



BT-Q1200 Ultra



Enhanced 51-CH Performance with 48hrs NAV/LOG Time Dual Software Inside



## **Table of Contents**

1. OVERVIEW	1
2. PRODUCT NOTICE	
3. FEATURES	
4. PRODUCT SPECIFICATION	
5. HARDWARE INTRODUCTION	
5-1. Appearance	
5-2. Hardware Function	
5-3. Battery installation	
5-4. Charging Battery	7
5-5. LED INDICATORS	7
5-6. Function of Auto On-Off (Power saving mode)	8
6. SETUP BT-Q1200ULTRA	
6-1. Install the driver and software utility for BT-Q1200Ultra	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-Q1200ULTRA WITH YOUR PC	12
7-3. START THE SOFTWARE UTILITY	12
8. USEFUL REFERENCE APPLICATIONS ON THE INTERNET	36
8-1. LOCR GPS PHOTO	36
8-2. GPSBABEL	37
8-3. SPORTSMATE	38
8-4. JETPHOTO STUDIO	39
8-5. VEOGEO	40
9. TROUBLE SHOOTING	41
10. APPENDIX	42
10-1. ACTIVATE THE BLUETOOTH FUNCTION IN YOUR PDA/SMART PHONE OR PC	42
10-2. Create Bluetooth Setting (Windows Mobile 5/6 for Pocket PC)	43
10-3. CONFIGURE THE GPS INTERMEDIATE DRIVER	46
10-4. Start your navigation software	49
10-5 SAFETY NOTICES	50



# 1. Overview

Thank you for choosing Ostarz Super 51-CH BT-Q1200Ultra – Bluetooth® Solar GPS Travel Recorder, built-in new generation GPS chipset MTK with 51 channels performance for your navigation and travel log, and also, provides stand-alone logging up to 200,000 records with 48 hrs recording under sufficient sunlight, and supports Smart Power control for power saving to extend usage time even more. Besides, BT-Q1200Ultra software utility supports multi-condition setting which allows you to customize and personal travel record by 3-level detail adjustment and provides download, save, and split to arrange tracking record; moreover, you can display travel path directly on Google Earth and combine geography information with photos by Geotagging.

## 2. Product Notice

- Please take out the battery and store it in dry/cool places when not use for a long period.
- If BT-Q1200Ultra isn't used in temperature between -10°C ~ 60°C, its battery charging capability will decrease. Leave the BT-Q1200Ultra far from heat or high temperature environment. And also, do not expose your BT-Q1200Ultra in temperature higher than 140°F/60°C to prevent the battery inside BT-Q1200Ultra from overheating, exploding or burning itself. The Lithium battery inside the BT-Q1200Ultra should be recycled.
- It is recommended to turn BT-Q1200Ultra 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, alcohol, or strong detergents.
- Do not attempt to open BT-Q1200Ultra by yourself. Unauthorized hacking may damage the unit, and void your warranty.



# 3. Features

- Super 51-CH performance Bluetooth® Solar GPS Travel Recorder with 48hrs navigation time (\*1)
- Adopt MTK chipset with high sensitivity -158dBm with fast TTFF
- The innovative GPS Travel Recorder to adopt solar panel with the slim type designed
- Dual Power Supply Built in rechargeable Li-Ion battery & Solar power
- Support "One Touch" to turn On/Off LOG mode
- Stand-Alone travel recorder to log up to 200,000 records (\*2)
- 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 digit 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
- Auto On-Off function for smart power control
- Personal/Portable Navigation (PDA, Smartphone, PC, etc.)
- \*1 BT-Q1200Ultra can be extended up to 48 hours usage under enough sunlight (24 days usage with 2 hours navi per day)
- \*2 The waypoints would be decreased when the more options of Log Format are selected



# 4. Product Specification

	General			
GPS Chip	S 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 battery			
Bluetooth				
Standard	Fully compliant with Bluetooth V1.2			
Bluetooth Profile	Serial Port Profiles (SPP), Up to 15 meters			
Others				
Size / Weight	88.5 (L) X 56 (W) X 13.5 (H) mm/ 64g (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. Power Button (ON/OFF/Enable LOG mode/Disable LOG mode)
- 3. Battery status LED (Red/Green)
- 4. Bluetooth status LED (Blue)
- 5. GPS status LED (Orange)
- 6. LOG status LED (Blue)
- 7. Internal antenna
- 8. Solar panel (Auxiliary power source)



## 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	
Power Button (On)	Press power button and hold for 3 sec to power BT-Q1200Ultra on.	
Power Button (Off)	Press power button and hold for 3 sec to power BT-Q1200Ultra off	
Power Button (Enable Log mode)	After power BT-Q1200Ultra on, press power button once to enable log mode. Then BT-Q1200Ultra would start logging with the blinking LOG status LED (blue).	
Power Button (Disable Log mode)	Press power button again to disable log mode. The LOG status LED (blue) would be off, and stop logging.	



## 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. 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 and take out the battery from the unit.





## 5-4. Charging Battery

For the first time using the BT-Q1200Ultra, 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.

NOTE: The Cigarette Adaptor can only be used to charge BT-Q1200Ultra. Please don't make use of it with devices other than BT-Q1200Ultra.

### 5-5. LED Indicators

LED Status		Flash	ON	OFF
Power (Red/Green)	TIT	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 / Log Mode is on
GPS (Orange)	$\boxtimes$	Flash per 1 sec.(Orange): GPS position is fixed, Navigation	Detecting Satellite, GPS position not fix	GPS not powered
Log (Blue)		Log Mode is on	Memory is full	Log Mode is off



## 5-6. Function of Auto On-Off (Power saving mode)

BT-Q1200Ultra 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-Q1200Ultra 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 when log is enabled.

## 6. Setup BT-Q1200Ultra

## 6-1. Install the driver and software utility for BT-Q1200Ultra

### 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.

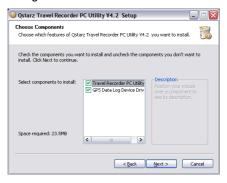


2. System would pop up the utility installation dialog. Please click <Next> for the next step.

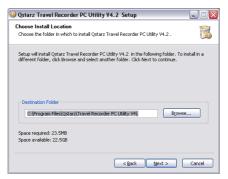




3. Please select "Travel Recorder PC Utility V4" and "GPS Data Log Device Driver", and then click <Next> to the next step. If you already installed USB driver, please unselect "GPS Data Log Device Driver."

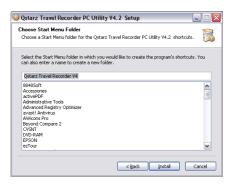


4. Click <Next> if you want to install the program in default target folder or you can click <Explore> to change the install folder.





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-Q1200Ultra supports showing your travel path directly on Google Earth. Please go to <a href="http://earth.google.com">http://earth.google.com</a> for the free download of Google Earth, and then install it to your computer. For the operation procedure of Google Earth, please refer to <a href="http://earth.google.com/support/">http://earth.google.com/support/</a>

## 7. Start to use

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

A fully charged battery with solar power can last up to 48 hours continuously operation (under optimum conditions).

## 7-2. Connect BT-Q1200Ultra with your PC

1. Please connect BT-Q1200Ultra with your PC by mini USB cable.

## 2. Power on BT-Q1200Ultra and switch it to Start Logging



NOTE: Please make sure turn BT-Q1200Ultra 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-Q1200Ultra. Any intention to use PC
  Utility V4 connecting GPS units other than BT-Q1200Ultra 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.
- 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-Q1200Ultra.
  - 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. The product key is located on the envelop of the driver CD.





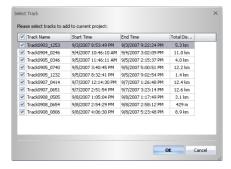
2.3 PC Utility will automatically detect the com port and baud rate and load in the GPS tracks.





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.



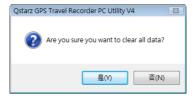
2.5 Tracks will be shown on the Google Map window.





### 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.

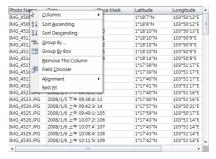


5.3 <Photo List> window will show the properties of photos. The information includes "file name", "date", "place mark", "latitude", "longitude", and "Geotagged flag".





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"

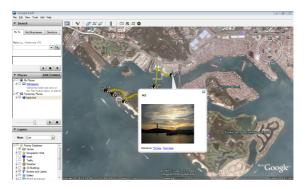
After the option is turned on, the uploaded photo will be put on map.

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.



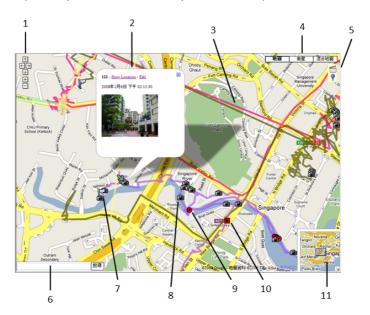
The <display time zone> setting is in the status bar.





### 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:

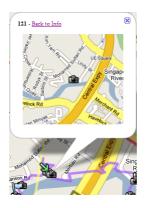
Drag the zoom slider up or down to zoom in or out incrementally.

#### 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.

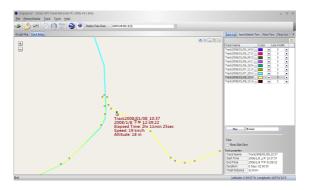
As you pan or zoom in the map, the view of overview map changes accordingly. You can change the existing view in the map by doing one of the following:

- 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.

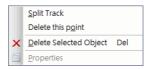


## Right click mouse button:

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.

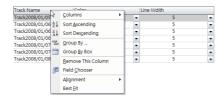




**Play** shows your travel log by means of animation. You can adjust the **flow** speed and use scroll bar to forward or backward.

**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.



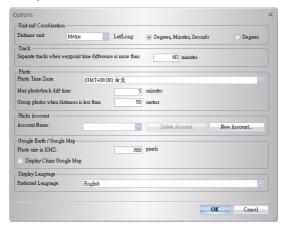
## 16. <File> \ <New Project> <Open Project> <Save Project> <Save Project As>

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:**

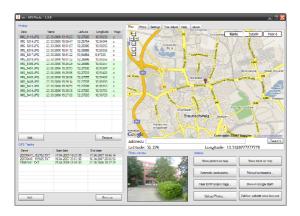
Set the languages for menu, buttons and messages.



## 8. Useful reference Applications on the internet

### 8-1. locr GPS Photo

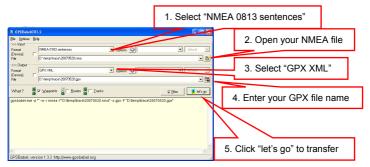
BT-Q1200Ultra is the member of locr GPS Photo certified product. This utility can integrate travel log and digital photos by date/time to show your photos on the map directly. After the integration, the current GPS coordinates also can be imported to your digital photos for the further application. Please 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

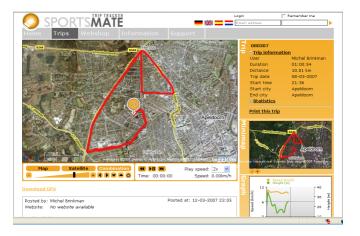
This utility can transfer your NMEA file to GPX file or other format. Please go to <a href="http://www.gpsbabel.org">http://www.gpsbabel.org</a> for free download.





## 8-3. SPORTSMATE

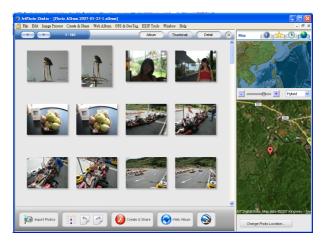
This web site can share your travel log with your friends. Before sharing your trip, please apply a new account first. Please go to <a href="http://www.ttsm.com">http://www.ttsm.com</a> for the further information.





## 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 <a href="http://www.jetphotosoft.com">http://www.jetphotosoft.com</a> 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 <a href="www.veogeo.com">www.veogeo.com</a> for further information and register for a free new account.





## 9. Trouble Shooting

Question	Answer
Can BT-Q1200Ultra be used to navigate when travel log is on?	Yes, you can use BT-Q1200Ultra 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-Q1200Ultra 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-Q1200Ultra is compatible with Nokia N73. The battery model is BP-6M.
How can I know if my memory is full?	If you see the Log LED is steady lighted up, which 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 adjust under <tool> \ <option> and see the local Date/Time under "Satellite Information" tab of utility.</option></tool>
Can the logged data be downloaded by Bluetooth?	Actually it's okay for Q1200Ultra to download data via Bluetooth interface. However, since it is not stable and with lower download performance than that of USB interface, we don't officially admit this feature.
My BT-Q1200Ultra could not use 48 hours?	BT-Q1200Ultra can use 48 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.
My Q1200Ultra is unable to log anymore. What's wrong?	Check if your Q1200Ultra's memory is full or the status in PC utility V3 software "Data Log List" appears to be "Error!" or not. Both can be resolved by performing a soft reset at PC Utility software V3 "Data Log List" -> "Reset."



## 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-Q1200Ultra on 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-Q1200Ultra 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.

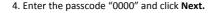
### NOTE 3:

Select correct com port and baud rate: 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-Q1200Ultra 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.**









On the Partnership Settings screen, selectSerial 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.



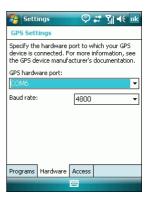
## 10-3. Configure the GPS Intermediate Driver

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.
- 3. On the **Hardware** tab, select the COM port BT-Q1200Ultra 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.