

Fluor-S Focusing Target Kit

This kit is designed to simplify the focusing of the lenses on the Fluor-S. The kit also includes a quick guide for the customer to keep at the instrument in order to help new users determine optimal settings for their application.

After use of the focus target and once the focus lines are set on the lens, the user can walk up to the instrument, rotate the focus ring of the lens until the focus lines line up and collect an image. We have found that the lens will stay in focus with most f-stop, zoom and filter changes. The exceptions to this generalization are when the zoom lens is changed to high zoom settings, from ~20-28mm, after the focus is set at a zoom of 40mm. In addition, the 610nm filter also is slightly out of focus with respect to the other filters. However, this is not noticed for most applications.

The focus target kit includes two focusing targets (black lines radiating out from a black center), and a set of stick-on arrows for the lenses. The different focus targets have different gray backgrounds to compensate for different light gathering efficiencies of the lenses.

Use of the focus target:

1. Turn on the Fluor-S and open the software acquisition window.
2. Place the focusing target near center of the platen. The white background target is to be used with the 20-40mm zoom lens and the gray background lens is to be used with the 50mm lens.
3. Fully open the f-stop of the lens (for the 50mm lens f-1.8, for the Zoom lens f-2.8). Zoom to highest setting on the zoom lens (40mm).
4. Select the 520nm filter and "focus" from the software control module acquisition window.
5. Center the focus target in the image.
6. Focus on the target to obtain the sharpest image.

Note: When the lens is in the sharpest focus, the white lines of the focus target will appear to converge the closest to the center of the target.

7. Place one stick-on arrow on the body of the lens just above or below the focus ring. Place a second stick-on arrow on the focus ring of the lens in line with the first line.
8. Confirm focus by collecting images after changing the f-stop of the lens and filters.

See reverse for Fluor-S MAX / MAX 2 focusing

Fluor-S MAX / MAX 2 Focusing Target Kit

This kit is designed to simplify the focusing of the lenses on the Fluor-S MAX.

After use of the focus target and once the focus lines are set on the lens, the user can walk up to the instrument, rotate the focus ring of the lens until the focus lines line up and collect an image. We have found that the lens will stay in focus with most f-stop, zoom and filter changes. The exceptions to this generalization are when the zoom lens is changed to high zoom settings, from ~28-35mm, after the focus is set at a zoom of 80mm. In addition, the 610nm filter also is slightly out of focus with respect to the other filters. However, this is not noticed for most applications.

The focusing target kit includes two focusing targets (black lines radiating out from a black center), and a set of stick-on arrows for the lenses. The different focusing targets have different gray backgrounds to compensate for different light gathering efficiencies of the lenses.

Use of the focusing target:

1. Turn on the Fluor-S MAX and open the software acquisition window.
 2. Place the focusing target near center of the platen. The white background target is to be used with the 28-80mm zoom lens with the 660nm filter in place, and the gray background target is to be used with the 50mm lens.
 3. Fully open the f-stop of the lens (f-1.4 for the 50mm lens) and (f-3.5 for the 28-80mm zoom lens). Zoom to highest setting on the zoom lens (80mm).
 4. Select "focus" from the software control module acquisition window.
 5. Center the focusing target in the image on the screen.
 6. Focus on the target to obtain the sharpest image.
- Note:** When the lens is in the sharpest focus, the white lines of the focusing target will appear to converge the closest to the center of the target.
7. Place one stick-on arrow on the body of the lens just above or below the focus ring. Place a second stick-on arrow on the focus ring of the lens in line with the first line.
 8. Confirm focus by collecting images after changing the f-stop of the lens and filters.

See reverse for Fluor-S focusing