INSTRUCTION MANUAL
Version 1.0

Camera Geotagger
For Nikon or Canon
GPS plus Beidou
Barometric altimeter
Position Tracing Logger
Shutter Release Remoter
LCD display
Bluetooth technology
GPS 北斗定位接收器
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Introduction

Thank you for your purchase of a Solmeta GPS receiver GMAX. The GMAX Receiver can geotag your shots and record the routes of your travel. Easy to use!
Be sure to read this manual thoroughly before use.
Highlights

- GPS/BDS information can be checked in LCD screen in real time, especially the signal strength and the number of the satellites can be displayed.
- GPS plus Beidou (BDS), double mode positioning, acquire GPS/BDS signal faster, positioning more quickly, more accurate.
- Triaxial geomagnetic sensor and triaxial acceleration sensor used to calculate direction.
- Atmospheric pressure sensor ensures accurate altitude, the altitude can be calibrated.
- Built-in high-capacity lithium rechargeable battery, a full charge supports 18 hours continuous work on the condition of the backlight and indicators all are off.
- The receiver will automatically switch to use the camera’s power when the internal battery reaches a low level.
- “Indoor location” function, re-use the last received GPS/BDS information when there is no GPS/BDS signal. Or, Indoor location can be disabled.
- In Auto working mode, the GMAX is on or off following the connected camera’s on or off.
- Detachable connecting cable allows different cable to use with different Nikon camera models.
- 4GB memory keeps a record of location information along the traveled route.
- The receiver is equipped with Bluetooth. While a “GMAX-Remoter” APP installed in your mobile phone, the receiver can communicate with the APP and used as a wireless remoter to realize the focus and shutter release on the camera.
Features

Geotagging Images and Adding the Shooting Direction
When the receiver is attached to the camera, the location information (latitude, longitude, elevation) and shooting time (UTC, Coordinated Universal Time) can be added to the images as they are taken.

Images can also be tagged with the shooting direction by using the receiver’s digital compass.

GPS/BDS logger
The receiver can be used as a tracing logger which keeps a record of location information along the route traveled. Build in 4GB memory card, the user no longer worry whether the storage space is enough or not. The 4GB memory supports more than 170 days continuous log record at the interval of 1 sec.

Using as an accuracy clock
The receiver can be used as an accuracy clock. The accuracy is based on the time which could be adjusted by GPS/BDS intermittently.

Timer release
The receiver can be used as an external timer release device when it connected to a camera. You can set the shooting start time, shooting end time and the interval via the custom setting.

Wireless remoter
While a Solmeta “GMAX-Remoter” APP installed in your mobile phone, the GMAX and your mobile phone can be used together as a wireless remoter. (See page 34)
Packing list

Confirm that the package contains the following items:

- Cable-GD for Ten-pin remote terminal
- Cable GE for Nikon D90
- Cable GF for Accessory terminal
- GMAX Storage bag
- Manual
- USB cable for charging & downloading logging data

Data cables (Connecting cables)

- Cable-GD for Ten-pin remote terminal
- Cable GE for Nikon D90
- Cable GF for Accessory terminal

Note
There is only one data cable in the standard package.
Nomenclature

- **Down Key**
- **Enter Key**
- **Up Key**
- **Bluetooth/Log indicator**
- **GPS/BDS acquisition indicator**

- **Power/Home Key**
- **Data/USB Terminal**

- **Mounting foot locking lever**
- **Release button**
- **Contacts**
- **Mounting foot locking pin**
Charging

The receiver is equipped a high-capacity lithium rechargeable battery, a full charge supports more than 18 hours of continuous work. The receiver can be charged by using any USB port that provides standard 5 volts.

Note

- 3-4 hours for a full charge. The battery icon 🍃 in the LCD shows the battery level.
- The current voltage of battery can be checked anytime in custom setting.
- When the power close to run out, the battery icon 🍃 will flash. After about 10 minutes, the receiver will automatically switch to use the camera’s power and the battery icon will not be displayed in the LCD.
Turning the Receiver On

To turn on the receiver, press \( \text{ON} \) for more than 3 seconds until the LCD shows

![LCD showing firmware version and coordinates](image)

The firmware version will be displayed first, and then the latitude and longitude will be displayed in the LCD.

Turning the receiver off

1. Short press \( \text{UP} \), the LCD shows a flashing \( \text{ON} \).
2. Short press \( \Delta \) or \( \nabla \) until the LCD shows a flashing \( \text{OFF} \), and then short press \( \leftarrow \) to turn off the receiver.
3. In some special situations, such as the receiver is software frozen and it cannot be turned off via upon procedure. In this case, the receiver can be forced off by pressing \( \text{ON} \) and \( \leftarrow \) together.

Acquiring GPS/BDS signals

To acquire GPS/BDS signals, bring the receiver outdoors where the sky is unobstructed and aim it up. Turn on the receiver to start automatic GPS/BDS signal acquisition. To check the acquisition status, watch the GPS/BDS indicator.

**Fast red blinking:** Signal not acquired

**Slow green blinking:** Signal acquired, 2D positioning fixed

**Stable green:** Signal acquired, 3D positioning fixed

When the receiver is searching the signal, a flashing \( \square \) is displayed in the LCD. Once the signal acquired, the \( \square \) will be stable and the latitude, longitude will be displayed in the LCD accordingly. The number in the top left indicates how many satellites are used.
**Geotagging Image as you shoot**

Connect the GPS/BDS signal acquired receiver to a compatible camera. Take photo as usual, the images will be geotagged as you shoot. The images can also be tagged with the shooting direction.

1. Turn off the camera.
2. Insert the receiver’s mounting foot fully into the accessory shoe. Secure the receiver.
3. Connect the receiver to the camera via the data cable. Plug one end into the receiver’s terminal and secure the connection. Plug other end into the camera’s Ten-pin remote terminal or Accessory terminal.
4. Turn on the camera, a stable GPS icon or other signal icon will be displayed in the camera’s monitor or control panel.
5. Take photo and images is automatically geotagged.

---

<table>
<thead>
<tr>
<th>LATITUDE</th>
<th>N 22° 31.0786'</th>
</tr>
</thead>
<tbody>
<tr>
<td>LONGITUDE</td>
<td>E 113° 55.1056'</td>
</tr>
<tr>
<td>ALTITUDE</td>
<td>79m</td>
</tr>
<tr>
<td>TIME (UTC)</td>
<td>2015/10/06</td>
</tr>
<tr>
<td>HEADING</td>
<td>08:30:25</td>
</tr>
</tbody>
</table>

The GPS/BDS data and heading viewed on the camera
Geotagging Image as you shoot

The GMAX is connected to the Accessory terminal camera

**Note**
- Since each camera’s GPS application is different, the user must refer to the camera’s manual to know the detail of how to use the GPS unit.

- If you wish to take geotagged photos in situations where the GPS signal is lost after it was acquired, such as when going indoors to continue shooting, the receiver’s “indoor location” function, which is enabled by default, will reuse the last known position for subsequent image.

- Following with each shutter release, the image’s GPS information also is recorded in the log file and the data is marked a “*Flash*” to indicate.
**Auto working mode**

You can choose Auto working mode in your photography day. When choosing Auto working mode, the receiver is on or off following the connected camera’s on or off. This ensures the receiver drains the power less and acquires the GPS signal quickly. The receiver is always on standby in Auto working mode. You can set the GPS working frequency and the working time of each time in Auto working mode. (See page 29)

How to start the Auto working mode?

1. While the receiver is on, press and the LCD shows a flashing

2. Press or until a flashing shown, and then press , a stable will be displayed. The Auto working mode is activated.
GPS/BDS logger

The GMAX can be used as a data logger. When the GMAX is GPS/BDS signal fixed, location information can be automatically recorded on the receiver itself along the route traveled. (There is no need to connect the receiver to the camera.)

The recorded location information can be viewed on a virtual map. Logs can also be used to geotag images at a later time.

Location information is recorded at regular intervals with the receiver. You can specify the positioning interval via the custom setting. The default is every 10 seconds. For how to set the interval see page 31. The GMAX supports more than 170 days continuous log record at the interval of 1 sec.

To check the logging record status, watch the logging indicator and the MEM icon on the LCD.

**Red blinking: The logging indicator will blink once while the location information recorded.**

MEM icon also will blink once while the location information recorded.

The flash memory can be easily read by the computer via USB connection. Just like a “U flash driver”, no software needed. Log file can be saved or deleted on the computer.

The file system supports FAT32 format.
# The main menu display

When the receiver is GPS/BDS signal fixed, you can check the GPS/BDS information, compass data and other information in the LCD. Press \( \Delta \) or \( \nabla \), the following 6 different displays will be shown in the LCD, one by one.

<table>
<thead>
<tr>
<th>LCD</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image1.png" alt="Image" /></td>
<td>The char in the up indicate the latitude. The char on the bottom represent the longitude.</td>
</tr>
<tr>
<td><img src="image2.png" alt="Image" /></td>
<td>The char in the up indicate the direction. The char on the bottom represent the pitch and roll.</td>
</tr>
<tr>
<td><img src="image3.png" alt="Image" /></td>
<td>The char in the up indicate the current speed. The char on the bottom represent the altitude.</td>
</tr>
<tr>
<td><img src="image4.png" alt="Image" /></td>
<td>The char in the up indicate the current speed. The char on the bottom represent the course over ground.</td>
</tr>
<tr>
<td><img src="image5.png" alt="Image" /></td>
<td>The char in the up indicate the time (UTC or Local time). The char on the bottom represent the date. Note: Once the TIM displayed, it means the time is accurate as 1/10 seconds and the signal is 3D fixed.</td>
</tr>
<tr>
<td><img src="image6.png" alt="Image" /></td>
<td>The char in the up indicate the internal temperature inside the receiver. The char on the bottom represent the air pressure.</td>
</tr>
<tr>
<td><img src="image7.png" alt="Image" /></td>
<td>This is the custom setting.</td>
</tr>
</tbody>
</table>
Custom setting

You can customize the following features to suit your preference.

1. Which positioning system to be used, GPS, Beidou, or GPS+Beidou. The default is GPS+Beidou double positioning.

2. The display format of latitude and longitude
   
3. Enable the “Indoor fixing” or disable it. Indoor fixing means when you are into a place where is no a GPS signal, the receiver is able to provide the last GPS information.

4. The backlight of the LCD is on or off.

5. Signal acquisition indicator and Bluetooth/Log indicator are on or off.

6. The “beep” voice is on or off while pressing the button.

7. Enable the compass function or disable it.

8. Compass calibration.

9. Which direction data displayed, the data is based on true north or magnetic north.

10. Level calibration.

11. Select the speed unit, Mile, Kilometer or Knots.

12. Select the altitude unit, meter or feet.

   Select which altitude data to be displayed, the data is from GPS/BDS or atmospheric pressure.

13. What kind of time to be shown on the LCD, UTC or Local time.

   The local time can be set.

14. The date display format, DD. MM. YYYY, MM. DD. YYYY, or YYYY. MM. DD

15. The temperature unit, Fahrenheit or Centigrade. The temperature is the temperature inside of the receiver.

16. The air pressure unit: psi, hpa, or bar.

17. GPS/BDS working frequency and the working time of each time in Auto mode.

18. GPS/BDS working frequency and the working time of each time in Clock mode. (The time can be adjusted by GPS/BDS, which make the time accurate).
19. Check the available memory for logging. Set the logging interval, or turn off logging. The interval can be set as 1s, 5s, 10s, 15s, 30s, 1min, 2min, 5min, 10min, 20min or 30min. 10 seconds is the default.
20. Turn on the Bluetooth or turn it off.
21. Timer release setting.
22. Restore the receiver.

The following information can be checked in the custom setting:
1. The battery’s current voltage.
2. The GPS/BDS chip’s firmware version and the Blue-tooth chip’s version.
Access the custom setting

1. When the receiver is on, press △ or ▽ until the LCD shows

   ![LCD showing SET 2]

2. To access the custom setting, press ← and the first setting of choosing the positioning system will be activated simultaneously

   ![LCD showing SAT GPS bdS]

3. To access other setting, press △ or ▽. To exit the custom setting and back to the main menu display, press ☑

Custom setting introduction

<table>
<thead>
<tr>
<th>Menu Item</th>
<th>Option Item</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>SAT</td>
<td>GPS bdS</td>
<td>Which positioning system to be used, GPS+Beidou, GPS or Beidou, GPS BDS: GPS plus Beidou, double position system</td>
</tr>
<tr>
<td></td>
<td>GPS</td>
<td>GPS: Global Position System</td>
</tr>
<tr>
<td></td>
<td>bdS</td>
<td>BDS: Beidou Position System</td>
</tr>
<tr>
<td>GEO disp</td>
<td></td>
<td>The display format of latitude and longitude.</td>
</tr>
<tr>
<td>Indoor</td>
<td>LOCK</td>
<td>Enable the “Indoor fixing” or disable it. LOCK means Indoor fixing. When you are into a place where is no a GPS signal, the receiver is able to provide the last GPS information. UNLOCK means does not use the GPS information.</td>
</tr>
<tr>
<td></td>
<td>UNLOCK</td>
<td></td>
</tr>
</tbody>
</table>

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### Access the custom setting

| **BACK LED** |  | **The LCD backlight is on, off or delay off.**  
| **ON→HIGH LIGHT** | **OFF** |  
| **MID LIGNHT** |  |  
| **LOW LIGHT** |  |  
| **Delay**: 1 **MIN** |  |  
| 2 **MIN** |  |  
| 3 **MIN** |  |  
| 4 **MIN** |  |  
| 5 **MIN** |  |  

### DIRECTION DATA

| **STATE LED** |  | **The indicators of the GPS/BDS signal acquisition and the Bluetooth/Log are on or off.**  
| **ON** |  |  
| **OFF** |  |  

| **BEEP** |  | **The “beep” voice is on or off while pressing the button.**  
| **ON** |  |  
| **OFF** |  |  

| **d IP** |  | **Enable the compass function or disable it.**  
| **ON** |  |  
| **OFF** |  |  

| **MAGNET CAL.** |  | **Compass calibration**  
| **[ ]** |  |  

### Direction data

| **MN** |  | **Direction is based on the data of true north or magnetic north.**  
| **TN** |  |  

**MN** means the direction is based on magnetic north.  
**TN** means the direction is based on true north.
## Access the custom setting

<table>
<thead>
<tr>
<th><strong>GPA CAL.</strong></th>
<th><strong>--:00 --:00</strong></th>
<th><strong>Level calibration</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>SPEED</strong></td>
<td>MILE KNOT KM</td>
<td>The speed unit. Mile, Kilometer or Knots.</td>
</tr>
<tr>
<td><strong>ALT</strong></td>
<td>GPS-ALT AIP-ALT FT MET</td>
<td>The altitude unit, meter or feet. Which altitude data to be shown, the data from GPS/BDS or atmospheric pressure. The altitude data can be calibrated when choosing the atmospheric pressure data.</td>
</tr>
<tr>
<td><strong>U or L</strong></td>
<td>U L</td>
<td>What kind of time to be shown in the LCD, UTC or Local time. L means Local time, U means UTC.</td>
</tr>
<tr>
<td><strong>MM dd.</strong></td>
<td>MM dd. dd. dd.</td>
<td>The date display format.</td>
</tr>
<tr>
<td><strong>F or ºC</strong></td>
<td>F ºC</td>
<td>The temperature unit. F means Fahrenheit. C means Centigrade.</td>
</tr>
<tr>
<td><strong>PSI</strong></td>
<td>PSI PSI PSI</td>
<td>The air pressure unit. PSI means Pounds per Square Inch. 1bar=1000HPA The pressure value can be calibrated when choosing HPA.</td>
</tr>
<tr>
<td><strong>BAR</strong></td>
<td>HPA BAR HPA</td>
<td></td>
</tr>
<tr>
<td><strong>HPR</strong></td>
<td>HPA CAL.</td>
<td></td>
</tr>
<tr>
<td><strong>AUTO SET</strong></td>
<td><strong>FRE</strong></td>
<td>GPS/BDS working frequency and the working time of each time in Auto mode. FRE is the frequency. 10min, 15min, 30min, 60min, or 90min can be selected. CON is the working time. 1min, 3min, or 5min can be selected.</td>
</tr>
<tr>
<td></td>
<td><strong>CON</strong></td>
<td></td>
</tr>
<tr>
<td><strong>CLOCK SET</strong></td>
<td><strong>FRE</strong></td>
<td>GPS/BDS working frequency and the working time of each time in Clock mode. FRE is the frequency. 1H, 2H, 4H, 8H, 24H, 48H, or 96H can be selected. CON is the working time. 1min, 3min, or 5min can be selected.</td>
</tr>
<tr>
<td></td>
<td><strong>CON</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>FAT3773Mb</strong></td>
<td>The number following the FAT is the available memory for logging. Set the logging interval, or turn off logging. The interval can be set as 1sec, 5sec, 10sec, 15sec, 30sec, 1min., 2min, 5min, 10min, 20min and 30min. Disable means turn off the logging. 10 sec. is the default.</td>
</tr>
</tbody>
</table>
## Access the custom setting

<table>
<thead>
<tr>
<th>SET BLE</th>
<th>OFF</th>
<th>Turn on the Bluetooth connection or turn it off. CH GMAX ** means the name of the device. The name can be set as 00, 01, 02, 03, 04, 05, 06, 07, 08, 09, 10, 11, 12, 13, 14, and 15.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>SET BLE</strong></td>
<td><strong>ON</strong></td>
<td><strong>CH GMAX:00</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Shooting start time</th>
<th>Shooting end time</th>
<th>Timer release setting. S means set the shooting start time. E means set the shooting end time. STEP means the interval</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>bat</strong></td>
<td><strong>bat 4.15 V</strong></td>
<td>The number following the bat is the current voltage of the battery.</td>
</tr>
</tbody>
</table>

| **SAT BLE** | **SAT 1:01 BLE v1.1.2-1** | The number following the SAT is the firmware version of the GPS/BDS chip. The number following the BLE is the version of the Bluetooth. |

| **SET RESTORE** | **FINISH SHUT DOWN** | Restore the receiver to factory settings. |
How to do the custom setting?

When the receiver is custom setting accessed, press Δ or ▽ is to access next setting or change the option. Press ↔ is to activate current setting or complete the setting.

Note
To exit the current setting and return to the main menu display, press ◁ .

Set the positioning system
1. While the LCD shows press ↔ and the option menu will flash.

2. Press Δ or ▽ to change the option

3. While your preferred positioning system appears, press ↔ to confirm your selection.

Set the display format of latitude and longitude
1. While the LCD shows press and the option menu will flash.

2. Press Δ or ▽ to change the option

3. While your preferred display format appears, press ↔ to confirm your selection.
How to do the custom setting?

Enable the “Indoor fixing” or disable it

1. While the LCD shows “Indoor fixing” or “lock”, press ← and the option menu will flash.

2. Press △ or ▽ to change the option

3. While your preferred option appears, press ← to confirm your selection.

Set the LCD backlight on, off or delay off

1. While the LCD shows “back lamp” press ← and the option menu will flash.

2. Press △ or ▽ to change the option

3.1 If you prefer ON, press ← while a flashing “ON” displayed, and the secondary option will flash.
   Press △ or ▽ to change the option

   While your preferred brightness appears, press ← to confirm your selection.

3.2 If you prefer Delay Off, press ← while a flashing “delay” displayed, and the secondary option will flash.
   Press △ or ▽ to change the option, 1min, 2min, 3min, 4min or 5 min.
   While your preferred time appears, press ← to confirm your selection.
How to do the custom setting?

3.3 If you prefer OFF, press ↔ while a flashing OFF displayed and the backlight will be always off.

Set the indicators of the GPS signal acquisition, logging and the Bluetooth are on or off

1. While the LCD shows press ↔ and the option menu will flash.

2. Press △ or ▽ to change the option

3. While your preferred option appears, press ↔ to confirm your selection.

Set the “beep” voice on or off while pressing the button.

1. While the LCD shows press ↔ and the option menu will flash.

2. Press △ or ▽ to change the option

3. While your preferred option appears, press ↔ to confirm your selection.

Enable the compass function or disable it.

1. While the LCD shows press ↔ and the option menu will flash.
How to do the custom setting?

2. Press △ or ▽ to change the option.

3. While your preferred option appears, press ← to confirm your selection.

Doing the compass calibration

Why calibrate?
The compass in the receiver is sensitive to nearby magnetic objects that could cause measuring error. To compensate for this error, it is sometime necessary to perform a calibration. (If the compass is accurate, there is no need to perform the calibration)

How to calibrate?

1. While the LCD shows

Press ← and the LCD shows
2. Perform the follow operation

Around X-axis

Around Y-axis

Around Z-axis

Hold the receiver, and rotate it slowly around the X-axis, Y-axis, and Z-axis, each axis done twice. Please do try to keep a constant speed of rotation, and each rotation takes almost 10 seconds.

3. After doing the rotation in each axis, press ↔ to complete the calibration.

Select your preferred direction data, the data is based on true north or magnetic north.

1. While the LCD shows press ↔ and the option menu will flash.

2. Press △ or ▽ to change the option

3.1 If you prefer press ↔ while the LCD shows a flashing and the LCD will show It means the calibration mode is activated.
How to do the custom setting?

To do the calibration, press ← while pointing the receiver to the magnetic north. (You should find the magnetic north in your location with help of other accurate compass.)

3.2 If you prefer $\text{TN}$ press ← while the LCD shows a flashing $\text{TN}$ and the LCD will show $\text{CAL}$ $\text{TN}$ It means the calibration mode is activated.

To do the calibration, press ← while pointing the receiver to the true north. (You should find the true north in your location with help of map or others)

**Level calibration**

1. While the LCD shows $\text{CAL}$ $\text{IN}$ press ← the pitch and the roll on the bottom will flash.

2. To do the level calibration, let the receiver in a horizontal position and then press ← the flashing pitch and roll will be stable. The calibration is completed.

**Set the speed unit**

1. While the LCD shows $\text{SPEED}$ $\text{MILE}$ press ← and the option menu will flash.

2. Press $\Delta$ or $\nabla$ to change the option

3. While your preferred unit appears, press ← to confirm your selection.

**Select your preferred altitude unit, and select the altitude data is from GPS or atmospheric pressure**
1. While the LCD shows [image of LCD showing A IR-ALT 258 FT], press ← and the option menu will flash.

2. Press △ or ▽ to change the option [image of LCD with A IR-ALT 258 FT and A IR-ALT 79 m].

3. While your preferred unit appears, press ← to confirm your selection and the secondary option will flash. The secondary option is to select which altitude to be shown.

4. Press △ or ▽ to change the option GPS-ALT or A IR-ALT.

4.1 If you prefer the altitude from GPS, press ← while a flashing GPS-ALT displayed and the LCD will show [GPS-ALT]. Press ← again to complete the setting.

4.2 If you prefer the altitude from atmospheric pressure, while a flashing A IR-ALT displayed, press ← and the LCD will show [A IR-ALT]. Press ← again and the third option will flash, the third option is to do the altitude calibration in different way.

Press △ or ▽ to change the option

AUTO-CAL b"  MANU-CAL b"  SEA-LEVL CAL

4.2.1 If you prefer using the GPS data as the reference to do the calibration, while the LCD shows [AUTO-CAL b" GPS-ALT], press ← and the LCD will show [AUTO-CAL]. Press ← again to complete the calibration.
How to do the custom setting?

4.2.2 If you prefer using the sea level pressure as the reference to do the calibration, while the LCD shows press ← and the value on the bottom will flash. Press △ or ▽ and ← to adjust the value. While the value is adjusted to the sea-level pressure issued by the local observatory, press ← and the LCD will show press ← again to complete the calibration.

4.2.3 If you prefer using the altitude as the reference to do the calibration, while the LCD shows press ← and the value on the bottom will flash. Press △ or ▽ and ← to adjust the value. While the value adjusted to the altitude of your location which is known in advance, press ← to complete the calibration.

Set what kind of time to be shown on the LCD, UTC or Local time

1. While the LCD shows press ← and the option menu will flash.

2. Press △ or ▽ to change the option.

3.1 If you prefer the UTC, while a flashing displayed, press ← to confirm your selection.

3.2 If you prefer the local time, press ← while a flashing
How to do the custom setting?

displayed, and the secondary setting option on the bottom will flash. The secondary setting is to set the local time.

Press △ or ▼ to add or reduce the time zone and the time will be changed accordingly. While the local time is adjusted to the current local time, press ← again to complete the setting and the LCD will show the local time.

**Set the date display format**
1. While the LCD shows  

   press ← and the option menu will flash.

2. Press △ or ▼ to change the option

3. While your preferred display format appears, press ← to confirm your selection.

**Set the temperature unit**
1. While the LCD shows  

   press ← and the option menu will flash.

2. Press △ or ▼ to change the option

3. While your preferred unit appears, press ← to confirm your selection.
Set the air pressure unit
1. While the LCD shows press ← and the option menu will flash.

2. Press △ or ▽ to change the option

3.1 If you prefer the unit as PSI, press ← while a blinking PSI displayed and the flashing char will be stable.

3.2 If you prefer the unit as bar, press ← while a flashing bar displayed and the flashing char will be stable.

3.3 If you prefer the unit as HPA, press ← while a flashing HPA displayed and the LCD will show it means the calibration mode is activated.

To do the calibration, press △ or ▽ to adjust the value. While the value is adjusted to the reference value of your location, press ← to complete the calibration.

Note
The calibration value is default by factory. You can only do the calibration when the reference value of your local observatory issued is available. The factory default cannot be changed even perform the restore setting.

Set GPS/BDS working frequency and the working time of each time in Auto mode
1. While the LCD shows press ← and the LCD will show
5. Press \( \Delta \) or \( \nabla \) to change the option, the option is the GPS working time of each time. 1min, 3min, or 5min can be selected.

6. While your preferred working time appears, press \( \leftarrow \) to confirm your selection.

**Set GPS/BDS working frequency and the working time of each time in Clock mode**

1. While the LCD shows [Clock Set], press \( \leftarrow \) and the LCD will show as [Clock Set]

2. Press \( \leftarrow \) again and the option will flash

3. Press \( \Delta \) or \( \nabla \) to change the option, the option is the GPS working frequency. 1hr, 2hr, 4hr, 8hr, 24hr, 48hr, or 96hr can be selected.

4. Press \( \leftarrow \) while your preferred frequency, and the LCD will show
How to do the custom setting?

5. Press ← again and the option will flash.

6. Press Δ or ▽ to change the option, the option is the GPS working time of each time. 1min, 3min, or 5min can be selected.

7. While your preferred working time appears, press ← to confirm your selection.

Set the regular interval of logging the travel routes

1. While the LCD shows, press ← and the LCD will show

2. Press ← again and the option menu will flash.

3. Press Δ or ▽ to change the option, the option is the interval. 1sec, 5sec, 10sec, 15sec, 30sec, 1min, 2min, 5min, 10min, 20min, 30min or disable can be selected. Disable means turn off the logging.

4. While your preferred interval appears, press ← to confirm your selection.

Turn on the Bluetooth or turn it off

1. While the LCD shows, press ← and the option menu will flash.

2. Press Δ or ▽ to change the option.
3.1 To turn on the Bluetooth, press ← while the LCD shows **SET BLE** and the LCD will show **ON**.

It is to set the device name. Press ▲ or ▼ to choose your wanted name, the name can be set as 00, 01, 02, 03, 04, 05, 06, 07, 08, 09, 10, 11, 12, 13, 14, and 15. While your preferred name appears, press ← to confirm your selection.

3.2 To turn off the Bluetooth, press ← while the LCD shows **OFF**.

The default is turn off.

**Timer release setting**
See page 33

**Restore the receiver**
1. While the LCD shows **SET** and the LCD will show **RESTORE 2**.

2. Press ← again and the receiver will automatically turn off. The receiver is restored.
Other applications

Timer release
The receiver can be used as an external timer release device when it is connected to the camera. You can specify the shooting start time, shooting end time and the interval according to your wanted via the custom setting.

How to set the timer release?
1. When the receiver is custom setting accessed and the LCD shows press \( \Rightarrow \) and the shooting starting time option will flash.

2. Press \( \Delta \) or \( \nabla \) and \( \Rightarrow \) to set the starting time as you wanted.
3. While the LCD shows \( \Rightarrow \) it is to set the shoot ending time. Press \( \Delta \) or \( \nabla \) and \( \Rightarrow \) to set the ending time as you wanted.
4. While the LCD shows \( \Rightarrow \) it is to set the interval.

Press \( \Delta \) or \( \nabla \) and \( \Rightarrow \) to set the interval time as you wanted.
After completing the timer release setting, connect the receiver to your camera via the data cable and the camera can be timer released as you wanted.
Wireless remoter

To use the GMAX as a camera wireless remoter, a “GMAX-Remoter” APP should be installed in your mobile phone in advance. The APP is a wireless remoter software. It can communicate with the GMAX receiver via the Bluetooth, and then to realize the focus and shutter release on the camera. (At the time of writing, the GMAX only supports iPhone iOS.)

1. Download and install the Solmeta APP in your mobile phone. The Solmeta APP can be searched in the “App Store” by inputting the key words of “GMAX-Remoter”.

2. Ensure that the Bluetooth of your GMAX and your cellphone are on and the GMAX has been connected to the camera properly. The Bluetooth is off and the channel (device name) is GMAX00 by default.

3. Running the “GMAX-Remoter” APP on your mobile phone. The APP will communicate with the GMAX. If the communicate is successful, the Bluetooth indicator on the receiver will green light up.

4. Use the APP as a remoter to realize the focus and shutter release on the camera.
For how to use the APP please refer to the “About” in the APP.
An accuracy clock
The receiver can be used as an accuracy clock. The time can be adjusted by GPS/BDS. You can set the GPS working frequency in custom setting. See page 30

How to run the clock mode?
1. While the receiver is on, press \( \) and the LCD shows a flashing \( \text{ON ?} \)
2. Press \( \Delta \) or \( \nabla \) until a flashing \( \text{CLOCK ?} \) Shown, and then press \( \leftrightarrow \)

   The clock mode is activated and the LCD only shows the time information.
3. To exit the clock mode, press \( \)  

Note
- The last char in the LCD is fast running 

   press \( \leftrightarrow \) can get the char stable.
- If you prefer the local time shown in the clock, you can do the setting in custom setting. See page 27
## Specifications

<table>
<thead>
<tr>
<th>Feature</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Compatible cameras</strong></td>
<td>Nikon DSLR cameras</td>
</tr>
<tr>
<td><strong>Geotagging Images</strong></td>
<td>Latitude, longitude, elevation, direction, time (UTC)</td>
</tr>
<tr>
<td><strong>Internal memory</strong></td>
<td>4 GB</td>
</tr>
<tr>
<td><strong>Reception frequency</strong></td>
<td>L1, 1575.42 MHz, B1, 1561.098MHz</td>
</tr>
<tr>
<td><strong>Data format</strong></td>
<td>NMEA-0813</td>
</tr>
<tr>
<td><strong>Data update rate</strong></td>
<td>One time per second</td>
</tr>
<tr>
<td><strong>Digital compass</strong></td>
<td>Tri-axial geomagnetic sensor and tri-axial acceleration sensor used to calculate direction</td>
</tr>
<tr>
<td><strong>Power supply</strong></td>
<td>1900 mAh Li-ion</td>
</tr>
<tr>
<td><strong>Dimensions</strong></td>
<td>55 x 75 x 45 mm / 2.2 x 3.0 x 1.8 in. (W x H x D)</td>
</tr>
<tr>
<td><strong>Weight</strong></td>
<td>Approx. 110 g / 3.8 oz.</td>
</tr>
<tr>
<td><strong>Operating temperature</strong></td>
<td>-40°C to +80°C / *-40° F to 176° F</td>
</tr>
<tr>
<td><strong>Operating humidity</strong></td>
<td>5% to 95%, Non condensing</td>
</tr>
</tbody>
</table>

*Receiver specifications and appearance are subject to change without notice.*
Warranty

- Solmeta Technology Co., Limited guarantees its product from manufacturing defects and workmanship for a period of **two-year** from the date of original purchase. During the two-year warranty, Solmeta Technology will repair or replace the product free of charge. Please keep your original invoice as proof of purchase.
- Customers who have products covered under the warranty are required to contact Solmeta Technology by e-mail (service@solmeta.com) for troubleshooting issues before returning the product.
- Customers are responsible for shipping and insurance charges for returning the product to Solmeta Technology.
- Charges will be imposed for repairing product, which is out of warranty coverage or invalid warranty.
- The guarantee is not valid if defect is due to damage caused by incorrect use, poor maintenance or if persons not authorized by Solmeta Technology have carried out alterations or repairs.
- For the device to be used correctly, the user should strictly adhere to all instructions included in the user guide and should abstain from any actions or uses that are described as undesired or which are warned against in the user guide.

Precautions for use

**Do not drop:** The product may malfunction if subjected to strong shocks or vibration.

**Keep dry:** This product is not waterproof, and may malfunction if immersed in or exposed to water.

**Avoid sudden changes in temperature:** Sudden changes in temperature, such as occur when entering or leaving a heated building on a cold day, can cause condensation inside the device. To prevent condensation, place the device in a carrying case or plastic bag before exposing it to sudden changes in temperature.

**Keep away from strong magnetic fields:** Do not use or store this device in the vicinity of equipment that generates strong electromagnetic radiation or magnetic fields. Strong static charges or the magnetic fields produced by equipment such as radio transmitters could affect the product’s internal circuitry.
A note on electronic devices: In extremely rare instances, a strong external static charge may cause the device to stop functioning. Turn the camera off and disconnect and reconnect the GMAX. In the event of continued malfunction, contact your retailer or Solmeta-authorized service representative.

Information in this document is subject to change without notice. Solmeta Technology reserves the right to change or improve their products and to make changes in the content without obligation to notify any person or organization of such changes or improvements.