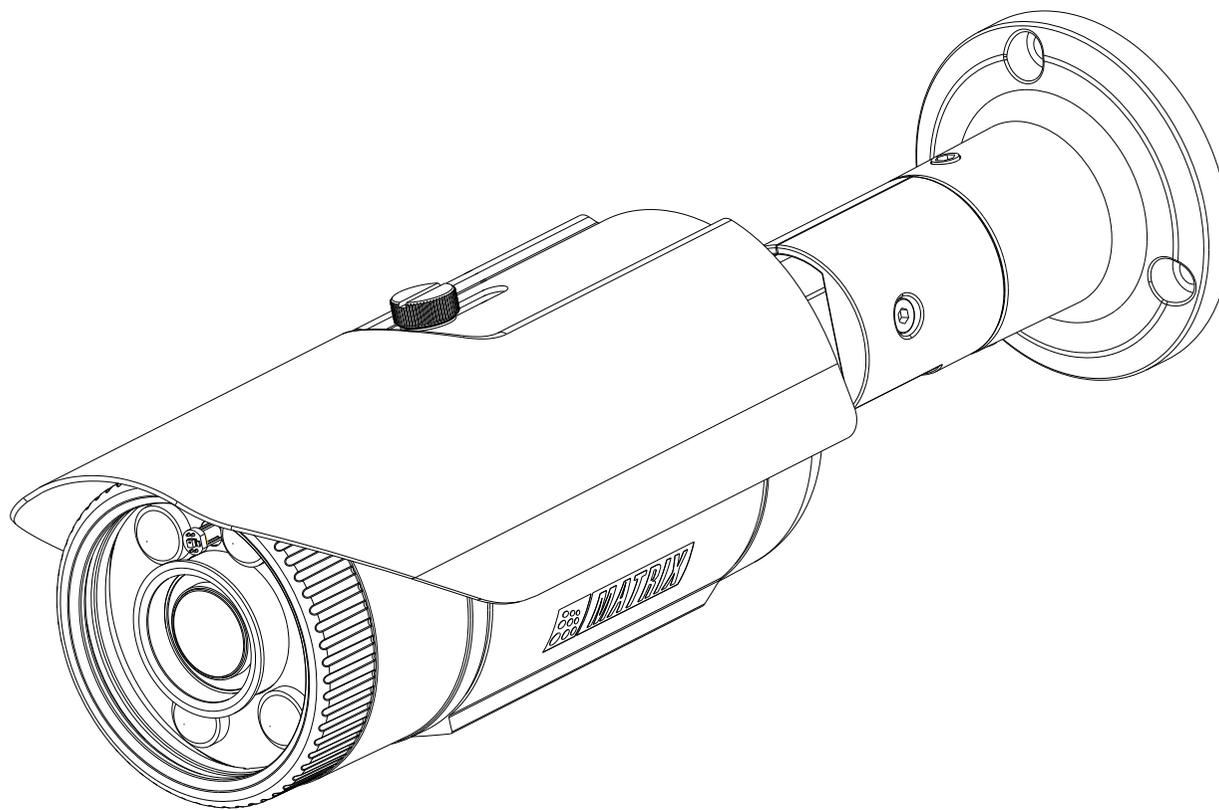


SATATYA PROJECT BULLET IP-Camera

The Persistent Vision



Safety Instructions

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

Cautions

- Ensure that the power supply voltage is correct before using the camera.
- Avoid placing cables too close to magnetic or high voltage devices, to reduce undesirable image noise.
- Do not touch the glass/lens with fingers. For cleaning use 'clean cloth' and wipe it gently.
- Do not mount the camera with the lens facing the sun or bright light to prevent damage to the sensor.
- Do not expose the camera to temperatures below or beyond its operating temperature.
- Do not mount the camera near a radiator or a heater.

Warning

- In the use of the product, you must be in strict compliance with the electrical safety regulations of the region and nation.
- Do not connect several devices to one power adapter as it may cause over-heating or fire hazard.
- If smoke, odour or noise rise from the device, turn off the power at once and unplug the power cable, and contact the nearest service center.
- To prevent electrical shock, turn off power supply before making electrical connections.

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Please read this guide first for correct installation and retain it for future reference. The information in this guide is prevailing at the time of publication. However, Matrix Comsec reserves the right to make changes in product design and specifications without prior notice.

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Warranty

Limited Warranty. Valid only if primary protection is provided, mains supply is within limit and protected, and environment conditions maintained within product specifications. Complete warranty statement is available on our website:

www.matrixcomsec.com

Know your Camera

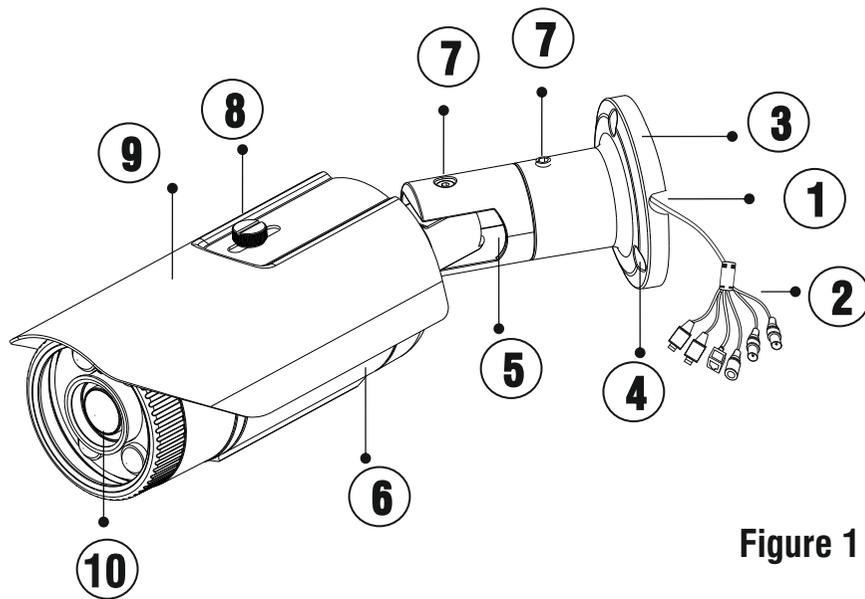


Figure 1

- | | |
|----------------------|--------------------------------------|
| 1. Cable Guide | 6. Camera Body |
| 2. Cable Assembly | 7. Screws for adjusting camera angle |
| 3. Base Plate | 8. Sunshield bolt |
| 4. Hole for mounting | 9. Sunshield |
| 5. Pivot Joint | 10. Lens |

The **Standard** variant consists of 2 connectors: Power connector and Ethernet connector (POE).

The **Premium** variant consist of 6 connectors: Power connector, Ethernet connector (POE), Audio IN, Audio OUT, Alarm IN and Alarm OUT.

What your Package contains

- Bullet IP Camera unit
- Wall mounting Template
- Wall mounting Screws with screw grip (4 nos.)
- Allen Key
- Cable Accessories for weather proofing
- Ingress Protection Accessories (4 parts)

Things you will Need

- A Power Drill, Screwdriver Set, Pliers, Wire-cutter, Ladder.
- Necessary Cabling
- A Power Supply with the recommended output voltage of 12V DC. Use an Adapter to connect the camera to the power outlet.

Camera Variants

The Bullet Cameras are available in two variants: **Standard** and **Premium**.

- 💡 You can capture near and broader view with lens of 2.8mm and 3.6/4.0 mm focal length. For example it can be used in ATM and Elevators.

With lens of 6 mm focal length, far and narrow view can be captured. For example it can be used in corridors or long passage to capture long view.

The respective available variants are listed in below:

Resolution with Type of Lens	Focal Length(mm)	Standard	Premium
2MP			
Fixed	2.8	CIBR20FL28CWS	CIBR20FL28CWP
	3.6	CIBR20FL36CWS	CIBR20FL36CWP
	6.0	CIBR20FL60CWS	CIBR20FL60CWP
Manual Varifocal	2.8-12	CIBR20VL12CWS	-
Motorized Varifocal	2.8-12	-	CIBR20MVL12CWP
5MP			
Fixed	2.8	CIBR50FL28CWS	CIBR50FL28CWP
	4.0	CIBR50FL40CWS	CIBR50FL40CWP
	6.0	CIBR50FL60CWS	CIBR50FL60CWP
Manual Varifocal	2.8-12	CIBR50VL12CWS	-
Motorized Varifocal	2.8-12	-	CIBR50MVL12CWP
8MP			
Fixed	2.8	CIBR80FL28CWS	CIBR80FL28CWP
	3.6	CIBR80FL36CWS	CIBR80FL36CWP
	6.0	CIBR80FL60CWS	CIBR80FL60CWP
Motorized Varifocal	4.3-10	-	CIBR80ML12CWP

Installation

Before you start

Please make sure:

- The device in the package is in good condition and all the assembly parts are included.
- All the related equipments are powered-off before Installation.
- The wall or ceiling is strong enough to support the weight of camera.

Step 1: Select a Location

Select a suitable location for your camera to enable coverage of the intended surveillance area. The location should preferably be a flat surface, such as a Wall or a Ceiling.

Step 2: Prepare for Installation

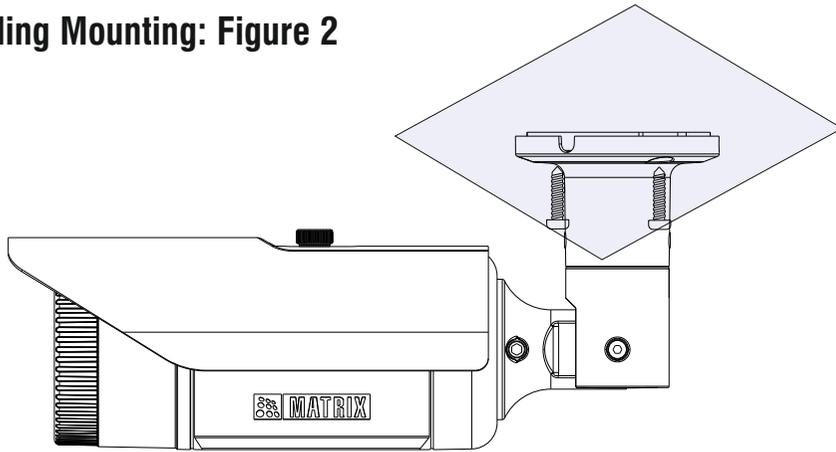
- The camera can be powered-up by an Adapter or PoE switch. In case, the camera is to be powered up by Adapter, a 2A plug is needed nearby.
- Provide proper connectivity between camera and recording location through LAN cable.
- It is advisable to make concealed wiring. However, wiring can also be done externally.

You can insert SD card in camera to store recordings during network failover and to upload image or clip as a result of event trigger. Refer to Accessing Reset Switch and SD Card Slot.

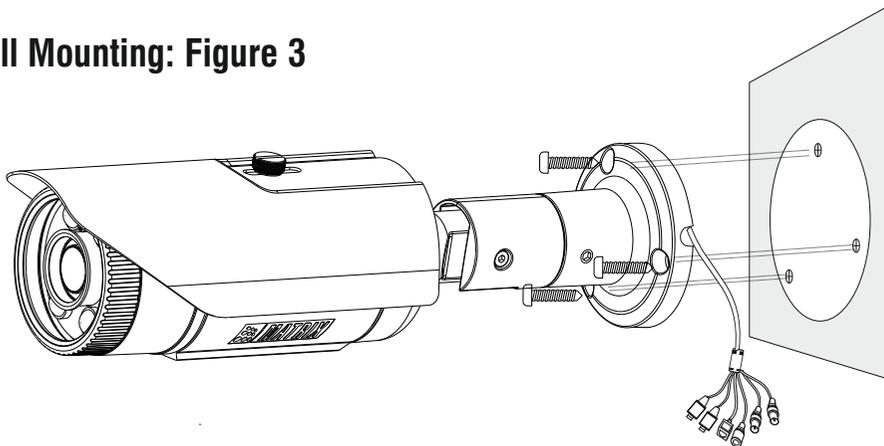
Step 3: Installing Mounting Template

- Stick the Mounting Template on the desired installation surface.
- Drill three holes through the markings of the Mounting Template on Wall or Ceiling.
- Insert the screw grips in the holes you drilled.

Ceiling Mounting: Figure 2



Wall Mounting: Figure 3



Step 4: Mounting the Camera

- To avoid cable damage, take the Power, Ethernet, Audio IN, Audio OUT, Alarm IN, Alarm OUT cables of the camera through the cable guide on the base plate. see **Figure3**
- Align the screw holes on the base plate with those you drilled on the installation surface.
- If the cabling is running through the interior of the wall or ceiling behind the installation surface then, drill the hole (20mm approx) on the center of the mounting template through the false ceiling. Before you mount the base plate, pull the cables of the camera through the hole drilled on the installation surface. see **Figure2**
- Secure the base plate of the camera on the installation surface with the supplied screws.

Step 5: Adjusting the Camera Angle

- Use the Allen Key supplied to you to loosen the socket screws on the pivot joint between the base plate and the camera body.
- Tilt the camera body to achieve the desired angle. You can turn the camera upto 360 degrees.
- Hold it at the desired angle and tighten the socket screw with the Allen key.

Figure 4

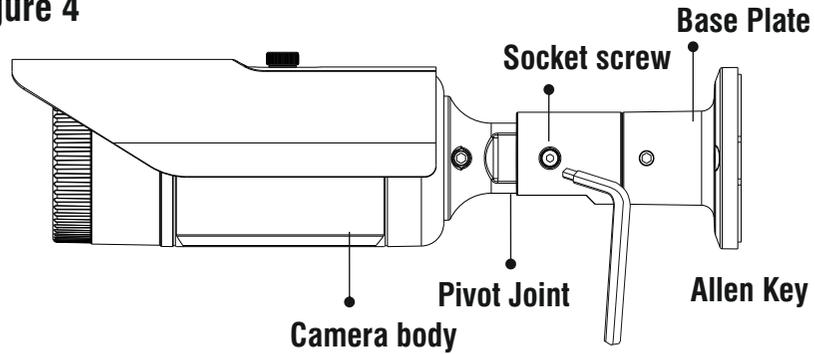
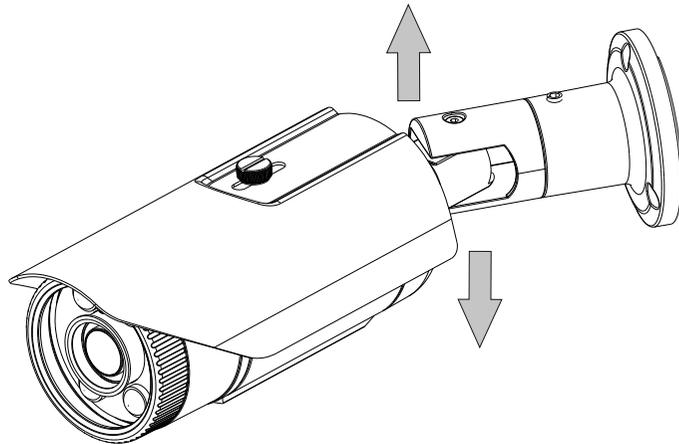


Figure 5



LED: CLASS1 (Category RS1)

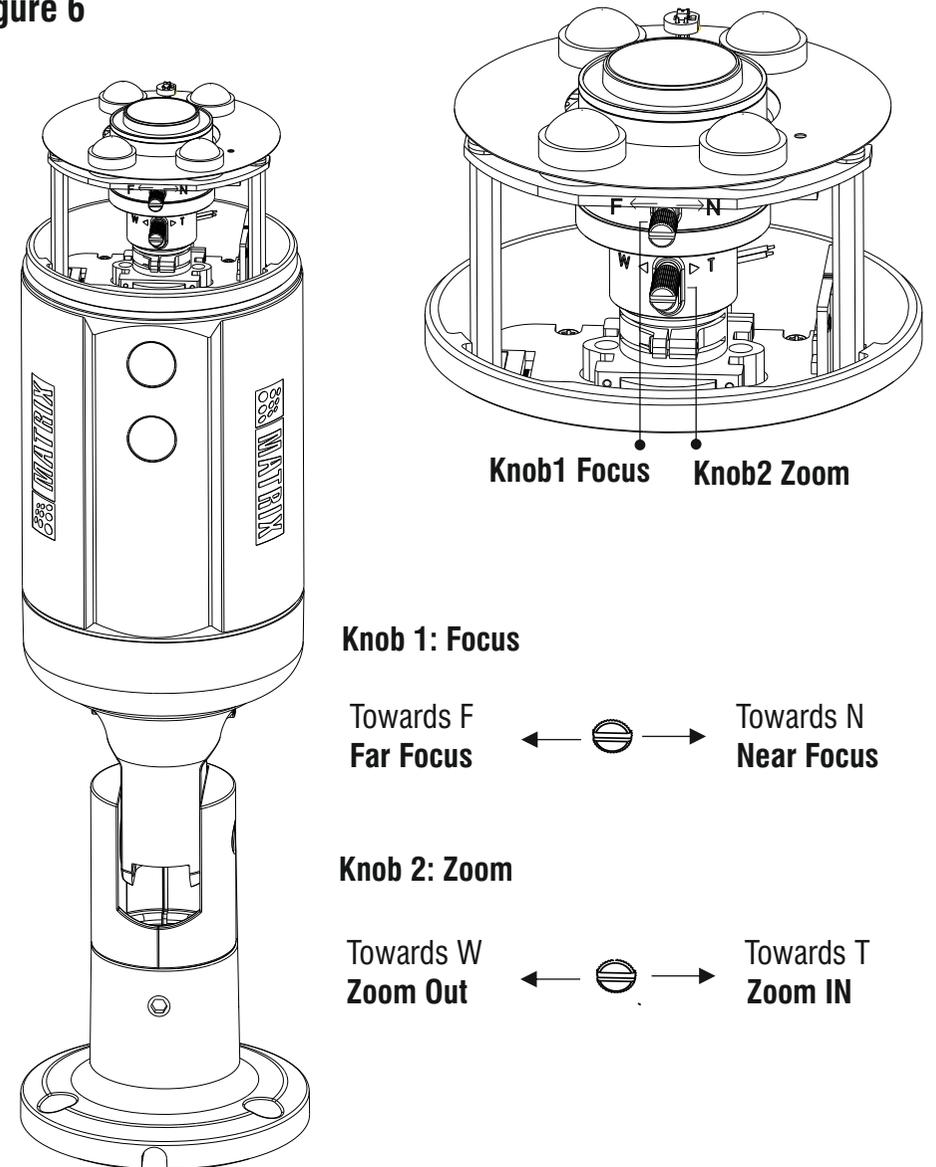


Never look at the transmit laser while the power is on. Never look directly at the fiber ports and the fiber cable ends when they are powered on.

Use of controls or adjustment to the performance or procedure other than those specified herein may result in hazardous laser emission.

Adjusting Focus and Zoom in Varifocal Cameras

Figure 6



Knob 1: Focus

Towards F
Far Focus



Towards N
Near Focus

Knob 2: Zoom

Towards W
Zoom Out



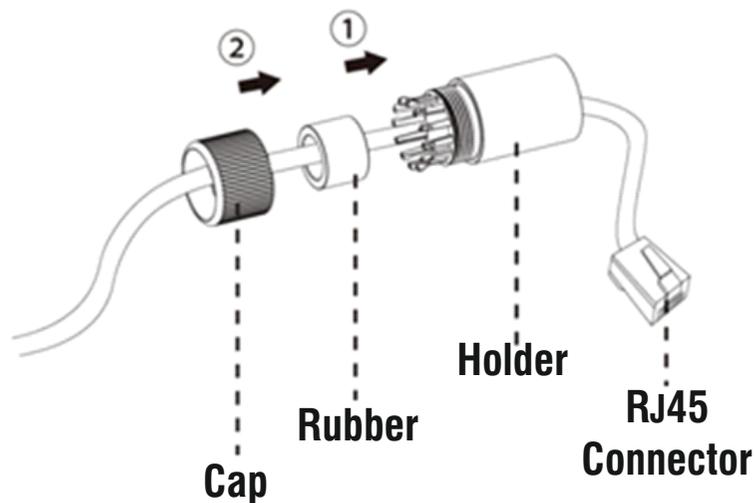
Towards T
Zoom IN

Step 6: Ingress Protection Accessory Installation

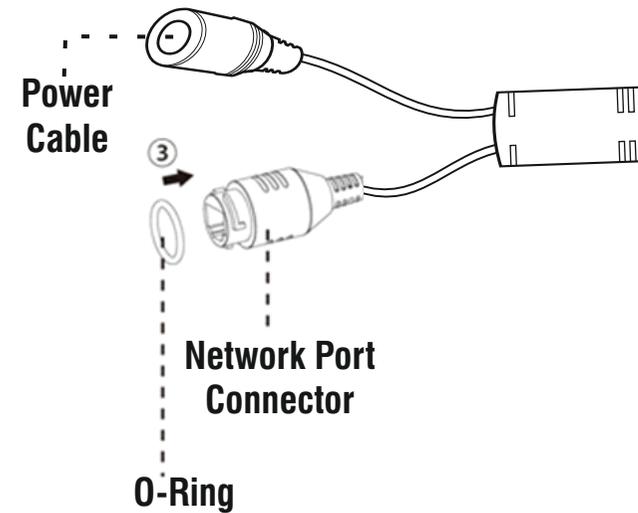
1. The Ingress Protection Accessory comprises of the following: Holder, Rubber, Cap and O-Ring.

You need to pass the RJ45 cable with connector through each in the sequence as shown below.

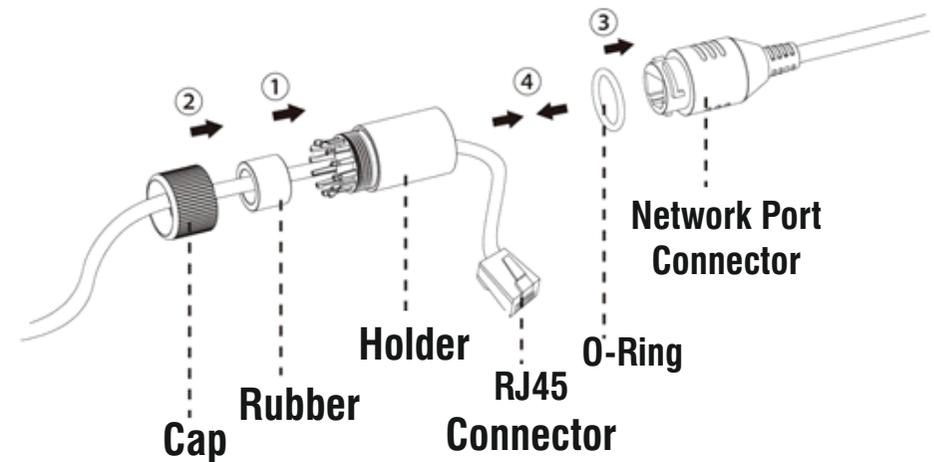
Now, insert the Rubber into the Holder and then place the Cap.



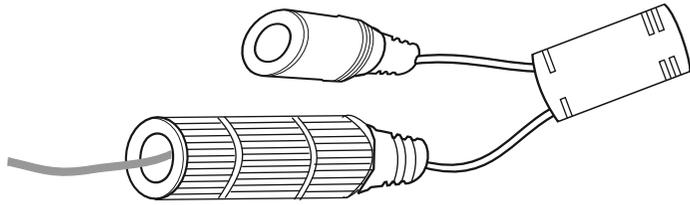
2. Affix the O-Ring on the Network Port Connector as shown below.



3. Insert RJ45 Connector into the Network Port Connector.



4. The Ingress Protection Accessory is connected with the camera.

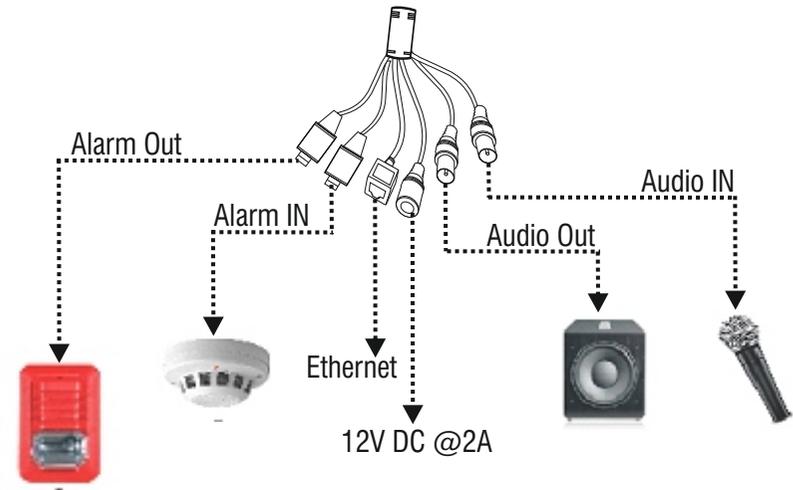


Step 7: Connecting Cables

- Connect the **Ethernet** cable to LAN port and **Power** cable to the 12V DC power supply.

In Premium variants, connect the Audio I/O cables if required.

1. You can connect the **Audio Input** device such as Mike to the Audio input cable of the camera. The audio when enabled will be recorded with the video and will be available at the monitoring location.
2. You may connect the **Audio Output** device such as earphone or speaker to the Audio Output cable of the camera. This will generate audio received from the network.
3. To detect alarm events you can connect a sensor device to the **Alarm IN** cable of the camera.
4. To get alerts on alarm you can connect the alarm sounding device such as hooter or siren to the **Alarm OUT** cable of the camera.



- 💡 If devices such as Mic and Speaker can be connected to Audio IN and Audio OUT, you may need to connect an external power source if their power requirements are not fulfilled with the camera Adapter.
- 💡 If devices such as Sensor and small Buzzers can be connected to Alarm IN and Alarm OUT, you may need to connect an external power source if their power requirements are not fulfilled with the camera adapter.

Power over Ethernet (PoE)

The IP camera is PoE- compliant, allowing transmission of power and data via a single Ethernet cable connected to PoE Switch.

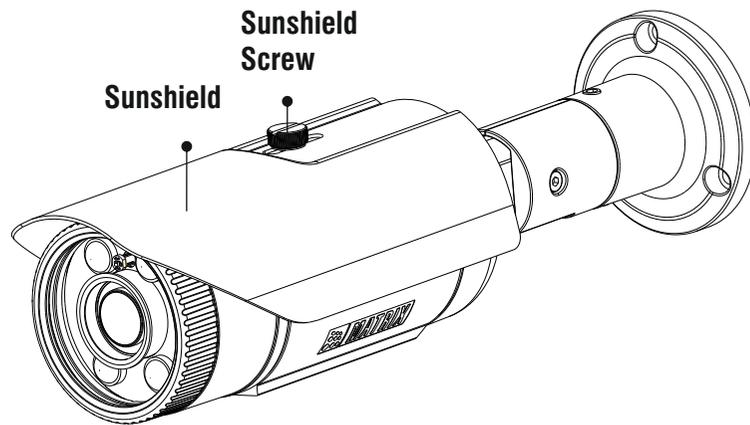
Accessing Reset Switch and SD Card Slot

If you forget the IP Address or Login Credentials of camera, the camera can be reset to factory default settings using the Reset Switch.

To access the Reset Switch

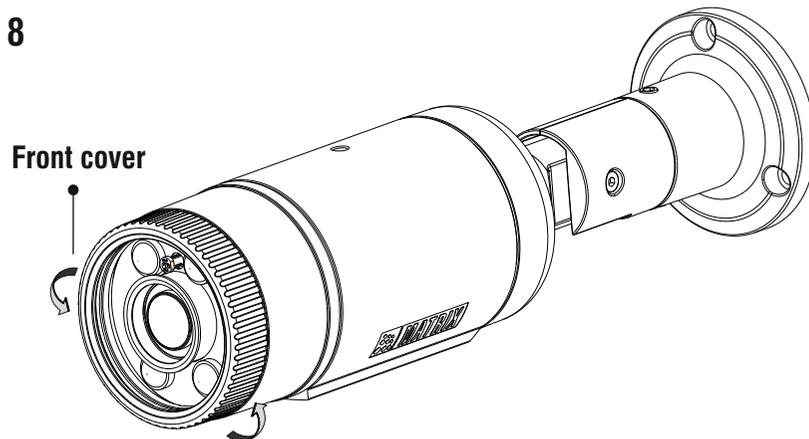
1. Open the Sunshield by removing the sunshield screw.

Figure 7



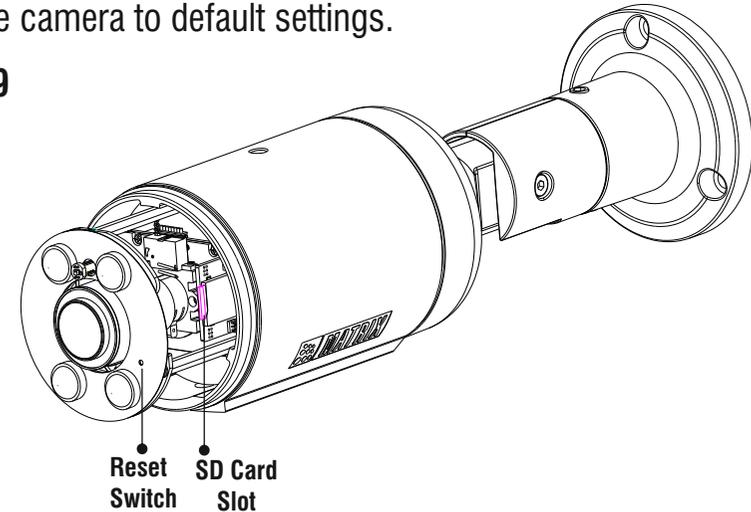
2. Open the front cover by rotating it in the anti-clockwise direction.

Figure 8



3. Press the Reset switch for minimum 5 sec and release the switch to reset the camera to default settings.

Figure 9

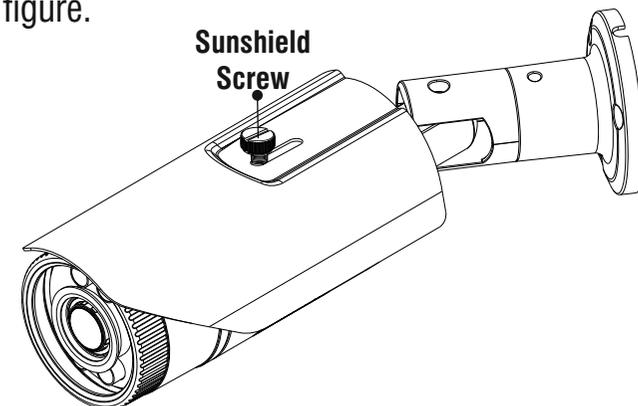


4. You can insert the SD card in the slot to store your camera recordings.

! After Reset or SD card insertion, you may need to set the camera focus and camera angle.

For greater IR vision during the night mode in 2.8mm focal length bullet cameras, It is recommended to put the sunshield at its minimum position from the camera lens as shown in below figure.

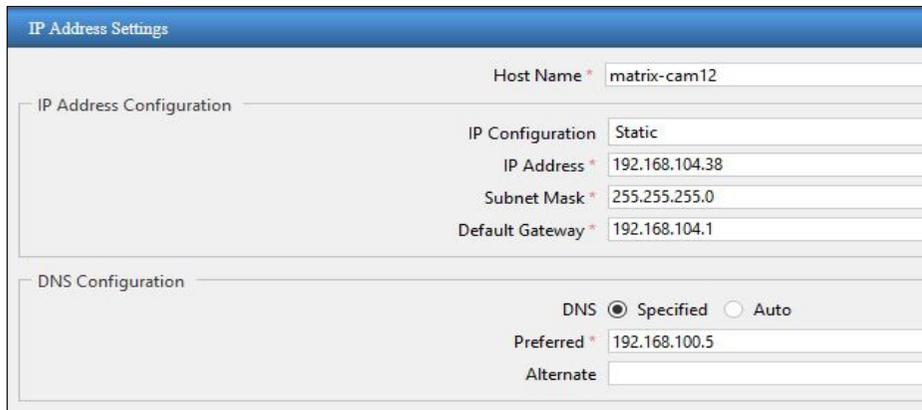
Figure 10



Network Configuration

To view and configure the camera via LAN (Local Area Network), you need to connect the camera in the same subnet with your PC. Then install the software to configure the IP Address.

- Once the camera is connected to the network, it will automatically be assigned a Dynamic IP Address by the DHCP Server. You can view the assigned IP Address through any IP scanner utility.
- If DHCP Server is unavailable or is not able to provide an IP Address then **192.168.1.126** will be set as default IP Address.
- You can change the IP Address and Subnet Mask of Camera from the Basic Settings page of the camera.



The screenshot shows the 'IP Address Settings' web interface. It features a blue header with the title 'IP Address Settings'. Below the header, there are several configuration sections:

- Host Name:** A text field containing 'matrix-cam12'.
- IP Address Configuration:** A section containing:
 - IP Configuration:** A dropdown menu set to 'Static'.
 - IP Address:** A text field containing '192.168.104.38'.
 - Subnet Mask:** A text field containing '255.255.255.0'.
 - Default Gateway:** A text field containing '192.168.104.1'.
- DNS Configuration:** A section containing:
 - DNS:** Radio buttons for 'Specified' (selected) and 'Auto'.
 - Preferred:** A text field containing '192.168.100.5'.
 - Alternate:** An empty text field.

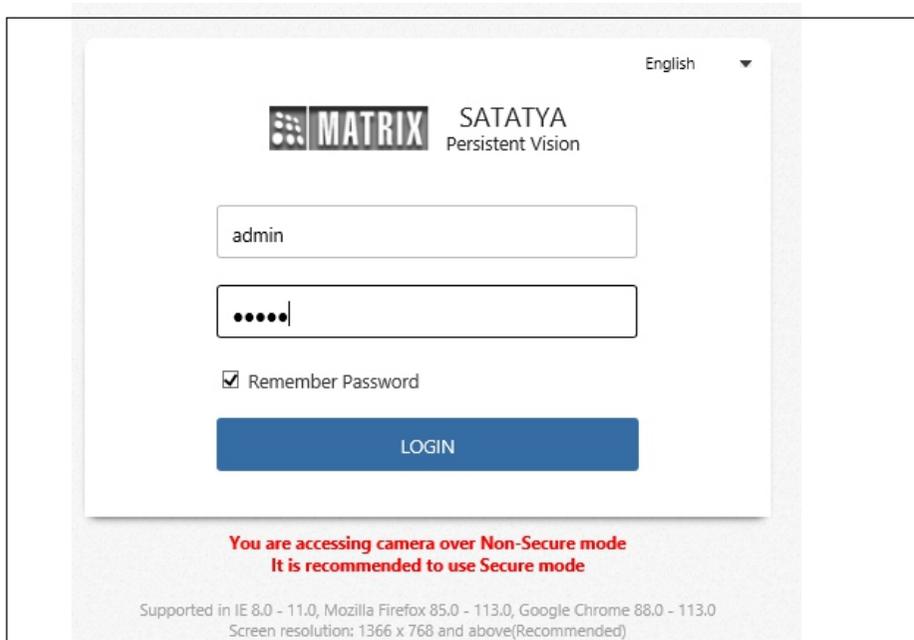
Accessing via Web Browser

The IP cameras are supported by Microsoft Windows Operating System.

- Run the Web Browser as Administrator.
- In the browser address bar, type the IP address of the camera e.g., 192.168.1.126 and press the Enter key to open the login interface.



- Enter the User Name and Password.
- By default, you can login with User Name as **admin, operator** or **viewer** with the password as **admin, operator** and **viewer** respectively.
- Click on Login.



- A pop-up appears as shown below. Click **Install**.



- Another pop-up appears, wherein it seeks your permission.
- Click Yes to allow.

- The Home page of the camera will open and the live view will be displayed.



- The camera configuration can be set from the Configuration tab.

Technical Specification

Specification	Standard	Premium
Power Supply		
User Adapter*	12V @2A	12V @2A
POE	Yes	Yes
Power Consumption	2MP	12VDC; Max: 7.5W PoE Supported
	5MP	12VDC; Max: 7.5W PoE Supported
	8MP	12VDC; Max: 9W PoE Supported
Connectors		
Ethernet	Yes	Yes
WiFi	No	No
Audio IN	No	Yes
Audio Out	No	Yes
Alarm IN	No	No
Alarm Out	No	No

* Use BIS, CE, ROHS and FCC approved Adapters.

Technical Specification

Specification	Standard	Premium
Casting		
Material	Aluminium Die Cast	Aluminium Die Cast
Colour	Infinity White	Infinity White
Physical		
Dimensions(LxW)	150mm x 70mm	150mm x 70mm
Weight	500 gm(Approx)	500 gm(Approx)
Storage		
NAS	Yes	Yes
SD Card	Yes	Yes
Software		
Focus	Yes(Manual)	Yes(Manual)
ONVIF Profile	S,G,T	S,G,T
Environmental		
Operating Temp.	-30 °C to +60 °C	-30 °C to +60 °C
Humidity	5 to 95% RH	5 to 95% RH

FCC Compliance

47CFR FCC PART 15B

Information to the user

(a) For a Class B digital device or peripheral, the instructions furnished the user shall include the following or similar statement, placed in a prominent location in the text of the manual:

NOTE: This equipment has been tested and found to comply with the limits of Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Certifications

CE	Yes
FCC	Yes
BIS	Yes
IP67	Yes
IK10	Yes
NEMA-4X	Yes

Disposal of Product after End-Of-Life

WEEE Directive 2002/96/EC

The product referred is covered by the waste Electrical and Electronic Equipment (WEEE) directive and must be disposed of in a responsible manner.

At the end of product life cycle; batteries, soldered boards, metal components and plastic components must be disposed through recyclers.

If you are unable to dispose-off the products or unable to locate e-waste recyclers, you may return the products to Matrix Return Material Authorization (RMA) department.



TELECOM | SECURITY

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