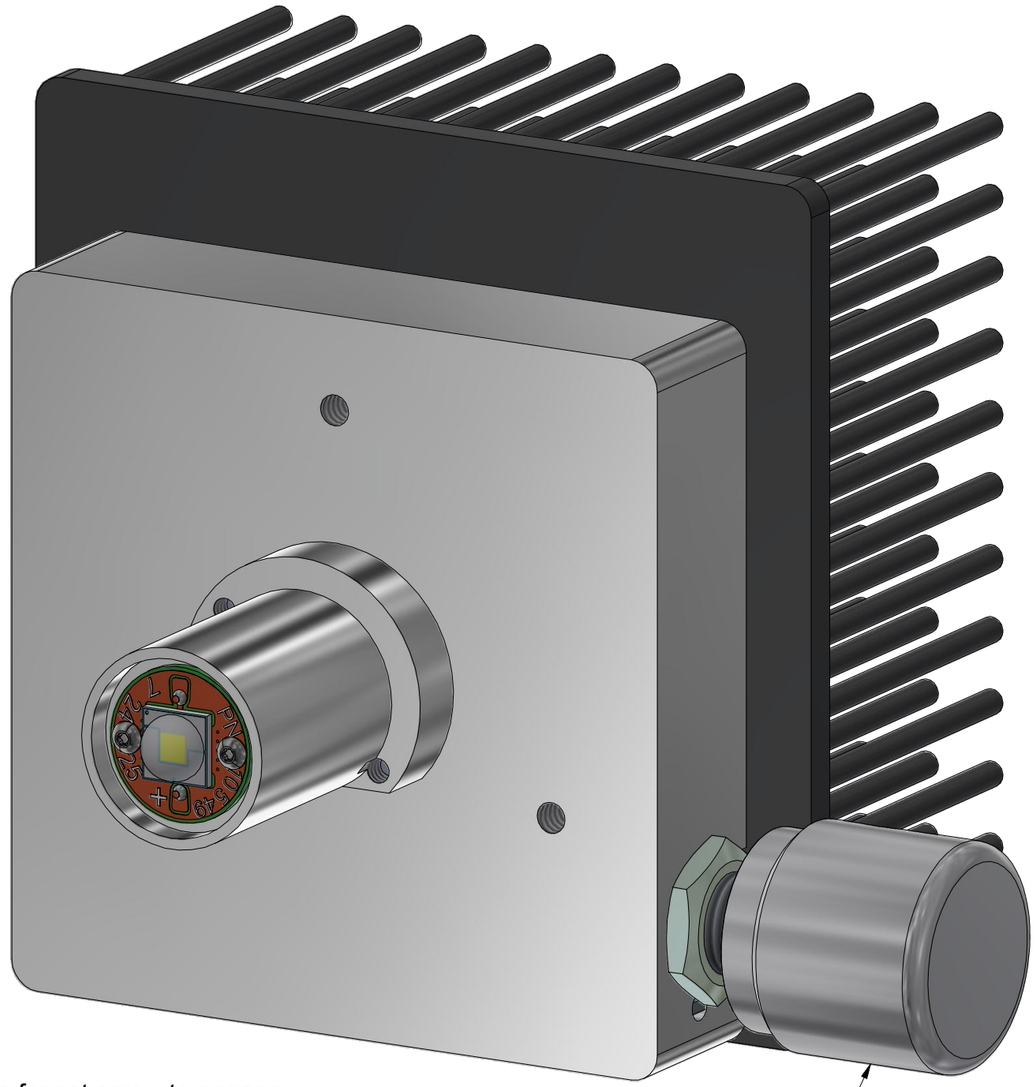
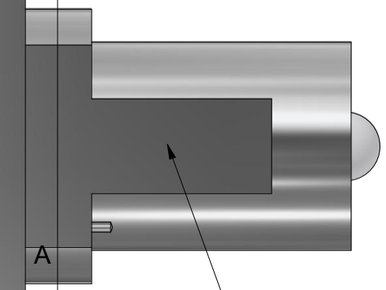
Nanodyne Replacement Illuminator for Zeiss OPMI x-FC* Microscopes - Included Items

* This illuminator fits the Zeiss OPMI 1-FC, OPMI 9-FC, Kolposkop Plus and others that we will add as we verify.

PN 12674 OPMI x-FC illuminator Assembly (High Power)





Bottom surface - Note flat surface for set screw to engage. Also note that the LED lens extends beyond the front of the protective lip on the adapter. This allows the LED lens to enter the small hole at the end of the 14mm hole in the OEM lens holder (and provide a smaller spot of light that is over twice as bright). The protective lip prevents damage to the LED when inserted into the microscope, but only limited protection outside of the microscope.

Intensity Adjust Knob

Additional Items Included But Not Shown:

PN 10456 Hex Key 1.5mm (for the set screw in the OEM lens holder - to remove the 14mm fiber optic cable holder and secure the Nanodyne illuminator)

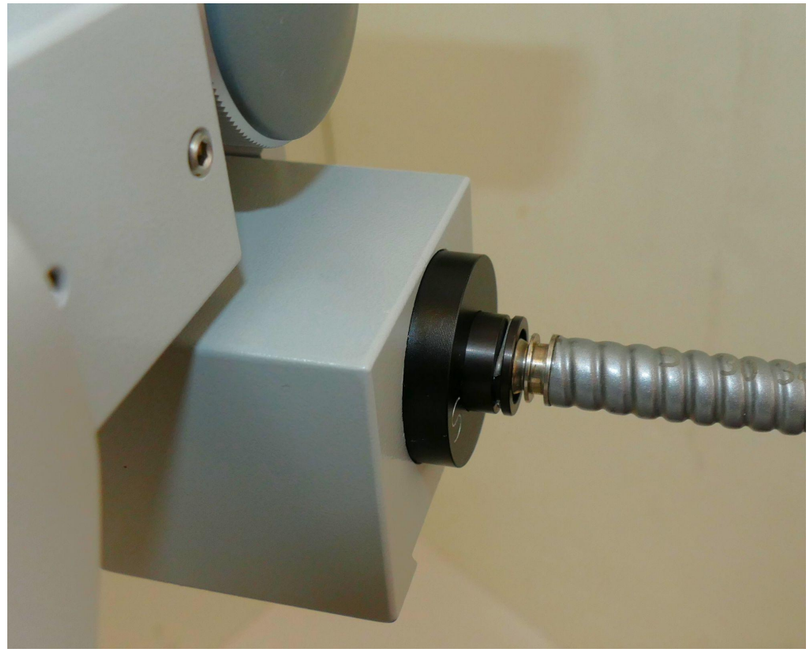
PN 11163 Power Supply 5V 2.1A and PN 10734 Power Cable 1.35mm ID/3.5mm OD x USB A 6 ft.

The illuminator may be powered by plugging the cable into the power supply provided, or into a suitable USB port on a computer or other device. (USB port may not provide full power)

Power supplies are subject to substitution without notice due to availability issues and changes in regulations.

Wayne Bonin 8/15/2025	
PN 12675 OPMI X-FC illuminator System (High Power)	REV 1
SHEET 1 OF 4	

Nanodyne Replacement Illuminator for Zeiss OPMI x-FC* Microscopes - Does it Fit My Microscope?

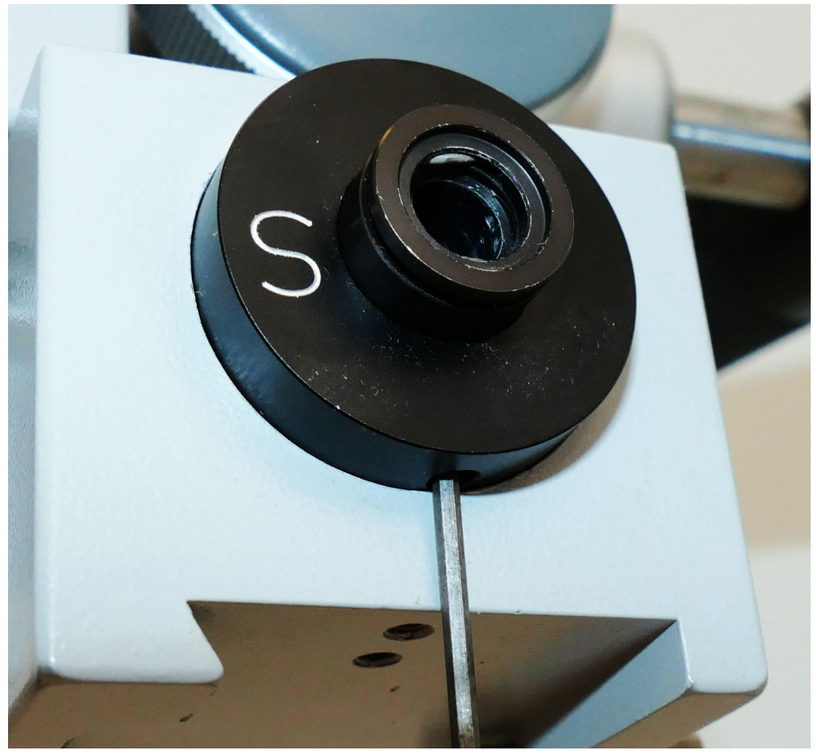


1. Photo at left.

OEM (Original Equipment Manufacturer) light source.

It has a 30mm diameter black metal collector lens holder, and 14mm diameter black metal insert that holds the fiber optic cable.

The insert is shown pushed it all the way, which generally gives the best lighting. It is secured by a set screw (see photos 2 and 3).



2. Photo at left.

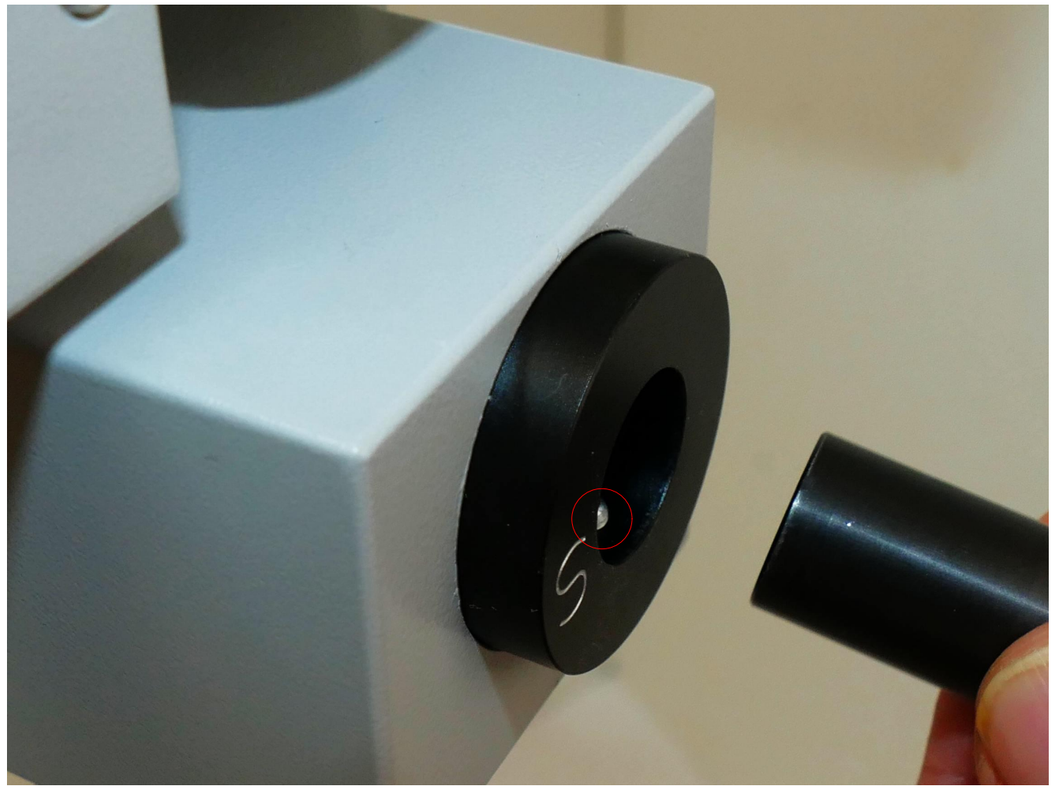
There is a flat on the bottom side of the 14mm insert that does not run all the way to the end, so the insert will be free to move in and outas soon as the set screw is loosened, but removing it requires several full turns with the hex key.

The cable is held by a spring clip can be removed by simply pulling it out as shown here. Loosen the set screw until the insert can be completely removed.

* This illuminator fits the Zeiss OPMI 1-FC, OPMI 9-FC, Kolposkop Plus and others that we will add as we verify.

Photos on this page show the port on the microscope that the OEM fiber optic cable plugged into.

That cable and the 14mm diameter part that held the cable are both removed to insert the Nanodyne illuminator. If your microscope has the same port (with or without the engraved letter "S"), this illuminator should fit.

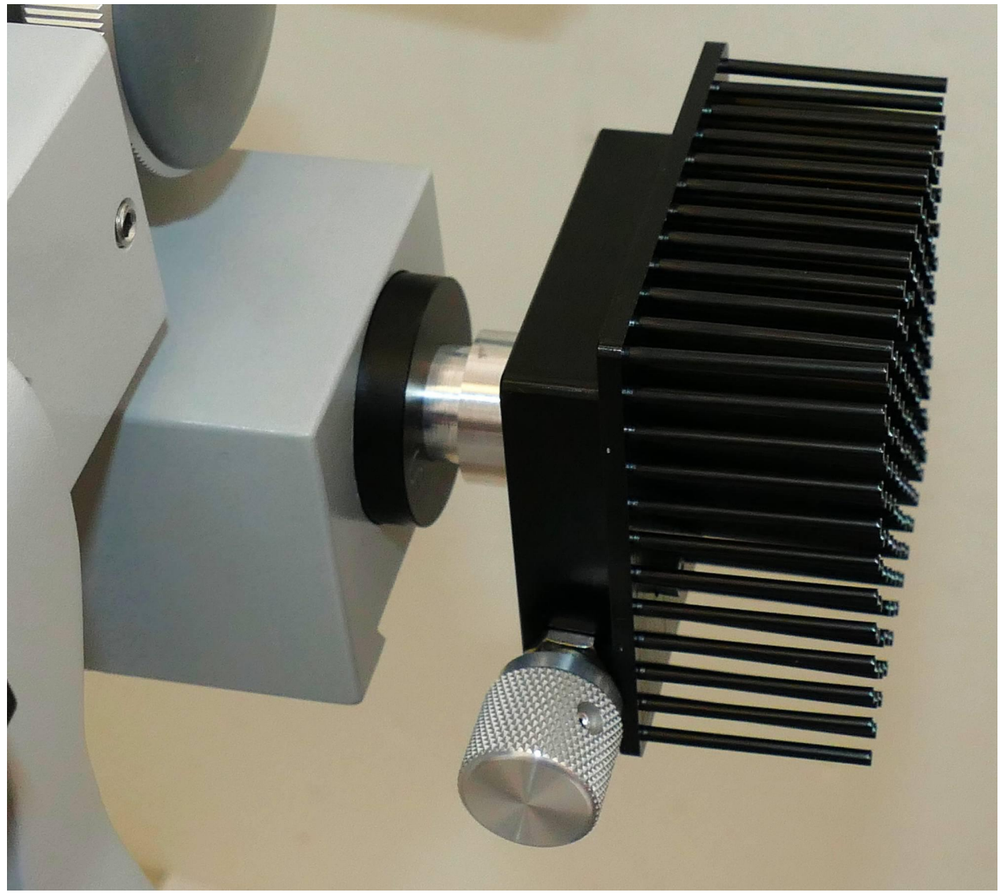


3. Photo above. 14mm insert removed, ready to insert the Nanodyne illuminator.

(There is a small error in the photo. To remove the 14mm insert, and also to install the Nanodyne illuminator, the set screw must be retracted so it does not intrude into the 14mm ID as it is doing in the above photo)

Wayne Bonin	8/15/2025
PN 12675 OPMI X-FC illuminator System (High Power)	REV 1
SHEET 2 OF	4

Nanodyne Replacement Illuminator for Zeiss OPMI x-FC Microscopes - Installation

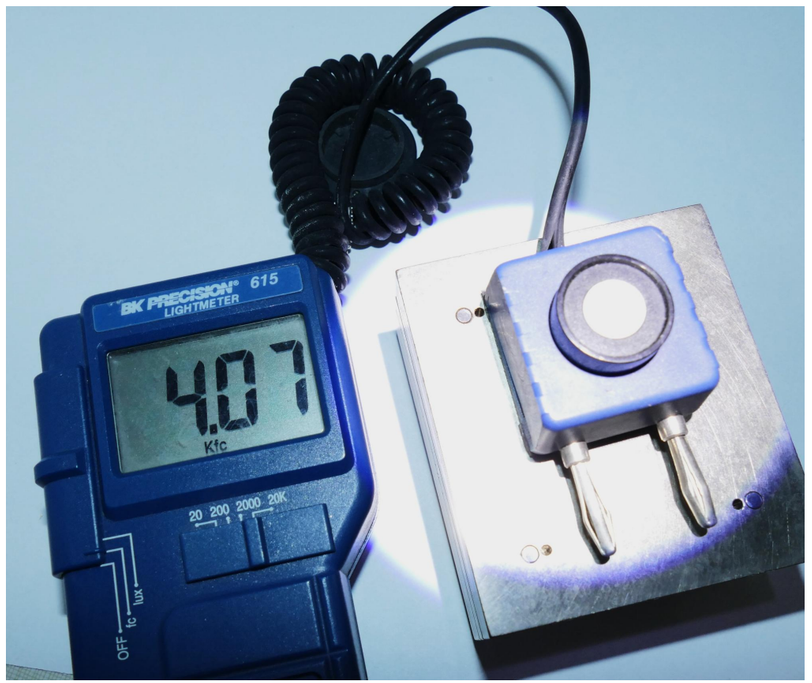


Jeff - As soon as we get the adapters from the machine shop I want to get a photo replacing this one (high power assembly), and also a low power assembly with flat back plate.

Actually 2 photos each, one pulled out for 3 inch round light and one pushed in all the way. (will need to use OPMI 9-FC)

Wayne Bonin	8/15/2025
PN 12675 OPMI X-FC illuminator System (High Power)	REV 1
SHEET 3 OF 4	

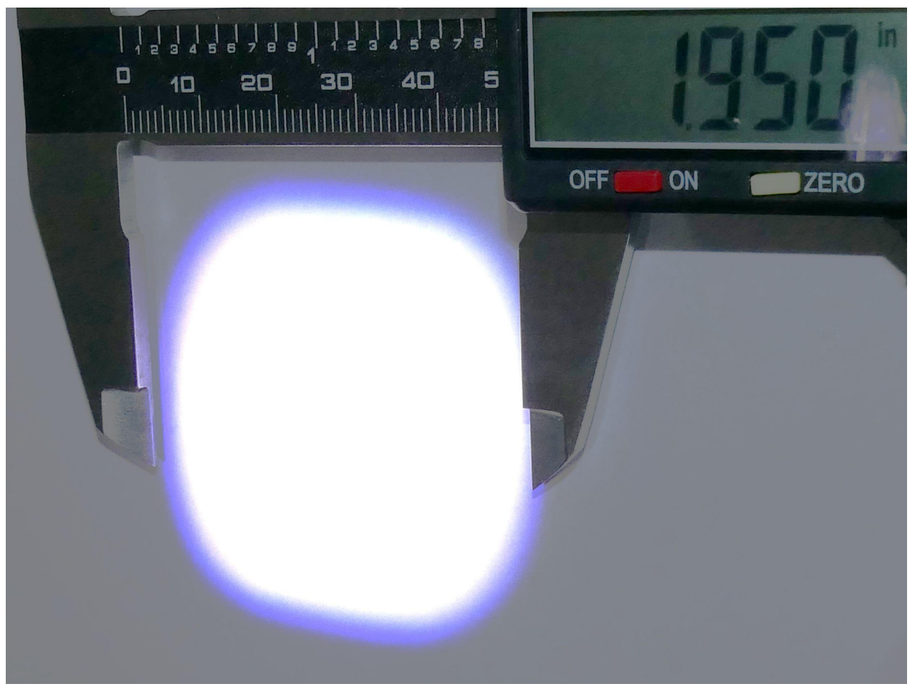
Nanodyne Replacement Illuminator for Zeiss OPMI x-FC Microscopes - High Power Unit - Performance



Far Left Image. Unit pulled out slightly to produce 3.3 inch diameter uniform circular pattern.

Near left image. Illuminator adjustment same as far left. Note 4.07Kfc light intensity.

Both at 12 inches, microscope to lighted surface.



Far Left Image. Unit pushed in all the way to produce 1.9 inch wide squareish pattern with rounded corners.

Near left image. Illuminator adjustment same as far left. Note 8.35Kfc light intensity - just over twice as bright.

Both at 12 inches, microscope to lighted surface.

Wayne Bonin	8/15/2025
PN 12675 OPMI X-FC illuminator System (High Power)	REV 1
SHEET 4 OF	4