探险家™ CŌLUMBUS™

V-1000
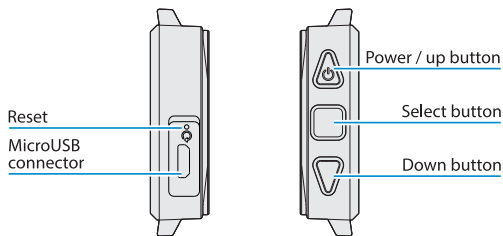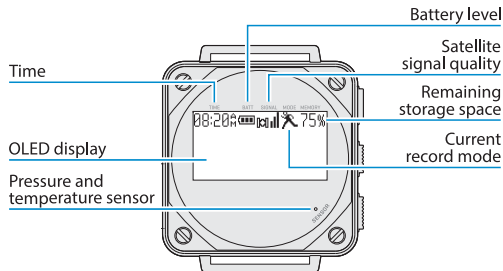## Wearable GPS Data Logger
Quick Start

⚠ **CAUTION**

Thank you for choosing our product.

This manual is intended to guide you through the safe and correct use of the product and its accessories, avoiding improper operations that may result in injury of yourself or any other person or cause device damage.

As a precision electronics, the product contains no component that can be repaired by your own. Any attempt to disassemble the product will void the original manufacturer's warranty.

The device is not waterproof. Avoid violently shaking the device or dropping it from a high place. Do not try to damage or puncture the device; otherwise, electrolyte in its built-in battery may leak or combust, causing injury or environmental pollution.

Parts Description

- Battery level
- Satellite signal quality
- Time
- Remaining storage space
- OLED display
- Current record mode
- Pressure and temperature sensor

08:20 ⣿ 75%

- Reset
- MicroUSB connector
- Power / up button
- Select button
- Down button

Tips.

- When the "●" appears on the screen, press "select" button first, and use the "up" and "down" buttons to view more information.

- Hold the "down" button for 3 seconds, you can start recording one running track immediately at any time.

- In the menu interface, long press the "select" button, to exit the menu quickly.

- If the device stop responding, you may need to reset it, use pin to press the reset hole.

Recoding your first track

Please setup the following features for the first use:

1 Set time zone: "SETTINGS" — "Setup" — "Time Zone".
e.g.: America Eastern Standard Time UTC-5:00

2 Profiles: " SETTINGS " — "Profiles" — "Gender, Height, Weight".

One Key to start recording a running track

1 You must wait for GPS location fix in an open area, the first fix usually requires 1-5 minutes.

2 By long pressing the "down" button at any time to **start recording a running track immediately**.

```
🏃✎      1Kcal
PACE  03:25
5m        00m01s
```

3 Hold the "down" button again to **end and save the track**.

• One key to start recording only applies to the running mode. In any record modes, hold the "select" button to begin recording track and hold the "select" button again to end and save the track.

• V-1000 offers 6 types of record modes: "Walking" (5m interval), "Running" (10m interval), "Cycling" (20m interval), "By car" (50m interval) and "By plane" (500m interval) and "User Defined" mode. In the track record page, short press the "select" button to select.

```
🏃‍♀️ ⬍ Walking    🚗 ⬍ By car
🏃 ⬍ Running    ✈ ⬍ By plane
🚴 ⬍ Cycling    👤 ⬍ User Defined
```

• During recording the track, you can short press the "select" button, to mark the current location as the point of interest (POI).

• You can still check data in other pages once the recording mode starts.

• Different record modes will display different statistics.

POI navigation

Pre-store or check the coordinates of one POI then you can be navigated to the destination, never get lost even in places without maps.

Store the current point as the point of interest (POI)

Enter the "POI navigation" page and wait for GPS positioning.

1 Hold the "select" button then select the place to be stored, for example "🏠".

```
▲  Choose Icon
🏠
▼
```

2 Press the "select" button again to save the current location as POI.

```
▲  POI Marked
🏠 N 10°00'00."
▼ E 20°00'00."
```
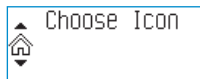
3 The screen displays how to return back immediately.

4 V-1000 offers 4 "user-defined" locations. You can manually enter your target destination, with the format of "degree, minute, second".

```
1⚑  2⚑  3⚑  4⚑
```

```
▲  Enter Location
🏠 N 10°00'00."
▼ E 20°00'00."
```

Retrieve the POI:

1 Press the "select" button to select the POI to retrieve.

2 The screen displays data about returning back immediately.

The direction of POI ⟶ ⬆ **25.0Km** 🔒 ⟵ Straight-line distance to POI

Icon of POI ⟶ 🏠 **50km/h** ⟵ Direction lock identification

Estimated time en route ⟶ **ETE.30:00** ⟵ Current speed

• V-1000 offers 12 POI and 4 user-defined locations.

• The coordinates of POI are saved to the <POI> directory of the device memory.

• When the distance is less than 10 meters between your current location and the destination, "Arriving" appears.

• When the speed exceeds 3km/h, the lock identification appears on the screen. This means the relative direction of the indicated destination is correct.

• If two arrows appear simultaneously, it means the destination locates in the direction of the two arrows.
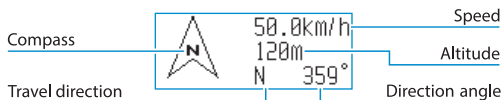
Press the "up" and "down" button to switch among the following pages.

The sign of "⟡" means to be visible only in the GPS mode.

1 General information page

Altitude — 120m 18.0°C — Temperature
Time — 10:00:00 AM
Date — 16-01-01 FRI — Week
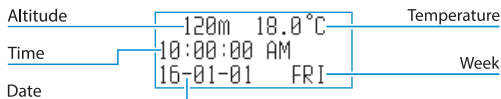
2 Current information page ⟡

Speed — 50.0km/h
Compass — 120m — Altitude
Travel direction — N 359° — Direction angle

- Please align the upper part of V-1000 directly with the travel direction.

3 Coordinates information page ⟡

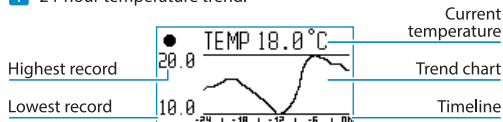Latitude — N 10°00'00.0"
E 20°00'00.0" — Longitude
Pdop value — Accuracy:2.0
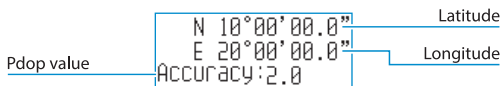
- The World Geodetic System is "WGS-84".
- "Pdop value" means positioning accuracy, and the smaller the value, the higher the precision.

4 Trend chart ●
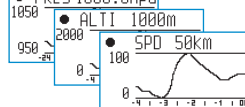
1 24-hour temperature trend.

Current temperature
TEMP 18.0°C
Highest record — 20.0 — Trend chart
Lowest record — 10.0 — Timeline
-24 -18 -12 -6 0h

PRES 1000.0hpa
1050
950
ALTI 1000m
2000
0
SPD 50km
100
0
-4 -3 -2 -1 0h
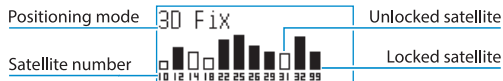
2 24-hour barometric pressure trend.
3 4-hour altitude trend.
4 4-hour average speed trend. ⟡

- If the barometric pressure curve continues to increase within 8 hours, atmospheric pressure is rising gradually which indicates the weather is getting better. Vice versa. **The measurement of the barometric pressure should be done in the same altitude.**
- The temperature is directly influenced by **body temperature, humidity and sunshine.**

5 GPS satellite information page ⟡

Positioning mode — 3D Fix — Unlocked satellite
Satellite number — Locked satellite
10 12 14 18 22 25 26 29 31 32 99

- Positioning modes: 2D mode and 3D mode.
- Satellites with numbers exceeding 99 are shown as 99.
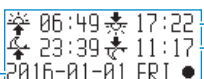
6 POI navigation page ⟡
Please see P2.

7 Track record page ⟡
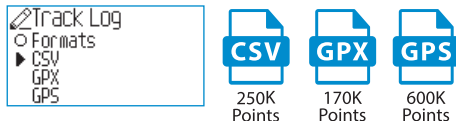Please see P3.

8 Astronomical information page ●

```
☀ 06:49 ☽ 17:22      Sunrise and sunset time
☾ 23:39 ☽ 11:17      Moonrise and moonset time
2016-01-01 FRI ●
```

Date, week

- **Please set the correct time zone before using this function.**
- The display of "--:--" indicates nothing happens on that day.

Brief introduction of settings

```
✎Operating Mode
▶ Sensor Mode
▷ GPS Mode
```

```
△ Return
□ Power Off
▽ Mode Switching
```

- There are two types of "Operating modes": "Sensor mode" and "GPS mode". When the GPS function is not used, please choose "Sensor mode" to save battery power.
- Hold the "select" button to go back to the general information page.
- Hold the "power" button then the "down" button to **switch between modes**.

```
✎Track Log
○ Formats
▶ CSV
  GPX
  GPS
```

CSV	**GPX**	**GPS**
250K Points	170K Points	600K Points

- Formats are available for "Track log"—"Formats": CSV (plain code format), GPX (common exchange format) and GPS (compressed format). Note that although GPS format allows to save the storage space more than 1 time, only the "TimeAlbum Pro™" supports importing GPS format.

- "Settings"—"Setup"—"Auto ON/OFF"—"On" means: V-1000 is automatically power ON/OFF, when connecting / disconnecting to the data cable.
- "Track log"—"User defined"—"Speed mask" means: only record the track point exceeding the value.
- "Track log"—"Auto start"—"On" means: after automatic startup, track recording will begin once positioning.
- "Settings"—"Setup"—"Altimeter Cal.", when "Off" is selected, the altitude under "Sensor mode" is measured by the barometric sensor, while the altitude under "GPS mode" is measured by GPS. When "On" is selected, the system will prompt you to manually input the current altitude for calibration (please refer to the accurate altitude values obtained from the map or landmark).

Play back the track

Download the "TimeAlbum Pro™"

Please visit the following link to download the latest applications: http://cbgps.com/download.htm

Read the track

Removable Disk (E:)

- V-1000 is featured by USB direct reading, only need to connect it with the computer, click and open the disk.
- In order to avoid data loss, please **shut down V-1000** before connecting to the computer for data transfer.

Track file naming
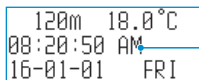

2016-01   01082050.CSV

e.g.: The track recorded in January, 2016 is saved in the "2016-01" folder. "01082050.CSV" means that CSV track is firstly recorded at 08:20:50 on 1st January.

Track playback and editing

Open "TimeAlbum Pro™", the imported track can be played back or edited on the map.

Geotagging photos

120m   18.0°C
08:20:50 AM
16-01-01   FRI

08:20:50

- Using V-1000 GPS time as the reference, you need to set the digital camera clock accurate to seconds.
- **Setup V-1000 before use. "Settings"—"Track log"—"User defined"—"By Time"—choose "1 second" as time interval.**
- Please carry V-1000 with you for outdoor shooting.
- If you select add photos under shooting track, "TimeAlbum Pro™" will add the GPS coordinates to the photos, as well as display the shooting location on the map.

Specifications

Waypoints amount *1	Approx. CSV: 250,000 Points; GPX: 170,000 Points; GPS: 600,000 Points
Duration *2	Approx. Sensor mode: 1 week; GPS mode: 16 hours
Acquisition times *3	Hot start: 1s, Warm start: 32s, Cold start: 35s
GPS accuracy *3	Horizontal: 3.0m/CEP(50%); 8.0m/CEP(95%)
Geodesics	WGS-84
Power consumption	DC5V, 300mA
Dimensions (W×H×D)	44.0×44.0×13.6mm (excluding the protruding part)
Weight	29g (excluding the watch strap)
Watch strap	22mm, NATO Standard

*1   The recordable quantity is an approximate value and may slightly vary from different conditions.
*2   When the "Screen off" starts up.
*3   The test was done outdoor, in an open area.

On content unmentioned in the instruction, please visit the official website at any time to learn about the latest use skill and information.
Welcome to send the product use experiences to columbusservice@hotmail.com, we will share them on the official website.