

# HD-CVI Camera User's Manual



## Welcome

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

## CVIVD-TP2IRZ

|             |     |
|-------------|-----|
| Megapixels: | 2MP |
|-------------|-----|

|                 |       |
|-----------------|-------|
| Max Resolution: | 1080p |
|-----------------|-------|

|                    |                                                                            |
|--------------------|----------------------------------------------------------------------------|
| Image Resolutions: | 2MP (1920x1080) / 1.3M (1280x960) / 720P (1280x720) / D1 (704x576/704x480) |
|--------------------|----------------------------------------------------------------------------|

|               |                                    |
|---------------|------------------------------------|
| Image Sensor: | 1/2.8 inch Sony IMX322 Exmoor CMOS |
|---------------|------------------------------------|

|                   |                                                           |
|-------------------|-----------------------------------------------------------|
| Min Illumination: | Color: 0.1Lux@(F2.0, AGC ON) B&W: 0.001Lux@(F2.0, AGC ON) |
|-------------------|-----------------------------------------------------------|

|       |    |
|-------|----|
| LEDs: | 30 |
|-------|----|

|              |          |
|--------------|----------|
| IR Distance: | 100 feet |
|--------------|----------|

|      |     |
|------|-----|
| OSD: | Yes |
|------|-----|

|           |       |
|-----------|-------|
| Protocol: | ONVIF |
|-----------|-------|

|                       |                |
|-----------------------|----------------|
| Operating Temperature | -4°F to +122°F |
|-----------------------|----------------|

|            |                 |
|------------|-----------------|
| Dimension: | 6in x 6in x 4in |
|------------|-----------------|

|        |       |
|--------|-------|
| Power: | DC12V |
|--------|-------|

# Important Safeguards and warnings

## **1. Electrical Safety**

All installation and operation 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 any fires or electrical shock caused by improper handling or installation.

## **2. Transportation Security**

Heavy stress, violent vibration or water splash are not recommended 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 11 Lbs.

## **4. Qualified Engineers Needed**

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

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 should be used in the specified working temperature. Please keep it away from electromagnetic radiation environments.

Please keep the camera ventilated.

Do not allow water and other liquid 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 dustproof cap on to protect the CCD (CMOS) component when you do not use the camera.

## 1.1 Overview

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

## 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 HD-CVI HD.
- 720p series supports 720p@30fps
- 1080p series support 1080p@30fps
- 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
- Support OSD (on-screen display), suitable for user self-defined setup, except on economy models.
- Supports DC12V power supply.
- IP66 compliance.
- Supports intelligent IR function.

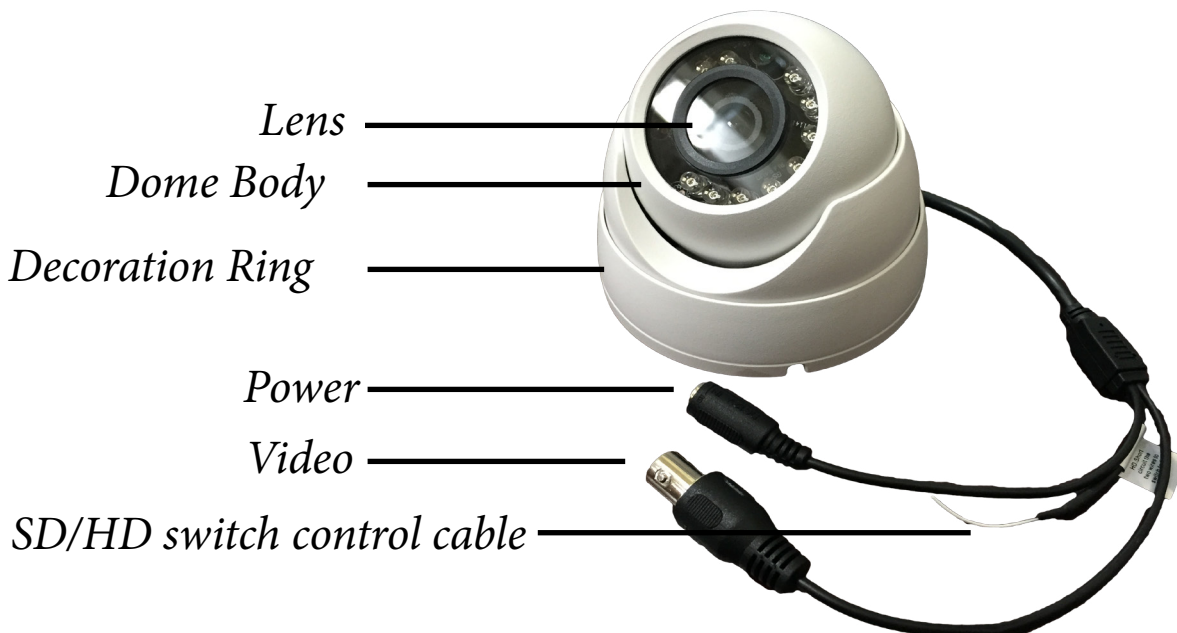
## 2

## Dome Framework

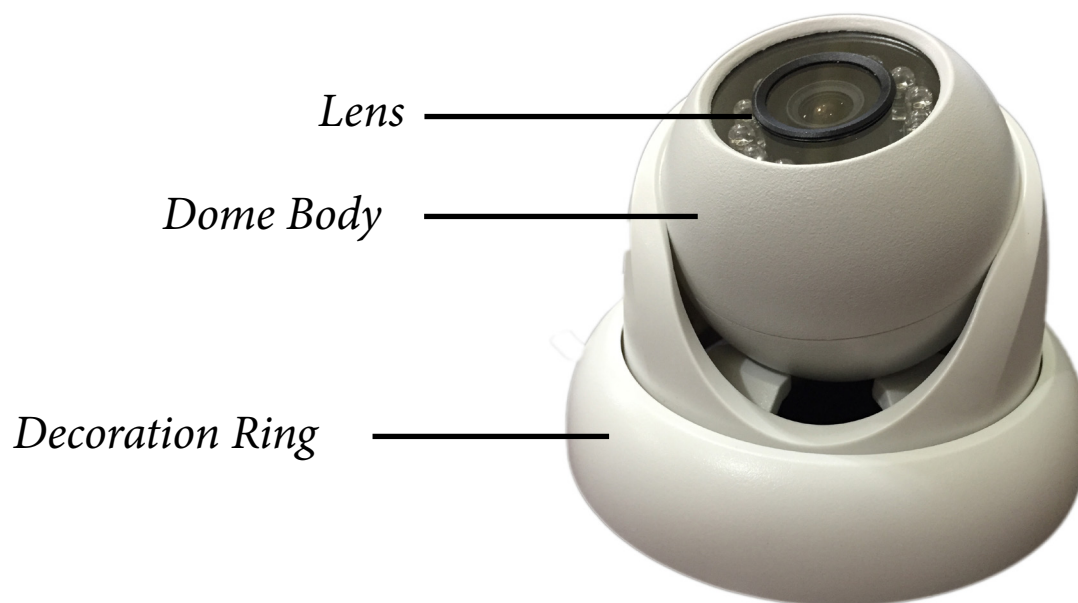
### Important

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 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

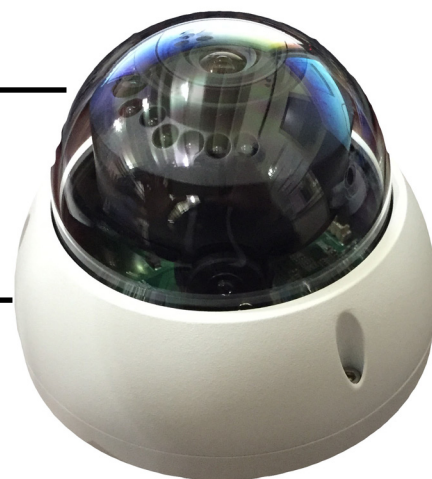


### 3 HD-CVI Glass Housing



*Dome Cover* —————

*Dome Enclosure* —————



*IR Light* —————

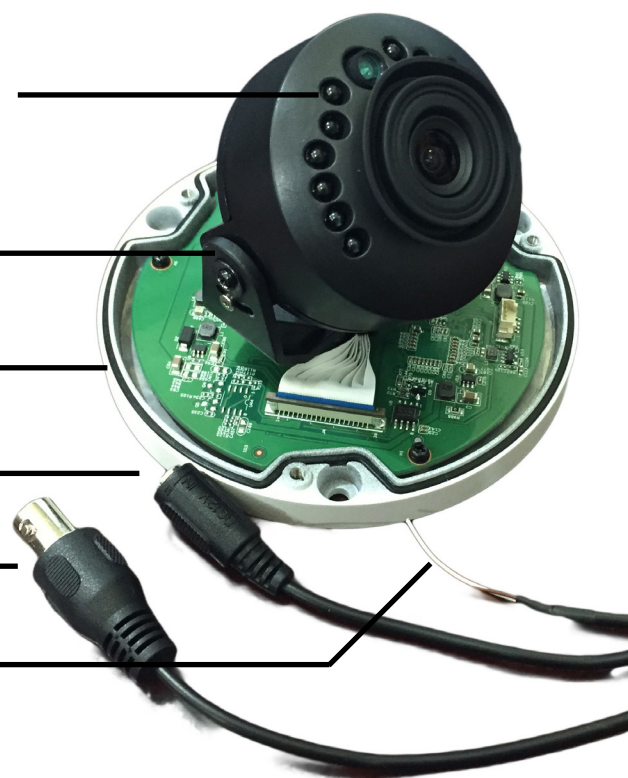
*Dome Module* —————

*Dome Pedestal* —————

*Power Input Port* —————

*Video Output Port* —————

*SD/HD Switch Cable* —————



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

## 3

## Dome Installation

### Important

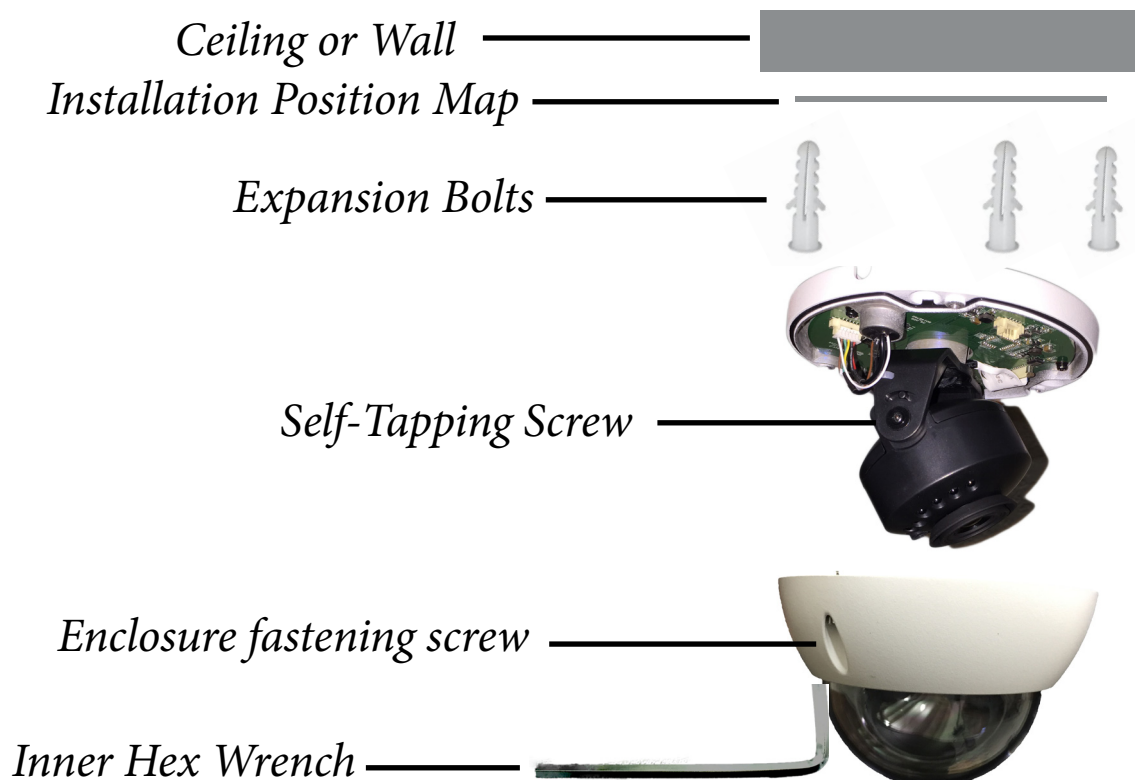
Before the installation, please make sure the installation surface can sustain at least 3 times the weight of the bracket and the camera.

### 3.1

### HD-CVI Glass Housing

The dome camera is usually installed on a ceiling. Although, It could also be installed on a 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 pull the cable through the cable exit of the pedestal.
- Do not remove the electrostatic film until the installation is completed. After you remove the film, do not touch the enclosure in case there is any scratch.



### **Step 1**

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

### **Step 2**

Use the 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 move(ceiling/side). Pull the cable through the cable side exit at the installation surface and the pedestal. (Please skip this step if you are mounting on a ceiling). 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

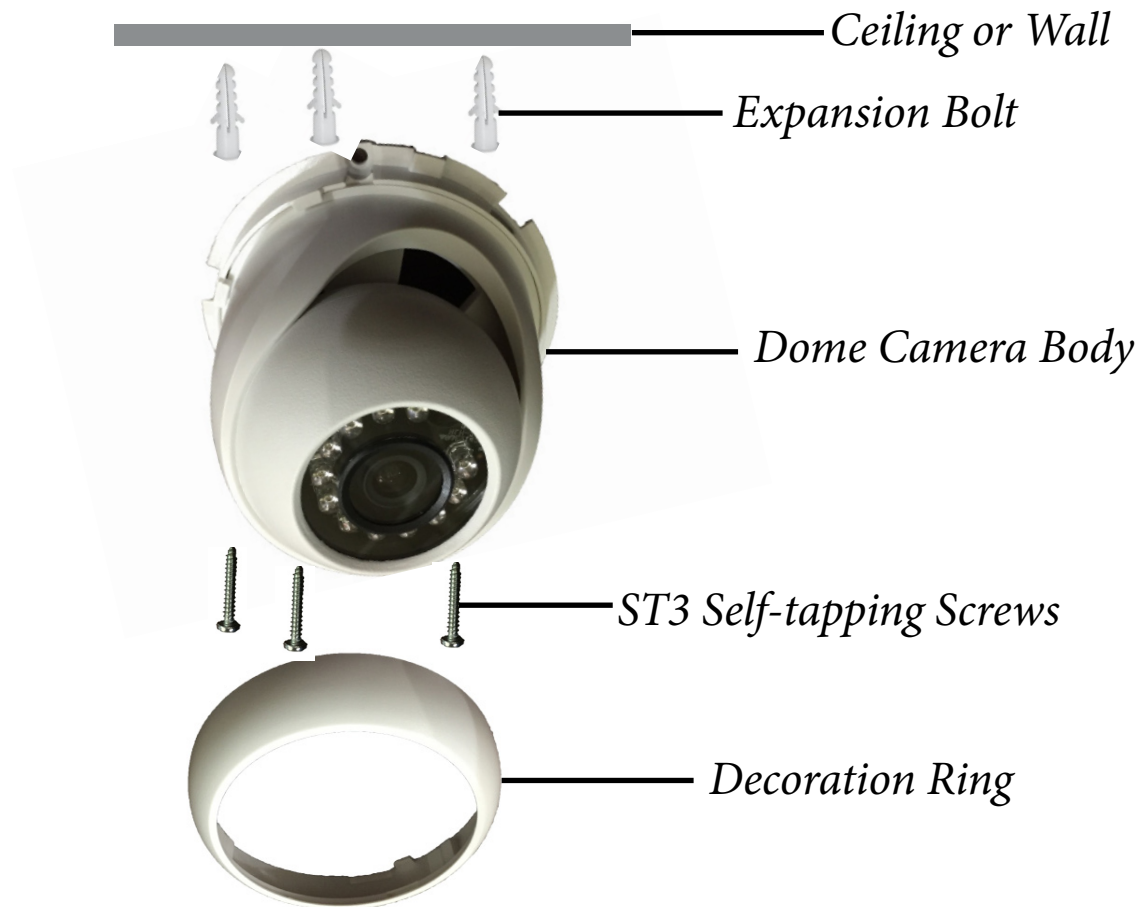
### HD-CVI Plastic Housing

#### Step 1

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

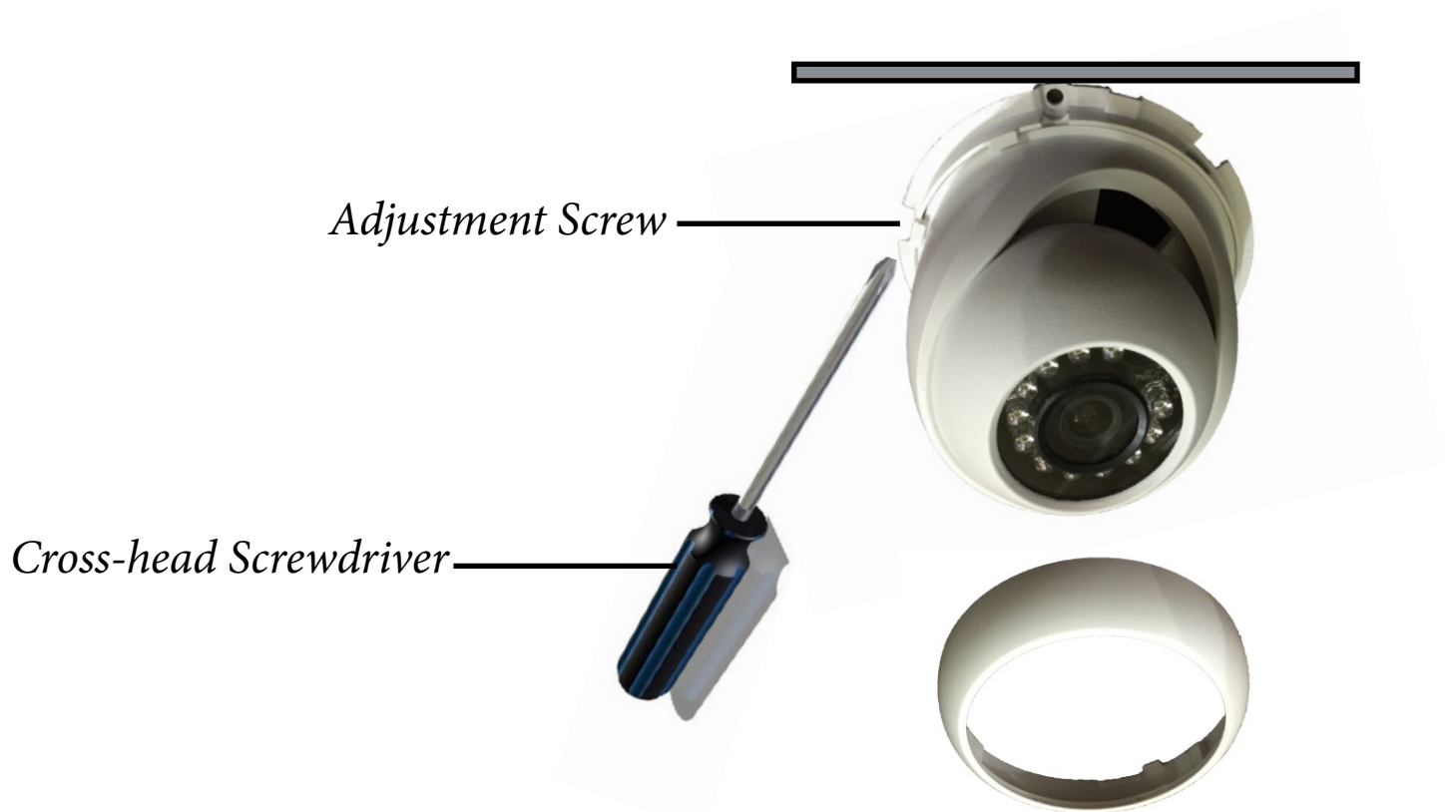
#### Step 2

Turn counter clockwise to remove the decoration ring. Please drill 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 a clear view of the area you want to monitor.



### **Step 4**

Line up the decoration ring to the neck of the camera body and tighten in place. Push and then turn decoration ring clockwise. The installation is 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. 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

## HD-CVI Metal Housing



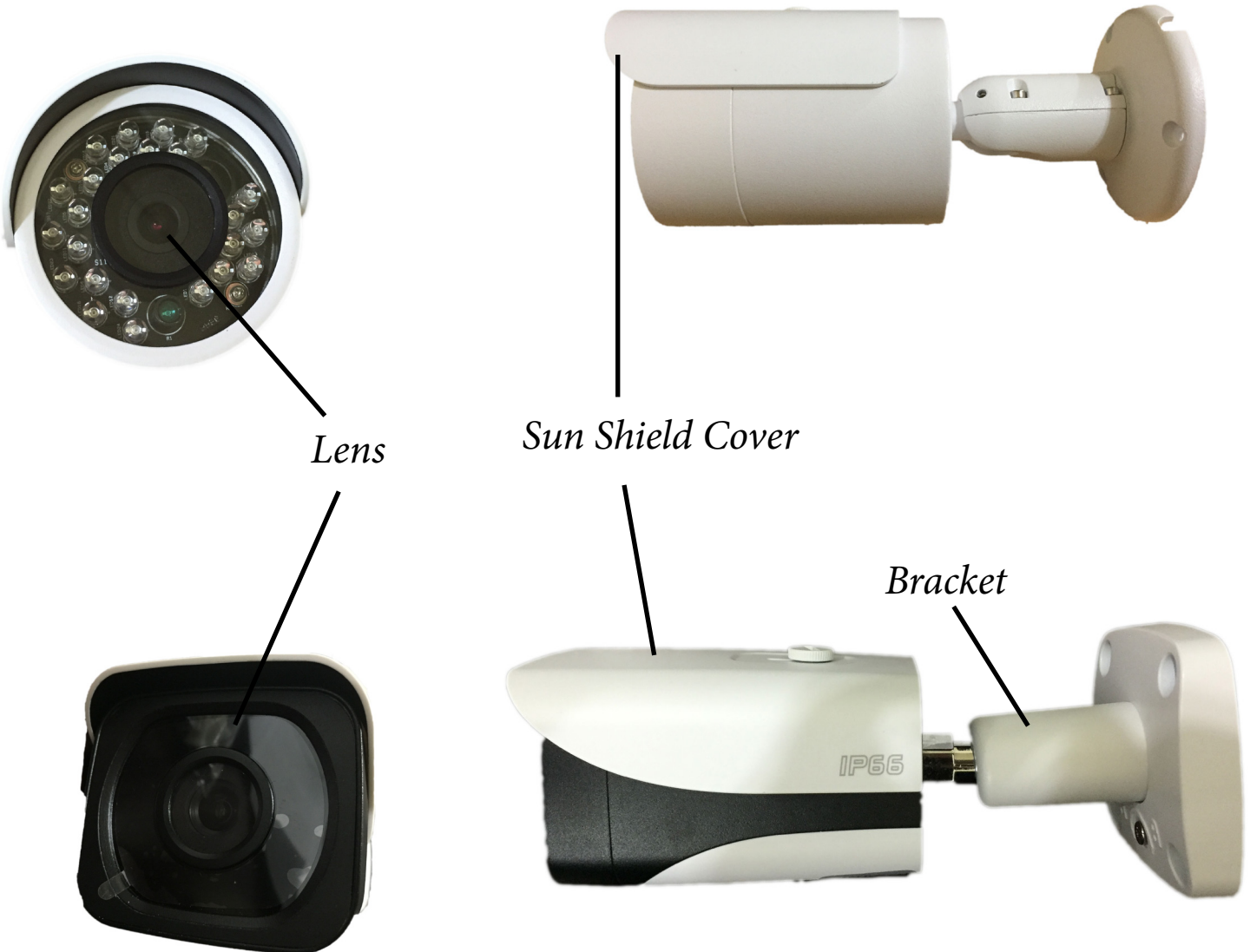
### **Step 1 Adjust Monitor Angle**

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



**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  $3.14(\pi)$



**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.

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

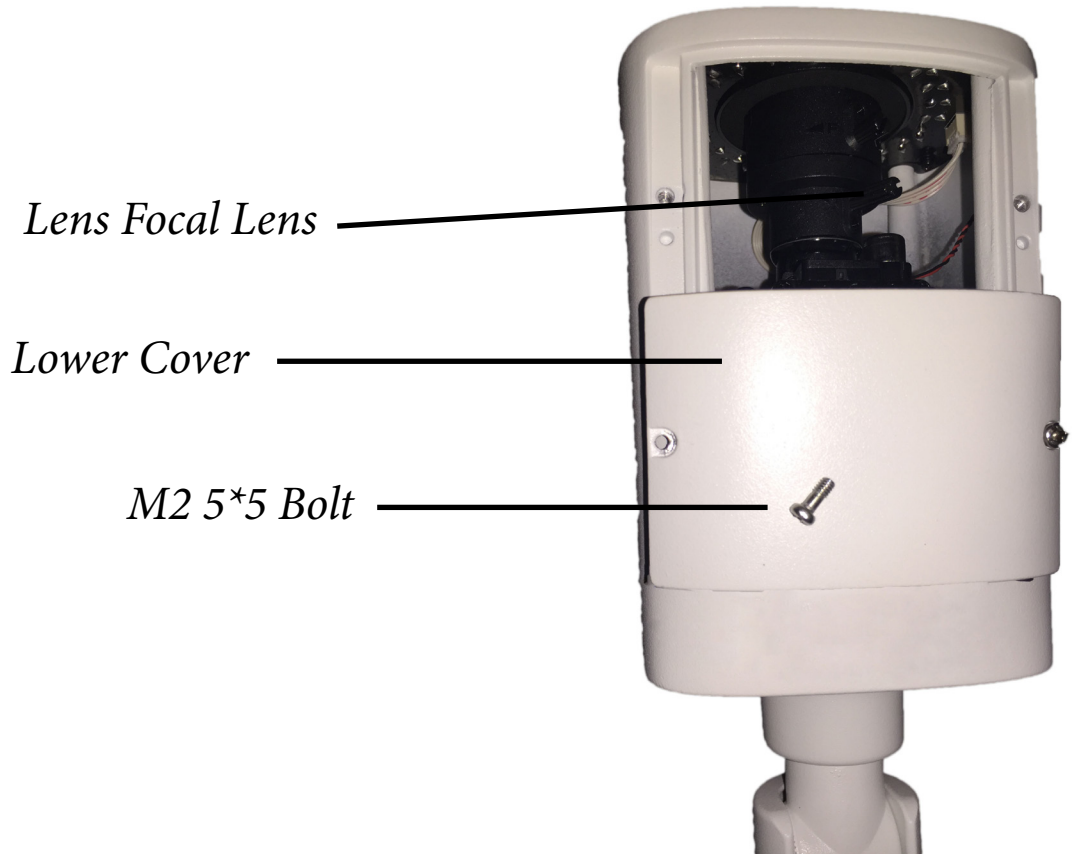
**Step 2**

Unscrew the M3 x 20 and M3 x 5 screws on the bracket and adjust the camera to the exact location which needs to be monitored by rotating the bracket and camera body, then secure the bolts.

## *VariFocal Camera*



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

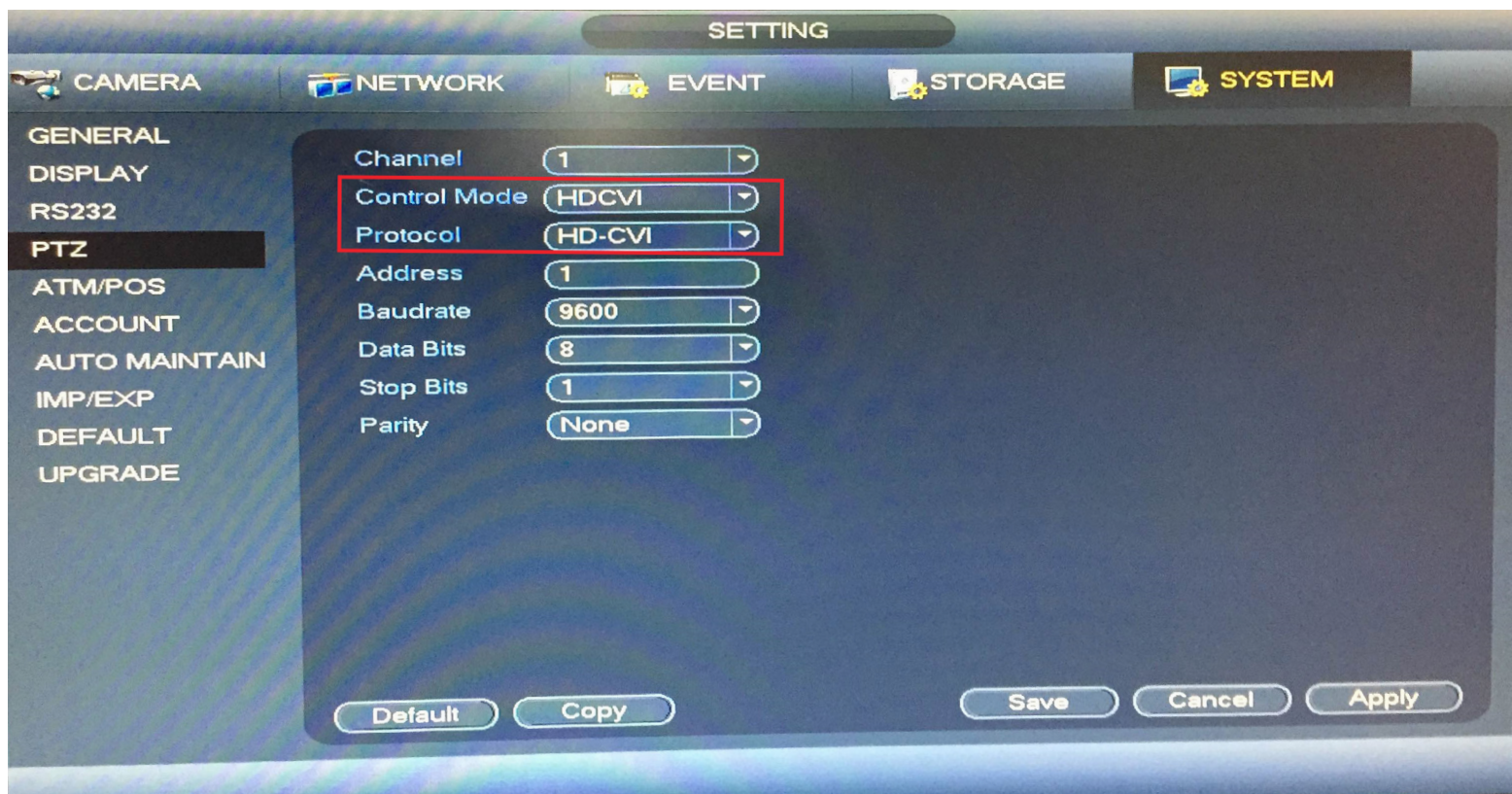


## 5.1

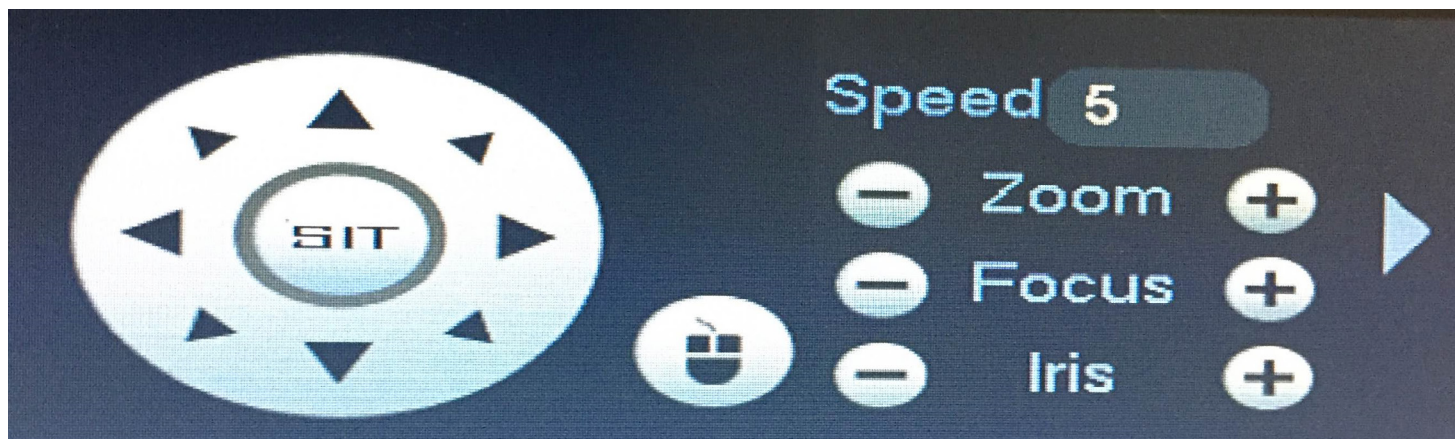
## HD-CVI Series DVR settings

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

After connecting the camera to the HD-CVI series DVR go to Main Menu ->Setting->System->PTZ. You need to set control mode as HD-CVI and the protocol as HD-CVI. Click save button to save current setup.



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.