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**9971 Series Lens Coupled Gated Intensifier for CCD Cameras**

The NVS 9971 series is a lens coupled, gated image intensifier accessory for use with any C-Mount video camera. It consists of an image intensifier wired for gating and external gain control, a gate drive amplifier that switches the photocathode on and off, and a relay lens assembly. The gate drive amplifier converts TTL level signals into the levels required to switch the photocathode. The Model 9971 is available with a Gen II, Gen III, or UV intensifier. Although the video relay lens is designed for use with a 2/3" format camera, it may also be used with a 1/2" format with a slightly reduced field of view. Video relay lenses for other formats are also available.

	<u><b>Model 9971X (Gen II)</b></u>	<u><b>Model 9971/III (Gen III)</b></u>
Type:	DEP XX2050 (XD-4), P-43 phosphor	ITT FS9911C, P-43 phosphor
Spectral Sensitivity:	350nm to 920nm	400nm to 940nm
Luminous Gain (2850°K):	30,000 typ. to 50,000 max	50,000 typ. to 80,000 max
Gate Mode:	External	External
Gate Width:	20ns to 34ms (up to 300kHz rep. rate)	50ns to 34ms (up to 20kHz rep. rate)
Gain:	Zero to max gain (0-10V input)	Zero to max gain (0-10V input)
Sensitivity:	5 x 10 <sup>-5</sup> lux full video 1 x 10 <sup>-6</sup> lux useable video	1 x 10 <sup>-5</sup> lux full video 5 x 10 <sup>-7</sup> lux useable video

**CCD Camera (not included):**

Type: Sony XC-ST70 interline transfer  
 Sensor: Sony ICX-082 (2/3" format)  
 CCD Pixels: 768(H) x 494(V)  
 Noise Figure: >60dB  
 Output Signal: RS-170 (NTSC)  
 Sync: Genlock or crystal controlled  
 VD and HD: TTL level

**Miscellaneous:**

Input Power: 12VDC, nominal 150mA  
 Size/Weight: 127mm x 56mm x 71mm, 0.67 kg  
 Lens Mount: 1" format, C-Mount with back focus adjustment  
 Options: S-20 photocathode for UV (180-830nm response)  
 Control box: Modes—auto, internal, external gating  
 Size—135mm x 64mm x 79mm

**Model 9971 – Gen II, no gating, no gain control**

**Model 9971UV – S20 Gen II**