SATATYA PTZ Dome IP-Camera
The Persistent Vision

MATRIX®

TELECOM | SECURITY
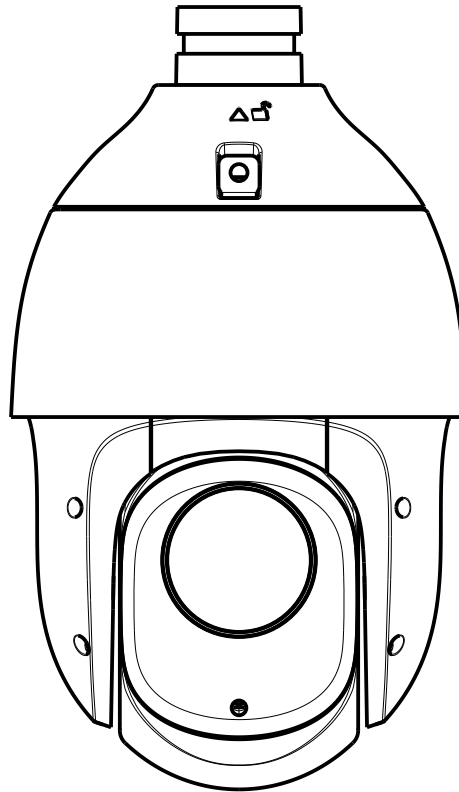
Safety Instructions

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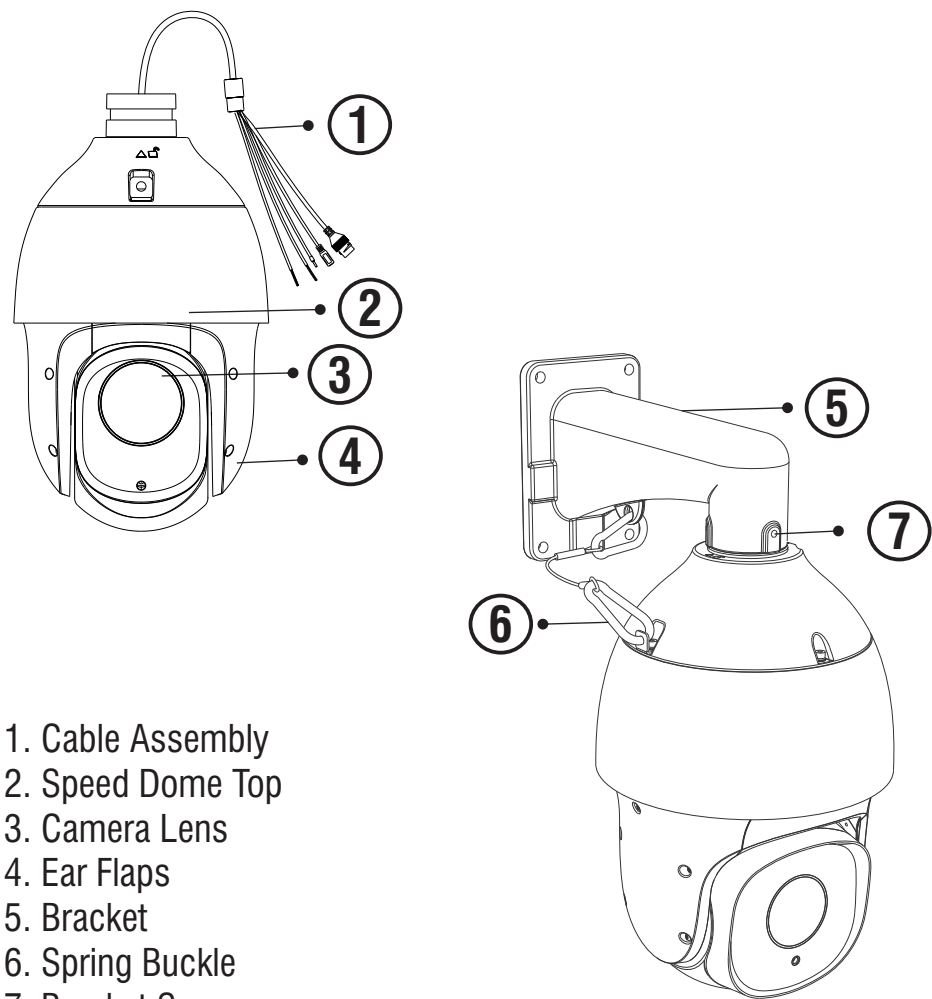
Warranty
Limited Warranty. Valid only if primary protection is provided, mains supply is within limit and protected, and environment conditions maintained within product specifications. Complete warranty statement is available on our website:
www.matrixcomsec.com

Know your Camera

Figure 1

1. Cable Assembly
2. Speed Dome Top
3. Camera Lens
4. Ear Flaps
5. Bracket
6. Spring Buckle
7. Bracket Screw

What your Package Contains

- PTZ Dome IP Camera Unit
- Wall Mounting Template
- Wall Mounting Screws with Screw Grip
- Cable Accessories
- Power Adapter

💡 The Ceiling Mounting Template and other Ceiling Mounting accessories like Pedant Pipe will not be provided by Matrix.

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 SATATYA PTZ Dome Cameras are Premium 2MP with zoom focal length cameras. The variants are listed in the table below:

Resolution with Type of Lens	Focal Length(mm)	Premium
2MP		
Zoom Lens_25x	4.8mm-120mm	PZCR20ML25CWP
Zoom Lens_33x	4.6mm-152mm	PZCR20ML33CWP

Installation Instruction

Recommendations:

1. Use a UL listed power supply unit marked "Class 2" or "LPS" or "PS2" and rated 12V DC.

2. Make sure the wired LAN hub providing Power over the Ethernet (PoE) is in accordance with IEEE 802-3af, shall be a UL listed device with the output evaluated as a limited power source as defined in UL60950-1 or PS2 as defined in UL62368-1.

Installation

Installation Methods

- Wall Mount
- Ceiling Mount

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 installation surface of the wall-mounted installation bracket must have the capacity to bear enough weight.

- The outdoor installation shall be completely sealed and moisture-proof; the outgoing cable shall be laid close to the lower edge of the wall mounted installation bracket to avoid rain entering the interior of the dome camera along the cable.

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 by the Adapter or PoE switch. In case, the camera is to be powered using the Adapter, a 5A plug is needed nearby.
- Provide proper connectivity between camera and recording location through LAN cable.

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. For details refer to Accessing Reset Switch & SD Card Slot.

Step 3: Wall Mounting

- Stick the Mounting Template at the exact location of camera installation. The location can be ceiling or wall.
- Drill four holes according to the dimensions of the bracket positioning holes, see **Figure 2a.**
- Insert the screw grips in the holes you drilled.
- In case of **Concealed Wiring**, a separate hole has to be drilled in the center for cable outlet.
- Affix the Mounting Template or plate with Bracket using the screws on the wall/ ceiling as shown in **Figure 2b.**
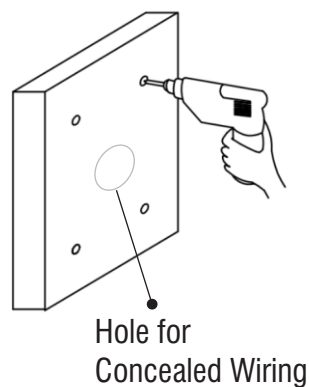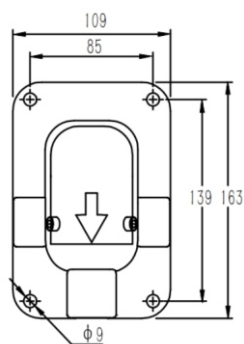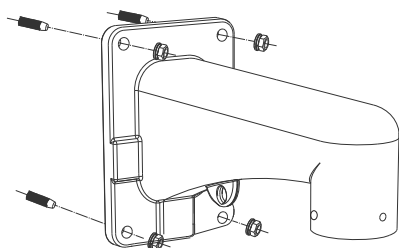
Figure 2a

Hole for
Concealed Wiring

Figure 2b

Step 4: Arranging the Cables

For Concealed Cabling:
- Insert the main-cabling through the center hole and make proper connection with LAN Cable, see **Figure 3a**.

For External Cabling:
- Pull the cable out through the cable guide, sideways to the camera, see **Figure 3b**.
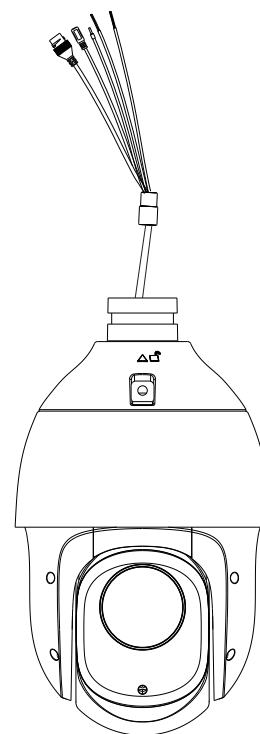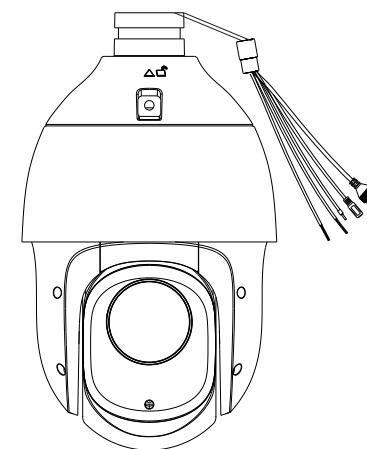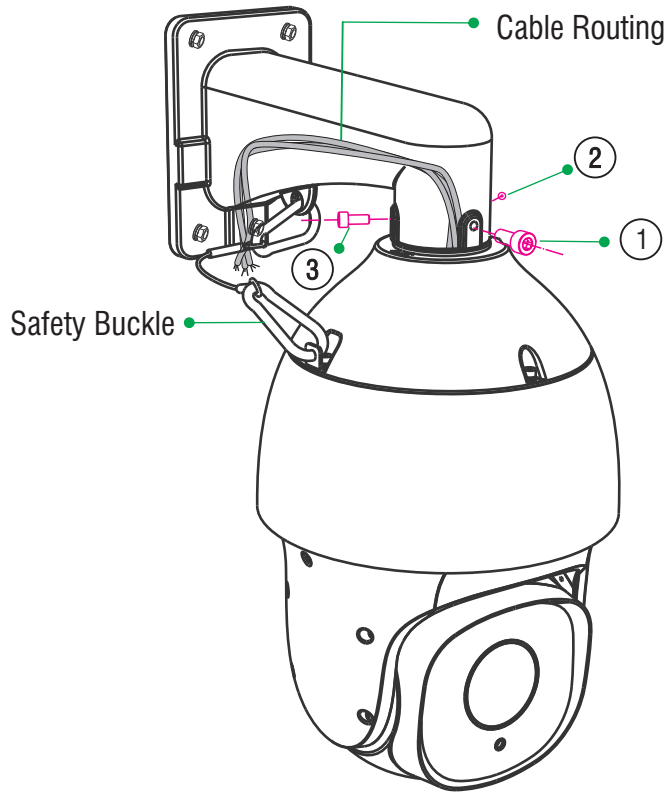
Figure 3a

Figure 3b

Step 5: Mounting the Dome Body

- Insert the Safety Buckle into the Dome and then hook it onto the Mounted Bracket as shown in **Figure 4**.
- Route the cables through the Bracket, see **Figure 4.**
- Affix the Dome body with the Bracket using the three Bracket screws(1,2,3). Tighten the screws using the screw driver, as shown in the figure below.
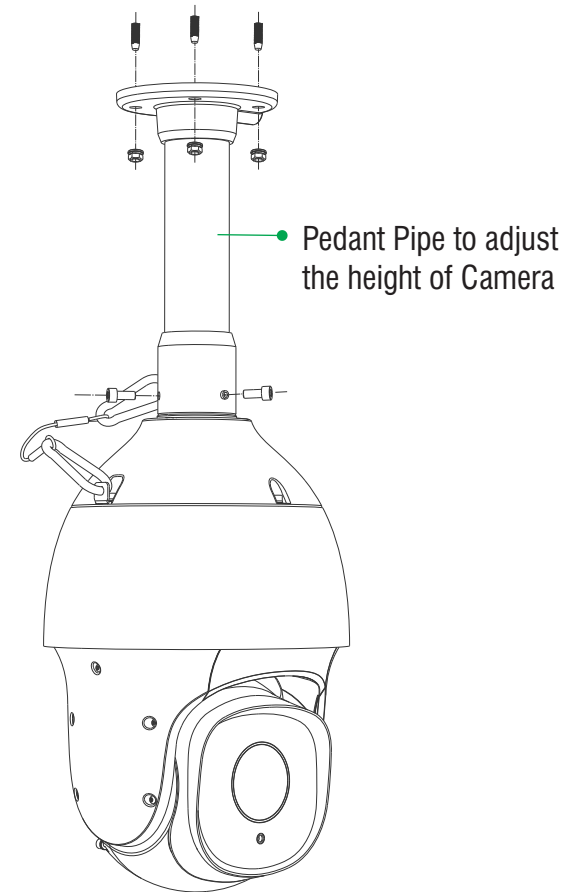
Figure 4

Cable Routing

Safety Buckle

Ceiling Mounting

- For Ceiling Mounting follow the same steps as mentioned in Wall Mounting. Use the Pendant Pipe instead of the Bracket as shown in **Figure 5.**

Figure 5

Pedant Pipe to adjust the height of Camera

Step 6: Adjusting Camera Angle

Camera angle can be adjusted via **PAN Movement** and **Tilt Movement**, refer to the table below for PAN and Tilt Movement Range.

| Parameter Name	PZCR20ML25CWP	PZCR20ML33CWP
PAN Range	360^0	
PAN Speed	Manual: 0.1^0 to 200^0/s; Preset: 240^0/s	Manual: 0.1^0 to 180^0/s; Preset: 240^0/s
Tilt Range	-15^0 to -90^0 (Auto Flip)	-16^0 to -90^0 (Auto Flip)
Tilt Speed	Manual: 0.1^0 to 120^0/s; Preset: 180^0/s	Manual: 0.1^0 to 120^0/s; Preset: 120^0/s

Step 7: IP66/ IP67 Protection Accessory Installation

IP66/IP67 Protection Accessory is used in both the Cameras. The installation process for IP66/IP67 is as follows:

1. By default your camera contains the LAN connector fitted by IP66/IP67 protection accessory.

Power Cable

Protection Accessory
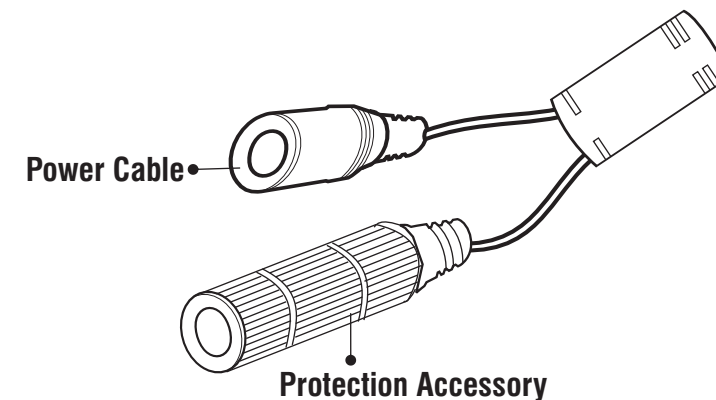
**2.** The IP66/IP67 protection assembly consist of tail end, middle part, "IO" ring and LAN connector as shown below.

Tail end   Middle Part   "O"ring   LAN Connector
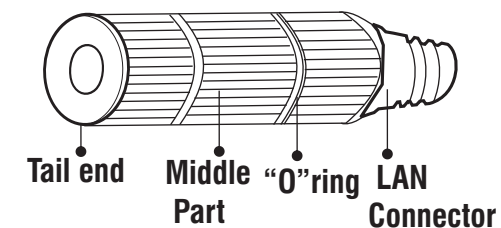
3. Rotate the middle part of IP66/IP67 assembly in anticlockwise direction to detach the IP66 accessory from the LAN connector.

IP6/67 Accessory   **LAN Connector**
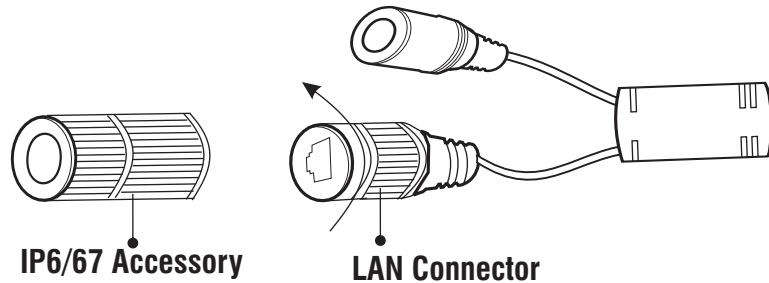
⚠️ *Do not remove the "O" ring from its place.*

**4.** Loosen the tail end of the IP66/IP67 accessory by rotating it in anticlockwise direction.
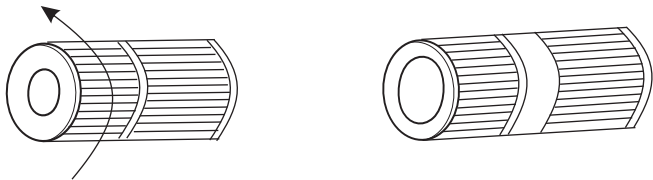
5. Insert the ethernet cable from behind. Then tighten the "tail end" by rotating in clockwise direction to its maximum and crimp the RJ45 connector.
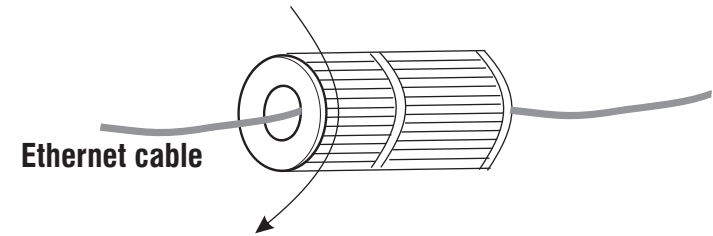
Ethernet cable

6. Insert male RJ45 connector into female connector part. Then tighten the middle part by rotating in clockwise direction.
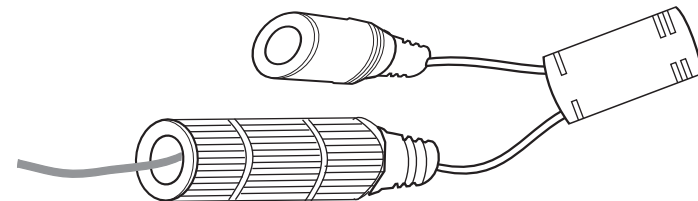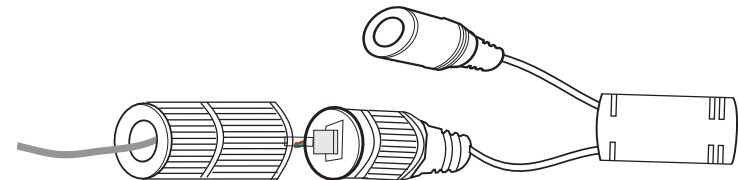
Step 8: Connecting the Cables

Connect the **Ethernet** cable to LAN port and **Power** cable to the 12V DC power supply.
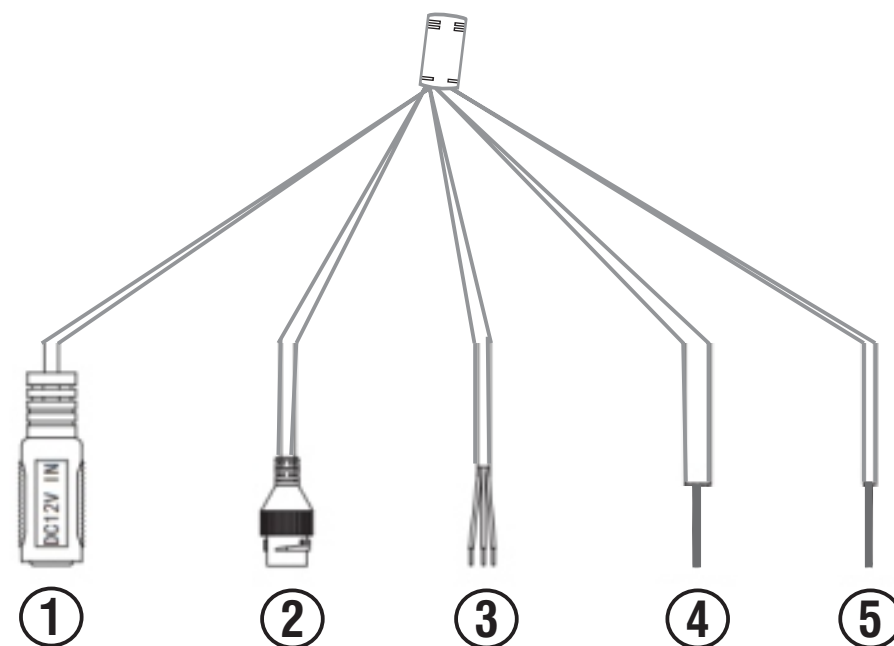
Power over Ethernet (PoE)

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

Connect Audio I/O and Alarm I/O cables if required.The Cable Assembly description is as follows:

Wiring Details

1. DC Power Cable is used in PZCR20ML25CWP and PZCR20ML33CWP Camera for power supply.

2. Network Cable Socket present in both variants. It is used to connect the camera to the computer host or other network equipment. When connecting the network cable, it is recommended that the network cable should not be more than 100m long. Also used when you need to provide power to the Camera using PoE.

3. Audio Input/ Output Cable present in both variants. You can connect the **Audio Input** device such as Mic 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. 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.

4. Alarm IN Cable present in both variants. To detect alarm events you can connect a sensor device to the **Alarm IN** cable of the camera.

5. Alarm OUT Cable present in both variants. 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 are 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 are 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.

Accessing Reset Switch & SD Card Slot

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

- The Reset Switch and SD card compartment lid is located behind the camera lens as shown in **Figure 6**.
- To Access the Reset Switch open the lid. 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.

Figure 6

Reset Switch/ SD Card Compartment Lid
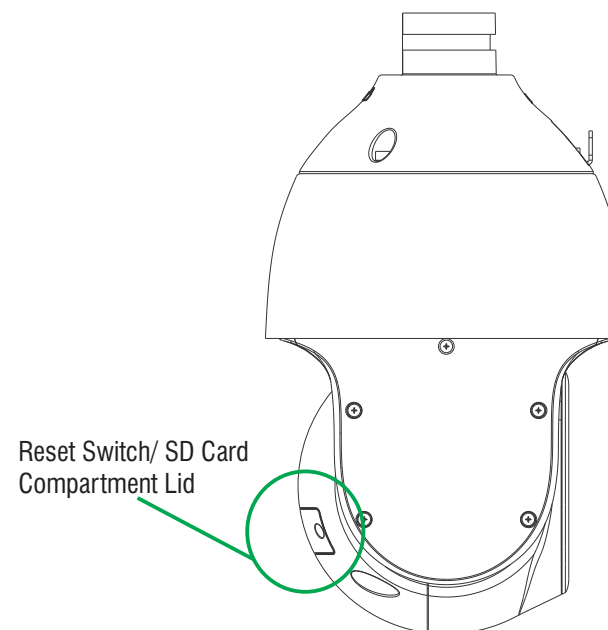
Accessing via Web Browser

You need to download controls before using the PTZ Dome Camera for the first time.

💡 Use the IE browser of the Windows Operating System, make sure that the version is 8.0 or later. Except for Firefox and Google browsers, do not use other third-party browsers and any IE browser shell programs such as Maxthon, Window of the World. We do not guarantee that you can log in normally with such software.

Login Device

- The default IP address of the device is: **192.168.1.2**
- Set the IP address of the computer and the IP address of the device in the same network. For example, set the IP address of the computer to 192.168.1.3 to access the device through IE browser.
- Open the IE browser, enter the IP address of the PTZ Camera in the address bar, and click "go" to login into the device. If you are logging in for the first time, the Login screen appears, see **Figure 7**.
- Enter the User Name as admin and Password as admin.
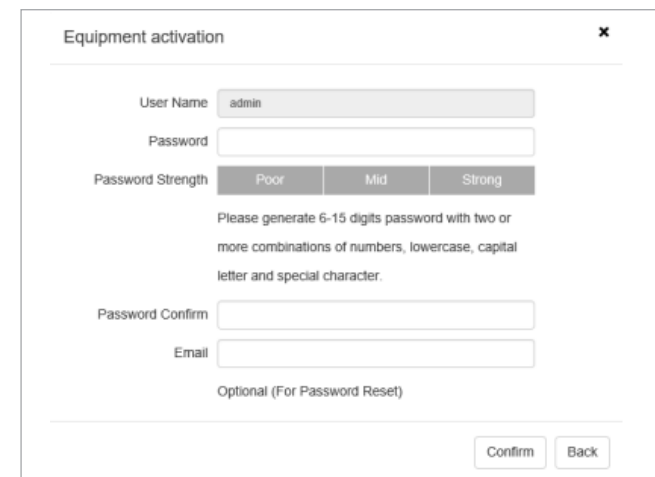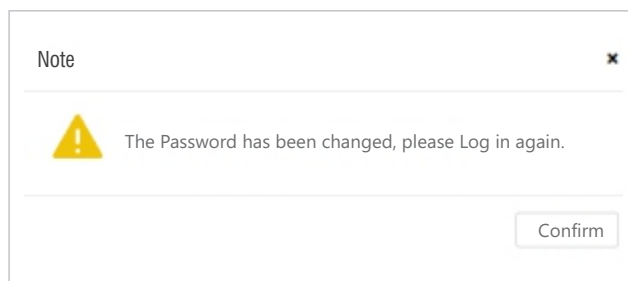- Click Login.

Figure 7

Equipment Activation

- The Equipment Activation screen appears if you are logging in for the first time, see **Figure 8**. Set the login password and click 'Save' to enter the IE login interface.

Figure 8

- The prompt box for activating Device will appear, see **Figure 9**. Click on 'Confirm' Button.

Figure 9

- The video preview serial interface will prompt the link to download the video plug-in, see **Figure 11**.

Figure 11

Please click to download the plugin. If installed already, please just press F5 to refresh it (no need to install again). Please close the browser during installing.
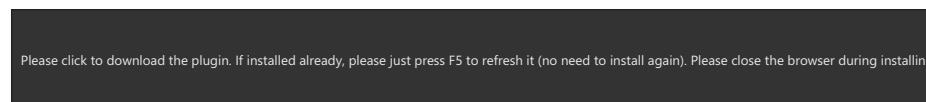
IE Login Interface

- Enter the User Name and Password (the password is the one which was set at the time of activation) in the login window, see **Figure 10** and click '**Login**'.
- The default User Name: **admin**; Password: **admin**
- If the equipment port number is modified, you need to enter the modified port number. The default port number is 3000.

Figure 10

- Click the link to download and install the plug-in. The IE interface needs to be closed during installation.
- After the video plug-in is installed successfully, enter the device IP again and login using the account password to enter the preview interface, see **Figure 12**.

Figure 12
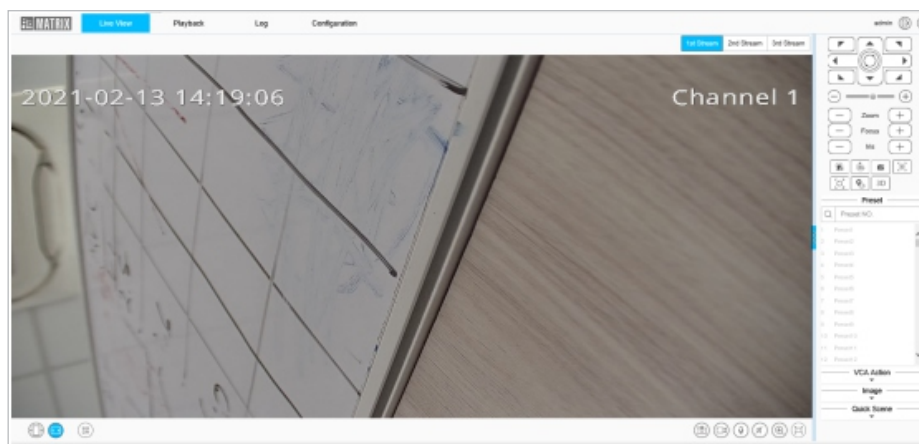
- After you log into the system, the prompt box of "change password" will appear in the lower right corner of the desktop. Please click the text in the box, link to the user management interface, select the user, and click "edit", as shown in the figure below (supported in some models).

Figure 13

> Please change password in time for security. ✕
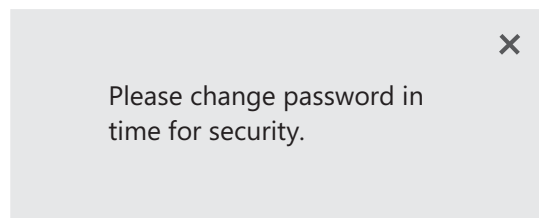
💡 In order to ensure the security of your information, please be sure to change the initial password!

Technical Specification

Specification	PZCR20ML25CWP	PZCR20ML33CWP
Power Supply		
Adapter	12V DC	12V DC
PoE	Yes	
Power Consumption	10.7W(IR Off), 21W(IR On)	14W(IR Off), 24W(IR On)
Connectors		
Ethernet	Yes	
WiFi	No	
Alarm IN	Yes	
Alarm Out	Yes	
Audio IN	Yes	
Audio Out	Yes	
Reset Switch	Yes	
Illuminator		
IR LED	Yes (6)	Yes (10)
IR Range	Upto 150m	Upto 200m
IR Irradiance Angle	Adjustable by Zoom	
White LED	No	

Technical Specification

Specification	PZCR20ML25CWP	PZCR20ML33CWP
Casting		
Material	Alluminium Die Cast	
Colour	White(Speed Dome Top) & Black(Ear Flaps)	
Dimension (Φ = Diameter)	Φ161x276mm (Φ6.34×10.87inch)	Φ222x372mm (Φ8.74×14.65inch)
Weight	2.9kg	5.3kg
Storage		
NAS	Yes	
SD Card	Yes(upto 512GB)	Yes(upto 512GB)
Software		
Alarm Trigger	Motion Detection, Network Disable Alarm, IP Conflict, MAC Conflict Detection	
Video Analytics	Tripwire, Perimeter, Object Abandon, Object Lost, Loitering, Video Abnormal, Audio Abnormal.	Tripwire, Double Tripwire, Perimeter, Object Abandon, Object Lost, Loitering, Running, Parking, Heatmap, Crowd, People Counting, On Duty Detection, Safety Helmet Detection, Video Abnormal, Audio Abnormal

Technical Specification

Specification	PZCR20ML25CWP	PZCR20ML33CWP
ONVIF Compatibilty	Yes - S, G, T, M	
Environmental		
Operating Temp.	-40°C to +70°C (IR off), -40°C to +40°C (IR ON)	

FCC Compliance

This device complies with part15 of the FCC rules. Operation is subject to the following two conditions:

1. This device may not cause harmful interference.
2. This device must accept any interference received, including interference that may cause undesired operation.

This equipment has been tested and found to comply with the limits of 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.

Warning
This is a Class A product. In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures.

Certifications

CE	Yes
FCC	Yes
BIS	Yes
IP67	Yes(PZCR20ML33CWP)
IP66	Yes(PZCR20ML25CWP)
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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MATRIX COMSEC PVT. LTD.
Head Office
394-GIDC, Makarpura, Vadodara Gujarat, 390010, India
Ph: (+91)1800-258-7747
Email: Tech.Support@MatrixComSec.com
www.matrixcomsec.com