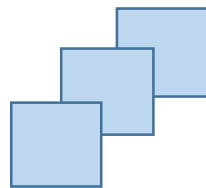


FIFOTRACK PERSONAL GPS TRACKER




Model: Q1

Version: V1.4

www.fifotrack.com

Copyright and Disclaimer

- ⦿ All copyrights belong to Shenzhen fifotrack Solution Co., Ltd. You are not allowed to revise, copy or spread this file in any form without consent of fifotrack.
- ⦿  is trademark of fifotrack, protected by law.
- ⦿ Please read this user guide carefully before installation to avoid any possible personal injury or property loss.

Revision History

Version	Author	Revision Date	Firmware	Description of change
V1.1	Cici Wu	Feb 12, 2016	V1.1	Initial revision
V1.2	Cici Wu	June 7, 2016	V1.4	Adding chapter 6 “Working mode”
V1.3	Cici Wu	Jan 7, 2017	V1.6	Battery life upgrade
V1.4	Cici Wu	Apr 15, 2017	V1.7	01 Chapter 6 “Working mode” improvement 02 Adding B15 “deep sleep” mode as default, turn off GSM module without movement. 03 Battery life upgrade

Related Files

Version	File	Remarks
V1.2	<fifotrack Q1 GPRS Protocol and Command List>	GPRS protocol between terminal and server, command details of GPRS/SMS/COM
V1.1	<fifotrack Parameter Tool User Guide>	PC software tool for parameters configuration
V1.1	<USB Cable Driver Installation Guide>	How to install USB cable driver
V1.1	<Firmware Upgrade Guide>	How to upgrade firmware
V1.4	<fifotrack FIMS User Guide>	FIMS tracking software user guide
Download link: http://www.fifotrack.com/Support/Userguide/ Video support: http://www.fifotrack.com/Support/video.html		

Related Software

Version	Software	Remarks
V1.0	< Parameter Tool >	Parameter configuration tool on PC
V1.11.0	< PL2303_Prolific_DriverInstaller >	Driver for USB cable
V1.0	< Firmware Upgrade Suite>	Tool for firmware upgrade
V1.0	< GPRS Command Generator>	Generating GPRS command for FIMS tracking platform
Download link: http://www.fifotrack.com/Support/Userguide/		

Contents

1 Product Overview	5
2 Product Main Functions.....	5
3 Product and Accessories.....	5
3.1 Standard Packing Box.....	5
3.2 Optional Accessories.....	6
4 Product Appearance.....	6
5 LED Light	7
6 Working mode	7
7 Specification	8
8 First Use.....	9
8.1 Charging	9
8.2 Installing the SIM Card.....	9
8.3 Tracking by Calling	11
8.4 SMS Reply Content Example	12
8.5 Tracking by SMS Command - C01	12
8.6 Setting SOS number – B11	13
8.7 Setting voice monitoring – B31.....	13
8.8 Setting time zone – B14	13
8.9 Configuration by PC	14
9 FIMS Platform Tracking.....	15

1 Product Overview

Q1 is the latest generation personal tracker model designed for kids, pets, elders, asset tracking and vehicle tracking, etc. It keeps good balance between size and battery life. Q1 is not only one of the smallest trackers, but also has long battery life up to 4 days. Besides, Q1 has passed IP65 waterproof level, and suitable for outdoor activities. Q1 uses own FIFOTRACK GPRS PROTOCOL which is simple and practical. This enables the customers to integrate on their own platform and develop APP efficiently.

2 Product Main Functions

- Real Time Tracking
- Mobile Phone Tracking
- Small size 52*40*17mm
- 6 days battery life
- Voice monitoring
- IP65 Waterproof
- GEO-Fence Alarm
- Fall down alarm
- SOS Alarm
- 8 MB Flash Memory
- OTA

3 Product and Accessories

3.1 Standard Packing Box



Main Unit



Charger



Charging cable



Screwdriver



Backup screws and plastic plug

3.2 Optional Accessories



Configuration USB cable



Pouch

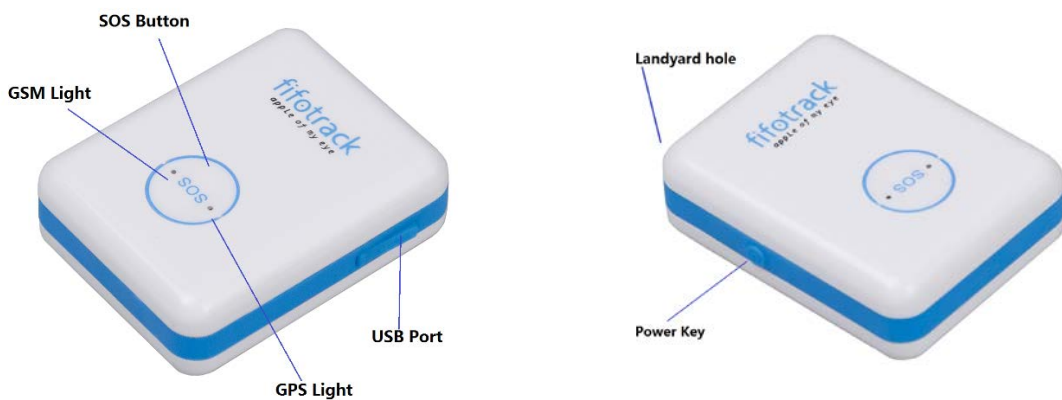


Magnet



Y charger

4 Product Appearance



SOS Button	
Press SOS button for 2 seconds	SOS alarm
Short press SOS button	Wake up device
USB cable port	
Micro USB	Port for power charging or configuration
Charging voltage	DC 5V/1A
Power Key	
Press power key for 2 seconds	Power on or power off

5 LED Light

GPS Light (Green)	
Flash 0.1s on and 3s off	GPS valid
Flash 2s on and 2s off	No GPS signal
GSM Light (Orange)	
Flash 0.1s on and 3s off	GSM valid
Flash 2s on and 2s off	No GSM
Battery status(Both GPS and GSM light)	
Off	Sleep mode or power off
Flash every 0.1s	Low battery
On	Charging
Flash 0.1s on and 3s off	Battery full

6 Working mode

Q1 has four working modes for power saving and for different applications.

Command to set up working mode	
000000,B03,<basic_tmr>,<accoff_tmr>,<parking_tmr>	
1) 000000: SMS command password, default 000000.	
2) basic_tme: normal time interval, unit s.	
3) accoff_tmr: time interval when ACC Off, unit s, default 0s. Q1 can't support ACC detection, please always set up "0".	
4) parking_tmr: time interval when parking, unit s, default 0s.	
Eg: 000000,B03,60,0,3600	
Set up normal time interval to 60 seconds, parking time interval to 1 hour.	
Device will upload GPRS data every 60 seconds while device is moving, upload GPRS data every hour while device stops.	
GPRS uploading time interval	
GPRS uploading time interval < 1 minute	Device in full working mode, both LED lights on.
GPRS uploading time interval ≥ 1 minute	01 Device enters into normal sleep mode automatically after uploading data. 02 Both LED lights are off mostly except the moment of GPRS uploading. 03 Turn off all the power except GSM module, device will be woken up by IO trigger, moving, incoming phone or SMS.

GPRS uploading time interval \geq 60 minutes	<p>01 Device enters into deep sleep mode automatically after uploading data.</p> <p>02 Both LED lights are off mostly except the moment of GPRS uploading.</p> <p>03 Turn off all the power including GSM module, device will be woken up only by movement or I/O trigger.</p>
Movement or stop	
If "parking_tmr" is set up	Device uploads GPRS data at "parking_tmr" interval while device stops, uploads GPRS data at "basic_tmr" interval while device is moving.
If "parking_tmr" is set up as "10000000"	No GPRS data uploads when device stops.
If "parking_tmr" is 0	Device upload GPRS data at "basic_tmr" interval no matter device is moving or stops

7 Specification

Item	Specification
Dimension	52*40*17mm
Weight	38g
GSM Module	SIMCOM800C
GPS Module	U-blox7Q
Charging Voltage	DC 5V/1A
Internal Battery	550mAh/3.7V Lithium battery
Power Consumption	Average 4~5mA standby current
Battery Life	30 seconds time interval - 11 hours
	1 minute time interval - 13 hours
	5 minutes time interval - 58 hours
	10 minutes time interval - 82 hours
	60 minutes time interval - 96 hours
	Tracking by calling or SMS – 148 hours (without time interval)
Microphone	Inbuilt microphone
Operating Temperature	-20°C~70°C
Humidity	5%~95%
LED Light	2 LED lights indicating GPS/GSM/Power status
Button/Switch	1 SOS button, 1 power switch
Flash Memory	8MB (Buffer storage: GPRS 16000 units, SMS 4000 units)
Sensor	3D Acceleration sensor

GSM Band	Frequency	GSM 850/900/1800/1900MHz
GPS Sensitivity		-161dBm
GPS Start Speed		Cold start 70s Hot start 5s
Position Accuracy		10m
I/O Port		1 USB port

8 First Use

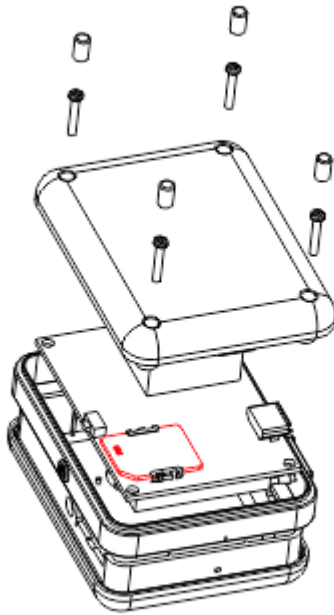
8.1 Charging

First time using Q1, please charge device at least 1 hour. Full charging time is 2 hours.

8.2 Installing the SIM Card

- SIM card type is **Micro SIM card**.
- Device can't support 3G or 4G network. Make sure the SIM card supports 2G.
- Ensure the SIM card has enough balance.
- Ensure PIN code has been closed.
- Authorization SOS numbers can't work well if SIM card doesn't have caller ID service. E.g.: device can't reply SMS to authorization SOS number because device can't identify incoming call.
- SIM card should have GPRS function for platform tracking.
- Power off device before SIM card installation.

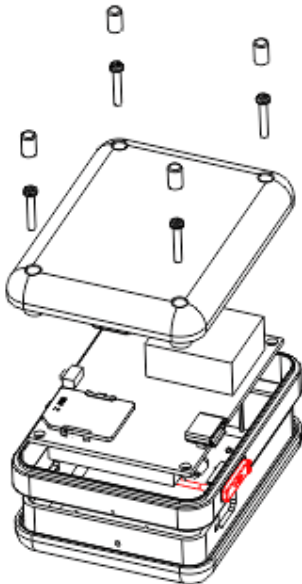
Step 1: Open case and insert SIM card



Open case from red arrow corner which is near USB port.

SIM card slot is under battery, near power key. Make sure SIM card chip side downward

Step 2: Put back case

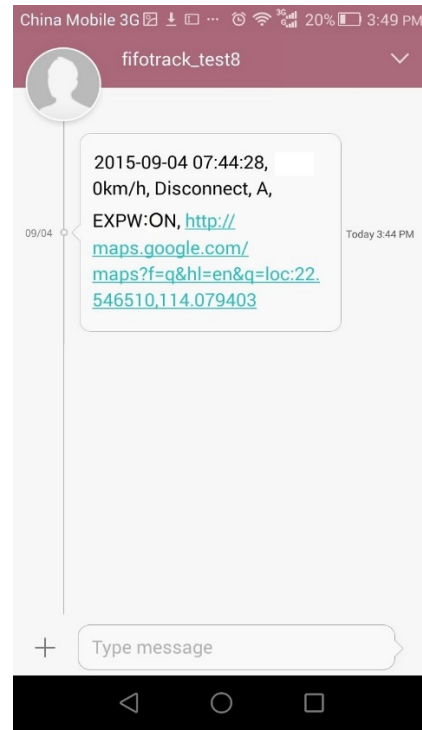
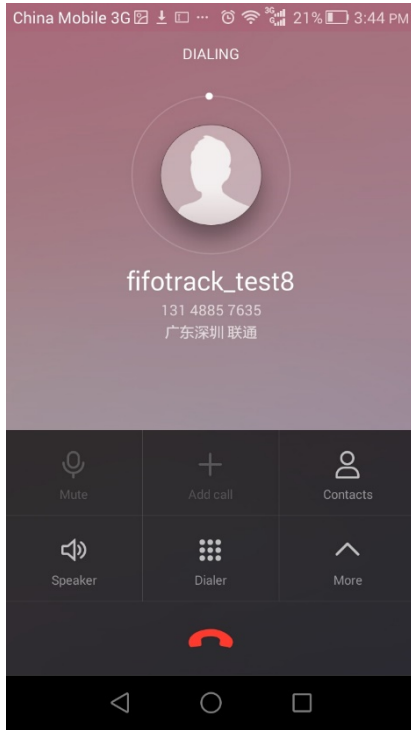


When put back case, make sure the USB rubber plug is above PCBA.



8.3 Tracking by Calling

Call the SIM card number inside Q1, you will get a SMS reply with Google map link. Click it for specific map location.



8.4 SMS Reply Content Example

2015-09-04 07:44:28, 0km/h, Disconnect, A, EXPW:ON, <http://maps.google.com/maps?f=q&hl=en&q=loc:22.546510,114.079403>

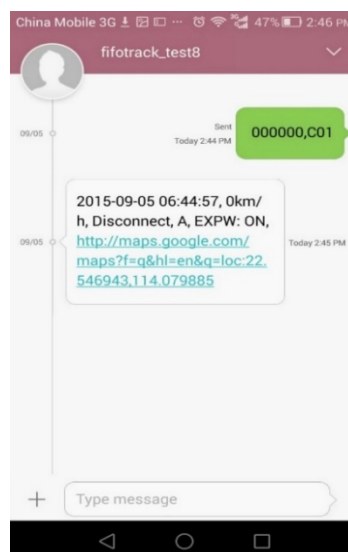
SMS Reply Format:

Field	Detail	Remarks
2015-09-04 07:44:28	Date and time, format YYMMDD hh:mm:ss	Date and time
0Km/h	Speed is 0km/h	Speed
Disconnect	GPRS disconnect	GPRS connection status, "disconnect" or "connect".
A	GPS valid	GPS Status, "A" means GPS valid, "V" means GPS invalid.
EXPW:ON	External power on	External power status. "ON" means external power normal, "OFF" means external power cut.
http://maps.google.com/maps?f=q&hl=en&q=loc:22.546510,114.079403	Google map link, latitude in front of longitude after "Loc". Unit degree Latitude=22.546510° Longitude=114.079403°	Google map link with latitude and longitude, which can be opened directly on smart phone.

8.5 Tracking by SMS Command - C01

SMS Command: 000000,C01

SMS Reply: Current location



Note: *Default SMS password is “000000”, set new SMS password with B10 command. All SMS commands should start with password.*

Please refer to <FIFOTRACK COMMAND LIST> for more details.

8.6 Setting SOS number – B11

SMS Command: 000000,B11,phone number 1,phone number2,phone number 3

SMS Reply: ok

For example: 000000,B11,13420956677,13420967787,13829070835

Note:

- 1) Only SOS numbers are allowed to call devices if any SOS number is authorized.
- 2) Max 3 phone numbers can be authorized.
- 3) After SOS button is pressed, device will call SOS numbers twice cyclically if all three SOS numbers are set, until any call is answered.
- 4) Set up only one phone number, SMS command is: 000000,B11,phone number1

8.7 Setting voice monitoring – B31

SMS Command: 000000,B31, sos-number,two-way-call,monitor,sms

SMS Reply: ok

For example: 000000,B31,1,0,1,1

When first SOS number (13420956677) calls device, voice monitoring function is valid, device will send SMS to first SOS number after calling.

Note:

- 1) B31 command is for SOS number attribute settings when SOS number calls device.
- 2) sos-number: choosing which SOS number to be set, refer to command B11, phone number 1,2 or 3, “1”=phone number 1
- 3) two-way-call: 0 or 1, default 0, Q1 doesn’t have two-way calling function.
- 4) Monitor: 0 or 1, activating voice monitoring set up “1”, default 1
- 5) sms: 0 or 1, activating SMS reply when calling set up “1”, default 1

8.8 Setting time zone – B14

SMS Command: 000000,B14,time zone

SMS Reply: ok

For example: 000000,B14,8

Set time zone to Eastern eight zone (GMT+8).

Note:

- 1) Time zone, range [-12, 12].
- 2) Default value of *time zone* is 0.

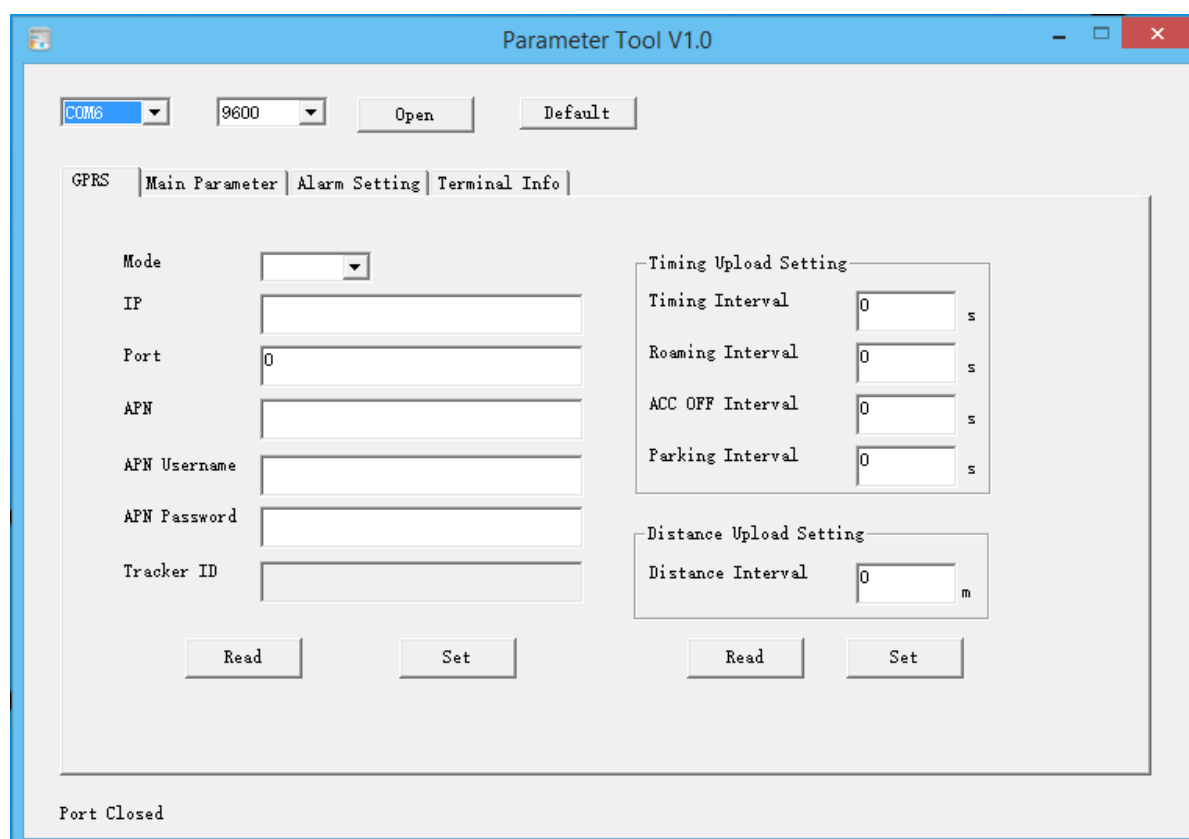
3) When SMS time zone is set, all tracking/alarm SMS use new time zone for date and time.

8.9 Configuration by PC

fifotrack company provide <FIFOTRACK PARAMETER TOOL> for configuration. Please download USB cable driver and install it before using parameter tool. Refer to <USB CABLE DRIVER INSTALLATION GUIDE> if need.



Connect Q1 to PC with **configuration USB cable** (optional accessory). Run “fifotrack Parameter Tool” software which will identify port automatically and read all of the current parameters.



Please read <FIFOTRACK PARAMETER TOOL USER GUIDE> for more details.

9 FIMS Platform Tracking

fifotrack FIMS tracking system is a stable and user-friendly platform.

To add Q1 online, you need finish below 4 steps:

Step 1: Set server type, IP and port

Command: 000000,B00,server type,IP,port

For example: 000000,B00,1,47.88.35.165,10502

Note:

- 1) 000000 is device password, default 000000
- 2) B00 is command
- 3) 1 is main server
- 4) 47.88.35.165 is FIMS server IP
- 5) 10502 is port of FIMS
- 6) Between fields is comma without any space

Step 2: Set APN

Command: 000000,B01,APN name,APN user,APN password

For example: 000000,B01,cmnet

Set APN name as cmnet, no APN user and APN password

Note:

- 1) APN name "cmnet" is for China mobile, don't copy, just an example.
- 2) Please contact your SIM card operator or Google to get APN information. Part of APN only have APN name, don't have APN user and APN password, leave the APN user and APN password blank.

Step 3: Set tracking time interval

Command: 000000,B03,time interval

For example: 000000,B03,10

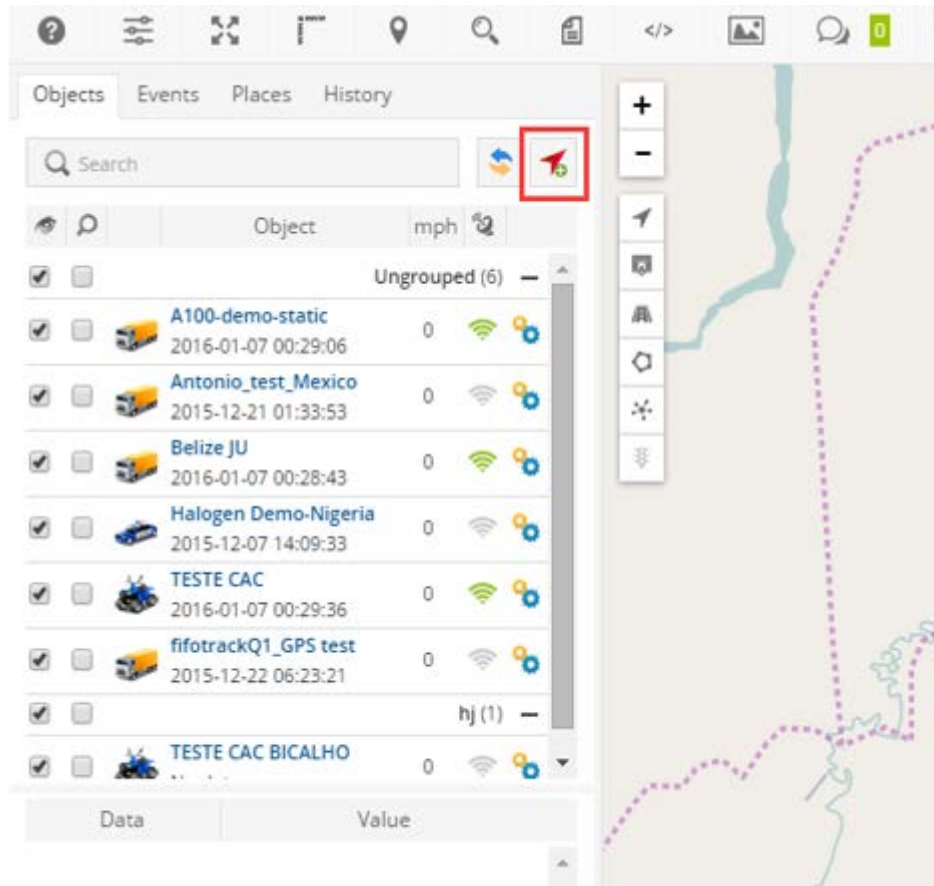
Set tracking time interval every 10 seconds.

Note:

- 1) Time interval, unit s, more than 10s is suggested
- 2) Time interval default 0, which means turn off timing tracking

Step 4: Add device to FIMS platform

- 1) Login on FIMS: www.fimsgps.com
- 2) Click adding object icon
- 3) Put IMEI number and device name



Add object ✕

Name

IMEI

Please e-mail us at info@fifotrack.com if any question or feedback.