

MT909 4G GPS Tracker

User Manual V1.0



Preface

Congratulations on choosing the Mictrack MT909 4G GPS tracker. This manual shows how to easily program and setup the tracker for best results. Make sure to read this manual carefully before using this product, so as to avoid delays or confusion with it's operation. Please note that specifications and instructions are subject to change without notice to facilitate product improvement. Updates and changes will be integrated into the latest release. The manufacturer assumes no responsibility for any errors or omissions in outdated documents.

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1. Overview

The MT909 is the 4G GPS tracker, supporting 4G LTE/2G GSM networks. This device can be used locate, track and monitor any remote target via SMS, PC Computer or Mobile APP. It is commonly used to track and locate individual vehicles, motorbikes or boats, and is a valuable tool for enhanced fleet management. The user can check the historical route travelled and other vehicle data.

The MT909 has an excellent track record for stable performance and possesses a wide variety of features.

2. Application

- 4G LTE with 2G Fallback
- Real-time tracking
- GPS, LBS and AGPS positioning
- SOS alert
- Low battery alarm
- Smart motion detection
- Power saving / sleep mode
- Easy Installation (Built-in powerful magnet)
- Waterproof IP65
- PC and Mobile APP tracking
- Programmable via web, USB or SMS
- Open protocol and easy to integrate

3. Applications

- Personal Tracking
- Vehicle Tracking
- Asset Tracking
- Container Tracking
- Logistics Tracking

4. Specifications

Item	Specifications
Dimension	78(L)*39(W)*29(H)mm
Weight	123g
Charging Mode	USB-C charging DC 5V

Item	Specifications
Backup battery	Rechargeable 3.7V 3000mAh Li battery
Power consumption	8mA standby current
Working temperature	-20°C to 55°C
4G Bands	4G LTE: B1/B2/B3/B4/B5/B7/B8/B28/B66 2G:850/900/1800/1900MHz
Working temperature	-20°C to 60°C (-4°F to 140°F)
GPS Sensitivity	-162dBm
Positioning Accuracy	5-10m
Warm start	15s on average
Cold start	30s on average
Humidity	5%~95% non-concretion
Antennas	Internal 4G & GPS antennas
Sensor	3D acceleration/movement sensor
LED	Network/CHG/GPS
SIM Card interface	Micro Size SIM (3FF)
Protocol	TCP, SMS
Waterproof	IP65

5. MT909 Interface



6. In the box

6.1 Standard Accessories

- 1* MT909 GPS Tracker
- 1* USB-C charging cable
- 1* Screwdrivers

7. Installation

7.1 SIM Card installation

- Get ready a Standard size SIM Card with 30MB data a month.
- Open the back cover
- Insert Micro Sim card (3FF) to sim card slot correctly
- After that the device will be ready.

7.2 Power ON & Power OFF

- Insert the sim card to POWER ON
- Remove the sim card to Power OFF

7.3 LED Indications

7.3.1 Blue LED - GPS indicator

Status	Description
Flashing	GPS is unavailable or searching the GPS
Solid Blue	GPS is available
OFF	GPS in sleep

7.3.2 Red LED - Charging indicator

Status	Description
OFF	No charge or fully charged
Solid Red	In charging

7.3.3 Yellow LED - Network indicator

Status	Description
Solid Yellow	Network work
Flashing	Network is unavailable or searching the network
OFF	Device is sleep or Power OFF

7.4 Install the Device

Following a successful command, you should always receive a reply SMS from the unit. Be patient, as this may take some time depending if the unit is required to reboot to process the command. Failure to reply will indicate either an incorrect SMS Command, or the unit has powered off, lost Cell Mobile signal or run out of SIM Card credit.

7.5 Setting Authorized Mobile Phone Numbers

Command: admin,password,number

Example: admin,123456,13424392330

Reply: admin ok

Note:

- The devices only support one center phone number
- The defaulted password is 123456.

7.6 Change the password

Command: password,old password,new password

Example: password,123456,000000

Reply: password ok

Note: The password should consist of 6 digits or letters.

7.7 Request the single position

Command: G1234

When sent this command to device, it will reply the location by using Google Link.

<https://maps.google.com/maps?q=+22.64819,+114.03435>

ID:7026181031

ACC:OFF

GPS:A

Speed:0.00KM/H

25-06-23 15:35:23

7.8 Over-Speed alarm

Command : speed,password,speed value

Example: speed,123456,080

Reply: speed ok

Disable Over-Speed Alarm

Command : speed,password,000

Command : speed,123456,000

Reply: speed ok

Note:

- Speed unit is KM/H and the range is [0, 999].
- Device will call and send alarm message to authorized phone number.

7.9 Phone Alarm for shake

Disable phone alarm for shake: 121#

Reply: OK

Enable phone alarm for shake: 122#

Reply: OK

7.10 SMS Alarm for shake

Disable SMS alarm for shake: 126#

Reply: OK

Enable SMS alarm for shake: 125#

Reply: OK

7.11 Low Battery Alarm

While device detect internal battery is low power, it will send message "Your tracker is low power, please recharge it" to Center Number .

7.12 Working Mode

7.12.1 Normal Mode

Command: nmod,password

Example : nmod,123456

Reply: OK

Note: In normal mode, the device reports to the server every 30 seconds. After 5 minutes without movement, it enters standby mode (heartbeat every 5 minutes to maintain connection). Vibration or SOS button press wakes the device.

7.12.2 Smart Mode

Command: tmod,password, T

Example : tmod,123456,5

Reply: OK

Note:

- In this mode, the device wakes every T minutes, operates for 2 minutes, then sleeps until the next cycle. During inactive periods, it stays asleep and can't be woken by vibration or the SOS button.
- T is the wake up interval time and the range is [5,720] minutes.

7.12.3 Power Saving Mode

Command: smod,password

Example: smod,123456

Reply: OK.

Note: In power-saving mode, the device reports to the server every 30 seconds. After 2 minutes without movement,, it will go to sleep. Wake via vibration or SOS button press.

7.12.4 Setup Interval Time from Wake Up

Command: FREQ,password,T

Example : FREQ,123456,30

Reply : OK

Note: T is [10,3599] seconds and default is 30 seconds. When device not go to sleep and

it will report as this interval time.

7.12.5 Set Sleep Time

Command:sleep,password,T

Example: sleep,123456, 5

Note: if the device no movement in T minutes and tracker will go to sleep, T is [1-1440] minutes,

7.13 Set Heartbeat Interval Time

Command for set heartbeat time:interval,password,X

Example: interval,123456,600

Reply: OK

Note: The unit of X is L second, the max time is [10,65535] seconds

7.14 Set APN (Access Point Name)

Command: APN,password,apn

Example: apn,123456,cmnet

Unit Reply: apn ok.

APN user name:apn+password+space+user

Example: apnuser123456 internet

Reply: APN OK

APN password:apnpassword+password+space+password

Example: apnpassword123456,internet

Reply: APN OK

Note: please contact your SIM Card provider to get the correct APN details

7.15 Set Server IP and PORT

Command : IP+ space+ IP address+ space+ port number

Example:IP 113.98.254.180 8185

Reply: SET OK.

7.16 SOS Alarm

Press the SOS button four times consecutively to send an SOS event to the platform.

7.17 Reboot

Command : CQ

Reply: system reset ok!

7.18 Reset

Command : FORMAT

Reply: OK

Any questions please do not hesitate to contact us:



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