

HDview

16 CHANNEL TRUE HD
DIGITAL VIDEO RECORDER



HDV16RX USER MANUAL



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This manual is designed to be used as a quick start guide alongside the informative general user interface (GUI) of the DVR. Additional details of the subjects covered may be found within the on-screen menus or in the full manual that can be found on the supplied software disc. The menu above is not exhaustive and is designed to lead the user quickly to the most often required aspects of the unit.

The DVR will require a connection to a monitor to be programmed.

IMPORTANT NOTICE

- **Please read this manual** and keep for later use.
- Please strictly comply with the warning indications on the machine and in this book.
- Please abide by instructions when operating.
- Do not use accessory devices not recommended by the manufacturer.
- Incorrect usage of accessory device may cause harm.
- Please use the power adapter equipped for the unit. Before connecting the AC power cord to the socket, please check if the specified requirements of the adapter is in accordance with the local power supply network.
- Do not place anything on or around the power cord. A damaged power cord may cause electric shock.
- Please do not touch any control parts not mentioned in the manual. Incorrect adjustment of a control part not mentioned in the manual may damage the machine.
- Before cleaning the machine, pull out the power plug and clean the machine with a slightly damp cloth. Do not use any liquid or sprayed cleaning agent.
- Disconnect the unit from the mains power source if the unit is not likely to be used for a long period of time.
- Ensure air ventilation around the unit, and do not cover or block the vent hole.
- Do not place the unit in direct sunlight or near a heat source such as a heat radiator, heating equipment, or other objects that generate heat.

Front Panel



- | | |
|---|--|
| 1. Camera inoput indication panel | 7. REC - Access shortcut record menu |
| 2. Optional disc burner | 8. Menu - Access main menu |
| 3. System indicator lights | 9. Search - Initiate play back |
| 4. Individual camera selection | 10. Navigation arrows and select button |
| 5. Mult - Select multiple channel viewing | 11. Power off - Press and hold for power off |
| 6. Control keys for playback menu | 12. USB for mouse or USB stick |

Rear Panel



- | | |
|--------------|---|
| 1. AUDIO IN | Audio input |
| 2. AOUT | Audio output |
| 3. VIDEO IN | 1-16 for video input from camera |
| 4. USB 1 + 2 | For mouse control, USB backup and Wifi dongle |
| 5. VGA | Output for monitor |
| 6. HDMI | Output for monitor |
| 7. LAN | Socket connection for ethernet cable |
| 8. RS485 + - | Signal Control |
| 9. ALARM | Alarm IN / OUT |
| 10. DC12V | Power input |
| 11. POWER | ON/OFF Switch |

DVR Connection Diagram

Monitor



VGA / HDMI Connection

Mouse controller

Local area network

DVR rear panel



Camera

Video Input (BNC female)

Camera PSU

Power supply



BNC Video (female)
Power Jack (female)

Video / Power cable

Notes on Camera Connection:

The DVR is specifically designed for High Definition 720p cameras (using AHD technology).

The DVR can also support connection to lower resolution analogue cameras.

The camera input channels on the DVR are grouped into pairs for the connection of either HD cameras or Analogue cameras. Channels 1 & 2 can have either 2 HD cameras or 2 Analogue cameras connected but not 1 of each, the same applies to channel pairs 3 & 4, 5 & 6, 7 & 8, and so on upto 15 & 16.

Basic operations

CONNECTION TO A MONITOR

The DVR has a HDMI and VGA output to connect to a monitor. Please select the appropriate connection and select the correct input channel on the monitor.

POWER ON

Plug one lead from the 5-way power supply into the 12VDC power supply input marked on the DVR. Turn on the DVR at the mains power point. Select the ON position on the switch on the rear of the DVR. The Power supply indicator light will illuminate on the DVR's front panel followed by several short bleeps.

POWER OFF

Turn off the DVR at the mains power source after selecting power off from the **Shortcut Menu**. Select OFF on the power switch on the rear of the DVR. Switch the mains supply to OFF.

N.B Auto resume after power failure. If the DVR is shut down abnormally, the DVR can automatically backup video and resume previous working status after the power is restored.

MOUSE CONTROLLER CONNECTION

In order to prevent un-authorized tampering, the majority of DVR functions are controlled via the mouse controller.

Please plug in the supplied mouse via the USB interface on the front or rear panel when operating the DVR.

LIVE VIEWING

On start up the DVR will display a divided screen. Using the Mouse Control, double click on any image to bring to full screen. Double click again to return to that main divided screen.

The system time and date will be visible, this can be adjusted by entering the **Main Menu > System > General**

The recording status and alarm status are indicated by the following icons:



Recording



Motion Detect



Video Loss

TO ACCESS THE MENU

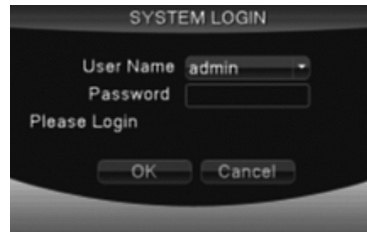
Right click the mouse anywhere on screen to activate the **Shortcut Menu**.

Selecting **Main Menu** option will automatically display the **System Login** screen.

The default settings are:

User Name: Admin

Password: 'leave blank'



Once logged in you may now right click again to access your menu selections. An opportunity to change the password is provided within the settings menu. Please note if an incorrect password is entered three times the DVR alarm will activate. If a wrong password is entered five times the system will lock out. To reset the system turn the main power off and back on after 5 minutes.

SHORTCUT MENU

Right-clicking on the live camera screen will activate the Shortcut Menu where the most regularly used settings can be found.

Main Menu	Enter to adjust system settings
Record Mode	Shortcut for Record Mode
Playback	To view recorded files
PTZ Control	Controls and settings for specialized Pan Tilt and zoom cameras
High-speed PTZ	Enables PTZ control via mouse control
Colour Setting	Edit colour settings per channel
Output Adjust	Adjust display output settings of DVR
Logout	Logout, Shutdown or Reboot system
View 1	1 Channel view
View 4	4 Channel view
View 8	8 Channel view (On 8 channel version only)
View 16	16 Channel view

Record setup

RECORD CONFIGURATION

QUICK GUIDE

OPTION 1- Manual Record (Cameras Recording Continuously)

From the live camera view screen:

- Right-click on the screen to bring-up the **Shortcut Menu** and log-in.
- Select **Record Mode** and highlight the **ALL** option for **Manual**
- Click **OK** to finish set-up

ADDITIONAL MANUAL RECORD CONFIGURATION OPTIONS

Select Main Menu > Record > Record Config. to access the 'Record Plan'.

- Channel – Select 1–16 (all other settings now affect the specific channel selected)
- Redundancy – Select if double backup recording is required when two hard drives are fitted (not as standard)
- Length – Sets the file length of each video file to be recorded onto the hard drive (function does not apply to motion detection length)
- Pre-Record – The system can automatically archive up to 30 seconds of recording prior to a motion or alarm trigger
- Mode – Selects the recording preference either by schedule or to stop and start recording manually

NB. When entering the 'Record Plan' the default screen will always start with a display of the settings for Channel 1 and the current day's schedule.

QUICK GUIDE

OPTION 2- Motion Detection Record (Activated by Motion)

From the live camera view:

Right-click on the screen to bring-up the **Shortcut Menu** and log-in to the **Main Menu**.

- Select **Main Menu > Record > Record Config.**
- Select **Channel** as **ALL**
- Select **Mode** as **Schedule**
- Select **Week** as **ALL**
- Select **Period 1** as **Detect**
- Click **OK**
- From the **Main Menu** select **Alarm > Motion Detect**
- Select **Channel** as **ALL**
- Select **Enable**
- Select **Record Channel 1, 2, 3, 4/16**
- Click **OK** to finish set-up

ADDITIONAL SCHEDULE RECORDING OPTIONS

Select Main Menu > Record > Record Config.

- **Week** – You now have the ability to specify the recording requirements by each day (select all if **ALL** days require the same configuration)
- **Period 1-4** – Each day can be segmented into 4 specific recording periods
- **Regular** – Simply records constantly within the selected period
- **Detect** – Only records by motion detection via the camera(s) within the programmed period
- **Alarm** – Only records by alarm trigger within the selected period (selected models only)

RECORDING PLAYBACK

Right click on the live camera view, login and enter **Playback** directly from the **Shortcut Menu**.

QUICK GUIDE

In the playback menu refer to the right hand side of the screen and enter the following:

- Select Month and Year of the required recording
- Click on the day of Month
- Select Channel required
- Click on the symbol with the two inwards pointing arrows
- Select Start time (Top right-hand corner of the screen)
- Select End time (Top right-hand corner of the screen)
- Click the magnifying glass symbol
- Double click on the recording required
- Playback will begin

During playback simply use the icons at the foot of the screen to control playback.

DIGITAL ZOOM

During playback it is possible to carry out a digital zoom. Left click and hold anywhere in the picture then move the mouse in any direction to create a selection window. Once you are happy with the selection window release the left click and then left click again within the created window to zoom in. To return to the original screen simply double click.

NB. Practice playing back footage to familiarize yourself with the process before an incident occurs.
As default the record resolution is set to 720p. For best performance in this resolution it is recommended that only one channel at a time is selected for playback.

TRANSFERRING A RECORDING TO USB

Recorded data can be easily transferred using a USB stick drive.

The amount of data that can be stored is only limited by the capacity of the USB drive. Larger capacity drives are available.

QUICK GUIDE

During playback refer to the right hand side of the screen;

After finding the required recording (by following the RECORDING PLAYBACK instructions):

- Insert the USB stick into the back of the DVR
- Select the file to be backed up onto the USB stick by clicking inside the white box for the required time
- At the bottom right hand side of the page Click on the disc symbol
- The **Backup** window will appear, select **Detect** and then **Backup**
- Selecting **Backup** readies the selected file
- Select **Backup Format** as **AVI**
- Select **Start**
- A progress bar will then display when backup is complete

NB. Practice backing-up footage to familiarize yourself with the process before an incident occurs.
The AVI file will enable playback via a PC using AVI players such as Windows Media Player and DIV-X.

ADDITIONAL BACKUP MENU OPTIONS

Insert USB stick > Select Main Menu > Record > Backup > Backup

- **Type** – Select all recorded material or recordings made from specific triggers such as alarm or motion detection events.
- **Channel** – Select the channels that you wish to back up.
- **Start Time** – Select the start date and time of the desired back up.
- **End Time** – Select the end date and time of the desired back up.
- **Remove** – Clear the file information.
- **Add** – Show the file information satisfying the set file attributes.
- **Start** – Click the play button to start the backup and click the pause button to stop the backup.
- **Cancel** – During backup you can exit the page layout to carry out other functions.
- **Backup Format** – Recommend: AVI

ADDITIONAL BACKUP NOTES

Once the selections have been entered as listed above; click Add. Data applicable to the selections will now appear in the main screen.

Clicking start will commence the backup operation and replace the capacity requirement with information on the estimated time to complete the process.

Main Menu Layout

Main Menu	Sub Menu	Function
Record	Config	Set the recording configuration, recording type, recording time section
	Playback	Set recording look-up, recording play, video file storage
	Backup	Detect or format backup devices, backup selected files
Alarm	Motion	Set motion detect alarm channel, sensitivity, area, defending time detection section, alarm output, screen hint, recording, PTZ, patrol
	Video blind	Set camera mask alarm channel, sensitivity, defending time, section, alarm output, screen hint, recording, PTZ, patrol
	Video loss	Set video loss alarm channel, defending time, section, alarm output, screen hint, recording, PTZ, patrol
	Alarm input	Set alarm input channel, equipment type, defending time section, alarm output, screen hint, recording, PTZ, patrol
	Alarm output	Set alarm mode: configuration, manual, shut down
System Configuration	General Config	Set system time, data format, language, hard configuration disk full time operation, machine number, video format, output mode, summertime, stay time
	Encode Config	Set main (assistant) coding parameter: code mode, resolving ability, frame rate, code stream control, image quality type, code stream value, frame between value, video/audio enable
	Network Config	Set basic network parameters, DHCP and DNS parameters, network high speed download
	Net Service	PPPOE, NTP, Email, IP purview, DDNS parameter
	GUI display	Set channel name, preview hint icon state, transparency, cover area, time title, channel time fold
	PTZ Config.	Set channel, PTZ protocol, address, baud rate, date bit, stop bit, check
	Serial port Config	Set serial port function, baud rate, date bit, stop (RS232) bit, check
	Tour	Set patrol mode and interval time
Management tools	Hard disk management	Set appointed hard disk as read-write disc, read-only disc or redundant disc, clear data, resume date and so on
	User management	Modify user, team or password. Add user or team. Delete user or team.
	Online user	Break the connection with the already login user. Lock the account after, break until booting up again.
	TV adjust	Adjust TV upside, downside, nearside, starboard distance
	Auto maintenance	Set automatic reboot system and automatic deleting files
	Restore	Resume setup state: common setup, code setup, recording setup, alarm setup, network setup, network service, preview playback, serial port, setup, user management
System info	Hard disk info	Display hard disk capability and recording time
	Code stream stats	Display code stream information
	Log info	Clear all log information according to the log video and time
	Edition info	Display edition information
Shut down		Logout, shut down or reboot

Remote Viewing

NETWORK INTRODUCTION- IMPORTANT

Networking should always be carried out by a competent/qualified engineer, specifically when adjusting settings on the router which is required for remote viewing.

When unsure please contact your ISP (Internet Service Provider) for more information.

There are two main ways to connect the DVR to a network;

- A connection from the DVR's LAN port via an Ethernet cable to the router (recommended for the most stable connection).
- A connection using the optional DVRWLA* (wireless adaptor dongle), which enables the DVR to obtain a connection to the LAN via Wi-Fi.

*DVRWLA is supplied and can be purchased as a separate item

To then add the DVR onto the network (for remote viewing), please refer to and complete the **How to Remote Access your DVR** guide that comes supplied with the DVR.

Once the DVR has been added to the network there are different methods to view the DVR remotely:

Smart-phone: iPhone / Android App. Refer to the **How to Remote Access your DVR** guide for the recommended App or scan the QR code during DVR start up

Desktop Browsing: CMS (Central Management Software) that is supplied on the CD supplied with the DVR (Windows compatible)

Web Browsing: Internet Explorer (Windows / Internet Explorer)

Cloud Service: (Windows / Internet Explorer / App)

To remote view the DVR using the recommended App, CMS, Internet Explorer or the Cloud please refer to the **How to Remote Access your DVR** guide.

NB: ESP are unable to guarantee that your PC / mobile device will be compatible with the DVR and software supplied. Your specific model of phone, tablet or other device, the hardware it contains, your service provider, the types of data services they offer and your specific phone / device plan will all affect the performance of your PC / mobile device for remote access to the DVR.

Troubleshooting Guide

In the event of trouble with the system please follow the troubleshooting guide. If further problems persist please contact the installer / supplier.

The DVR will not boot up normally

- The power supply is not correctly connected
- The incorrect power supply is being used
- The power supply is not producing the required voltage
- Is the socket for the power supply plugged in and switched on?
- Disconnect any other devices connected to the power supply / DVR to identify external device trouble

Connection issue with the monitor

- The monitor cable is not correctly connected or damaged
- The incorrect power is applied to DVR / Monitor
- The correct input channel has not been selected on the monitor
- The correct resolution has not been selected in the DVR's **GUI Display** menu
- Connect a temporary test monitor to adjust the DVR's **GUI Display** menu

There are no cameras displayed on the monitor

- The camera power supply is not correctly connected or damaged
- The camera signal cable is not correctly connected or damaged
- Try another channel input if connecting an analogue camera to the system
- There is a connection issue with the monitor

Real-time image problems (eg. mono picture)

- Set **Video Standard** option to PAL in the **General** menu on the DVR
- The signal from the camera is too weak due to excess distance between camera and DVR.
- The colour and brightness setting of the DVR are incorrect, enter the **Shortcut** menu for **Colour** settings

I cannot find the video files in Playback mode

- Recording did not take place in the specified time range
- The recording parameters have not been programmed correctly / switched off
- Hard drive has been overwritten
- Hard drive cannot be detected

DVR cannot detect hard disk

- The DVR's power supply is not correctly connected or damaged
- The DVR has an incorrect power supply
- The HDD has not been connected correctly
- An incorrect HDD has been installed

The images appear unstable during playback

- The recommend setting for 720p playback is 1 channel only
- Frame rate is set to a low rate, enter the **Encode** menu and adjust the frame rate for future recordings

Network connection to DVR is not stable

- Network is not stable
- DVR is not networked correctly
- Incorrect network details have been entered in remote viewing platform

During remote viewing the image is not clear or the image is unstable

- Broadband connection is not stable enough to support 720p streaming. Select **Extra Stream** as opposed to **Main Stream** where applicable.



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