GPS TRACKER
USER MANUAL

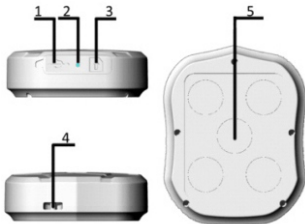## PREFACE

Thank you for purchasing WINNES GPS tracker. This manual shows how to operate the device smoothly and correctly in details, please make sure to read this manual carefully before using the device. Please be noted that any update of the manual is made without prior notice. Each time the update of the manual will be released in the latest product sales. The manufacturer won't assume any legal responsibility for any errors or omissions made in this manual.

TK905/TK905B

1.SUMMARY

Working based on existing GSM/GPRS/LTE network and GPS satellites, this product can locate and monitor any movable equipment by SMS, APP and Internet. It has the newest advanced technology of GPS and AGPS dual positioning.

Content	Specs.
Dim.	TK905: 90mm x 72mm x 22mm(3.5"*2.8"*0.8") TK905B: 90mm x 72mm x 32mm(3.5"*2.8"*1.26")
Weight	TK905: 168g / TK905B: 235g
Ver.–4GSA	LTE-FDD:B1/B2/B3/B4/B5/B7/B8/B28/B66 GSM:850/900/1800/1900MHz
GPS sensitivity	-159dBm
GPS accuracy	5m
Charging input	DC 5V ⎓ 1.0A
Battery	TK905: Rechageable 3.7V 5000mAh Li-ion battery TK905B: Rechageable 3.7V 10000mAh Li-ion battery
Stand by	TK905:60days TK905B:100 days
Time To First Fix	Cold status 45s Warm status 35s Hot status 1s
Storage Temp.	-40°C to +85°C
Operation Temp.	-20°C to +55°C

2. HARDWARE DESCRIPTION

1. USB port
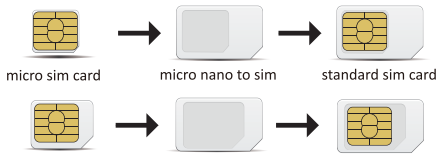2. Indicator light
3. SIM card slot
4. Lanyard hole
5. Strong Magnet

INDICATOR LIGHT STATUS	MEANING
Yellow light -Solid	No GPRS signal
Yellow light -Flash	GPRS connection
Blue light -Solid	No GPS signal
Blue light -Flash ·	GPS connection

Buy a Normal SIM card(Standard SIM card), register the SIM card and top up with credit

nano sim card → nano to sim → standard sim card

micro sim card → micro nano to sim → standard sim card

NOTE:
IF you have bought a Nano/Micro SIM card, you will need to use an adaptor to fit in.

.3.

3.TURN ON THE DEVICE

- Open the rubber cover, insert the SIM card(chip up) to the slot.
- The indicator light is on when SIM card is inserted.
- The device gets GPS location when there is GPS signal and gets LBS location when there is no GPS signal.
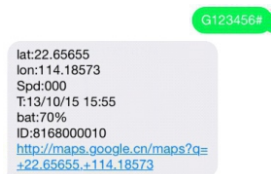- The device automatically turns off when the SIM card is removed.

Note: Don't trun on the SIM card PIN code.

4. SMS TRACKING

Note : The yellow space   is a blank in SMS command.

4.1. Call the SIM card phone number in tracker, you will receive a Google Maps link of position, or sending message "G123456#" to SIM card phone number in tracker .

E.g:

G123456#

lat:22.65655
lon:114.18573
Spd:000
T:13/10/15 15:55
bat:70%
ID:8168000010
http://maps.google.cn/maps?q=
+22.65655,+114.18573

4.2. Admin number setting (After admin number set, all SMS operations to the device are under this number only.)

Command:admin123456 phone number （This phone number is your own mobile phone number, not the SIM card number in tracker .)
Reply:admin ok

E.g:
      admin123456 13265790180

> Admin123456 13265790180

> admin ok

When the unit is in over-speed alarm, Shake sensor alarm, or low battery alarm, it will send alarm information to the admin number. (13265790180)

Admin number Canceling:
Command :noadmin123456
Reply:noadmin ok

4.3.Over-speed Alarm setting

Over-speed Alarm setting:
Command:speed123456 070 (Suppose speed is 70km/h)
Reply:speed ok

E.g:

> speed123456 070

> speed ok

When the unit speed is over 70km/h, it will send message "speed alarm!" to the admin number every 5 minutes.

Over-speed Alarm canceling:
Command :nospeed123456
Reply:nospeed ok

4.4. Shake Alarm setting

Command:shock123456
Reply:shock ok
E.g：

Shock123456

shock ok

Note:Pls keep the tracker being stationary for 5 minutes, this function will work.
The tracker will send SMS "sensor alarm!" to the admin number when the unit get shocked.

Shake alarm Canceling:
Command:noshock123456
Reply:noshock ok

4.5. Device working mode setting

Sleep by time mode setting：
Command:sleep123456 time
Reply:sleep time ok
E.g：

sleep123456 time

sleep time ok

(Tracker only works for 5 minutes after being waked up, and back to sleep mode, GPS shut off, GSM works in low consumption mode. SMS command, calling tracker can wake up the tracker.)

Sleep by shock sensor mode setting: (Factory setting is "Sleep by shock mode")
Command:sleep123456 shock
Reply:sleep shock ok

E.g:

Sleep123456 shock

sleep shock ok

(No shock for 5 minutes, the tracker will work in "sleep by shock" mode, GPS shut off, GSM works in low consumption. Vibration, SMS, calling can wake up the tracker.)

4.6. Terminal (local) Time Setting (factory setting GMT 0)

Command:timezone123456 local time zone
Reply:time ok

E.g:
timezone123456 +1
timezone123456 -1
timezone123456 0

Timezone123456 +1

time ok

4. 7. Reset Hardware
Commanda : begin123456
Reply : begin ok
E.g :

begin123456

begin ok

.7.

5. EXPLANATION OF PARAMETERS/CODES IN SMS MESSAGE

```
lat:22.63952
lon:114.17122
Spd:002
T:24/09/15 16:00
bat:100%
ID:2015070203
http://maps.google.com/maps?
q=+22.63952,+114.17122
```

```
lac:27a4 1223
T:24/09/15 15:17
bat:100%
ID:2015070203
Last:T:25/09/15 03:04
http://maps.google.com/maps?
q=+22.63949,+114.17188
```

Pic（1）   Pic（2）

Pic 1: Replied real-time tracking information under GPS satellites signal.

♦ **Lat:22.63952 lon:114.17122**   Positioning of the latitude and longitude values.

♦ **Spd:000**   This refers to the device moving speed. The unit is km/h.

♦ **T:24/09/15 16:00**   real-tracking time, the Default is London time. You can set language and time zone in APP.

♦ **Bat:100%**   The battery value is between 10% and 100%. Once it is less than 30%, it alarms.

♦ **2015070203** Device ID No. to log in APP and platform.

♦ **Google Link**   This is the link to the Google map showing the position of the device.

Pic 2: Replied LBS tracking information without GPS satellites signal.

◆ **Lac:27a4 1223** Real-time LBS positioning data.

◆ **T:24/09/15 15:17** LBS positioning time.

◆ **Bat:100%** The battery value is between 10% and 100%. Once it is less than 30%, it alarms.

◆ **Last:T:25/09/15 03:04** This is the time when tracker got last GPS signal.

◆ **Google Link** This is the position of last gps signal appeared.

6. START ONLINE TRACKING

6.1. Set the APN for the tracker, then its online tracking by APP and platform works.

(Note: If you inserted the correct SIM Card and the device is online on the APP, no need to send the following APN setting commands.**)**

Every sim card carrier has own APN content, we have two methods to find out apn content : check sim card carrier on internet or put sim card into cell phone to find out APN.

Set apn by sending command "apn123456 content" , "apnuser123456 content" ,"apnpasswd123456 content" pls note the content is from SIM card carrier , there is small blank after 123456 in every command.

COMMAND INSTRUCTION TO SET APN

INSTRUCTION	COMMAND	REPLY
Set APN (any existing will be replaced)	apn123456 xxxx	apn ok
Set APN username	apnuser123456 xxxx	apnuser ok
Set APN password	apnpasswd123456 xxxx	apnpasswd ok

E.g:

For vodafone mobile SIM card in Germany, we got APN information below.

APN name:web.vodafone.de

APN username:vodafone

APN password:vodafone

Send SMS to set apn below:

1. apn123456 web.vodafone.de

2. apnuser123456 vodafone   (no need to set if without apnuser)

3. apnpasswd123456 vodafone (no need to set if without password)

6.2. WEBSITE TRACKING

Website: www.mytkstar.net

Select "Log in by IMEI/ID" on the bottom of screen

IMEI/ID No. : on the back side of cover.

Password: 123456

6.3. APPLICATIONS FOR ANDROID/IOS

Search "WINNES GPS" in the Apple App Store/Google Play Store or Scan the QR Code to install the applications on your cell phone.

WINNES GPS
Utilities

6.3.1. Login by IMEI/ID (Only one tracker)

Select "Log in by IMEI/ID" on the bottom of screen

Server: www.mytkstar.net

IMEI/ID No. . : on the back side of cover.

Password: 123456

6.3.2. login by username

Note: If you have two tracking devices or more, you need to contact the seller customer service first to create an account for your devices. You can login by username when you get a username and password.

Select "Log in by username" on the bottom of screen
Server: www.mytkstar.net
username:contact the seller customer service to create it.
Password:123456

6.3.3. Real-time tracking

Real-time tracking not only can track the position of the device, but also can track the position of smart phone.
On map click "+" and "-" to zoom in and zoom out the map.
Click "   " to view different location between smart phone and device, and click "   " to change the map vision between 2D/3D.

EXPLANATION OF OTHER ICONS IN APP:

Historical route: It could find the route map for nearly six months by choosing the beginning and ending time.
Geo-fence: It will generate an alarm on App when the device is out of the Geo fence you set.
Issue: Issue commands to the device.
Device info: The information of device.
Device message: The alert message generated by the device.
User Info: The information of account.
Alarm setting: Turn on/off the different alarm types for the device.

7. Notices:

1. GPS tracking can be worked outdoor.
2. Please make sure SIM card supports making calls, sending messages, GPRS network.
3. Please make sure SIM card is with sufficient balance.
4. Please make sure the SIM card has opened the call shows and turned off the call transfer.
5. Please insert the SIM phone card correctly.
6. Do not assembly and disassembly device at will.

8. FAQ and processing methods.

1.Fail to turn it on:
- Please check if battery is charged.

2.No SIM signal:
- Please check if SIM card installed correctly.
- Please check if SIM card is Support the device's band network.
- Don't turn on the PIN code.
- No calls can be diverted.

3.No GPS signal:
- A more open view of the sky is recommended to make sure the device can receive the GPS signal normally.

4.No reply to SMS command:
- The command format is wrong or insufficient SIM card balance.
- Please make sure SIM card has sufficient balance, and supports making calls, sending messages, GPRS network,and has opened the call shows and turned off the call transfer.

5.SMS position OK, cannot use the APP and web platform:
- Please check if APN is correctly set. And find out the correct APN content of the SIM card. (Pls refer to 6.1 setting.)

6.Platform position is difference from the actual position:
- No uploading position time or no GPS signal: call the device phone number and receive the position message. If it shows like Pic 2, it means no GPS signal. The position is the last GPS positioning location; If it shows like Pic 1, it means the device doesn't reach the uploading time.

FCC Statement

This device complies with part 15 of the FCC rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

•Reorient or relocate the receiving antenna.

•Increase the separation between the equipment and receiver.

•Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

•Consult the dealer or an experienced radio/TV technician for help.

The device has been evaluated to meet general RF exposure requirement. The device can be used in portable exposure condition without restriction.

Specific Absorption Rate (SAR) information:

This device meets the government's requirements for exposure to radio waves. The guidelines are based on standards that were developed by independent scientific organizations through periodic and thorough evaluation of scientific studies. The standards include a substantial safety margin designed to assure the safety of all persons regardless of age or health. FCC RF Exposure Information and Statement the SAR limit of USA (FCC) is 1.6 W/kg averaged over one gram of tissue. Device types: This device has also been tested against this SAR limit. This device was tested for typical body-worn operations with the back of the phone kept 10mm from the body. To maintain compliance with FCC RF exposure requirements, use accessories that maintain an 10mm separation distance between the user's body and the back of the device. The use of belt clips, holsters and similar accessories should not contain metallic components in its assembly. The use of accessories that do not satisfy these requirements may not comply with FCC RF exposure requirements, and should be avoided.