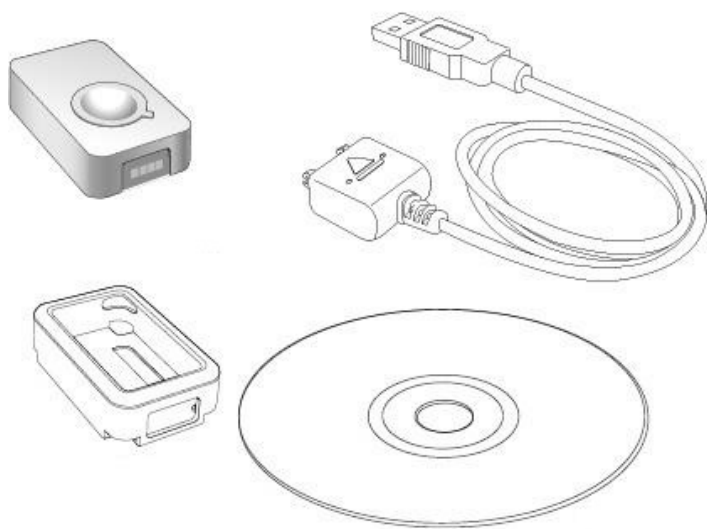# GPS Logger

GPS Logger package comes in two specifications, **GPS Logger (USB)** & **GPS Logger (Bluetooth)**. Please check the package contents as shown below before getting started.

Package contents & specifications

The **GPS Logger** package comes with 1 **@trip PC** CD-ROM, 1 GPS data logger, 1 **GPS Logger Dock/ USB Cable**, and 1 color jelly case.
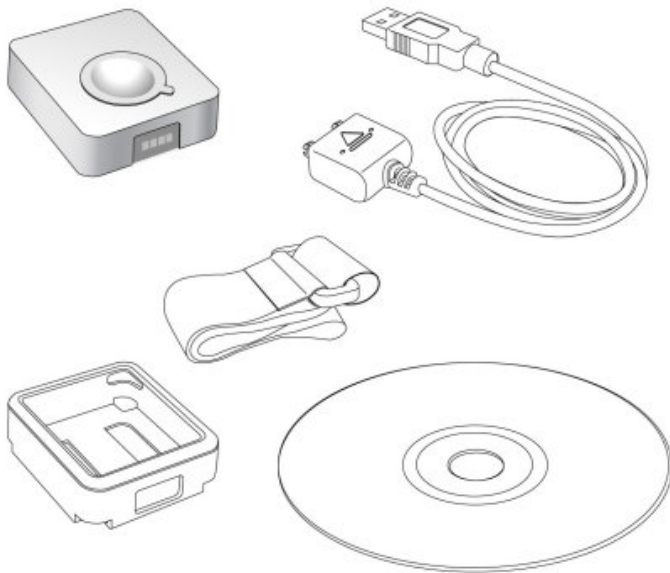

GT-120 package contents

GT-120	
Dimension	44.5 x 28.5 x 13mm
Weight	20g
Chipset	Built-in SiRF StarIII low-power chipset
Antenna	Built-in GPS patch antenna
Battery	Built-in 230mAh Lithium-ion battery
LED indicators	Blue & Red
Cold start	< 35 seconds
Warm start	< 35 seconds
Connection interface	USB 1.1
Operation temperature	-10 °C to + 50 °C
Water-resistant	Yes

GT-200e	
Dimension	46 x 41.5 x 14 mm
Weight	37g
Chipset	Built-in SiRF StarIII low-power chipset
Antenna	Built-in GPS patch antenna
Battery	Built-in 750 mAh Lithium-ion battery
LED indicators	Blue & Red
Cold start	< 35 seconds
Warm start	< 35 seconds
Connection	USB 1.1 for PC connection;
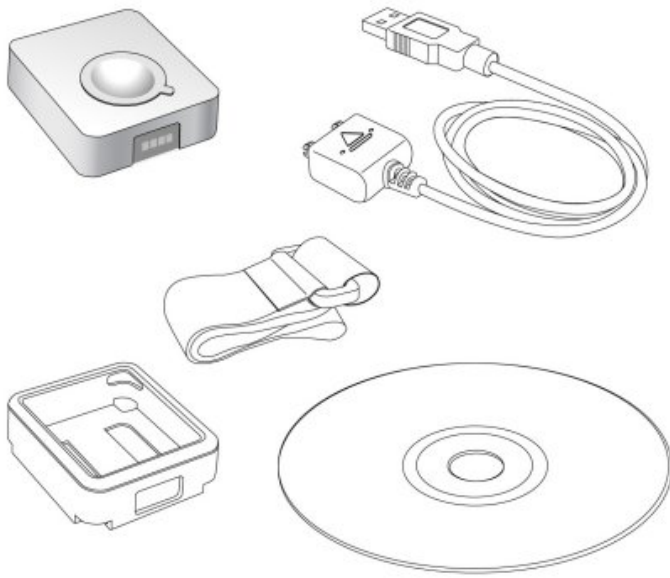
interface	Bluetooth V2.0 EDR Class 2 for PDA & mobile phones
Operation temperature	-10 °C to + 50 °C
Water-resistant	Yes

GT-200e package contents

GT-600 package contents

GT-600	
Dimension	46 x 41.5 x 14 mm
Weight	37g
Chipset	Built-in SiRF StarIII low-power chipset
Antenna	Built-in GPS patch antenna
Battery	Built-in 750 mAh Lithium-ion battery
LED indicators	Blue & Red
Cold start	< 35 seconds
Warm start	< 35 seconds
Connection interface	USB 1.1 for PC connection;
Operation temperature	-10 °C to + 50 °C
Water-resistant	Yes
Motion detection	Yes

GT-200	

Dimension	46 x 41.5 x 14 mm
Weight	37g
Chipset	Built-in SiRF StarIII low-power chipset
Antenna	Built-in GPS patch antenna
Battery	Built-in 750 mAh Lithium-ion battery
LED indicators	Blue & Red
Cold start	< 60 seconds
Warm start	< 38 seconds
Connection interface	USB 1.1 for PC connection; Bluetooth V2.0 EDR Class 2 for PDA & mobile phones
Operation temperature	-10 °C to + 50 °C
Water-resistant	Yes

GT-200 package contents
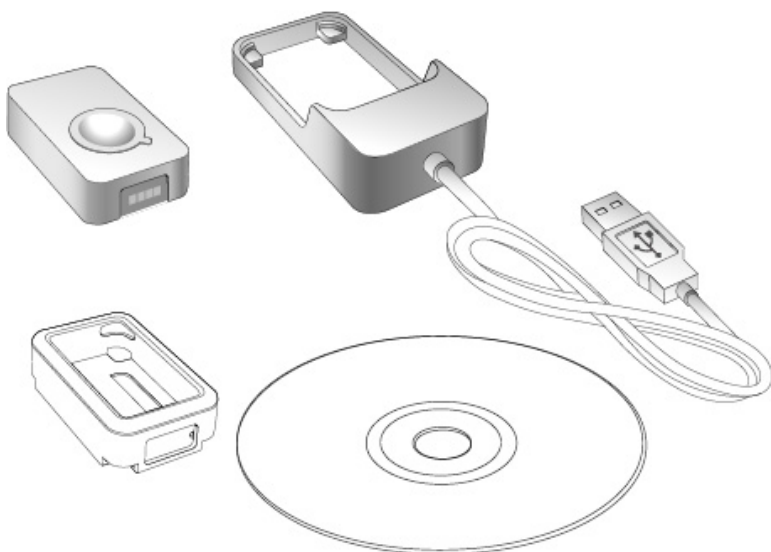
| GT-100	
Dimension	47 x 29 x 12 mm
Weight	21g
Chipset	Built-in SiRF StarIII low-power chipset
Antenna	Built-in GPS patch antenna
Battery	Built-in 230mAh Lithium-ion battery
LED indicators	Blue & Red
Cold start	< 60 seconds
Warm start	< 38 seconds
Connection interface	USB 1.1
Operation temperature	-10 °C to + 50 °C
Water-resistant	Yes

GT-100 package contents

GPS Logger Dock	**GPS Logger Dock** works both as **GT-100** built-in battery charger and data transfer medium for **GT-100**.
GPS Logger USB Cable	**GPS Logger Cable** works both as **GT-600 / GT-200 / GT-200e / GT-120** built-in battery charger and data transfer medium for **GT-600 / GT-200 / GT-200e / GT-120**.
@trip PC CD-ROM	**@trip PC** is an easy to use software tool to fast create and personalize the Travel Blog for your journey. Follow the on-screen instructions to complete the installation.
GPS Logger jelly case	Besides especially designed for broader appliances, both **GPS Logger (USB)** & **GPS Logger (Bluetooth)** also comes with a jelly case for easier wear or any

	other kind of attachment.
GPS Logger Fastening Strap	**GPS Logger Fastening Strap** allows you to tie and fasten the GPS Logger anywhere for easier travel.

Note: Considering the need for GPS Logger to be used outdoors, it is designed as a water-resistent device. Just like the watch, it'll still function normally when it gets splashed by rain or water. Although it is made water-resistent, it should **NOT** be carried under water for activities like swimming, diving, and etc. Inappropriate use of GPS Logger might cause unexpected damages to it.

Outlook of GPS Logger

GT-100 / GT-120	GT-200 / GT-200e / GT-600
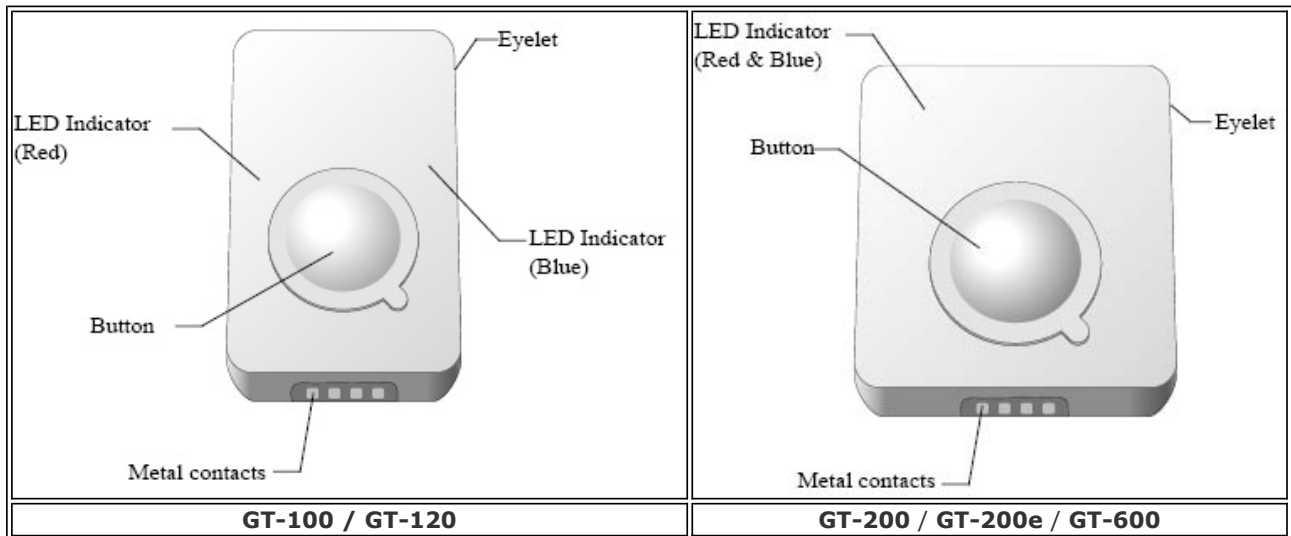
Next

Getting Started with GPS Logger

The following demonstrates how to get started with your **GPS Logger** and **@trip PC**:
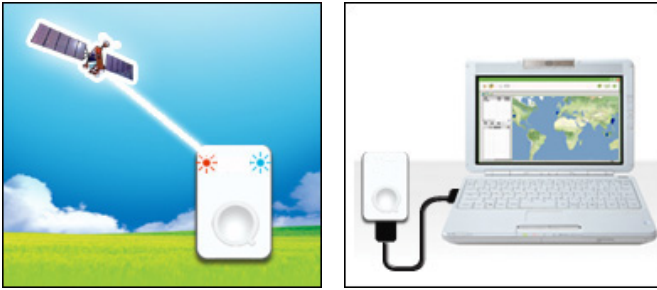
1. Install @trip PC

2. Charge GPS Logger

3. Power on

4. Get first GPS fix

5. Connect PC to import data

1. Install @trip PC

Insert the CD-ROM to the CD-ROM drive and follow the on-screen instructions to install **@trip PC**.

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2. Charge GPS Logger

GPS Logger Dock/ USB Cable serves as a charger as well as data transfer medium. Please follow the instructions shown in the illustrations below to connect your **GPS Logger** to PC and have it fully charged.

It takes about 4 hours to fully charge your **GPS Logger** for the first time. 2-hour charge is enough for later use. The red LED indicator stays on during charging, and goes off when charging is complete. Remove your **GPS Logger** when charging is complete.
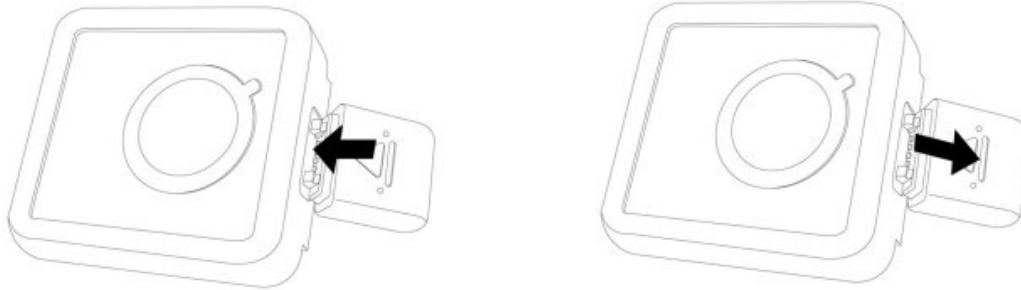
Tip: You can also use any market available standard USB car charger or USB travel charger to charge up the battery power for your **GPS Logger**.
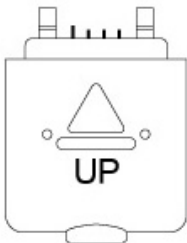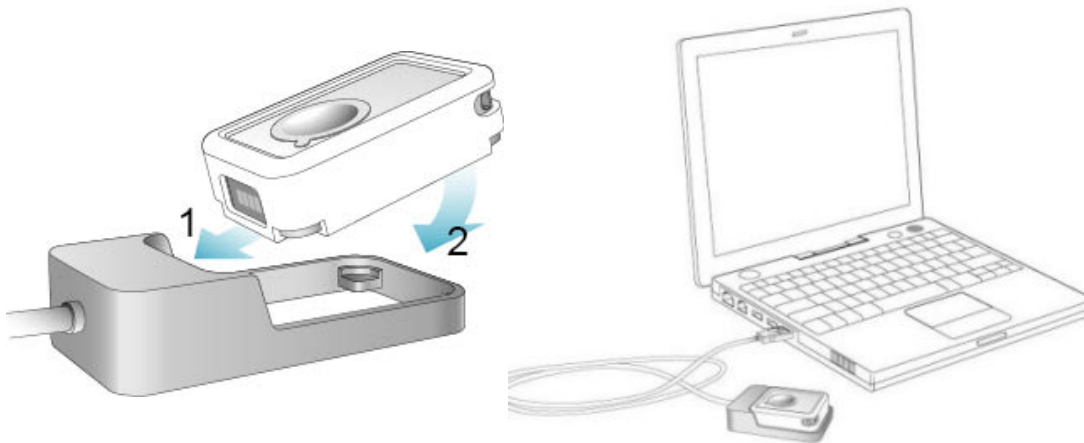

Note: One side of the USB connector marked with an arrow should face up when you intend to connect it to the device, in order to avoid unexpected damage caused by incorrect plugging.
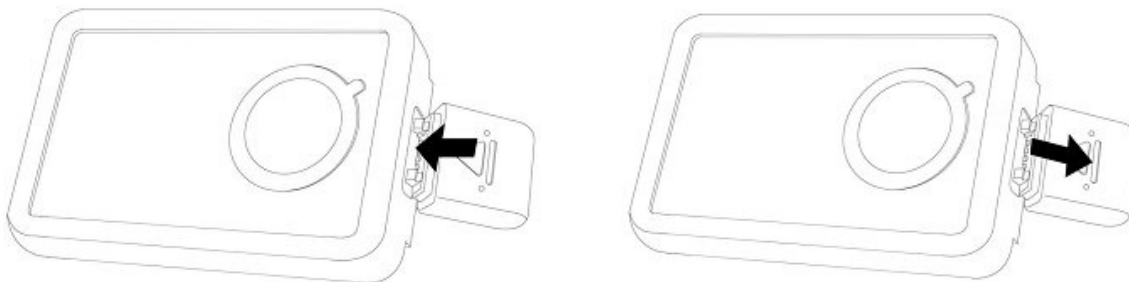
Connect & Remove **GPS Logger USB Cable**

Connect & Remove **GPS Logger USB Cable**

Install & Charge **GPS Logger**

3. Power on/off your GPS Logger

Long press the button to power on/off your **GPS Logger**. The blue LED indicator blinks once upon power-on, and the red LED indicator blinks upon power-off.

Tip: Go to GPS Logger indicators to familiarize yourself with the LED indicators.

Note: **@trip PC** automatically adds GPS information to the photos taken on your journey with fussy time mapping; therefore, setting up a correct time for your camera/ camera phone will enhance the mapping procedure.

4. Initiate your GPS Logger for the first GPS fix

It requires a clear sky for your **GPS Logger** to receive GPS signals and acquires a GPS fix. Please leave your **GPS Logger** on the balcony, the top of your car, or anyplace where there is no obstruction or shading to fasten up the GPS fix acquisition for your **GPS Logger**.

Once the first GPS fix is successfully acquired, both the blue and red LED indicators of **GPS Logger** will blink simultaneously twice, indicating that track logging has begun. **GPS Logger** will then start logging based on the tracking interval configured in hardware settings.

Note:

1. Find the LED indicator demos in GPS Logger LED indicators.
2. For more detailed information on the GPS fix, correct wear and use of your **GPS Logger**, please refer to Essentials for Beginners.

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5. Data import & @trip PC

Connect your **GPS Logger** to your computer, and launch **@trip PC** to start importing track data logged in your GPS device. Click **Import GPS Track** and follow the on-screen instruction to import the track logs saved on **GPS Logger** to your computer. Click on the imported track, and you can see it on **Google Map** in few seconds.

Note:
1. It requires Internet connection to retrieve the map data for the selected track.
2. For correct mapping of track data and photos, please make sure your camera time is adjusted prior to starting a track. If any photo taken along the track is not correctly located, please Adjust Camera Time with @trip PC, or use Photo Locator for further fixing.

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GPS Logger LED Indicators

The following lists various LED indications of **GPS Logger**:

Main indication:

Power On

The blue LED indicator blinks once.

Operation: Long press (1.5 seconds) the button to power on GPS Logger.

Note: When the device is powered on and starts tracking, the blue LED indicator blinks every 4 seconds. For GPS Loggers with firmware versions older than 3.0, the blue LED indicator blinks every 16 seconds.
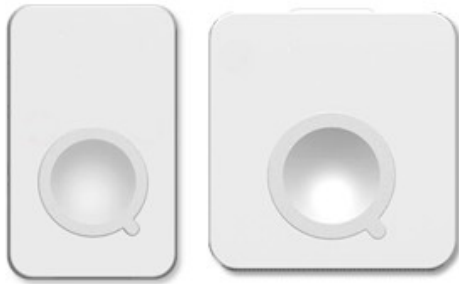
Data Logged

Both the red and blue indicators blink simultaneously twice.

Status: Device is powered on and GPS data has been logged successfully.

Power Off

Long press the button, and the red LED stays red until GPS

Logger is powered off.

Memory full / Battery low

The red LED blinks: twice / once.

BT Pairing

The blue and red LED indicators blink in turn for 5 minutes during pairing mode.

Operation: While **Bluetooth GPS Logger** is turned off, long press (5 seconds) to enter pairing mode. (Please refer to the user manual of your handset or bluetooth device for details on bluetooth pairing.)

Note:

1. If necessary, enter the passcode " **0000** " to complete pairing.

2. Once Bluetooth GPS Logger is successfully paired, it will not exit the pairing mode automatically. It is normal to see both the red and blue LED indicators flash continuously.

3. Once Bluetooth GPS Logger is connected via bluetooth, only the blue LED indicator will flash continuously.

4. Once bluetooth connection is enabled on GT-200e, it will start logging by default.

5. If bluetooth connection fails, GT-200 Bluetooth GPS Logger will turn off automatically after 5 minutes.

Others:

Charging

The red LED indicator stays on during charging and goes off when charging is complete.

Status: The device is connected to power sources, such as car charger or computer USB port.

Push-to-log

The blue LED indicator blinks once, followed by **both** indicators blinking simultaneously twice.

Status: Device is powered on and functions normally.

Operation: Press the button once to log the current GPS information.

Data Transfer

The red LED indicator stays on, and the blue LED indicator blinks randomly.

Status: The device is connected to PC and transferring data.

GPS Receiver

The blue LED indicator blinks steadily.

Status: Receiving GPS information for the connected navigation device/ software.
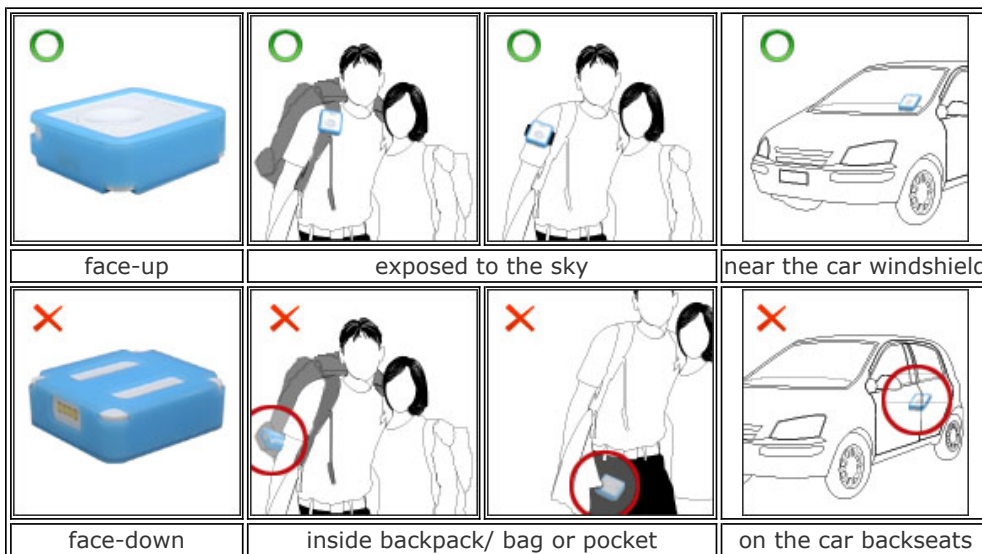
Essentials For Beginners

Before hitting on the road with your **GPS Logger** , please read the following information thoroughly to ensure the **GPS Logger** to work properly, lest any incorrect operation ruin your precious travel memories.

GPS Logger wear & attachment

When taking **GPS Logger** from indoors to outdoors, it usually takes longer to get a GPS fix. Please place your **GPS Logger** face-up toward the sky and press the button to acquire a GPS fix.

Tip: If **GPS Logger** functions normally and gets a GPS fix, both the red and blue LED indicators blink simultaneously twice, indicating the current GPS information is logged successfully to the device memory.

Please always place your **GPS Logger** exposed to the open sky to ensure the successful GPS fix acquisition. Refer to the illustration below to expose your **GPS Logger** as much as possible in the open sky to ensure stable and successful GPS fix acquisition.

face-up	exposed to the sky	near the car windshield
face-down	inside backpack/ bag or pocket	on the car backseats

GPS Logger setup

GPS Logger: **GPS Logger** is water-resistant, designed for a broader use. Multiple tracking modes with different data logging intervals work for both short & long journey.

Note: Click ⊞ on the main menu bar of @trip PC to configure your GPS Logger. For detailed setup information, please refer to Hardware & Software Settings.

Camera/ Camera phones: **@trip PC** automatically adds GPS information to the photos taken on your journey with fussy time mapping; therefore, setting up a correct time for your camera/ camera phone will enhance the mapping procedure.

Note: Besides auto-mapping, you can also manually map the photos to your Trip. For more information, please refer to Compose Trip.

Safety information

Please do not leave your **GPS Logger** exposed to high temperature for a long time, such as on the inside of the windshield of a car at noon in the summer, to avoid the overheat to cause any device malfunction or danger.

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GPS Classroom

What is GPS: Global Position System (GPS) is developed and operated by the Department of Defense (DOD) of the United States, on which the accuracy and maintenance of this system fully depends. Any change made by the authorities might influence the accuracy and performance of the GPS equipments.

How GPS works: GPS provides satellite signals which are specially coded for the computation in a GPS receiver to produce the position, velocity and time. Usually it requires four GPS satellite signals to computer correctly the position in three dimensions and the offset time of the GPS receiver's clock.

Limitations on GPS reception: Initial or any use after a longer interval over four hours takes a few minutes for a successful location. Any obstruction above or around the receiver, such as high buildings in the neighborhood, or bad reception location, such as in a tunnel or in the building, will influence the time needed for a successful GPS location.

Cold Start: Cold start of the GPS device refers to the state of the tracker when time and position are known to within some limits, the almanac known, and the ephemeris unknown.

Example: If the GPS device has been off for a few hours, and the ephemeris data is known for at least three satellites, the start up will be a warm start and fix the positional in 10 - 20 seconds. Therefore, if ephemeris data for only 2 or less satellites is known it's a cold start and acquisition will take as much as a few minutes.

Warm Start: Warm start of the GPS device refers to the state of the device when time and position are known to within some limits, the almanac known, and at least 3 satellite ephemeris are known from previous operation.

Example: If the GPS device has been off for only a few minutes, the ephemeris data for all the satellites will be known and therefore the GPS device will fix the positional in a matter of seconds.

Note: The almanac data is an estimated (computed) data and can be valid for months while the ephemeris is only valid for 3 - 6 hours.

Note: Actual acquisition time depends on the terrain and satellite coverage.

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Use GPS Logger as GPS Receiver

A **GPS Logger** serves not only as a GPS data logger that records all the GPS data on your journey but also works as a GPS receiver for many navigation software by third parties. Connect it to any PC installed with navigation software to work both together as a GPS navigation system.

GPS Logger with PC

1. Slide **GPS Logger** onto **GPS Logger Dock/ USB Cable** and connect it to your PC USB port.
2. Please go to **Start**-> **Settings** -> **Control Panel** -> **System** -> **Hardware** -> **Device Manager** -> **Ports (COM & LPT)**, and note down the com port number of "**GPS Logger USB Com Port**" device.
3. Please refer to the user manual of your navigation software to set up the transfer port and set the Baud rate between 9600 and 115200.
4. The blue LED indicator starts to flash when the setup is completed. **GPS Logger** now works as GPS receiver for your navigation software.

Note: When you connect **GPS Logger** to the PC installed with navigation software, please select the specific COM port that **GPS Logger** is assigned.

Bluetooth GPS Logger

1. During **Bluetooth GPS Logger** is turned off, long press (5 seconds) to enter pairing mode. Long press (1.5 seconds) the button to power off **Bluetooth GPS Logger**.
2. The blue and red LED indicators blink in turn for 5 minutes during pairing mode.
3. Once **Bluetooth GPS Logger** is successfully paired, it will not exit the pairing mode automatically. It is normal to see both the red and blue LED indicators flash continuously.
   *If necessary, enter the passcode "**0000**" to complete pairing.
4. Please refer to the user manual of your navigation software for the detailed information on using **Bluetooth GPS Logger** as GPS receiver for your navigation software.