

V500 Body Camera User Guide

MARCH 2024

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MN010569A01-AA

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This product is restricted to occupational use only as a body worn camera. This product is not classified as a handheld or head mounted device.



NOTE: This device is intended for use in occupational/controlled conditions where users are aware of their exposure and can exercise control over their exposure to meet the requirements in national and international regulations. This device is **not** authorized for general population, consumer use.

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This device is intended for use in occupational/controlled conditions, where users have full knowledge of their exposure and can exercise control over their exposure to meet ICNIRP limits. This device is **not** authorized for general population, consumer, or any other use.

Product Safety and RF Exposure Product Safety and RF Exposure Compliance



CAUTION: Before using this product, read the operating instructions for safe usage contained in the Product Safety and RF Exposure booklet enclosed with your radio.

CAUTION: This radio is restricted to occupational use only to satisfy RF energy exposure requirements. Before using this product, read the RF energy awareness information and operating instructions below.

The product must only be used with approved Motorola Solutions accessories.

- To ensure continued compliance with applicable RF exposure limits, use only Motorola Solutions approved, supplied or replacement batteries, and accessories.
- For a list of Motorola Solutions approved accessories, please refer to your user manual or visit motorolasolutions.com.

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- The document title and part number
- The page number or title of the section with the error
- A description of the error

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Chapter 1

Read Me First

This user guide covers operating basic functions and other features of your body camera.

1.1

Notations Used in This Guide

This guide is designed to give you more visual cues. The following graphic icons are used throughout the user guide.



CAUTION: The signal word CAUTION with the associated safety icon implies information that, if disregarded, may result in minor or moderate injury, or serious product damage.



IMPORTANT: IMPORTANT statements contain information that is crucial to the discussion at hand, but is not CAUTION. There is no warning level associated with the IMPORTANT statement.



NOTE: NOTE contains information more important than the surrounding text, such as exceptions or preconditions. They also refer the reader elsewhere for additional information, remind the reader how to complete an action (when it is not part of the current procedure, for instance), or tell the reader where something is on the screen. There is no warning level associated with a note.



TIP: TIP informs the reader of a different way of accomplishing the same task. At times, tips can include quicker ways of achieving the same goal.

The following special notations highlight certain information:

Example	Description
Menu key or PTT button	Bold words indicate a name of a key, button, or soft menu item.

Chapter 2

V500 Body Camera Overview

Familiarise yourself with the buttons and functions on your body camera.

Figure 1: V500 Front Facing



Callout	Description
1	RGB LED
2	Speaker
3, 5, 7	Microphone
4	Front button (programmable)
6	Light sensor

Figure 2: V500 Top Facing



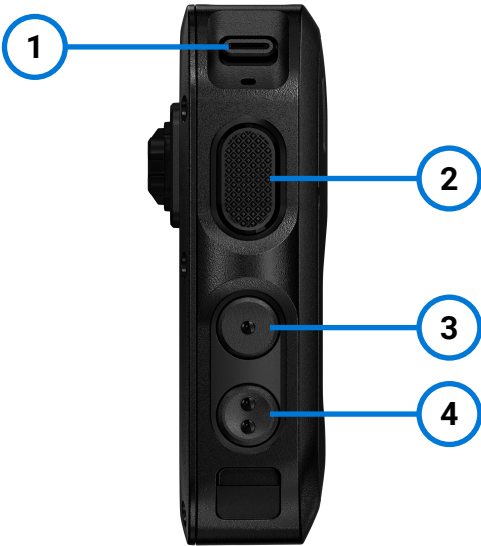
Callout	Description
1	RGB LED
2	LCD display with RGB backlight
3	Top button 2 (T2)
4	Top button 1 (T1)

Figure 3: V500 Bottom Facing



Callout	Description
1	Power on/off button
2	USB-C docking connector

Figure 4: V500 Left Facing



Callout	Description
1	Toggle switch
2	Programmable button 0 (P0)
3	Programmable button 1 (P1)
4	Programmable button 2 (P2)

Figure 5: V500 Right Facing

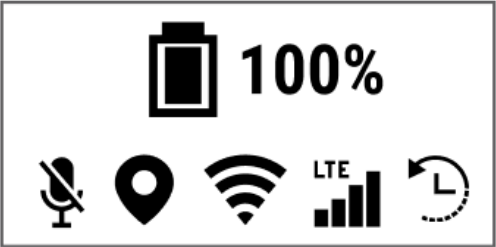


Callout	Description
1	USB-C accessory connector (behind rubber cover)

2.1

LCD Display Overview

Figure 6: LCD Display Example



Icon	Description
	Battery fully charged
	Battery charging
	Empty battery
	Microphone mute status
	GPS location fix status
	WiFi connectivity status
	LTE network connectivity status
	Pre-recording status
	Recording
	Live streaming

2.2

LEDs and Display Backlight Overview

Table 1: LEDs and Display Backlight in Use

Front LED	Top LED	Display Backlight	Display	Description
Off	Off	White or Off	 Homescreen	Assigned and undocked (ready to record) The bottom panel of icons depends on the device state and settings.
Solid Red	Solid Red	White or Off	 Recording Screen	Recording The bottom panel of icons depends on the device state and settings.

Table 2: LEDs and Display Backlight in Smart Dock

Front LED	Top LED	Display Backlight	Description
Rapid Blinking Green	Rapid Blinking Green	Solid Green	Camera assigned through RFID
Solid Green	Solid Green	Solid Green	Camera manually assigned
Off	Off	White or Off	Top display shows status and charging information (charging 0% – 89%)
Off	Fading Green	White or Off	Top display shows status and charging information (charging 90% – 99%)
Off	Solid Green	White or Off	Top display shows status and charging information (fully charged 100%)
Blinking Red	Blinking Red	Solid Red	Unassigned and undocked The V500 cannot record media until assigned.
Off	Off	Solid Red	Docked and cannot connect to Video-Manager
Solid Amber	Solid Amber	Off	Service required is set to On The V500 cannot be assigned or allocated.

Chapter 3

Getting Your Body Camera Ready

- Before you can use your V500, your device must be assigned to you. For more information, see [V500 Assignment on page 23](#).
- Each V500 requires a valid VideoManager License in order for you to assign body cameras and access footage. For more information, see the *VideoManager Admin Guide*.

3.1

Docking and Charging

Motorola Solutions recommends the use of a V500 Smart Dock for best charging performance and connectivity to VideoManager.



NOTE: You must fully charge the battery before first usage.



IMPORTANT: To ensure optimal battery health, you should charge the camera in an ambient temperature between 0°C and 25°C (32°F and 77°F). If the temperature is too hot or too cold, battery charging may be stopped to protect the battery.



CAUTION: You must use only Motorola Solutions approved batteries. There is a risk of explosion if the battery is replaced by an incorrect type.

The V500 body camera can also be charged using a standard USB-C cable and 5VDC charger. For optimal charging, it is recommended that the charger has a minimum wattage of 10W.



CAUTION: You must only charge the V500 body camera using a USB-IF certified adapter. The camera may be damaged if an incompatible charger is used.



NOTE: If the camera is powered off, it will automatically power on when it is docked and has sufficient charge.

Procedure:

Perform one of the following actions:

Option	Actions
Charging your body camera using a V500 Smart Dock	a. Ensure that the camera is facing the front of the Smart Dock. b. Place the camera into the slot ensuring that the camera is fully inserted. For more information, see Table 2: LEDs and Display Backlight in Smart Dock on page 15.
Charging your body camera using the USB-C cable and 5VDC charger	a. Connect the V500 body camera to a USB charger by plugging a USB-C cable into either the side or bottom USB-C port. NOTE: It is not possible to connect a USB device to both USB-C ports simultaneously. When one USB-C port is in use, the other port is automatically disabled. b. Connect the USB-A side of the cable to a compatible 5VDC USB charger. For more information, see V500 Body Camera Overview on page 11.

3.2

Powering Your Body Camera On or Off

Figure 7: Power Button Located on the Bottom of the Camera



Power On

Procedure:

Press and hold the power button on the bottom of the camera until the device screen turns on.

The body camera vibrates briefly and goes through the booting and information sequences. When it is ready to use, the display shows the camera status information on the homescreen.



NOTE: The body camera is automatically powered on when it is placed in a charger such as Smart Dock.

Power Off

Procedure:

Press and hold the power button on the bottom of the camera until the device vibrates and the power off screen is displayed.

Chapter 4

Mounting Positions

The V500 body camera has a mount on the rear of the camera to allow the camera to be securely attached to a uniform. The camera has a wide range of mounting accessories to suit your uniform or preferred mounting system.

The V500 comes with various mounting options and a range of compatible accessories which depend on the type of attachment chosen:

- Quick Release (QR)
- Klick Fast (KF)
- Alligator pre-fitted attachment point
- Close Fit (VF)

The V500 mounts to a suitable attachment point on the torso of the operator. The operator can interact with the camera through button gestures without the need to remove the camera from its mounting position.

4.1

Mounting the V500 Using a Quick Release

The V500 Quick Release (QR) mount is designed to support a wide range of mounting options, including tiltable Klick Fast fittings.

Figure 8: Quick Release Mount



Attaching the V500 to a Quick Release Fixing

Procedure:

1. Hold the camera and the mount in an upright position.

The two arms of the mount should be pointing downwards in most use cases.

KF-TILT2 mount only: The mount must be attached in the opposite direction with the two arms pointing upwards.

2. Align the two arms on the mount with the QR mount on the back of the camera.
3. Push the mount into the QR mount until it clicks into place.

The mount should remain attached to the camera when pulled upwards.



TIP: KF-TILT2 mount only: The tilt angle of the mount can be adjusted by pushing on the top or bottom of the mount.

Detaching a Quick Release Fixing from the V500

Procedure:

1. Press the end of the two arms on the QR mount fitting inwards until they fit through the camera mount.
2. Lift the QR mounting accessory upwards to release it from the camera.

4.2

Mounting the V500 Using a Klick Fast

The Klick Fast (KF) mount is designed to fit directly to a Klick Fast compatible uniform mounting point.

Figure 9: Klick Fast Mount



Attaching the V500 to a Klick Fast Mount

Procedure:

1. Hold the camera in an upright position above the Klick Fast mount point on the uniform.
2. Push the Klick Fast stud firmly down into the uniform mount until a click is heard.
3. Check if the camera is properly seated by pulling upwards.

Detaching the V500 from a Klick Fast Mount

Procedure:

1. Rotate the camera 180° into an upside down position.
2. Pull the camera upwards until it disengages from the uniform mount.

4.3

Mounting the V500 Using an Alligator Clip

The V500 Alligator clip is designed as a universal clothing mount and does not require any specific uniform mounting point.

Figure 10: Alligator Clip



Procedure:

1. Press the top parts of the alligator clip together to open the jaws of the clip.
2. Find a suitable part of clothing to attach the clip to and insert the clothing into the clip.
3. Release the alligator clip to allow it to grip onto the clothing.



TIP: The clip can be rotated to ensure that the camera remains in an upright position.

4.4

Mounting the V500 Using a Close Fit

A Close Fit (VF) mount is designed to mount the camera close to the body and is compatible with Molle and magnet mounting VF uniform fittings.

Figure 11: Close Fit Mount



Attaching the V500 to a Close Fit Mount

Procedure:

1. Hold the camera at a 90° position in front of the VF mount point.
2. Locate the camera VF mount into the tabs on the VF mount point.
3. Rotate the camera 90° clockwise to lock the camera in an upright position.

Detaching the V500 from a Close Fit Mount

Procedure:

1. Rotate the camera 90° counterclockwise to unlock the camera from the VF mount point.
2. Lift the camera forwards to detach it from the mount point.

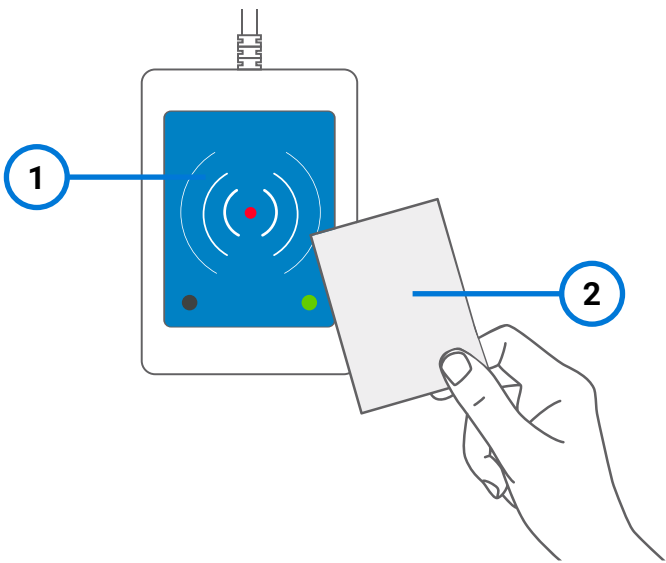
Chapter 5

V500 Assignment

When your body camera is configured, your system administrator may want camera users to utilise an RFID system for camera assignment. For further information on configuring RFID reader assignment and other ways to assign cameras, see the *VideoManager User Guide*.

After presenting your RFID card to the card reader, your docked and assigned V500 identifies itself with a blinking green display backlight and LEDs.

Figure 12: Presenting Your RFID Card to the Card Reader



Callout	Description
1	RFID reader
2	RFID card

Chapter 6

Using the Video Camera

The following section describes how to start or stop recording, as well as how to live stream.



NOTE: Camera button functions are configurable in VideoManager. The button functions can differ in your camera configuration. You should consult your administrator for guidance on button configurations.

6.1

Recording

Figure 13: Record Button



NOTE: This is the default configuration. Button functions are programmable.

Start Recording

Procedure:

Single press on the front button.

Start Recording initiated is indicated by a short bleep. The front and top LEDs should be solid red.

Stop Recording

Procedure:

Press and hold the front button.

Stop Recording initiated is indicated by the front and top LEDs turning from red to off, accompanied by a longer, high pitched bleep.

6.2

Live Streaming and Location Tracking



NOTE: Live streaming and location tracking is only available if your VideoManager administrator has enabled this feature. For more information on how to set up Network Profiles, see the *VideoManager Admin Guide*.

The V500 can live stream video, audio, and location information to VideoManager. The V500 connection to VideoManager can be configured in the V500 Device Profile to one of the following:

- **Automatic:** The V500 will connect automatically to VideoManager, provided network coverage is available.
- **Manual:** The camera operator must enable connectivity to VideoManager using a button gesture. Live streaming and location tracking will only be available in VideoManager if connectivity has been enabled.

When the V500 is connected to VideoManager:

- Available devices are listed in Tactical VideoManager and the last reported position is shown on the map view.
- The live stream is available when recording is started on the V500. Recording can be activated by the camera operator performing the start recording button gesture, or remotely by the VideoManager operator.
- The V500 will start the live stream when the VideoManager operator chooses to view the stream.



The icon is shown on the V500 LCD display when a live stream is being viewed.

Live streaming prerequisites:

- Live streaming over LTE requires that a SIM card (eSIM or physical SIM) is installed with an active data plan. For more information, see [Installing a SIM Card on page 26](#).
- **Optional:** If the SIM card requires specific APN (Access Point Name) details, the APN configuration must be added in VideoManager. See the *VideoManager Admin Guide* for more information on how to configure LTE Access Point Names. For the required APN details, contact your SIM provider.
- The V500 can only live stream when network coverage is available. The V500 LCD display indicates the



LTE signal strength. A minimum of two signal bars is recommended for reliable streaming.

6.3

Uploading Footage Over LTE

Recordings can be uploaded to VideoManager over LTE without returning the V500 to the Smart Dock. Recordings upload must be enabled in the V500 Network Profile by your VideoManager administrator. For more information, see the *VideoManager Admin Guide*.



IMPORTANT: Footage upload can consume a large amount of network data. Ensure that your LTE data allowance is sufficient to avoid incurring significant network charges.

Procedure:

Perform one of the following actions:

- If streaming is set to automatic in the Device Profile, press the button to stop recording. New recordings are uploaded to VideoManager automatically when you stop recording.
- If streaming is set to manual in the Device Profile, use the configured button gesture to allow the V500 to connect to the network.

6.4

Installing a SIM Card



NOTE: The V500 supports eSIM installation. If you require installation of a physical SIM card, contact Motorola Solutions.

An eSIM is a virtual SIM card in the form of a QR code instead of a physical SIM. Installing an eSIM onto the V500 involves scanning the eSIM QR code with the camera. After the QR code is scanned, the V500 connects to the network provider over WiFi to download and activate the eSIM.

A valid Network Profile with WiFi internet access must be configured in VideoManager to complete eSIM provisioning. For more information on how to configure a Network Profile, see the *VideoManager Admin Guide*.

Procedure:

1. Ensure that the V500 is docked and connected to VideoManager.
2. Find the V500 to be provisioned with an eSIM by performing the following actions:
 - a. Navigate to the **Devices** tab.
 - b. Select the **Search Devices** pane.
 - c. Filter the body-worn cameras as necessary, and click **Find devices**.

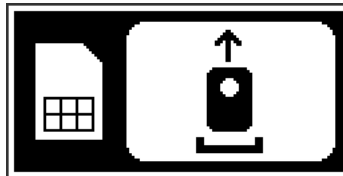
3. Next to the relevant V500, click **> View device info**.

4. Select **Provision eSIM**.

VideoManager prompts you to specify the Network Profile to be used.

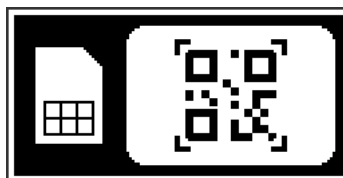
5. From the list, select a valid profile and click **Provision Device eSIM**.

The V500 LCD displays that the device is in eSIM provisioning mode.



6. Undock the camera from the docking station.

The camera is ready to scan your eSIM QR code when the V500 LCD display shows the following:



7. Scan your eSIM QR code.

When the QR code is successfully scanned, the V500 beeps and the LCD display indicates the success.

The V500 attempts to download and activate the eSIM, which can take several seconds. A progress bar is displayed on the LCD display.

Once complete, the V500 beeps again and the LCD display indicates that the camera can be docked.



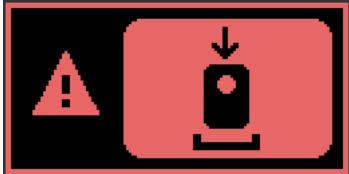
8. Place the camera back into the Docking Station to allow it to connect to VideoManager.

If provisioning succeeds, VideoManager reports the ICCID of the eSIM in the device details. For more information on how to enable streaming over LTE, see [Live Streaming and Location Tracking on page 25](#).

If provisioning fails, the Dock Camera indication is displayed with a red backlight. For more information, see [eSIM Installation Troubleshooting on page 27](#).

6.4.1

eSIM Installation Troubleshooting

Description	Action
The QR code is not being read by the V500.	- Try moving the camera closer or further away from the QR code. - The QR code may be too small to be scanned successfully. The QR code must be a minimum size of 4 x 4 cm. - Try to improve the lighting to ensure that the V500 camera has a clear image.
eSIM provisioning failed, which is indicated by the red backlight and error screen: 	Dock and connect the V500 to VideoManager to access the camera audit log containing information about the failure. For more information on how to access the camera audit log, see the <i>VideoManager User Guide</i>.