Fringer EF-FX / EF-FX Pro User's Manual
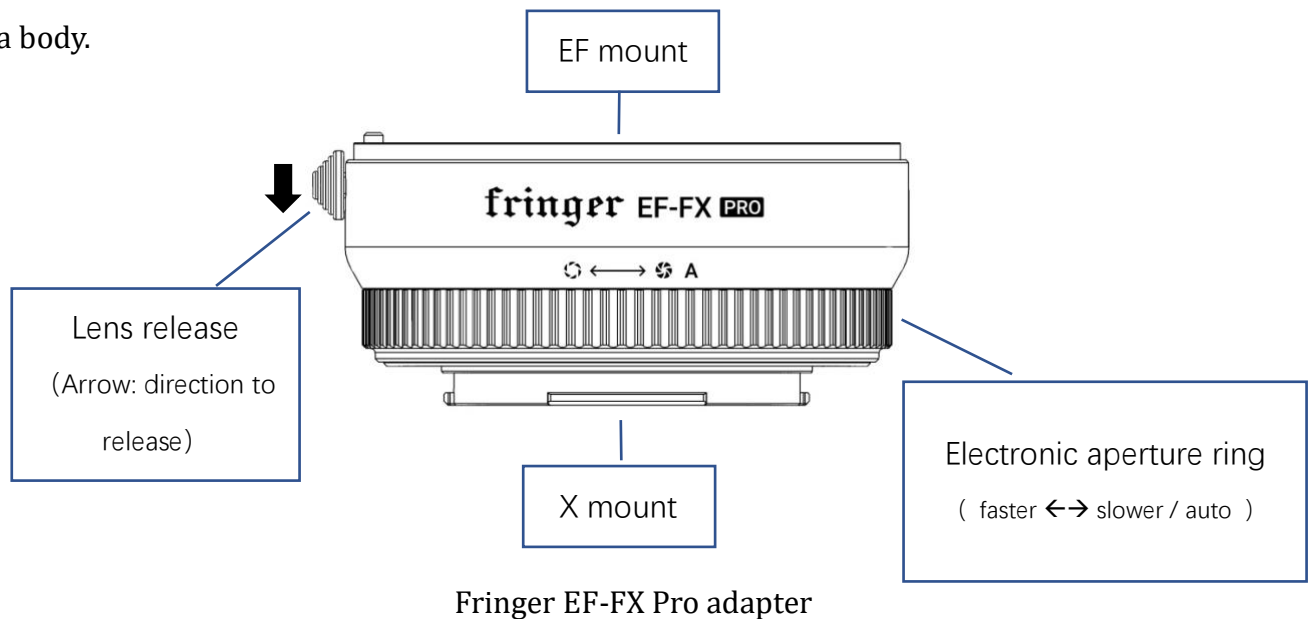
Notice： Setting shutter speed manually can avoid aperture noises during view finding. See sector 3.2 for details.

1. Introduction

This product is compatible with Canon EF mount and Fujifilm X mount protocols. It can control lens' aperture electronically, auto focus and report lens information for EXIF recording.

The pro version has a built-in electronic aperture ring. Like native XF lenses, it sets aperture values. And it employs contactless sensors so that you don't need to worry about wearing problems. The standard version doesn't have an aperture ring and the aperture value can only be set through the camera body.

EF mount

Lens release
(Arrow: direction to release)

fringer EF-FX PRO

○ ←——→ ⑤ A

X mount

Electronic aperture ring
（ faster ←→ slower / auto ）

Fringer EF-FX Pro adapter

2. Compatibility

This adapter works on X mount cameras. However, due to capability differences of different camera models, its performance may vary.

On cameras equipped with none X-Trans CMOS or X-Trans I CMOS, such as X-A series, X-E1 and X-Pro1, since the camera body lacks PDAF support, adapted lenses can only work under CDAF mode. AF speed may be slow. And for some lenses AF accuracy may not be good, either. If its performance can't satisfy you, MF is recommended.

On cameras equipped with X-Trans II CMOS, e.g. X-E2, X-T1, etc., X-Trans III CMOS, e.g. X-H1, X-T2, X-Pro2, XE3, etc., and X-Trans IV CMOS, e.g. X-T3, as those PDAF focus points are activated, AF becomes faster and more accurate. Since PDAF region of X-Trans II CMOS is much smaller, X-Trans III & IV based cameras are recommended.

We have tested and optimized over 90 models of EF mount lenses. All optimized lenses can activate all the PDAF focus points and gain a better AF performance. However, the EF mount is a huge system and there are so many different lens models. A lot of them have not been tested and optimized,

yet. Most of them would work on the adapter. However, the AF performance may be lower as PDAF may not work at all. And a small amount of them may not be compatible. If you encounter a poor AF performance or compatibility issues, please wait for us to test and optimize that lens and support it in future firmware updates.

See the attached list at the end for tested and optimized lens models.

3. Function descriptions

3.1 Lens self-test

When you install a lens on the adapter and power on the camera for the first time, the adapter may drive lens' AF module to the close end and then to infinity to do a self-test and calibration. All lenses not on the optimized lens list and some of lenses on that list will do the self-test. During this procedure, please do not touch the MF ring of the lens. Or you may interfere with the calibration. If there is something wrong with the self-test procedure, the AF function may not be in a normal state. If that happens, turning on and then turning off the camera at once will clear the defective calibration data. Installing another lens and power on the camera will do the same.

3.2 Setting aperture and shutter speed value

The pro version is equipped with an electronic aperture ring similar to some Fujifilm XF lenses. Looking down to the top of the camera, turning it left increases aperture while turning it right decreases it. When it is turned to the smallest aperture setting, one more step brings it to the Auto mode under which the aperture will be decided by the camera. Each step of movement is 1/3 EV which is the same as XF lenses.

Like some XC lenses, the standard version needs camera's command dial to set aperture value. Please refer to camera's manual for more details.

On pro version, if you want to set the aperture value through the camera body as on standard version, you may install standard version's firmware for it. See sector 4 for detailed procedures. Be noted that the electronic aperture ring will be totally disabled after you do that. If you want to restore its function, just reinstall the pro version firmware.

For X-H1 and X-T3, you may set "A" of aperture ring to "Command" ("BUTTON/DIAL SETTING" -> "APERTURE RING SETTING (A)" -> "COMMAND"). After doing this, turning the aperture ring to the end to "A" position activates camera body's command dial (default is front dial) for the aperture setting. Now you can switch between aperture ring and command dial freely without flashing different firmware version.

You may set shutter speed through the command dials on camera. During view finding, when environment brightness changes, the lens aperture blades may move frequently with a little noise and slightly flashing of LCD or EVF. It only occurs when both AF and aperture priority are enabled. That's a

unique behavior of Fujifilm mirrorless. Native XF lenses behave the same. But their aperture motor moves so fast and silently that you will never notice. However, EF lenses' aperture motor moves slower and noisier. If you want to avoid it, manually set shutter speed by moving shutter speed dial to any position other than 'A'. Of course you may still set shutter speed to auto if that's tolerable. **Be noted that if "PREVIEW EXP./WB IN MANUAL MODE" in the camera menu is set to "OFF", the described issue may occur even the shutter speed is set manually.**

For some of the zoom lenses not in the optimized lens list, max aperture value may not be correctly displayed. But their functions would be OK. The aperture display issue will go away when the lens is added to the optimized lens list in the future through firmware update.

3.3 Setting AF modes

For a better AF performance, please always use phase detection focus points. See the dashed box in the following charts (X-Trans II and III only). For cameras equipped with X-Trans III CMOS, e.g. X-H1, X-Pro2, X-T2, X-T20 and X-E3, use central 7 x 7 among all 91 AF points. For cameras equipped with X-Trans II CMOS, e.g. X-T1, X-T10, X-E2 and X-E2s , use central 3 x 5 among all 77 focus points. Whatever you set AF mode to AF-S or AF-C, single point or zone, the use of focus points outside the dashed box will activate CDAF and AF performance may be degraded. **For X-Trans IV (e.g. X-T3), all the AF points covering the entire sensor support PDAF. Thus, you may use any of them and get optimal performance. And WIDE/TRACKING mode also works.**
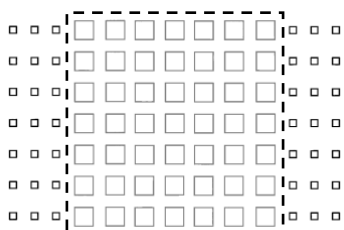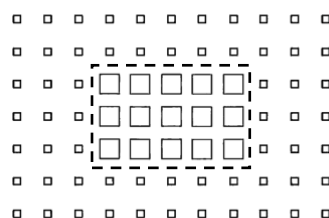
| X-Trans III | X-Trans II |

Under the single point AF mode, setting focus point to **medium size** is recommended for a better AF successful rate and accuracy. Remember, **small size focus point means contrast AF only** and may cause degraded performance.

We have tried our best to make EF lenses work better on X mount. But please understand that different lens and camera system will never collaborate like a native system. Sometimes even lenses optimized may encounter AF issues. You may try to improve its accuracy by half pressing shutter release button **more than once** before releasing the shutter. Or you may try AF-C instead of AF-S mode. If necessary, please change to the MF mode.

You may change it to the MF mode by turning AF/MF switch on the lens to the MF position. The camera will be set to the MF mode automatically.

For some lenses not in the optimized lens list, PDAF may not work. Thus, you may encounter slow

and inaccurate AF. Sometimes MF would be the only choice.

3.4 Lens built-in IS and camera IBIS functions

This product can activate image stabilizing functions of lenses with IS, OS or VC support. When the IS switch on the lens is turned on, the lens' IS function is controlled by "IS MODE" menu item. If it's set to "Continuous" (Mode 1), IS function is activated all the time. That may consume more power. When it's set to "Shooting only" (Mode 2), IS function is enabled when the shutter release button being half-pressed and disabled about 2 seconds after its release.

Be noted,

● Not all the lenses with IS function can active it reliably each time half-pressing the shutter release button under "Shooting only" mode. If that happens, please change to "Continuous" mode. So far, we found following lenses that may have this issue.

EF 100/2.8L IS	EF 70-300/4-5.6L IS
EF 200/2L IS	EF 100-400/4-5.6L IS
EF 300/4L IS	EF-S 15-85/3.5-5.6 IS
EF 500/4L IS	EF-S 17-85/4-5.6 IS
EF 70-200/4L IS	TAMRON 35/1.8 Di VC
EF 70-200/2.8L IS	SIGMA 150-600/5-6.3 OS
EF 70-200/2.8L IS II	

● When IS mode is set to "Continuous", please only turn on the IS switch when necessary to save battery power. Meanwhile, please turn off the IS switch before powering off the camera. Or the IS elements may not go back to proper position.

● When using IS lens on an IBIS body, e.g. X-H1, IBIS is disabled automatically to prevent interference with lens' IS function.

● When using none IS lens on an IBIS body, e.g. X-H1, IBIS function can be activated. The usage is the same as none IS native XF lenses. Please use "IS Mode" menu item to control it. However, **only lenses shorter than 100mm can be supported well by the IBIS**.

4. Firmware update

You need a PC or Mac and a Micro B USB cable, i.e. most Android phone's data cable (not type C), to upgrade the adapter.

1) Download new firmware from Fringer's website. Be noted that there are two versions, i.e. pro version and standard version. The former supports electronic aperture ring while the latter needs to set
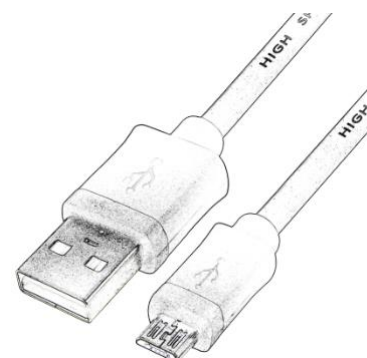
aperture through the camera body. For example 'EFFX100**P**.BIN' is v1.00 for **pro** version and 'EFFX100**S**' is v1.00 for **standard** version.

2) Get the adapter off the camera. Make sure not to connect the adapter with the computer while it is installed on a camera body.

3) Plug the USB cable to the Micro USB port located inside the lens mount of the adapter.

4) Connect the other end of the cable to a USB port of your PC or MAC. Then a mobile drive named 'FRINGER' emerges. Open 'VERSION.TXT' on that drive and check the current firmware version (the line begins with 'Version:').

5) If upgrading is needed, copy the downloaded firmware file to the drive named 'FRINGER'. Then eject the drive. Ejection is mandatory for Mac and optional for PC. Ignore any error messages about the drive. Wait for more than 10 seconds. Then disconnect the adapter with the computer.

6) Reconnect your adapter with the computer. Check VERSION.TXT again and make sure its firmware version has changed to the new one.

Note: Do not copy files other than the official firmware to the adapter.

Begin with firmware v1.80, you may read the adapter's firmware version by Fujifilm's method, i.e. press and hold DISP button before power on the camera. The "Lens version" on the screen is actually the adapter's firmware version. See the following figure.
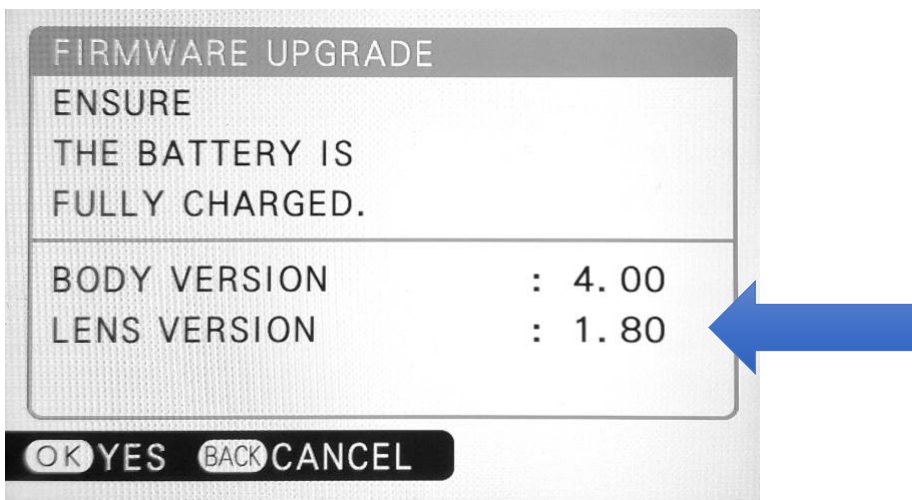
V2.0 and 2.10 is the new baseline. Adapters with firmware 1.x must be upgraded to 2.0 or 2.10 before installing any firmware newer than 2.10.

| V1.x | → | V2.0 or V2.10 | → | V2.20 or newer | ✓ YES! |

| V1.x | ⟶ | | V2.20 or newer | ✗ NO! |
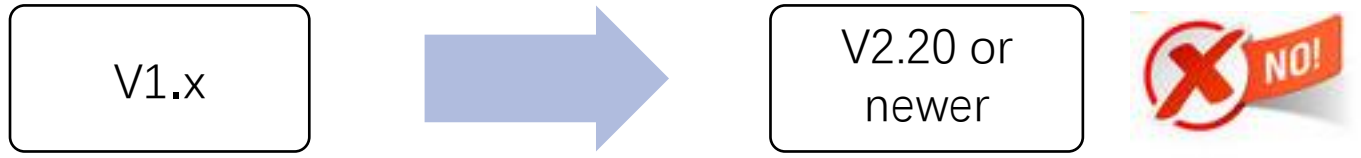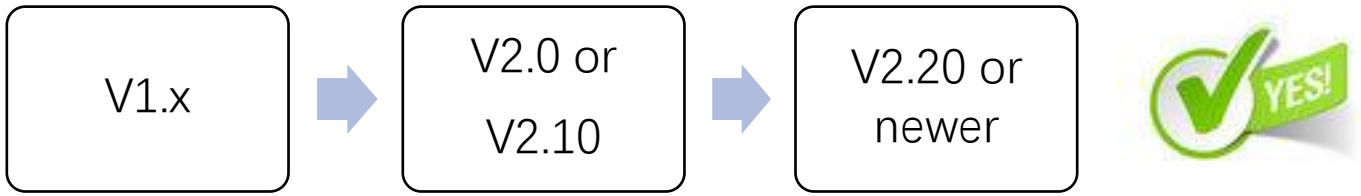
5. Tested and optimized lens list (firmware v2.50)

EF 14/2.8L II	EF 17-40/4L	SIGMA 24/1.4 art
EF 24/1.4L II	EF 24-70/2.8L	SIGMA 30/1.4 art
EF 35/1.4L	EF 24-70/2.8L II	SIGMA 35 /1.4 art
EF 35/1.4L II	EF 24-70/4L IS	SIGMA 50/1.4 art
EF 35/2	EF 24-105/4L IS	SIGMA 70/2.8 art
EF 40/2.8 STM	EF 24-105/4L IS II	SIGMA 85/1.4 art
EF 50/1.2L	EF 70-200/2.8L	SIGMA 135/1.8 art
EF 50/1.4	EF 70-200/2.8L IS	SIGMA17-50/2.8 OS
EF 50/1.8 STM	EF 70-200/2.8L IS II	SIGMA 18-35/1.8 art
EF 85/1.2L II	EF 70-200/2.8L IS II + 1.4X	SIGMA 24-35/2 art
EF 85/1.4L IS	EF 70-200/2.8L IS II + 2X	SIGMA 50-100/1.8 art
EF 85/1.8	EF 70-200/4L	SIGMA 70-200/2.8 EX DG HSM OS
EF 100/2.8L	EF 70-200/4L IS	SIGMA 70-200/2.8 EX DG HSM OS + 1.4X
EF 100/2L	EF 70-200/4L IS + 1.4X	SIGMA 70-200/2.8 EX DG HSM OS + 2X
EF 135/2L	EF 70-300/4-5.6L IS	SIGMA 100-400/5-6.3 OS C
EF 180/35L	EF 70-300/4-5.6 IS II	SIGMA 150-600/5-6.3 OS
EF 200/2L IS	EF 100-400/4.5-5.6L IS	SIGMA 50/1.4 EX
EF 200/2L IS + 1.4X	EF 100-400/4.5-5.6L IS II	SIGMA 105/2.8 EX OS MACRO
EF 200/2L IS + 2X	EF 200-400/4L IS	TAMRON SP 35/1.8 Di VC USD F012
EF 200/2.8L II	EF 200-400/4L IS + 1.4X	TAMRON SP 45/1.8 Di VC USD
EF 200/2.8L II + 1.4X	EF-S 24/2.8 STM	TAMRON SP 85/1.8 Di VC USD
EF 200/2.8L II + 2X	EF-S 35/2.8 Macro IS STM	TAMRON SP 90/2.8 VC F004
EF 300/4L IS	EF-S 10-18/4.5-5.6 IS STM	TAMRON 10-24/3.5-4.5 Di II VC HLD
EF 300/4L IS + 1.4X	EF-S 10-22/3.5-4.5	TAMRON 18-400/3.5-6.3 Di II VC HLD
EF 400/5.6L	EF-S 15-85/3.5-5.6 IS	TAMRON SP 24-70/2.8 Di VC USD G2
EF 500/4L IS	EF-S 17-55/2.8 IS	TAMRON SP 70-200/2.8 Di VC USD G2
EF 500/4L IS + 1.4X	EF-S 17-85/4-5.6 IS	TAMRON 100-400/4.5-6.3 Di VC USD
EF 600/4L IS II	EF-S 18-55/3.5-5.6 IS II	TAMRON SP 150-600/5-6.3 Di VC USD G2
EF 600/4L IS II + 1.4X	EF-S 18-55/3.5-5.6 IS STM	TAMRON SP 200-500/5-6.3 Di LD
EF 16-35/2.8L II	EF-S 18-135/3.5-5.6 IS STM	TOKINA ATX 11-16/2.8 PRO DX (I & II)
EF 16-35/2.8L III	EF-S 18-135/3.5-5.6 IS USM	TOKINA ATX 11-20/2.8 PRO DX
EF 16-35/4L IS	EF-S 55-250/4-5.6 IS STM	