

# Digital Video Recorder

## User Manual

AD-808Q

## **Disclaimer**

This manual is designed to assist customers in the use of the Digital Video Recorder (DVR). No warranty or representation, either expressed or implied, is made with respect to the contents of this documentation, its quality, performance, merchantability, or fitness for a particular purpose. Information presented in this documentation has been carefully checked for reliability; however, no responsibility is assumed for inaccuracies. The information contained in this documentation is subject to change without notice.

In no event will our company be liable for direct, indirect, special, incidental, or consequential damages arising out of the use or inability to use this product or documentation, even if advised of the possibility of such damages.

Video and Audio surveillance may be regulated by laws that vary from state to state and country to country. Check the laws in your local region before using the DVR for surveillance purposes.

We are not liable for damages resulting from corrupted or lost data due to a mistaken operation or malfunction of the Digital Video Recorder, the software, the hard drives, personal computers, peripheral devices, or unapproved/unsupported devices.

This equipment has been tested and found to comply with the limits for a Class A computing device pursuant to Subpart B of Part 15 of FCC rules, which are designed to provide reasonable protection against such interference when operated in a commercial environment.

## Important Safety Information

Stop using the equipment immediately if you detect condensation. Continued use may damage the equipment. Remove the power cord and power supply from the power outlet and wait until the moisture evaporates completely before resuming use.

Avoid strong magnetic fields. Never place the equipment in close proximity to electric motors or other equipment generating strong electromagnetic fields. Exposures to strong magnetic fields may cause malfunctions or corrupt image data.

Avoid condensation related problems. Moving the equipment rapidly between hot and cold environments may cause condensation (water droplets) to form on its external and internal surfaces.

Do not cover the ventilation opening or slots on the outer casing. To prevent the device from overheating, provide at least two inches of air space around the vent and the slots.

Do not operate the equipment beyond its specified temperature, humidity or power source ratings. Do not use the device in an extreme environment where there is high temperature or high humidity. Use the device at temperatures within +0°C ~ +40°C (32°F ~ 104°F) and humidity below 90 %. The normal operating power needed for this device is DC 12V 50/60Hz.

Do not drop metallic objects into the device. This could permanently damage the equipment. Immediately turn the power off or unplug the power cord and power supply from the power outlet if this happens. Contact a qualified service personnel authorized by your equipment distributor.

Do not attempt to disassemble or alter any part of the equipment that is not expressed in this guide. Disassembly or alteration of this device may result in electrical shock.

Stop operating the equipment if a heavy object is dropped on the device and/or if the casing is damaged. Also, do not strike or shake the device. Failure to do so may result in fire or electrical shock. Immediately turn the equipment's power off and unplug the power cord and power supply from the power outlet if this happens.

Do not allow the equipment to come into contact with, or become immersed in, water or other liquids. Do not allow liquids to enter the interior. The equipment is not waterproof. If the exterior comes into contact with liquids or salty air, wipe it dry with a soft, absorbent cloth. In the event that the water or other foreign substances enter the interior, immediately turn the equipment off and unplug the power cord and power supply from the power outlet. Continued use of the equipment may result in fire or electrical shock.

Do not use substances containing alcohol, benzene, thinners or other flammable substances to clean or maintain the equipment. The use of these substances may

cause fire or electrical shock. Use a dry cloth and clean it on a regular basis to wipe away the dust and dirt that collects on the device. In dusty, humid or greasy environments, the dust that collects around the ventilation areas on the outer casing may become saturated with humidity and short-circuit, leading to fire.

Do not cut, damage, alter, or place heavy items on the power cord or power supply. Any of these actions may cause an electrical short circuit, which may lead to fire or electrical shock.

Do not handle the equipment if your hands are wet. Handling it with wet hands may lead to electrical shock. When unplugging the power cord, make sure that you hold the solid portion of the plug. Pulling on the flexible portion of the power cord may damage or expose the wire and insulation, creating the potential for fire or electrical shock.

This equipment should be operated only with the supplied power cord and power supply. The voltage of the power source must be verified before using. Use only the recommended power accessories. If the device has not been used for a long period of time, disconnect the power source. Use of power sources not recommended for this equipment may lead to overheating, distortion of the equipment, fire, electrical shock, or other hazards.

Do not attempt to disassemble, alter or apply heat to the batteries. Do not place the batteries near heat sources or expose to direct flame or heat. Neither should you immerse them in water. Such exposure may damage the batteries and lead to the leakage of corrosive liquids, fire, electrical shock, or explosion. If the eyes or skin contact these substances, immediately flush with water and seek medical assistance from a medical professional.

Do not use the supplied power cord and power supply with any other products. There is a risk of fire and other hazards when the supplied power cord and power supply are used with other products.

Do not attempt to disassemble, alter, or repair the equipment, It may cause fire, electrical shock, explosion or serious injury. Please contact your equipment distributor for services.

## **Important Maintenance Information**

For your benefit, please follow these steps and you will increase the working lifetime of the equipment.

Please read the manual and follow the warnings and instructions listed in it.

Do not block any ventilation openings. Ensure sufficient ventilation around the equipment. The openings on the equipment are provided for ventilation and to ensure reliable operation of the equipment. The openings should never be blocked by placing the product on a bed, sofa, rug, or similar surfaces. Equipment should never be placed near or over a radiator or heat source, or in a built-in enclosure such as a bookcase or rack unless proper ventilation is provided.

Make sure the equipment is turned off before it is unplugged. Disconnect the power if it has not been in use for a long period of time.

Do not power off the equipment during normal operation. Please follow the correct procedures for shutting down the equipment to avoid damage of hard disk:

- (1) Stop the recording first.
- (2) Select the "logout" button on the menu screen to logout.
- (3) Select the "Shutdown" button on the menu screen to logout.
- (4) Turn off the power switch and then disconnect the power cord.
- (5) Wait for 30 seconds before restarting or moving the equipment.

Do not use liquid cleaners or aerosol cleaners when cleaning the device. Use only a dry cloth for cleaning.

Do not use the equipment in a dusty or dirty work area. The ventilation openings should be cleaned at regular intervals.

Do not operate your equipment near a source of heat or in direct sunlight. Do not place the equipment near water or in extremely humid conditions.

Do not use the equipment near water or other liquids, or in rainy/moist situations. If liquid gets into your equipment, turn it off and take it to your dealer for inspection.

Do not use the equipment in a potentially flammable work area.

Do not place this product on an unstable cart, stand, tripod, bracket, or table. Do not drop the unit or subject the unit to major shocks or jolts. The product may not operate normally.

Do not exert pressure on the equipment such as stacking objects on it.

## **Overview**

This high quality Digital Video Recorder (DVR) is designed to use advanced H.264 digital technology with an embedded Linux operating system. This outstanding DVR provides high quality video and low error coding ratio performance to ensure the reliability of this device in security and surveillance applications. This device has been meticulously developed to be a capable and dependable video surveillance device. The auxiliary features of this device are listed below.

## **DVR Feature**

- Advanced H.264 video compression
- ADPCM audio compression format
- Dual video out (BNC/ VGA) for CRT and LCD monitor connection
- Pentaplex operation (Record/ Playback/ Backup/ Remote viewing at the same time)
- Multiple recording modes (Manual/ Schedule/ Motion)
- Multiple alarm notification buzzers (Video loss/ Video Blind/ Motion/ HDD failure)
- Remote monitoring via web browser or mobile phone
- Mobile phone viewing (Android/ Blackberry/ iPhone /iPad / Nokia–Symbian/ Windows Mobile)
- Include wireless remote control and USB mouse for easy operation and setup

## DVR Specifications

Model	<b>AD-800Q</b>
Operating system	Embedded LINUX
System resources	Multi-channel real-time recording, playback, multi-channel network, USB backup
Operation interface	16-bit true color graphical menu interface and mouse support
Menu display	1/4/8 screen
Video standards	PAL(625line,50f/s); NTSC(525 line,60f/s)
Video Recording	D1:NTSC 1f/s-7f/s CIF:1f/s-30f/s
Video compress standard	H.264 Baseline Profile@L3.1
Recording FPS	120fps
Motion detection	Zones:396(22*18)detection zones,Sensitivity:1-6(6 is highest) Trigger recording, PTZ movement, tour, alarm, email, snapshot & FTP
Audio compression	ADPCM
Simplex/duplex/ triplex	triplex(Recording, Playback , LAN Transmission)
Communication	RS485×1
Playback	One channel or multi-channel playback 8 channel synchronized playback)
Search mode	Time/ Event search
HDD consumption	Audio:28.8MB per hour/ Video:25~450MB per hour
Video storage	Hard disk, network
Backup mode	Network download/USB/SATA HDD
Video input	8 channel BNC,1.0Vp-p,75Ω
Video output	1 channel BNC,1.0Vp-p,75Ω and 1 channel VGA
Audio input	8 channel RCA
Audio output	1channel RCA, 200-3000mV,5KΩ
Network interface	RJ45 10M/100M
PTZ control	RS485:A,B
USB interface	3 port
Hard disk	1 SATA port/ Support up to 2TB (2000GB)
Power supply	12V DC
Power consumption	<10W(without hard disk)
Operating temperature	0℃- +55℃
Operating humidity	10%-90%
Atmosphere pressure	86kpa-106kpa

Alarm In	1 2 3 4 alarm in port
Alarm out	N1 Alarm out port; connect GND, OUT, COM
Dimension/Weight	13" x 10" x 2.4"; 5.5 lb

### Hard Disk installation

For the first use, please install the hard disk



Remove the screws on both board sides of shell



Extracted from the next cover up



Connect hard disk and mother



Fix the screw of hard disk sides of shell

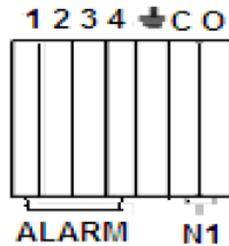


Close cover



Install the screws back on

## Alarm input port



4-channel grounding alarm inputs. (Normal open or Normal close type)

Please parallel connect COM end and GND end of the alarm detector (Provide external power to the alarm detector).

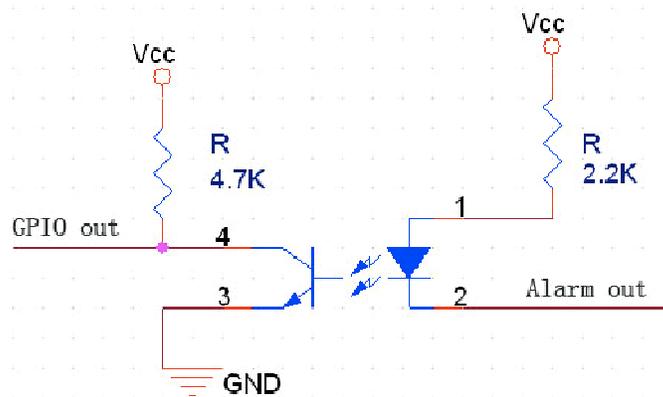
Please parallel connect the Ground of the DVR and the ground of the alarm detector.

Please connect the NC port of the alarm sensor to the DVR alarm input (ALARM)

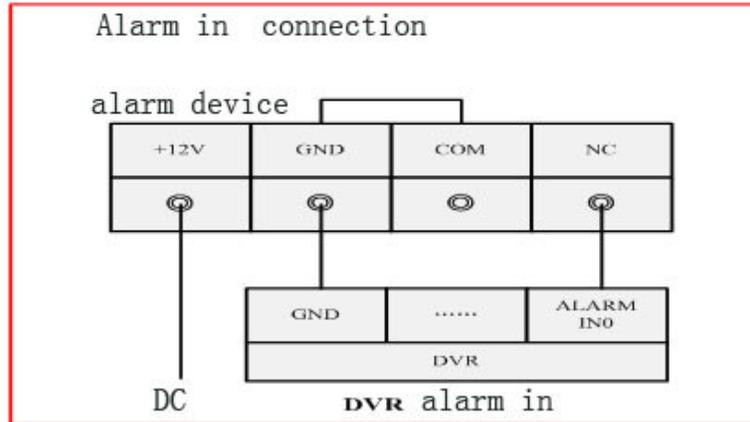
Use the same ground with that of DVR if you use external power to the alarm device.

Use the controllable +12V power to reset the smoke sensor remotely.

### Alarm input circuit:

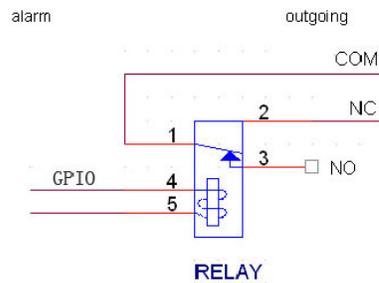


## Alarm in connection:



## Alarm output port

4-way switching value alarm output is selectable in normally open contact. It is also selectable in normally closed contact. The external alarm device should need external power. For controllable +12V, it can be used to provide power to devices such as reset smoke sensor.



## RS485



RS-485: A, B

RS485 A/B cable is for the A/B cable of the PTZ decoder. When the DVR receives a camera control command, it transmits that command up the coaxial cable to the PTZ device. RS485 is a single direction protocol; the PTZ device can't return any data to the unit. To enable the operation, connect the PTZ device to the RS485 (A,B) input on the DVR.

Since RS485 is disabled by default for each camera, you must enable the PTZ settings first. This series DVRs support multiple protocols such as Pelco-D, Pelco-P.

### To connect PTZ devices to the DVR

Connect RS485 A,B on the DVR rear panel.

Connect the other end of the cable to the proper pins in the connector on the camera.

Please follow the instructions of PTZ device for camera configurations.

### To connect PTZ Decoder

Ensure the decoder has the same grounding with DVR, otherwise you may not control the PTZ. Shielded twisted wire is recommended and the shielded layer is used to connect to the grounding.

Avoid high voltage. Ensure proper wiring and some thunder protection measures.

For too long signal wires, 120Ω should be parallel connected between A, B lines on the far end to reduce reflection and guarantee the signal quality.

“485 A, B” of DVR cannot parallel connect with “485 port” of other device.

The voltage between of A,B lines of the decoder should be less than 5v.

## Front Panel



-  – Stop
-  – Record
-  – Forward
-  – Backward
-  /  – Play Forward / Pause
-  – Search for recorded video files

**PTZ** – Pan Tilt Zoom Control

**MENU** – Enter Menu Selections

-  – Right
-  – Down
-  – Left
-  – Up
-  – Enter

**ESC** – Escape

**FN** – Functions

**Net** – Network Indicator

**REC** – Start recording manually



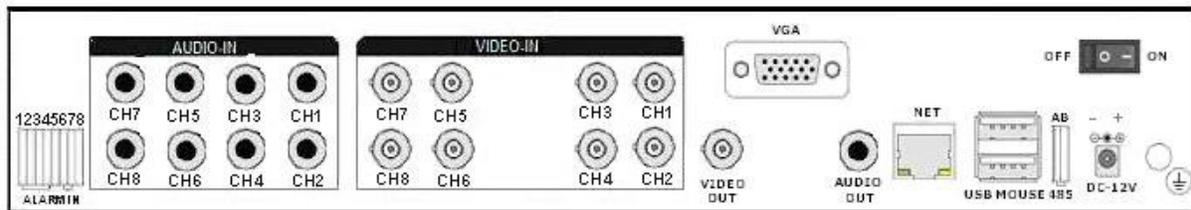
– Power



– Infrared sensor for remote control

**USB** – USB mouse port

## Rear Panel of AD- 808Q



**CH 1** – Channel 1 (camera 1) connection

**CH 2** – Channel 2 (camera 2) connection

**CH 3** – Channel 3 (camera 3) connection

**CH 4** – Channel 4 (camera 4) connection

**CH 5** – Channel 5 (camera 5) connection

**CH 6** – Channel 6 (camera 6) connection

**CH 7** – Channel 7 (camera 7) connection

**CH 8** – Channel 8 (camera 8) connection

**Audio In** – Channel 1 Audio input

**Audio In** – Channel 2 Audio input

**Audio In** – Channel 3 Audio input

**Audio In** – Channel 4 Audio input

**Audio In** – Channel 5 Audio input

**Audio In** – Channel 6 Audio input

**Audio In** – Channel 7 Audio input

**Audio In** – Channel 8 Audio input

**Audio out** – Audio output, connection to sound box

**On- Off** – Power Switch

**LAN** – RJ45 Ethernet network port

**VGA** – VGA connection to VGA monitor

**USB** – port

**ALARM** – Alarm Inputs (8 Ports)

**RS- 485 B A** – RS- 485 Connections

**Power** – Power Input DC12V

**Ground** – Ground Connection

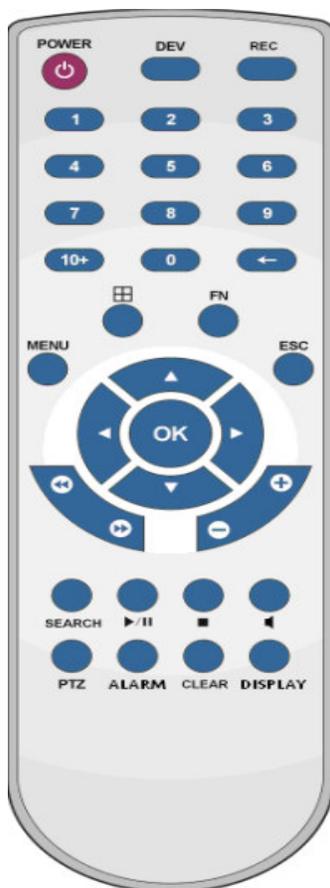
## Remote Control

Loading batteries:

Step1: Open the battery cover of the Remote Controller

Step2: Place two AAA size batteries and check the polarity (+ and –)

Step3: Replace the battery cover



KEY pad Name	Operating instruction	Keypad Name	Operating instruction
<b>【POWER】</b>	Power ON/OFF	<b>【ENTER】 【OK】</b>	OK/ENTER key
<b>【DEV】</b>	Select DVR	<b>【SWITCH】</b>	Switch To Upper/Lower Case on soft keyboard
<b>【MENU】</b>	Main Menu	<b>【MODE】</b>	Switch to IRIS/FOCUS/ZOOM modes
<b>【ESC】</b>	Escape Key	<b>【PTZ】</b>	Access/Exit PTZ control under preview state

【◀◀】	Play backward	【+/-】	A. Volume/ number Adjustment B. Select item
【▶▶】	Play Forward	【ZOOM IN/OUT】	Lens Control
【▶▶】	Forward	【MUTE】	Mute
【■】	Stop	【0~9 10+】	Digit Input
【▶/  】	Play / Pause	【FN】	Short cut
【▲.▼.◀.▶】	Four- way Movement of the focal point	【田】	Switch to 1/4/8 Display mode
【REC】	To Recording Mode	【ALARM】	Alarm Reset
【SEARCH】	Search	【CLEAR】	Clear Alarm
【DISPLAY】	Display control		
【Shift】	Shift between number key and function key		

## Mouse

### Connecting the Mouse

This DVR supports a USB mouse through the ports on the front and rear panel.

 *Note: If the mouse doesn't work, check the following steps:*

1. Make sure the mouse is plugged properly into the USB mouse port.
2. Change to a different mouse port.
3. Change the physical mouse.

**Left key single click** to enter the function icon

**Right key single click** to open the shortcut

**Left key double click** to execute the selected operation

**In Main Screen** Double-click the left button on one of the camera displays to switch to full screen display. Double-click again to return to the previous screen display.

**In Menu Setting** Right click to show the pop-up options and short cuts. Click the left button to select the option.

For entering a value, click on the parameter entering area. An input window will appear, then click to enter the value.

## Power On

Before you power on the equipment, please check all of the connections are properly connected.

Step1: Plug in the power cord to the socket on the rear panel

Step 2: Switch on the power switch on real panel

Step 3: Power Indicator will be on and the system will start loading

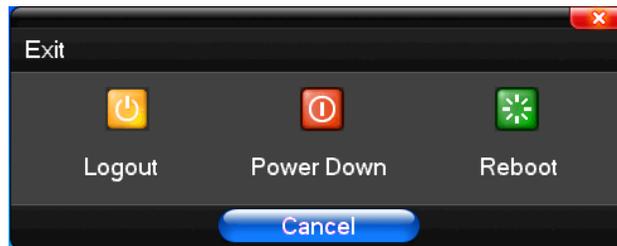
Step 4: System will generate a beep after system loading complete

Step 5: The System Login Menu will display

*Note: The DVR will automatically recover to its previous state when the device is restarted from the power off.*

## Power Off

Enter **【Exit】** ,select **【Power Down】** .



Before turning off the hard switch (see below) or disconnecting the power source to turn the system off, it is strongly recommended that the user applies these following steps to have the best protection for equipment and user applications:

A. Please confirm that the all of the hard disk (HDD) activities are properly stopped, which includes “recording”, “playback”, and “backup”.

B. Please confirm that all of the user and remote monitoring activities and applications are properly stopped and then logout.

There are two steps to turn off the DVR; the soft switch and the hard switch. It is strongly

recommended that the user applies these two steps sequentially to have the best protection for equipment.

Step 1 – Soft Switch Off: select  (Exit) on the Main Screen Display] to turn the system off.

Step 2 – Hard Switch Off: flip the power switch to turn the system off.

This equipment is designed for the long term security surveillance applications. Frequently disconnecting the power source is not recommended.

### Main Screen Display

			
Button	Description	Button	Description
	Main Menu		PTZ control
	Wizard language		Alarm control
	Multi channel		Display setup
	Recording Control		Exit
	Playback Bake up		

1		Channel is Recording	2		Channel is Motion Detection Triggered
3		Channel is alarm triggered	4		Channel Audio is enabled

### On Channel (camera) Displays

## Multi Channel Display

Right-Click on the Main Screen Display to show the short-cut list

Select <Multi Channel> to enter the Multi Channel Display Mode

Or, click on  (Multi Channel) to enter the Multi Channel Display mode



## Recording

Right-Click on the Main Screen Display to show the short-cut list

Select on <Recording Control> to enter the Recording Control mode

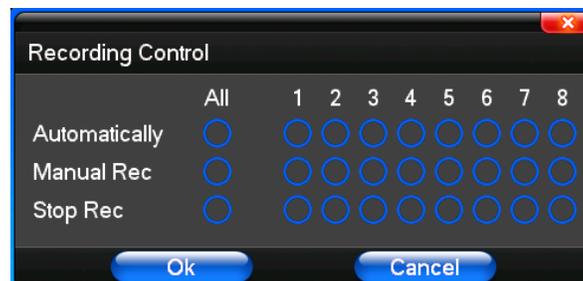
Or, click on  (Recording Control) Control to enter the Recording Control mode

The Recording Control menu contains the following sub selections:

**Automatically** – Select Recording by pre-set conditions to start recording such as Time setting, Motion detection and/or Alarm Triggered

**Manual Rec.** – Start Recording by selecting the corresponding channels. The mode has the highest priority.

**Stop Rec.** – Stop Recording by selecting the corresponding channels



## Playback and Backup

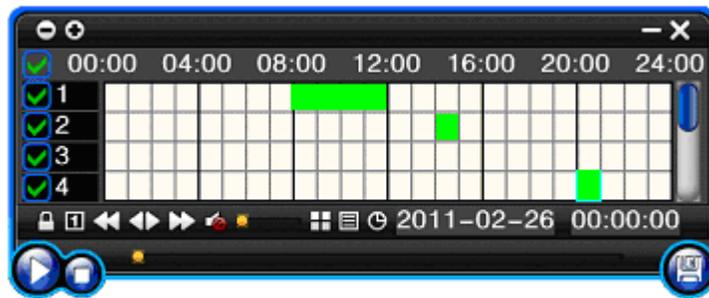
Right-Click on the Main Screen Display to show the short-cut list

Select on <Playback and Backup> to enter the Payback and Backup mode

Or, click on  (Payback and Backup) Control to enter the “Playback and Backup” mode

Select the highlighted Recording period

Select  (Play/Pause) to playback



Button	Description	Button	Description
	Synchronous/asynchronous play		Voice Adjustment
	Frame by Frame		1/4/8 Screen Display (switch Display Mode)
	Slow Speed		Hide / Display list
	Normal Speed		Recording Date
	Fast Speed		Play/Pause/Stop
	Sound Off/On		Rewind

## PTZ Control

Right-Click on the Main Screen Display to show the short-cut list

Select on <PTZ Control> to enter the PTZ mode

Or, click on  (PTZ Control) Control to enter the PTZ Control mode

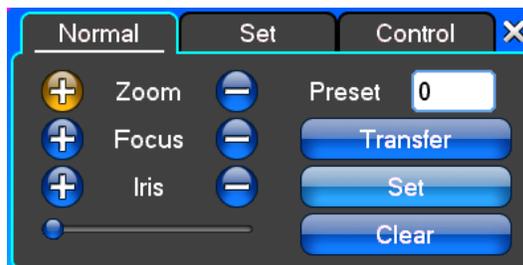
### Normal

**Zoom** – Zooming Adjustment

**Focus** – Focal Length Adjustment

**IRIS** – IRIS Adjustment

**Preset** – Camera Angle Adjustment



### Setup

**Setup** – Please refer to the speed dome user's manual

**Preset** – Please refer to the speed dome user's manual

**Dwell Time** – Please refer to the speed dome user's manual

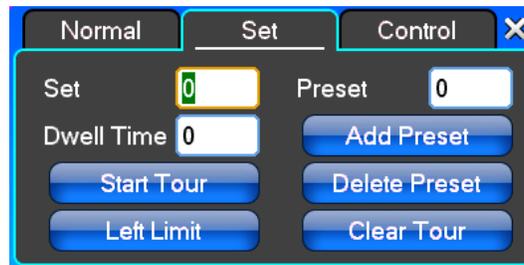
**Pattern/Tour** – Start/Stop the Cruise

**Left/right Limit** – Cruise limit Settings

**Add Preset** – Add the cruise lines

**Delete Preset** – Delete the cruise lines

**Clear Tour** – Clear the cruise lines



## **Control**

**Control** – PTZ Control

**Tour Scan** – Point between cruise control.

**Pattern Scan** – Track patrol control

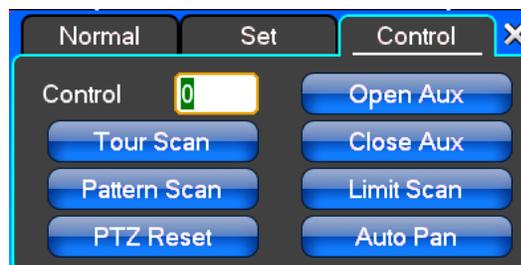
**PTZ Reset** – Remove all Settings and reset to the original state

**Open AUX** – Please refer to the speed dome user's manual for Aux definition. In some cases, it can be used for special processes.

**Close AUX** – Please refer to the speed dome user's manual for Aux definition. In some cases, it can be used for special processes.

**Limit Scan** – Boundary scan control

**Auto Pan**– Remove the cruise line designated



## Alarm Control

Right-Click on the Main Screen Display to show the short-cut list

Select on <Alarm Control> to enter the Alarm Control mode

**Set Alarm** – Select the protection channel

**Clear Alarm** – Remove protection condition

**Alarm Output** – Select the Alarm Output

**All** – Select all Channels

	All	1	2	3	4	5	6	7	8
Set Alarm	<input type="radio"/>								
Clear Alarm	<input type="radio"/>								
Alarm Output	<input type="checkbox"/>								

Ok Cancel

## Display Setup

Right-Click on the Main Screen Display to show the short-cut list

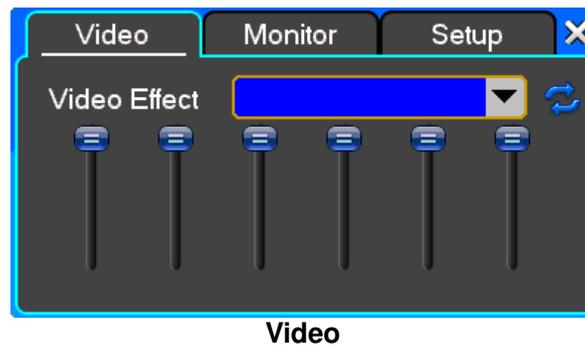
Select on <Display Setup> to enter the Display Setup mode

### Video

**Video Effect** – Optional: Standard, Smooth, Sharp, User Define

**Default** – Restore video out to default setting

Through the slider to adjust the brightness, contrast, saturation, Chroma, Sharpness, and De-noise.

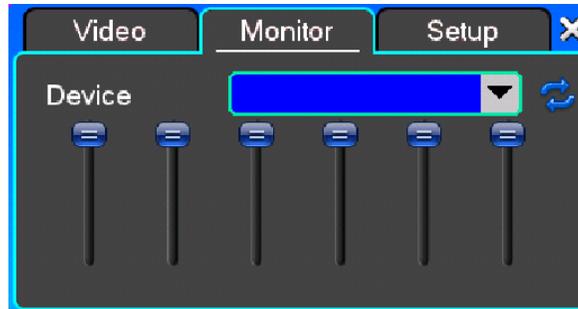


### Monitor

**Device** – Optional: VGA output, TV output

**Default** – Restore to default display setting

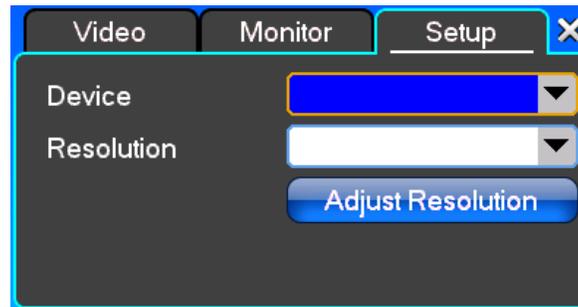
Use the slider to adjust the Brightness, Contrast, Saturation, Chroma, Sharpness, and De-noise.



## Setup

**Device** – Optional – VGA output, TV output

**Resolution** – Setting the resolution of the display device.



**Setup**

## Recording Setup

The Recording Setup menu contains the following sub menu selections:

### Recording Setup

Channel – Select the corresponding channel (camera) for recording configuration

Encoding Type (Image Size) – Select the video recording resolution from the following options: CIF (352x240), DI (704x480), HDI (704x240), QCIF (176x120)

Image Quality – Select the image quality from the list

Frame Rate – Select the Frame Rate (Frames Per Second) from the list

Audio – Select to turn on/off the audio for corresponding channel

Pre- Alarm Rec. – select to turn on/off the Pre- Alarm Recoding for corresponding channel



### Sub-Stream

Channel – Select the corresponding channel (camera) for Sub-Stream configuration

Encoding Type – Select the video recording resolution (only in whole function model)

Frame Rate – Can click on the button to undertake choosing (optional) : automatic, 1FPS, 2FPS, 3FPS, 4FPS, 5FPS.

Image Quality – Select the image quality from the list



## **Information (Channel) Overlay**

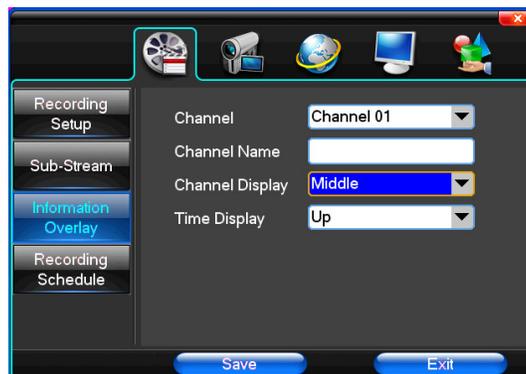
Channel (camera) On-Screen Display setting

Channel – Select the corresponding channel (camera) for on-screen display setting

Channel Name – Manual input is optional

Channel Display – elect the position of “Channel Name” for on-screen display

Time Display – Select the position of “Time” for on-screen display



## **Recording Schedule**

Channel – Select the corresponding channel (camera) for recording configuration

Normal (Schedule) Recording – Start normal recording per the schedule setup

Motion Detection – Start recording when motion detection is triggered

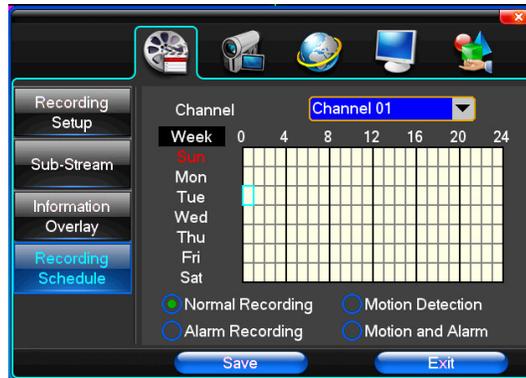
Alarm Recording – Start recording when alarm is triggered

Motion and Alarm Recording – Start recording when motion detection and alarm are triggered

Select the time zones to start the recording for the corresponding recording mode (Normal Schedule

Recording, Motion Detection, Alarm Recording)

 Note: Click to select, Right-click to deselect.



## Camera

The Camera Setup menu contains the following sub menu selections:

### **PTZ Setup**

**Channel** – Select the corresponding channel (camera) for PTZ configuration

**PTZ Protocol** – Select the PTZ Protocol form the list

**PTZ Address** – Enter the PTZ Address

**Bit– Rate** – The control interface baud rate (Please refer the PTZ camera manual)

**Date Bit** – (Please refer the PTZ camera manual)

**Stop Bits** – (Please refer the PTZ camera manual)

**Date Check** – (Please refer the PTZ camera manual)



### **Video Setup**

Video mode – Select NTSC for U.S. standard

Channel – Select the corresponding channel (camera) for Video configuration

Reserved Section – Drag the mouse to select the privacy area

Buzzer Alarm – select to enable the buzzer for Video Loss alert

Alarm output – Select the alarm output for Video Loss alert

*Note: Cameras purchased in U.S.A are NTSC format. Please confirm the video standard of the cameras matches the video standard setting of the DVR. NTSC, named for the National Television System Committee, is the analog television system that is used in most of North America, most of*

South America (except Brazil, Argentina, Uruguay, and French Guiana), Burma, South Korea, Taiwan, Japan, the Philippines, and some Pacific island nations and territories. PAL, named for the Phase Alternating Line, is an analogue television.



## Motion Detection

**Channel** – Select the corresponding channel (camera) for Motion Detection configuration

**Sensitivity** – Select the motion detection sensitivity

**Detection Area** – Select “Setup” to enter motion Detection setup for corresponding channel

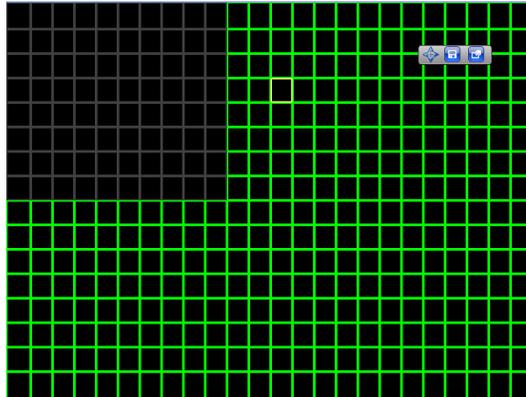
The green square area is the motion detection active region. The dark grey square area is the motion detection non-active region. Click on a square to activate the motion detection. Right-Click on a square to de-activate the motion detection.

Click on Save and Exit to save the setting. Click on Exit Without Saving to Cancel the setting.

**Trigger Recording** – Select the corresponding channel to start recording when the motion detection is triggered

Alarm output – Select the alarm output for Motion Detection alert





Motion Detection Area Setup

### **SEQ Display**

Sequential Display is a feature used to define the sequence of on screen display for each channel (camera). User can select the channels (cameras) to be displayed on screen and define the time interval between each display.

Start SEQ Display – Right-Click on main screen to select <Start SEQ Display> from the shortcut

Stop SEQ Display – Right-Click on main screen to select <Stop SEQ Display> from the shortcut

**Time** – Enter the time interval between each channel (camera) display

*Note: minimum interval is 5 seconds*

## Network Setup

The Network Setup contains the following parameters for the network configuration:

### **Ethernet General Setup**

**DHCP** – Select to enable DHCP

**UPnP** – Select to enable UPnP

**IP Address** – Enter the IP address of this DVR

**Subnet Mask** – Enter the subnet mask

**Default Gateway** – enter the gateway

*Note: Generally, the default DNS is the router's IP address if this DVR connects to internet through a router*

**DNS Server** – enter the primary DNS

*Note: Generally, the default DNS is the router's IP address if this DVR connects to internet through a router*

**Server Port** – This Server Port (TCP) number is the port for video streaming

*Note: This video steam port needs to be forwarded on the router over a virtual server for video streaming.*

**HTTP Port** – The HTTP port number is the port for IE browser accessing.

*Note: The default value is 80. This port needs to be forwarded on the router or virtual server for remote monitoring. If the port value is changed, user needs to add the port number when typing the IP address into the IE browser address bar .i.e. set HTTP port to 88, IP address: <http://192.168.0.50>, user needs to enter that address as <http://192.168.0.50:88> to IE browser.*

**Handset Port** – This Server Port (TCP) number is the port for Mobile Phone video streaming

*Note: This Handset Port setting is required for mobile device remote viewing such as on smart phones. Please refer to the mobile device manual, instructions of the APPs (Applications), and mobile service provider for more information*



## **PPPoE (Dial- Up) Setup**

<PPPoE Enable>: Enable/disable the PPPoE internet service login

PPPoE IP – Enter the IP address which is provided by the Internet Service Provider.

PPPoE Account – Enter the login user name

Password – Enter the login password

*Note: The PPPoE needs to be enabled along with the entering of the User Name, Password, and IP address of ISP if PPPoE login is employed on the DVR. Please contact your Internet Service Provider (ISP) for more information*



## **DDNS (Dynamic Domain Name System) Setup**

**DDNS Server** – Dynamic Domain Name System (DDNS) setting for internet remote viewing

*☞ DYNDNS service is recommended. For the following DDNS parameter settings, user needs to have one active account from DYNDNS for valid parameter values. Please visit [dyndns.org](http://dyndns.org) to obtain an account if the user does not have one.*

**DDNS Domain** – Enter the domain name (example – <your domain name>.dyndns.org)

**User Name** – Enter the user name

**Password** – Enter the password



## **Email**

E– mail notification for Video Loss or Alarm input is triggered

**SSL Protocol** – Enable/Disable SSL Protocol

**Email address 1** – Enter the email address

**Email address 2** – Enter the email address 2

**Send Email** – The sender's email address

**SMTP Server** – Enter the name of the SMTP mail server

**Email Account** – Enter the sender email account

**Email password** – Enter the sender email account password

**Video Loss** – Select to enable the email notification when video loss occurs

**Input Alarm** – Select to enable the email notification when alarm input is triggered



## Access Control

Access Control is a list of permission specifies which users IPs or system IPs are granted access to the DVR

**List Rule** – Select from the options: Not Used, Access permission, Access Refused

**Starting IP** – Define the Starting IP address

**Ending IP** – Define the ending IP Address

**Add** – Add the IP to the access control list

**Delete** – Delete the IP to the access control list



## System Setup

### Time

**Remote Controller** – Enter the remote controller number for multiple DVR identification

**Device Name** – Enter the name for the DVR

**Date Mode** – Select the date format

**Time Mode** – Select the time format

**System Date** – Set up the System Date

**System Time** – Set up the System time

**DST** – Select to enable the Daylight Saving Time (DST)

**NTP Setup** – The Network Time Protocol (NTP) is used to synchronize the time to a server or reference time source.



## **Hard Disk Drive (HDD) Management**

**Disk Full** – Select the option from the list when the Disk Full condition is detected

**File Time** – Set up the length of the recording file in minutes

**Formatting** – Format the selected Hard Disk



## **User Management**

The User Management contains the following parameters for user setup:

**User** – Select the user to be modified

**User Right** – Select/Deselect user authority

**Add User** – Add user

**Delete User** – Delete the selected user

**Edit User** – Edit the selected user

**Edit Password** – Edit the password of selected user



## **Alarm Setup**

**Alarm In** – Select the corresponding alarm channel for the alarm input setup

**Input type** – Select the alarm input type

**Clear Alarm** – Select the length to clear the alarm and stop the alarm triggered video recording

**Record Channel** – Select the corresponding channel to start recording when the alarm input alert is triggered



## Output Schedule

**Buzzer Output** – Select the time intervals for buzzer output when alarm is triggered

**Send Email** – Select the time intervals for email notification when alarm is triggered

**Alarm Output** – Select the time intervals of delay for alarm output when alarm is triggered

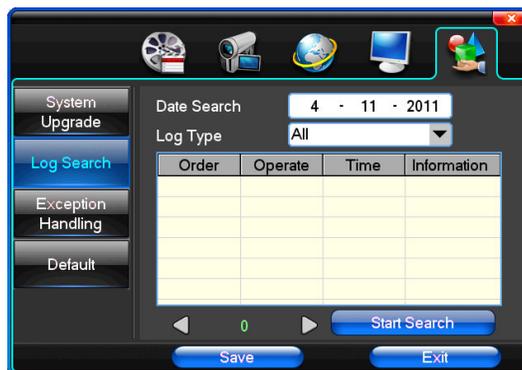


## System Management

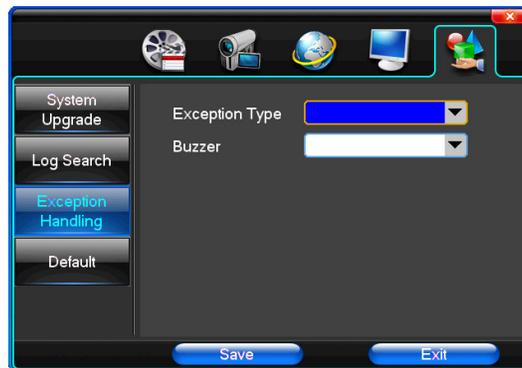
**System upgrade** – The system hardware and software information



**Log Search** – Search the system event log



**Exception Handling** – Select to turn on the buzzer alert when system error is detected



**Default** – The <Restore Settings> function restores the parameters of selected category back to factory default value

