



# SYNTRONICS

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### 2071 Series Lens Coupled Intensifier for CCD Cameras

The NVS 2071 series is a lens coupled, image intensifier accessory for use with any C-Mount video camera. It consists of an image intensifier and a relay lens assembly. The 2071 is available with a Gen II, Gen III, or UV intensifier. Although the video relay lens is designed for use with a 1/2" format camera, it may also be used with a 1/3" and 2/3" format (producing a slightly different field of view). Video relay lenses for other formats are also available. The 2071 can be wired for gating and external gain control; it can also be supplied with a gate drive amplifier which converts TTL level signals into the levels required to switch the photocathode.



	<u><b>Model 2071 (Gen II)</b></u>	<u><b>Model 2071/III (Gen III)</b></u>
Type:	DEP XX1451 or XD-4, P-43 phosphor	ITT F9800P/FS9911C, P-43 phosphor
Spectral Sensitivity:	350nm to 920nm	400nm to 940nm
Luminous Gain (2850°K):	20,000 typ. to 30,000 max	50,000 typ. to 80,000 max
Gate Mode (Optional):	External	External
Gate Width (Optional):	20ns to 34ms (up to 300kHz rep. rate)	50ns to 34ms (up to 20kHz rep. rate)
Gain (Optional):	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-ST50 interline transfer  
Sensor: Sony ICX-082 (1/2" 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: 3 VDC, nominal 15mA (includes adapter)  
Size/Weight: 88mm long x 51mm diameter, 0.28 kg  
Lens Mount: 1" format, C-Mount with back focus adjustment  
Options: S-20 photocathode for UV (180-830nm response)  
Gating and external gain control  
Control box: Modes—auto, internal, external gating  
Size—135mm x 64mm x 79mm

**Model 2071** – Gen II XX1451  
**Model 2071/III** – Gen III

**Model 2071X** – Gen II XD-4  
**Model 2071UV** – S20 Gen II