TripMate852

User's Manual

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Note and Warning

- **TripMate852 uses AAA battery*2. If TripMate852 is used in temperature lower than -10°C or higher than 60°C, the battery capability will decrease. Please leave TripMate852 far from heat or high temperature environment. In addition, do not expose your TripMate852 in temperature higher than 140°C/60°C. If you do not follow these rules, the battery may become heat, explode or burn itself, and this will lead to very serious damage.**
- **While in the hospital, turn off TripMate852 is recommended. Like other common equipments do, wireless GPS device may also interfere with medical equipments which use radio frequency.**
- **Remove batteries from TripMate852 when not using it for a long period of time.**
- **Keep TripMate852 and all accessories out of small children's reach for safety caution.**
- **We assume no responsibility for any damage and loss resulting from the use of this manual and also by deletion of data as a result of malfunction, dead battery, or misuse of the product in any way.**
- **Use only the supplied and approved accessories. Unauthorized accessories, antenna, modifications or attachments could damage TripMate852, and may violate regulations governing radio devices.**
- **Use a dry, clean soft cloth to clean your TripMate852. Do not use harsh cleaning solvents, chemicals, or strong detergents.**
- **Do not attempt to open TripMate852 by yourself. Unauthorized hacking may damage the unit, and void your warranty.**

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Chapter1. Before you begin

1.1 Introduction

TripMateTripMate852 features an all-in-one, cost-effective portable GPS logger solution. When you travel in different country, it allows you to record your routes. The TripMate852 includes LED displays for status update. Through user friendly software utility, it can combine your pictures and record routes show on the map. This recorder is small and robust, ideal to carry everywhere for applications such as route tracking, mountain climbing or fleet management.
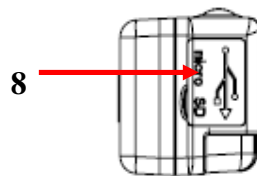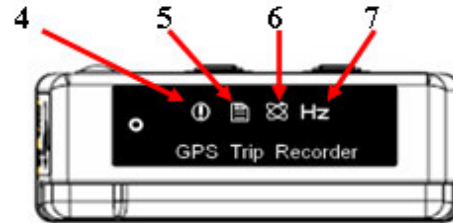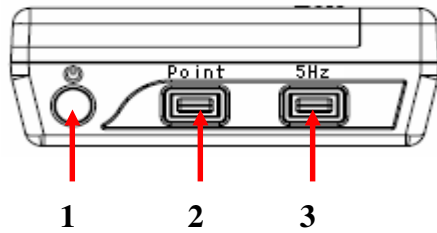
1.2 Feature overview

◎ MTK 3329 chip
◎ Smart log function
◎ Smart power saving with sensor
◎ Micro SD card for unlimited storage
◎ LED display
◎ Support AGPS
◎ Powered by AAA battery*2

1.3 Specification

General			
Frequency	L1,1575.42MHz	C/A Code	1.023Mhz
Datum	WGS84		
Performance Characteristics			
Position Accuracy	Without aid: 3.0m 2D-RMS	Velocity Accuracy	Without aid: 0.1m/s
	<3m CEP(50%) without SA(horizontal		DGPS(WAAS,EGNOS,MSAS): 0.05m/s
	DGPS(WAAS,EGNOS,MSAS): 2.5m	Acceleration	Without aid: <4g
Timing Accuracy	50ns RMS		DGPS(WAAS,EGNOS,MSAS): <4g
Reacquisition Time	<1s	Hot start	1.5s
Warm start	34s	Cold start	35s
AGPS	<15s	Sensitivity	Acquisition: -148dBm Max.
Update	5Hz		Tracking: -165dBm Max.
Dynamic			
Altitude	Maximum 18,000m	Acceleration	Maximum 4g
Velocity	Maximum 515m/s		
Power			
Operation Time	Up to 12 hours	Battery	AAA battery*2
I/O			
Baudrate	115200 bps	Protocol	NMEA 0183 v3.01

Environment			
Operation Temperature	-10° to 50°		
Interface			
USB Bridge	Fully compliant with USB2.0	SD	Micro SD card
	12Mbps		
Others			
Weight (g)	57.5g(with battery)	Dimension	72*27x25mm
	36.5g(without battery)	NMEA	GGA,GSA,GSV,RMC

1.4   Buttons and Description

1. **Power on/off button**
2. **Point button**
3. **1Hz / 5Hz switch button**
4. **Memory warning LED**
5. **Log status LED / POI LED**
6. **Satellite status LED**
7. **1Hz / 5Hz mode LED**
8. **USB & Micro SD slot cover**
9. **Battery Cover**

1.5   LED ICON Description

Symbol	Category	Color	Status	Function
	MEMORY WARNING	Red	Off	Memory capacity is higher than 20%.
			Slowly blinking	Memory is less than 20% available. (LED blinks 1 time / 2 seconds)
			On	No Micro SD card inside / Memory is full.
	LOG	Green	Slowly blinking	In log mode. (LED blinks 1 time / 2 seconds)
			Blinking 3 times	LED blinks 3 times, Points of Interest (POI) is recorded.
			Quickly blinking	LED quickly blinks, the device is updating APGS data.
	SATELLITE	Orange	On	Acquiring satellite signal, GPS position not fixed.
			Slowly blinking	GPS position fixed and device start to log data. (LED blinks 1 time / 2 seconds)
Hz	5Hz	Green	Off	1Hz mode (log 1 point / per second)
			Slowly blinking	5Hz mode (log 5 points / per second) (LED blinks 1 time / 2 seconds)

1.6 Accessories

Congratulations on your purchase of the TripMate852. Before you start using TripMate852, please make sure if your package includes the following items. If any item is damaged or missing, please contact your dealer at once.

- ◎ Mini USB cable x1
- ◎ AAA battery x2
- ◎ Quick start guide x1
- ◎ Strap x1
- ◎ Micro SD card 1G x1 (inside the TripMate852)

*Unit package contents may vary depending on countries without prior notice.
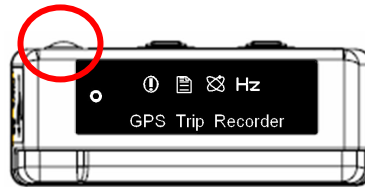
Chapter2. Getting started

2.1 Turn on/off TripMate852

Step1. Remove TripMate852 battery cover and insert AAA batteries into battery chamber.

Step2. Please check and make sure Micro SD card is inside the TripMate852.

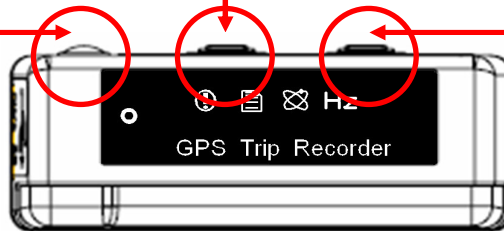Step3. Press "POWER" button for 3 seconds to power on and start logging your route & POI.

POWER

2.2 Button description

Press "Point" button for 1 second, the LED will blink 3 times and POI is recorded.

Press "5Hz" button for 3 seconds, it will change log frequency from default 1Hz (log 1 point / per second) to 5Hz (log 5 points / per second) and the LED will blink.

Press "Power" button for 3 seconds to power on / power off TripMate852.

2.3 Sleeping mode

TripMate852 will go into sleeping mode for power saving when the device is not in motion for over 10 minutes. And TripMate852 will automatically wake up with a move of the device when it is under sleeping mode.

2.4 Helpful Tips

− It's better to turn off the TripMate852 when you don't use it, otherwise it might still keep recording data.
− Some vehicles having heavy metallic sun protecting coating on windshields may affect GPS signal receptions
− Driving in and around high buildings may affect GPS signal receptions.
− Driving in tunnels or indoor parking may affect signal reception.
− In general, TripMate852 performs best in open space where it can see clean sky. Also weather will affect GPS reception – rain & snow contribute to worse sensitivity.
− Low battery of TripMate852 may affect signal reception.
− TripMate852 may not work indoors where it can not see the sky.
− For the 1st time you use TripMate852, it will take 1 to 3 minutes to obtain the satellite constellation information and fix your position, this is called "Cold Start". If you replace the battery, TripMate852 will do Cold Start again.
− If your TripMate852 can't fix your position for more than 20 minutes, we suggest you change to another spot with open space and then try again.
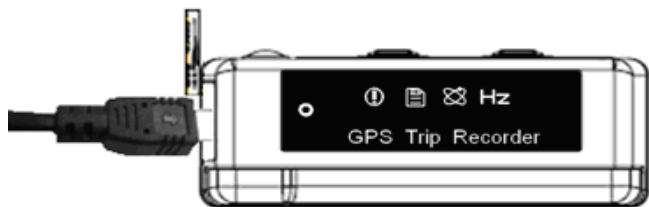
Chapter3. AGPS Tool

3.1   AGPS Tool software

AGPS Tool software can be used to download AGPS data into Micro SD card which is inside
TripMate852. Please execute AGPS Tool.exe in Micro SD card directly.
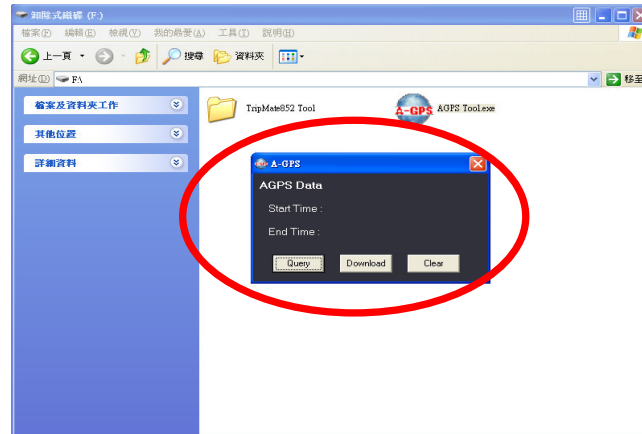(Refer to the Micro SD card > AGPS Tool.exe)

3.2   Download AGPS

Please power on TripMate852 and build a connection between your PC and TripMate852 via
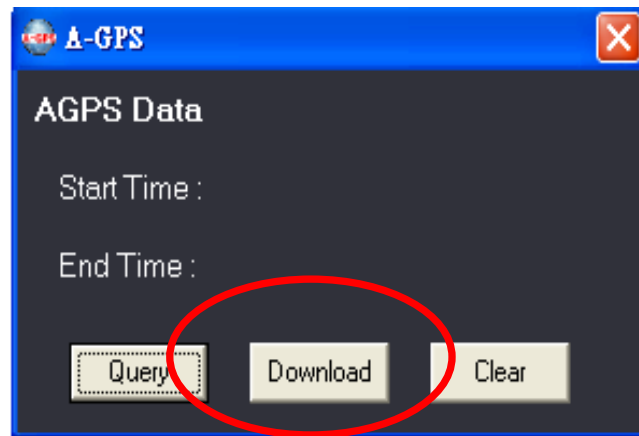USB cable, see below:

Please follow below steps to download AGPS.
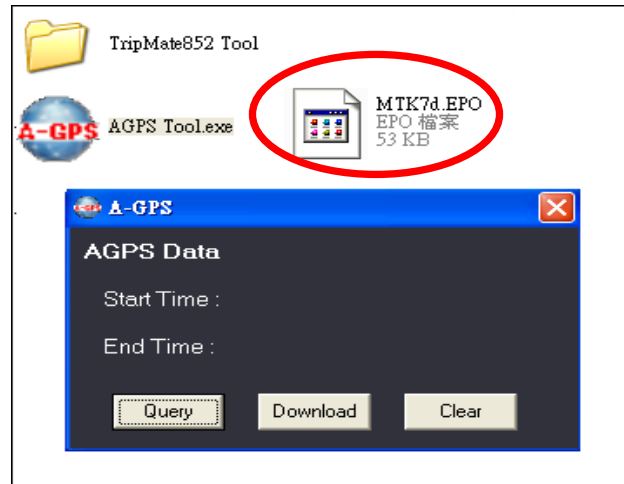
1. Execute **AGPS Tool.exe** in Micro SD Card directly

   → AGPS download window will pop-up

2. click **Download**

   → downloading AGPS data into Micro SD card

3. EPO file will be created in Micro SD card when successfully download AGPS data

4. Power off TripMate852 → Power on TripMate852
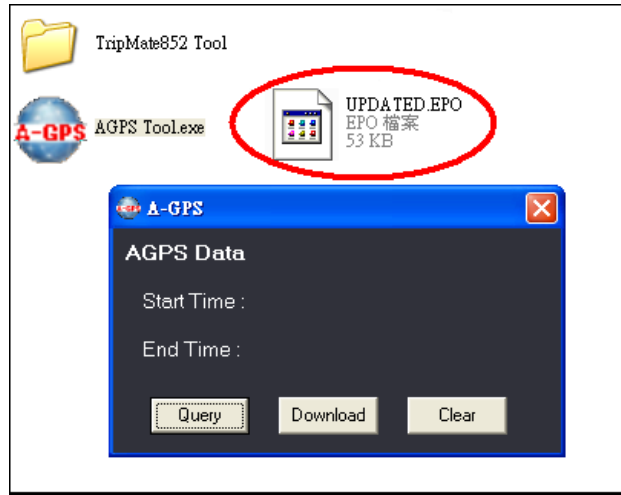

5. LOG LED will quickly blink, the device is updating AGPS data

6. EPO file will rename to UPDATED.EPO

　　→ Complete AGPS download

[Note and Warning] Please DO NOT move the EPO file to other place, just remain it in the Micro SD card after downloading. Then, the EPO file which includes AGPS data can be applied by TripMate852 successfully. AGPS data has six days time limited.

Chapter4. Using Photo Tagger software

4.1. Execute and install software utility Photo Tagger
Complete GPS Photo Tagger installation

4.2. Google Earth
If you computer is not yet installed with Google Earth. Google Earth has free download version, go download it in the internet first. For more information, please visit http://earth.google.com/.

4.3. Software Utility - TripMate852
For further function to use the Photo Tagger software in detail, please refer to Photo Tagger user manual:
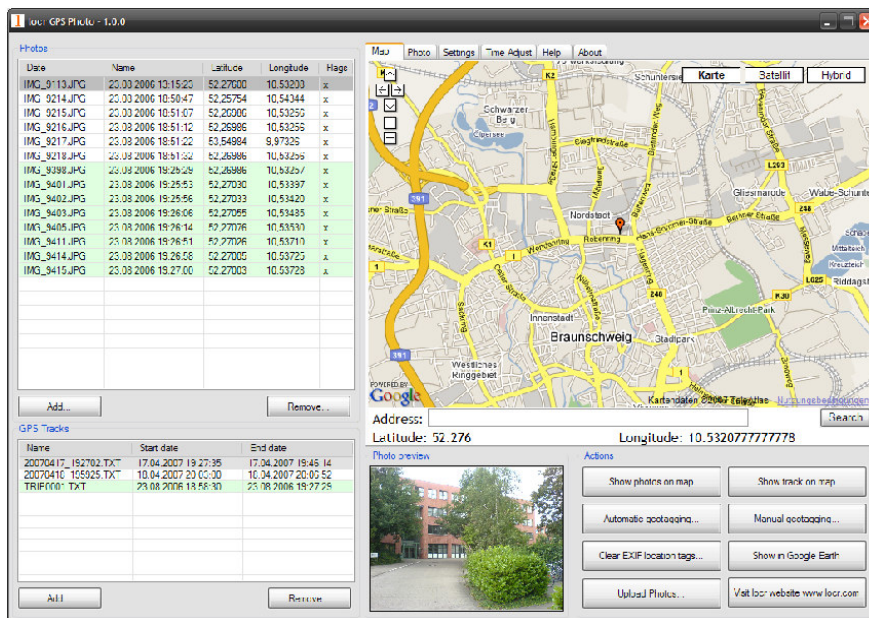
Photo Tagger software > Help > User Manual

To use a mini-USB cable to connect the TripMate852 to your PC, you have to power on the TripMate852 unit.

Appendix A. Locr GPS Photo

With TripMate852 and locr GPS Photo software, users are allowed to import geotagging adds information to photos. The position (latitude/ longitude) then be written into the EXIF header for the further application. Also, locr GPS Photo can integrate travel log and digital photos by date/ time to show photos on the map directly.

Please find the installation file for Windows XP/ Vista in CD tool, or go to http://www.locr.com for further information.

Appendix B. Certification

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 interface, and
2. This device must accept any interference received, including interference that may cause undesired operation.

FCC RF Exposure requirements:
This device and its antenna(s) must not be co-located or operation in conjunction with any other antenna or transmitter.
NOTE: THE MANUFACTURER IS NOT RESPONSIBLE FOR ANY RADIO OR TV INTERFERENCE CAUSED BY UNAUTHOURIZED MODIFICATION TO THIS EQUIPMENT. SUCH MODIFICATIONS COULD VOID THE USER'S AUTHORITY TO OPERATE THE EQUIPMENT.

CE Notice

CE0984①

Is herewith 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 89/3360EEC.
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

Appendix C. Warranty Information

Thank you for your purchase of GPS product from the company.

The company warrants this product to be free from defects in materials and workmanship for one year from the date of purchase. The warranty for accessories is six months. The stamp of distributor or a copy of the original sales receipt is required as the proof of purchase for warranty repairs. The company will, as its sole option, repair or replace any components, which fail in normal use. Such repair or replacement will be made at no charge to the customer for parts or labor. The customer is, however, responsible for any transportation costs.

This warranty does not cover failures due to abuse, misuse, accident or unauthorized alteration of repairs. The company assumes no responsibility for special, incidental punitive or consequential damages, or loss of use.