HD Analog Camera
Quick Start Guide

Statement

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.

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 2004/108/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

Disclaimer

This manual is for reference only. It may contain several technical incorrect places or printing errors, and the content is subject to change without notice. All information in this booklet has been thoroughly reviewed. Devision is not liable for damage caused by improper use of this device.

Warnings Follow these safeguards to prevent serious injury or death.	**Cautions** Follow these precautions to prevent potential injury or material damage

Warnings

WARNING: Installation and servicing should be performed only by qualified and experienced technicians to conform to all local codes and to maintain your warranty.
WARNING: This device is configured for 12V DC operation only. Do not connect to a higher voltage. Use only with NRTL approved Class 2 or LPS power supplies. To prevent potential ground loop issues, a separate PSU should be used for each camera. A multiple-output PSU may be used if the multiple output PSU has isolated and protected (2A max) outputs.

Cautions
CAUTION: The light emitted from the near-infrared light emitting diodes (LEDs) provides illumination over a wide area. This light is not considered a risk to the unshielded human eye. However, as with any light source, it is recommended that normal precautions be taken to avoid unnecessary exposure. For example, avoid staring into the beam or viewing the LEDs directly with optical instruments at close range.

Important Safety Instructions
- Read and keep these instructions.
- Ensure that your installation area can safely support 3 times the weight of the camera.
- Do not install the camera in extreme temperature conditions. Only use the camera where temperatures are within the limits shown in the camera specifications. Be especially careful to provide ventilation when operating under high temperatures.
- Do not install indoor rated cameras where they will be exposed to rain or moisture.
- To prevent damage to the imager, do not aim the camera toward an extreme light source.
- Do not touch the camera lens, dome or bezel (front glass plate).
- Do not drop the camera or subject it to physical shock.
- Do not use strong or abrasive cleaners, clean only with a soft cloth and mild detergent or alcohol.
- Do not open the camera or attempt to service it yourself. Refer all service issues to your dealer.

Product Features
This series of camera adopts a high-performance imaging sensor and advanced circuit board design technology. It features high resolution, low distortion, and low noise. It is ideal for surveillance systems and image processing systems.

Overview
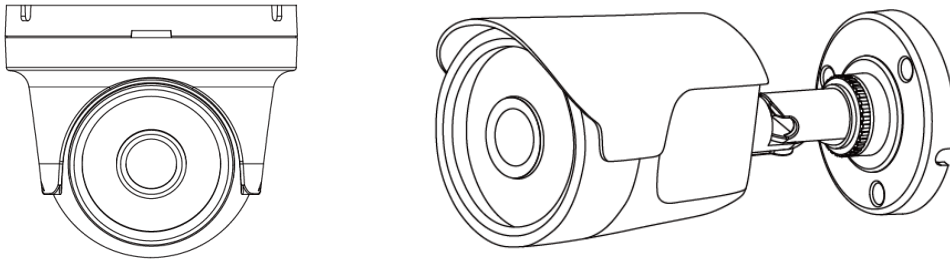
**Installation**

Before you start:

1. Please make sure that the camera is in good condition and all of the assembly parts are included.
2. Make sure that all related equipment is powered-off during the installation.
3. Check that the camera specification agrees with the installation environment.
4. To avoid damage, ensure the power supply voltage matches your camera requirements.
5. Please make sure the installation surface is strong enough to withstand three times the weight of the camera and the mounting.
6. If the installation surface is concrete, you need to insert expansion screws before you install the camera. If the installation surface is wood, you can use self-tapping screws to secure the camera.
7. 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.

Note: The pictures shown in this manual is for reference only, different models may vary its shape and structures. Please take actual product as standard.
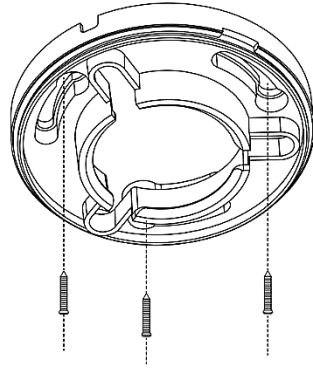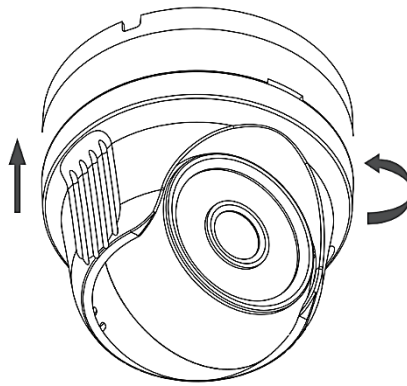
Installation

Indoor

1. Open the camera mounting base using the tool provided in the package.
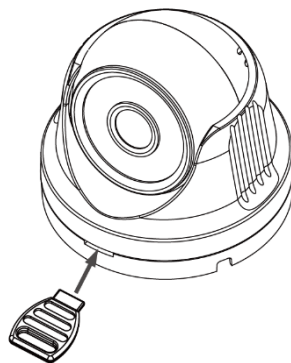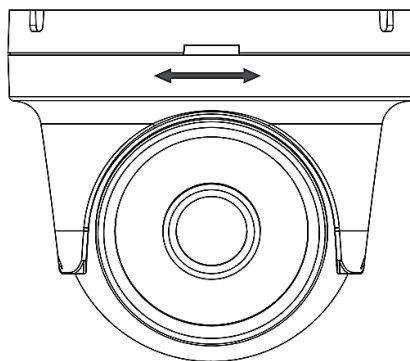
2. Route the cables properly and connect the corresponding cables.
3. Use the screws to fix the mounting base to the ceiling.

4. Push the support case upward to the mounting base to secure the eyeball camera
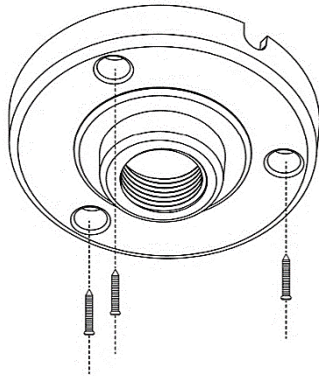

5. Compare video image on the display. Adjust the camera horizontal and vertical direction by spinning the eyeball till you find the perfect angle of areas that need to be monitored and complete the installation.
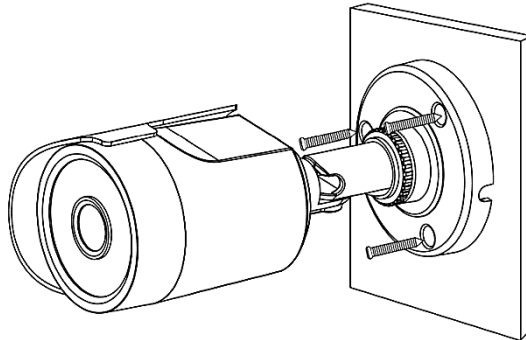
<u>Outdoor</u>

1. Drill the screws holes and the cable hole (if needed) in the ceiling or wall according to the supplied mounting template.

2. Route the cables properly through the cable hole.
3. Connect the corresponding cables.
4. Secure the camera to the ceiling or wall with the supplied screws.

5. Adjust the view angle
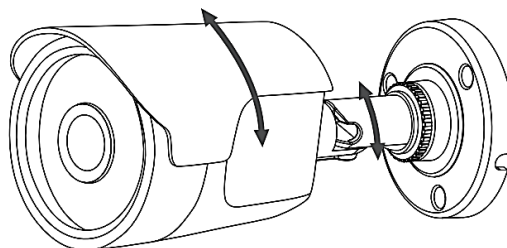
OSD Operation

<u>OSD Menu</u>

To access the OSD Menu of the camera, Right Click on the Channel and get the Menu. Click on **PTZ** Menu. Then select **Menu Operation** in the PTZ Control Menu.

Note: Some models with OSD switch on its cable to access the OSD Menu.

Right Click Menu

IP Camera
Remote Setup
System Setup
View Layout ▶
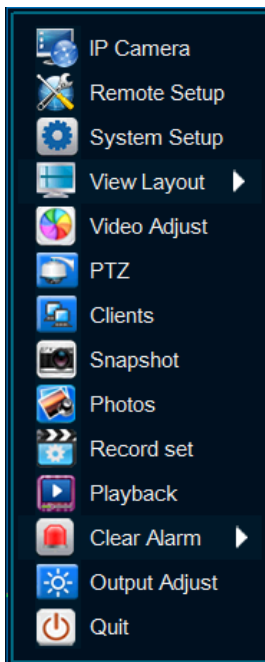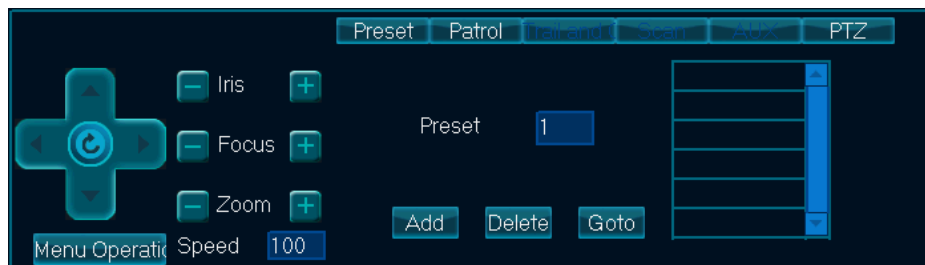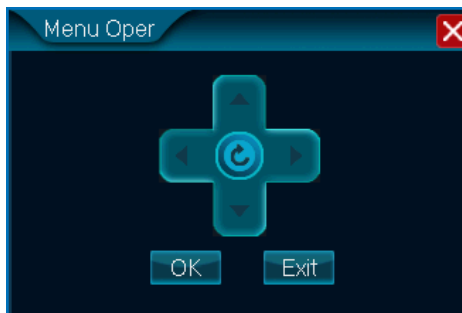Video Adjust
PTZ
Clients
Snapshot
Photos
Record set
Playback
Clear Alarm ▶
Output Adjust
Quit

Right Click Menu

PTZ Menu

Preset   Patrol   Scan   PTZ

Iris − +
Focus − +
Zoom − +

Menu Operatio   Speed 100

Preset   1

Add   Delete   Goto

PTZ Menu

Menu Operation

Menu Oper

OK   Exit

Menu Operation

Use the navigation buttons and OK button in the Menu Operation to control the operation.

OSD Menu Structure

OSD MENU

EXPOSURE	BACKLIGHT AND WB	DAY AND NIGHT	DENOISE	IMG	OUTPUT	DEFAULT CONFIG	EXIT WITHOUT SAVING	EXIT & SAVE
EXPOSURE	BACKLIGHT	D/N MODE	DENOISE DAY	BRIGHTNESS	MIRROR			
NRT	PREVENT EXPOSURE	D/N SWITCH	DENOISE NIGHT	CONTRAST	FLIP			
AE REFERENCE	WBRB	ICR SWAP	RETURN	SATURATION	STANDARD			
DWDR	WBGM	BW BURST		HUE	OUTPUT MODE			
ANTI FLICKER	RETURN	RETURN		SHARPNESS	NRT			
RETURN				ANTI MORIRE	RETURN			
				ANTI ALIASING				
				IMG STYLE				
				RETURN				

1. EXPOSURE
   - **EXPOSURE**: AUTO,1/60, 1/100, 1/120, 1/500, 1/1k, 1/2k, 1/4k, 1/10k, 1/100k are selectable.
   - **NRT**: NRT is OFF by default.
   - **AE REFERENCE**: You can set the AE REFERENCE from 0 to 100.
   - **DWDR**: You can set the DWDR value from 0 to 100.
   - **ANTI FLICKER**: You can set the ANTI FLICKER as ON or OFF.
   - **RETURN:** Select RETURN to the previous menu.
2. BACKLIGHT AND WB
   - **BACKLIGHT:** You can configure the BACKLIGHT as OFF or value 1 to 3.
   - **PREVENT EXPOSURE:** You can configure the PREVENT EXPOSURE as OFF or value 1 to 3.
   - **WBRB:** You can set the WBRB value from 0 to 100.
   - **WBGM:** You can set the WBGM value from 0 to 100.
   - **RETURN:** Select RETURN to the previous menu.
3. DAY AND NIGHT
   - **D/N MODE:** You can configure the D/N MODE as AUTO, DAY or NIGHT.
   - **D/N SWITCH:** You can configure the D/N SWITCH value from 10 to 50.
   - **ICR SAP:** You can set the ICR SWAP as ON or OFF.
   - **BW BURST:** You can set the BW BURST as ON or OFF.
   - **RETURN:** Select RETURN to the previous menu.
4. DENOISE
   - **DNOISE DAY:** You can set the DNOISE DAY value from 0 to 5.
   - **DENOISE NIGHT:** You can set the DENOISE NIGHT value from 0 to 5.
   - **RETURN:** Select RETURN to the previous menu.
5. IMG
   - **BRIGHTNESS:** Adjust BRIGHTNESS value from 0 to 100.
   - **CONTRAST:** Adjust CONTRAST value from 0 to 100.
   - **SATURATION:** Adjust SATURATION value from 0 to 100.
   - **HUE:** Adjust HUE value from 0 to 100.
   - **SHARPNESS:** Adjust SHARPNESS value from 0 to 100.
   - **ANTI MORIRE:** Adjust ANTI MORIRE value from 0 to 100.
   - **ANTI ALIASING:** Adjust ANTI ALIASING value from 0 to 100.
   - **IMG STYLE:** You can adjust the IMG STYLE with predefined style preset from 1 to 3
   - **RETURN:** Select RETURN to the previous menu
6. OUTPUT
   - **MIRROR:** You can select MIRROR ON or OFF.
   - **FLIP:** You can select FLIP ON or OFF.
   - **STANDARD:** You can set Video STANDARD as NTSC or PAL. If you choose NTSC, Select APPLY NOW to take effect and RETURN to previous menu. If you choose PAL, Select APPLY NOW to take effect and RETURN to previous menu.
   - **OUTPUT MODE:** You can select the OUTPUT MODE of this camera as AHD, CVI, TVI or CVBS. When you select any of this mode, Select APPLY NOW to take effect. RETURN to the previous menu.
   - **NRT:** NRT is OFF by default.
   - **RETURN:** Select RETURN to the previous menu
7. DEFAULT CONFIG
   - DEFAULT CONFIG reset the camera to its default values.
8. EXIT WITHOUT SAVING
   - EXIT WITHOUT SAVING exit the menu without saving the changes.
9. EXIT & SAVE
   - EXIT & SAVE saves all the changes and exit the menu.