

GLE-Ground Loop Hum Eliminators

With Wide Bandwidth

FEATURES & SPECIFICATIONS:

- Bandwidths up to 500 MHz
- Passive device, Failure-free
- Low Signal Loss
- Easy to use
- No Differential Gain or Phase Distortion
- Multi-Channel Versions Available

Allen Avionics has a family of Wide Bandwidth Ground Loop Hum Eliminators. These products will satisfy the broadcast industry's need for wide bandwidth components for use in high-definition video applications, high speed video switching systems, high resolution or high-definition video display and projections systems and all wide bandwidth analog and digital transmission applications.



These Hum Eliminators provide a high degree of common mode rejection at power frequencies (50 Hz, 60 Hz and 400 Hz) while passing all frequencies from DC to over 300 MHz for the GLE-50 and GLE-75. It will pass frequencies from DC to over 500 MHz for the GLE-50-VHF and GLE-75-VHF.

GLE PRODUCTS and SPECIFICATIONS		
ITEM	GLE Series	GLE-VHF Series
PRODUCTS	GLE-50, GLE-50-H (50 Ohm) GLE-75, GLE-75-H (75 Ohm) GLE-75-5 (5 Channels)	GLE-50-VHF, GLE-50-VHF-H (50 Ohm) GLE-75-VHF, GLE-75-VHF-H (75 Ohm) GLE-50-VHF-5, GLE-75-VHF-5 (5 Chs)
BANDWIDTH	300 MHz minimum	500 MHz minimum
COMMON MODE REJECTION	>60dB (50Hz, 60 Hz, 400 Hz)	>60dB (50Hz, 60 Hz, 400 Hz)
RISE TIME	1.80 Nanoseconds	0.72 Nanoseconds
FREQUENCY RESPONSE	1.5 dB @ 150 MHz 2.0 dB @ 250 Mhz 3.0 dB @ 300 Mhz	1.5 dB @ 200 MHz 2.0 dB @ 300 MHz 3.0 dB @ 500 MHz
REFERENCE FREQUENCY	100 KHz	100 KHz
INSERTION LOSS	0.4 dB maximum	0.2 dB maximum
*PACKAGE	Die-cast Aluminum	Die-cast Aluminum
DIMENSIONS (1 channel) h-w-d	4-11/16" x 3-11/16" x 2-1/16"	4-11/16" x 3-11/16" x 2-1/16"
DIMENSIONS (5 channel) h-w-d	4-3/4" x 3-1/16" x 7-7/16"	8-1/2" x 3-1/2" x 4"

ALLEN AVIONICS – GLE’s

Differences in ground potentials, unbalanced power loads and large, multi-wire or multi-cable video or serial data distribution systems using coaxial cable can form ground loops and become a receptor for unwanted energy. This unwanted energy results in common mode currents flowing in the ground loop. See Figure 1.

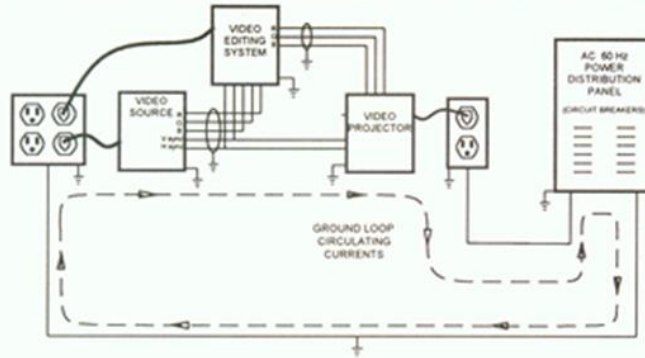


Figure 1

Any of the GLE Series of high frequency hum eliminators will protect all high-speed video or data in coaxial distribution systems from ground loops and electromagnetic interference caused by power lines and interfering RF sources. Common mode currents present in shielded cable transmission systems are removed by providing an effective reduction (50 to 60 dB) of CMV (Common Mode Voltage) at power frequencies (50Hz,60Hz and 400 Hz).

The GLE Series is ideally suited for use with wide bandwidth, high-resolution video projection systems that require bandwidths of 350 MHz or more. Modern, high-speed serial video routers, data switching or distribution systems or any high-speed analog or digital networks that employ high frequency video, serial data or high frequency control signals will benefit from the use of a wide bandwidth hum eliminator. See Figure 2.

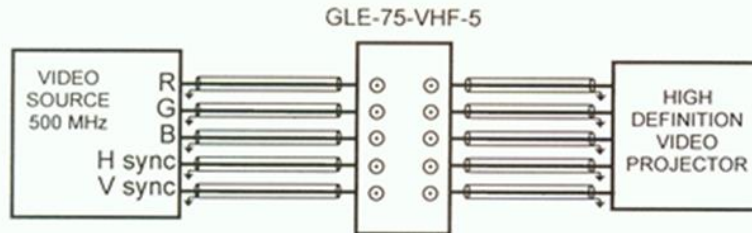


Figure 2

All of the GLE Series of hum eliminators are available in single and multi-channel versions, including 5-channel models (GLE-50-5 and GLE-75-5) and (GLE-50-VHF-5 or GLE-75-VHF-5), specifically designed for video projection systems. “Heavy Duty” versions of the single-channel GLE Series are also available. The Heavy Duty models (GLE-50-H, GLE-75-H, GLE-50-VHF-H or GLE-75-VHF-H) (H for heavy duty) feature 1/4” guard rails to protect the BNC connectors. Jack covers are supplied on the single-channel, heavy duty units to protect the BNC connectors when not in use. All multi-channel models are supplied with guard rails.

