QSTARZ™

Bluetooth®

BT-Q1000

Travel Recorder®

Super 51-CH Performance Bluetooth GPS Travel Recorder
Superior Track Logger and Navigation DUAL-IN-ONE

Table of Contents

1. Overview

Thank you for purchasing Qstarz Super 51-CH serial **BT-Q1000** - Bluetooth GPS Travel Recorder, built-in new generation GPS chipset MTK with 51 channels tracking for your navigation and travel log, and also, provides stand-alone logging up to 100,000 records. Besides, **BT-Q1000** 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. **BT-Q1000** supports 32hrs operating time for your log. You don't have to worry your GPS need 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-Q1000 isn't used in temperature between -10℃ ~ 60℃, its battery charging capability will decrease. Leave the BT-Q1000 far from heat or high temperature environment. And also, do not expose your BT-Q1000 in temperature higher than 140℉/60℃ to prevent the battery inside BT-Q1000 from overheating, exploding or burning itself. The Lithium battery inside the BT-Q1000 should be recycled.**
- **It is recommended to turn BT-Q1000 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-Q1000 yourself. Unauthorized hacking may damage the unit, and void your warranty.**

3. **Features**

- **Adopt MTK chipset with high sensitivity -158dBm and 51-Channel tracking**
- **Stand-Alone travel recorder to log up to 100,000 records (Waypoints would be reduced due to more options of Log Format)**
- **Personal/Portable Navigation (PDA, Smartphone, PC, etc.)**
- **Easily switch Travel Recorder to LOG mode or NAV mode (Navigation + Log)**
- **Support POI button for memorizing your location**
- **Provide tool with friendly UI for setup and download data from Travel Recorder**
- **Draw your navigation path immediately on Google Earth as default**
- **Support Multi-Selection setting to record data (Time interval, Speed, Distance)**
- **Active NMEA protocol VTG / GLL / ZDA manually via Qstarz setup tool.**
- **Backup your travel record as CSV / NMEA / Google Earth file format.**
- **Lower power consumption up to 32hrs for travel recording**
- **Fast Position Fix ,Cold start 36s, Warm start 33s,Hot start 1s**
- **WAAS+EGNOS support**
- **Auto On-Off function for smart power control**

4. **Product Specification**

General	
GPS Chip	MTK GPS Module
Frequency	L1, 1575.42MHz
C/A Code	1.023MHz chip rate
Channels	51 CH Performance
Antenna (Internal)	Built-in patch antenna with LNA
Sensitivity	Tracking -158dBm
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	36/33/1 sec, average
Dynamic Condition	
Altitude	<18,000m
Velocity	<515m/sec
Acceleration	<4g
Protocol	
GPS Output Data	NMEA 0183 (V3.01) -GGA, GSA, GSV, RMC
Baud Rate	115,200 bps
Power	
Built-in rechargeable Li-ion battery, Up to 32 hrs after fully charged	
Bluetooth	
Standard	Fully compliant with Bluetooth V1.2
Bluetooth Profile	Serial Port Profiles (SPP), Up to 15 meters
Others	
Size / Weight	72.2 (L) X 46.5 (W) X 20 (H) mm / 64.7g (battery included)
Operating Temperature	- 10 ℃ to + 60 ℃
Storage Temperature	- 20 ℃ to + 60 ℃
Charging	0 ℃ to + 45 ℃

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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) / Push to log (Blue)
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-Q1000
Mode Switch (NAV)	When switch to NAV mode, BT-Q1000 can be used to navigate with handheld devices (PDA / Smartphone / Laptop…). And the data log function is enabled for recording your travel path.
Mode Switch (LOG)	When switch to LOG mode, BT-Q1000 only can be used to record your travel path, but navigation function is disabled.
POI Button	Push to log the favorite Point of Interest

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

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5-3. Battery installation

- Put Battery in place:
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

- Take Battery out:
1. Press the **PUSH** button on the bottom side of the unit

2. Pull out the battery cover

3. Then take out the battery from the unit.

- Charging your battery

For the first time using the BT-Q1000, 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 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 blinking, the battery is fully charged.

5-4. LED Indicators

LED Status		Flash	ON	OFF
Power (Red/Green)		Low Power (Red) Fully charged (Green)	Recharging (Green)	
Bluetooth (Blue)		Flash per 2 sec.: Bluetooth connected and transmitting Mode Flash per 5 sec.: Power saving mode	Not connected /Pairing	GPS not powered
GPS (Orange)		Flash per 1 sec.(Orange): GPS position is fixed, Navigation Flash 3 times (Blue): POI(Point of Interest) is recorded	Detecting Satellite, GPS position not fix	GPS not powered

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5-5. Function of Auto On-Off (Power saving mode)

BT-Q1000 supports **Auto On-Off** (Power saving mode). It 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-Q1000 will auto wake up itself and the blue LED will turn to flash every 2 seconds and GPS Orange LED will be also On.
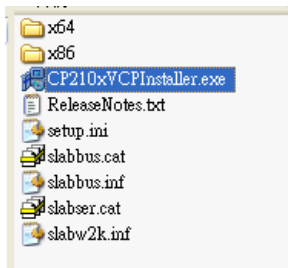
6. Setup BT-Q1000
NOTE : Please power OFF/ON to start log after completing parameter setting.
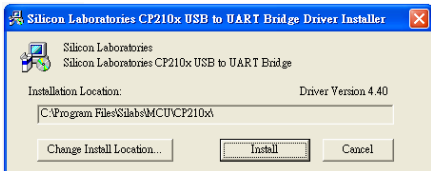
6-1. Install USB Driver

NOTE 1:
*The USB driver of BT-Q1000 only supports Microsoft Windows system (Win XP / Win Vista).*

1. Please insert the Driver CD to your computer, and find the folder "USBDriver\Windows_2K_XP_S2K3_Vista". Double click "CP210xVPInstaller.exe" to install the USB driver.

2. System would pop up the driver installation dialog. Please click <Install> to install the driver.
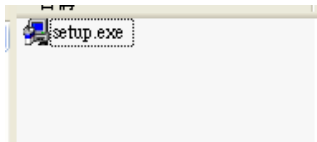

3. After completing the installation, please click <Yes> to restart your computer for taking effect of new setting. Driver installation dialog will show up. Please click <Install> to install the driver.
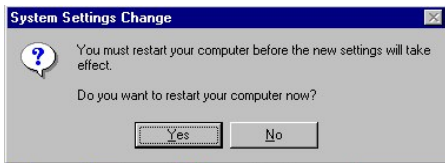
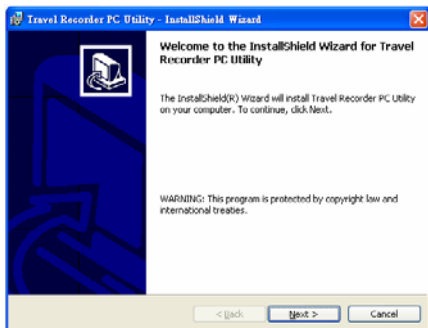## 6-2. Install the software utility for BT-Q1000.

1. Please insert the Driver CD to your computer, and find the folder "Utility". Double click "setup.exe" to install the software utility.

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

3. Please select "I accept the terms in the license agreement", and then click <Next> to the next step.
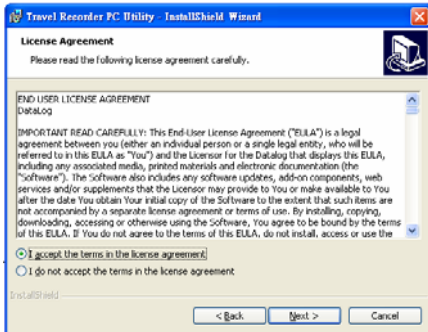
4. Please entry user name and organization and then click <Next> to the next step. (You can also click <Next> directly without any entry)
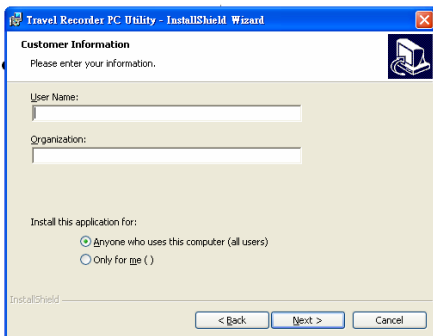
5. Please select "Typical" and then click <Next> to the next step.
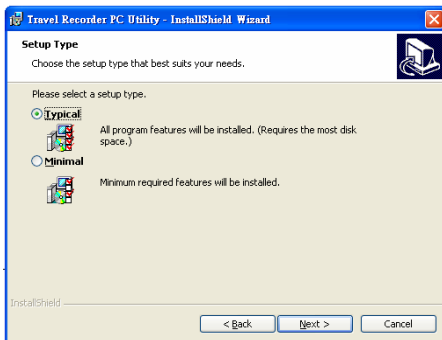
6. Check again if all the settings are correct. Then please click <Install> to start the utility installation.
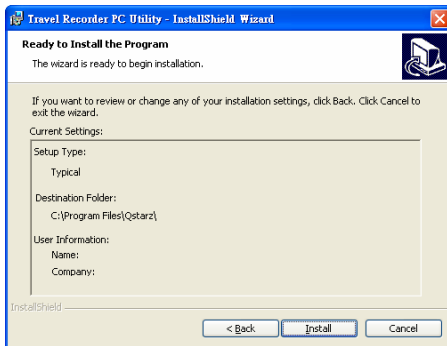
7. When the utility installation is completed, please click <Finish> to exit the installation dialog.

6-3. Install Google Earth

BT-Q1000 supports to show your travel path directly on Google Earth. Please go to http://earth.google.com for getting 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/
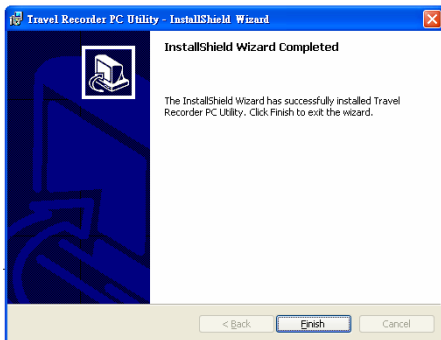
7. Start to use

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

A fully charged battery can last up to 32 hours continuously operation (under optimum conditions).

7-2. Connect BT-Q1000 with your PC

1. Please connect BT-Q1000 with your PC by mini USB cable.

2. Switch BT-Q1000 to <LOG> position.

3. Check the COM port no. your PC is assigned for BT-Q1000.

NOTE:
Before checking the COM port, please make sure USB driver has been installed properly.

    3.1   Go to <Start> \ <Settings> \ <Panel Control> \ <Performance and

Maintenance> / <System>

3.2 Select <Hardware> tab and then click <Device Manager>

3.3 Expand the <Ports (COM & LPT)> and check "CP210x USB to UART Bridge Controller" to see which COM port is for BT-Q1000. (COM4 is for example)
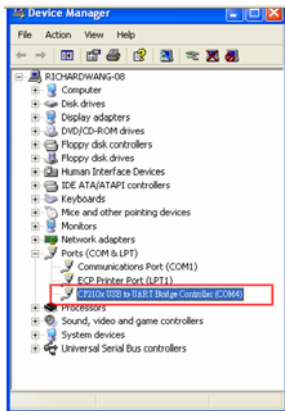
7-3. Start the software utility

NOTE 1:
Before starting the software utility, please make sure that the USB driver and the software utility has been installed properly. And also, make sure that BT-Q1000 already connect to your PC by mini USB cable, and switch BT-Q1000 to LOG position.

1. Click from <Start> / <All Programs> / <Qstarz Travel Recorder> / Travel Recorder PC Utility.

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2. < CONFIGURATION > \ <Connect Setting>
Establish the communication between BT-Q1000 and your PC.

  2.1 Click < CONFIGURATION > tab / <Connect Setting> button.
  2.2 Select COM port (refer to 7-2, item 3) and set the baud rate at 115200.
  2.3 Click <Connect> button to establish the communication between BT-Q1000 and your PC.

Click "Scan" button to search available COM port for your selection

3. < CONFIGURATION > \ <User Mode>
BT-Q1000 utility provides three user modes (Basic / Advanced / Professional) for your personal setting. You can complete the settings by each user mode per your requirement. Setup the user mode for your personal setting before logging your travel path.

NOTE 1:
  After finishing the personal setting and disconnect the communication between BT-Q1000 and PC, please switch BT-Q1000 off and then switch to <NAV> or <LOG> position to let BT-Q1000 start to log.
*NOTE 2:*
 - *Basic Mode usually is for your daily log.*

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- *Advanced Mode can help you to measure the speed for your needs.*
- *If you need more detail information for the specific purpose, you can use Professional Mode to complete your settings.*

3.1   Click < CONFIGURATION > tab / <User Mode> button.
3.2   Select one user mode (Basic / Advanced / Professional) for personal setting

    3.2.1 **Basic Mode** provides simple setting for you. Select the transportation gear (Vehicle / Bicycle / Jog) you will use, and then click <SET> to set specific values to BT-Q1000. The detail is as below.

Basic Mode	AutoLog Option	Output Period	Log Format
Log for Vehicle (3 sec)	Log every 3 sec	GGA, GSA, GSV, RMC	UTC, VALID, LATITUDE, LONGITUDE, HEIGHT, SPEED, RCR, DISTANCE, NSAT, HDOP
Log for Bicycle (5 sec)	Log every 5 sec		
Log for Jog (10 sec)	Log every 10 sec		
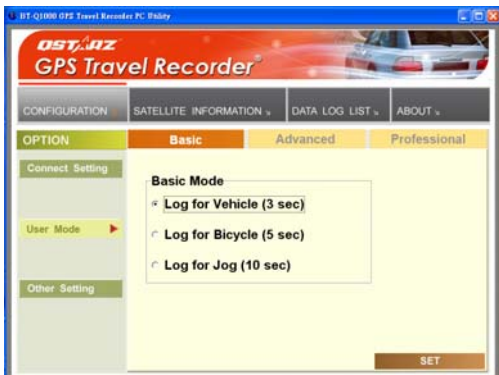
3.2.2 **Advanced Mode** let you setup two parameters. Select the transportation gear (Vehicle / Bicycle / Jog) you will use and you can modify the default value for your requirement, and then click <SET> to set the updating and specific value to BT-Q1000. The detail is as below.

Log for Vehicle

| Advanced Mode	AutoLog Option	Output Period	Log Format
Log for Vehicle (Time + Speed)	Time: 1~999 (3 secs as default)	GGA, GSA, GSV, RMC	UTC, VALID, LATITUDE, LONGITUDE, HEIGHT, SPEED, RCR, DISTANCE, NSAT, HDOP
	Speed: 10~999 (60km/h as default)		
How BT-Q1000 log waypoints with the settings (3secs, 60 km/h) - When the speed is below 60km/h, BT-Q1000 would log one waypoint per 3 seconds. - When the speed is above 60km/h, it would log one waypoint per second.			

Log for Bicycle

Advanced Mode	AutoLog Option	Output Period	Log Format
Log for Bicycle (Distance + Speed)	Distance: 10~9999 (40m as default)	GGA, GSA, GSV, RMC	UTC, VALID, LATITUDE, LONGITUDE, HEIGHT, SPEED, RCR, DISTANCE, NSAT, HDOP
	Speed: 10~999 (25km/h as default)		
How BT-Q1000 log waypoints with the settings (40m, 25 km/h) - When the speed is below 25km/h, BT-Q1000 would log one waypoint per 40 meters. - When the speed is above 25km/h, it would log one waypoint per second.			

Log for Jog

Advanced Mode	AutoLog Option	Output Period	Log Format
Log for Jog (Distance +	Distance: 10~9999 (30m as default)	GGA, GSA,	UTC, VALID, LATITUDE,

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Speed)	Speed: 10~999 (10km/h as default)	GSV, RMC	LONGITUDE, HEIGHT, SPEED, RCR, DISTANCE, NSAT, HDOP

How BT-Q1000 log waypoints with the settings (30m, 10 km/h)
- When the speed is below 10km/h, BT-Q1000 would log one waypoint per 30 meters.
- When the speed is above 10km/h, it would log one waypoint per second.
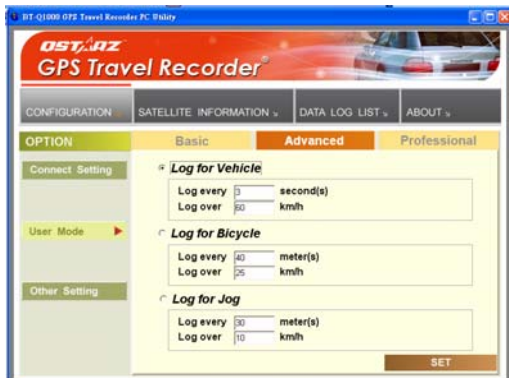
3.2.3 **Professional Mode** provides three sections for your detailed settings manually, including Output Period, AutoLog Option, and Log Format. After complete all settings, click <SET> to set the values to BT-Q1000. The detail is as below.

(1) Output Period
- **Description**
  1. NMEA setting here only affects the NMEA sentences for navigation. There's nothing to do with data recording.
  2. The default settings: GGA, GSA, GSV, RMC
  3. Check the checked box of GLL, VTC, ZDA to enable the protocol.

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4. Adjust the Period (s) for sentence update rate (For example, GLL (3) means GLL sentence is updated per 3 seconds.

(2) AutoLog Option

- **Description**
  1. Provide three conditions (Time, Distance, Speed) for setting your log interval.
  2. Support multi-settings (Time+Distance+Speed) for your log interval.
  3. Time interval is between 1~999 second(s).
  4. Distance interval is between 10~9999 meters.
  5. Speed interval is between 10~999 km/h.
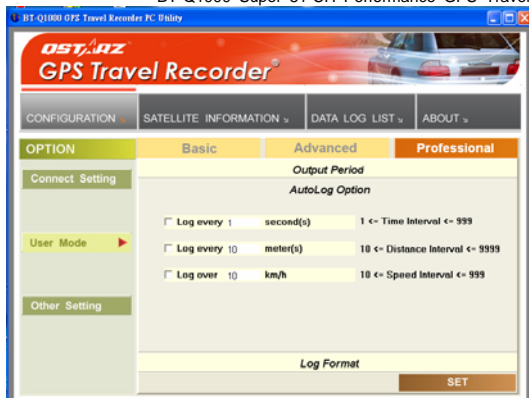
- **How BT-Q1000 log waypoints with different settings**

AutoLog Setting	Description
Log every X seconds	BT-Q1000 would log one waypoint per X seconds.
Log every Y meters	BT-Q1000 would log one waypoint per Y meters.
Log over Z km/h	When the speed is above Z km/h, it would log one waypoint per second.
1. Log every X seconds 2. Log every Y meters	BT-Q1000 would log one waypoint per X seconds or per Y meters, depends on which condition meets the setting (distance / time) first.
1. Log every X seconds 2. Log over Z km/h	- When the speed is below Z km/h, BT-Q1000 would log one waypoint per X seconds. - When the speed is above Z km/h, it would log one waypoint per second.
1. Log every Y meters 2. Log over Z km/h	- When the speed is below Z km/h, BT-Q1000 would log one waypoint per Y

	meters.
	- When the speed is above Z km/h, it would log one waypoint per second.
1. Log every X seconds 2. Log every Y meters 3. Log over Z km/h	- When the speed is below Z km/h, it would log one waypoint per Y meters or per X seconds, depends on which condition meets the setting (distance / time) first. - When the speed is above Z km/h, it would log one point per second.

(3) Log Format

- **Description**
  1. Setup which information you want to record for each logging point.
  2. The default recording fields are UTC, VALID, LATITUDE, LONGITUDE, HEIGHT, SPEED, RCR, and DISTANCE.

- **The table of Format Type**

Format Type	Item	Description
UTC	Date/Time	Universal Coordinated Time, formerly GMT or Greenwich Mean Time.
	Mili-second	Mili-second
Fix Mode	VALID	Data fix or not
Navigation	Latitude	A north/south measurement of position perpendicular to the earth's polar axis.
	Longitude	An east/west measurement of position in relation to the Prime Meridian, an imaginary circle that passes through the north and south poles.
	Height	The altitude of a place above sea level or ground level.
	Speed	Rate of motion

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	Heading	The compass direction in which the longitudinal axis of a ship or aircraft points
Differential Data	DSTA	DGPS station ID number
	DAGE	Time in seconds since last DPGS update
DOP	PDOP	(Positional Dilution Of Precision) ; Position accuracy; 3D-coordinates
	HDOP	(Horizontal Dilution Of Precision); horizontal accuracy; 2D-coordinates
	VDOP	(Vertical Dilution Of Precision); vertical accuracy; height
Method	RCR	Record method: Speed/ Time/ Distance/ POI Button
Satellite Information	NSAT	Number of Satellite (in Used, in View)
	SID	Satellite ID
	Elevation	The elevation of the satellite
	Azimuth	Line-Of-Sight angle of the satellite
	SNR	Signal to Noise Ratio
Other	Distance	The distance between two logging points

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4. < CONFIGURATION > \ <Other Setting>

Setup the recording method for the flash memory of BT-Q1000 under <Other Setting>.

1.1　Click <CONFIGURATION> tab / <Other Setting> button.
1.2　The default setting is <Stop>. When the flash memory is full, BT-Q1000 will stop logging data. If you want to record new data, you must erase all data in the flash memory.
1.3　Click <Overwrite> to change to Overwrite method. Then system will pop up a message box to notify you "Overwrite is set". When the flash memory is full, BT-Q1000 will overwrite the memory data. So the previous data will be updated as newer.
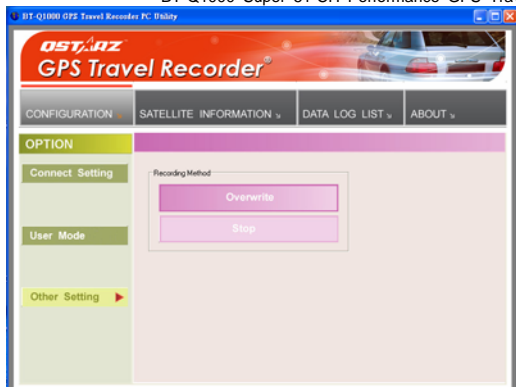
5. <SATELLITE INFORMATION>

Show the current satellite viewer of your BT-Q1000 at < SATELLITE INFORMATION > tab.

1.1 Click <CONFIGURATION> tab / <Other Setting> button.
1.2 Please see the detail description of satellite information as below.

Item	Description
Date	UTC date
Time	Universal Coordinated Time, formerly GMT or Greenwich Mean Time.
Mode	(3D Fix/ 2D Fix/ No Fix)
TTFF	Time to first fix
Latitude	A north/south measurement of position perpendicular to the earth's polar axis.
Longitude	An east/west measurement of position in relation to the Prime Meridian, an imaginary circle that passes through the north and south poles.
Speed	Rate of motion

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PDOP	(Positional Dilution Of Precision) ; Position accuracy; 3D-coordinates
HDOP	(Horizontal Dilution Of Precision); horizontal accuracy; 2D-coordinates
VDOP	(Vertical Dilution Of Precision); vertical accuracy; height

1.3 Click <Hot> / <Warm> / <Cold> button to perform hot/warm/cold start immediately.

Item	Description
<Hot> button	Perform hot start
<Warm> button	Perform warm start
<Cold> button	Perform cold start

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6. <DATA LOG LIST>
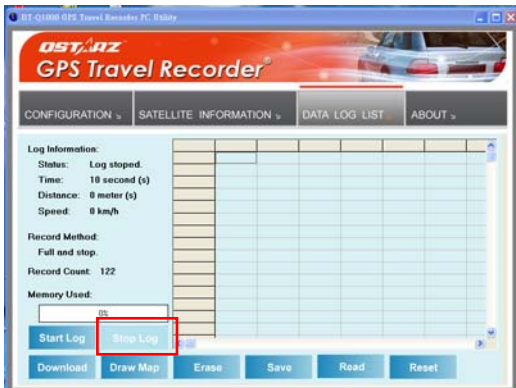 Access the log data which is downloaded from BT-Q1000.

NOTE 1:
Before accessing your log data of BT-Q1000, please establish the
communication between BT-Q1000 and PC with mini USB cable. (Refer to 7-3,
*item 2)*

NOTE 2:
Please install Google Earth before trying to download and draw map on Google
*Earth. (Refer to 6-3)*

   6.1 Click <DATA LOG LIST> tab.
   **6.2** Click <Stop> button to stop logging data.

6.3 Click <Download> button to download the log data from BT-Q1000. System will pop up the message box to show the progress status. It will take a few minutes depending on the data volume. After completing the log data downloading, those data will be shown on data grid.
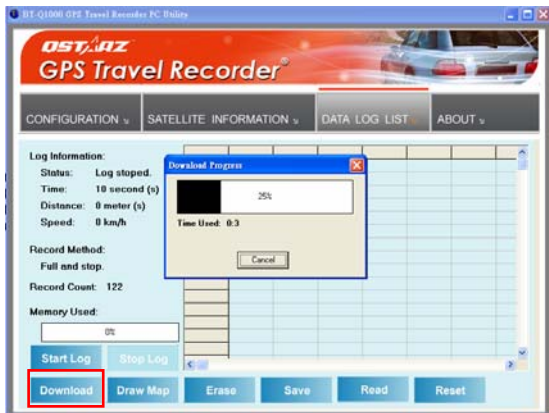
6.4 Click <Draw Map> button to show your log data on Google Earth. System will pop up a dialog box for setting the data period and drawing type. After click <RUN> button, system will indicate Google Earth to show your travel path according your log data.
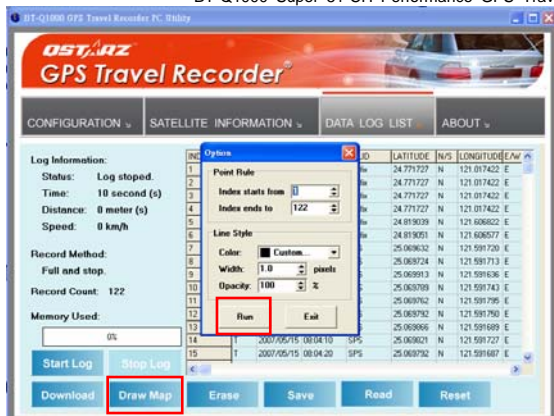
6.5 Your travel path will be shown on Google Earth as the following image. You can check the detail information for each log point.
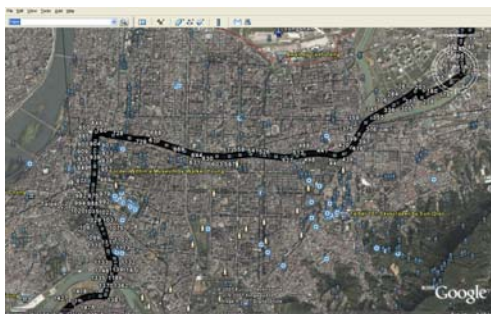
Icon Image	Description
	Push POI button to log, show your favorite Point of Interest
	Logged by time interval
	Logged by distance
	Logged by speed
	logged point with multi-settings (Time+Distance+Speed)

6.6 Please see the other function at <DATA LOG LIST> as below.

Item	Description
<Start Log> button	Enable Log feature
<Stop Log> button	Disable Log feature
<Download> button	Download the log data from BT-Q1000. System will pop up the message box to show the progress status. It will take a few minutes depending on the data volume. After completing the log data download, those data will be shown on data grid.
<Draw Map> button	Show your log data on Google Earth.
<Erase > button	Clear all log data from the flash memory of BT-Q1000. *NOTE: Before erasing the data, we suggest to stop logging data first by clicking <Stop Log> button.*
<Save > button	Save the logged data in the memory of BT-Q1000 into your PC. It supports CSV file, NMEA file, and Google Earth file format.
<Read> button	Open CSV file that saved as before
<Reset> button	Reset your BT-Q1000 and reload to factory setting.

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7. <About>

Here we show the information of software utility.

8. Useful reference Applications on the internet

8-1. locr GPS Photo

BT-Q1000 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.
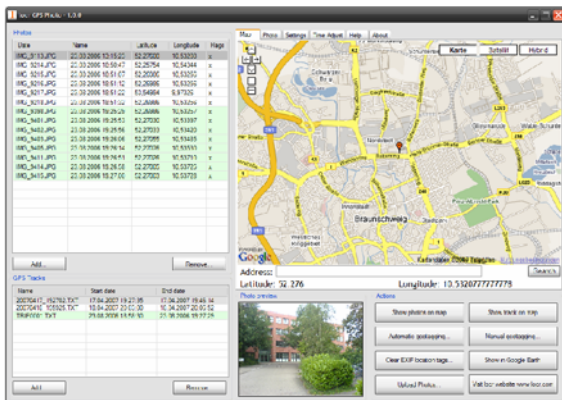
8-2. GPSBabel

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

1. Select "NMEA 0813 sentences"

2. Open your NMEA file

3. Select "GPX XML"

4. Enter your GPX file name

5. Click "let's go" to transfer
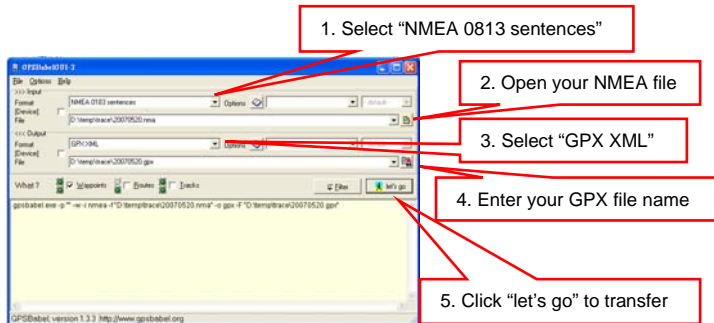
8-3. SPORTSMATE

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.
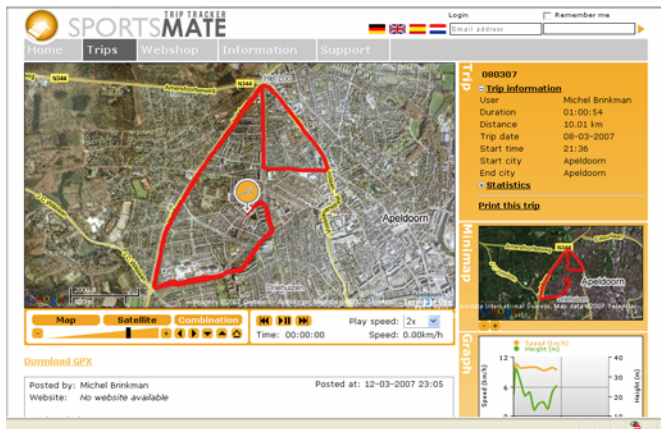
8-4. JetPhoto Studio

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.
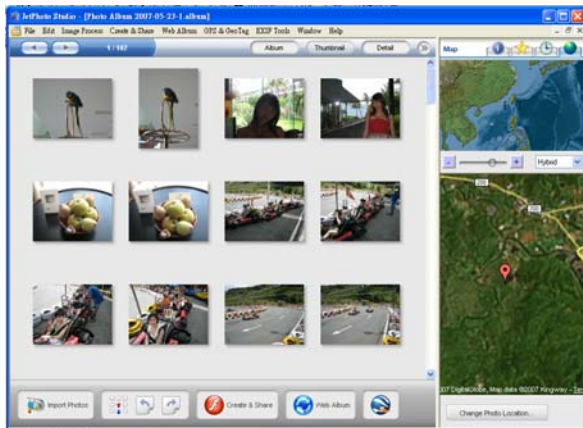
9. **Trouble Shooting**

Question	Answer
What's the difference between NAV and LOG?	NAV : BT-Q1000 can be used to navigate with handheld devices (PDA / Smartphone / Laptop…). And the data log function is also enabled for logging your travel path. LOG : BT-Q1000 only can be used to record your travel path, but navigation function is disabled.
I lost my travel charger, and where can I find a travel charger for the GPS unit?	DC Input range of BT-Q1000 is 4.5~5.5V. You can use a travel charger which support DC output range from 4.5~5.5V. Besides, you can also use a common mini USB cable to charge your unit via the laptop.
How can I know if my memory is full?	If you see the orange GPS light turns from orange to solid blue, that means the memory is full.
I noticed that the internal clock time is 1 hour behind, how can I do?	There is no internal clock delay; it is UTC time (Greenwich time) that confused you. For local time, you can see the local Date/Time under "Satellite Information" tab of utility.
Can the logged data be downloaded by Bluetooth?	So far Bluetooth function is not a standard component on laptop. So we didn't perform the download via Bluetooth interface. BT-Q1000 is designed to download data via USB interface.
Why does BT-Q1000 only can log 50000~60000 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-Q1000 could not use 32 hours?	BT-Q1000 can use 32 hours under the optimum environment. GPS would need more power consumption when keep trying a position fix, seeking Bluetooth 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.

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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-Q1000 to <NAV> position for paring 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-Q1000 would be identified as"iBT-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 : 115200 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 for Pocket PC)

1. Switch your Bluetooth Receiver on.
2. Tap the Bluetooth icon at the bottom.

3. Check "Turn on Bluetooth".

4. Tap the "Devices" tab, and then tap "New Partnership".

5. System will search for all Bluetooth devices.
6. Select "iBT-GPS" device, and tap "Next".

7. Enter Passkey "0000" if required, and then tap "Next".

8. Check "Serial Port", and then tap "Finish".

9. The "iBT-GPS" device will be established in the list.

10. Tap the "COM Ports" tab, and select "New Outgoing Port".

11. Select the "iBT-GPS", and then tap "Next".

12. Uncheck "Secure Connection", and select a COM port (for example, COM 8) from the "Port:". Then tap "Finish".

13. The "iBT-GPS" with its COM port will be shown on the list.

10-3. 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.

10-4. 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 300 328-1
EN 301 489-1 / 17
EN60950

FCC Notice
This device complies with Part 15C, Part 15B and ID Application 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.

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