

Starizona LensSlider Instructions



LensSlider shown with optional camera and lens

Warning: Some Canon EF-S and compatible lenses for APS-C sensor cameras protrude quite a bit behind the lens flange and could possibly interfere with a filter. Use caution when installing a lens for the first time.

The Starizona LensSlider offers an easy way to attach Canon EF-compatible lenses to a CCD camera and integrates our popular Filter Slider for easily switching filters. Use your CCD camera with any Canon lens and open a new world of wide-field astrophotography!



The constellation of Orion captured with an Atik 490EX monochrome camera, LensSlider and Sigma 18-35mm f/1.8 lens. Lens was set to 18mm at f/4. Filters used were H-alpha, red, green and blue. Total exposure time 3.5 hours.

Attaching a Lens

The LensSlider has 3 petals on the front inside diameter that clamp down onto the mating flange petals of the camera lens. Unlike with a camera body, the lens can be inserted in any of 3 possible orientations on the LensSlider. Any of these orientations will work.



- Start by loosening the red lock ring. This only needs to be loosened about ½ turn.
- Align the flange petals on the camera lens between the petals on the LensSlider and insert the flange until it seats against the black lip above the red lock ring.
- Twist the lens clockwise and you will feel it stop when fully engaged.
- Tighten the red lock ring and the lens is securely mounted to the LensSlider.

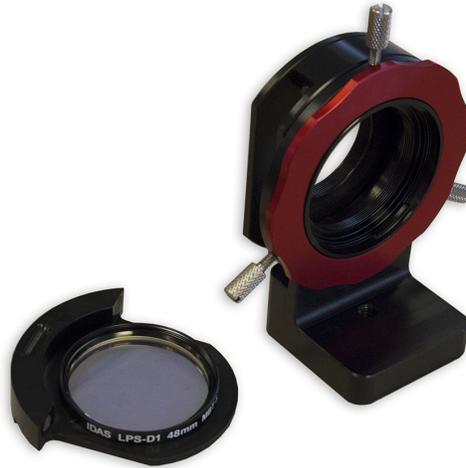
Attaching a CCD Camera

Any camera with a 17.5mm backfocus and 42mm T-threads will attach directly to the LensSlider and work correctly. This includes Starlight Xpress, ZWO and some QHY cameras. Atik cameras, which have a 13mm backfocus distance, will require an optional 4.5mm spacer to set the correct distance from the lens to the camera. Another optional adapter is available for cameras with a CS-mount, including the Starlight Xpress Lodestar and Ultrastar, and some Mallincam models.

To attach a camera, simply remove the nosepiece from the camera and thread it onto the male threads on the Filter Slider or appropriate spacer.

Installing Filters

The Filter Slider has a removable drawer that can hold a standard 2" mounted filter. Step rings are available to allow the use of 1.25", 31mm or 36mm filters.



The drawer is held in by magnets and easily snaps into place during use. Remove the drawer and thread the filter into the drawer.

Extra drawers are available to allow you to leave your filters each mounted in a separate drawer for easy switching during the night.

Orienting the Camera and Filter Slider

The 3 thumb screws around the outside of the LensSlider allow for rotation of the camera to set the orientation of the sensor. However, because of the mounting base, there are some orientations where the Filter Slider drawer could be blocked.

In this case, simply rotate the camera 180 degrees and you can get the same orientation of the long axis of the CCD while making the drawer accessible.

Mounting the LensSlider on a Mount or Telescope

The LensSlider with camera and lens may not weigh enough to easily balance on a mount by itself. In that case, it is probably easiest to piggyback the lens setup on top of a telescope.

To attach the LensSlider to a top dovetail on a telescope, we recommend the Losmandy DVA clamp. This allows a 1/4"-20 screw to go into the base of the LensSlider and then clamp onto a Losmandy or Vixen style dovetail plate.

To attach the LensSlider directly to an equatorial mount, a Losmandy DUP or VUP universal dovetail plate can be used for Losmandy or Vixen style mount saddles, respectively.

Setting the Lens F-Stop

Note: *Lens manufacturers probably do not recommend actually doing this, but we have had no trouble with it. But if it breaks your lens, remember we said not to really do it.*

Most fast lenses will have to be stopped down to give the best performance. Normally when a lens is removed from the Canon camera body, the aperture automatically reverts to its wide open position.

To set the f-stop on the lens for use with a CCD camera requires setting it on a Canon body first. Attach the lens as normal to the Canon body and turn the camera on. Make sure the camera is in “aperture priority” mode, usually by setting the dial on top to “A.” Use the appropriate controls to set the desired f-stop.



Depth of Field
Preview Button

Now, hold down the “depth of field preview” button, located on the camera body near the base of the lens, usually on the left from the photographer's perspective. While holding this button down, remove the lens from the camera body. This takes a little dexterity to hold the depth of field button while also pressing the lens release button and twisting the lens off. The lens will now be stopped down.

To revert to the fully open position, simply reattach the lens to the Canon body and power it up. Now take it off normally and it will be wide open again.

Specifications

- *Fits Canon EF and compatible lenses*
- *1/4"-20 base mounting thread*
- *Weight: 0.75 lbs.*
- *Height from base to lens optical axis: 2.50"*
- *Total height (with thumb screw): 4.81"*
- *Anodized aluminum construction*
- *Stainless steel hardware*
- *Made in USA*

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