

HDCVI Gateway Bullet Camera

User's Manual

V1.0.0

1.2.51.32.12927-0000

- Heavy stress, violent vibration or water splash are not allowed during transportation, storage and installation.
- Please pack the device with standard factory packaging or material with same quality when transporting the device.
- It is recommended to use the device together with lightning protection device to enhance lightning protection effect.
- It is recommended to GND the device to enhance device reliability.
- It is advised to use qualified video transmission cable to improve video quality. It is recommended to use RG59 coaxial cable or higher standard.

Warning

- Please use the standard accessories provided by manufacturer and make sure the device is installed and fixed by professional engineers.
- Please prevent the device surface from the radiation of laser beam when using laser beam device.
- Please do not provide two or more power supply modes for the device, otherwise it may cause damage to the device.
- Any device is not supported to be connected between the camera and PoC Transceiver when the camera is in the condition of PoC power supply, including UTC, Balun, optical transceiver, distributor and convertor etc.
- Otherwise it may burn the connected device.
- PoC supply voltage is up to 52V. Therefore please do not dismantle the device during normal operation; otherwise it may cause danger to both device and users due to high voltage.

Statement

- Please refer to the actual product for more details; the manual is just for reference.
- The manual will be regularly upgraded according to the product update; the upgraded content will be added in the manual without prior announcement.
- Please contact the customer service for the latest procedure and supplementary documentation.
- The company is not liable for any loss caused by the operation which is not followed by the manual.
- Please refer to the company's final explanation if there is any doubt or dispute.

1 General Introduction

1.1 Overview

This series HDCVI gateway camera conforms to the HDCVI standard. It supports megapixel definition and coaxial transmission for both video and control signal. The camera is equipped with in-house developed smart sensor and intelligent monitoring and control device. The product needs to be used together with XVR which supports HDCVI standard and realizes high speed, long distance, realtime and lossless image transmission, besides it supports 433MHz/868 MHz /915 MHz frequency band wireless communications while conforming to Airfly protocol. The device can be applied to the places which require UHD image quality with complex light such as banking, telecommunication, supermarket, hotel, government, school, airport, factory, public security, judicial and safe city etc.

1.2 Features

- 720P series supports RG59 coaxial cable transmission without any loss. The distance is over 500m, 1080P, 4M and 4K series support RG59 coaxial cable transmission without any loss. The distance is over 300m.
- Supports alarm signal wireless transmission distance up to 100m in the areas without blocks (It is different according to different types of node).
- Supports wireless alarm devices pairing via OSD menu.
- It has access to max. 32 channels wireless nodes.
- Supports auto day/night function, realizes round-the-clock monitoring.
- Supports parameter adjustment via OSD menu.
- Supports DC 12V/30% wide voltage power supply.
- Supports IP67 compliance.

Welcome

Thank you for purchasing our HDCVI camera! This user's manual is designed to be a reference tool for your system. Please read the following safeguard and warnings carefully before you use this series product! Please keep this user's manual well for future reference!

Important Safeguards and Warnings

Electrical safety

- All installation and operation here should conform to your local electrical safety codes.
- The power shall conform to the requirement in the SELV (Safety Extra Low Voltage) and the Limited power source is rated DC 12V or AC24V in the IEC60950-1. (Power supply requirement is subject to the device label).
- Please install easy-to-use device for power off before installing wiring, which is for emergent power off when necessary.
- Please check if the power supply meets the requirements of working voltage of the camera before operating the device (The material and length of the power supply cable will influence terminal voltage value).
- Please prevent the line cord from being trampled or pressed, especially the plug, power socket and the junction from the device.

Environment

- Please don't aim the device at strong light (such as lighting, sunlight and so on) to focus.
- Please transport, use and store the device within the range of allowed humidity and temperature.
- Please do not allow water and other liquid falling into the camera in case that the internal components are damaged.
- Please keep the sound ventilation in case of heat accumulation.

2 Device Structure

2.1 Dimension

Please refer to Figure 2-1 for the dimension. The unit is mm (inch).

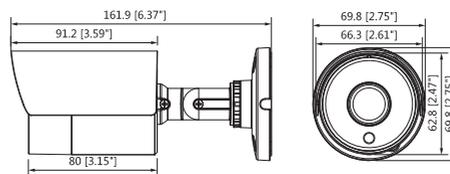


Figure 2-1

2.2 Cable Port

Please refer to Figure 2-2 for the power port.

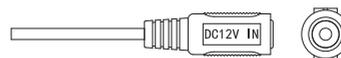


Figure 2-2

Please refer to Figure 2-3 for the video port.

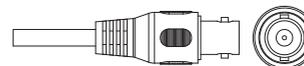


Figure 2-3

3 Device Installation

Caution

- The installation ceiling or wall shall be thick enough to sustain at least 3X weight of the camera.
- Please do not remove the electrostatic adsorption film (if any) on the surface of transparent cover before installation and debugging is completed, which is to avoid damage during installation.
- Please do not install it near city power transmission cable.
- Please do not install it near large-scale metal products.
- Please do not install it near high-power electrical appliance and strong current, electromagnetic environment.
- The following installation figures are for reference only; please refer to the actual device for more details.

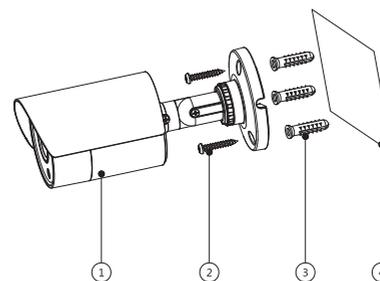


Figure 3-1

SN	Name
1	Device Body
2	Self-tapping Screw
3	Expansion Bolt
4	Mounting Surface

Table 3-1

Step 1

Install camera bracket.

- If it is cement wall, first it needs to install expansion bolt ③ (the mounting hole sites of expansion bolts need to be in accordance with those of the bracket), and then install the bracket, which is shown in Figure 3-1.
- If it is wooden wall, you can skip the first step, use self-tapping screw ② to install the bracket directly.

Step 2

Install the device ①.

Use the mounting pedestal on the camera bottom and use screws to fix the device on the bracket.

Step 3

Adjust the camera to the proper monitoring position, and then tighten the adjusting ring on the bracket and fix the camera, which is shown in Figure 3-2.

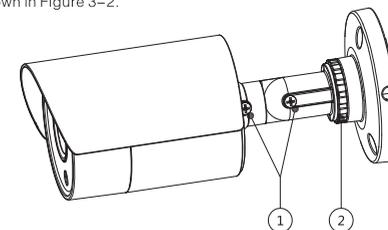


Figure 3-2

SN	Name
1	Bracket Adjusting Screw
2	Bracket Adjusting Ring

Table 3-2

Step 4

Connect the video output port of device cable to the back-end XVR, connect the power port to power and adjust the device angle well. So far, the device installation and cable connection have been completed, you can check monitoring image via XVR.

4 Menu and Settings

4.1 Menu Operation

Step 1

Click the right mouse button and select "PTZ", the system will display the interface of PTZ setting, which is shown in Figure 4-1.

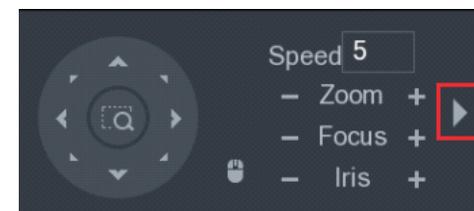


Figure 4-1

Step 2

Click [PTZ] and the system will enter the complete PTZ setting interface, which is shown in Figure 4-2.

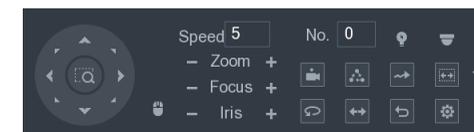


Figure 4-2

Step 3

Click  and the system will enter the operation interface of OSD menu, which is shown in Figure 4-3.

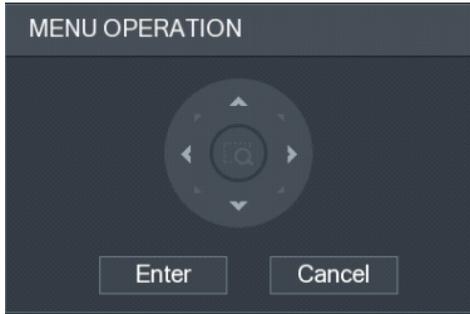


Figure 4-3

It can modify each parameter of OSD menu in the menu operation interface, please refer to Table 4-1 for more details about operation methods.

Button	Function	Button	Function
	Open menu or confirm.		Select menu item.
	Exit menu.		Modify menu value.

Table 4-1

If there is “↓” in the parameter value, click the “Enter” button in “Menu Operation” interface to go to the 2nd menu. Click “Return” button to go back to the previous menu interface or exit the menu.

Note

- The operation interface above is just an examples, different back-end devices have different operation interface, please refer to corresponding HCVR manual for more details.
- Menus are different according to different products; please refer to actual device for exact menu.

5 Gateway Function

This HDCVI gateway camera can be used as a gateway device; it can have access to in-house developed smart sensor and intelligent monitoring and control device, such as wireless door contact, alarm, curtain sensor and other node devices. It can cooperate with back-end XVR to generate audible alarm signal and support pop-up windows, log remind, alarm activated recording and alarm push etc. The recommended scheme of networking is shown in Figure 5-1.

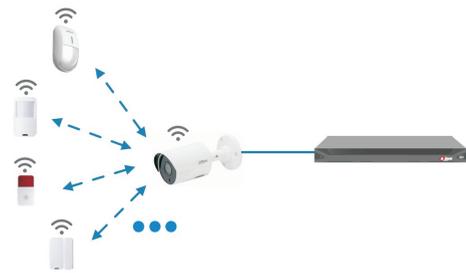


Figure 5-1

5.1 Add Node Device

Connect the gateway camera to back-end XVR, the monitor will display monitoring image normally, then it is ready to add node device. There are two modes of adding node device, which is described in the following chapter.

5.1.1 Add Node Device on XVR Device End

Step 1

Right click the mouse and enter the main menu of XVR device, which is shown in Figure 5-2.

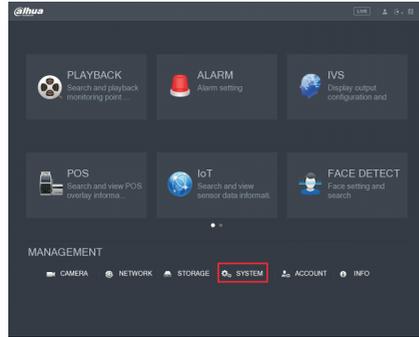


Figure 5-2

Step 2

Select “System > Sensor” and it will display the interface of “Sensor”, which is shown in Figure 5-3

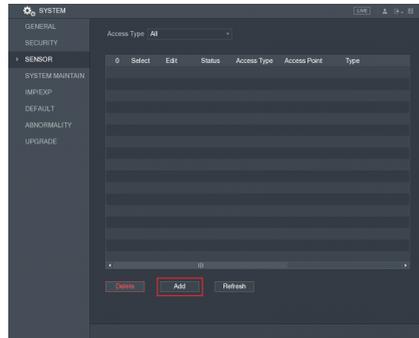


Figure 5-3

Step 3

Click “Add” and it will display the interface of “Add Sensor”

Step 4

Set add options.

It supports the following two modes to add node device:

- Manual Pair Add

- Select “Access Type” as “HDCVI”, “Add Way” as “Pair” and “Access Point” as the connection channel between camera and XVR device, click “Pair” and the interface bottom will display pairing is in progress and enter countdown, which is shown in Figure 5-4.
- It is to complete pairing for node device during countdown (Please refer to corresponding user manual for pairing operation according to different node devices).

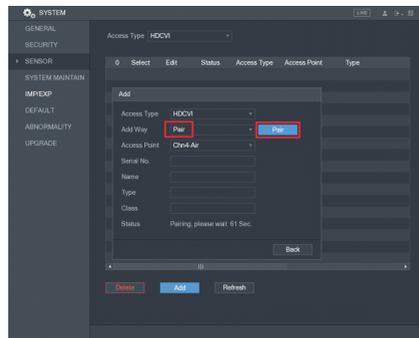


Figure 5-4

- Trusted Sites Add

- Select “Access Type” as “HDCVI”, “Add Way” as “Trusted Sites” and “Access Point” as the connection channel between camera and XVR device, input the serial number of node device in “Serial No.” (Please see serial No. on the device label), which is shown in Figure 5-5.
- Make node device enter pair mode (Please refer to corresponding user manual for pairing operation according to different node devices).
- Click “Add” when the node device is in the pair status.

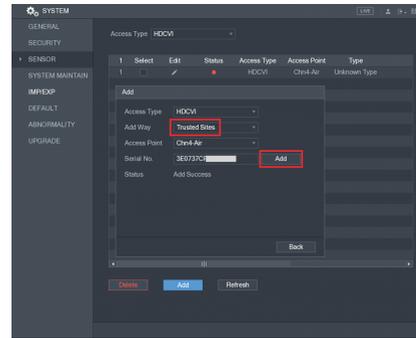


Figure 5-5

After pair is completed

- The indicator light of node device is off, it means device pair succeeds. Click right button and return to sensor interface where you can check the added node devices, which is shown in Figure 5-6. The gateway camera will send signal to XVR back-end device and generate alarm if the node device alarm is triggered.
- The indicator light of node device flashes slowly for three times and goes out, it means pair failed. Please operate step 4 again.

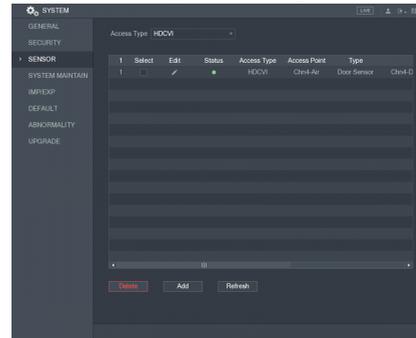


Figure 5-6

5.1.2 Add Node Device on Front-end OSD Menu

Step 1

Enter OSD menu “Advanced > Enroll”, click the icon  on the menu operation interface and enable pair function. At this moment the camera is in the pair status, the Enroll will be disabled automatically if it fails to discover node devices or complete pair within 60s.

Step 2

Complete the pair operation of node device (Please refer to corresponding user manual for pair operation according to different node devices).

Step 3

After pair operation is completed.

- The indicator light of node device is off, which means device pair succeeded. OSD menu displays that Enroll is off. Wait for about 3 minutes and enter “Sensor” interface (please refer to 5.1.1) to check the added node devices, which is shown in Figure 5.6. If the node device alarm is triggered at this moment, the gateway camera will send signal to XVR back-end device and it will generate alarm.
- The indicator light of node device flashes slowly for three times and goes out, it means that pair failed, please operate step 2 again.

5.2 Modify Node Name

Enter the “Sensor” interface (Please refer to 5.1.1), check and modify the name of added node device, which is shown in Figure 5-6.

Step 1

Click the  in front of the corresponding devices in the list (drag the progress bar to check serial number), and then you can modify the device name, which is shown in Figure 5-7.

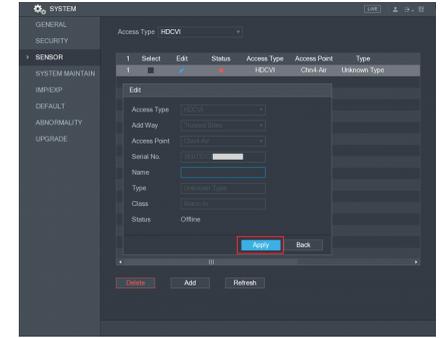


Figure 5-7

Step 2

Input the custom name in the “Name” and click “Apply”.

5.3 Delete Node Device

Step 1

Select corresponding device (drag progress bar to check serial number), click “Delete” to delete all the selected node devices.

Step 2

Cut off the power of node device, and remove the device pairing information completely (refer to the user manual of node device for more details).

6 Appendix Maintenance

Caution

Please maintain the device according to the following instructions in order to ensure the image effect and long-term stable operation of the device.

Maintenance for lens and mirror surface

The lens and mirror surface are covered with antireflection coating, so it may produce hazardous substance and lead to performance reduction or scratch, dimness etc. Please don't touch sensor CCD (or CMOS) directly, you can use hair dryer to remove dust or dirt on the lens surface. Please use dry cloth slightly soaked with alcohol to get rid of dust and dirt gently if it is necessary to be cleaned.

Camera Body Maintenance

Use a soft dry cloth to clean the camera body when it is dirty, in case the dirt is hard to remove, use a clean dry cloth soaked with mild detergent and wipe gently, make it dry later. Don't use volatile solvent like alcohol, benzene, thinner and etc. or strong detergent with abrasiveness, otherwise it will damage the surface coating or reduce the working performance of the device.

Note

- This manual is for reference only. Slight difference may be found in the user interface.
- All the designs and software here are subject to change without prior written notice.
- All trademarks and registered trademarks mentioned are the properties of their respective owners.
- If there is any uncertainty or controversy, please refer to the final explanation of us.
- Please visit our website or contact your local service engineer for more information.