

eSky wireless Inc.

ES825
User Manual
V1.1

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Version history

Version	Data	Note
V1.0	2018.11.12	First version
V1.1	2018.12.5	Second version

FCC Statement

Any Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:

- (1) This device may not cause harmful interference, and
- (2) This device must accept any interference received, including interference that may cause undesired operation.

FCC Radiation Exposure Statement:

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.

1. ES825 introduction

ES825 is a 2G (GPRS)/ 4G (Cat.M1&Cat.NB1) mini waterproof GPS tracker for pet (without voice feature).

ES825 use BG96 module and support WIFI positioning, it uses magnet charging method. ES825 for non-portable use only.

1.1 ES825 Appearance Introduction



1. Rubber shell (For pet)
2. LED
3. SOS button
4. Magnet charge
5. Hole
6. SIM card slot
7. Rubber ring

Note: The meaning of each LED means, please check below.

LED Color	Resource	OFF	Fast flash (1s)	Normal flash (3s)	Slow flash (6s)	Steady
Red	Charge	Not in charging	/	/	/	In charging
Green	GPS and GPRS(LTE)	/	GPRS(LTE) OK GPS not fix	GPRS(LTE) not lock GPS fixed	GPRS(LTE) not lock GPS not fix	GPRS(LTE) and GPS both OK

1.2 ES825 Working Mode Introduction

*This chapter is under revise, please refer to your contact person.

Mode	Estimated using time
1-day-1-report mode	7 months
Deep sleep interval mode	Mode,1,60# 60min interval- 16days
1-hour SMS check mode	40 days
SMS standby mode	7 days
TCP standby mode	6 days
GPS Sleep mode	Mode,5,3# 3min interval- 4days
GPS always on mode	Mode,6,60# 60s interval - 14h
Vibration mode	Depend on vibration time

1.2.1 1-day-1-report mode

This mode has the lowest power consumption.

The command likes “Mode,0,8#”, which can be checked by ES825 protocol.

After setting the command, the device will wake up at 8AM every day to report. After reporting, it will be power off, and will wake up the next day at 8AM.

1.2.2 Deep sleep interval mode

For example: Mode,1,5#, which can be checked by ES825 protocol.

After setting the command, the device will wake up every 5 mins to report. After reporting, it will be power off.

1.2.3 1-hour SMS check mode

This mode saves a lot of data traffic.

After setting this mode, the device will wake up every one hour to check if has SMS command coming but no reporting, if Yes, it will deal with the SMS command, if not, after waiting some time, it will power off.

1.2.4 SMS standby mode

This mode also saves data traffic, but it is more real-time.

After setting this mode, the device will waiting SMS command at any time, but it will not open GPS, WIFI, TCP and so on, it only check SMS. If has SMS coming, it will deal with it at once.

1.2.5 TCP standby mode

This mode is similar with SMS standby.

After setting this mode, the device will open TCP all the time, but close all the other activities. Once comes TCP command, the device will deal with it at once.

1.2.6 GPS sleep mode

This mode will never power off but will close GPS or WIFI when not reporting.

After setting this mode, it will open GPS or WIFI (GPS not fix) for reporting the location. After reporting, it will close GPS or WIFI for saving power, and recalculate the next report round.

In this mode, customer can set SMS and TCP command, and the device will deal with them at any time.

1.2.7 GPS always on mode

This is real-time tracking mode. It will has the highest power consumption.

After setting this mode, the device will open GPS or WIFI all the time for reporting the location, you and check the location on the APP, it will update at any time.

1.2.8 Vibration mode

This is an intelligence mode.

If the device in static mode, the device is always in sleep mode, and when detect vibration, it will power on automatically and start reporting as the interval setting.

2. Test Preparation

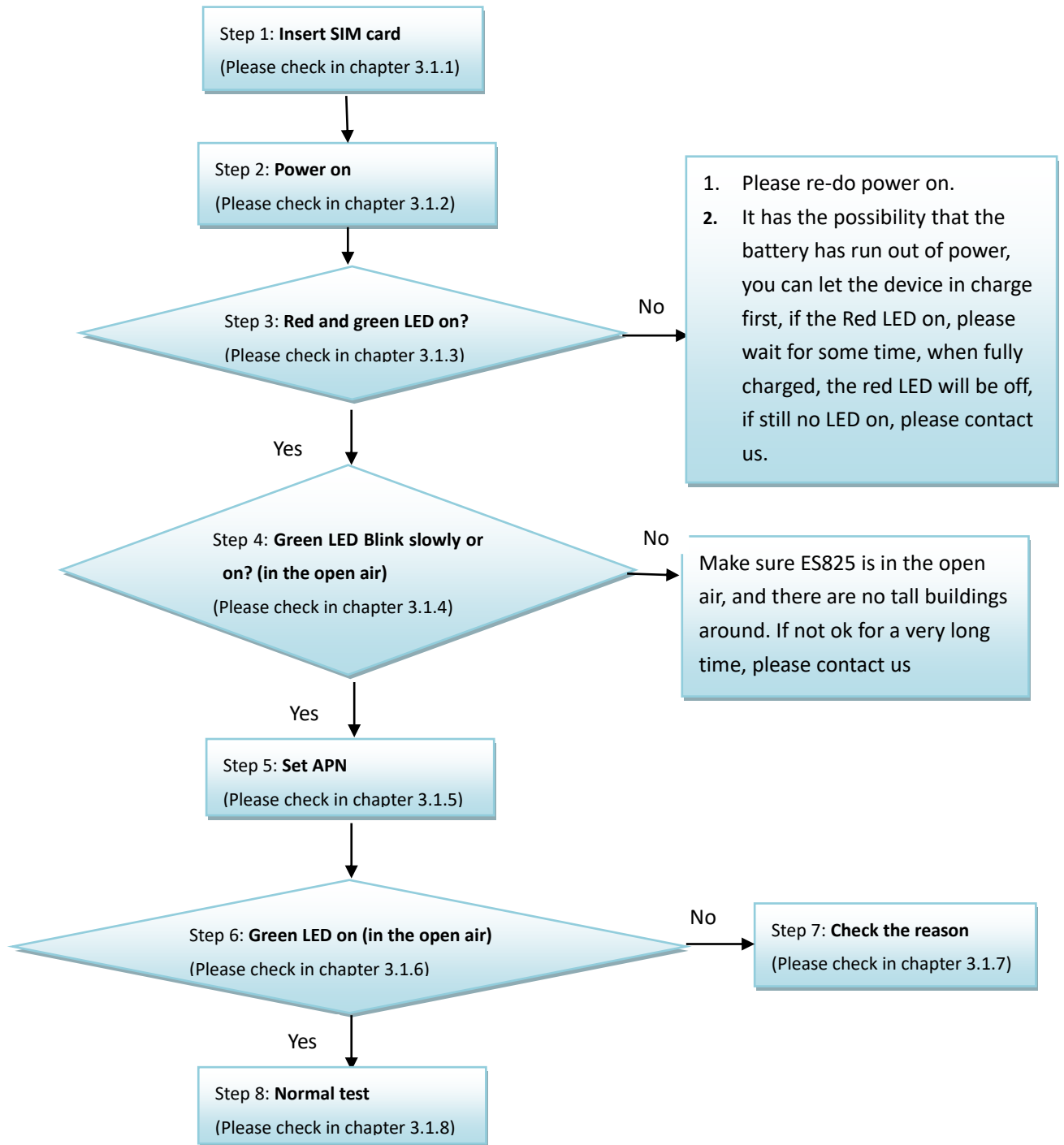
Make sure the equipment below are all available.

Equipment Lists:

Equipment Name	Number	Note
ES825	1	Necessary
SIM Card	1	Necessary
Mobile phone	1	Necessary(APP)
Charging wire	1	Necessary

3. Quick Test Steps

3.1 Normal test



3.1.1 Step1: Insert SIM Card

First you should take off the rubber ring of ES825 and prepare the Nano SIM Card, like below:



 Note:

This step must be done before power on the ES825.



After inserted the SIM Card, you will hear " ka", it means the SIM Card is inserted OK.

3.1.2 Step2: Power on

Please press the SOS button, the device will be powered on.

3.1.3 Step3: Red and green LED on?

After power on the ES825, Red and green LED will be on for 1 second, and then green LED will start blinking.



3.1.4 Step4: Green LED Blink slowly or on? (in the open air)

Please go to the open air, and wait for some minutes, the Green LED blink slowly(if GPRS or LTE not lock) or on(if GPRS or LTE locked) if GPS fixed.

3.1.5 Step5: Set APN

The command to re-set APN is "APN". The format of "APN" is shown below.

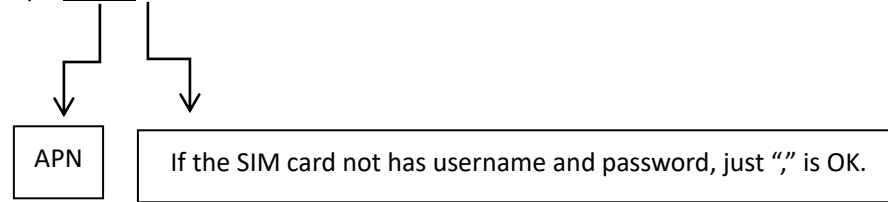
Content	/
Command code	Apn
Separator	,
Parameter1	APN
Separator	,
Parameter2	Username
Separator	,
Parameter3	Password
End Sign	#

For example:

The APN of China Mobile is CMNET.

So the content of SMS should be:

apn,cmnet, #



3.1.6 Step6: Green LED on? (in the open air)

If the command responses " APN=Success! ", the green LED will be ON if GPRS or LTE lock.

3.1.7 Step7: Check the reason

If Green LED not on, it will has below possibility.

1) APN=Fail!



- Make sure no parameters are missed.
- Make sure the user name and password of SIM Card.

2) No Response.

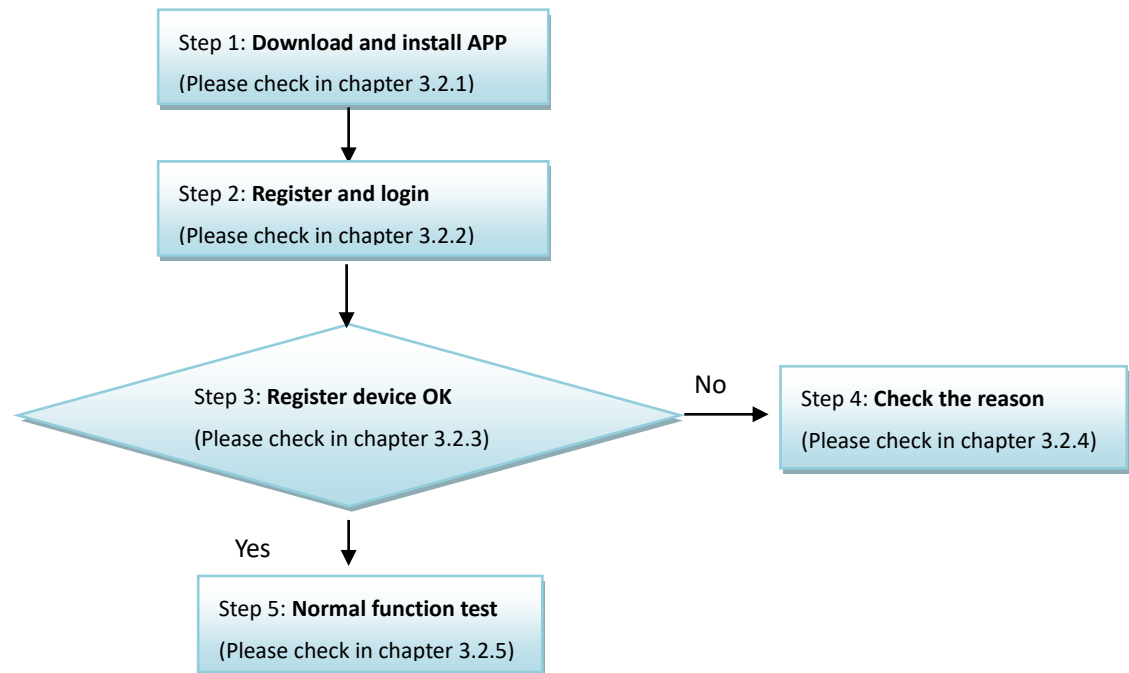


- Make sure APN/apn spelling correct. No space in the beginning.
- Make sure ending character '#', No space in the end.
- Make sure that SIM card has plugged, or plugged in right way.
- Make sure SIM supports SMS service. Try to use the SIM card send SMS by your mobile phone.
- Make sure GPRS/LTE coverage is good.
- If all above are meet but still no response, please contact us.

3.1.8 Step8: Normal test

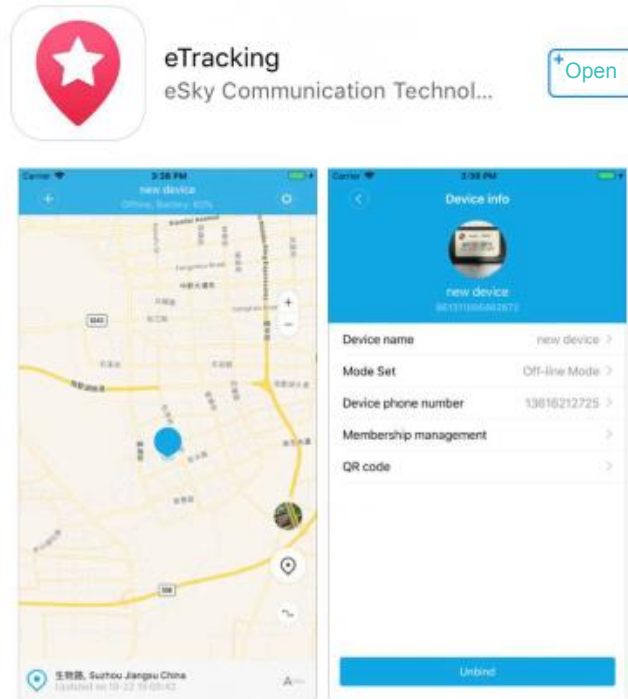
Now you can do your test follow the ES825 protocol.

3.2 APP test



3.2.1 Step1: Download and install APP

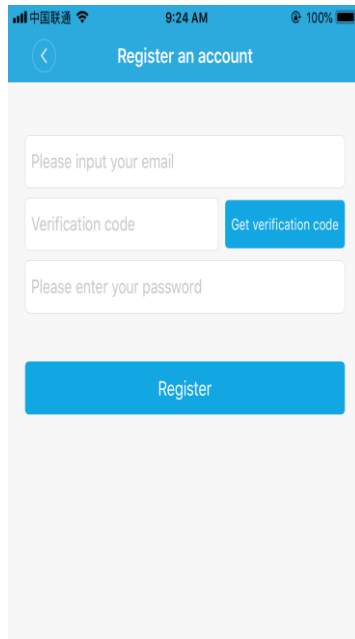
Please search the key words “etracking” in the app store, and choose the one like below shows, download and install.



3.2.2 Step2: Register and login

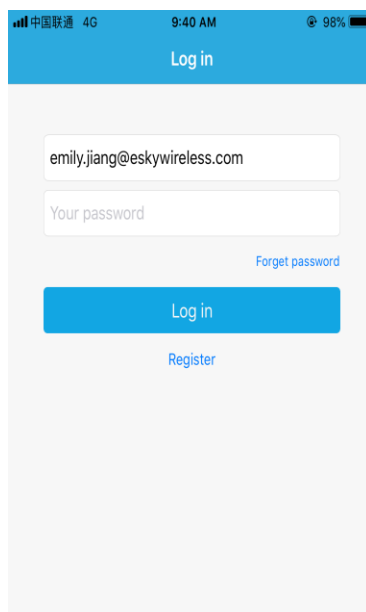
After install the APP, open the APP.

Please click "Register" if you need register first, and follow the steps as below:



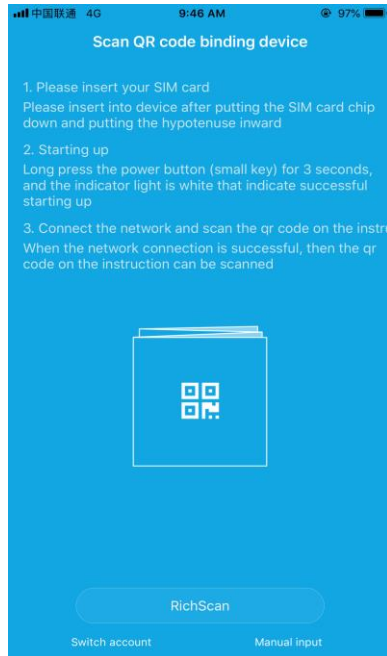
- Please input your e-mail account on the first white blank
- Please click the first blue blank and you will receive 4 numbers from your email.
- Please input the 4 numbers into second white blank
- Please set a password on the third white blank, then click the second blue blank.

After register successfully, you will see the login screen as below:

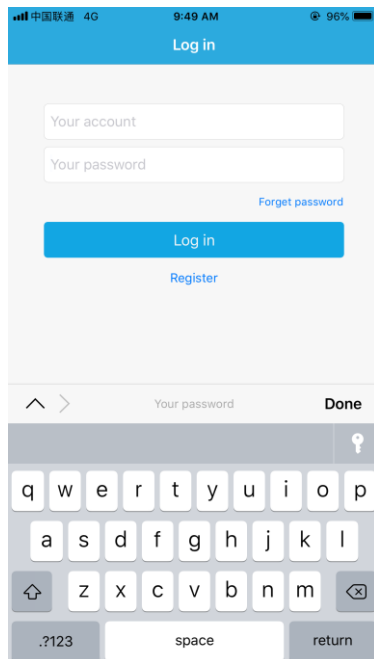


3.2.3 Step3: Binding device device

After login, you will see the screen as below:

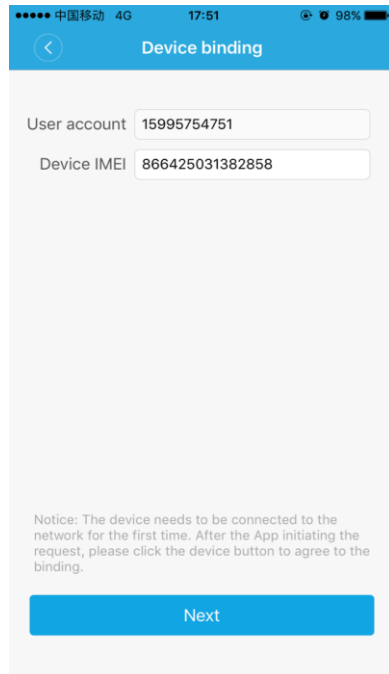


if you want the turn into existing account, please click “ Switch account ”



If you do not turn into other account, please continue to bind devices.

You can bind the device by scanning 2 QR code of the device or entering the IMEI of the device .
Please click the “ RichScan” or “ Manual input” to bind devices.
Then you can see the screen as below:



Click “next” and press the SOS button of ES825, and you will enter management interface of the APP.

Note:

The first account binding the devices is the administrator.

Other account need to be permitted by administrator if it want to bind the same device.

3.2.4 Step4: Check the reason

If register fail,



- Device off line noted, please check if the battery has run out of power, you can let the device in charge for a while and then try again.
- Make sure GPRS/LTE signal coverage is good.
- If noted “the bind request has been sent to the administrator”, that means the device has been bind, if you make sure it is your first bind, please contact us. The device support bind by not only one mobile phone, if it is not first bind, you just need to contact the person who first bind.

3.2.5 Step5: Normal function test

Please choose the suitable device working mode in APP for testing.

4. Usage presentation

For pet



Note:

The frequency for LTE: Band2:1850-1910MHz(TX);1930-1990MHz(RX)
Band4:1710-1755MHz(TX);2110-2155MHz(RX)
Band5:824-849MHz(TX);869-894MHz(RX)
Band12:699-716MHz(TX);729-746MHz(RX)
Band13:777-787MHz(TX);746-756MHz(RX)
Band26:814-849MHz(TX);859-894MHz(RX)

The LTE module FCC ID: XMR201707BG96.

The frequency for 2G: GPRS850:824-849MHz(TX);869-894MHz(RX)
GPRS1900:1850-1910MHz;1930-1990MHz(RX)