

Orion® 1.25" Multiple Filter Wheel #5520

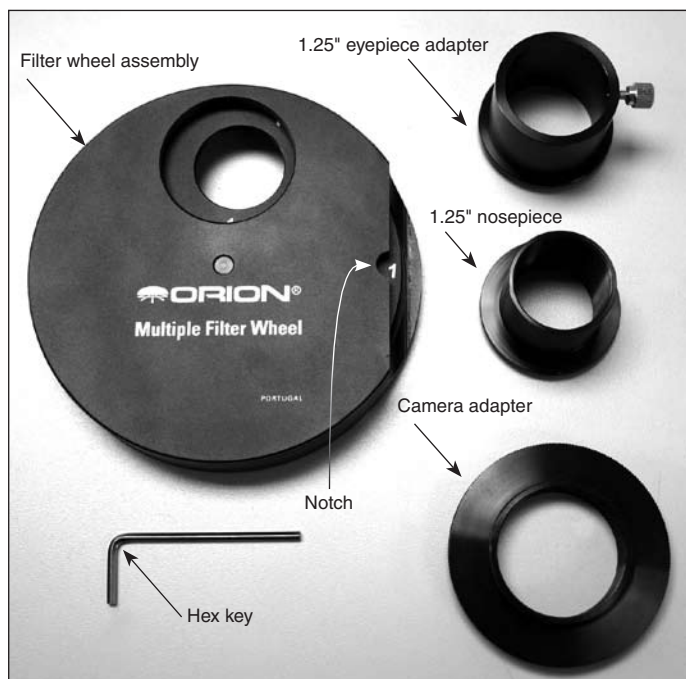


Figure 1. The Multiple Filter Wheel

Congratulations on your purchase of a quality Orion accessory. The Orion Multiple Filter Wheel allows use of up to five 1.25" filters without the time-consuming and sometimes frustrating process of removing an eyepiece or imaging system every time a different filter is needed. With its innovative design and compatibility with 1.25" Orion filters, the Orion Multiple Filter Wheel lets you dial in the details of virtually any celestial object with a simple turn of the wheel.

Parts List

- 1 Filter wheel assembly
- 1 1.25" nosepiece
- 1 Camera adapter
- 1 1.25" eyepiece adapter
- 1 Hex key

Filter Installation

Use the supplied hex key to unthread the four socket head screws of the front (non-labeled) panel of the filter wheel assembly (Figure 2). Be sure to place the screws in a safe place so they do not become lost. Once all four screws have been removed, gently separate the front plate from the filter wheel. Install the 1.25" filters of your choice into the tray simply by threading them into the filter tray. You may wish to note the number designation of each installed filter for convenient reference during use. You may find it useful to leave one of the five threaded filter locations empty, providing an unfiltered option for viewing or imaging. Once you have installed all the filters you wish to use, carefully place the filter tray back into the wheel assembly. Be sure the small plastic tab fully registers with the central hole of the wheel assembly so that it "clicks" into place. Position the rear plate so that the opening is aligned with the opening of the front plate. Complete installation by reattaching the rear plate of the filter wheel assembly with the socket head screws.

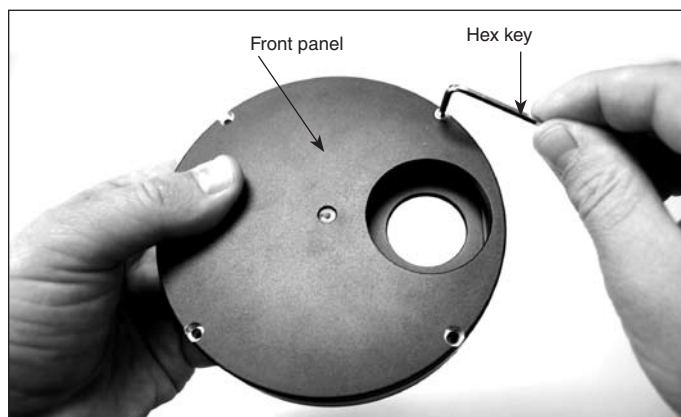


Figure 2. Partial disassembly of the filter wheel.

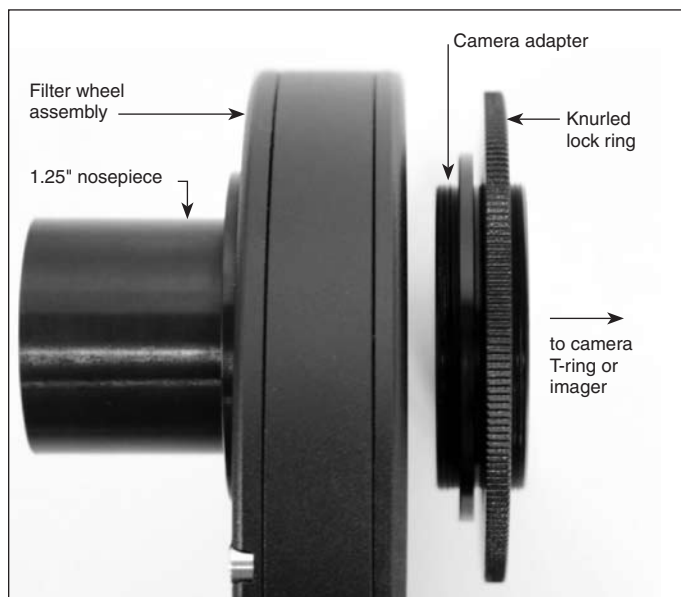


Figure 3. Attaching the camera adapter.

If you are installing an individual filter or swapping one filter for another, you can avoid partial disassembly of the filter wheel. To install an individual filter, unthread the 1.25" nosepiece from the assembly to expose the internal filter tray. Rotate the tray so the desired filter location is shown. Install the 1.25" filter by placing it on the filter tray and rotating it clockwise with your fingertips. Orion 1.25" filters feature a knurled rim which will prove helpful for this type of installation. Be careful not to touch the actual filter surface. Note: individual filter installation without disassembly may not be convenient for all users, especially those with large fingers!

Attaching a Camera to the Filter Wheel

The Multiple Filter Wheel can be extremely useful for astro-imaging with a camera body, be it a SLR camera, CCD, or CMOS device. To attach a SLR camera to the filter wheel, use the included camera adapter and an optional T-ring for your SLR model. Attach the side of the camera adapter without the knurled lock ring to the rear (labeled) plate of the wheel assembly by rotating it clockwise until tight. Now thread your SLR camera T-ring onto the exposed T-threads (Figure 3).

Note: The filter wheel arrives with the camera adapter pre-installed.

If you are using a digital imager that features T-threads, you can attach it directly to the Multiple Filter Wheel. If your digital imager has a 1.25" nosepiece, remove it to expose the T-threads. Now sim-



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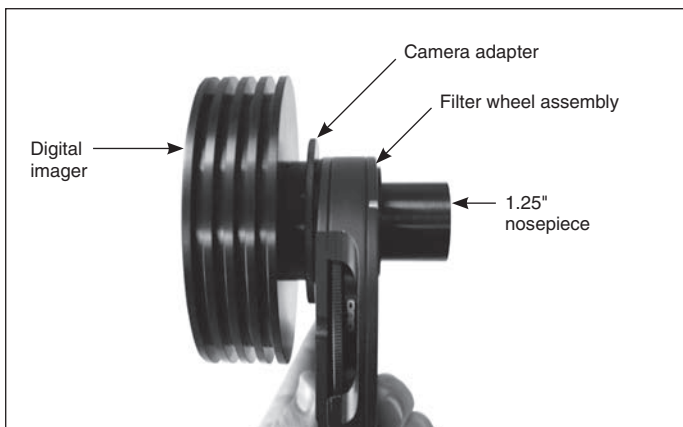


Figure 4a. The Multiple Filter Wheel with digital imager attached via T-threads.

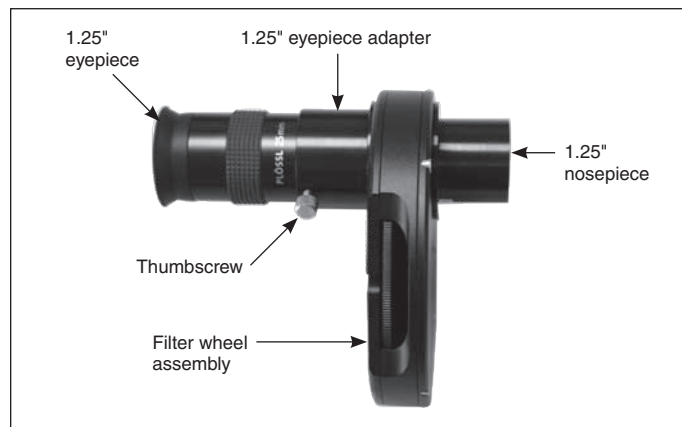


Figure 4b. The Multiple Filter Wheel with 1.25" eyepiece attached.

ply thread the imager onto the camera adapter, and then thread the adapter onto the rear (labeled) plate of the filter wheel assembly (Figure 4a).

You can lock your camera or digital imager in a preferred position by using the camera adapter's locking ring. Once you have positioned your camera or imager, rotate the knurled locking ring counter clockwise until it locks the camera or imager into place.

Attaching the Filter Wheel to a Telescope

Now that you have installed your 1.25" filters into the wheel assembly, it is time to attach the filter wheel to your telescope.

Using the 1.25" nosepiece

If your telescope features a 1.25" focuser, adapter, or diagonal the easiest way to attach the Multiple Filter Wheel is by using the included 1.25" nosepiece. Thread the nosepiece onto the front plate of the wheel assembly. Now simply insert the nosepiece into your telescopes' 1.25" focuser or accessory and secure by tightening the thumbscrew.

Using T-threads

Some Orion telescopes feature focus adapters with exterior T-threads. If you are using such a telescope, you can attach the Multiple Filter Wheel directly to the T-threads without using the 1.25" nosepiece. Carefully attach the wheel to the T-threads by rotating the entire assembly clockwise until tight.

Attaching an Eyepiece to the Filter Wheel

For visual use, you will need to attach the 1.25" eyepiece adapter to the Multiple Filter Wheel. To do this, thread the 1.25" adapter onto

the back (labeled) plate of the wheel assembly. Once the adapter is completely attached, unscrew the knurled thumbscrew until it is flush with the inside surface of the adapter and insert a 1.25" eyepiece. Secure the eyepiece by tightening the thumbscrew (Figure 4b).

Use

The Orion Multiple Filter Wheel features a helpful number system that allows you to quickly place the filter of your choice into the light path. Simply note the reference number of each filter during installation, then rotate the knurled wheel until the desired number is displayed in the small notch in the filter wheel housing (Figure 1).

When using the Multiple Filter Wheel, you may find it useful to leave one of the five threaded filter locations empty, as it provides an unfiltered option for viewing or imaging.

Keep in mind that use of the Multiple Filter Wheel requires 20mm of inward focus travel. This will not be a problem for most telescope designs, but could be a problem for Newtonian reflectors.

Care and Storage

Feel free to leave your 1.25" filters installed in the wheel during storage. To avoid excessive dust buildup, be sure to attach the dustcaps prior to storing, and use a foam-lined accessory case.

The foam-lined box your Multiple Filter Wheel arrives in also acts as a convenient storage container. Simply unthread the 1.25" nosepiece from the filter wheel and place the wheel and nosepiece in the die-cut foam. If you have the 1.25" eyepiece adapter installed, unthread it and replace with the T-thread ring. Now you can safely store your filter wheel without worrying about dust build-up on your filters.

One-Year Limited Warranty

This Orion 1.25" Multiple Filter Wheel is warranted against defects in materials or workmanship for a period of one year from the date of purchase. This warranty is for the benefit of the original retail purchaser only. During this warranty period Orion Telescopes & Binoculars will repair or replace, at Orion's option, any warranted instrument that proves to be defective, provided it is returned postage paid to: Orion Warranty Repair, 89 Hangar Way, Watsonville, CA 95076. If the product is not registered, proof of purchase (such as a copy of the original invoice) is required.

This warranty does not apply if, in Orion's judgment, the instrument has been abused, mishandled, or modified, nor does it apply to normal wear and tear. This warranty gives you specific legal rights, and you may also have other rights, which vary from state to state. For further warranty service information, contact: Customer Service Department, Orion Telescopes & Binoculars, 89 Hangar Way, Watsonville, CA 95076; (800)-676-1343.