



BLUETOOTH GPS RECEIVER

P/N **NBGPS4C2XXX**

USER GUIDE



Declaration of Conformity.

We declare that product NBC2XXX conforms to the
R&TTE Directive 1999/5/EC



FCC ID: TNZNSRTA3C2XXX

CE 0678



Federal Communications Commission (FCC) Statement

15.21

You are cautioned that changes or modifications not expressly approved by the part responsible for compliance could void the user's authority to operate the equipment.

15.105(b)

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 and 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 in 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 is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Operation is subject to the following two conditions:

- 1) this device may not cause interference and
- 2) this device must accept any interference, including interference that may cause undesired operation of the device.

FCC RF Radiation Exposure Statement:

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. End users must follow the specific operating instructions for satisfying RF exposure compliance. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

.1 Getting Start

Before the device can be used, a pair procedure has to be carried out by switch on the slide switch to put the device into pairing mode, and then initialize the pairing procedure on the device and a host (PDA, Smart phone, NB PC...etc), its password is '0000'. After they are paired, then the device is ready to use for normal operation. When GPS is fixed, it has latitude, longitude, altitude, speed, course and some satellites information will be sent to host.



.2 LEDs Function

1. Bluetooth Status LED (Blue)

Flashing - Bluetooth is on and ready to transmit.

2. GPS Status LED (Green)

Flashing - Position is fixed.

Steady light - Device is on but position is not fixed.

3. Battery Status LED (Red)

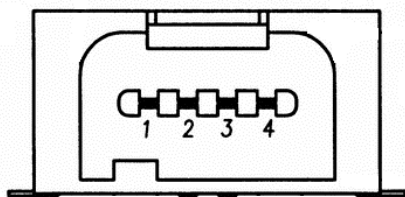
Flashing - Power is low and charging immediately is required.

Steady light - Connected to power charger, charging.

Off - Battery is fully charged and has adequate power supply.

.3 Power Connector

+5V DC power input connector



+: Pin1 -: Pin4

.4 General Specification

General

Frequency	L1, 1575.42 MHz
C/A code	1.023 MHz chip rate
Channels	20

Accuracy (Open Sky)

Position	10 meters, 2D RMS 7 meters 2D RMS, WAAS corrected 1-5 meters, DGPS corrected
Altitude	< ± 35m Vertical in term of 95%
Velocity	0.1 meters/second
Time	1 microsecond synchronized to GPS time

Datum

Default	WGS-84
Other	Support different datum by request

Acquisition Rate (Open sky, stationary requirements)

Snap start	<1 sec., average
Hot start	5 sec., average
Warm start	38 sec., average
Cold start	42 sec., average

Dynamic Conditions

Altitude	18,000 meters (60,000 feet) max
Velocity	515 meters/second (1000 knots) max
Acceleration	5g, max
Jerk	20 meters/second ³ , max

DC Power

Main power input	5 ± 5% VDC input
Power consumption	350 mW (continuous operation mode) 1.1mW @ shutdown

Sensitivity

Tracking sensitivity	-159dBm (15dB-Hz with SiRF GSW3.2 software)
Acquisition sensitivity	-142dBm (32dB-Hz with SiRF GSW3.2 software)

Software

Operating firmware	GSW3.2
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Bluetooth Technical data

Specification	Bluetooth V2.0
Supply voltage	2.8~3.3V DC
Frequency range	2.402~2.483 GHz
Receiver sensitivity	-82dBm
Bluetooth range	10m Class2
Power consumption	35mA (Typital)

Bluetooth Serial Port

Connection	Communicate with Host Platform via Bluetooth (class 2) Serial Port Protocol (SPP)
Protocol message	NMEA, Msg.: GSV(5x), RMC(1x), GLL(1x),GGA(1x) and GSA(5x)
Serial port settings	Baud rate: up to 115200 bps (default setting is 38400 bps) Data bits: 8 Parity: NO Stop bit: 1 Flow control: NO

.5 Environment Specification

Operating temperature	-10 degrees Celsius to 60 degrees Celsius
Storage temperature	-40 degrees Celsius to 85 degrees Celsius