



# **Electric Focuser for iOptron MAK150 OTA Dual-Speed Focuser # 8452**

## **Instruction Manual**

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The #8452 Electric Focuser (eFocuser) is designed for iOptron Rumak-type 150mm Maksutov-Cassegrain telescope (MAK150) dual-speed focuser. The eFocuser then can be controlled by a compatible iOptron mount. It may work with other scopes use the similar dual-speed focuser.

**Features:**

- Whisper quiet operation
- Powerful stepper motor
- Zero backlash
- Plug into iOptron Port with no external power source needed
- 3 speed control by a compatible iOptron hand controller

**Currently supported mount** (with firmware version V161101 or later):

- CEM25/CEM25P/CEM25EC
- CEM60/CEM60EC
- iEQ30 Pro
- iEQ45 Pro

**Package includes:**

- 1X eFocuser for MAK150
- 1X Pulley
- 1X Synchronous belt
- 1X Control cable

**Installation:**

1. Remove both fine tuning and coarse tuning knobs from the dual-speed focuser.



2. Pull the eFocuser out from the cover by remove three screws.



3. Slide the iOptron eFocuser mounting ring onto the telescope focusing tube and adjust its position. Tighten two set screws to lock the E-Focuser.



- Put the eFocuser pulley onto the dual-speed focuser fine tuning shaft. Tighten the set screw.



- Wrap the belt on motor shaft first. Then put it onto the eFocuser pulley. You may turn the pulley while install the belt. Adjust the motor mounting screws to adjust the belt tension if needed.



- Put the cover on. Make sure that the cover is not blocked by the telescope body or dual-focuser. The fine tuning shaft is sit inside the small opening. Secure the cover by tightening three long screws.



- Connect the eFocuser to the mount use supplied 6P6C cable (same as the hand controller cable.) One end to the port on the eFocuser. The other end to the PORT on an iOptron mount.



- Power the mount on. After pass the initial screen, press MENU on the hand controller and move the cursor to "Electric Focuser". Press ENTER to bring Electric Focuser menu. Follow the on screen instruction to control the focuser.

