

# AstroScope™ Night Vision

for Sony High Definition Camcorders



AstroScope shown on Sony NX-5U Video Camcorder

AstroScope shown on Sony Advanced/ Professional Camcorder



AstroScope shown on Sony Handycam Video Camcorder



AstroScope shown on Sony AX-1 Handycam Video Camcorder

## Convert Your Sony HD Camcorder Into a High-Performance Night Vision System.

Now experience the high quality and performance of Sony camcorders at night with the Sofradir EC AstroScope Night Vision Module. Specially designed for use on popular Sony Handycams and Advanced/Professional Camcorders, the AstroScope results in the production of high-quality, high-resolution night-time video.

The AstroScope Night Vision Module transforms dark scenes (below  $10^{-4}$  lux) into bright, high-resolution imagery video recorded by the Sony camcorder. The AstroScope assemblies are specifically designed for rugged use on many Sony fixed-lens camcorders to produce high-quality video under very demanding conditions.

At the heart of the AstroScope system is a Gen III Central Intensifier Unit (CIU). AstroScope's modular design enables you to expand your night vision capabilities by allowing you to easily transfer the CIU to other camcorder and digital SLR camera platforms.

We have models that feature automatic gain control plus includes a manually adjustable maximum output brightness permitting the user to achieve the optimum balance of brightness and clarity in the image.



variable gain feature

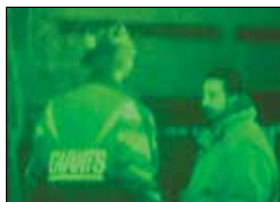
**When you need to get the shot, AstroScope delivers!**



Operational Documentation



Special Operations



Criminal Investigation



Television Production



Electronic News Gathering



# AstroScope™ Night Vision

for Sony High Definition Camcorders



A design that delivers optimum performance in every configuration.

Features	Benefits
<ul style="list-style-type: none"> <li>Professional-Grade Accessory</li> </ul>	<ul style="list-style-type: none"> <li>Designed for use in field environments, the AstroScope system is rugged, compact and versatile.</li> </ul>
<ul style="list-style-type: none"> <li>Modular Design</li> </ul>	<ul style="list-style-type: none"> <li>Take advantage of the opportunity to "swap" a CIU from one AstroScope system configuration to another (for example, use one CIU for both a camcorder and a digital SLR camera).</li> </ul>
<ul style="list-style-type: none"> <li>Improved Low-light Performance by 8 to 10 F-stops!</li> </ul>	<ul style="list-style-type: none"> <li>Capture bright, tack-sharp, edge-to-edge image detail. The AstroScope system is the highest performance design available for night vision photography.</li> </ul>
<ul style="list-style-type: none"> <li>User-Friendly Design</li> </ul>	<ul style="list-style-type: none"> <li>No special setup, calibration or operator training required. Simple, field-expedient configuration and operation.</li> </ul>

Unlike pocketscope-based night vision setups, AstroScope is specifically designed for image capture applications. Only AstroScope enables you to use high-performance lenses to shoot full-frame images at distances beyond 1000 meters!

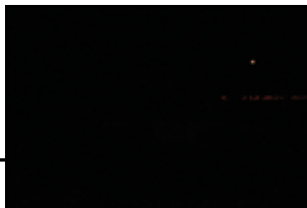
AstroScope's modular design enables you to easily transfer the image intensifier to other camera platforms including digital SLR cameras and video cameras.

- ◆ Unlike pocketscopes, designed for image capture configurations
- ◆ Use high-performance objective lenses
- ◆ Installs in less than 30 seconds

Experience the difference.

See 8 to 10 F-stops more light!

Without AstroScope



With AstroScope



BOTH SHOTS WERE TAKEN USING THE SAME CAMERA SETTINGS.

## Alternative AstroScope Configurations for Sony Broadcast Cameras



AstroScope 9312SB for 1/2" Sony Cameras



AstroScope 9323B for 2/3" Cameras



# AstroScope™ Night Vision

## for Sony High Definition Camcorders

Please call us to discuss the wide variety of AstroScope components available to meet your specific requirements (including support for camcorders not listed here).

### AstroScope Camcorder Adapters

Select one or more adapters (Also requires CIU and Objective Lens shown in the separate tables)

ITEM	DESCRIPTION
<b>9350BRAC-30</b> Part #: 914884 9350B-30V- Variable Gain P/N: 915076	AstroScope Night Vision Adapter for 30mm HD camcorders. Includes back body adapter with relay optic and locking ring to attach to camcorder and front c-mount lens adapter. Requires CIU and lens for operation.
<b>9350BRAC-37</b> Part #: 914885 9350B-37V – Variable Gain P/N: 915079	AstroScope Night Vision Adapter for 37mm camcorders. Includes back body adapter with relay optic and locking ring to attach to camcorder and front c-mount lens adapter. Requires CIU and lens for operation.
<b>9350BRAC-62</b> Part #: 915492 9350B-62V – Variable Gain P/N: 915493	AstroScope Night Vision Adapter for 62mm camcorders. Includes back body adapter with relay optic and locking ring to attach to camcorder and front c-mount lens adapter. Requires CIU and lens for operation.
<b>9350BRAC-EX1 Adapter for PMW-EX1</b> Part #: 914915 9350B-EX1V – Variable Gain P/N: 915088	AstroScope Night Vision Adapter for Sony® PMW-EX1 camcorder. Includes back body adapter with relay optics, front c-mount lens adapter and bracket that attaches to base of NV and camcorder. Requires CIU and lens for operation.
<b>9350BRAC-EX1R Adapter for PMW-EX1R</b> Part #: 915207 9350B-EX1RV – Variable Gain P/N: 915206	AstroScope Night Vision Adapter for Sony® PMW-EX1R camcorder. Includes back body adapter with relay optics, front c-mount lens adapter and bracket that attaches to base of NV and camcorder. Requires CIU and lens for operation.
<b>9350BRAC-EX3 Adapter for PMW-EX3</b> Part #: 915049 9350B-EX3V – Variable Gain P/N: 915091	AstroScope Night Vision Adapter for Sony® PMW-EX3 camcorder. Includes back body adapter with relay optics, front c-mount lens adapter and bracket that attaches to base of NV and camcorder. Requires CIU and lens for operation.
<b>9350BRAC-NX5U Adapter for HXR-NX5U</b> Part #: 915232 9350B-NX5UV – Variable Gain P/N: 915307	AstroScope Night Vision Adapter for Sony® HXR-NX5U camcorder. Includes back body adapter with relay optics, front C-mount lens adapter and bracket that attaches to base of NV and camcorder. Requires CIU and lens for operation.
<b>9350BRAC-V1U Adapter for HVR-V1U</b> Part #: 915253 9350B-V1U/V – Variable Gain P/N: 915260	AstroScope Night Vision Adapter Kit for Sony® HVR-V1U camcorder. Includes back body adapter with relay optics, front c-mount lens adapter and bracket that attaches to base of NV and camcorder. Requires CIU and lens for operation.
<b>9350BRAC-Z7U Adapter for HVR-Z7U</b> Part #: 914913 9350B-Z7UV – Variable Gain P/N:915082	AstroScope Night Vision Adapter for Sony® Z7U and Z5U camcorders. Includes back body adapter with relay optics, front c-mount lens adapter and bracket that attaches to base of NV and camcorder. Requires CIU and lens for operation.

Please contact us for a complete listing of all available camcorder adapters.

### AstroScope Central Intensifier Unit (CIU) Options

ITEM	DESCRIPTION
<b>Gen III Aviation</b> Model #: 9350CIU3-A Part #: 914365 Model # 9350CIU3-AV (variable gain) Part # 914984	Super high performance-grade, thin-filmed, auto-gated third-generation image intensifier, specially selected for the most demanding military applications. Leading-edge sensitivity, resolution and contrast with better halo reduction and anti-blooming technology.
<b>Gen III Pinnacle</b> Model #: 9350CIU3-N Part #: 914248 Model #: 9350CIU3-NV (variable gain) Part # 914986	Exceptional-grade, thin-filmed, auto-gated third-generation image intensifier, specially selected for the most demanding military applications. State-of-the-art sensitivity, resolution and contrast, with built-in technology designed to reduce halos and blooming effects!
<b>Gen III Omni IV</b> Model #: 9350CIU3-IV Part #: 914065 Model #: 9350CIU3V-IV (variable gain) Part #914985	Specially selected, third-generation image intensifier. Military-grade sensitivity, resolution and contrast.

### Objective Lens Options

ITEM	DESCRIPTION
<b>Part #: 914309</b>	8 mm F1.3 Lens
<b>Part #: 915229</b>	25 mm F1.8 Lens
<b>Part #: 903020</b>	50 mm F1.3 Lens
<b>Part #: 914029</b>	75 mm F1.3 Lens
<b>Part #: 908006</b>	12.5-75 mm F1.2 Zoom Lens
<b>Part #: 908000</b>	135 mm F2.8 Lens
<b>9350FLA-PVS</b>	Front Lens Adapter that includes an integrate 23mm F1.3 1X High performance Night Vision Optic. Replaces the 9350FLA included in the standard bracket and eliminates the need for a C-mount lens.

Export of this product is controlled by the US State Department. Prior authorization is required for re-export or transfer. Contact us for additional information.



Night Vision  
Imaging

373 US Hwy 46W Fairfield, NJ 07004 973-882-0211 Fax: 973-882-0997  
info@sofradir-ec.com [www.sofradir-ec.com](http://www.sofradir-ec.com)