

GT60 Personal Tracker (GPS+SMS+GPRS)

User Guide

Version 1.4



Add: Room 1819, 18 Floor, Stars Plaza, No 38,HongLi Rd, Shenzhen ,China TEL: 0755-33001211 FAX: 0755-33001212 WEB: <u>www.redview.net</u>

Copyright © March. 17, 2008 Redview Inc. All rights reserved.

Redview Document

Printed in China

Redview Inc. Add: Room 1819, 18 Floor, Stars Plaza, No 38,HongLi Rd, Shenzhen ,China TEL: 0755-33001211 FAX: 0755-33001212 WEB: <u>www.redview.net</u>

Notice

This manual, as well as the software described in it, is furnished under license and may be used or copied only in accordance with the terms of such license. The content of this manual is furnished for informational use only, is subject to change without notice, and should not be construed as a commitment by Redview Inc. Redview Inc. assumes no responsibility or liability for any inaccuracies that may appear in this book.

RedView Inc. reserves the right to make changes to specifications at any time and without notice. The information furnished by RedView Inc. in this publication is believed to be accurate and reliable; however, RedView Inc. assumes no responsibility for its use, or for infringements of patents or other rights of third parties resulting from its use. No license will be granted under any patents or patent rights owned by RedView Inc.

Revision History

Revision Da	ate	Author	Revision Version	Description
2008 March	n 17	Qin Qing	V1.0	*
2008 Dec	15	Henry Xu	V 1.4	

Content

USER GUIDE	1
VERSION 1.4	1
1 INTRODUCTION	4
2 FEATURE:	5
3 Accessories	6
4 Specification	8
5 HARDWARE DESCRIPTION	10
6 GET STARTED (6.1) CHARGE BATTERY	14
(6.2) Buy SIM card	15
(6.3) Install SIM card	15
(6.4) Turn On / Turn Off	16
(6.5) Apply for one position service	17
(6.6) Set a time interval for tracking report function	19
(6.7) Stop continuous tracking report function	20
(6.8) Set preset phone number for SOS key	21
(6.9) Make a SOS help	22
(6.10) Cancel a SOS call	22
(6.11) Dial the preset phone number by Call B or Call C	23
(6.12) Receiving an incoming call	23
(6.13) Adjust Voice Volume	24
(6.14) Voice monitor	24
(6.15) Power saving state	25
7 DISPLAYING LOCATION ON MAP	26
8 More Professional SMS Instruction	30
8 SMS INSTRUCTION EXAMPLE:	34
9 GPRS COMMUNICATION SETTING	35
10 CAUTION:	
11 DIY !!! Build your control center system on your PC	
12 DIY TRACKING KITS FOR GPRS-TCP	42
13 TROUBLE SHOOTING	46
ATTACHMENT A: PROBLEM INDEX	49
Attachment B :	51
ATTACHMENT C: WORLDWIDE APN (ACCESS POINT NAME) LIST	53

1 Introduction

GT60 is a personal remote position device with built-in GPS and GSM/GPRS modules. It is a compact size, high accuracy remote location tracking device. Based on GPS satellite, it provides accurate position information under dynamic conditions. Personal remote position device transmits the longitude and latitude coordinate to authorized cell phone.

You can use these features for protecting and searching for children and old persons. You can also use it as a security device as well as for asset protection and animal tracking where you need remote positioning. Further, you can use it as a security purpose and other purpose which needs remote positioning such as asset protection and animal tracking.





2 Feature:

- Built-in GPS personal locator.
- GSM /SMS communication or GPRS TCP/UDP connection .
- Works worldwide! Support 3-frequency GSM 900/1800/1900 MHZ And 4-frequency GSM 850/900/1800/1900 MHZ.(Optional)
- High sensitivity, new technology and latest GPS SiRF-Star III chipset!
- Compact size, and smaller than one name card. Easy to hide,
- Fast Signal Acquisition
- Support single location and continuous tracking
- Support location triggered by tracker
- Support location triggered by authorized cell phone
- Support alarm and remote monitor (include over speed alert, low battery alert, SOS alarm, blind area alert, power on alert, etc.)
- Support quick dialing buttons for 3 preset phone numbers
- Support check location by SMS and GPRS
- Support automatically saving power
- Monitors can track the person without interfering him, *LIVE! Real-Time tracking!*
- Locate the locator holder by the mobile phone via SMS (SMS system).
- SOS button send out exact location for immediate rescue/action.
- Geo-fencing to restrict movement to a defined radius.
- No monthly service charges to be paid to the call center

Extend function

- Build in speaker and microphone, Support Two-Way conversation without ear microphone (hand-free);
- Build in motion sensor for power saving
- Build in motion sensor for vibration alarm
- Voice monitoring function (wiretapping)
- Removable internal battery

Optional accessory

- \star USB configuration cable for parameter setting by PC tool
- \bigstar Optional magnetic mount
- \bigstar With optional external battery (work for 7 days);
- ★ <u>DIY Tracking! Working with Redview's SMS modem , Redview's GPRS</u> software kits and PDA tracking kits .customer can watch the position and trace of their object on the map real-time automatically at very low cost, without monthly payment , without any manual input. Support almost all navigation map , include Google earth.

3 Accessories

1. USB charged cable



2 Wall charger and car charger





3. waterproof case





- 4. CD ROM (Including our product document and program)
- 5. USB Configure cable for parameter setting thru PC (Optional accessory)



4 Specification

GSM module	Embedded GSM 900/1800/1900Mhz Embedded GSM 850/900/1800/1900Mhz (Optional) And GPRS TCP/UDP	
GPS Chipset	latest GPS SiRF-Star III chipset	
GPS Sensitivity	-158Db	
GPS Frequency	L1, 1575.42 MHz	
C/A Code	1.023 MHz chip rate	
Channels	20 channel all-in-view tracking	
Position Accuracy	10 meters, 2D RMS	
Velocity Accuracy	0.1 m/s	
Time Accuracy	1 us synchronized to GPS time	
Default datum	WGS-84	
Reacquisition	0.1 sec., average	
Hot start	1 sec., average	
Warm start	38 sec., average	
Cold start	42 sec., average	
Altitude Limit	18,000 meters (60,000 feet) max.	
Velocity Limit	515 meters/second (1000 knots) max.	
Acceleration Limit	Less than 4g	
Jerk Limit	20 m/sec	
Operating temperature	-25° to 65° C	
Humidity	5% to 95% Non-condensing	

Dimension	$76 \text{ mm} \times 44 \text{mm} \times 20 \text{ mm}(13 \text{mm}) \dots$
Weight	75 g
Voltage	Rechargeable and replaceable 1200 mAh battery (3.7V), 5V for charging input.
Charging connector	DC 5V (Mini USB port)
Standby time	Over 60 hours (Sleep Mode)
LED	3 LED indicating Power, GPS and GSM status and other operation status.
KEY	SOS Emergency key, quick dial key B, quick dial key C, Power key

5 Hardware description

Red LED --- indicate power state:

State	Meaning
OFF	The power is too low to work
	or Charging was completed.
ON	Charging
Flash (ON for 0.1s, OFF for 0.1s)	The power is not enough, need recharging
Flash (ON for 1s, OFF for 2s)	Working

Blue LED -- indicate the GPS signal state:

State	Meaning
ON	One key be pressed
Flash (ON for 0.1s, OFF for 0.1s)	Initializing, or Battery power is too low to work
Flash (ON for 0.1s, OFF for 2.9s)	GPS receiver work well
Flash (ON for 1s , OFF for 2s)	No GPS signal

Green LED -- indicate the GSM signal state:

State	Meaning
ON	One call is coming
Flash (ON for 0.1s, OFF for 0.1s)	Initializing, or Battery power is too low to work
Flash (ON for 0.1s, OFF for 2.9s)	GSM receiver work well
Flash (ON for 1s, OFF for 2s)	No GSM signal

Button Function description

Button	Meaning	
Power button	Turn on/Turn off . Please see 6.4 for more details.	
SOS button	When it is pressed, GT60 will send its location information to the preprogrammed phone number by SMS. And simultaneously, GT60 will dial this phone number. \Press it to receive an incoming call.	
Call B button	Press B button to make a phone call and/or send an SMS to the preprogrammed phone number. \Press it to reject a call, cancel calling or complete a conversation	
Call C button	Press C button to make a phone call and/or send an SMS to the preprogrammed phone number. \Press C button can adjust voice volume when calling	



SIM Card



6 Get Started

(6.1) Charge battery

Before you can use the GT60, you must **FULLY** charge the battery by USB cable at least 3 hours under the Power-OFF state. Or the device may be NOT work well.

Charger state indicate :

Red light is On , it indicates that it is in charging. Red light is Off , it indicates that charge completed.

(6.2) Buy SIM card

Buy SIM card from local telecommunication service provider .

Ensure that your GT60 has a working SIM installed:

- (1) Please make sure that your SIM card support SMS function and have enough deposit (Test the SIM in a phone to make sure it can send and receive SMS)
- (2) Check that the SIM Lock code is turned off

Please make sure that your SIM card do NOT need other password ,Or do NOT need some authorization when using it

For example, you NEED type one password when you use some kind of SIM cards in your mobile phone.

(3) If you require the function of sending an SMS location report to the authorized phone number when it makes a call to the GT60, please make sure the SIM installed supports displaying caller ID.

(6.3) Install SIM card

Open the cover



Insert the SIM Card



(6.4) Turn On / Turn Off

Turn on :

When the device is off, keep press the power button for about 6 seconds. Three LED will be flash quickly.

Turn off :

When the device is on ,press the button and wait for 6 seconds . When the LED go out ,it indicates that the device already be in OFF mode.



(Tips: How to get better GPS signal:

- 1 Working outdoor, GT60 can get better GPS signal;
- 2 The front &top side of GT60 should be placed toward sky.)

(6.5) Apply for one position service

No matter where you are ,when you want to know the position of your tracker , send a SMS or make a telephone call to GT60; it will report its location back to you by SMS .

Edit a message as following format, then send it to GT60: Format: W+Password+, +000 (*init password is : 000000*)

For example: W000000,000



The GT60 will send back one SMS including the position information.



Position Data means :

Longitude = 114 degree - 04 cent - 57.74 second Latitude = 22 degree - 32 cent - 40.05 second

if SMS show: Longitude = 000 degree - 00 cent - 00 second Latitude = 00 degree - 00 cent - 00 second

It means that GPS signal is too weak to work well

if SMS show: Last : Longitude = 114 degree - 04 cent - 57.74 second Latitude = 22 degree - 32 cent - 40.05 second

"Last" means that GPS signal is NOT enough good to get new position data, but GT60 sent the position data of latest history data.

(Tips: Apply for one position service by another easier way:

- (a) Dial the GT60 telephone number by your mobile phone
- (b) After listening to the ring of GT60 for 10~20 seconds, end calling
- (c) Then, after 20 second, your mobile phone will receive the Position SMS.)

(6.6) Set a time interval for tracking report function

Tracking report function can be turned on or off according to the requirements of the user .Tracking function will continually report tracker's position until it get stop command. In this continuous tracking mode,GT60 will send one position message at the preset time interval.

Step1: Edit a message as following format, then send it to GT60: ----- W+Password+,+002+,+XXX Note : XXX Unit: minutes (preset time interval) -- if XXX=000 it is STOP tracking

For example : W000000,002,005 its means that GT60 will send one Position Data in each 5 minute.



Step 2: GT60 will send back one SMS ---Set Timer OK/preset time interval OK

In this example ,the SMS is Set Timer OK/005

This SMS means that GT60 already be in tracking mode now and preset time interval is 5 minutes.

Step3: GT60 will send back position SMS at present time interval.

In this example ,the SMS will send back one position data at every 5 minutes. The target phone will receive the Position Data each 005 minute.



Position Data means :

Longitude = 114 degree - 04 cent - 57.74 second Latitude = 22 degree - 32 cent - 40.05 second

(6.7) Stop continuous tracking report function

This function is used to turn off tracking report function.

Edit a message as following format, then send it to GT60: Format: W+password+,+002+,+000 For example : W000000,002,000

The GT60 will send back one SMS-----Stop Timer OK. This message means tracking report function is turned OFF.

(6.8) Set preset phone number for SOS key

This function is used to set what telephone number will be dialed when press SOS key..

- Step1 . Edit a message as following format ,then send it to GT60 W+password+,+003+,+3+,+1+,+ (area number) +telephone number For example W000000,003,3,1,00526667774455
- Step2 .About ten seconds later, the GT60 will send back one SMS-----Set Tel OK/3,1,00526667774455.This message means the preset phone number for SOS key is OK.
- step3 .Press the SOS button for 2 seconds, the GT60 will send one Alarm SMS to "00526667774455", and then dial "00526667774455".

Note:

- (a) After the SOS button is pressed, you can call and talk to another person
- (b) Press the Call Key B, you can end the call or cancel the SOS call
- (c) After pressing the SOS key, GT60 goes to normal mode when you press Call B key to cancel the SOS call.
- (d) About area number:

In different countries ,the area number may different .Please contact with your telecommunication provider to get the area number .

If any question about this function ,welcome to contact our technical support team: <u>customer@redview.net</u>.

(6.9) Make a SOS help

This function is especially useful in emergencies. When the SOS key is pressed, GT60 will be in SOS mode and the following SMS will be sent to the preset phone number : SOS Alarm and the position information.

And GT60 will dial the preset telephone number at the same time. When the telephone is picked up, 2 way communication begins.

When the SOS button is pressed, an SOS call will be made.



(6.10) Cancel a SOS call

When in SOS state , press Call B key to end the call , device will exit SOS state and return normal state.



(6.11) Dial the preset phone number by Call B or Call C

Press the Call B button/ Call C button once, GT60 will call the preset phone number of Call B/Call C, then you can talk with another person.



If you want to complete this talking, you can end the call by pressing the Call B button.

(6.12) Receiving an incoming call

GT60 will ring when you have an incoming call. Press SOS key to receive the call and you can talk to other people. To end the call press B button.



(6.13) Adjust Voice Volume

When talking with another mobile phone by GT60, you can press "Call C" button to adjust voice volume.



(6.14) Voice monitor

This function is used to monitor the voice around the tracker unit. After authorizing phone number to call the GT60, the holder of the phone can hear what happened around the GT60.

Step1. Set the authorized phone number by sending following SMS command to tracker unit:

W000000,030,authorized phone number

In 2 mins, the tracker unit will send back following SMS to phone to confirm setting ok:

Set MON OK/phone number

For example, customer want to set authorized phone number:00511234567890 by sending following SMS: W000000,030,00511234567890

And then the tracker unit will return following SMS to confirm setting:

Set MON OK/00511234567890

Step2. The authorized phone number call GT60 and then the holder of phone can listen what happen around GT60

In this example, when you call the GT60 using your telephone, which number is 00511234567890, you will monitor the GT60. When you end the call the monitor will stop.

(6.15) Power saving state

A built-in movement sensor is used in GT60, so after GT60 don't move for a preset time interval, the device will be standby to saving power.

Setting preset time interval of entering power saving state is following:

W000000,026,XX

The XX is preset time interval (unit : min). The min time interval is 5 min and the max time interval is 60 min.

For example, when following SMS is send to GT60: W000000,026,10

This means the GT60 will be in power saving state when the device keep still for 10 min.

(Tips:

Once GT60 is moved, GT60 will left power saving state and enter normal state $\)$

7 Displaying location on map

- (7.1) Download google earth software from <u>http://earth.google.com/</u>
- (7.2) Start the Google Earth software.(For more information about Google Earth software, please refer to <u>http://earth.google.com/</u>) As following picture shows:



Or you can start the Internet Explorer and type "http://maps.google.com" to connect to Google Map website for displaying the location map.

(7.3) You can get the latitude & longitude data by sending"W+Password+, +000" SMS command Code to the GPS Tracker GT60.

Type the latitude and longitude that you receive from SMS and click on search button. The Google earth will display the location map for you.

For example:

Step1: you can see the Position Data from SMS in you mobile phone:

Last: Latitude = 22 32 40.05 N Longitude = 114 04 57.74 E

Step2: Now you can type the latitude and longitude as following, and click on the searching button.

```
(Note:
```

```
pay attention to change the Position Data Format
format : 22 32 40.05 N 114 04 57.74 E )
```





Step3:Now you can find the exact position of the tracker.

(7.4) Or you can use local map software on **PDA** or **Car Navigation Device**, input the Position coordinates Data.





8 More Professional SMS Instruction

***** is user password , and init password is 000000

	SMS Instruction	Format	Note
1	Request one position	W*****,000	[example]: W000000,000
2	Modify user password	W*****,001,######	****** is old password ####### is new password [example]: W000000,001,888888
3	Set the time internal of Continuous tracking	W*****,002,XXX	XXX(3 digital) =000, STOP =[1,999] time internal (unit: mins) [example]: W000000,002,005
4	Set a preset phone number for SOS button/ Call B button/ Call C button; When this button is pressed, GT60 will dial the preset Number, and send one Alarm SMS to the preset Number	W*****,003,F,P,TelNumber	 F =0, close this function =1, only send alarm SMS to the preset number =2, only Call the preset number =3, Send alarm SMS, then Call the preset number P =1, Set the preset number for SOS key =2, Set the preset number for Call B =3, Set the preset number for Call C TelNumber: Preset Tel number (TelNumber must <16 digits) [example]: W000000,003,1,3,0051666779955
5	Set Low Power Alert When the GT60 power voltage is lower than the preset value, GT60 will send one lower power alarm SMS to the SOS preset number.	W*****,004,X	X (voltage preset value) =0, close =1, <3.3V send SMS alarm =2, <3.4V send SMS alarm =3, <3.5V send SMS alarm (default) =4, <3.6V send SMS alarm =5, <3.7V send SMS alarm [example]: W000000,004,1
6	Set Over Speed alarm When the GT60 speed higher than the preset value, GT60 will send one over speed alarm SMS to the SOS preset	W*****,005, XX	XX (the speed preset value) =00, close =[01 <xx<20] (unit:="" 10km="" h)<br="">[example]: W0000000,005,08</xx<20]>

	number.		
7	Set Geo-fence alarm When the GT60 move out preset scope, GT60 will send one Geo-fence SMS to the SOS preset number.	W*****,006,XX	XX (preset distance to original place) =00 close =01 30m =02 50m =03 100m =04 200m =05 300m =06 500m =07 1000m =08 2000m [example]: W000000,006,04
8	Set Vibration Alarm	W000000,041,X	X: preset value for shock sensitivity =0 Close shock alarm =1 high shock sensitivity =2 middle shock sensitivity =3 low shock sensitivity [example]: W000000,041,2
9	Extend setting (note: Please use this instruction carefully)	W*****,008,ABCDEFG###	 A=0, Close position report function which get position SMS by Calling GT60 A=1, Open position report function which get position SMS by Calling GT60 B=0, position SMS format be analyzed in order to read easily. For example: Longitude = 114 degree - 04 cent - 57.74 second Latitude = 22 degree - 32 cent - 40.05 second B=1, position SMS format is NMEA 0183 Format For example: \$GPRMC,072414.000,V,3114.3763,N,12 131.3255,E,0.00,0.00,050805,*0 0 C=0, GT60 do NOT hung up when one call incoming . C=1, GT60 hung up after 4~5 rings when call incoming D=0, GT60 do NOT send one notice SMS to SOS preset number when the GT60 power on D=1, GT60 do send one notice SMS to

			SOS preset number when the GT60 power on
			E=0, GT60 do NOT shut down automatically when the power voltage lower than 3V
			E=1, GT60 will shut down automatically when the power voltage lower than 3V
			F=0, GT60 do NOT send the notice SMS to the SOS preset number when the GPS signal is weak
			F=1, GT60 send the notice SMS to the SOS preset number when the GPS signal is weak G=0. Open 3 LED when GT60 works
			G=1, Close 3 LED when GT60 works
			###, end char
			(default value should be : ABCDEFG=1011110)
			[example]: W000000,008,1111###
10	Set monitor number function	W*****,030, TelNumber	TelNumber : is the monitor telephone number, the length must < 16 digits
			[example]: W000000,030,0051666998877
11	Set the function of auto-sleep mode without moving.	W*****,026, XX	XX=00 close auto-sleep mode XX=[05 <xx<60] (unit:="" minute)<br="">The time of keeping still</xx<60]>
			[example]: W000000,030,010
12	Get GSM IMEI number	W000000,607	
13	Reset ALL parameter as default.	W******,991,199### Or W******,990,099###	[example]: W000000,991,199###
	(note: Please use this instruction carefully)		W000000,990,099###
	GPRS setting		
14	Set the Tracker ID of GT60 for GPRS	W*****,010, ID	ID : the Tracker ID of the tracker, (Tracker ID must be < 14 digits)
			[example]: W000000,010,123456

15	Set APN	W******,011,APN	APN : APN string
			[example].
			W000000,011,CMNET
16	Set IP Address &port number	W******,012, IP,PORT	IP: xxx.xxx.xxx
			PORT: [1,65536]
			[example].
			W000000,012,192.168.110.1,8000
17	Select Protocol	W******,013,X	
			Depend on redview GPS
18	Set time interval of send a	W******,014,XXXXX	XXXXX: means times interval,
	GPRS package		(Unit: IUS)
			The length of XXXXX must be 5 digits
			XXXXX=00001. means time
			interval is 10s
			[example]:
			W00000,014,00006
			W000000.014.00000
			will STOP GPRS function

8 SMS Instruction Example:

(1) Send Instruction "W*****,000"

Meaning: Apply one position, GT30 will reply one position SMS

(2) Send Instruction "W*****,002,005"

Meaning: Set the time internal of position refresh, GT30 will replay one position SMS each 5 minutes in SMS working mode.

(3) Send Instruction "W*****,003,3,1,(area number)+13628888444"

Meaning: when the SOS button be pressed, the GT30 will send one SMS to "13628888444", and then dial up "13628888444". --

(4) Send Instruction "W*****,003,3,2, (area number)+13628888444"

Meaning: when the Dial button B be pressed, the GT30 will send one SMS to "13628888444", and then dial up "13628888444"

(5) Send Instruction "W*****,003,1,3, (area number)+013628888444"

Meaning: when the Dial button C be pressed, the GT30 will **only** send one SMS to "13628888444".

- (6) Send Instruction "W*****,005,03"
 - Meaning: when the speed is up 30 km/h, the GT30 will send one Alarm SMS the mobile phone linking to SOS alarm
- (7) Send Instruction "W*****,030, (area number)13628888444"

Meaning: The telephone which number is 13628888444 can be used to monitor GT60 by calling GT60. When press button B ,the monitor will be stopped .

9 GPRS communication setting

Step1: Make sure that your SIM card in GT30 support the GPRS function

Step2: Set tracker ID of GT30 by send one SMS:

SMS Format: W*****,010, Tracker ID

For example : W000000,010,123456

GT30 will response one SMS to confirm the setting. For example : "Set SIM OK/123456"

(tip:

"123456" can be considered to be the device's name. (Tracker ID must be < 14 digits) If there are several devices, you can use their Tracker ID to differ from each other.)

Step3 : Set IP address and Port by send one SMS

SMS Format: W*****,012,IP,PORT

IP: xxx.xxx.xxx.xxx PORT: [1,65536]

For example : W000000,012,202.116.11.12,8000

GT30 will response one SMS to check it. Like "Set IP ok /202.116.11.12#8000"

(tip:

Make sure that the IP should be the Extranet IP. If your pc is in Intranet ,you must know your Extranet IP . You may need the help of you network administrator)

Step4: Set APN String

SMS format : W*****,011, APNString

For example : **W000000,011, CMNET**

GT30 will response one SMS to check it For Example "set APN OK /CMNET"

Step5: Set time interval of sending GPRS package

SMS format: W******,014, XXXXX

XXXXX: means times interval, (Unit: 10s) (The length of XXXXX **MUST** be **5 digits**)

XXXXX=00001, means time interval is 10s; XXXXX=00000, means **STOP** GPRS function.

For example: **W000000,014,00003**

SMS meaning: Make GT30 send a GPRS package every 30 seconds

GT30 will response one SMS to confirm the setting . For example "set GPRS Timer ok/00003"

(tip: W000000,014,00000 mean STOP GPRS function)

Step6: Enable communication protocol for GPRS

SMS format: **W*******,013,**X**

X meaning is defined by RedView GPS. You can set it as 1 or 0

For example: W00000, 013, 1 W00000, 013, 0

(tip:

If you have question about it, pls contact with our support teams: <u>customer@redview.net</u>)

Step7 : According to the document of our *GTP communication protocols*, the server can analyses the GPRS data.

Please contact us if you have not this protocol : <u>customer@redview.net</u>

(tips:

1 You can get the latitude & longitude data sent from GT60 by GPRS every interval time from the Any software of TCP receiver ,which is installed in your PC.

2 for bulk number:

You can configure GT60 by PC tools named "Parameter Editor" in CD ----the tools is be designed by RedView GPS, and it is for configuring bulk number of Tracker unit, And the customers require one special USB configure cable from RedView GPS which connect PC with Tracker unit.

GPS Tracker Parameter Editor V1.	. 02		X
APN CMNET	PW SMS1	SetPW	Init All
APN FW	TEL1	SetKey1	Read All
TM S State	SMS2 TEL2	SetKey2	☐ TelToSMS ☐ LatMode
IP GPRS	SMS3 TEL3	SetKey3	AutoOffTel
	SMSSTX	SMESTX	GPSAlarm
Low Bat 3.5V 💌 Speed Km/h	TelSTX	TelSTX	ExSMSMode
Area Alarm Nul 💌 Sleep Other	Tel Min	SMS	COM1 -

For detail, read RedView Configuration tool V1.02 User Guide in CD

10 Caution:

- a) This device is not design for water-proof, and use the water-proof bag accessory if necessary
- b) This device must work with GPRS/GSM network.
- c) Make sure enough deposit in the SIM card to avoid any in convince.

11 DIY !!! Build your control center system on your PC

RedView GPS provide one low cost solution help you build your control center system on your PC, which is very cheaper than other center system.

You NEED: ---- (very low cost)

- (1) Google Earth Plus (<u>http://earth.google.com/products.html</u>) Or any other navigation map software (PC version)
- (2) one PC
- (3) RT200 SMS modem (provided by RedView GPS)
- (4) RView TrackMaker software on PC (provided by RedView GPS freely)
- (5) Some GT60 (provided by RedView GPS)

System structure



Software Interface

RViewLinker



Google earth



One navigation map software



12 DIY Tracking Kits for GPRS-TCP

Overview

This DIY system was specially developed for Redview GPS Trackers. With this application software, + RedView GPS Tracker, +RViewLinker, you will be able to use your own PC to track the position of your loved one without the need of a call center. For example, you can use this system to monitor your child, the elders, the pets, your car, or the assets installed with our GPS Tracker - live and real-time. Without any payment to the call center.

This application software enables you to use Google Earth to track your vehicle(s) LIVE & Real-Time in office or home by your own PC; without the call center. It can also replay the historical route(s) afterwards.

DIY call center. It is specially designed for small enterprise and family application. You customer can setup its own call center at a very cheap cost, no monthly service payment is required .The position and trace of the target can be shown on electronic map directly, without manual input.

Features:

- 1 Build your own control center system at very low cost;
- 2 DIY your tracking, and Without any payment to center service;
- 3 Easily support up to 500 GPS Trackers;
- 4 Support the trace storage and replay;
- 5. Living and Real time;
- 6. Easily use, a good choice for small enterprise, home, small group.
- 7. The customers can select their faviorate map by themselves

Application :

- **1** Personal
- **2 SOHO**
- **3 Small Enterprise**
- **4 Small Organization**

To build the DIY call center system,

You NEED: ---- (very low cost)

- (1) Google Earth (<u>http://earth.google.com/products.html</u>) Or any other navigation map software (PC version)
- (2) One PC connecting internet
- (3) RedView GPRS-TCP DIY Tracking software on PC (one license provided by RedView GPS)
- (4) Virtual UART driver program
- (5) Some RedView Tracker Unit. (provided by RedView GPS)

Architecture



Software interface

GIS Map Interface	Net Config
GPS IN COM7	PORT 8052
Pls set Map COM port as: COM 8	Tracker ID 123456789
Open COM Colse COM	LISTEN
COM State>> Sending the GPS data to GIS Map	Stop Listen
700 D.4.	
APS Data	
rrs Data FPS Signal>>> GOOD	
Optic GOOD NET state>> Waiting the New data Waiting GOOD Vol ID==(Invalid) GPSData==\$GPRMC, IOI ID==123456789 GPSData==\$GPRMC,040126.354,V,2236 VO1 ID==123456789 GPSData==\$GPRMC,040126.358,V,2236 IO2 ID==123456789 GPSData==\$GPRMC,040263.358,V,2236 VO3 ID==123456789 GPSData==\$GPRMC,04026,035,V,2236 IO2 ID==123456789 GPSData=\$GPRMC,04026,035,V,2236	59084,N,11407,8107,E,0.00,031207,,,N*66 59084,N,11407,8107,E,0.00,031207,,,N*6E 59084,N,11407,8107,E,0.00,031207,,,N*66
GOOD BFS Signal>> GOOD NET state>> Waiting the New data Waiting	5 9084, N, 11407, 8107, E, 0, 00, 031207, ,, N*66 5 9084, N, 11407, 8107, E, 0, 00, 031207, ,, N*66 5 9084, N, 11407, 8107, E, 0, 00, 031207, ,, N*66 5 9084, N, 11407, 8107, E, 0, 00, 031207, ,, N*62 5 9084, N, 11407, 8107, E, 0, 00, 031207, ,, N*62
GOOD Stignal>> GOOD NET state>> Waiting the New data Waiting Waiting the New data Waiting Control of the New data Waiting <thcontregradient o<="" th=""><th>5 9084,N,11407,8107,E,0.00,031207,,,N*66 5 9084,N,11407,8107,E,0.00,031207,,,N*65 5 9084,N,11407,8107,E,0.00,031207,,N*65 5 9084,N,11407,8107,E,0.00,031207,,N*65 5 9084,N,11407,8107,E,0.00,031207,,N*66 5 9084,N,11407,8107,E,0.00,031207,,N*66 5 9084,N,11407,8107,E,0.00,031207,,N*64 5 9084,N,11407,8107,E,0.00,031207,,N*64 5 9084,N,11407,8107,E,0.00,031207,,N*64 5 9084,N,11407,8107,E,0.00,031207,,N*69</th></thcontregradient>	5 9084,N,11407,8107,E,0.00,031207,,,N*66 5 9084,N,11407,8107,E,0.00,031207,,,N*65 5 9084,N,11407,8107,E,0.00,031207,,N*65 5 9084,N,11407,8107,E,0.00,031207,,N*65 5 9084,N,11407,8107,E,0.00,031207,,N*66 5 9084,N,11407,8107,E,0.00,031207,,N*66 5 9084,N,11407,8107,E,0.00,031207,,N*64 5 9084,N,11407,8107,E,0.00,031207,,N*64 5 9084,N,11407,8107,E,0.00,031207,,N*64 5 9084,N,11407,8107,E,0.00,031207,,N*69
GOOD SFS Signal>> GOOD NET state>> Waiting the New data Waiting	5 9084,N,11407,8107,E,0.00,031207,,,N*66 5 9084,N,1407,8107,E,0.00,031207,,,N*65 5 9084,N,1407,8107,E,0.00,031207,,N*65 5 9084,N,11407,8107,E,0.00,031207,,N*65 5 9084,N,11407,8107,E,0.00,031207,,N*65 5 9084,N,11407,8107,E,0.00,031207,,N*65 5 9084,N,11407,8107,E,0.00,031207,,N*64 5 9084,N,11407,8107,E,0.00,031207,,N*64 5 9084,N,11407,8107,E,0.00,031207,,N*64 5 9084,N,11407,8107,E,0.00,031207,,N*64 5 9084,N,11407,8107,E,0.00,031207,,N*69
GOOD SFS Signal>> GOOD NET state>> Waiting the New data Waiting Wood ID==(Invalid) GPSData==\$GPRMC, 100 ID==(Invalid) GPSData==\$GPRMC,040126.354,V,2236 101 ID==123456789 GPSData==\$GPRMC,040256.357,V,2236 103 ID==123456789 GPSData==\$GPRMC,040256.357,V,2236 104 ID==123456789 GPSData==\$GPRMC,040326.361,V,2236 105 ID==123456789 GPSData==\$GPRMC,040326.367,V,2236 101 ID==123456789 GPSData==\$GPRMC,040426.365,V,2236 102 ID==123456789 GPSData==\$GPRMC,040426.365,V,2236 103 ID==123456789 GPSData==\$GPRMC,0404523.3279,V,2236 104 ID==123456789 GPSData=\$GPRMC,040453.3279,V,2236 104 ID==123456789 GPSData=\$GPRMC,040453.3279,V,2236 104 ID==123456789 GPSData=\$GPRMC,040453.3279,V,2236 104 ID==123456789 GPSData=\$GPRMC,040553.279,V,2236 104 ID==123456789 GPSData=\$GPRMC,040553.279,V,2236 104 ID==123456789 GPSData=\$GPRMC,040553.279,V,2236	5 9084,N,11407,8107,E,0.00,031207,,,N*66 5 9084,N,1407,8107,E,0.00,031207,,,N*66 5 9084,N,1407,8107,E,0.00,031207,,N*65 5 9084,N,1407,8107,E,0.00,031207,,N*65 5 9084,N,1407,8107,E,0.00,031207,,N*65 5 9084,N,1407,8107,E,0.00,031207,,N*64 5 9084,N,1407,8107,E,0.00,031207,,N*64 5 9084,N,11407,8107,E,0.00,031207,,N*64
GOOD SFS Signal>> GOOD NET state>> Waiting the New data Waiting Woiting the New data OID ID==(Invalid) GPSData==\$GPRMC, GOOD IOI ID==123456789 GPSData=\$GPRMC,040156.354,V.2236 IO3 ID==123456789 GPSData=\$GPRMC,040256.357,V.2236 IO4 ID==123456789 GPSData=\$GPRMC,040356.361,V.2236 IO5 ID==123456789 GPSData=\$GPRMC,040356.361,V.2236 IO1 ID==123456789 GPSData=\$GPRMC,040356.361,V.2236 IO1 ID==123456789 GPSData=\$GPRMC,040426.365,V.2236 IO1 ID==123456789 GPSData=\$GPRMC,040426.365,V.2236 IO1 ID==123456789 GPSData=\$GPRMC,040452.3279,V.2236 IO1 ID==123456789 GPSData=\$GPRMC,040453.3279,V.2236 IU2 ID==123456789 GPSData=\$GPRMC,040533.279,V.2236 IU2 ID==123456789 GPSData=\$GPRMC,040553.279,V.2236 IU2 ID==123456789 GPSData=\$GPRMC,040553.279,V.2236 IU2 ID==123456789 GPSData=\$GPRMC,040553.279,V.2236 IU2 ID==123456789 GPSData=\$GPRMC,040553.279,V.2236	5 9084, N, 11407, 8107, E, 0, 00, 031207, ,, N*66 5 9084, N, 11407, 8107, E, 0, 00, 031207, ,, N*66 5 9084, N, 11407, 8107, E, 0, 00, 031207, ,, N*65 5 9084, N, 11407, 8107, E, 0, 00, 031207, ,, N*62 5 9084, N, 11407, 8107, E, 0, 00, 031207, ,, N*62 5 9084, N, 11407, 8107, E, 0, 00, 031207, ,, N*64 5 9084, N, 11407, 8107, E, 0, 00, 031207, ,, N*64 5 9084, N, 11407, 8107, E, 0, 00, 031207, ,, N*69

Map ineterface:



13 Trouble shooting

If you find some trouble in using GT60, please refer the following:

(1) Check GPS signal is good,

In normal ,the blue led should in rapid blink----light for 0.1 second and then dark for 2.8second in turn

If blue led is not in this correct state, it indicate GPS signal is too weak to get position info.

please check following issue:

(a) Working outdoor, GT60 can get better GPS signal;

- (b) The front side of GT60 should be placed toward sky;
- (c) Charging GT60 for more than 3 hours for the tracker has enough power before using.
- (2) Check GSM signal is good

In normal ,the green led should in rapid blink ----light for 0.1 second and then dark for 2.8s in turn

If green led is not in this correct state, it indicate GSM communication is wrong please try following issue:

- (a) Whether the GSM network is strong enough to make the track unit work. You can judge it by calling someone thorough your cell phone.
- (b) Whether the SIM card is installed correctly or not ,and try to pull out and insert SIM card as following picture shows to ensure it; try this operation a few times may help to ensure correct installation
- (c) Whether there is enough deposit in SIM card or not;
- (d) Whether your SIM card in GT60 support SMS function or not, (including send SMS and receive SMS)
- (f) Whether SIM card has specific requirement on cell phone or not, for example whether the SIM card can only use in a appointed cell phone, other cell phone cannot use the SIM card
- (g) Whether SIM card is binding to the specific cell phone or not

(h) Whether SIM card need some authorization when using it

For example, you need type one password when you use some kind of SIM cards.

If so, you may remove it by help of SIM card provider.

- (i) Whether the tracker has enough power to work, we strongly suggest it was charged at least 3 hours before use it
- (3) The SMS which be replied by GT60 is including the characters --- " Last" It is indicate the GPS signal is weak.
- (4) Please Contact our support team by mail : <u>customer@redview.net</u>

Attachment A: Problem Index

Problem: Unit will not turn on	
Possible Cause:	Resolution:
The power button is not pressed long enough	Press and hold the button for 3-5 seconds.
Battery needs charging	Recharge battery for 3 hours
Problem: Unit will not reply with SMS	
Possible Cause:	Resolution:
Green LED is flashing (on for 1 second and off for 2 seconds)	Make GT60 connected to GSM network.
GSM Network is slow	Wait for SMS. Some GSM networks slow down during peak time or when they have equipment problems.
Unit is sleeping	Cancel sleeping mode
Wrong password in your SMS or wrong SMS format	Write correct password or SMS format
The SIM in GT60 has run out of credit	Replace or top up the SIM card

Possible Cause:	Resolution:
No GSM signal	Check with a mobile phone to see if there is a signal
	in the area or try to call the unit to see if you hear a
	ring tone.
No SIM card	Insert a working SIM card. Check in phone that the
	SIM can send SMS message.
SIM card has expired	Check in phone that the SIM can send SMS
	message. Replace SIM card if needed.
SIM has PIN code set	Remove PIN code by inserting SIM in you phone and
	deleting the code.
SIM is warped or damaged	Inspect SIM, clean the contacts. If re-inserting doe
	not help try another to see if it will work.
Roaming not enabled	If you are in a different country your SIM accourt
	must have roaming enabled.
Battery is low	Recharge the unit and the GSM will start working.

1

Problem: Blue LED is Flashing (on for 1 second and off for 2 seconds) or the SMS received starts with			
'Last'			
Possible Cause:	Resolution:		
Unit does not have clear view of the sky	Move the unit to a location where the sky is visible. Tall buildings, trees, heavy rain, can cause problems with the GPS reception.		
Bad GPS reception	Place the front side of GT60 towards sky		
Battery is low	Recharge the unit and the GPS will start working.		

Attachment B:

You can get the latitude & longitude data sent by the GT60 every interval time from the software ,which is installed in your PC.

GPRS-TCP DIY RViewLinker (Demo Version)	vvv. redviev. net		
GIS Map Interface	– Net Config		
	PORT 8053		
GPS IN COM/			
Pls set Map COM port as: COM 8	Tracker ID 123	_	
	,		
Open COM Colse COM	LISTEN		
COM State>> COM is Colse!!! Can not send GPS to Man Pls Onen it	Stop Listen		
GPS Data			
GPS Signal>>> GOOD			
NET state>>> Recieving the New data for NET			
Waiting			
NO1 ID==123 GPSData==\$GPRMC,100923.844,V,2232.6578,N,	,11404.9585,E,,,110108,,*10		
NO2 ID==123 GPSData==\$GPRMC,101221.000,A,2232.6688,N,11404.9714,E,0.00,,110108,,*1F NO3 ID==123 GPSData==\$GPRMC,101251.000,A,2232.6688,N,11404.9714,E,0.00,,110108,,*18			
NO4 ID==123 GPSData==\$GPRMC,101321.000,4 2232.6688,N	NO4 ID==123 GPSData==\$GPRMC,101321.000,4 2232.6688,N,11404.9714,E 0.00,,110108,,*1E		
K			
Suggestion			
ERR>>>>> No ERR			
Suggestion>>> No suggestion			

And then you must edit the data as format below

Format: 22 32 40.51N 114 04 57.78E

(N is the north latitude, and \mathbf{E} is the east longitude)

Now you can type or copy the latitude and longitude as following, and click on the searching button.

Now you can find the exact position of the tracker



Attachment C: Worldwide APN (Access Point Name) List

Country	Mobile operator	Access point name
Argentina	Personal	gprs.personal.com
Argentina	Unifon	internet.gprs.unifon.com.ar
Australia	Telstra	telstra.internet
Australia	Optus	internet
Australia	Three	3netaccess
Australia	Vodafone	internet
Austria	Max Online	gprsinternet
Austria	One	wap.one.at
Belgium	Orange	orangeinternet
Belgium	Mobistar	web.pro.be
Belgium	Proximus	internet.proximus.be
Bermuda	AT&T	proxy
Bermuda	Mobility	net.bm
Brazil	Claro	claro.com.br
Brazil	Oi	gprs.oi.com.br
Brazil	TIM	tim.br
Bulgaria	Mobiltel (Mtel)	inet-gprs.mtel.bg
Canada	Fido	internet.fido.ca
Canada	Rogers AT&T	internet.com
Chile	Entel PCS	imovil.entelpcs.cl bam.entelpcs.cl
Chile	Telefonica GSM	web.tmovil.cl
China	China Mobile	cmnet
Croatia	VIPNET	gprs.vipnet.hr
Czech Republic	Eurotel	internet
Czech Republic	Oskar	internet
Czech Republic	Oskar prepaid cards	ointernet
Czech Republic	T-Mobile	internet.t-mobile.cz

Denmark	TDCmobil	internet
Denmark	Orange	web.orange.dk
Eygpt	Vodafone	internet.vodafone.net
Dominican Republic	Orange Dominicana	orangenet.com.do
Finland	Telia Mobile	internet
Finland	DNA	internet
Finland	Sonera	internet
Finland	Radiolinja	internet
Finland	Saunalahti	saunalahti
France	Orange	orange.fr
France	SFR	websfr
France	Bouygues Telecom	eBouygTel.com
Germany	D2 Vodafone	web.vodafone.de
Germany	E-Plus	internet.eplus.de
Germany	02	internet
Germany	Quam	quam.de
Germany	T-Mobile D1	internet.t-d1.de
Greece	Vodafone	internet.vodafone.gr
Greece	Telestet	gint.b-online.gr
Greece	Cosmote	internet
Hungary	Vodafone (Prepaid "Optimized")	vitamax.internet.vodafone.net
Hungary	Vodafone (Prepaid "Standard")	vitamax.snet.vodafone.net
Hungary	Vodafone (Postpaid "Optimized")	internet.vodafone.net
Hungary	Vodafone (Postpaid "Standard")	standardnet.vodafone.net
Hong Kong	CSL	internet
Hong Kong	Orange	web.orangehk.com
Hong Kong	New World	internet
Hong Kong	People	internet
Hong Kong	SmarTone	internet

Hong Kong	Sunday	internet
India	Orange, Hutch	www
Iceland	Siminn	gprs.simi.is
India	BPL Mobile	bplgprs.com
India	Airtel	airtelgprs.com
Indonesia	Telkomsel	internet
Ireland	O2	internet
Ireland	Vodafone	live.vodafone.com
Israel	Cellcom	internetg
Israel	Orange	internet
Italy	TIM	uni.tim.it ibox.tim.it
Italy	Vodafone Omnitel	web.omnitel.it
Italy	Wind	internet.wind
Latvia	Latvia Mobile Telefone	internet.lmt.lv
Luxembourg	LUXGSM	web.pt.lu
Luxembourg	Tango	internet
Malaysia	Celcom	celcom.net.my
Mexico	Movistar	internet.movistar.mx
Mexico	Telcel	internet.itelcel.com
Montenegro	Monet	gprs.monetcg.com
Netherlands	T-Mobile	internet
Netherlands	KPM Mobile	internet
Netherlands	Orange	internet
Netherlands	O2	internet
Netherlands	Vodafone (normal)	web.vodafone.nl
Netherlands	Vodafone (business)	office.vodafone.nl
New Zealand	Vodafone NZ	www.vodafone.net.nz
Norway	Netcom	internet.netcom.no

Norway	Telenor	internet
Pakistan	UFone	ufone.internet
Paraguay	Personal	internet
Paraguay	Tigo	internet.tigo.py
Philippines	Smart	internet
Philippines	Globe	internet.globe.com.ph
Poland	Era	erainternet
Poland	Idea	www.idea.pl
Poland	PlusGSM	www.plusgsm.pl
Portugal	Optimus	internet
Portugal	TMN	internet
Portugal	Vodafone (Telcel)	internet.vodafone.pt
Romania	Connex	internet.connex.ro
Romania	Orange	internet
Russia	BeeLine	internet.beeline.ru
Russia	Megafon	internet.nw
Russia	MTS	internet.mts.ru
Russia	PrimTel	internet.primtel.ru
Saudi Arabia	Saudi Telecom	Jawalnet.com.sa
Serbia-Montenegro	Mobtel Srbija	internet
Serbia-Montenegro	Telekom Srbija	gprsinternet
Singapore	M1	sunsurf
Singapore	Singtel	internet
Singapore	Starhub	shwapint
Slovakia	Eurotel	internet
Slovakia	Orange	internet
South Africa	MTN	internet
Spain	Amena	amenawap

Spain	Telefonica (Movistar)	movistar.es
Spain	Vodafone	airtelnet
Sweden	Telia	online.telia.se
Sweden	Vodafone SE	internet.vodafone.net
Switzerland	Swisscom	gprs.swisscom.ch
Switzerland	Orange CH	internet
Switzerland	sunrise	internet
Switzerland	UMC	www.umc.ua
Taiwan	Chunghwa Telecom	internet
Taiwan	Far EasTone	fetnet01
Taiwan	KG Telecom	internet
Taiwan	Taiwan Cellular	internet
Thailand	AIS	internet
Thailand	DTAC	www.dtac.co.th
Turkey	Avea	internet
Turkey	Aycell	aycell
Turkey	Telsim	telsim
Turkey	Turkcell	internet
UK	Jersey Telecom	pepper
UK	O2	mobile.o2.co.uk
UK	T-Mobile	general.t-mobile.co.uk
UK	Vodafone UK	internet
UK	Orange	orangeinternet
Ukraine	Kyivstar GSM	www.kyivstar.net
Ukraine	UMC	www.umc.ua
USA	T-Mobile	internet2.voicestream.com
USA	AT&T	proxy
USA	Cingular	isp.cingular
Venezuela	Digital TIM	gprsweb.digitel.ve