

# Owner's Manual & Safety Instructions

**Save This Manual** Keep this manual for the safety warnings and precautions, assembly, operating, inspection, maintenance and cleaning procedures. Write the product's serial number in the back of the manual near the assembly diagram (or month and year of purchase if product has no number). Keep this manual and the receipt in a safe and dry place for future reference.

17g

# COBRA™

## 8 CHANNEL SURVEILLANCE DVR WITH 4 HD CAMERAS

With Mobile Monitoring Capabilities



Visit our website at: <http://www.harborfreight.com>  
Email our technical support at: [productsupport@harborfreight.com](mailto:productsupport@harborfreight.com)

**63890**

When unpacking, make sure that the product is intact and undamaged. If any parts are missing or broken, please call 1-888-866-5797 as soon as possible.

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No portion of this manual or any artwork contained herein may be reproduced in any shape or form without the express written consent of Harbor Freight Tools. Diagrams within this manual may not be drawn proportionally. Due to continuing improvements, actual product may differ slightly from the product described herein.  
Tools required for assembly and service may not be included.

## **⚠ WARNING**

**Read this material before using this product.  
Failure to do so can result in serious injury.  
SAVE THIS MANUAL.**

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## IMPORTANT SAFETY INFORMATION

### **WARNING**

Read all safety warnings and instructions.

*Failure to follow the warnings and instructions may result in electric shock, fire and/or serious injury.*

Save all warnings and instructions for future reference.

### Installation Precautions

1. **Check federal, state and local surveillance laws before installing video and/or audio surveillance equipment.**
2. Install only according to these instructions. Improper installation can create hazards.
3. **Do not overreach when installing this product. Keep proper footing and balance at all times.**  
*This enables better control in unexpected situations.*
4. Wear ANSI-approved safety goggles during installation.
5. Keep installation area clean and well lit.
6. Keep children and bystanders out of the area during installation.
7. Do not install when tired or when under the influence of alcohol, drugs or medication.

### Use Precautions

1. This product is not a toy. Do not allow children to play with or near this item.
2. Use as intended only.
3. Do not modify.
4. Maintain product labels and nameplates. These carry important safety information. If unreadable or missing, contact Harbor Freight Tools for a replacement.

## Service

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**Have your DVR equipment serviced by a qualified repair person using only identical replacement parts.**  
*This will ensure that the safety of the equipment is maintained.*

## Camera Safety Warnings

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1. To prevent electric shock, do not attempt to disassemble Camera. There are no serviceable parts inside.
2. **Do not expose the Power Adapter to rain or wet conditions.** *Water entering the Power Adapter will increase the risk of electric shock.*
3. **Do not abuse the Power Adapter cord. Never use the cord for unplugging the plug from the outlet. Keep cord away from heat, oil, sharp edges or moving parts.** *Damaged or entangled cords increase the risk of electric shock.*
4. Handle Camera with care. Camera could be damaged by improper handling or storage.

## DVR Safety Warnings

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1. Maintain adequate airflow around DVR.
2. Use supplied Power Adapter only.
3. To prevent electric shock, do not attempt to disassemble DVR. There are no serviceable parts inside.
4. **Do not expose the Power Adapter or DVR console to rain or wet conditions.** *Water entering the Power Adapter or DVR console will increase the risk of electric shock.*
5. **Do not abuse the Power Adapter cord. Never use the cord for unplugging the plug from the outlet. Keep cord away from heat, oil, sharp edges or moving parts.** *Damaged or entangled cords increase the risk of electric shock.*
6. Maintain labels and nameplates on the unit. These carry important safety information. If unreadable or missing, contact Harbor Freight Tools for a replacement.
7. The warnings, precautions, and instructions discussed in this instruction manual cannot cover all possible conditions and situations that may occur. It must be understood by the operator that common sense and caution are factors which cannot be built into this product, but must be supplied by the operator.



**SAVE THESE INSTRUCTIONS.**

## Grounding

### **⚠️ WARNING**



**TO PREVENT ELECTRIC SHOCK AND DEATH FROM INCORRECT GROUNDING WIRE CONNECTION:**

Check with a qualified electrician if you are in doubt as to whether the outlet is properly grounded. Do not modify the power cord plug provided with the tool. Never remove the grounding prong from the plug. Do not use the tool if the power cord or plug is damaged. If damaged, have it repaired by a service facility before use. If the plug will not fit the outlet, have a proper outlet installed by a qualified electrician.

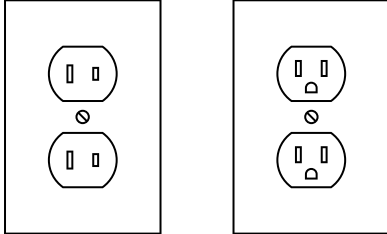


Figure A: Outlets for 2-Prong Plug

1. The included Power Adapters do not require grounding.
2. The Power Adapters may be used in either of the 120 volt outlets shown in the preceding illustration. **(See Figure A.)**

## Extension Cords

**Note:** Do not use an extension cord with the Power Adapters.

## Symbology

	Double Insulated
	Canadian Standards Association
	Underwriters Laboratories, Inc.

<b>V</b>	Volts
~	Alternating Current
<b>A</b>	Amperes

## Specifications

<b>DVR</b>	
Hard Drive	1TB
Video Standard	NTSC
Video Codec	H.264
Operating System	Linux
Video I/O	Input: 8 BNC Output: 1 HDMI / 1 VGA
Audio Codec	G.711
Audio I/O	Input: 4 RCA Output: 1 RCA
Recording Resolution	2048 x 1536 (3MP) 1920 x 1080 (1080P) 1280 x 720 (720P) 960 x 480 (960H)
Recording Mode	Normal / Motion / Alarm
Motion Detection	Selectable Area and Sensitivity Detection
PTZ Interface	RS485
Network Interface	RJ-45
USB Interface	USB 2.0
DVR Input Rating	12V DC / 2A
Power Adapter Rating	12V DC / 2A

<b>Camera</b>	
Lens Type	Fixed 3.6mm
Horizontal Resolution	1080P
Effective Pixels	1920H x 1080V
Night Vision Type	Infrared LEDs with Low Light Sensor
Image Type	Daylight: Color Infrared: Black & White
Infrared Distance	100 ft. (Under ideal conditions. Objects may be partially or completely obscured depending on camera position.)
Ingress Protection Rating	IP 66 - Protected from low-pressure water jets
Video Connector	BNC
Camera Input Rating	12V DC / 300 mA
Power Adapter Rating	12V DC / 2A - To power included 4 cameras.
Cable Length	60 ft.
Operating Temperature	14°-122° F

# Components and Controls



Read the **ENTIRE IMPORTANT SAFETY INFORMATION** section at the beginning of this manual including all text under subheadings therein before set up or use of this product.

## DVR Front Panel

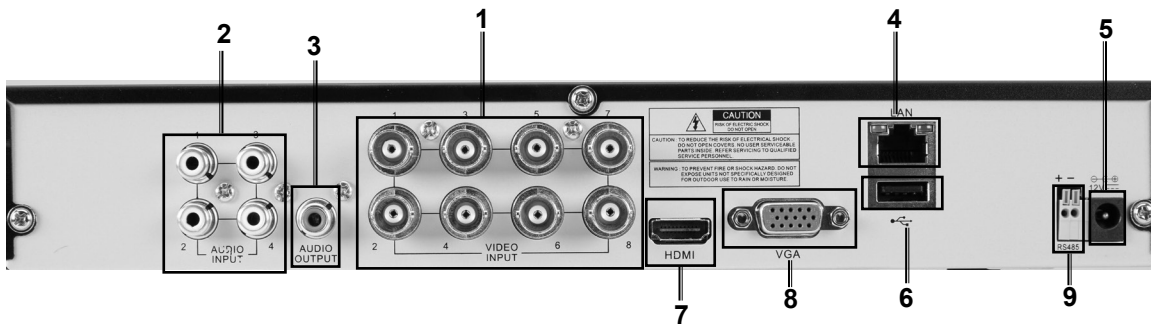


1	Green Power Indicator - glows when power is on
2	Red Hard Drive Light - flashes when recording

3	USB Port
---	----------

Figure B

## DVR Back Panel



1	BNC Video Input	8
2	RCA Audio Input	4
3	RCA Audio Output	1
4	RJ45 LAN Ethernet Port	1
5	12VDC Power Input	1

6	USB 2.0 Port	1
7	HDMI Video Output	1
8	VGA Video Output	1
9	RS485 PTZ Connector	1

Figure C

Part	Description	Qty
1	8-channel H.264 DVR	1
2	Hard Drive (pre-installed)	1
3	3.6mm wide-angle indoor/ outdoor color camera with infrared night vision	4
4	60 ft. camera cable	4
5	1-to-4 way splitter power cable	1
6	12V/2A power adapter for DVR	1

Part	Description	Qty
7	12V/2A power adapter for 4pc camera	1
8	Mouse w/ USB cable	1
9	Remote Control	1
10	AAA battery	2
11	Mounting Screw	12
12	Mounting Anchor	12

**Mouse**

**12VDC/2A Power Adapter**



Use the Mouse to navigate the DVR

**Record Serial Number Here:**

**Note:** If product has no serial number, record month and year of purchase instead.

**Note:** Some parts are listed and shown for illustration purposes only, and are not available individually as replacement parts.

Remote Control Functions	
1 - 8	Select Channel
0	Lock and Unlock Controls
ALL	Toggle between single, 4 and 8 Screen Displays
MENU	Open Menu
MUTE	Mute
SUBMENU	Open Pop-Up Menu
▲	Menu Up
▼	Menu Down
◀	Menu Left
▶	Menu Right
SEL	Confirm Selected Operation
◀◀	Rewind
▶▶	Play / Search Records
▶▶▶	Fast Forward
•	Record
	Pause
■	Stop

**Remote**

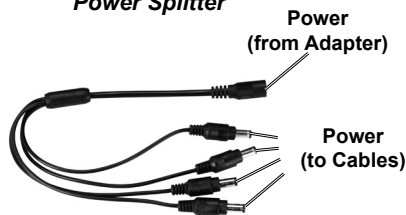


**Note:** 2 AAA batteries included

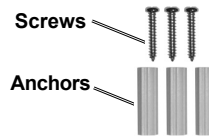
**12VDC/1A Power Adapter**



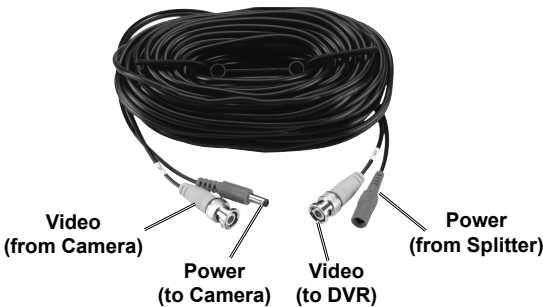
**Power Splitter**



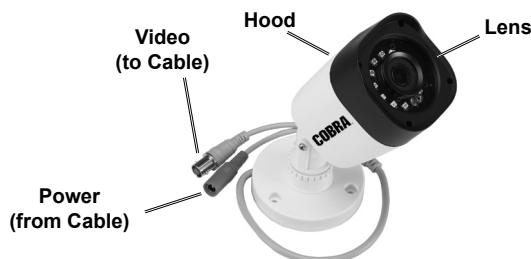
**Mounting Hardware**



**Cable - 60 ft.**



**Camera**



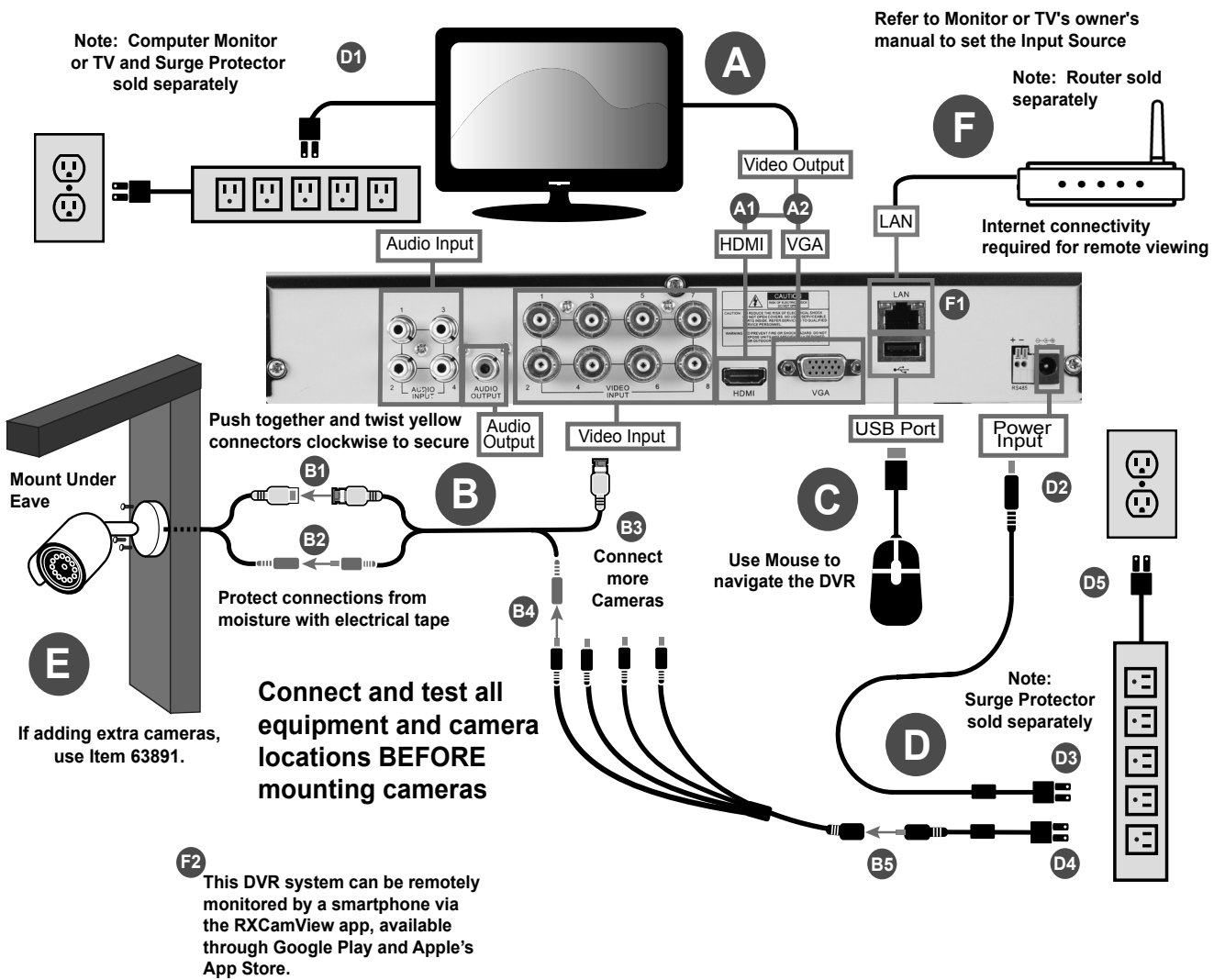
# Setup



Read the **ENTIRE IMPORTANT SAFETY INFORMATION** section at the beginning of this document including all text under subheadings therein before set up or use of this product.

**NOTICE: CHECK FEDERAL, STATE AND LOCAL SURVEILLANCE LAWS BEFORE INSTALLING VIDEO AND/OR AUDIO SURVEILLANCE EQUIPMENT.**

- A Connect Monitor
- B Connect Cameras
- C Connect Mouse
- D Connect Power
- E Mount Cameras
- F Connect Remotely





## Startup Wizard

**Note:** After DVR startup is completed, the Startup Wizard will be displayed. Wizard setting menu includes: Homepage, HDD Management, Network Configuration, Email Configuration, Record Schedule, and General System Configuration.

**Note:** You can click **Cancel** to skip Startup Wizard. Check the box labeled **Don't show this window next time** if you don't want to display Startup Wizard.

1. If the HDD is installed in the DVR for the first time, it will be need to be formatted. Select the HDD which you want to format, and then click **Format HDD**. See Figure D

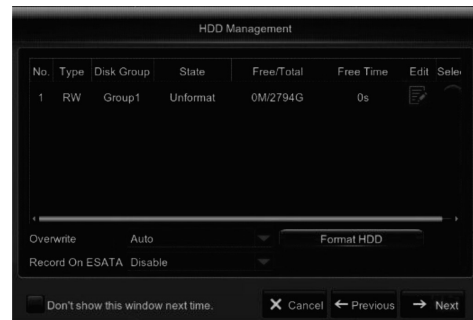


Figure D

**Note:** Use Overwrite option to overwrite the old recordings on the HDD when HDD is full. For example, if you choose the option 7 days then only the last 7 days' recordings are kept on the HDD. To prevent overwriting any old recordings, select Disable. If you have disabled this function, please check HDD status regularly, to make sure it is not full.

## Network Configuration

**Note:** This menu allows you to configure network parameters, such as PPPoE, DHCP, Static, and 3G. The most common types are DHCP or Static. Most likely your network type is DHCP, unless the network is manually addressed (usually called Static).

1. If you need an authentication username and password to the internet, then choose PPPoE. If you want to use a mobile network connection, then choose 3G. See Figure E.

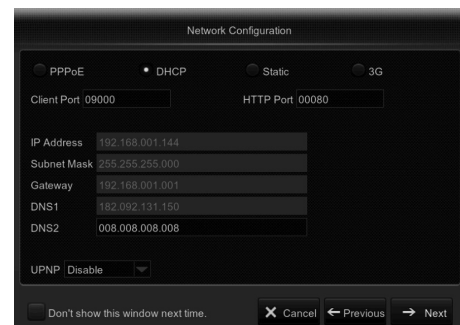


Figure E

## Email Configuration

**Note:** This menu allows you to configure email settings. Go through these settings if you want to receive sytem notifications via email when a motion is detected, HDD becomes full, HDD is in error state, or Video Loss occurs. Full account information for the account the emails will be sent FROM will need to be entered, as well as the email addresses where the emails will be sent to. See Figure F.

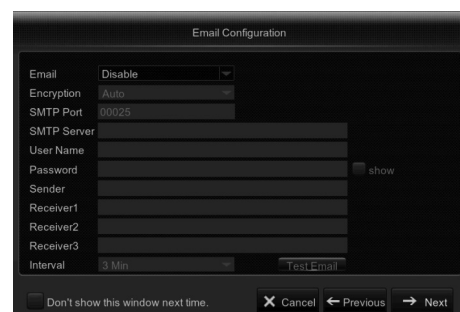


Figure F

## Record Schedule

**Note:** This menu allows you to specify when the DVR records video and define the recording mode for each channel. The recording schedule allows for Normal (continuous) recording, Motion recording, and Alarm recording. To set the recording mode, click first on the mode button (Normal, Motion, or Alarm), then drag the cursor to mark the slots. See Figure G.

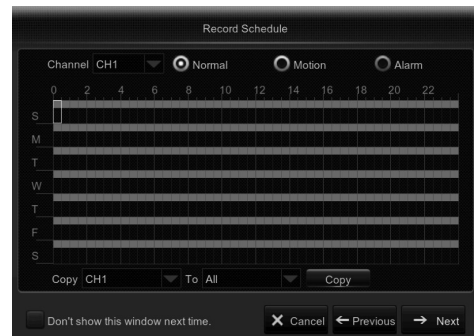


Figure G

## General System Configuration

**Note:** This menu allows you to configure the general parameters of the system such as Date, Time, Date Format, Time Format, Language, Menu Timeouts, and Mode.

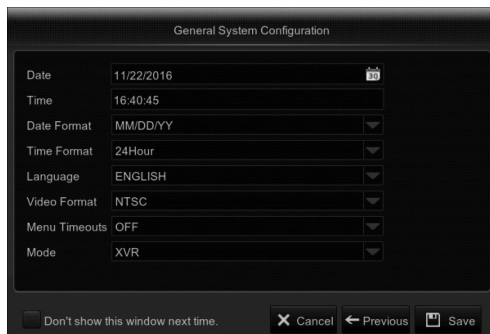


Figure H

# Live Screen

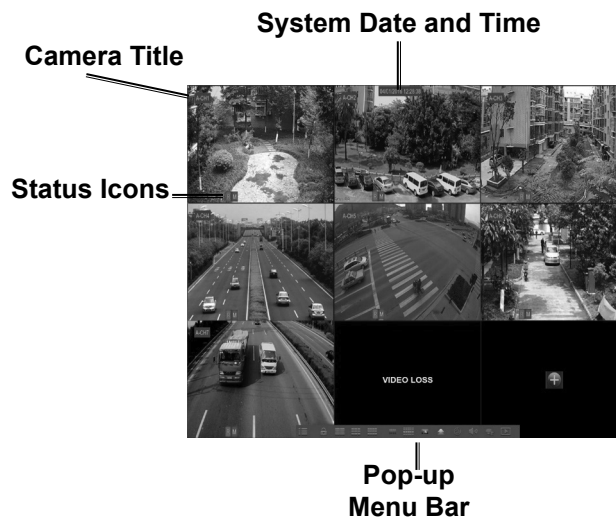


Figure 1

## Camera Icons

### System Date & Time

Displays current system date & time

### Camera Title

**A-**: Indicates that the camera connected is an AHD camera

**T-**: Indicates that the camera connected is a TVI camera

**C-**: Indicates that the camera connected is a CVI camera

### Status Icons

**R** = DVR is currently recording.

**M** (Green) = DVR is detecting motion from the camera but not recording.

**M** (Red) = Camera has detected motion and triggers recording.

**I** (Green) = Indicates that the external sensor device is triggered but not recording.

**I** (Red) = Indicates that the external sensor device is triggered for recording.

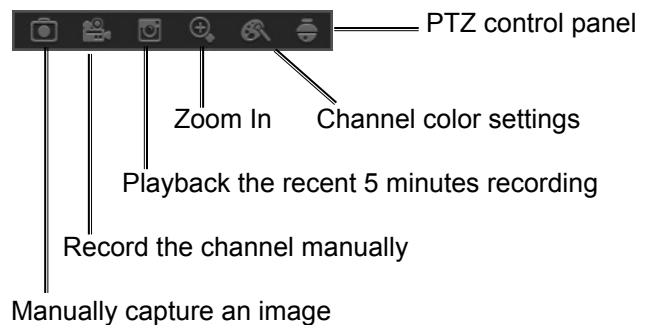
**H** = Indicates that the DVR cannot detect an HDD or the HDD is not formatted.

**VIDEO LOSS**: Connection to the camera has been lost.

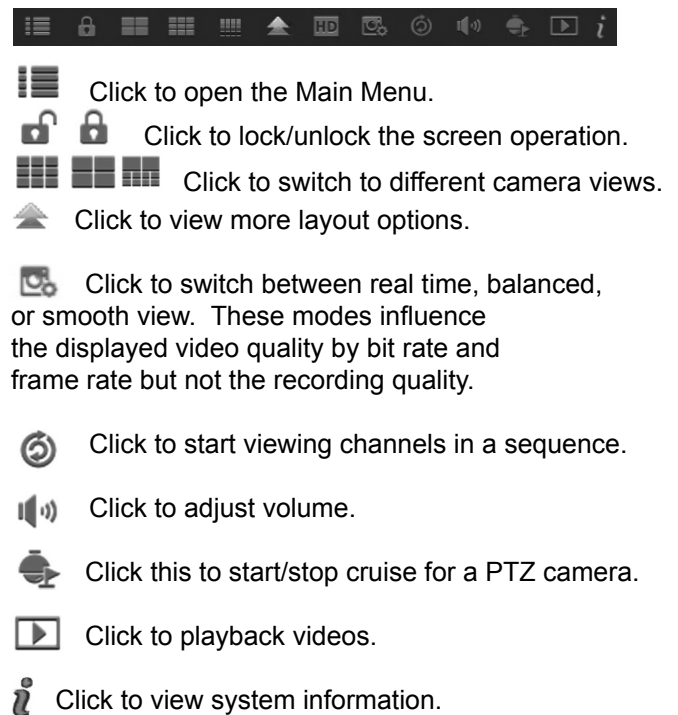
**No Camera**: Camera has not been connected to the DVR.

**No HDD**: HDD is not installed.

## Camera Quick Toolbar



## Pop-up Menu Bar



**Note:** This menu allows you to configure channel parameters.

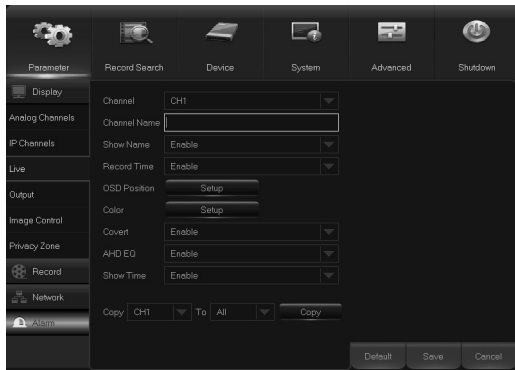


Figure J

**Channel:** Select the channel you want to modify.

**Channel Name:** Enter the name of the channel.

**Show Name:** Enable to display the channel name on the live screen.

**Record Time:** Disable if you do not want to see the recording time on the channel.

**OSD Position:** Click Setup to determine where you want the channel name and current date to be displayed when you are viewing the channel. Drag the channel name box and the date/time box to the desired location on the channel view.

**Covert:** Enable if you want to hide this channel from appearing on the Live Viewing screen. Disabling or enabling this option does not affect video recording on the HDD.

**Output**

**Note:** This menu allows you to configure video output parameters.

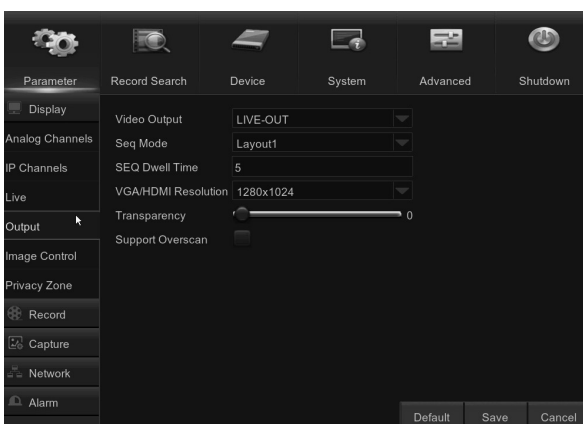


Figure L

**Video Output:** This is the monitor that you use for live view display.

**AHD EQ:** Enable or disable AHD EQ (Enhanced Quality) function. Configure this parameter if you are an advanced user.

**Show Time:** Disable if you do not want the current time to appear on the channel.

1. Click Setup in the **Color** row from Figure J to configure video color settings. You will see the screen shown below.

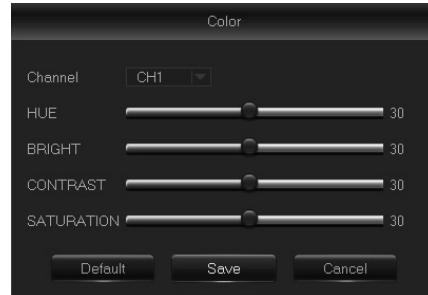


Figure K

**HUE:** Changes the color mix of the image.

**BRIGHT:** Defines how bright the image appears on the display.

**CONTRAST:** Increases the difference between the darkest black and the whitest white in the image. Modify the contrast if the sections of the image look "greyed out".

**SATURATION:** Alters how much color is displayed in the image. The higher the saturation, the brighter and vivid colors will appear to be. Setting this parameter too high can degrade the image quality.

**Sequence Mode:** Choose your favorite layout from the drop-down menu for viewing channels in a sequence on live view.

**SEQ Dwell Time:** Set how long you want the live view from a channel to be displayed in a sequence.

**VGA/HDMI Resolution:** Select the highest resolution your monitor/TV supports. The higher the resolution, the more details you will see on your images. The DVR will restart after you change the resolution.

**Transparency:** Decide how transparent you want the menus to be. Choose partially transparent (see-through) if you need to keep an eye on happenings while adjusting settings.

**Support Overscan:** Check to adjust the position of the video image on the live viewing screen.

## Private Zone

**Note:** This menu allows you to create Privacy Zone(s) if you want to partially cover up part of the image. You can create up to four privacy zones in any size and location on the channel view. These zone(s) appear as “red box rectangle areas.” Just click inside the default red-lined rectangle and drag it where you want to create a privacy zone.

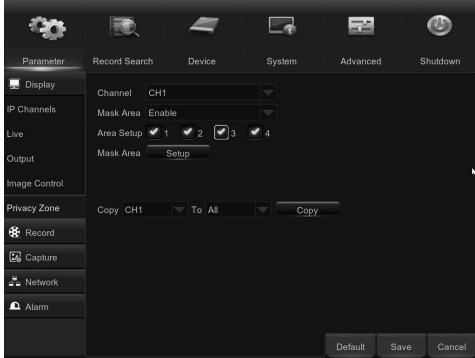


Figure M

1. Select the Channel where you want to set privacy zone(s), then set Mask Area to Enable. Decide how many privacy areas you want to set and check the area(s) in Area Setup, and click Setup to open the channel in full screen mode and start marking the privacy zones See Figure Q.

**Note:** Depending on the number of areas you have chosen in Area Setup, you will see areas covered with black rectangles on the channel view. See Figure N.

2. When you have finished marking the areas, right-click to return to the Main Menu.



Figure N

## Record

**Note:** This menu allows you to configure the channel recording parameters.

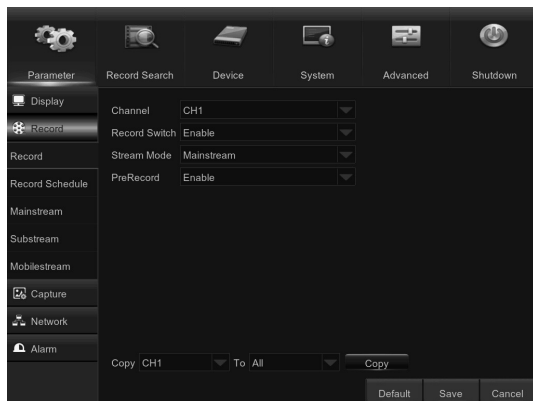


Figure O

**Channel:** Select the channel to set its recording parameters.

**Record Switch:** Enable in order to allow the video to be recorded to the HDD.

**Stream Mode:** Choose the recording resolution. The available options are Mainstream and Substream.

**PreRecord:** If this option is enabled, the DVR starts recording a few seconds before an event occurs. Use this option if your primary recording type is motion-based.

## Record Schedule

**Note:** This menu allows you to specify when the DVR records video and defines the recording mode for each channel. The recording schedule alternates between Normal (continuous) recording, Motion recording, and Alarm recording. To set the recording mode, click first on the mode button (Normal, Motion, or Alarm), then drag the cursor to mark the slots. The recording schedule is valid only for one channel. If you want to use the same recording schedule for other channels, use the **Copy To** function.

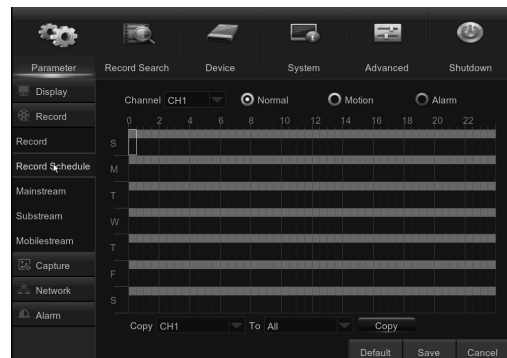


Figure P

**Channel:** Select the channel to set its recording parameters.

**Normal:** When the time slot is marked **Green**, this indicates the channel performs normal recording for that time slot.

**Motion:** When the time slot is marked **Yellow**, this indicates the channel records only when a motion is detected during that time slot.

## Mainstream

**Note:** This menu allows you to configure the recorded video parameters. All modifications you apply to these settings will affect the recorded video saved into the HDD.



Figure Q

**Channel:** Select the channel to configure recording-related information.

**Resolution:** This parameter defines how large the recorded image will be.

## Substream

**Note:** This menu allows you to configure the settings of a particular channel if the channel is being viewed via remote access, for example Web Client.

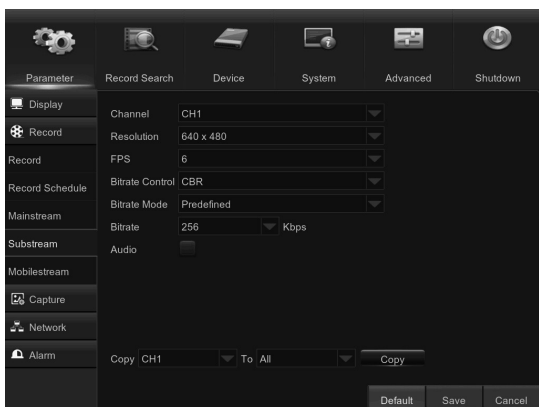


Figure R

**Channel:** Choose the channel where the settings are applied.

**NOTE:** To use the motion detection, you must enable and configure the motion settings for the channel in the Alarm menu. When the time slot is marked **Red**, this indicates the channel records only when the sensor is triggered during that time slot.

**No Record:** A time slot marked **Black** means that there is no recording scheduled for the time slot.

**FPS:** This parameter defines the number of frames per second that the DVR will record.

**Bitrate Control:** Select the bitrate level based on the complexity of the scene. For a simple scene such as a gray wall, use constant bitrate (CBR). For a more complex scene such as a busy street, use variable bitrate (VBR).

**Bitrate Mode:** If you want to set the bitrate by yourself, then choose **User-defined**. If you want to select the predefined bitrate, choose **Predefined**.

**Bitrate:** This parameter corresponds to the speed of data transfer that the DVR will use to record video. Recordings that are encoded at higher bitrates will be of better quality.

**Audio:** Select this option if you want to record audio along with video and have a microphone connected to the DVR, or are using a camera with audio capability.

**Resolution:** Set the resolution.

**FPS:** This parameter defines the number of frames per second at the remote session.

**Bitrate Control:** Select the bitrate level based on the complexity of the scene. For a simple scene such as a gray wall, use constant bitrate (CBR). For a more complex scene such as a busy street, use variable bitrate (VBR).

**Bitrate Mode:** If you want to set the bitrate by yourself, then choose **User-defined**. If you want to select the predefined bitrate, choose **Predefined**.

**Bitrate:** Enter manually or choose from the drop-down menu.

**Audio:** Check this box if you want to hear the live sound at the remote session. Make sure the camera with audio capability is properly connected to the selected channel.

## Mobile Stream

**Note:** This menu allows you to configure the settings of a particular channel if the channel is being viewed via a mobile device.

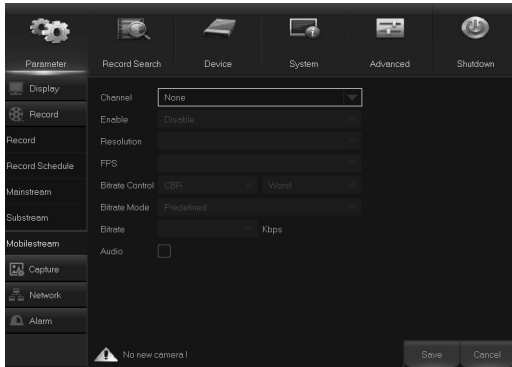


Figure S

**Channel:** Choose the channel where the settings are applied.

**Enable:** Enable to allow to use mobile streaming on this channel.

## Capture

**Note:** This menu allows you to configure the snapshot capturing parameters.

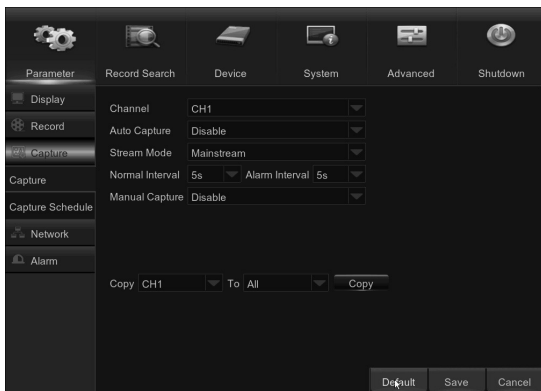


Figure T

**Channel:** Select the channel to set its capture parameters.

**Resolution:** Set the resolution.

**FPS:** This parameter defines the number of frames per second at the mobile session.

**Bitrate Control:** Select the bitrate level based on the complexity of the scene. Refer to previous two sections for criteria.

**Bitrate Mode:** If you want to set the bitrate by yourself, then choose **User-defined**. If you want to select the predefined bitrate, choose **Predefined**.

**Bitrate:** Enter manually or choose from the drop-down menu.

**Audio:** Check box if you want to hear the live sound at the mobile session. Make sure the camera with audio capability is properly connected to the selected channel.

**Auto Capture:** Enable or disable automatic capturing on the channel. When enabled, you can select the snapshot capturing interval.

**Stream Mode:** Select the image resolution.

**NOTE:** When the Auto Capture is enabled, you can select the image capturing interval.

**Normal Interval:** Snapshots are captured based on normal interval.

**Alarm Interval:** Snapshots are captured based on alarm interval only when a motion is detected or sensor is triggered.

**Manual Capture:** Enable or disable manual capturing on the channel.

## Capture Schedule

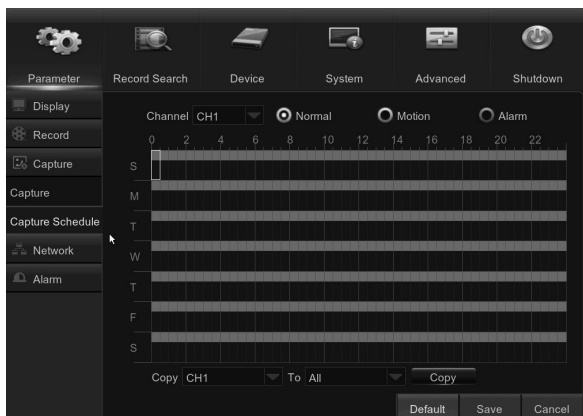


Figure U

**Channel:** Select the channel to set its snapshot capturing schedule.

## Network Settings

### Network

**Note:** This menu allows you to configure network parameters, such as PPPoE, DHCP, Static, and 3G. The most common types are DHCP or Static. Most likely your network type is DHCP, unless the network is manually addressed (usually called Static). If you need an authentication username and password to the Internet, then choose PPPoE. If you want to use mobile network connection, then choose 3G.

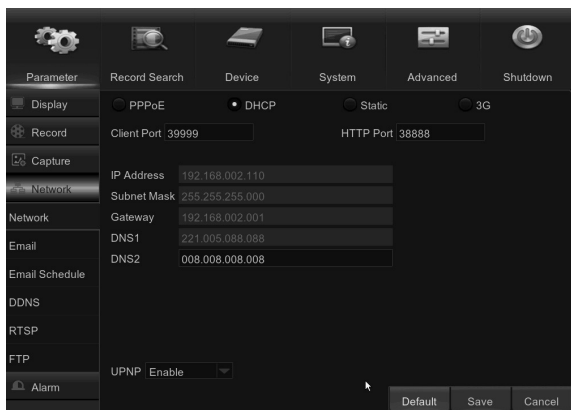


Figure V

**Network Type:** Select the network type you are using, from the following:

**PPPoE:** This is an advanced protocol that allows the DVR to connect to the network more directly via DSL modem.

**DHCP:** This is the network type when a device on your network (usually a router) assigns automatically all the network parameters for your DVR.

**Static:** Requires all the network parameters to be filled in manually.

**3G:** Prior to using the mobile network, you need to connect a 3G dongle to the DVR.

**Normal:** When the time slot is marked **Green**, this indicates the channel is capturing snapshots based on the Normal Interval.

**Motion:** When the time slot is marked **Yellow**, this indicates the channel is capturing snapshots based on Alarm Interval only when a motion is detected.

**Alarm:** When the time slot is marked **Red**, this indicates the channel is capturing snapshots based on Alarm Interval only when a sensor is triggered.

**No Capturing:** A time slot marked **Black** means that there is no snapshot capturing scheduled for the time slot.

**HTTP Port:** This port will be used to log in remotely to the DVR (via Web Client). If the default port 80 is already taken by other applications, please change it.

**Client Port:** This is the port that the DVR will use to send information through. If the default port 9000 is already taken by other applications, please change it.

**IP Address:** The IP address identifies the DVR in the network. It consists of four groups of numbers between 0 to 255, separated by periods. For example, "192.168.001.100". You need to enter the IP address manually **only** if your network type is Static.

**Subnet Mask:** Subnet Mask is a network parameter which defines a range of IP addresses that can be used in a network. If IP address is like a street where you live then Subnet Mask is like a neighborhood. The subnet address also consists of four groups of numbers, separated by periods. For example, "255.255.000.000". As with IP address, you need to enter the Subnet Mask manually **only** if your network type is Static.

**Gateway:** This address allows the DVR to access the Internet. The format of the Gateway address is the same as the IP Address. For example, "192.168.001.001". As with IP address, you need to enter the gateway address manually **only** if your network type is Static.

**DNS1/DNS2:** DNS1 is the primary DNS server and DNS2 is a backup DNS server. Normally it should be sufficient to enter the DNS1 server address.



**UPnP:** If you want to log in remotely to the DVR using Web Client, you need to complete the port forwarding. Enable this option if your router supports the UPnP. You need to enable UPnP

on both the DVR and router. In this case, you do not need to manually configure port forwarding on your router. If your router does not support UPnP, make sure the port forwarding is completed manually.

## Email

**Note:** This menu allows you to configure email settings. Please complete these settings if you want to receive the system notifications on your email when a motion is detected, HDD becomes full, HDD is in error state, or Video Loss occurs.

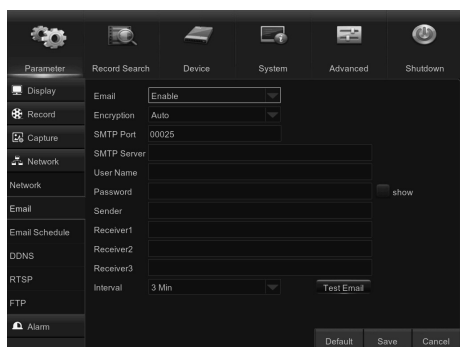


Figure W

**Email:** Enable this feature.

**Encryption:** Enable if your email server requires the SSL or TLS verification. If you are not sure, set to Auto.

## Email Schedule

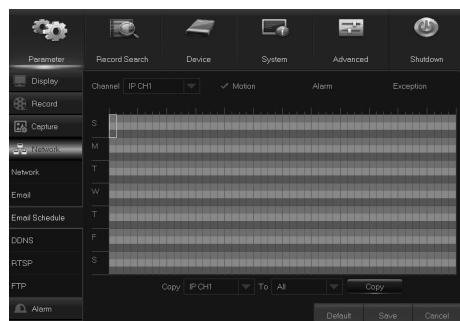


Figure X

**SMTP Port:** Enter the SMTP port of your email server.

**SMTP Server:** Enter the SMTP server address of your email.

**User Name:** Enter your email address.

**Password:** Enter the password of your email.

**Receiver 1-3:** Enter the email address where you want to receive the event notifications from the DVR.

**Interval:** Configure the length of the time interval between the notification emails from the DVR.

**Note:** To make sure all settings are correct, click **Test Email**. The system sends an automated email message to the receiver inboxes. If you received the test email, it means the configuration parameters are correct.

**The color codes on email schedule have the following meanings:**

**Green:** Slot for Motion.

**Yellow:** Slot for I/O Alarm.

**Red:** Slot for Exception (HDD full, HDD error, or Video Loss).

## DDNS

**Note:** This menu allows you to configure DDNS settings. The DDNS provides a static address to simplify remote connection to your DVR. To use the DDNS, you first need to open an account on the DDNS service provider's web page.

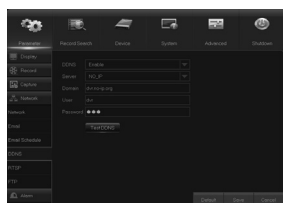


Figure Y

**Server:** Select the preferred DDNS server: DDNS\_3322, DYNDNS, NO\_IP, CHANGEIP, or DNSEXIT.

**Domain:** Enter the domain name you created on the DDNS service provider's web page. This will be the address you type in the URL box when you want to connect remotely to the DVR via PC. For example: dvr.no-ip.org.

**User/Password:** Enter the user name and password you obtained when creating an account on the DDNS service provider's web page. After all parameters are entered, click **Test DDNS** to test the DDNS settings.

**DDNS:** Enable the DDNS service.

## RTSP

**Note:** The DVR can be remotely viewed via RTSP protocol. See Figure Z.

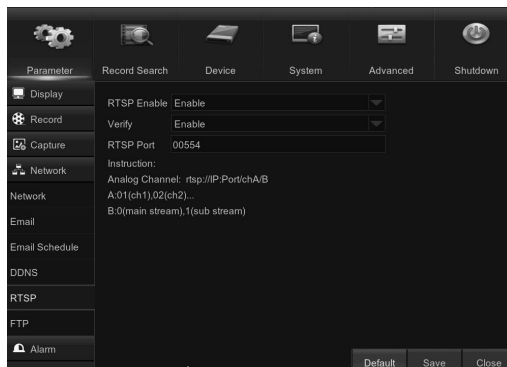


Figure Z

**RTSP Enable:** Enable/Disable

**Verify:** Enable/Disable

**RTSP Port:** Default is 554. If default port 554 is already taken by other applications, please

## FTP

**Note:** This menu allows you to enable FTP function to view and load captured snapshots from DVR to your storage device over FTP.



Figure AB

change it.

**Analog Channel:** rtsp://IP:Port/chA/B

**A:** 01(ch1), 02(ch2)...16(ch16)

**B:** 0(main stream), 1(sub stream)

For example, the DVR IP address is 192.168.1.120, and you want to view CH1 with mainstream, then the RTSP address will be: rtsp://192.168.1.120:554/ch1/0. See Figure BAA.

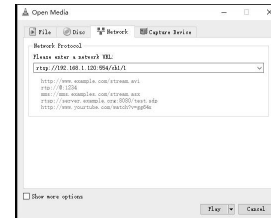


Figure AA

**Note:** RTSP user name and password is same with DVR user name, password and permissions. Follow the instruction to input IP and port to preview video.

**FTP Enable:** Enable the feature in DVR.

**Server IP:** Enter your FTP server IP address or domain name.

**Port:** Enter the FTP port for file exchanges.

**Name/ Password:** Enter your FTP server user name and password.

**Directory Name:** Enter the default directory name for the FTP file exchanges.

**Test FTP:** Click to test the FTP settings.

# Alarm Settings

## Motion

**Note:** This menu allows you to configure motion parameters. A sufficient amount of difference between frame activity is interpreted as motion. When the motion is detected, the system can be set to automatically initiate recording. In this menu you can select the channels where you want the motion detection recording to take place.

If you set the motion detection at a high sensitivity level ("8" is the most sensitive), then the frequency of false alarm events increases. If the sensitivity level is too low ("1" is the least sensitive), you might increase the risk that a significant motion event will not trigger the motion detection to record.

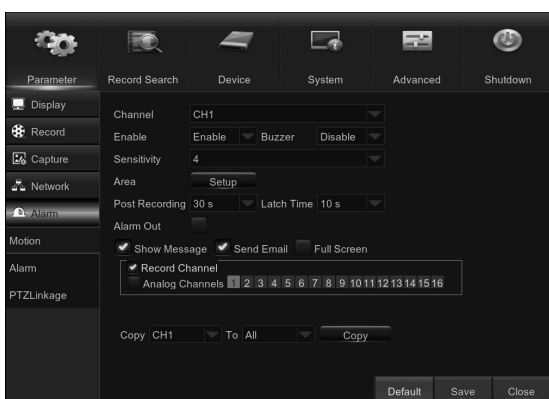


Figure AC

**Channel:** Select the channel you want to set the motion detection.

**Enable:** Enable or disable the function.

**Buzzer:** The DVR can use its internal buzzer to emit an alarm tone. You can set the buzzer duration in seconds when the motion is detected.

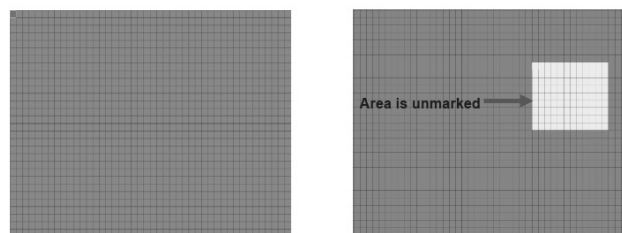
**Sensitivity:** Set the sensitivity level.

**Area:** To setup motion area, click Setup.

**Note:** By default, the whole screen is marked for motion detection (red blocks).

**To disable the motion detection on an area:**

1. Click the grid cursor and then drag the mouse to highlight the scope to unmark the area (transparent block).
2. After setting is completed, right click the mouse button to return and click Save to make the area setup effective.



Motion Detection Area Setup

**Post Recording:** You can set how long after an event occurs that the DVR will continue to record. The default recording length is 30 seconds but it can be set higher, up to 5 minutes.

**Alarm Out:** Optional function. If your DVR connects to an external alarm device, you can set it to emit an alarm tone.

**Latch Time:** To configure the external alarm time when motion is detected.

**Show Message:** Check the box to display "M" icon on the screen when motion is detected.

**Send Email:** Receive an auto-email when the motion is detected.

**Full Screen:** When this function is enabled and a motion is detected in a channel, you will see that channel in full screen.

**Analog Channels:** Here you can select which channels you want to include to the motion detection. If the motion is detected, the recording will start immediately on those channels.

## Alarm

**Note:** This is an optional function. If the DVR you purchased doesn't connect to external sensor I/O alarm devices, you will not find this section in your DVR OSD menu.

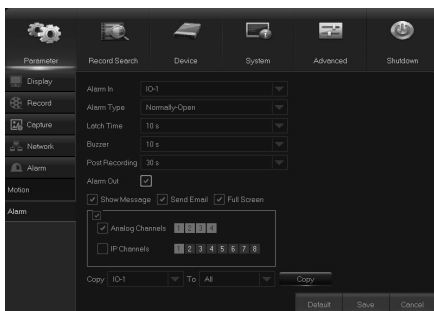


Figure AD

**Alarm In:** User may set four groups of alarm inputs.

**Alarm Type:** There are 3 types for your choice: **Normally-Open**, **Normally-Close**, and **OFF**. Choose one to match your sensor type, or Choose **OFF** to close the sensor trigger function.

**Latch Time:** Set how long the buzzer will sound when an external sensor is triggered: 10s, 20s, 40s, or 60s.

## PTZ Linkage

**Note:** After connecting the PTZ cameras, you can set the linkage between PTZ cameras and Motion Alarm and/or external I/O sensor alarm. This function lets you turn your PTZ camera's focus to the preset point when a motion or I/O alarm happens.

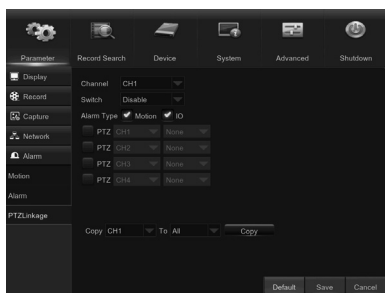


Figure AE

**Buzzer:** The DVR can use its internal buzzer to emit an alarm tone. You can set the buzzer duration in seconds when a sensor is triggered.

**Post Recording:** Set how long alarm record will last when alarm ends: 30s, 1minute, 2minutes, or 5minutes.

**Alarm out:** Enable external alarm device to emit an alarm tone when a sensor is triggered.

**Show Message:** Display the alarm messages on the screen when sensor is triggered.

**Send Email:** Set to send email to specified email when sensor is triggered.

**Full Screen:** When sensor is triggered, the corresponding channel will be switched to the full screen mode.

**Analog Channels:** Select which channels you want to record when sensor is triggered.

**Channel:** Select the channel to set.

**Switch:** Enable or disable the PTZ linkage function.

**Alarm Type:** Choose what kind of alarm will trigger the PTZ linkage function.

**PTZ:** Associates the PTZ camera with preset points. View preset point at 5.8.3.1 PTZ control.

# Record Search & Backup

## General

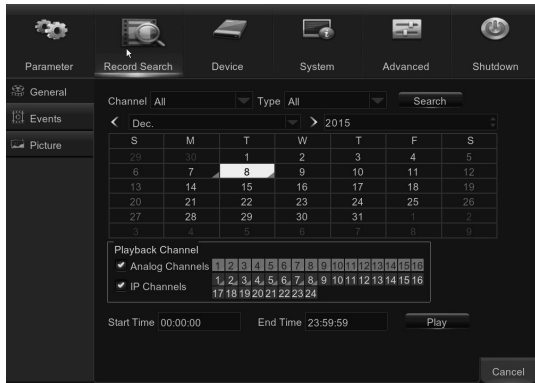


Figure AF

1. Select the channel & the recording type (All / Normal / Alarm (including preset point & IO) / Motion / IO / Manual).
2. Determine the recording date.
3. Click **Search**.
4. Select the recording from the table.

**NOTE:** Dates marked with orange triangles have video recordings.

5. Select the channels you want to playback.
6. Modify the start time and end time if necessary and then click **Play**.

## Events

**Note:** This section is used to check the recording file lists and make backup.

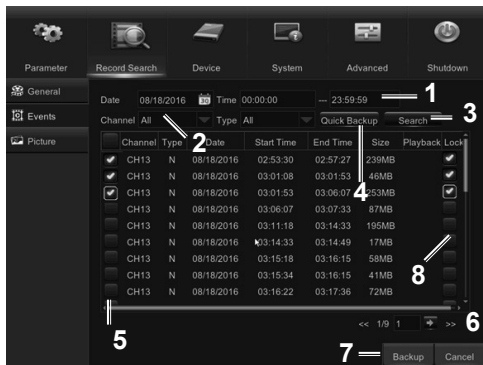


Figure AG

6. If you want to move to a different page, click << or >>. Or input an individual page number, then click ➡ to jump to the page.
7. After selecting the files, insert the USB drive with enough free space and click Backup to start the backup. **DO NOT REMOVE THE USB DRIVE WHILE THE BACKUP IS IN PROGRESS.** There are 3 types of file formats for your backup files: original H.264, AVI and MP4. The total size of the backup files will be displayed. See Figure AH.

1. Select the recording Date & Time.
2. Select the Channel and Type (All / Normal / Alarm [including Motion & IO] / Motion / IO).
3. Click Search.
4. If you want to make backup for all recording files you had searched, click Quick Backup.
5. If you want to make backup for individual files, select the recording list(s) from the table.

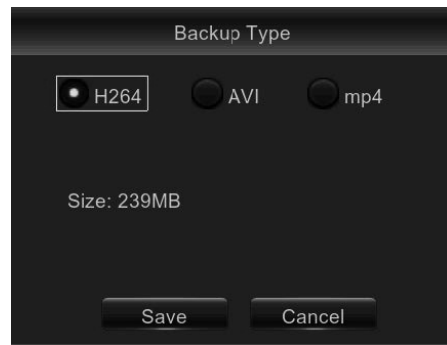


Figure AH

8. If you want to Lock the recording files, tick the checkbox after the files. The locked files will be protected and unable to be overwritten by the HDD Overwrite function.

## Picture

**Note:** This section is used to view the captured pictures and make backup.

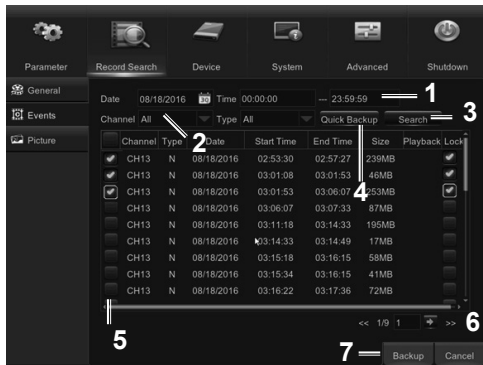


Figure AI

1. Select the recording Date & Time.
2. Select the Channel and Type (All / Normal / Alarm [including Motion & IO] / Motion / IO /Manual).
3. Click Search.
4. If you want to make backup for all captured images you had searched, click **Quick Backup**.
5. If you want to make backup for individual files, select the picture lists from the table.
6. If you want to move to a different page, click << or >> to move to previous or next page. Or input an individual page number, then click ➡ to jump to the page.
7. After selecting all files, click **Backup** to start the backup. REMEMBER TO FIRST INSERT USB DRIVE AND DO NOT REMOVE IT UNTIL BACKUP IS FINISHED.

**Note:** Due to the system limitation, a max of 500 captured pictures will be searched & shown. If you want to view a captured picture, please double click a picture from the list and the system view will turn to picture play mode. See Figure AJ. Right click your mouse to exit the play mode.



Figure AJ

- ◀ **Backward Play, click twice to pause**
- ▶ **Forward Play, click twice to pause**
- ◀◀ **Move to previous page**
- ▶▶ **Move to next page**
- **Single picture display**
- ■ **Quad pictures display**
- ■ ■ **Nine pictures display**

## Playback Video Recordings

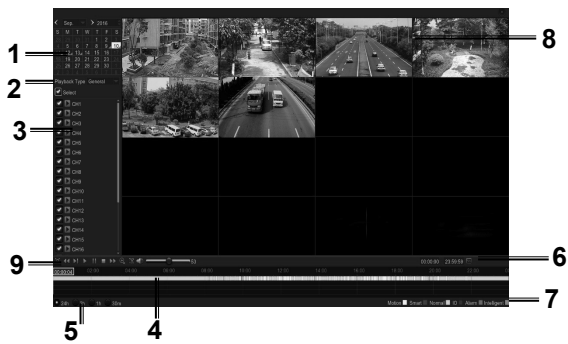


Figure AK

1. **Recording Calendar:** Dates marked with orange triangles have recordings.
2. **Playback Type:** Select the playback type among General, Events, Picture & Sub-periods
3. **Channels:** Check the channels to playback.
4. **Time Bar:** The color indicates the video recording type:

- Motion recording (Yellow)
- Smart recording (Dark Green)
- Normal recording (Green)
- I/O sensor recording (Blue)
- Alarm recording (Red)

### Smart Search

**Note:** Use this function to find motion within a specific area of the recording. Only one channel can be searched at a time. (It supports to search a single channel every time.)


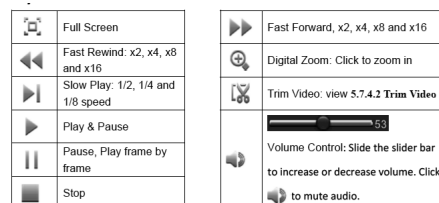
1. Select a channel to playback in full screen.
2. Click the smart search icon  and the system will enlarge the channel into full screen and display the Smart Search Quick Toolbar. See Figure AL. You can move the toolbar by dragging the vertical bar icon on the left.



Figure AL

5. **Time Frame:** Select Playback timeline.
6. **Smart Search:** Please see more in the following Smart Search section.
7. **Recording Type Indicator:** Motion, Smart, Normal, IO & Alarm.
8. **Recording Playback Screen:** Video recordings from selected channels.
9. **Playback Control Bar:**





3. Use the cursor to mark the area on the channel where you want to find motion or click  to search motion all over the screen.




Figure AM

4. Click  to start search.
5. As a result of Smart Search, you will see the motion-based recording(s) on the channel Time Bar marked with Dark Green lines.

## Trim Video

**Note:** Use this function if you need to backup a particular section of the video recording.

1. Connect a USB flash drive to the DVR.
2. Double-click on the channel (to display in full screen during video playback) that you wish to backup.
3. Click on the Time Bar to mark the beginning of the video footage you wish to backup.
4. Click  to start selecting the footage. See Figure AN.

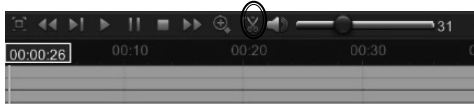



Figure AN

5. Click on the Time Bar to mark the end of the video footage you wish to backup. The marked up area is now displayed within the red arrows. See Figure AO.



Figure AO

6. Click  to save the footage.

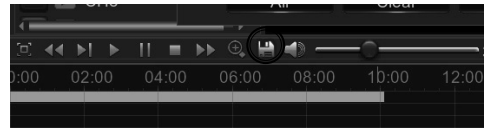


Figure AP

7. A video type selection message appears, as below. Select the file format and click **Save**.

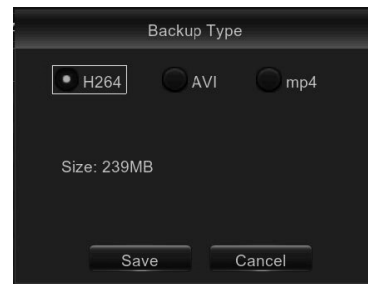


Figure AQ

## Time Frame

**Note:** During video playback, the time bar is displayed in 24 Hours (00:00~24:00) by default.



Figure AR

**Note:** You can shorten the time bar to be displayed in 2 Hours, 1 Hour or 30 Minutes in order to make an accurate position to the time bar.



Figure AS

## Sub-periods Playback

**Note:** This function will allow you to divide a recording video into average separate segments and play together in the same screen.

1. In the video playback interface, choose **Sub-periods** from **Playback Type** section.
2. Select a channel that you want to play.
3. Choose the Split Screens. If you have a 4 Channel DVR, the max number of split screens will be 4. For an 8 channel DVR, 8 screens. For a 16 channel DVR, 16 screens.

For example, if the video you want to play is 60 minutes in length, and the split screen is 4, the video will be divided in to 4 segments, and each segment will be 15 minutes in length. All 4 segments will be played in the same screen. See Figure AT.

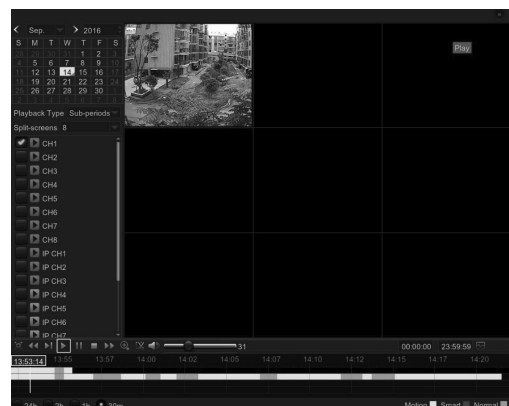


Figure AT



## Play Backup Files

1. Install the Video Player software in the CD drive of a Windows 7 computer and run program.

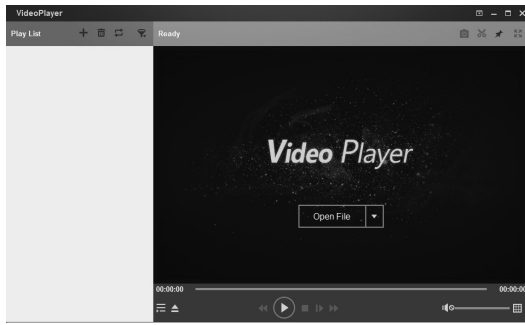


Figure AU

2. Copy the backup files to your computer.
3. Click + or "Open File" button to add files. (RF, AVI, Mp4, 264 & 265 files are supported.) See Figure AV.

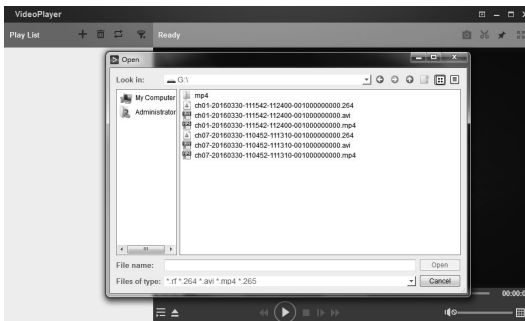
























Figure AV

### Function Descriptions:

4.  Play: Play file
5.  Pause: Pause
6.  Stop: Stop playback
7.  Frame Forward: Step forward by frame
8.  Slow forward: Play at 8x, 4x, 2x, 1x, 1/2, 1/4, 1/8, and 1/16 speed
9.  Fast forward: Play at 16x, 8x, 4x, 2x, 1x, 1/2x, 1/4x, 1/8x speed
10.  Open file/Open Directory
11.  Expand/pack up the list
12.  Screenshot: Save path: C:\Users\Administrator\VideoPlayer\picture
13.  Cut: Save path: C:\Users\Administrator\VideoPlayer\video

14.  Full screen display
15.  Never on top
16.  Always on top
17.  On top during playing
18.  Adjust volume
19.  Window Division
20.  1/4/9/16 channels optional.
21.  Add folder or file
22.  Playback mode, Single, Order, Repeat one, Repeat ALL are optional
23.  Delete all files in the list
24.  Search File
25.  Language/Settings

### Basic Settings: Set on-Top mode

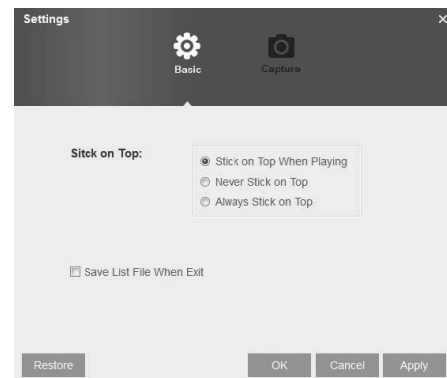


Figure AW

### Capture Settings: Set path to save images

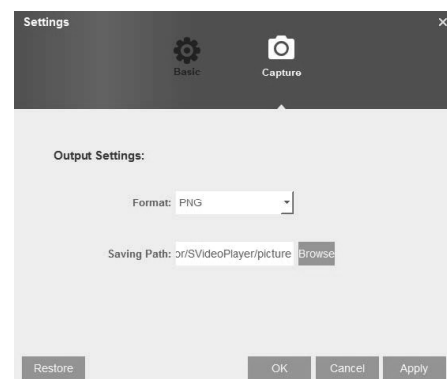


Figure AX

# Device

## HDD

**Note:** This menu allows you to check & configure the internal HDD that the DVR uses for saving recordings. You need to format the HDD both at the first startup, and if it is ever replaced.

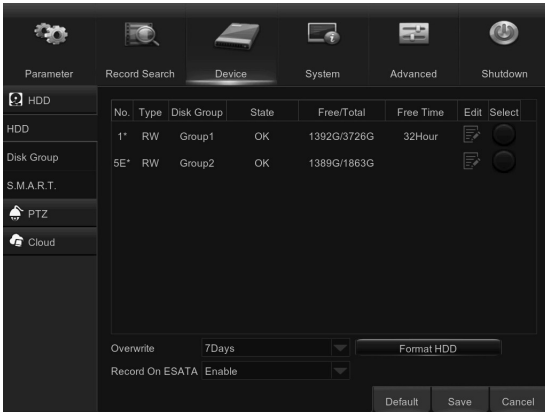


Figure AY

1. **To format HDD:** Select the HDD you want to format and then click **Format HDD**. See Figure AY.
2. To start formatting, enter your user name and password and then click **OK** to confirm.

**Note: Overwrite:** Use this option to overwrite the old recordings on the HDD when HDD is full. For example, if you choose **7 days** then only the last 7 days' recordings are kept on the HDD. To prevent overwriting any old recordings, select **Disable**. If you have disabled this function, please check the HDD status regularly, to make sure it is not full. Recording will be stopped if HDD is full.

**Note: Record on eSATA:** This menu is only displayed when your DVR has an eSATA port on the rear panel. It will record the video to an external eSATA HDD to enhance your HDD capacity.

**Note:** If the eSATA recording function is enabled, eSATA backup function will be disabled.

## S.M.A.R.T.

**Note:** This function will help to check the HDD health. Please note that your DVR may not have this function.



Figure AZ

**Note:** If you want to continue using the HDD even after S.M.A.R.T finds an exception, check the box marked **Self-check not passed, continue to use the HDD**. Select **HDD ID**, then **Self-check Type**, then **Check** to start the test. **Self-check State** will display the result.

**Note:** If an HDD S.M.A.R.T error is found, the HDD can still be used, but at the risk of losing video recording. Replacing with a new HDD is recommended.

## PTZ Setup & Control

**Note:** This menu allows you to configure the PTZ (Pan-Tilt-Zoom) settings for the dome camera.

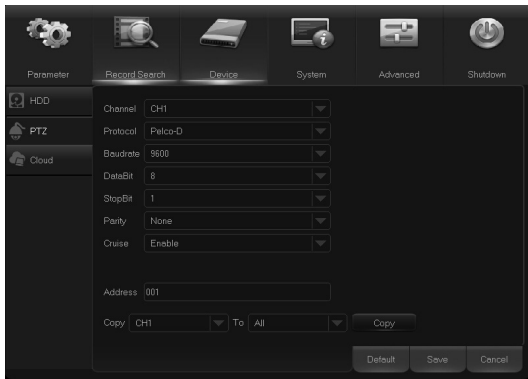


Figure BA

- Channel:** Choose a channel with a dome camera connected.
- Protocol:** Choose the communication protocol between the PTZ-capable camera and DVR. If your camera has UTC (Up the Coax) function, you can choose COAX1 or 2 to display your camera OSD menu or control the UTC PTZ function.

- Baudrate:** The speed of the information sent from the DVR to the PTZ-capable camera. Make sure it matches the compatibility level of your PTZ-capable camera.
- DataBit / StopBit:** The information between the DVR and PTZ-capable camera is sent in individual packages. The DataBit indicates the number of bits sent, while the EndBit indicates the end of the package and the beginning of the next (information) package. The available parameters for DataBit are: 8, 7, 6, 5. The available parameters for the StopBit are 1 or 2.
- Parity:** For error check. See the documentation of your PTZ-capable camera, to configure this setting.
- Cruise:** Enable to allow to use the Cruise mode. In order to use the Cruise mode, set a number of preset points.
- Address:** Set the command address of the PTZ system. Please note that each PTZ-capable camera needs a unique address to function properly.


## PTZ Control

**Note:** After finishing PTZ setup, you can use the PTZ function to control your PTZ camera.

- Click any channel on the Live Viewing screen to open Camera Quick Toolbar, and click the PTZ control icon. See Figure BB.



Figure BB

- The PTZ control panel will be displayed. See Figure BC. Click  to activate PRESET points setup page.

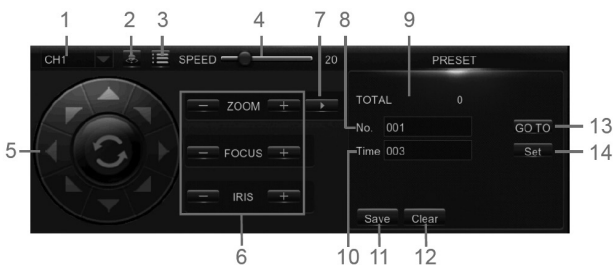






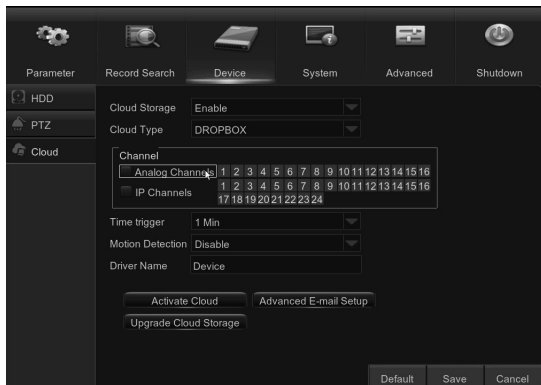


Figure BC

No.	Icon	Item	Description
1		Channel	Click to select the channel of the PTZ camera.
2		Cruise	Start / stop PTZ cruise by preset points. Make sure you had enable the Cruise function for this channel in 5.8.3 PTZ Setup
3		UTC Menu	If you have choose protocol for this channel as COAX1 or COAX2, the UTC menu button will be display. Click this icon to enter UTC OSD menu. Also used to confirm your selection in the UTC OSD menu.
4	Speed	Speed	Adjust the PTZ speed
5		Pointer Panel	A) Click the direction arrow to select the direction of the PTZ camera B) Click up/down/left/right arrow to move cursor in UTC OSD menu C) Click  to switch to auto pan mode
6	- ZOOM + - FOCUS + - IRIS +	Zoom Focus Iris	Click to zoom in/out. Click to adjust the focus Click to adjust the iris setting
7		PRESET	To display or hide the preset point panel
8	No	No.	Number of preset point
9	Total	Total	Display the total number of preset points
10	Time	Time	Set the time how long the camera will stay in the preset point
11	Save	Save	Click to save the settings and preset points
12	Clear	Clear	Click to delete the selected preset point
13	GO_TO	Go to	Enter the number of a specific preset point, click this button to move your PTZ camera to the preset point
14	Set	Set	Click to set a specific preset point on a PTZ camera. You can add up to 255 preset points for the DVR. However, the actual preset quantity varies depending on the PTZ camera performance.

## Cloud Storage

**Note:** This menu allows you to see what is happening on your camera at any given time. Uploading the snapshots can be based on a time interval or when motion is detected.



**Figure BD**

**Cloud Storage:** Enable to allow cloud settings.

**Cloud Type:** Only Dropbox cloud storage is supported currently.

**Channel:** Select the channels where you want to upload the snapshots to Dropbox.

**Time trigger:** Set the image uploading interval. Set OFF if you want to use motion based uploading.

**Motion Detection:** Enable if you want to upload snapshots to Dropbox when the camera detects a motion.

**Drive Name:** Enter the cloud storage name for your DVR.

**Activate Cloud:** Click to activate the cloud function. An activation email will be sent to the Receiver email account.

**Advanced E-mail Setup:** Click to configure your email settings.

**Upgrade Cloud Storage:** Click to upgrade the current cloud storage service.

### To start uploading snapshots:

1. Enable Cloud Storage and configure Cloud settings for channel(s).
2. Configure advanced e-mail settings in Advanced E-mail Setup.
3. Click Activate Cloud and wait for the verification email.
4. Click Activate Cloud in Dropbox link on verification email.

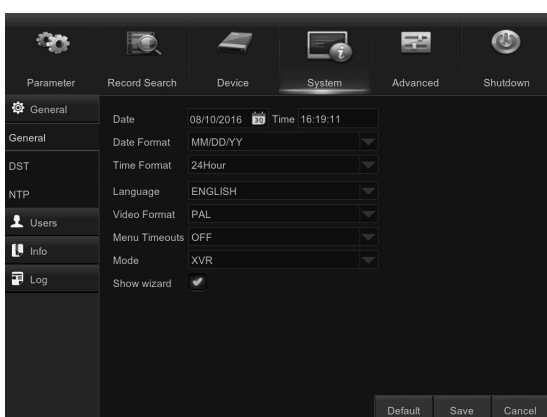
**NOTE:** Make sure to check your email and follow the link to complete cloud storage activation within 3 minutes.

5. Enter your Dropbox account credentials.

**Setup of the Cloud service is now complete. If you encountered any problems while activating the Cloud service, please repeat steps from 3 to 5.**

## System

### General



**Figure BE**

**Date/Time:** Enter the date and time manually.

**Note:** For date/time automation over the Internet, enable NTP.

**Date Format:** Set the date format here.

**Time Format:** Set the time format here.

**Language:** Choose the OSD language.

**Video Format:** Choose video format between NTSC and PAL. If picture is flickering or has only black screen, format may be incorrect.

**Menu Timeouts:** Set the time that the DVR will exit the menus when they are not in use.

**Mode:** DVR. This mode will focus on basic analog cameras.

**Show Wizard:** Check if you want the Startup Wizard to reappear each time you start up the DVR.



Figure BF

**DST:** Enable if Daylight Saving Time (DST) is observed in your region.

**Time Offset:** Select the amount of time to offset for DST.

**Daylight Saving Time:** Choose to set the daylight saving time in weeks or in days.

**Start Time/End Time:** Set the start time and end time for daylight saving.

NTP

**Note:** NTP stands for Network Time Protocol. This feature allows you to synchronize the date and time automatically over the Internet. DVR needs to be connected to the internet.

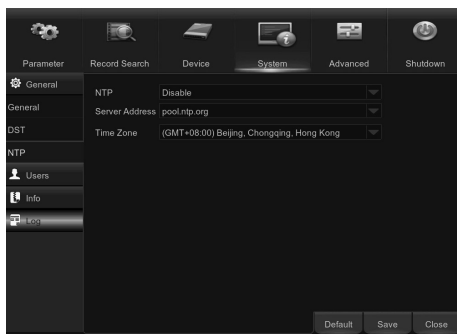


Figure BG

**Note:** Enable if you want the DVR to update the date and time automatically.

**Server Address:** Select the NTP (Network Time Protocol) server.

**Time Zone:** Select the Time Zone in your location.

**Update Time:** Click here to update the system date and time immediately.

**Note:** When NTP function is enabled, system will update the system time at 00:07:50 every day, or every time when the system is started up.

Users

**Note:** This menu allows you to configure the user login information.

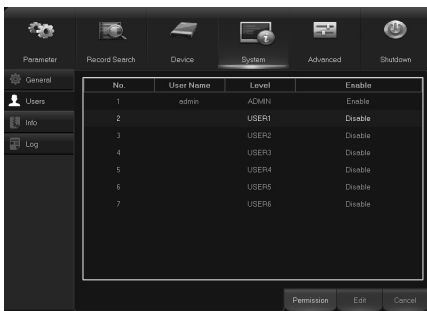


Figure BH

- To enable/disable the user account, modify the user name and password, click on the user account you wish to edit, then click Edit. See Figure BI.
- To modify user access permissions, click on the user account you wish to modify, then click Permission. The user in Admin level has all permissions to the system. After modifying the permissions, click **Save** to save the modifications.

- To enable/disable the user account, modify the user name and password, click on the user account you wish to edit, then click Edit. See Figure BI.

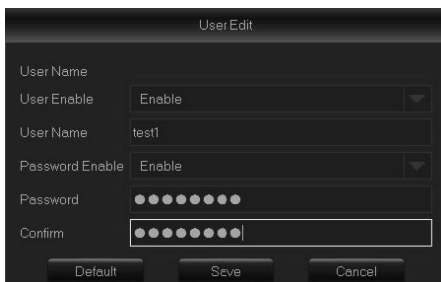


Figure BI

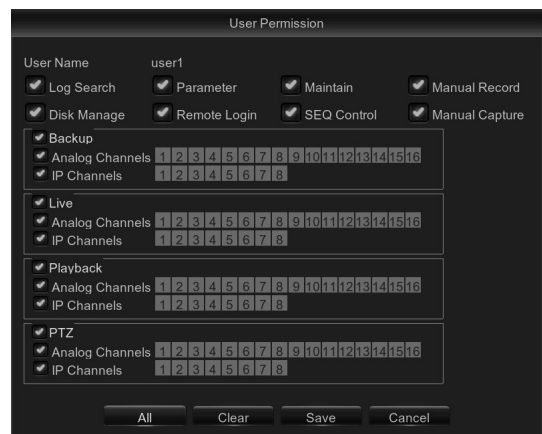


Figure BJ

## Info

**Note:** This menu allows you to view the summary of the system, channel information & record information.



Figure BK

**Device Name:** Enter the desired name for your DVR. The name can include both letters and numbers.

## Log

**Note:** This menu allows you to view a list of events of system operation.

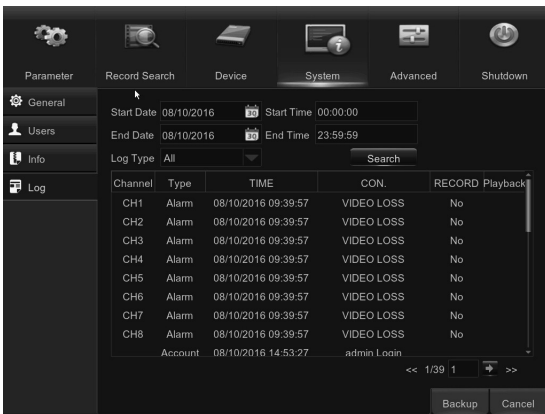


Figure BL

**Device ID:** Enter the desired ID for your DVR. The device ID is used to identify the DVR, and can only be composed of numbers, and cannot be the same with other IDs when multiple DVRs are connected in the same network.

**MAC Address:** Display the MAC address of the DVR. When multiple DVRs are connected to the same network, each DVR must have a unique MAC address to ensure that the DVR can connect to the network.

**Note:** If your DVR supports P2P function, you will find a QR code in the info page. You can scan this QR code using the mobile app to remotely access DVR.

**Channel Info:** View the information summary on the channels.

**Record Info:** View the recording information summary by channel, record state, stream type, FPS, bitrate, and resolution.

1. To search for a log, enter the start time/end time in the respective fields and click **Search**.
2. To display log details, double-click on the item.
3. To backup a log entry, connect an external USB disk to the DVR, click on the log event and click **Backup**.
4. **Log Type:** Select the log type.
5. **Start Time/End Time:** Specify the start and end date/time of the logs you want to review and/or save on an external USB storage device. Click **Search**. The logs will be listed on the table.

# Advanced

**Note:** This menu allows you to configure automatic system maintenance, load factory defaults, update the firmware settings, etc.

## Maintain

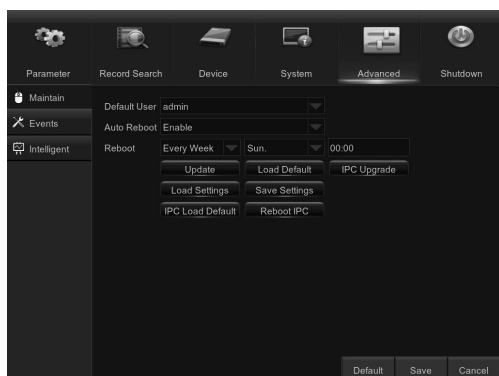


Figure BM

**Default User:** If you want to login to the DVR automatically for live view after each startup, then only an administrator user account can be set for auto login.

**Auto Reboot:** Set **Enable** to reboot the DVR based on a schedule.

## Events

**Note:** This menu allows you to set the type of events that you want the DVR to notify you about.

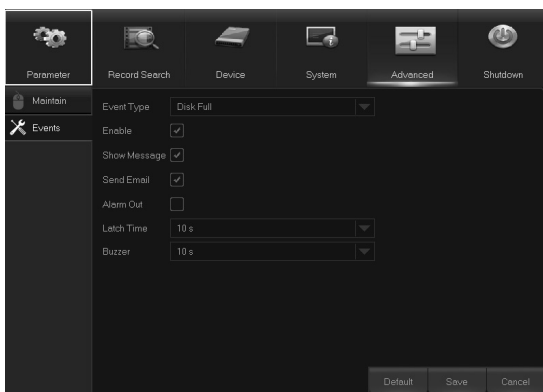


Figure BN

**Event Type:** Select the event type. Options are:

Disk Full: When HDD is full.

Disk Error: If HDD is not detected properly.

**Reboot:** Set the rebooting schedule based on day, week, or month.

**Update:** Click to load the update file and then upgrade the firmware. **DO NOT** power off the DVR or remove the USB during the upgrading.

**Load Settings:** Select this option to import the setting that you have saved earlier, using the **Save Settings** function.

**Load Default:** Use this feature to restore the factory default settings of the DVR. It is recommended to load defaults for all options, after upgrading the firmware.

**Save Settings:** Select this option to save the DVR current settings, such as the video recording settings, network configurations, etc. to the USB device.

**Video Loss:** If camera is not detected properly.

**Enable:** Check the box to enable the monitoring of the event.

**Show Message:** Check the box to display a message on the screen when Disk Full, Disk Error, or Video Loss event happens.

**Send Email:** Let the DVR to send you an auto-email when an event occurs.

**Alarm Out:** Click to enable the external alarm device to sound. This is an optional function.

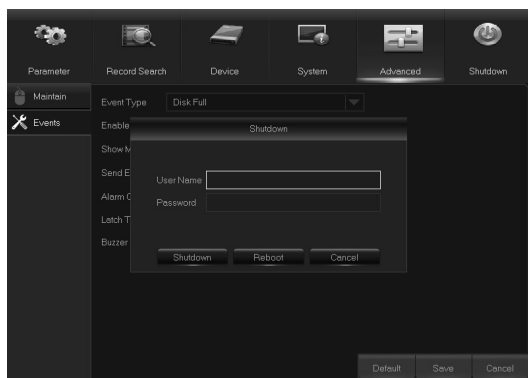
**Latch Time:** Determine how long the external sensor alarm device to sound (10s, 20s, 40s, 60s).

**Buzzer:** Set the buzzer duration when the event occurs (Off/10s/20s/40s/60s). To disable buzzer, select **OFF**.

# Shutdown

---

1. Manually turn off or reboot the DVR. See Figure BO.



**Figure BO**

**Note:** You will need to input your user name and password to complete the operation.



# Remote Access

## System Environment Requirements

The minimum requirements for hardware and OS required to run Web Client are given as below.

Item	Minimum	Recommended
CPU	Intel i3	Intel i7 or higher
RAM	4G or more	8G or more
Hard Drive	500G or more	1000G or more
Display RAM	2G or more	4G or more
Display Resolution	1280*1024	1920*1080
OS	Windows® Vista, Windows® 7 ,Windows® 8 Mac OS X® 10.9 and above	
DirectX	DirectX 11	
Direct3D	Acceleration Function	
Ethernet Adapter	10/100M Ethernet Adapter	
IE	Microsoft Internet Explorer (Ver. 11,10,9,8)	
Mozilla Firefox	43.0.4 or above	
Google Chrome	V44 or below	
Mac Safari	5.1 or above	

## Web Plugin Download and Installation

### For IE/Chrome/Firefox users:

1. Launch Explorer on your PC and enter the DVR static IP address or DDNS domain name (Host Name) you have set on the DVR in the URL box. The first time you run the web client, the system will install the web client plugin. Click **download** to download the plugin and install to your computer. See Figure BP.



Figure BP

2. After installing the plug-in, close & relaunch your browser and repeat step 1 to open the login page. Input your user name and password to login to the web client. See Figure BQ.

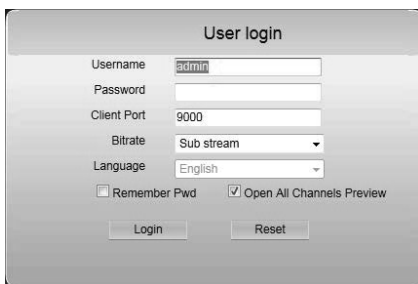


Figure BQ

**Note:** If you use Google Chrome, please use Version V41 or below. If you use V42 to V44, you need to enable NPAPI plugins. Please enter chrome://flags/#enable-npapi on URL bar to find and enable NPAPI. The system does not support V45 or above.

### For Mac/Safari users:

1. Launch Safari on your Mac and enter the DVR static IP address or DDNS domain name (Host Name) that you have set on the DVR in the URL box.

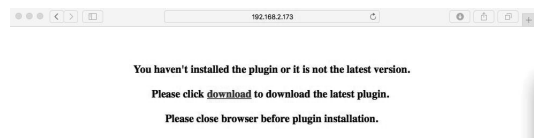


Figure BR

2. Download the plug-in “SurveillanceClient.dmg,” locate the downloaded file and double click it. See Figure BS.

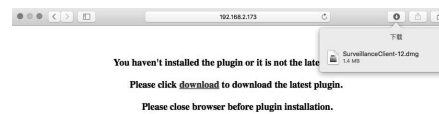


Figure BS

3. Click on **Continue** then **Install**. Enter user name and password for Mac computer, click on **Install Software**, then **Close** to finish installation.

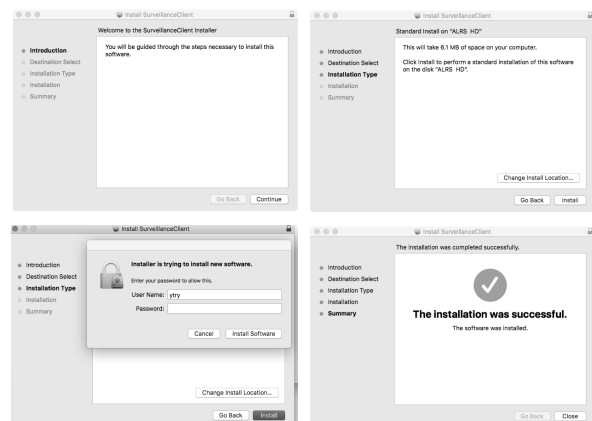


Figure BT

4. Close Safari and repeat Step 1 to open the Web Client login page.

# Web Client Manager

## Live Interface

**Note:** This is the first screen that opens after you have logged in to the Web Client. Here you can open or close live preview, record video to a local computer manually, take snapshots of the screens, PTZ control, color adjustment, etc.



Figure BU



Click to record the channel to computer



The channel is being recorded to computer



Click to take a snapshot of the channel

**Note:** Right-click on a channel picture to select the picture quality. See Figure BV.

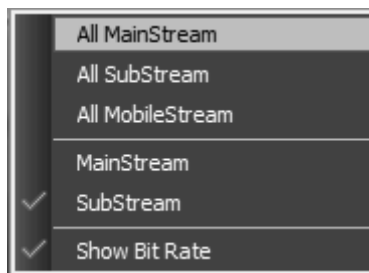


Figure BV

▶ Preview is closed. Click to open live preview.

▶ Preview is opened, click to close live preview.




Unable to open live view, because camera is not connected to this channel.

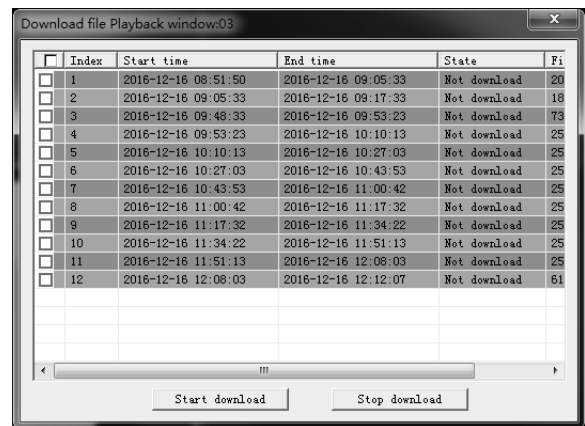
## Playback

**Note:** You can search & play recorded files stored on the HDD inside the DVR, and save the result to the local directory on your PC.



Figure BW

**Note:** Download video clips from the DVR to your local computer by clicking the  icon.



## Remote Setting

**Note:** This mode will allow you to remotely configure the settings of the DVR.

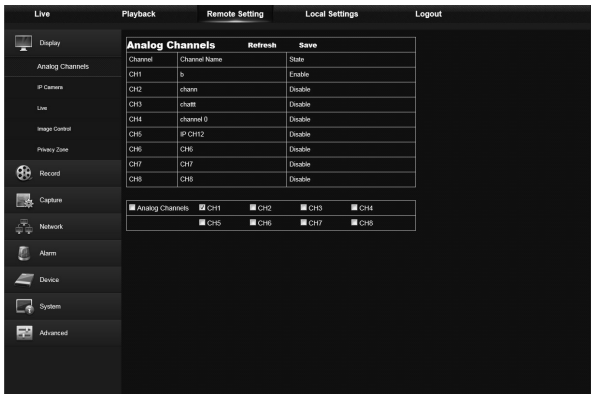


Figure BX

**Snapshot Path:** Set the path to save manual snapshots on your PC's local drive.

**Save:** Click **Save** to save the modifications.

**File Type:** Choose your preferred file type for manual recordings.

**Interval:** Determine the maximum length of manual recordings.

**Note:** At the Local Settings screen, find specific setting modes. See Figure BY.



Figure BY

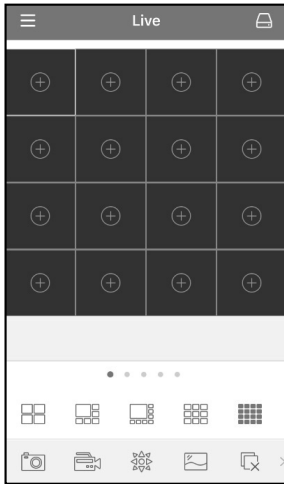
**Record Path:** Set the path to save manual recordings on your PC's local drive.

**Download Path:** Set the path on your PC's local drive where you want to download recordings from the DVR.


# Remote Access from Mobile Devices

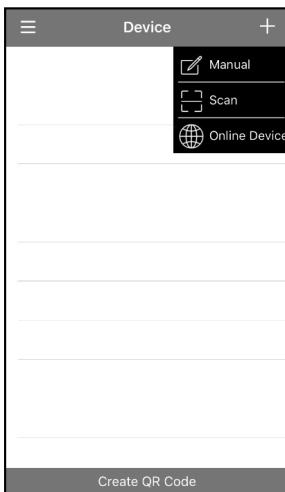
**Note:** This DVR allows for remote access via mobile devices based on Android & iOS operating systems.

1. Use the QR codes included on the top of the DVR to download the RXCamView app from Google Play Store (for android devices) or App Store (for iOS devices). Once downloaded, install the app.
2. Open the app. It will display the live view screen, as in Figure BZ.



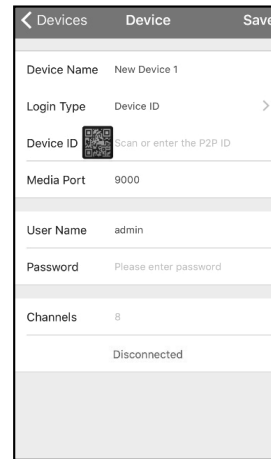
**Figure BZ**

3. Press the  icon to open device list page, then press **+** to add device. See Figure CA.



**Figure CA**

4. Press "Manual" and input the DVR information. See Figure CB.



**Figure CB**


**Device Name:** Input the name you want to display.

**Login Type:** Device ID and IP/DOMAIN

-Device ID: For P2P connection.

-IP/DOMAIN: IP address or Domain name of the DVR.

**Device ID/IP Address:** Input the P2P ID or IP

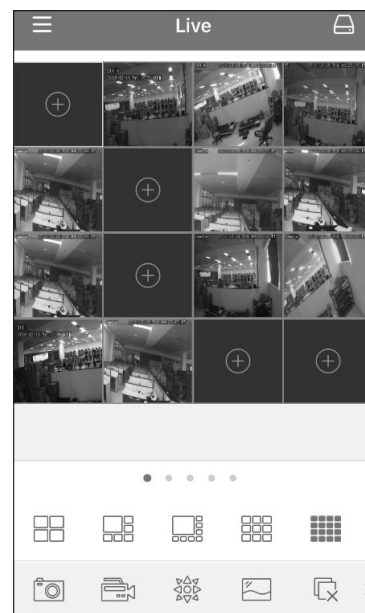
address/Domain name. You can use the  icon to scan the P2P QR code and add a device.

**Media Port:** Input the media port in DVR network setting.


**User Name / Password:** Input the user name & password of the DVR.

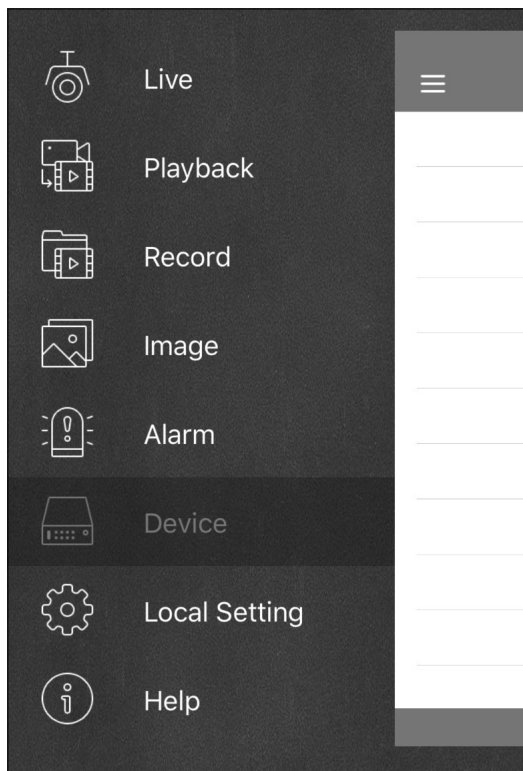
**Channels:** System will display the number of channels of the DVR after connected.

5. After all settings have been completed, press **Save**. The app will then show the Live View display. See Figure CC.



**Figure CC**

**Note:** Use the  icon to open the Menu list where you can check & configure the live view, playback, local recorded videos, captured pictures, push alarm notifications, Device manager, Local Setting & Help documents.



**Figure CD**

## Troubleshooting

Problem	Likely Solutions
The system does not detect the HDD.	Check that the power supply, data cord, and power cables are properly connected. Double-check that the HDD is properly supported by system.
User forgot their password.	Consult with Cobra technical personnel. Try to make password easy to remember and relatively safe.
Abnormal or nonexistent video signal after connecting DVR and camera together.	Check network cable at DVR side to see if cable is firmly connected and in good condition, or to check if NTSC or PAL is selected consistently.
Prevent DVR from being affected by heat.	Place DVR in a place with good air circulation and away from heat sources to ensure stability and health of the item.
Remote Control won't work.	Make sure to aim remote control at IR receiver on front panel during use. Also, check condition of batteries and see if remote itself is not broken.
User wants to take HDD from their PC and install it in DVR.	All HDDs supported by the system will work. However, once DVR runs, data on your HDD will be lost.
User wants to playback while recording.	This is ok. The system supports this function.
User wants to clear some records from the DVR's HDD.	Due to file security, user may not clear parts of records. To remove all records, user must format HDD.
Cannot log in DVR client.	Check to see if network settings are correct and RJ-45 port is functional. Make sure account and password are correctly input.
Cannot find any records during playback.	Check to see that data line for HDD is ok and system time is properly adjusted. Try a few times and restart.
DVR cannot control PTZ.	Check for the following errors: PTZ in the front side is malfunctioned. Setting, connection, and installation of PTZ are incorrect. PTZ setting is incorrect. Protocol or address of PTZ decoder does not match that of DVR.
Dynamic detection will not work.	Check that the motion detection time and regional settings are correct, and that sensitivity is not set too low.
Alarm will not work.	Check that alarm setting, alarm connection, and input signals are correct.
Buzzer goes off persistently.	Check alarm setting to determine if motion detection is enabled, object motion is detected all the time, and I/O alarm is set as <b>Always Off</b> .
User cannot stop recording by pressing "Stop" or clicking "Stop Recording" in the context menu.	Change recording setting to No Record. To stop Startup recording, change record mode to scheduled recording or manual recording. Set channel as <b>Off</b> status in Record setting.

## Maintenance and Servicing

1. To shut down DVR, first shut down the system and then turn off the power. Do not turn off the power directly or HDD data will be lost or damaged.
2. Please keep DVR away from heat sources or places.
3. Clean the internal dust regularly. Make sure DVR is well ventilated so as to ensure good heat dissipation.
4. Please do not hot plug audio and video cables, or cables connected to ports like RS-232 or RS-485. Otherwise the ports will be damaged.
5. Please check the HDD cable and data cable regularly to see if they are aging.
6. Please prevent the audio and video signals of the DVR from being interfered with by other electronic devices, and prevent the HDD from being damaged by static electricity and induced voltage. If the network cable is frequently disconnected and reconnected, it is suggested that the connecting line be replaced regularly, or the input signal may be unstable.

### **FCC STATEMENT**

**Note:** This equipment has been tested and found to comply with the 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.

## Limited 90 Day Warranty

Harbor Freight Tools Co. makes every effort to assure that its products meet high quality and durability standards, and warrants to the original purchaser that this product is free from defects in materials and workmanship for the period of 90 days from the date of purchase. This warranty does not apply to damage due directly or indirectly, to misuse, abuse, negligence or accidents, repairs or alterations outside our facilities, criminal activity, improper installation, normal wear and tear, or to lack of maintenance. We shall in no event be liable for death, injuries to persons or property, or for incidental, contingent, special or consequential damages arising from the use of our product. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the

above limitation of exclusion may not apply to you. THIS WARRANTY IS EXPRESSLY IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING THE WARRANTIES OF MERCHANTABILITY AND FITNESS.

To take advantage of this warranty, the product or part must be returned to us with transportation charges prepaid. Proof of purchase date and an explanation of the complaint must accompany the merchandise. If our inspection verifies the defect, we will either repair or replace the product at our election or we may elect to refund the purchase price if we cannot readily and quickly provide you with a replacement. We will return repaired products at our expense, but if we determine there is no defect, or that the defect resulted from causes not within the scope of our warranty, then you must bear the cost of returning the product.

This warranty gives you specific legal rights and you may also have other rights which vary from state to state.

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