



**UV Converter P/N SPZ17019 for  
Mounting on 4X Beam Expander P/N SPZ17022  
User Notes**

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The UV converter is a UV sensitive plate that can be mounted over the 4X Beam Expander.

The UV sensitive plate is positioned at the object plane of the 4X beam expander, 8 mm in front of the unit. When UV radiation hits the fluorescent plate, it absorbs the UV radiation and re-emits visible light proportionate to the incident UV light. This light pattern is then expanded 4 times and imaged onto the imager of a C-mount camera.



**Setup:**

Follow the instructions for use of the 4X beam expander. Adjust the distance of the UV plate from the 4X beam expander by screwing it in and out until the sharpest image is shown. Then it is to be locked with the locking nut. If the intensity of the laser is above the saturation intensity, the wedge beam splitter (P/N SPZ17015) can be purchased and attached in front of the UV plate. This beam splitter will then reduce the effective power/energy falling on the plate by ~20 times.

<b>Specifications:</b>	<b>UV Converter with 4X Beam Expander</b>
Beam Expansion	4X nominal (see label)
Resolution	15 $\mu\text{m}$ x 15 $\mu\text{m}$ at converter plate
Spectral Range	193 to 360nm
Minimum signal	~50 $\mu\text{J}/\text{cm}^2$
Saturation Intensity	~30mJ/cm <sup>2</sup> at 193nm w/o splitter ~15J/cm <sup>2</sup> at 248nm, w/o splitter 20 times greater with optional beam splitter P/N SPZ17015
Effective Aperture	1/2" format, 1.5 x 1.2mm
	1/3" format, 1.2 x 0.9mm
Damage threshold	0.1J/cm <sup>2</sup> w/o beam splitter, 2J/cm <sup>2</sup> w/splitter