



# HDCVI CAMERAS



# Important Safeguards and warnings

## **1. 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 12V DC (24V AC) in the IEC60950-1.

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

## **2. Transportation Security**

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

## **3. Installation**

Do not apply power to the camera before completing installation.

Please install the proper power cut-off device during the installation connection.

Always follow the instruction guide the manufacturer recommended. If this product is installed in the ceiling, please make sure this installation position can sustain the min 50N.

## **4. Qualified Engineers needed**

All the examination and repair work should be done by the qualified service engineers.

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

## **5. Environment**

This series camera should be installed in a cool, dry place away from direct sunlight or strong light, inflammable, explosive substance and etc.

# Important Safeguards and Warnings

This series camera be used in the specified working temperature. Please keep it away from electromagnetic radiation objects and environments.

Please keep the sound ventilation.

Do not allow water and other liquid from falling into the camera.

## **6.Accessories**

Be sure to use all the accessories recommended by the manufacturer.

Before installation, please open the package and check all the components that are included.

Contact your local retailer ASAP if something is broken in your package.

## **7.Daily Maintenance**

Please shut down the device and then unplug the power cable before you begin daily maintenance work.

Use the dry soft cloth to clean the device.

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

Please put the dust-proof cap on to protect the CCD (CMOS) component when you do not use the camera.

# 1 General Introduction

## 1.1 Overview

This series megapixel HD 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.
- Support HD video and control signal coaxial transmission.
- Supports 75-3 coaxial cable transmission without any loss. 720P series transmission distance over 500m, 1080p series transmission distance 300m.
- High speed, long distance real-time transmission
- Support HDCVI HD and analog SD switch output.
- 720p series supports 720p@25, 720p@30, 720p@50, 720p@60.
- 1080p series support 1080p@25, 1080p@30
- Supports high performance 3D noise reduction, excellent performance in low illumination.
- Support ICR switch to realize surveillance both in the daytime and at night.
- 3.6mm fixed lens (2.8mm, 6mm, 8mm optional)
- Support OSD(on-screen display), suitable for user self-defined setup.
- Supports DC12V power supply.
- IP66 compliance.
- Supports intelligent IR function.

## 2 Dome Framework and Dimensions

Please refer to the following figures for Dimension information. The unit is mm(millimeter).

### **Important**

Dimensions of Cameras may vary depending on your model. If you are having trouble finding the dimensions you can find the measurements by using a caliper or try your best using a ruler. To find the circumference of the bottom of the camera use the following formula: Diameter of circle x 3.14(*pi*)

### 1 HD-CVI Metal Housing



## 2 HD-CVI Plastic Housing



*Lens* —————

*Dome Body* —————

*Decoration Ring* —————



### 3 HD-CVI Glass Housing



*Dome Cover* —————

*Dome Enclosure* —————



*IR Light* —————

*Dome Module* —————

*Dome Pedestal* —————

*Power Input Port* —————

*Video Output Port* —————

*SD/HD Switch Cable* —————



When the Standard definition/high definition switch control cable is short circuit, systems outputs standard definition video. Otherwise, when the circuit is open, system outputs the high definition video.

## 3 Dome Installation

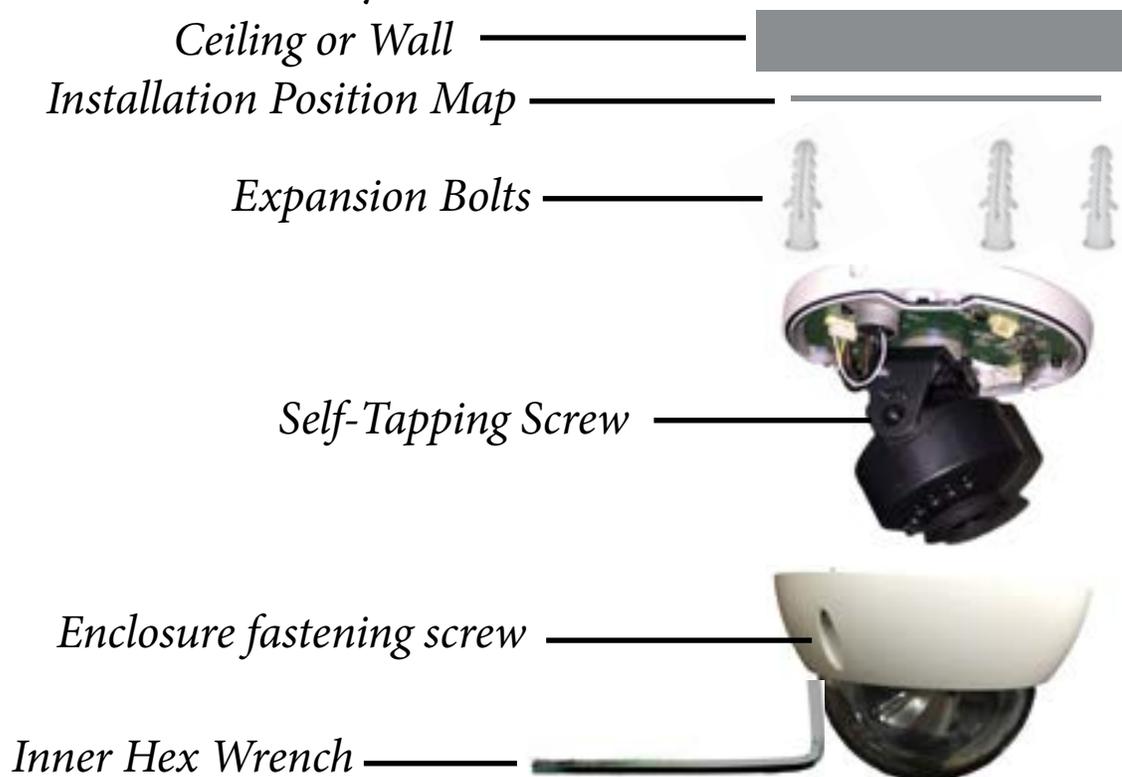
### Important

Before the installation, please make sure the installation surface can sustain at least 3X weight of the bracket and the camera.

### 3.1 HD-CVI glass housing

The dome camera usually uses the ceiling installation. It can be installed on the ceiling or the wall.

- For the side exit cable installation, please make sure the side exit cable direction is the same as shown in the installation position map.
- Before you secure the screws on the pedestal, please put the cable through the cable exit of the pedestal.
- Before you complete the installation and debug, do not remove the electrostatic film. After you remove the film, do not touch the enclosure in case there are any scratches.



### **Step 1**

Take the installation position map from the accessories bag and then put it on the surface of the ceiling or the wall according to the cable exit position. Dig three holes according to the installation position map and then take three expansion bolts from the accessories bag and put them to the holes you just dug.

### **Step 2**

Use inner hex wrench to remove the three enclosure fastening screws and then remove the dome enclosure.

### **Step 3**

Adjust the pedestal position according to the cable exit mode(ceiling/side). Pull the cable through the cable side exit at the installation surface and the pedestal (Please skip this step if you want to use ceiling exit mode). Line up the screw holes at the bottom of the pedestal to the expansion bolts in the installation surface. Put three self-tapping screws to expansion bolts and then secure firmly. Now the pedestal is on installation surface.

### **Step 4**

Adjust the camera module angle to a proper position and then fix the screws to fasten.



### **Step 5**

Use three enclosure fastening screws to secure the dome housing on the pedestal.

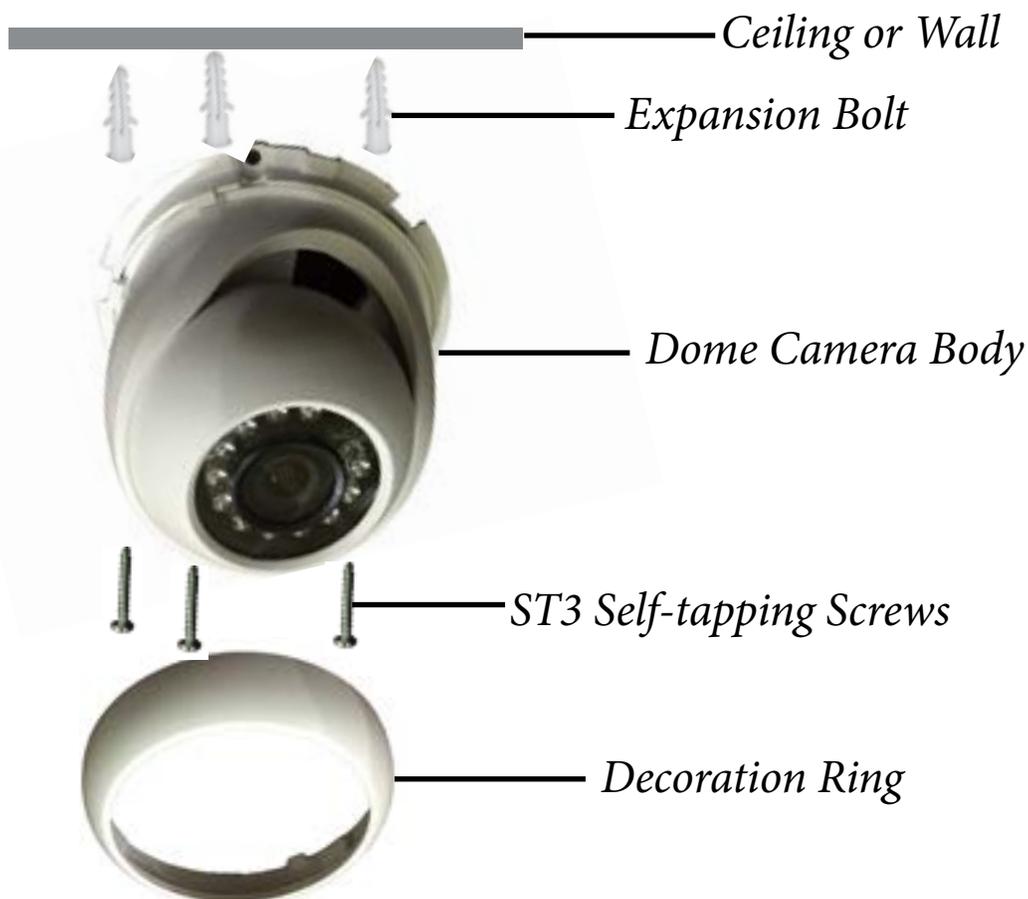
## 3.2 HDCVI Plastic Housing

### Step 1

Please take the installation position map in the accessories bag, and then paste it on the ceiling or the wall according to your monitor area requirements. Draw and then dig three holes in the installation surface and then insert three expansion bolts in the holes. Secure these three bolts firmly.

### Step 2

Turn counter clockwise to remove the decoration ring. Please dig a “cable exit hole” in the surface according to the installation position map if you want to draw out the cable from the top of the installation surface. You need to draw out the cable from the cable channel side port of the pedestal if you want to draw out the cable from the side port of the cable channel. Adjust the device installation pedestal to the proper position and then draw the cable through the cable exit. Line up the three screw holes in the installation position. Put the three self-tapping screws in the three plastic expansion bolts firmly. Now the dome camera is secure in the installation surface.

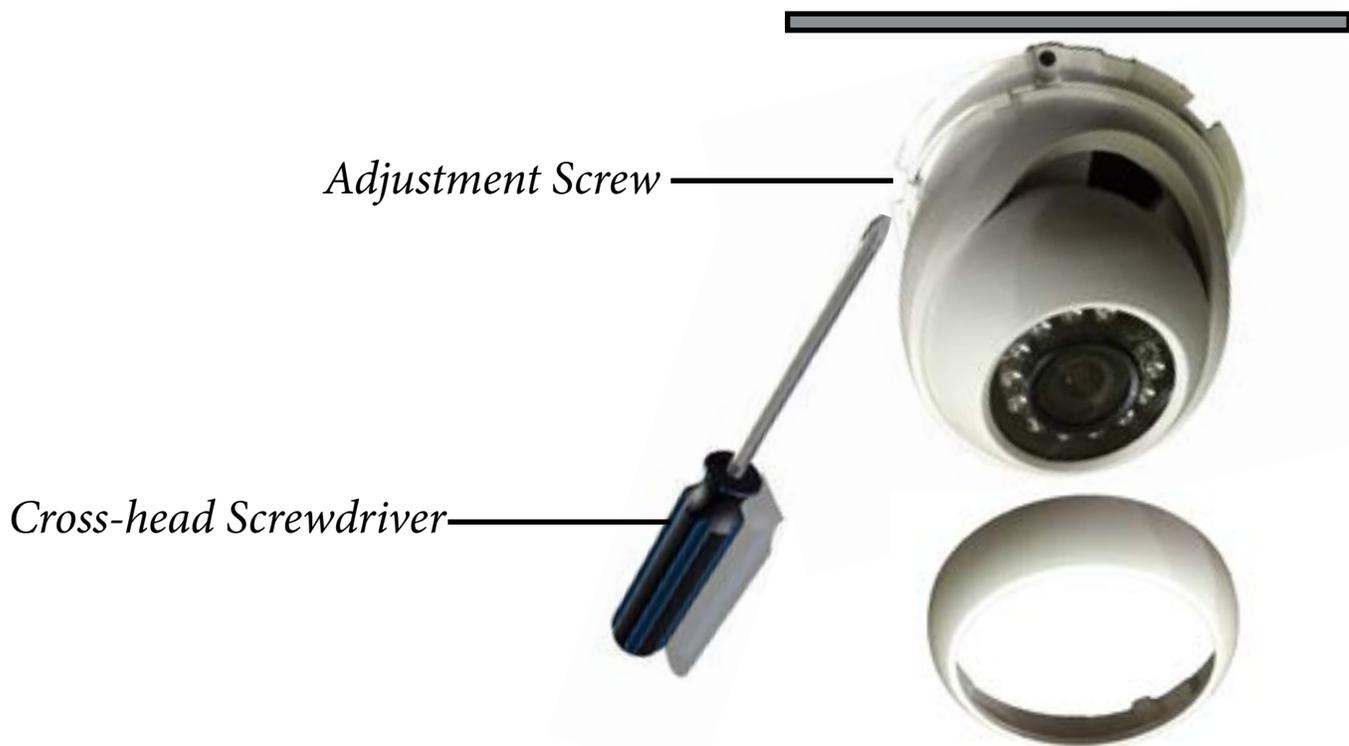


### **Step 3**

Adjust the lens to get the clear monitor video. Use cross-head screwdriver to loosen the screw and then turn the camera body to the proper position manually. Fix the screw again.

### **Important**

Do not remove the screw. Loosen a little bit. Please secure after you have completed the setup.



### **Step 4**

Line up the bulge of the decoration ring to the nick of the camera body and install along the tilt installation. Push and then turn decoration ring clockwise. The installation completed after you secure the decoration ring. You need to use the proper tool to open up the side port of the U-cable channel of the decoration ring if you want to draw out the cable from the side port of the cable channel when you are installing the device cable. And then you can draw out the cable from the cable channel of the pedestal. Finally you can install the decoration ring to complete the installation.

## 3.3 HDCVI Metal Housing

### **Step 1 Device Installation**

Take the wrench from the accessories bag and use it to loosen the three set of screws on the side of the camera body.



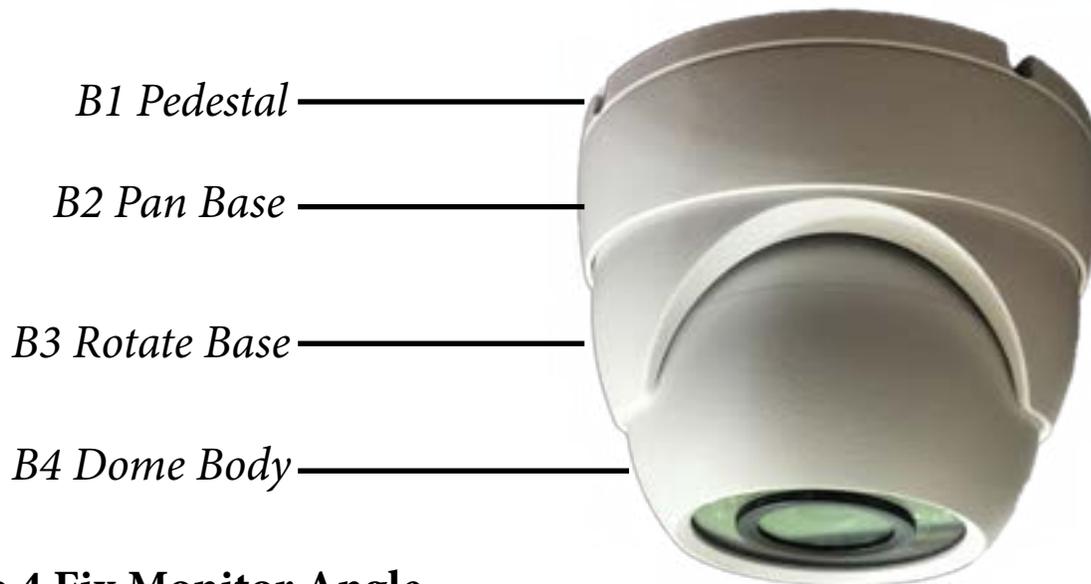
### **Step 2 Pedestal installation**

Turn the pedestal of the device and then pull the cable through it. Use four screws to secure the pedestal to the proper position.



### **Step 3 Adjust Monitor Angle**

Turn the pan base to the pedestal and secure firmly. Adjust rotate base and the dome body to get the lens to the proper monitor angle.



### **Step 4 Fix Monitor Angle**

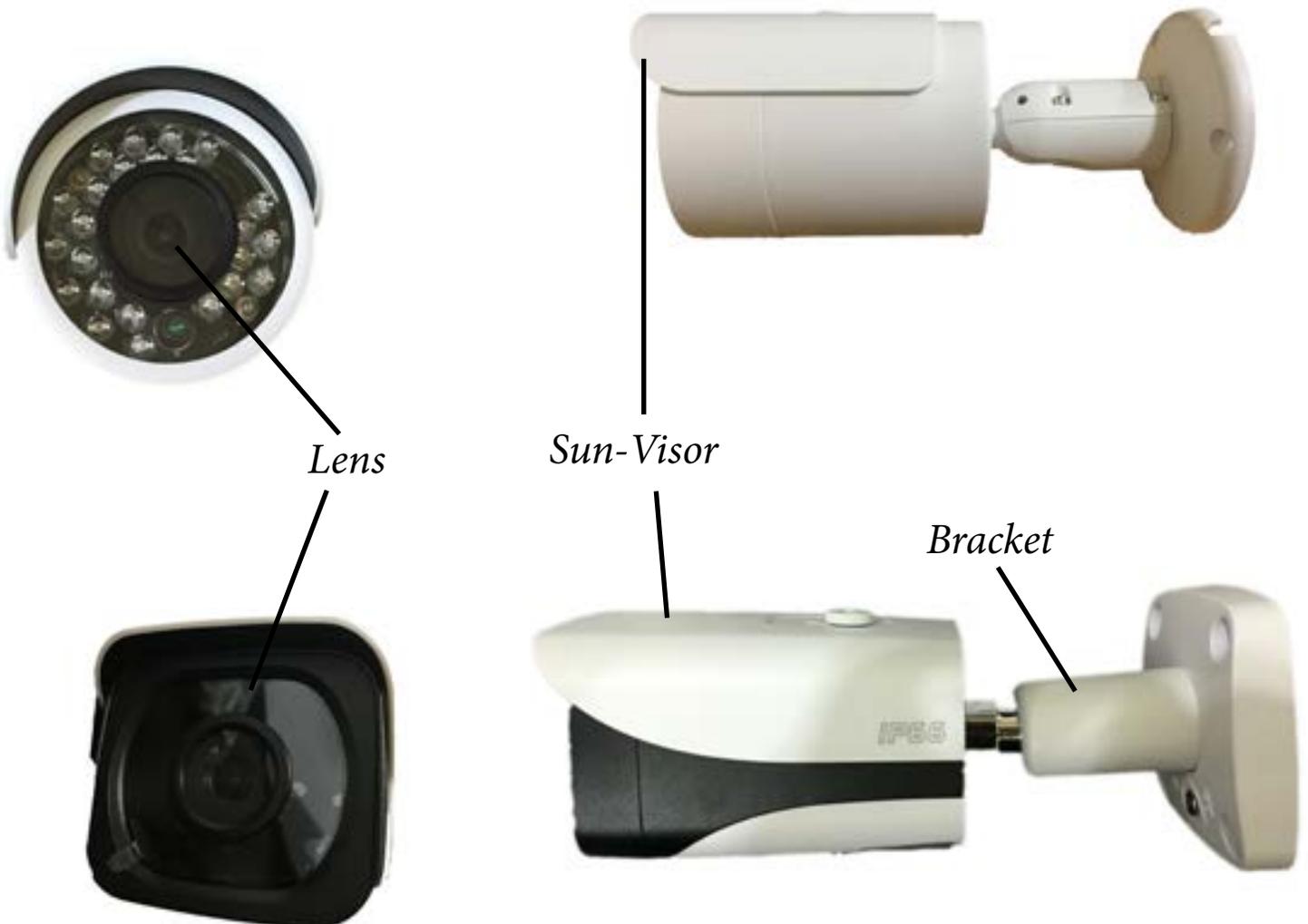
To prevent the dome from moving, use wrench to secure the three set screws to secure the monitor angle position.

# 4 Bullet Framework Dimensions

Please refer to the following figures for Dimension information. The unit is mm(millimeter).

## **Important**

Dimensions of Cameras may vary depending on your model. If you are having trouble finding the dimensions you can find the measurements by using a caliper or try your best using a ruler. To find the circumference of the bottom of the camera use the following formula: Diameter of circle x 3.14( $\pi$ )



# 5

## Bullet Installation

### **Important**

Before the installation, please make sure the installation surface can sustain at least 3X weight of the bracket and the camera.

*2 Megapixel Camera*



Before you install the bracket, please pull the cable through the cable exit of the bracket chassis.

- Please install the expansion bolt if you want to install in cement wall (please make sure the installation holes of the expansion bolts are the same as the bracket) then you can install the bracket.
- If you want to install in wood surface, please skip the first step and then use the self-tapping screws to install the bracket directly

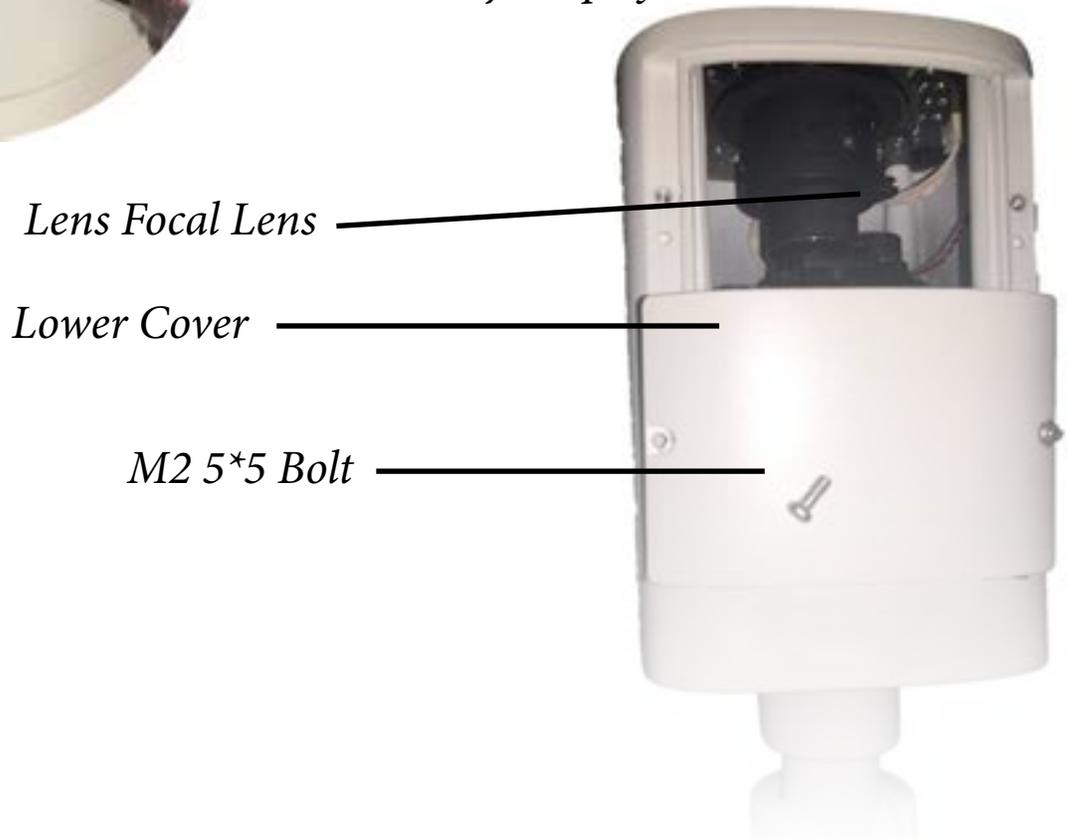
## Step 2

Unscrew the M3 x 20 and M3 x 5 screws on the bracket and adjust the camera via the three directions indicated in the figure below have the camera facing the exact location which needs to be monitored by rotating the bracket and camera body, then secure the bolts.



## Vari-Focal Camera

*Unscrew M2 5\*5 Bolt from the lower cover of the camera. Remove the Cover and adjust the vari-focal(zoom) to your preference.*



# 5

## HDCVI Series DVR settings

**The following operation and interfaces for reference only. Please refer to the HDCVI series DVR user's manual for detailed information.**

After connecting the camera to the HDCVI series DVR, from Main Menu ->Setting->System->PTZ, you need to set control mode as HDCVI and the protocol as DH-SD1. Click save button to save current setup.

The screenshot shows the 'SETTING' interface of an HDCVI Series DVR. The 'SYSTEM' tab is selected, and the 'PTZ' sub-menu is active. The configuration parameters are as follows:

Parameter	Value
Channel	1
PTZ Type	Local
Control Mode	HDCVI
Protocol	HD-CVI
Address	1
Baudrate	9600
Data Bits	8
Stop Bits	1
Parity	None

At the bottom of the interface, there are four buttons: 'Default', 'Copy', 'Save', and 'Apply'.

On the preview interface, right click mouse and then select PTZ; you can see an interface shown as below.



Click Iris “+” to open menu or confirm current operation. Click up/down button to view all the items on the left pane of the following list. Click left/right button to set the corresponding values on the right pane of the following list. If there is “↵” click confirm button to go to the 2nd menu. Repeat the previous steps to set detailed value. Click return button to go back to the previous menu interface.