

MT600 4G GPS Tracker

User Manual V3.0



Preface

Congratulations on choosing the MT600 4G Vehicle 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 its 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 The manufacturer assumes no responsibility for any errors or omissions in outdated documents.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 MT600 is the latest technology 4G GPS tracker, fully supporting 4G LTE mobile 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 also can remotely cut off Fuel / Ignition and check the historical route travelled and other vehicle data.

The MT600 has an excellent track record for stable performance and possesses a wide variety of features.

2. Application

● 4G LTE network support (fallback to 3G/2G network)

- Real-time tracking
- Vehicle trip history and mileage data on web server
- SOS alarm reporting (optional)
- ACC switch status report
- Geo-Fence alarm and reporting
- External power cut off alarm
- Remote cut off fuel / ignition (optional)
- Vehicle towing / Movement alarm
- Over-Speed alarm and reporting
- Backup battery low power alarm
- Car battery low power alarm
- High temperature alarm
- Power saving / sleep mode

3. Specifications

Item	Specifications
Dimension	90(L) x 70(W) x 24(H) mm
Weight	138g
Input Voltage	12-36 VDC
Backup battery	3.7 V 500 mAh
Power consumption	50mA standby current
Working temperature	-20°C to 60°C
Humidity	5%~95% non-concretion
Working Hours	10 hours in power-saving mode, 4 hours in normal mode

Item	Specifications
LED Indicator	4G(blue), GPS(green), Power(red)
Sensor	3D acceleration/movement sensor/ temperature sensor
Antennas	External 4G & GPS antennas
GPS Sensitivity	-162dBm
Positioning Accuracy	2.5m
4G Frequency bands	MT600-E (For Europe/Asia/Australia) 4G LTE: B1/B3/B5/B7/B8/B20 3G WCDMA : 850/900/2100MHz 2G: 900/1800MHz MT600-A (for US/Canada) 4G LTE: B2/B4/B12 3G WCDMA: 850/1700/1900MHz MT600-V (for Verizon) 4G LTE: B4/B13 MT600-AU (For Europe/Asia/Australia) 4G LTE: B1/B2/B3/B4/B5/B7/B8/B28/B40 3G WCDMA: 850/900/1900/2100MHz 2G :850/900/1800/1900MMz MT600-AUT (for AU Telstra) 4G LTE: B1/B3/B5/B7/B28 3G WCDMA: 850/2100MHz Note: Please select correct device according to your local frequency band, or contact us for help.

4. MT600 and Accessories

Standard accessories:



Optional accessories:

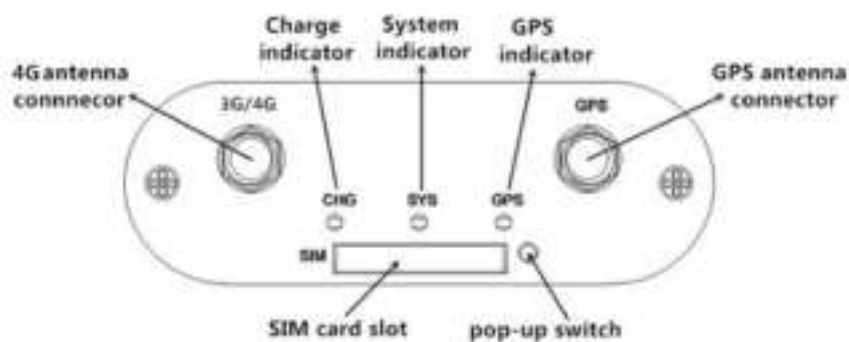


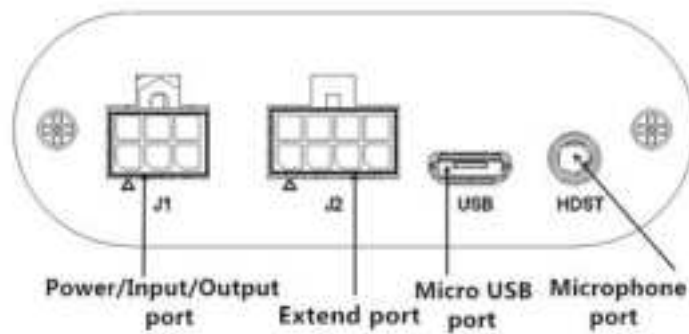
SOS Button



Relay(12V)

5. Unit Diagram





6. Installation

6.1 SIM Card installation

1. Insert the SIM card into the SIM card plastic tray.
2. Ensure the SIM card has metal contacts facing up (Diagram #1).
3. Gently slide the SIM Tray into the SIM Slot (Diagram #2).

Note:

- The device only supports **Standard Size SIM card**;
- To remove SIM card, use paperclip to press the SIM card pop-out button to eject the SIM card tray.

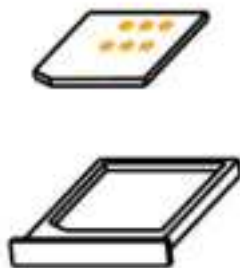


Diagram #1

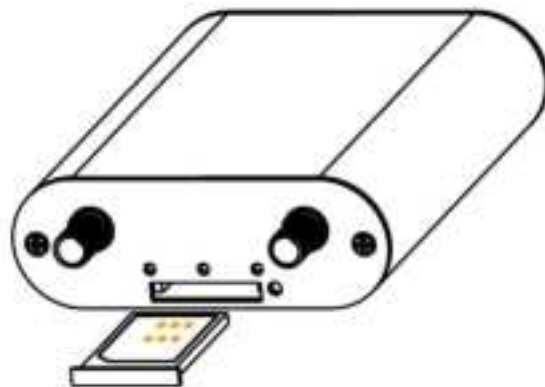


Diagram #2

6.2 LED Indications

6.2.1 CHG-Charge indicator (RED)

Status	Description
Constant ON	Currently Charging
OFF	Charging Complete or sufficient battery. (Note: it will auto-charging when backup battery voltage is low and LED light, or LED will no light any more.)

6.2.2 SYS-System indicator (BLUE)

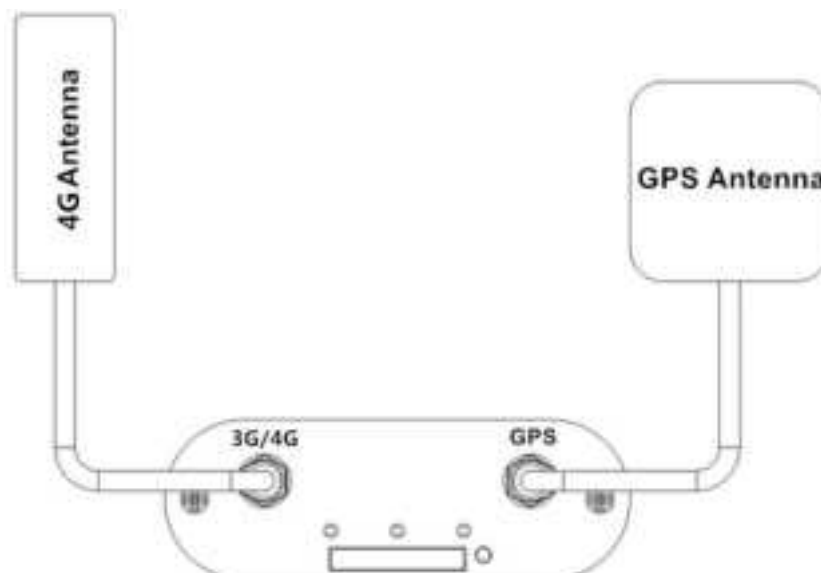
Status	Description
Constant ON	No SIM Card (or) No Network Reception
OFF	Vehicle Parked – ACC Power OFF
Quick flash	Normal Working Mode

6.2.3 GPS-GPS indicator (GREEN)

Status	Description
OFF	GPS / Satellites Unavailable – Out of Range
Quick flash	GPS/Satellite Locked – Normal Mode

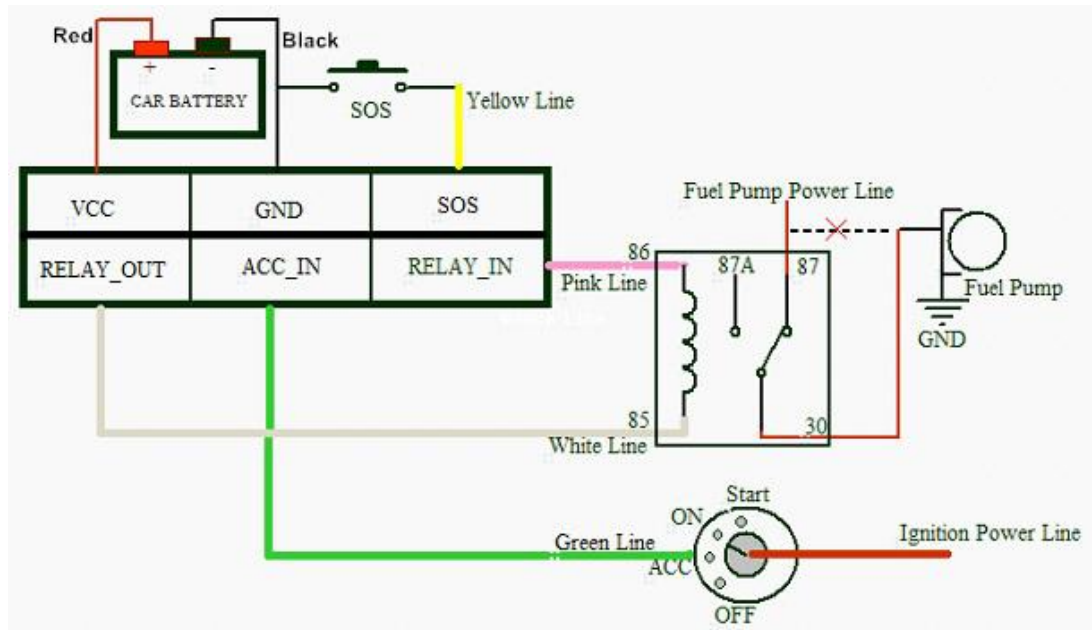
6.3 Device Button Instruction

Button	Description
Power ON/OFF	● Insert the SIM tray to POWER ON the unit; Take out SIM tray to POWER OFF the unit ● Connect the external power to POWER ON; Disconnect the power to POWER OFF

6.4 Install 4G & GPS Antenna

- Connect the 4G Antenna firmly to "3G/4G" Socket
- Connect the GPS Antenna firmly to "GPS" socket

6.5 Connection of supplied wiring loom



When installing the device, please connect supplied wiring loom as follows: (or contact us for help)

- **Red:** Connect to constant 12V Car Battery(+)
- **Black:** Connect to Earth (Chassis) Car battery(-)
- **Green:** Connect to ACC switched 12V Power
- **Yellow:** Connect to **red** wire of supplied SOS switch
- **White:** Connect to Relay terminal (85)
- **Pink:** Connect to Relay terminal (86)

Note: Relay is optional for remote fuel / ignition shut-off.

6.6 Install the SOS switch (optional)

- **Red:** connect to Yellow wire from supplied wiring loom
- **Black:** connect to Earth (Chassis) Car battery(-)

Note: installation Video: <http://youtube.com/c/mictrackgps>

7. Setup and Configuration

Note: When sending SMS command to the unit, do NOT use spaces or symbols not listed below. [brackets and + are for instructional use only] * and # are valid command parameters.

7.1 Setting Authorized Mobile Phone Numbers

SMS Command format: mobile number+password+[command parameter]

Note: Command Parameter here is the sequence of the mobile number

i.e. [1=Admin] or [2=SOS call number]

For example: *13424392330*0000*1**

Unit Reply: SET USER NUMBER 1 OK.

Note:

- The defaulted password is 0000.
- It can authorize up to 3 phone numbers.

7.2 Deleting authorized number

SMS Command format: password+number+[command parameter]

Note: Command Parameter here is the sequence of the mobile number
i.e. [1=Admin] or [2=SOS call number]

For example: **0000*1**

Unit Reply: DELETE USER NUMBER 1 OK.

7.3 Changing the Admin password

SMS Command format: 777+new password+old password

For example: 77712340000

Unit Reply: SET USER PASSWORD OK.

7.4 Instant Location Request (used to receive unit location via SMS)

SMS Command format: 666+password

For example: 6660000

When sent, this command will result in a Unit Reply SMS as follows:

ID:865662000409210

Date:05:36:59 11/11/2016

Fix:A State:SMS

<http://maps.google.com/maps?q=+22.63146%2c1+14.03701>

Note: This link can to be opened on any Smart Phone to reveal the Google Maps Location of the unit at the time of request

7.5 SOS Alarm (optional)

When the SOS button is pressed for 3 seconds, the unit will automatically send it's location to authorized phone number via SMS, and also upload location data to the Web Tracking Platform server along with the status description "SOS"

7.6 Round Geo-fence (Setting of size and shape of Geo-Fence)

SMS Command format: 005+password+R+[Command Parameter]

Note: Command Parameter here is fence diameter in KM [0.1~999.9]

For example: 0050000R1.0

Unit Reply: SET ROUND GEO-FENCE:ON

7.6.1 Enable the Round Geo-fence

SMS Command format: 211+password

For example: 2110000

Unit Reply: SET ROUND GEO-FENCE: ON.

7.6.2 Disable the Round Geo-fence

SMS Command format: 210+password

For example: 2100000

Unit Reply: SET ROUND GEO-FENCE: OFF.

7.7 Square Geo-fence (Setting of dimensions and shape of Geo-Fence)

SMS Command format: 006+password+G1,IO/I/O,E/W longitude upper limit+N/S latitude upper limit,E/W longitude lower limit+N/S latitude lower limit.

For example: 0060000G1,IO,E114.04540N22.59034,E114.05978N22.59797

Unit Reply: SET SQUARE GEO-FENCE1(IO)OK.

7.7.1 Enable the Square Geo-fence

SMS Command format: 311+password

For example: 3110000

Unit Reply: SET SQUARE GEO-FENCE: ON.

7.7.2 Disable the Square Geo-fence

SMS Command format: 310+password

For example: 3100000

Unit Reply: SET SQUARE GEO-FENCE: OFF.

7.8 Remote cut off fuel and ignition (optional)

To remotely Cut-Off fuel or power

SMS Command format: 940+password

For example: 9400000

Unit Reply: SET OILWAY DISCONNECT.

To remotely Resume fuel or power

SMS Command format: 941+password

For example: 9410000

Unit Reply: SET OILWAY RECOVERY CONNECT.

Note: The default setting for the Cut-Off feature is OFF

7.9 External power cut off alarm

If the external power to the unit is disconnected, [i.e. unit tampering or vehicle battery removal] the unit will call the authorized phone numbers, and then send location data to the authorized phone number and upload location data to the Web Tracking Platform server along with the status description “DEF”

7.10 Towing alarm

If the vehicle was be moved or towed when ACC is turned OFF, it will SMS location data to the authorized phone number, and upload location data to the Web Tracking Platform server along with the status description “TOWED”

7.11 Low battery Alarm (internal backup battery)

When the unit's internal backup battery is low, it will SMS the authorized phone number, and upload location data to the Web Tracking Platform server along with the status description “BLP”

7.12 Low battery Alarm (Vehicle Battery)

When the vehicle battery is low, it will SMS the authorized phone number, and upload

location data to the Web Tracking Platform server along with the status description “CLP”

7.13 High Temperature Alarm

When the devices internal temperature is high [preset value] it will SMS the authorized phone number, and upload location data to the Web Tracking Platform server along with the status description “HT”

7.14 Over-Speed alarm (Alerts that the unit is exceeding a preset speed)

SMS Command format: #122#user password#[Command Parameter]##

Note: Command Parameter here is [Km/Hour]

Example: #122#0000#100##

Unit Reply: SET SPEED LIMIT:ON

To disable the Over-Speed Alarm

SMS Command format: #122#0000#0##

Note: Command Parameter here is [0=OFF]

Unit Reply: SET SPEED LIMIT:OFF.

Note: Speed is in KM/H, Maximum setting = [999].

7.15 Set time zone

SMS Command format: 896+password+ [+/-]HH:MM

Note: Command Parameter here is [Plus or Minus GMT]&[Hours/Minutes]

For example: 8960000+10:00

Reply: SET TIME ZONE:+08:00

Note: The default is Greenwich Time (UTC). [i.e. Melbourne Australia = +10:00]

7.16 Set APN (Access Point Name)

SMS Command format 1: #803#password#APN##

For example : #803#0000#telstra.internet##

SMS Command format 2: #803#password#APN#APN user name#APN password##

For example: #803#0000#CMNET#INTERNET#INTERNET##

Reply: SET GPRS APN OK.

Note: Please **CALL** your SIM Card provider to get the correct APN info.

7.17 Set Tracking Server IP and PORT

SMS Command format: #804#password#IP address(or domain) #port##

Example: #804#0000#112.95.164.248#7700##

Reply: SET SERVER IP AND PORT OK.

7.18 Set GPRS Upload Interval Time

This sets how often [in seconds] the unit sends location data back to the Tracking Platform whilst the ACC is switched on. This will affect accuracy and data usage.

7.18.1 ACC ON (Upload default status is AUTO)

SMS Command format: #805#password#interval time#[command parameter]##

Note: Command Parameter here [1=ON] & [0=OFF]

For example: #805#0000#10#1##

Unit Reply: SET GPS PERIODIC UPLOAD ON.

Note: interval time maximum [10,65535]seconds

Unit Reply: SET GPS PERIODIC UPLOAD OFF.

7.18.2 Vehicle Towed Alarm (vehicle moves whilst ACC is turned OFF)

SMS Command format: #809#password#interval time#[command parameter]##

Note: Command Parameter here [1=ON] & [0=OFF]

For example: #809#0000#10#1##

Unit Reply: SET GPS TOWED UPLOAD ON.

Note: interval time maximum [10,65535]seconds

Unit Reply: SET GPS TOWED UPLOAD OFF.

7.18.3 ACC OFF & Vehicle Stationary (Upload status is AUTOLOW)

[Periodic upload of vehicle status to the Web Tracking Platform server whilst ACC off
– variable to save SIM data costs when parked for long periods and Power Saving]

SMS Command format: #807#password#interval time##

For example: #807#0000#2##

Unit Reply: SET GPS POWER SAVING UPLOAD ON.

Note: interval time maximum [2,1440] minutes [If interval time = 0, it will stop upload]

Unit Reply: SET GPS POWER SAVING UPLOAD OFF.

7.19 SMS Response ON/OFF

To turn SMS messages OFF

SMS Command format: 160+password

For example: 1600000

Unit Reply: SET SEND SMS:OFF.

To turn SMS messages back ON

SMS Command format: 161+password

For example: 1610000

Unit Reply: SET SEND SMS:ON.

Note: if you want to disable the SMS alerts, send **1600000**

7.20 Unit Phone Calling Control (useful for SIM Card data cost saving)

To turn OFF unit Calling Alerts

(i.e. to save SIM data costs)

SMS Command format: 150+password

For example: 1500000

Unit Reply: SET VOICE CALL:OFF

To turn ON unit Calling Alerts

SMS Command format: 151+password

For example: 1510000

Unit Reply: SET VOICE CALL: ON\

Note: if you want to disable the call alerts, send **1500000**

7.21 Set GPRS mileage and trip distance reporting

This sets how often [in kilometres] the unit uploads data of “trip distance travelled” back to the Tracking Platform whilst the ACC is switched on. This will affect accuracy and data usage. This setting is often used for International Shipping clients and Trucking Fleets to save data on long journeys.

7.21.1 Set upload interval distance

SMS Command format: #141#password#[command parameter]##

Note: Command Parameter here is [0=OFF] & [1000=1000 Kms]

Unit Reply: SET GPS MILEAGE STATISTICS:ON/OFF

7.21.2 Clear the distance data

SMS Command format: #142#password#[command parameter]##

Note: Command Parameter here is [0=clear current trip distance]

& [1=clear total distance travelled]

Unit Reply: SET GPS MILEAGE STATISTICS:CLEAR CURRENT/ALL

7.21.3 Check the current trip distance travelled

SMS Command format: #143#password##

For example: #143#0000##

Unit Reply: TOTAL GPS MILEAGE:X.X Km

CURRENT GPS MILEAGE:X.X Km

8. App & PC Tracking platform

8.1 Active the device ID number

8.1.1 Contact with your sales or distributor

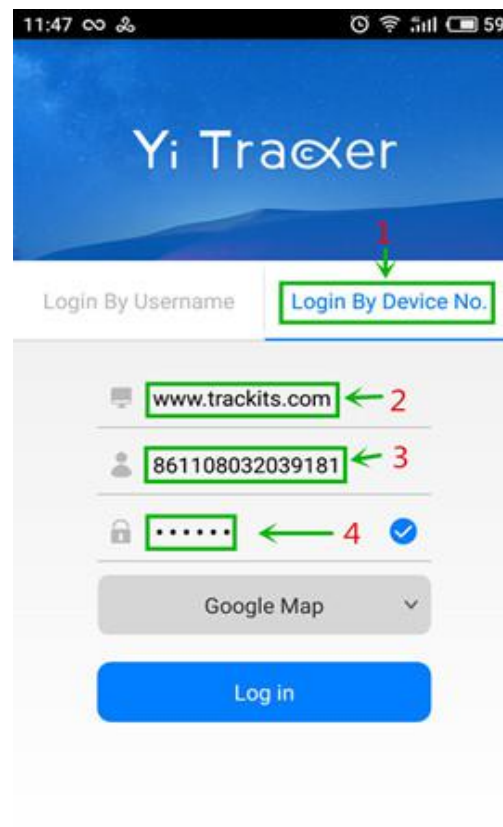
8.1.2 If not please subscribe the server plan from official online shop:

<https://www.mictrack.com/shop/gps-tracking-platform-service>

And then leave the device's ID number to active.

8.2 App install and login

- Search “Yi tracker” in Google Play or iOS store to download the Mobile App(do not select Yi tracker2)
- Choose the “Login by Device No.”
- Input server www.trackits.com
- Input **your device's ID number** and password(default is 123456, you can change the password later)



8.3 PC login

- Web: www.trackits.com
- Choose "ID No."
- Input **your device's ID number** and password(default is 123456)



9. Troubleshooting

Issues	Caused	Solutions
Send SMS to the device but no reply	1>Data only SIM card and don't supported SMS service, 2>New SIM card have not active 3>Card balance is not enough	Please check the SIM card status and make sure it can work.
	Command is wrong	Please check the command format again
	Password is wrong	Please check the password again (default is 0000)
	4G antenna install wrong	Please check the 4G antenna if install correct.
Can not get the location	GPS antenna install wrong	Please check again
Can not power on	Backup battery is low voltage	Please try to connect 12V
Charge Led no light	Backup battery voltage is over 3.7V.	The device will auto-charge once detect to low voltage and then LED light, or LED will not light.
Device Can not online on the server	Device ID is wrong	Please check the ID
	Device have not active on server	Please contact your sales to active your device's ID
	The IP and port setup wrong	Check the IP and port again
	APN setup error	Check the APN setting again

Tips:

- How to setup APN: <https://www.mictrack.com/apn-settings-for-mictrack-gps-trackers>
- How to use Mictrack Server: <https://www.mictrack.com/how-to-use-mictrack-server>
- Global Frequency bands check: <https://www.mictrack.com/4g-lte-frequency-bands-list>

Note: Please remember to monitor the credit balance of your SIM card, to avoid confusion or delays in setting up your new unit. This can be a common issue, especially when initially setting up a new unit, and the unit fails to reply to a correct SMS command sequence.

If you have any questions please contact us info@mictrack.com.