HDCVI IR Vandal-proof Dome Camera User's Manual

Version 1.0.0

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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

1．Electrical safety

All installation and operation here should conform to your local electrical safety codes.

Please check if the power supply is correct before operating the device.

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 prevent the line cord from being trampled or pressed, especially the plug, power socket and the junction from the device.

Note: Do not connect these two power supplying sources to the device at the same time; it may result in device damage!

We assume no liability or responsibility for all the fires or electrical shock caused by improper handling or installation.

We are not liable for any problems caused by unauthorized modification or attempted repair.

2．Environment

Please don't aim the device at strong light (such as lighting, sunlight and so on) to focus; otherwise it may cause overexposure (It is not the device malfunction), which will affect the longevity of CCD or CMOS.

Please transport, use and store the device within the range of allowed humidity and temperature.

Please don't keep the device in a place which is wet, dusty, extremely hot, and extremely cold and with strong electromagnetic radiation or unstable lighting.

Please do not allow water and other liquid falling into the camera in case that the internal components are damaged.

Please do not allow rain or damp to the indoor device in case fire or lightning may occur.

Please keep the sound ventilation in case of heat accumulation.

Please pack the device with standard factory packaging or material with same quality when transporting the device.

Heavy stress, violent vibration or water splash are not allowed during transportation, storage and installation.

3. Operation and Daily Maintenance

Please do not touch the heat dissipation component of the device directly in order to avoid scald.

Please do not dismantle the device; there is no component which can be fixed by users themselves in the machine. It may cause water leakage or bad image for the device due to unprofessional dismantling. It is recommended to use the device with thunder proof device in order to improve thunder proof effect. The grounding holes of the product are recommended to be grounded to further enhance the reliability of the camera.

Do not touch the CCD (CMOS) optic component directly. You can use the blower to clean the dust or dirt on the lens surface. Please use a dry cloth wetted by alcohol to wipe away the dust gently if it is necessary to clean.

Always use the dry soft cloth to clean the device. If there is too much dust, please use the water to dilute the mild detergent first and then use it to clean the device. Finally use the dry cloth to clean the device. 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.

Dome cover is an optical device, please don't touch or wipe cover surface directly during installation and use, please refer to the following methods to deal with once dirt is found:

Stained with dirt

Use oil-free soft brush or hair dries to remove it gently.

Stained with grease or fingerprint

Use soft cloth to wipe the water drop or oil gently to make it dry, then use oil-free cotton cloth or paper soaked with alcohol or detergent to wipe from the lens center to outward. It is ok to change the cloth and wipe several times if it is not clean enough.

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.

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 supplier or customer service if there is any problem occurred when using the device.

Please contact the customer service for the latest procedure and supplementary documentation.

There may be deviation between the actual value of some data and the value provided in the manual due to the reasons such as the real environment is not stable and so on. Please refer to the company's final explanation if there is any doubt or dispute.

The company is not liable for any loss caused by the operation which is not followed by the manual.

1 General Introduction

1.1 Overview

This series HDCVI camera conforms to the HDCVI standard. It supports video signal high-speed long distance transmission without any delay. It can be controlled by the DVR conforming to the HDCVI.

1.2 Features

- High-performance CMOS image sensor, megapixel definition.
- For 720P series, support 75-3 coaxial cable transmission without any loss. The distance is over 500m. For 1080P series, support 75-3 coaxial cable transmission without any loss. The distance is over 300m.
- High speed, long distance real-time transmission.
- Support HDCVI HD video output
- Support ICR switch to realize surveillance both in the daytime and at night.
- Support AE, AWB, Auto Electronic Shutter and Auto Electronic Gain.
- Support DC12V power supply.
- Support OSD menu.
- Support IP66 compliance.
- Support IK10 compliance.
- Can be applied to hotel, supermarket, office, judicial bureau, jail and other places which need vandal-proof requirements.

1.3 Applicable Models

The manual can be applied to the following models:
HAC-HDBWXXXXE, HAC-HDBWXXXXE-Z, HAC-HDBWXXXXF and HAC-HDBWXXXXR-Z/VF
Note:
"XXXX" is the four numbers in the model, such as 2100.

2 Device Framework

HAC-HDBWXXXXR

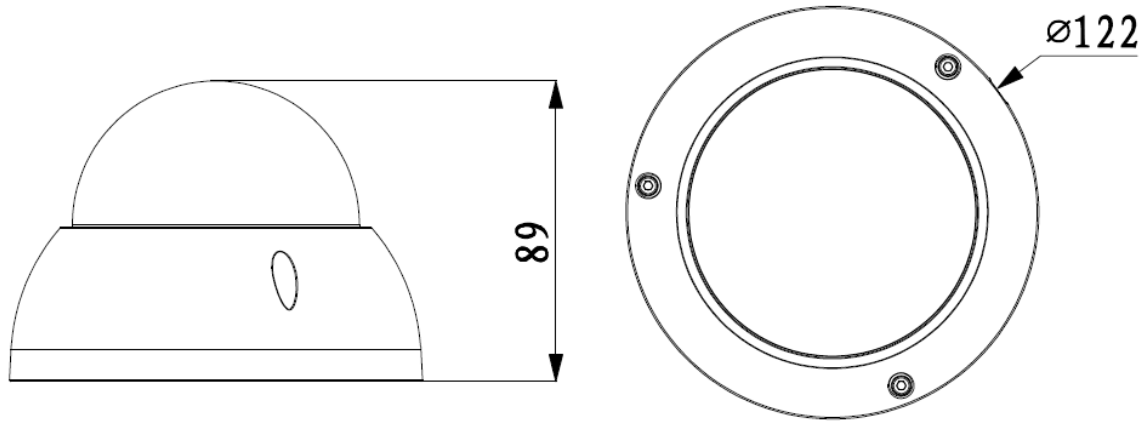See Figure 2-1 for the dimension of HAC-HDBWXXXXR.

Figure 2-1

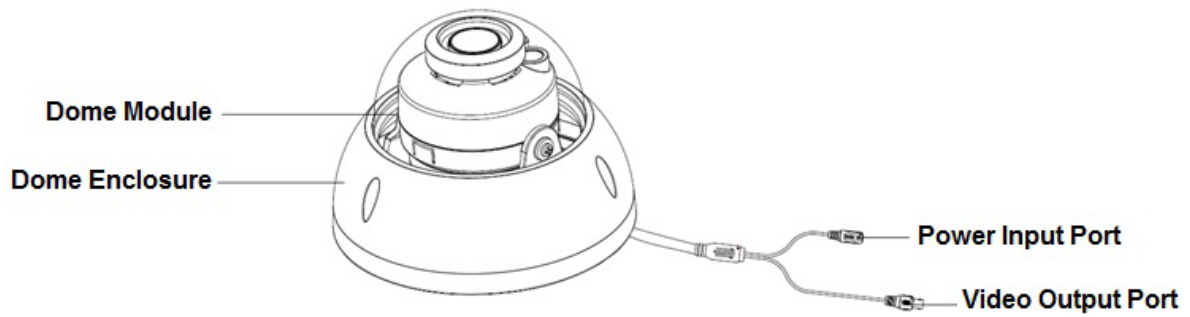See Figure 2-2 for the structure components of HAC-HDBWXXXXR.

Figure 2-2

HAC-HDBWXXXXE

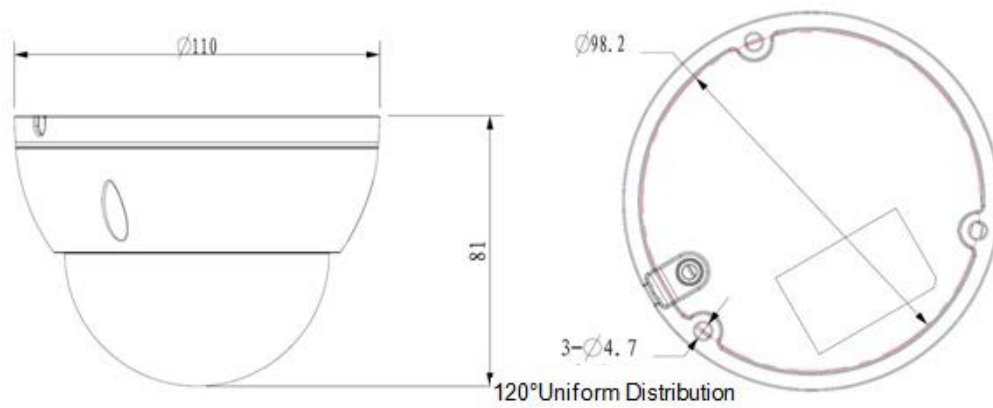See Figure 2-3 for the dimension of HAC-HDBWXXXXE.

Figure 2-3

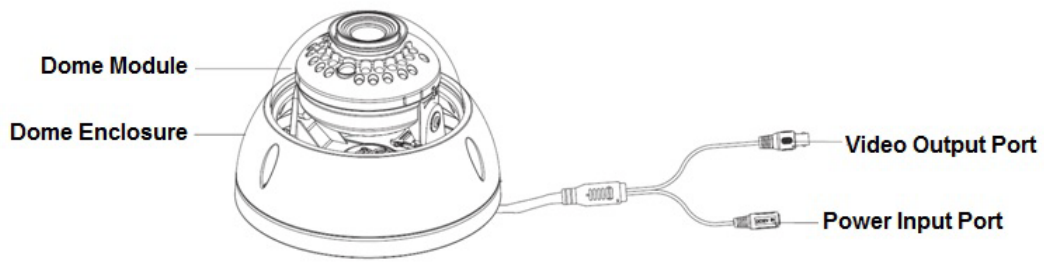See Figure 2-4 for the structure components of HAC-HDBWXXXXE.

Figure 2-4

HAC-HDBWXXXXE-Z

See Figure 2-5 for the dimension of HAC-HDBWXXXXE-Z.

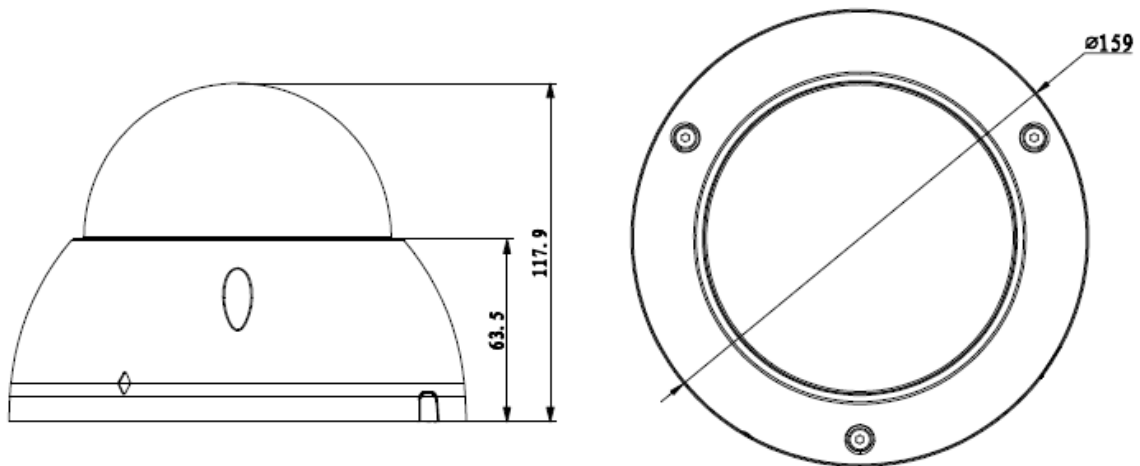
Figure 2-5

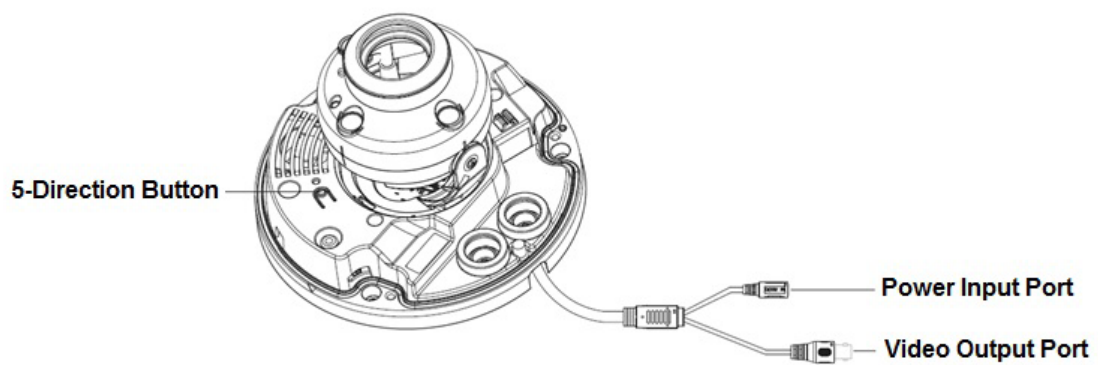See Figure 2-6 for the structure components of HAC-HDBWXXXXE-Z.

Figure 2-6

HAC-HDBWXXXXF

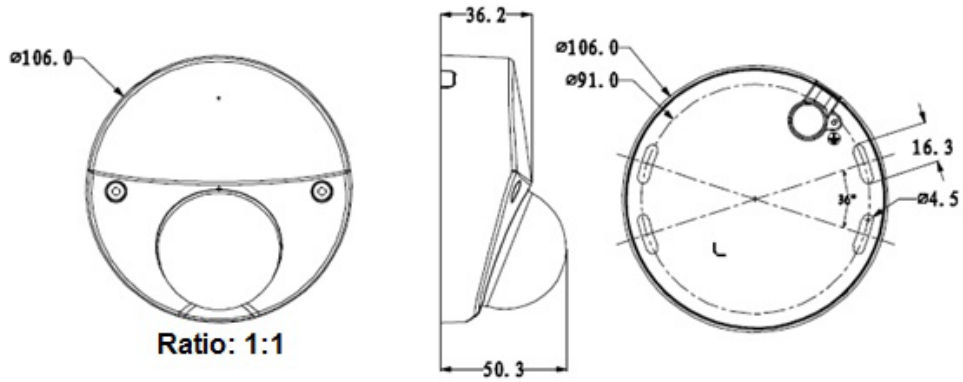See Figure 2-7 for the dimension of HAC-HDBWXXXXF.

Figure 2-7

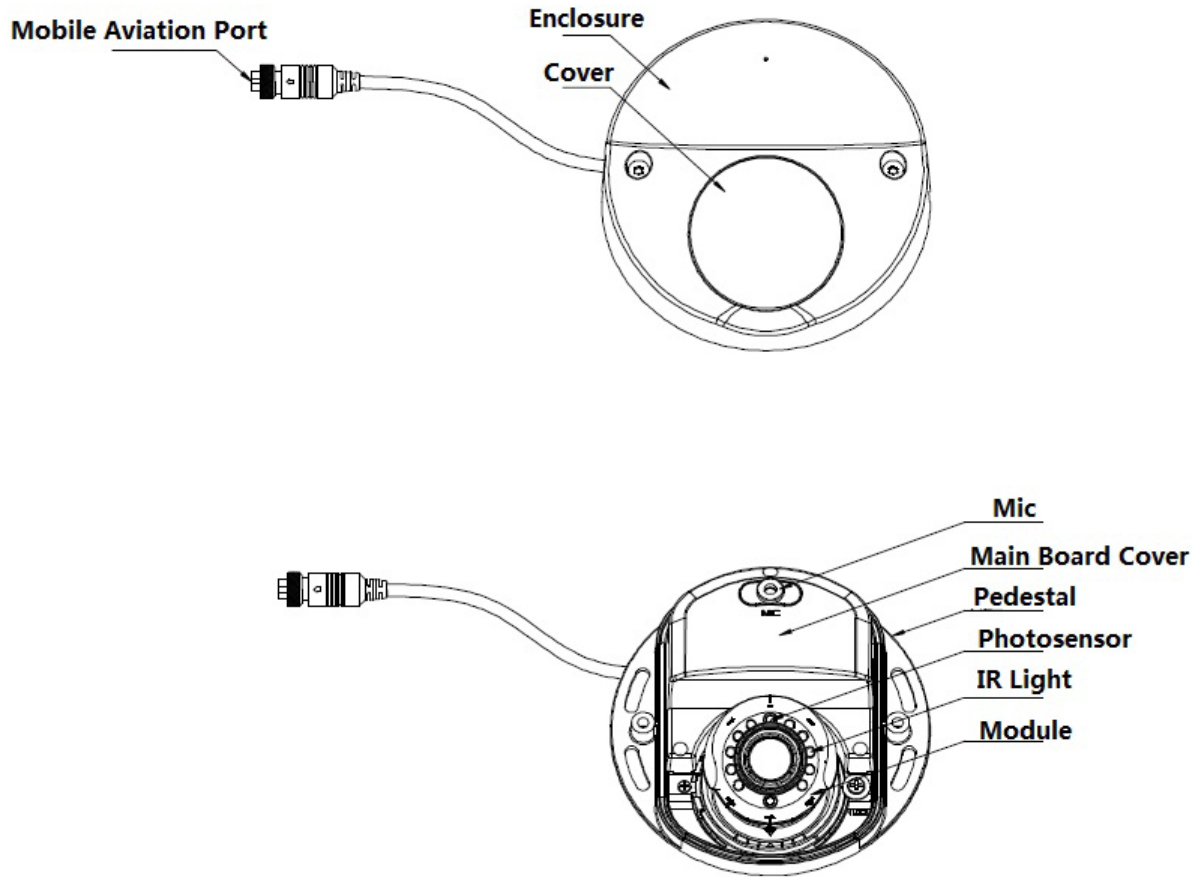See Figure 2-8 for the structure components of HAC-HDBWXXXXF.

Figure 2-8

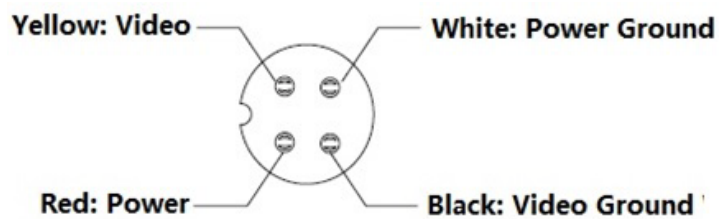See Figure 2-9 for the cable sequence of aviation port.

Figure 2-9

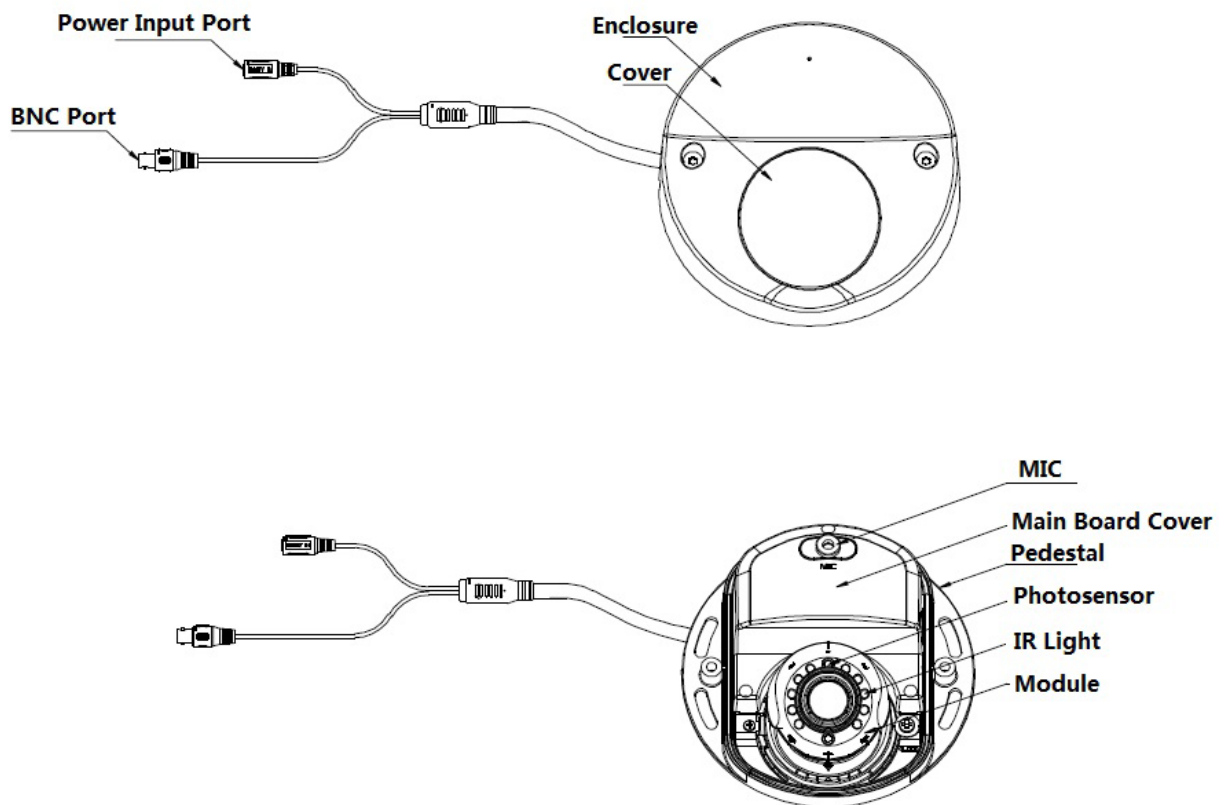See Figure 2-10 for the structure components of HAC-HDBWXXXXFP/N.

Figure 2-10

Note:
There are two kinds of cable for HAC-HDBWXXXXF, please refer to the actual product for more details.

3 Installation

Dome camera mainly uses ceiling installation; installation surface includes ceiling and wall. Users can install the device with the installation position map and the screws in the accessories bag.

Attention:
● Before the installation, please make sure the installation surface is thick enough to sustain at least 3X weight of the camera.
● For the installation mode of side outlet, make sure the direction of side outlet is in accordance with that of the installation position map when sticking the installation position map. Besides, pull the cable through the pedestal cable slot before locking the screw.
● Before you complete the installation and debugging, do not remove the electrostatic attraction film on the transparent enclosure. Otherwise it may result in injury. After remove electrostatic attraction film, don't touch dome enclosure in case it may leave stain.
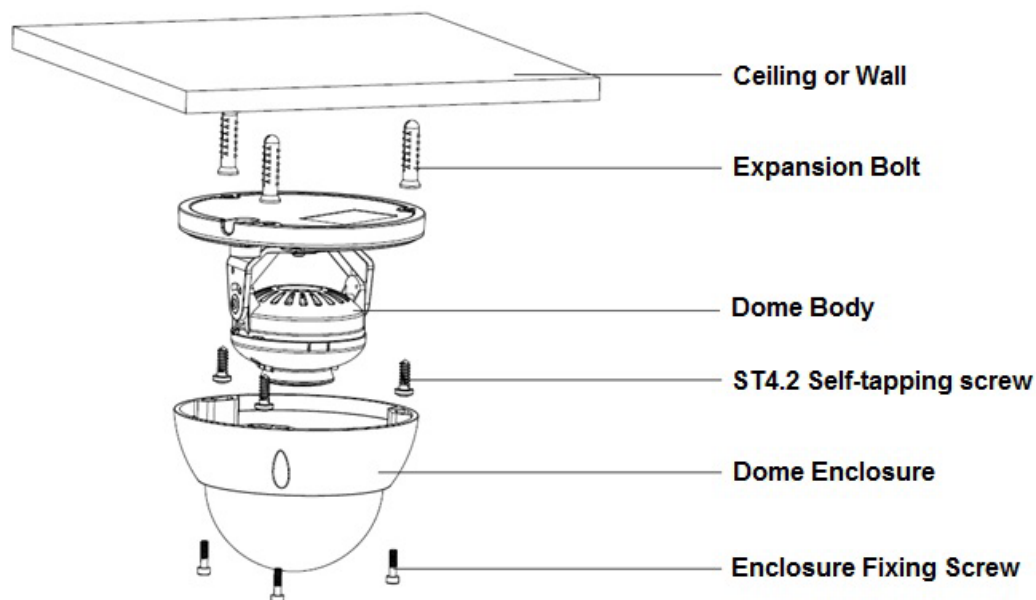

See Figure 3-1 for the installation steps.

Figure 3-1

Step 1 Take out the installation position map from the accessories bag, stick it on the ceiling or wall according to the location of cable exit. Dig holes on the installation surface according to the position map, take out expansion bolts from the accessories bag and put them into the installation holes and fix them.

Step 2 Unscrew the three locking screws by inner hex wrench and take off the dome cover.

Step 3 Adjust the location of dome pedestal according to the client's requirement of top cable exit or side cable exit. Pull the cable through the side cable exit which is on the installation surface and pedestal (please skip this step if it is top cable exit), aim the fixing holes of the screws on the dome pedestal to the fixing holes of expansion bolts on the installation surface,

then fasten the self-tapping screws into expansion bolts and lock them, and fix the dome on the installation surface.

Step 4 Connect the video output port of device cable to the back-end encoding device, and connect the power port to power supply.

Step 5 Adjust lens angle to a proper monitoring location after displaying image on the back-end encoding device, and adjust focal length of the lens to make image clear.

Step 6 Fix the dome enclosure on the dome pedestal by using three locking screws.

So far, camera installation and cable connection are completed; you can check monitoring video via back-end coding device.

Note:
Please refer to the actual product for more details of installation.

4 Menu

4.1 HDCVI Series DVR Settings

This HDCVI camera series can adjust OSD menu via coaxial control. After connected the camera to the HDCVI series DVR, from Main Menu->Setting->System->PTZ, you need to select the channel number for access and set control mode as HDCVI and the protocol as DH-SD1. Click "Save" button to save current setup. See Figure 4-1.
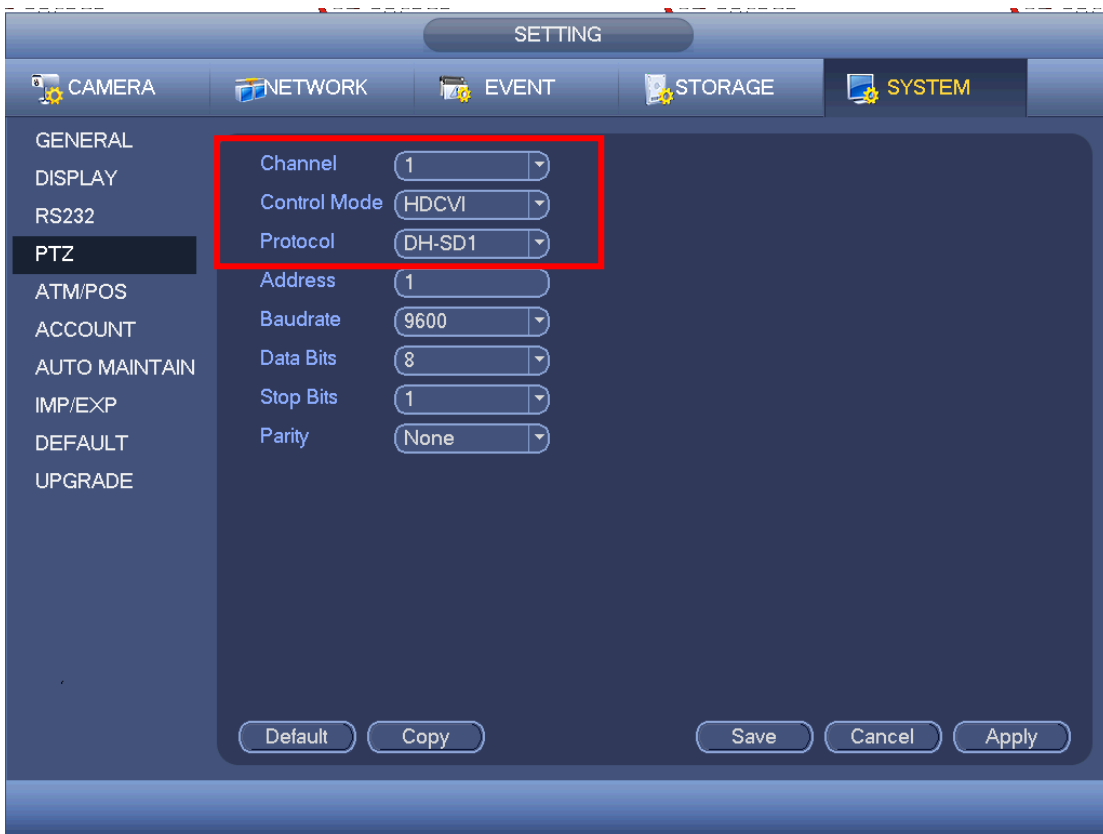

Figure 4-1

4.2 Menu Operation

Click the right mouse button and select "PTZ Control", then you will see the "PTZ Setup" menu, which is as shown in Figure 4-2 and Figure 4-3.
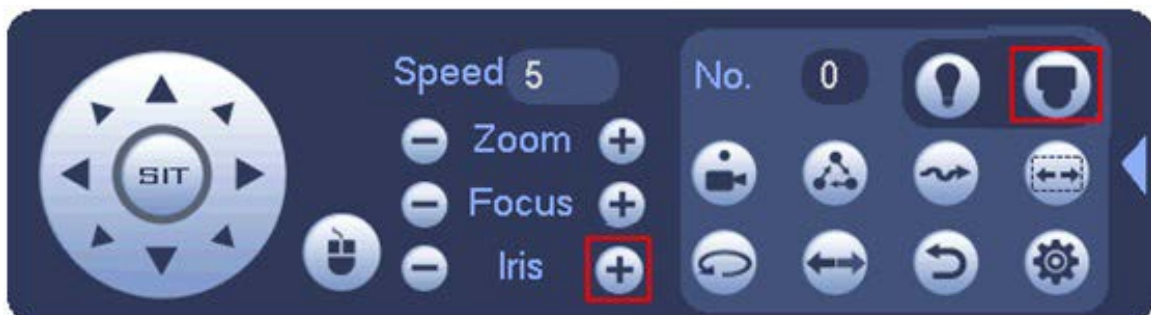

Figure 4-2

Figure 4-3

See Sheet 4-1 for the details of button functions.

Button	Function	
Iris ⊕	Open menu or confirm	
⬛ + Enter	Open menu	
▲ 、 ▼	Select menu item	
◀ 、 ▶	Select menu value	
⊖ Zoom ⊕	Adjust lens zoom and auto trigger focus	Note: Thesse buttons are only applied for motorized vari-focal camera.
⊖ Focus ⊕	Adjust lens focal length	
⊖ Iris	Auto focus under current zoom rate	
◀	Lens reset	

Sheet 4-1

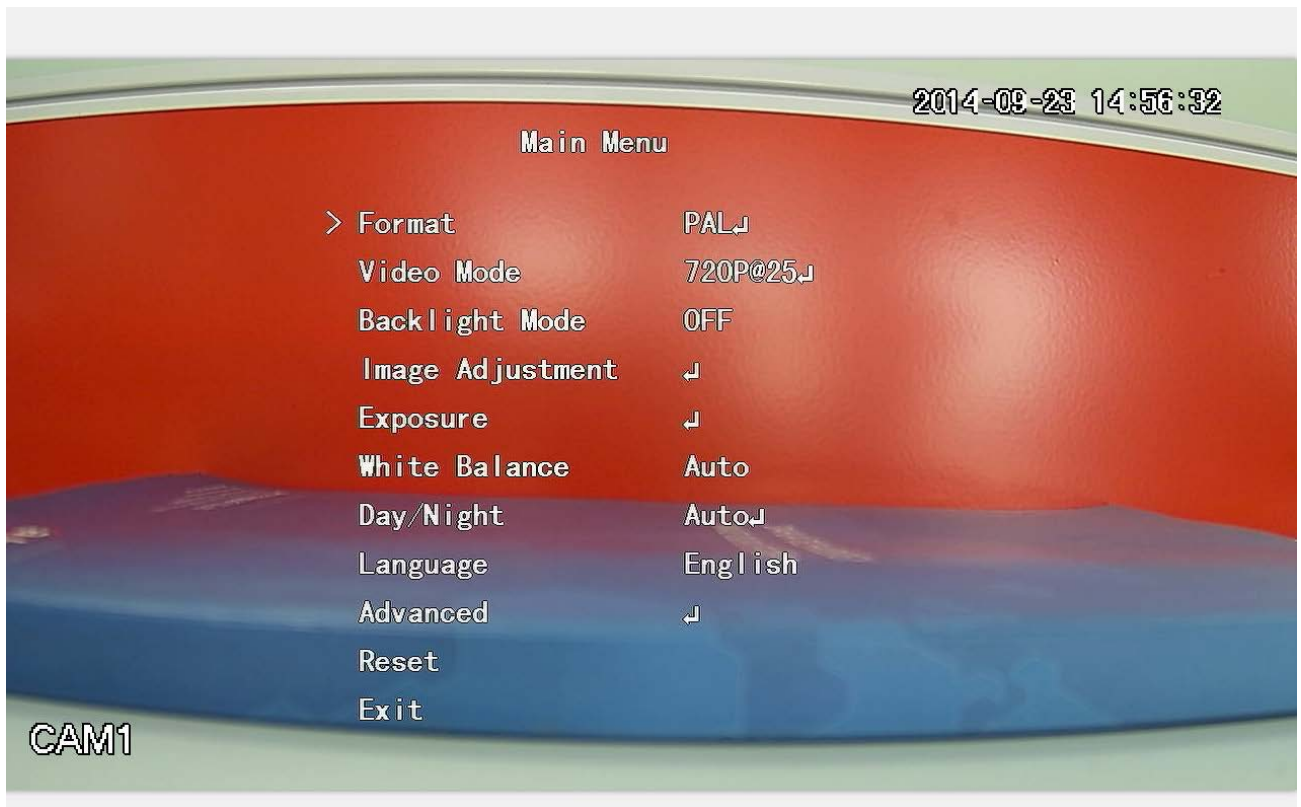The main menu interface is shown in Figure 4-4.

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Figure 4-4

If there is " ↵ ", click iris "+" or the "Confirm" button in "Menu Operation" interface to go to the 2nd menu. Click "Return" button to go back to the previous menu interface.

Note:

● The operation interface above is the example of HCVRHG-AF series, different rear-end devices have different operation interfaces; please refer to corresponding HCVR manual for exact operation.

Appendix I Maintenance

Attention:
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 when it is stained with dust, grease, fingerprint and so on, please refer to the following methods to deal with once dirt is found:

Stained with dirt

Use oil-free soft brush or hair dries to remove it gently.

Stained with grease or fingerprint

Use soft cloth to wipe the water drop or oil gently to make it dry, then use oil-free cotton cloth or paper soaked with alcohol or detergent to wipe from the lens center to outward. It is ok to change the cloth and wipe several times if it is not clean enough.

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.

Maintenance for Dome Cover
Dome cover is an optical device, please don't touch or wipe cover surface directly during installation and use, please refer to the following methods to deal with once dirt is found:

Stained with dirt

Use oil-free soft brush or hair dries to remove it gently.

Stained with grease or fingerprint

Use soft cloth to wipe the water drop or oil gently to make it dry, then use oil-free cotton cloth or paper soaked with alcohol or detergent to wipe from the lens center to outward. It is ok to change the cloth and wipe several times if it is not clean enough.

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.**