

Bluetooth GPS Receiver Series Model: BT-771



USER MANUAL

UniTraQ International Corp. All right reserved, © 2009 2F., No.136, Ziqiang S. Rd., Zhubei City, Hsinchu County 30264, Taiwan (R.O.C.)

TEL: 886-3-6578491 FAX: 886-3-6578492

MADE IN TAIWAN



Contents

1.	Introduction2						
2.	Fea	ture	s2				
3. Specifications							
	3.1	GP	S Specifications3				
	3.2	Blu	etooth Specifications4				
	3.3	LEI	D and Power4				
	3.4	Bat	tery Warning4				
	3.5	Out	tput and Interface Specifications5				
	3.	5.1	Output protocol5				
	3.	5.2	Output format5				
	3.	5.3	Data communication interface5				
	3.6	Acc	cessories5				
	3.0	6.1	Standard Accessories5				
	3.0	6.2	Optional Accessories5				
4.	Оре	erati	ons6				
	4.1	Har	dware Descriptions6				
	4. 2	Cha	arging Battery6				
5.	Bluetooth Connection6						
	5.1	Lap	otop or Notebook6				
	5.1.1		BlueSoleil instructions 16-9				
	5.	1.2	BlueSoleil Instructions 29-12				
	5.	1.3	PDA or Smart Phone				
6.	GPS Testing Software1						
	6.1	GP	SView for Windows 2000/XP (PC or Notebook)16				
	6.	1.1	Install GPS View for Windows 2000/XP16-18				
	6.	1.2	Using GPSView for Windows 2000/XP19-20				
	6.2	Ins	tall GPSView for Win CE (PDA or Mobile Phone)21				
	6.2	2.1	Installing the GPSView Software into Win CE Mobile Phone21-23				
	6.2	2.2	Using GPSView Software (For Win CE Mobile Phone)24-25				



Notice

Thank you for purchasing the high-performed GPS Bluetooth Receiver. To manipulate the GPS Bluetooth Receiver and GPS Software, please take the time to read through this user manual to understand the operating features.

Warning: If you choose to use the GPS Bluetooth Receiver in a vehicle, it is the sole responsibility of the owner/operator of the GPS Bluetooth Receiver to secure the GPS unit so that it will not cause damage or personal injury in the event of an accident. Do not mount the GPS Bluetooth Receiver over airbag panels or in a place where the driver or passenger are likely to have an impact with it in an accident or collision.

Warning: If you choose to use the GPS Bluetooth Receiver in a vehicle, it is the sole responsibility of the operator of the vehicle to operate the vehicle in a safe manner, maintain full surveillance of all driving conditions at all times, and never become distracted by the GPS Bluetooth Receiver to the exclusion of safe operating practices. It is unsafe to operate the GPS Bluetooth Receiver while you are driving. Failure by the operator of a vehicle equipped with the GPS Bluetooth Receiver to pay full attention to operating the vehicle and road conditions while the vehicle is in motion could result in an accident or collusion with property damage and personal injury.

Caution: It is the users' responsibility to use this product prudently. This product is intended to be used only as a travel aid and must not be used for any purpose requiring precise measurement of direction, distance, location, or topography.

Caution: The Global Positioning System (GPS) is operated by the government of United State, which is solely responsible for its accuracy and maintenance. The system is subject to changes which could affect the accuracy and performance of all GPS equipment. Although the GPS Bluetooth Receiver is a precision electronic NAVigation AID (NAVAID), any NAVAID can be misused or misinterpreted and, therefore, become unsafe.



1. Introduction

Bluetooth-enabled computing device into the wireless navigation system with most GPS-enabled navigation software selling in the market. It is a mobile GPS receiver combined an advanced GPS receiver, a mini antenna and Bluetooth wireless technology together. It is the perfect solution for you seeking a compact and wireless GPS receiver that consumes low power and has a long battery life with high gain.

With new GPS chipset and high sensitive GPS antenna, BT-771 will surely lead you to experience the highest GPS reception and the remarkable GPS accuracy. The GPS Bluetooth Receiver is a total solution GPS receiver with Bluetooth, and built-in rechargeable battery for time to first fix. With low power consumption, the BT-771 is well suited to system integrations including PDA, Smart phone, Tablet PC and Notebook PC with Bluetooth devices. It satisfies a wide variety of applications that are purposes in automotive and outdoor recreation navigation system.

BT-771 is the new generation of the smallest compact GPS Bluetooth receiver from BT-771 simply tums a

2. Features

- ◆ Compatible with Bluetooth serial port profile (SPP) completely.
- Support USB interface to charge the battery.
- ♦ 65 parallel satellite-tracking channels for fast acquisition and reacquisition.
- ◆ Support NMEA0183 V3.01 data protocol.
- ◆ Support WASS/EGNOS.
- ♦ Built-in 1050mAh Lithium-polymer battery inside makes **BT-771** continue work to 8hr.
- Built-in rechargeable battery for supply power to internal SRAM keeping almanac and ephemeris for time to first fix(TTFF).
- Three LED indicators show the devices status.
- Built-in ceramic patch antenna inside.
- ◆ Low power consumption
- Compact Size & Light Weight



3. Specifications

3.1 GPS Specifications

Parameter	Specification		
Receiver Type	65 channels		
Frequency	1575.42MHz		
Code	C/A code		
Update Rate	1Hz		
Accuracy	2.5m CEP(Stand-Alone, S/A off)		
Startup Time			
Hot start	< 1 sec		
Cold start	35 sec(Typical)		
Warm start	25 sec(Typical)		
Reacquisition	< 1 sec		
Acquisition sensitivity	-147dBm		
Tracking sensitivity	-159dBm		
Reacquisition sensitivity	-147dBm		
Dynamics			
Altitude	18,000m(Max)		
Velocity	500m/s		
Acceleration	4G (Max)		
Datum	WGS-84		
Antenna	Built-in Patch Antenna		
Battery	3.7V/1050mAh Li-Ion Rechargeable		
Operation Current	50mA supply current at 2.7V DC		
Operation Time	24 Hours, after fully charged, in continuous		
Charging Time	4 Hours		
Operation temperature	-10℃~+60℃		
Storage temperature	-20℃~+60℃		
Humidity	5% to 95% non-condensing		
Dimension	70mm(L) x 40mm(W) x 20mm(H)		



3.2 Bluetooth Specifications

Fully compliant with Bluetooth V1.2

Range: Up to 10 meters

Bluetooth Profile: serial Port Profile (SPP)
Frequency: 2.4GHz~2.4835GHz ISM Band

3.3 LED and Power

No	NAME	LED	FUNCTION
1	Battery Status LED	RED	ON: During charging battery with connection to a
			power charger
			OFF: Once battery is fully charging
			BLINKING: Low power
			Power on/off switch
2	GPS Status LED	Green	ON: Current position fixed
			BLINKING: During GPS signal reception
			OFF: Waiting for GPS signal reception
3	Bluetooth Status LED	BLUE	ON: Bluetooth connection is on and ready for
			data transmission
			BLINKING: No Bluetooth connection yet.
			Searching Bluetooth connection
4	Power Jack		Connect a power charger to the power jack to
			recharge the internal battery
5	Battery		Rechargeable and replaceable Lithium-in Battery
6	Battery Cover		Battery Cover

3.4 Battery Warning

To prevent any accidents, which might be caused with rechargeable at high temperature, please do not leave alone the GPS BT receiver for long time at a vehicle when it is not used.

Do not expose the internal battery to high temperature over $140\,^{\circ}F(50\,^{\circ}C)$

Do not disassemble the battery



3.5 Output and Interface Specifications

3.5.1 Output protocol

Baud rate: 9600bps

Data bit: 8
Parity: none
Stop bit: 1

3.5.2 Output format

NMEA 0183 V:3.01

GPGGA/ GPGSA/GPGSV/GPRMC (1/Sec)

3.5.3 Data communication interface

Bluetooth 2.0 with SPP profile

3.6 Accessories

3.6.1 Standard Accessories

- 1. GPSView Software & User Manual CDx1
- 2. Batteryx1

3.6.2 Optional Accessories:

- 1. Travel Charger
- 2. USB cable
- 3. Car Charger



4. Operations

4.1 Hardware Descriptions



1.Built-in Antenna

2.LED Lights

- 1-Red light: power on
- 2-Blue light: Being receiving Bluetooth signal
- 3-Green light 1: Being charging battery; Green light 2 (flashing): Low battery

3.The Power Button

Turns the unit on and off

4.2 Charging Battery

You can use car charger to connect BT-771 GPS Bluetooth Receiver with battery of car, or use travel charger to connect with an outlet. When battery is been charging, the battery status LED on the GPS receiver lights red continuously

5. Bluetooth Connection

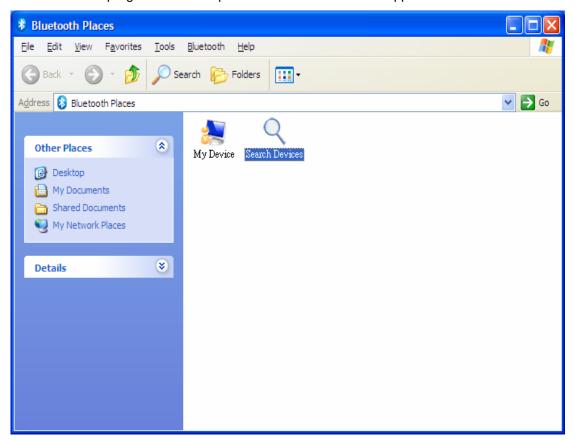
5.1 Laptop or Notebook

5.1.1- 1 BlueSoleil instructions 1:

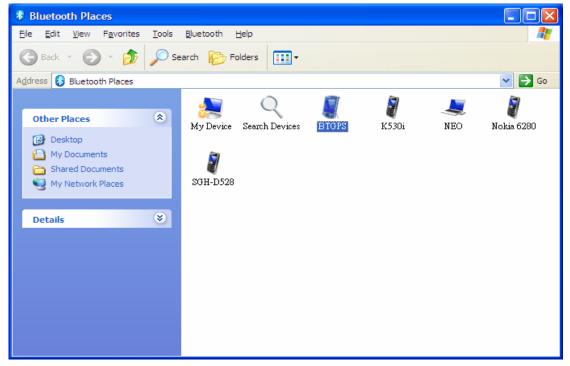




Please click the program on desktop and the window below will appear.

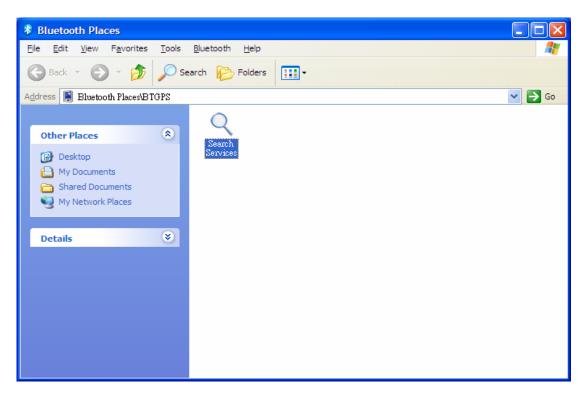


Please click "Search Devices"

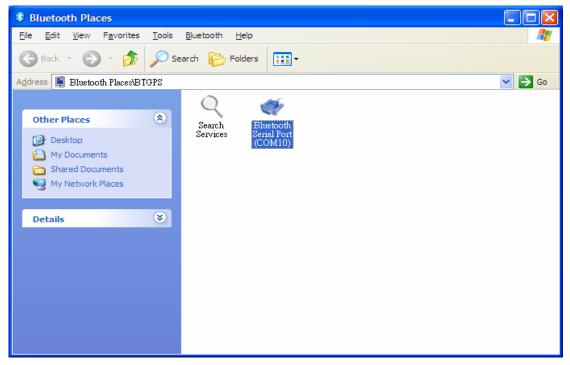


Bluetooth devices nearby will be searched. Please select "BTGPS" among them.



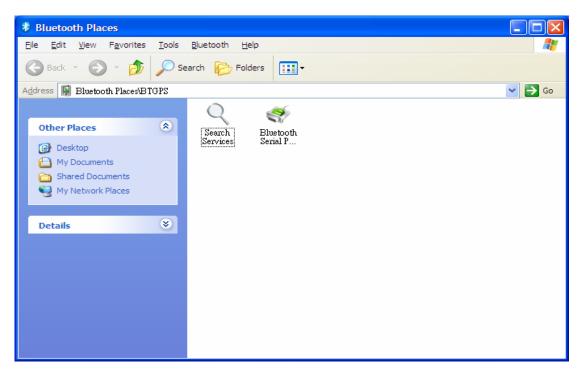


Please click "Search Services"



Available service will show up. Please choose "Bluetooth Serial Port (COM10)", it will be pairing with BTGPS. (COM10 is regarded as an example, Physical COM PORT depends on users' computers.)





After connection is complete, the illustration will become green color.

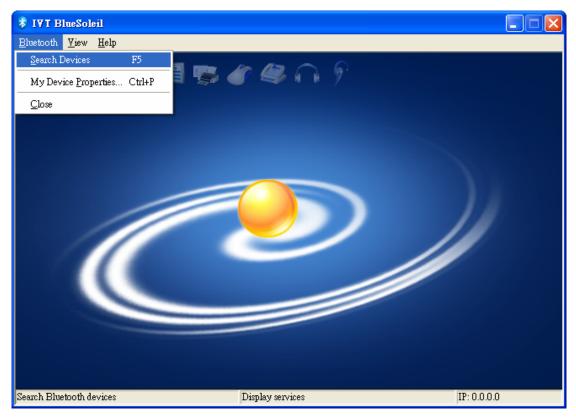
5.1.2-2 BlueSoleil Instructions 2:

BlueSoleil classic use interface



Please Right click Bluetooth illustration in Tool on the mouse and select "Display Classic View". Classic window will appear.





Please click "Bluetooth and select "Search Device".



Bluetooth devices nearby will be searched. Please choose "BTGPS among them.





Please right click "BTGPS illustration on the mouse and select "Search Services".



Available service will show up. Please choose "Bluetooth Serial Port (COM10)", it will be pairing with BTGPS. (COM10 is regarded as an example; Physical COM PORT depends on users' computers.)





Please right click applicable item on the mouse and select "Connect". It will complete Bluetooth connection.



After connection is complete, the illustration will become green color.

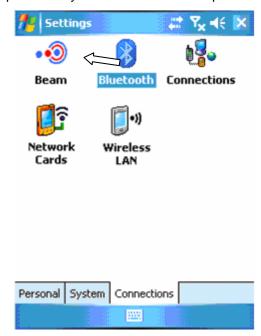


5.1.3 PDA or Smart Phone

Mobile5 BT setup

Turn On your **Bluetooth GPS** and setup; follow the setup process in your Windows Mobile 5 phone:





Go to the **Devices** tab and choose **New Partnership**



Choose BT GPS and select Next





You will be asked for the passkey, enter "0000" and then select Next

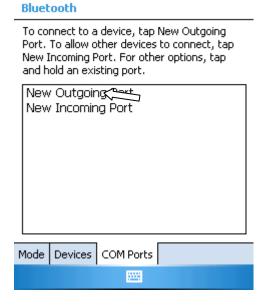


Now go to the **COM Ports** tab and select **New Outgoing Port**

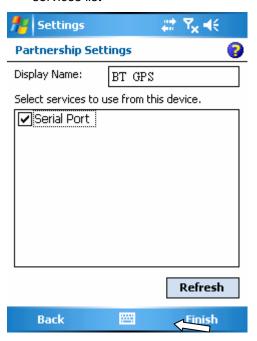
Y_X ■€ ok

Back

Settings



select **Serial Port** under the available services list

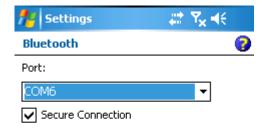


Choose **BT GPS** from the list and select **Next**





Select the desired GPS COM port for your device (eg: COM 6), make sure **Secure Connection** is marked and choose **Finish**





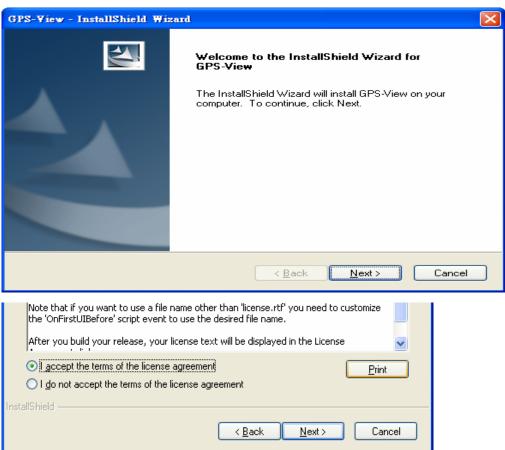


6. GPS Testing Software

- 6.1 GPSView for Windows 2000/XP (PC or Notebook)
 - 6.1.1 Install GPS View for Windows 2000/XP

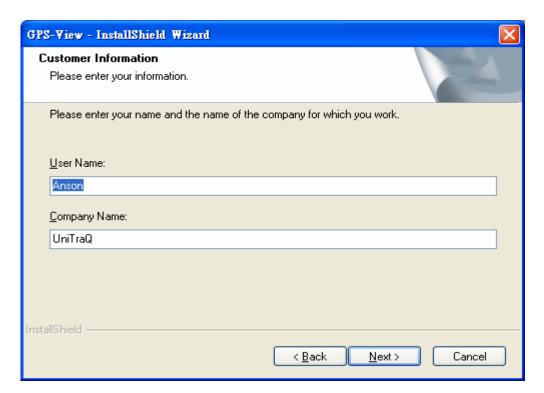


Please select "GPS View" Then installation Window will appear. Please click "Next". Please refer to the following window.

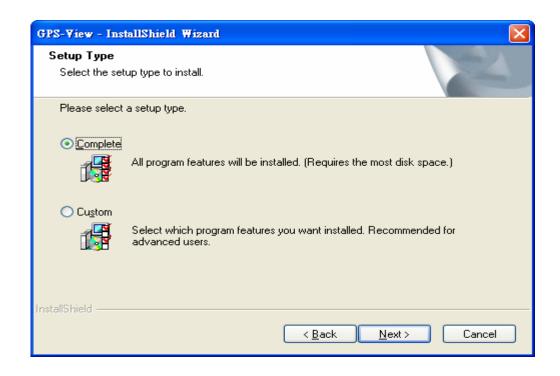




Please click "I accept the terms of the license aggrement" and then go to "Next"

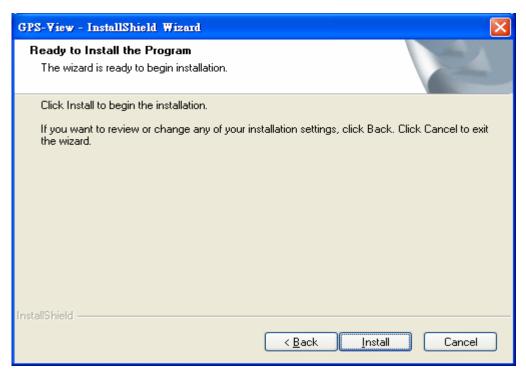


Please enter the details of User and then click" Next".

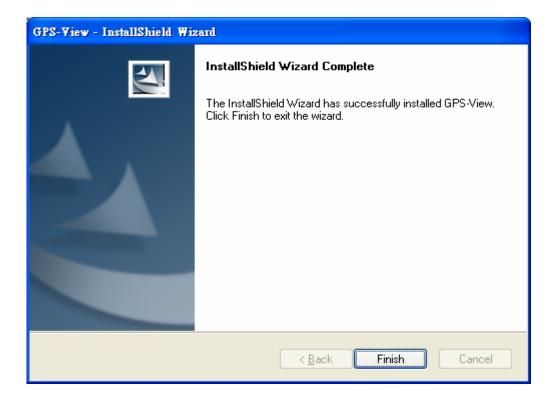




Please select "Complete" and then click "Next".



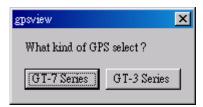
Please click "Install". Start installing.



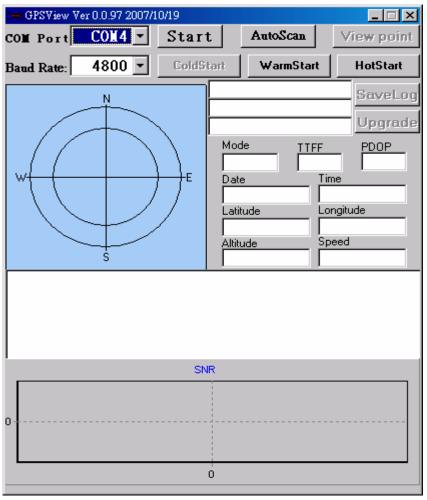


Complete Installation.

6.1.2 Using GPSView for Windows 2000/XP

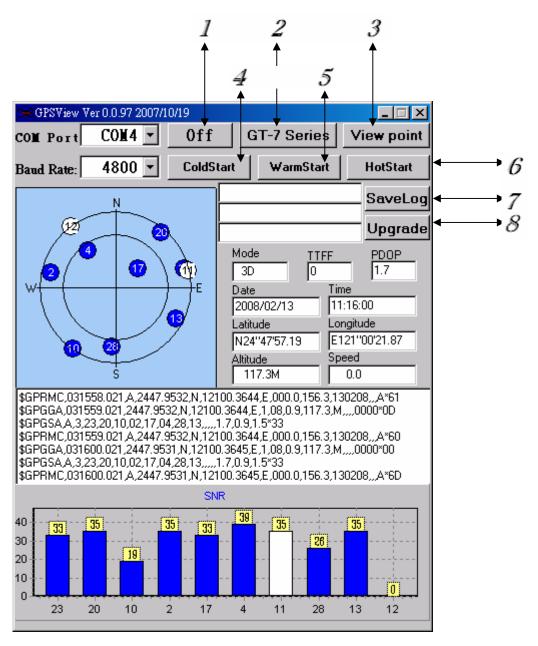


Execute GPS View Selection Series. Enter the Window below.



Click on "Auto Scan" or Select "COM PORT" which will connect to BT-GPS, then Click on "Start". It will display the connection status of GPS and NMEA as shown below.





- 1. Off the GPS connection
- 2. Series Selection
- 3. Open Position Coordinate Window
- 4. Execute Cold Start
- 5. Execute Warm Start
- 6. Execute Hot Start
- 7. Save NMEA Data(Automatically save in the same Program file)



8. Upgrade Firmware(If upgrading Firmware, save it in the same Program file)

6.2 Install GPSView for Win CE (PDA or Mobile Phone)

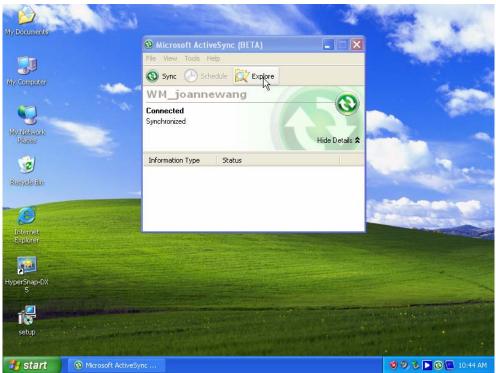
6.2 1 Installing the GPSView Software into Win CE Mobile Phone:

- 1. After starting your computer, put Mobile Searcher Software CD into CD-ROM.
- 2. Press the symbol of ActiveSync.



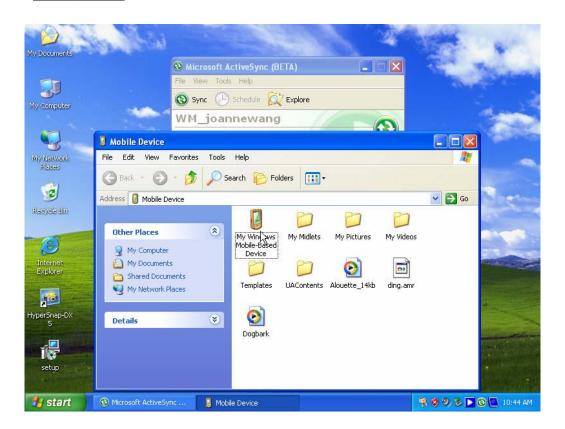


3. Press "Explore".

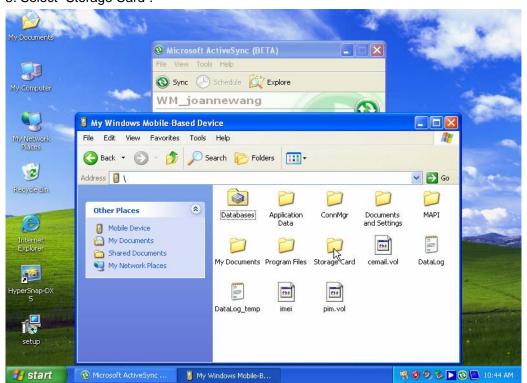


4. Select "My Windows Mobile-Based Device".



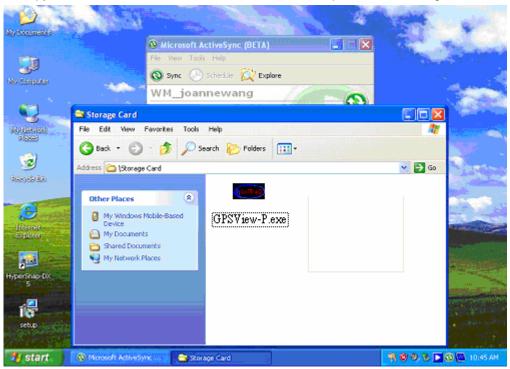


5. Select "Storage Card".



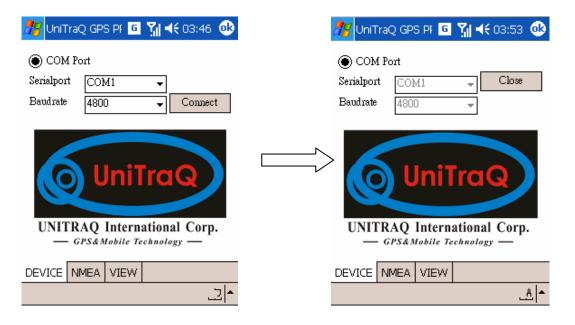


6. Copy the file of "GPSView-P.exe" from CD-ROM and paste it on "Storage Card".



6.2.2 Using GPSView Software (For Win CE Mobile Phone)

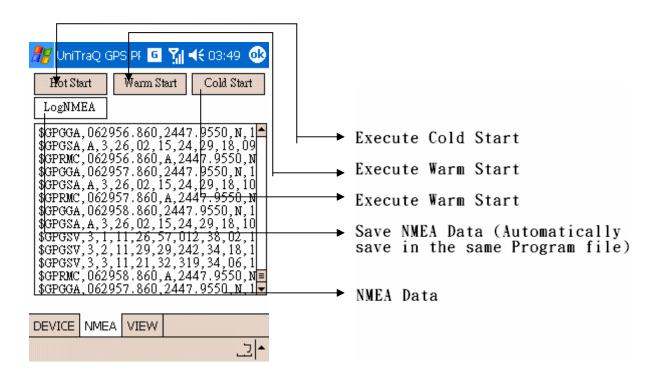
- 1. Switch on your Win CE mobile phone and open "File Explorer".
- 2. Find out the document of "Storage Card" and open the file of "Locate".

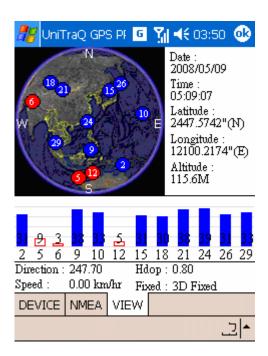


Select "COM PORT" which will connect to BT-GPS, then Click on "Start". It will display the connection status



of GPS and NMEA as shown below.





Display the pages which is usable information for satellites



UniTraQ International Corp

2F., No.136, Ziqiang S. Rd., Zhubei City, Hsinchu County 30264, Taiwan (R.O.C.)

Email <u>support@unitraq.com</u>
Website <u>www.unitraq.com</u>

© 2009 UniTraQ International Corp. All rights reserved.

Not to be reproduced in whole or part for any purpose without written permission of UniTraQ International Corp ("UniTraQ") Information provided by UniTraQ is believed to be accurate and reliable. These materials are provided by UniTraQ as a service to its customers and may be used for informational purposes only. UniTraQ assumes no responsibility for errors or omissions in these materials, nor for its use. UniTraQ reserves the right to change specification at any time without notice.

These materials are provides "as is" without warranty of any kind, either expressed or implied, relating to sale and/or use of UniTraQ products including liability or warranties relating to fitness for a particular purpose, consequential or incidental damages, merchantability, or infringement of any patent, copyright or other intellectual property right. UniTraQ further does not warrant the accuracy or completeness of the information, text, graphics or other items contained within these materials. UniTraQ shall not be liable for any special, indirect, incidental, or consequential damages, including without limitation, lost revenues or lost profits, which may result from the use of these materials.

UniTraQ products are not intended for use in medical, life-support devices, or applications involving potential risk of death, personal injury, or severe property damage in case of failure of the product.

All of products designed and produced in Taiwan, and RoHS compliance