SATATYA PROJECT DOME IP-Camera
The Persistent Vision

MATRIX ®

TELECOM | SECURITY
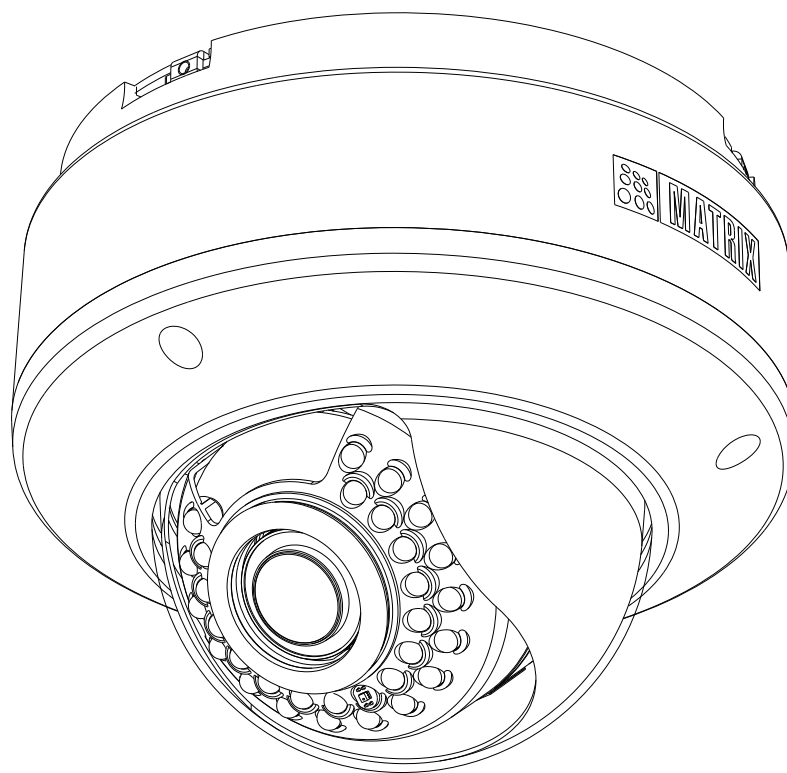
Safety Instructions

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.

Contents

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:
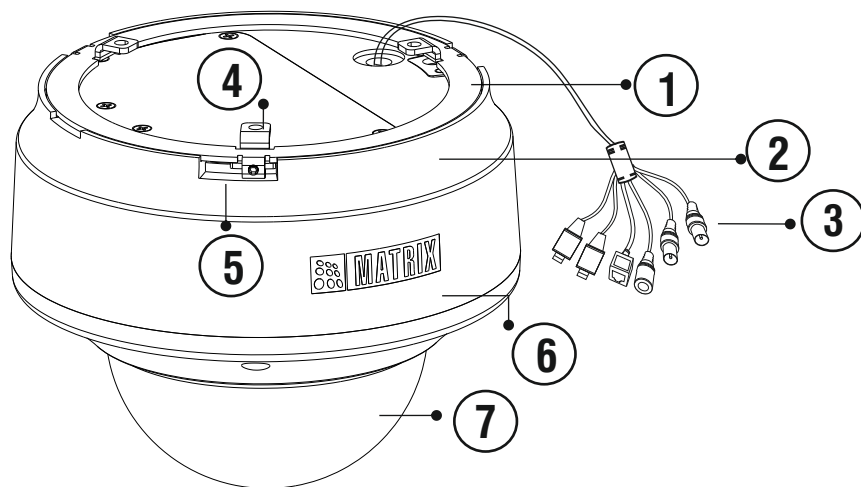**www.matrixcomsec.com**

Know your Camera

Figure1

1. Mounting Ring
2. Base Plate
3. Cable Assembly
4. Hole for Mounting
5. Base Plate grove for fitting Mounting Ring
6. Camera Body
7. Lens Enclosure

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

- SATATYA Dome IP Camera Unit
- Wall Mounting Template
- Wall Mounting Screws with Screw Grip (3 nos.)
- Allen Key
- Cable Accessories compliant with Ingress Protection
- Ceiling Support Plate
- Ceiling Support Plate Screws (M4x35 pan-PH)
- 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 Dome 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	CIDR20FL28CWS	CIDR20FL28CWP
Fixed	3.6	CIDR20FL36CWS	CIDR20FL36CWP
Fixed	6.0	CIDR20FL60CWS	CIDR20FL60CWP
Manual Varifocal	2.8-12	CIDR20VL12CWS	-
Motorized Varifocal	2.8-12	-	CIDR20MVL12CWP
5MP			
Fixed	2.8	CIDR50FL28CWS	CIDR50FL28CWP
Fixed	4.0	CIDR50FL40CWS	CIDR50FL40CWP
Fixed	6.0	CIDR50FL60CWS	CIDR50FL60CWP
Manual Varifocal	2.8-12	CIDR50VL12CWS	-
Motorized Varifocal	2.8-12	-	CIDR50MVL12CWP
8MP			
Fixed	2.8	CIDR80FL28CWS	CIDR80FL28CWP
Fixed	3.6	CIDR80FL36CWS	CIDR80FL36CWP
Fixed	6.0	CIDR80FL60CWS	CIDR80FL60CWP
Motorized Varifocal	4.3-10	-	CIDR80ML12CWP

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 5A 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 7.5mm diameter holes through the markings of the Mounting Template on Wall or Ceiling. (Drill 50mm diameter hole also if installing on false ceiling)
- Insert the screw grips in the holes you drilled.
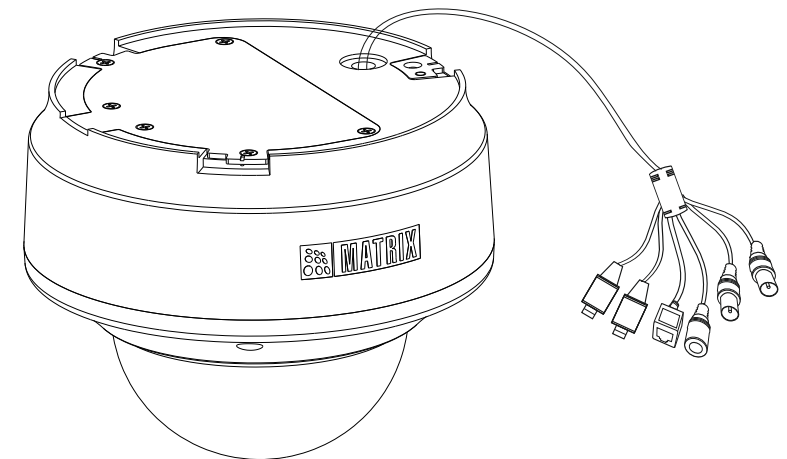
Figure 2

Mounting Template

Mounting Ring
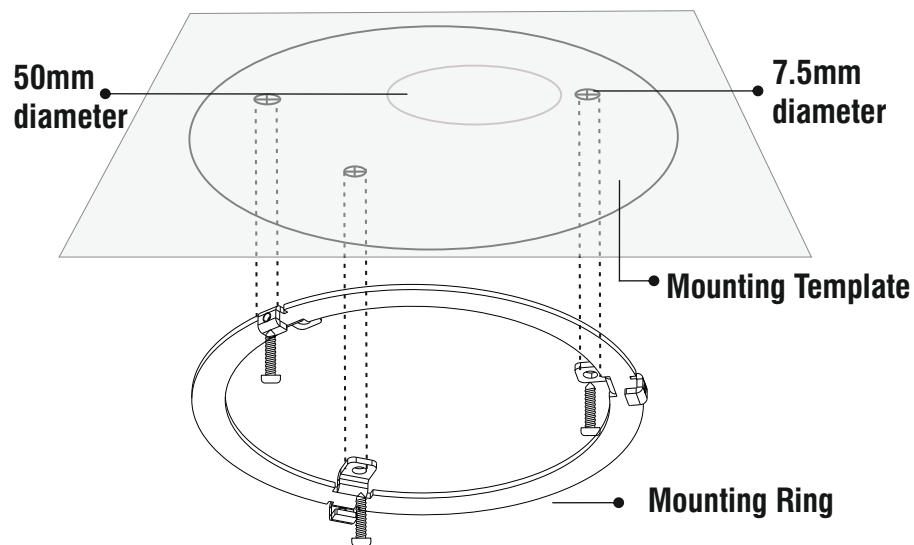
- Align the screw holes on the base plate with those you drilled on the installation surface.

## Step 4: Mounting the Camera

A. On Wall/Ceiling

- To avoid cable damage, take the Power, Ethernet, Audio IN, Audio OUT, Alarm IN, Alarm OUT cables of the camera through the cable hole on the base plate, see **Figure 3**.
- If the cabling is concealed, prior to the installation pull the cable off the hole drilled on the installation surface.
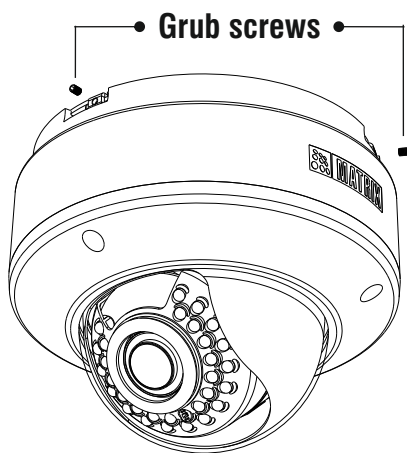
Figure 3

- Now secure the base plate of the camera to the mounting ring. Interlock the mounting ring slit to the groove on the base plate, see **Figure 4**.
- Turn the camera body clockwise to fit in the slit of mounting ring.
- Finally fit the base plate with three M3x4 Grub screws, see **Figure 5**.

Figure 4

Mounting ring

Slit

Base Plate

Grove

Figure 5

Grub screws
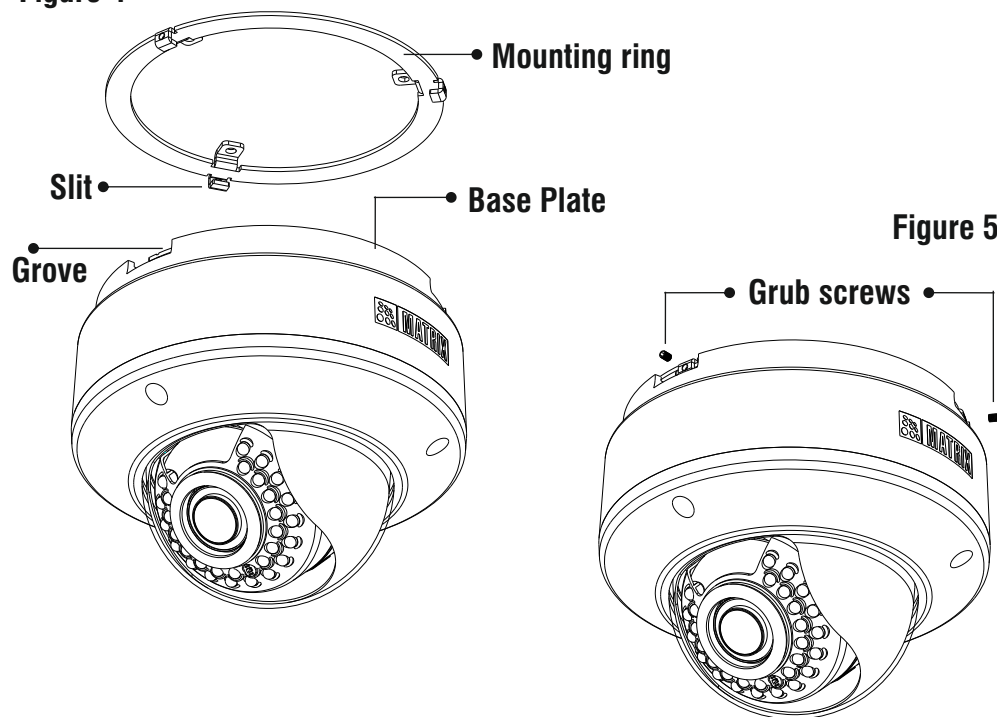
B. On False Ceiling (Recommended Method)

For installing Dome Camera on false ceiling follow the below mentioned steps,

- Install the mounting template on the false ceiling.
- Drill the holes through the markings of the mounting template on the false ceiling.
- By this you will get one 50mm diameter and three 7.5mm diameter holes on the false ceiling.

- Insert the Ceiling Support Plate through the 50mm diameter hole as shown in **Figure 6.**
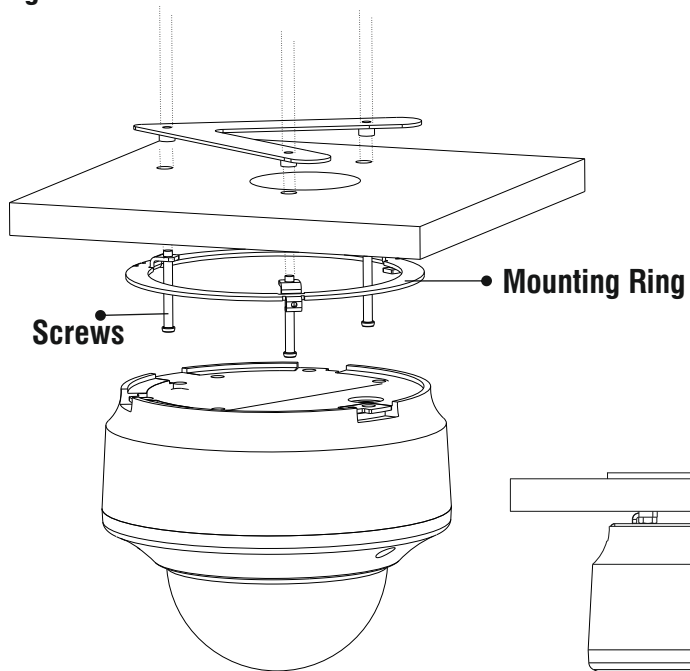
Figure 6

False Ceiling

Ceiling Support Plate
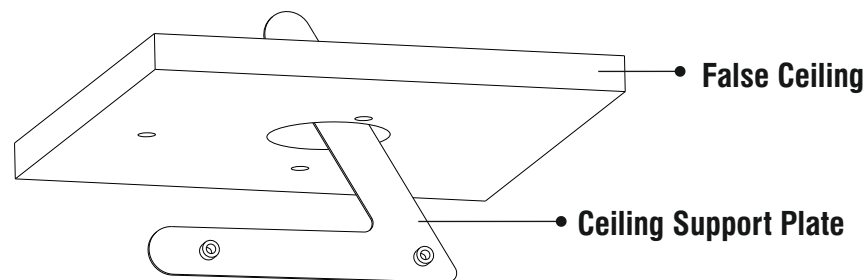
- Place the Ceiling support plate over the false ceiling with keeping the clinching nuts towards the holes on mounting template.
- Move Ceiling Support Plate manually as the holes on Ceiling Support Plate align with the holes (7.5mm) on mounting template as illustrated in **Figure 7**.
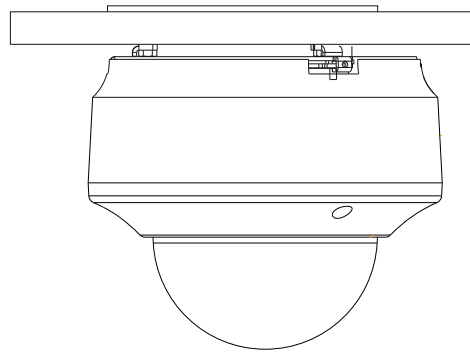
Figure 7

Clinching Nut

Figure 8
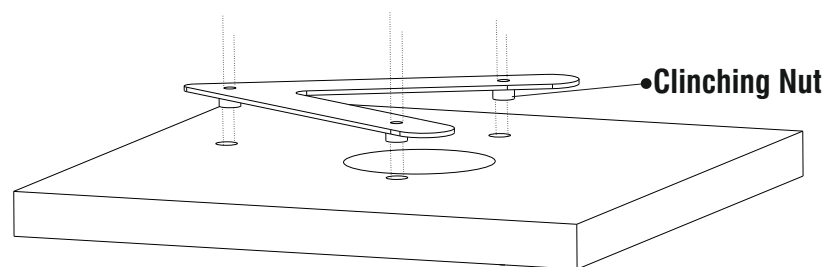
**Mounting Ring**

Screws

Figure 9

- Align the screw holes of the mounting ring with the holes (7.5mm) on mounting template and insert the screws through the false ceiling as illustrated in **Figure 8**.
- It is recommended to use M4 Pan-PH screws of length 35mm.
- Tighten the screws.
- Finally fix the Camera to the mounting ring as illustrated in **Figure 9**.

Step 5: Adjusting Camera Angle

Opening Lens cover

- Use the Allen Key to loosen the Retainer screws on 3 sides of camera body.
- The retainer screws will still remain loosely connected.
- Open the lens casing body.
- Now you can adjust the camera angle.

Figure 10

Alley Key

Retainer screws
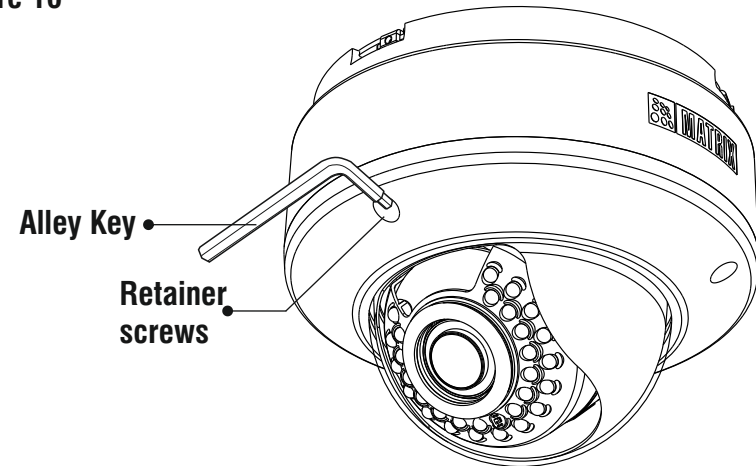
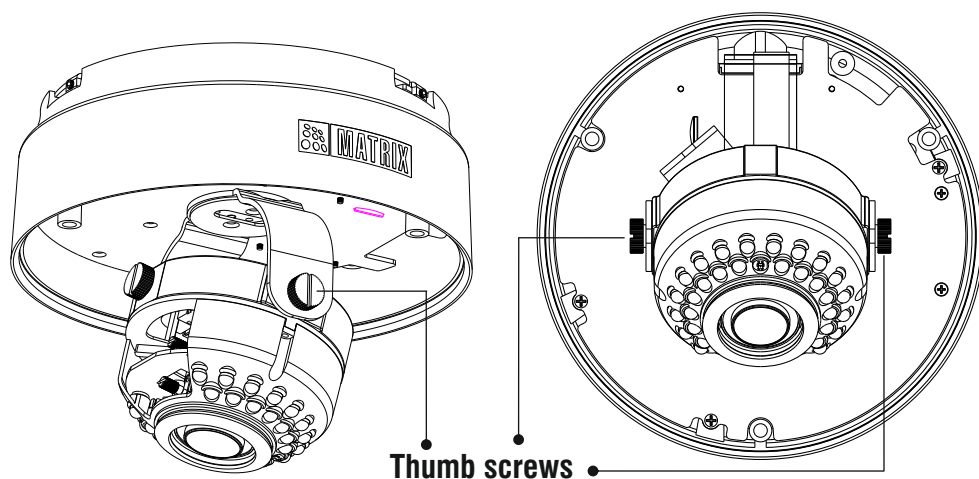**LED:** CLASS1 (Category RS1)

🔔 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.
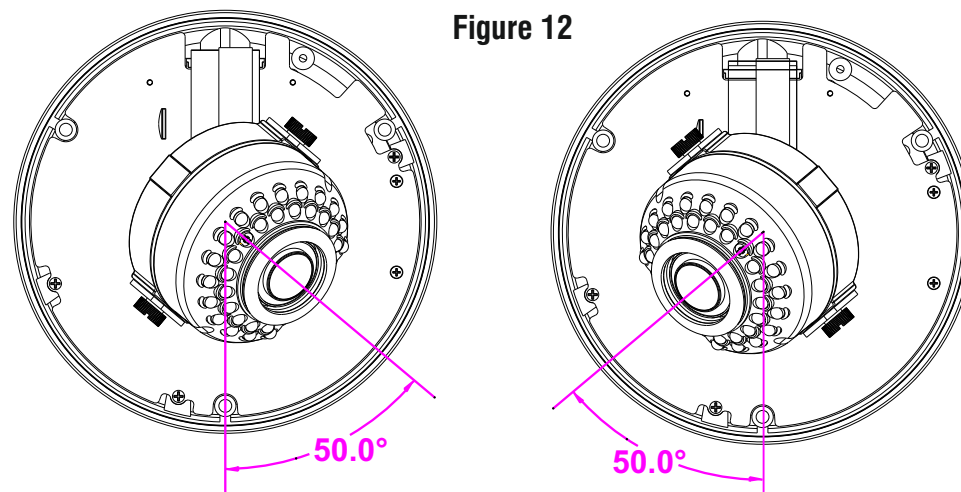
Figure 11

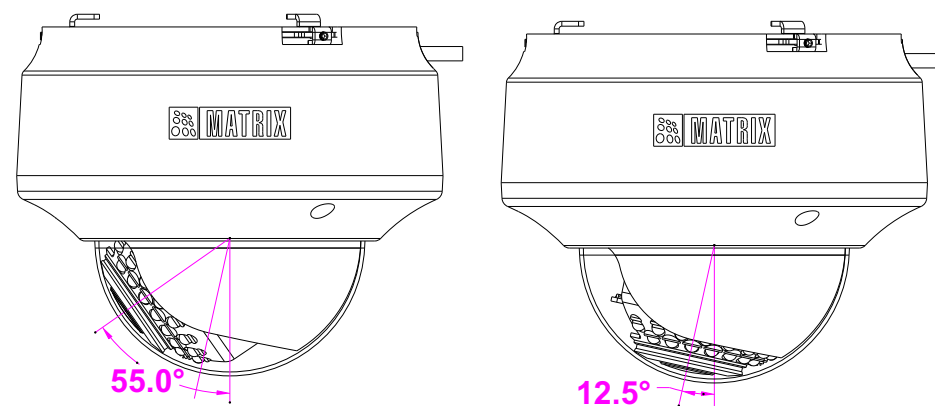Thumb screws

PAN, TILT movement

- Loosen thumb screws on both sides of lens for PAN movement, see **Figure 11**.
- For **PAN movement** you can move the camera to 100 degrees on one side, see **Figure 12**. To capture other side view, you have to open the camera body from the mounting ring, turn the body and mount to other side.

Figure 12

50.0°   50.0°

- For **Tilt movement** you can move the camera from 12.5 to maximum 55 degrees, see **Figure 13**.
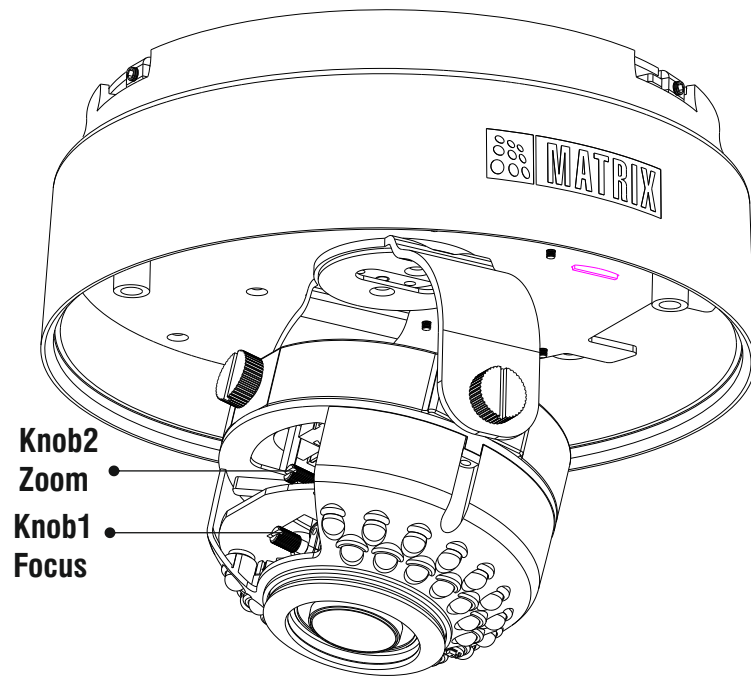
Figure 13

55.0°   12.5°

- If the horizontal view is not aligned i.e. the view is tilted, then you can adjust the view by loosening the bottom thumb screw and adjusting the lens accordingly.

Adjusting Focus and Zoom in Varifocal Cameras

Knob2 Zoom

Knob1 Focus

Knob 1: Focus

Towards F
Far Focus ← ⊖ → Towards N
**Near Focus**

Knob 2: Zoom

Towards W
Zoom Out ← ⊖ → Towards T
Zoom IN

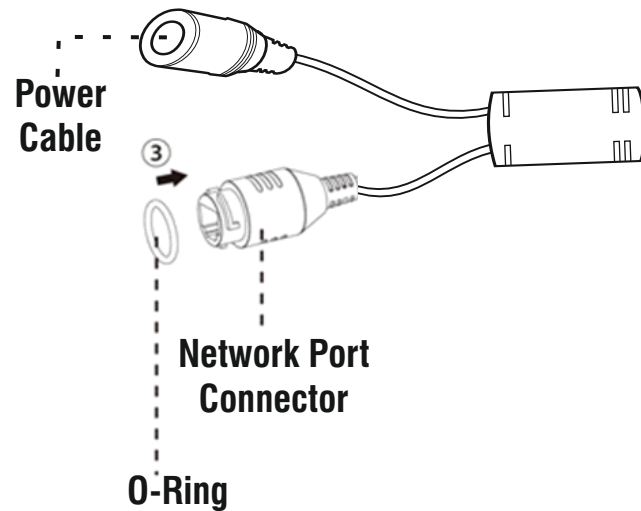## Step 7: Ingress Protection Accessory Installation

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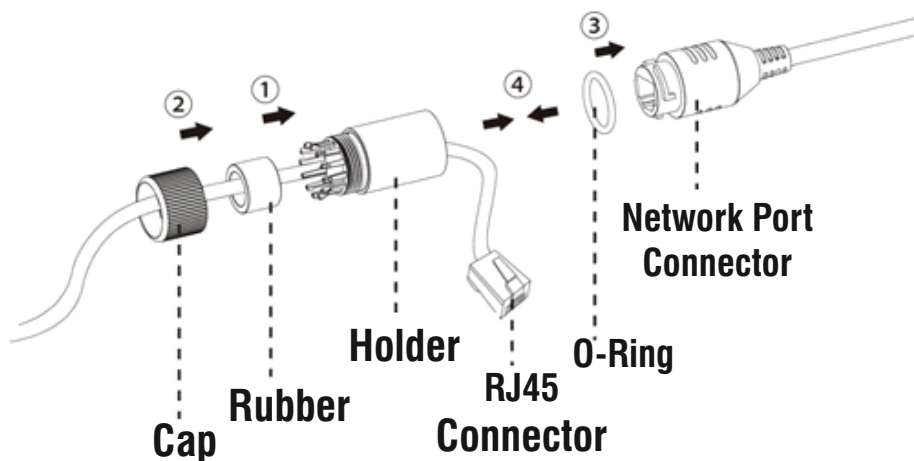
Now, insert the Rubber into the Holder and then place the Cap.

Holder

Rubber

RJ45 Connector

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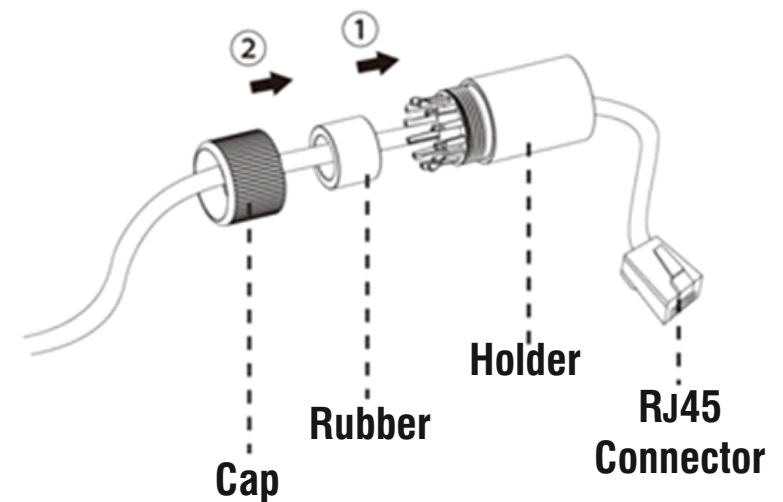
2. Affix the O-Ring on the Network Port Connector as shown below.

Power Cable

Network Port Connector

O-Ring

3. Insert RJ45 Connector into the Network Port Connector.

Network Port Connector

Holder

O-Ring

RJ45 Connector

Rubber

Cap

4. The Ingress Protection Accessory is connected with the camera.
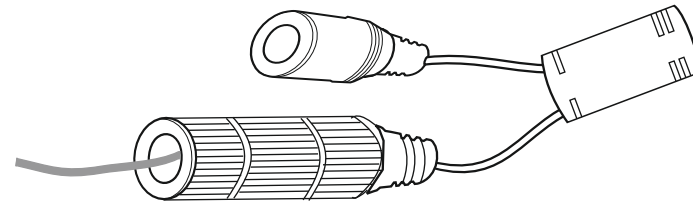
Step 8: Connecting the Cables

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

In Premium, Professional and Enterprise variants; connect Audio I/O and Alarm 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.

Alarm Out

Alarm IN

Audio IN

Audio Out

Ethernet

12V DC @2A
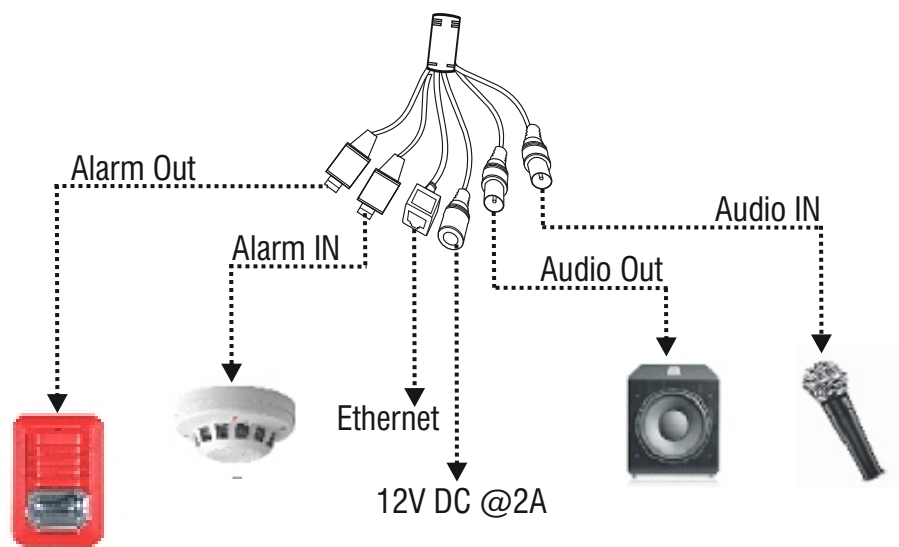
💡 If devices such as Mic and Speaker can be connected to Audio IN and Audio OUT, you may need to connect an external power source if their power requirements are not fulfilled with the camera adapter.

💡 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 Retainer screws and remove the lens cover. See **Figure 10**

2. The Reset switch is located near the lens. See **Figure 14**. Press the Reset Switch for minimum 5 sec and release the switch to reset the camera to default settings.
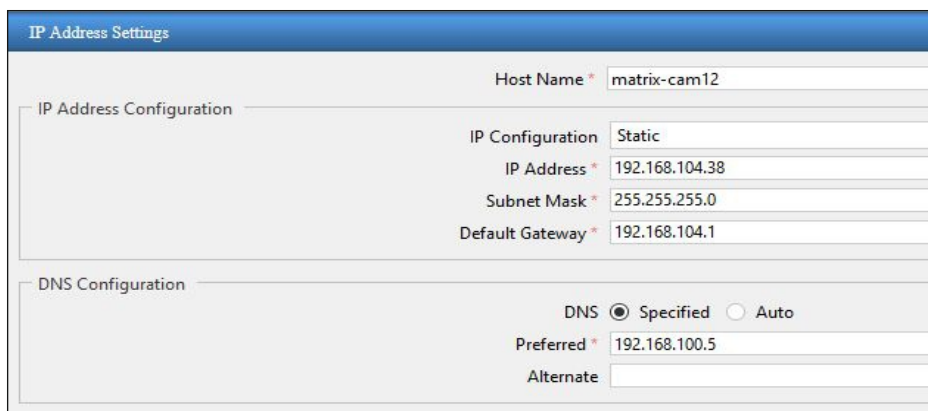
Figure 14

SD Card Slot

Reset Switch
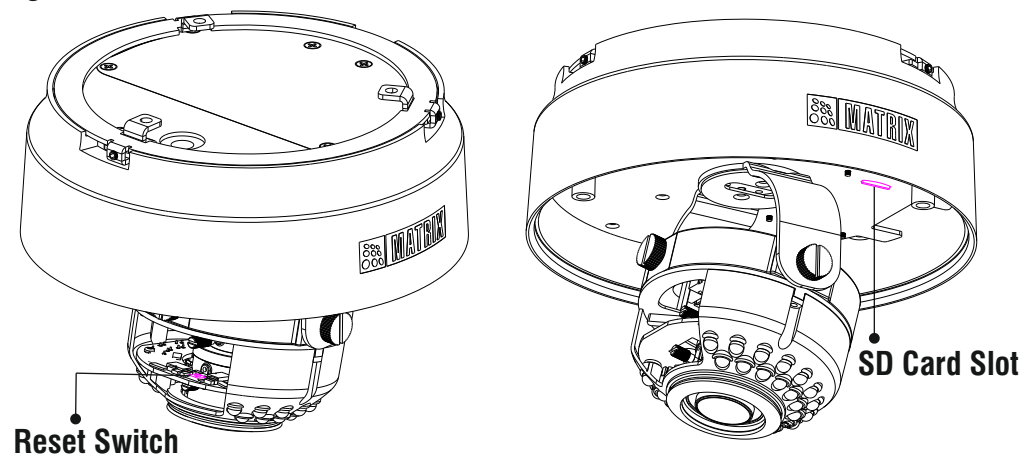
3. You can insert the SD card in the slot to store your camera recordings. See **Figure 14**.

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

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.

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**.

This website wants to install the following add-on: 'MXSS_IPCamera.cab' from 'MATRIX COMSEC PVT. LTD.'.   What's the risk?   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 Configuration tab.

Technical Specification

Specification	Standard	Premium
Power Supply		
Adapter *	12V DC	
PoE	Yes (802.3af, Class 2)	
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	
WiFi	No	
Audio IN	No	Yes
Audio Out	No	Yes
Alarm IN	No	Yes
Alarm Out	No	Yes

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

Technical Specification

Specification	Standard	Premium
Storage		
NAS	Yes	
SD Card	Yes	
Casting		
Material	Aluminium Die Cast	
Colour	Infinity White	
Physical		
Dimensions	Diameter x Height:158mm x 134mm	
Weight	1.4 kg	
Software		
Auto Focus	No	Yes (Only for Motorized Varifocal)
Auto Zoom	No	Yes (Only for Motorized Varifocal)
ONVIF Profile	S, G, T	
Environmental		
Operating Temp.	-30 $^{\circ}$C to +60 $^{\circ}$C	
Humidity	5 to 95% RH	

Certifications

CE	Yes
FCC	Yes
BIS	Yes
IP67	Yes
IK10	Yes

Disposal of Product after End-Of-Life
WEEE Directive 2002/96/EC

The product refered 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.

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