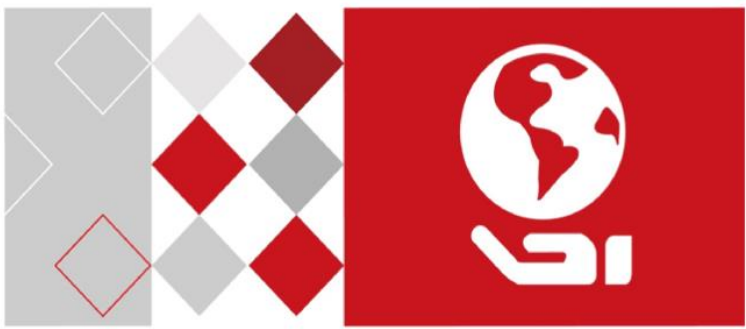
HIKVISION
HiWatch Series



Digital Video Recorder

Quick Start Guide

Quick Start Guide

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About this Manual

This Manual is applicable to Turbo HD Digital Video Recorder (DVR).
The Manual includes instructions for using and managing the product. Pictures, charts, images and all other information hereinafter are for description and explanation only. The information contained in the Manual is subject to change, without notice, due to firmware updates or other reasons. Please find the latest version in the company website ((https://www.hi-watch.eu/).
Please use this user manual under the guidance of professionals.

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Regulatory Information

FCC Information

Please take attention that changes or modification not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

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

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 EMC Directive 2014/30/EU, the LVD Directive 2014/35/EU, 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

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

Industry Canada ICES-003 Compliance

This device meets the CAN ICES-3 (A)/NMB-3(A) standards requirements.

Symbol Conventions

The symbols that may be found in this document are defined as follows.

Symbol	Description
NOTE	Provides additional information to emphasize or supplement important points of the main text.
WARNING	Indicates a potentially hazardous situation, which if not avoided, could result in equipment damage, data loss, performance degradation, or unexpected results.
DANGER	Indicates a hazard with a high level of risk, which if not avoided, will result in death or serious injury.

Safety Instructions

- Proper configuration of all passwords and other security settings is the responsibility of the installer and/or end-user.
- In the use of the product, you must be in strict compliance with the electrical safety regulations of the nation and region. Please refer to technical specifications for detailed information.
- Input voltage should meet both the SELV (Safety Extra Low Voltage) and the Limited Power Source with 100~240 VAC, 12 VDC or 48 VDC according to the IEC60950-1 standard. Please refer to technical specifications for detailed information.
- Do not connect several devices to one power adapter as adapter overload may cause over-heating or a fire hazard.
- Please make sure that the plug is firmly connected to the power socket.
- If smoke, odor or noise rise from the device, turn off the power at once and unplug the power cable, and then please contact the service center.

Preventive and Cautionary Tips

Before connecting and operating your device, please be advised of the following tips:

- Ensure unit is installed in a well-ventilated, dust-free environment.
- Unit is designed for indoor use only.
- Keep all liquids away from the device.
- Ensure environmental conditions meet factory specifications.
- Ensure unit is properly secured to a rack or shelf. Major shocks or jolts to the unit as a result of dropping it may cause damage to the sensitive electronics within the unit.
- Use the device in conjunction with an UPS if possible.
- Power down the unit before connecting and disconnecting accessories and peripherals.
- A factory recommended HDD should be used for this device.
- Improper use or replacement of the battery may result in hazard of explosion. Replace with the same or equivalent type only. Dispose of used batteries according to the instructions provided by the battery manufacturer.

Chapter 1 Rear Panel Interfaces Description

The rear panel interfaces vary with different models. Refer to Table 1-1 for the common interfaces description of rear panels.

Table 1-1 Common Interfaces Description of Rear Panels

Item	Description	Item	Description
VIDEO IN	BNC interface for Turbo HD and analog video input	**VIDEO OUT**	BNC connector for video output
AUDIO IN	RCA connector	**AUDIO OUT**	RCA connector
LINE IN	Connector for two-way audio input	**USB Interface**	Universal Serial Bus (USB) port for additional devices
VGA	DB15 connector for VGA output. Displays local video output and menu.	**HDMI**	HDMI video output connector
RS-485 Interface	Connector for RS-485 devices	**RS-232 Interface**	Connector for RS-232 devices
LAN	Connector for network	**eSATA**	Storage and expansion interface for record or backup
ALARM IN/OUT	Connector for alarm input/output	**GND**	Ground
Power Switch	Switch for turning on/off the device	**Power Supply**	100 to 240 VAC, 48 VDC, or 12 VDC for different models

Chapter 2 Installation and Connections

2.1 DVR Installation

During installation of the DVR:

- Use brackets for rack mounting.
- Ensure ample room for audio and video cables.
- When routing cables, ensure that the bend radius of the cables are no less than five times than its diameter.
- Connect the alarm cable.
- Allow at least 2 cm (≈0.75-inch) of space between racks mounted devices.
- Ensure the DVR is grounded.
- Environmental temperature should be within the range of -10 to +55º C, +14 to +131º F.
- Environmental humidity should be within the range of 10% to 90%.

2.2 Hard Disk Installation

Before you start

Before installing a hard disk drive (HDD), please make sure the power is disconnected from the DVR. A factory recommended HDD should be used for this installation.

One or two SATA hard disks can be installed depending on different models.

Tools Required: Screwdriver.

NOTE

As the installation steps of HDD are similar among different models, here we just take an example.

Step 1 Remove the cover from the DVR by unfastening the screws on the back side.

Figure 2-1 Remove Cover

Step 2 Connect one end of the data cable to the motherboard of DVR and the other end to the HDD.

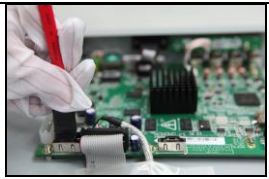

Figure 2-2 Connect Data Cable

Step 3 Connect the power cable to the HDD.

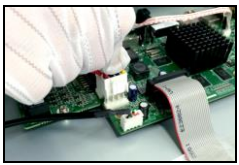

Figure 2-3 Connect Power Cable

Step 4 Place the HDD on the bottom of the device and then fasten the screws on the bottom to fix the HDD.

Figure 2-4 Fix Hard Disk

Step 5 Re-install the cover of the DVR and fasten screws.

2.3 RS-485 and Controller Connection

To connect PTZ to the DVR:

Step 1 Disconnect *pluggable block* from the RS-485 terminal block.

Step 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.

Step 3 Connect A+ on PTZ to D+ on terminal block and B- on controller to D- on terminal block. Fasten stop screws.

Step 4 Connect pluggable block back into terminal block.

Typical Connection:

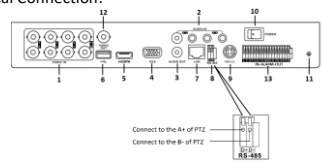

Figure 2-5 Controller Connection A

NOTE

Make sure both the controller and DVR are grounded.

Chapter 3 Menu Operation

3.1 Startup

Proper startup is crucial to expanding the life of the DVR.

Step 1 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. The Power button on the front panel should be red, indicating the device is receiving the power.

Step 2 Press the POWER button on the front panel.
The Power LED should turn blue. The unit will begin to start.

3.2 Activating Your Device

Purpose

For the first-time access, you need to activate the device by setting an admin password. No operation is allowed before activation. You can also activate the device via Web Browser, SADP or client software.

Step 1 Enter the same password in the text fields of **Create New Password** and **Confirm New Password**.

Step 2 Click **OK** to save the password and activate the device.

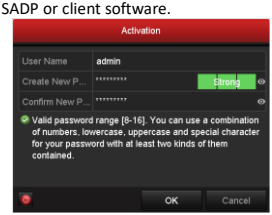

Figure 3-1 Set Admin Password

WARNING

STRONG PASSWORD RECOMMENDED–We highly recommend you create a strong password of your own choosing (Using a minimum of 8 characters, including at least three of the following categories: upper case letters, lower case letters, numbers, and special characters.) in order to increase the security of your product. And we recommend you reset your password regularly, especially in the high security system, resetting the password monthly or weekly can better protect your product.

NOTE

Clear-text password is supported. Click and you can see the clear text of the password. Click the icon again and the content of the password restores invisible (the same below).

3.3 Using the Unlock Pattern for Login

Purpose

For the Admin user, you can configure the unlock pattern for device login.

After the device is activated, you can configure the device unlock pattern.

Step 1 Use the mouse to draw a pattern among the 9 dots on the screen. Release the mouse when the pattern is done.

NOTE

- Connect at least 4 dots to draw the pattern.
- Each dot can be connected for once only.

Step 2 Draw the same pattern again to confirm it. When the two patterns match, the pattern is configured successfully.

Step 3 You can use the configured unlock pattern for future login.

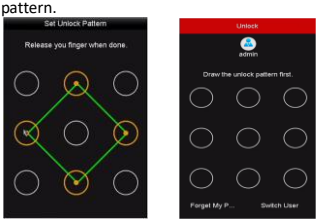

Figure 3-2 Draw the Pattern

3.4 User Login

Purpose

If DVR has logged out, you must log in to the device before operating the menu and other functions.

Step 1 Select the **User Name** in the drop-down list.

Step 2 Enter the **Password**.

Step 3 Click **OK** to log in.

NOTE

For the admin, if you have entered the wrong password for 7 times, the account will be locked for 60 seconds. For the operator, if you have entered the wrong password for 5 times, the account will be locked for 60 seconds.

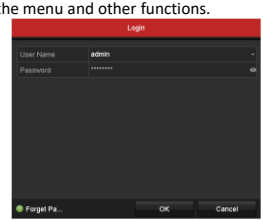

Figure 3-3 Login

3.5 User Logout, Shutdown and Reboot

Purpose

You can log out of the system, shut down, or reboot the device on your demands.

Step 1 Go to **Menu > Shutdown**.

Step 2 Click **Logout**, **Shutdown**, or **Reboot**.

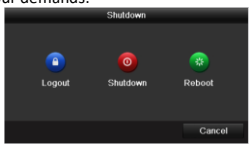

Figure 3-4 Logout

NOTE

After you have logged out of the system, menu operation on the screen is invalid. It is required to enter a user name and password to unlock the system.

3.6 Viewing Signal Input Status

Purpose

The analog signal inputs (Turbo HD, AHD, HDCVI, CVBS) and IP signal input can be recognized and connected automatically. For some series of DVR, you can configure 5 MP long distance transmission on the Signal Input Status interface. For other models, there is no Signal Input Status interface.

NOTE

The following steps are about 5 MP long distance transmission configuration for the supported DVR.

Step 1 Go to **Menu > Camera > Signal Input Status**.

Figure 3-5 Signal Input Status

Step 2 Click ⚙ to enter the 5 MP Long Distance Transmission Settings interface.

Step 3 Check the channel(s) to enable 5 MP long distance transmission.

Step 4 Click **Apply** to save the settings and **OK** to return to the Signal Input Status interface.

Figure 3-6 5 MP Long Distance Transmission Settings

3.7 Adding IP Cameras

Purpose

Before you can get live video or record the video files, you should add the network cameras to the connection list of the device.

Before you start

Ensure the network connection is valid and correct, and the IP camera to add has already been activated. Please refer to the *User Manual* for activating the inactive IP camera.

Step 1 Go to **Menu > Camera > IP Camera**.

Step 2 Select the IP camera from the list and click to add the camera (with the same admin password of the DVR's).

Step 3 (Optional) Check **Enable H.265 (For Initial Access)** for the connected IP camera supporting H.265. Then the IP camera will be encoded with H.265.

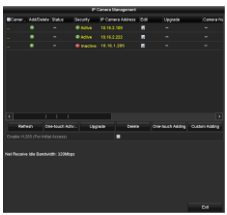

Figure 3-7 Add IP Camera

3.8 Connecting PoC Cameras

Purpose

Some models support PoC (Power over Coaxitron) cameras connection. DVR will detect the connected PoC cameras automatically, manage the power consumption via the coaxial communication, and provide power to the cameras via coaxitron.

Before you start

Connect the PoC camera to the DVR.

Step 1 Go to **Menu > Camera > PoC Information**.

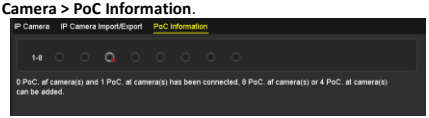

Figure 3-8 PoC Information

Step 2 Check the status of connected PoC camera.

: When the PoC camera is connected to the DVR, the default status is AF.

: If the connected PoC camera supports AT mode and the power of the DVR PoC module is enough, the DVR will switch the default AF mode to AT mode.

: If the DVR detects the power consumption of the PoC camera is higher than the allowed maximum power of DVR PoC module, it will stop power supply to the camera, and the camera status becomes grey.

Step 3 Check the connected AF or AT camera number and the connectable camera number.

NOTE

- Only Hikvision PoC camera is supported.
- The maximum connectable AT/AF camera number varies with different models.
- Do not unplug or plug the PoC camera if it is powered by the external power supply.

3.9 Network Settings

3.9.1 Configuring General Settings

Purpose

Network settings must be properly configured before you operate DVR over network.

Step 1 Go to **Menu > Configuration > Network > General**.

Step 2 Configure the general parameters of network.

Step 3 Click **Apply** to save the settings.

Figure 3-9 Network Settings

3.9.2 Configuring Hik-Connect

Purpose

Hik-Connect provides the mobile phone application and the service platform page (www.hik-connect.com) to access and manage your connected DVR, which enables you to get a convenient remote access to the surveillance system.

NOTE

The Hik-Connect can be enabled via operation on SADP software, GUI and Web browser. We introduce the operation steps on GUI in this section.

Step 1 Go to **Menu > Configuration > Network > Platform Access**.

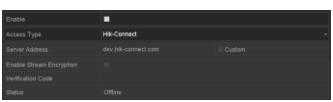

Figure 3-10 Hik-Connect Settings

Step 2 Check the **Enable** checkbox to activate the function.
Then the **Service Terms** interface pops up.

1) Create the verification code and enter the code in the **Verification Code** text field.
2) Check the checkbox of **The Hik-Connect service will require internet access. Please read Service Terms and Privacy Statement before enabling the service**.
3) Scan the QR code on the interface to read the Service Terms and the Privacy Statement.
4) Click **OK** to save the settings and return to the Hik-Connect interface.

Figure 3-11 Service Terms

NOTE

- Hik-Connect is disabled by default.
- The verification code is empty when the device leaves factory.
- The verification code must contain 6 to 12 letters or numbers and is case sensitive.
- Every time you enable Hik-Connect, the Service Terms interface pops up and you should check the checkbox before enabling it.

Step 3 (Optional) Check **Custom** and enter the **Server Address**.

Step 4 (Optional) Check **Enable Stream Encryption**.
After this feature is enabled, the verification code is required for remote access and live view.

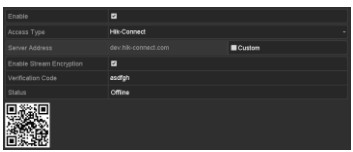

Figure 3-12 Hik-Connect Settings

NOTE

You can use the scanning tool of your phone to quickly get the code of the device by scanning the QR code.

Step 5 Click **Apply** to save the settings.
After configuration, you can access and manage the DVR by your mobile phone on which the Hik-Connect application is installed or by the website (www.hik-connect.com).

NOTE

Please refer to the help file on the official website (www.hik-connect.com) and the *Hik-Connect Mobile Client User Manual* for adding the device to Hik-Connect and more operation instructions.

3.10 Live View

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

Live View Icons

In the live view mode, there are icons at the upper-right corner of the screen for each channel, showing the status of the record and alarm in the channel for quick reference.

Alarm (video loss, tampering, motion detection, VCA or sensor alarm)

Record (manual record, continuous record, motion detection, VCA or alarm triggered record)

Alarm and Record

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

3.11 Recording Settings

Before you start

Make sure that the disk has already been installed. If not, please install a disk 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.

NOTE

After rebooting all the manual records enabled are canceled.

Step 1 Click **Start Recording** from the right-click menu.

Step 2 Select **Continuous Record** or **Motion Detection Record** on your demand.

Step 3 Click **Yes** in the pop-up box to confirm the settings.

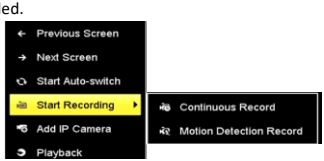

Figure 3-13 Start Recording from Right-Click Menu

3.12 Playback

Purpose

The recorded video files and pictures on the hard disk can be played back in the following modes: instant playback, all-day playback for the specified channel, and playback by normal/event/smart/tag/system logs/sub-periods/external file search/picture.

Step 1 Go to **Menu > Playback**.

Step 2 Check the channel(s) in the channel list for playback.

Step 3 Double click a date on the calendar.

Step 4 (Optional) Use the toolbar in the bottom part of Playback interface to control the playing progress.

Step 5 (Optional) Select the channel(s) to execute simultaneous playback of multiple channels.

Figure 3-14 Playback

Chapter 4 Accessing by Web Browser

NOTE

You shall acknowledge that the use of the product with Internet access might be under network security risks. For avoidance of any network attacks and information leakage, please strengthen your own protection. If the product does not work properly, please contact with your dealer or the nearest service center.

Purpose

You can get access to the device via web browser. 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 include 1024*768 and above.

Step 1 Open web browser, enter the IP address of the device and then press Enter.

Step 2 Log in to the device.

- If the device has not been activated, you need to activate the device first by setting the password for the admin user account.
- If the device is already activated, enter the user name and password in the login interface, and click **Login**.

Step 3 Install the plug-in before viewing the live video and managing the camera. Please follow the installation prompts to install the plug-in.

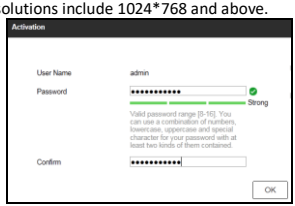

Figure 4-1 Activate the Device

Figure 4-2 Login

NOTE

- You may have to close the web browser to finish the installation of the plug-in.
- After login, you can perform the operation and configuration of the device, including the live view, playback, log search, configuration, etc.

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