

# HD-TVI Turret & 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 n tice. 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.

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

## **Regulatory Information**

### **FCC Information**

FCC compliance: This equipment has been tested and found to comply with the limits for a digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

### FCC Conditions

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:

- 1. This device may not cause harmful interference.
- 2. This device must accept any interference received, including interference that may cause undesired operation.

### EU Conformity Statement

This product and - if applicable - the supplied accessories too are marked with "CE" and comply therefore with the applicable harmonized European

standards listed under the Low Voltage Directive 2006/95/EC, the EMC Directive 2 04/108/EC, the RoHS Directive 2011/65/EU.



2012/19/EU (WEEE directive):
 Products marked with this symbol cannot be disposed of as unsorted municipal waste in the European Union. For proper recycling, return

this product to your local supplier upon the purchase of equivalent new equipment, or dispose of it at designated collection points. For more information see: www.recyclethis.info.



2006/66/EC (battery directive):This product contains a battery that cannot be disposed of as unsorted municipal waste in the European Union.

See the product documentation for specific battery information. The battery is marked with this symbol, which may include lettering to indicate cadmium (Cd), lead (Pb), or mercury (Hg). For proper recycling, return the battery to your supplier or to a designated collection point. For more information see: www.recyclethis.info.

# 1 Introduction

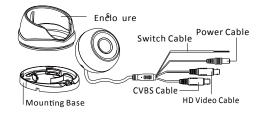
# **1.1 Product Features**

This series of camera adopts new generation sensor with high sensitivity and advanced circuit design technology. It features high resolution, low image distortion and low noise, etc., which makes it suitable for surveillance system and image processing system.

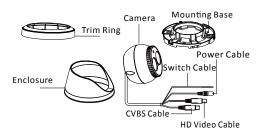
- High performance CMOS sensor and high resolution bring high-quality image;
- Low illumination;
- •OSD menu, parameters are configurable;
- •Support auto white balance, auto gain control, electronic shutter control;
- •SMART IR mode;
- Unit transmission control;
- •Advanced 3-axis design meets different installation requirements.

## 1.2 Overview

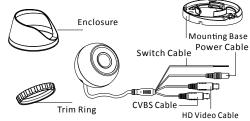
### 1.2.1 Overview of Type I Camera



## 1.2.2 Overview of Type || Camera



### 1.2.3 Overview of Type ||| Camera



# NOTE

- All the diagrams only apply to cameras with a 1080p resolution. The cameras with a 720p resolution of these three types do not have CVBS cables and switch cables.
- The switch cables are designed for toggling status of the WDR functions for 1080p cameras. The WDR function is disabled by default, and you can short the white and black line-ends of the switch cable to enable the function.

# 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.

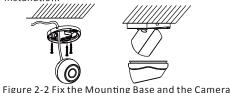
# 2.1 Installation of Type I Camera *Steps:*

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



Figure 2-1 The Drill Template 2.Fix the mounting base to the ceiling with the supplied screws.

3.Route the cables to the cable hole and connect the corresponding power cable and video cable.
4.Secure the camera to the mounting base.
5.Fix the enclosure to camera to complet the installation.



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

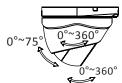


Figure 2-3 3-axis Adjustment

## 2.2 Installation of Type II Camera

### Steps:

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

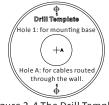


Figure 2-4 The Drill Template

2.Connect the corresponding power/video cables.3.Insert the supplied screws to the screw holes and tighten the screws to secure the camera to the ceiling.

4.Loosen the lock screw.

5.Rotate the enclosure to adjust the pan angle; rotate the camera to adjust the tilt angle.6.Tighten the lock screw to clamp the lens.

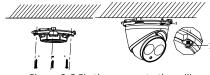


Figure 2-5 Fix the camera to the ceiling

7.Attach the trim ring to the camera.8.Rotate the trim ring clockwise to secure it to the camera.

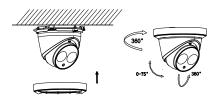


Figure 2-6 Install the trim ring

# 2.3 Installation of Type III Camera

### Steps:

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

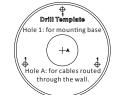


Figure 2-6 The Drill Template 2.Fix the mounting base to the ceiling with the supplied screws.

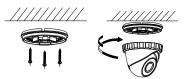


Figure 2-7 Fix the Mounting Base and Camera

3.Route the cables to the cable hole and connect corresponding power cable and video cable.4.Secure the camera to the mounting base.

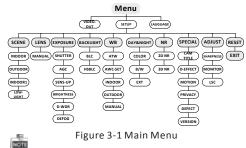
5.Fix the enclosure to camera.

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



Figure 2-8 3-axis Adjustment

# 3 Menu Operation



 A coaxial camera controller (purchase separately) is required to select the menu and adjust the camera parameters.

•Cameras with a 720p resolution of these three types do not support menu operation.

### 3.1 VIDEO.OUT

PAL or NTSC is selectable .

### 3.2 LANGUAGE

English, Japanese, CHN1, CHN2, Korean, German, French, Italian, Spanish, Polish, etc., are selectable.

### 3.3SETUP

### 3.3.1 SCENE

You can select indoor, outdoor, indoor 1 and low -light as the working environments.

### 3.3.2 LENS

The camera is equipped with a fixed lens.

#### 3.3.3 EXPOSURE

**SHUTTER**: AUTO, 1/25, 1/50, FLK, 1/200, 1/400, 1/1k, 1/2k, 1/5k, 1/10k, 1/50k, x2, x4, x6, x8, x10, and x15 are selectable.

AGC: You can set the AGC value from 0 to 15. SENS-UP: You can set the SENS-UP to OFF or AUTO. BRIGHTNESS: You can set the brightness value from 1 to 100.

**D-WDR**: You can set the D-WDR to ON to improve the image quality or OFF to disable the function. **DEFOG**: You can set the defog function as ON to enable the function. Position, size, and the defog gradation are configurable.

EXPOSURE	HSBLC
1. SHUTTER         AUTO           2. AGC         OFF           3. SENS-UP            4. BRIGHTNESS                    5. DEFOG         OFF           6. BACKLIGHT         OFF           7. RETURN         RET	1. SELECT AREA 1 2. DISPLAY ON → 3. LEVEL →  →4 4. MODE ALL DAY 5. BLACK MASK ON 6. DEFAULT → 7. RETURN RET

Figure 3-2 Exposure Figure 3-3 HSBLC

### 3.3.4 Backlight

### Backlight Compensation (BLC):

-GAIN: Set the gain of BLC as High, Middle, or Low. -AREA: Press the up/down/left/right button to define the BLC position and size. Select RET or AGAIN to go back the BLC menu or re-define the BLC area.

-Default: Restore the BLC settings to the default. HSBLC:

Select an HSBLC area. Set the DISPLAY status as ON. Press the up/down/left/right button to define the area position and size. Set the HSBLC LEVEL from 0 to 100. Select ALL DAY or Night for the HSBLC mode. Set the BLACK MASK status as ON or OFF.

#### 3.3.5 White Balance (WB)

INDOOR, OUTDOOR, MANUAL, ATW (Auto-tracking White Balance), AWC→SET are selectable.

### 3.3.6 Day & Night

Color, B/W, and EXT are selectable for DAY and NIGHT switches.

#### 3.3.7 NR

**2D NR**: You can set 2D NR status as ON or OFF. **3D NR**: Set the Smart NR status as ON and adjust the 3D smart NR sensitivity ranges from 0 to 100. Set the 3D NR LEVEL ranges from 0 to 100. Set the START. AGC level as the threshold to enable AGC, and set the END. AGC level as the threshold to disable AGC

sable AGC.	3D NR
2D&3D NR	1. SMART NR ON ↔ 2. LEVEL  8 0
1. 2DNR OFF 2. 3DNR ON ↔ 3. RETURN RET	3. START. AGC - 10 4. END. AGC - 10 5. RETURN RET
Figure 3-5 NR	Figure 3-6 3D NR

3.3.8 SPECIAL

Camera Title: Edit the camera title on this section. D-effect:

-FREEZE: Set the freeze function as ON or OFF. -MIRROR: OFF, MIRROR, V-FLIP, and ROTATE are selectable for mirror.

-**D-ZOOM**: Define the zoom area by configuring the position from PAN & TILT.

-SMART D-ZOOM: The D-Zoom area, sensitivity and time are configurable.

-NEG.IMAGE: Set the NEG IMAGE as ON or OFF.

SPECIAL	MOTION
1. CAM TITLE         ON ↔           2. D-DFFECT         ↔           3. MOTION         OFF           4. PRIVACY         OFF           5. LANGUAGE         ENG ↔           6. DEFECT         ↔           7. VERSION         130722           8. RETURN         RET	1. SELECT AREA 1 2. DISPLAY ON 3. SENSITIVITY

Figure 3-7 Special Figure 3-8 Motion Detection

Motion: Select a MOTION area. Set the DISPLAY status as ON or OFF. Press the up/down/left/right button to define the position and size of the area. Set the SENSITIVITY from 0 to 60. Set the MOTION VIEW status as ON or OFF.

**Privacy**: Select a PRIVACY area. Set the DISPLAY status as INV, MOSAIC, COLOR or OFF. Press the up/down/left/right button to define the position and size of the area.

**Defect**: LIVE DPC, STATIC DPC and Black DPC are adjustable in this section.

Version: You can check the software version of the device.

PRIVACY	
PRIVACE	ADJUST
1. SELECT AREA 1 2. DISPLAY MOSAIC ← 3. COLOR 10 4. TRANS. 1 5. DEFAULT ← 6. RETURN RET	1. SHARPNESS 15 2. MONITOR LCD 3. LSC OFF 4. VIDEO. OUT PAL 5. RETURN RET

Figure 3-9 Privacy Mask Figure 3-10 Adjust

3.3.9 ADJUST

Sharpness: Adjust the sharpness from 0 to 15. Monitor: Monitor CRT, and Monitor LCD are selectable. LSC: Set the LSC status as ON or OFF.

# 3.3.10 RESET

Reset all the settings to the default. 3.3.11 EXIT Press OK to exit the menu.