

Bluetooth*

BT-Q1000 Platinum

Travel Recorder®

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



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1. Overview

Thank you for purchasing Ostarz Super 51-CH series BT-Q1000P - 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 200,000 records. Besides, BT-Q1000P 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-Q1000P supports 32hrs 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-Q1000P isn't used in temperature between -10°C ~ 60°C, its battery charging capability will decrease. Leave the BT-Q1000P far from heat or high temperature environment. And also, do not expose your BT-Q1000P in temperature higher than 140°F/60°C to prevent the battery inside BT-Q1000P from overheating, exploding or burning itself. The Lithium battery inside the BT-Q1000P should be recycled.
- It is recommended to turn BT-Q1000P 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-Q1000P by yourself. Unauthorized hacking may damage the unit, and void your warranty.

3. Features

- Adopt MTK chipset with high sensitivity -158dBm and 51-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
- Active NMEA protocol VTG / GLL manually via Qstarz setup tool
- Save the travel records as GPX / PLT / CSV / NMEA / Google Earth file format
- Support WAAS+EGNOS+MSAS
- Personal/Portable Navigation (PDA, Smartphone, PC, etc.)
- Lower power consumption up to 32hrs for travel recording
- Fast Position Fix ,Cold start 36s, 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 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)		
Accuracy	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 (Default)		
•	VTG, GLL(Optional)		
Baud Rate	115,200 bps		
	Power		
Built-in rechargeable Li-ion ba	ttery, 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 °C to + 60 °C		
Storage Temperature	- 20 °C to + 60 °C		
Charging $0 ^{\circ}\!$			

5. Hardware Introduction

5-1. Appearance

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





5-2. Hardware Function

Hardware Function	Description	
Power Jack	Take the power cable and connect it to the power	
rowel Jack	jack (mini USB type) for charging only	
Mode Switch (OFF)	Power off BT-Q1000P	
	When switch to NAV mode, BT-Q1000P only can be used to navigate with handheld devices (PDA /	
Mode Switch (NAV)	Smartphone / Laptop), and the data log function is disabled.	
Mode Switch (LOG)	When switch to LOG mode, BT-Q1000P 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

- 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-Q1000P, 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 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 under Nav Mode	GPS not powered / Pairing under Log mode
GPS (Orange)	X	Flash per 1 sec.: GPS position is fixed, Navigation	Detecting Satellite, GPS position not fix (Orange)	GPS not powered
POI (Blue)	\boxtimes	Flash per 2 sec: Low memory Flash 3 times: POI(Point of Interest) is recorded	Memory is full	

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

BT-Q1000P 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-Q1000P 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.



6. Setup BT-Q1000P

6-1. Install the driver and software utility for BT-Q1000P

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

Minimum System Requirement	Recommended System Requirement	
- Windows XP or Vista	- Windows XP	
- Pentium 3, 500Mhz	- Pentium 4 2.4GHz+ or AMD 2400xp+	
- 128M RAM	- 512M RAM	
- 128MB disk space	- 2 GB of free disk space	
- Network speed: 128Kbits/sec	- Network speed: 768 Kbits/sec or	
- 3D-capable video card with	better (DSL/Cable)	
16Mbytes of VRAM	- 3D-capable video card with 32 MB of	
- 800x600, "16-bit High Color" screen	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.

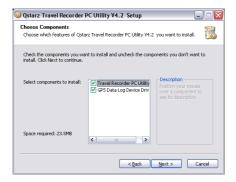


TravelRecorderV4 installer.exe

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."

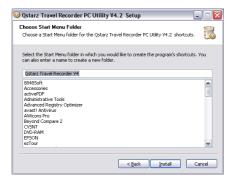




4. Click <Next> if you want to install the program in default target folder or you can click <Explore> to change the install folder.



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-Q1000P 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 32 hours continuously operation.

7-2. Connect BT-Q1000P with your PC

1. Please connect BT-Q1000P with your PC by mini USB cable.



2. Power on BT-Q1000P and switch it to Start Logging

NOTE: Please make sure turn BT-Q1000P to Log mode or it will enter sleep mode automatically in few minutes under NAV mode.

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-Q1000P. Any intention to use PC Utility V4 connecting GPS units other than BT-Q1000P would result in software disconnection automatically.
- NOTE 3: Qstarz Travel Recorder PC Utility V4 can't be opened with Qstarz Travel Recorder PC Utility V3 simultaneously. Please execute either one of both or the program may experience unstable status.
- NOTE 4: If you use V3 software to configure the log contents, please make sure to select the options below: Date/Time, Valid, Latitude, Longitude, RCR. Unselect either one of these will result in fail loading log data in V4 software and fail drawing tracks on Google Map/Earth.
- 1. Click from <Start> \ <All Programs> \ <Qstarz Travel Recorder V4> \ Travel Recorder PC Utility V4.
- 2. <File> \ <Read Log>



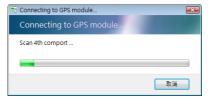
Download the log data from BT-Q1000P.

- 2.1 Click <File> \ <Read Log> or the quick link icon.
- 2.2 Users have to input product key at the first time of use. <u>The product key is located on the envelop of the driver CD.</u>





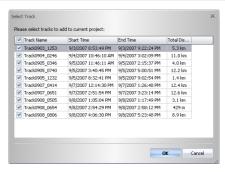
2.3 PC Utility will automatically detect the com port and baud rate and load in the GPS tracks.



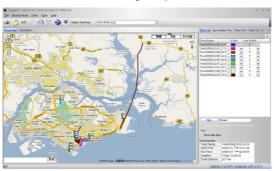
If download proccess doesn't work well, please pull USB port out of Travel Recorder, turn off-on, and plug it in again to make connection. You may also try to manually select com port to get more stable connection. Please refer to "4.1 Connection Setting."

2.4 A track list window will be popped up. Select the tracks to import.



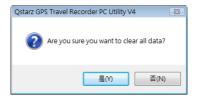


2.5 Tracks will be shown on the Google Map window.



3. <File> \ <Clear Log>

Clear the data stored in the Travel Recorder.



4. <File> \ <Config GPS>

Configure the recording method of the flash memory of Travel Recorder.



4.1 Connection Setting

I. Auto Scan GPS Module (Recommended)



The program will automatically detect the comport. It is recommended to set to auto scan.

II. Manual Setting

Users can also manually set the port. Although it can speed up the initial connect time, but it is not recommended unless users understand the valid port.

To find the valid com port, please go to <Device Manager> and expand the <Ports (COM & LPT)> and check "CP210x USB to UART Bridge Controller" to see which COM port is assigned to Travel Recorder. (COM4 is for example)



4.2 GPS Log Setting

There are 4 log modes: General mode, vehicle mode, cycling mode, and hiking mode. Users can also change the default setting of these 4

modes.

Log every () seconds:

If the criterion is checked, Travel Recorder will not log if difference between current time and last logged time is less than the specified time.

Log every () meters:

If the criterion is checked, Travel Recorder will not log if the distance of current position and last logged position is less than the specified distances.

Log over () km/h:

If the criterion is checked, Travel Recorder will not log if the speed is under the setting.

4.3 Data Log Memory

A bar show how many percentage of memory is used in the Travel Recorder.

Overwrite:

When the memory is full, Travel Recorder will keep logging by overwriting the memory from the earliest point.

Stop Log:

When the memory is full, Travel Recorder will stop logging.

5. <Photo/Media> \ <Add Media Files>

Users can add media files from a file folder, or selected files.





- 5.1 Add media files from a folder: Select a folder to add media files.
 Add media files from selected files: Use Ctrl-Click, or Shift-Click to select multiple files.
- 5.2 After photos are added, all photos will be shown on the <Photo View> and <Photo List> window. Under <Photo View> window, Users can click on the "next photo" and "prev photo" buttons to browse photos, add comment to each photo, and rotate, delete photos. PC Utility will automatically match photos and GPS logged waypoints by time.

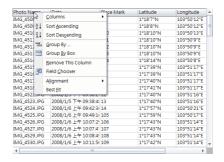




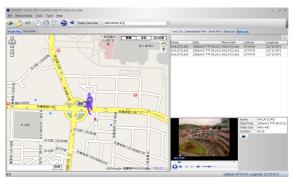
5.3 <Photo List> window will show the properties of photos. The information includes "file name", "date", "place mark", "latitude", "longitude", and "Geotagged flag".



Click right mouse button on a column. You can choose **Column Type**, **Column Size**, **Sort** or **Group** data.



5.4 <Media List> window will show the properties of media files, including sound and video. The program will also find matched locations on map for media files based on time. You can Preview and even extend screen to full screen by Full Screen button.





6. <Photo> \ <Shift Photo Time>



will invoke the shift photo time window. All photos will be added (or subtracted) the specified time. The dates are saved in the Exif parts of Jpeg or Tiff file. After the shift, PC Utility will automatically match the photo and track waypoints again. Users can put more than 365 in days.



7. <Photo> \ <Write GPS Info into Photos>



will save the latitude, longitude, and altitude information into photo. A progress window will show the writing progress.



8. <Photo> \ <Upload Photos to Flickr>



will invoke upload wizard. Users can set "Title", "description", "Tag", "Public or Private", and "Upload photo size".



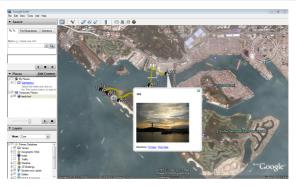
If you want to upload geotagged photos directly on Flickr web site:
You have to turn on the following option. "Your Account">"Privacy &
Permissions">"Import EXIF location data: Yes"
After the option is turned on, the uploaded photo will be put on map.
Go to Flickr > "You" > "Your map", you can browse your photos on the map.

9. <File> \ <View in Google Earth>



will invoke Google Earth to view the tracks and photos. Please install Google Earth previously in order to activate this feature.





10. <File> \ <Export as KMZ>



Save the tracks and photos in kmz file. Users can use Google Earth to load in such file format.

The picture size packed in the kmz file can be set in the options dialog. <Tools> \ <Options> \ <Google Earth> \ <Photo size in KMZ>

11. <Display Time Zone> <Photo Time Zone>

There are two time zone settings in "Travel Recorder PC Utility". One is "Photo time zone", the other is "Display time zone". "Photo time zone" is set to the same time zone of your digital camera. The "Display time zone" is set for displaying purpose.

For example, if you live in England and you travel to United State, the "Photo time zone" should be set to "England" because your digital camera time zone is in England, and the display time zone should be set to "United State".

The "Photo time zone" by default is set to the PC default value. In most of the case

the default value is correct.

<Tools> \ <Options> will invoke the options dialog. You can set <Photo Time Zone> in the dialog.



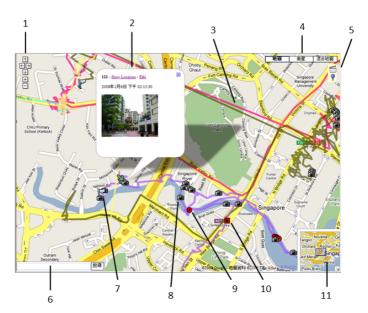
The <display time zone> setting is in the status bar.





12. <Google Map>

Google Map is a free map service that you view in the PC Utility V4. Click and drag maps to view adjacent sections immediately. View satellite image with or without map data of your desired location that you can zoom and pan.



12.1 Navigation Control

Arrows:

Click the appropriate arrow buttons to move the view north, south, east or west.

Zoom:

Click + to zoom in on the center of the map. Click to zoom out.

Zoom slider:

Drag the zoom slider up or down to zoom in or out incrementally.

12.2 Info Window

Info windows appear when you click a marker and display additional information about the location, such as photo and start point.

Show Location:

will show the zoomed in location of a waypoint.







Edit:

Allow you to edit detail information of a waypoint. You can also add photos in or delete photos from single waypoint.



12.3 Track

Display tracks recorded by Travel Recorder. You can move cursor to a track and hold a while to show the info of a waypoint.



12.4 Views

Click these to display different views, including aerial images and street level imagery.

12.5 Special Functions

Slide Show:

Click to activate photo slide show.





Place Mark:

Click Y to add a place mark on map. then the "Place Mark Property" dialog will pop up for editing.



12.6 Search Bar

Allow you to search any location on map.

12.7 Start Point



The start point of a track with a small flag.

12.8 Camera



To signify the locations of your photos.

12.9 Point of Interest (Push to Log)



To signify the locations when you press POI button.

12.10 Place Mark



To signify the locations when you manually add place marks.

12.11 Overview map

This view shows the location of current map view. The overview map appears in the bottom right corner of the map. It helps orient you by showing the location of current map view in the context of a larger geographical area. The area currently displayed in the map is show as a purple box in the overview map. At any time, click | to hide the

overview map or click \times to display it again.

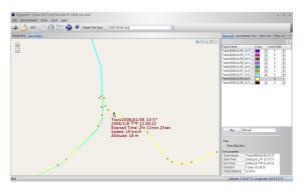
As you pan or zoom in the map, the view of overview map changes accordingly. You can change the existing view in the map by doing one of the following:

- Drag and drop the purple box in the overview map.
- Drag and drop the area outside the purple box to pan the map.



13. <Track Editor>

Switch to folder "Track Editor" on the left window. Move the cursor on the track will show the preselected waypoint time. Click on track to select the whole track.





Undo erases the last change done and reverts it to an older state. **Redo** reverses the undo or advances the buffer to a more current state. **Area Selection** allows you to select multi-waypoint by clicking and holding mouse left button until an area being selected.



Delete a waypoint or a whole track.

Property shows the "Place Mark Property" dialog for editing.

Drag a waypoint when it drift to a improper location.

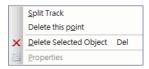


Right click mouse button:

Split Track will split the track into two tracks.

Delete this point will delete the selected waypoint.

Delete Selected Object will delete the selected track.



You can also select multi-waypoint by the windows common selecting function: Shift Select, and Ctrl Select.

14. <Track List>

Switch to <Track List> window will show all the tracks and its properties loaded from Travel Recorder. Select any one of tracks and the center of map will move to the location of start point of that track. You can **Rename**, **Delete**, change **Color** and **Line Width** of tracks. Changes will be synchronized immediately on map.

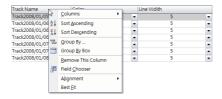




Play shows your travel log by means of animation. You can adjust the **flow** speed and use scroll bar to forward or backward.

Photo Slide Show allows the program activate slide show when playing process encounters any matched photos on tracks.

Click right mouse button on a column. You can choose **Column Type**, **Column Size**, **Sort** or **Group** data.



15. < Altitude Graph> / < Speed graph>

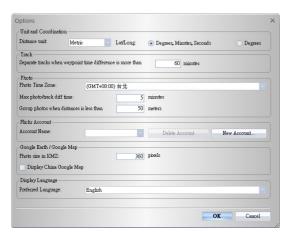
Switch to <Speed/Altitude View> window will show the speed and altitude graph. The waypoints with photos on it will be marked with red square. Moving cursor on red square will display the photo. You can pan left, pan right, zoom in, zoom out in the speed or altitude graph.



16. <File> \ <New Project> <Open Project> <Save Project> <Save Project As> Save Project will save the tracks and photo as a project file.
Open project will open the saved project. The project, photos, and photo comments will be restored after the project opened.



17. <Tools> \ <Options>



<Unit and Coordination>

Distance unit:

Metric: Kilometer / meters will be used for displaying.

Imperial: Miles / feet will be used for displaying.

Lat/Long:

Degrees, minutes, seconds: Latitude and longitude will be display like

23°12'20"

Degrees: Latitude and longitude will be display like 23.22152°

<Photo>

Photo Time Zone:

Please refer to Title 11.

Max photo/track diff time:

The setting is used to match photo and track waypoints. PC Utility V4 will match photos and waypoints by time. It will find the nearest waypoint time to locate the photo. Yet, if the closest waypoint time is more than the "Max photo/track diff time", it will not match the photo.

Group photos when distance is less than:

This setting can organize specific range of photos into just one waypoint which allows you to avoid massive place marks sticking together when you take too many photos in one location.

<Flickr Account>

Please refer to Title 8.

<Google Earth / Google Map>

Photo size in KMZ:

The size of the photos packed in the KMZ file. It is related to the command "File" > "Export As KMZ..."

<Display Language>

Preferred Language:

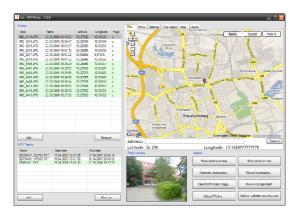
Set the languages for menu, buttons and messages.



8. Useful reference Applications on the internet

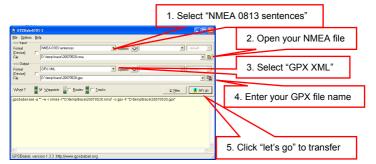
8-1. locr GPS Photo

BT-Q1000P 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

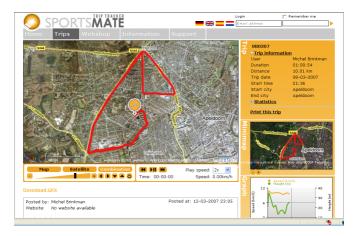
This utility can transfer your NMEA file to GPX file or other format. Please go to http://www.gpsbabel.org for free download.





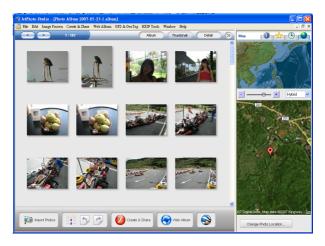
8-3. SPORTSMATE

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.





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.



9. Trouble Shooting

Question	Answer
Can BT-Q1000P	
be used to	Yes, you can use BT-Q1000P to navigate when travel
navigate when	log is on simultaneously.
travel log is on?	
I lost my travel	DC Input range of BT-Q1000P is 4.5~5.5V. You can use
charger and	a travel charger which support DC output range from
battery. Where	4.5~5.5V. You can also use a common mini USB cable
can I find	to charge your unit via the laptop. Besides, The battery
replacements for	for BT-Q1000P is compatible with Nokia phone series.
both?	The battery model is BL-5C.
I noticed that the	There is no internal clock delay; it is UTC time
internal clock	(Greenwich time) that confused you. For local time,
time is 1 hour	you can adjust under <tool> \ <option> and see the</option></tool>
behind, how can I	local Date/Time under "Satellite Information" tab of
do?	utility.
Can the logged	So far <i>Bluetooth</i> function is not a standard component
data be	on laptop. So we didn't perform the download via
downloaded by	Bluetooth interface. BT-Q1000P is designed to
Bluetooth?	download data via USB interface.
Why does	We active more options previously to provide detailed
BT-Q1000P only	GPS information for user's reference and download. So
can log	it would use more memory. If you reduce the options
150,000~160,00	(under Log Format) for your log, it would save the
0 waypoints?	memory and increase more waypoints.



My BT-Q1000P	BT-Q1000P can use 32 hours under the optimum
could not use 32	environment. GPS would need more power
hours?	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.

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-Q1000P 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-Q1000P 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.

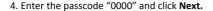
NOTE 3:

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 5/6 for Pocket PC)

- 1. Switch BT-Q1000P 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.**







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 "iBT-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.
- On the Hardware tab, select the COM port BT-Q1000P 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. 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 V.1.2.1 (2001-08)

EN 301 489-1 V.1.4.1 (2002-04) / EN 301 489-17 V.1.2.1 (2002-04)

EN 50371: 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.
- This device must accept any interference received, including interference that may cause undesired operation.

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