

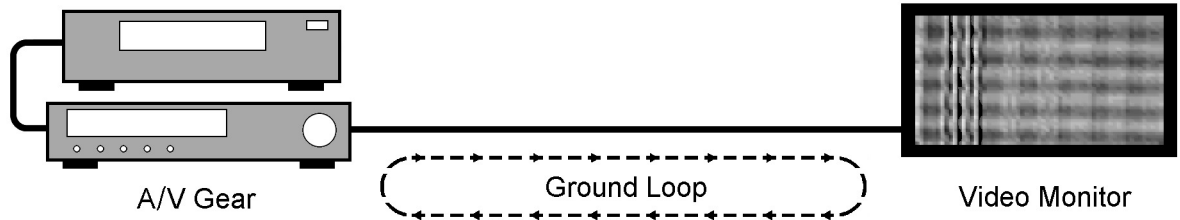
EMPIRE STATE FILTER COMPANY, INC.

VIDEO HUM ELIMINATORS

Empire State Filter Co.'s line of hum eliminators is designed to remove interference created by long cable runs, 60 cycle power demands, grounding noise, and magnetic coupling. Normal voltage differences between system grounding points cause small AC power currents to flow through video cables. At power frequencies, a voltage drop of only 7mV peak can cause a visible hum bar. This ground loop current flows through the shield of the video cables which produces a magnetic field in the core of the hum eliminator to create an inductor, or choke. The high impedance of this choke in the ground path effectively removes the hum from the signal cable at the output port of the unit. The video signal, on the center conductor, is shielded from this choke (by the cable's ground shield) and passes through the unit unaffected. The major advantage of this coil based design hum eliminator over a transformer based one is bandwidth. The low frequency response extends to DC, avoiding an effect called field-rate tilt and the high frequency response is more than 150 MHz making these units suitable for even high-definition and projection TV systems. A transformer typically has a bandwidth no greater than 10 MHz. All of our units are passive devices which require no external power.

Features:

- single or multi channel available
- stand-alone or rack mounted units
- composite or RGB inputs
- 100 MHz minimum bandwidths
- BNC connectors
- sturdy aluminum housings



Single channel units are designed for composite signals, multi-channel units can be used either for multiple composite signals, YUV or RGB plus sync signals. Other models are also available with internal audio ground loop isolators to remove both audio and video interference.

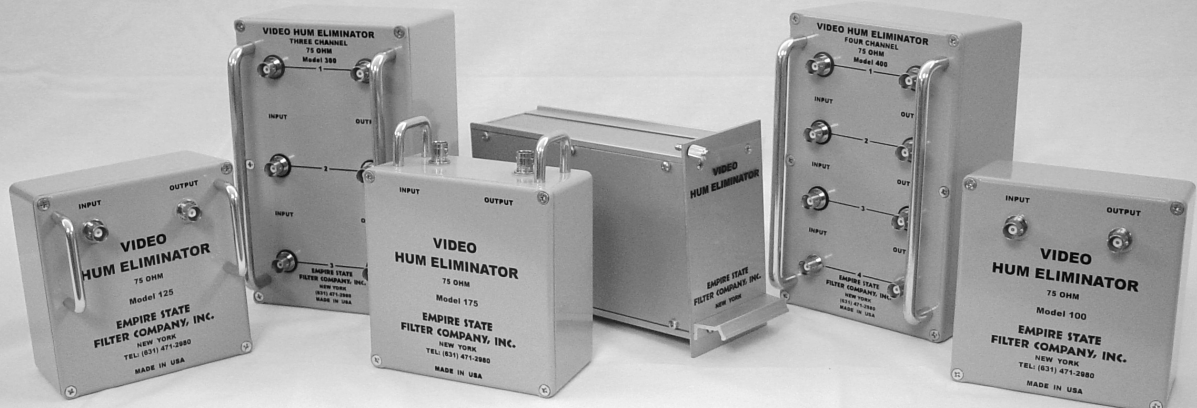
Our use of quality materials in the manufacture of these products will assure you that you are getting the best hum eliminator possible. Don't hesitate to call or fax us if your situation requires a custom solution. For a more detailed look at our products visit us on the web at www.empirefilter.com.

Parts taken with permission from Sound & Video Contractor Magazine, "Losing the Hum Bar" by Bill Whitlock, July 2002

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Video Hum Eliminators with BNC connectors

	Model#	Description	Impedance	Bandwidth	Size	Weight
 Single Channel	100	single channel hum eliminator	75 Ohm	0-150 MHz	4.75 x 4.75 x 2.33	2.75 lbs
 Single Channel	125	single channel hum eliminator with protected BNC's	75 Ohm	0-150 MHz	4.75 x 4.75 x 2.33	2.75 lbs
 Single Channel	150	single channel hum eliminator	75 Ohm	0-150 MHz	4.75 x 4.75 x 2.33	2.75 lbs
 Single Channel	175	single channel hum eliminator with protected BNC's	75 Ohm	0-150 MHz	4.75 x 4.75 x 2.33	2.75 lbs
 3 Channel	300	3 channel hum eliminator	75 Ohm	0-150 MHz	7.40 x 4.70 x 3.20	7.5 lbs
 4 Channel	400	4 channel hum eliminator	75 Ohm	0-150 MHz	7.40 x 4.70 x 3.20	7.5 lbs
 5 Channel	500	5 channel hum eliminator	75 Ohm	0-150 MHz	7.40 x 4.70 x 3.20	7.5 lbs