

The CAMERA menu can be accessed by pressing MENU on the remote control or by right clicking with the mouse, then selecting Main Menu.

Main Menu (Middle)



CAMERA LABEL: Select the way in which the camera label is shown on the live screen. Each camera can show the camera number [NUMBER], camera name [NAME], both of these by selecting [ALL], or to display none of these by selecting [OFF].

NAME: Change the camera name. (The virtual keyboard will appear when a camera's name is selected.)

INSTALL: Install or Uninstall a camera; when "Install+" is set to OFF the camera for the selected channel will not be recorded or show on screen.

HIDDEN: Hide a selected channel on live view. When hidden the camera will not show on live view, but the camera's signal will continue to record as normal.

CAMERA MENU > PTZ



Adjust the settings on this page to control PTZ and/or UCC cameras through the DVR. UCC allows camera OSD adjustments and zoom/focus adjustments to be made remotely through DVR.

PORT: Set the Baud Rate, Data Bit, Parity & Stop Bit parameters for the attached PTZ camera. Refer to the PTZ camera's manual for PORT settings and instructions on connecting to the RS-485 port.

ID: Select an ID number for the associated PTZ camera.

TYPE: Select the PTZ type from a list of common PTZ protocols.

Settings for Clinton PTZ Camera	
Baud Rate	4800
Data Bit	8
Parity	NO
Stop Bit	1
ID	1
Type	CLINTON-W
UCC	n/a

Settings for Clinton UCC Camera	
Baud Rate	9600
Data Bit	8
Parity	NO
Stop Bit	1
ID	1
Type	NONE
UCC	TYPE A

UCC: Important Information

- For UCC to function, the SDI Output from the camera must be set to EX-SDI 2.0 & the DVR must be EX-SDI 2.0/UCC compatible (not all DVRs support UCC).
- The ID & Baudrate must match on Camera and DVR. The default UCC settings for Clinton cameras is ID: 1 and Baudrate: 9600. To change the ID & Baudrate of the camera: Enter the camera's OSD menu- then access the SERIAL Menu and scroll to CAM ID and/or BAUDRATE to set the desired settings.
- Depending on the DVR, there may be an option for UCC Type (A/B). For most newer 2MP/4MP cameras , select Type A.

CAMERA MENU > Spot



A Spot monitor will only show live camera footage. DVR menu functions will not be displayed on a Spot monitor. Spot monitor options vary depending on the model of the DVR.

CAMERA: Select the camera(s) to be displayed on the Spot monitor. Select ALL to display every available camera. Choose specific cameras to only display those cameras on the Spot monitor.

DEFAULT: Select the camera to display on spot monitor when sequence is off.

SEQUENCE: Select On/Off to enable/disable camera sequencing on the spot monitor.

INTERVAL: Select the time interval before sequencing onto the next camera.

POPUP: Select 'ON' to enable pop-up full screen when an event occurs.

For DVR models (EX Series, FXR & Shadow) with BNC Main or Spot options:

BNC Output as MAIN Monitor

BNC Output as SPOT Monitor

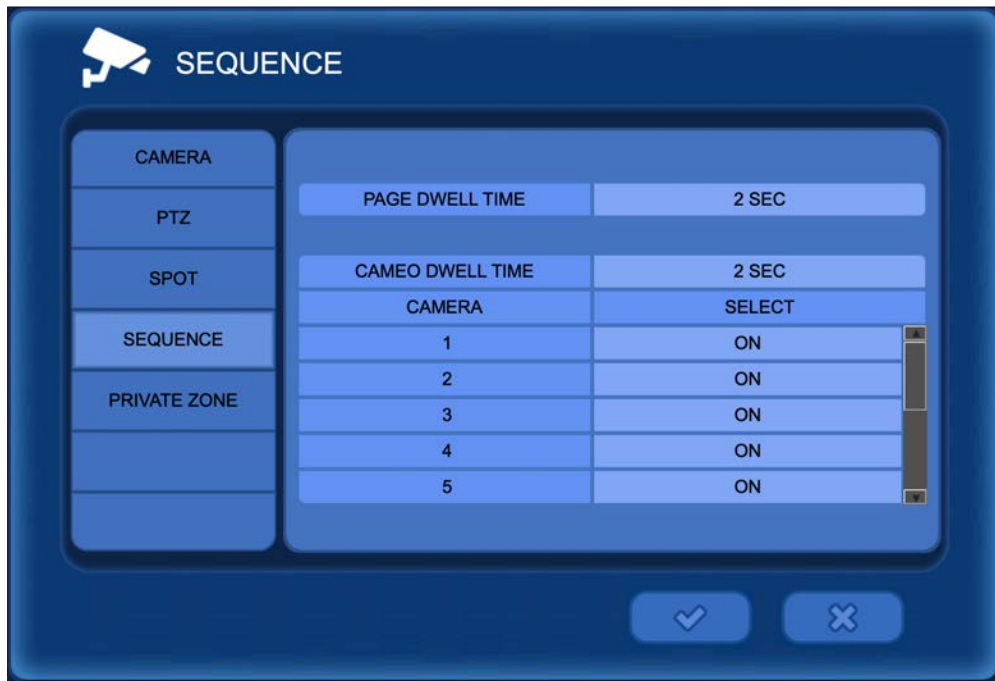


CAMERA: OFF



CAMERA: ON (ALL or selected Camera(s))

CAMERA MENU > Sequence

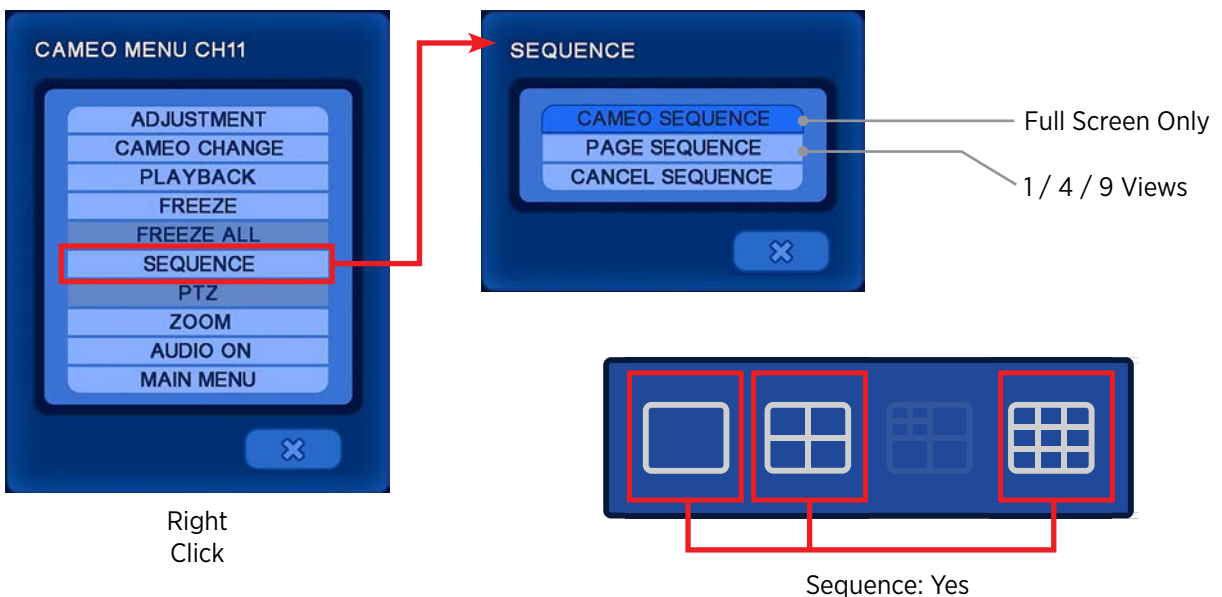


The MAIN monitor can sequence the individual full screen image or certain Multiplex views (Full Screen, Quad Screen or 9 Cameras). The adjustments made in this menu can be turned ON or OFF by right clicking in the live view and selecting Sequence.

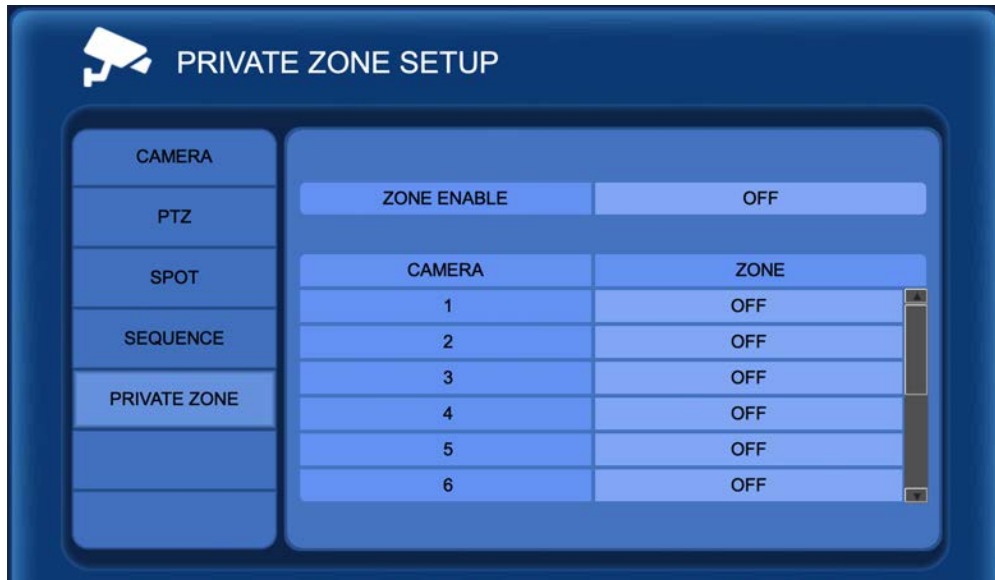
PAGE DWELL TIME: Select the dwell time before the sequence proceeds to the next page on the main monitor. Available on 1 / 4 / 9 camera screens. All cameras will be displayed.

CAMEO DWELL TIME: Select the dwell time before the sequence proceeds to the next channel while full screen. Individual cameras can be selected ON or OFF during the Cameo Sequence.

CAMERA: Clicking Select+ will turn all cameras ON or OFF during the Cameo Sequence. Alternatively, individual cameras can be selected ON or OFF during the Cameo Sequence.



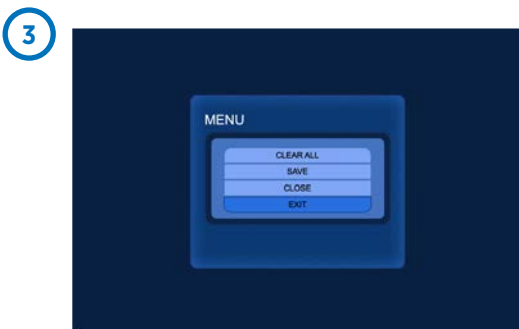
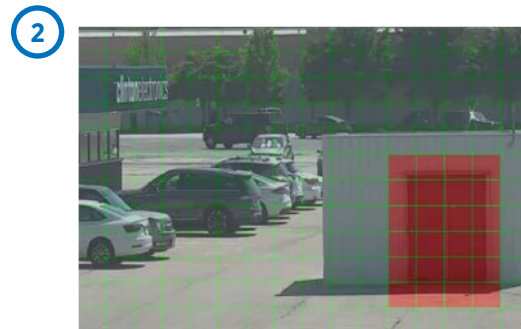
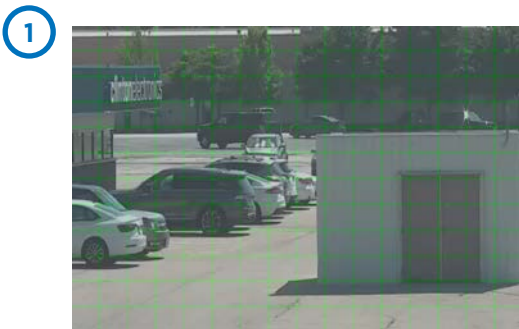
CAMERA MENU > Private Zone



ZONE ENABLE: Select from OFF or ON to enable or disable privacy masking. When set to OFF, no privacy masks will display— even if configured and set to ON for a specific camera.

ZONE: Select the camera in which to apply the Privacy Zone. When a Zone is selected, the corresponding camera image will appear on screen. From here you can set the Privacy Zone as follows:

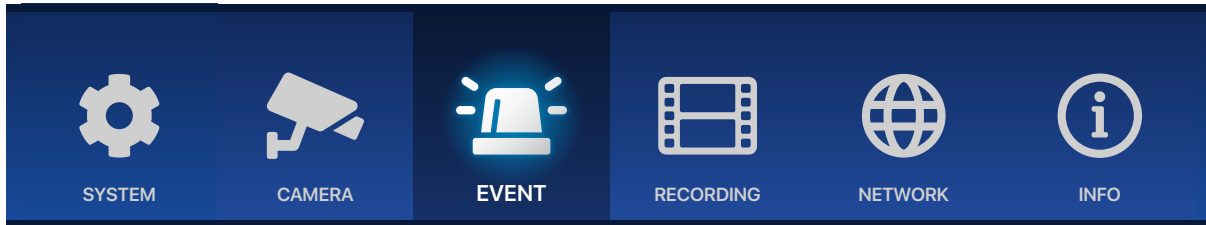
1. Move the cursor to the desired privacy zone start point.
2. Click and hold the left mouse button on a square to set a starting corner. Move the cursor to the desired opposite end corner and release the mouse button to define a block of cells.
3. Right-click with the mouse to bring up the Zone Menu. Using this menu, a selected area can be deleted or saved, or you can return to the previous menu screen.
4. After clicking the check mark to confirm changes and returning to Live View; the area with the Privacy Zone will now be blocked from view.



EVENT MENU > Motion > Input

The EVENT menu can be accessed by pressing MENU on the remote control - or by right clicking with the mouse, then selecting Main Menu.

Main Menu (Middle)



MOTION>INPUT: Defines the parameters of the motion detection area(s).

ACTIVE: Select ON to activate the motion detection area.

LEVEL: Select the motion sensitivity level from low (1) to high (11).

AREA: Define motion areas by selecting individual cells or groups of cells:

*The default Area will be the entire image.

1. Begin by right-clicking, then select CLEAR ALL to clear the motion area.
2. Left click with the mouse, or press enter on the remote to select a cell.
3. Left click and drag the mouse cursor to select multiple cells.
4. To select multiple cells with the remote, press enter and use the arrow keys. Press enter again to confirm.
5. When done setting up motion cells, right click with the mouse, or press the MENU button on the remote to bring up selection options.
6. Select Save, then click the check mark.

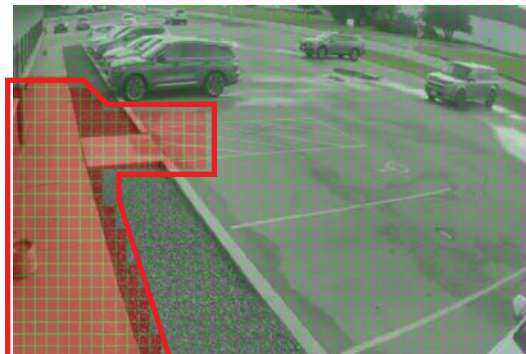
To apply settings to all cameras in the column, click the tab at the top of the column.



To enable motion only recording, Time (continuous) recording should be turned OFF. Refer to Recording Settings.



Draw a motion area with the mouse.



Only motion in the highlighted area will be detected.

EVENT MENU > Motion > Action



MOTION>ACTION: Assign different actions for the DVR to perform when motion is detected.

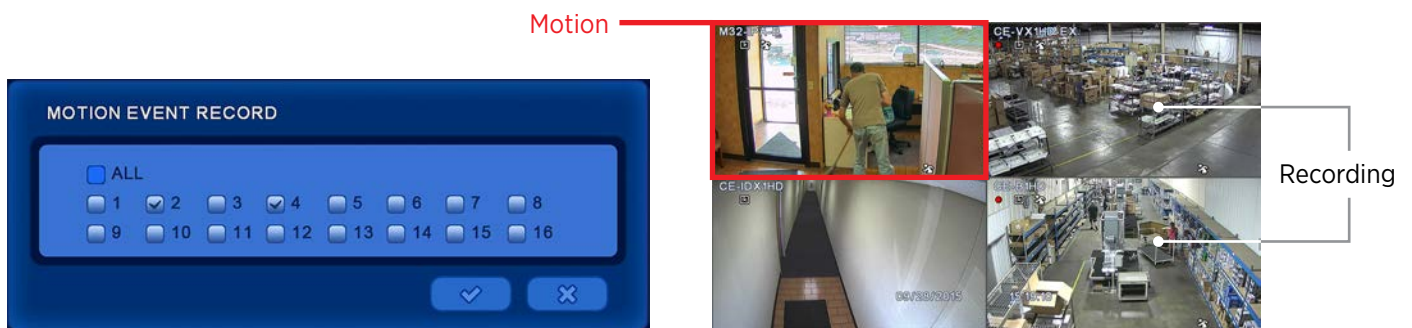
RECORD: Enable a DVR channel to record when motion is sensed by a another camera. Select ON to activate the motion area.

The default setting is to only record the channel in which motion has occurred.

Example: Camera channel 1 will only record when camera 1 senses motion.

The RECORD (Motion Event) can be setup to record different cameras other than the selected channel.

Example: When channel 1 senses motion, recording is triggered on channel 2 and 4.



ALARM: Select ON to enable an externally attached alarm. You can also apply a delay before the alarm is triggered, and select the duration of the alarm (from 0-99 seconds).

BUZZER: Select ON to enable an audible chime from the DVR when motion occurs.

PRESET: Set the preset number. When motion occurs, a PTZ camera will move to the preset position. For information on setting up PTZ presets see page 17.

E-MAIL: Enabling this function will send an E-mail to the selected recipients when a motion event occurs.

EVENT MENU > Alarm In

Alarm In:
Input



ACTIVE: Select On/Off to activate alarm.

NAME: Input the desired alarm name.

TYPE: Select the alarm type. (NO : Normally Open, NC : Normally Closed)

Alarm In:
Action



RECORD: Set to On to record when the alarm input is triggered.

ALARM: Select On/Off to enable or disable the selected alarm out.

BUZZER: Select On to enable an audible chime from the DVR when alarm input is triggered.

PRESET: Set the preset number. (When alarm input is triggered, a PTZ camera will move to the preset position.)

EMAIL: Select On to receive an email notification when alarm input is triggered. Define email recipients in the following menu: Setup / Network / Email.

EVENT MENU > Video Loss

Video Loss:
Input

MOTION	INPUT	ACTION	WARNING
ALARM IN	CAMERA	ACTIVE	DWELL TIME
VIDEO LOSS	1	OFF	OFF
SYSTEM	2	OFF	OFF
DISPLAY	3	OFF	OFF
	4	OFF	OFF
	5	OFF	OFF
	6	OFF	OFF
	7	OFF	OFF

ACTIVE: Setting video loss to [ON] will trigger the items selected within the “Action” tab.

DWELL: Adjustable time delay (1-20 seconds) between Video Loss & Action

Video Loss:
Action

MOTION	INPUT	ACTION	WARNING		
ALARM IN	RECORD	ALARM	BUZZER	PRESET	E-MAIL
VIDEO LOSS	1	OFF	OFF	OFF	OFF
SYSTEM	2	OFF	OFF	OFF	OFF
DISPLAY	3	OFF	OFF	OFF	OFF
	4	OFF	OFF	OFF	OFF
	5	OFF	OFF	OFF	OFF
	6	OFF	OFF	OFF	OFF
	7	OFF	OFF	OFF	OFF

RECORD: Select which channels to record when video loss occurs.

ALARM: Select On to enable the selected alarm to trigger upon video loss of the associated channel.

BUZZER: Select On to enable an audible chime from the DVR when video loss occurs.

PRESET: Set the preset number. (When video loss occurs, a PTZ camera will move to the preset position.)

EMAIL: Select On to receive an email notification when video loss occurs. Define email recipients in the following menu: Setup / Network / Email.

EVENT MENU > Video Loss

Video Loss:
Warning



ALL VIDEO LOSS E-MAIL: Select ON to receive an email notification when Video Loss on all channels occurs. Define email recipients in: NETWORK > E-MAIL > Address.

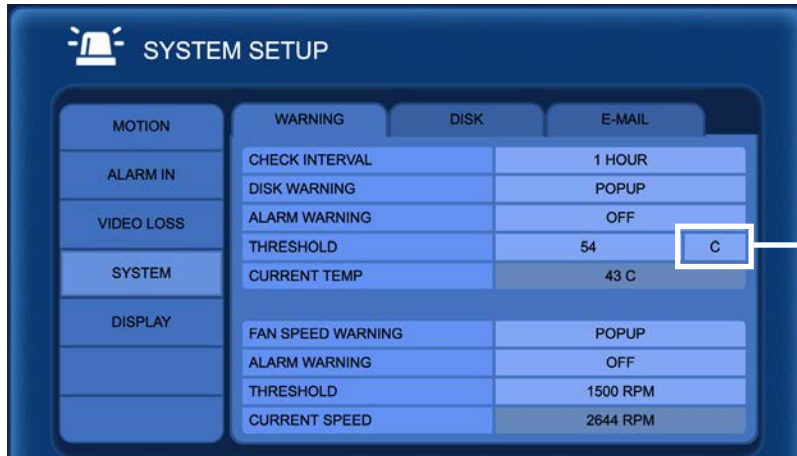
ALL VIDEO LOSS BUZZER: Select ON to enable and audible chime from the DVR when Video Loss on all channels occurs.

MAX VIDEO IN: Displays the total available camera inputs of the DVR.

CURRENT VIDEO IN: Displays the current number of cameras connected to the DVR.

EVENT MENU > System Setup

System:
Warning



Click to change from °Celsius (C) to °Fahrenheit (F)

CHECK INTERVAL: Select the check interval time. This is how often the DVR will preform a S.M.A.R.T. check of the HDD.

DISK WARNING: When HDD temperature is checked and found to be out of the threshold, select the notification type: Log Only, Popup + Buzzer, Popup, or for no notification select OFF.

ALARM WARNING: Select an Alarm Output when a Disk Warning is triggered.

THRESHOLD (HDD): Set the warning temperature threshold. Change from °Celsius to °Fahrenheit as needed.

CURRENT TEMP: Displays the current temperature of the HDD.

FAN SPEED WARNING: When the fan speed drops below the threshold, select the notification type: Popup + Buzzer, Popup, or for no notification select OFF.

ALARM WARNING: Select an Alarm Output when a Fan Speed Warning is triggered.

THRESHOLD (FAN): Set the warning fan speed threshold.

CURRENT SPEED: Displays the current fan speed (RPM).

System:
Disk



Automatically disabled when HDD overwrite is ON.

DISK FULL WARNING: Select to notify user when the HDD reaches the used space limit.

USED SPACE: Select the HDD full percentage.

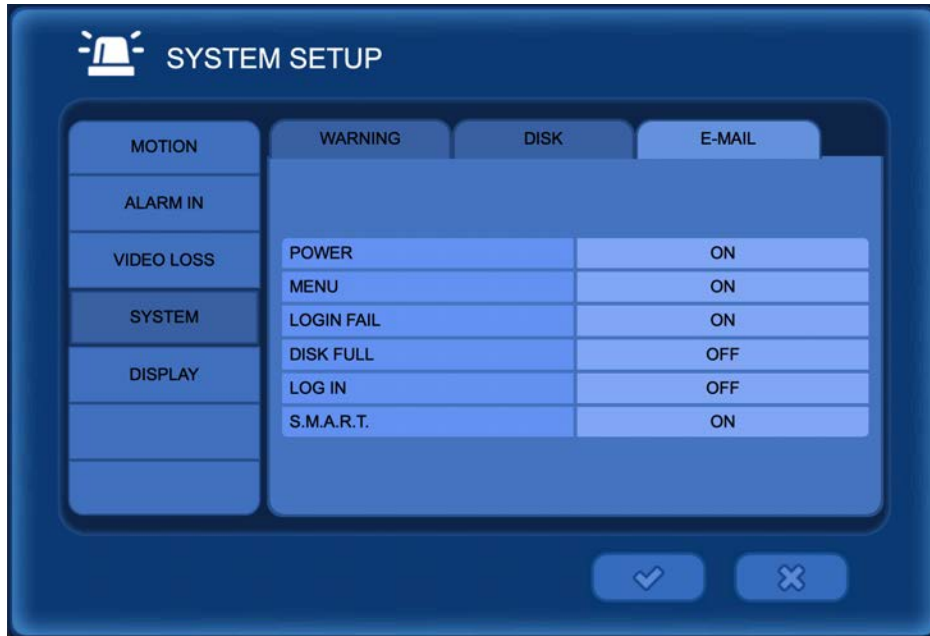
ALARM: Select an Alarm Output when a Disk Full Warning is triggered.

BUZZER: Select On to enable the DVR buzzer.

MESSAGE: Select On to enable a Pop-Up message; "DISK FULL" will be displayed on the screen.

EVENT MENU > System Setup & Display

System:
Email



Set options to ON or OFF to receive an e-mail notification whenever any of following actions occur: POWER (On/Off), MENU (accessing DVR menu), LOGIN FAIL (failed attempt to login to DVR), DISK FULL (HDD is full), LOGIN (login to DVR), or SMART (monitors internal operations of the HDD and warns of potential problems).

Email recipients can be setup in the following menu: NETWORK > E-MAIL > Address.

Display
Setup



DISPLAY: Set the duration of the full screen POPUP when an event occurs within the selected camera.

RECORD ICON: Select On to display the record status icon at the top of the screen.

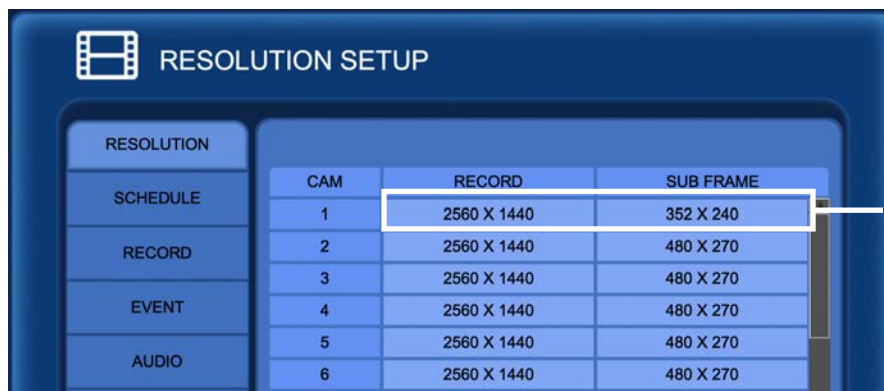
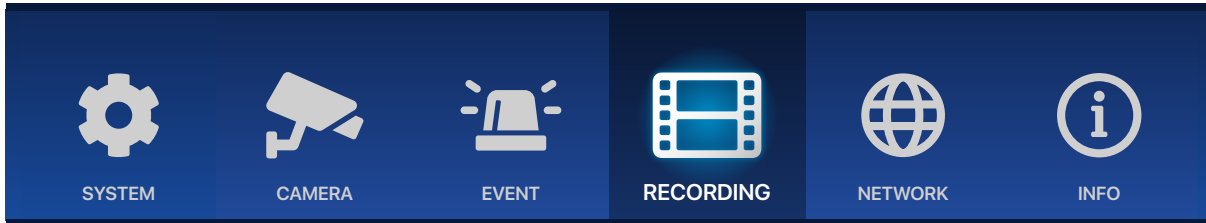
EVENT ICON: Select On to display the event icon at the bottom of the screen when an event occurs.

EVENT POPUP: When an event occurs the camera image will be displayed full screen.

RECORD > Resolution

The RECORDING menu can be accessed by pressing MENU on the remote control, or by right clicking with the mouse, then selecting Main Menu.

Main Menu (Middle)



Resolution options will vary depending on the type of DVR.

RESOLUTION: Set the main recording resolution for each channel. This does not affect the live view of the camera, for example a 4MP camera will display Live with full resolution— but can record at a lower resolution.

SUBFRAME: Set the recording subframe resolution for each channel. This affects the resolution of the video used for remote searching (across the network) on the AVMS software and/or the CVMS mobile app. Additional Subframe settings can be configured via the NETWORK > Subframe menu.

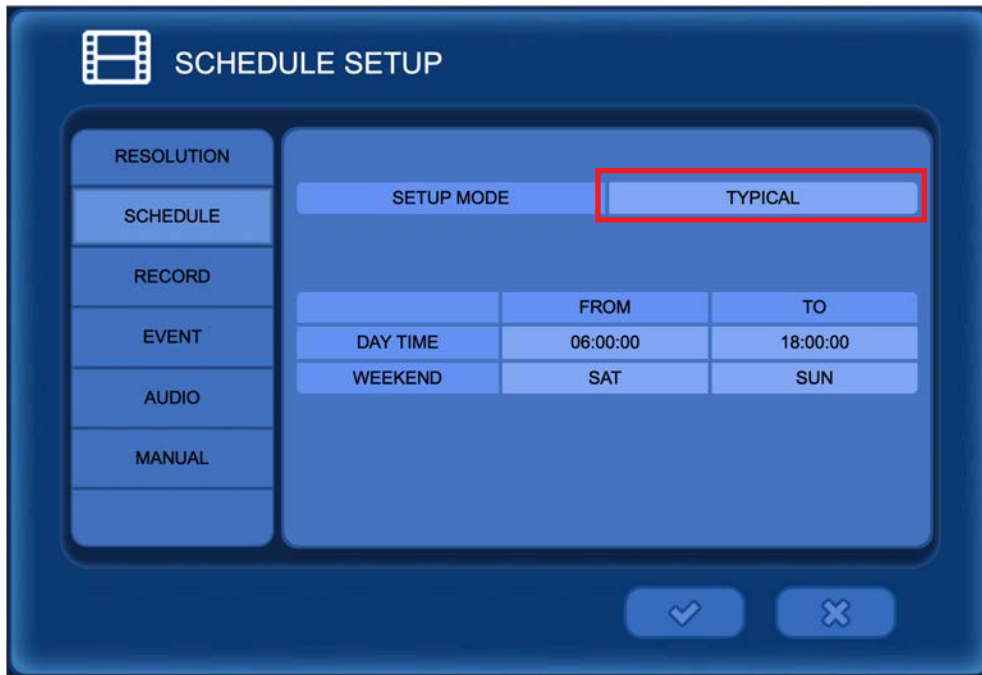
	Pixels (W x H)	Common Term
RECORD	2560 x 1440	4MP / QHD
	1920 x 1080	2MP / Full HD
	1280 x 720	720p / HD
	944 x 480	960H
	720 x 480	D1 / SD
SUBFRAME	640 x 360	-
	480 x 270	-
	352 x 240	CIF

NOTICE



- Once the Recorded Resolution is set, the recorded video quality can not be increased. Ex: 4MP (2560x1440) camera set to record at 944x480 will lower the quality of the video when recorded.
- Higher resolution video takes up more space on the HDD, but provides more detail. The lower the resolution, the lower the video quality/detail.

RECORD > Schedule > Typical



SETUP MODE: TYPICAL

Three basic recording schedules can be defined based on Day Time, Night Time & Weekend. The times & Weekend days adjusted in this menu will use the settings from the RECORD menu.

- **DAY TIME** - Set the recording start (FROM) & stop (TO) times for schedule recording. NIGHT TIME hours will automatically be the hours remaining from the DAY TIME hours.
- **WEEKEND** - Set the weekend days.

The FPS (Frames Per Second) & recording quality (Bitrate) can be adjusted for each camera for both Time (continuous) recording and Event recording. Adjusting these settings will affect the network stream for Live video when viewed with AVMS software or CVMS mobile app. **See BITRATE chart on pg51.*

Continuous & Motion Recording

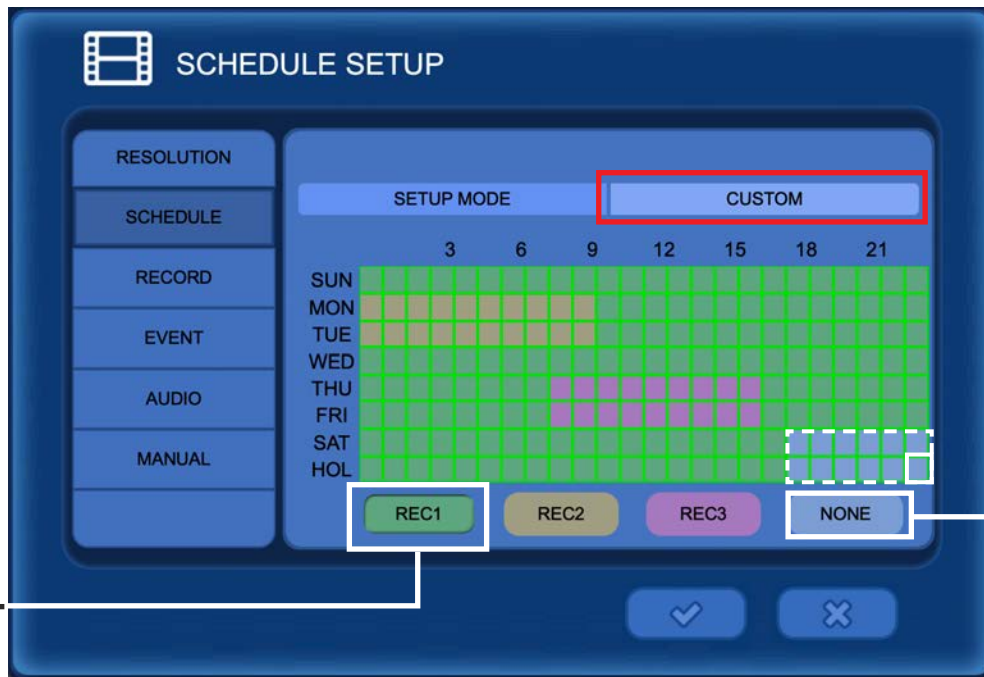


Motion Only Recording



To only record EVENTS (Motion, Alarm, Video Loss) set the Time options to OFF.

RECORD > Schedule > Custom



To select a block of cells, first select a REC button (1,2,3 or None) then left click & drag the cursor to the desired block endpoint. To select a single cell only, left click on the cell.

Holiday dates can be setup in SETUP MENU/General Setup/Holiday.

SETUP MODE: CUSTOM

Three separate recording schedules can be defined based on a 24 hour day, days of the week, and holidays. The recording groups (REC1,2,3) will use the settings from the RECORD menu.

- **REC 1 / REC 2 / REC 3 / NONE** - Set the recording options for each hour of the day based on the settings for each group. To adjust the settings for REC 1; click on the RECORD option on the sidebar, then click the REC 1 tab. Selecting NONE will disable recording for the selected camera(s).

The FPS (Frames Per Second) & recording quality (Bitrate) can be adjusted for each camera for both Time (continuous) recording and Event recording. Adjusting these settings will affect the network stream for Live video when viewed with AVMS software or CVMS mobile app. **See BITRATE chart on pg51.*



RECORD > Event & Audio

Event:

CAMERA	PRE RECORD	POST RECORD
1	5 SEC	3 SEC
2	5 SEC	3 SEC
3	5 SEC	3 SEC
4	5 SEC	3 SEC
5	5 SEC	3 SEC
6	5 SEC	3 SEC
7	5 SEC	3 SEC
8	5 SEC	3 SEC

These settings define the recording parameters before and after an event occurs.

PRE-RECORD: Set the record time before an event occurs. (The DVR will continuously store footage for the selected “Pre-Record” time and then save that data when an event actually occurs.)

POST RECORD: Set the record time that you wish to record after an event occurs.

Audio:

AUDIO	RECORD
1	OFF
2	OFF
3	OFF
4	ON
5	OFF
6	OFF
7	OFF
8	OFF

RECORD: Select ON to enable audio recording for the corresponding channel. An external microphone must be connected to the back of the DVR.

Audio recording may be prohibited in some states. Check local laws for details.
Clinton Electronics is not responsible for illegal use of audio recording.

RECORD > Manual



MANUAL only applies to the remote control. Pressing the REC button on the remote control will begin Manual recording & override any existing DVR recording settings. Press REC again to stop Manual recording.

FPS: Frames Per Second

BITRATE: Adjust the recording quality from 32 ~ 8192 Kbps.

AUDIO: Select ON to enable audio recording for the corresponding channel. An audio device must be connected to the back of the DVR.

Press REC to begin Manual Recording



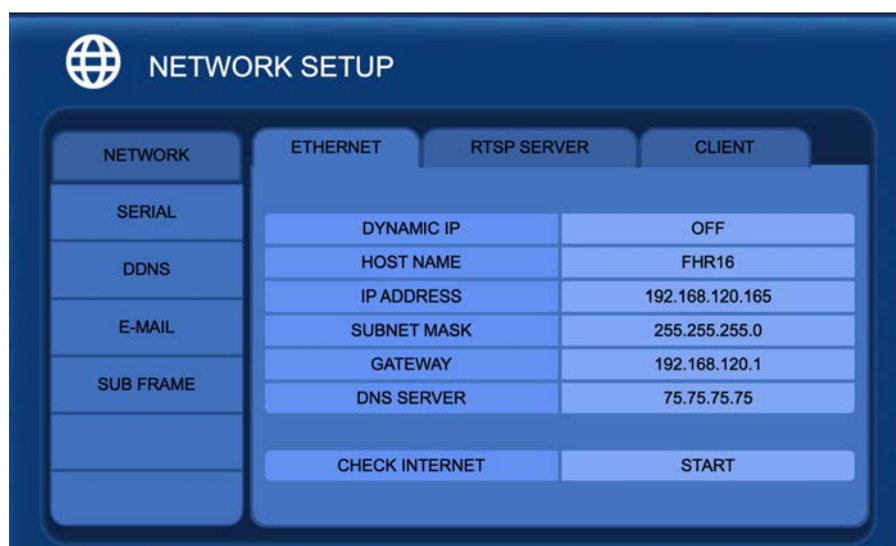
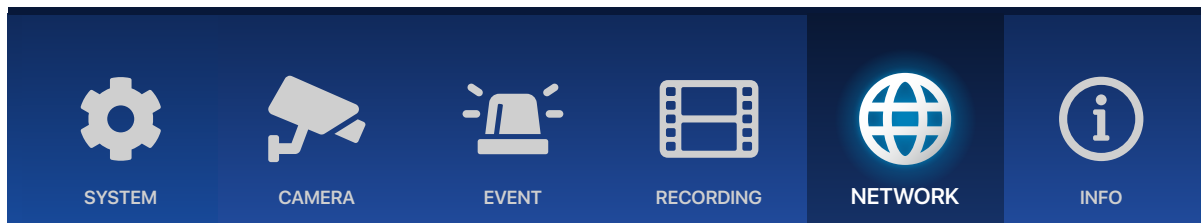
Use the chart below as a reference for max recommended bitrate values with common resolutions and frame rates. Recording at higher bitrates than shown below can waste recording space on the HDD.

Bitrate Guide (Kbps)			
Resolution	30 fps	15 fps	5 fps
2560 x 1440 (4MP)	8192	4096	1536
1920 x 1080 (2MP)	4096	2048	768
1280 x 720 (720p)	2048	1024	384
944 x 480	1536	768	288
720 x 480 (D1)	1024	512	192

NETWORK > Network Setup > Ethernet

The NETWORK menu can be accessed by pressing MENU on the remote control or by right clicking with the mouse, then selecting Main Menu.

Main Menu (Middle)



DYNAMIC IP (DHCP): Turn this setting ON to have the DVR automatically place network settings into the corresponding fields. *When ON the DVR IP Address, Subnet Mask, Gateway and DNS Server can not be edited.*

1. Select ON to pull network settings.
2. Click the ✓ button to save network settings.
3. After successful Check Internet test: turn Dynamic IP OFF, then click ✓ to prevent the DVR from pulling an invalid IP address in the future. **See Check Internet information in this section.*

HOST NAME: Enter a desired host name. When/If email notifications are setup they will come from this name.

Dynamic IP must be OFF to edit

IP ADDRESS: Edit/Enter an IP address for the DVR.

SUBNET MASK: Edit/Enter the Subnet Mask.

GATEWAY: Edit/Enter the Gateway address.

DNS SERVER: Edit/Enter the DNS Server address.

CHECK INTERNET: Select START to initiate a internet connection test.

Successful Connection - "Internet access has succeeded"

Failed Connection - "Internet access has failed"

DNS Server address must be correct for successful check internet test.

NETWORK > Network Setup > RTSP Server

The screenshot shows a web-based configuration interface for a DVR. The main heading is 'NETWORK SETUP' with a globe icon. Below it, there are four tabs: 'NETWORK', 'ETHERNET', 'RTSP SERVER', and 'CLIENT'. The 'RTSP SERVER' tab is selected. On the left, there is a vertical menu with options: NETWORK, SERIAL, DDNS, E-MAIL, and SUB FRAME. The main content area is a table with the following settings:

ETHERNET	RTSP SERVER	CLIENT
	RTSP SERVER	ON
	TCP PORT	555
	HTTP PORT	8555
	ONVIF CHANNEL	ON
	USER	remote
	PASSWORD	****

At the bottom of the table, there is a text field containing the RTSP URL: `rtsp://192.168.120.165:555/main/ch0 ~ 15`. Below the table are two buttons: a checkmark (confirm) and an 'X' (cancel).

Enter/Edit settings for remote access of the DVR using the SMS Software, Webviewer or CEC Connect phone App.

RTSP SERVER: Select “ON” to enable the RTSP stream from the DVR.

TCP [RTSP] PORT: The default RTSP port number is **554**, edit as needed.

HTTP PORT (TCP): Set the HTTP streaming port number, default **8554**.

ONVIF CHANNEL: Click ON to set the desired DVR channels for ONVIF (Profile S) access. If desired this setting can be turned OFF. When set to OFF the DVR will not be discoverable when scanning the network for ONVIF devices. The ONVIF port number is fixed at **8000** (not configurable).

USER: Edit the user name for RTSP and ONVIF login. Default user is **remote**.

PASSWORD: Edit the password for RTSP and ONVIF login. Default password is: **1111**

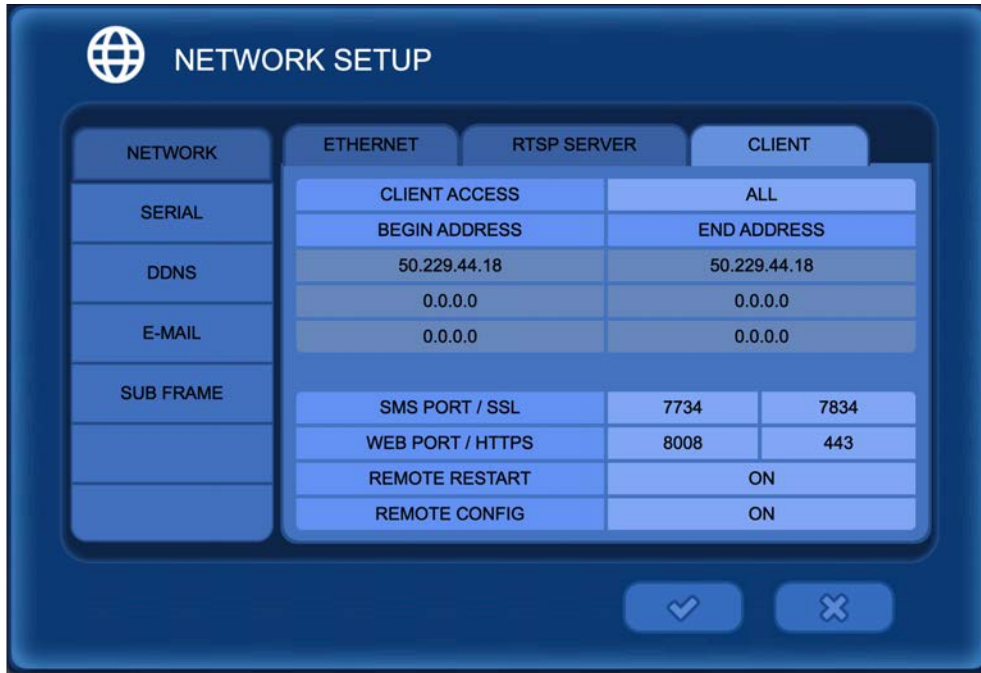
- *The RTSP address is a Local address (must be on the same network as the DVR). To connect externally (outside the network) Port Forwarding may need to be setup. Contact Clinton Technical Support for more information.*

- *The RTSP address will start at 0 for camera 1. Example:*

Camera 1: `rtsp://192.168.xxx.xxx:554/main/ch0`
Camera 2: `rtsp://192.168.xxx.xxx:554/main/ch1`

Camera 15: `rtsp://192.168.xxx.xxx:554/main/ch14`
Camera 16: `rtsp://192.168.xxx.xxx:554/main/ch15`

NETWORK > Network Setup > Client



Enter/Edit settings for remote access of the DVR using the AVMS Software or CVMS Mobile App.

CLIENT ACCESS: Select “ALL” to enable access from all IP addresses. Select “RANGE” to limit access to only certain IP addresses.

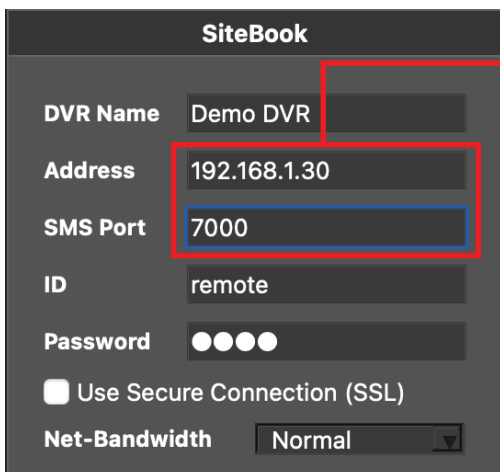
BEGIN ADDRESS / END ADDRESS: Enter the desired beginning and ending address for client access when RANGE is selected above.

SMS PORT/SSL (TCP): Set the SMS and/or the SSL port. (Default SMS port: 7000, SSL port: 7001) AVMS & CVMS Mobile app use this port for connecting.

WEB PORT/HTTPS (TCP): Set the Web port and/or the HTTPS port. (Default web port: 80, default HTTPS port: 443)

REMOTE RESTART: Select ON to enable restarting of the DVR from a remote location via AVMS or CVMS Mobile App.

REMOTE CONFIG: Select ON to enable configuration of the DVR from a remote location via AVMS or CVMS Mobile App.



AVMS Software DVR Info

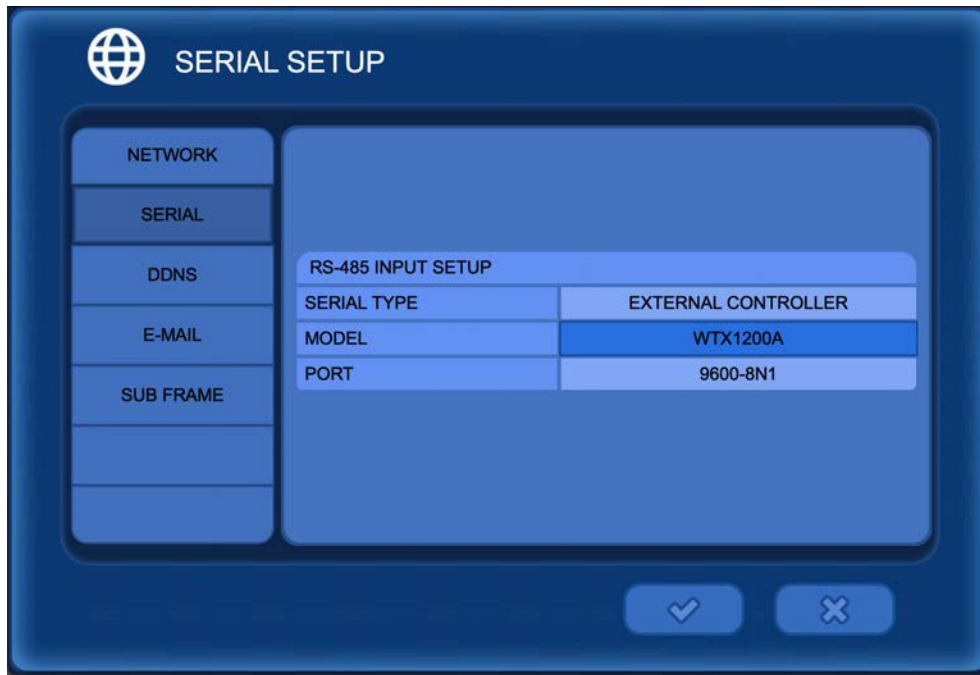


CVMS Mobile App Info

The IP Address from the Ethernet tab and the SMS Port number from the Client tab are used on the AVMS software and/or CVMS Mobile app.

Click 'Secure Connection' if using the SSL port for connection instead of the SMS port.

NETWORK > Serial Setup



RS-485 INPUT SETUP: Match the settings from the PTZ keyboard if connected via RS-485.

SERIAL TYPE: Select an external device.

MODEL: Select the protocol to use. For Clinton Electronics CE-PTZKEYB keyboards, select WTX1200A.

PORT: Select the Baud Rate / DATA bit / Parity / Stop Bit. For Clinton keyboards set to 9600-8N1.

Settings for CE-PTZKEYB	
Model	WTX1200A
Baud Rate	9600
Data Bit	8
Parity	NO
Stop Bit	1

NETWORK > DDNS Setup

NETWORK	DDNS SERVER	no-ip.com
SERIAL		
DDNS	HOST NAME	JohnSmith01.cedyn.com
E-MAIL	USER NAME	JohnSmith01
SUB FRAME	PASSWORD	****
	ROUTER IP	ON
	STATUS	UNCHECKED CHECK
	URL	JohnSmith01.cedyn.com

DDNS should only be set up if using a dynamic external IP address. Check with the ISP (internet service provider) to see if the network is using a dynamic IP address.

DDNS SERVER: Select a DDNS server: dyndns.com / ddnsdvr.com / no-ip.com

HOST NAME: Enter the host name registered on the DDNS server.

USER NAME: Enter the user name registered on the DDNS server.

PASSWORD: Enter the password registered on the DDNS server.

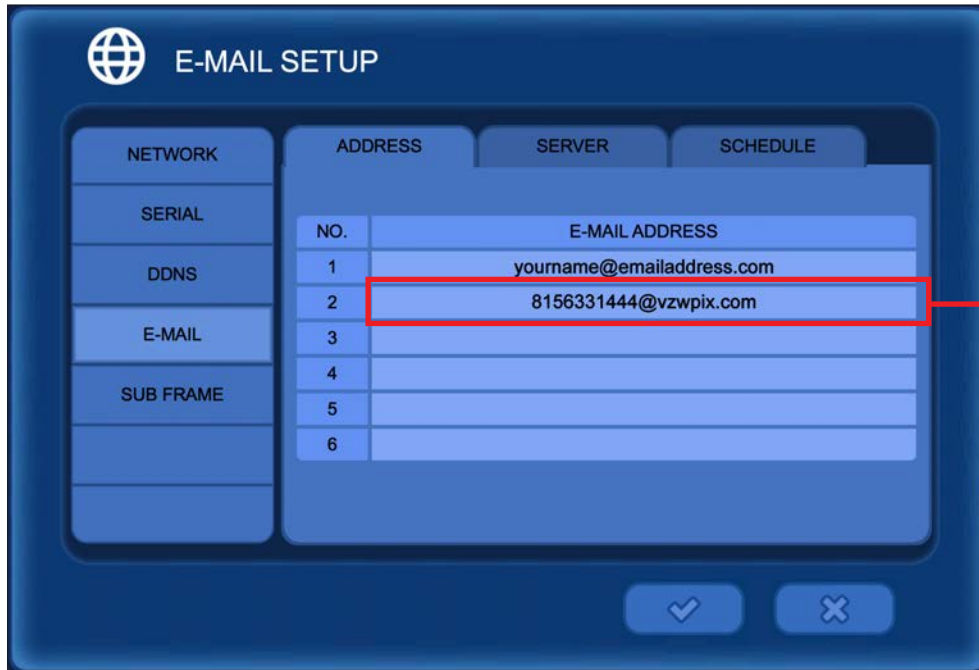
ROUTER IP: Select On to send IP information to the DDNS server. *This should be set to On when using a router.*

STATUS: Check the connection status.

When using a DDNS server; first complete the host name, user name and password registration on the DDNS server website. Then enter the information into the DVR.

For information on setting up a free DDNS service, see the DDNS service setup guide included with the DVR or download it online at www.clintonelectronics.com.

NETWORK > E-Mail Setup > Address



E-MAIL SETUP

NO.	E-MAIL ADDRESS
1	youname@emailaddress.com
2	8156331444@vzwpix.com
3	
4	
5	
6	

E-MAIL ADDRESS: Enter the email address(es) to receive notifications from the DVR. Notifications include Health Checks, Event Notifications (Motion, Alarm Input, Video Loss, etc...), and other system level events such as reboots and failed login attempts. Event notifications can be setup in the EVENT menu.

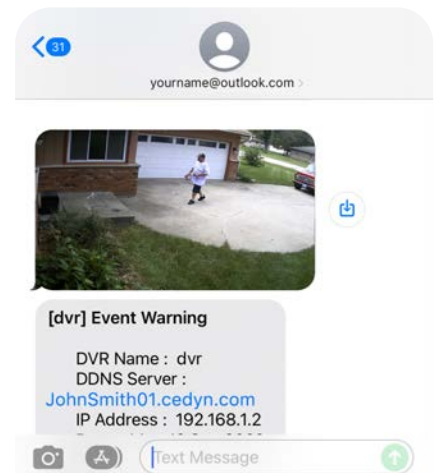
Depending on the cell phone carrier (AT&T, Verizon, etc...) it may be possible to receive emails on a phone as a SMS text message. Follow the steps below to find out what your email address would be.

1. Open the texting app on the phone to receive notifications.
2. In the recipient field, instead of a phone number enter an email address that you can check (your own email).
3. Check your email— there should be an email from your phone
4. The email is typically the phone number followed by the carriers name, ex: 8156331444@vzwpix.com (Verizon).
5. Enter this number/email into the E-MAIL ADDRESS list above as a recipient of notifications.

The phone should now receive notifications from the DVR.

Examples of phone email addresses:

- AT&T: phonenumber@txt.att.net.
- T-Mobile: phonenumber@tmomail.net.
- Sprint: phonenumber@messaging.sprintpcs.com.
- Verizon: phonenumber@vtext.com or phonenumber@vzwpix.com.
- Virgin Mobile: phonenumber@vmobl.com.



*JPG of event

The E-MAIL Server must be configured to send notifications. See info on following page.

NETWORK > E-Mail Setup > Server

The screenshot shows a web interface for 'E-MAIL SETUP'. On the left is a navigation menu with options: NETWORK, SERIAL, DDNS, E-MAIL, and SUB FRAME. The main area is divided into four tabs: ADDRESS, SERVER, and SCHEDULE. The ADDRESS tab is active, showing fields for MAIL SERVER (with a dropdown menu), E-MAIL (text input with 'yourname@outlook.com'), PASSWORD (text input with '****'), SMTP SERVER (text input with 'smtp.mail.yahoo.com'), SMTP PORT (text input with '25'), and MAIL TEST (text input with 'SEND'). At the bottom right are two buttons: a checkmark and an 'X'.

MAIL SERVER: Select the mail server; SMTP server or DVR System.

SMTP SERVER: This is the most common selection. Most common/popular email servers such as Outlook or Yahoo, etc have SMTP email servers. Gmail does not support 3rd party email access.

DVR SERVER: This should only be selected if the DVR is part of a local network that has its own email server.

E-MAIL: Input the user email address. This will be the **"FROM"** email address when the DVR sends an email. Some email account logins are case-sensitive so enter the information exactly as one would to login in.

SMTP SERVER: Input the SMTP server address: smtp-mail.outlook.com, smtp.live.com, smtp.mail.yahoo.com, etc.

SMTP PORT: Input the SMTP server port number.

MAIL TEST: Sends a test email to the address entered on this menu.

NOTICE



- *If no Mail Server information is entered emails will not be sent.*
- *If the email login/password contains uppercase & lowercase characters enter it exactly as you would from a computer.*
- *Avoid e-mail addresses & passwords with special characters (& ; / # * +). These special characters can sometimes cause the e-mails to not send.*
- *Selecting DVR Server disables editing information in this menu.*
- *If the password for the email address is changed (from email account settings), it must be updated on the DVR for emails to be sent.*
- *Gmail address can no longer be used due to a change with Google's third-party support.*

NETWORK > E-Mail Setup > Schedule

Standard
Schedule:

The screenshot shows the 'E-MAIL SETUP' interface with the 'SCHEDULE' tab selected. The 'SEND MAIL' option is set to 'ON', the 'FREQUENCY' is '30 MIN', and the 'SCHEDULE' is set to 'STANDARD'. The 'FROM' time is '00:00:00' and the 'TO' time is '23:59:59'. The interface includes a left sidebar with menu items: NETWORK, SERIAL, DDNS, E-MAIL, and SUB FRAME. At the bottom, there are checkmark and close buttons.

SEND MAIL: Select ON to configure the email setup and to enable email sending.

FREQUENCY: Set the time interval between emails from the DVR. Ex: if the time is set to 30 minutes, the DVR will send emails only every 30 minutes— depending on configured events. If set to OFF, the DVR will constantly send an email every time there is an event trigger.

SCHEDULE: Choose between Standard, Custom or OFF.

STANDARD: The DVR will send email notifications during the set From and To times.

CUSTOM: The DVR will only send emails during the hours and days selected on the calendar. Hours highlighted in green are active times, and hours in blue indicate that emails will not be sent.

Custom
Schedule:

The screenshot shows the 'E-MAIL SETUP' interface with the 'SCHEDULE' tab selected. The 'SEND MAIL' option is set to 'ON', the 'FREQUENCY' is '30 MIN', and the 'SCHEDULE' is set to 'CUSTOM'. A calendar grid is displayed with days of the week (SUN to HOL) and hours (3, 6, 9, 12, 15, 18, 21). The grid shows active times in green and inactive times in blue. Below the grid are 'NONE' and 'SEND' buttons. The interface includes a left sidebar with menu items: NETWORK, SERIAL, DDNS, E-MAIL, and SUB FRAME. At the bottom, there are checkmark and close buttons.

NETWORK > Subframe



Sub Frame defines the network limits for Frames per Second and Bitrate for the network Sub Stream. Setting to a lower quality and frames per second will result in less data transfer for lower bandwidth applications. These settings do not affect live view or recorded video on the DVR.

FPS: Select the desired frames per second for network substream.

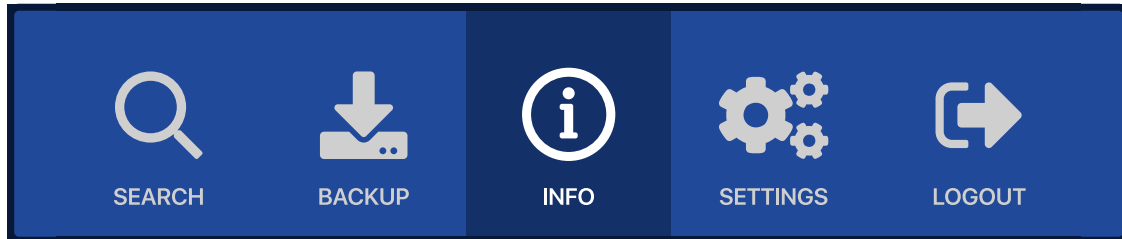
BITRATE: Select the desired bitrate level for network substream: 32-1024 Kbps. The main stream bitrate is set in: Recording/Record/Bitrate.

INFO

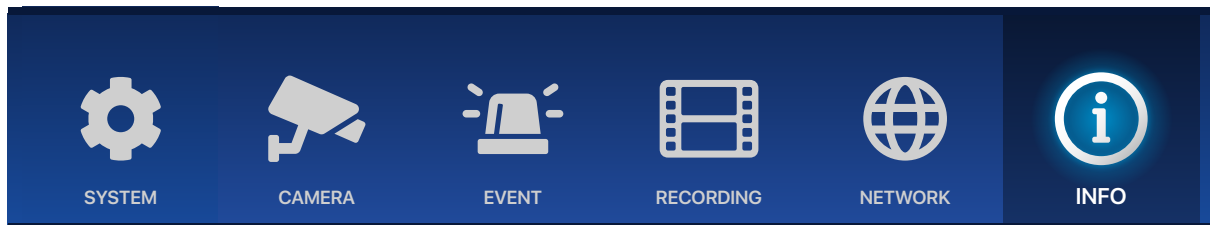
The INFO menu can be accessed by pressing MENU on the remote control then selecting the INFO icon, or by pressing the UP arrow on the remote.

With the mouse the INFO menu can be accessed by moving the mouse cursor to the top of the screen or by right-clicking, then selecting Main Menu, then clicking on the INFO icon.

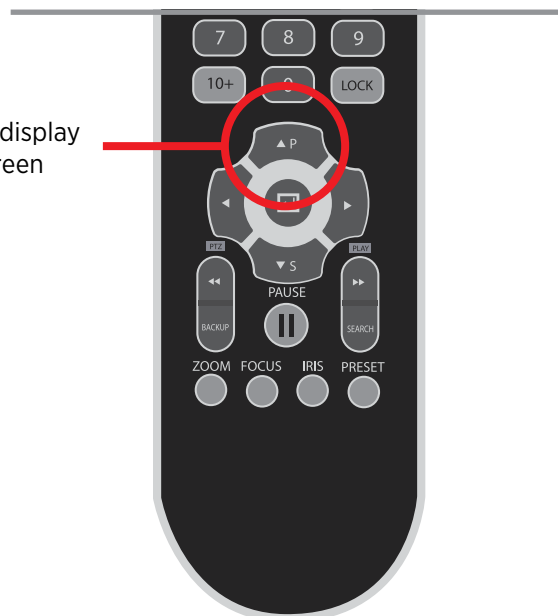
Top Menu



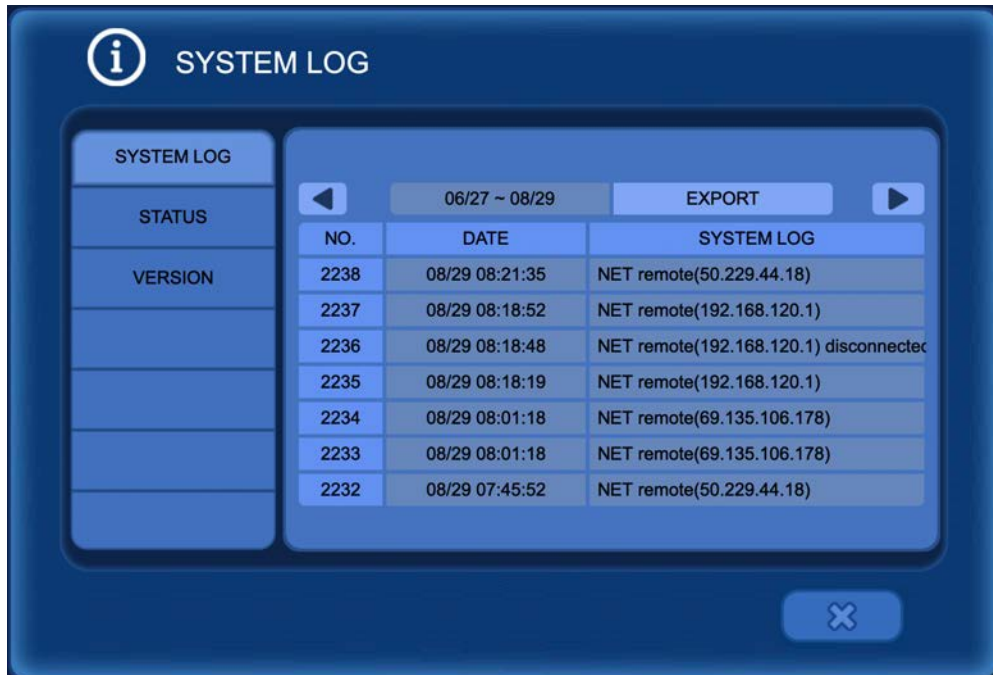
Main Menu (Middle)



Press UP to display menu screen



INFO > System Log



SYSTEM LOG: A numbered list of DVR events with the time & date of the event can be found here. Events such as Login/Logout, Video Loss, Power On/Off, Firmware Updates, Remote Login Info, etc.

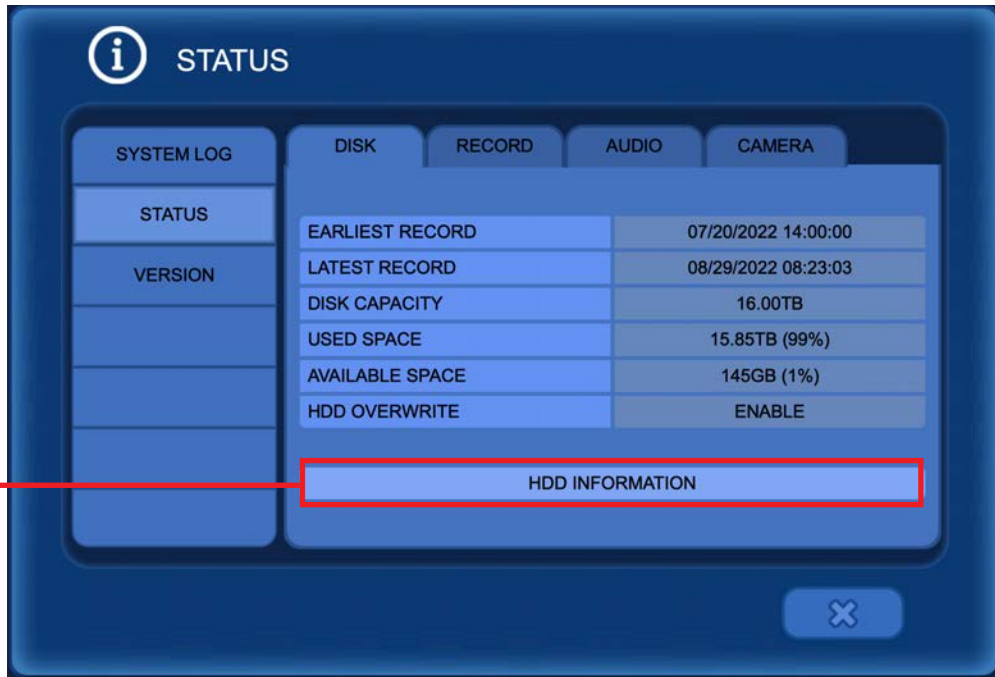
Click the Left or Right arrow buttons or use the scroll wheel on the mouse to move through the list of events.

EXPORT: The System Log can be exported to a disk or USB device for review on a computer. (file saved as .TXT)

1. Insert a disk (CD-RW or DVD-RW) or connect a USB device to the DVR.
2. Click the EXPORT button.
3. [TARGET] Select the location where the list will be saved: USB device or disk.
4. [FOLDER] Give the folder a name if desired.
5. Click the ✓ button to export the system log.

USB should be formatted to FAT32. To format, refer to: SETUP MENU > Disk > Check / USB

INFO > Status > Disk



STATUS displays important information about the HDD, recorded video settings and audio settings. These settings are not editable in this menu.

DISK: Shows DVR information at a glance.

EARLIEST RECORD: Oldest recorded video.

LATEST RECORD: Most recent recorded video.

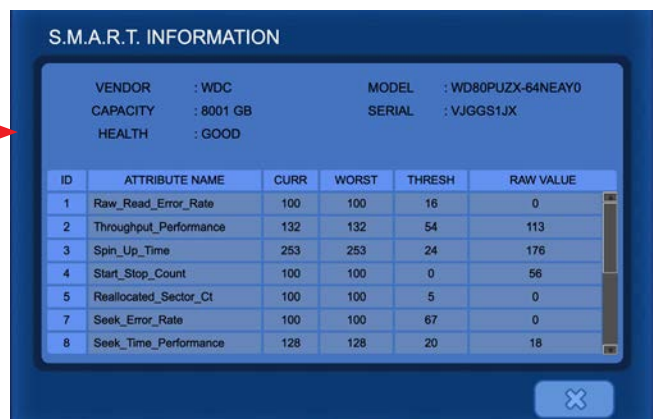
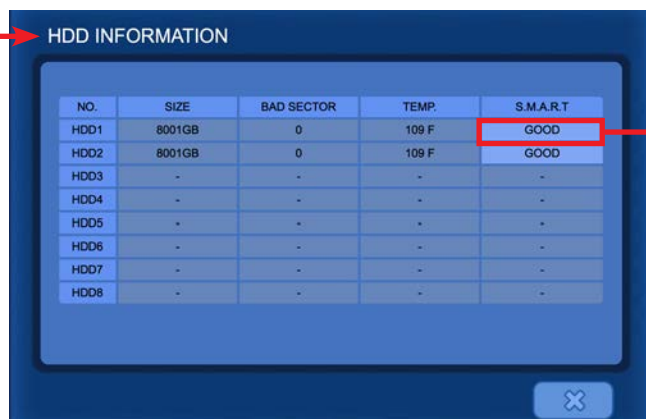
DISK CAPACITY: Total storage capacity of installed HDD(s).

USED SPACE: How much space on the HDD has recorded video.

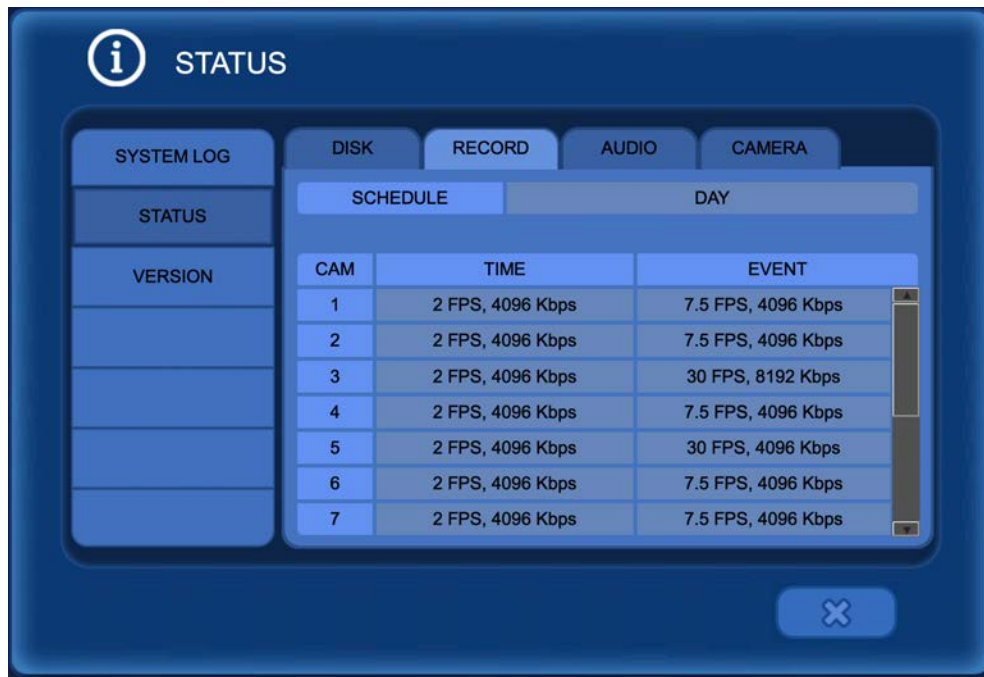
AVAILABLE SPACE: How much space is left of the HDD.

HDD OVERWRITE: Shows if the HDD will overwrite oldest video once the HDD is full. To change HDD Overwrite settings: SYSTEM Menu > General > System

HDD INFORMATION: Click to display information on specific installed HDD(s). To view more detailed information about the specific HDD, click the status of the HDD in the S.M.A.R.T column.



INFO > Status > Record / Audio / Camera



RECORD: Shows the current scheduled recorded frame rate and bitrate for each channel.



AUDIO: Shows audio recording settings.



CAMERA: Shows input resolution from connected cameras.



DVR PROGRAM: Displays the currently installed version of Firmware on the DVR. It is recommended to regularly check for firmware updates offered on our website: www.clintonelectronics.com/downloads

PRODUCT DATE: Displays the release date of the current firmware.

VIDEO: Displays the number of available camera inputs.

AUDIO: Displays the number of available audio inputs.

MAC ADDRESS: Displays the MAC address of the DVR.

MODEL: Displays the model number of the DVR.

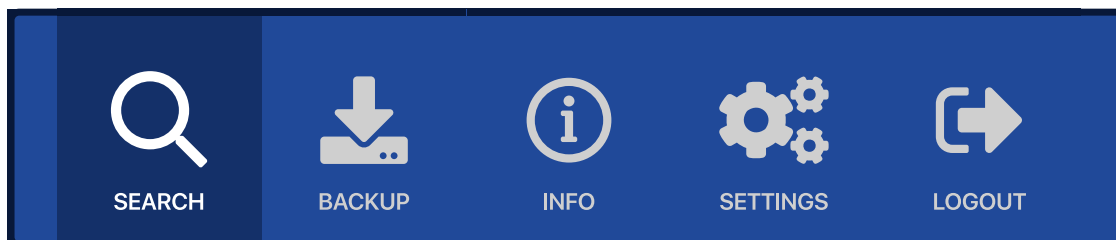
SERIAL: Displays the serial number of the DVR.

It is recommended to regularly check for firmware updates offered on our website: clintonelectronics.com

SEARCH

To review recorded video, move the mouse cursor to the top of the screen and click the SEARCH icon, the first icon from the left; or with the remote control press the UP arrow to display the top menu. Alternatively- press the Search button on the remote to display the SEARCH menu.

Top Menu



There are several different methods of searching recorded video: Playback, Quick Search, Calendar search, Event Search, Overlapped List, Museum Search, Go To First & Go To Last.



PLAYBACK: Replays the latest recorded video from the selected channel.

QUICK SEARCH: Enter the exact time & date information to search.

CALENDAR: Displays a calendar with colored bars to indicate recording type to help narrow search selection.

EVENT SEARCH: Enter the date of the event and filter by event type; motion, alarm in, video loss.

OVERLAPPED LIST: Search for data that occurs from manually changing the time backwards or when an hour is lost from daylight savings time.

MUSEUM SEARCH: Search an exact area of a selected camera by drawing a motion box.

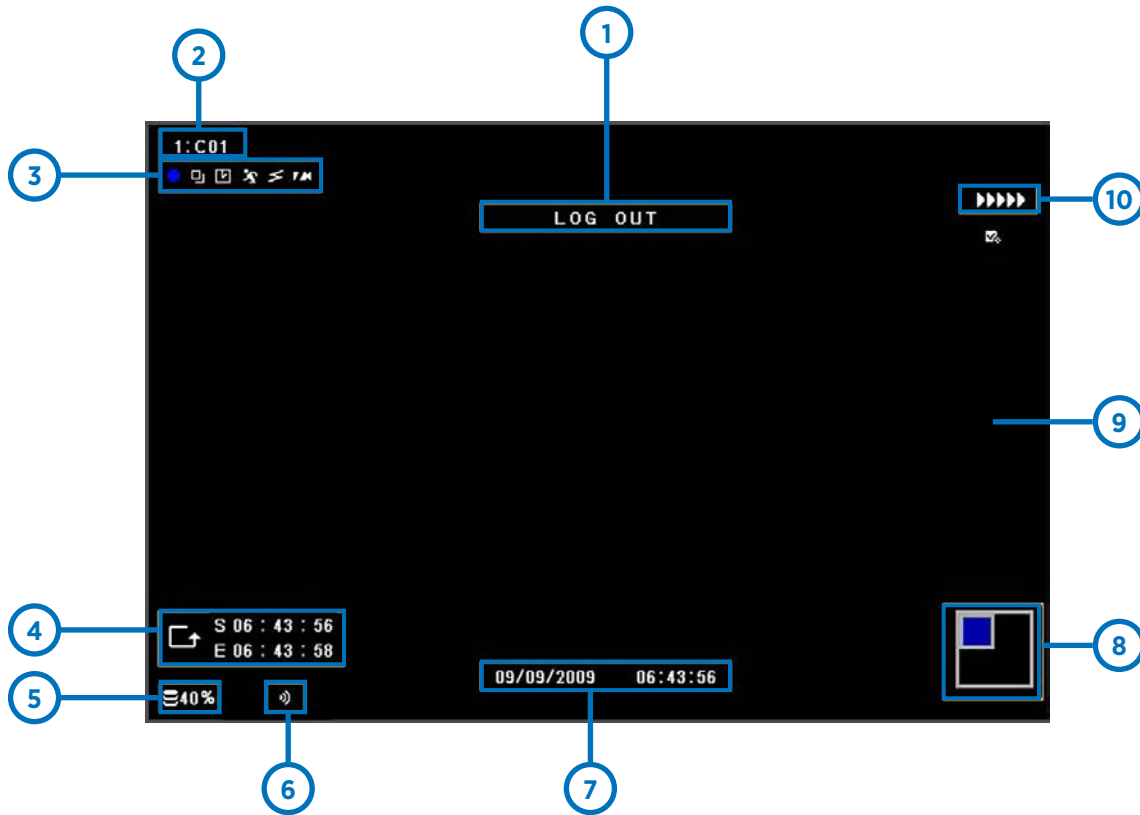
GO TO FIRST: Quickly jumps to the earliest/oldest recorded video on the DVR.

GO TO LAST: Quickly jumps to the latest/most recent recorded video on the DVR.

GO TO JUMP: Only selectable when actively searching video. Quickly change the playback time by as much as 12 hours.

Video can also be searched from a CD/DVD or USB device that has backed-up video by clicking in the TARGET row and selecting the appropriate drive.

SEARCH SCREEN LAYOUT



1. Execution Information Message

2. Camera Name

3. Search Status Icons

4. Repeat Segment: S-Start Time, E-End Time

5. Backup Progress Status %

6. Audio Icon - displayed when audio is present





7. Date and Time of Recorded Video

8. Zoom 2x / 4x Location









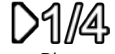
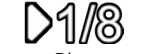
9. Video Area

10. Search/Playback Speed

Search Status Icons:

-  Record Icon: Shows when recording is active.
-  Time Icon: Shows when time (schedule) record mode is active.
-  Motion Icon: Shows when motion occurs.
-  Sensor Icon: Shows when the external sensor is triggered.

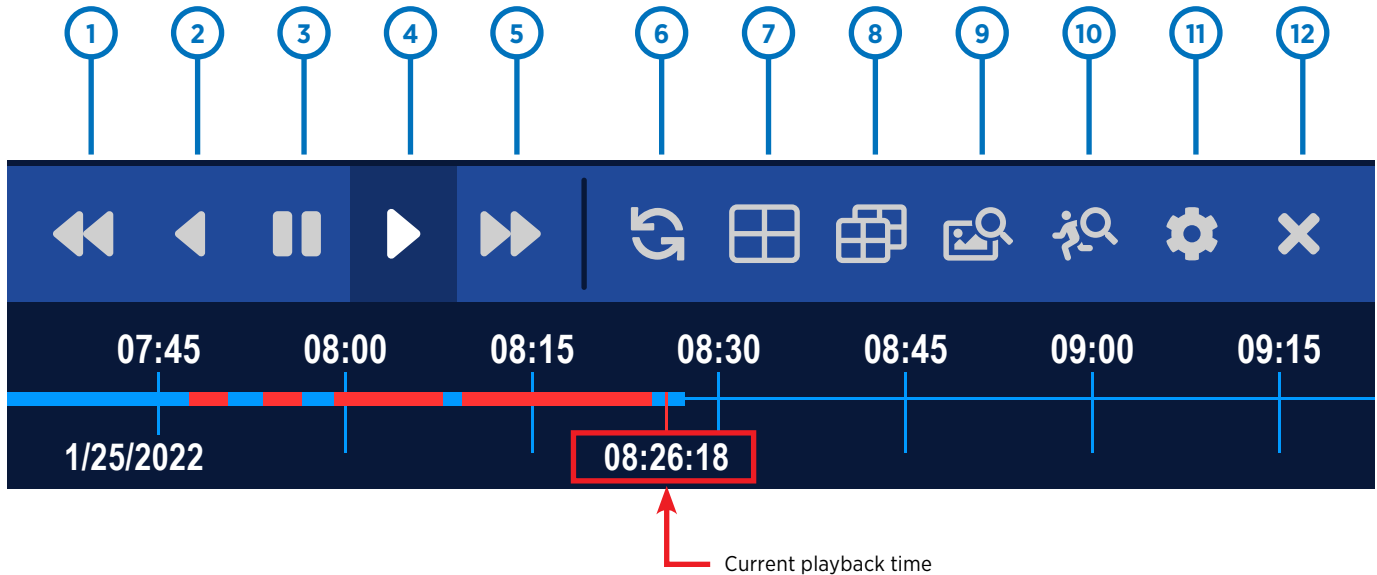
Playback Speed Icons:


				
Play	2x Fast Forward	3x Fast Forward	4x Fast Forward	5x Fast Forward
				
Pause	Play 1 Frame	Play Half Speed	Play Quarter Speed	Play Eighth Speed

SEARCH MENU ICONS EXPLAINED


While performing a search, move the mouse cursor to the bottom of the screen to display the Search control panels. Control panel functions can alternatively be selected by pressing the corresponding buttons on the remote control.

To quickly search with the mouse, click and drag the timeline to the desired time, then release the mouse to play video. Right click on the timeline to change the zoom level from 90 minutes to 6 hours.



 Continuous Recording

 Motion/Event Recording

 No Video Recorded

1. Fast Reverse

2. Reverse Play

3. Pause

4. Play

5. Fast Forward

6. Repeat Segment

1st Mouse Click: Segment Start

2nd Mouse Click: Segment End

3rd Mouse Click: Cancel Segment

7. Change Multiplex View

8. Cycle Channels in Multiplex View

9. Preview Search Mode

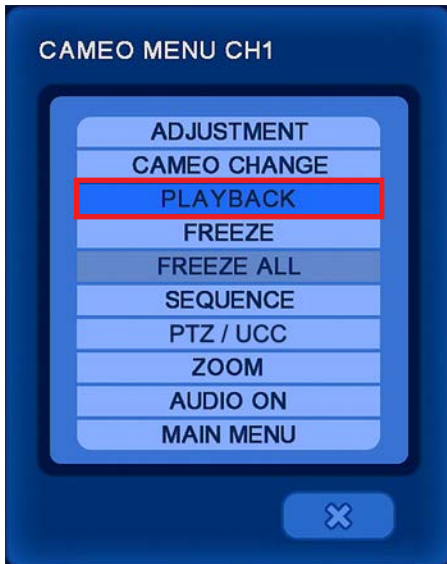
10. Museum Search Mode

11. Main Menu (Middle Menu)

12. Exit Search

SEARCH > Playback & Quick Search

Playback:

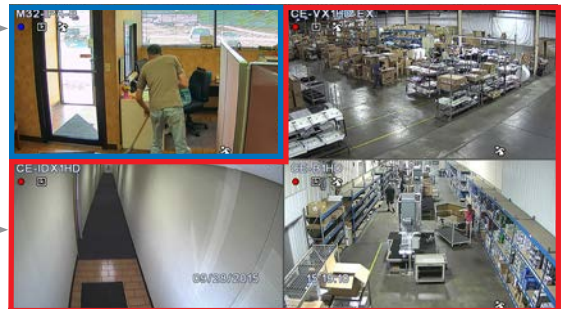


To access PLAYBACK: in the LIVE View- right click on a desired camera, then select playback.

PLAYBACK replays the latest recorded video from the selected channel. The recording icon will change from **RED** to **BLUE**.

The selected channel will Playback recorded video while the remaining cameras display LIVE video. Use the search controls as necessary to search forwards or backwards through video.

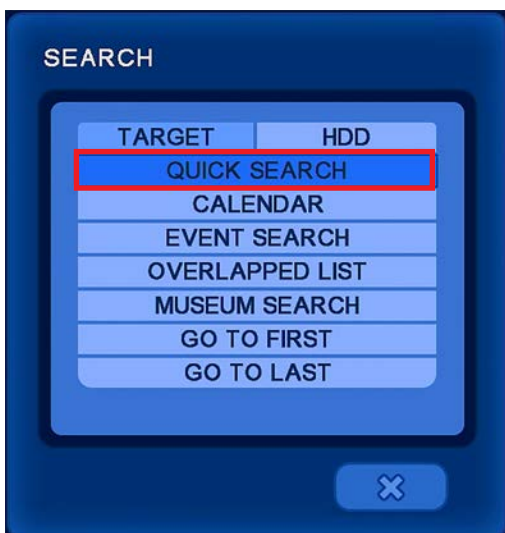
BLUE icon indicates
Playback Mode



Remaining cameras
display LIVE video

The following Search Menu items can be accessed by moving the mouse cursor to the top of the screen and clicking the SEARCH icon, the first icon from the left, or with the remote control press the UP arrow to display the top menu. Alternatively- you can press the Search button on the remote to display the SEARCH menu.

Quick Search:



Quickly search through recorded footage from all channels by entering the exact Year / Month / Day / Hour / Minute.



SEARCH > Calendar



Displays a calendar with colored bars to indicate recording type to help narrow search selection.

1. Select a highlighted day. Days not highlighted have NO recorded video.
2. Drag the arrow indicator to the desired hour.
3. Click the ✓ mark to start reviewing video from that hour or click in the timeline area to narrow the selection down to minutes.

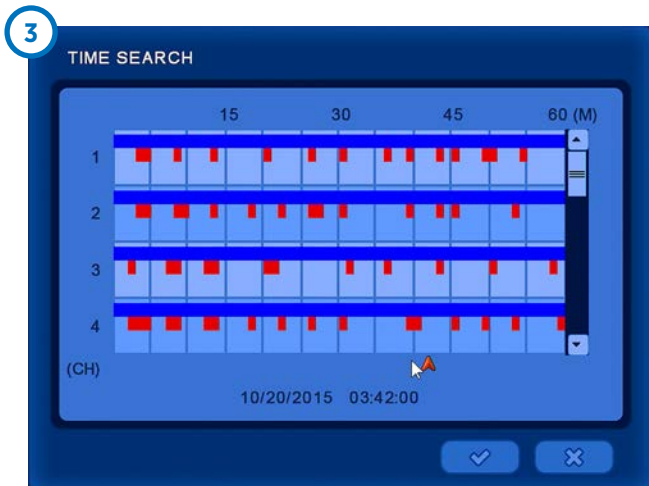
Date & Time information is displayed at the bottom of the timeline. Use the scroll bar to scroll up or down to view more channels.



Click on highlighted DAY



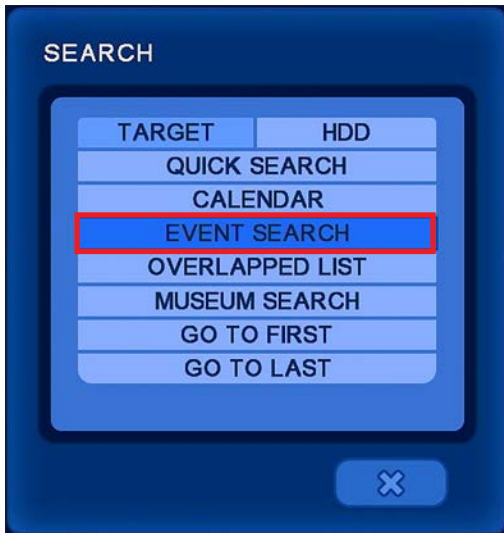
Drag arrow to select HOUR



Drag arrow to select MINUTE

Color Bar Description	
BLUE	Time Recording
RED	Event/Motion Recording
TEAL	Audio Recording

SEARCH > Event Search



DATE: Enter the Year / Month / Day to search for events.

MOTION: Filter video for Motion.

ALARM IN: Filter video for Alarm Input from an external source.

VIDEO LOSS: Filter video for Video Loss.

SELECT CAMERA: Search ALL cameras, or select specific cameras to view.

VIEW SEARCH LOG: Displays all selected filters for event search. Events are detailed with time/date, camera number and event type.

Events (Motion, Alarm In, Video Loss) must be setup and enabled for the Event Search to function. If the events are not ON, no search results will be found.



Enter date information



Select camera(s) to search



EVENT SEARCH RESULT: Use the scroll wheel on the mouse to scroll up or down through the list. If the list is blank - no events were found.

NO: Select the event segment you wish to playback.

PREV: Display previous search results page.

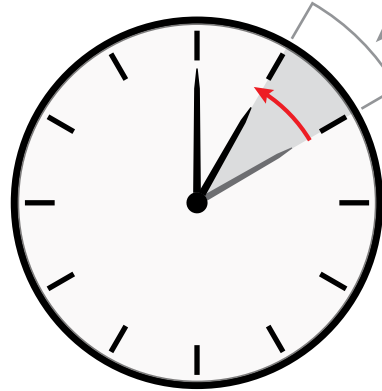
NEXT: Display next search results page.

GOTO: Input an event page start number.

SEARCH > Overlapped List



OVERLAPPED LIST: Search for overlapped data that occurs from removing DST (daylight savings time) or from changing the time backwards on the DVR.



When time is changed, the recorded video from that time will not display in regular searches.

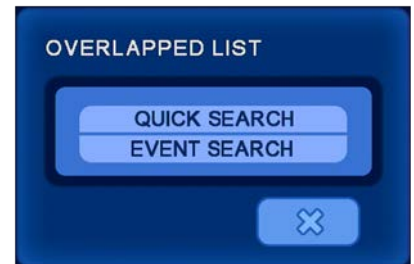
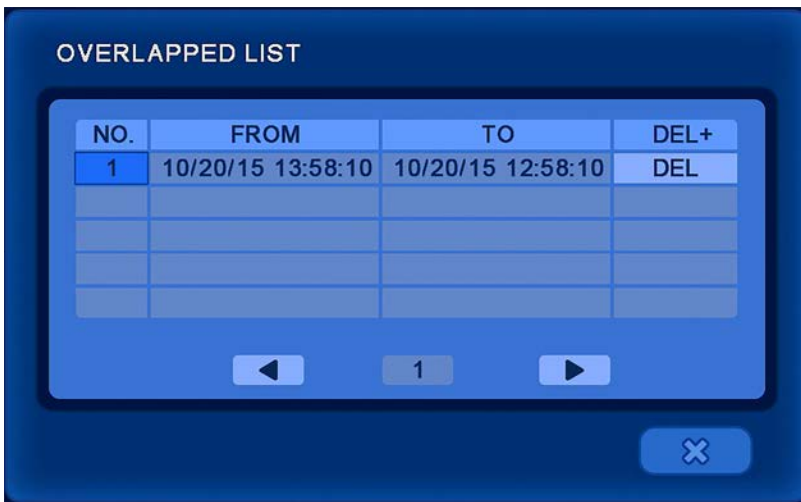
This hour of "lost" recorded video is saved in the Overlap List.

NO: Click on the desired number to view the video from the overlap list.

QUICK SEARCH: Search for video using the Calendar search option.

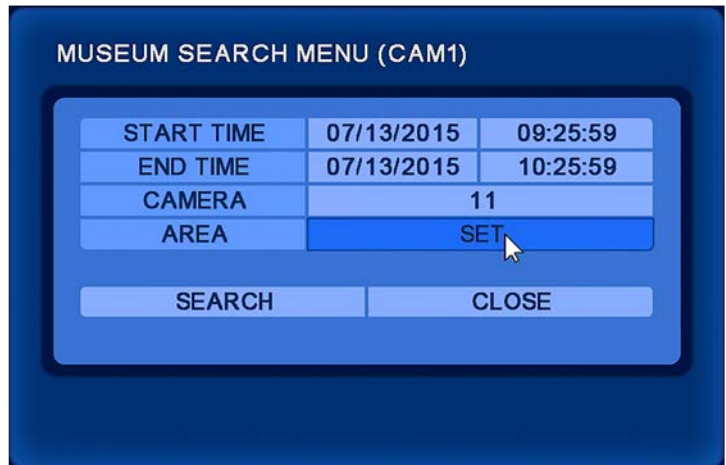
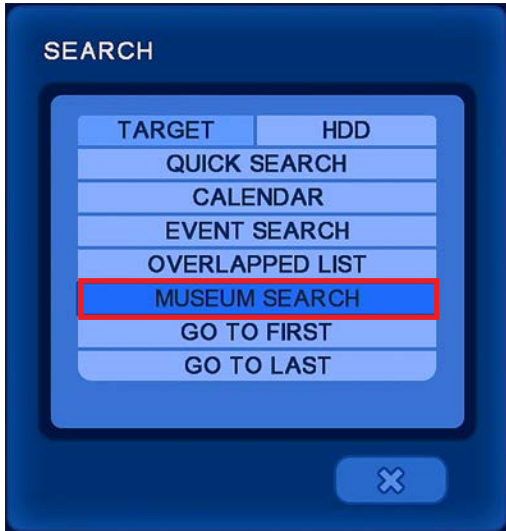
EVENT SEARCH: Search for video using Event triggers.

DEL: Deletes the selected overlapped video(s).



SEARCH > Museum Search

Museum Search is a very effective way to search for motion in only a specific region of an individual camera. Example; a camera placed next to a road will have motion events constantly making searching difficult. Using the search grid in museum search narrows down the motion to a specific area to search. Museum Search will search for/detect motion that has occurred - even if Motion Recording is not enabled.



START TIME: Enter the Date & Time info to start the search from.

END TIME: Enter the Date & Time info to stop the search.

CAMERA: Select the desired camera to search for motion.

AREA: Select a motion search area-

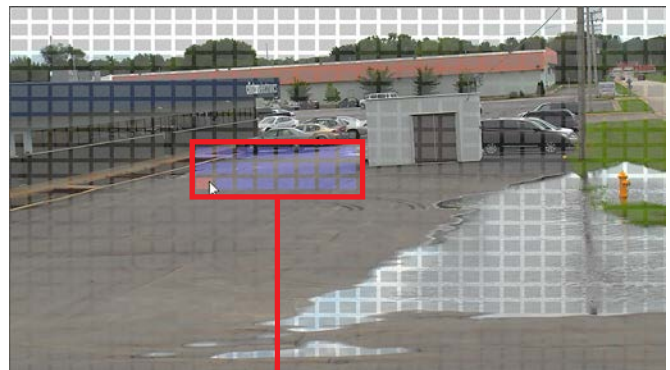
1. Press SET.
2. Move the mouse cursor to the desired start point.
3. Click & hold the left mouse button on a square to set the corner.
4. While holding the mouse button down, drag the highlighted box to the desired size.
5. Clicking off/releasing the mouse button sets the search grid.

SEARCH: Search the selected Area for motion. Depending on the Start & End Times this could take several minutes to complete.

CLOSE: Exits from the Museum Search menu.



Draw a motion area to search.



Only motion in this grid will be searched.

SEARCH > Museum Search

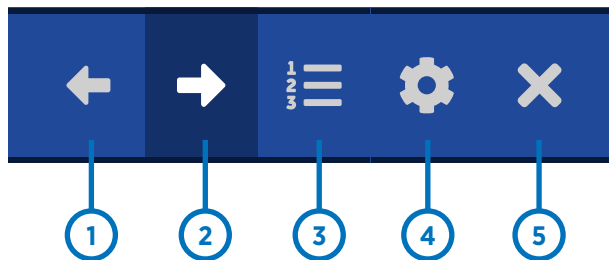
Museum Search continued...

The Museum Search results will only display motion that took place in the previously defined search area.

**Red boxes shown to indicate where the search area was. They do not display on the DVR.*



Move the mouse cursor to the bottom of the screen to display the Museum Search control panel.



1. Page Left through search results
2. Page Right through search results
3. View Search results in list form
4. Display Museum Search settings. Clicking the STOP button will stop the search if it is taking too long.
5. Exit the Museum Search results preview.

The time to complete the Museum Search will vary depending on the Start & End Times. The longer the time frame to search, the longer the search will take to complete.



Museum Search can be quickly accessed from any search method by clicking on the Museum Search icon from the Search control panel at the bottom of the screen.

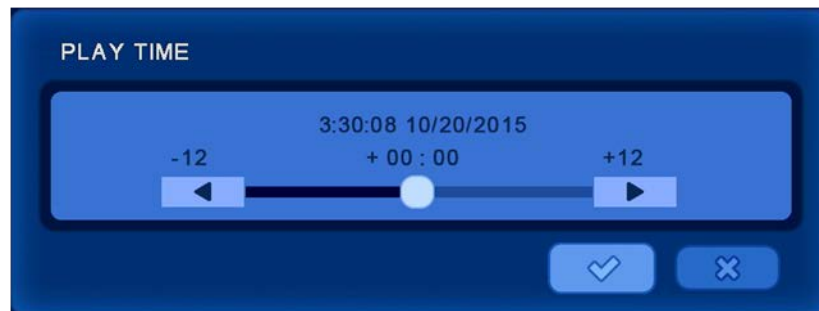
SEARCH > Go To First / Go To Last



GO TO FIRST: Quickly jumps to the earliest/oldest recorded video on the DVR.

GO TO LAST: Quickly jumps to the latest/most recent recorded video on the DVR.

GO TO JUMP: Only selectable when actively searching video. Quickly change the playback time by as much as 12 hours. To access move the mouse cursor to the top of the screen and click on the Search icon for a second time. GO TO JUMP will now be displayed at the bottom of the menu.



GO TO JUMP menu. Quickly jump forwards or backwards up to 12 hours.

SEARCH > Panorama & Preview

CAMEO MENU CH6

LIVE CHANGE
PLAY CHANGE
PANORAMA
PREVIEW
MUSEUM SEARCH
ZOOM
JPEG EXPORT
AUDIO ON
MAIN MENU

To access Panorama & Preview search options, you must be viewing a single channel. Right click on the video area to bring up the CAMEO MENU for that channel.

PANORAMA: Display up to 16 consecutive still frames of a selected channel during playback. Each window of the selected multiplex view (4 / 9 / 16) represents 1 frame of video. The higher the recorded frame rate (FPS) the faster the still frames will refresh.

PREVIEW: Displays video from the selected channel as a still image from every 4 minutes of video.

PANORAMA ▶

Displays video frame by frame in a multiplex view (4/9/16).



PREVIEW ▶

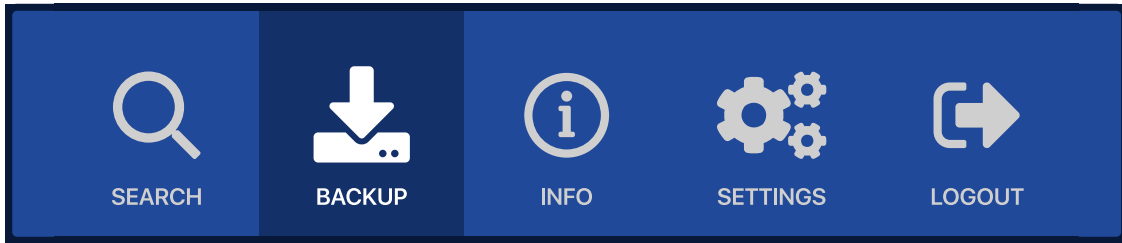
Each frame is a still image taken every 4 minutes.



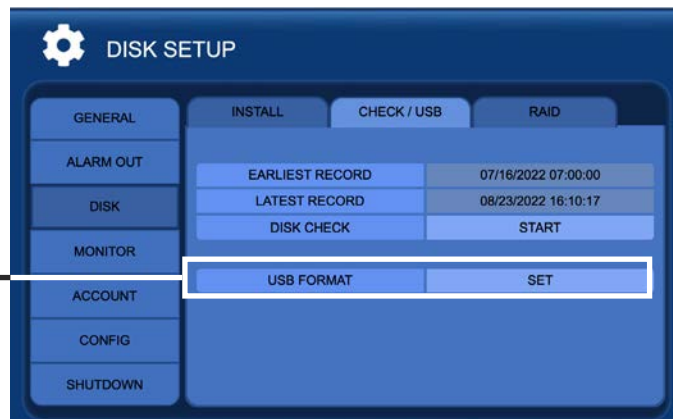
PREVIEW can be quickly accessed from any search method by clicking on the Preview icon from the Search control panel at the bottom of the screen, or right clicking, then selecting PREVIEW.

BACKUP

Top Menu



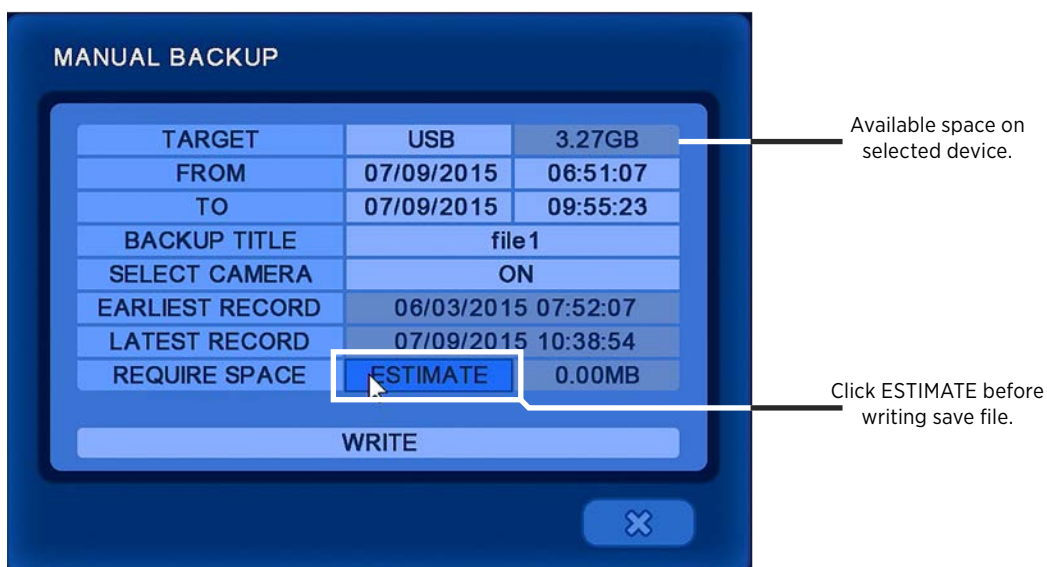
A blank CD-R, DVD-R, or a formatted USB drive is required for video backup. (USB drives up to 32GB and must be formatted to FAT32) For formatting information refer to: SETUP MENU > Disk > Check/USB > USB Format.



Press BACKUP to display menu screen

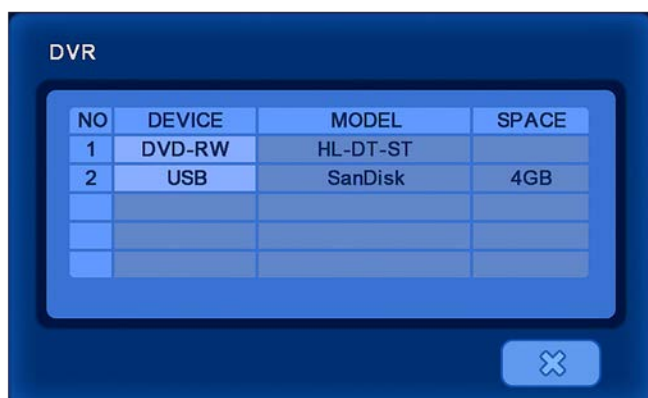


BACKUP

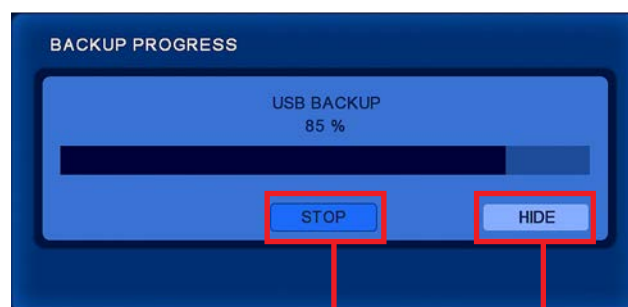


TO BACKUP RECORDED VIDEO:

1. Insert CD/DVD (if the DVR is equipped with a CD-RW/DVD-RW disk drive) or formatted USB into the DVR.
2. Move the mouse cursor to the top of the screen and click the BACKUP icon, the second icon from the left. Or with the remote control press the Backup button to display the BACKUP menu.
3. Click [**NONE**] in the Target row. If a USB or CD/DVD is inserted into the DVR it will be displayed.
4. Select which device to use.
5. Set From (start) & To (stop) Dates & Time. *The longer the time frame, the longer it will take to backup video.*
6. Name the file if desired by clicking [**backup**] in the BACKUP TITLE row.
7. Click the [**ON**] button next to SELECT CAMERA to select which cameras will be saved. The more cameras selected- the larger the file size.
8. Click the [**ESTIMATE**] button. Doing so ensures there is enough room on the selected disk/USB for the saved video. *If the file is too large it can not be saved. To lower the file size either shorten the amount of time to be saved or select fewer cameras.*
9. Click [**WRITE**] to start the backup process. A progress bar displays the percentage of completion.
10. Once the video is backed up, the DVR will beep. It is now safe to remove the USB device or disc from the DVR.



Select the desired drive/device

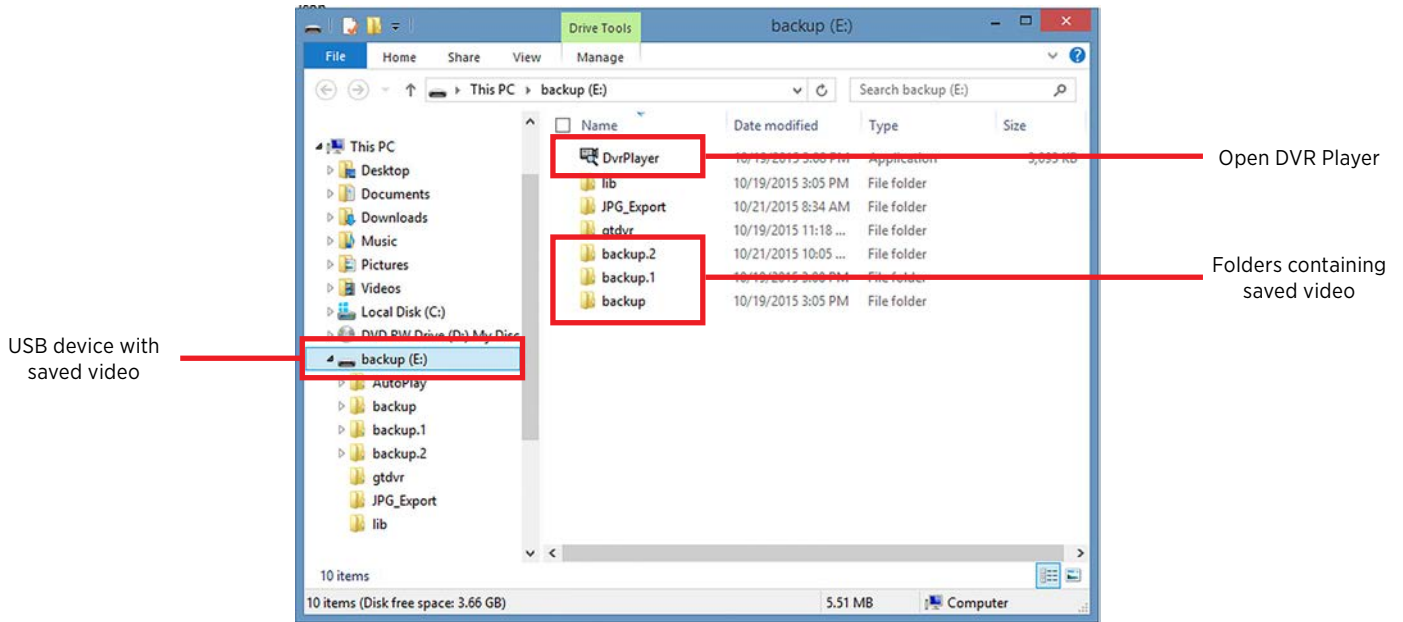


Click STOP to cancel the backup

Click HIDE to return to regular DVR operation

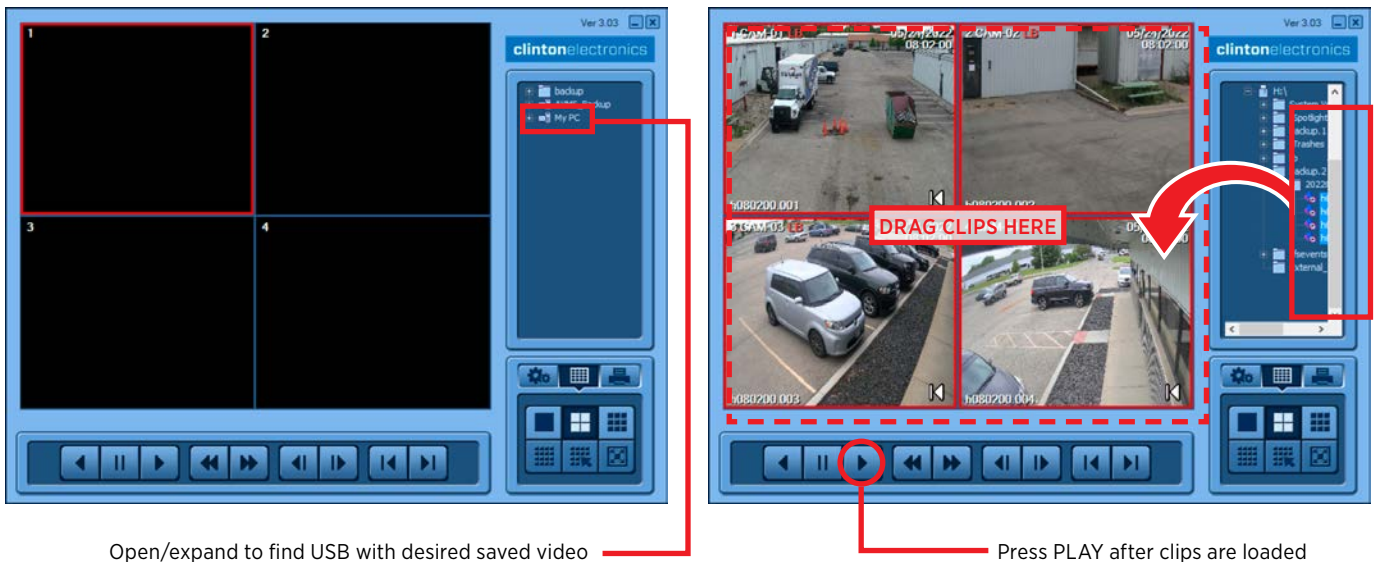
BACKUP > View Saved Video

The backed up video is saved as a proprietary file type and can not be viewed without the embedded DVR player software. (The DVR player software is saved to the device at the same time the video is being saved).



TO VIEW SAVED VIDEO FROM BACKUP:

1. Insert CD/DVD or USB with saved video into a Windows PC. **Not supported for use on MAC computers.*
2. Locate the device with saved video.
3. Open the DVR Player software.
4. Locate the device with saved video from the menu bar on the right.
5. Open the folder containing the saved video.
6. Drag & Drop the desired clips into the multiplex view on the left.
7. Click the PLAY button to play video. **Video always loads in PAUSE mode.**



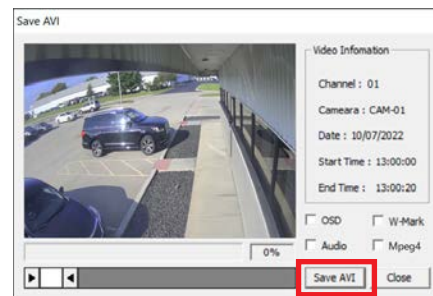
BACKUP > Convert Saved Video

TO EXPORT SAVED VIDEO TO AVI/MP4:

1. Select the desired video to convert (can only convert one video at a time). The selected video will have a red box.
2. Click the 'Option Control' tab.
3. Click the 'AVI Convert' button.
4. If desired, click the options to include the OSD (time and date embedded onto video), a Watermark, include Audio (if audio was originally recorded), or select Mpeg4 to export as an MP4 video instead of AVI.
5. Adjust the duration of the video if desired.
6. Click 'Save AVI' to begin the export, then select a location to save to when prompted.



Click Option Control tab, then click the AVI Convert button.



Click the Save AVI button to begin the export.

- If the backup was saved from a DVR with older firmware, the version of DVR Player may not support the MP4 export option. The MP4 export option is available on the DVR Player Ver 3.08 and newer.
- AVI videos are only playable on Windows PC— AVI videos will not play on Mac OS computers.

REMOTE ACCESS > AVMS & CVMS Mobile

Clinton DVRs can be accessed on a local network or remotely with our free monitoring software, AVMS and our free mobile app, CVMS Mobile. Available for download at: www.clintonelectronics.com/support

The DVR must have proper network settings/port forwarding for either app to function.



AVMS:

Operating System	Minimum System Requirements
Windows	OS: Windows 7 or newer
	RAM: 2 GB of RAM or higher
	Processor: Single Core 3 GHz or higher Dual Core 1.6 GHz or higher
Mac	OS: OS X El Capitan ver 10.11.6 or newer
	RAM: 8 GB of RAM or higher
	Processor: 2.5 GHz Intel Core i5 or better



CVMS Mobile:

Operating System	Minimum Requirements
iPhone	OS: iOS 12.1 or newer
	*Not recommended for iPhone 5 or older phones. iPhone 6 video quality is reduced for performance.
Android	OS: Android 7.0 or newer

PORT FORWARDING BASICS

- *Router IP addresses and configuration pages vary by manufacturer. Use the following information as a basic guide in configuring a router to set up port forwarding.*
- *Refer to the Port Forwarding section of the user manual for the router or visit www.portforward.com and click on the Port Forwarding Guides link for more detailed information.*
- *Call Clinton Tech Support for help with router port forwarding.*

1. Open an internet browser (Internet Explorer, Google Chrome, Safari, etc.)
2. Log in to the router. This will usually be the Default Gateway found in NETWORK > Network Setup > Ethernet > Gateway.
3. Enter the login information for the router.
4. After successful login to the router find the **Advanced Settings** or **Firewall Settings**.
5. Find the **Port Forwarding/Port Triggering** section and select **Port Forwarding**.
6. Service Types: **TCP/UDP** should be enabled.
7. Enter the Web Port number from the DVR (default is 80) into the **Starting Port** and **Ending Port**.
8. Enter the IP address of the DVR (found in NETWORK > Network Setup > Ethernet > IP Address).
9. Click **OK** or **SAVE**.

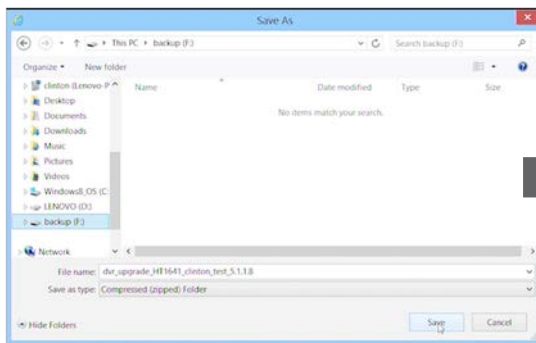
These steps will need to be repeated to open the SMS Port (default 7000). Instead of entering 80 for the Starting and Ending Ports, you will enter 7000.

FIRMWARE UPDATE

Latest DVR firmware can be found online at www.ClintonElectronics.com/support

Follow the procedure below to install the firmware onto your DVR.

1. Insert a USB device (Formatted to FAT32) into a computer.
2. Download the appropriate DVR firmware from www.ClintonElectronics.com/support.html
3. Save the firmware update to the USB. Do Not open the contents of the firmware update or rename the file. Opening, modifying or renaming the firmware update will make it unreadable by the DVR.
4. Remove the USB device from the computer.
5. Insert the USB device into the DVR.
6. Restart the DVR. To restart: SETUP MENU > Shutdown > Restart
7. Confirm the firmware update during the DVR restart. Once the update starts do not remove the USB device from the DVR. The firmware update can take several minutes to complete depending on the size of the update.
8. After successfully updating the firmware; remove the USB device when prompted then click the ✓ mark.
9. The DVR will perform a self-restart. This can take several minutes.
10. After this second restart an “Upgrade Completed” window will be displayed. Click the ✓ mark to return to regular DVR functions.



Download & Save firmware update from ClintonElectronics.com/support.html onto USB



Insert USB with firmware update into DVR & Restart



Confirm the firmware update by clicking the ✓ button, do not remove USB from DVR or power down



Remove USB from DVR when prompted

NOTICE



- Do Not remove the USB device from the DVR until the firmware has successfully been installed.
- If the USB device is not removed after prompted, the DVR will initiate the firmware update again after restart.



clintonelectronics

DVR User Manual

For DVRs: Shadow, EX, FXR, & HY16

Clinton Electronics
6701 Clinton Road
Loves Park, IL 61111

Technical Support:
1-800-549-6393
Monday~Friday 8am~5pm (Central Standard Time)

www.clintonelectronics.com