



# LIGHT POLLUTION IMAGING FILTER, RASA 8

#93614



## PARTS LIST

Light Pollution Imaging Filter in Filter Cell

Spectral Transmission Chart

Plastic Case

The Light Pollution Imaging Filter for the Rowe-Ackermann Schmidt Astrograph (RASA) 8 improves image contrast by selectively blocking wavelengths of light strongly emitted by certain sources of light pollution. These sources include high and low pressure sodium-vapor streetlights, mercury-vapor streetlights, and natural airglow caused by oxygen in the atmosphere. The filter only blocks narrow sections of the spectrum instead of wide regions; this helps to retain image brightness and color balance. Specific emission lines from nebulae, such as H- $\alpha$  (656nm), H- $\beta$  (486nm), OIII (496nm and 501nm), and SII (672nm), are highly transmitted, so emission nebulae won't be dimmed.

The included spectral transmission chart indicates the transmission measured for the filter you received.

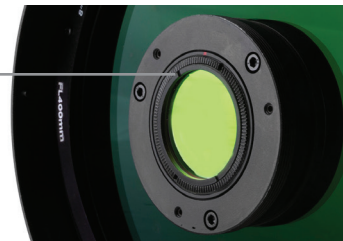
## INSTALLING THE FILTER IN RASA 8

The Light Pollution Imaging Filter replaces the RASA 8 optical window. This maintains optical performance, as no extra piece of glass is added to the fast optical system. The optical window is removed along with its cell, and the filter is installed using its own cell.

**WARNING:** When removing the optical window and installing the filter, avoid touching optical surfaces or you may leave fingerprints. Handle the filter and optical window by their cells only.

1. Carefully grasp the knurled edge of the optical window cell within the RASA 8 lens group cell, and begin rotating it counter-clockwise. If the edge of the optical window cell cannot be grasped initially because it is too recessed, use the notches in the knurled surface of the cell to begin rotating it. Completely unthread and remove the optical window cell. The optical window can be stored in the filter case when the filter is in use.
2. Install the Light Pollution Imaging Filter by threading its cell into the lens group cell of the astrograph. The notches in the edge of the filter cell should be facing outward. Do not over-tighten, the filter cell should only be threaded until it stops turning.

Notches on filter  
face outward



## CARE AND CLEANING OF THE FILTER

Avoid touching the optical surfaces of the filter. Handle the filter by its cell only. Keep the filter stored in its plastic case when not in use. If the filter remains installed on the astrograph, keep the astrograph's dust cover on.

Dust should normally be removed with a blower bulb or an optical cleaning brush. If the filter must be cleaned, use optical grade tissue with a few drops of optical cleaning solution applied to the tissue. Gently wipe one small area at a time. Do not rub. Use a new tissue and solution for each wipe.

<b>Filter Glass</b>	Schott B270
<b>Glass Thickness</b>	1.9 mm
<b>Filter Diameter</b>	46 mm
<b>Clear Aperture</b>	43 mm
<b>Coatings</b>	Dichroic multi-bandpass and multi-layer antireflection coatings
<b>Filter Cell</b>	Aluminum, black anodized

### CELESTRON TWO YEAR LIMITED WARRANTY

Celestron warrants your telescope mount to be free from defects in materials and workmanship for two years. Celestron will repair or replace such product or part thereof which, upon inspection by Celestron, is found to be defective in materials or workmanship. As a condition to the obligation of Celestron to repair or replace such product, the product must be returned to Celestron together with proof-of-purchase satisfactory to Celestron.

This product is designed and intended for use by those 14 years of age and older.



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