

## 2M HD IP Remote Head Camera

### Quick Manual

Ver. 1.0 / 2021.02

Before installing and using the camera, please read this manual carefully. Be sure to keep it handy for future reference.

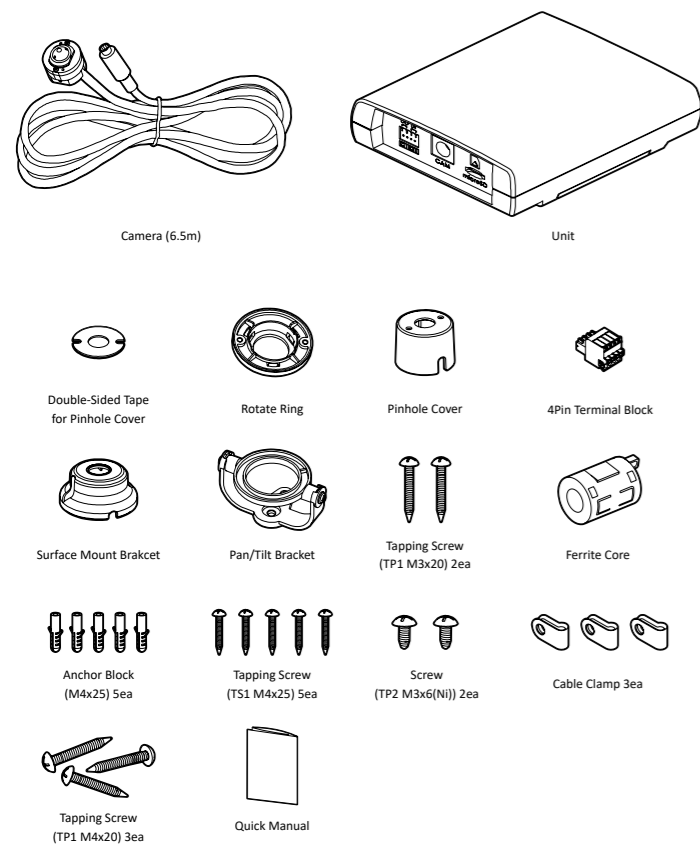


This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, 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.

To disconnect power from the mains, pull out the mains cord plug. When install the product, ensure that the plug is easily accessible.

## 1. Product & Accessories

Please check if all the camera and accessories are included in the package.



## Safety Information

These instructions are intended to ensure that the user can use the product correctly to avoid danger or property loss.



**WARNINGS** : Serious injury or death may be caused if any of these warnings are neglected.

### POWER

- Use only standardized adapters written in the manual. Incorrect connection of the power source can cause fire, electric shock, or failure.
- If there is smoke or a strange smell from the power source, disconnect the power immediately and contact the service center or purchasing office. If you continue to use it as it is, it can cause fire and electric shock.
- Disconnect the power plug from the outlet before connecting to the power terminal block.

### INSTALLATION

- Install it according to the temperature and humidity environment suitable for the product specifications. Otherwise, it can cause fire and electric shock.
- Thunder and lightning can cause problems with the camera. When installing, be careful to minimize damage caused by lightning such as grounding.
- Do not place conductive materials (drivers, coins, metal sticks, etc.) and water-filled containers on the camera. It causes injuries caused by fire, electric shock, and falling.
- If you want to move the installed product, turn off the power and move it or reinstall it. Otherwise, it can cause fire and electric shock.
- Do not install it in places where there is a lot of moisture, dust, soot, etc. It causes fire and electric shock.
- Avoid places where direct sunlight comes in or where heat comes out, such as heating appliances. It causes fire and electric shock.

### CLEANING

- Do not spray water directly on each part of the product when cleaning. It causes fire and electric shock.

If the product is not functioning properly or damaged, contact the service center or purchasing office.



**CAUTIONS** : Injury or equipment damage may be caused if any of these cautions are neglected.

### POWER

- Use the power line after fixing it firmly to the power connection terminal. Incomplete connection can cause a fire.
- Do not extend the adapter output cable. If you need to install the power cable extension, please contact the service center.
- Use insulated power for PoE connected external power.

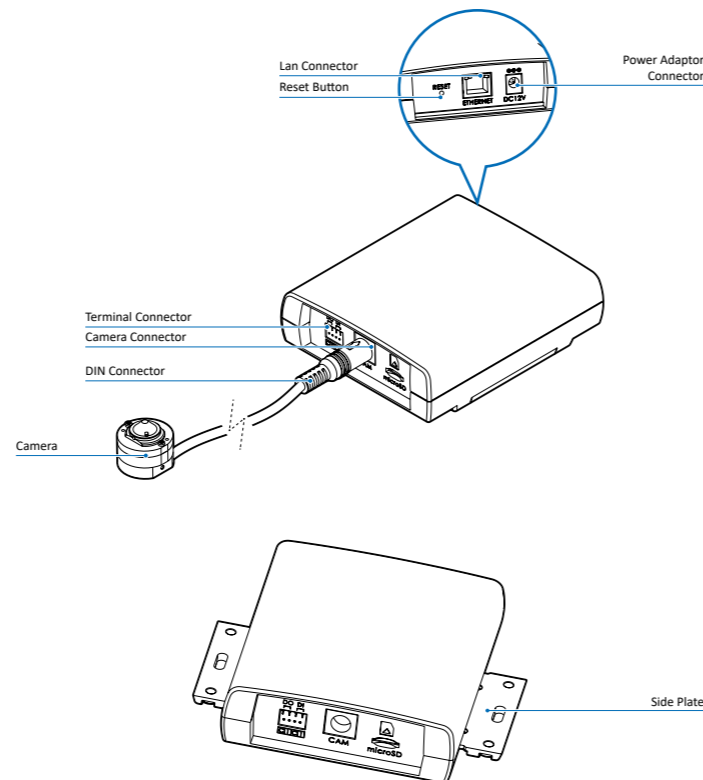
### INSTALLATION

- It is recommended not to touch the lens when installing the product as the factory ships with a focus adjustment completed during the manufacturing completion inspection phase.
- Avoid installing cameras facing bright lights like sunlight. Causes damage to the image sensor.
- Make sure it safe and securely when installing camera on the wall or ceiling. This can cause injury by the fall.
- Do not connect multiple cameras to one adapter. Excess capacity causes abnormal heat and fire.
- Wear protective gloves when installing/uninstalling the camera. This causes burns caused by high temperature on the surface of the product.
- Don't drop or shock the product. Please stay away from places where vibration is severe or magnet types are present.
- Install it in a well-ventilated place. This can cause fire and failure.

### CLEANING

- Wipe the contaminated surface with a clean, soft, dry cloth or wet the soft, dry cloth to prevent water from flowing, then wipe the contaminated area.

## 2. Part Name



## 3. Installation

Before installing your camera, you have to read the following cautions.

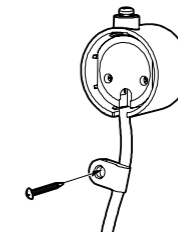
- You have to check whether the location can bear five times of the weight of your camera.
- Don't let the cable to be caught in improper place or the electric line cover to be damaged. Otherwise it may cause a breakdown or fire.
- When installing your camera, don't allow any person to approach the installation site. If you have any valuable things under the place, move them away.

### Inconspicuous Installation

- Drill a hole (diameter: 3mm) on a desired spot where the camera lens will be located.
- Peel off one side of the double-sided tape, and attach it to the flat surface of the pinhole cover by aligning the grooves on the tape with the screw holes on the pinhole cover.
- Peel off the other side of the tape, and stick the taped surface to the installation surface after aligning the hole on the pinhole cover with the drilled hole on the installation surface and facing the top screw hole upward.
- Fasten the pinhole cover by using the tapping screws (M3x20) appropriate for the material of the installation surface.

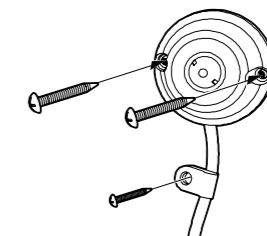
## Installation and Use Precautions

- The battery (battery pack or equipped battery) must not be exposed to excessive heat such as sunlight, fire, etc.
- Do not disassemble the camera at your discretion.
- If you forcefully install the product with excessive force, malfunction can damage the camera.
- Do not punch or shake the camera and be careful not to damage the camera with careless storage or malfunction.
- Be careful not to install the camera in a rainy or humid place, and do not leave it in a wet place.
- Installing or using the product in water can cause serious product failure.
- Do not install the product if there is chemical or vapor in the place where the product is installed, or if it can be generated.
- Be careful not to get chemicals on the surface of the product when installing the product. Chemical solvents such as cleaning agents and adhesive components can cause fatal damage to the surface of the product.
- Do not install it near the kitchen or cooking table as edible oil such as soybean oil can also cause product damage and deformation. It can cause product damage.
- Be careful not to get foreign substances on the Micro SD card terminal. If there is any foreign substance, wipe it with a soft cloth.
- Data will not be saved at the end of the life of the Micro SD card. In this case, purchase a new Micro SD card.
- Moisture may occur in the glass of the camera when the new product box is opened (or when the product is initially running). The generated moisture is removed by a Gore vent attached to the camera within hours of the power connection.
- For products enclosed with a desiccant or card-type absorbent, please install it according to the manual.
- Use only with cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus.
- Unplug this apparatus when a cart is used. Use caution when moving the cart/apparatus combination to avoid injury from tip-over.

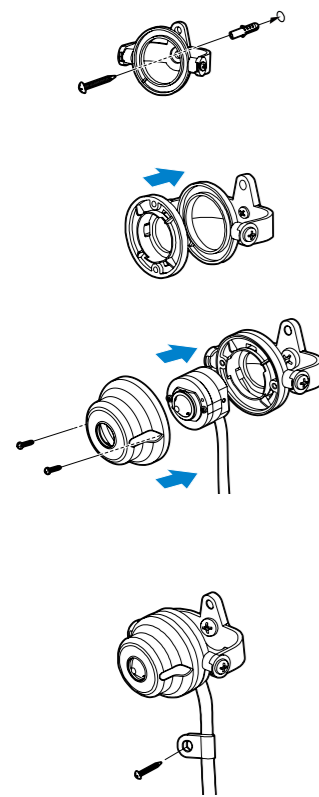


- Place the camera inside the pinhole cover by routing the camera's cable through the cable holder on the pinhole cover, and tighten the top screw head to fix the camera.
- Use the cable clamp optionally if you want to fix the camera's cable to a desired spot with a tapping screw (M4x20).

### Surface Installation for fixed angle

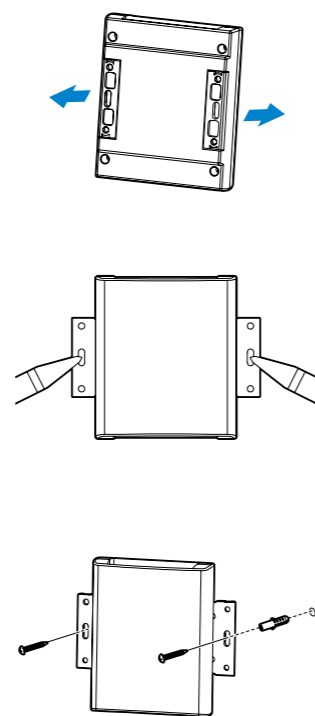


- Place the camera on a desired installation surface.
- Cover the camera with the surface mount bracket by routing the camera's cable into the cable holder on the bracket. Then, fasten the bracket using the tapping screws (M3x20) and anchor blocks appropriate for the material of the installation surface.
- Use the cable clamp optionally if you want to fix the camera's cable to a desired spot with a tapping screw (M4x20).



### Surface Installation for pan/tilt adjustment

- 1 Drill a hole on a desired installation surface, and insert an anchor block into the hole.
- 2 Fix the pan/tilt bracket by inserting the tapping screw (M4x25) to be passed through the screw hole on the bracket and tightening it into the anchor block.
- 3 Insert the rotate ring into the bracket by pressing it into the bracket's mount ring.
- 4 Place the camera unit on the pan/tilt bracket.
- 5 Place the surface mount bracket on top of the camera, fix the bracket by inserting the tapping screws (M3x6) into the screw holes on the bracket by aligning the screw holes with the holes on the rotate ring on the pan/tilt bracket, and tighten the screws.
- 6 Use the cable clamp optionally if you want to fix the camera's cable to a desired spot with a tapping screw (M4x20).



### Main Unit Installation

- 1 Pull out both slide plates at the bottom of the main unit.
  - 2 Place the main unit on the installation surface by facing the bottom of the main unit toward the installation surface, and mark the drilling spots based on the alignment holes on the slide plates.
  - 3 Drill the marked spots with a screw driver.
  - 4 Insert the anchor blocks to the drilled holes, and tighten them into the installation surface.
  - 5 Place the main unit in the same way as in 2), and insert the tapping screws to be passed through the alignment holes on the main unit.
  - 6 Tighten the screws into the anchor blocks to fix the main unit to the installation surface.
- Reset to the Factory Default**  
Press the reset button for 5 seconds to return the setup to the factory default.
- Warning :**  
If you press the 'Reset' button, you will lose all setting data. If needed, please, make a note for further installation.

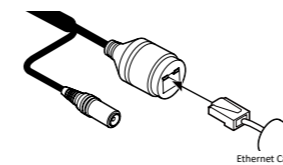
## 4. Cabling

### Two Options

Use a PoE-enabled switch to connect data and power through a single cable and begin viewing and recording images instantly. A non-PoE switch will require an adaptor for power transmission.

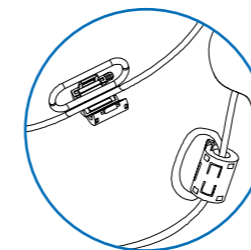
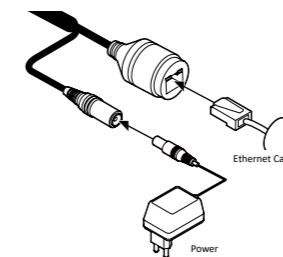
#### 1. Using a PoE-Enabled Switch

The Camera is PoE-compliant, allowing transmission of power and data via a single Ethernet cable. PoE eliminates the need for the different cables used to power, record, or control the camera. Follow the illustration below to connect the camera to a PoE-enabled switch using an Ethernet cable.



#### 2. Using a Non-PoE Switch

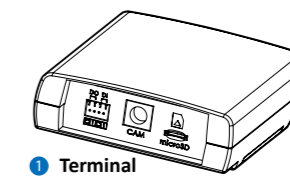
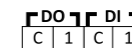
If a PoE-enabled switch is not used, use a power adaptor for power transmission and non-PoE switch for data transmission. Follow the illustrations below to connect the camera without a PoE-enabled Switch.



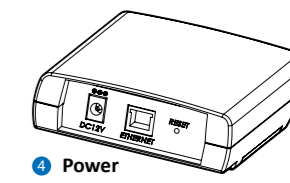
#### Use of Ferrite Core

Installing the ferrite core to a LAN cable is highly recommended to reduce high frequency noise level.

1. Open the ferrite core by lifting the clip.
2. Make one loop with the cable through ferrite core.
3. Close the ferrite core to hold the cable loop into its place.



1 Terminal  
2 Camera



4 Power  
3 Network

#### 1 DI/DO Terminal Connection

Connect external input/output devices (e.g. alarm device) optionally if they are necessary. Refer to the reference below for the appropriate connection.

##### DO (Alarm)

It is used for connecting an external device such as relays and LEDs.

DO	Function	Specifications
C	Ground	
1	Output	0 to 24 VDC Max load : 50mA

##### DI (Sensor)

It is used for connecting a device such as a PIR and a door/window sensor.

DI	Function	Specifications
C	Ground	
1	Output	0 to 5 VDC Max load : 50mA

#### 2 Camera Connection

Connect the camera unit to the main unit by inserting the camera's DIN connector to the camera's connector on the main unit.

#### 3 Lan Connector

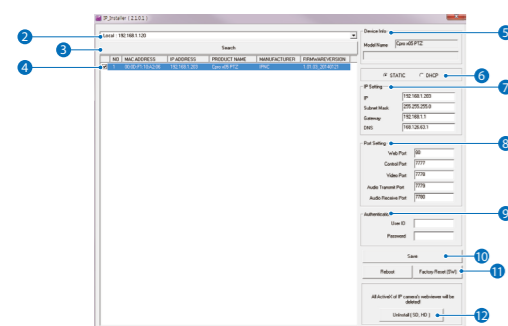
Connect the crossover cable into the RJ-45.

#### 4 Power Connector

Connect a DC12V power adaptor to the power connector on the main unit. If the camera is powered on via PoE, a power adaptor is not necessary to be connected to the main unit.

Rate Power	Power Consumption	PoE
DC 12V	3.6W	IEEE 802.3af Class3

## 5. IP Installer



### 1. Run IP Installer

- 1 Run the IP installer in S/W folder.
- 2 Click on Network Adaptor selection Menu (NIC) after run this program.
- 3 Select a network which a camera is connected then click on a 'Search' button. (Takes about 5 sec.)
- 4 Select a camera to set.
- 5 The information of the selected camera will be shown at Device Info.

### 6. Select the network type.

- 1 The default network type of the camera is DHCP mode.
- 1 If you have a DHCP server, it will automatically set the Camera IP.
- 1 If you do not have a DHCP server, Camera IP is set to 192.168.1.80 after one minute.

### 7. Input IP setting information when the network type is set to STATIC.

- 1 Default TCP/IP information  
- IP: 192.168.1.80  
- Subnet Mask: 255.255.255.0  
- Gateway: 192.168.1.1  
- DNS : 168.126.63.1

### 8. Change the port as necessary when the network type is set to STATIC.

- 1 A 'Port Forwarding' has to be set for external access to the camera.
- 1 Refer to the manual of the network hub for 'Port Forwarding' settings.
- 1 An additional change of HTTPS, RTSP port can be done at Web Viewer > Admin page.

### 9. Input ID and PW of the camera for authentication.

- Make sure to change the ID and PW for security reason.
- Go to "Web viewer>Setup>System>Users Management" for ID and PW change.
- The ID and PW will be set to default value when 'factory reset' the camera.

- 1 Default ID / PW : admin / admin

### 10. Make sure to click on 'Save' button to save changed values.

- An "Apply" message will be popped-up when the settings are applied normally, or an error message will be popped-up when failed.

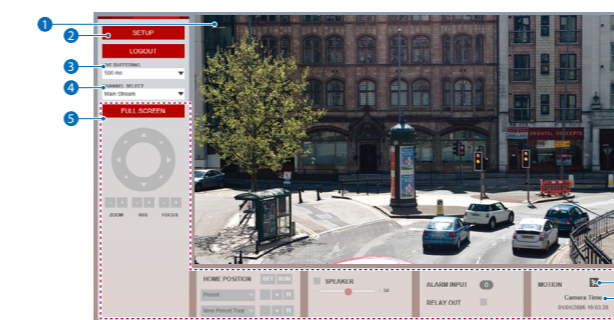
### 11. To reboot or reset (except network setting) the camera.

- Select a camera (multiple camera can be selected) > Input ID and PW > Click on Reboot or Factory Reset button.

### 12. Able to delete an Active-X which is installed when accessing to Web Viewer.

- You don't need the function because this camera use the VLC plugin instead of the Active-X.

## 6. Web Viewer Screen



### Web viewer is optimized with explorer 10 or above version and Chrome.

### 1 Live video display. This is the region for live video stream from the camera.

### 2 Setup popup button. Click it to open the Setup page to setup details of IP camera like Video, Network, Events, System and etc.

### 3 When the image goes unsmoothly because of bad network connection, it stored image during setup time and shows the image on the live view screen.

- User will see the delayed images as much as setup time.

### 4 Channel Select button. Select a stream produced from the camera between Stream 1 ~ 3 to display it in the live view screen.

- Refer the "Setup > Video & Audio > Video" to setup the Video Stream.

### 5 Below "Menu" is supported in accordance with models.

- PTZ Control**  
This camera model does not support.
- Speaker Control/Alarm Input/Relay Out**  
This feature is supported.
- Pre-set**  
Does not support.

### 6 Motion. It shows the Motion event status.

- Event Alert Icon ( ) appears if 'Motion Detection' is activated.

### 7 Camera Time. Display the camera time.

## Disposal of Old Appliance



1. When this crossed-out wheel bin symbol is attached to a product it means the product is covered by the European Directive 2002/96/EC.
2. All electrical and electronic products should be disposed of separately from the municipal waste stream in accordance to laws designated by the government or the local authorities.
3. The correct disposal of your old appliance will help prevent potential negative consequences for the environment and human health.
4. For more detailed information about disposal of your old appliance, please contact your city office, waste disposal service or the shop where you purchased the product.