

MT510 3G Personal Tracker

User Manual V2.0



Preface

Thank you for choosing the 3G Personal GPS tracker. This manual shows how to operate the device smoothly and correctly. Make sure to read this manual carefully before using this product. Please note that specification and information are subject to changes without prior notice in this manual. Any change will be integrated in the latest release. The manufacturer assumes no responsibility for any errors or omissions in this document.

Contents

1. Overview.....	1
2. Application.....	1
3. Specifications.....	1
4. Hardware description.....	2
4.1 Appearance.....	2
5. First use.....	3
5.1 SIM Card installation.....	3
5.2 Indications.....	3
5.2.1 3G Indicator (Blue).....	3
5.2.2 GPS Indicator (GREEN).....	3
5.2.3 Charge Indicator (YELLOW/RED).....	3
5.3 Device Button Instruction.....	3
6. Main Operation and Application.....	4
6.1 Set Authorization Phone Number.....	4
6.2 Delete authorization number.....	4
6.3 Change the password.....	4
6.4 Single Locating.....	4
6.5 Calling Switch.....	4
6.6 SMS Response ON/OFF.....	5
6.7 Call Restriction Switch.....	5
6.8 Phone positioning function.....	5
6.9 SOS Alarm.....	5
6.10 Voice Monitor.....	5
6.11 Round Geo-fence.....	5
6.11.1 Enable the Geo-fence.....	6
6.11.2 Disable the Geo-fence.....	6
6.12 Square Geo-fence.....	6
6.12.1 Enable the Geo-fence.....	6
6.12.2 Disable the Geo-fence.....	6
6.13 Low battery Alarm.....	6
6.14 Over-speed alarm.....	6
6.15 Set time zone.....	6
6.16 Set GPRS user name.....	7
6.17 Set APN(Access Point Name).....	7
6.18 Set Server IP and PORT.....	7
6.19 Set GPRS Upload Interval Time.....	7
6.20 Power Saving Mode.....	7
6.20.1 Power Saving Mode ON & Device Stop interval time.....	7
6.20.2 Power save mode ON&device Move interval time.....	8
6.21 Invalid GPS Data Upload.....	8

6.22 Mileage report.....8

6.22.1 Set report interval time..... 8

6.22.2 Clear the Mileage..... 8

6.22.3 Check the current mileage.....8

1. Overview

MT510 is the latest 3G Personal tracker support WCDMA/UMTS. This device can locate and monitor any remote targets by SMS/PC/APP.

The unit features excellent and stable work performance. It is used for personal, vehicle and pets.

2. Application

- **3G WCDMA/UMTS support**
- Real-time position inquire
- Two way voice communication
- Voice monitoring
- Personal trip history on web
- SOS alarm
- Over-speed alarm
- Motion report
- Geo-fence alarm
- Backup battery low power alarm
- Power saving mode
- Mileage report

3. Specifications

Item	Specifications
Dimension	89(L)*57(W)*20(H)mm
Weight	89g
Charging Voltage	Micro USB interface DC 5V
Backup battery	1600mAh/3.7V
Power consumption	60mA standby current
3G Frequency bands	MT510-E 900/2100MHz@UMTS 900/1800MHz@GSM MT510-A 850/1900MHz@UMTS 850/900/1800/1900MHz@GSM MT510-T 850/2100MHz@UMTS 850/900/1800/1900MHz@GSM

Item	Specifications
GPS Chip	U-BLOX7
GPS Sensitivity	-162dBm
Channel	56 Channel
Positioning Accuracy	10m
Hot start	1s on average
Warm start	15s on average
Cold start	30s on average
Working temperature	-20°C to 55°C
Humidity	5%~95% non-concretion
Antenna	Built-in 3G/GPS antenna
Sensor	3D acceleration sensor
LED	3G/GPS/CHG
SIM Card interface	Standard SIM Card

4. Hardware description

4.1 Appearance



5. First use

5.1 SIM Card installation

Pay attention to the following items before installing the SIM card:

- Ensure the SIM card have enough balance
- Ensure the SIM card enable caller ID and GPRS function
- Ensure the SIM card disable PIN password and call forwarding function.

Install the SIM card

- Get ready a **Standard** SIM Card
- Insert the SIM Card to the slot

Pay Attention:

- Device will POWER ON automatically after insert the SIM card

5.2 Indications

5.2.1 3G Indicator (Blue)

Status	Description
Always ON	No SIM Card or no network
Slow flash (8s/time)	Work mode

5.2.2 GPS Indicator (GREEN)

Status	Description
Always OFF	GPS unavailable
Quick flash (1s/time)	GPS available

5.2.3 Charge Indicator (YELLOW/RED)

Status	Description
Always ON(Yellow)	Under charging
Light bright(Yellow)	Charging completed
Slow lash(Red)	Low battery

5.3 Device Button Instruction

Button	Description
Power Button	● Insert the SIM card to POWER ON, take out SIM card to POWER OFF.

SOS Button	● Press and hold button for 3 seconds(vibrate twice), the unit will call the authorized phone numbers by sequences and send position to authorized phone numbers and upload data to server. ● Short press button for 1 second(vibrate one time) to hang up/Answer or the call(incoming or Speaking)
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6. Main Operation and Application

6.1 Set Authorization Phone Number

Instruction format: *cell phone number *password*serial number(1-3)**

For example:*13424392330*0000*1**

Reply:SET USER NUMBER 1 OK.

Note:

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

6.2 Delete authorization number

Instruction format:**password*number(1-3)**

For example:**0000*1**

Reply:DELETE USER NUMBER 1 OK.

6.3 Change the password

Instruction format:777+new password+old password

For example:77712340000

Reply:SET USER PASSWORD OK.

6.4 Single Locating

Instruction format:666+password

For example:6660000

Description:Send this SMS command to unit,it will reply SMS as follow:

ID:865662000409210

Date:05:36:59 15/08/2015

Fix:A State:SMS

<http://maps.google.com/maps?q=+22.63146%2c1+114.03701>

6.5 Calling Switch

Calling OFF:150+password

For example:1500000

Reply:SET VOICE CALL:OFF

Calling on:151+password

For example:1510000

Reply:SET VOICE CALL: ON

Note: if you do not want to get the Calling alert, send **1500000** to disable it.

6.6 SMS Response ON/OFF

SMS OFF:160+ user password

For example:1600000

Reply:SET SEND SMS:OFF.

SMS ON:161+ user password

For example:1610000

Reply:SET SEND SMS:ON.

Note:

- If you do not want to get the SMS alert, send **1600000** to disable it.

6.7 Call Restriction Switch

Call restriction OFF:170+password

For example:1700000

Reply:SET INCOMING CALLS:OFF.

Call restriction ON:171+password

For example:1710000

Reply: SET INCOMING CALLS : ON

Note:

- 170 mode,it can only receive incoming call from 3 authorization numbers.
- 171 mode the device can answer incoming call from any cell phone.

6.8 Phone positioning function

If incoming call is from one of the 3 authorized numbers and it is hung up after ringing for 2-5 times, the device will send location to authorized phone number and then upload data to server and the status is :**CALL**.

6.9 SOS Alarm

Press SOS button for 3 seconds(vibrate twice),device will call the authorized phone numbers and then send location to authorized phone number and upload data to server,the state is: **SOS**.

6.10 Voice Monitor

Disable the monitor : 000+password

For example: 0000000

Reply: SET VOICE MONITOR:OFF.

Enable the monitor :001+password

For example:0010000

Reply:SET VOICE MONITOR:ON.

Note: Default is MONITOR OFF

6.11 Round Geo-fence

Instruction format:005+password+R+X

For example:0050000R1.0

Reply:SET ROUND GEO-FENCE:ON

Note: X define[0.1-999.9]KM

6.11.1 Enable the Geo-fence

Instruction format:211+password

For example:2110000

Reply:SET ROUND GEO-FENCE: ON.

6.11.2 Disable the Geo-fence

Instruction format:210+password

For example:2100000

Reply:SET ROUND GEO-FENCE: OFF.

6.12 Square Geo-fence

Instruction format:006+password+G1,IO//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

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

6.12.1 Enable the Geo-fence

Instruction format:311+password

For example:3110000

Reply:SET SQUARE GEO-FENCE: ON.

6.12.2 Disable the Geo-fence

Instruction format:310+password

For example:3100000

Reply:SET SQUARE GEO-FENCE: OFF.

6.13 Low battery Alarm

When the backup battery is low power,it will send SMS to authorized phone number and upload data to server, the state is:**BLP**.

6.14 Over-speed alarm

Command:#122#user password#X##

Example:#122#0000#100##

Reply:SET SPEED LIMIT:ON

Close command: #122#0000#0##

SET SPEED LIMIT:OFF.

Note: X is speed value, unit is KM/H definition is [0, 999].

6.15 Set time zone

Instruction format:896+password+ +/-HH:MM

For example:8960000+08:00

Reply: SET TIME ZONE:+08:00

Note: The default is Greenwich time(UTC).

6.16 Set GPRS user name

Instruction format: #801#password#user name##

For example: #801#0000#MT500##

Reply: SET SERVER USER NAME OK.

6.17 Set APN(Access Point Name)

Instruction format 1: #803#user password#APN##

For example: #803#0000#CMNET##

Instruction 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 local mobile operator to get the correct APN.

6.18 Set Server IP and PORT

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

Example: #804#0000#112.95.164.248#7780##(or) #804#0000#e.trackits.com#7700##

Reply: SET SERVER IP AND PORT OK.

6.19 Set GPRS Upload Interval Time

Instruction format: #805#password#interval time#X##

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

Reply: SET GPS PERIODIC 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 PERIODIC UPLOAD OFF.

6.20 Power Saving Mode

Enable power save mode : 100+password

For example: 1000000

Reply: SET POWER SAVE MODE:ON.

Disable power save mode : 101+password

For example: 1010000

Reply: SET POWER SAVE MODE:OFF.

Note: Default is OFF

6.20.1 Power Saving Mode ON & Device Stop interval time

Instruction format: #807#password#interval time##

For example: #807#0000#2##

Reply: SET GPS POWER SAVING UPLOAD ON.

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

6.20.2 Power save mode ON&device Move interval time

Instruction format:#809#password#interval time#X##

For 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

6.21 Invalid GPS Data Upload

Invalid data upload ON:081+users password

For example:0810000

Reply:INVALID DATA UPLOAD:ON

Invalid data upload OFF:080+user password

For example:0800000

Reply:INVALID DATA UPLOAD:OFF

6.22 Mileage report

6.22.1 Set report interval time

Format:#141#password#X#Y##

For example: #141#0000#10#1##

Reply:SET GPS MILEAGE STATISTICS:ON/OFF

Note: X is the mileages and define is [0,1000]KM;

Y is alert mode and define is[0,1],Y=0 disable the alert, Y=1 enable alert.

6.22.2 Clear the Mileage

Format:#142#password#T##

For example: #142#0000#1##

Reply:SET GPS MILEAGE STATISTICS:CLEAR CURRENT/ALL

Note:T is [0,1].T=0,clear current mileage;T=1,clear total mileage.

6.22.3 Check the current mileage

Format:#143#password##

For example:#143#0000##

Reply: TOTAL GPS MILEAGE:X.X Km

CURRENT GPS MILEAGE:X.X Km

Note: mileage unit is KM

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 do not hesitate to contact us info@mictrack.com.