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1. Summary
Working based on existing GSM/GPRS network and GPS satellites, this tracker is a small and powerful tracking device that is developed for personal, vehicle and pet etc. Not only transmitting the longitude and latitude coordinate to your cell phone by SMS, but also transmitting the longitude and latitude coordinate to the designated server by GPRS and then displaying the location by specific map software.

2. Features
- Mini size
- Tracking via SMS or GPRS
- Support voice call
- SOS alarm

3. Applications
- Track the vehicle/equipment etc.
- Protect the child/elderly/disabled/pet etc.
- Personnel management

4. Specification

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<th>Specs</th>
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<tr>
<td>Dimension</td>
<td>70.7mm x 42.9mm x 20.1mm</td>
</tr>
<tr>
<td>Weight</td>
<td>40g</td>
</tr>
<tr>
<td>Network</td>
<td>GSM/GPRS</td>
</tr>
<tr>
<td>Band</td>
<td>900/1800Mhz</td>
</tr>
<tr>
<td></td>
<td>900/1800/1900Mhz</td>
</tr>
<tr>
<td></td>
<td>850/900/1800/1900Mhz</td>
</tr>
<tr>
<td>GPS chip</td>
<td>SIRF3 chip</td>
</tr>
<tr>
<td>GPS sensitivity</td>
<td>-159dBm</td>
</tr>
<tr>
<td>GPS accuracy</td>
<td>5-20m</td>
</tr>
<tr>
<td>Cold start</td>
<td>42 sec.</td>
</tr>
<tr>
<td>Warm starts</td>
<td>35 sec.</td>
</tr>
<tr>
<td>Hot start</td>
<td>1 sec.</td>
</tr>
<tr>
<td>Battery</td>
<td>Chargeable 3.7V 800mAh battery</td>
</tr>
<tr>
<td>Operation Temp.</td>
<td>-20°C to +55°C</td>
</tr>
<tr>
<td>Humidity</td>
<td>5%-95% non-condensing</td>
</tr>
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5. Start up

Do charge the battery to capacity in 8 - 12 hours for first use. After first use, the battery can be charged fully in 3 - 5 hours. Please use the battery and charger provided by the manufacturer.

Insert the SIM card into the tracker like this.

Switch on the unit outdoors. Three LEDs will light at the same time during the tracker starting.

In 10 to 30 seconds, the unit will begin to work and acquire the GSM signal as well as the GPS signal. The red LED means power, it will be dim for 0.5 second and bright for 0.5 second in the normal status. The orange LED means GSM signal, it will flash every 3 seconds if it got GSM signal. The blue LED means GPS signal, it will flash every 3 seconds if it got GPS signal.
6. Set the authorized number.

Send SMS “password + A1, + country code + mobile number” to set the first SOS number.
Send SMS “password + A2, + country code + mobile number” to set the second SOS number.
Send SMS “password + A3, + country code + mobile number” to set the third SOS number.
Send SMS “password + A4, + country code + mobile number” to set the CALL1 number.
Send SMS “password + A5, + country code + mobile number” to set the CALL2 number.

E.g. send “123456A1,+8613812345678” to tracker to set +8613812345678 as the first SOS number. Send “123456A2,+8613898765432” to tracker to set +8613898765432 as the second SOS number. (default password: 123456. +86 is the country code of China. A must be capital. No space in the command)

If SOS button is pressed, the tracker will send a HELP message to these three SOS numbers then call the three SOS numbers in turn till one of these three SOS number answers it. If CALL1 button is pressed, the tracker will dial the CALL1 number. If CALL2 button is pressed the tracker will dial the CALL2 number.

It doesn't mean all of the five authorized numbers should be set, but one authorized number at least. Only the authorized number can do the following operation.

7. Delete authorized number.

Send SMS “password+A1, +D” to delete the first SOS number.
Send SMS “password+A2, +D” to delete the second SOS number.
Send SMS “password+A3, +D” to delete the third SOS number.
Send SMS “password+A4, +D” to delete the CALL1 number.
Send SMS “password+A5, +D” to delete the CALL2 number.
E.g. send “123456A1, D” to delete the first SOS number.

8. Check the authorized numbers and other setting.
Send SMS: “password +G” to the tracker it will reply all the authorized numbers and other setting.
E.g. send “123456G” to the unit. It will reply all the authorized numbers and other setting.
Note: G must be English in capital.
Send 123456G to the unit, it will reply: E.g. Telephones: Axxxxx; Bxxxxx; Cxxxxx; Dxxxxx; Exxxx; F; G; H;
Speed: 080; 0; 0; 0; 0; 0; 1; BAT: 100, 30%
A, B, C, D, E, are the preset numbers of cellphone. F; G; H; means nothing now, we remain it for future functions.
So please ignore them.
Speed: 080 means the setting of over-speed alarm is 80km/h.

0 means the function turned off; 1 means the function turned on;
The first digital refers to over speed alert;
The second digital refers to Continuous Tracking;
The 0; 0; 0; means nothing now, we remain it for future functions. So please ignore them.
The six digital refers to Low battery alarm.
BAT: 100, 30% means the current battery is 100% and the setting of low battery alarm is 30%.

9. Apply for one position service.
Send SMS “password +F” to the unit, it will reply its position by SMS. Only the authorized number can get the reply.
Note: F must be English in capital.
E.g. send “123456F” to the unit. It will reply its position.

10. Continuous tracking function
Send SMS “password +M (0/1), xxx (S/M/H)” to the unit, the tracker will reply one position message at a
11. **SOS function**

Press the SOS button for 3 seconds, it will send "help me! + GPS info" to A1, A2, A3 authorized numbers. In the mean time, it will dial up the 3 authorized numbers (A1, A2, A3). The first preset number will take priority over the second one and the third one. If the tracker fails to connect to the first number, it will switch to the second one. In case the second number fail to be connected too, the system will connect to the third number. This will go on and on until one of the telephone pick up, then two ways communication starts.

12. **Dial the preset phone number by Call 1 or Call 2.**

Press the CALL1 button for 3 seconds, the tracker will dial the CALL1 number. Press the CALL2 button for 3 seconds, the tracker will dial the CALL2 number.

13. **Listen in function.**

When one of these preset numbers calls the GPS tracker, the unit will answer the call automatically. Then user can monitor the sounds around the tracker.

14. **Speeding alarm**

Sent SMS “password +J(0/1) + speed” to set the Speeding alarm function.

Note: J must be English in capital, J0 means turn off the over speed alarm function; J1 means turn on the speeding alarm function. speed should be <250 and must three digits, e.g. 080=km/h.

For example, send “123456J1,080” to tracker. When the object moves exceeds 80 km/h, the unit will send SMS as “Over speed! +GPS info” to the A1,A2,A3 number. Send “123456J0,080” to tracker means turn off the speeding alarm function.
15. Set up GEO-FENCE.
Send SMS "password + x, + y, + z, + aabbccddeeffgghiijkllmmnneppqqrrssjj" to set up the geo-fence for the device to restrict its movement within a district. The device will send the message to the A1, A2, A3 numbers as "Stockade + geo info" when it breaches the district.

5 GEO-FENCES can be set for the tracker.

Note: I must be English in capital.
X = No. of the GEOFENCE (1-5)
y = 1 means turn on, y = 0 means turn off
z = 0 means go into, z = 1 means go out
c = N means north latitude, c = S means south latitude
j = E means east longitude, j = W means west longitude

aa,bb,cc,dd,kk,ll,mm,nn,qq,rr,ss must be 2 digitals.
E.g. 03 means 3.
fff,ppp must be 3 digitals. E.g. 011 means 11.
E.g. The first Lat. 51° 11' 35.25" N, Long. 90° 12' 56.70" E
The second Lat. 50° 24' 11.15" N, Long. 11° 01' 11.73" E

16. Low battery alarm
Send SMS "password + N (0/1), + xx" to set the low-battery alarm.

Note: N must be English in capital, NO means turn off the low-battery alarm function; N1 means turn on the low-
battery alarm function. xx should be <45 and must be two
digitals.
E.g. send “123456N1, 30” to the tracker means when
the battery is lower then 30%, it will send a alarm to the
authorized number. Send “123456N0, 30” to the tracker
means turn off the low battery alarm function.

17. Set the local time
Send SMS “password + L + time zone” to set the local
time
Note: L must be English in capital, + in the time zone
means east, - in the time zone means west. Time zone must
be 2 digitals. So Beijing time zone should be like this:
+08
E.g. send “123456L+08” to set the time to the Beijing
time.

18. Modify the password.
Send SMS “Previous password + H + new password” to
change the password.

Note: H must be English in capital, send it to tracker to
modify the password. (Default password: 123456)
E.g. send “123456H456789” means change the
password 123456 to 456789
The password won't be erased by changing SIM card.
Be sure keep the password in mind, otherwise you have
to update the software to restore the original setting in
case of losing the password.
The password must be 6 digits, If not, the tracker can not
recognize the password.

19. GPRS setting
In order to use GPRS function, the user needs to set IP,
Port and APN (access point name) by sending SMS
commands. Make sure that your SIM card in the tracker
supports the GPRS function.
Send SMS “password + C + APN, IP: Port” to set the
APN, IP and port.
Note: C must be English in Capital. Please get APN from
your local GSM operators and pay attention to the lower
case or upper case of those letters.
Make sure that the IP should be the public IP. If your pc is in Internet, you must know your public IP.
E.g. send SMS “123456CCMNET, 119.122.101.91:7289”. CMNET is the APN in China, please set the APN in your country.
Send SMS “password + O + username, password” to set the username and password for GPRS.
Note: O must be English in capital. This setting depends on different providers. If the provider doesn’t need username and password for the GPRS, you do not need to send this command.
E.g. send SMS “123456Owap, wap”. The username will be wap and the password will be wap.
Send SMS “password + D” to turn on GPRS
Note: D must be English in capital.
E.g. send SMS “123456D” to turn on GPRS.
Send SMS “password + E” to turn off GPRS
Note: E must be English in capital.

E.g. send SMS “123456E” to turn off GPRS.
Send SMS “password + B” to get the IMEI number of the unit.
Note: B must be English in capital.
E.g. send SMS “123456B” to get IMEI number of the unit.

20. Displaying location on map
Go to http://maps.google.com and type in the latitude and longitude like this: 22.7640801N, 114.3975566E
Click search button, then you can see the position.

Download Google earth software from http://earth.google.com/ and install it in to your computer.
Start the Google Earth software and type the latitude and longitude into the software like this:
22.7640801N, 114.3975566E. Click search. Then you can see the position.

21. Cautions

Please comply with the instructions to extend the unit life:
1. Keep the unit dry. Any liquid, i.e. rain, moisture, may destroy or damage the inside circuitry.
2. Don't use & store the unit in dusty places.
3. Don't put the unit in overheated or overcooled places.
4. Handle carefully. Don't vibrate or shake it violently.
5. Clear the unit with a piece of dry cloth. Don't clean in chemicals, detergent.

6. Don't paint the unit, this may cause some foreign materials left in between the parts.
7. Don't disassemble or refit the unit.
8. Please use and charger provided by manufacturer. Using other chargers will cause unwanted situation.