



LT2400 GPS VEHICLE TRACKER

Long Life GPS tracker

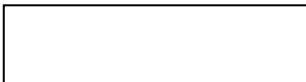


Included;

- 1 x 3G GPS tracker with built-in magnets
- 1 x mains/USB charger
- This manual
- A free APP for your mobile phone - Android or IOS.
- A free website link on your computer

Required;

- 3G SIM card



IMPORTANT
Record your IMEI number here
(Shown on the tracker label)

Mongoose Australia PTY Limited

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LT2400 GPS VEHICLE TRACKER

Thank you for choosing Mongoose as your GPS tracking provider.

The LT2400 is a battery operated GPS/AGPS dual positioning tracker that is designed to transmit its location at intervals of your choice. It also contains LBS (land based system) to give approximate location based on mobile phone cell sites if, for some reason there is no satellite GPS reception. LBS will show which cell tower area the tracker is within – not an actual accurate location.

It contains a high capacity battery and the mobile APP displays the current battery condition.

The battery is re-chargeable – use the charger supplied.

The tracker also contains strong magnets to assist in attaching the tracker to the desired vehicle, equipment or asset.

The tracker allows free access to a 3rd party mobile APP and online PC website.

The APP is a powerful tool and is used for tracker location, historical travel as well as issuing commands that control how the tracker operates.

Location data is stored on the website for a continuing 6 month period. More detailed travel history and reporting functions can be found on the website.

Please read this manual to familiarize yourself with its features and how it works.

How GPS tracking works:

The tracker uses fixed orbit GPS satellites to find its location on the earth. The tracker therefore needs to be able to 'see' the sky in order to receive satellite information.

The tracker requires its own mobile SIM card so it can send GPS locations to the website and the mobile APP. It also allows for text and voice communications.

Locations are automatically uploaded to the website using inexpensive mobile data. The website saves the location data for up to 6 months.

The mobile APP is used to display the information stored on the website.

The APP and the website are also used to control and change tracker settings.

The tracker, APP and website work seamlessly together with virtually no delay in operation.

The trackers 3G SIM card must have the ability for voice, text and data.

The only ongoing cost is for the SIM card usage payable to the SIM provider. Due to the nature of this product, a PrePay SIM card is sometimes more than sufficient, but ensure 'auto top-up' is selected when registering the SIM phone number with the service provider.

Get tracking: See page 8 on advice where to place the tracker.

1. Fully charge the battery until the red charging LED goes out before using – see below
2. Insert the SIM card and turn on outdoors. (on/off switch is next to SIM slot)
LEDs flash when GSM and GPS signals are located
3. Pair your mobile phone to the tracker and set the time zone – page 5
4. Set the desired upload frequency of location & start reporting
5. Download the mobile APP and logon to see your tracker.

BATTERY & CHARGER

For the first time, fully charge the battery for 12 to 18 hours.

Subsequent charging should take approximately 5~8 hours.

Charge until the red charging LED goes out.

Use the charger supplied.

The charging lead has a USB connector to the supplied wall charger.



NOTE: Do not use the USB lead connected to other equipment such as a computer to charge - charging time will be considerably extended.

The battery is 20,000mAh Li-ion and allows for up to 6 months on standby.

Battery life is shorter when being used and is dependent on the settings chosen.

Example: If used to track a vehicle every 30 seconds when moving, battery life is approximately 4 weeks.

SIM CARD INSTALLATION



Lift the rubber cover



Insert the SIM card & turn on



Close the dust cover

The LEDs light solid whilst searching for both GSM and GPS signals. After approximately, 20~40 seconds the LEDs should start to flash. Reminder, the tracker must be outdoors or very close to a window/door to receive GPS signals. Once signals are acquired, it can be initialized as detailed on the following pages.

PLACEMENT & SECURITY OF THE TRACKER

The tracker has built-in magnets to assist with attaching the tracker to a vehicle, equipment or asset. Ideally, it should not be placed under metal which can block GPS satellite reception. We strongly recommend experimentation in different placements before deciding on a long term location.

In some situations the built-in magnets may not be strong enough, or suitable, to keep it attached. Locations such as on a trailer chassis and then driving over speed bumps or potholes the shock of which could cause the tracker to become detached.

Placement must also take into consideration the rubber cover over the on/off switch and SIM card slot. This should not be easily accessible to anyone wishing to disable or turn the tracker off.

Other means of securing the tracker from becoming detached or tampered with must be sought.

TAMPER ALARM (SOS)

The tracker has a built-in optical tamper detector on its base. If the tracker is removed or falls off, it will trigger an alert. The switch is spring loaded and the tracker must be secured to a flat surface for the switch to be depressed. The magnets allow attachment to most suitable flat metal surfaces.

When setting up the tracker or testing its features you can cover the optical tamper with say black tape to prevent unwanted alerts.

Just send these 4 text commands from your mobile phone to the trackers phone number.

1. Pair your mobile phone to the tracker

The tracker needs to know your mobile phone number so it can communicate with you. Send this text message from your phone to the trackers SIM number;

admin123456 XXXXXXXXXXXX



space here

123456 is default password - XXXXXXXXXXXX is your mobile number Reply: **admin okay**

2. Set the time zone

Send this text message **timezone123456 11** (11 hours ahead of GMT)
Australia range:- 10 or 11 NZ:- 12 or 13



space here

Reply: **Time ok**

3. Set upload frequency

Send this text message **upload123456 30** (upload location to website every 30 sec's)



space here

Reply: **Upload ok**

4. START GPRS DATA LOCATION REPORTING

Send this text message **gprs123456** Reply: **GPRS ok**

THE APN NUMBER

The APN (Access Point Name) is the address of the SIM card provider's data connection. Some SIM cards, such as those in New Zealand, automatically adds the APN to this GPS tracker which means you don't have to do anything.

Open and login into the mobile APP and if there is a message at the top of the screen 'not enabled', this means that the website has not received any data from the tracker. One reason may be the APN needs to be set. Contact your SIM card provider for the correct APN.

Here are some Australian examples;

Telstra	telstra.internet or telstra.wap	Vodafone NZ	vodafone.net.nz
Optus	connect or yesinternet or connectme	2 Degrees (NZ)	internet
Vodafone AUS	live.vodafone.com	The Warehouse (NZ)	warehouse
Aldi	mdata.net.au		

To set the APN, send this text message:- **apn123456 xxxxxxxxxxxx** Reply: **apn ok**
xxxxxxxxx = your SIM cards APN

Download the Mobile APP

Mobile APP download & login details

Download the Android or IOS APP from the APP or Play Store

Search for :- **MONGOOSEGPS**

(or scan the QR code on our GPS website)



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

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

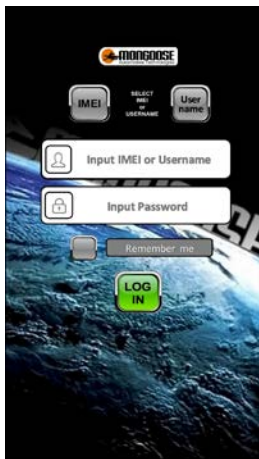
Select either login by **IMEI** or **Username**

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**'



Multiple trackers

Please contact Mongoose for a username and password to be allocated

The mobile APP gives you full control of the trackers features as well as showing real time location and historical travel. The APP can only be used on Apple or Android smartphones and tablets. Not compatible with Windows Smart Phones.

START TRACKING

'real time' shows current or last reported location.

'historical route' shows where the tracker has been.

'geo-fence' sets permitted areas of travel

'commands' lets you control how the tracker works

'alarms' which alerts do you want to receive

'messages' a record of alerts sent to your phone

'logout'

'Device info' details of phone numbers and other tracker information

'User info' details of the trackers user



ONLINE WEBSITE Goto:- www.mongoosegps.com

Log onto to the website as you would for the mobile APP.

The website stores all the location data.

Travel is more detailed with engine start times, stop times etc.

Reports can be saved and printed.

If you have more than one tracker, contact Mongoose to request a username account and your own password that allows you to monitor and tracker all devices.



TEXT (SMS) LOCATION REQUEST

If not using the APP, send this text from any smart mobile phone to the trackers mobile number:-

123

You will receive a text reply.

Tap the blue link 'to view' portion of the text message and the mobile phones own maps open to show the location.

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



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

LED's – WHAT THEY MEAN

Green LED — Mobile GPRS signal state

Unlit	off or asleep
Lit solid	searching
Flashing once every 3 sec's	working

Blue LED — GPS signal state

Unlit	off or asleep
Lit solid	searching
Flashing once every 3 sec's	working

Red LED — battery

Lit solid	charging
Off	fully charged or not connected to charger

DEVICE INFO'

IMPORTANT: If not completed, some functions will not operate.

On APP, select '**device info'** and complete all the details.

FREQUENCY OF LOCATION REPORTING

To maximize the battery life to the expected 240 days, the tracker should be set to report its location at reasonable time intervals. The more often it reports, the battery life will incrementally decrease. The tracker only reports when moving.

When stationary for more than 10 minutes, it enters sleep mode – turns off GPS reception and stops reporting locations to preserve battery life. Mobile reception (GSM) is still on.

There are two ways to set the upload frequency;

1. Send this text message **upload123456 30** (upload every 30 seconds when moving)
2. Use the APP: 'Issue command' – 'Send via GPRS' – 'Common' – Select 'Upload frequency'

SLEEP MODE – AWAKE BY SHOCK

When the tracker detects no movement for at least 10 minutes, it will enter sleep mode. GPS reception and location data upload are turned off to provide maximum battery life. Mobile reception is still on.

The tracker will wake up either by detecting movement from its built-in shock sensor or by receiving a text message.

NOTE: If the shock sensor doesn't receive sufficient movement, it may not immediately wake up.

You can turn on sleep mode by APP command or this text message: **sleep123456 shock5**

Sensitivity is between 1 & 9 – 1 being most sensitive

You can cancel sleep mode by APP command or this text message: **nosleep123456**

TIME-ZONE

GPS time is based on GMT (Greenwich Mean Time). To get accurate reporting times, a text command to the tracker must be sent to set the correct time zone & daylight saving.

timezone123456 10 – when no daylight saving (NSW) (12 for NZ)

timezone123456 11 – with daylight saving (NSW) (13 for NZ)

The tracker does not automatically update time – it must be done manually.

TIP: PHOTO ELECTRIC SWITCH

The LT2400 has a photo electric tamper which is detailed on page 5.

It can also be used to send the 'SOS' alert by using it as a light sensitive trigger.

For example, in a dark enclosed area, (say in a race car trailer) leave the tracker on it's side so the photo cell is not covered. If someone opens the door to let light in, the tracker will send the SOS alert - a silent alarm !

GEO-FENCE

A geo-fence is an invisible boundary around a fixed location. This boundary can have a minimum radius of 100m to a maximum of 5000m. Geo-fences can be added and deleted. If the tracker moves out of or into a geo-fenced area, it will send a text alert to the authorised numbers confirming it is either 'IN' or 'OUT' of the geo-fenced area.

NOTE: In normal use this can become an unnecessary text, costly and will shorten battery life. Only use the feature when required. To stop it sending texts, either delete the geo-fence or turn off in 'alarm settings' on the mobile APP.



SHOCK ALERT – ON/OFF

When the tracker is stationary and it receives a heavy shock, it will send the text alert.

You can activate shock alert by APP command or text message: **shock123456**

You can cancel shock alert by APP command or text message: **noshock123456**

MOVE ALERT

Once the tracker has remained stationary for more than 3~10 minutes, you can set a move alert.

move123456

reply: **move ok**

If the tracker moves more than 500m (default), it will send a text alert to the paired mobile phones. Move alert can also be set from the APP and move distance can be adjusted.

To cancel this mode, send

nomove123456

reply: **nomove ok**

SPEED ALERT

You can set a speed limit for the tracker and receive a text alert if this speed is exceeded every 5 minutes.

speed123456 105

reply: **speed ok**

To cancel this alert, send

nospeed123456

reply: **nospeed ok**

Do not set speeds lower than 50km/h as GPS will be inaccurate at low speeds.

LOW BATTERY ALERT

When battery voltage is too low, it will send a text alert 'bat:1' every 30 minutes. Battery condition is shown on the mobile APP.

MONITOR / TRACK MODE

Track mode is for GPS tracking.

Monitor mode is for listening in to the built-in microphone.

The mode has to be selected to use it.

To monitor

Send: **monitor123456**

reply: **monitor ok**

Quality and volume depends on tracker location and surrounding noise.

Make a phone call to the tracker to listen in.

When in monitor mode, GPS tracking is off.

Switch back to tracker mode when finished

To track

Send: **tracker123456**

reply: **tracker ok**

Note; to use monitor mode, the trackers GSM SIM card must have voice capability. Voice capability may be unavailable from SIM card suppliers depending on the services they provide.

GLOBAL RE-SET

The tracker can be re-set to factory settings which erases any settings you may have set.

From the paired phone, send: **begin123456**

reply: **begin ok**

or

send: **format**

No reply

Caution:

This product contains a Li-ion battery which has harmful chemicals.

Don't dismantle, drop, bump, puncture or treat it violently.

Do not get wet.

Never incinerate.

Never submerge.

Do not leave the battery discharged as this will prevent its recharge ability.

This GPS tracking device uses the 3G GSM mobile network for sending data and texts.

Mongoose is not responsible or liable if the mobile network becomes unavailable for any reason.

The purchase of this product provides free access to a mobile APP and website. These are operated by a 3rd party and Mongoose has no control over the design or operation. Mongoose accepts no liability or responsibility if the APP or website become unavailable or access terms change.

TEXT COMMAND CHART

Instruction	Text to send to trackers SIM #	Reply
Cell phone pairing (master user #1)	admin123456 xxxxxxxxxx <i>(xxxxxxx = your mobile phone number)</i>	admin ok
Cancel pairing	noadmin123456 xxxxxxxxxx	noadmin ok
SOS – Tamper alert	sos123456 xxxxxxxxxx mobile no' sosms123456 Text alert soscall123456 Call alert To cancel, insert 'no' in front of text eg; nososcall123456	ok
Set time zone	timezone123456 13 <i>(EG: NZ Daylight saving - 13 hours ahead of GMT)</i>	time ok
Set upload frequency	upload123456 30	upload ok
Start sending data	gprs123456	gprs ok
Set sleep mode on Turn off sleep mode	sleep123456 shock4 nosleep123456	sleep ok nosleep ok
Move alert	move123456 nomove123456	move ok nomove ok
Speeding alert	speed123456 105 nospeed123456	speed ok nospeed ok
Shock alert	shock123456 noshock123456	shock ok noshock ok
Request location	g123456	Tap blue to see on your phones map
Monitor mode (listen) or Tracker mode	monitor123456 <i>(does not track in this mode)</i> tracker123456	↕ monitor ok tracker ok
Set mobile APN	apn123456 xxxxxxxx <i>(xxxxxxx = APN name)</i>	APN ok
Change password	pwd123456,XXXXXX <i>Must be 6 digit</i>	OK ! New password: XXXXXX Keep safe !
Check setting	Param1 or Param2	Shows settings
Language	LAG1 (English) LAG2 (Chinese)	Switched to English Switched to Chinese
Reset	format or begin123456	Re-sets all settings to default



Specification

GSM module	3G Quad Band
Network	3G GSM/WCDMA/GPRS/LBS
GPS sensitivity	-159dBm
GPS chipset	UBLOX
GPS Position Accuracy	5m (outdoors)
Time Accuracy	Synchronized to GPS time & GMT
Cold start	35~80 sec
Hot start	1 sec., average
Warm start	35 sec., average
Battery	Re-chargeable Li-ion – 3.7v 20,000mAh
Charger	110v~220v input 5v output
Standby	Up to 240 days subject to usage & environmental effects
Operating temperature	-20°C to +55° C
Dimensions	120x65x47mm 456g
Humidity	5% to 95% Non-condensing
Dust / Water resistance	IP67
USB input	For factory use only – do not insert charger

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