HD-TVI
1080P Dome Camera
User Manual

Thank you for purchasing our product. If there are any questions, or requests, please do not hesitate to contact the dealer.

This manual may contain several technical incorrect places or printing errors, and the content is subject to change without notice. The updates will be added to the new version of this manual. We will readily improve or update the products or procedures described in the manual.

Privacy Notice

Surveillance laws vary by jurisdiction. Check all relevant laws in your jurisdiction before using this product for surveillance purposes to ensure that your use of this product conforms.

Please refer to the product specification for camera parameters and functions.

1 Introduction

1.1 Product Features

This camera adopts new generation sensor with high sensitivity and advanced circuit board design technology. It possesses the features of high resolution, low distortion, and low noise, etc. It is extremely suitable for supervisory system and image processing system.

The main features are as follows:

● High performance CMOS sensor and high resolution bring high-quality image;
● Low illumination;
● OSD menu, parameters are configurable;
● Support auto white balance, auto gain control, electronic shutter control and internal synchronization;
● SMART IR mode;
● 2.8-12mm motorized vari-focal lens;
● Advanced 3-axis design meets different installation requirements.

1.2 Overview

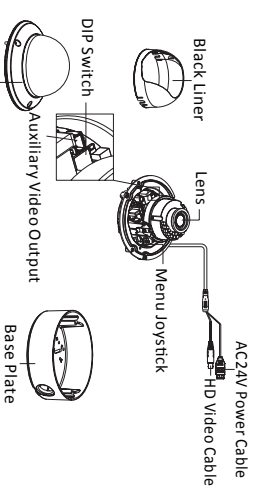### 1.2.1 Overview of Type I Camera

Figure 1-1 Overview of Type I Camera
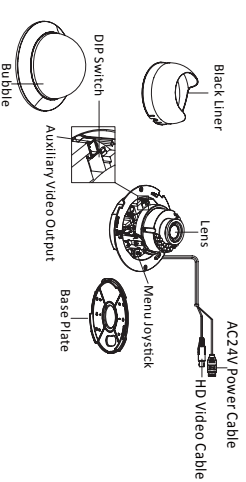
1.2.2 Overview of Type I Camera

Figure 1-2 Overview of Type II Camera

2 Installation

Before you start:

● Please make sure that the device in the package is in good condition and all the assembly parts are included.
● Make sure that all the related equipment is power-off during the installation.
● Check the specification of the products for the installation environment.
● Check whether the power supply is matched with your power output to avoid damage.
● Please make sure the wall is strong enough to withstand three times the weight of the camera and the mounting.
● If the wall is the cement wall, you need to insert expansion screws before you install the camera. If the wall is the wooden wall, you can use self-tapping screw to secure the camera.
● If the product does not function properly, please contact your dealer or the nearest service center. Do not disassemble the camera for repair or maintenance by yourself.

2.1 Ceiling Mounting

Steps:

1. Drill the screw holes and the cable hole on the ceiling according to the supplied drill template.
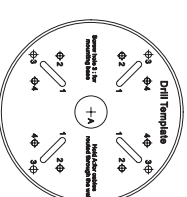
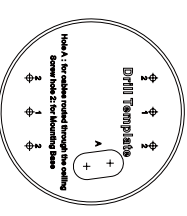Type I: Type II:

Figure 2-1 The Drill Template

2. Loosen the screws on the bubble of type 1 camera /rotate the bubble of type2 camera to remove the bubble and the black liner.
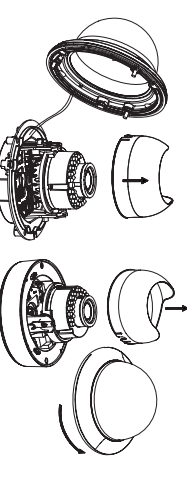
Type I: Type II:

Figure 2-2 Remove the Bubble

3.Attach the back box of type 1 camera /base plate of type2 camera to the ceiling and secure them with supplied self-tapping screws.

4.Route the cables through the cable hole.

5.Align the camera with the back box/base plate, and tighten the set screws to secure the camera with the back box/base plate.
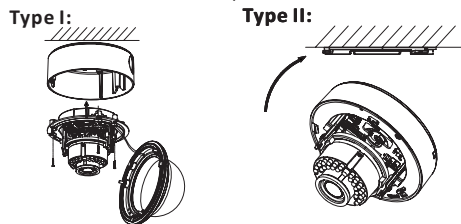
Type I: **Type II:**

Figure 2-3 Fix the Camera to the Ceiling

6. Connect the corresponding cables.

7. Adjust the camera according to the figure below to get an optimum angle.

8. Fit the black liner on the camera and tighten the screws on the bubble of type 1 camera or rotate the bubble of type 2 camera to complete.

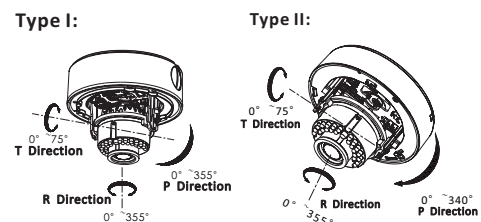**Type I:**   **Type II:**

Figure 2-4 3-axis Adjustment

2.2 In-ceiling Mounting

You need to purchase an in-ceiling mount separately if you adopt in-celling mounting.

Steps:

1.Drill the screw holes and the cable hole in the ceiling according to the supplied drill template.

2.Screw the bolts through the mount by aligning with the 2 bolt holes. Fit the toggles onto the bolts.

3.Push the two toggle bolts through the two screw holes on the ceiling. Rotate the bolt till the toggle holds the ceiling tightly.
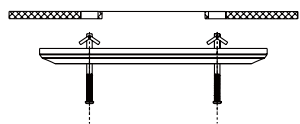
Figure 2-5 Install the Mount

4.Route and connect the corresponding cables.

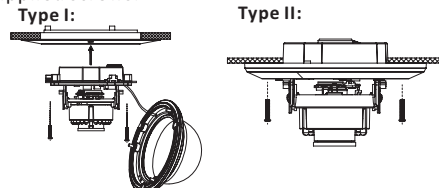5.Fix the camera to the in-ceiling mount with the supplied screws.

Type I: **Type II:**

Figure 2-6 Fix the Camera to the Mount

6. Repeat steps 6-8 of the Ceiling Mounting section to complete the installation.

2.3 In-ceiling Mounting with Gang Box

Only the type 1 camera supports in-ceiling mounting with gang box.

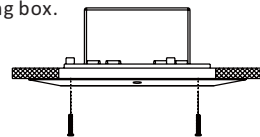1.Repeat steps 2-4 of the In-ceiling Mounting section to secure the in-ceiling mount (supplied) to the gang box.

Figure 2-7 Install the Mount

2.Route and connect the corresponding cables.

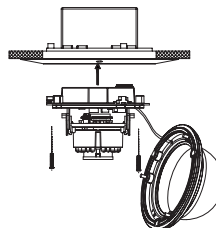3.Align the camera with the gang box, and tighten the screws to secure the camera with the gang box..

Figure 2-8 Fix the Camera to the Gang Box

4. Repeat steps 6-8 of the Ceiling Mounting section to complete the installation.

3 Menu Operation

Press the menu button to enter the menu interface. When the menu interface is not displayed, you can press and hold any direction key of the joystick for 3s to enter the focusing interface. Move the joystick to adjust the camera lens by the FOCUS+, FOCUS-, ZOOM+ and ZOOM-.

After connecting the camera with back-end device, you can also control the camera with mouse in PTZ control mode. The direction keys works as the menu joystick.

After connecting the camera with back-end device, you can also control the camera with mouse in PTZ control mode. The direction keys works as the menu joystick.

3.1 Smart Focus

Press the menu button to enter the menu interface. When the menu interface is not displayed, you can press and hold any direction key of the joystick for 3s to enter the focusing interface. Move the joystick to adjust the camera lens by the FOCUS+, FOCUS-, ZOOM+ and ZOOM-.

3.2 VIDEO.OUT

You can set the frame rate as 25 fps/30fps.

3.3 DAY/NIGHT

Color, B/W, AUTO and EXT are selectable for DAY/NIGHT switches. Under the mode of the AUTO and EXT, you can set the IR LED as Smart and CDS. If the IR LED is selected as Smart, you can set the brightness of the IR LED.

DAY/NIGHT	
1. MODE	AUTO
2. D TO N	63
3. N TO D	63
4. DELAY TIME	20
5. RETURN	RET

Figure 3-2 DAY/NIGHT

SPECIAL	
1. PRIVACY	ZONE
2. MOTION	
3. HLC	
4. RETURN	RET

Figure 3-4 SPECIAL

3.4 AWB

Auto, User, Push, 8000k, 6000k, 4200k and 3000k are selectable for AWB. Under the mode of AUTO, you need to set the R-G/B-G Gain and to select an indoor/outdoor mode. If the AWB mode is select as User, You need to set the R/G/B Gain manually.

3.5 AE

You can set the AE mode as HOLD, DC and ESC.

Brightness: Brightness refers to the brightness of the image.

Shutter: Shutter denotes the speed of the shutter. You can set the shutter as AUTO, 1/25, 1/30, 1/50, 1/60, 1/100, 1/120, 1/250, 1/500, 1/1k, 1/3k and 1/10k.

Flicker: You can set the flicker status as 50HZ/60HZ to prevent image flicking.

BLC: BLC bases on the back area to enhance the brightness of the whole image. You can set the BLC gain from 0 to 16.

AGC: AGC optimizes the clarity of image in poor light scene. The value of AGC can be set from 1-5.

LSC: LSC corrects the phenomenon where the image gets darkened or blurred on the periphery.

AWB	
1. MODE	AUTO
2. R-G GAIN	255
3. B-G GAIN	151
4. RETURN	RET

Figure 3-3 AWB

3.6 SPECIAL

Privacy zone: Select a PRIVACY area. Set the MASK PAT as OFF, GRAY, WHITE or BLACK. Set the SX/EX/SY/EY value to define the position and size of the area.

Motion: Set the Motion status as ON or OFF. Set the SENSITIVITY from 0 to 255. Set the alarm status as ICON/TRANCE/OFF. Set the hold time from 0 second to 255 seconds.

HLC: HLC supplements the brightness of the peripheral area of the image. You can set the mask value and threshold from 0 to 255.

3.7 EFFECT

Color Gain: Color gain adjust this feature to change the saturation of the color. You can set the value from 0 to 255.

Color Hue: You can adjust the image HUE from 0 to 71.

Sharpness: Sharpness determines the amount of detail that an imaging system can reproduce. You can set the value from 0 to 255.

Contrast: Contrast enhances the difference in color and light between parts of an image. You can set the value from 0 to 255.

Bright Off.: Bright Off. refers to the brightness compensation of the image. You can set the bright compensation value as 0 or 1.

Mirror: You can set the Mirror status as ON/OFF.

Flip: You can set the FLIP status as ON/OFF.

EFFECT	
1. COLOR GAIN	200
2. COLOR HUE	200
3. SHARPNESS	25
4. CONTRAST	150
5. BRIGHT OFF.	1
6. MIRROR	ON
7. FLIP	ON
8. RETURN	RET

Figure 3-5 EFFECT

SYSTEM	
1. CAMERA ID	255
2. ID DISP.	ON
3. NAME DISP.	ON
4. LANGUAGE	ENG
5. FACTORY INIT	OFF
6. RETURN	RET

Figure 3-6 SYSTEM

3.8 SYSTEM

You can set the camera ID from 0 to 255.

Select the ID display and name display status as ON/OFF.

Chinese and English are selectable for the language of the menu.

You can restore the camera to the default by setting the factory initialization status as ON.

3.9 EXIT

Exit and Save & exit are selectable.