



## SINGLE-CHANNEL HUM ELIMINATORS

### HEC-2000, HEC-2000-H, HEC-2000-V

#### FEATURES

- Flat Response
- Bandwidths up to 30MHz
- No Low or High Frequency Roll-Off
- No Differential Gain or Phase Distortion
- Rugged, Waterproof Case
- BNC Connectors
- Passive Device, Failure-Free
- For Color and Black & White Video
- Reversible
- Small, Compact Package

#### FIELD

- Between Remote Truck, Telco and Microwave
- For Intertruck Hookup
- For VTR Units
- For Monitoring Lines

#### STUDIO

- Between Buildings
- On Long Runs in Buildings
- Between Studios and Transmitters
- On Incoming and Outgoing Telco Circuits



The HEC-2000-V now joins the line of single-channel Hum Eliminators manufactured by Allen Avionics. Like the HEC-2000 and the HEC-2000-H, the HEC-2000-V stops all 50Hz and 60Hz hum. The HEC-2000 series is designed to eliminate hum in video applications caused by long cable runs or ground loops.

This newest addition is a heavy-duty version, like the HEC-2000-H, and features 1/4" thick, stainless steel guard rails to protect the BNC connectors. Connector covers are supplied on the heavy-duty units to protect the connectors when not in use.

With the addition of the HEC-2000-V to the HEC-2000-H, the end user has a choice of connector location and protection, plus the performance of the standard HEC-2000. The HEC-2000-H is designed for optional rack mount installation.

#### **ALLEN AVIONICS, INC.**

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# SINGLE-CHANNEL HUM ELIMINATORS

The HEC series works in circumstances where interference is caused by small differences in ground potential (less than 20 volts) or by induced currents in long cable runs. When there are multiple power panels in a building, or even on a single floor, equipment and lighting loads result in small differences in potential which induce ground loop current flow and 60Hz hum. ( See Figure 1 )

Electromagnetically-induced currents in long cable runs also create hum. For 50Hz and 60Hz power systems, and where induced currents are high, the HEC-2000, HEC-2000-H and HEC-2000-V increase the attenuation at the power frequency.

Should a small amount of hum remain after an HEC has been added to the circuit, a second HEC can be added in series, without significant degradation of the video signal.

## ELECTRICAL SPECIFICATIONS

### HEC-2000, HEC-2000-H, HEC-2000-V

**IMPEDANCE:** 75 Ohms, unbalanced  
**BANDWIDTH:** DC to 30MHz  
 0.75 dB @ 10MHz  
 1.20 dB @ 20MHz  
 1.50 dB @ 30MHz  
**HUM REDUCTION:** 60dB for 50Hz or 60Hz systems  
**INSERTION LOSS:** 0.2dB maximum  
**RETURN LOSS:** 20dB minimum  
**PACKAGE:** Die cast metal  
**MOUNTING:** Four (4) 6-32x1/2" inserts  
**DIMENSIONS:** (See Drawings)  
**WEIGHT:** 3-1/2 lbs.

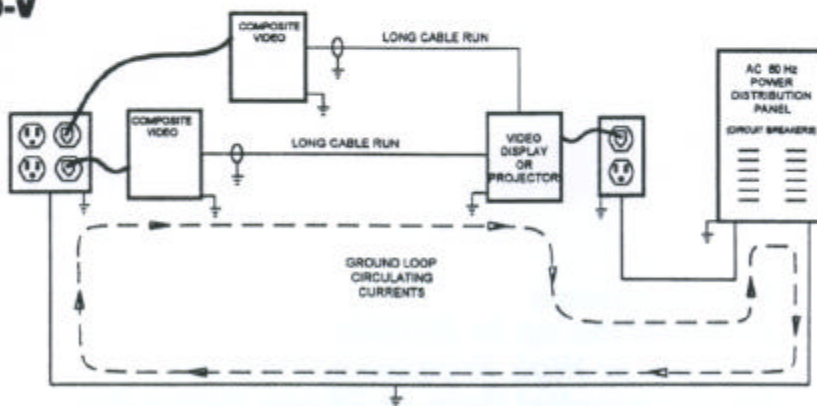
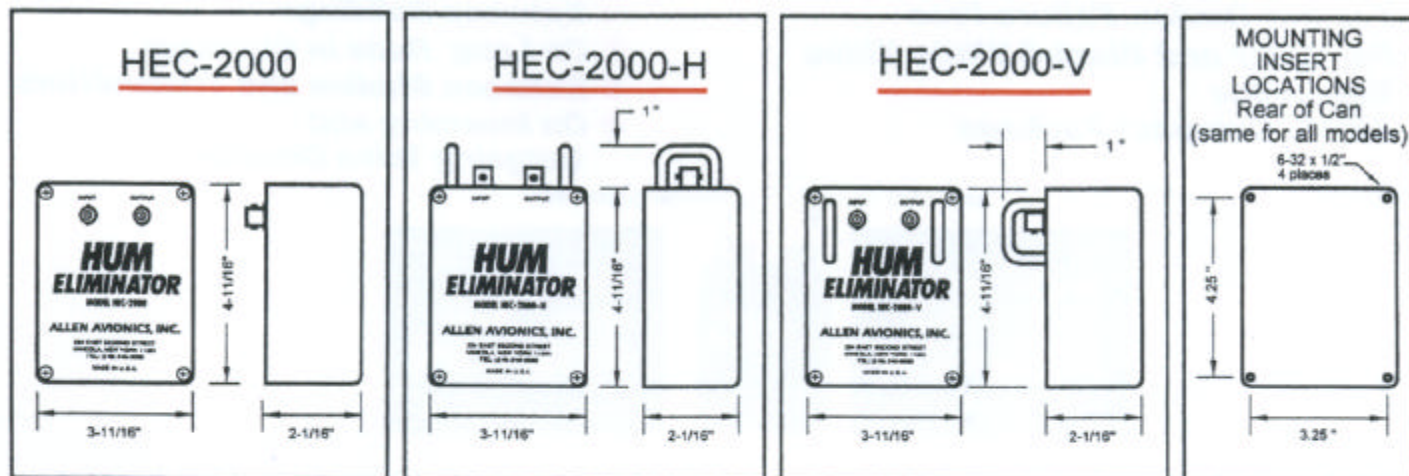


Figure 1



## RACK CARD KIT- MODEL #RMC-2

Provides mounting for two units per card which can be stored in a rack (Model # RM-1) containing up to 5 cards and ten (10) Hum Eliminator units.



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