

Utilities Guide for GPS

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This manual describes how to use the Optio WG-2 GPS camera's GPS function and precautions when using it. Please read this manual before using the GPS function with this camera.

Before using GPS

About GPS

GPS means Global Positioning System. The camera receives signals from GPS satellites to determine its position and the time. This is called "positioning".

Function of Optio WG-2 GPS

Location of where images are shot can be recorded

The latitude and longitude etc., of still pictures or movies can be recorded. You can see the positions of images you shot on a map by using the provided software.

Saving log files

The camera receives information from GPS satellites regularly and saves it to the SD Memory Card as a log file in KML format. The log files can be imported to Google Earth or Google Maps or other programs that can read KML files on your computer and you can display your locations on their maps.

*Google, Google Earth and Google Maps are trademarks of Google Inc.

Correct the clock using GPS information

The camera corrects its clock automatically using time data received from GPS satellites.

Precautions for using GPS

- The GPS function is set to off as the default. To use it, set [GPS On/Off] to [On].
- GPS satellites always move. Depending on the situation (location, time etc.), positioning may take longer or be impossible.
- To use the GPS function, you must be in an open area, such as out of doors.
- Positioning may be difficult or impossible in the following situations:
 - Under the water
 - Under the ground or indoors
 - In tunnels
 - Among high-rise buildings
 - Under elevated or near high-voltage electrical power lines
 - In the woods
 - Near mobile phones that use the 1.5 GHz band
- When the GPS function is set to on, the camera performs positioning regularly even if it is turned off. Make sure to set [GPS On/Off] to [Off] (p.5) before turning off the camera when taking it where using electronic products is prohibited, such as hospitals or airplanes.
- Positioning may take few minutes when using the GPS function for the first time, after not positioning for a long while, or after changing the battery.
- The Geodetic system for this camera's GPS function uses the World Geodetic System 1984 (WGS 84).
- Using GPS or recording the positions of images you shot is prohibited in some countries or regions. Consult appropriate embassy or travel agent before travelling with a GPS camera.
- Do not carry the camera in a metal container during positioning. If the camera is covered with metal, the positioning function cannot work.
- In the following situations, the camera cannot receive GPS information. It starts positioning again immediately after being removed from the following situations:
 - When the alarm is set
 - When the camera is connected to a computer with a USB cable
 - When the camera is connected to AV equipment with an AV or HDMI cable
 - For a minute after changing the battery
- GPS function of this camera was designed and manufactured for personal digital camera use only. Do not try to use it as a navigation instrument for an aircraft, motor vehicle, personal navigation or any

other type of navigation, or for surveying. PENTAX will not be held liable for any damages caused by use of this camera for any of the purposes mentioned above.

Hereby, PENTAX RICOH IMAGING CO.,LTD., declares that this SG661 GPS Module/GYSFDMASA-P1 is in compliance with the essential requirements and other relevant provisions of Directive 1999/5/EC.
For a full version of the Declaration of Conformity (DoC), please refer to <http://www.pentax.jp/english>.

The CE Mark is a Directive conformity mark of the European Union.

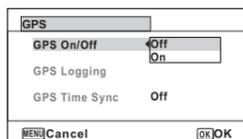
Using the GPS

Preparation for Using GPS Function

Set the [GPS On/Off] to [On] for receiving GPS information (latitude, longitude, altitude, date and time etc.).

When the GPS information is recorded on captured images (p.6) and recorded to the camera as a log (p.8), saved to the SD Memory Card as a log file (p.10) or the camera corrects its clock automatically (p.14), [GPS On/Off] need to be set to [On].

- Use the four-way controller (▲▼) to select [GPS] on the [Setting] menu.
- Press the four-way controller (▶).
The [GPS] screen appears.
- Use the four-way controller (▲▼) to select [GPS On/Off].
- Press the four-way controller (▶).
A pull-down menu appears.
- Use the four-way controller (▲▼) to select [Off] or [On].
Off: Does not receive GPS information
On: Receives GPS information



- When [GPS On/Off] is set to [On], the camera performs positioning regularly even if it is turned off, which reduces the battery life. The guide of battery life: Approx. 60 hr.
(When [GPS On/Off]: [On], [Logging Interval]: [15 sec.] and the camera is turned off to receive GPS information continuously.)
- Before changing the battery, set [GPS On/Off] to [Off].

Record the GPS Information on Captured Images

When [GPS On/Off] is set to [On], the received GPS information is recorded onto captured images.

The following icons appear on the display.

	During receiving GPS information. [GPS On/Off] on the [GPS] setting is set to [On], and signals from GPS satellites are being received.
	GPS information has been received. [GPS On/Off] on the [GPS] setting is set to [On], and signals from GPS satellites have been received.
	GPS information has not been received. [GPS On/Off] on the [GPS] setting is set to [On], but signals from GPS satellites have not been received.
	GPS error. To recover from an error, turn off the camera, remove and then re-insert the battery and turn on the camera again. If is still displayed, the built-in GPS unit may be malfunctioning. Contact your nearest PENTAX Service Center.

When [GPS On/Off] is set to [Off], no icon is displayed.

- Only when is displayed on the capture mode screen, the GPS information is recorded onto images.
- When [GPS On/Off] is set to [On], the camera performs positioning regularly even if it is turned off, which reduces the battery life.
- When recording GPS information onto a movie, the data at the start of recording is saved.
- When dividing a movie, the GPS information before dividing is displayed.
- When adding a title picture to a movie, the GPS information of the movie is displayed.
- When shooting in (Interval Shot) mode, GPS information may not be recorded onto images.

Displaying the GPS information recorded on captured image

- Press the button after shooting still pictures or movies.
The camera enters mode and the image appears on the display.
- Press the OK button until the GPS information is displayed.
If the camera did not receive GPS information, the values are displayed as "--".
*The positioning time is displayed in GPS time (time data received from GPS satellites). This may be different from the time you have set on the camera.



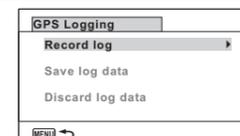
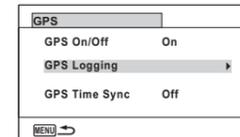
The image on which the GPS information is recorded can be imported to the supplied software "MediaImpression 3.5 for PENTAX" and the position at which the image was shot can be displayed on the map (Windows only.)
Select an image in the preview screen and click (position) on [Property] area to display map.
*To display map, you need to connect to the Internet.
* [Media Browser Interface] (Operating Manual p.209)

Recording and Saving a Log

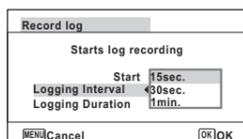
Receives GPS information with interval and duration you have set and records it to the camera as a log.
The recorded log can be saved to the SD Memory Card as a log file (KML format).

Recording a Log at a Set Interval and Duration

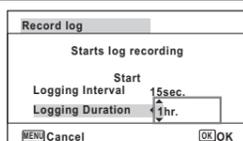
- Use the four-way controller (▲▼) to select [GPS] on the [Setting] menu.
- Press the four-way controller (▶).
The [GPS] screen appears.
- Use the four-way controller (▲▼) to select [GPS Logging].
If you cannot select this menu, set [GPS On/Off] to [On].
- Press the four-way controller (▶).
The [GPS Logging] screen appears.
- Use the four-way controller (▲▼) to select [Record log], and press the four-way controller (▶).
The [Record log] screen appears.
- Use the four-way controller (▲▼) to select [Logging Interval], and press the four-way controller (▶).
A pull-down menu appears.



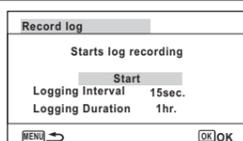
7 Use the four-way controller (▲▼) to select the logging interval, and press the OK button.



8 Use the four-way controller (▲▼) to select [Logging Duration], and press the four-way controller (▶).



9 Use the four-way controller (▲▼) to select the logging duration, and press the OK button.

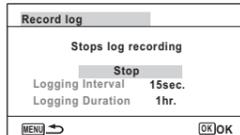


10 Use the four-way controller (▲▼) to select [Start], and press the OK button.

- Once you record a log, you cannot record a new log until you save the existing log to the SD Memory Card as a log file (p.10) or discard it (p.12).
- [Record log] can be set only when [GPS On/Off] is set to [On].
- When the battery level indicator is red, logging stops.
- (Interval Shot) and (Interval Movie) cannot be selected from the Capture Mode Palette while recording a log.

Stopping Recording Log

Selecting [Record log] while recording a log displays a confirmation screen. Select [Stop] and press the OK button to stop recording the log.



Saving a Recorded Log

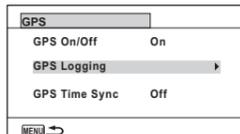
Saves the recorded log to the SD Memory Card as a log file (KML format). The log files are saved in the [GPSLOG] folder under the root directory of the SD Memory Card.

1 Use the four-way controller (▲▼) to select [GPS] on the [Setting] menu.

2 Press the four-way controller (▶).

The [GPS] screen appears.

3 Use the four-way controller (▲▼) to select [GPS Logging].



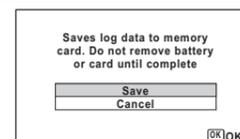
4 Press the four-way controller (▶).

The [GPS Logging] screen appears.

5 Use the four-way controller (▲▼) to select [Save log data], and press the OK button.

A confirmation screen appears.

6 Use the four-way controller (▲▼) to select [Save], and press the OK button.



7 Press the OK button.

Returns to the [GPS Logging] screen.

- The logs are saved in the SD Memory Card only (you cannot save them in the built-in memory).
- Up to 999 log files or to the capacity of the SD Memory Card can be saved.

- The information saved in logs are latitude, longitude, altitude and date and time.
- The logs cannot be displayed on the camera. Transfer the logs to your computer and use software that supports files in the KML format such as Google Earth or Google Maps to display the logs.

Discarding a Recorded Log

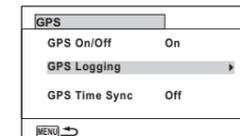
Discards a recorded log without saving it to the SD Memory Card.

1 Use the four-way controller (▲▼) to select [GPS] on the [Setting] menu.

2 Press the four-way controller (▶).

The [GPS] screen appears.

3 Use the four-way controller (▲▼) to select [GPS Logging].



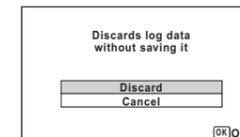
4 Press the four-way controller (▶).

The [GPS Logging] screen appears.

5 Use the four-way controller (▲▼) to select [Discard log data], and press the OK button.

A confirmation screen appears.

6 Use the four-way controller (▲▼) to select [Discard].



7 Press the OK button.

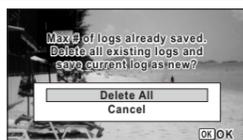
Deleting logs

If 999 log files are saved, the camera cannot save a log file anymore. Insert a new SD Memory Card or delete logs according to the following procedures to save new ones.

1 Turn the camera on.

[Max # of logs already saved. Delete all existing logs and save current log as new?] message is displayed.

2 Use the four-way controller (▲▼) to select [Delete All].



3 Press the OK button.

All the logs are deleted and the camera returns to capture mode.

- If you select [Cancel], you can continue shooting still pictures or movies although you cannot save a log.

- If you start up the camera in playback mode, the camera returns to playback mode after you have deleted logs.

Correcting time automatically

The camera corrects its clock automatically using time data received from GPS satellites.

1 Use the four-way controller (▲▼) to select [GPS] on the [Setting] menu.

2 Press the four-way controller (▶).

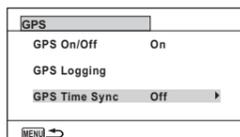
The [GPS] screen appears.

3 Use the four-way controller (▲▼) to select [GPS Time Sync].

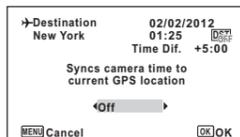
If you cannot select this menu, set [GPS On/Off] to [On].

4 Press the four-way controller (▶).

The setting of [World Time] is displayed.



5 Use the four-way controller (◀▶) to switch between [On] and [Off].



6 Press the OK button.

Returns to the [GPS] screen.

- [GPS Time Sync] can be set only when [GPS On/Off] is set to [On].
- [GPS Time Sync] does not function in the following situations:
 - During movie recording
 - During movie playback
 - When displaying a slide show
 - During interval shooting
 - When the self-timer is set