



# VT4500 INSTALLATION GUIDE

THE UK'S MOST AWARD-WINNING CAMERA TELEMATICS COMPANY



[www.visiontrack.com](http://www.visiontrack.com)

## Important Information:

- Failure to comply with the following Warnings, Approval and Safety information may invalidate warranty, certification or type approval of this product.
- Before you begin installing and commissioning the system please ensure that you have read this manual thoroughly referring to any supplementary information provided for the unit as required.
- Unauthorised modification to this equipment or associated accessories is forbidden without the expressed permission and agreement from the product manufacturer.
- This equipment should not be operated in hazardous environments i.e. areas that contain explosive materials or flammable vapours.
- This equipment should not be operated within aircrafts or in close proximity to medical equipment.
- This equipment may only be located in a position where it cannot interfere with the normal operation of the vehicle or present a hazard to the driver or passengers.
- Care must be taken in the routing of all cables so that the insulation does not become worn or damaged.
- All installation and service work must be carried out in accordance with FCSI362, FCSI372, RQAS, 95/54/EC, ISO 21609 and / or any other statutory guidelines or Directives currently in force. Therefore it is strongly recommended that the unit is installed and commissioned by suitably trained and qualified installation personnel with accreditation.
- Unauthorised changes or alterations to the equipment or the installation will invalidate certification issued by the Approved Accreditation Bodies and may also affect the vehicle manufacturers warranty.
- Under no circumstances may any part of the product be installed inside the engine compartment area.

## Important Information:

List of do's and don't's when installing a VisionTrack MDVR.

**Power:** All VisionTrack devices **MUST** be wired to their own power supply and not connected/shared to an existing power pickup point. We recommend that the vehicle power pickup points should be located using the vehicle manufactures instructions. **\*THIS MEANS YOU CANNOT USE ANOTHER TELEMATICS PROVIDERS POWER SUPPLY OR PICK UP POINTS TO POWER A VISIONTRACK DEVICE.**

To avoid interference, the VisionTrack power supply **MUST** be installed as far away from other Telematics devices and power supplies already installed within the vehicle as possible. Ideally on the opposite side of the vehicle.

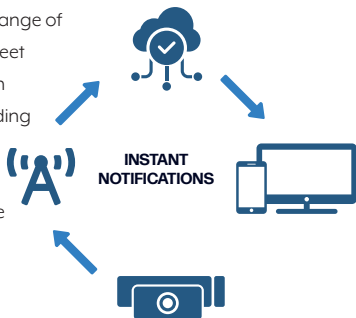
**GPS/3G and 4G Antennas:** To avoid interference the VisionTrack device antennas **MUST** be installed as far away from each other as well as other Telematics devices already installed within the vehicle as possible. Ideally in the opposite side A-pillar.

**Securing:** The MDVR has an internal accelerometer to measure harsh driving events so you **MUST** ensure that it is firmly secured in the vehicle.







You **MUST** also ensure the device is calibrated as part of the commission process.

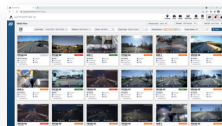
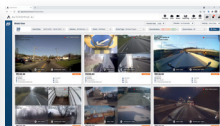
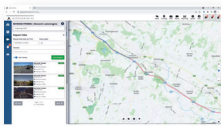
## Overview

The **VT4500** is a compact mobile digital video recorder (MDVR) that supports our full range of multi-channel cameras, monitors and fleet safety devices. This five-channel solution offers 360° coverage of a vehicle, providing excellent footage and picture clarity that is uploaded automatically to our multi-award-winning IoT platform in the event of an incident.



## Key features:

- |   |  |  |   |
|---|--|--|---|
| Supports 5-channels<br>(1 channel FHD,<br>4 Channels AHD)                       |   |   | Provides HD images<br>before, during and<br>after an incident       |
| Monitor driver behaviour from<br>anywhere using the VisionTrack<br>IoT platform |   |   | API available for<br>direct integration with<br>telematics software |
| Accurate G-shock sensor<br>measures impact force and<br>driving style           |  |  | Fully lockable<br>tamper-proof case                                 |



## What's in the box:



**1** VT4500 Mobile DVR



**2** VT4500 Locking Case



**3** S-VT4500 GPS MODULE



**4** S-VT4500 4G MIMO ANTENNA



**5** Camera Input Cable



**6** Monitor Output/Alarm Input Cable



**7** Power Cable



**8** VT4500 REMOTE CONTROL



**9** Cable Clips

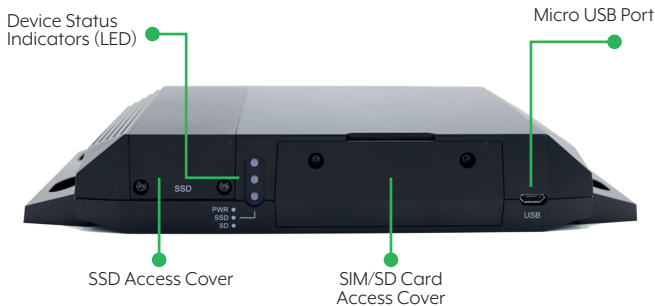


**10** Screws and Torx Key



**11** Preparation Pad

## VT4500 Details:



## VT4500 Installation:

- 1 Park your vehicle on a flat level surface. Turn off the engine before installing the VT4500.
- 2 Find **installation location** for VT4500 like in the **glove box, under the dash or in the trunk**.
- 3 Use provided **Velcro adhesive** to **secure VT4500** recorder. Velcro can be attached and detached freely.  
**NOTE: The adhesive will not stick well with dust or oil, etc.**  
**Please make sure the surface is clean before applying.**
- 4 Install the VT4500 Remote Control (Panic Button) onto the dash within reach of the driver using the 3M™ Pad provided. (Example shown below).



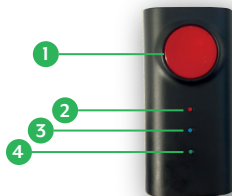
Panic Button install location example.

- 5 Arrange the power cable neatly alongside the door pillar trim. The VT4500 requires a continuous 12 to 24 volt power supply from the vehicle. As well as ignition, this can be installed into the 24/12v vehicle.

## Panic Button:

### Items Definition

1. Panic Button
2. Red LED (Warning)
3. Blue LED (Record)
4. Green LED (Network)



## VT4500 Wiring:

### Power

Pin	Colour	Label	Description
1	Black	GND_SIGNAL	Ground
2	Red	BAT+	Power Battery +
3	White	ACC_IN	Power ACC + (Ignition Feed)

### Triggers

1	White	ALARM_IN1	Alarm In1, Voltage on/off (3~70V)
2	Purple	ALARM_IN2	(Alarm In2, Voltage on/off (3~70V))
3	Green	ALARM_IN3	(Alarm In3, Voltage on/off (3~70V))
4	Grey	RPM_IN	RPM
5	Blue	SPEED_IN	Speed
6	Orange	ALARM_IN4	Alarm in4, NC/NO
7	Brown	ALARM_OUTIA	Alarm out
8	Black	GND (x2)	Ground



## VT4500 Wiring:

### Cable Connections

Locate the cables and connect using the diagram and descriptions below.



#### 1 Camera Input Cable

Line the connection up with the AV IN (shown above) and push until click to secure.



#### 2 Panic Button

Line the connection up with the REMOTE input (shown above) and push until click to secure.



#### 3 VT4500 GPS Module

Line the connection up with the GPS input (shown above) and push until click to secure.



#### 4 Monitor Output/Alarm Input Cable

Line the connection up with the AV OUT/ALARM (shown above) and push until click to secure.



#### 5 Power Cable

Line the connection up with POWER (shown above) and push until click to secure.



#### 6 7 S-VT4500 4G MIMO ANTENNA




Line the antenna connections up with the VT4500 inputs and twist to secure (clockwise). ANT 1 (8) ANT (9).



## VT4500 Specifications:

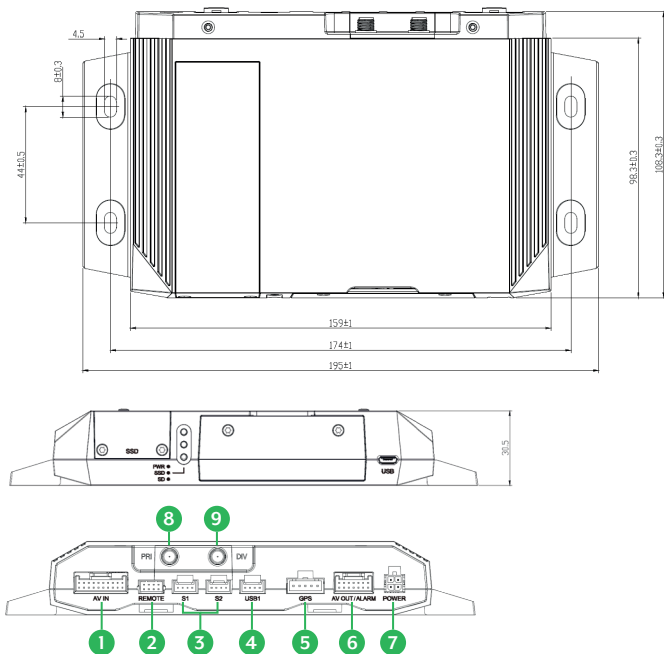
<b>Video In</b>	FHD(1920x1080) x 1 Channel, AHD(1280x720) x 4 Channels
<b>Audio In</b>	5CH from cameras
<b>AV Out</b>	1 Video out, 1 Audio out
<b>Band support</b>	LTE : B1/B3/B7/B8/B20 (EU)   B2/B4/B5 (NF) WCDMA : B1/B8 (EU)   B2/B5 (NF)
<b>Max Data Rate</b>	UL:5.76Mbps, DL : 7.2Mbps
<b>Video resolution</b>	1080p HD (1920x1080), 720P (1280x720), DI(NTSC:720x480, PAL 720x576)
<b>Recording Speed</b>	Full HD: 30fps(25fps), HD: 60fps(50fps) DI: Up to 120 fps (NTSC) or 100fps(PAL)
<b>Recording Mode</b>	Continuous , Event, Dual Mode
<b>Memoryt</b>	Support 32GB, 64GB(FAT32), 128GB(FAT32)
<b>G-Sensor</b>	Internal 3-axis G-sensor
<b>Gyro</b>	3Axis(X,Y,Z), output rate:100 Hz,
<b>RTC</b>	Internal battery
<b>Alarm In/Out</b>	4 x Alarm In, 1 x Alarm Out
<b>Remote controller</b>	3x LED, Panic button, M1 & M2 button
<b>LED</b>	Green LED (Network), Blue LED (Record), Network (Red LED)
<b>Super Capacitor</b>	Enable recording of last file and shut down
<b>Power input</b>	DC 12V/24V 3A
<b>Delayed Power Shutdown</b>	Supports Delayed Power Shutdown
<b>Size / Weight</b>	195mm X 144mm X 31mm / 323g
<b>Operation Temp.</b>	-10°-55°

## LEDs and Buzzer Specification:

Status/Step		LED			Buzzer	Voice [Remark] To hear the Voice, please audio output cable to speaker.	
		Warning	Record	Network			
		(Red) 	(Blue) 	(Green) 			
Start-up	Bootling step1 (0~20)		On	Off	Off		
	Bootling step2 (20~30)		On	On and Off	Off		
	Bootling Finished (30, 1second)		On	On	On	[Beep] (1000Hz, 200msec)	「Beep」(1time)
	Power off	During Power off	Off	Simultaneous Flashing(Blink rate: fast)			
		Power off finished	Off	Off	Off	[Beep] [Beep] (500Hz, 150msec)	
Record	Continuous Record	Recording		On			
	Event record	Stand by		On			
		Recording		Flashing(Blink rate: fast)			
	Dual record	Continuous recording		On			
		Event recording		Flashing(Blink rate: fast)			
No record	Not record		Off				
Network	3G Network Device Ready				On		
	Communication				On		
Function	SD Initialize (Format)		Off	On and Off	Off and On	(Beep, 1time) continuously	
	G-Sensor Calibration					「Beep→」( after 2 seconds) Beep、Beep」	
	FW Upgrade			On and On and Off and Off	Off and Off and On and On		
	Button Press					[Beep] (2000Hz, 200msec)	「Beep」
Warning	System Warning	SD Card Full	Flashing(Blink rate: fast)	Off		「Beep x 4」(3times)	
		Video loss Video STD error	On				
Error	Record Error	SD error, No SD, Write fail	Flashing(Blink rate: Slow)	Off		「Beep x 4」(3times)	
	Network Error	3G Network Device error SIM error			Off		
		Data Network connection error			Flashing(Blink rate: Slow)		
		DMS communication error			Flashing(Blink rate: Slow)		
Event Trigger	G-Sensor, Panic Button, Alarm-In					「dingdong x2」(1time)	
	Over Speed					「beep, beep x2」(1time)	

## VT4500 Dimensions LxHxW:

**Dimensions** LxHxW 108.3x30.5x195



### Items Definition

- |           |                |           |                 |           |                   |
|-----------|----------------|-----------|-----------------|-----------|-------------------|
| <b>1.</b> | AV Input       | <b>5.</b> | AV Output/Alarm | <b>9.</b> | Diversity Antenna |
| <b>2.</b> | Remote Control | <b>6.</b> | AV Output       |           |                   |
| <b>3.</b> | n/a            | <b>7.</b> | DC Power In     |           |                   |
| <b>4.</b> | n/a            | <b>8.</b> | Primary Antenna |           |                   |



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2 Chapman Way  
High Brooms Industrial Estate  
Tunbridge Wells  
Kent  
TN2 3EF



VisionTrack Official Website