Steelsring EF/GFX Smart Adapter

User's Guide

Version 1.0 updated 2017/11/08

Thank you for choosing Steelsring products

1. Features of Steelsring EF/GFX

Smart adapter for EF mount compatible lens (see Note 1), with following features:

- Automatic EF Lens identification, information gathering, and EXIF recording in GFX camera

- Support Auto Focus and Auto Exposure of compatible EF lenses.

- Support Image Stabilization of compatible EF lenses.

- With EF Lens information auto tuning, includes AF info auto tuning for EF lenses with AF capability.

- With USB plug for firmware upgrade by customer self.

- With multi-functional button for advanced control of adapter working mode.

NOTE: 1) Only Canon and Sigma Lenses will be tested in the factory, lenses or smart EF adapters of other brands are not guaranteed to work with.
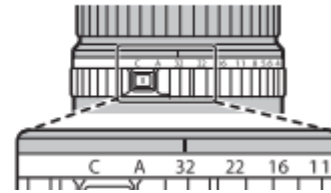
2. Function description

1. Lens release button

   Pull down to release the lens locking

2. Multiple functions button (MFB)

   a) Force adapter into firmware update mode if being pressed when adapter power on. Please ***do not*** push when you put lens/adapter combination into camera body and want to shoot pictures. _FW update can only be done with a PC (or Mac in the future) and an USB Micro cable, not through camera body._

   b) When shooting, a quick button click will switch lens exposure mode between FUJI lens mode C (Aperture priority

by camera command dial) and A (Programming auto mode by camera). According to FUJI:

① C (⊖): Set aperture to the value chosen with the camera command dial.

② A (⊖): Set aperture to the value chosen automatically by the camera.

c) From firmware v1.1, it is possible to re-trigger lens info auto tuning manually by keeping the MFB pressed for more than 10 seconds. Once MFB being released, adapter will do the lens information gathering again, and update camera with the new lens information. In order to do lens info auto tuning, adapter must be mounted with an EF lens on the camera, and camera must be powered on.

d) Other usages of MFB like aperture locking, AF micro adjustment etc. will be added via firmware updates in the future.

3. Lens to adapter mounting alignment point indication

4. Adapter to camera mounting alignment point indication

For front view from lens

5. Adapter to camera mounting alignment point indication

    For back view from camera.

6. USB Micro Socket (With soft plastic socket cover)

● USB Micro cable is not include in the package, any USB Micro cable is applicable.

● Keep the USB socket cover safe when removed, and _**keep it tight when being inserted**_ into the socket, otherwise it may _**fall and harm**_ your camera CMOS.

● Future firmware releases will be published in steelsring.com

3. Feature description

● Auto focus of EF lenses in GFX cameras.

- When shooting, half-press shutter button to start AF hunting. When AF locked, fully press down shutter button to start capture.

- If AF lock is back/front focused, customer can manually rotate EF lens focus ring to correct the focus lock position while _keeping the shutter button half pressed_, and then fully press down to start capture. _**Please make sure your lens**_

allows full-time MF, otherwise it will damage your lenses.

- AF-S works OK with current FW release and recommended, AF-C works but it may hunt back and forth. AF performance improvement is a continuous and longtime effort, will be improved through future firmware releases.

● Auto exposure and aperture control through GFX camera command dial or program automatic controlled.

Default mode is C , aperture priority mode by GFX camera command dial , MFB can be used to switch the exposure mode to A or P - program automatic controlled

● EF Lens Image Stabilization activation/deactivation.

For any EF lenses equipped with Image stabilization, customer can use the lens IS switch to turn it on/off. In current firmware release, if turned on, it remains on until being turned off. Future firmware release will sync the lens IS on/off state according to GFX camera setting and states change.

● EF Lens info and EXIF recording

- One of the major advantage of Steelsring GFX adapter over our competitors is lens parameters can be passed correctly to GFX camera, so user will not feel confused in choosing exposure parameters and reviewing their pictures later. This

information includes Lens type name, lens capabilities, focal length range, aperture range, current focal length, and current aperture.

- Some zooming lenses with variable max/open aperture (for example, 70-300 f/4.5-5.6) may not display correct aperture range when being zoomed, it is a known issue, will be improved by lens parameter tuning through future firmware releases.

● EF Lens AF/MF mode switch

- FUJI lenses do not have MF/AF switch in it body, so AF/MF mode change is done through GFX camera body.

- EF lenses MF/AF switch button can also put EF lens into MF mode by ignoring AF instruction from GFX camera. Usually GFX camera will show AF prohibited sign on its LCD screen

- MF mode or manually turn AF ring in AF mode will affect the accuracy of AF. When you feel something wrong with AF, please leave the AF focus ring untouched, turn off the camera power then turn it on to re-initialize the adapter's AF algorithm. Put camera into picture display/review mode, then turn into live view or shoot mode can also power cycle adapter to reinitialize its AF algorithm.

- When powered on, adapter will try to drive the lens to the wide focal end whether AF/MF mode setting in EF lens body is AF or not, it will cause no problem to Canon/Sigma lenses.

- MF/AF mode switch in **_lens body_** has a side effect to eliminate some occasional AF drive wrong situation. For example, when you see camera back LED light (right-up corner, around Q button) is flashing for AF driving, but lens actually does not run at all. In this case, switch the lens MF/AF switch to MF mode will make sure camera back led light stop flashing forever.

● EF Lens Focus Zone Switch

It is suggested to turn the EF Lens focus zone switch to full range or to focus zone with infinity end being included when power on GFX camera, this will properly initialize adapter's full range AF driving capability. When it is properly initialized, zone switch can be used to limit the AF hunting range, and can switch to full range AF hunting with no problem.

● Adapter firmware update by user itself

- Remove USB Micro socket cover, put it on some safe place

- Plug USM Micro cable into adapter

- Press down MFB and keep it pressed with one hand

- Plug-in other side of USB Micro cable into PC

- Release MFB

- Start firmware updater, detailed steps to be explained in future firmware release notes

- EF Lens auto tuning for AF performance

For all compatible EF lenses, lens tuning is necessary, because it will collect EF lens information, and pass it to GFX body for display or EXIF recording. For EF lenses with AF capability, it is necessary because EF lens AF parameters are collected for better AF in GFX camera, the AF tuning process includes EF Lens being driven back and forth for 2-3 times. AF Tuning step will be bypassed for manual EF lenses. EF lens tuning can be triggered automatically or manually.

Auto triggered EF lens tuning happens, when

1) An EF lens is mounted for the first time in the adapter

2) EF lens tuning information was lost due to firmware update, or adapter's memory being overflowed by too much EF lens data. (Current max limitation is 48 lenses, it may change in different firmware releases)

Manually triggered EF lens tuning maybe needed, if

1) Lens was identified as a wrong lens.

2) When lens AF behave weird, such as too much AF hunting, cannot focus on target on certain distance. This may happen if EF lens auto tuning failed for some reason, for example, focus zone switch was not set to full range position.

Usually, EF lens tuning will last for 5-10 seconds during powering up for auto tuning, or 5-10 seconds after manually triggered. During this process, camera LCD may display wrong lens info or black out, it is normal, and will return to correct information displaying after auto tuning finished.

Each time of lens tuning will consume some kind of resource inside adapter, please do not abuse it for no reason. Each time of camera power up, you may trigger lens tuning for once, because usually camera will report "Lens error" for your second attempt.

4. Procedures of using adapter

● Mount EF lens into EF/GFX adapter

● Mount lens/adapter combination into camera

- Turn on camera power

  When a new EF lens to the adapter is mounted for the first time, after camera powered on, GFX camera's shoulder LCD will black out for about 10s while waiting for adapter to initialize for the new lens. Once lens data for the new lens is ready, GFX camera shoulder LCD will display the right lens max aperture. Then adapter will drive the lenses to its infinity position to initialize the AF algorithm.

  If you see wrong lens information or lens was not driven to wide focal position first, or GFX camera was black out forever, it means adapter did not initialize properly, please report to https://www.facebook.com/Steelsring

  In picture playback mode, you can check the shooting lens info by pressing UP button twice continuously, then lens information and exposure parameters will be shown up in the LCD display.

- Half-press shutter button to start AF, full-press shutter to capture

- Power off the camera

5. Lens Compatibilities

- EF mount lenses support is not limited to the Canon brand, Sigma, Tamron or other lens may also work with this EF/GFX

adapter, as long as it talks EF lens protocol. However only Canon and Sigma lenses are tested in development and production, other EF lenses are not guaranteed.

- Compatible lenses table

Lens Brand	Lens Name	Result

6. TIPS

7. FAQ

- How to tell which firmware version my adapter has?

Put the adapter/any lens combination into camera body, keep "DISP BACK" button pressed down while powering up the camera, lens version displayed on the LCD screen is your adapter firmware version.

● Any dumb xxx to EF adapters without EF lens pins will not activate the adapter, and it shows no lens installed when camera power on.

● An EF/GFX adapter without compatible EF lenses mounted, will consume zero camera battery, so it's safe to leave the adapter alone on the GFX camera.

● We strongly suggest customer to remove the adapter from camera mount first, before mounting an EF lens.

8. Known issues/imitations

● Steelsring EF/GFX Adapter is not weather sealed, please do your preparation or use it at your own risk during wet weathers.

● EXIF info for zooming lens may be inaccurate, will be improved in future firmware release.

9. Troubles

● Usually , when something wrong, please turn camera power on/off to see if it will occur again

- Pull the camera battery out is the last defense if camera freeze forever. It's OK, we did it quite a lot in developing the adapter, and I am deeply sorry for what happened, please report it to https://www.facebook.com/Steelsring , better with your operation steps so that we can reproduce and make some diagnosis.