

Q-FOCUSER-ASKARFMA230 INSTALLATION INSTRUCTIONS

Installation of the Q-Focuser-AskarFMA230 bracket is straightforward and requires only a few simple steps.

Tools needed (not provided): 3mm hex key, 2.5mm hex key, 1.5mm hex key, Philips screwdriver

Q-Focuser Version Note: Either the Standard or High Precision version can be used with this bracket, however it MAY be necessary to use the external 12v power with the High Precision version for additional torque.

Note: The pictures and descriptions were written for a ZWO EAF, but these instructions are very similar for the Q-Focuser.

STEP 1 – Prepare the Telescope

- Position the scope rings so they are 40mm apart on center.
- With the Askar Photographic Spacer installed, position the forward scope ring so that the rear edge of the ring is flush with the back edge of the Photographic Spacer. See below.
- From the zero position, rotate the focuser until it is approximately 2/3 of the way "out".



STEP 2 – Install the Focus Gear

- If necessary, loosen the clamping screw with a Philips screwdriver.
- Position the Focus Gear so that the rear edge is flush with the back edge of the knurled focus ring on the focuser. See below. Note: remove the tiny thumb screw prior to installing the Focus Gear.
- Tighten the clamping screw. There should be little to no gap in the seam.
- Place the belt around the Focus Gear.



STEP 3 – Prepare the Q-Focuser

- Push the pulley onto the Q-Focuser pinion shaft. Note there is a "flat" on the pulley that matches the "flat" on the Q-Focuser pinion shaft.
- Using a 1.5mm hex driver, tighten the set screws until they contact the pinion shaft and turn 1/8 of a turn more. Do not overtighten the set screws.
- Slide the 4mm x 30mm Pin in the other end of the pulley.
- Using a 1.5mm hex driver, tighten the set screws until they contact the pin and turn 1/8 of a turn more. Do not overtighten the set screws.
- STEP 4 Slide the Pulley Support onto the Bracket. There is a dovetail channel for the Pulley Support to slide into and hold it loosely on the Bracket. Note: picture is of the EAF bracket. The Q-Focuser bracket is slightly different.
- STEP 5 With a 3mm hex driver, attach the bracket to the scope rings using(4) M5x8mm button head screws. Note: the Bracket can be mounted on either side of the rings.



de of the rings.

STEP 6 – Slide the Q-Focuser into the bracket. Keep it closest to the telescope. <u>Make sure to slip the</u> <u>belt around the pulley as you are sliding the Q-Focuser into the bracket.</u> As the Q-Focuser approaches the stop point, the Pin will slip into the small hole in the Pulley Support.



STEP 7 – Using a 2.5mm hex key, loosely fasten the Q-Focuser to the bracket with (2) M3x14mm socket head screws and (2) M3 washers. Do not fully tighten the screws. The Q-Focuser and Pulley Support still need to slide away from the telescope. STEP 8 – Position the belt so it is in the center of the Pulley. Using one finger on the base of the Pully, slide the Q-Focuser and Pulley away from the scope in order to tighten the belt. The Pulley Support will slide with the Q-Focuser. While maintaining pressure on the base of the Pulley, fully tighten the M3x14mm socket head screws. For added support, consider using the QHY supplied M3x5mm socket head screws through the top of the bracket into the Q-Focuser. The belt should be tight but not rigid. While not critical, try to position the Pulley so it is parallel to the Pulley Support.



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