PROGRAMMING THE TISO TRACK AS YOU GO UNIT

Overview

The tracker can be programmed via SMS text messages.
When you issue a command to the unit it responds to let you know that it has accepted the command and processed it.

Details

All commands **(excluding the quick commands listed on the next page)** must start with a colon [:]

There are two types of command accepted by the unit.

[R] - READ Command
[W] - WRITE Command

The Format of a WRITE Command is

:W,[field],[data]

The Format of a READ Command is

:R,[field]

[field] - is the field you want to work with
[data] - is either text data or a Logic state (i.e. 1 or 0)

By default every command that is issued to the device is automatically written to the memory of the device, when it contacts a server this information is then uploaded to the server.

QUICK SMS COMMANDS

There are a few basic commands that the tracker understands if you send them as a SMS.
These do not need the colon before them and are not case sensitive.

TRACK – (Data Mode) Connect to the internet and send live tracking data to the website. Updates the position approx. every 15 seconds. Does not stop until you send CLEAR

HISTORY – (Data Mode) Use this mode for continuous tracking (e.g. Fleet Tracking). The device will initially send any previous positional data stored in its memory to the server. It will then only send its position only whilst the unit is moving. When stationary, it will go to sleep if STANDBY power mode or Static mode has been selected. (The ability to view historical positioning data will be added to the Tiso website in Summer 2009)

CLEAR – (Data Mode) Stop sending data, the unit will then revert to the power mode selected previously.

ACTIVE – (Power Mode) Makes the unit constantly run at full power. This mode is required if using the 3 I/O connections or one of the expansion units.

STANDBY – (Power Mode) Sends the unit into a low power "sleep" mode if the unit is stationary and not processing any other commands. The unit will wake up automatically if the accelerometer is triggered (if turned on), an SMS command is received, or if one of the alarms are triggered.
This mode uses about 5% of the power of active mode and we suggest that you should use this if you are not using any of the I/O connectors or expansion modules.

HALT – Immobilise the vehicle, if the "X" relay is connected in line to with the starter motor solenoid.

GO – Mobilise the vehicle if the HALT command has been sent.

ARM - Enable alarm messages. (It will only enable the alarms which have been activated individually)
It also resets the centre of the geo-fence radius to the current position

DISARM - Disable alarm messages.

GEO – Reset geo-fence alarm.

ACC – Reset accelerometer alarm.

INFO – Sends a text back with a list of possible commands

:W,0,	:R,0	BATTERY WARNING MESSAGES	Default = 11

First digit is SMS and second is Website (valid 00,01,10,11)

By Default, a warning is sent to all authorised numbers when the battery level drops below the Internal Battery Warning Level.
The message "[DEVICE NAME],Low Battery,#,Battery Alarm" is sent to the authorised mobile numbers.
These can be disabled, either just for SMS, Website, or both. The first digit is SMS and second is Website (00,01,10,11)
Messages are only sent to the website when in "TRACK" mode, or with GPRS (internet) turned on

READ CURRENT SETTING: **:R,0**

WRITE SETTING COMMAND: **:W,0,[TWO DIGIT BINARY DATA]**

WRITE EXAMPLE: **:W,0,00** Disable all messages

WRITE EXAMPLE **:W,0,10** Disable website messages only

REPLY / CONFIRMATION

SMS Format - [DEVICE NAME],0,[BATTERY WARNING MESSAGE STATUS],[REQUESTING MOBILE NO.]

Example SMS - www.tisogps.com,0,00,+447939909384

:W,1,	**:R,1**	**Authorised Mobile Number 1**	
:W,2,	**:R,2**	**Authorised Mobile Number 2**	
:W,3,	**:R,3**	**Authorised Mobile Number 3**	

Authorised Mobile number that can read and change values and receive sms messages
Authorised Mobile number that can read and change values and receive sms messages
Authorised Mobile number that can read and change values and receive sms messages

By default there are no Authorised Mobile numbers programmed into the device. An Authorised Mobile number is used to restrict control or access to your tracker to up to three mobile numbers.
(If you accidentally programme the first number into your tracker incorrectly then any further commands will be ignored. If this happens you must do a Factory Reset which will clear all of the numbers (see Factory Reset section))

It is recommended to include your country code in the mobile number
For example: In the UK for number 07973 123456 use +44 7973 123456 (Note that the 0 has been dropped from the beginning of the number)

READ CURRENT SETTING: **:R,1** Read Authorised Mobile Number 1

WRITE SETTING COMMAND: **:W,1,[MOBILE NUMBER]** (Authorised Mobile Number 1)
:W,2,[MOBILE NUMBER] (Authorised Mobile Number 3)
:W,3,[MOBILE NUMBER] (Authorised Mobile Number 3)

WRITE EXAMPLE: **:W,1,+447939909384** This would write +447939909384 as Authorised Mobile Number 1

REPLY / CONFIRMATION

SMS Format - **[DEVICE NAME],1,[AUTHORISED MOBILE NUMBER 1],[REQUESTING MOBILE NO.]**

Example SMS - **www.tisogps.com,1,+447939909384,+447939909384**

:W,4,	**:R,4**	**Authorised txt Mobile Number 1**	
:W,5,	**:R,5**	**Authorised txt Mobile Number 2**	
:W,6,	**:R,6**	**Authorised txt Mobile Number 3**	

Authorised Mobile number that can read and receive sms messages
Authorised Mobile number that can read and receive sms messages
Authorised Mobile number that can read and receive sms messages

Authorised txt mobile numbers are similar to authorised mobile numbers. They are used to allow access to reading a unit configuration and also additionally receive SMS text message from the tracker For example: Static Alarm or Vehicle Alarm message.

It is recommended to include your country code in the mobile number
For example: In the UK for number 07973 123456 use +44 7973 123456 (Note that the 0 has been dropped from the beginning of the number)

READ CURRENT SETTING: **:R,4** Request Authorised txt Mobile Number 1

WRITE SETTING COMMAND: **:W,4,[MOBILE NUMBER]** (Authorised txt Mobile Number 1)
:W,5,[MOBILE NUMBER] (Authorised txt Mobile Number 2)
:W,6,[MOBILE NUMBER] (Authorised txt Mobile Number 3)

WRITE EXAMPLE: **:W,4,+447973123456** This would write +447939909384 as Authorised txt Mobile Number 1

REPLY / CONFIRMATION

SMS Format - **[DEVICE NAME],4,[AUTHORISED TXT MOBILE NUMBER 1],[REQUESTING MOBILE NO.]**

Example SMS - **www.tisogps.com,4,+447973123456,+447939909384**

:W,9,	**:R,9**	**GEO-FENCE WARNING MESSAGES**			Turns the Geo-Fence warning messages on or off

If a Geo-Fence radius is set and the unit moves more than this distance, the message "[DEVICE NAME], Geo Fence Alarm, Send GEO to reset geo fence alarm or ARM to lock new location" is sent to the authorised mobile numbers.

These can be disabled, either just for SMS, Website, or both. The first digit is SMS and second is Website (00,01,10,11)
Messages are only sent to the website when in "TRACK" mode

READ CURRENT SETTING: **:R,9**

WRITE SETTING COMMAND: **:W,9,[TWO DIGIT BINARY DATA]**

WRITE EXAMPLE: **:W,9,00** Disable all messages

WRITE EXAMPLE **:W,9,10** Disable website messages only

REPLY / CONFIRMATION

SMS Format - **[DEVICE NAME],9,[GEO FENCE WARNING MESSAGE STATUS],[REQUESTING MOBILE NO.]**

Example SMS - **www.tisogps.com,9,00,+447939909384**

:W,@,	**:R,@**	**ACCELEROMETER WARNING MESSAGES**	**Default = 11**		Turns the accelerometer warning messages on or off

If the Accelerometer sensitivity is set, the unit will send a warning message if motion exceeds the threshold level, the message is "[DEVICE NAME], Accelerometer Alarm"
These can be disabled, either just for SMS, Website, or both. The first digit is SMS and second is Website (00,01,10,11)
Messages are only sent to the website when in "TRACK" mode or with GPRS (internet) turned on

READ CURRENT SETTING: **:R,@**

WRITE SETTING COMMAND: **:W,@,[TWO DIGIT BINARY DATA]**

WRITE EXAMPLE: **:W,@,00** Disable all messages

WRITE EXAMPLE **:W,@,10** Disable website messages only

REPLY / CONFIRMATION

SMS Format - **[DEVICE NAME],@,[ACCELEROMETER WARNING MESSAGE STATUS],[REQUESTING MOBILE NO.]**

Example SMS - **www.tisogps.com,@,+447939909384**

:W,*,	**:R,***	**CONFIRMATION MESSAGES**	**Default = 11**		Turns the confirmation messages on or off

These can be disabled, either just for SMS, Website, or both. The first digit is SMS and second is Website (00,01,10,11)
Messages are only sent to the website when in "TRACK" mode or with GPRS (internet) turned on

READ CURRENT SETTING: **:R,***

WRITE SETTING COMMAND: **:W,*,[TWO DIGIT BINARY DATA]**

WRITE EXAMPLE: **:W,*,00** Disable all messages

WRITE EXAMPLE **:W,*,10** Disable website messages only

REPLY / CONFIRMATION

SMS Format - **[DEVICE NAME],*,[CONFIRMATION MESSAGE STATUS],[REQUESTING MOBILE NO.]**

Example SMS - **www.tisogps.com,*,00,+447939909384**

:W,$,	:R,$	ALARM MESSAGES	Default = 11		Turns the alarm messages on or off

These can be disabled, either just for SMS, Website, or both. The first digit is SMS and second is Website (00,01,10,11)
Messages are only sent to the website when in “TRACK” mode or with GPRS (internet) turned on

READ CURRENT SETTING: **:R,$**

WRITE SETTING COMMAND: **:W,$,[TWO DIGIT BINARY DATA]**

WRITE EXAMPLE: **:W,$,00** Disable all messages

WRITE EXAMPLE **:W,$,10** Disable website messages only

REPLY / CONFIRMATION

SMS Format - **[DEVICE NAME],$,[CONFIRMATION MESSAGE STATUS],[REQUESTING MOBILE NO.]**

Example SMS - **www.tisogps.com,$,00,+447939909384**

:W,?,	:R,?	Use Website or Socket Server	Default=1 (use website)		Choose between using a website for tracking or a socket server system

This enables you to choose the protocol to either use website based system for tracking, or a socket server, which is common for commercial customers.

READ CURRENT SETTING: **:R,?**

WRITE SETTING COMMAND: **:W,?,[0 or 1]**

WRITE EXAMPLE: **:W,?,1** Select Use Website

REPLY / CONFIRMATION

SMS Format - **[DEVICE NAME],B,[USE DIFFERENTIAL UPDATE STATUS],[REQUESTING MOBILE NO.]**

Example SMS - **www.tisogps.com,?,1,+447939909384**

:W,%,	:R,%	Accelerometer Sensitivity	Default=3		The level of movement that triggers an accelerometer alarm message. 0 (off) to 5

This is the level that will trigger an accelerometer alarm, on a scale of 0 (off) to 5 (max). If you experience false alarms, lower the amount.

READ CURRENT SETTING: **:R,%**

WRITE SETTING COMMAND: **:W,%,[Sensitivity level]**

WRITE EXAMPLE: **:W,%,5** Select Maximum Sensitivity level

REPLY / CONFIRMATION

SMS Format - **[DEVICE NAME],%,[SENSITIVITY LEVEL],[REQUESTING MOBILE NO.]**

Example SMS - **www.tisogps.com,%,5,+447939909384**

:W,!,		**Program sender as Auth Mob Number 1**			This programs the senders mobile number as authorised Mobile number 1

This setting is useful if you do not have access to the authorised mobile phone. You will need the last 4 digits of your IMEI number, which is either found on the side of the cardboard box, or on the Telit modem inside the tracker.

WRITE SETTING COMMAND: **:W,!,[LAST FOUR DIGITS OF IMEI]**

WRITE EXAMPLE: **:W,!,7518** This will program the sender as Auth Mob 1 if the IMEI was 490154203237518

REPLY / CONFIRMATION

SMS Format - **[DEVICE NAME],!,[NEW AUTHORISED MOBILE NUMBER ONE],[REQUESTING MOBILE NO.]**

Example SMS - **www.tisogps.com,!,+447939909384,+447939909384**

:W,/,	**:R,/**	**APN FILE**	**Default= /trk/txt.php**		Selects file used on the tracking website. Do not change under normal operation.

This is the file used on the tracking website. Do not change under normal operation.

READ CURRENT SETTING: **:R,/**

WRITE SETTING COMMAND: **:W,/,[APN FILE]**

WRITE EXAMPLE: **:W,/,/trk/txt.php** Select /trk/txt.php as apn file

REPLY / CONFIRMATION

SMS Format - **[DEVICE NAME],/,[APN FILE],[REQUESTING MOBILE NO.]**

Example SMS - **www.tisogps.com,/,/trk/txt.php,+447939909384**

:W,B,	**:R,B**	**Use differential Update time/distance**	**Default=0**		Either Move min dist over and min time elapse Or Move min dist or min time elapse

Changes the setting from a complimentary (time **AND** distance) comparison of time and distance to differential (time **OR** distance).

READ CURRENT SETTING: **:R,B**

WRITE SETTING COMMAND: **:W,B,[0 or 1]**

WRITE EXAMPLE: **:W,B,1** Select Differential

REPLY / CONFIRMATION

SMS Format - **[DEVICE NAME],B,[USE DIFFERENTIAL UPDATE STATUS],[REQUESTING MOBILE NO.]**

Example SMS - **www.tisogps.com,B,1,+447939909384**

:W,C,	**:R,C**	**Set Changeover Speed (to moving values)**	**Default= 10 knots**		At this speed the Moving Values are used for the min time and dist (ie Not stationary ones)

This is measured in knots, so unaffected if unit is set to use Miles or Kilometers.

READ CURRENT SETTING: **:R,C**

WRITE SETTING COMMAND: **:W,C,[CHANGEOVER SPEED]**

WRITE EXAMPLE: **:W,C,15** set speed to 15 knots

REPLY / CONFIRMATION

SMS Format - **[DEVICE NAME],C,[CHANGEOVER SPEED],[DATE],[TIME],[REQUESTING MOBILE NO.]**

Example SMS - **www.tisogps.com,C,15,+447939909384**

:W,D,	**:R,D**	**Minimum Distance in metres (Stationary)**	**default= 100**		Min.Distance the Tracker must move whilst stationary before records are accepted as valid

READ CURRENT SETTING: **:R,D**

WRITE SETTING COMMAND: **:W,D,[MINIMUM DISTANCE (STATIONARY)]**

WRITE EXAMPLE: **:W,D,250** set minimum distance to 250 meters

REPLY / CONFIRMATION

SMS Format - **[DEVICE NAME],D,[MINIMUM DISTANCE (STATIONARY)],[DATE],[TIME],[REQUESTING MOBILE NO.]**

Example SMS - **www.tisogps.com,D,250,+447939909384**

:W,E,	**:R,E**	**Minimum Distance in metres (Moving)**	**default = 10**		Min. Distance the Tracker must move whilst moving before records are accepted as valid

READ CURRENT SETTING: **:R,E**

WRITE SETTING COMMAND: **:W,E,[MINIMUM DISTANCE (MOVING)]**

WRITE EXAMPLE: **:W,E,25** set minimum distance to 25 meters

REPLY / CONFIRMATION

SMS Format - **[DEVICE NAME],E,[MINIMUM DISTANCE (MOVING)],[REQUESTING MOBILE NO.]**

Example SMS - **www.tisogps.com,E,25,+447939909384**

:W,G,		**Device Reset**			Reset the Unit

WRITE SETTING COMMAND: **:W,G,1** resets the unit

CONFIRMATION

SMS Format - **[DEVICE NAME],G,[RESET],[REQUESTING MOBILE NO.]**

Example SMS - **www.tisogps.com,G,1,+447939909384**

:W,H,	**:R,H**	**GPRS always on flag**	**default = 0**		Enable Continuous GPRS Connection

By default the GPRS is established when the data is ready to send to the server. After it has finished sending the tracker will stay connected to the server until a default time out occurs. If this flag is turned off the tracker will automatically close the GPRS connection as soon as it has finished sending the information.

READ CURRENT SETTING: **:R,H**

WRITE SETTING COMMAND: **:W,H,[0 or 1]**

WRITE EXAMPLE: **:W,H,1** Enables Continuous GPRS Connection

REPLY / CONFIRMATION

SMS Format - **[DEVICE NAME],H,[GPRS ALWAYS ON STATUS],[REQUESTING MOBILE NO.]**

Example SMS - **www.tisogps.com,H,1,111108,170647,+447939909384**

	:R,I	**FIRMWARE_VERSION**			Return the Software Version Number

READ CURRENT SETTING: **:R,I**

REPLY

SMS Format - **[DEVICE NAME],I,[FIRMWARE VERSION],[REQUESTING MOBILE NO.]**

Example SMS - **www.tisogps.com,I,6.6,+447939909384**

:W,J,	**:R,J**	**GPRS Server**	**default = 85.234.142.236**		Set the GPRS Server that the tracker will connect to (can be DNS Name or IP Address)

The GPRS Server that you want to use with your device, this is generally an IP Address or a Domain address.
Some networks don't allow IP addresses and some networks don't allow domain addresses so you may have to try both before you get success.

READ CURRENT SETTING: **:R,J**

WRITE SETTING COMMAND: **:W,J,[GPRS SERVER]**

WRITE EXAMPLE: **:W,J,tracker.lsdl.co.uk** set tracker.lsdl.co.uk as the server

REPLY / CONFIRMATION

SMS Format - **[DEVICE NAME],J,[GPRS SERVER],[REQUESTING MOBILE NO.]**

Example SMS - **www.tisogps.com,J,tracker.lsdl.co.uk,+447939909384**

:W,K,	**:R,K**	**GPRS PORT**	**default = 5780**		Set the GPRS Port that the Tracker will connect on.

The GPRS Port is the port that your server software or custom application is listening on, as default any software supplied via the web site listens on Port: 5780, although this is an arbitrary value that can be changed both in the device and in the software.

READ CURRENT SETTING: **:R,K**

WRITE SETTING COMMAND: **:W,K,[GPRS PORT]**

WRITE EXAMPLE: **:W,K,6001** use port 6001

REPLY / CONFIRMATION

SMS Format - **[DEVICE NAME],K,[GPRS PORT],[DATE],[TIME],[REQUESTING MOBILE NO.] or [GPRS COMMAND]**

Example SMS - **www.tisogps.com,K,+447939909384**

	:R,L	**Request Position of Device**			Request the Current Location of the device

Displays the Longitude, Latitude, Date and Time of request

READ CURRENT SETTING: **:R,L**

REPLY

SMS Format - **[DEVICE NAME],L,[LATITUDE,LONGITUDE],[REQUESTING MOBILE NO.]**

Example SMS - **www.tisogps.com,L,017.09662,59.25454,+447939909384**

	:R,M	**IMEI Number**			Return the IMEI number of the device

This will return the tracker's IMEI Number

READ CURRENT SETTING: **:R,M**

REPLY

SMS Format - **[DEVICE NAME],M,[IMEI NUMBER],[DATE],[TIME],[REQUESTING MOBILE NO.]**

Example SMS - **www.tisogps.com,M,490154203237518,+447939909384**

:W,N,	**:R,N**	**Device Name**	**default = www.tisogps.com**		Return the Device Name of the device, this name is also used in sms response messages

This is the Device Name of the tracker. The device name is the friendly name that you decide to give to it. The unit responds Www.tisogps.com by default.

READ CURRENT SETTING: **:R,N**

WRITE SETTING COMMAND: **:W,N,[DEVICE NAME]**

WRITE EXAMPLE: **:W,N,Tiso Tracker** This will write 'Tiso Tracker' to the unit

REPLY / CONFIRMATION

SMS Format - **[DEVICE NAME],N,[DEVICE NAME],[REQUESTING MOBILE NO.]**

Example SMS - **Tiso Tracker,N,Tiso Tracker,+447939909384**

:W,O,	:R,O	GPRS Operator Name / APN	default = asdamobiles.co.uk		Set the Name of the Access Point Name (APN) of the Network Operator

The GPRS Operator is always set to the Network provider of your sim card.

For example: Orange Sim cards use - orangeinternet

(See alternative GPRS configuration section for other examples)

READ CURRENT SETTING: **:R,O**

WRITE SETTING COMMAND: **:W,O,[GPRS OPERATOR NAME]**

WRITE Example: **:W,O,orangeinternet** sets orangeinternet as GPRS Operator

REPLY / CONFIRMATION

SMS Format - **[DEVICE NAME],O,[GPRS OPERATOR NAME],[REQUESTING MOBILE NO.]**

Example SMS - **www.tisogps.com,O,orangeinternet,+447939909384**

:W,P,	:R,P	Password	default = web		Set the Password used for GPRS Connections

This is the password that your network provider likes you to use when initialising a GPRS Connection

READ CURRENT SETTING: **:R,P**

WRITE SETTING COMMAND: **:W,P,[PASSWORD]**

WRITE EXAMPLE: **:W,P,aardvark** This will set 'aardvark' as the password

REPLY / CONFIRMATION

SMS Format - **[DEVICE NAME],[PASSWORD],[REQUESTING MOBILE NO.]**

Example SMS - **www.tisogps.com,P,aardvark,+447939909384**

:W,Q,	:R,Q	Min Time interval between records moving	Dafault = 180		Min.Time Interval between records whilst moving more than Changeover speed

READ CURRENT SETTING: **:R,Q**

WRITE SETTING COMMAND: **:W,Q,[MIN TIME INTERVAL]**

WRITE EXAMPLE: **:W,Q,240** This will set the minimum time to 240 seconds

REPLY / CONFIRMATION

SMS Format - **[Device Name],Q,[MIN TIME INTERVAL],[REQUESTING MOBILE NO.]**

Example SMS - **www.tisogps.com,Q,240,+447939909384**

:W,S,	:R,S	TISO ALARM WARNING MESSAGES	Default = 11	First digit is SMS and second is Website (valid 00,01,10,11)

These can be disabled, either just for SMS, Website or both.

READ CURRENT SETTING: **:R,S**

WRITE SETTING COMMAND: **:W,S,[TISO ALARM WARNING MESSAGE STATUS]**

WRITE EXAMPLE: **:W,S,00** Disable all messages

:W,S,10 Disable website messages only

REPLY / CONFIRMATION

SMS Format - **[DEVICE NAME],S,[TISO ALARM WARNING MESSAGE STATUS],[REQUESTING MOBILE NO.]**

Example SMS - **www.tisogps.com,S,00,+447939909384**

:W,T,	:R,T	Min Time interval between records stationary	default = 60

Min.Time Interval between records whilst stationary or moving less than Changeover speed

READ CURRENT SETTING: **:R,T**

WRITE SETTING COMMAND: **:W,T,[MIN TIME INTERVAL]**

WRITE EXAMPLE: **:W,T,120** This will set the minimum time to 120 seconds

REPLY / CONFIRMATION

SMS Format - **[DEVICE NAME],T,[MIN TIME INTERVAL],[REQUESTING MOBILE NO.] or [GPRS COMMAND]**

Example SMS - **www.tisogps.com,T,120,+447939909384**

:W,U,	:R,U	Username	default =web

Set the Username used for GPRS Connections

This is the username that your network provider likes you to use when initialising a GPRS Connection.

READ CURRENT SETTING: **:R,U**

WRITE SETTING COMMAND: **:W,U,[USERNAME]**

WRITE EXAMPLE: **:W,U,user1** This will set 'user1' as the Username

REPLY / CONFIRMATION

SMS Format - **[DEVICENAME],U,[USERNAME],[REQUESTING MOBILE NO.]**

Example SMS - **www.tisogps.com,U,user1,+447939909384**

:W,V,		**Factory Reset (must use last 4 digits of IMEI)**			**Factory Reset the Device(removes all user settings)**

Resets the device and all of its settings to what they were when the manufactured, all user data is erased. To do a factory reset the user must also send the last 4 digits of the IMEI number of the tracker (this can be found on the TELIT modem, or the sticker on the side of the outer box)
(This is useful if the user accidentally programmes an invalid Authorised mobile number into the device, as it clears all memory including the Authorised Mobile list)

WRITE SETTING COMMAND: **:W,V,[Last 4 IMEI digits]**

WRITE EXAMPLE: **:W,V,7518** This will set reset the box if the IMEI was 490154203237518

REPLY / CONFIRMATION

SMS Format - **[DEVICE NAME],V,[LAST 4 DIGITS OF IMEI],[REQUESTING MOBILE NO.]**

Example SMS - **www.tisogps.com,V,7518,+447939909384**

:W,W,	**:R,W**	**Geo-Fence Alarm**	**Default =0 (off)**		**Geo-Fence Alarm**

Geo-Fence alarm triggers if the unit moves out of a definable radius.
This can be useful to allow some movement (e.g. construction or farm machinery), but it will send a notification if it is moved too far. This can also be useful for boats, where the accelerometer alarm is unsuitable, due to the constant motion of the water.
The distance is measured in meters and the default setting is 0 meters (off)
To use geo-fence alarm, the accelerometer **must** be activated as well, but you can turn off the accelerometer alarm messages.
We recommend that this is set to a minimum of 100 meters if turned on to avoid false alarms, due to short inaccuracies caused when one of the tracked GPS satellites cannot be contacted for various reasons.
If the geo-fence alarm is triggered, it can be reset to the old position by sending the command **GEO**
You can reset the centre of the radius to the current position of the unit by sending **ARM**

READ CURRENT SETTING: **:R,W**

WRITE COMMAND: **:W,W,[DISTANCE IN METERS]**

WRITE SETTING EXAMPLE: **:W,W,100** This will set Geo-fence radius to 100meters

REPLY / CONFIRMATION

SMS Format - **[DEVICE NAME],W,[GEOFENCE DISTANCE],[REQUESTING MOBILE NO.]**

Example SMS - **www.tisogps.com,W,100,+447939909384**

:W,X,	**:R,X**	**"X" Relay State**	**Open (1) or Closed (0)**		**Sets the State of the External Auxiliary Relay**

This is the state of the X relay, used for immobilising vehicles.

READ CURRENT SETTING: **:R,X**

WRITE COMMAND: **:W,X,[0 or 1]**

WRITE SETTING EXAMPLE: **:W,X,1** This will set the relay state to Open

REPLY / CONFIRMATION

SMS Format - **[DEVICE NAME],X,[RELAY STATE],[DATE],[TIME],[REQUESTING MOBILE NO.]**

Example SMS - **www.tisogps.com,X,1,+447939909384**

:W,Y,	**:R,Y**	**Mileage**	**default = 0**	**Used to link the vehicle mileage to the tracker**

This is allows you to configure the mileage of the vehicle or trailer that the device is installed in. It provides you with an easy means of checking that the mileage reported by the Vehicle or Trailer matches the value stored in the device
(Due to accuracy of GPS Location systems you will always have a slight discrepancy between mileages)

READ CURRENT SETTING: **:R,Y**

WRITE COMMAND: **:W,Y,[MILEAGE]**

WRITE EXAMPLE: **:W,Y,26750** This will set the Mileage to 26750

REPLY / CONFIRMATION

SMS Format - **[DEVICE NAME],Y,[MILAGE],[REQUESTING MOBILE NO.] or [GPRS – COMMAND]**

Example SMS - **www.tisogps.com,Y,26750,111108,170647,+447939909384**

:W,Z,	:R,Z	Use Miles	default = 1

Use Miles for calculations or Kilometers

Default setting is Miles but if you want to use miles select this. Internally the tracker logs the distance it has travelled, changing this effects the calculation used for mileage/kilometers Miles = 1, Kilometers

READ CURRENT SETTING: **:R,Z**

WRITE COMMAND: **:W,Z,[0 or 1]**

WRITE EXAMPLE: **:W,Z,1** This will change the units used to miles, choose 0 for Kilometers

REPLY / CONFIRMATION

SMS Format - **[DEVICE NAME],Z,[USE MILES],[REQUESTING MOBILE NO.]**

Example SMS - **www.tisogps.com,Z,1,+447939909384**

:W,#,	:R,#	Internal Battery Warning Level	Defailt=333

Max 420 min 300

Internal battery alarm is triggered when charge falls below this point (WORKS IN ACTIVE MODE ONLY)

READ CURRENT SETTING: **:R,#**

WRITE COMMAND: **:W,#,[Level]**

WRITE SETTING EXAMPLE: **:W,#,400** This will change the internal battery warning level to 400

REPLY / CONFIRMATION

SMS Format - **[DEVICE NAME],#,[LEVEL],[REQUESTING MOBILE NO.]**

Example SMS - **www.tisogps.com,#,400,+447939909384**