Steelsring EF/GFX AF Micro Adjustment Guide

v1.0, 2017/11/23

1. **About AF micro adjustment in EF/GFX**

   a) Focus point deviation is a common problem to smart adapters in FUJI cameras. FUJI AF algorithm is not very smart, its fault tolerance is very low compared with DSLR and Sony E cameras.

   b) This new feature will allow user to adjust the focus locking point position in the range between -127 -> 127. A negative adjustment moves focus point back to near side or front of target, a positive adjustment move focus to far side or behind the target. AF micro adjustment actions at the moment when focus is locked (when you see the green box in EVF/LCD).

   c) Adjustment can be done in full AF range or applied to a single AF Zone. There are 3 fixed AF zones.

      i.   Zone 1 -   Nearest end -> 1/2 of AF range .

      ii.   Zone 2 -   1/2 -> 3/4 of AF range.

      iii.   Zone 3 -   3/4 -> Infinity.

   d) A zone AF adjustment will effect only when the focus lock is located in its zone. Priority of zone AF micro adjustment is higher than all range AF micro adjustment. All range micro adjustment will works only when

zone adjustment is set to default. If zone adjustment value was set to 0, all range micro adjustment will also be ignored.

e) For each lens, there are 4 AF adjustment values can be set, 1 value for full AF range and 3 values for 3 AF zones.

2. **Adapter's firmware update to v1.4 or later** (This is optional if you have v1.4+ or later installed already)

   a) Firmware update is as usual

      i. Download http://www.steelsring.com/firmware/fw_efgfx-1.4b.zip

      ii. Unzip it to fw_efgfx-1.4b folder

      iii. Put adapter into firmware update mode, and USB cable connected

      iv. Mouse left double click steps1.bat to verify adapter/cable connection (This step is optional)

      v. Mouse left double click steps2-1.4b.bat to start firmware update

      vi. When it said "Done successfully", pull the cable out, and disconnect the adapter

3. **Test EF lens before AF adjustment**

   a) Before an EF lenses can be AF tuned, it must be used at least once with the adapter and on the camera. Otherwise there will be no lens info can be used for AF tuning later.

   b) If you lens's focus deviation situation is very consistent, you may consider to use the AF tuning to improve it. Otherwise, if could be worse if not set right.

4. AF Tune Process

Whole process is divided into 3 steps.

a) Step1, download EF lens info from adapter (This step is optional, if you already download once)

    i.   Mouse left double click AF-TUNE-STEPS1.bat. Follows the instruction, put the adapter into firmware update mode first. When firmware updater found your adapter, it will start downloading lens data into lens.bin file. Make sure you have a newly created lens.bin file before proceeding to step2.

    ii.   Attention: Adapter is not in firmware update mode anymore when it just finish the firmware flashing and showing you success message. You need to pull the cable out, and then put it in firmware update mode again to proceed.

b) Step2, display/change EF lens AF adjustment setting (This step is repeatable as you wish)

    i.   Mouse left double click AF-TUNE-STEPS2.bat

    ii.   Firmware updater will find the lens.bin file in current file folder, and list all registered EF lens and their current AF adjustment setting, and you can chose one or many to change it.

    iii.   For each lens, only its focal range will be list for identification purpose. For example , EF 85 f/1.8, and EF 85 f/1.4 USM IS, they are both listed as 85mm, usually lenses are listed in order by which

it is registered, but it is not always correct, because sometimes, there are too much EF lenses being registered, old lens info will be overwritten by later lens registration information.

iv. For each lens, there are 4 AF adjustment values can be entered.

    1. Value 1: Full range AF adjustment

    2. Value 2: AF Zone 1 AF adjustment (Near -> 1/2 of AF Range)

    3. Value 3: AF Zone 2 AF adjustment (1/2 -> 3/4 of AF Range)

    4. Value 4: AF Zone 3 AF adjustment (3/4 ->Infinity)

v. For each adjustment value, if you input a wrong number or value is out of range, the adjustment value will be reset to default – which means no AF adjustment. So if you want to keep the original adjustment value untouched, you need to enter the same value again to keep it. A zone adjustment value 0 will disable all range AF adjustment in that zone as well.

vi. When you finished AF setting, enter 0 in the lens selection list to quit. If there were changes in lens setting, you will be asked if you want to save it back into lens.bin file.

c) Step3, upload you AF adjustment setting to adapter (This step is repeatable as you wish)

i. Mouse left double click AF-TUNE-STEPS3.bat. Follows the instruction, put the adapter into firmware update mode first.

ii. When firmware updater found your adapter, it will start uploading

lens.bin file into adapter.

  iii. Pull out the cable and disconnect the adapter.

5. **Reuse of lens.bin across firmware releases.**

  a) We will try to maintain the compatibility of lens.bin between firmware releases, but we can't guarantee it forever.

  b) It is a good behavior to backup current lens.bin data from adapter before new firmware update.

  c) It maybe not safe to reuse lens.bin from previous firmware update, please pay attention to each firmware release's note for advices.