



# EZHD

“RF” Series

Real Time Triple Technology Recorders

960H – EZHD – IP



**EZHD-TRF4**  
**EZHD-TRF8**  
**EZHD-TRF16**

## Quick Installation Guide

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## Regulatory information

### FCC information

**FCC compliance:** This equipment has been tested and found to comply with the limits for 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.

### FCC conditions

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:

1. This device may not cause harmful interference.
2. This device must accept any interference received, including interference that may cause undesired operation.

### EU Conformity Statement



This product and - if applicable - the supplied accessories too are marked with "CE" and comply therefore with the applicable harmonized European standards listed under the Low Voltage Directive 2006/95/EC, the EMC Directive 2004/108/EC, the RoHS Directive 2011/65/EU.



2012/19/EU (WEEE directive): Products marked with this symbol cannot be disposed of as unsorted municipal waste in the European Union. For proper recycling, return this product to your local supplier upon the purchase of equivalent new equipment, or dispose of it at designated collection points. For more information see: [www.recyclethis.info](http://www.recyclethis.info).



2006/66/EC (battery directive): This product contains a battery that cannot be disposed of as unsorted municipal waste in the European Union. See the product documentation for specific battery information. The battery is marked with this symbol, which may include lettering to indicate cadmium (Cd), lead (Pb), or mercury (Hg). For proper recycling, return the battery to your supplier or to a designated collection point. For more information see: [www.recyclethis.info](http://www.recyclethis.info).

Thank you for selecting this KT&C EZHD Series product. For additional information please refer to the complete User Guide for this DVR series. End users should contact their KT&C Certified Dealer for service. Certified Dealers can obtain support directly from KT&C.

### About This Guide

While KT&C makes every effort to insure the completeness and accuracy of the information contained in this Guide, we are not responsible for typographical errors or misprints. At the same time, KT&C reserves the right to make changes to improve the performance of our products at any time without notice, and so the specifications and content of this document are subject to change without notice. Every effort will be made to include updates in new versions of this manual and/or online.

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## DVR Pre-Installation

The EZHD series DVRs are highly advanced surveillance equipment that should be installed carefully. Please take into consideration the following precautionary steps before installation of the DVR.

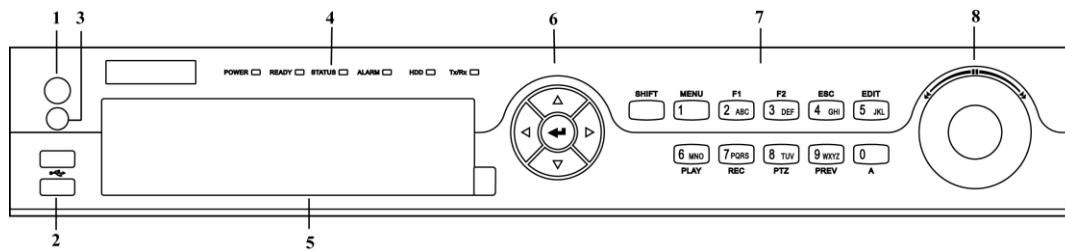
1. Keep all liquids away from the DVR.
2. Install the DVR in a well-ventilated and dust-free area.
3. Ensure environmental conditions meet factory specifications.
4. Install a manufacturer recommended HDD.

## DVR Installation

During the installation of the DVR:

1. Use brackets for rack mounting (where applicable; otherwise, use a suitable rack shelf).
2. Ensure there is ample room for audio and video cables.
3. When installing cables, ensure that the bend radius of the cables are no less than five times than its diameter.
4. Connect both the alarm and RS-485 cable.
5. Allow at least 2cm (≈0.75-inch) of space between racks mounted devices.
6. Ensure the DVR is grounded.
7. Environmental temperature should be within the range of -10 °C ~ 55 °C, 14°F ~ 131°F.
8. Environmental humidity should be within the range of 10% ~ 90%.

## Front Panels



Front Panel of 4ch/8ch/16ch

Description of Front Panel

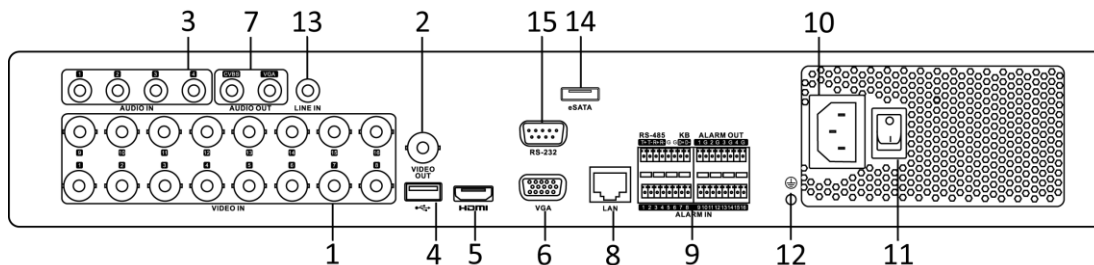
No.	Name	Function Description
1	<b>POWER ON/OFF</b>	Power on/off switch.
2	<b>USB Interface</b>	Connect to USB mouse or USB flash memory.
3	<b>IR Receiver</b>	Receiver for IR remote control.
4	<b>POWER</b>	Power indicator lights in green when DVR is powered up.
	<b>READY</b>	Ready indicator is normally green, indicating that the DVR is functioning properly.
	<b>STATUS</b>	Indicator turns green when DVR is controlled by an IR remote control with the address from 1~254; Indicator turns red when the SHIFT button is used; Indicator does not light when the DVR is controlled by a keyboard or by the IR remote control with the address of 255; Indicator turns green when the DVR is controlled by IR remote control (with the address from 1~254) and keyboard at the same time, and the SHIFT button is not used; Indicator turns orange : (a) when the DVR is controlled by IR remote control (with the address from 1~254) and keyboard at the same time and the SHIFT button is used as well; (b) when the DVR is controlled by IR remote control (with the address from 1~254) and the SHIFT button is used.
	<b>ALARM</b>	Alarm indicator turns red when a sensor alarm is detected.
	<b>HDD</b>	HDD indicator blinks in red when data is being read from or written to HDD.
	<b>Tx/Rx</b>	TX/RX indicator blinks in green when network connection is functioning properly.
5	<b>Not used</b>	N/A
6	<b>DIRECTION</b>	The DIRECTION buttons are used to navigate between different fields and items in menus. In Playback mode, the Up and Down button is used to speed up and slow down recorded video. In All-day Playback mode, the Left/Right button can be used to select the recorded video for the next/previous day; in Playback by Normal Video Search, the Left/Right button can be used to select the next/previous recorded file. In Live View mode, the directional buttons can be used to cycle through channels. In PTZ control mode, it can control the movement of a PTZ camera.
	<b>ENTER</b>	Confirm selection in any of the menu modes. It can also be used to tick checkbox fields. In Playback mode, it can be used to play or pause the video. In Single-frame Playback mode, pressing the ENTER button will advance the video by a single frame. In Auto-switch mode, it can be used to stop /start auto switch.
7	<b>SHIFT</b>	Switches compound keys between the numeric/letter input and functional control.
	<b>1/MENU</b>	Enter numeral "1"; Access the main menu interface.
	<b>2ABC/F1</b>	Enter numeral "2"; Enter letters "ABC";

		<p>The F1 button can be used to select all items on the list;</p> <p>In PTZ Control mode, the F1 button can be used to zoom out (zoom-) the PTZ camera;</p> <p>In live view or playback mode, the F1 button can be used to switch between main and spot video output.</p>
	<b>3DEF/F2</b>	<p>Enter numeral “3”;</p> <p>Enter letters “DEF”;</p> <p>In PTZ Control mode, the F1 button can be used to zoom in (zoom+) the PTZ camera;</p> <p>The F2 button can be used to cycle through tab pages.</p>
	<b>4GHI/ESC</b>	<p>Enter numeral “4”;</p> <p>Enter letters “GHI”;</p> <p>Exit and back to the previous menu.</p>
	<b>5JKL/EDIT</b>	<p>Enter numeral “5”;</p> <p>Enter letters “JKL”;</p> <p>Delete characters before cursor;</p> <p>Select the checkbox and ON/OFF switch;</p> <p>Start/stop record clipping in playback.</p>
	<b>6MNO/PLAY</b>	<p>Enter numeral “6”;</p> <p>Enter letters “MNO”;</p> <p>In Playback mode, it is used for direct access to playback interface.</p>
	<b>7PQRS/REC</b>	<p>Enter numeral “7”;</p> <p>Enter letters “PQRS”;</p> <p>Manual record, for direct access to manual record interface; manually enable/disable record.</p>
	<b>8TUV/PTZ</b>	<p>Enter numeral “8”;</p> <p>Enter letters “TUV”;</p> <p>Access PTZ control interface.</p>
	<b>9WXYZ/PREV</b>	<p>Enter numeral “9”;</p> <p>Enter letters “WXYZ”;</p> <p>Multi-camera display in live view;</p> <p>In Playback mode or Menu→Playback→Tag playback interface, this button can be used to delete the selected tag.</p>
	<b>0/A</b>	<p>Enter numeral “0”;</p> <p>Switch between input methods (upper and lowercase alphabet, symbols and numeric input).</p> <p>In Playback mode, this button can be used to add the default tag.</p>
<b>8</b>	<b>JOG SHUTTLE Control</b>	<p>Move the active selection in a menu. The inner ring will move the selection up and down; the outer ring will move it left and right.</p> <p>In Playback mode, the inner ring is used to jump 30s forward/backward in video files. The outer ring can be used to speed up/slow down the video.</p> <p>In Live View mode, it can be used to cycle through different channels.</p> <p>In PTZ control mode, it can control the movement of the PTZ camera.</p>

## Rear Panels



The rear panel varies for different models, primarily in terms of the number of BNC camera inputs. Openings for 16 BNCs exist; unused openings are closed with plastic covers.



Description of Rear Panel

No.	Item	Description
1	<b>VIDEO IN</b>	BNC interface for TVI and/or CVBS analog video input.
2	<b>VIDEO OUT</b>	BNC connector for CVBS main monitor video output.
3	<b>AUDIO IN</b>	RCA connectors (line in) for recording audio
4	<b>USB Port</b>	Universal Serial Bus (USB) port for additional devices.
5	<b>HDMI</b>	HDMI main monitor video output connector. Display local video output and menu. HDMI and VGA display the same image(s).
6	<b>VGA</b>	DB15 connector for main monitor VGA output. Display local video output and menu. HDMI and VGA display the same image(s).
7	<b>AUDIO OUT</b>	RCA connectors for audio playback through VGA or CVBS monitor
8	<b>Network Interface</b>	Connector for LAN/WAN network interface
9	<b>RS-485 Interface</b>	Connector for RS-485 devices. T+ and T- pins connect to R+ and R- pins of PTZ receiver respectively. D+, D- pin connects to Ta, Tb pin of controller. For cascading devices, the first DVR's D+, D- pin should be connected with the D+, D- pin of the next DVR. Connectors (16) for alarm inputs. Connectors (4) for alarm outputs.
10	<b>Power Supply</b>	AC 100 ~ 240V power supply.
11	<b>Power Switch</b>	Switch for turning power on/off ("hard" power off).
12	<b>GND</b>	Ground
13	<b>LINE IN</b>	BNC connector for two-way audio input.
14	<b>eSATA</b>	Connects external SATA HDD, CD/DVD-RW.
15	<b>RS-232 Interface</b>	Connector for RS-232 devices (future use)

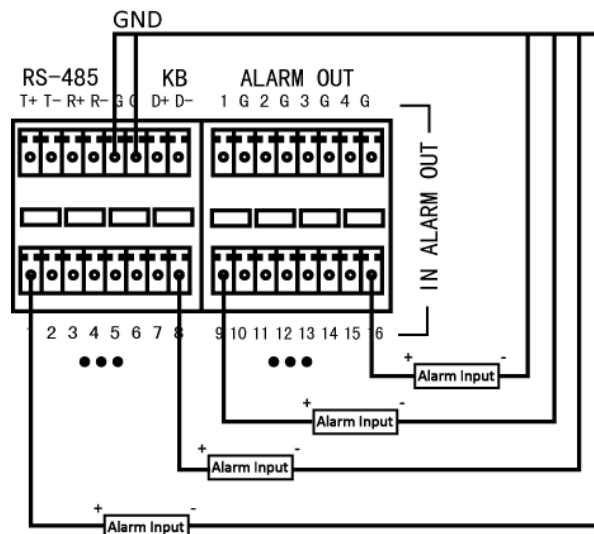
## Peripheral Connections

### Wiring of Alarm Input

The alarm input is an open/closed relay. To connect the alarm input to the device, use the following diagram.

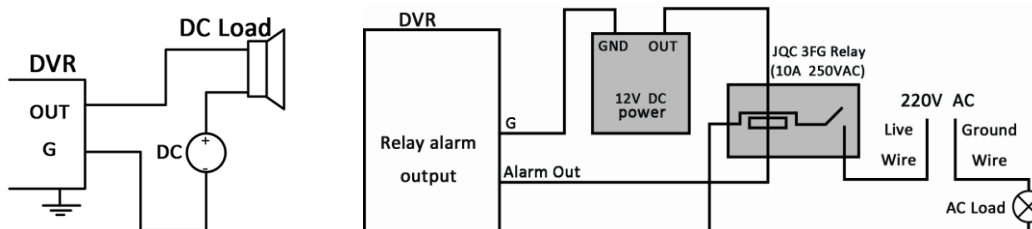


If the alarm input is not an open/close relay, please connect an external relay between the alarm input and the device.



### Wiring of Alarm Output

To connect to an alarm output (AC or DC load), use the following diagram:



DC Load Connection Diagram

AC Load Connection Diagram

For DC load, the jumpers can be used within the limit of 12V/1A safely.

To connect an AC load, jumpers should be left open (you must remove the jumper on the motherboard in the DVR). Use an external relay for safety (as shown in the figure above).

There are 4 jumpers (JP1, JP2, JP3, and JP4) on the motherboard, each corresponding with one alarm output. By default, jumpers are connected. To connect an AC load, jumpers should be removed.

#### Example:

If you connect an AC load to the alarm output 3 of the DVR, then you must remove the JP 3.

### Alarm Connection

To connect alarm devices to the DVR:

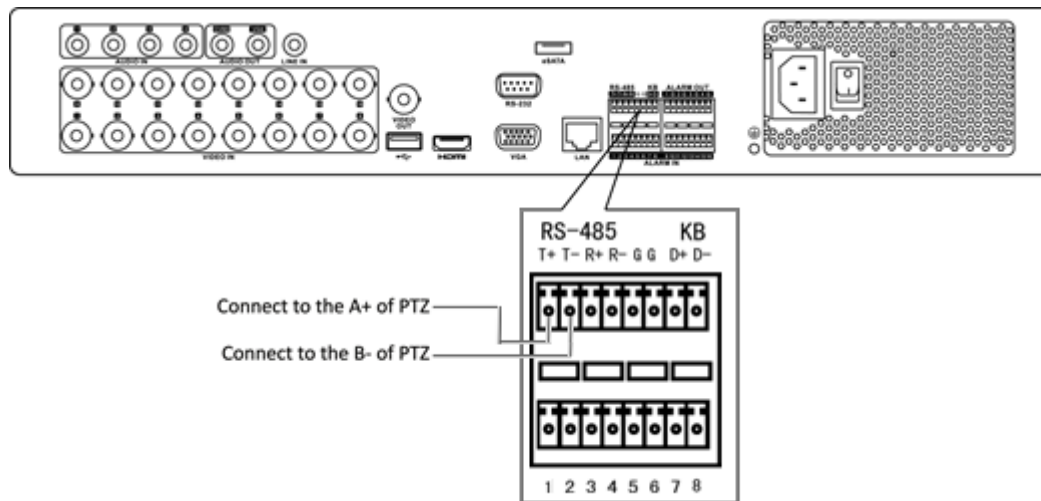
1. Disconnect *pluggable block* from the ALARM IN /ALARM OUT terminal block.



2. Press and hold the orange part of the *pluggable block*; insert signal cables into slots and release the orange part. Ensure signal cables are in tight.
3. Connect *pluggable block* back into terminal block.

## RS-485 Connection

1. Disconnect *pluggable block* from the RS-485 terminal block.
2. Press and hold the orange part of the *pluggable block*; insert signal cables into slots and release the orange part. Ensure signal cables are in tight.
3. Connect A+ on PTZ to D+ on terminal block and B- on controller to D- on terminal block. Fasten stop screws.
4. Connect *pluggable block* back into terminal block.



### To connect PTZ to the DVR:

1. Disconnect *pluggable block* from the RS-485 terminal block.
2. Press and hold the orange part of the *pluggable block*; insert signal cables into slots and release the orange part. Ensure signal cables are in tight.
3. Connect A+ on PTZ to T+ on terminal block and B- on controller to T- on terminal block. Fasten stop screws.
4. Connect *pluggable block* back into terminal block.

Make sure the DVR is grounded.

## Termination Switch Operation



- This function is applicable to certain models only.
- The termination switch is placed on the mainboard instead of the rear panel. Open the upper cover and turn on/off the SW switch if needed.

**Purpose:**

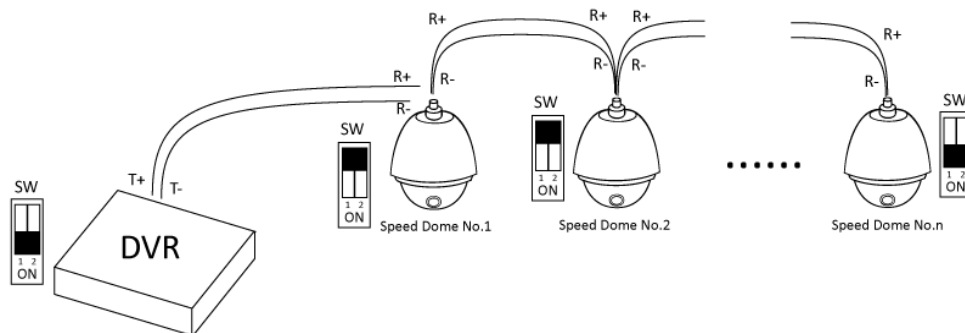
To connect the DVR with several speed domes, the multi-drop/bus topology can be used, which means multiple speed domes are connected with each other via the R+ and R- of RS-485 serial interface, for proper impedance and to reduce reflections, terminations should be in

place only at the 'start' and the 'end' of the bus/'daisy chain'.

**Steps:**

1. Turn on the termination switches on the DVR and the furthest speed dome.
2. Keep other termination switches off.

The connection diagram and status of each termination switch are shown in the following figure.



# Specifications

## Table 1 Specification

Model		KEZ-TRF4	KEZ-TRF8	KEZ-TRF16
Intelligent Video Inputs	Analog EZHD/SD Inputs	4	8	16
	HD Video Resolutions	EZHD / HD-TVI 720p30(25), 720p60(50), 1080p30(25)		
	Analog CVBS Video Input	Up to 960x480,720x480(NTSC); 960x576,720x576(PAL)		
	Adaptive Ports	Input Format Auto Detection, EZHD/SD can be mixed in any combination, at any time		
	Interface	BNC Connector; 1V p-p, 75Ω		
	Privacy masking	4 areas programmable in OSD menu		
	Additional OMNI-IP Plug-and-Play or ONVIF Channels (up to 2Mpixel)	2		
	Maximum OMNI-IP Plug-and-Play or ONVIF Channels (up to 2Mpixel)	2 ~ total cameras supported (disable any BNC channel and replace with IP cameras)		
	Total Cameras Supported	6	10	18
Video Output	Main HDMI & VGA	Full HD 1920×1080/60Hz; SXGA: 1280×1024/60Hz; 720P: 1280×720/60Hz; XGA: 1024×768/60Hz		
	CVBS Analog BNC	NTSC 704x480 / PAL 704x576; 1V p-p, 75Ω		
	Display Modes	1, 2x2, 1+5, 1+7, 3x3, 4x4 split; User Defined Sequence / Alarm Pop-up HDMI/VGA and/or CVBS may be configured as main or call/event monitor		
Recording	Video Compression	Dual Stream: H.264 for Main Stream and Sub-stream		
	Video Bitrate	32Kb/s~10Mb/s each channel		
	Encoding	Main Stream	1080p; 720p; WD1; 4CIF; VGA; CIF	
		Sub Stream	WD1, 4CIF; CIF; QVGA; QCIF	
	Frame Rate	Main Stream	1/16 fps ~ Real time frame rate	
		Sub Stream	1/16 fps ~ Real time frame rate	
	Quality	6 levels: Lowest/Lower/Low/Medium/Higher/Highest		
	Mode	Continuous; Motion; Alarm; Motion or alarm, Motion + Alarm, Video Content Analysis		
	Motion Detection	Configurable per camera for area(s), sensitivity and arming schedule programmable by day of week and hour of day		
	Schedule Period	Per day in 1 hour blocks; or 8 time periods per day, each with different record mode; plus holidays		
Pre- and Post- Event Recording	Pre-record 0~30 seconds; post record 5s~10 minutes			
Playback	Synchronous Playback	4 channels	8 channels	16 channels
	Playback Resolution	1080p, 720p, WD1, 4CIF, VGA, CIF, QVGA, QCIF		
	Search Type	Time/Date; motion or log event; Manual Tags; Smart Search for motion events from recorded video and VCA Smart Search can fast forward through playback periods when there is no motion or Video Content alarm in the video		
	Capacity	Up to record rate		
	Playback Controls	Play; Pause; Forward/Reverse; speed control for single~1.8~16X; jog/shuttle Slide bar with overview of record type and snapshot display from slider position		
	Digital Zoom During Playback	Supported on Local Displays and CMS		
Event & Alarm	Event Source	MD (Motion Detection), Video Loss, Video Tampering/Exceptions; Video Content Analysis (for up to 2 cameras)		
	Event Action Schedule	Per day in 1 hour blocks; or 8 time periods per day, each with different record mode; plus holidays		

	<b>Event Action</b>	Buzzer, E-mail, Alarm Full Screen Pop-up, Notify CMS Client, trigger alarm output
	<b>MD Area</b>	User selectable grid pattern 22x15 areas with adjustable per camera sensitivity
	<b>VCA Line Crossing</b>	Up to 4 lines per camera, each with direction and arming schedule. Maximum of 2 cameras.
	<b>VCA Area Intrusion</b>	Up to 4 areas per camera, each with arming schedule, percent area blocked and loitering timer thresholds. Maximum of 2 cameras.
<b>System Alarm</b>	<b>Alarm Source</b>	HDD Error, HDD Full, LAN Fail/Address Conflict, Illegal login, Video Signal Exception/, Record/Capture exception
	<b>Alarm Action</b>	Buzzer, E-mail, Notify CMS Client (network permitting), trigger alarm output
<b>Audio</b>	<b>Two-way audio</b>	Audio input pass through to remote web or CMS client; remote audio from web or CMS client pass through to audio output
	<b>Input</b>	4 Inputs for record, 1 input for two way audio; RCA, 2V p-p, 1K $\Omega$
	<b>Output</b>	2 Outputs; RCA, 2V p-p, 1K $\Omega$
	<b>Compression</b>	Up to 64Kbps, G.711u
<b>Network</b>	<b>Interface</b>	1Gb/s 1000 Base-T Ethernet RJ-45
	<b>Addressing</b>	Static IP, DHCP, xDSL support
	<b>NTP/DST</b>	Supported; choice of time zone, NTP server, DST start/end/offset
	<b>Protocols Supported</b>	TCP/IP, PPPoE, DHCP, DNS, DDNS, NTP, SMTP, SNMP, NFS, iSCSI, UPnP™, HTTPS, KT&C Plug-and-Play (for connected IP Cameras), OMNI Utility Device Discovery
	<b>NAT</b>	uPnP router NAT/port mapping forwards ports automatically (*Router must support/permit uPnP function)
	<b>Users</b>	Up to 128 simultaneous connected users
	<b>DDNS</b>	Simple DDNS free service tracks WAN IP address and HTTP port
<b>Security</b>	<b>User IDs</b>	"Admin", plus multiple configurable login IDs
	<b>User Levels</b>	All rights for "admin"; Per camera per user rights assignment for Operator and User levels
	<b>User Privilege Control</b>	Local and remote access to Live views, audio, recording, playback, menus, PTZ, alarms, copy, logs, upgrade, reboot
<b>Storage &amp; Clip copy</b>	<b>HDD Storage</b>	4 SATA HDD up to 4Tb each
	<b>eSATA</b>	One, on rear panel
	<b>NAS/SAN</b>	up to 8 network disks (8 NAS disks, or 7 NAS disks +1 IP SAN disk)
	<b>Copy Type</b>	Multi-Channel or Single Channel File
	<b>Copy Device</b>	USB 2.0 Drive (2 ports)
	<b>S.M.A.R.T.</b>	Temperature, duration, error rates, bad sector detection, and more
<b>Serial &amp; I/O</b>	<b>USB 2.0 Ports</b>	Two front, one rear for mouse and data I/O
	<b>Serial Port</b>	1 RS-232C (future use)
	<b>RS-485</b>	One; selectable speed and bit pattern; multiple protocols (Pelco P, Pelco D, others)
	<b>Inputs</b>	16 alarm inputs
	<b>Outputs</b>	4 alarm outputs
	<b>Keyboard</b>	Input for external control keyboard
	<b>Up the Cable Control</b>	Multiple protocols, can be sent out of any BNC port to compatible cameras
<b>User Controls</b>	<b>Local Controls</b>	Front Panel camera, function and navigation buttons; IR Remote; Mouse
<b>Software</b>	<b>Web Viewer</b>	Live view, playback and configuration via IE, Chrome, Firefox, Safari (with free plug-in/extension installed)
	<b>User Rights Control</b>	Per user-per camera for multiple functions
	<b>Mobile Viewer</b>	iOS and Android supported ; live 1 & 4 camera views; single camera playback; snapshots from live or play; copy clips/record to smartphone; audio

		support; PTZ control. HD version of app, optimized for tablets, displays up to 16 live view cameras		
	<b>CMS</b>	Free PC and MAC Clients support multiple device viewing, playback (with digital zoom) and configuration; user rights per camera; E-map support; live view up to 64 cameras in 4:3 and 48 cameras in 16:9; up to 16 cameras in playback		
	<b>Event Logging</b>	Multiple types: alarm, exception, operation, information; dozens of sub-types within each major type		
	<b>Firmware Upgrade</b>	From USB or remotely		
	<b>Backup/Restore Configuration</b>	From USB or remotely		
<b>General</b>	<b>Dimension (W x H x D)</b>	17.5" x 15.3" x 2.7" 445 x 390 x 70mm		
	<b>Chassis Type</b>	19" rack-mountable 1.5U chassis		
	<b>Weight without HDDs</b>	11 lb. / 5Kg		
	<b>Operating Temp</b>	14°F~131°F (-10°C~55°C)		
	<b>Operating Humidity</b>	10% ~ 90%		
	<b>Voltage</b>	100~240 VAC 47~63Hz		
	<b>Power</b>	Up to 30W	Up to 40W	Up to 55W
	<b>Certifications</b>	FCC, CE, RoHS		

## HDD Storage Calculation Chart

The following chart shows an estimation of storage space used based on recording at one channel for an hour at a fixed bit rate.

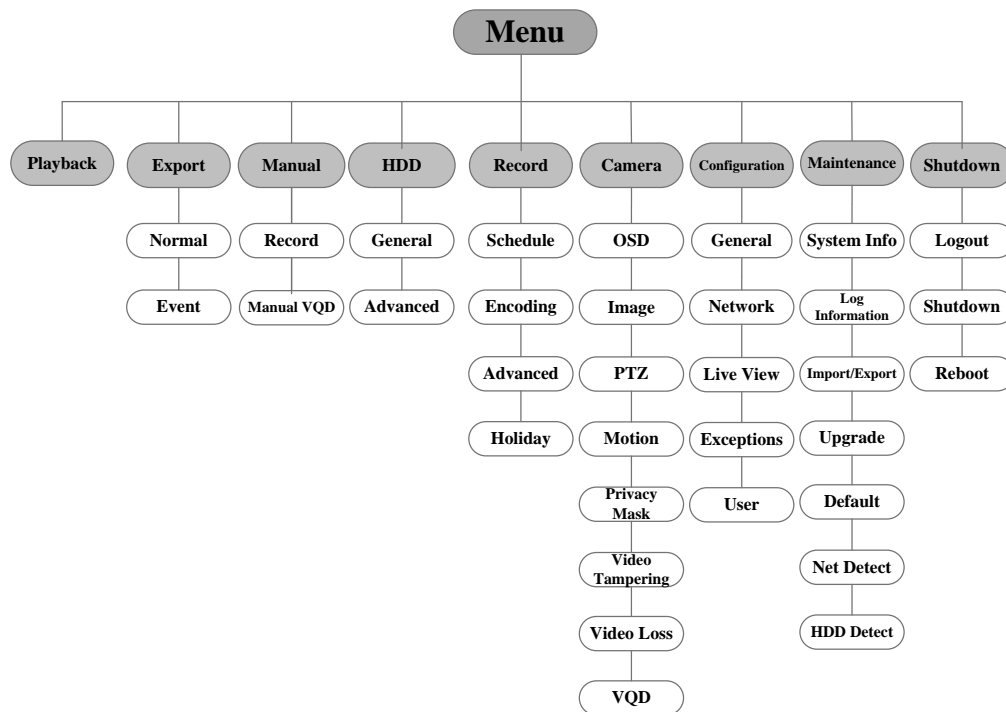
Bit Rate	Storage Used
96K	42M
128K	56M
160K	70M
192K	84M
224K	98M
256K	112M
320K	140M
384K	168M
448K	196M
512K	225M
640K	281M
768K	337M
896K	393M
1024K	450M
1280K	562M
1536K	675M
1792K	787M
2048K	900M
4096K	1800M
8192K	3600M
16384K	7200M



Please note that supplied values for storage space used are just for reference. Storage space used is estimated by formulas and may have some deviation from actual value.

# Menu Operation

## Menu Structure



## Startup and Shutdown

Proper startup and shutdown procedures are crucial to expand the service time of the DVR.

### To start the DVR:

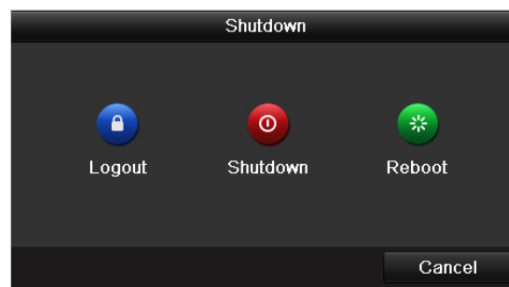
Check the power supply is plugged into an electrical outlet. It is **HIGHLY** recommended that an Uninterruptible Power Supply (UPS) be used in conjunction with the device. Turn on the power switch on the rear panel; the Power indicator LED on the front panel should be yellow.

### To shut down the DVR:

#### Steps:

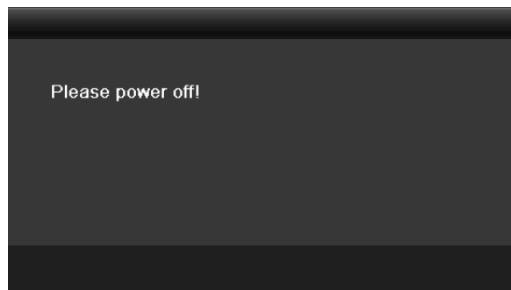
1. Enter the Shutdown menu.

Menu > Shutdown



2. Select the **Shutdown** button.
3. Click the **Yes** button.

4. Turn off the power switch on the rear panel when the note appears.



After the device starting up, the wizard will guide you through the basic settings, including editing password, date and time settings, network settings, HDD initializing, and recording.

## Live View

Some icons are provided on screen in Live View mode to indicate different camera status. These icons include:

### Live View Icons

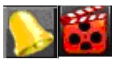
In the live view mode, there are icons at the right top of the screen for each channel, showing the status of the record and alarm in the channel, so that you can find problems as soon as possible.



Indicating that there is an alarm or are alarms. Alarm includes video loss, tampering, motion detection or sensor alarm, etc.



Recording (manual record, continuous record, motion detection or alarm triggered record)



Alarm & Recording



Event/Exception (event and exception information, appears at the lower-left corner of the screen.)

## Adding IP Cameras

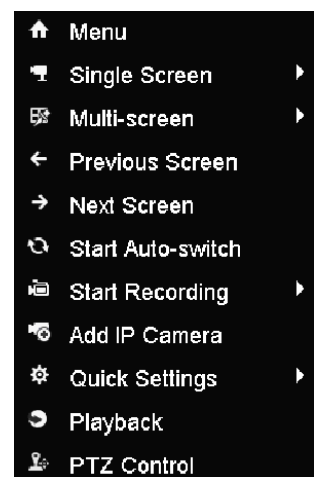


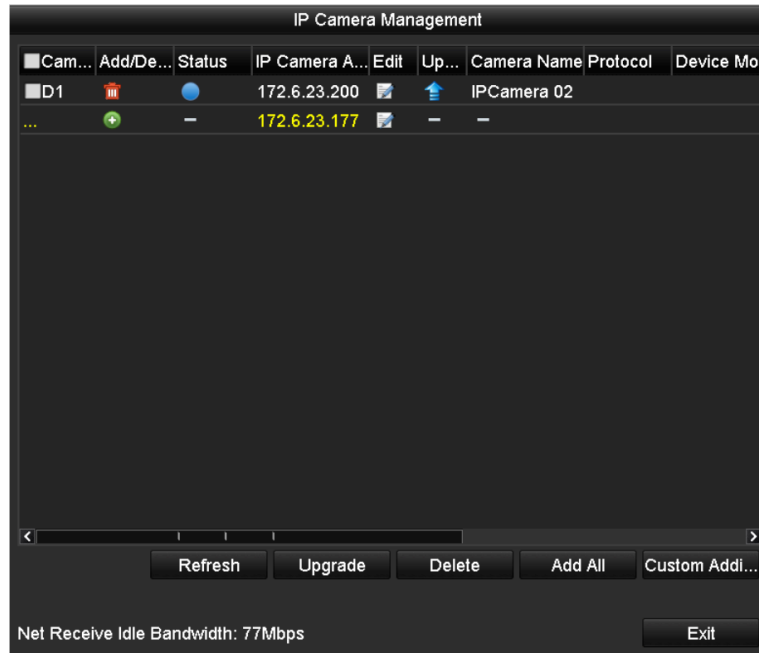
The connection of KT&C PnP IP and ONVIF cameras is supported by the EZHD DVRs.

For all EZHD-TRF4/8/16 DVR models 2 additional network cameras can be added. BNC cameras can be disabled to allow the connection of additional IP cameras up to the maximum number of cameras/channels supported by the recorder.

### Steps:

1. Right-click the mouse in the live view mode to show the right-click menu.
2. Select **Add IP Camera** in the pop-up menu to enter the IP Camera Management interface.











3. The online cameras with same network segment will be displayed in the camera list. Click the  button to add the camera.



The added camera is marked in white while the camera not added is marked in yellow.

Explanation of the icons

Icon	Explanation	Icon	Explanation
	Edit basic parameters of the camera		Add the detected IP camera.
	The camera is connected.		The camera is disconnected; you can click the icon to get the exception information of camera.
	Delete the IP camera.		Advanced settings of the camera.

4. To add other IP cameras:

- 1) Click the **Custom Adding** button to pop up the Add IP Camera (Custom) interface.
- 2) You can edit the IP address, protocol, management port, and other information of the IP camera to be added.
- 3) Click **Add** to add the camera.
- 4) To disable BNC cameras and replace them with IP cameras, see the detailed instructions in the full User Guide.

## Record

### Before you start:

Make sure that the HDD has already been installed. If not, please install a HDD and initialize it. You may refer to the user manual for



detailed information.

**Purpose:**

Two kinds of record types are introduced in the following section, including Instant Record and All-day Record. And for other record types, you may refer to the user manual for detailed information.



After rebooting all the manual records enabled are canceled.

## Instant Recording

On the live view window of each channel, there is a quick setting toolbar which shows on the bottom of the window when you click on it.



Click the icon to enable the record, and the icon turns to . And click icon to disable the record, then the icon turns to .

## All-day Recording

Perform the following steps to set the all-day recording.

On the live view window, right lick the window and move the cursor to the Start Recording option, and select Continuous Record or Motion Detection Record on your

And click the **Yes** button in the popup Attention message box to confirm the settings. the channels will start to record in the selected mode.

## Playback

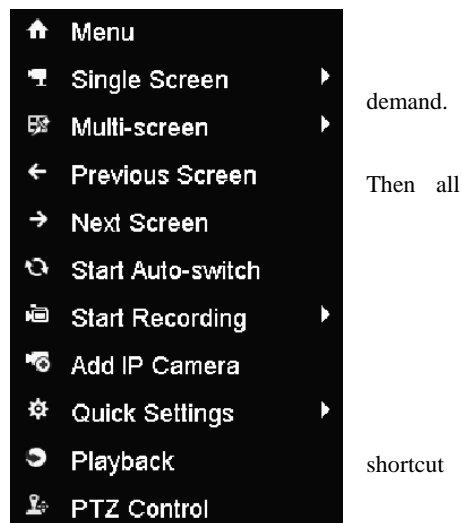
Play back the record files of a specific channel in the live view menu.

### ● OPTION 1:

Choose a channel under live view using the mouse and click the button in the operation menu.



Only record files recorded during the last five minutes on this channel will be played back.





## ● OPTION 2:

1. Enter the Playback menu.

Right click a channel in live view mode and select **Playback** from the menu.

2. Playback management.

The toolbar in the bottom part of Playback interface can be used to control playing process.



Just check the channel or channels if you want to switch playback to another channel or execute simultaneous playback of multiple channels.

## Backup

Recorded files can be backed up to various devices, such as USB flash drives, USB HDDs or USB DVD writers.

To export recorded files:

1. Enter Video Export interface.

Choose the channel(s) you want to back up and click the **Quick Export** button.

**Normal**

☒ Analog
 ☒ A1
 ☒ A2
 ☒ A3
 ☒ A4
 ☒ A5
 ☒ A6
 ☒ A7
 ☒ A8  
☒ A9
 ☒ A10
 ☒ A11
 ☒ A12
 ☒ A13
 ☒ A14
 ☒ A15
 ☒ A16

Start/End time of record: 04-03-2014 09:31:55 -- 15-04-2014 18:36:11

Record Type: All

File Type: All

Start Time: 15-04-2014 00:00:00

End Time: 15-04-2014 23:59:59

2. Enter Export interface, choose backup device and click the **Export** button to start exporting.

Export

Device Name

USB1-1

▼

Refresh

Name

Size

Type

Edit Date

Delete

Play

Free Space

2,004MB

New Folder

Format

Export

Cancel


- ### 3. Check backup result.

Choose the record file in Export interface and click  button to check it.

## Accessing by Web Browser

## Logging In

You can access the DVR from a web browser. Open web browser, input the IP address of the device and then press Enter. The login interface appears.

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HDT DISTRIBUTION GERMANY

English ▾

User Name

Password

Login

Input the user name and password, and click the **Login** button.

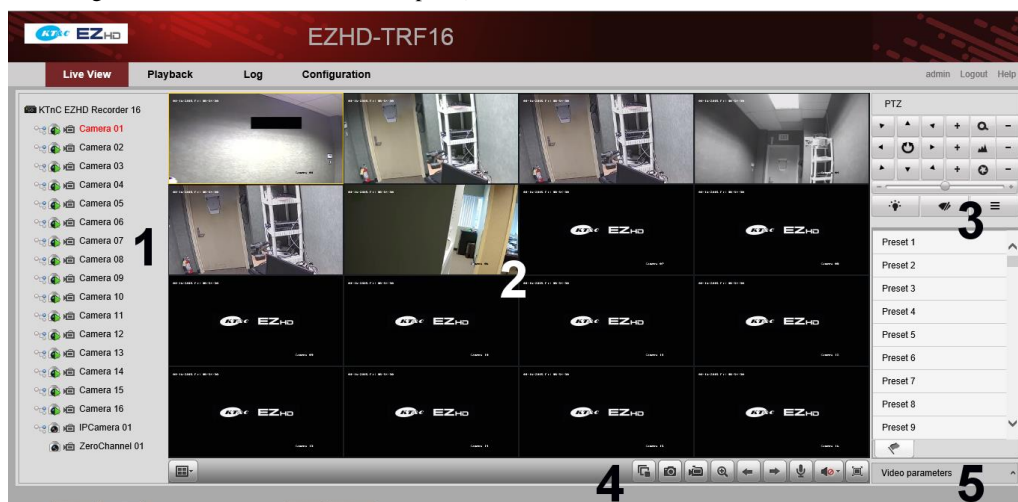


- You may use one of the following listed web browsers: Internet Explorer 6.0, Internet Explorer 7.0, Internet Explorer 8.0, Internet Explorer 9.0, Internet Explorer 10.0, Apple Safari, Mozilla Firefox, and Google Chrome.
- The supported resolutions are 1024\*768 and above.
- The default IP address of the DVR is 192.0.0.64.
- The default user name is admin, and password is 12345.
- It is highly recommended that you change the default password right after the first login to avoid security issues.


When you log in for the first time, the system will remind you to install the Plug-in control. You must close the browser before installing the plug-in. After the installation, you can configure and manage the DVR remotely.

## Live View

The live view interface appears by default when you log into the device. You can choose to automatically start live streaming, or disable it as needed. (See Local Configuration / Auto Start Live View option).




### Interface Functions











No.	Name	Description
1	Channel List	Displays the list of channels and the playing and recording status of each channel.
2	Live View Window	Displays the images from the channels; single and multi-window division is supported.
3	PTZ Control	Pan, tilt, zoom operations are supported, as well as preset editing and calling.  PTZ functions can only be used if the connected camera supports PTZ control.
4	Play Control Bar	Live view and recording controls (see table below for details)
5	Video Parameters Configuration	Brightness, contrast, saturation and hue of the image can be adjusted.

### Start Live View

#### Steps:

1. In the live view window, select an active window by clicking the mouse.
2. Double click a camera from the device list to start live view.
3. You can click the  button on the toolbar to start/stop the live view from all cameras on the device list.

Refer to the following table for the description of buttons on the live view window:

Icon	Description	Icon	Description
	Select the window-split mode		Previous page
	Start/Stop all live view		Next page
	Capture pictures from the camera live view		Start/stop audio
	Start/Stop all recording		Start/Stop two-way Audio
	Enable/Disable digital zoom		Adjust volume

## Remote Recording at the PC

### Before you start

Make sure the PC has access to adequate HDD or network disk storage, and the HDD or network disk has been formatted and chosen in Local Configuration as the target recording path.

Configuration	
<b>Local Configuration</b>	
Protocol	TCP
Stream Type	Sub Stream
Image Size	Auto-fill
Record File Size	512M
Live View Performance	Balanced
Auto Start Live View	Yes
Rules	Enable
Save record files to	C:\RecordFiles <span>Browse</span>
Save snapshots in live view to	C:\CaptureFiles <span>Browse</span>
Save snapshots when playback to	C:\PlaybackPics <span>Browse</span>
Save clips to	C:\PlaybackFiles <span>Browse</span>
Save downloaded files to	C:\DownloadFiles <span>Browse</span>
<span>Save</span>	

You can then click on the Snapshot and Record buttons on the control bar at the bottom of the screen.

## Local Recording (in the DVR) using the Web Interface

Two recording types can be configured: Manual and Scheduled. This section describes the configuration for scheduled recording.

### Steps:

1. Click **Configuration > Remote Configuration > Camera Settings > Schedule Settings** to enter the Record Schedule settings interface.
2. Select the camera to configure for the recording schedule.
3. Check the checkbox of **Enable Record Schedule** to enable recording schedule.
4. Click **Edit** to edit record schedule.
5. Choose the day in a week to configure scheduled recording.
  - 1) Configure All Day or Customize Record:
    - If you want to configure the all-day recording, please check the **All Day** checkbox.
    - If you want to record in different time sections, check the **Customize** checkbox. Set the Start Time and End Time.



The times for each segment cannot be overlapped. Up to 8 segments can be configured.

- 2) Select a **Record Type**. The record type can be Continuous, Motion, Alarm, Motion & Alarm, and Motion | Alarm.
  - 3) Check the checkbox of **Select All** and click **Copy** to copy settings of this day to the whole week. You can also check any of the checkboxes before the date and click **Copy**.
  - 4) Click **OK** to save the settings and exit the Edit Schedule interface.
6. Click **Advanced** to configure advanced record parameters.
7. Click **Save** to validate the above settings.

## Playback using the Web Interface



### Interface Introduction

No.	Name	Description
1	Channel List	Displays the list of channels and the playing status of each channel.
2	Playback Window	Displays the image of channel.
3	Play Control Bar:	Play control operations are supported.
4	Time Line	Displays the time bar and the records marked with different colors.
5	Playback Status	Displays the playback status, including channel number and playback speed.
6	Calendar	You can select the date to play.

### Start Playback

#### Steps:

1. Click **Playback** on the menu bar to enter playback interface.
2. Click the camera from the device list for playback.
3. Select the date from the calendar and click **Search**.
4. Click the **Play** button to play the video file searched on the current date.
5. Use the buttons on the toolbar to operate in playback mode.





Button	Description	Button	Description
	Play/Pause		Stop
	Slow down		Speed up
	Play by single frame		Capture
	Stop all playback		Download

	Video clip		Open/Close audio
	Full Screen		Reverse play

6. You can drag the progress bar with the mouse to locate the exact playback point. You can also input the time in the textbox

 and click  button to locate the playback point.

The color of the video on the progress bar stands for the different video types.

 Command  Schedule Recording  Alarm Recording  Manual Recording

## Logs

You can view and export the log files at any time, including operation, alarm, exception and information of device.

### *Before you start*


The Log function can be realized only when the device is connected with HDD or network disk. And make sure the HDD or network disk has been initialized for the first time to use.

### *Steps:*

1. Click **Log** on the menu bar to enter the Log interface.
2. Set the log search conditions to refine your search, including the Major Type, Minor Type, Start Time and End Time.
3. Click the **Search** button to start searching log files.
4. The matched log files will be displayed on the list shown below.



Up to 100 log files can be displayed on each page.

You can click the  button to save the searched log files to local directory.

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