

MANTRA

# MACTRA™

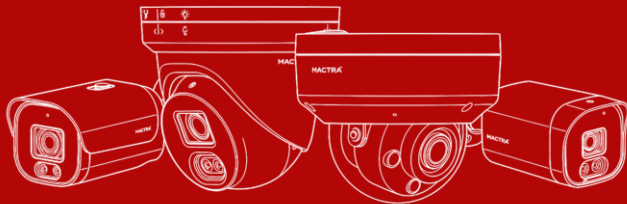
## Technical User Manual

V1.0





# “Smarter Lens Sharper Surveillance”



## Index

1. Power ON Procedure	-----
2. Default Network Configuration	-----
3. PC Network Setup	-----
4. NVR/Third party NVR/VMS Connection	-----
5. LED Status Indication	-----
6. Troubleshooting Guide	-----
7. Default Camera Access Procedure	-----
8. Firmware Upgrade	-----
9. Storage Options	-----
10. Safety instructions	-----



## 1. Power ON Procedure

1. Connect the camera to a power source in accordance with the supported power specifications:

Mini Bullet Camera	Bullet Camera	Dome Camera	Turret Camera
12 V – 13.5 W	12 V – 14 W	12 V – 14 W	12 V – 9 W
PoE (IEEE 802.3af)	PoE (IEEE 802.3af)	PoE (IEEE 802.3af)	PoE (IEEE 802.3af)

2. Ensure that the power source meets the specified requirements before powering on the camera.
3. After powering ON:
  - The white LED gradually glows from low intensity to medium and full brightness.
  - The LED then gradually dims and turns OFF.
4. Once the LED sequence is completed, the camera is ready for access through the web application.

## 2. Default Network Configuration

Parameter	Default Value
Default IP Address	192.168.1.20
HTTPS Port	8443
Default Web URL	https://192.168.1.20:8443
Username	admin
Password	AdminPassword@123

Table 1: Default Network Configuration

## 3. PC Network Setup

Set your computer's IP address to the same network subnet (e.g., 192.168.1.100 / 255.255.255.0).

1. Connect the camera and the PC to the same switch/router.
2. Open a web browser and enter: <https://192.168.1.20:8443>
3. Log in using the default credentials.

## 4. NVR/Third party NVR/VMS Connection

To add this camera to a third-party Network Video Recorder (NVR) or Video Management System (VMS), ensure both devices are on the same local network. The camera supports standard integration protocols:

- **ONVIF Integration:** Use the camera's IP address, the default ONVIF port (refer to the camera's web UI Network settings), and your admin credentials to connect the camera automatically.
- **RTSP Support:** Use the camera's IP address, RTSP port, and administrator credentials to view live video in compatible VMS platforms, media players, and third-party applications.



## 5. LED Status Indication

LED Status	Description
White LED Breathing	Camera Booting
LED OFF	Camera Ready
No LED Glow on startup	Camera Booting problem

Table 2: LED Indication Status

## 6. Troubleshooting Guide

Symptom	Possible Cause	Resolution
No LED glow during startup	Camera not receiving power or boot failure	Verify the power supply, PoE connection, and cable connections. Reboot the camera.
Camera not accessible through web browser	Incorrect IP address or network configuration	Verify the camera IP address, network settings, and Ethernet connection.
Login failed	Incorrect username or password	Verify the credentials and ensure the correct case is used. Reset the password if necessary
No live video displayed	Browser compatibility issue or network problem	Refresh the browser, try a supported browser, and check network connectivity.
Poor image quality	Dirty lens or insufficient lighting	Clean the lens and ensure adequate lighting in the monitored area.
Image too bright or too dark	Incorrect exposure settings	Adjust brightness, exposure, WDR, or other image settings.
Camera frequently reboots	Unstable or insufficient power supply	Verify that the power source meets the specified voltage and power requirements.
Network connection drops intermittently	Faulty network cable or unstable network	Check the Ethernet cable, switch port, and network configuration.
No recording on SD card	SD card not detected, damaged, or full	Reinsert, format, or replace the SD card. Ensure sufficient storage space is available.
IR LEDs not turning on at night	Ambient light level too high or incorrect settings	Verify Day/Night settings and ensure the environment is sufficiently dark.
PoE power not working	Unsupported PoE switch or injector	Ensure the PoE source complies with IEEE 802.3af standards.
No audio detected	Audio disabled or microphone issue	Verify audio settings and microphone connections (if applicable).
Camera not detected by VMS/NVR	Network or protocol configuration issue	Ensure the camera and VMS/NVR are on the same network and compatible protocols are enabled.
Firmware upgrade failed	Corrupted firmware file or interrupted upgrade process	Verify the firmware file, maintain stable power during the upgrade, and retry the process.
Date and time incorrect	NTP configuration issue	Configure the correct time zone and NTP server settings.

Table 3: Troubleshooting Guide

**Note:** If the problem remains unresolved, please contact the manufacturer or authorized technical support for assistance.



## 7. Default Camera Access Procedure

- Enter the camera's default IP address into a supported web browser to access the login page. Enter the default **username (admin)** and **password (AdminPassword@123)**.
- Please note that the **username** is case-sensitive, as shown in **Figure 1**.

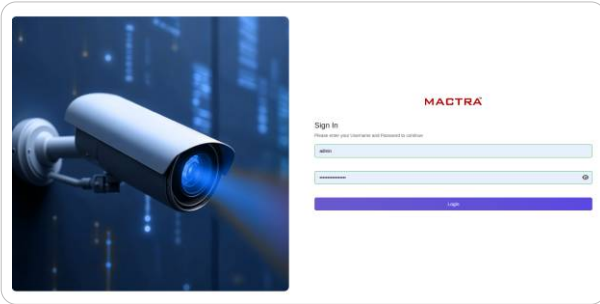


Figure 1: Default Login Screen

- After a successful login, the initial security setup prompt will appear, requiring a password change.
- Enter a new password that complies with the password policy and is different from the default password.
- Then, click the **Complete Setup & Continue** button to proceed, as shown in **Figure 2**.

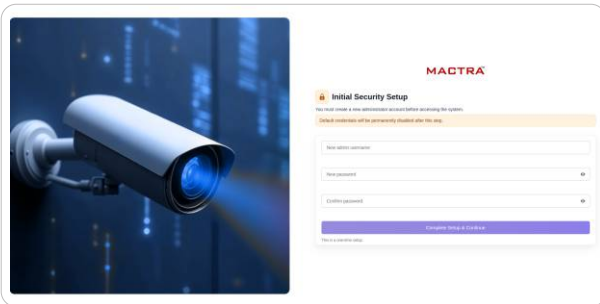


Figure 2: Initial Security Setup



- Additionally, during the initial setup, you must configure three security questions and answers.
- These are required to verify the administrator's identity and securely recover access to the device if the password is forgotten, as shown in **Figure 3**.

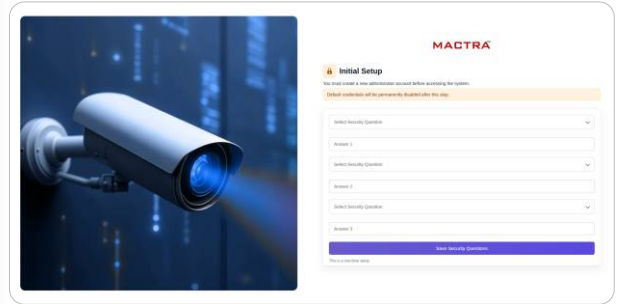


Figure 3: Security Questions Setup

- Click the **Save Security Questions** button.
- The login screen will be displayed again.
- Enter your **username** and your newly created **password** to log in.
- After successful authentication, the camera's live video preview will be displayed, as shown in **Figure 4**.

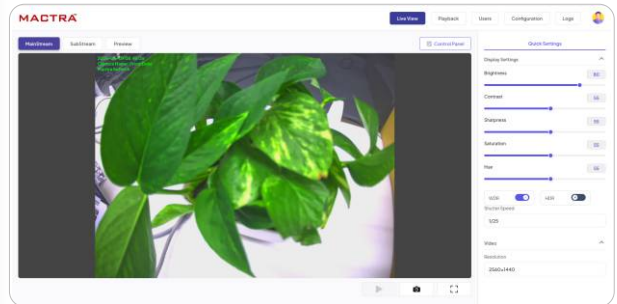


Figure 4: Live Video Preview



## 8. Firmware Upgrade

- Login to camera Web UI.
- Navigate to:
  - Configuration -> Maintenance -> Firmware Upgrade
- Click **Browse** and select firmware file.
- Click **Upgrade**.
- Wait until upgrade completes.
- Camera will reboot automatically.

### Firmware upgrade Important Notes

- Do not power OFF camera during upgrade.
- Use only official firmware.

Ensure stable network connection.

## 9. Storage Options

Storage Type	Description
Micro SD Card	Local recording inside camera
NVR Storage	Recording through ONVIF/NVR
FTP/SFTP	Event snapshot or video upload

Table 4: Storage Option

### Supported Micro SD Card

- Recommended Class 10 Micro SD card
- Maximum Capacity: 256GB (example)
- Format: FAT32/EXT4 (based on firmware support)

### Installing Micro SD Card

1. Power OFF the camera.
2. Open SD card cover.
3. Insert Micro SD card properly.
4. Power ON the camera.



## 10 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.



**MACTRA™**

**For more information :**

 :+91 79 69268101 |  :sales@mactra.com |  :one@mactra.com |  :www.mactra.com |  :India

© Mactra by Mantra Softech All Rights Reserved.

