

MANTRA

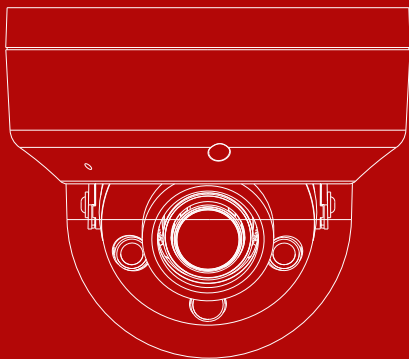
MACTRA™ NETWORK DOME CAMERA

Quick User Guide V1.0





“Dome Camera: Presence In Every Corner”



Index

- 1.0 Appearance Description** -----
- 1.1 Package Contents -----
- 1.2 Required Tools -----
- 2.0 Installation** -----
- 2.1 Installing Mounting Template -----
- 2.2 Mounting -----
- 2.3 Adjusting Camera Angle -----
- 2.4 Ingress Protection Accessory Installation -----
- 2.5 Connecting the Cables -----
- 3.0 Safety Instructions** -----
- 4.0 Warranty Terms** -----
- 5.0 Consumer Notices** -----
- 6.0 Activate and Access Network Camera** -----



1.0 Appearance Description

This camera has appearances shown as the figures below.

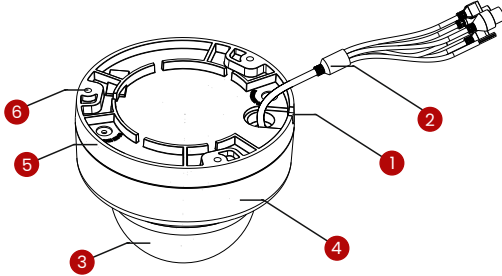


Figure-1

- | | |
|-------------------|---------------------|
| 1. Cable Guide | 4. Enclosure Top |
| 2. Cable Assembly | 5. Enclosure Bottom |
| 3. Top Glass | 6. Mounting Holes |

Note:

- The Standard variant consists of 2 connectors: Power Connector and Ethernet Connector (PoE).
- The Premium variant consists of 3 connectors: Power Connector, Ethernet Connector (PoE), and Audio OUT.

1.1 Package Contents

- Dome Camera Unit
- Wall Mounting Template
- Wall Mounting Screws with Screw Grips (3 Nos.)
- Cable Accessories
- Ingress Protection Accessories (4 Parts)
- Allen Key

1.2 Required Tools

- Power drill, screwdriver set, pliers, wire cutters, and a ladder.
- Necessary cabling.
- A power supply with the recommended output voltage of 12VDC.
- Use an adapter to connect the camera to the power outlet.



2.0 Installation

Before you start:

Please ensure the following before installation:

- Confirm that the device and all included mounting components are present and undamaged.
- Make sure all related equipment is switched off before beginning the installation process.
- Verify that the wall or ceiling structure is capable of safely supporting the weight of the camera.

Step 1: Select Location

- Choose an appropriate mounting location to ensure full coverage of the desired surveillance area. The selected surface should be flat and suitable for wall or ceiling installation.

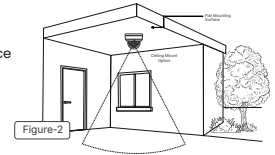


Figure-2

Step 2: Prepare for installation

- The camera can be powered using either a power adapter or a PoE switch.
- If an adapter is used, ensure a nearby power outlet is available to accommodate a 2A-rated power adapter.
- Use a LAN cable to connect the camera to the recording device.
- Concealed wiring is recommended for a neat and secure installation, though external wiring may also be used if required.
- A MicroSD card may be installed in the camera to store recordings during network outages and to save images or video clips triggered by events. Refer to Accessing Reset Switch and MicroSD Card Slot.

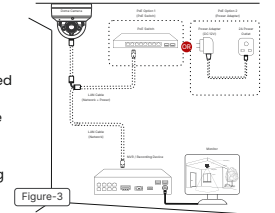


Figure-3

2.1 Installing Mounting Template

Step 3

- Affix the mounting template to the exact wall or ceiling location where the camera will be installed.
- Drill three holes at the marked positions on the mounting template.
- Insert the screw grips into the drilled holes.
- For concealed cabling, drill an additional center hole to route the cable through the surface.



Figure-4



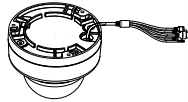
2.2 Mounting

Step 4

For External Cabling

- Route the cable through the cable guide and out of the side of the camera.

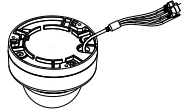
Figure-5



For Concealed Cabling:

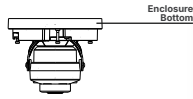
- First, use the provided Allen key to remove the camera's top cover. Then, feed the network cable through the center hole in the mounting surface and connect it securely to the camera's LAN port.

Figure-6



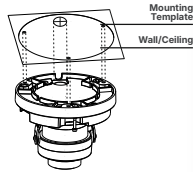
- Remove the three screws using an Allen key to detach the top cover of the enclosure.
- Take out the gasket.

Figure-7



- Secure the bottom part of the enclosure using the three screws supplied with the camera.

Figure-8

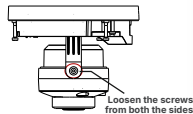


2.3 Adjusting Camera Angle

Step 5

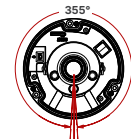
- Loosen the screws on both sides of the lens to adjust the camera angle.

Figure-9



- The camera supports Pan rotation up to 355°.

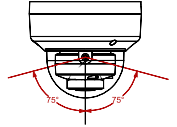
Figure-10



C. Tilt Movement

- For tilt adjustment, move the camera from 0° up to a maximum of 75°.
- If the horizontal view is misaligned, loosen the adjustment screw and adjust the lens to level the image.

Figure-11



Step 6

Accessing Reset Switch and microSD Card Slot

(Perform before sealing the camera)

- MicroSD Card Installation:** Insert a MicroSD card into the designated slot to store local recordings.
- Factory Reset:** If you need to restore the device to its factory default settings, press and hold the reset switch for at least 5 seconds.

(Note: If the card is inserted while the camera is powered on, restart the camera to ensure proper detection).

Figure-12

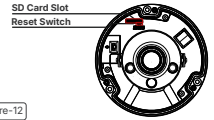
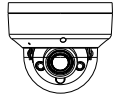


Figure-13

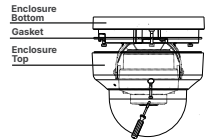


Step 7

Place the Gasket and Top Cover

- After configuring the camera and inserting the MicroSD card, place the rubber gasket into the groove at the enclosure's bottom.
- Align the top cover over the enclosure and firmly tighten the 3 screws using the supplied Allen key to ensure a proper weather seal.

Figure-14



IR Illumination Notice

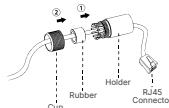
CAUTION: This camera emits infrared (IR) light for night-vision capabilities. While it is safe for general use, avoid staring directly into the IR LEDs at close range for prolonged periods when the device is powered on.



2.4 Ingress Protection Accessory Installation

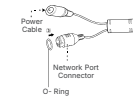
- The ingress protection accessory includes the following components: holder, rubber seal, cap, and O-ring.
- Pass the RJ45 cable (with connector) through the cap, rubber seal, and holder in the specified sequence.

Figure-15



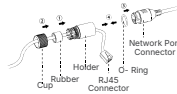
- Install the O-ring onto the network port connector as illustrated.

Figure-16



- Plug the RJ45 connector into the network port on the camera and twist the holder onto the port.

Figure-17



- Insert the rubber seal into the holder, then firmly tighten the cap to ensure a waterproof seal.

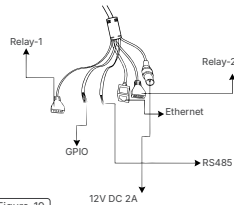
Figure-18



2.5 Connecting the Cables

- Connect the Ethernet cable to the LAN port and the power cable to the 12VDC power supply.
- This camera has a built-in microphone for standard audio recording.
- Connect an external speaker to the Audio OUT cable for playback. Note that external speakers require an independent power supply.
- For premium variants, connect alarm input devices to the GPIO port and controllers to the RS485 interface.
- Use the Relay-1 and Relay-2 outputs to connect external response devices if required.

Figure-19



Power over Ethernet (PoE):

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



3.0 Safety instructions

Read and retain these instructions for future reference

- Ensure that the installation surface or mounting structure is capable of safely supporting the weight of the camera and all associated mounting accessories.
- Do not expose the camera lens to direct bright light sources for extended periods, as this may damage the image sensor. Avoid installing or operating the camera near unstable light sources, fluorescent lamps, or highly reflective surfaces that may cause image degradation.
- Do not touch the camera lens with your fingers or any hard objects, as this may affect image quality or damage the lens surface.
- Use only a soft, dry cloth or approved cleaning materials to clean the camera. Do not use strong chemicals, solvents, or abrasive detergents.
- Do not install or operate the camera near sources of strong electromagnetic interference, such as radio transmitters, television transmitters, or high-voltage electrical equipment.
- Select an installation location that is adequately separated from sources of electromagnetic radiation to ensure optimal camera performance.
- Protect the camera from exposure to liquids and moisture during operation. For transportation and storage, it is strongly recommended to use the original packaging.
- Installation, servicing, and dismantling of the camera should only be performed by qualified and authorized personnel.
- Disconnect the power supply before installing, servicing, or performing maintenance on the camera.
- The camera is designed for both ceiling and wall mounting. For wall-mounted installations, ensure that the cable gland is oriented downward to maintain proper weather protection. The camera should be installed at a height greater than 3 meters above ground level.

4.0 Warranty Terms

1. Warranty Coverage

The warranty is applicable only to the first purchaser of the product and is not transferable.

2. Warranty Period

The offsite warranty for CCTV products, including cameras, NVR/DVR units, and related hardware supplied by the Company, shall be for a period of 12 months from the date of the Company's Tax Invoice, unless otherwise specifically mentioned in the Tax Invoice or commercial offer. Accessories, power adapters, chargers, batteries, cables, connectors, mounting brackets, and other consumable or external accessories shall carry a warranty of 6 months from the date of the Company's Tax Invoice, unless otherwise stated.

3. Meaning of Offsite Warranty

Offsite warranty means that the purchaser shall be responsible for sending or delivering the defective product to the Company's authorized service center or support location. The cost and risk of transportation, courier, packing, insurance, removal, and reinstallation shall be borne by the purchaser.

4. Support Through MactraOne

For support, service requests, repair status, warranty claims, or RMA-related assistance, the purchaser shall contact **MactraOne** Support through the official support channel provided by the Company. Warranty service shall be processed only after verification of product details, serial number, invoice, warranty validity, and reported issue.



5. Authorized Service Only

Repairs under the warranty period shall be carried out only by the Company's authorized personnel or authorized service center. Any repair, opening, modification, tampering, or servicing done by an unauthorized person or agency shall void the warranty.

6. Mandatory Documents for Warranty Claim

The original Tax Invoice is compulsory for claiming warranty. The Company may also require the product serial number, installation details, warranty card, RMA request number, and other supporting information before accepting the warranty claim.

7. Warranty Exclusions

The warranty shall not cover defects, failures, or damages caused due to:

- Negligence, mishandling, misuse, abuse, or improper operation.
- Physical damage, breakage, cracks, dents, scratches, or burnt parts.
- Water, moisture, liquid ingress, dust, corrosion, rust, or chemical exposure.
- Electrical surge, voltage fluctuation, lightning, short circuit, improper earthing, or use of unsuitable power supply.
- Fire, accident, natural calamity, theft, vandalism, or force majeure events.
- Improper installation, wrong configuration, unsupported mounting, or poor site conditions.
- Use of non-approved power adapters, cables, accessories, storage devices, or third-party components.
- Tampering, seal breakage, serial number removal, alteration, or damage.
- Unauthorized repair, modification, reverse engineering, firmware alteration, or software manipulation.
- Normal wear and tear, cosmetic damage, consumables, accessories, or plastic/body parts not affecting product function.
- Damage during transportation from the purchaser's location to the service center.
- Any issue arising from third-party software, third-party applications, network configuration, internet service, storage device failure, or customer-side infrastructure.

8. CCTV-Specific Limitations

The Company shall not be responsible for video loss, recording loss, data loss, footage corruption, missed events, image quality issues caused by poor lighting, improper camera placement, unstable network, insufficient storage, incorrect configuration, unsupported hard disk, or environmental conditions beyond the product's specified operating limits.

9. Software, Firmware, and Application Responsibility

The Company shall not be responsible for any defect, malfunction, compatibility issue, data loss, performance issue, cybersecurity issue, or operational failure arising due to third-party software, customer-developed applications, unauthorized integrations, unsupported operating systems, improper network settings, or changes not approved by the Company. Where firmware, mobile application, VMS, cloud platform, or software support is provided by the Company, the same shall be subject to the applicable license terms, service terms, update policy, and support policy of the Company.

10. Repair or Replacement During Warranty

During the valid warranty period, the Company may, at its sole discretion, repair the defective product, replace the defective part, or replace the product with an equivalent or functionally similar product. The replaced part or product may be new, refurbished, or serviceable equivalent, subject to availability.

11. Warranty Continuation After Repair

In the event of repair or replacement of any part or unit, the warranty shall continue only for the remaining unexpired period of the original warranty. Repair, replacement, transit time, or service processing time shall not extend or restart the warranty period.



12. Chargeable Repairs

If damage, misuse, tampering, unauthorized repair, physical damage, liquid damage, electrical damage, or any non-warranty condition is detected by the authorized service personnel, the warranty shall not apply. In such cases, repairs may be carried out on a chargeable basis, subject to availability of parts and purchaser approval.

13. Spare Part Availability and Commercial Settlement

In the event of unforeseen circumstances or non-availability of spare parts, the Company may offer a commercially reasonable solution, including repair with available alternatives, replacement with an equivalent model, upgraded replacement on a chargeable basis, or depreciated commercial settlement as per the Company's prevailing policy.

14. No Responsibility for Installation Site and Infrastructure

The Company shall not be liable for defects or performance issues caused by improper installation, weak network connectivity, inadequate bandwidth, unstable power supply, incompatible storage devices, poor lighting, excessive heat, dust, rain exposure, or any site condition not suitable for CCTV product operation.

15. Limitation of Liability

The Company shall not be liable for any indirect, incidental, special, punitive, exemplary, business, operational, financial, or consequential loss or damage, including but not limited to loss of profits, loss of business, loss of contracts, loss of operation time, loss of goodwill, loss of anticipated savings, loss of data, loss of footage, or security breach claims.

16. Maximum Liability

The maximum liability of the Company under or in connection with the product, whether arising under contract, warranty, tort, negligence, statute, or otherwise, shall be limited to fifty percent (50%) of the net product value paid by the purchaser for the specific defective product, excluding taxes, duties, freight, installation charges, software charges, AMC charges, cloud subscription charges, third-party charges, and any other incidental charges.

17. User Rights and Obligations

The purchaser/user guarantees that the CCTV product shall not be used in any manner that violates applicable laws or the legal rights of any third party, including but not limited to privacy rights, data protection rights, intellectual property rights, portrait rights, surveillance regulations, and recording-related laws. The purchaser/user shall be solely responsible for obtaining all required permissions, notices, consents, approvals, and legal authorizations for installation and use of the CCTV product. In case of any violation, the purchaser/user shall bear all legal liabilities, claims, penalties, costs, and consequences arising therefrom.

18. Regulatory and Compliance Notice

The purchaser/user shall install and operate the product strictly in accordance with the user manual, applicable laws, safety instructions, and regulatory requirements. Any changes or modifications not expressly approved by the responsible compliance party may void the user's authority to operate the equipment.

19. RF Exposure Statement

To maintain compliance with applicable RF exposure guidelines, the equipment should be installed and operated with a minimum distance of 20 cm between the radiator and the user's body. The device and its antenna must not be co-located or operated in conjunction with any other antenna or transmitter unless specifically approved.

20. Final Decision

The Company's decision regarding warranty applicability, product condition, repair feasibility, replacement eligibility, and commercial settlement shall be final and binding, subject to applicable law.



5.0 Consumer Notices

FCC NOTICE: This equipment has been tested and found to comply with the limits for a 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:

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

Changes or modifications not expressly approved by the party responsible for compliance to Part 15 of the FCC Rules could void the user's authority to operate the equipment.

CE NOTICE: This equipment has been tested and found to comply with the limits for a Class B or Class 2 digital device, pursuant to EN 55032 & EN 55035 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 their own expense. Changes or modifications not expressly approved by the party responsible for compliance to EN 55032 & EN 55035 Rules could void the user's authority to operate the equipment. This Class B digital apparatus meets all requirements of the Canadian Interference-Causing Equipment Regulations.

6.0 Activate and Access Network Camera

- Scan the QR code to activate and access the network camera.
- Note that mobile data charges may apply if Wi-Fi is unavailable.





MACTRA™

For more information :

☎ :+91 79 69268101 | ✉ :sales@mactra.com | ✉ :one@mactra.com | 🔗 :www.mactra.com | 📍 :India

© Mactra by Mantra Softech All Rights Reserved.

