i.Trek M3™

Personal Navigation System

User Manual

GPS Receiver

Battery LED
GPS LED
Bluetooth LED

Power

On – Press power button 1 sec. until the LED is on.
Off – Press power button 1 sec. until the LED is off.

Bluetooth LED

Flashing Slowly – No connection to Bluetooth device.
Flashing Quickly – Connected to other Bluetooth device.

GPS LED

Solid Green – The GPS is searching for satellites.
Flashing Green – The GPS position has fixed.

Battery LED

Red – The battery is low and requires charge.
Yellow – The battery is charging.
LED off – The battery is fully charged.

Package Contents

Bluetooth GPS receiver x 1
Battery x 1
AC Charger x 1
Car Charger x 1
User CD x 1

Setting up Your Bluetooth GPS

The instruction is provided as a general guideline. The steps may be different on your particular device. Please refer to user manual of each device for more detailed information.

Pocket PC

* Make sure Bluetooth is enabled on the Pocket PC.
1. Open Bluetooth Manager by clicking on **Bluetooth Manager** icon.
2. Select **New** -> **Connect!** to start Connection Wizard.
3. Highlight **Explore a Bluetooth device** and click **Next**.
4. Select **Tap here to choose a device** and click **Next**.
5. Bluetooth wizard will search and display available Bluetooth devices on screen.
6. Click on **BT GPS** icon and available service will display.
7. Enter **0000** as passkey.
8. Select **SPP Slave** and click **Next**.
9. Select Finish and BT GPS will now available as short cut.

Palm OS

1. Click on **Bluetooth** icon to start Bluetooth Manager.
2. Make sure Bluetooth is selected to **On**.
3. Click on **Setup Devices** and then click on **Trusted Devices**.
4. Click on **Add Devices** to search for available devices.
5. Click on **Bluetooth GPS** and enter **0000** as passkey.

Windows

1. From Desktop, click on **My Bluetooth Places** icon to open Bluetooth Manager.
2. Click on **Search for devices in range** to search all available Bluetooth devices.
3. Enter **0000** as passkey and **BT GPS** icon should be displayed.
4. Right click and select Connect **SPP Slave**.
5. The Bluetooth connection will be established and BT GPS icon will become green.

MAC OS X

1. Go to System Preferences and click on the Bluetooth icon.
2. Click on **settings** to ensure BT is turned on and **discoverable**.
3. Select the **Devices** tab.
4. Click on **set up new device**.
5. This brings up the Bluetooth Set Up Assistant
6. Follow the instructions on the set up assistant and enter **0000** as passkey.
7. The device should be listed in the **devices** window.
8. Locate the BT serial utility application in the **utilities** folder, double click to open
9. Click on **new**
10. Assign the port a name, select **outgoing**, click on **select device**.
11. Select the Bluetooth GPS and highlight **SPP slave** in the right hand window.
12. Click **select** button and select the port type **RS-232**.
13. Click **OK** to finish setup.

Setting up Your Software

Every navigation software has different setup instruction. Please refer to the user manual of each respective program for detail setup information. Below are some useful tips.

Protocol
The default protocol on i.Trek M3 Bluetooth GPS is NMEA and majority of the navigation software also uses NMEA as standard protocol. We recommend keeping this setting at default.

Baud Rate
4800 is the most common baud rate used by navigation software, and we recommend keeping this value. However, if 4800 does not work, we recommend switching the baud rate to 38400.

Com Port
Com port is assigned by Bluetooth Manager automatically. If several choices are available, please make sure the software uses the com port which has been assigned to serial port (out bound).

Connection
Some software offer several choices for GPS connection. Please make sure connection method is set to Bluetooth.

FAQ and Trouble Shooting

Does BT GPS require driver?
No, BT GPS does not require driver to run. As long as the host device supports Bluetooth and serial profile, it will recognize BT GPS through discovery mode.

The BT GPS is successfully paired through Bluetooth Manager. However, the GPS mapping software can not recognize the BT GPS.
Only one program can access the GPS at one time. Please make sure all GPS programs are turned off except for one you intend to use.

The BT GPS has received satellite signals. However, it can not acquire a fix.
GPS stores the satellite data in the internal memory. If you have not used GPS for a while or have traveled a long distance, please remove the battery for a while and let the GPS reset.

The BT GPS takes long time to get a fix.
When you first use the GPS, please make sure that you are outside with good view of the sky and stay stationary. It may take about few minutes to locate the satellites for the first time. However, it will locate much faster during the subsequent uses.

The BT GPS can not be paired after the battery is completely drained.
When the battery is completed drained, the unique paring ID is lost. Please delete the BT GPS short cut and the paired device from the Bluetooth manager, restart the host device, and re-pair the BT GPS again.

How long is the warranty and where to exchange the defective product?
The warranty is one year from the date of purchase. Replacement will be issued directly by your authorized dealer.

Technical Specifications

Antenna

Receiver Frequency: 1575.42 MHz (L1 band) C/A code
Antenna Type: Built-in Active Antenna

GPS Receiver

Technology: SiRF star III
Satellite Measure Used: 20-channel parallel automatic selection
Tracking Sensitivity: -159 dBm
Operating Temperature: -20℃ to 60℃
Battery Life: 15 hours with built-in rechargeable battery (1650 mAh)

Time to First Fix (TTFF)

Reacquisition: 0.1 second typical
Hot Start: 1 seconds typical
Warm Start: 38 seconds typical
Cold Start: 42 seconds typical

Accuracy of Position Fix

Horizontal: 10m 2D RMS without SA
Velocity: 0.1/sec 95% without SA

Receiver Configuration

Baud Rate: 38400; 8, N, 1 by default
Update rate: Once every seconds
Output Message: NMEA 0183 version: 2.20, supports commend GGA, GSA, GSV, RMC

Physical Characteristics

Dimension: 72.5 x 40.4 x 26mm
Weight: 75g