

CHIPnTRAC – short guide to setting up and using this GPS Tracker

Preliminaries

This GPS Tracker uses three technical features:

- **GPS function:** through information provided to the tracker by GPS satellites this function monitors where the tracker is located, provided it has a clear line of sight to the sky and satellites which it needs to get its position and speed data.
- **GSM function:** this provides access to the cellular telephone system so when a SIM card is installed the tracker is able to **receive admin text messages** (sent to it in a set format described in detail below), **send text message responses** to those admin text messages it has received, **receive telephone calls** sent to the mobile number on the SIM card (which the tracker notes but is not able to pick up and instead after two rings an ansafone service provided by the mobile service provider responds) and in response to each call received by the tracker it **sends a text message with position, speed and battery condition data** to the designated mobile phone number(s).
- **Internal systems controlling several essential operational functions** – these include the various admin and reporting tasks set out below.

Before attempting to set up or install the tracker in a vehicle the following essential requirements are worth noting

- **SIM card:** you will need to get a SIM card (large size) from a cellular services provider (like O2 or Vodafone) either attached to your existing mobile phone contract or as a self-standing SIM as a PAYG deal or a contract. But please note you will need to ensure the SIM card package you get provides **both mobile data** (at least 1GB per month) **and calls**. Whilst the data part of the package will cover the text messages to and from the tracker, it is essential the tracker is able to **receive calls** from a designated mobile phone number as that initiates a response from the tracker when it will provide the position and speed data in text messages to the designated mobile phone number.
- **Installation:** the two key factors to consider for the installation are first the **tracker must be positioned in the vehicle so it has a clear view of the sky** and the satellites so it is not shielded by ferrous metal – for example steel bodywork. Typical locations might be on the dashboard or the rear parcel shelf under a sloping glass screen – various methods of concealing them from prying eyes are of course possible. The tracker can be placed under glass, wood, alloy or fibreglass panels such as an alloy or fibreglass bonnet or hardtop or under a soft top of a convertible like an MGB Roadster or RV8. Make sure the tracker can be removed from its location when installed so you can access the back-up battery and SIM card when necessary. The second consideration is the **tracker needs a permanent electrical feed from the vehicle's battery** and it must be a continuous supply and not cut when the

ignition key is turned off and removed. Without a permanent power feed the rechargeable battery will expire so the tracker will not be able to work!

Setting up the tracker

Stage 1

1. Insert the full size **SIM card**. Some trackers have slide and flip metal covers for the SIM card which must be clicked shut others are just slide in.
2. Put in a **fully charged battery** and close the back cover and refix the end clip. The small green indicator LED light on the side of the tracker (between the USB socket and SOS button) will be on – **single flashes**.
3. After a short while the small LED light will change to a **double flash every 3 seconds**. This indicates the tracker is receiving both GPS and GSM signals.

Stage 2

You can now set up the tracker – the **blue text** is where you add information:

1. Use your mobile phone to send the text message **begin123456**
2. The tracker will reply with the message **begin ok!**
3. Set your mobile phone as the authorised number by sending the text message **admin123456SPACEyourphonenumber**
For **yourphonenumber** enter the number, for example 07770 777777.
4. To remove an authorised (designated) phone number send the message **noadmin123456SPACEphonenumber**

After setting up the tracker and powering up

Reconfirm the authorised numbers using the admin command.

admin123456SPACEyourphonenumber

Send the Tracker to sleep by texting

sleep123456SPACEtime

Testing

- **Make sure the tracker wakes up** fully by sending the text message: **nosuppress123456**
- **Phone the tracker** as a phone call and not as a text message.
- You will **hear it ring twice and then hang up** (possibly an ansafone may come in after two rings).
- A minute or two later you will **receive a text message** from the tracker with its location and other data
- To send the tracker back to sleep, text **sleep123456SPACEtime**
Simply enter the word **time** and **not** the minutes before the tracker goes to sleep.

Setting up additional authorised or designated mobile phone numbers and removing them if necessary

You can have up to 5 designated mobile phone numbers so each will have control over the tracker – that's the primary number plus an additional 4.

1. Send the text message: **admin123456SPACEotherphonenumber**
2. Tracker will reply: **admin ok!**

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Removing a designated mobile phone number

3. Send the text message: **noadmin123456SPACEphonenumber**

Setting the time in the tracker

To change the timezone:

Send a text message: **timeSPACEzone123456SPACEtimezone**

For **timezone** simply enter the timezone number – for example for the UK enter 1.

Locating the vehicle when the tracker is in sleep mode

The procedure is:

1. To wake up the tracker send the text message: **nosuppress123456**
2. Tracker will reply with the text message: **nosuppress ok!**
3. Phone the tracker as a phone call and not as a text message.
4. You will hear it ring twice and then hang up (possibly an ansafone may come in after two rings).
5. A minute or two later you will receive a text message with the tracker's location and other data. The screen will show the location data.
6. Send the tracker back to sleep, text: **sleep123456SPACEtime**

Setting warning parameters

Move alert

Having parked the vehicle wait about 10 minutes and then:

1. Send the text message to wake up the tracker: **nosuppress123456**
2. Receive a response: **nosuppress ok!**
3. Send a command which will put a "virtual stockade" around the vehicle. If the vehicle is moved outside a circle of the size (diameter) specified it will send a warning text message to the designated mobile phone number. The stockade diameter range is from 200 metres to 9,999 metres. The example below creates a **200 metre diameter stockade**.
To create the stockade, send the text message: **move123456SPACE0200**

If the vehicle is moved outside the stockade then a warning is sent from the tracker in the form, for example:

Move! Lat:51.394051 long:000.353075 speed:072.0 T:04/01/11

This provides the GPS coordinates of the vehicle, its speed in kph and the date and time. The position will be updated every 3 minutes.

4. To turn off the Move reporting send a text message with the command: **nomove123456**
5. Tracker will confirm receipt of that command: **nomoveok!**

Speed alert

You can ask the tracker to warn you if the vehicle exceeds a set speed:

1. Send the tracker the text message: **speed12345SPACE060**
This will send a warning message if the speed exceeds **60kph**.
2. To turn off the Speed command send the message: **nospeed123456**
3. Tracker will then confirm with the text message: **nospeedok!**

Low battery

If the tracker is relying on the internal back-up battery, it will:

- Send a warning text message when the battery is low: low battery 10% and its position with GPS co-ordinates.
- Turn off the warning use: **lowbattery123456SPACEoff**

SOS button

Next to the On/Off button is a button marked **SOS**. Pressing this button will send a message to all authorised/designated phones: **help me!**

The information sent in the text message will include the tracker's GPS coordinates. This message will be sent every 3 minutes until one of the authorised or designated mobile phone numbers turns it off by sending the message: **helpSPACEme!**

Auto-Tracking

You can ask the tracker to send regularly updated positions to your mobile phone.

- Send a text message with the command to wake up the tracker: **nosuppress123456**
- Tracker sends a text message confirmation: **nosuppress ok!**
- Send a text message to the tracker **fix030s005n123456**

Shock Sensor Alert

To set up alerts for any tampering with the vehicle:

- Send a text message with the command: **shock123456**
 - To cancel this command, send: **noshock123456**
- After setting the shock you can set three levels of sensitivity:
- | | |
|---|--------------------------------|
| Level 1 (default) detects slight vibrations | sensitivity123456SPACE1 |
| Level 2 detects 8 vibrations in 2 seconds | sensitivity123456SPACE2 |
| Level 3 detects 25 vibrations in 5 seconds | sensitivity123456SPACE3 |

Send to sleep

To send the tracker to sleep after turning off any alerts, this will save battery life especially when running on the internal battery alone, send

sleep123456SPACEtime

Viewing the location on a PC using the latitude and longitude data from the tracker's text message

If you do not have a smart phone (with which you can access Google maps using the link in the text message), you will need to type in the latitude and longitude data into the search box in Google maps but make sure you leave a space between the end of the latitude coordinate and the start of the longitude coordinate and make sure you include a minus sign if that is shown in the text message. If you fail to do so the location you will search for will be east of Greenwich and not west!.

See a copy of the **full Set Up Guide** at:

<http://www.v8register.net/protect/files/150712-CHIPnTRAC-guide-notes-VS1.pdf>