# SATATYA Dome IP-Camera

The Persistent Vision

**MATRIX**
SECURITY SOLUTIONS

## Safety Instructions

### ⚠ Cautions

- Avoid placing cables too close to magnetic or high voltage devices, to reduce undesirable image noise.
- 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.
- Turn off power supply before making electrical connections.

**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.

# CONTENTS

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

# Know your Camera
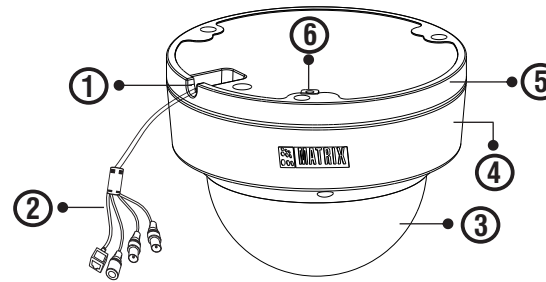


**Figure:1**

1. Cable Guide

2. Cable Assembly

3. Top Glass

4. Enclosure Top

5. Enclosure Bottom

6. Holes for Mounting

## What your Package contains

- Ÿ   SATATYA Dome IP Camera unit
- Ÿ   Wall mounting Template
- Ÿ   Wall mounting Screws with screw grip (3 nos.)
- Ÿ   Cable Accessories to compliant for IP 66

## Things You will Need

- Ÿ   A power drill, screwdriver set, pliers, wire-cutter, a ladder.
- Ÿ   Necessary Cabling
- Ÿ   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 SATATYA Dome Camera is available in **Standard** and **Premium** variants which are available in 2MP as well as 3MP. The variants are listed in the table.

### 2MP Camera Variants

| Type of Lens | Focal Length | Standard | Premium |
|---|---|---|---|
| Fixed | 2.8mm | MIDR20FL28CWS | MIDR20FL28CWP |
| Fixed | 3.6mm | MIDR20FL36CWS | MIDR20FL36CWP |
| Fixed | 6mm | MIDR20FL60CWS | MIDR20FL60CWP |

### 3MP Camera Variants

| Type of Lens | Focal Length | Standard | Premium |
|---|---|---|---|
| Fixed | 2.8mm | MIDR30FL28CWS | MIDR30FL28CWP |
| Fixed | 3.6mm | MIDR30FL36CWS | MIDR30FL36CWP |
| Fixed | 6mm | MIDR30FL60CWS | MIDR30FL60CWP |

# Installation

## Before you start:

Please make sure:
- Ÿ  The device in the package is in good condition and all the assembly parts are included.
- Ÿ  All the related equipments are powered-off before installation.

## Step 1: Select a Location

Select a suitable location, preferably any flat surface such as a wall or a ceiling   to enable coverage of the intended surveillance area. The wall or ceiling is strong enough to support the weight of camera.

## Step 2: Prepare for Installation

- The camera can be powered-up by an adaptor or PoE switch. In case, the camera is to be powered up by adaptor, 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.
- Insert the SD card in case fail-over recording is required. **Figure11.**

## Step 3: Installing Mounting Template

- Stick the Mounting template at the exact location of camera installation. The location can be ceiling or wall.
- Drill  three holes through the markings provided on the Mounting Template on Wall or Ceiling.
- Insert the wall plugs supplied as accessory in the holes you drilled. See **Figure2.**
- In case of concealed wiring, a separate hole has to be drilled in the center for cable outlet.

**Wall/Ceiling**
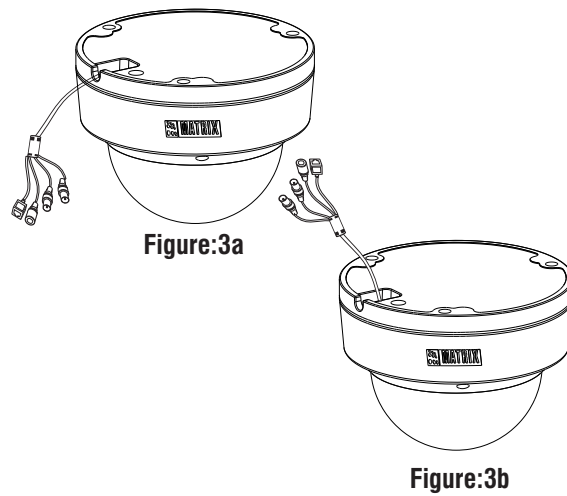
**Mounting Template**
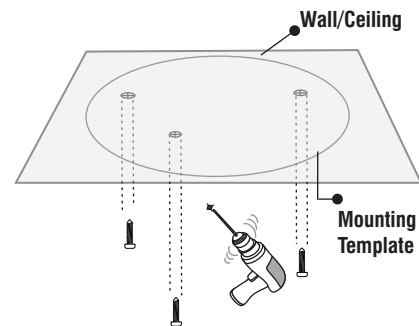
**Figure:2**

## Step 4: Taking off the cable

**For External Cabling:**
- Take the cable out through the cable guide, sideways to the camera. See **Figure3a**.

**For Concealed Cabling:**
- Put the main-cabling of the center hole and make proper connection with LAN Cable. See **Figure3b**.



**Figure:3a**

**Figure:3b**

## Step 5: Mounting the Camera

- Take off the enclosure top by removing 3 screws using screw driver. See **Figure4.**
- Remove the Gasket. See **Figure4.**
- Attach the bottom of the enclosure with the three screw provided along with the camera. See **Figure5.**



Enclosure Bottom

Gasket

Enclosure Top

**Figure:4**

Wall/Ceiling
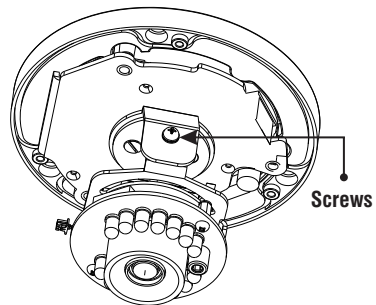
Mounting Template
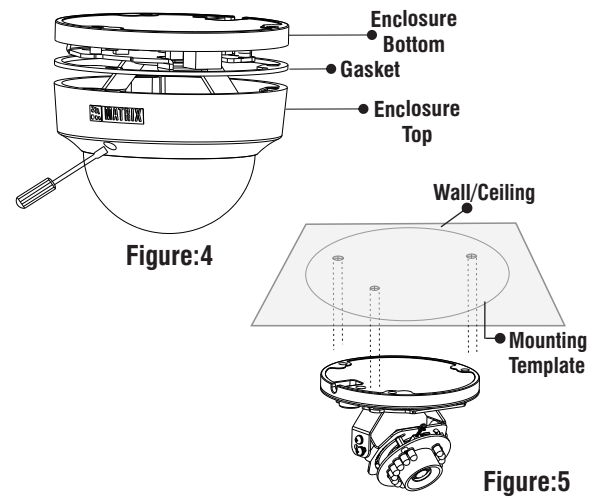
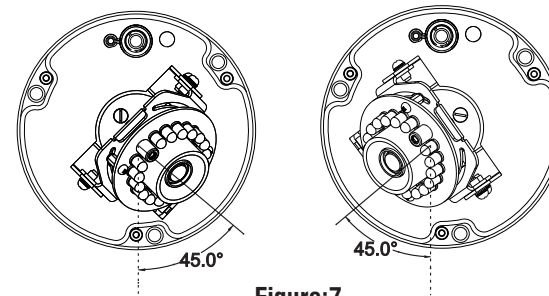**Figure:5**

## Step 6: Adjusting Camera Angle

Loosen the screws on both sides of lens to adjust the camera angle. See **Figure6.**

### A. PAN Movement

For **PAN movement** you can move the camera to 45 degrees each side. see **Figure7**. To capture other side view, turn the body and mount to other side.
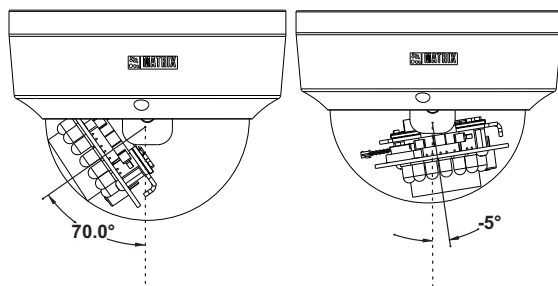


**45.0°**   **45.0°**

**Figure:7**



**Screws**

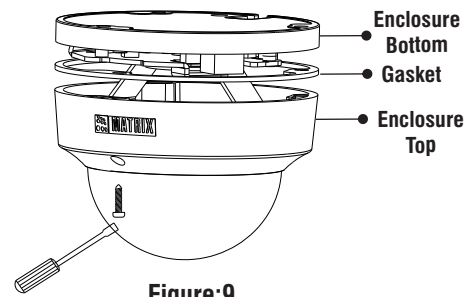**Figure:6**

### B. Tilt Movement

- For **Tilt movement**, move the camera from minimum -5 degree to maximum 70 degrees. See **Figure8**.
- If the horizontal view is not aligned i.e. the view is tilted, then you can adjust the view by loosening the screw and adjusting the lens accordingly. See **Figure6**.
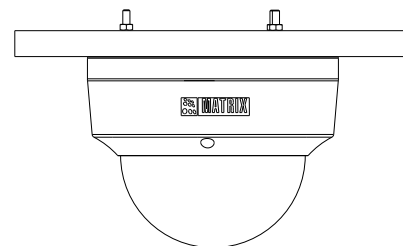
**Figure:8**

## Step 7: Place the Gasket and Top Cover

- After installing the camera at the desired location and position, place the Gasket at the enclosure bottom.
- Finally align the enclosure top and fix it with the 3 screws. See **Figure9.**
- The installed camera is shown in **Figure10**.
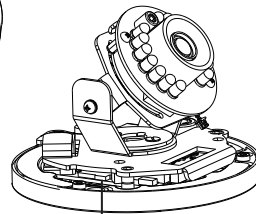


**Figure:9**



**Figure:10**

## Accessing Reset Switch & SD Card Slot

If you forget the IP address or login credentials of camera then the camera can be reset to factory default settings using the reset switch.

- The Reset switch is located as shown in **Figure12.** Press the Reset switch for minimum 5 sec and release the switch to reset the camera to default settings.

- You can insert the SD card in the slot to store your camera recordings. See **Figure11**.



**Reset Switch**
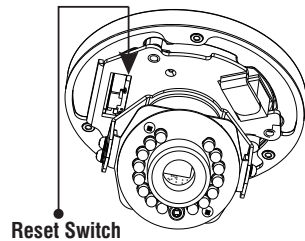
**Figure:12**

**SD Card Slot**

**Figure:11**

## IP66 Protection Accessory Installation

1. By default your camera contains the LAN connector fitted by IP66 protection accessory.



**Power cable**

**IP66 protection accessory**
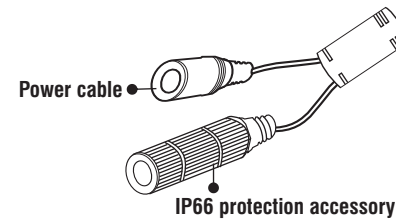
2. The IP66 protection assembly consist of tail end, middle part, "IO" ring and LAN connector as shown below.



**Tail end**   **Middle Part**   **"O"ring**   **LAN Connector**
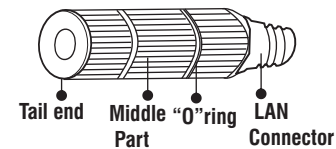
3. Rotate the middle part of IP66 assembly in anticlockwise direction to detach the IP66 accessory from the LAN connector.

**IP66 accessory**  **LAN Connector**
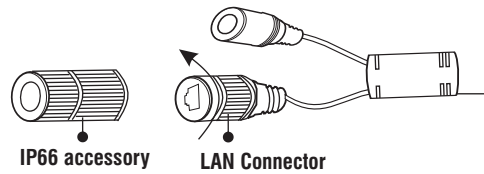
⚠ Do not remove the "O" ring from its place.

4. Loosen the tail end of the IP66 accessory by rotating it in anticlockwise direction.
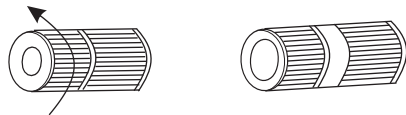
5. Insert the ethernet cable from behind. Then tighten the "tail end" by rotating in clockwise direction to its maximum and crimp the RJ45 connector.

**Ethernet cable**

6. Insert male RJ45 connector into female connector part. Then tighten the middle part by rotating in clockwise direction.

## Powering the Camera

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

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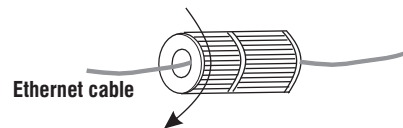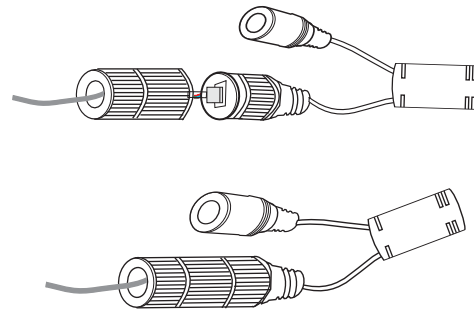
In Premium variants, connect Audio I/O cables if required.

1. **Audio Input** device such as Mike to the Audio input cable of the camera can be connected. The audio when enabled will be recorded with the video and will be available at the monitoring location.

2. **Audio Output** device such as earphone or speaker to the Audio Output cable of the camera can be connected. This will generate audio received from the network.

## Network Configuration

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

### Steps to get the IP address:

- Once the camera is connected to the network, dynamic IP address will automatically be assigned 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 camera.

IP Address Settings

IP Address Configuration
Host Name * matrix-cam
IP Configuration  Static
IP Address * 192.168.104.132
Subnet Mask * 255.255.255.0
Default Gateway * 192.168.102.1

DNS Configuration
DNS ● Specified ○ Auto
Preferred * 192.168.1.1
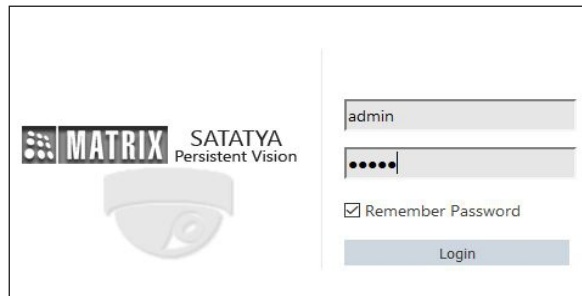Alternate

## Accessing via Web Browser

The IP cameras are supported by Microsoft Windows Operating System.

**IMPORTANT**

In Internet Explorer you can access the camera with Matrix ActiveX plugin. In other browsers you need to install Quicktime or VLC plugin.

**Steps:**
- Run the web browser as administrator, enter 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**.



- The browser will ask you to install ActiveX control.
- Click on Run Add-on to install the plugin and **Run** it.
- Install the Camera software by clicking on **Install**.
- The home page of the camera will be opened and the live view will be displayed.
- The camera configuration can be set from **Configuration** tab.

## Technical Specification

| Specification | Standard | Premium |
|---|---|---|
| Hardware | | |
| Power Supply | 12V @2A | 12V @2A |
| POE | Yes | Yes |
| Reset Switch | Yes | Yes |
| Power Cosumption | Max. 6W | Max. 6W |
| Ethernet | Yes | Yes |
| Audio IN | No | Yes |
| Audio Out | No | Yes |
| Casting | | |
| Material | Aluminum | Aluminum |
| Colour | White | White |
| Physical | | |
| Dimensions (Diameter x Height) | 110mm x 85mm | 110mm x 85mm |
| Weight | 450gm | 450gm |

| Specification | Standard | Premium |
|---|---|---|
| Storage | | |
| NAS | Yes | Yes |
| SD Card | Yes | Yes |
| Software | | |
| IVA Events | Motion Detection, View Tamper, Trip Wire, Zone Intrusion | Motion Detection, View Tamper, Trip Wire, Zone Intrusion, Audio Exception |
| ONVIF Profile | S | S |
| Environmental | | |
| Operating Temp. | 0 to 50 deg C | 0 to 50 deg C |
| Humidity | 5 to 95% RH | 5 to 95% RH |

## FCC Compliance

<u>47CFR FCC PART 15B</u>

<u>Information to the user</u>
(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.

## Compliance

| EMC Directive | 2014/30/EU |
|---|---|
| Low Voltage Directive | 2014/35/EU |
| RoHS Recast (RoHS 2) | 2011/65/EU (As per standard EN 50581:2012) |

| Mechanical | |
|---|---|
| Vibration (sinusoidal) | IEC 60068-2-6 :2007 |
| Protection against Mechanical impact (IK 10) | IEC 62262:2002 |
| Degree of Protection (IP66) | IS/IEC 60529:2001 |

## 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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