

Fringer EF-NZ (Model FR-NZ1) User's Manual

(Firmware v1.20)

1. Introduction

This adapter is compatible with Canon EF/EFS mount and Nikon Z mount protocols. It can control lens' aperture electronically, auto focus and report lens information for EXIF recording. Most EF/EFS lenses manufactured by Canon and third parties, e.g. Sigma, Tamron, etc., get similar phase detection AF performance to that of adapting Nikon F mount lenses to Z mount through Nikon FTZ adapter.

Both bayonets of EF and Z mount are made of brass. The body and tripod mount are made of alloy. All these parts are made by high precision CNC and very solid and durable. The professional light extinction design inside the adapter will make sure the optical performance of the lens is maximized.

A removable tripod mount is included. It's useful when medium sized lenses are used or when the whole setup is to be installed on a gimble. But if you don't need it, you may remove it by uninstalling the two screws under it using the L-wrench which is also included. When you reinstall it, please be noted that don't use too much force. Or the thread may be damaged.

There is a Micro USB plug for a firmware update purpose near the tripod mount. Read section 4 for more details.

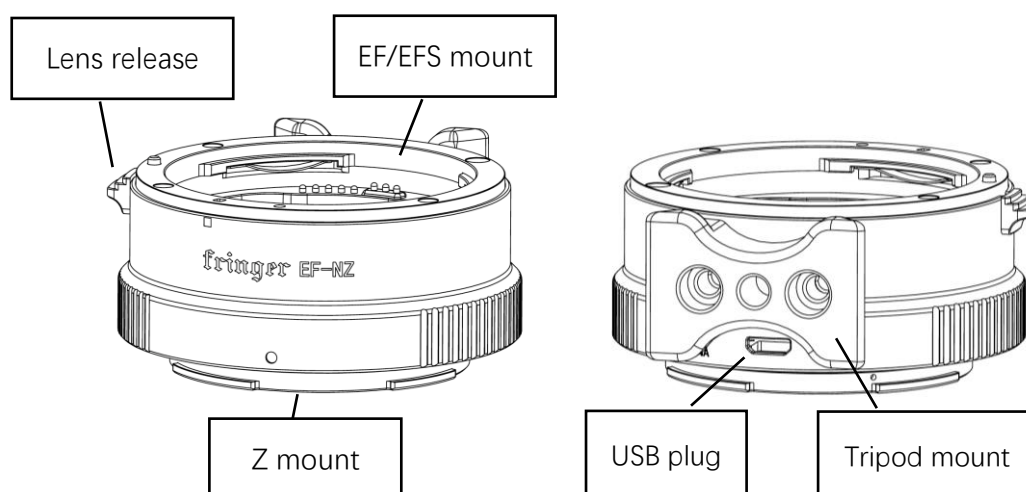


Figure 1

2. Compatibility

This adapter works with Z mount cameras including Z6, Z7, Z50, and theoretically other Z cameras to be released in the future. If compatibility issues are found when a new Z camera comes, we may fix it through a new firmware update.

Begin with firmware 1.20, the adapter is compatible with almost all EF/EFS mount lenses manufactured by Canon and major third parties except some rare cases. Aperture control works for all AF or MF (such as TS-E) lenses. Phase detection AF works for all AF lenses. Whatever which AF modes, i.e. AFS, AFC, face and eye detection focus, and still photo or movie mode you use, it's just like adapting an F mount lens through the FTZ adapter.

However, because the EF/EFS mount is a huge family, we haven't tested all lenses. Thus, if you encounter any compatibility problem, please let us know. As long as we can find a lens sample to do tests, the problem may be solved through a firmware update.

3. Function descriptions

The basic usage is similar to adapting a Nikon F mount lens through the FTZ adapter.

3.1 Installation and image area setting

We suggest to install the lens to the adapter first. Then install the adapter to the camera. When you need to change the lens, please power off the camera first. Then replace the lens and power on the camera again.

When an APS-C lens is installed, the adapter will not force the camera to use DX format. Instead, the choice is yours. But if you set the image area to FX, there may be dark corners, distortions, etc. That isn't the malfunction of the adapter but limitations of APS-C lens itself.

3.2 Lens built-in IS and camera IBIS functions

This adapter fully supports both IS (or OS, VC, etc.) function of the lens and IBIS function of the camera. But they cannot work together.

IBIS is controlled by the camera menu. As long as the menu item "Vibration Reduction" is set to "ON", it keeps working.

Lens IS function is controlled by the IS switch on the lens. As long as it's at "ON" position, it keeps working.

The two IS functions are independent. Don't turn on both at the same time. Or the

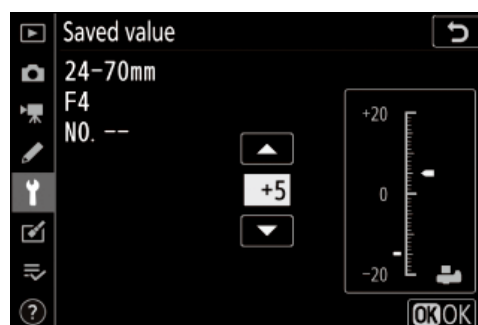
function will fail. For the latest generation of Canon IS lenses and all tele-lenses longer than 300mm, lens IS function is recommended. For all the other lenses, IBIS is preferred.

When lens IS function is activated, if you power off the camera, the operation will not finish until the IS module is parked. That may cause a delay of 2 or 3 seconds. Of course, you will not notice it unless the camera is turned on immediately after being turned off.

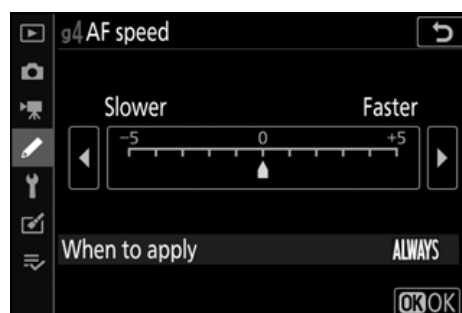
3.3 AF settings

All the AF modes, i.e. AFS, AFC, AFF (for video), MF (please set AF/MF switch on the lens to MF), are supported. You may use AF area of Single-point, Dynamic-area, Wide-area and Auto-area. But please be noted, if AF area of Pinpoint is used, some lenses may not perform well. In that case please use Single-point instead. You may also use face/eye detection AF like using a native Nikon lens.

Some lenses may need AF fine-tune to get better AF accuracy. However, sometimes different lens samples of the same model may need different AF fine-tune values. For example, we have encountered two EF50/1.0L lenses that need +15 and -9 to get the best AF accuracy. Thus, we don't provide the table of suggested AF fine-tune values anymore. Please try your lens and find the best setting by yourself. Be noted, for some very fast lenses, e.g. EF50/1.0L, EF50/1.2L, EF85/1.2L II, etc., correct AF fine-tune setting is a must to get sharp images.



On Z cameras, there is a Movie AF Speed setting on the menu (Custom Settings->Movie). It may help users produce smooth focus transfer effects. Currently, the following lenses support movie AF speed setting. In the future, more lenses may be added to the list. However, some relatively old lenses may not support this function at all. They will never be added.



EF 35/1.4L II	EF 70-300/4-5.6 IS II
EF 40/2.8 STM	EF 100-400/4.5-5.6L IS II
EF 50/1.8 STM	EF-S 24/2.8 STM

EF 85/1.4L IS	EF-S 10-18/4.5-5.6 IS STM
EF 100/2.8L Macro IS	EF-S 15-85/3.5-5.6 IS
EF 300/2.8L II	EF-S 18-55/3.5-5.6 IS STM
EF 300/2.8L II + 1.4X	EF-S 18-135/3.5-5.6 IS USM
EF 300/2.8L II + 2X	EF-S 18-135/3.5-5.6 IS STM
EF 16-35/2.8L III	EF-S 55-250/4-5.6 IS STM
EF 16-35/4L IS	SIGMA 28/1.4 art
EF 24-70/2.8L II	SIGMA 17-70/2.8-4 OS C
EF 24-70/4L IS	SIGMA 18-200/3.5-6.3 C
EF 24-105/4L IS II	SIGMA 50-100/1.8 art
EF 70-200/2.8L IS II / III	SIGMA 100-400/5-6.3 OS C
EF 70-200/2.8L IS II / III + 1.4X	TAMRON SP 35/1.4 Di USD F045
EF 70-200/2.8L IS II / III + 2X	TAMRON 10-24/3.5-4.5 Di II VC HLD
EF 70-300/4-5.6L IS	

3.4 settings for MF lenses without electronic contacts

Unlike Nikon FTZ adapter, when installed on Fringer EF-NZ adapter, lenses without electronic contacts also get the green square focus indication at the focus point position. When this function greatly helps a lot of manual lens users, it has a drawback. The Non-CPU Lens Data menu item doesn't work anymore. Without correct focal length data, the IBIS function of certain Z cameras, e.g. Z6 and Z7, doesn't work properly. To fix this, we added manual lens focal length input function.



Usage: When the adapter is installed on the camera and no electronic lens is installed, turn on the camera and set it in photo shooting mode. (We use a 135mm manual lens as a sample)

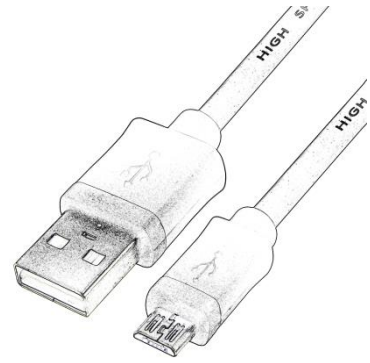
- 1) Half press and hold shutter button (or AF-ON button). Press AFL button (Center of sub-selector by default) for 3 times. Release shutter button (or AF-ON button).
- 2) Now, there should be a F1.1 on the screen. It means we are now inputting the first digit of the focal length number.
- 3) Press AFL button once. Now the F number displayed on the screen represents the value currently stored. F10 means 0, F11 means 1, ..., F19 means 9.
- 4) Press AFL button for multiple times until current digit reaches the value you want. Each time after it's pressed, current digit will increase by 1. For example, we need to set it to 1 for a 135mm lens.
- 5) Half press shutter button (or AF-ON button) and release it. Now, there should be a F2.2 on the screen. It means we are now inputting the second digit of the focal length number.
- 6) Repeat step 3 to 4 to set the second digit. For example, we need to set it to 3 for a 135mm lens.
- 7) Half press shutter button (or AF-ON button) and release it. Now, there should be a F3.3 on the screen. It means we are now inputting the third digit of the focal length number.
- 8) Repeat step 3 to 4 to set the third digit. For example, we need to set it to 5 for a 135mm lens.
- 9) Half press shutter button (or AF-ON button) and release it. Now, there should be a F1 on the screen. It means the focal length number has been stored and the camera has returned to photo shooting mode.

During the above process, you may cancel at any time by turning off the camera. In that case, the focal length value stored won't be changed.

After a new value is set, you may take a photo and check the focal length field in the EXIF. The value is stored in the adapter permanently and won't be affected by turning off the camera or removing the battery from the camera.

4. Firmware update

You need a PC or MAC and a Micro B USB cable, i.e. some Android phones' data cable (not type C), to upgrade the adapter.



- 1) Download new firmware from Fringer's website.
- 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 shown in Figure 1.
- 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, e.g. EFNZ_100.BIN, 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 about 20 seconds. The adapter would disconnect itself and reconnect. The 'FRINGER' drive would appear again. If it doesn't reconnect automatically, disconnect the USB cable and reconnect it with the computer.
- 6) Check VERSION.TXT again and make sure its firmware version has changed to the new one. You may also check the adapter's version through the camera menu item "Firmware version". The number after "MA" is the adapter firmware version.

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

Troubleshooting:

Some of the cables in the market are for charging only and not suitable for data transfer. Thus, if you can't find the "FRINGER" drive when the adapter is connected to the computer, check your cable!