User guide

1. power on (pairing):
    1. 1 long press the power bottom 3S until the Blue led is on .
    1.2 the BTGPS will turn off, if the BTGPS don’t paired in 5 minute,
2. paired the BTGPS using the Bluetooth host device(for example: PDA,Moble phone,netbook with bluetooth);
3. open the navigation soft in the Bluetooth host device;
4. place the BTGPS at the open sky(NO fix:green led flash 1s/times,fix :green led on)
5. low battery voltage warning :Red led on;the BTGPS will turned off ,if don’t charge the BTGPS in 15minute;

power off:long press the power bottom 1s;

Product Description:

1. Product Name	BT-GPS-005(StarIII) BT-GPS-009(StarIII)
2. Product Features	• Ultra slim design (12mm thickness). • Adopt high sensitivity SiRF Star III GSC3 chipset up to 9 hours or Star II GSC2X chipset with X-trac (available from SIRF from September 2006) up to 12 hours. • A-GPS Supported. • Easy to link with any Bluetooth capable mobile phones with Bluetooth 1.2compliant. • 20 channel GPS Receiver for fast acquisition and reacquisition (StarIII). • 12 channel GPS Receiver for fast acquisition and reacquisition (StarII). • 200,000 effective correlators for fast Time To First Fix (TTFF), even at poor satellite signal.(S • Built-in WAAS/EGNOS Demodulator. • Compatible with Bluetooth Serial Port Profile (SPP) completely. • Built-in rechargeable Lithium-Polymer battery for up to 9/12 hours full operation. • Built-in rechargeable battery for memory for RTC backup and fast Time To First Fix (TTFF).(Don't support StarII) • Support NMEA 0183 v2.2 data protocol. • 3-color LED to show the status of Bluetooth, GPS and battery/charging. • Include a magnet pad to be easy to place on the car dashboard.
3. Product Applications	Car/pedestrian navigation with bluetooth enable mobile phones
4. Performance	
Receiver (number of channels)	L1, C/A code (20 Channels all-in-view tracking)
Frequency	L1,1,575.42 MHz

Acquisition Time	
Cold start	42 sec (10 sec with A-GPS)
Warm start	35 sec (5 sec with A-GPS)
Hot start	1 sec
Update rate	1 HZ (max)
GPS Accuracy	
Position	RMS: approx. 5m
Sensitivity	
Acquisition	-155dBm
Tracking	-159dBm
Dynamics	
Altitude	Max. 18,000 m
Velocity	Max. 515 m/sec
Acceleration	+/-4g
Power	
Power consumption	Star II GSC2x version -when bluetooth is pairing - 101 mA in GPS acquiring, 98 mA in GPS tracking -when bluetooth is connected - 71 mA in GPS acquiring, 68 mA in GPS tracking Star III GSC3 version -when bluetooth is pairing - 130 mA in GPS acquiring, 126 mA in GPS tracking -when bluetooth is connected - 101 mA in GPS acquiring, 98 mA in GPS tracking
Battery capacity	Up to 9 hours for Star III GSC3 chipset
Low power warning	Red LED ON when battery has only 20 minutes power left
Power supply	5.0V compatible with Nokia power charger
Power saving mode	Auto power OFF after Bluetooth being disconnected for 5 minutes
RTC Buffer Battery	

Buffer Satellite Positions	Cold start – if BT-GPS has been significantly moved since it was last switched on (>1000km) and the last switch on was more than 6 months, then it may be to perform a cold start. Warm start – since our buffer backup battery is supplied by rechargeable lithium-polymer battery, therefore if BT-GPS has not been significantly moved since it was last switched on (>1000km), and the last switch on was less than 6 months, then it may be to perform a warm start always. Hot start – if the last switch on was less than 2 hours, then it may be to perform a hot start.
Interface	
Connectivity	Bluetooth version 1.2 with SPP service
GPS baud rate	57600 bps
Blueotooth baud rate	57600 bps
I/O Protocol	Standard NMEA 0183 protocol (Version 3.01): GGA, GSA, GSV, RMC, VTG, ZDA (default setting: RMC, GGA only)
Battery & Charging Time	
Battery cell type	Rechargeable Lithium Polymer Battery
Battery capacity	Typical: 800mAh
First time charging	1.5 hours
Normal charging time	2 hours
Physical Characteristics	
Dimensions	91(L) X 45.5(W) X 13(H) mm
GPS Antenna	Build-in patch antenna
External antenna connector	No
Weight of GPS receiver	59g
Environment Conditions	
Operating Temperature	Normal: -20° C to +60° C Charging 0° C to +45° C
Storage	-20° C to +60° C

Temperature	
Operating Humidity	5%-95% RH, non condensing
Bluetooth Specification	Bluetooth Version 1.2 compliant BluetoothTM Class2 operation (up to 10 meter range) RF frequency: 2.4GHZ-2.48GHZ ISM Band Modulation: FHSS / GFSK RF channels: 79 RF Input Sensitivity: -80 dBm RF Output level: -6dBm----4 dBm
5.Bluetooth PIN Code	None(on some mobile phones, 0000 must be entered)
6.Bluetooth Device ID	GW-BTGPS009
7.Certifications	
RoHS	YES

Caution: The user is cautioned that changes and modifications made to the equipment without the approval of manufacturer could void the use's authority to operate this equipment.
Notes :This equipment has been tested and found to comply with the limits for a Class B digital device ,pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation This equipment generates ,uses can radiate radio frequency energy and ,if not installed and used in accordance with the instructions ,may cause harmful interference to radio communications .However ,there is no guarantee that interference will not occur a particular installation .If this equipment does cause harmful interference to radio or television reception ,which can be determined by turning the equipment off and on ,the user is encouraged to try to correct the interference by one or more of the following measures:
-Reorient or relocate the receiving antenna.
-Increase the separation between the equipment and receiver.
-Connect the equipment into an outlet on a circuit different from that to which the receiver if connected.
-consult the dealer or an experienced radio/TV technician for help

FCC Warning:
This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:⑴This device may not cause harmful interference ,and ⑵this device must accept any interference received ,including interference that may cause undesired operation.

EXPOSURE TO RADIO FREQUENCY ENERGY
This device and its antenna must not be co-located or operated in conjunction with any other antenna or transmitter. To comply with FCC RF exposure requirements, only use supplied antenna.