



**3G QUAD BAND**  
**GPS VEHICLE TRACKER**

**Model VT900**

**USER MANUAL & INSTALLATION GUIDE**

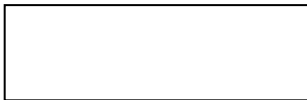


Included;

- 1 x GPS tracker 12v~24v
- 1 x wiring harness
- 1 x 12v engine immobiliser 4 pin relay & loom
- Free to download mobile APP ( Android and IOS)
- Free access to an international 24/7 website

This product requires a 3G mobile SIM card (not included)

4G and/or data only SIM cards are not compatible



**IMPORTANT**

**Record your IMEI (id) number here  
(Shown on the tracker's label & carton)**

**Mongoose Australia PTY Limited**

**[www.mongoose.com.au](http://www.mongoose.com.au)**

**Mongoose (New Zealand) Limited**

**[www.mongoose.co.nz](http://www.mongoose.co.nz)**

## VT900 GPS VEHICLE TRACKER

Thank you for purchasing this Mongoose GPS tracker.

To ensure correct operation please read this manual before use and see our FAQ's on our website.

### SIM CARD INSTALLATION

**IMPORTANT: The trackers 3G mobile SIM card must be activated by the provider and be capable of text and data.**

**Data only SIM cards are not compatible**

Please test the SIM card in a mobile phone before inserting into the tracker to ensure it is working. Can it send/receive texts, phone calls and get onto the internet? Has it sufficient credit if PrePay type?



- Do not make any power connections at this time
- Insert the SIM card correctly, as shown. It will click into place.
- Install the tracker – see page 14
- Observe the blue and green LED's next to the SIM card slot – see below
- Fully replace the rubber cover to ensure a good seal.

***NOTE: Inserting the SIM card turns on the trackers battery back-up.***

***If not using the tracker or disconnecting it, always remove the SIM card.***

***Continual discharging will damage the battery and void product warranty.***

#### LED's (under the rubber cover)

##### **Green LED** — Mobile communication

Unlit	Mobile reception is off
Lit solid	Searching for signal and/or GPRS transmission
Flashing once every 3 sec's	Working normal

##### **Blue LED** – GPS satellite reception

Unlit	GPS off
Lit solid	Searching
Flashing once every 3 sec's	Working normal

## EASY SET-UP – JUST ONE TEXT MESSAGE TO START TRACKING !

JUST SEND THIS TEXT MESSAGE FROM YOUR  
MOBILE PHONE TO THE TRACKERS SIM PHONE NUMBER.

### Pair your mobile phone number to the tracker

Send this text message: **admin123456 xxxxxxxxxxx**



there is a space here

**123456** is default password      **xxxxxxxxxx** is your mobile phone number

Tracker replies: **admin okay**

NOTE: If no reply, check the SIM card is inserted correctly,  
activated (turned on by the provider) and has credit.

### THE MOBILE 'APN' NUMBER

The APN (Access Point Name) is the address of the SIM card provider's data channel.

Some New Zealand SIM card suppliers already record their APN on the SIM cards (Vodafone NZ and 2 Degrees NZ), so the following instruction may not be necessary.

This will also be necessary if you use your current SIM card and phone number but change providers.

**AUSTRALIA:** Here are some examples. Contact your SIM card provider to verify the correct APN.

Telstra      **telstra.internet or telstra.wap**  
Vodafone    **live.vodafone.com**  
Optus        **connect or yesinternet or connectme**  
Aldi          **mdata.net.au**

**NEW ZEALAND:** Here are the NZ APN's;

Vodafone    **vodafone.net.nz**  
2 Degrees    **internet**  
Spark        **internet** ..... NZ Spark SIM users must set the APN

To set the APN, send this text message:- **apn123456 xxxxxxxxxxx**



there is a space here

xxxxxxx = your trackers SIM card APN

Example: **apn123456 internet**

Reply: **APM okay**

## Download the Mobile APP

The mobile APP can be downloaded to any number of phones and users. Users will have to know the IMEI or Username plus the password to use the APP.

Download the APP - Go to App Store for Apple - Go to Play Store for Android  
(or scan the QR code on our GPS website)

Search for :- **MONGOOSEGPS**



Single Tracker User
Log in by 'IMEI'
<b>IMEI</b> (id printed on the tracker & carton)
<b>Password = 123456</b>

Multiple Tracker User
Log in by 'username'
<b>Username</b> (your choice –call Mongoose to set-up)
<b>Password</b> (your choice –call Mongoose to set-up)

### LOGON TO THE MOBILE APP

Select either

**IMEI / ID** (Single tracker users)

or

**Username** (Multiple tracker users – see page 7)

Enter the '**IMEI**' number which is printed on tracker

or

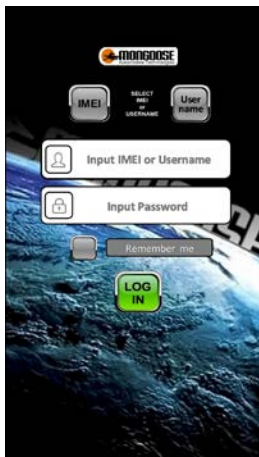
Enter '**Username**' for multiple tracker users

Enter password '**123456**'

(Can be changed later)

Select '**remember me**'

(Saves typing again)



## THE APP MENU.

Open the APP and logon as detailed on page 4.

- **The top bar shows the trackers status**
- **'real time'** - shows the current or last reported location  
The blue dot is your mobile phone – the green triangle is the tracker
- **'historical'** to show where the tracker has been and can play the route taken
- **'Geofence'** sets a permitted radius of travel
- **'Commands'** allows you to control the tracker
- **'Alarms'** sets which alerts you wish to receive
- **'Messages'** a record of alerts sent
- **'Device info'** – fill in all details or the tracker may not operate correctly
- **'User info'** - details of the owner/driver



## DEVICE INFO' - IMPORTANT

Select **'Device info'**.

1. Edit the device name to one of your choice
2. Enter the vehicles registration number
3. Enter the phone number of the trackers SIM card
4. Enter the name of the main driver
5. Enter the paired mobile phone number – 'contact number'

### **Important;**

**Item 5 is required. The tracker needs to know who to send alerts to. If this is left blank, no alerts will be sent .**



## REAL TIME TRACKING

Select 'Real Time'.

The green triangle is the tracker.

The blue dot is your mobile phone.

The green line shows the direction and distance your phone is from the tracker.

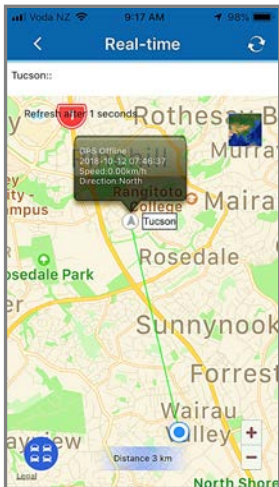
This location is the last one recorded.

This could be right now, or sometime in the past.

The grey dialogue box gives the time and date of that recorded location.

You can view in either map or satellite view.

The blue circle with 4 cars showing is for zooming into the area where your phone is – or where the tracker is and back to normal view.



## HISTORICAL TRACKING

Select 'Historical'

The opening screen allows you to choose;

'Today' – 'Yesterday' or 'Custom'

You can only replay any 24 hour period.

Once you have selected a 24 hour period, the screen opposite will appear showing start and end points. The green trace line is the route taken.

The control buttons at the bottom allow you to play – pause – change progress – change replay speed.

The dialogue box will change for each recorded location and displays;  
vehicle – time – date – speed - direction



## MULTIPLE TRACKER USERS

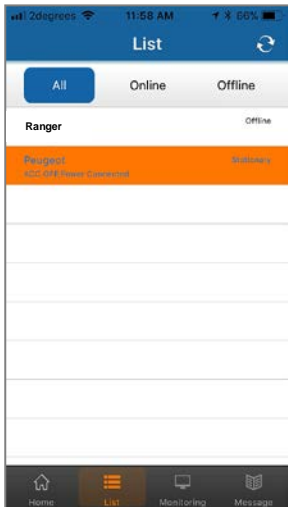
If you have more than one tracker, contact Mongoose who can create your own GPS account. You can choose your own username and password to logon.

This allows you to monitor and track all your trackers on your mobile phone or the website with just one logon.

By selecting 'monitoring', you can see where all your vehicles are.

Select 'list' and then choose which vehicle you wish to see more details about.

If you have a fleet of vehicles, we can create sub-accounts so selected staff only see those vehicles you wish them to see.



## ONLINE WEBSITE

Go to: [www.mongoosegps.com](http://www.mongoosegps.com)

Logon to the website with the same details as the mobile APP.

The tracker sends all its location data to the website where it is stored for a continuing 6 month period.

The mobile APP reads the information from the website. Travel is more detailed to include engine start and stop times. Reports can be saved and printed.



## FINDING LOCATION BY A TEXT MESSAGE FROM ANY MOBILE PHONE

If you have difficulty logging on to the APP or website or are using a mobile phone without the APP, you can find a trackers location by simply texting the tracker to request location:-

Send:- **123**

You will receive a text reply (fig.1).

Tap the reply to load a preview (fig.2)

Tap again to see location on phones map (fig.3).



fig 1



fig 2

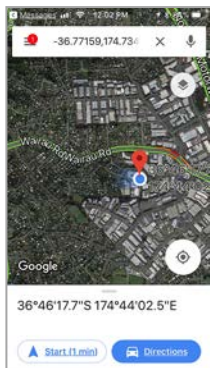


fig 3

If you require a status update as well as the link, send this text:- **G123456#**

- **v:A** = GPS signal ok. **v:V** = no GPS signal
- **2013-08-30 20:54:15**: the last reported date and time
- **Spd:000km/h**: the speed of tracker.
- **Bat:6** state of battery back-up charge
- **ID:4102000759**: Unique IMEI code of the tracker
- **S19G04 ; plmn : 46001** Mobile operator data
- **Lac:9516, cellid:23596** LBS data

Tap the message to see the location on the phones own maps





## GEO-FENCE

A geo-fence is an invisible programmable boundary.

The boundary has a minimum radius of 100m to a maximum of 5000m.

200m is the recommended minimum to avoid false alerts.

The area is easily set from the APP or website.

If the tracker moves outside this area it will send an alert to the paired mobile phone. You will also receive an alert when it re-enters the area.

Multiple geo-fences can be set, for instance, around your home, your place of work, usual parking places, shopping centres, friend's houses, etc.

Delete a geo-fence if you do not wish to receive alerts.

11:07 AM

Add geofence

Name

Longitude

Latitude

Radius

Enter a name for your geo-fence. Then tap 'longitude'

The map on the right opens. Move the map so the cross-hairs are over where you want the centre of your geo-fence to be.



Use the slider bar to increase or decrease the size of the geo-fenced area.

The text in the centre of the 'cross-hairs' shows the radius chosen (distance from centre to perimeter).

Min' 100m Max' 5000m

Press the save icon top right.



## **USER FEATURES**

You can control by either text messages from your mobile phone - see chart on page 12, or from the mobile APP's 'Commands'.

### **TIME**

The time may need to be reset depending on where this product is used. See page 12 for the text command that changes the time.

### **ARM - ALERTS ON**

**To receive any of these alerts the tracker must be armed.**

- a. A geo-fenced area has been breached (sent whether armed or disarmed)
- b. Vibration sensor activated
- c. Vehicle has been 'moved'
- d. Vehicle speeding
- e. Ignition has been turned on
- f. Main power has been disconnected (sent whether armed or disarmed)

With ignition off, the tracker is 'armed' by using the APP under 'Command' or send this text message **111**

The reply will show the tracker status:- GSM:2 Power:7 Arm delay in 0s  
eg: GSM is signal strength 1 = strong ~ 5 = weak. Power is percentage.

### **DISARM - ALERTS OFF (Disarm before driving)**

It is disarmed via the APP command or send a text message:- **000**

### **SHOCK (VIBRATION) ALERT TYPES**

On page 12 is a command chart of text messages that can be sent to the tracker.

You can choose the type of alert you wish to receive;

- Phone call only
- Text alert only
- Receive both phone call and text
- None

### **SHOCK ALERT**

A shock/vibration will cause the tracker to send you an alert.

These alerts can be either a text message, a phone call or both.

See the programming chart for programming and sensitivity options.

### **IGNITION ALERT**

If the ignition of the vehicle is turned on, you will receive an alert.

### **SPEED ALERT**

A speed limit can be set between 50~300kph.

Speed over the set limit will send an alert to your mobile phone.

### **MOVE 'TOW' ALERT**

This is similar to geo-fence but is not at a fixed location – the location is where your vehicle is parked when you activate 'move'.

When stationary for more than 3 minutes, a 'move' command can be sent and sets a permitted radius of travel of your choice (100m~5000m) from the parked location.

Movement outside this radius will send a text alert to your mobile phone.

*If move alert is on, then geo-fence is automatically off.*

### **POWER DISCONNECT ALERT**

If the power to the tracker is disconnected, the tracker will send an alert.

### **FREQUENCY OF REPORTING – default 30 seconds**

Set how often the tracker reports when moving or stationary with the engine running.

Typically, 30 seconds is used when moving as this gives a good map plot when history is viewed. 60 seconds is commonly used when not moving but the engine is still running (eg: traffic jams).

Set your own times to suit your requirements.

### **ENGINE IMMOBILISATION (12volt relay supplied)**

The tracker has the ability to immobilise the engine via the mobile APP or by a text message.

We highly recommend the installer only immobilises the starter motor.

By text, only the master paired phone can authorise immobilisation.

Any APP user can immobilise the engine as they have the confidential logon details.

### **PASSWORD FOR COMMANDS – does not affect your logon password.**

The default password is 123456. This may be changed to any 6~8 digit number.

Must be digits (numerals).

Note: If changing the password, please make careful note of the new number.

### **SOS NUMBERS**

Apart from the main 'master' user, you can add another mobile number that can receive alerts from the tracker. Certain control commands can only be sent by the master user.

### **BATTERY BACK-UP**

The GPS tracker has an internal battery which is charged once connected to your vehicle.

It provides 2~3 hours back-up in the event the vehicle battery is disconnected.

## APP ICONS

'Real time'	– shows current or last reported position
'Historical'	– graphically shows the route taken over different time periods
'Geofence'	– allows you to set defined areas
'Command'	– sets tracker parameters & commands
'Device info'	- Details about the tracker, SIM number etc
'Messages'	- A record of texts sent from device to you
'Alarm setting'	- Define which alerts are required
'Logout'	- Closes the APP

Most of the tracker functions can be controlled from within the APP under 'command' and 'alarm setting' either by GPRS (data) or by SMS (text).

Some phone~APP combinations may not have all options given in this manual.

## SMS (TEXT) COMMANDS -

Instruction	Text to send to tracker	Reply
Cell phone pairing (master user #1)	<b>admin123456 xxxxxxxxxx</b> <i>(xxxxxxx = your mobile number)</i>	admin ok
Cancel pairing	<b>noadmin123456 xxxxxxxxxx</b>	noadmin ok
SOS Alerts (2 numbers)  Cancel SOS Check SOS numbers	<b>SOS, xxxxxxxx</b> <b>SOS, xxxxxxxx</b> <b>SOS,,</b> <b>SOS</b>	SOS! S1:xxxxxxx SOS! S2:xxxxxxx  SOS Alarm: Call & SMS
Set time	<b>timezone123456 XX</b> <i>(XX = hours ahead of GMT)</i>	time ok
Request location & status	<b>g123456#</b>	Google http link + status
Google map request	<b>123</b>	GPS: http link
Change password (affects texts, not login)	<b>pwd123456,xxxxxx</b> <i>Must be 6 digit</i>	OK ! New password: 123456 Keep safe !
Reporting interval moving - engine on	<b>run,30 or upload123456</b> <b>30</b>	OK! acc on GPRS Reptime: 30s
Reporting interval stationary – engine on	<b>stop,180</b>	OK! acc off GPRS Retime: 180s
Alarm Arm Disarm	<b>111</b> <b>000</b>	GSM:5 Power:6 Arm delay on 0s GSM:4 Power:6 DISARMED

<b>Instruction</b>	<b>Text to send to tracker</b>	<b>Reply</b>
Immobilise (kill engine) Run (allow engine starting)	<b>555</b> <b>666</b>	Cut oil ok ! Resume oil ok !
<b>Vibration alerts</b> <u>1<sup>st</sup> digit is alert type</u> 0 = none 1 = Text (SMS) 2 = Phone call 3 = Both text and phone call <u>2<sup>nd</sup> digit is vibration sensitivity</u> 1 to 9 1 is most sensitive	<b>vib0,3</b>	Off – no alerts
	<b>vib1,3</b>	SMS, 3
	<b>vib2,5</b>	Call, 5
	<b>vib3,5</b>	SMS & Call, 5
Shock alert Cancel shock alert	<b>shock123456</b> <b>noshock123456</b>	shock ok noshock ok
Speed alert Cancel speed	<b>spdX</b> (where X = 50~300km/h) <b>spd0</b>	OK! Over speed alarm: X km/h OK! Over speed alarm: off
Move alert Cancel move	<b>moveXXXX</b> (where xxxx = 100~5000m) <b>move0</b>	OK! Move alarm on OK! Move alarm off
If main power disconnected	<b>pwr0</b> <b>pwr1</b> <b>pwr2</b> <b>pwr3</b>	No alerts Text alert Phone call alert SMS then call alert
Language	<b>LAG1</b> (English) <b>LAG2</b> (Chinese)	Switched to XXX
Check tracker	<b>status</b>	Shows current status
Check IP address, APN and IMEI number	<b>(S42,1234)</b>	Shows date/time/IMEI/IP/APN
Reset	<b>format</b>	Re-sets all settings to default
Re-boot	<b>RST</b>	Re-starts the tracker

## WIRING - INSTALLATION

If unfamiliar with vehicle electrics, we advise professional installation.

Wiring connections should be bare wire soldered and insulated or bullet connected.

### ENGINE IMMOBILISATION

The tracker has the ability to immobilise the starting of the engine via the password protected APP.

We highly recommend installers immobilise the starter motor only as this does not affect the safe operation of the vehicle. **Please ensure that the installation has been carried out correctly.**

If, for some reason, the fuel or ignition is immobilised and the APP command is sent when the vehicle is being driven, this product is designed to safely slow a vehicle down. The tracker will pulse the circuit off and on 20 times within 1 minute finally resulting in an open circuit.

If the immobilisation command is sent with the ignition off, immobilisation is immediate with no pulsing.

Apart from providing *accurate* GPS locations, this product can also prevent theft of a vehicle due to its various alerts and engine immobilisation. It should therefore be hidden from tampering.

1. Choose a mounting location that allows for the tracker to face towards the sky - patterned side up.
2. Ensure there is no metal above that will shield the trackers built-in antennas.
3. Do not put the tracker close to other emission sources such as computers, parking system, alarms, Bluetooth units or other electronic equipment.
4. Once SIM card is inserted, plug in the loom and park outdoors to get good GPS reception.
5. Verify operation by looking at the LED's.
6. You can attach the tracker with a cable tie or fix with the supplied Velcro pad.



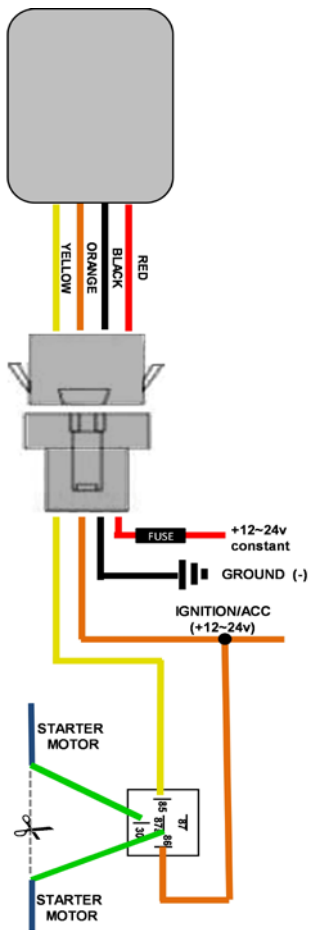
### NOTES:

This product may not function correctly if the vehicle is parked undercover where it cannot 'see' the GPS satellites.

The APP and website are owned & operated by a 3<sup>rd</sup> party and are free to use for purchasers of Mongoose GPS trackers. Mongoose is not liable if access or the facilities become unavailable either in the short or long term.

Be aware that use of this product may infringe the rights or invade the privacy of others.

We are not responsible for the non-operation of this product should the mobile service providers of the GPS, GSM, WCDMA or GPRS signals become unavailable for whatever reason.



## CONNECTION OF A CAR ALARM SIREN.

There is no direct input from a car alarm siren.

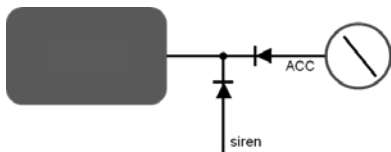
However, get an alert if the car alarm is activated, the siren can be connected to the ignition input wire of the tracker.

This will produce the 'ignition alert' (page 10) – there is no 'car alarm' alert on this model of tracker.

### For (+) positive sirens (Mongoose)

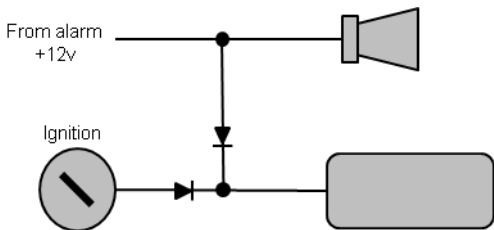
No relay required, connect siren trigger wire to orange wire of tracker. Use diodes to prevent

ignition sounding the siren and the siren turning the ignition on.



### For (-) negative sirens (other alarm types)

Use a suitable low impedance miniature relay, not supplied, to convert negative siren output to positive. Connect as below.





### Specification

GSM module	3G Quad Band 850/900/1900/2100
Network	GSM/WCDMA/GPRS/LBS
GPS sensitivity	-159dB
GPS chipset	UBLOX-7 or SIMTK6260
GPS Position Accuracy	5m (outdoors)
Time Accuracy	Synchronized to GPS time & GMT
Cold start	35~80 sec
Hot / warm start	1 sec., /35 sec., average
Operating voltage	10~75v DC
Operating temperature	-20°C to 55° C
Dimensions	70x40x20mm 50g
Humidity	5% to 95% Non-condensing
Dust / Water resistance	IP67
Back-up battery	2~3 hours

### TERMINOLOGY

**GPRS** – This stands for Global Packet Radio System. It is the method of sending data over the mobile phone network.

**LBS** – This stands for Location Based Service. It is a method of locating a tracker to the closest mobile transmission tower. Normally used for search and rescue. There is no actual location accuracy, just the location within the radius of the mobile tower – narrows any possible search area.

Sometimes when replaying history, you may see straight lines from some distance away. This is caused by a lack of GPS signal and the tracker ‘pings’ off the nearest mobile tower.

Uncheck ‘LBS’ on the date selection screen to prevent this occurring.

### **Help and fault finding**

Please visit the Mongoose website detailed on the back page.

Go to ‘Products’ – ‘GPS’

Select FAQ’s left of the screen.

There you will find useful information and answer to common questions.

Cautions:

1. Keep the unit dry to extend product life.
2. Clean with dry cloth. Do not clean with chemicals or detergent, etc.
3. Do not paint the unit or apply metal foil stickers.
4. Do not disassemble, tamper or attempt any repair.
5. Tampering, abuse and misuse will void any warranties.

## PRODUCT WARRANTY CONDITIONS

Mongoose warrants for the period of 2 YEARS (24 months) that it will make good without charge, at Mongoose's discretion, by way of repair or replacement with the same or with a reasonable equivalent.

It is the product owner's responsibility to return the GPS tracker for service, repair or replacement at their own cost.

Any claim made to Mongoose under this warranty must comply with the following:

- (a) any defect has been notified to the supplying Mongoose dealer as soon as the defect was noticed.
- (b) a copy of your retail 'proof of purchase' stating where and when it was purchased and (if applicable) who carried out the installation.
- (c) the product was manufactured within 12 months prior to the commencement of this warranty period.
- (d) the product was purchased from Mongoose or one of its authorised dealers/resellers.
- (e) the product has not been disassembled or the manufacturers security seals have not been broken or tampered with.
- (f) if installation of the product was required, that it has been installed by a Mongoose approved installation agent or suitably qualified industry recognised person.
- (g) that the original installer, or other Mongoose dealer nominated by the original installer, has determined that the reported defect is a genuine product defect and not caused by;
  1. incorrect operation, incorrect installation or any other consequential damage caused by other equipment not part of this product.
  2. operation of the product after it is known to be defective
  3. tampered with, alteration or modification by any person
  4. the fitment and/or connection of additional parts or accessories not supplied by or approved of by Mongoose
  5. water damage, misuse, accident, deliberate act or abuse, misdirected electrical current, insufficient or excess voltage, ingress of any fluid or fire
  6. excessive heat from either the vehicle or the sun

### **Items not covered by this warranty:**

- (1) labour costs for removal & refitting of parts
- (2) mobile 'onsite' service
- (3) normal wear and tear
- (4) any consequential loss incurred by the failure of this product or SIM card failure
- (5) product purchased from internet trading sites which is not supplied by an authorised dealer
- (6) Mobile SIM cards
- (7) The download and use of the mobile APP and website

### **Warranty when not fitted by auto electrician or suitably qualified persons**

This warranty may be void or limited to 12 months 'manufacturing defects only' depending on the reasons for repair.

### **Installation warranty**

Warranty on the installation is borne by the installer.

### **THIS WARRANTY IS NOT TRANSFERABLE**





### **Mongoose Australia**

[www.mongoose.com.au](http://www.mongoose.com.au)

Email: [sales@mongoose.com.au](mailto:sales@mongoose.com.au)

Ph: (02) 9482 4444

### **Mongoose New Zealand**

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Email: [sales@mongoose.co.nz](mailto:sales@mongoose.co.nz)

Ph: (09) 443 3128