

# The operation guide of ML-7

This is a guide to instruct the user to use ML-7 properly. You can find the information to define every parameter of ML-7 at the following chapters. If you still have any questions, please send your valuable comments to [etek@etek.com.tw](mailto:etek@etek.com.tw). We shall reply you in the soonest time.

## 1. Appearance



## 2. Package Contents

- ML-7 device
- AP data cable
- Power Adapter
- A CD disk with user guide and utility

## 3. Introduction

**ML-7** is the smallest GPS data logger in the world! With small in size, light in weigh and mini to hidden, **ML-7** is the most suitable GPS data logger for you to apply the GPS logger to difference applications such as dove tracking, photo management, sport tracking and vehicle tracking. It will definitely be your best helper on your journey.

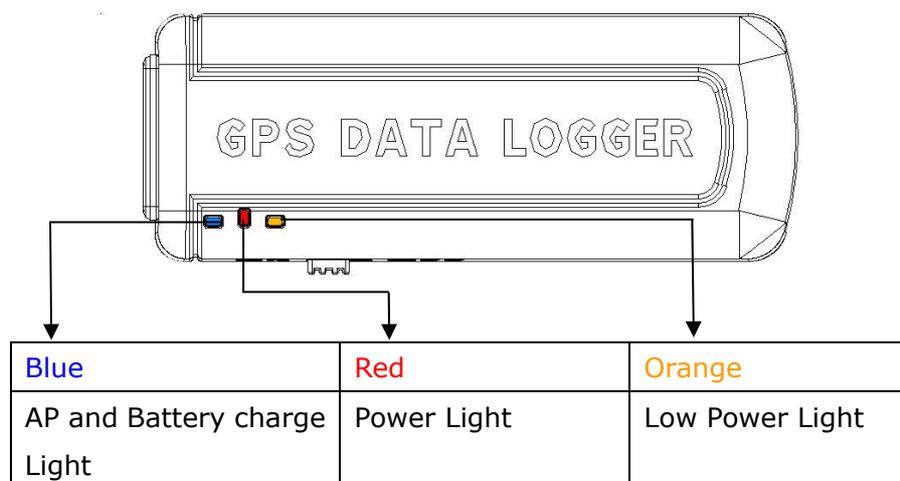
## 4. Features

- 51 independent tracking channels
- Ultra small size
- 16Mb flash memory
- The data will be just logged only when the GPS is fixed

## 5. Applications



LED Light Status



## 6. Specifications

General Descriptions	Parameters
<b>Frequency</b>	L1 frequency; 1575.42MHz support 51 independent tracking channels
<b>Sensitivity</b>	-146dBm
<b>Update Rate</b>	1Hz
<b>Acquisition</b>	Cold Start: 36 sec. Warm Start: 33 sec. Hot Start: 1 sec.
<b>Reacquisition</b>	<1 sec.
<b>Dynamics</b>	Altitude: 18000m (max.) Velocity: 515 m/sec. (max.) Vibration: 4G (max.)
<b>Supply Voltage</b>	DC 5V
<b>Power Consumption</b>	Data Record Mode <60mA Power Saving Mode<0.5mA Tracking: 30mA
<b>NMEA Message</b>	NMEA0183, default 115200 Output:GGA,GSA,GSV,RMC Log: RMC
<b>Datum</b>	Default WGS-84
<b>Serial Interface</b>	TTL@2.8V
<b>Weight</b>	12.4g
<b>Dimension</b>	46.9mm(L) x 18.1mm(W) x 14.9mm(H)
<b>Battery</b>	Include 170mA
<b>Battery Life</b>	5-6 Hours
<b>Operating Temperature</b>	0~45 <sup>0</sup> C
<b>Storage Temperature</b>	-5~35 <sup>0</sup> C
<b>Operating Humidity</b>	<= 95%, non condensing
<b>Accessories</b>	USB to RS232 cable charger

## 7. Find out Virtual Com Port for ML-7

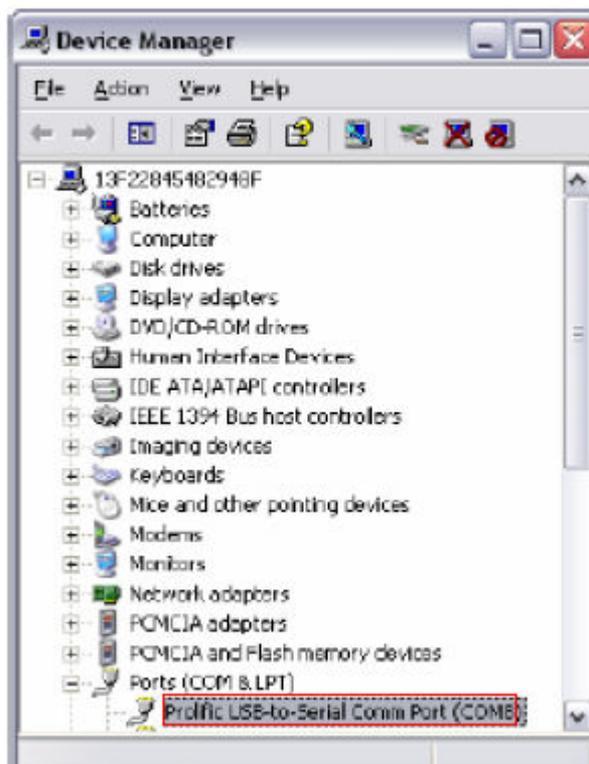
Before connecting the ML-7 to computer, you should find out a virtual com for the ML-7.

1. Please find the relevant USB driver for your computer OS.



2. Install the driver

3. Please go to the **device manager** to find out virtual com port for connecting ML-7 and computer.



## 8. The instruction of AP utility

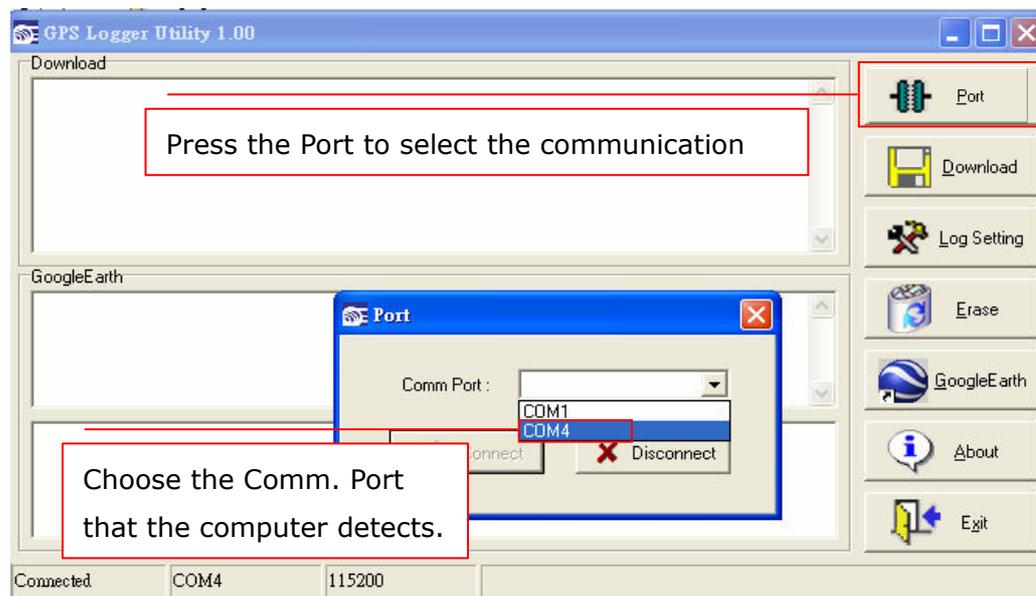
a. Download the AP utility from CD disk and install the AP to your computer.



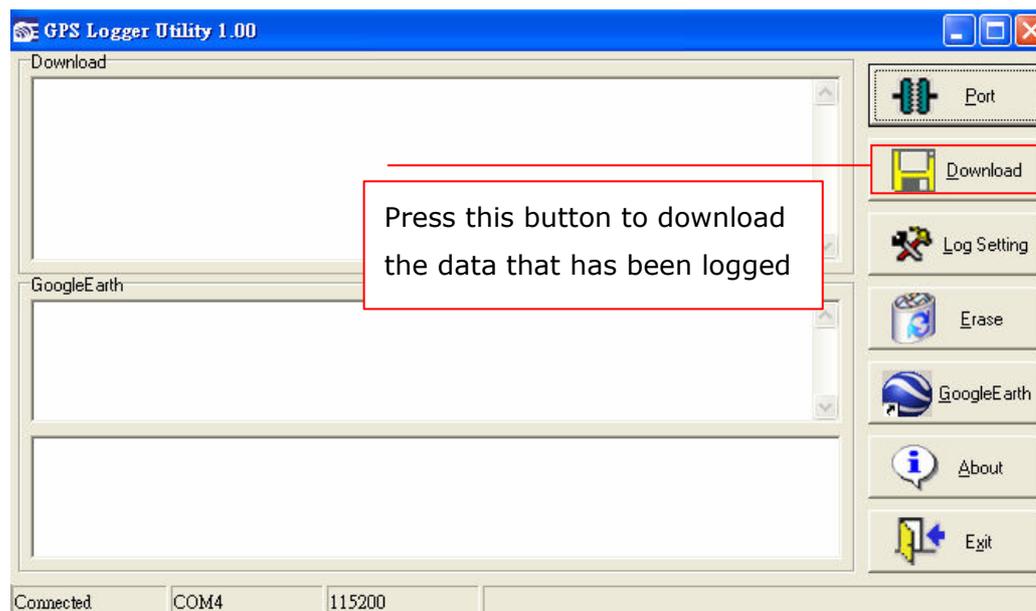
! Please note the install password is "demover".

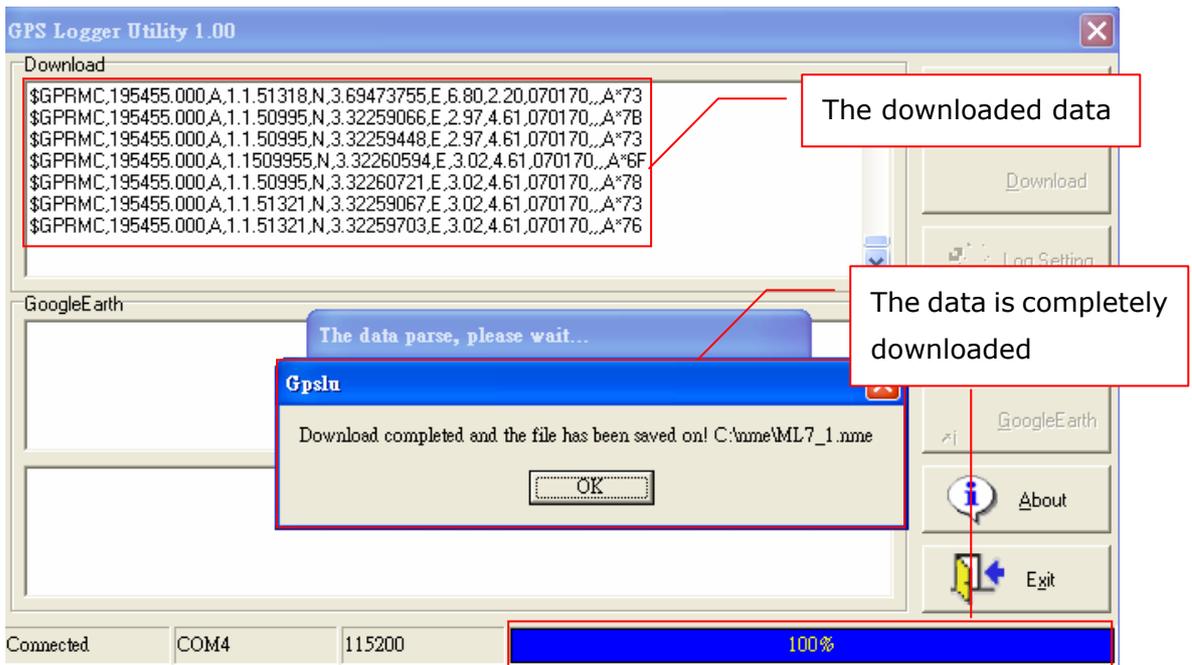
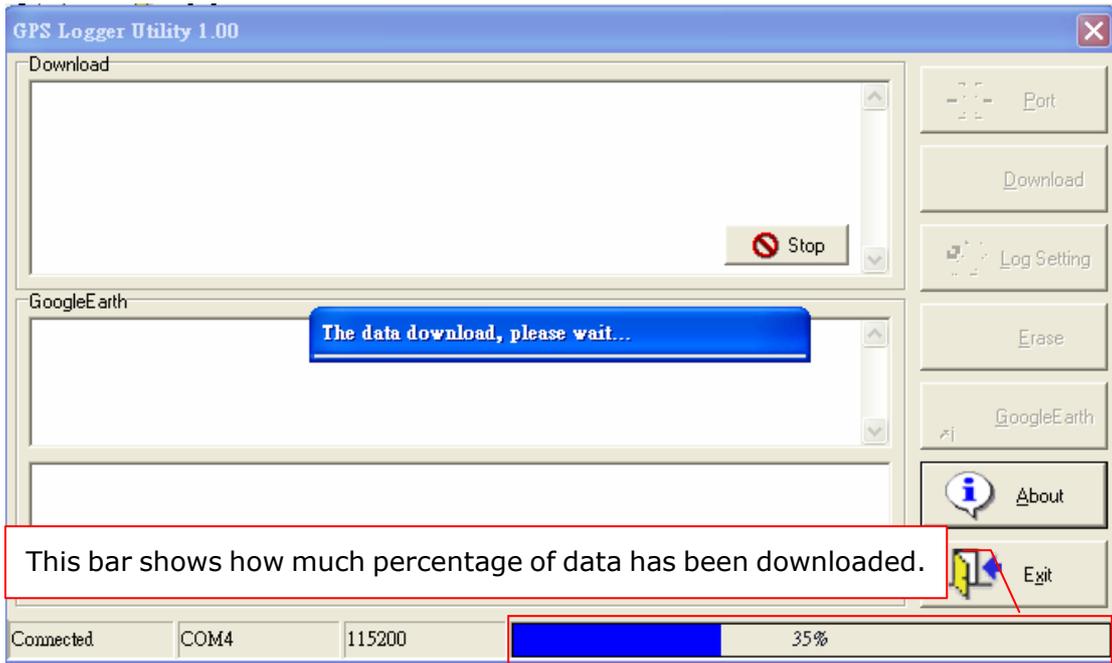
! Please install the USB driver before operating the AP utility.

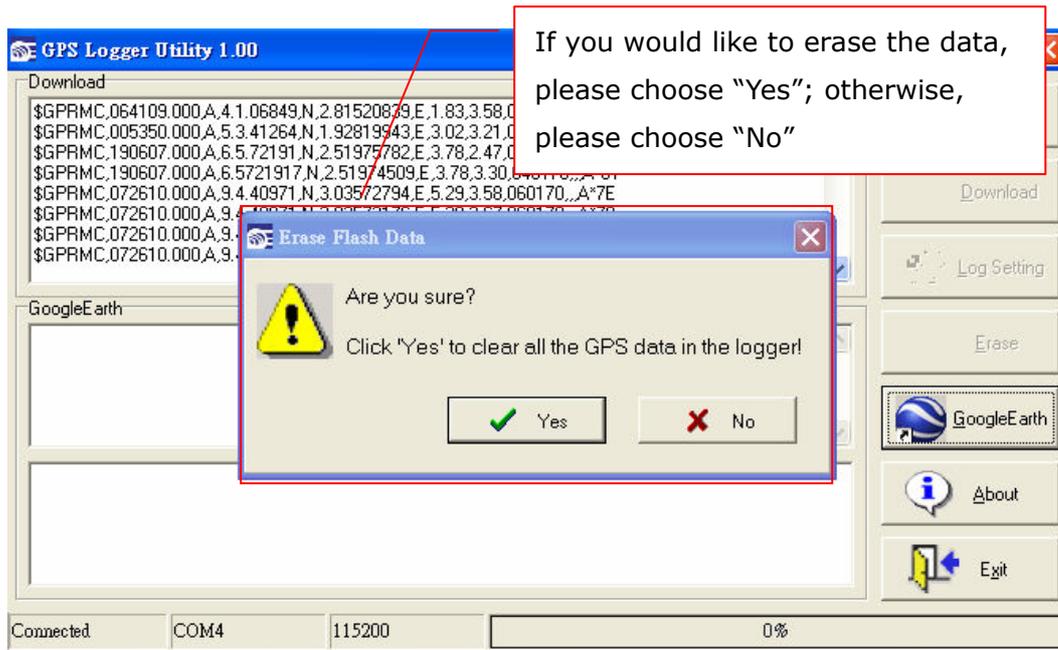
b. When the AP is installed, make the connector between the ML-7 and computer.



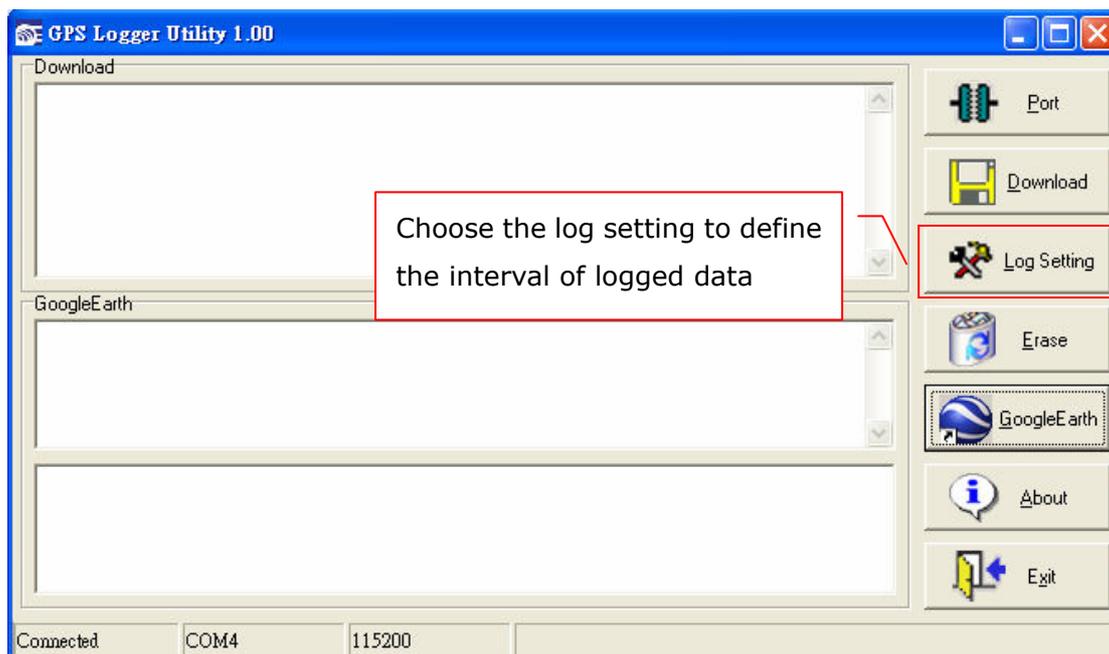
c. To download the file



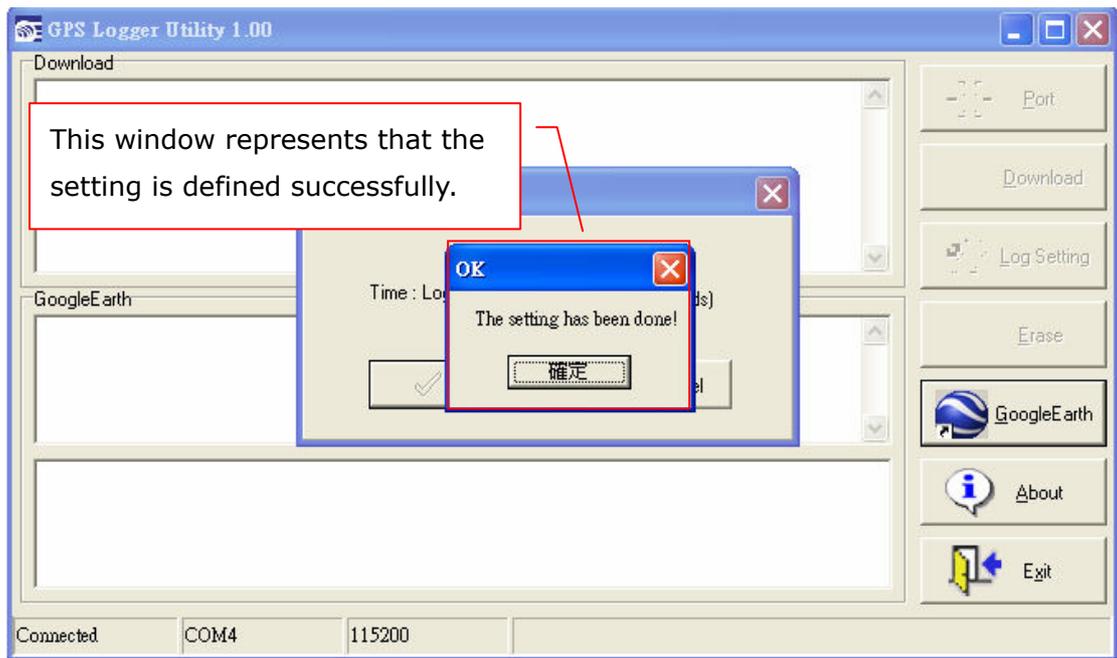
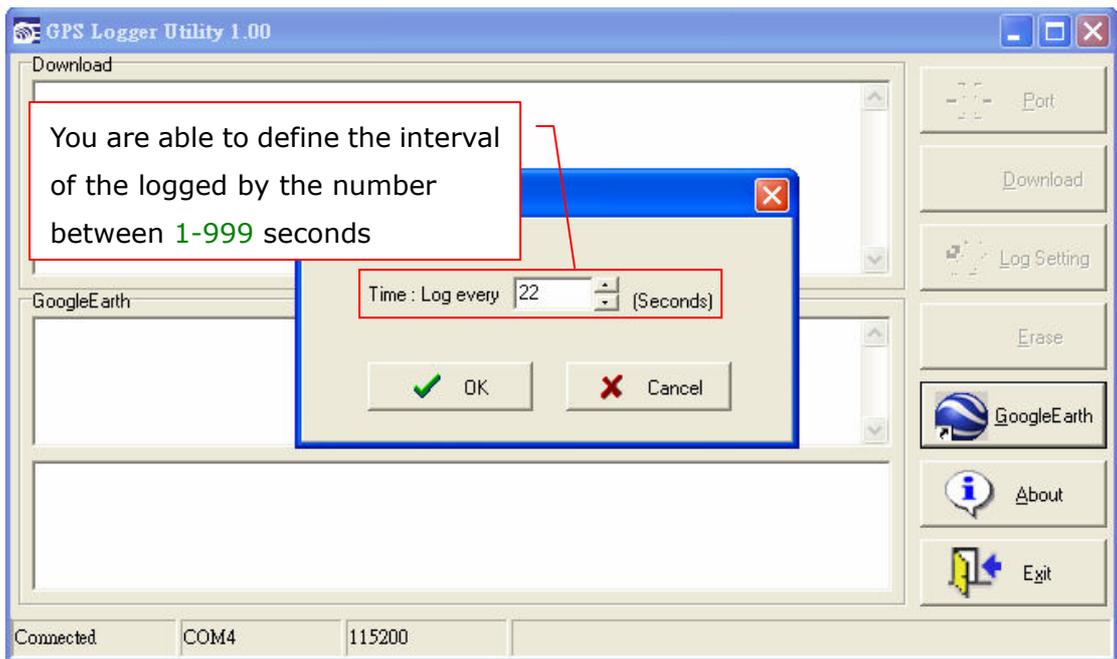




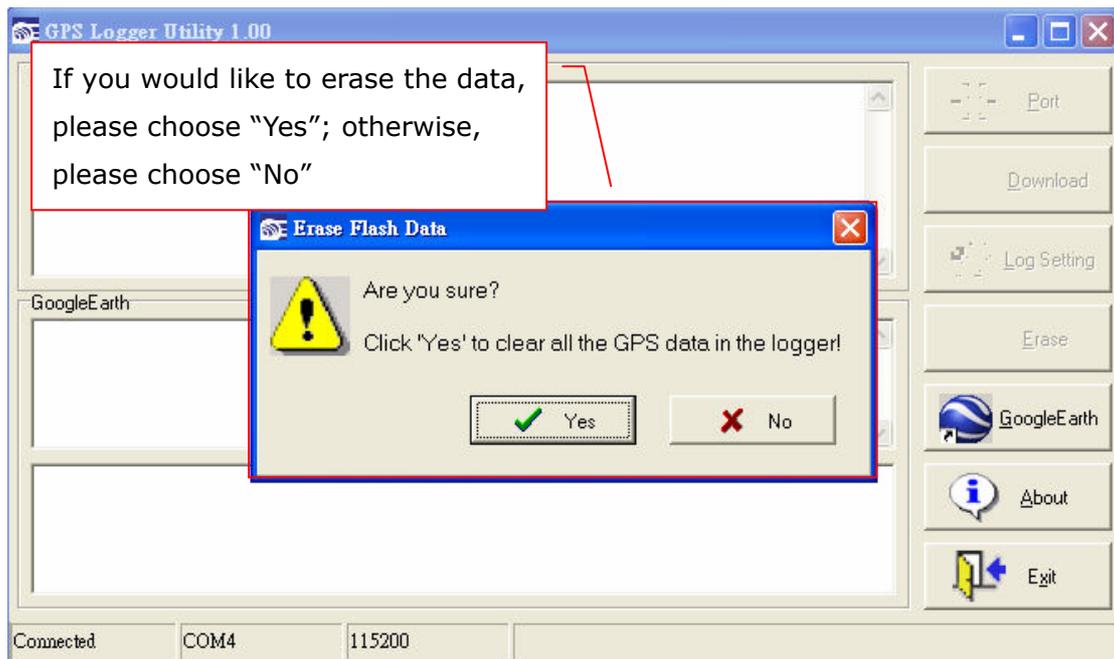
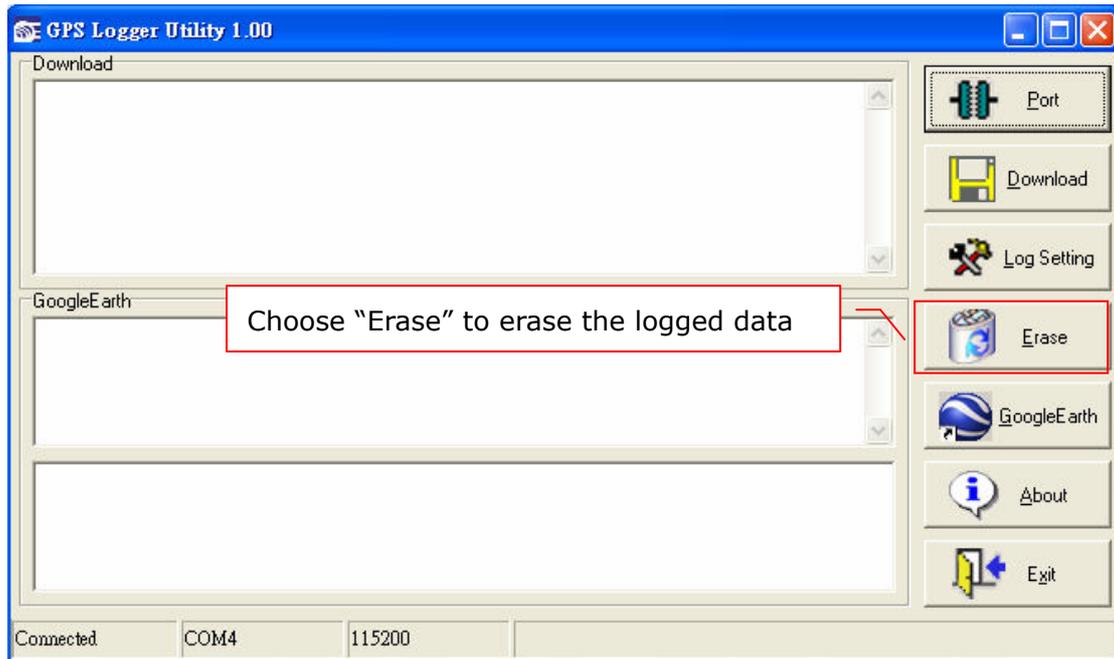
#### d. Log Setting



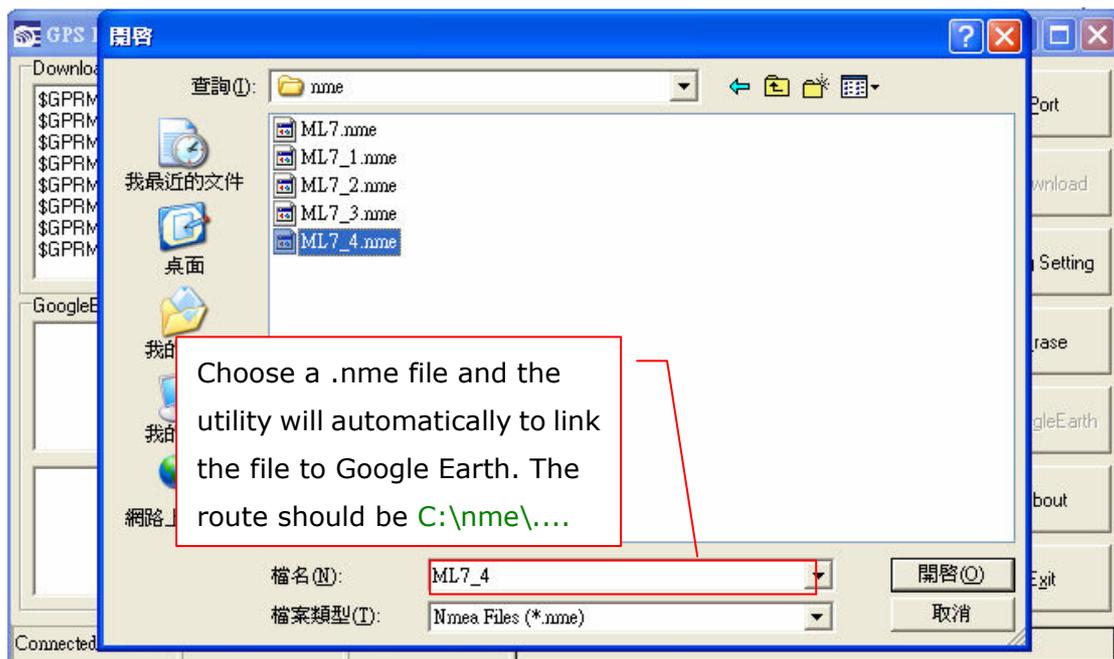
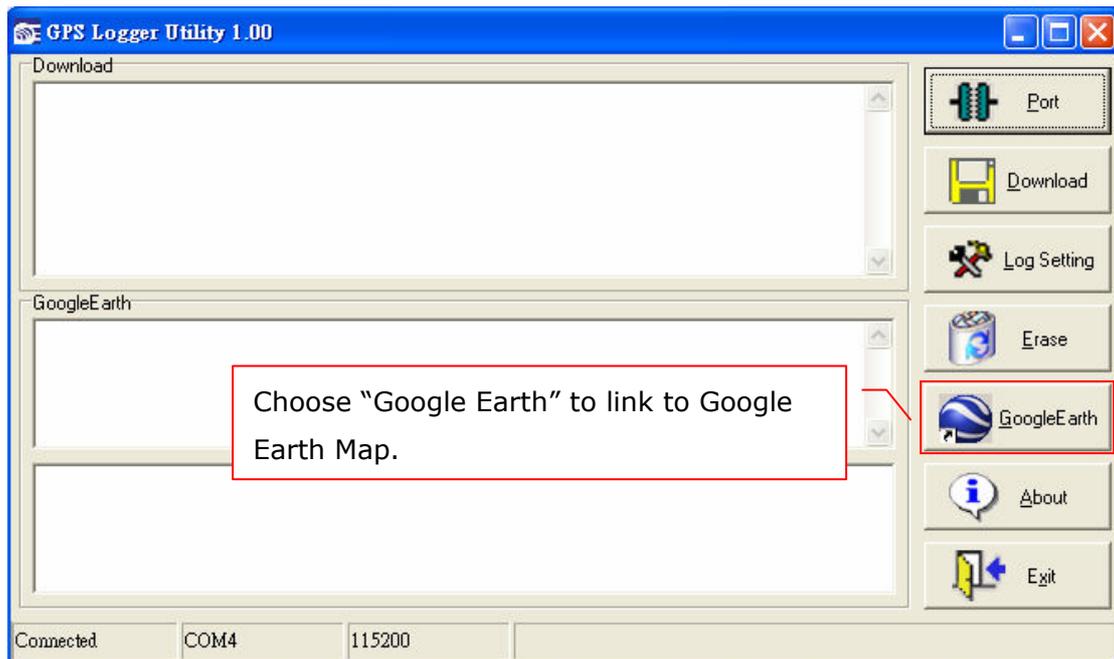
PS: The data downloaded will be fixed data only



e. To erase the data.



f. Connect to Google Earth Map



You can also download the free software from Locr. Please refer to the website link as below:  
<http://www.locr.com> to locate your digital photos and other applications.

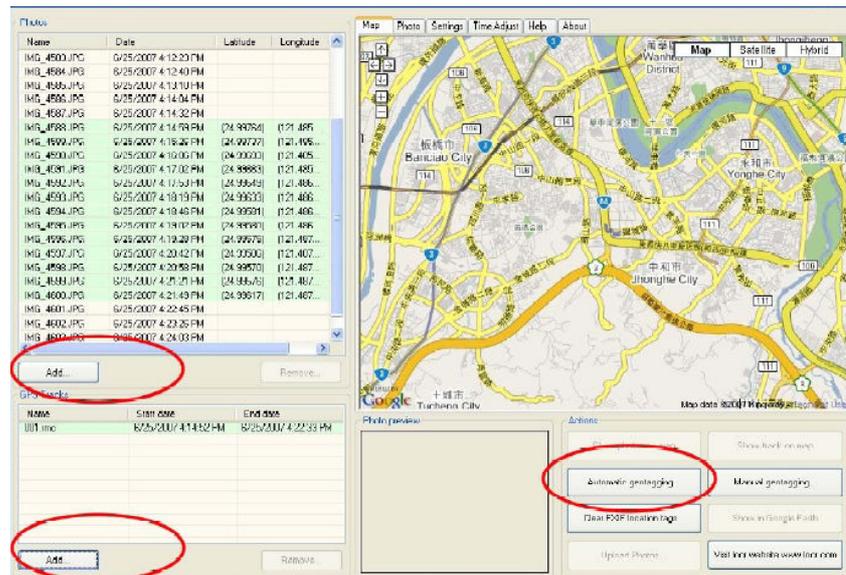
The traces will be shown on Google Map

Locr Demo:

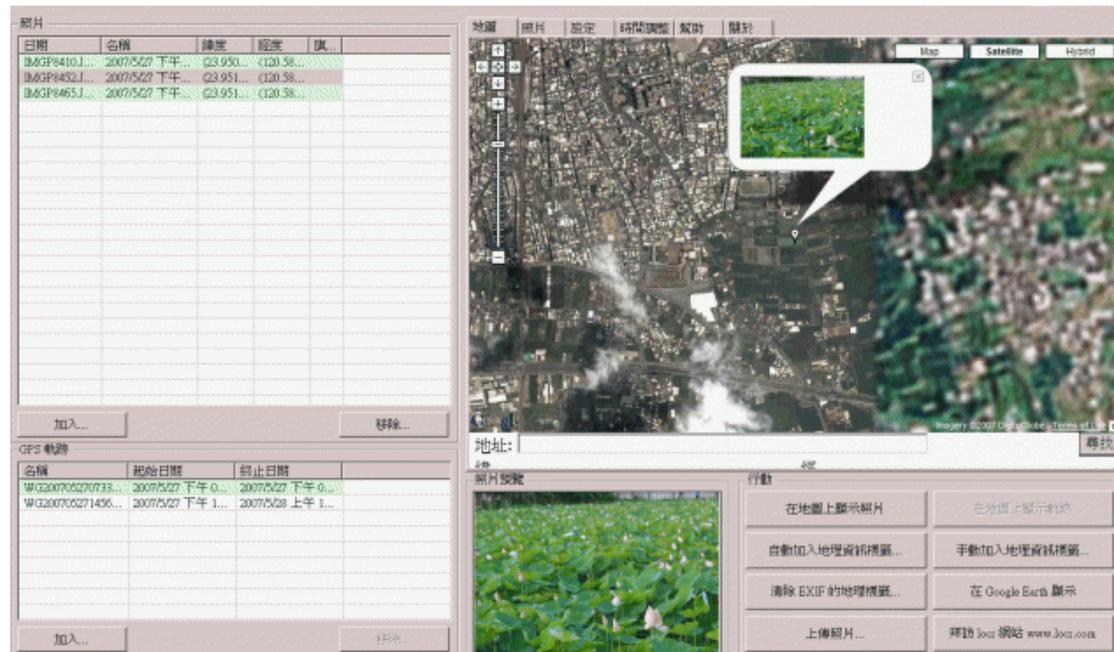


The demo window will be like following:

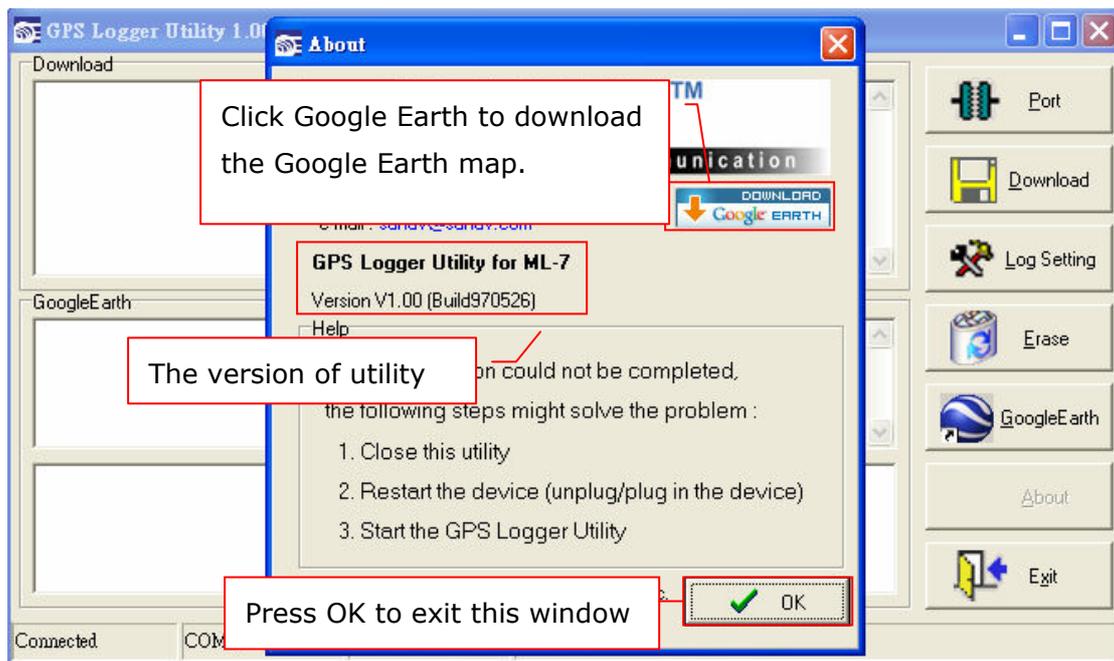
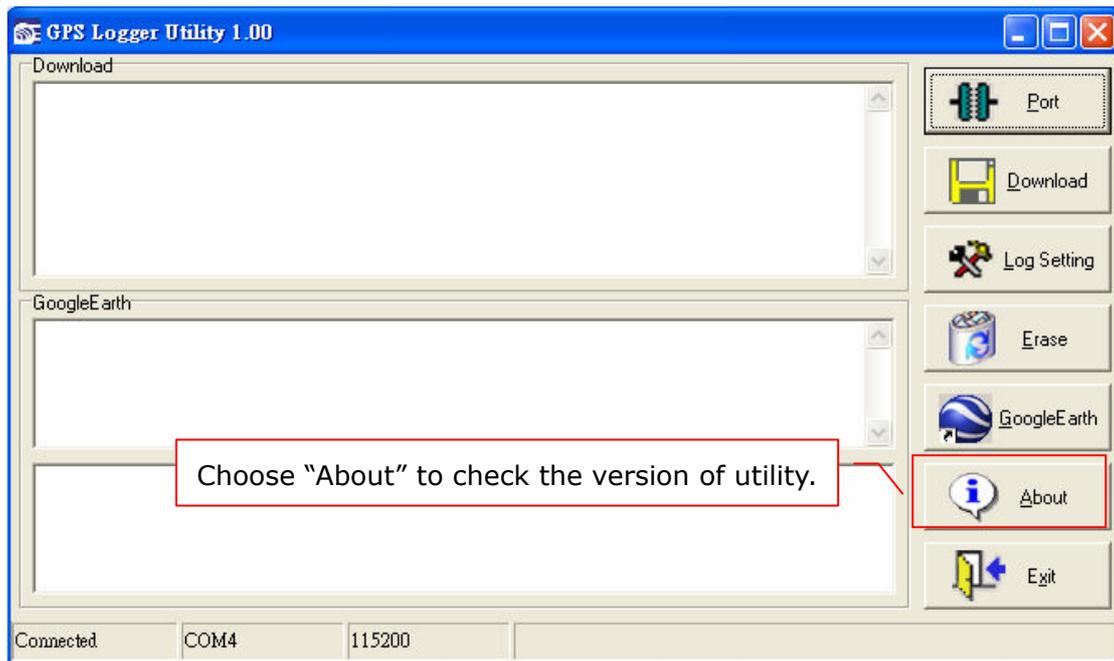
-Locate the point.



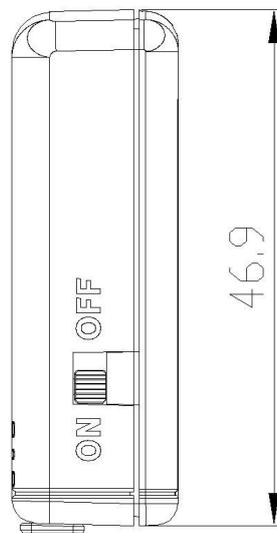
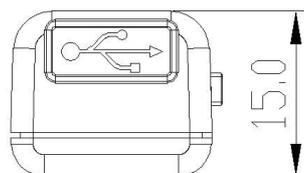
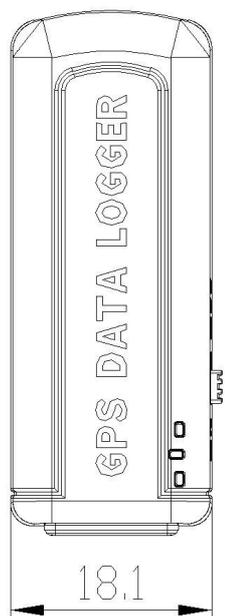
-Locate your digital photos.



g. To check the version of the utility.



## 8. Mechanical



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