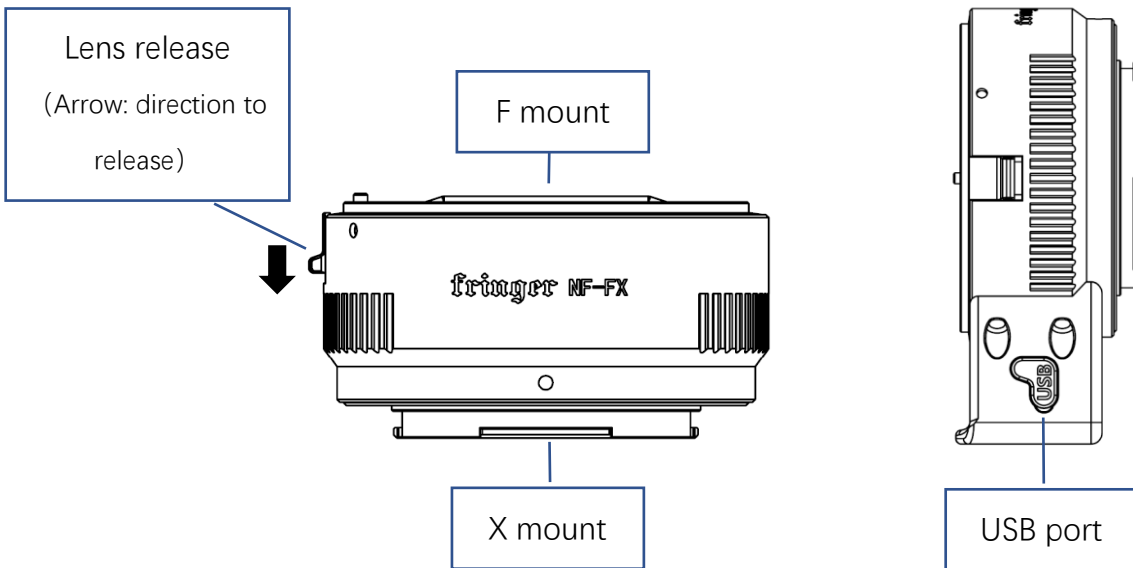


Fringer NF-FX Smart Adapter User's Manual

Notice: Setting shutter speed manually can avoid aperture noises during view finding.
See section 3.2 for details.

1. Introduction

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



Fringer NF-FX (FR-FTX1) adapter

2. Compatibility

functions \ Lens type	AF/AF-D	AF-S/AF-P G	AF-S/AF-P E	Third party AF
	Lenses	Lenses	Lenses	lenses
Electronic aperture control	●	●	●	●
Auto focus		● ^①	● ^①	● ^①
LaCA correction profile		● ^②	● ^②	● ^②
Lens parameters in EXIF	●	●	●	●

① Only tested and optimized lenses support PDAF and have better AF performance. See section 5 for the lens list.

② For all tested and optimized lenses, there are profile data for each of them stored in the adapter. They are sent to the camera to correct lateral chromatic aberration (LaCA) which can be seen as color fringes on high contrast edges. See section 5 for the lens list.

③ Among lenses that are not on the tested and optimized lens list, especially Tamron lenses, there may be some of them that are not compatible. In that case, none of the auto functions is available.

This adapter works with F mount lenses. It supports electronic aperture control on Nikon D, G, E

lenses and other electronic F lenses from third parties like Sigma and Tamron. There is an aperture motor inside the adapter. Thus, lenses with mechanical diaphragm controls as well as electromagnetic ones are both supported. Meanwhile, it supports auto focus on Nikon AF-S, AF-P lenses and other F mount AF lenses from major third parties. Be noted, Nikon AF/AF-D lenses can be used. But AF won't work as there isn't AF motor inside these lenses. MF can be used instead. For all F mount lenses that have CPU chip and successfully communicate with the adapter through lens contacts, EXIF will record lens parameters like focal length range, max aperture range, current focal length, current aperture, etc. For lenses with built-in image stabilization functions (VR/OS/VC, etc.), image stabilization can be activated and controlled by the camera menu item "IS MODE". For lenses without built-in image stabilization functions, IBIS can be activated.

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

CMOS Type	Camera model	Compatibility description
X-Trans I & non X-Trans	X-E1, X-Pro1, X-M1, X-A1, X-A3, X-A5, X-A7, X-T100, X-T200	No PDAF support. Poor AF performance. Use MF if necessary.
X-Trans II	X-E2, X-E2s, X-T1, X-T10	PDAF focus area is very small. AF performance is not so good.
X-Trans III	X-H1, X-T2, X-T20, X-Pro2, X-E3	7 columns of AF points in the middle support PDAF. Better AF performance if PDAF activated.
X-Trans IV	X-T3, X-T30, X-Pro3, X-T4, X-S10, X-E4	All AF points support PDAF. A big leap in AF performance. Recommended!

We have tested and optimized over 160 models of F mount lenses. All optimized lenses can activate all the PDAF focus points and gain a better AF performance. However, the F 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, such as some of Tamron lenses, may not be compatible. If you encounter poor AF performance or compatibility issues, please wait for us to test and optimize that lens and support it in future firmware updates.

See section 5 for tested and optimized lens models.

3. Function descriptions

3.1 Lens installation and self-test

When you install a F mount lens, make sure the lens is turned to the proper position and get locked. Meanwhile, the lens release button should be up normally. Or it may cause camera malfunction

such as flashing screen.

When you install a lens that is not on the tested and optimized lens list 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. 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. There isn't such procedure for any tested and optimized lenses.

3.2 Setting aperture and shutter speed value

Like Fujifilm XC lenses, there is no aperture ring on the adapter. You may use camera's command dial to set aperture value. Please refer to the camera's manual for more details.

For Nikon AF-D lenses, please set aperture ring on the lens to the minimum position (maximum F number). Or the lever inside the lens may interfere with that of the adapter when controlling diaphragm.

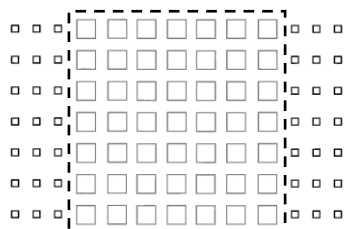
You may set shutter speed through the command dials on camera. During view finding, when environment brightness changes, the lens aperture blades may move frequently with a minor noise and brightness change of LCD or EVF. It only occurs when both AF and aperture priority are enabled. That's a unique behavior of the Fujifilm mirrorless. Native XF lenses behave the same. But their aperture motor moves so fast and silently that you will never notice. However, SLR lenses' aperture moves slower and noisier. If you want to avoid it, manually set the shutter speed. 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.**

Regarding D/G lenses from Nikon and other non-electromagnetic auto lenses from third parties, there is a mechanical coupling between the lens and the adapter which may bring aperture control tolerance inevitably. When the camera is metering, if the shutter speed is set to auto, e.g., aperture priority mode, it may use a different aperture from your setting. That may cause metering tolerance. To avoid it, you need to set the shutter speed manually so that the camera will use the same aperture setting when metering.

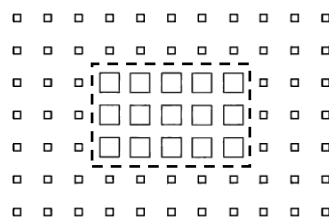
3.3 Setting AF modes

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, X-T30, X-Pro3, X-T4 and X-S10), 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 the 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.

For cameras equipped with X-Trans IV CMOS, e.g. X-T3, setting the camera to boost mode may degrade AF performance. The camera may prefer CDAF instead of PDAF under certain circumstances in that mode. If that happens, please turn off the performance boost mode.

We have tried our best to make F mount lenses work better on X mount. But please understand that different lens and camera systems 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 in addition to 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 lenses not in the optimized lens list, PDAF doesn't work. Thus, you may encounter slow and inaccurate AF. Sometimes MF would be the only choice.

3.4 Lens built-in IS (VR/OS/VC) and camera IBIS functions

This product can activate image stabilizing functions of lenses with VR, OS or VC. 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 1 second after its release.

Be noted,

- When IS mode is set to "Continuous", please only turn on the IS switch when necessary to save

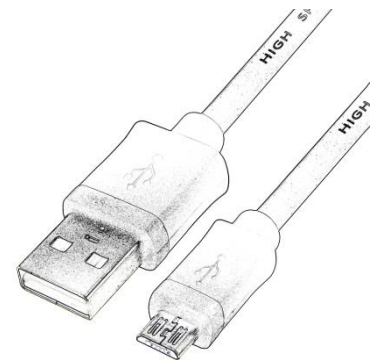
battery power.

- When IS mode is set to “Continuous”, the IS module is in working position all the time. If you turn off the camera or switch to the playback mode, the adapter will instruct the lens to park the IS module. That may cause an extra delay of about a second or more. Thus, when using a lens with IS functions, you may set IS to modes other than “Continuous” to get a faster playback response.
- When using IS lens on an IBIS body, e.g. X-H1, X-T4 and X-S10, IBIS is disabled automatically to prevent interference with lens’ IS function.
- When using a non-IS lens on an IBIS body, IBIS function can be activated. The usage is the same as non-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. some Android phone’s 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 USB port 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 current firmware version (the line begins with ‘Version:’).
- 5) If upgrading is needed, copy the downloaded firmware file to the drive named ‘FRINGER’. Wait for about 20 seconds. Ignore any error messages about the drive. The adapter would disconnect itself and reconnect. The ‘FRINGER’ drive appears 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.

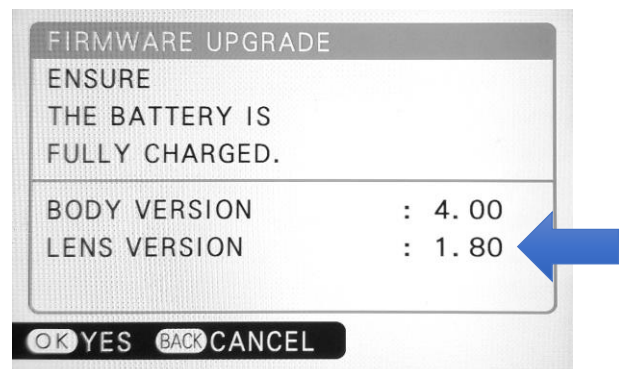


Note: Do not copy files other than the official firmware to the adapter.

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!

You may also 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.

5. Tested and optimized lens list (firmware v1.50)

1.	AF-P DX NIKKOR 10-20mm f/4.5-5.6G VR
2.	AF-S DX NIKKOR 10-24mm f/3.5-4.5G ED
3.	AF-S DX NIKKOR 12-24mm f/4G ED
4.	AF-S DX NIKKOR 16-80mm f/2.8-4E ED VR
5.	AF-S DX NIKKOR 16-85mm f/3.5-5.6G ED VR
6.	AF-S DX NIKKOR 17-55mm f/2.8G ED
7.	AF-P DX NIKKOR 18-55mm f/3.5-5.6G
8.	AF-P DX NIKKOR 18-55mm f/3.5-5.6G VR
9.	AF-S DX NIKKOR 18-55mm f/3.5-5.6G VR
10.	AF-S DX NIKKOR 18-55mm f/3.5-5.6G VR II
11.	AF-S DX NIKKOR 18-70mm f/3.5-4.5G ED
12.	AF-S DX NIKKOR 18-105mm f/3.5-5.6G ED VR
13.	AF-S DX NIKKOR 18-140mm f/3.5-5.6G ED VR
14.	AF-S DX NIKKOR 18-200mm f/3.5-5.6G ED VR II
15.	AF-S DX NIKKOR 18-300mm f/3.5-5.6G ED VR
16.	AF-S DX NIKKOR 18-300mm f/3.5-6.3G ED VR
17.	AF-S DX NIKKOR 55-200mm f/4-5.6G ED VR
18.	AF-S DX NIKKOR 55-300mm f/4.5-5.6G VR
19.	AF-P DX NIKKOR 70-300mm f/4.5-6.3G ED
20.	AF-P DX NIKKOR 70-300mm f/4.5-6.3G ED VR
21.	AF-S DX NIKKOR 35mm f/1.8G
22.	AF-S DX Micro NIKKOR 40mm f/2.8G
23.	AF-S DX Micro NIKKOR 85mm f/3.5G ED VR
24.	AF-S NIKKOR 14-24mm f/2.8G ED
25.	AF-S NIKKOR 16-35mm f/4G ED VR
26.	AF-S NIKKOR 18-35mm f/3.5-4.5G ED
27.	AF-S NIKKOR 24-120mm f/4G ED VR
28.	AF-S NIKKOR 24-70mm f/2.8E ED VR
29.	AF-S NIKKOR 24-70mm f/2.8G ED

30.	AF-S NIKKOR 24-85mm f/3.5-4.5G ED VR
31.	AF-S NIKKOR 28-300mm f/3.5-5.6G ED VR
32.	AF-S NIKKOR 70-200mm F2.8G ED VR
33.	AF-S NIKKOR 70-200mm F2.8G ED VR + 1.4X
34.	AF-S NIKKOR 70-200mm F2.8G ED VR + 1.7X
35.	AF-S NIKKOR 70-200mm F2.8G ED VR + 2X
36.	AF-S NIKKOR 70-200mm F2.8G ED VR II
37.	AF-S NIKKOR 70-200mm F2.8G ED VR II + 1.4X
38.	AF-S NIKKOR 70-200mm F2.8G ED VR II + 1.7X
39.	AF-S NIKKOR 70-200mm F2.8G ED VR II + 2X
40.	AF-S NIKKOR 70-200mm f/2.8E FL ED VR
41.	AF-S NIKKOR 70-200mm f/2.8E FL ED VR + 1.4X
42.	AF-S NIKKOR 70-200mm f/2.8E FL ED VR + 1.7X
43.	AF-S NIKKOR 70-200mm f/2.8E FL ED VR + 2X
44.	AF-S NIKKOR 70-200mm f/4G ED VR
45.	AF-S NIKKOR 70-200mm f/4G ED VR + 1.4X
46.	AF-S NIKKOR 70-200mm f/4G ED VR + 1.7X
47.	AF-S NIKKOR 70-200mm f/4G ED VR + 2X
48.	AF-P NIKKOR 70-300mm f/4.5-5.6E ED VR
49.	AF-S NIKKOR 70-300mm f/4.5-5.6G ED VR
50.	AF-S NIKKOR 80-400mm f/4.5-5.6G ED VR
51.	AF-S NIKKOR 200-400mm f/4G IF-ED VR
52.	AF-S NIKKOR 200-400mm f/4G IF-ED VR + 1.4X
53.	AF-S NIKKOR 200-400mm f/4G IF-ED VR + 1.7X
54.	AF-S NIKKOR 200-400mm f/4G IF-ED VR + 2X
55.	AF-S NIKKOR 200-400mm f/4G ED VR II
56.	AF-S NIKKOR 200-400mm f/4G ED VR II + 1.4X
57.	AF-S NIKKOR 200-400mm f/4G ED VR II + 1.7X
58.	AF-S NIKKOR 200-400mm f/4G ED VR II + 2X

59.	AF-S NIKKOR 200-500mm f/5.6E ED VR
60.	AF-S NIKKOR 200-500mm f/5.6E ED VR + 1.4X
61.	AF-S NIKKOR 200-500mm f/5.6E ED VR + 1.7X
62.	AF-S NIKKOR 200-500mm f/5.6E ED VR + 2X
63.	AF-S NIKKOR 20mm f/1.8G ED
64.	AF-S NIKKOR 24mm f/1.4G ED
65.	AF-S NIKKOR 24mm f/1.8G ED
66.	AF-S NIKKOR 28mm f/1.4E ED
67.	AF-S NIKKOR 28mm f/1.8G
68.	AF-S NIKKOR 35mm f/1.4G
69.	AF-S NIKKOR 35mm f/1.8G ED
70.	AF-S NIKKOR 50mm f/1.4G
71.	AF-S NIKKOR 50mm f/1.8G
72.	AF-S NIKKOR 58mm f/1.4 G
73.	AF-S Micro NIKKOR 60mm f/2.8G ED
74.	AF-S NIKKOR 85mm f/1.4G
75.	AF-S NIKKOR 85mm f/1.8G
76.	AF-S NIKKOR 105mm f/1.4E ED
77.	AF-S VR Micro-Nikkor 105mm f/2.8G IF-ED
78.	AF-S VR Micro-Nikkor 105mm f/2.8G IF-ED + 1.4X
79.	AF-S VR Micro-Nikkor 105mm f/2.8G IF-ED + 1.7X
80.	AF-S VR Micro-Nikkor 105mm f/2.8G IF-ED + 2X
81.	AF-S NIKKOR 200mm f/2G ED VR II
82.	AF-S NIKKOR 200mm f/2G ED VR II + 1.4X
83.	AF-S NIKKOR 200mm f/2G ED VR II + 1.7X
84.	AF-S NIKKOR 200mm f/2G ED VR II + 2X
85.	AF-S NIKKOR 300mm f/2.8G ED VR II
86.	AF-S NIKKOR 300mm f/2.8G ED VR II + 1.4X
87.	AF-S NIKKOR 300mm f/2.8G ED VR II + 1.7X
88.	AF-S NIKKOR 300mm f/2.8G ED VR II + 2X
89.	AF-S NIKKOR 300mm f/4E PF ED VR
90.	AF-S NIKKOR 300mm f/4E PF ED VR + 1.4X
91.	AF-S NIKKOR 300mm f/4E PF ED VR + 1.7X
92.	AF-S NIKKOR 300mm f/4E PF ED VR + 2X

93.	AF-S NIKKOR 400mm f/2.8G ED VR
94.	AF-S NIKKOR 400mm f/2.8G ED VR + 1.4X
95.	AF-S NIKKOR 400mm f/2.8G ED VR + 1.7X
96.	AF-S NIKKOR 400mm f/2.8G ED VR + 2X
97.	AF-S NIKKOR 500mm f/4G ED VR
98.	AF-S NIKKOR 500mm f/4G ED VR + 1.4X
99.	AF-S NIKKOR 500mm f/4G ED VR + 1.7X
100.	AF-S NIKKOR 500mm f/4G ED VR + 2X
101.	AF-S NIKKOR 500mm f/5.6E PF ED VR
102.	AF-S NIKKOR 500mm f/5.6E PF ED VR + 1.4X
103.	AF-S NIKKOR 500mm f/5.6E PF ED VR + 1.7X
104.	AF-S NIKKOR 500mm f/5.6E PF ED VR + 2X
105.	AF-S NIKKOR 600mm f/4G ED VR
106.	AF-S NIKKOR 600mm f/4G ED VR + 1.4X
107.	AF-S NIKKOR 600mm f/4G ED VR + 1.7X
108.	AF-S NIKKOR 600mm f/4G ED VR + 2X
109.	AF-S NIKKOR 80-200mm f/2.8D IF-ED
110.	AF-S NIKKOR 80-200mm f/2.8D IF-ED + 1.4X
111.	AF-S NIKKOR 80-200mm f/2.8D IF-ED + 1.7X
112.	AF-S NIKKOR 80-200mm f/2.8D IF-ED + 2X
113.	AF-S NIKKOR 300mm f/4D IF-ED
114.	AF-S NIKKOR 300mm f/4D IF-ED + 1.4X
115.	SIGMA 10-20mm F3.5 EX DC HSM
116.	SIGMA 10-20mm f/4-5.6 EX DC HSM
117.	SIGMA 12-24mm F4 DG HSM A016
118.	SIGMA 14-24mm F2.8 DG HSM A018
119.	SIGMA 17-50mm F2.8 EX DC OS HSM
120.	SIGMA 17-70mm F2.8-4 DC MACRO OS HSM
121.	SIGMA 17-70mm F2.8-4 DC MACRO OS HSM C013
122.	SIGMA 18-35mm F1.8 DC HSM A013
123.	SIGMA 18-200mm F3.5-6.3 DC MACRO OS HSM C014
124.	SIGMA 24-35mm F2 DG HSM A015
125.	SIGMA 24-70mm F2.8 DG OS HSM A017
126.	SIGMA 24-105mm F4 DG OS HSM A013

127.	SIGMA 50-100mm F1.8 DC HSM A016
128.	SIGMA APO 70-200mm F2.8 EX DG OS HSM
129.	SIGMA 70-200mm F2.8 DG OS HSM S018
130.	SIGMA 100-400mm F5-6.3 DG OS HSM C017
131.	SIGMA 150-600mm F5-6.3 DG OS HSM S014
132.	SIGMA 150-600mm F5-6.3 DG OS HSM C015
133.	SIGMA 20mm F1.4 DG HSM A015
134.	SIGMA 24mm F1.4 DG HSM A015
135.	SIGMA 30mm F1.4 DC HSM A013
136.	SIGMA 30/1.4 EX DC HSM
137.	SIGMA 35mm F1.4 DG HSM A012
138.	SIGMA 40mm F1.4 DG HSM A018
139.	SIGMA 50mm F1.4 EX DG HSM
140.	SIGMA 50mm F1.4 DG HSM A014
141.	SIGMA 85mm F1.4 DG HSM A016
142.	SIGMA 105mm F1.4 DG HSM A018
143.	SIGMA 135mm F1.8 DG HSM A017
144.	SIGMA 150mm f/2.8 EX DG HSM APO Macro
145.	TAMRON 10-24mm F/3.5-4.5 Di II VC HLD (Model B023)

146.	TAMRON 16-300mm f/3.5-6.3 Di II VC PZD MACRO B016
147.	TAMRON 18-400mm F/3.5-6.3 Di II VC HLD (Model B028)
148.	TAMRON SP 24-70mm F/2.8 Di VC USD (Model A007)
149.	TAMRON SP 24-70mm F/2.8 Di VC USD G2 (Model A032)
150.	TAMRON 35-150mm F/2.8-4 Di VC OSD Model A043
151.	TAMRON SP 70-200mm F/2.8 Di VC USD (Model A009)
152.	TAMRON SP 70-200mm F/2.8 Di VC USD G2 (Model A025)
153.	TAMRON 70-210mm F4 Di VC USD A034
154.	TAMRON 100-400mm F/4.5-6.3 Di VC USD (Model A035)
155.	TAMRON SP 150-600mm F/5-6.3 Di VC USD G2 (Model A022)
156.	TAMRON SP 35mm F/1.4 Di USD (Model F045)
157.	TAMRON SP 35mm f/1.8 Di VC USD F012 (Lens firmware V3)
158.	TAMRON SP 45mm f/1.8 Di VC USD F013 (Lens firmware V3)
159.	TAMRON SP 85mm f/1.8 Di VC USD F016 (Lens firmware V4)
160.	TOKINA AT-X 11-16mm f/2.8 PRO DX II
161.	TOKINA AT-X 11-20mm f/2.8 PRO DX
162.	TOKINA AT-X 12-28mm f/4 PRO DX
163.	TOKINA AT-X 14-20mm f/2 PRO DX