



## LT2400 GPS TRACKER

**GSM 2G – Use only Vodafone SIM cards (Do not use 4G data only SIMs)**



Included;

- 1 x 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;

- GSM SIM card

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

**Mongoose (New Zealand) Limited**  
**[www.mongoose.co.nz](http://www.mongoose.co.nz)**

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## **LT2400 GPS 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 contains a high capacity battery with a standby life of up to 240 days.

The battery is re-chargeable and the mobile APP shows battery condition.

The tracker also contains strong magnets to assist in attaching the tracker to the desired vehicle, equipment or asset. See page 7.

The tracker is supplied with a mobile APP and an online 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.

This manual details the features as well as giving the option of sending text commands. The website stores location data for up to 6 months and provides more detail compared to the APP.

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

If you have any questions, we offer telephone assistance during normal office hours Monday to Friday.

**0800 80 50 80 or 09 443 3128**

### **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 GSM 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 GSM SIM card must have the ability and credit 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:

1. Fully charge the battery before using – >24 hours
2. Insert the SIM card and turn on *outdoors*.  
LEDs flash when GSM and GPS signals are located
3. Pair your mobile phone to the tracker
4. Set the time zone
5. Set the upload frequency of location & start reporting
6. Download the mobile APP and logon to see your tracker.

### Battery & charger

For the first time, fully charge the battery for 8 to 12 hours.

Subsequent charging should take approximately 5~8 hours.

Please use the charger supplied.

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

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

The battery is 20,000mAh Li-ion and allows for up to 240 day standby operation.

The mobile APP shows battery life on the opening screen.

### SIM card installation – 2G – Only use Vodafone SIM cards with voice, text & data



Lift the rubber cover



Insert the SIM card & turn on



Close the dust cover

### On/Off switch:

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.

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 12** (12 hours ahead of GMT)



space here

(Change to '13' when daylight saving starts)

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 or STOP GPRS DATA LOCATION REPORTING

**gprs123456**

**nogprs123456**

Reply: **GPRS ok**

**NoGPRS ok**

**THE APN NUMBER** – not required for Vodafone NZ or 2 Degrees NZ SIM cards

If this product is used overseas or with a different GSM SIM provider, you will have to set the APN number of the SIM card provider as the tracker needs to know through whom to send the data.

eg;

Vodafone NZ = **apn123456 vodafone.net.nz**

2 Degrees NZ = **apn123456 internet**

Other = ask the SIM supplier for the APN number

Reply: **apn ok**

## DOWNLOAD THE MOBILE APP

### APPLE IOS

Download the APP :- **LKGPS**



### ANDROID

Scan the QR code to access the mobile APP

Not available on PlayStore



### MOBILE APP

The APP gives you full control of the trackers features as well as showing real time location and historical travel.

Please explore the features.

### APP ICONS

- 'Real time tracking' – shows current / last reported position
- 'Historical route' – shows the locations/route for a particular day
- 'Geofence' – allows you to set defined boundaries
- 'Issue command' – sets tracker parameters & commands
- 'Device info' - details about the tracker, SIM number etc
- 'Device message' - record of texts sent from device
- 'Alarm setting' - define which alerts are required



### Link to the website:-

Go to:- [www.zg666gps.com](http://www.zg666gps.com)

The international website will open in Chinese. Select your chosen language by clicking on the corresponding flag.

The next time you go to the website, it will default to your language.

Log onto to the website, as detailed on page 3, using the IMEI number.



Please note: The APP and website are owned & operated by a 3<sup>rd</sup> party. Purchasers of Mongoose GPS trackers have free usage under current access terms. Mongoose is not responsible if access terms change or the facilities become unavailable.

## **TAMPER ALARM**

The tracker has a built-in tamper switch 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.

The switch must be depressed for at least 15 seconds for the tamper to become active.

Releasing the switch for more than 4 seconds will cause the tracker to wake up (if in sleep mode), find its location and send an alert. See page 9 for alert types.

## **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.**

## **LED's – WHAT THEY MEAN**

Green LED — Mobile GPRS signal state

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

Blue LED – GPS signal state

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

Red LED – battery

Lit solid	charging
Off	fully charged

## **MULTIPLE TRACKERS – USERNAME LOGON**

If you have more than one tracker, call Mongoose to request an account. You can choose your own username and password that allows you to monitor all devices with just one logon.

**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'

## REQUEST LOCATION BY TEXT MESSAGE – paired phones only

If you haven't got the APP or near a computer, you can request location with a text message.

Send either of these text messages to the SIM number inside the tracker;

**g123456** or **where**

You will receive a text reply. Tap the blue portion of the reply to see the location on the phones maps.

*NOTE:* If no mobile phone is paired a location request from any phone will receive the reply.

Once a phone is paired, only paired phones can request location.

## SLEEP MODE

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.

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 text message: **sleep123456**

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

## TIME-ZONE

GPS tracking 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.

**timezone123456 12** – when New Zealand doesn't have daylight saving

**timezone123456 13** – when New Zealand does have daylight saving

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

## 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.

### 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 may 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

### 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. Switch back to tracker mode when finished

To track, send: **tracker123456**                      reply: **tracker ok**

Note; to use monitor mode, the trackers 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

## TEXT COMMAND CHART

Instruction	Text to send to trackers SIM #	Reply
Cell phone pairing (master user #1)	<b>admin123456 xxxxxxxxxx</b> <i>(xxxxxxx = your mobile phone number)</i>	admin ok
Cancel pairing	<b>noadmin123456 xxxxxxxxxx</b>	noadmin ok
SOS – Tamper alert	<b>sos123456 xxxxxxxxxx</b> mobile no' <b>sossms123456</b> Text alert <b>soscall123456</b> Call alert	ok
Set time zone	<b>timezone123456 13</b> <i>(EG: NZ Daylight saving - 13 hours ahead of GMT)</i>	time ok
Set upload frequency	<b>upload123456 30</b>	upload ok
Start sending location data to website	<b>gprs123456</b>	gprs ok
Move alert	<b>move123456</b> <b>nomove123456</b>	move ok nomove ok
Speeding alert	<b>speed123456 105</b> <b>nospeed123456</b>	speed ok nospeed ok
Shock alert	<b>shock123456</b> <b>noshock123456</b>	shock ok noshock ok
Request location	<b>g123456</b> or <b>where</b>	location data Tap blue to see on your phones map
Monitor mode (listen) or Tracker mode	<b>monitor123456</b> <i>(does not track in this mode)</i>  <b>tracker123456</b>	monitor ok  tracker ok
Change password	<b>pwd123456,XXXXXX</b> Must be 6 digit	OK ! New password: XXXXXX Keep safe !
Check setting	Param1 or Param2	Shows settings
Language	<b>LAG1</b> (English) <b>LAG2</b> (Chinese)	Switched to English Switched to Chinese
Reset	<b>format</b> or <b>begin123456</b>	Re-sets all settings to default



### Specification

GSM module	GSM 850-1800/900-1900Mhz Quad
Network	2G GSM/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

Caution: This product contains a Li-ion battery which has harmful chemicals. Don't dismantle, drop, bump, puncture or treat it violently. Never incinerate. Never submerge. Do not leave the battery discharged as this will prevent its recharge ability.

This GPS tracking device uses the 2G GSM mobile network for sending data and texts. Mongoose is not responsible or liable if the 2G network becomes unavailable for any reason.



**Mongoose New Zealand Limited**

41 a View Road, Glenfield  
Auckland 0627

[www.mongoose.co.nz](http://www.mongoose.co.nz)  
Email: [sales@mongoose.co.nz](mailto:sales@mongoose.co.nz)  
Ph: (09) 443 3128  
0800 80 50 80