

Focus-Iris Knob End Limit Adjustment

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If the Focus-Iris knob is coming up short on one or both sides, it's possible that the knob has gone out of calibration. There are two adjustment pots, VR2 and VR3, which control the end limits of each side of the knob. You will need a small (<.050") flat-head screwdriver to turn the pots. This calibration can account for errors up to a couple line widths. To calibrate the knob, do the following:

- 1) Mount the motor on the lens that's coming up short and connect the F/I to the MDR.
- 2) Open up the back of the F/I by removing the four phillips screws. Do not disconnect the transceiver board.
- 3) Locate the two adjustment pots near the bottom of the main PCB, by the eyebolt. See the figure below.



- 4) The motor direction switch on the MDR determines which pot affects which end stop of the knob. Turn the knob until you reach the end stop(s) that is coming up short of the mark on the lens.
- 5) Turn VR2 a few turns and watch the motor. It should creep slightly in one direction as you rotate VR2. If the motor doesn't move, try adjusting VR3 or turning VR2 in the opposite direction.

- 6) Each adjustment pot primarily adjusts one end stop, but the two pots do have a slight effect on each other. As a result, it might take some back-and-forth adjusting of both pots to make sure both ends are in the correct position. The pots are 10-turn pots, so take care not to rotate either one more than a few turns. The pots could be damaged otherwise.
- 7) Once you've determined which pot to turn for the adjustment needed, hold the knob against the end stop and rotate the pot until the motor just reaches the mark in question. It's important not to continue adjusting the pot in that same direction, otherwise some play will develop in the knob where the motor won't move.
- 8) After adjusting one end, rotate the knob to the other end stop and check the position. It's possible that the initial pot adjustment caused the other end to fall out of alignment. If so, rotate the other pot to move the second end stop into position.
- 9) Keep checking both end stops during the adjustment procedure. Once both of the knob end stops align with the lens end stops, the calibration is complete.