

Steelsring CONTAX645/GFX Smart Adapter

User's Guide

Version 1.0 updated 2017/11/01



Thank you for choosing Steelsring products

1. Features of Steelsring CONTAX645 /GFX Adapter

Smart adapter for all C645 lens (see Note 1), with following features:

- Automatic C645 Lens identification, information gathering, and EXIF recording in GFX camera
- Support Auto Focus and Auto Exposure of C645 lenses (no AF support for 120 F/4.0)
- With C645 lens information auto tuning, includes AF info auto tuning for C645 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) There is a known issue with Mutar 1.4x + C645 140/210/350 combinations, we promise to fix it in future firmware releases once we figure out the problem.

2. Function description





1. Lens release button

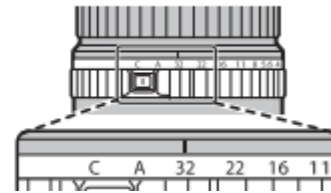
Pull down to release the lens locking

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), A (Programming auto mode by camera) or A-L (Aperture controlled by Lens Aperture Ring). 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 v1.0, 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 refreshed lens information. In order to do lens info auto tuning, adapter must be mounted with a C645 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 back view from camera.

5. 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 C645 lenses on 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 C645 lens focus ring to correct the focus lock position while **keeping the shutter button half pressed**, and then fully press down to start capture.

- 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.
- **About the AF performance of C645 lenses on the GFX.** FUJIFILM's AF algorithm highly depends on the accuracy of AF control of AF lenses, if you have a good quality C645 lens, it may AF fast and accurate with Steelsring C645/GFX adapter. However, some C645 lenses are aging and may have problem in precise AF control, a common phenomenon of such lenses is its MF ring will turn unwillingly when lens was driven by adapter's AF commands. This unwanted MF ring turns will bring errors to adapter's AF step control, and errors will accumulate to make AF useless in the end after several AF drives. New firmware development is planned to allow user mark a C645 lens as fault AF lens, thus adapter will use a different AF driving strategy by introducing more AF hunting to keep AF works for a longer time.

- Aperture control mode switch.

Single quick click of multifunction button of adapter will rotate the lens aperture control mode to: A-C (Aperture control by camera command dial), A-L (Aperture control by lens aperture ring), P (Programmed control by Camera , or T if

shutter speed priority). In A-C and A-L mode, camera should LCD will show A only, so don't be confused, you can turn lens aperture ring or camera command dial to confirm which A mode it is now. In A-C mode, C645 lens aperture ring is useless, can be set to any aperture value.

- C645 Lens info and EXIF recording

- With Steelsring GFX adapter, C645 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.

- 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 only.

- 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
- C645 Lens auto tuning for AF performance

For C645 lenses, lens tuning is necessary, because it will collect C645 lens information, and pass it to GFX body for display or EXIF recording. For C645 lenses with AF capability, it is necessary because C645 lens AF parameters are collected for better AF in GFX camera, the AF tuning process includes driving C645 lens back and forth for 2-3 times. AF Tuning step will be bypassed for manual C645 lens like 120 f/4. C645 lens tuning can be triggered automatically or manually.

Auto triggered C645 lens tuning happens, when

- 1) A C645 lens is mounted for the first time in the adapter
- 2) A C645 lens tuned info was lost due to firmware update

Manually triggered C645 lens tuning maybe needed, if

- 1) A C645 lens was identified as a wrong lens.

2) When lens AF behave weird, such as too much AF hunting, or cannot focus on target on certain distance. This may happen if C645 lens auto tuning failed for some reasons.

Usually, C645 lens tuning will last for 10-15 seconds during powering up for auto tuning, or 10-15 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 C645 lens into C645/GFX adapter
- Mount lens/adapter combination into camera
- Turn on camera power

When a new C645 lens to the adapter is mounted for the first time, after camera powered on, GFX camera’s shoulder

LCD will black out for about 10-15s 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

All C645 lenses are supported, except Mutar 1.4x + 140/210/350 combination may not function well occasionally.

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.

- An C645/GFX adapter without C645 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 a C645 lens.

8. Known issues/imitations

- Steelsring C645/GFX Adapter is not weather sealed, please do your preparation or use it at your own risk during wet weathers.
- There is a known issue with Mutar 1.4x + C645 140/210/350 combinations, to be fixed in future firmware releases.

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, I 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.