MP90 4G OBD Tracker

User Manual V1.0

Preface

Congratulations on choosing Mictrack MP90 4G OBD 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 The manufacturer assumes no responsibility for any errors or omissions in outdated documents.

Contents

1. Overview

The MP90 is a plug-and-play 4G OBD tracker without wiring. Easy install to any vehicle with a standard OBD II connector. It can be used locate, track and monitor the vehicle via SMS, PC Computer or Mobile APP. It is commonly used to track and locate individual vehicles, the user also can real time tracking and check the historical route travelled.

2. Application

- **4G LTE network support(can fall back to 3G/2G)**
- OBD II connector easy to install (Plug and Play)
- Real-time position acquiring
- Vehicle trip history and mileage data on web tracking platform
- Geo-Fence alarm and reporting
- Vehicle towing / Movement alarm
- Over-Speed alarm and reporting
- Remove and disconnect alarm
- Backup battery low power alarm
- Power saving / sleep mode
- Mileage report
- Compatible with most of third party platform
- Open protocol

3. Specifications

Item	Specifications
Dimension	67(L)*50(W)*25(H)mm
Weight	65g
Input Voltage	12V-24VDC
Backup battery	3.7 V 120 mAh; 50mA standby current at 12 V
Power consumption	50mA standby current at 12 V
Working temperature	-20°C to 55°C
Humidity	5%~95% non-concretion
Working hour	2 hours in power-saving mode, 0.5 hours in normal mode
LED indicator	4G(RED),GPS(BLUE)
Sensor	3D acceleration/movement sensor/ temperature sensor
Antenna	Internal 4G & GPS antennas
GPS Sensitivity	-162dBm

Item	Specifications
Positioning Accuracy	5-10m
Cellular Frequency bands	**MP90-E** (Asia/Europe/Africa) 4G LTE: B1/B3/B7/B8/B20/B28A 3G WCDMA : 900/2100MHz 2G: 900/1800MHz **MP90-A** (US/CA/Mexico) 4G LTE: B2/B4/B12 3G WCDMA: 850/1700/1900MHz **MP90-AU** (Australia/New Zealand) 4G LTE: B1/B2/B3/B4/B5/B7/B8/B28/B40 3G WCDMA: 850/900/1900/2100MHz 2G :850/900/1800/1900MMz

4. MP90 interface
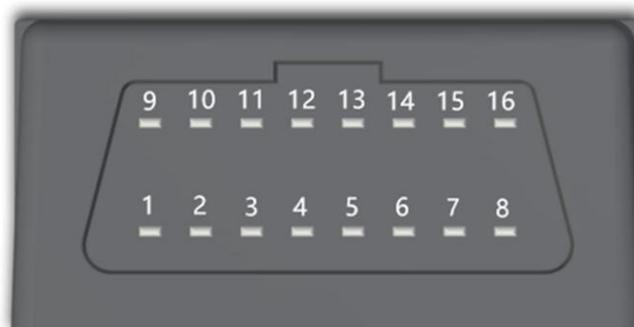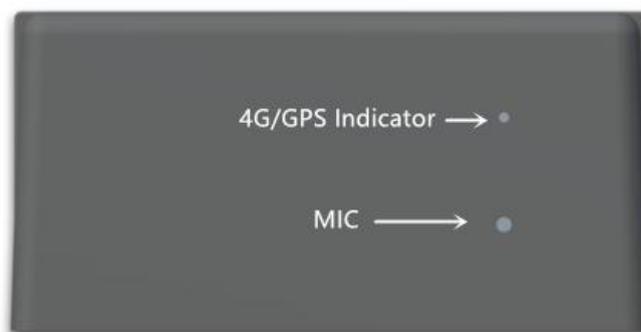
5. Installation

5.1 SIM Card installation

To install the SIM card, perform the following operations:

- Gently open the back case using screwdrivers((Diagram #1).
- Take out the over and **First** Insert SIM card to the SIM card slot(Diagram #2)
- **Second**, Insert battery wire to connector
- Attach back housing cover
- Device is ready

Note:

- The device only supports **Micro Size SIM card**;
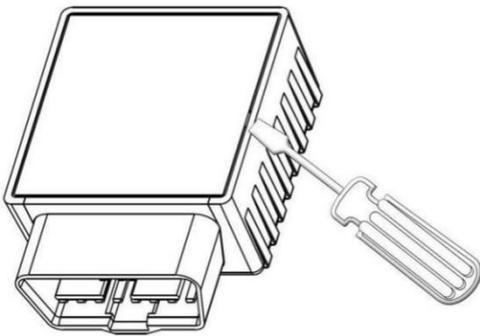
(Diagram #1)
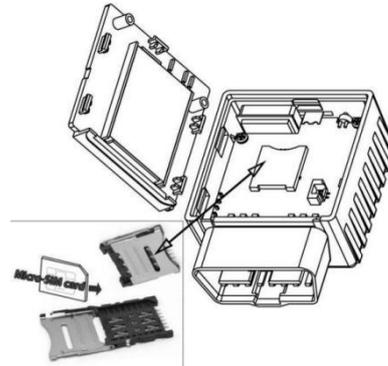
(Diagram #2)

5.2 Install the Device

Directly insert the ODB tracker to vehicle's OBD2 interface

5.3 LED Indications

5.3.1 SYS-System indicator (RED)

Status	Description
Always ON	No SIM Card (or) No Network Reception
Quick flash	Access network successful

5.3.2 GPS-GPS indicator (BLUE)

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

6. 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.

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 GSM Mobile signal or run out of SIM Card credit.

6.1 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.

6.2 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.

6.3 Changing the Admin password

SMS Command format: 777+new password+old password
For example: 77712340000
Unit Reply: SET USER PASSWORD OK.

6.4 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:861108030047996
Date:06:39:02 14/03/2017
Fix:A   State:SMS
http://maps.google.com/maps?q=+22.63146%2c+114.03701
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

6.5 Instant Location Request (Phone Call Activated)

If the unit receives an incoming call from one of it's 3x authorized numbers, and the call is hung up after ringing only 2-5 times, the device will send an SMS containing it's location to it's authorized phone number, and then upload it's location data to the Web

Tracking Platform server along with the status description "**CALL**"

6.6 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

6.7 Un-plug alarm

If the MP90 was remove from the OBD connector, it 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**"

6.8 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**"

6.9 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].

Note: Maximum 10 Characters

6.10 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 contact your SIM Card provider to get the correct APN details

(Most SIM Card GSM providers do not use passwords or username for access – it is already encoded into the SIM Card)

6.11 Set Tracking Server IP and PORT

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

Example:#804#0000#e.trackits.com#7700##

Reply: SET SERVER IP AND PORT OK.

6.12 Set the Upload Interval Time (Normal mode)

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.

6.13 Power Saving Mode

Enable power save mode : 100+password

Example: 1000000

Reply: SET POWER SAVE MODE:ON.

Disable power save mode :101+password

Example:1010000

Reply:SET POWER SAVE MODE:OFF.

Note: Default is OFF

6.13.1 Power Saving Mode & Device Stationary

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

For example: #807#0000#2##

Note:

Interval time define is [2,1440] minuets,If interval time is 0, it will stop upload and reply: SET GPS POWER SAVING UPLOAD OFF.

If you enable power saving mode(1000000) and device is stop, the device will upload will as 807 command interval.Upload status is **AUTOLOW**

6.13.2 Power save mode ON&device Move interval time

Command: #809#password#interval time#X##

Example: #809#0000#10#1##

Reply: SET GPS TOWED UPLOAD ON.

Note:

● Interval time define is[10,65535]seconds, X define is[0,1], If X=0,it will stop upload and reply: SET GPS TOWED UPLOAD OFF.

● If you enable power saving mode(1000000) and device is move, the device will upload will as 809 command.

● Upload status is **TOWED**

6.14 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**

6.15 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

# 7. App & PC Tracking platform

7.1 Active the device ID number

- Contact with your sales or distributor
- If not please subscribe the server plan from official online shop:
  https://shop.mictrack.com/product/gps-tracking-platform-service/

7.2 App install & Login

- Search "**Yi tracker**" in Google Play or iOS store(or scan the following QR code) to download the Mobile APP(not Yi tracker2);
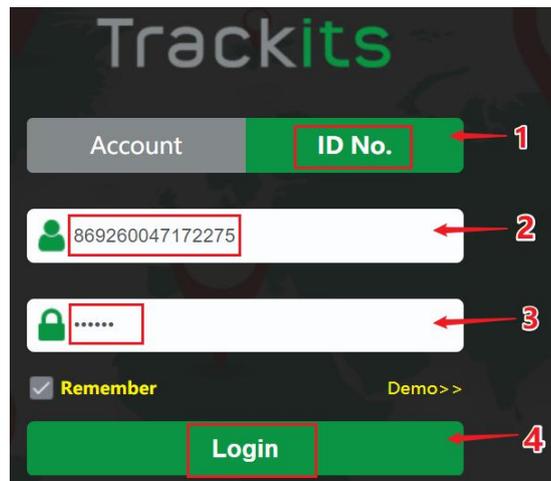

- Choose the" Login by Device No., Input server www.trackits.com
- Input your device's ID number and password(default is 123456) to login.
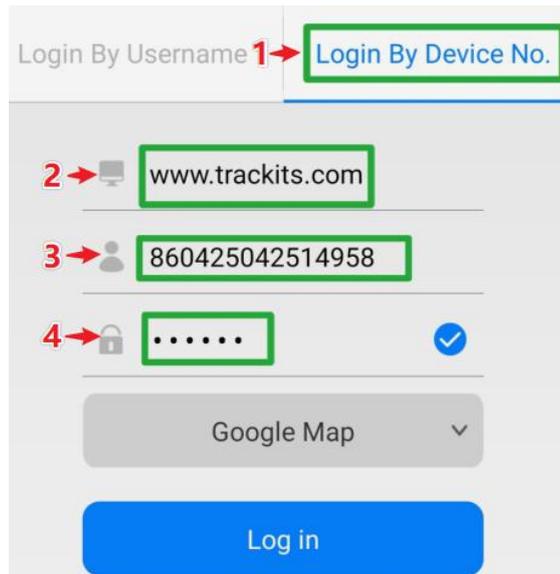
7.3 PC login

- Web: www.trackits.com, Choose "**ID No**."
- Input your device's ID number and password(default is 123456) to login
- Watch the video: https://bit.ly/trackis

8. Troubleshooting

Issues	Caused	Solutions
Send SMS to the device but no reply	1>SIM Card have not active 2>Card balance is not enough	Please check the SIM card status and try again.
	Text command format is wrong	Please check the command format again

	Connect network fail.	Please check LED status and make sure the network connect successful first.
GPS platform shows logged off		1.Check the APN setting ; 2. Check IP and port 3. Check network if match
GPS platform shows no location or the coast of Africa.	Device indoor/garage	Take it outside for a 10-minute walk or drive, and its location should update.
LED no light	Backup battery is low power	Please charge the device for 30 minutes at least.

Any questions please do not hesitate to contact us:

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