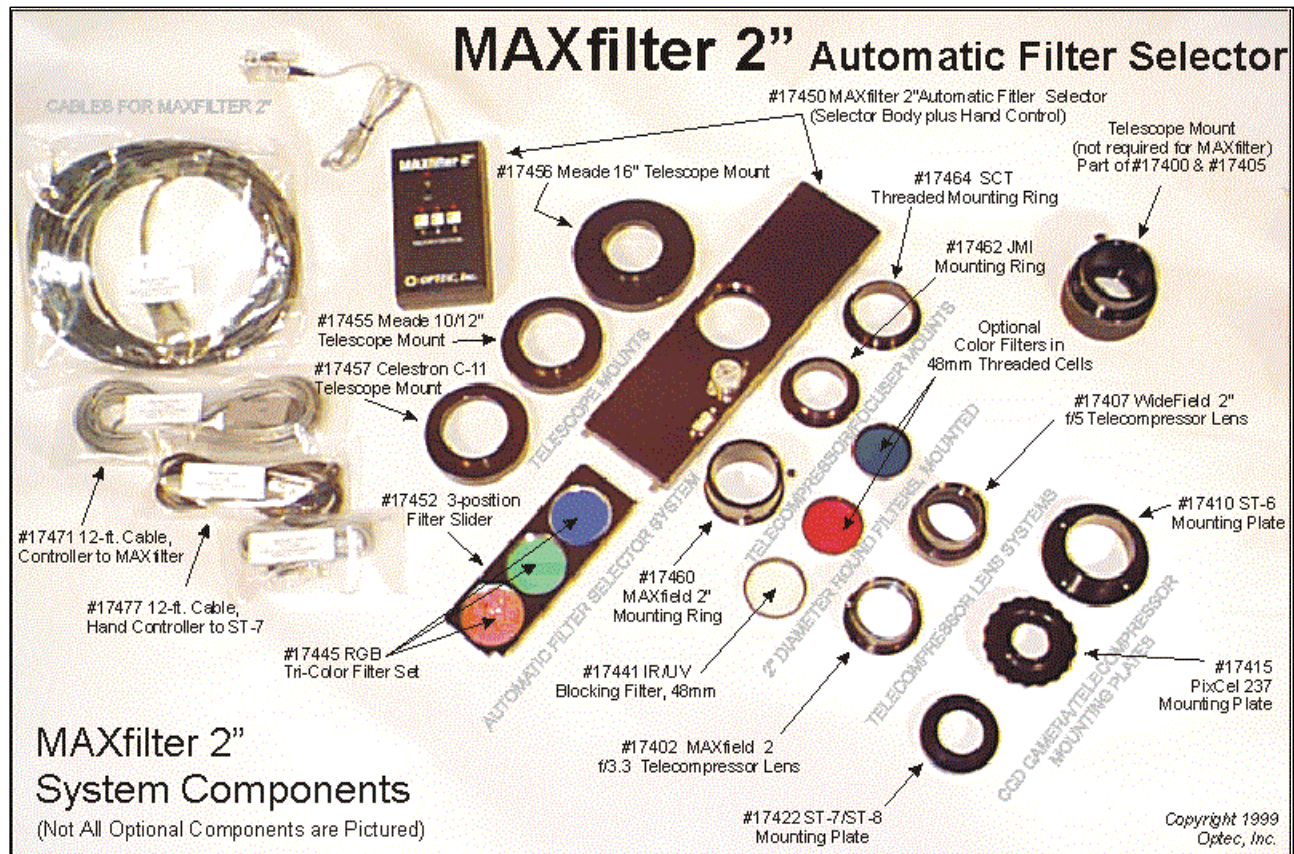




# MAXfilter 2"

## Assembly Instructions



### Mounting to Telescope

1. To connect the MAXfilter to the telescope a telescope mount is required. The most typical mounts thread onto the 2", 3" and 4" male threads found on the back of the Meade and Celestron Schmidt-Cassegrain Telescopes. A 2" Barrel Mount is also available for non-SCT type telescopes with a 2" eyepiece port. Each of these telescope mounts has a common dovetail for attaching the MAXfilter.

2. Attach the MAXfilter to the Telescope Mount and tighten the three #8 setscrews located around the front mounting plate of the MAXfilter. The proper size allen wrench should be included with the MAXfilter. Tighten each screw a little at a time until the MAXfilter is secure and snug up against the Telescope Mount. Do not over tighten. You may have to rotate the MAXfilter a little to clear the focusing knob of the Meade or Celestron telescope.

3. Attach the Telecompressor/Focuser Mount. Currently mounts are available for direct insertion of the MAXfield 2" or WideField 2", attachment of the JMI NGF-S focuser, or attachment of any accessory with a female 2" SCT thread. These mounts screw into the coarse thread on the back of the MAXfilter. Hand tighten only.

### Connecting the Cables

1. The Controller/MAXfilter cable should be the first one to be attached. Connect the 9-pin sub-D connector side of the cable to the mating connector located on the MAXfilter near the stepper motor. The 8-pin modular end of the cable can be connected to the hand control.
2. Plug the power supply into a wall outlet and then plug the DC power connector end of the cable into the hand control. Make sure the slide switch on the hand control is off. Note: plugging or unplugging the power cable into the hand control with the slide switch on will NOT cause any damage to the unit.
3. At this point the unit can be operated in manual mode by selecting pushbutton 1, 2 or 3.

### ***Connecting Cable for ST-4/5/6***

1. The Controller/SBIG ST-4/5/6 cable has a 4-pin modular connector on one end and a 9-pin sub-D (male pins) connector on the other end. Connect the 4-pin modular end to the hand control and the other end to the AUX connector on the SBIG controller box (Universal CPU in SBIG talk). See MAXfilter Wiring Diagram for pin and wire specifications.
2. In the SBIG camera software, go to 'Filter Setup' and set it to CFW-6A or CFW-8. Set Dark Position to 0 and then name the filter positions 1, 2 and 3 to your filters. The table below shows the default filter positions for the RGB and CMY filter sets. Positions 4, 5 and 6 in the SBIG control software are ignored by the Optec hand control.

<b><i>Filter Position</i></b>	<b><i>RGB Set</i></b>	<b><i>CMY Set</i></b>
Position 1	Red	Cyan
Position 2	Green	Magenta
Position 3	Blue	Yellow

### ***Connecting Cable for ST-7/8.***

1. The Controller/SBIG ST-7/8 cable has a plastic 9-pin sub-D to 6-pin modular adapter on one end and a 4-pin modular connector on the other end. Lengths of 12, 25, 50 and 100 feet are available. See MAXfilter Wiring Diagram for pin and wire specifications.
2. The 9-pin sub-D to modular adapter plugs into the Telescope controller port on the ST-7/8 camera head. The 4-pin modular connector end of the attached cable plugs into the MAXfilter hand control.
3. In the SBIG camera software, go to 'Filter Setup' and set it to CFW-6A or CFW-8. Set Dark Position to 0 and then name the filter positions 1, 2 and 3 to your filters. Normally, for RGB position 1 is Blue, position 2 is Green and position 3 is Red. Positions 4, 5 and 6 are ignored by the Optec hand control.
4. If telescope guiding with the ST-7/8 camera and Meade telescope is required. Plug into the plastic 9-pin sub-D to modular adapter the short length of cable with 6-pin modular connectors that should have been supplied with the ST-7/8 camera. The other end would go to the camera port on the Meade telescope control panel.

### ***Inserting or Removing the Filter Slider***

1. Loosen the two thumb screws holding the filter cover located at one end of the MAXfilter. Remove the cover and press the small momentary action pushbutton. The filter slider should extract in a few seconds. During this time the position 1 LED will flash on the hand control. Make sure you hold on to the filter slider as it is coming out to prevent it from falling.
2. To insert a filter slider, press the momentary action pushbutton again. You will hear the stepper motor turning and the position 1 LED will flash. Now, insert a filter slider. Unlike removing the filter slider, the stepper motor will keep turning until a slider is inserted. Push the slider up to the internal rack spur gear. Once engaged, the filter slider will move on its own to the number 1 position obtaining proper registration and then stop.

### ***Selecting a Filter***

1. Manually, a filter can be selected for use by pressing any of the three push buttons for positions 1, 2 or 3. The LED above the position selected will flash until the filter is in position. NOTE: when selecting a filter manually, the filter name is not changed in

the CCD image file. No filter information is conveyed back to the camera control program

2. By using CCDOPS for DOS, CCDOPS for Windows or CCDSOFT, position 1, 2 or 3 can be selected by picking on the filter from the filter window. The LED above the position selected will flash until the filter is in position. CAUTION: wait until the LED stops flashing before starting an exposure. There is no handshaking between the MAXfilter controller and the camera control software.

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