

20M HD IP Multi-Sensor Outdoor Dome Camera

Quick Manual

Ver. 1.0 / 2021.06

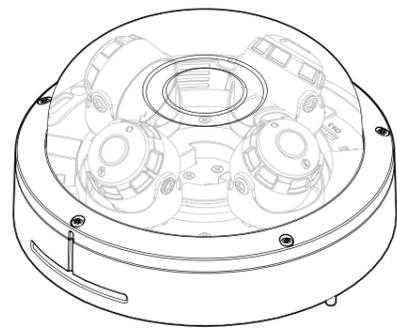
Before installing and using the camera, please read this manual carefully. Be sure to keep it handy for future reference.



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



Camera



RJ45 Cap Installer



Grommet



Quick Manual



Torx Wrench



Desi-Pak (Moisture Absorber)



Test Monitor Cable

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

1. Use only standardized adapters written in the manual. Incorrect connection of the power source can cause fire, electric shock, or failure.
2. 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.
3. Disconnect the power plug from the outlet before connecting to the power terminal block.

INSTALLATION

1. Install it according to the temperature and humidity environment suitable for the product specifications. Otherwise, it can cause fire and electric shock.
2. Thunder and lightning can cause problems with the camera. When installing, be careful to minimize damage caused by lightning such as grounding.
3. 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.
4. 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.
5. Do not install it in places where there is a lot of moisture, dust, soot, etc. It causes fire and electric shock.
6. Avoid places where direct sunlight comes in or where heat comes out, such as heating appliances. It causes fire and electric shock.

CLEANING

1. 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

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

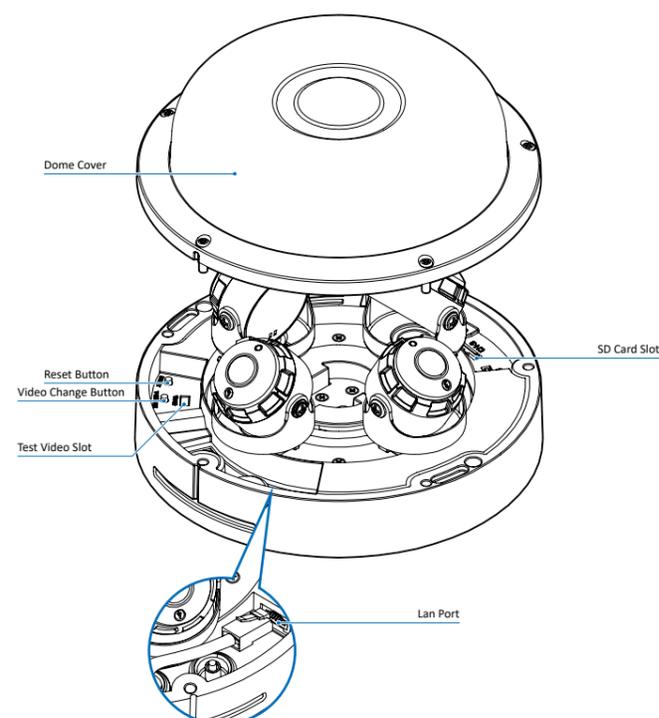
INSTALLATION

1. 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.
2. Avoid installing cameras facing bright lights like sunlight. Causes damage to the image sensor.
3. Make sure it safe and securely when installing camera on the wall or ceiling. This can cause injury by the fall.
4. Do not connect multiple cameras to one adapter. Excess capacity causes abnormal heat and fire.
5. Wear protective gloves when installing/uninstalling the camera. This causes burns caused by high temperature on the surface of the product.
6. Don't drop or shock the product. Please stay away from places where vibration is severe or magnet types are present.
7. Install it in a well-ventilated place. This can cause fire and failure.

CLEANING

1. 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



Dome Cover

Reset Button

Video Change Button

Test Video Slot

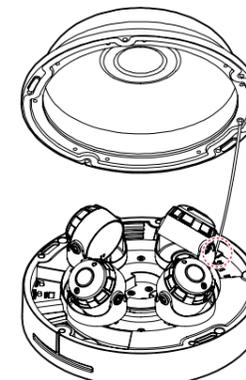
SD Card Slot

Lan Port

3. Disassemble the Camera

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

1. You have to check whether the location can bear five times of the weight of your camera.
2. 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.
3. 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.



1. Connect the safety hook to the screw on the bottom case and dome cover with the wire.



- 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.

- Desi-Pak (Moisture Absorber)**
When installing, unseal the vacuum-packed Desi-Pak and install it in the marked position. When inserting or removing Desi-Pak, be careful as it may be torn if you use a pointed tool.

- Test Video Slot**
When you connect the Test Monitor Cable to the Test Video Slot, the screen of CAM1 appears. Each time you press Video Change Button, the screen changes in order of CAM1, CAM2, CAM3, and CAM4.

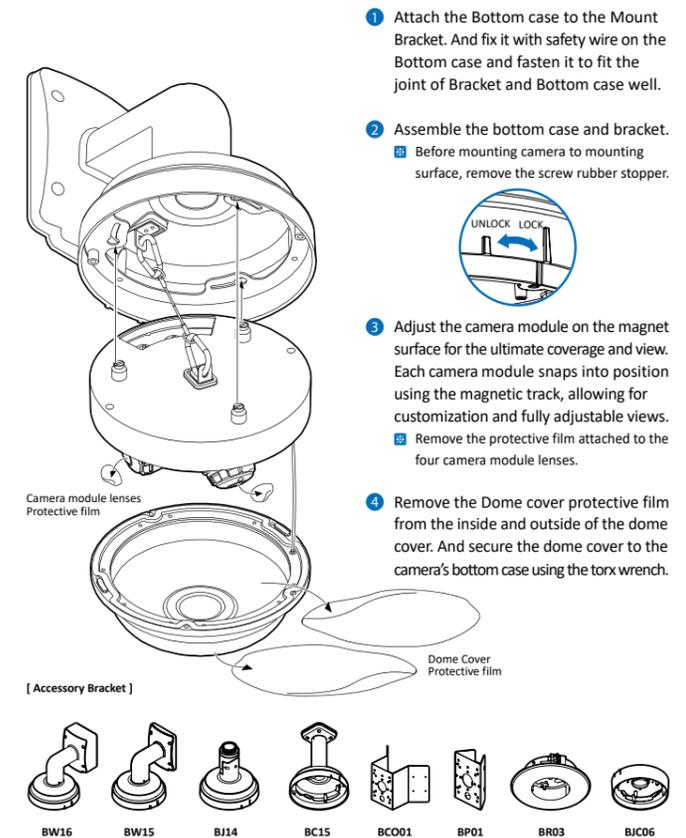
Reset Button
Test Video Slot
Desi-Pak

Installation and Use Precautions

1. The battery (battery pack or equipped battery) must not be exposed to excessive heat such as sunlight, fire, etc.
2. Do not disassemble the camera at your discretion.
3. If you forcefully install the product with excessive force, malfunction can damage the camera.
4. Do not punch or shake the camera and be careful not to damage the camera with careless storage or malfunction.
5. Be careful not to install the camera in a rainy or humid place, and do not leave it in a wet place.
6. Installing or using the product in water can cause serious product failure.
7. 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.
8. 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.
9. 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.
10. 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.
11. 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.
12. 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.
13. For products enclosed with a desiccant or card-type absorbent, please install it according to the manual.



4. Installation



1. Attach the Bottom case to the Mount Bracket. And fix it with safety wire on the Bottom case and fasten it to fit the joint of Bracket and Bottom case well.

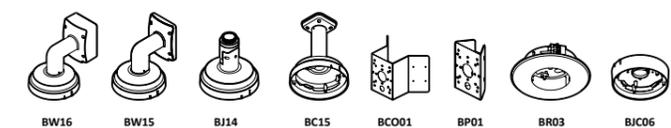
2. Assemble the bottom case and bracket.
 - Before mounting camera to mounting surface, remove the screw rubber stopper.



3. Adjust the camera module on the magnet surface for the ultimate coverage and view. Each camera module snaps into position using the magnetic track, allowing for customization and fully adjustable views.
 - Remove the protective film attached to the four camera module lenses.

4. Remove the Dome cover protective film from the inside and outside of the dome cover. And secure the dome cover to the camera's bottom case using the torx wrench.

[Accessory Bracket]



5. Cabling

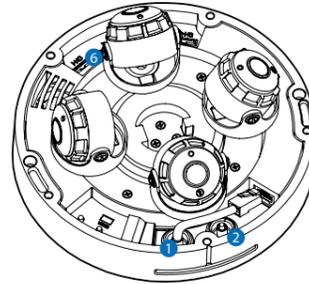
How to connect the Network Cable
Refer to the picture below and connect the network cable.

1 Installation Method 1

2 Installation Method 2

1. Insert the RJ-45 cap installer into the Lan cable.
2. Remove the Grommet blocking the bottom hole of the camera.
3. Pass LAN cable with cap installer through the hole of GROMMET from bottom to top.
4. Pay attention to the direction of the Grommet connection when connecting cables.
5. Remove the RJ-45 cap installer before connecting the LAN cable to the camera.
6. Connect the Lan Cable to the camera.
7. After completing the cable installation, insert Grommet into the bottom case.

⚠ Bending the cable can cause water leakage.



+	-	+	-	+	-	IN	COM	OUT
DC12V		DI		DO		AUDIO		

1 Network Connection

Connect the Straight through or crossover cable.

- ⚠** Bending the cable can cause water leakage.
- ⚠** Lan Cable thickness $\phi 5.0 \sim \phi 8.0\text{mm}$.

2 I/O Cable Connection

3 Power

Please check the correct rated power.

Rate Power	Power Consumption	PoE
DC 12V	DC12V : 28W / PoE : 31W	IEEE 802.3bt class5

4 Sensor/Alarm Input (DI)

Cable of the sensor/alarm input device should connect to + and - of the Terminal Block.

Alarm Out/Relay Out (DO)

It connects to the alarm lights, siren or lamps and the sensor types are normal open and normal close.

5 Audio In

Connect the 'Audio In' port of the camera to the microphone directly or 'Line Out' port of the amplifier connected with microphone.

- ⚠** If the microphone is connected directly, the microphone with the embedded amplifier such as condenser mic. needs to be used.

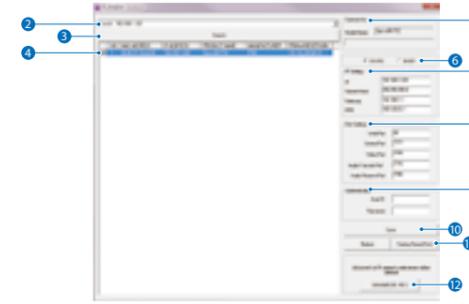
Audio Out

Connect the 'Audio Out' port of the camera to the 'Line In' port of the speaker.

- ⚠** If the speaker without the amplifier is connected to Audio Out port, it doesn't work properly. Therefore, the speaker with the amplifier or the separate amplifier is needed.
- ⚠** Audio Out supports only RTSP Back channel function. It plans to make it available on the web later.

6 SD Card Slot

6. 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

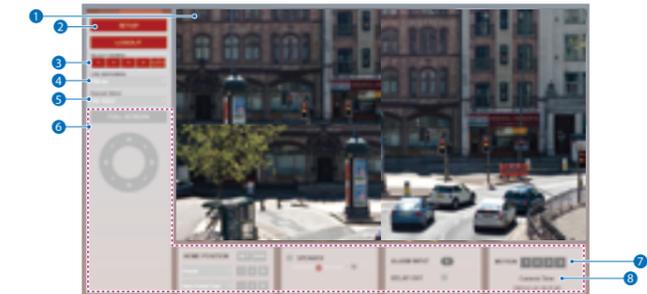
10 Make sure to click on 'Save' button to save changed values.

- ⚠ 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.

7. Web Viewer Screen



⚠ Web viewer is optimized with explorer10 or above version and Firefox.

- ⚠** If VLC is not installed or VLC plugin is not supported (Chrome), Live buffering and Channel select menu on 3, 4 will be changed to Live Viewer menu, and then if HTML5(MJPEG) is selected on Live Viewer menu, then you can check the video.

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 Select Viewer. Click it to open Viewer separately and Viewer at once.

4 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.

5 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.
- ⚠** If you select Viewer 1 to Viewer 4, Channel select button is activated.

6 Below "Menu" is supported in accordance with models.

PTZ Control / Preset
Does not support.

Speaker Control / Alarm Input / Relay Out
This function is supported.

7 Motion. It shows the Motion event status.

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

8 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.