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# TK-STAR TK4000 STICK GPS TRACKER USER MANUAL



## PREFACE

Thank you for purchasing the GPS tracker. This manual shows how to operate the device: read this manual carefully before using the device. Please note that specification and information contained in this manual are subject to change without prior notice. Any change will be integrated into the latest release. The manufacturer does not accept liability for any errors or omissions that may be contained in this document.

### 1. SUMMARY

This device combines the latest GPS position and GSM GPRS (mobile communication network) technologies. The tracker can be operated either by a phone call, by SMS text message, or via the internet (web application, Android and iOS App).

This product can be directly inserted into USB port in your computer, or directly inserted into another USB port;

tablet, car, powerbank etc. The tracker can also be used during charging.

TECHNICAL SPECIFICATIONS	
Dimensions	70mm x 25mm x 15mm (2.7"x0.98"x0.60 ")
Weight	40 grams
Network	GSM/GPRS
Band	850/900/1800/1900Mhz
GPS sensitivity	-159dBm
GPS accuracy	5 meters
Time To First Fix*	Cold: 45 seconds   Warm: 35 seconds   Hot status: 1 second
Car charger	Input: 12—24V   Output: 5V
Wall charger	Input: 110—220V   Output: 5V
Battery	Rechargeable 3.7V 380mAh Li-ion battery
Standby	80 hours
Storage Temp.	-40°C to +85°C
Operation Temp.	-20°C to +55°C
Humidity	5% - 95% non-condensing

*\*Time To First Fix (TTFF) is a measure of the time required for a GPS receiver to acquire satellite signals and navigation data. As well as calculating a position solution (called a fix).*

LED INDICATOR STATUS	MEANING
<b>GREEN-Solid</b>	<b>No GPRS signal.</b>
<b>GREEN-Flashing</b>	<b>GPRS communication established.</b>
<b>Center-RED-Not lit</b>	<b>Fully charged.</b>
<b>Center-RED-Solid red</b>	<b>Charging.</b>
<b>BLUE-Solid</b>	<b>Searching for GPS signal.</b>
<b>BLUE-Flashing</b>	<b>GPS location successful.</b>

Note: SMS tracking works in GREEN-Solid mode and GREEN-Flashing mode, online tracking only works in GREEN-Flashing mode, turn on GREEN-Flashing mode by sending command "gprs123456" and set APN for the tracker

## 2. INSTALLATION

### 2. 1 SIM-CARD INSTALLATION

Before starting make sure the SIM is a GSM card.

Note: insert SIM card before boot, please reboot the device if the SIM card already is installed when the device is on. Insert the SIM card mobile phone card, pay attention to the direction, in accordance with the shell icon.

## 2.2 TURNING ON THE DEVICE

Turn on the unit by pressing the “on/off” button until the indicator is on.

For first use, please initialize the unit and restore it to default setting. (Please refer to Section 3 for instructions.)

Wait for the device to acquire both Mobile network signal and GPS signal. This may take up to 40 seconds. GPS signal acquisition may take longer indoors.

Once the signals are acquired, the green and blue LEDs should be flashing as described above. You can then start setting up and operating your device as described in Section 3, 4 or 5.

## 3. COMMANDS

**Note:** ‘+space+’ means press the space key 1 time

INSTRUCTION	COMMAND	REPLY
Reboot the device	begin123456	begin ok
Change the password **	password123456+space+newpassword	Password ok
Authorize a number. Only this number will be allowed to configure and query the tracker	admin123456+space+phone number	admin ok
Remove authorized number	noadmin123456	noadmin ok
Set SOS number	sos123456+space+phone number	sos number ok
Cancel SOS number	nosos123456	nosos number ok
Obtain current position ***	G123456#	Google link
Set time zone (in relation to GMT)	timezone123456+space+1 timezone123456+space+ -1	time ok
Standby setup. Sets the number of minutes after which the tracker will go into standby mode. Default is 5 minutes	sleep123456+space+time	sleep time ok
Wake up on movement ****	sleep123456+space+shock	Sleep shock ok
Turn off Standby mode	sleep123456+space+off	sleep off ok
Exit/End Data mode	Nogprs123456	Nogprs ok
Set Data mode – the device will use data communication to send position information to our servers- *****	gprs123456	gprs ok
Set monitor mode	monitor123456	monitor ok
Set tracking mode	tracker123456	tracker ok
Format the device *****	format	

*\*\* The default password is 123456. If you change it, please replace 123456 in the commands above with the new password.*

*\*\*\* Always check the location received has been freshly calculated (GPS signal should be V:A). If the signal status is V:V, it could be that the device has entered Standby Mode. Call the number attached to the device to wake it out of Standby.*

*\*\*\*\* Sends the device into Standby Mode until movement is detected by the motion sensors, at which point, the device activates and resumes normal functioning.*

*\*\*\*\*\* To use Data Mode, the device needs to be setup to use the internet. This is discussed in Section 5 below.*

*\*\*\*\*\* This command can only be sent from an authorized number*

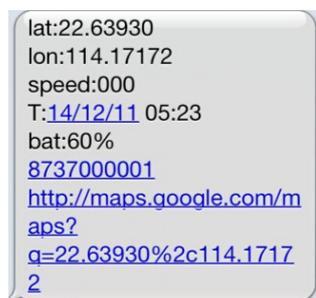
## **4. OPERATING THE TRACKER BY SMS TEXT MESSAGE**

Call the mobile number attached to the tracker and hang-up after it rings once.

The tracker will respond by sending you an SMS as described in Section 3.1 below

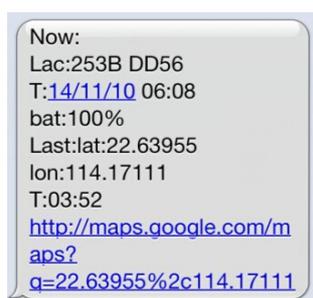
Click on the link to open google maps and see the location of the tracker.

### **4.1 EXPLANATION OF PARAMETERS/CODES IN SMS MESSAGE**



lat:22.63930  
lon:114.17172  
speed:000  
T:14/12/11 05:23  
bat:60%  
8737000001  
<http://maps.google.com/maps?q=22.63930%2c114.17172>  
2

Picture I



Now:  
Lac:253B DD56  
T:14/11/10 06:08  
bat:100%  
Last:lat:22.63955  
lon:114.17111  
T:03:52  
<http://maps.google.com/maps?q=22.63955%2c114.17111>

Picture II

**Picture I:** As a real-time positioning information of satellite signal recovery

- ◆ **lat:22.63930 lon:114.17172:** The real-time GPS position
- ◆ **Speed: 000** This indicates the latest known speed of the unit in KM/H.
- ◆ **T:14/12/11 05:23** Timestamp of the time and date when the GPS position was calculated.
- ◆ **Bat: 60%** The approximate level of the battery. A value between 10% and 100%, with 100% being fully charged.
- ◆ **8737000001:**The IMEI (International Mobile Station Equipment Identity) number of this device.
- ◆ **Google Maps link:** This is the link to the Google map showing the position of the tracker unit. Clicking on the text will open Google maps to show the position of the unit.

**Picture II:** Historical positioning information, without satellite signal (GPS) recovery but with GPRS (LBS)

- ◆ **Now: lac:253B DD56:** The real-time LBS position
- ◆ **T:14/11/10 06:08:** Timestamp of the time and date when the LBS position was calculated.
- ◆ **Bat: 100%** The approximate level of the battery. A value between 10% and 100%, with 100% being fully charged.
- ◆ **Last: lat: 22.63955 lon: 114.17111:** the last GPS position
- ◆ **T:03:52** The time the last GPS position was calculated
- ◆ **Google Maps link:** The last GPS position

## 5. OPERATING THE TRACKER ONLINE.

### COMMAND INSTRUCTION TO SET THE ACCES POINT NAME (APN)

**! Turn on GPRS function by sending comand “gprs123456” and APN must be setup for the device to be able to upload data over the internet. There are two ways to find APN out: check sim card carrier on internet or put sim card into own cell phone to find check APN**

INSTRUCTION	COMMAND	REPLY
Set new APN (any existing will be replaced)	apn+123456+space+apn content	apn ok
Set APN username	apnuser+123456+space+content	apnuser ok
Set APN password	apnpasswd+123456+space+content	apnpasswd ok
Set data upload interval ( default:120 seconds)	Upload+123456+space+30	Upload ok

Also, after setting the APN, the tracker must be set to Data mode. Ask your mobile provider for the correct APN settings. This can also be generally found in the FAQ online.

### 5.1 Using the internet

Platform : <http://3.tkstargps.net/>

IMEI: Printed on the back of the device as show in section 3.2.2 and in SMS message

Password: 123456

### 5.2 Using the App for ANDROID/iOS

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Search TKSTAR in the Apple App Store/Google Play Store to install the applications on your device.

Select “Log in by IMEI”

Server: [3.tkstargps.net](http://3.tkstargps.net)

IMEI: Printed on the back of the device as show in section 3.2.2 and in SMS message

Password: 123456