

Bluetooth® GPS Receiver 48 channels

User's Manual



Caution

Read before you start to use:

- Global position system (GPS) is obtained by American Ministry of National Defense, and they got the full responsibility about the preciseness and the maintenance. Any changes may cause the capacity and preciseness of GPS differed.
- If you use this device inside of buildings, tunnels, or any huge objects beside you, the GPS signals might be cut-off or disturbed. Please do not consider that the receiver is malfunction.
- The receiver operating temperature is located between -20°C and $+60^{\circ}\text{C}$. For safety and lifetime of Li-ion battery usage, do not place this device over two hours with overheated environment...

1. Introduction

The Bluetooth GPS Receiver is a total solution of GPS receiver with SiRF-IV 48 channels all-in-view tracking technology.

This Bluetooth GPS Receiver can communicate with other electronic devices by Bluetooth interface.

The Bluetooth GPS Receiver is designed as an ultra low power consumption device, and high position accuracy. It will update the satellite position every second. This Bluetooth GPS Receiver auto-locating feature is capable of automatically determining a navigation solution without intervention. However, acquisition performance could be interfered and do cold start if the receiver were initialized with occurrence of the following events:

- 1) **First in use**
- 2) **The GPS receiver is not in use for more than 3 months or transportation over distances further than 500 kilometers.**
- 3) **Change Li-ion battery.**

2. Features and Functions

- 1) SiRF-IV series simultaneous time-frequency search bins. Signal detection better than -163dBm
- 2) Cold start < 30 seconds at -147dBm
- 3) Hot start $< 1\text{sec.}$ under open sky.
- 4) 2.5m CEP accuracy.
- 5) Signal reacquisition 1 sec.
- 6) Acquire and track 48 satellites simultaneously
- 7) Bluetooth class-2 operation, 4dBm output level Up to 10m of operation
- 8) SPP compatible, version 2.0 compliant
- 9) High capacity Li-ION rechargeable battery.

Check the Package Content

Before you start using, please check out if your package includes the following items. If any item is damaged or missed, please contact your reseller at once.

- Bluetooth GPS receiver X 1
- N3650 Battery X 1
- Car Charger X 1
- AC Adapter X 1 (Option)
- Skid proof Disk X 1
- User manual X 1

Safety

- Use the chargers that come with package.
- Check the laws and regulations on the use of mobile phones and their accessories in the areas where you drive.
- Do not allow children to play with the GPS receiver, it contains small parts that could become detached and create a choking hazard.
- Observe all signs that require an electrical device or RF radio product to be switched off in the designated areas.
- This device contains a Li-Ion battery. Please keep it away from fire anytime
- (Including discarding the device) or the battery may explode.
- The embedded battery must be properly disposed or may be recycled, contacts your local recycling centers for disposal methods.

BASIC OPERATIONS

Charging the battery

For the first use, the battery should be charged for about **4** hour to assure a full charge. Afterward, it takes about **2** hours to fully re-charge. Plug the charging jack of car charger or AC adapter into power jack and connect the charger properly to cigar-lighter or a main power outlet. When is in charging, the Red LED will be lighted up. When the battery is fully charged, the Red LED will be turned off. Unplug car charger or AC adapter from power jack.

Power ON/OFF

Push power switch 1~2 seconds to switch **ON/OFF** the power.

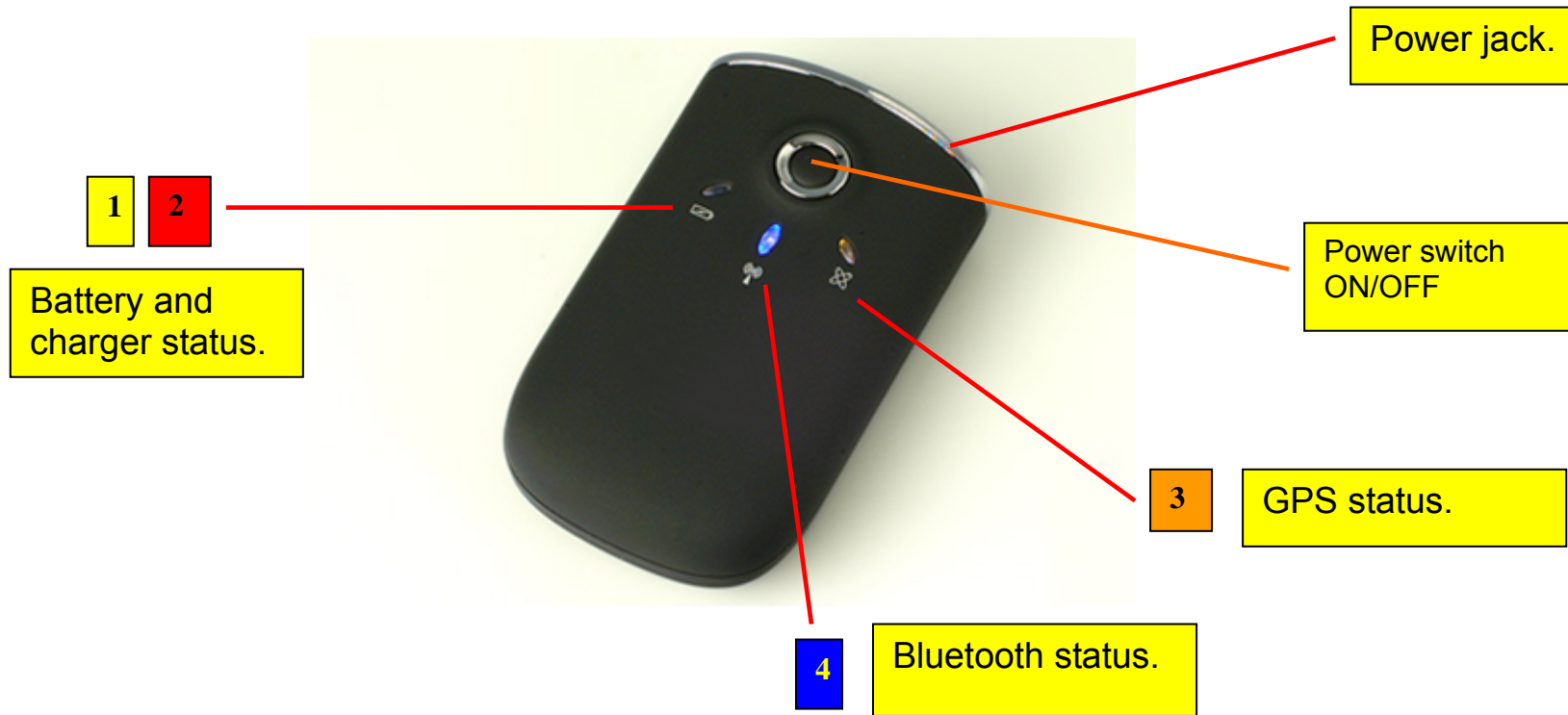
How to replace Lithium-ion Battery

- Open the bolt on the bottom cover and take the Li-ion battery out.
- Place new Li-ion battery.
- The Li-ion battery is replaceable and rechargeable.
- The Li-ion battery can last more than 13 hours in continuous operation mode.

Connect to your PC/PDA/SMARTPHONE

- A. Push the power button for 1~2 seconds, power on the Bluetooth GPS receiver.
- B. Put the Bluetooth GPS receiver at proper place (open sky) for good GPS signal reception.
- C. Turn on the power of your navigation platform like **PC/PDA/ Smartphone** etc...
- D. Search for Bluetooth device by your Bluetooth manager on your Host Platform (**PC/PDA/Smartphone**). Normally Pin code is not necessary. But some Bluetooth embedded system force to enter pin code (password), please fill **0000** in such case.
- E. Connect the Bluetooth GPS Receiver and then make sure baud rate set at 38400 bps (standard) in your application program.
- F. Load your GPS mapping or routing software, along with the corresponding maps of the areas that you are occupying or plan to travel. Start the application. Make sure the application is set for the COM port that your Bluetooth-enabled mobile device will use for serial communication. Now you should be ready to use your GPS application as directed by the user documentation that came with the software. More configurations may be necessary.
- G. In firstly use of this Bluetooth GPS Receiver, we strongly recommend you to bring your Bluetooth GPS receiver **outdoor or open sky at least 15~20 minutes for sure 3D position fixed and almanac updated.**

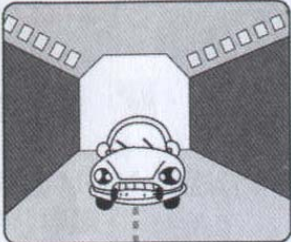
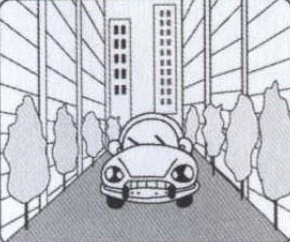
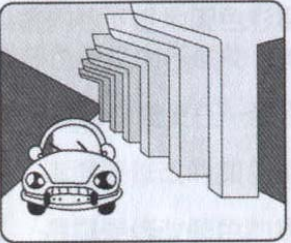
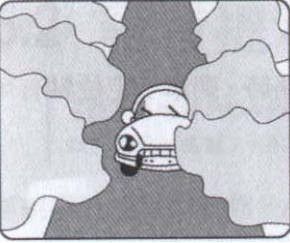
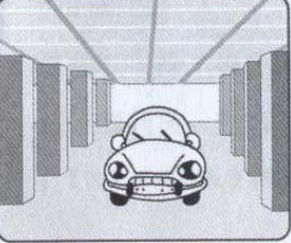
LED Display



1	Yellow	Yellow LED indicates slow battery power.
2	Red	Red LED indicates battery is in charging.
3	Orange	Flashing 1sec. ON/1 sec. OFF position is fixed.
4	Blue	<ul style="list-style-type: none"> ● Flashing 1sec. ON/3 sec. OFF Bluetooth is on and ready to transmit. ● Flashing 0.5 sec. ON/3 sec. OFF Bluetooth are transmitting data.

Concerning of Poor GPS Signal

It is possible unable to receive GPS signal or signal low in these places:

	<p>➤ Inside the tunnel, GPS signal is blocked.</p>		<p>➤ Beside some buildings, GPS signal is low or disturbed.</p>
	<p>➤ Covers above, GPS signal are blocked.</p>		<p>➤ Inside forests, or too many covers, GPS signal is low or disturbed.</p>
	<p>➤ Inside buildings, GPS signal is blocked.</p>		

- If you use the Bluetooth GPS Receiver inside the car, some anti-sunlight windscreen film will make the GPS signal degraded or signal blank.
- GPS satellite is owned by America military; sometimes they will tune-down the accuracy by some reason. In such cases, the GPS position may not fixed exactly.



Used equipment must be disposed of in compliance with current environmental protection regulations. You should return it to your reseller or dispose of it in an approved recycling centre.

DECLARATION: We hereby declare that this product complies with essential requirements and other related requirements, of the 1999/5/EC R&TTE directive and particularly with article 3 sections 1a, 1b and 3.



The name Bluetooth[®] belongs to the legal owners and is used in this manual for description purpose only.