

QSTARZ®

Bluetooth®

BT-Q1000X

Travel Recorder™ X

eXtreme 66-CH Performance Bluetooth A-GPS Travel Recorder
Superior Track Logger and Navigation DUAL-IN-ONE



Table of Contents

1. OVERVIEW	1
2. PRODUCT NOTICE.....	1
3. FEATURES.....	2
4. PRODUCT SPECIFICATION	3
5. HARDWARE INTRODUCTION	4
5-1. APPEARANCE	4
5-2. HARDWARE FUNCTION	4
5-3. BATTERY INSTALLATION	5
5-4. LED INDICATORS.....	6
5-5. FUNCTION OF AUTO ON-OFF, AUTO LOG ON-OFF	7
6. SETUP BT-Q1000X	8
6-1. INSTALL THE DRIVER AND SOFTWARE UTILITY FOR BT-Q1000X	8
6-2. INSTALL GOOGLE EARTH	12
7. START TO USE.....	12
7-1. FULLY CHARGE THE BATTERY WHEN USING AT THE FIRST TIME	12
7-2. CONNECT BT-Q1000X WITH YOUR PC	12
7-3. START THE SOFTWARE UTILITY.....	12
8. USEFUL REFERENCE APPLICATIONS ON THE INTERNET.....	14
8-1. LOCR GPS PHOTO	14
8-2. GPSBABEL.....	15
8-3. SPORTSMATE	16
8-4. JETPHOTO STUDIO.....	17
8-5. VEOGEO	18
8-6. RACECHRONO	19
9. TROUBLE SHOOTING	20
10. APPENDIX.....	21
10-1. ACTIVATE THE <i>BLUETOOTH</i> FUNCTION IN YOUR PDA/SMART PHONE OR PC ...	21
10-2. CREATE <i>BLUETOOTH</i> SETTING (WINDOWS MOBILE 5/6 FOR POCKET PC).....	22
10-3. CONFIGURE THE GPS INTERMEDIATE DRIVER.....	25
10-4. START YOUR NAVIGATION SOFTWARE	27
10-5. SWITCH TO <i>eXTREME</i> 5Hz SPORT MODE BY QSTARZGPSVIEW SOFTWARE APPLICATION.....	28
10-6. SAFETY NOTICES.....	30

1. Overview

Thank you for purchasing Qstarz eXtreme 66-CH series **BT-Q1000X** - Bluetooth® A-GPS Travel Recorder™, built-in second generation GPS chipset MTK with 66 channels tracking for your navigation and travel log, and also, provides stand-alone logging up to 200,000 records. Besides, **BT-Q1000X** software utility supports multi-condition setting to customize personal travel record. All tracking records can be downloaded, saved, and also can display directly on Google Earth with photos by integrated Geotagging function. **BT-Q1000X** supports 42hrs operating time for your log. You don't have to worry your GPS needs to be recharged shortly, and supports Smart Power control for power saving.

2. Product Notice

- Please take out the battery and store it in dry/cool places when not use for a long period.
- If BT-Q1000X isn't used in temperature between -10°C ~ 60°C, its battery charging capability will decrease. Leave the BT-Q1000X far from heat or high temperature environment. And also, do not expose your BT-Q1000X in temperature higher than 145°F/60°C to prevent the battery inside BT-Q1000X from overheating, exploding or burning itself. The Lithium battery inside the BT-Q1000X should be recycled.
- It is recommended to turn BT-Q1000X off in the hospital. Wireless GPS receiver may interfere with the medical equipments which use radio frequency.
- The manufacturer assumes no responsibility for any damages and loss resulting from the use of this manual, or from deletion of data as a result of malfunction, dead battery, or from misuse of the product in any way.
- Please clean the unit with a dry and clean soft close. Do not use harsh cleaning solvents, chemicals, or strong

detergents.

- Do not attempt to open BT-Q1000X by yourself.
Unauthorized hacking may damage the unit, and void your warranty.

3. Features

- Adopt MTK II chipset with high sensitivity -165dBm and 66-Channel Performance
- Stand-Alone travel recorder to log up to 200,000 records (Waypoints would be reduced due to more options of Log Format)
- Easily switch Travel Recorder to LOG mode or NAV mode (Navigation + Log)
- Support POI button for memorizing your location
- Stand-Alone travel recorder to log up to 200,000 records (*)
- Provide PC utility with friendly UI and Multi-Language
- Support Multi-Mode setting to record data Vehicle, Bicycle, Jog)
- Draw your navigation path immediately on Google Earth as default
- Support GeoTagging function for digital photo and generate KMZ file easily
- A-GPS support boosts the fix speed to 15sec faster
- Save the travel records as GPX / CSV / NMEA / Google Earth file format
- DGPS(WAAS+EGNOS+MSAS), QZSS support
- Personal/Portable Navigation (PDA, Smartphone, PC, etc.)
- Lower power consumption up to 42hrs for travel recording
- Fast Position Fix ,Cold start 35s, Warm start 33s,Hot start 1s
- Auto On-Off function for smart power control

*The waypoints would be decreased when the more options of Log Format are selected

4. Product Specification

General	
GPS Chip	MTK II GPS Module
Frequency	L1, 1575.42MHz
C/A Code	1.023MHz chip rate
Channels	66-CH Performance
Antenna (Internal)	Built-in patch antenna with LNA
Sensitivity	Tracking -165dBm
Datum	WGS84
Performance Characteristic	
Position	Without aid: 3.0m 2D-RMS
Accuracy	<3m CEP(50%) without SA (horizontal) DGPS (WAAS, ENGOS, MSAS): 2.5m
Velocity	Without aid: 0.1m/s, DGPS (WAAS, ENGOS, MSAS): 0.05m/s
Time	50 ns RMS
Cold/Warm/Hot Start	35/33/1 sec, average
Dynamic Condition	
Altitude	<18,000m
Velocity	<515m/sec
Acceleration	<4g
Protocol	
GPS Output Data	NMEA 0183 (V3.01) -GGA, GSA, GSV, RMC (Default) VTG, GLL(Optional)
Baud Rate	115,200 bps
Power	
Built-in rechargeable Li-ion battery, Up to 42 hrs after fully charged	
Bluetooth	
Standard	Fully compliant with <i>Bluetooth</i> V1.2
Bluetooth Profile	Serial Port Profiles (SPP), Up to 10 meters
Others	
Size / Weight	72.2 (L) X 46.5 (W) X 20 (H) mm/ 64.7g (battery included)
Operating Temperature	- 10 °C to + 60 °C
Storage Temperature	- 20 °C to + 60 °C
Charging	0 °C to + 45 °C

5. Hardware Introduction

5-1. Appearance

1. Power jack (mini USB type)
2. Mode switch (OFF/NAV/LOG)
3. Battery status LED (Red/Green)
4. *Bluetooth* status LED (Blue)
5. GPS status LED (Orange) / Log status LED (Green)
6. Internal antenna
7. POI button



5-2. Hardware Function

Hardware Function	Description
Power Jack	Take the power cable and connect it to the power jack (mini USB type) for charging only
Mode Switch (OFF)	Power off BT-Q1000X
Mode Switch (NAV)	When switch to NAV mode, BT-Q1000X only can be used to navigate with handheld devices (PDA / Smartphone / Laptop...), and the data log function is disabled.
Mode Switch (LOG)	When switch to LOG mode, BT-Q1000X can be used to record your travel path, and navigation function is still enabled.
POI Button	Push to log the favorite Point of Interest

Mode Switch (OFF)**Mode Switch (NAV)****Mode Switch (LOG)**

5-3. Battery installation

1. Press the **PUSH** button on the bottom side of the unit



2. Pull out the battery cover. Insert battery in the unit



3. Put battery cover on to the cabinet



4. Then push down and force it forward to fit firmly



- Charging your battery


For the first time using the BT-Q1000X, please charge battery until it is fully charged. Take the power cable and connect it to the power jack (mini USB type) and recharge through USB cable, travel charger, or car cigarette adaptor.






This will begin to charge the battery. Charging time is about 3 hours typically.

- When the Power LED is Red, battery power is low status. Please recharge.
- When the Power LED is Green, the battery is under charging mode.
- When the Power LED is off, the battery is fully charged.

5-4. LED Indicators

LED Status		Flash	ON	OFF
Power (Red/Green)			Recharging (Green) Low Power (Red)	Fully charged

Bluetooth (Blue)		<u>Flash per 2 sec.:</u> Bluetooth connected and transmitting Mode <u>Flash per 5 sec.:</u> Power saving mode	Not connected / Pairing	GPS not powered / Log Mode is on
GPS (Orange)		GPS position is fixed, Navigation	Detecting Satellite, GPS position not fix	GPS not powered
Log (Red)		Log Mode is on <u>Flash per 2 sec:</u> Low memory (20%) <u>Flash 3 times:</u> POI(Point of Interest) is recorded	Memory is full	Log Mode is off

5-5. Function of Auto On-off, Auto Log On-Off

Auto On-Off (Power saving mode): Q1000X can automatically enter sleeping mode after the *Bluetooth* connectivity is turned off, so the Blue LED will turn to flash every 5 seconds. Thus you can always power it on with very low power consumption.

Under power saving mode, when detecting *Bluetooth* is being connected, BT-Q1000X will auto wake up itself and the blue LED will turn to flash every 2 seconds and GPS Orange LED will be also On.

Note: *Power saving mode would not function if log is enabled.*

Auto Log On-Off: Under Log mode, BT-Q1000X will automatically stop log after the GPS doesn't fix. However, the LED will not indicate it since it works in background. As long as the GPS fixes again, BT-Q1000X will start to log. Thus you can save very much memory during your travel.

6. Setup BT-Q1000X

6-1. Install the driver and software utility for BT-Q1000X

System Requirement (Only compatible with Microsoft Windows XP / Vista)

Minimum System Requirement	Recommended System Requirement
<ul style="list-style-type: none">- Windows XP or Vista- Pentium 3, 500Mhz- 128M RAM- 128MB disk space- Network speed: 128Kbits/sec- 3D-capable video card with 16Mbytes of VRAM- 800x600, "16-bit High Color" screen	<ul style="list-style-type: none">- Windows XP- Pentium 4 2.4GHz+ or AMD 2450xp+- 512M RAM- 2 GB of free disk space- Network speed: 768 Kbits/sec or better (DSL/Cable)- 3D-capable video card with 32 MB of VRAM or greater- 1280x1024, "32-bit True Color" screen

1. Please insert the Driver CD to your computer, and find the folder "Utility\PC Utility V4\". Double click "TravelRecorderV4_installer.exe" to install the software utility package. This software package contains USB driver and PC Utility V4 software inside.

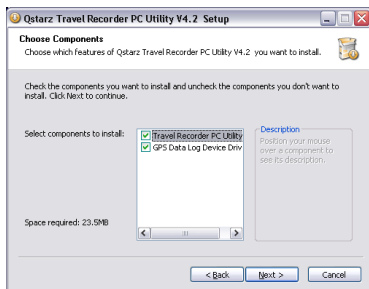


TravelRecorderV4
_installer.exe

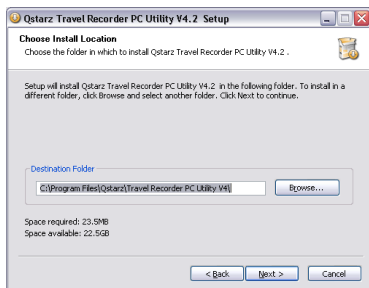
2. System would pop up the utility installation dialog. Please click <Next> for the next step.



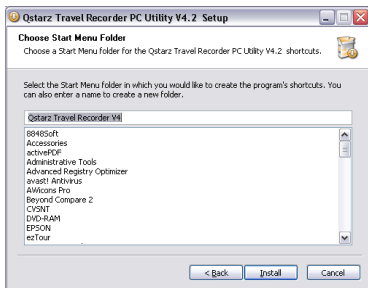
3. Please select “Travel Recorder PC Utility V4” and “GPS Data Log Device Driver”, and then click <Next> to the next step. If you already installed USB driver, please unselect “GPS Data Log Device Driver.”



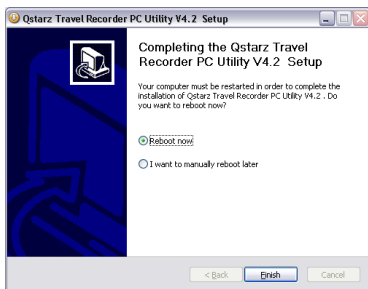
4. Click <Next> if you want to install the program in default target folder or you can click <Explore> to change the install folder.



5. Give a folder's name for quick links in start menu and click <Install> to install the program.



6. When the utility installation is completed, please click <Finish> to reboot. Or you can also reboot later by selecting “No, I want to reboot later by myself.”



6-2. Install Google Earth

BT-Q1000X supports showing your travel path directly on Google Earth. Please go to <http://earth.google.com> for the free download of Google Earth, and then install it to your computer. For the operation procedure of Google Earth, please refer to <http://earth.google.com/support/>

7. Start to use

7-1. Fully charge the battery when using at the first time

A fully charged battery can last up to 42 hours continuously operation.

7-2. Connect BT-Q1000X with your PC

1. Power on BT-Q1000X.
2. Please connect BT-Q1000X with your PC by mini USB cable.

7-3. Start the software utility

NOTE 1: Before starting the software utility, please make sure that the USB driver and the software utility has been installed properly.

NOTE 2: PC Utility V4 only supports BT-Q1000X. Any intention to use PC Utility V4 connecting GPS units other than BT-Q1000X would result in software disconnection automatically.

NOTE 3: PC Utility V3 is not compatible with BT-Q1000X. Please don't make use of it with BT-Q1000X.

Users have to input product key at the first time of use. **The product key is located on the envelope of the driver CD.**



Important Notice: Do not lose your Product Key. Keep the packaging, or write the number down and keep it in a safe place.

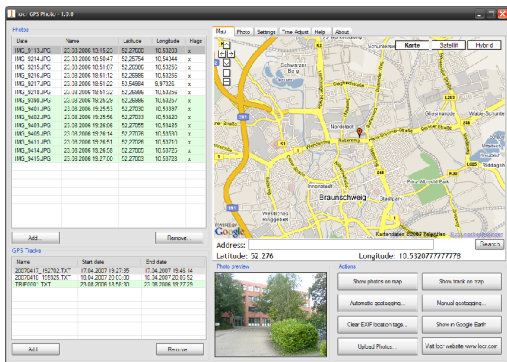
For more software instructions, please refer to the software user's manual in driver CD or at Help -> Users Manual after software installation.

For A-GPS functionality, please also refer to User's Manual or Quick Guide.

8. Useful reference Applications on the internet

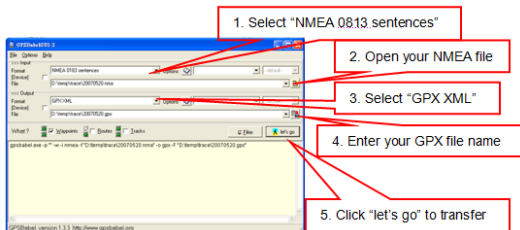
8-1. locr GPS Photo

BT-Q1000X is the member of locr GPS Photo certified product. This utility can integrate travel log and digital photos by date/time to show your photos on the map directly. After the integration, the current GPS coordinates also can be imported to your digital photos for the further application. Please find the installation file for Windows XP/Vista or Symbian system in Qstarz GPS CD. Go to <http://www.locr.com> for the further information.



8-2. GPSTabel

This utility can transfer your NMEA file to GPX file or other format. Please go to <http://www.gpsbabel.org> for free download.



8-3. SPORTSMATE

This web site can share your travel log with your friends. Before sharing your trip, please apply a new account first. Please go to <http://www.ttsm.com> for the further information.

SPORTSMATE TRIP TRACKER

Home | Trips | Webshop | Information | Support

Login ☐ Remember me

Email address

Trip 080307

Trip information

User	Michel Brinkman
Duration	01:00:54
Distance	10.01 km
Trip date	08-03-2007
Start time	21:36
Start city	Apeldoorn
End city	Apeldoorn

Statistics

Print this trip

Minimap

Graph

Speed (km/h) and Height (m) graph showing data over time.

Download GPX

Posted by: Michel Brinkman
Website: No website available

Posted at: 12-03-2007 23:05

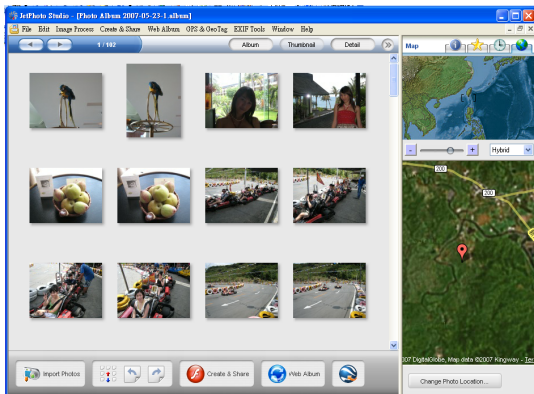
Map | Satellite | Combination

Time: 00:00:00 Play speed: 2x Speed: 0.00km/h

8-4. JetPhoto Studio

This utility can integrate travel log and digital photos by date/time to show your photos on the map directly. After the integration, the current GPS coordinates also can be imported to your digital photos for the further application. Please go to

<http://www.jetphotosoft.com> for free download.



8-5. VeoGeo

This website allows you to combine travel log and video by date/time to show your video on the map directly. Please go to

www.veogeo.com for further information and register for a free new account.

[Login](#) [Register](#)

VeoGeo BETA

[Browse](#)

[Blog](#)

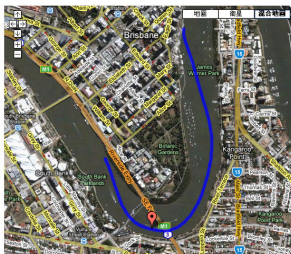
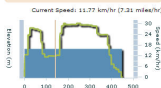
[Forum](#)

[Upload](#)

[Search for activities](#)

[Advanced Search](#)

CityCat - Downstream - Brisbane



Ads by Google

Mountain biking Alps

Wide number of local cycling paths
Beautiful nature
www.silviana.info

Mountain Bike Accessories

Buy Now, 15% Off Your 1st Purchase
Free Shipping
Today Huge Savings
www.sagecycles.com

Prescription Sunglasses


for cyclists Wrap Rx specialists
www.bicyclists.com

Outdoor Instructor Course


8-6. RaceChrono

RaceChrono is a GPS based lap timing software for Nokia S60 smart phones. It can be used to measure lap times on almost any vehicle and track. It can be used to measure lap times for example for motorbikes, bicycles, cars, water jets and quadbikes. Most important of all, it supports 5Hz update rate.

Please find the installation file in Qstarz GPS CD or go to <http://www.racechrono.com> for the further information.


RaceChrono

[About](#)
[News](#)
[Manual](#)
[Download](#)
[Forum](#)



Version 1.00

[Download](#)

RaceChrono is a GPS based lap timing software for Nokia S60 smart phones. It can be used to measure lap times on almost any vehicle and track. It can be used to measure lap times for example for motorbikes, bicycles, cars, water jets and quadbikes.

RaceChrono version 1.00 released!

I'm very happy to announce that the version 1.00 is now released! It has simplified live timer, improved optimal lap browsing, better OBD-II support and session exports in GPX format. Also it features many user interface improvements!

FAQ: Which Phones does RaceChrono work on?

A: RaceChrono works on phones with Nokia S60 2nd edition feature pack 1 and above, or Nokia S60 3rd edition.

FAQ: How does RaceChrono work?

RaceChrono uses GPS position data to determine lap times and performance.

[Read more](#)

9. Trouble Shooting

Question	Answer
Can BT-Q1000X be used to navigate when travel log is on?	Yes, you can use BT-Q1000X to navigate when travel log is on simultaneously.
I lost my travel charger and battery. Where can I find replacements for both?	DC Input range of BT-Q1000X is 4.5~5.5V. You can use a travel charger which support DC output range from 4.5~5.5V. You can also use a common mini USB cable to charge your unit via the laptop. Besides, The battery for BT-Q1000X is compatible with Nokia phone series. The battery model is BL-5C.
Why does BT-Q1000X only can log 150,000~160,000 waypoints?	We active more options previously to provide detailed GPS information for user's reference and download. So it would use more memory. If you reduce the options (under Log Format) for your log, it would save the memory and increase more waypoints.
My BT-Q1000X could not use 42 hours?	BT-Q1000X can use 42 hours under the optimum environment. GPS would need more power consumption when keep trying a position fix, seeking <i>Bluetooth</i> connection, or under an unstable environment (bad weather, forest, buildings). Those would take GPS more calculation and power consumption. So it would spend more power consumption. After the red LED light is blanking, it still can be used for your navigation without any problem.

10. Appendix

Navigate as a *Bluetooth* GPS Receiver with Handheld devices

10-1. Activate the *Bluetooth* function in your PDA/Smart phone or PC

Before activating the *Bluetooth* function in your PDA/PC, please switch BT-Q1000X to <NAV> or <LOG> position for pairing and check if your device is equipped with *Bluetooth* function. If not, you may need to acquire an optional CF/SD *Bluetooth* card or *Bluetooth* dongle.

NOTE 1:

BT-Q1000X would be identified as "Qstarz GPS" under Bluetooth Manager. In further use, you just need to click it to connect to this GPS Travel Recorder.

NOTE 2:

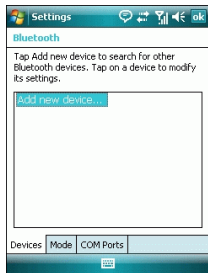
The pairing procedure is required to execute in the first time only. And the pass code is "0000" if required.

NOTE 3:

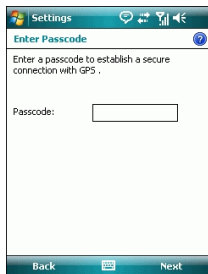
Select correct com port and baud rate: 115,200 under your navigation software (Most of navigation software can auto-detect Bluetooth Com port, so you do not need to setup manually).

10-2. Create *Bluetooth* Setting (Windows Mobile 5/6 for Pocket PC)

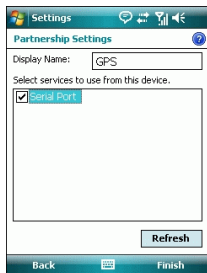
1. Switch **BT-Q1000X** on.
2. From the **Start** menu, click **Settings**. On the **Connections** tab, click the *Bluetooth* icon
3. On the **Devices** tab, click **Add New Device...** The settings application will search for your device. When it is found, click **Next**.



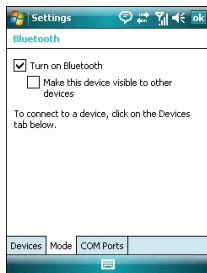
4. Enter the passcode "0000" and click **Next**.



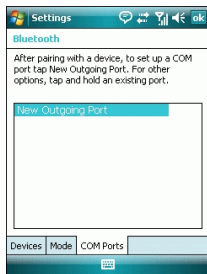
5. On the **Partnership Settings** screen, select **Serial Port** and click **Next**



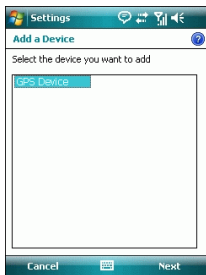
6. Select the **Mode** tab and check the **Turn on Bluetooth** checkbox if it is not already checked.



7. Select the **COM Ports** tab and click **New Outgoing Port**

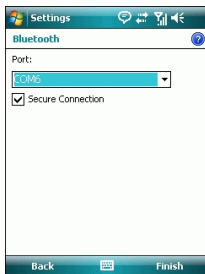


8. Select “Qstarz GPS” from the **Add a Device** list and click **Next**



9. Uncheck **Secure Connection**. From the **Port** drop-down list, select a port number. Remember the port you choose. You will need it when you configure the GPS Intermediate Driver.

10. Click **Finish** and exit the *Bluetooth* Control Panel item.

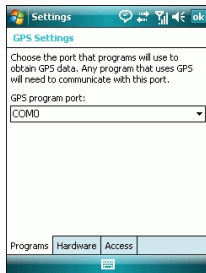


10-3. Configure the GPS Intermediate Driver

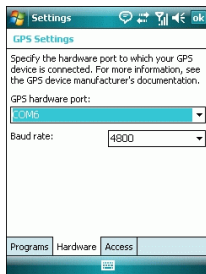
The GPS Intermediate Driver is a software layer between a Windows Mobile application and the GPS hardware drivers. This allows applications to work with a variety of GPS hardware. The GPS Intermediate Driver uses the registry to determine what COM port should be used to communicate with the GPS hardware. The recommended way to configure the registry to work with your GPS device is the GPS Settings icon

1. From the **Start** menu, click **Settings**. On the **System** tab, click the **External GPS** icon. On some devices, this item has a different name.

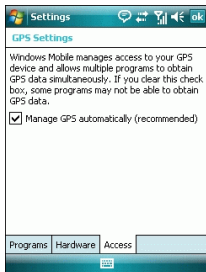
2. On the **Programs** tab, select any available COM port from the **GPS Program Port** drop-down list. The GPS data sent through the GPS Intermediate Driver is streamed to applications through this port. This should not be the same port that your GPS receiver is configured to use. If your application can't receive GPS data stream, leave **GPS Program Port** for empty. Applications will use **GPS Hardware Port** as communication port.



3. On the **Hardware** tab, select the COM port BT-Q1000X is configured to use from the **GPS Hardware Port** drop-down list



4. On the **Access** tab, make sure that the **Manage GPS Automatically** checkbox is checked



10-4. Start your navigation software

Activate your navigation software and make sure to select the correct "COM Port".

NOTE 1:

In the map software such as TomTom, you might need to change preference and set "Other Bluetooth GPS Device" according to PDA/phone model. In some case please consult map software company to vary the setting if you have issue on positioning.

NOTE 2:

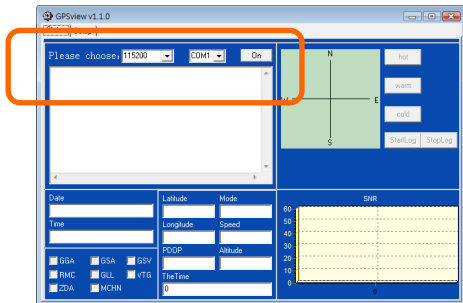
There might be specific setting requirement per navigation software. Such as Tomtom, please delete other GPS settings under Tomtom software, and keep one only.

10-5. Switch to eXtreme 5Hz sport mode by QstarzGpsView software application

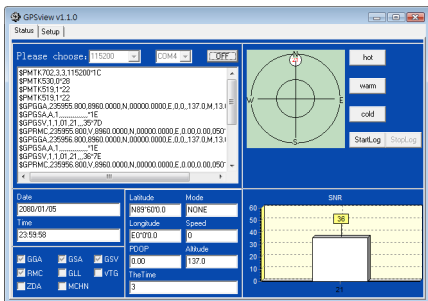
eXtreme 5Hz sport mode allows your GPS to get the same or even higher positioning and accuracy ability during eXtreme sports.

NOTE: The default setting for Q1000X is 1Hz. If you are no longer to use eXtreme 5Hz sport mode, either to switch it from software or to hard reset the GPS by unplugging the battery over 5 mins.

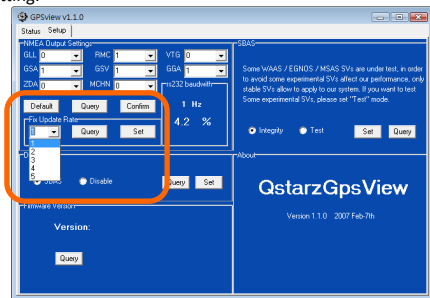
1. Connect BT-Q1000X with your PC by mini-USB cable.
2. Switch BT-Q1000X on.
3. Execute QstarzGpsView.exe from Driver CD
"Tools\QstarzGpsView.exe".
4. Select COM port (refer to software manual, item 5-1 II) and set the baud rate to **115200**.



5. Click **On** button to establish the communication between BT-Q1000X and your PC. If the connection is successful, the NMEA stream will keep showing.



6. Click **Setup** tab, and you can change to eXtreme Sport mode under **Fix Update Rate**. The higher number means the device can bear extremier environment. After select an update rate, click **Set** to save the setting.



10-6. Safety Notices

R&TTE / CE Notice

This device is confirmed to comply with the requirements set out in the Council Directive on the Approximation of the Laws of the Member States relating to Electromagnetic Compatibility (89/336/EEC), Low-voltage Directive (73/23/EEC) and the Amendment Directive(93/68/EEC), the procedures given in European Council Directive 99/5/EC and 89/336/EEC.

The equipment was passed. The test was performed according to the following European standards:

EN 300 328-2 V1.2.1 (2001-08)

EN 301 489-1 V1.4.1 (2002-04) / EN 301 489-17 V1.2.1 (2002-04)

EN 50451: 2002

EN 60950: 2000

FCC Notice

This device complies with part 15 of the FCC rules. Operation is subject to the following two conditions:

1. This device may not cause harmful interference.
2. This device must accept any interference received, including interference that may cause undesired operation.

Spec. is subject to change without prior notice.
All rights reserved. All registered trademark is
belong to their respected companies.