photoMate 887 Lite

User's Manual

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Ver 1.0

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Chapter 1 Before you begin

1.1 Note and Warning

- photoMate 887 Lite uses + Lithium-Ion battery. If 887 Lite is used in temperature lower than -10℃ or higher than 60℃, its battery charging capability will decrease. Please leave 887 Lite far from heat or high temperature environment. In addition, do not expose your 887 Lite in temperature higher than 140℉/60℃. If you do not follow these rules, the battery inside 887 Lite may overheat, explode or burn itself, and this will lead to very serious damage. The + Lithium-Ion battery inside the 887 Lite should be recycled.
- For a long period not using 887 Lite, please store it in dry/cool places.
- For safety, keep 887 Lite and all accessories out of children's reach.
- 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.
- Use only the supplied and approved accessories. Unauthorized accessories, modifications or attachments could damage 887 Lite, and may violate regulations governing radio devices.
- Use a dry, clean soft cloth to clean the unit. Do not use harsh cleaning solvents, chemicals, or strong detergents.
- Do not attempt to open 887 Lite yourself. Unauthorized hacking may damage the unit, and void your warranty.

1.2 Introduction

This photoMate 887 Lite Mini GPS Recorder features an all-in-one, cost-effective portable GPS logging solution. With its on-board memory, it allows you to log your routes by ways of time/ distance/ speed. Through user friendly software utility, it shows your track on Google Earth. This data logger is small and robust, ideal to carry everywhere for applications such as route tracking, mountain climbing or fleet management.

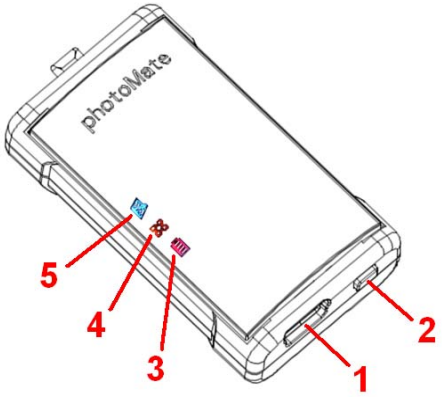
1.3 Features

1. Trip Recording
2. Smart LOG function
3. 125,000 waypoints
4. AGPS available
5. Fuzzy Auto on/off
6. Phototagger software
7. G-Mouse function

1.4 Applications

- Record your trip
- Manage business trip expense
- Concerned about one’s driving behavior
- Geo-photo

1.5 Appearance



1. DC jack (mini USB type)
2. Button (Power On/ Power Off/ POI)
3. Battery status LED (Red / Green)
4. GPS status LED (Orange)
5. Log status LED / POI LED (Green)

1.6 Power On/Off and Push Button for POI

Power off **Power On and LOG** **Record POI**

1.7 LED Display

887 Lite has three LED lights, one is Battery Status LED, the 2nd one is GPS Status LED, the 3rd one is LOG status LED & POI LED.

The status table of LED shows as following:

Category	Symbol	Color	Status	Function
Battery Status LED		Red	Blinking:	The battery is too low
		Green	On:	The battery is charging
		Green	Blinking:	The battery is fully charged
GPS Status LED		Orange	Always on:	Acquiring satellites, GPS position is not fixed and device is not logging data yet.
			1Sec Blinking:	GPS position is fixed and device is logging data.
LOG Status LED / POI LED		Green	Slowly Blinking:	In LOG mode (1 time / 3 seconds)
			Blinking 3 times:	LED blinks 3 times, POI (Point of Interest) is recorded
			Always on:	The memory is full
			Quickly Blinking:	The memory space is too low (20% left now) (1 time / 1 second)

Chapter 2 Getting Started

2.1 Checking the package content

Congratulations on your purchase of 887 Lite with built-in + Lithium-Ion chargeable battery. Before you start using 887 Lite, please make sure if your package includes the following items. If any item is damaged or missing, please contact your dealer at once.

- 887 Lite x 1
- USB to mini-USB cable x 1
- Strap x 1
- CD Tool x 1 (user manual, software utility, driver)
- Quick Start Guide x 1

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

2.2 Getting Started

Please follow the procedure step by step.

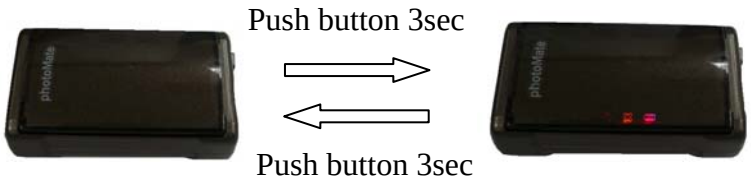
Step 1 Charging Your Battery

To charge your 887 Lite GPS Recorder, you have to plug your USB cable into the power source. Charging time is about 90 minutes and you can charge from PC/ Laptop USB HOST.

For the 1st time you use 887 Lite, please charge battery until it is full (the green LED is blinking). Shown as below:

- If the LED is red, that means battery power is critically low. Charge immediately.
- If the LED is green, that means battery is charging now.
- If the battery LED is blinking, that means battery is fully charged.

Step 2 Turning on the power



Power off **Power On and LOG**

Step 3 Start trip recording

2.3 Helpful Tips

- It’s better to turn off 887 Lite 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 park may affect signal receptions.
- In general, 887 Lite performs best in open space where it can see clean sky. Also weather will affect GPS reception – rain & snow contribute to worse sensitivity.
- Note that 887 Lite may not work indoors where it can not see the sky.
- For the 1st time you use 887 Lite, it will take 1 to 3 minutes to obtain the satellite constellation information and fix your position, this is called “Cold Start”.
- If your 887 Lite can’t fix your position for more than 20 minutes, we suggest you change to another spot with open space and then try again.

Chapter 3 How to configure your GPS Record?

The GpsView program only supports the Microsoft Windows based platform.

3.1 Driver Installation

Before the USB connector plugs in your PC / Laptop, please have your USB Driver Installation ready. (Install InstallDriver.exe driver for USB port from CD-ROM.)

3.2 GpsView software

Please select correct COM port and Baud Rate to configure GPS after open the GpsView software.

3.2.1 Connect USB cable between GPS and PC / Laptop

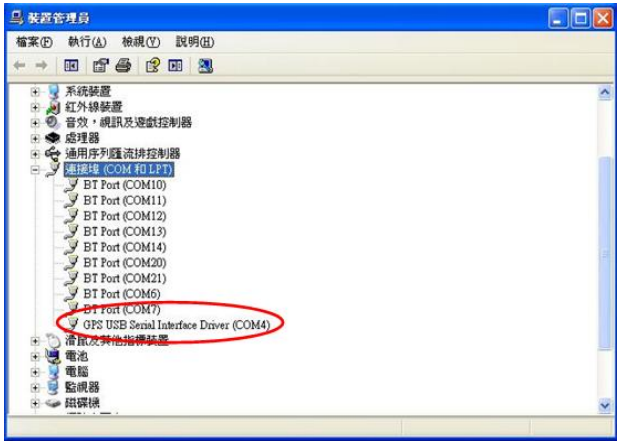
To USB port on PC/Laptop

3.2.2 Executing GpsView Program

Click “Command” tap. Update Rate 1 ~ 5Hz is user configurable. And still more options for choice of NMEA output, DGPS…etc. all available through pull-down menus.

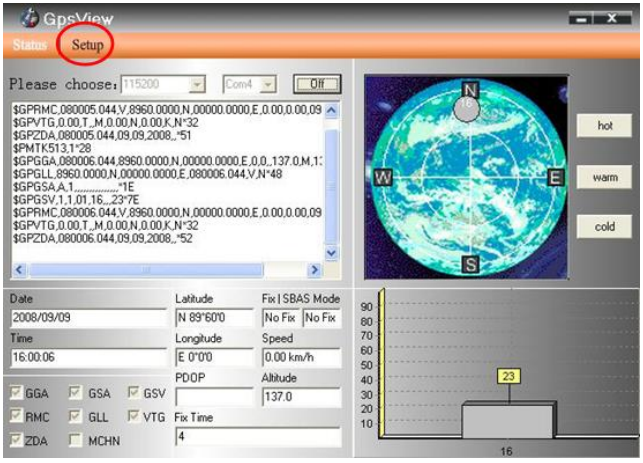
3.2.3 Download AGPS

1. Start→Control Panel→System→Hardware→Device Management→Connector（COM and LPT）Check COM port position

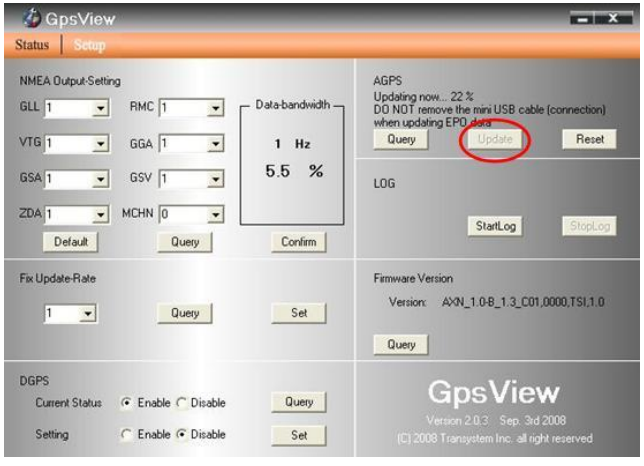


2. Open GpsView.exe→Check Baud Rate and COM port→ click “On”

3. Choose “Setup”



4. Click “Update”



5. When Updating now…100%, click “Enter” to complete

[NOTE] When you use AGPS function, we suggest use GpsView to download the AGPS data via USB cable. AGPS has six days time limited.

Chapter 4 Using Photo Tagger software

4.1 Execute and install software utility Photo Tagger

Complete GPS Photo Tagger and USB driver installation (Refer to CD)

4.2 Google Earth

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

4.3 Software Utility --- Photo Tagger

For further function to use the Photo Tagger software in detail, please refer to Photo Tagger user manual:

Photo Tagger software > Help > User Manual

[Note] Before you use the mini-USB cable to connect 887 Lite to your PC / Laptop, you have to power on the 887 Lite unit.

Appendix

Appendix A. Specifications

General	
Frequency	L1,1575.42MHZ
C/A Code	1.023MHZ
Datum	WGS84
Performance Characteristics	
Position Accuracy	Without aid: 3.0m 2D-RMS
	<3m CEP(50%) without SA(horizontal)
	DGPS (WAAS,EGNOS,MSAS):2.5m
Velocity Accuracy	Without aid: 0.1m/s
	DGPS (WAAS,EGNOS,MSAS):0.05m/s
Acceleration	Without aid:<4g
	DGPS (WAAS,EGNOS,MSAS):<4g
Timing Accuracy	50 ns RMS
Reacquisition Time	<1s
Hot start	1.5s
Warm start	34s
Cold start	35s
AGPS	<15s
Sensitivity	Tracking:-165dBm Max, Acquisition:-148dBm Max.
Update	1Hz

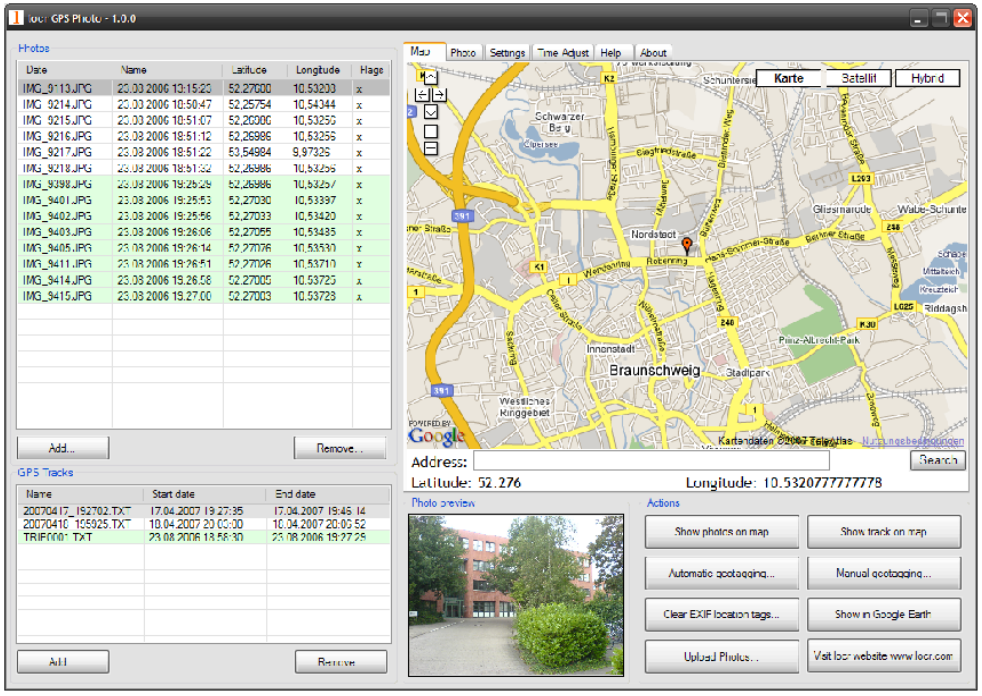
Dynamic	
Altitude	Maximum 18,000m
Velocity	Maximum 515m/s
Acceleration	Maximum 4g
Power	
Input Voltage	Vin : 5.0V±5%
Battery	Built-in chargeable + Lithium-Ion battery
I/O	
Available Baud Rates	115200 bps
Protocols	NMEA 0183 v3.01
Environment	
Operating Temperature	-10 ~ 60C
Storage Temperature	-20 ~ 60C
Charging	0 ~ 45C
USB Bridge	
Standard	Fully compliant with USB2.0
Full speed	12Mbps
Dimension	44 x 26 x 15 mm
Data Log	
Log GPS data by time interval/ distance/ speed limit	
User can configure settings by using utility	

＊.Citation of chipset spec. is from MTK

Appendix B. locr GPS Photo

With 887 Lite Mini GPS Recorder 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 C. Certification

FCC Notices

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 Notices

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 D. 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.