

MX-G10M MKII

GPS Receiver For Canon

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Statement

Please read this manual carefully before using and strictly operate and store in accordance with the instructions. Please save it for your future reference. If the user manual cannot help you to solve certain problems, please ask your retailer for help or email us: info@marrex.cn.

Cautions

- Do not use the unit under water, and don't expose it to rain. Please store it in a cool, dry place.
- Please charge the unit strictly according to related rules. Otherwise, damage might be caused to the battery.
- Please do not move it from overheated to supercooled conditions frequently, as well as keep away from heat sources such as heater and oven.
- Please be careful to install the MX-G10M MKII gently to avoid damage to the device or camera.
- Please turn off the power when left unused.

PRODUCT INTRODUCTION

General Introductions

The Marrex MX-G10M MKII is a new version of GPS receiver specially designed for Canon DSLR cameras. It is very useful for photographers to organize stock photos. With the MX-G10M MKII, figuring out when, where and why a certain photo was taken is not a problem anymore. When connected to the camera and positioned successfully, the GPS information (longitude, latitude, elevation and Coordinated Universal Time) will be recorded as EXIF data. With the log function, travel routes will be recorded into internal storage. The MX-G10M MKII is equipped with a built-in Li-ion battery and LCD screen. In addition, the MX-G10M MKII uses a highly sensitive antenna and upgraded GPS chipset to enhance the speed of positioning

Highlights

- LCD screen

GPS information and configuration parameters can be real-time displayed on the high-resolution LCD. The screen can be viewed even under bright sunlight.

- GPS data-hold

If the GPS signal is lost, the MX-G10M MKII will automatically reuse the last valid GPS information for tagging the current photo. Once the receiver is turned off, the stored GPS data will be lost.

- Built-in Li-ion battery

A built-in rechargeable battery can continuously run for up to 6 hours. When connected to a camera, the MX-G10M MKII will not charge from the camera.

- High precise time

The LCD screen will show the UTC time once the MX-G10M MKII has found satellites. You can get the local time by setting an appropriate time zone.

- Fast acquisition

Highly sensitive antenna and upgraded GPS chipset accelerate the satellite searching speed. In good weather and open sky, the unit takes 60 seconds for a cold start, 15 seconds for a warm start, and 1 second for a hot start.

- Log function

Once the log function is enabled, the MX-G10M MKII will automatically record GPS information once every 5 seconds into the .log, .gpx and .kml files which are saved in built-in storage. (System default is "Disable.")

- 3-axis electronic compass

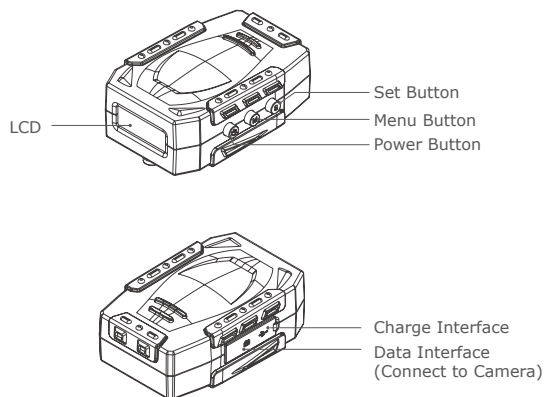
Provide accurate azimuth (Range 0-359°).

Specifications

Channels	66 capturing channels, 22 tracking channels
Tracking sensitivity	-163dBm
Capturing sensitivity	-146dBm

Positioning accuracy	3m CEP50 without SA, 2.5m SBAS
Logging mode	NMEA-0183, KML One file per day, based on UTC
Battery	900mAh rechargeable Li-ion battery
Dimension (L×W×H)	73mm x 50mm x 31.5mm
Weight	Approx. 72g (2.54oz.)

Product Structure





Button Definition

- ⏻ Power Button: Turns the GPS unit on / off and scrolls forward through pages.
- Ⓜ Menu Button: Scrolls backward through pages.
- Ⓢ Set Button: Enters the current setting option & confirms setting.


Operation


Charge

Connect the MX-G10M MKII with the provided USB cable to a travel adapter, a computer (slower charging speed) or any other USB port which provides standard 5 volts. It will automatically start charging and the battery icon  on the screen will flash. When the GPS unit has been fully charged, the icon  stops flashing.

Tips: Since the MX-G10M MKII can't charge from the camera, please fully charge the unit (usually takes 4 hours) before use. For long time shooting, please take a power bank with the supplied USB cable with you.

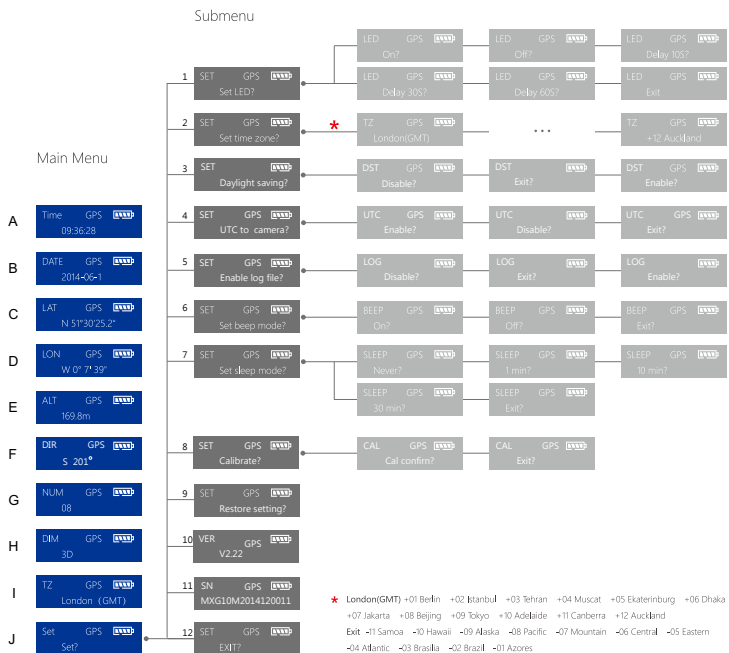
Power On and Off

Press the power button  for more than 3 seconds to turn the MX-G10M MKII on.

Press the power button  for more than 3 seconds to turn the MX-G10M MKII off.

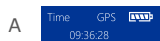
LCD Display Operation Guide

Display Menu tree diagram:



Main Menu Introduction

Turn on the MX-G10M MKII and the LCD shows the Main Menu. Press the Menu button **M** to turn page backward or the Power button **P** to turn page forward.



A Time: Shows the UTC or local time, which can be set on the submenu



B Date: Shows the date (Year-Month-Day)



C LAT: Latitude, "N" = north, "S" = south



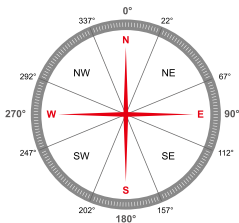
D LON: Longitude, "W" = west, "E" = east



E ALT: Altitude, measured in meters.

F DIR GPS 
S 201°

DIR: Shooting Direction, azimuth range: 0 - 359°. This LCD display shows direction is south, azimuth is 201°



G NUM GPS 
08


NUM: Number of captured satellites


H DIM GPS 
3D

DIM: Dimension, 2D = latitude and longitude are available; 3D = latitude, longitude and altitude are available





I TZ GPS 
London (GMT)

TZ: Time Zone, which can be set on the submenu

J Set GPS 
Set?

Set: Set menu, at this display, press the Set button  to access the submenu

Submenu Introduction

The MX-G10M MKII offers 9 custom options. Select "Set?" menu in the main menu display and press Set button  to access the submenu. Then turn page backward or forward by the Menu button  or the Power button . Use the Set button  to access current custom settings and confirm your selection.

1 SET GPS 
Set LED?

Set the background LED lights. Select LED On, Off or Delay 10 / 30 / 60 seconds. System default is "delay 10s." To save battery power, please turn off the LED background light.

2 SET GPS 
Set time zone?

Set time zone. System default is "London(GMT)."

3 SET 
Daylight saving?

Set daylight saving time. System default is "Disable". If your shooting area is observing daylight saving time, please enable the DST setting to get accurate local time.

4 SET GPS 
UTC to camera?

Set UTC to camera. System default time is UTC. If you want the GPS time to be recorded as local time, please disable the "UTC to camera" setting.



5

Enable log file. System default is "Disable." If you want to log your route, please select "Enable" before you start your trip. Refer to page 13 "Enable Log Function."



6

Set beep mode. Select the background beep to On or Off. System default is "On."



7

Set GPS sleep mode. If the unit enters sleep mode, it will turn off its LCD screen and keep sending data to camera. You could select Never or 1 / 10 / 30 minutes to enter sleep mode. System default is "10 min."



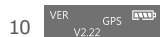
8

Calibrate the built-in digital compass (magnetic north standard). Refer to page 14 "Compass calibration."



9

Restore setting. To go back to the system default settings, press Set button **S** and it will show "Restore Success."



10

Version of the GPS receiver system.



11

Serial Number of your MX-G10M MKII.



12

Exit the custom setting menu. Press Set button **S** to return to main menu.

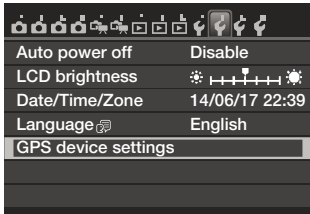
Setup Guide

1. Turn the camera off
2. Press the Power button **U** for more than 3 seconds to turn on the GPS receiver. The "GPS" icon on the upper right of LCD screen will flash, indicating that it is searching for satellites. When a steady satellite signal is captured, the "GPS" icon will stop flash.

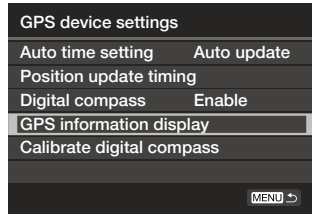
It takes about 60 seconds to start the receiver up when cold, 15 seconds if you have just shut it down then restart, and 1 second to wake up the LCD screen. For successful positioning, you must be outdoors with good weather and a sky unobstructed by tall buildings.
3. Press the Menu button **M** (page backward) or Power button **U** (page forward) to change the parameters displayed on the screen. If any parameters need to be changed, select main menu "Set?" and press the Set button **S** to enter the submenu. Set parameters according to your needs and exit the submenu. (Refer to page 6 "LCD Display Operation Guide")
4. Connect the GPS unit to DSLR camera with the supplied data cable. When inserting the cable, be sure that the end is oriented correctly and do not use force.

- Mount the MX-G10M MKII to the camera's hot shoe, or secure it to your camera's neck strap or neck strap lug with the supplied strap and clip, leaving the shoe free for use with a flash or other device.
- Turn the camera on.
- View geotag information on camera.

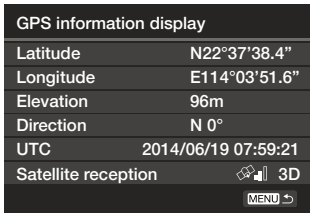
A. Select "GPS device settings."



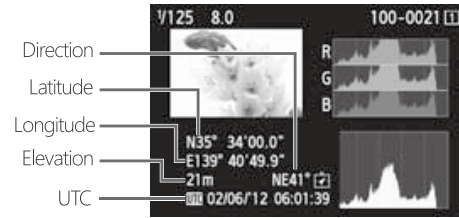
B. Select "GPS information display."



C. The detailed GPS information is displayed.



- With the MX-G10M MKII turned on, once you begin shooting, the geotag information of each photo will be displayed on the camera's LCD.



- Geotag information can be viewed on a computer when images are uploaded to photo sharing sites like Flickr, or opened in imaging software, such as Picasa, ACDSee, GeoSetter, Opanda IExif, Adobe Lightroom, FSViewer.

Enable Log Function

- Default setting of log function is "Disable" for saving power and storage space. To use this function, please set "Log Enable."
- The MX-G10M MKII will record GPS information once every 5 seconds into log , .gpx and .kml file which stored in the built-in removable disk.
- Connect the GPS receiver to a computer by the supplied USB cable and

open the GPS folder. There are three file forms: .kml, .gpx and .log(.txt). All have the same content but are suitable for different software (.kml is for Google Earth, .gpx and .log file are for most other software).

4. Copy the suitable file to the suggested software. All the GPS dots will connect together and show as a track.
5. The memory capacity of the built-in disk is 4.35MB. This allows you to record up to 85,376 positions. The GPS receiver could continuously log for about 118 hours. The subsequent positions cannot be recorded into the disk if it is filled. Please export the log files and delete them regularly to maximize storage space.

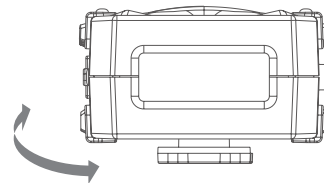
Please note:

One log file is created every 24 hours according to Coordinated Universal Time (UTC). So, depending on the time difference between your shooting local time and UTC, two separate log files may be created even if logging is only active over one day. Similarly, only one log file may be created even if logging is active two days.

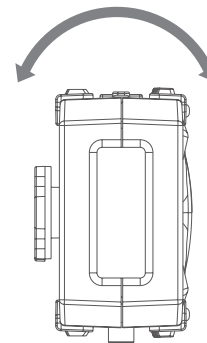
Compass calibration

1. Press the **M** button to access the main menu SET ("Set?").
2. Press the **S** button to access submenu and Press **M** repeatedly until "Calibrate?" shows on the display.
3. Press the **S** button to access "Cal. confirm?", and press **S** button again to "Calibrating...H."

4. Holding the receiver in your hand, rotate both devices slowly around the X-axis and Y-axis (as the picture shows).



5. Do the rotation 2-3 times until LCD shows "Calibrating...V." Then rotate the device slowly around Z-axis (as the picture shows).



Please note:

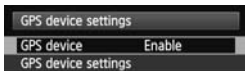
- Try to do the rotation at a constant speed. Each rotation takes about 5-10 seconds.
- If calibration times out (LCD shows "Cal. time out"), please try again and keep horizontal or vertical as far as possible.
- Calibration may not be possible under the following conditions because the digital compass uses geomagnetism: at high altitudes, near magnetic fields, in steel-structure buildings, or underground. Even if calibration is possible, the receiver may not be able to detect the shooting direction correctly.

You can also calibrate the compass via the camera setting.

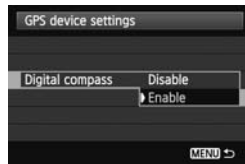
1. Select "GPS device settings" as the following screen shows, set "GPS device" to "Enable", and then select "GPS device settings".



- On the EOS-1DX and other models that display the following screen, set "GPS device" to "Enable", and then select "GPS device settings"



2. Set "Digital compass" to "Enable."



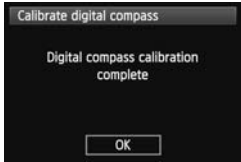
3. Select "Calibrate digital compass."



4. Press $\langle \text{SET} \rangle$ to prepare for calibration. Move the camera as shown.



5. Screen will display the following, indicating the compass calibration is complete.



GPS Firmware Upgrade

In order to fix bugs and improved stability, Marrex may release new versions of the firmware. The new firmware will be released on our website. You could update your MX-G10M MKII by the following steps

1. Download update file (.upd) from www.marrex.cn to your computer.
2. Connect the GPS to your computer by the supplied USB cable. The MX-G10M MKII will show up on your computer as a removable drive.
3. Copy the update file (.upd) to the MX-G10M MKII, and then safely remove it from the computer first. Unplug the USB cable and turn off the GPS receiver.
4. Connect the MX-G10M MKII to your computer again, you will see "Upgrade?" on the LCD screen. Press Set button **S** to access next step "Confirm upgrade?" and press Set button **S** again to confirm.

5. If upgraded successfully, the LCD will show "Upgrade Success", then the upgrade is complete and you can unplug the USB cable; If not, it will show "Upgrade Failed", please unplug the USB cable and try again from step 1.

Note: When the GPS receiver is upgrading, please keep powered on and do not unplug the USB cable. If powered off during upgrading, the GPS receiver will be seriously damaged, the costs of returns to the factory repair will be paid by you.

Warranty

Marrex Technology Co., provides a one-year warranty under normal use and lifelong paid maintenance from the date you purchase this product.

Marrex Technology will repair or replace the product under warranty for free during the one-year valid period, but customers should pay for shipping and insurance charges for returning the product to Marrex Technology.

This warranty only applies where a defect has arisen, wholly or substantially, as a result of faulty manufacture, parts or workmanship during the warranty period. Download update file (.upd) from www.marrex.cn to your computer.

This warranty does not cover:

- Any damage caused by human factors, including using the products in abnormal conditions and operating the device in ways not in accordance with the user manual.

- Any damage caused by incorrect use or poor maintenance, or when persons not authorized by Marrex Technology have carried out alterations or repairs.
- Force majeure events such as fire, flood, lightning strike, earthquake.
- Customers who cannot show a valid invoice. G10M MKII will show up on your computer as a removable drive.

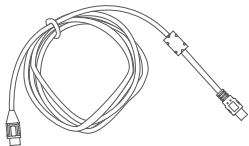
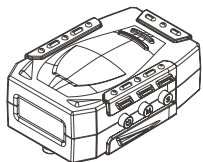
Marrex Technology reserves all the rights for the ultimate interpretation.

Compatibility

Canon 1DX, 1DC, 5D Mark III, 5DS, 5DS-R, 6D, 7D, 70D, 100D, 650D, 700D, 750D, 760D, 1200D, EOS M, EOS M2

Packing List

- MX-G10M MKII main unit
- USB cable
- Data cable

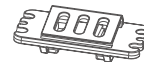


- Hanging strap



- User manual
- Warranty card

- A clip (To attach the MX-G10 MKII to your camera strap.)



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