



# **GPS-BT55S**

## **User's Guide**

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## 1. Read Me First

1. The battery must be charged for at least 8 hours for the 'INITIAL' use. The LED2 (ORANGE) will turn off after 3 hours' charging, please keep on charging for 5 more hours. Thereafter, for each time's battery charging please fully charge for 3 hours.
2. We strongly recommend that remove the battery if the device will not be used for over 2 weeks. Do not remove the battery within 2 weeks.
3. For fast data tracking purpose staying still before get fixed is recommended. (FIX then GOES!!)
4. Please note that the device will only receive the signal under the open sky. In this case, putting the device under the windshield is recommended.

## 2. Box Contents

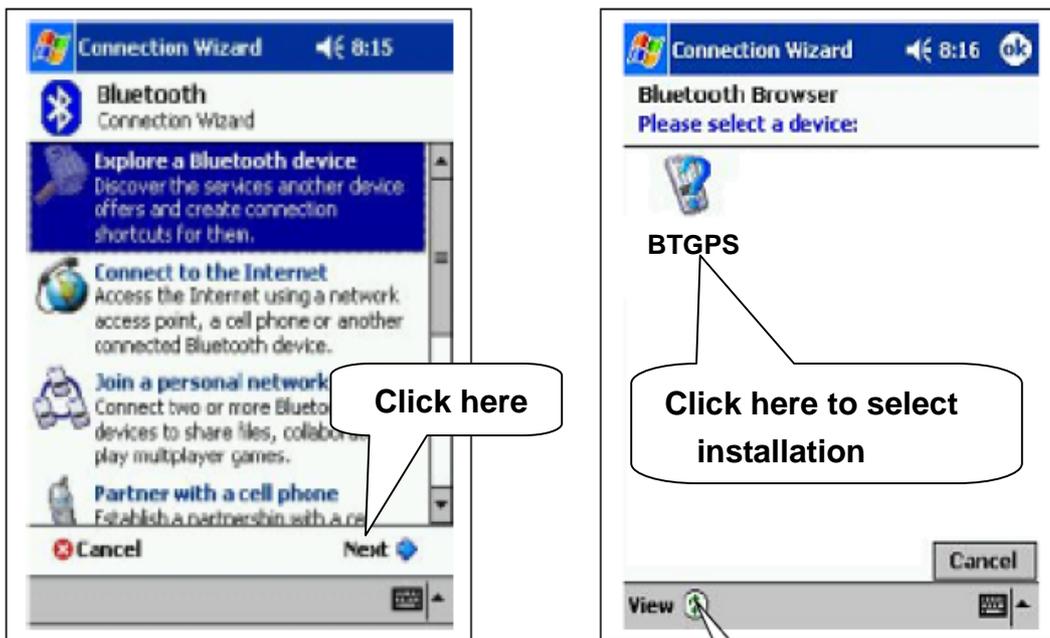
1. GPS Bluetooth receiver
2. Lithium-ion rechargeable battery
3. Car charger
4. Power adapter
5. Document CD

## 3. Getting Started

1. Install the battery
2. Turn on the GPS Bluetooth receiver.  
Press the power button for 3 seconds or until the LED1 (GPS Fix Status) turns into **RED** and LED2 (Bluetooth Status) turns into **Blue**.
3. Activate Bluetooth function of your PDA / PC  
Prior to activating the Bluetooth function of your PDA / PC, please make sure the device is equipped with Bluetooth function, and the driver software has been installed.
4. Activate Bluetooth Manager & Established New Connections.  
Illustrations using HP 2100 PDA as follows:
  1. First, find the device with which you wish to establish connection.
  2. Open "Bluetooth Manager" on your pocket PC.
  3. Press "New".
  4. Press "Connect".

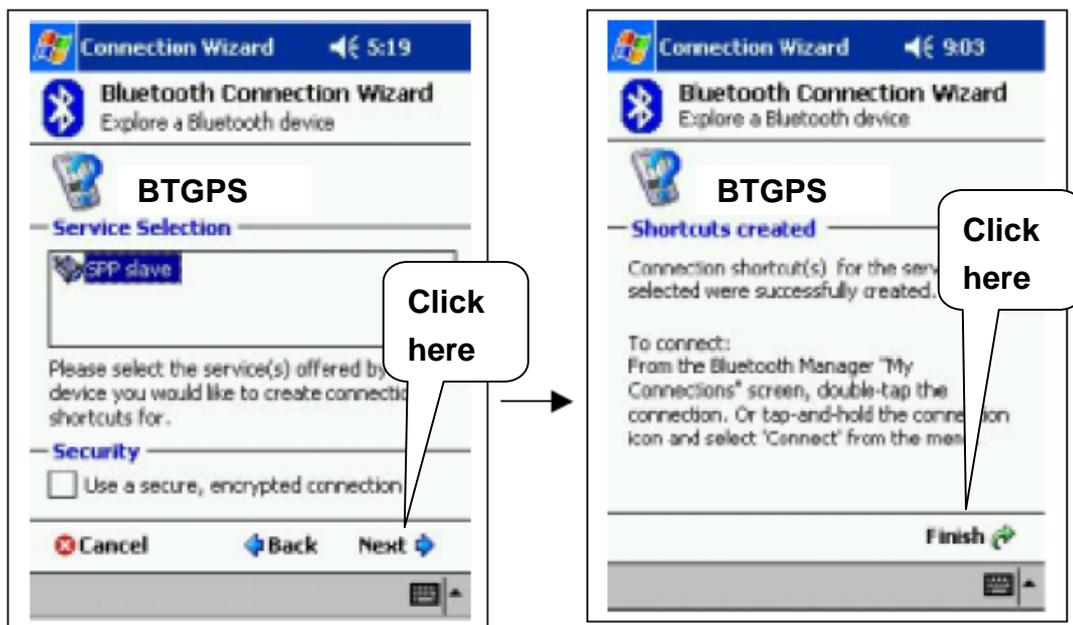
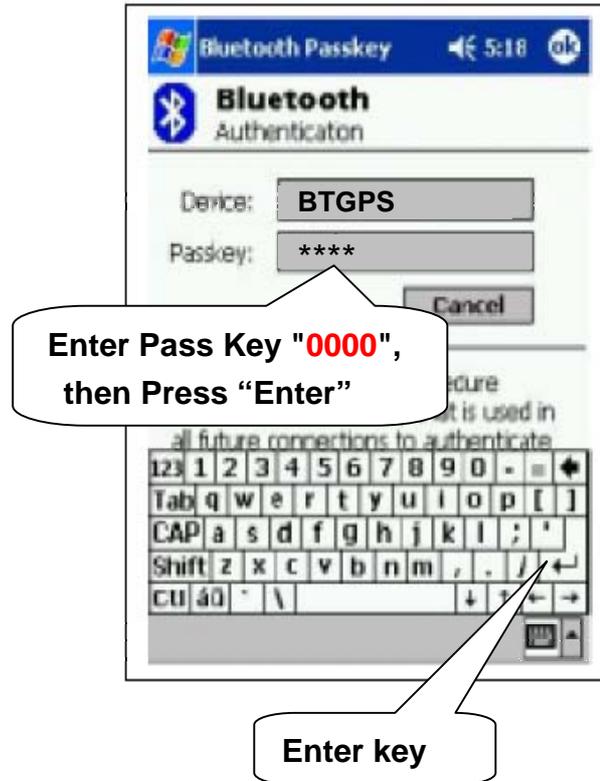
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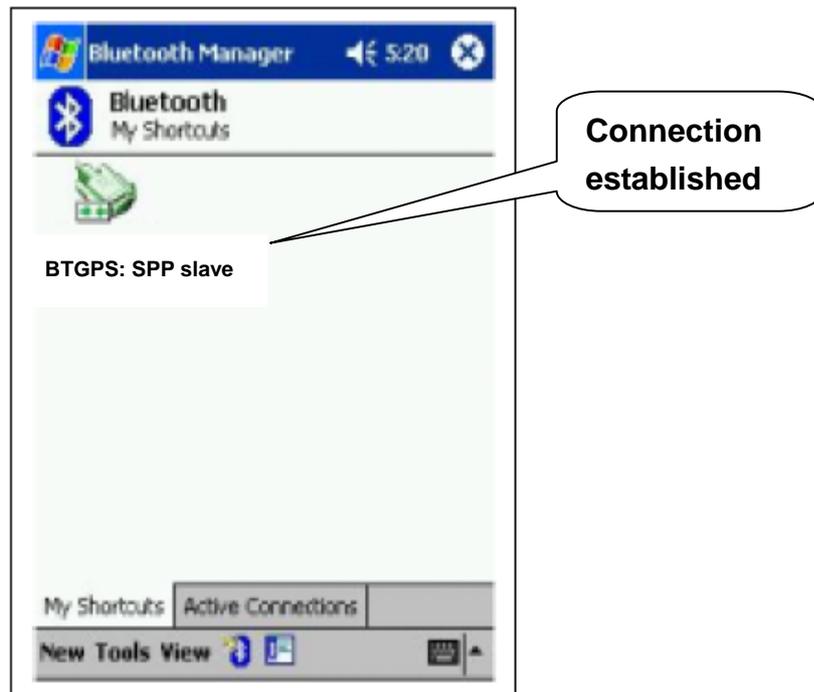
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**The connection between GPS Bluetooth receiver and PDA has been successfully established**

## 5. Turn off the GPS Bluetooth receiver

Press the power button for 3 seconds, all LEDs will go off.

**We recommend that close the E-map before turning off the GPS Bluetooth receiver, in order to avoid any possible PDA /PC freeze.**

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## 4. Hardware Description



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## 5. LED Indicator

Power on:

LED1: GPS Fix Status	LED2: Bluetooth Status
<b>Red (ON)</b> GPS not fixed yet!	<b>Blue (ON)</b> Blinking for every 3 seconds (in pairing mode)

GPS get fixed/Bluetooth connected:

LED1: GPS Fix Status	LED2: Bluetooth Status
<b>Red</b> Blinking for every 1 seconds	<b>Blue</b> Blinking quickly

Low battery: **LED1 (GREEN) blinking for every 1 second**

Charging: **LED2 (ORANGE) ON**

Battery is fully charged: **LED2 (ORANGE) turns off**



**GPS Bluetooth operates on OS with Bluetooth function that supports SPP**

**In order to avoid any unexpected problem,**  
**DO NOT attempt to change the default baudrate**

## 6. Specification

### GPS Features

Chipset	SiRF Star III
Frequency	L1, 1575.42MHz
C/A Code	1.023MHz chip rate
Channels	Supports 20 channels
Antenna (Internal)	Built-in low noise antenna

### Sensitivity

To – 159dBm Tracking, Superior Urban Canyon Performance

### Time to First Fix (TTFF)

Cold Start	42 sec, average
Warm Start	38 sec, average
Hot Start	1 sec, average
Reacquisition	0.1 sec
Update rate	1 Hz (max.)

### Accuracy

Position	5 – 25m CEP without SA
Velocity	0.1m/sec, without SA
Time	1 $\mu$ s synchronized to GPS time

### Power

Built-in rechargeable 710mAh Li-ion battery and 5V DC input	
Operation Current	<75mA (Typical)
Operation Time	10hrs, fully charged, in continuous mode

**Charging time** 3.0hrs. (Typical)

### Environmental Characteristics

Operating Temperature	- 10°C to + 60°C
Storage Temperature	- 20°C to + 85°C

### Datum

WGS-84

### Dynamic Conditions

Altitude	<18,000m (60,000feet)
Velocity	<515m/s (1000 knots)
Acceleration	<4G
Motional Jerk	20m/sec <sup>3</sup> max.

### Interface

Communication Protocol: Communicate with host platform via Bluetooth (class 2) serial port profile

Bluetooth communication distance 10meters (Typical)

GPS Protocol: Default: NMEA-0183 - GGA, GSA, GSV, RMC

Data bit: 8, stop bit: 1(Default)

### Device Size and Weight

61.5 (L) X 43.5 (W) X 20.5 (H) mm
2.42 (L) X 1.71 (W) X 0.80 (H) inch
51.4g (battery included)

### Accessories

Car charger (12V in, 5V output)
AC adaptor (5.3V output, 500mA)