

DS007 GPS Tracker

User Manual



Version: V1.5

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1. Product Overview

This device is an innovative miniature size and pet remote positioning device with built-in GPS and GSM/GPRS technology. It's for monitoring and protecting your pets. You can find your pets very soon when they got lost.

2. Main Functions And Features

2.1 Real time tracking and positioning

Using advanced GPS technology, GPS accuracy can up to 5~10m.

2.2 SMS get location and parameters

If you don't like to use smart phone APP or web platform. We have SMS channel for you. You can know where are your pets by sending a very simple SMS command, then you can receive a SMS with their address. You can also check the device's other parameters like IMEI, admin numbers, etc.

2.3 Support AGPS fast positioning

Using newest Ublox7 GPS solution, even in a place with weak GPS signal, the device can get location very fast.

2.4 Historical route checking

You can see where your pets in the past times in the APP or web platform.

2.5 Long time battery life

1~7 days' standby time and low battery alert.

2.6 Remotely operation

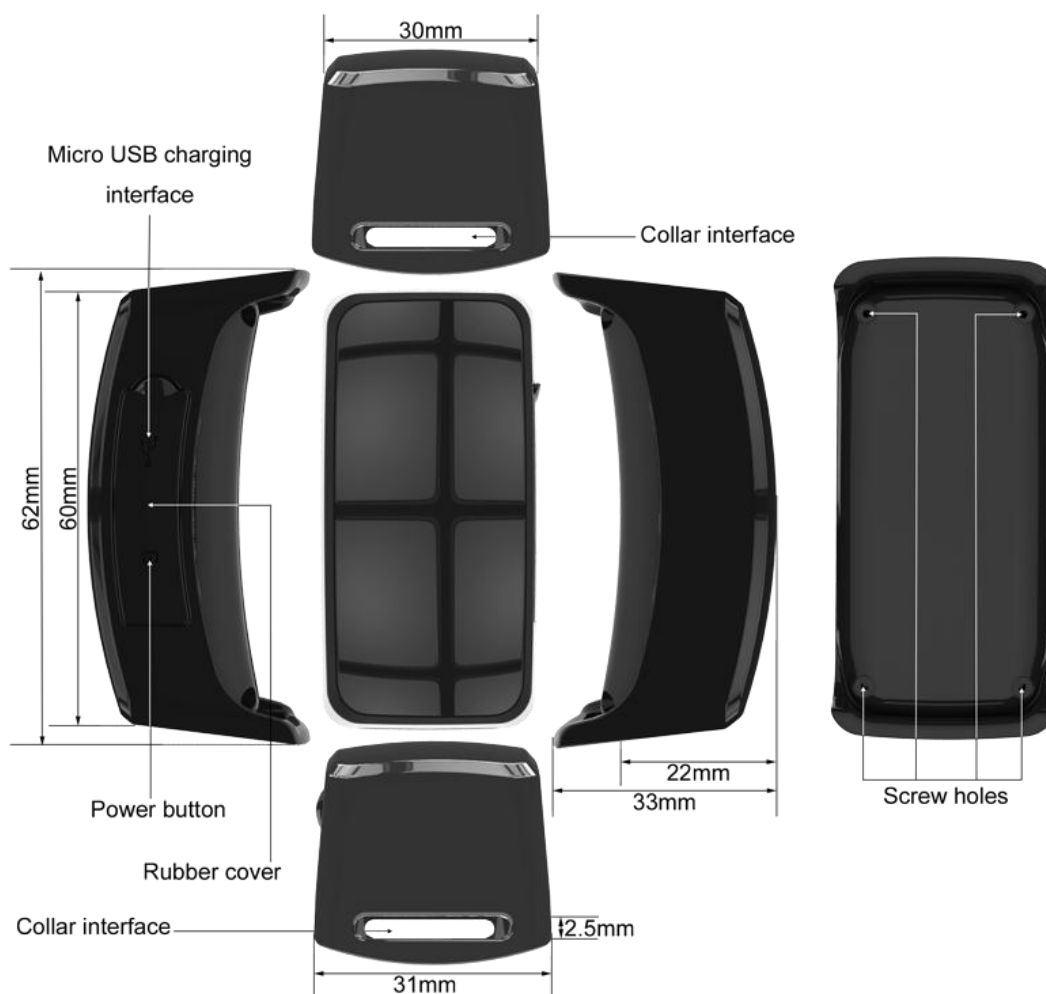
Support remotely restart, remotely shutdown, remotely disable power off button, in case of faulty operation.

3. Specification

Content	Specification
Size	67*30*21 mm
Weight	40g
Network	GSM/GPRS
Network band	Quad band GSM 850/900/1800/1900Mhz
GPS chipset	U-BLOX7
GSM/GPRS chipset	MTK
GPS sensitivity	-159dBm
GPS accuracy	5m
battery	750mah rechargeable lithium battery
Charging voltage	DC 5V/300mA
Battery life	1~7 days
Storage temperature	-40°C to +85°C
Working temperature	-20°C to +55°C
Working humidity	5%--95% non-condensing
Accessories	USB adapter/USB cable/collar/package box/User manual

4. Hardware Description

4.1 Interfaces



4.2 Device Status and Button Operating Manual

4.2.1 Device LED indicator introduction

Blue LED ● GPS	Flash 1 time per second	GPS fixed.
	Solid(keep on)	GPS not fixed.
Green LED ● GSM	Flash 1 time per second	GSM SIM card read successful.
	Flash 4 times per second(1 time/0.25s)	GPRS network connected successful and data uploading.
	Solid(keep on)	GSM SIM card read failed.
Red LED ● Power	Flash 1 time every 1 second(1 time/s)	Low battery alert.
	Flash 3 times per second(1 time/0.33s)	Charging.
	Solid(Keep on)	Full charge.

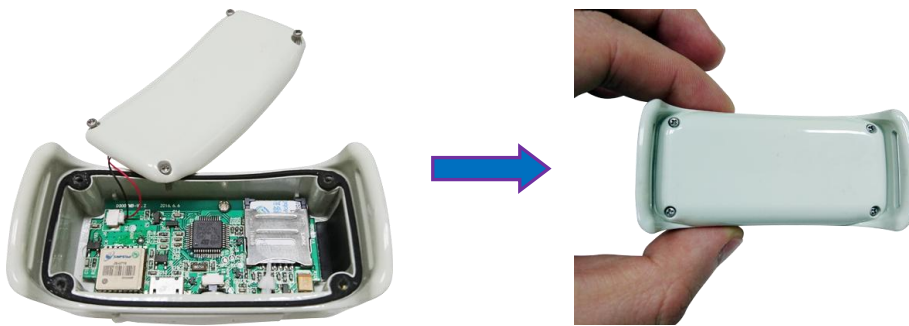
4.2.2 Button operating introduction

Power button	Press & hold for 3s when device is power off	Power on.
	Press & hold for 3-7s when device is power on	Power off.
	Press 1 time when there is a incoming calling	Hang up the incoming calling.

5. Operating Manual

Note: There is no GPS signal indoor, please move the device to a open sky area to make GPS fixed when the first time to start up and use device.

5.1 SIM Card Installation



1. Open the back case and insert the SIM card
2. Close the back case

Support micro SIM card. Please be sure to confirm the SIM card with caller ID, without call transfer, and PIN number is in the closed state, SMS need to be text format, can not recognize PDU format. And the SIM card number need to with a **2G/GPRS data plan**.

5.2 Battery and Charger

Please using the battery and charger provide by the manufacturer, the standard battery is rechargeable lithium battery, it can last for 12~160 h if full battery, and the charging time is 3~5 hours. **Please full charge the device when the 1st time to use.**

6. SMS Command Setting

Note: With no whitespace in text when entering SMS command, letters are not case-sensitive.

6.1 Basic Setting

6.1.1 Set APN

In order to use the GPRS function, the user needs to set the APN by sending SMS command.

--What is APN? Access point name (APN) is the name used to identify a general packet radio service (GPRS) bearer service in the GSM mobile network. The APN defines the type of service that is provided in the packet data connection.

- ※ Make sure that the SIM card in the tracker supports the GPRS function.
- ※ The APN can be acquired from your local GSM operators.

Command: **S1,APN,user name,password**

Website:

Note: If APN without user name and password, no need to fill in, however the “,” need to retain.

E.g. 1(APN with user name and password): **S1,orange.fr,orange,orange**

Orange.fr is Orange France SIM card's APN. After set successful, APN will be Orange.fr, device will reply SMS: **Set APN**

OK:APN:orange.fr,user name:orange,password:orange.

E.g. 2(APN without user name and password): **S1,cmnet,,**

CMNET is CMCC SIM card's APN. After set successful, APN will be CMNET, device will reply SMS: **Set APN**

OK:APN:CMNET,user name:.,password:..

Note: After set successful, device will restart automatically.

6.1.2 Set Authorized Number

You had to set administrator number before set authorized numbers.

Command to set admin number: **Admin,cellphone number,device password**

E.g.: **Admin,123456789,0000**

Device reply: **Set mobile admin number OK:123456789**

※ Modify admin number, just replaced the old number to the new number.

E.g.: **Admin,987654321,0000**

Device reply: **Set mobile admin number OK:987654321**

※ Delete number, just leave the cellphone number space as blank, and retain “,”.

E.g.: **Admin,,0000**

Device reply: **Set mobile admin number OK:0**

Note: No whitespace between characters, case insensitive; Any number can modify admin number as long as device password is correct.

※ It's not mandatory to set 3 authorized numbers, however at least 1 authorized number need to be set.

6.1.2.1 Set authorized number 1

Command: **A1,cellphone number**

E.g.: **A1,123456789**

After set successful, device will reply: **·Set mobile number 1 OK!**

※ Delete this number, just send **A0** to the device's number.

6.1.2.2 Set authorized number 2

Command: **B1,cellphone number**

E.g.: **B1,123456789**

After set successful, device will reply: **·Set mobile number 2 OK!**

※ Delete this number, just send **B0** to the device's number.

6.1.2.3 Set authorized number 3

Command: **C1,cellphone number**

E.g.: **C1,123456789**

After set successful, device will reply: **·Set mobile number 3 OK!**

※ Delete this number, just send **C0** to the device's number.

6.1.3 Modify Time Zone

Command: **TZ+00/-00**

E.g.: **TZ+02**, the system will add 2 hours based on the UTC time.

TZ-02, the system will minus 2 hours based on the UTC time.

If set **TZ+5.5** or **TZ-5.5**, this indicating UTC+05:30 or UTC-05:30.

After set successful, device will reply: Set timezone OK:E02/W2,current time(year.month.date hour:minute:second)

Website:

E.g.: Set timezone OK:E02,2016.05.06 12.11.30

※ Default time zone is UTC+08:00

6.2 Functions Setting

6.2.1 Three Working Modes

There are 3 working mode which are live tracking mode, fixed upload interval mode, and smart awaken mode. Device default working mode is fixed upload interval mode.

Command: **Mode,status**

Explain: status can be 0, 1 or 2, 0 indicates live tracking mode, 1 indicates fixed upload interval mode, 2 indicates smart awaken mode; device default password is 1.

6.2.1.1 Live Tracking Mode(0)

In this mode, Both GSM and GPS are on all the time, Battery can last 12~24 h. **Default upload interval is 60s.**

Command: **Mode,0**

Device reply: **Set working mode OK:0**

6.2.1.2 Fixed Upload Interval Mode(1)(default mode)

In this working mode, device can always receive SMS, calls. And it updates location to the tracking platform according to the upload interval you set. After upload GPS data, device will sleep. In sleep state, the GSM chip is working and receives calls, SMS and transmits location. The GPS chip is activated by incoming calls, SMS and pressing button, battery life from 12h to 160h based on the upload interval you had set and device using frequency. **Default upload interval is 5m.**

Command: **Mode,1**

Device reply: **Set working mode OK:1**

6.2.1.3 Smart Awaken Mode(2)

In this mode, Both GSM and GPS chip will be off to save power, the device is unable to receive calls or SMS. It can be only activated by movement. Once movement is detected, it will run for the set time and sleep again if no movement is detected.. **Default upload interval is 1h.**

Command: **Mode,2**

Device reply: **Set working mode OK:2**

6.2.2 GPS Upload Interval Setting

Command: **hr1,second**

E.g.: **hr1,60**

Device reply SMS: **Set Heartbeat ok:60**

Explain: Device's GPS packet uploading interval, default is 60s.

6.2.3 Low Battery Alarm

When the device battery level <15%, device will send alarm message "Low Power Alarm!" to all authorized numbers, and device's red led light will quickly flashing to remind the user to charge asap.

6.3 Inquiring Setting

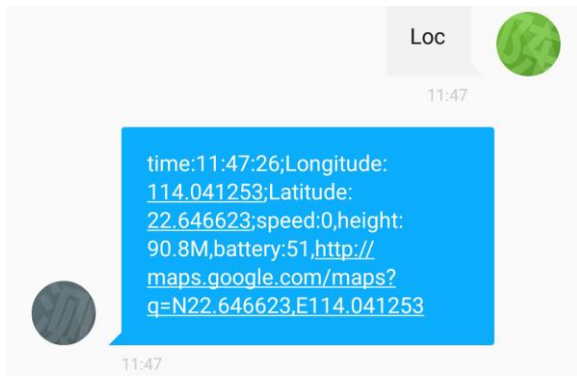
6.3.1 Get Location

Reply with coordinates and Google map link.

Command: **Loc**

After set successful, device will reply GPS data:

Website:



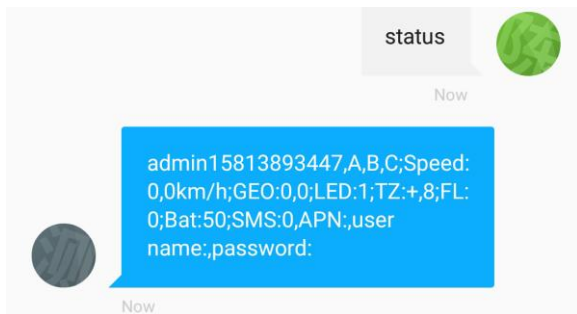
※ Put coordinates to Google earth or Google maps. Click on search button, then you will find the position fixed.

※ Click on the link then the location can be shown directly on Google Map on your mobile phone.

6.3.2 Get Device Status

Command: **Status**

After set successful, device will reply SMS:



Explain: admin15813893447(admin number),A(authorized number 1),B(authorized number 2),C(authorized number 3); Speed: 0,0km/h(over-speed alarm, 0: off, 1:on, 0km/h: over-speed value); GEO:0,0(GEO-fence alarm, 1: on, 0: off, 0: fence radius, unit is meter); LED:1(LED light is on); TZ:+,8(time zone); FL:0(fall down alarm, 1: on, 0: off); Bat: 50(battery level); SMS:0(SMS alarm, 0: off, 1: on);APN:(APN),user name:(APN user name),password:(APN password)

“0”& “1” definition: “0” indicating function be turn off; “1” indicating function be turn on.

6.3.3 Get IMEI Number

Command: **Version**

After set successful, device will reply SMS:



Note: CSQ is GSM signal value, range from 0-32.

6.4 Other Setting

6.4.1 Modify Device Password

Command: **Old password+H+new password**

E.g.: **0000H1111**

Website:

The password will be modified to **1111**

After set successful, device will reply : **Set password OK: 1111.**

※ Even the user change a SIM card, the device's password won't be deleted.

※ Please remember your new password, or you need to contact your agent to resume the device's initial password.

※ Please confirm the password is 4 digits', or the device can't identify. Device default password is 0000.

6.4.2 Set IP & Port

Command: **IP1,IP/domain name,port**

E.g.: **IP1,120.25.76.30,6050**

After set successful, device will reply SMS: **Set IP OK: 120.25.76.30,port:6050.**

Device default: IP:120. 25.76. 30, port: 6050

Note: Device already with a default IP and port, this command only needed when you want to change platform and server.

6.4.3 Disable Power Off

Command: **NPF1**

Explain: Via SMS command to disable power off by manual operation in order to prevent error operation or power off deliberately.

Device will reply SMS: **Set not power off ok !**

※ To turn off this function, please send command npf0 to device number.

Device will reply: **Set normal power off ok!**

6.4.4 Turn Off SMS Alarm

Command: **SMS0**

After set successful, device will reply: **Set SMS alarm Off!**(default setting)

Device will only send alarm information to platform by GPRS and won't send SMS alarm to the authorized numbers.

Turn on SMS and GPRS alarm, please send **SMS1**

After set successful, device will reply SMS: **Set SMS alarm On!**

Device will send message to admin number and authorized numbers by SMS method.

6.4.5 Remotely Reboot

Command: **Reboot**

Device will restart by itself without changing any settings.

After set successful, device will reply SMS: **Set restart OK!**