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## F-16A/B/ADF HUD Camera

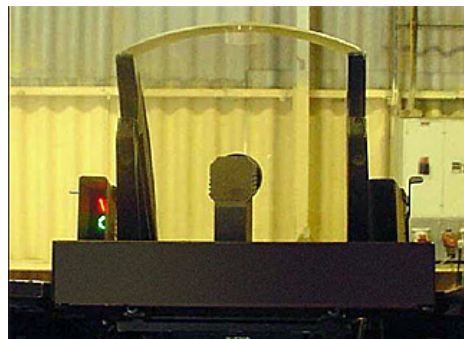
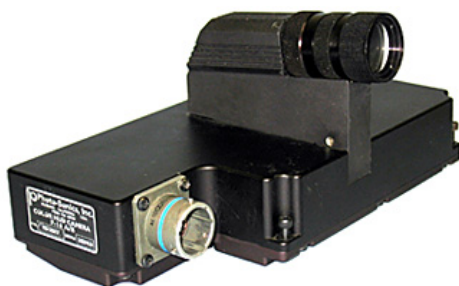
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This Color Video HUD Camera is an intelligent mix of Mil-Standard and commercial-off-the-shelf components and operates successfully on both the A/OA-10A and F-16A/B/ADF HUDs. The camera system provides the unique features and reliability of a full Mil-Standard camera without the high cost.

The camera assembly is mounted on top of the HUD directly behind the combining glass so that it records precisely what the pilot sees including the outside world and the HUD symbology. The camera converts the optical images into electrical video signals for output to an on-board video recorder or transmitter.

The camera electronics incorporate extensive filtering to provide exceptional, noise-free, image quality using aircraft power. The A/OA-10A HUD camera has a proven track record with over 11 years of operation on the A/OA-10A aircraft in the USAF, the ANG and the AFRES.



### SPECIAL FEATURES

- EXPOSURE LOCK - Maintains proper exposure of target during pull up.
- EVENT MARK - Gray for both day and night operation - can be quickly disabled for installations that utilize a VCR having the event mark incorporated.
- HIGH RESOLUTION - Up to 470 Lines.
- AUTOMATIC EXPOSURE CONTROL - 19 f-stop dynamic range.
- AUTOMATIC GAIN CONTROL - 6 f-stop dynamic range.
- EASY MAINTENANCE - Output signals are available on the single interface camera connector which can fault isolate down to the SRU without the need to disassemble camera.
- POWER - Built-in circuitry to enable power supply on PCB to be changed from 115 VAC to 28 VDC.

### FEATURES

- Automatic Exposure Control with lens iris
- Adjustable air-to-ground exposure lock (0-10 sec)
- Visual event mark
- 115 VAC, (85-265 VAC) 47-440 Hz, single phase
- Internal or external sync
- Pickup device - Interline-transfer hyper HAD CCD, 1/2"
- Horizontal resolution:
  - NTSC - 470 TV lines
- Picture elements:
  - NTSC - 768(h) x 494(v)
- S/N ratio:
  - NTSC - >-48dB
- Sensitivity - 0.35 Lux
- Minimum sensitivity - 4.5 Lux at f/1.2
- Shutter speeds - 1/60th second, 1/1000 second, flickerless, and CCD iris (AEC), Off for A/O-10A, and F-16A/B/ADF
- Automatic AGC
- Gamma - 0.45/1
- White balance - ATW, 3200K, 5600K, and Manual
- Video formats - Y/C component and NTSC composite
- Weight - less than 2 lbs
- 12 month warranty (after installation)

### ENVIRONMENTAL SPECIFICATIONS

<b>Operating Temperature</b>	-25°C to +71°C
<b>Storage Temperature</b>	-55°C to +80°C
<b>Altitude</b>	43,000 feet
<b>Over Pressurization</b>	-15,000 feet
<b>Humidity Operating</b>	+90% RH, 60°C, 2 hours

<b>Humidity Storage</b>	48 hours (two 24 hour cycles) 95% RH, +50°C, 6 hours 85% RH, +38°C, 16 hours
<b>Vibration</b>	Random, 6 G rms, 5 minutes duration
<b>Shock</b>	9 Gs, 11 msec., 1/2 sine wave, 3 axes
<b>Acceleration</b>	Lateral (Nx) - 6 Gs Longitudinal - 6 Gs Normal (+Nz) - +8 Gs Normal (-Nz) - 6 Gs

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### **EMI / EMC SPECIFICATIONS**

EMI Testing

CE-02 Conducted Emissions  
RE-02 Radiated Emissions

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### **OPTICAL SPECIFICATIONS**

<b>Lens Focal Length</b>	<b>FOV Horizontal</b>	<b>Degrees Vertical</b>	<b>FOV Horizontal</b>	<b>Milliradians Vertical</b>	<b>Application</b>
16.42mm, f1.4 14.7mm, f1.4	22.06 24.56	16.63 18.55	384.9 428.7	290.3 323.7	HUD-Special HUD-Special

### **Airborne Video Sales**

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