

V235GLTA-1 Ground Loop Transformer



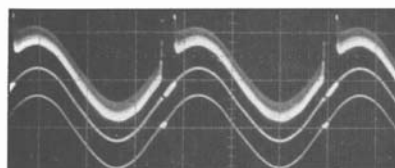
- Prevents video-signal distortion caused by ground loops
- Passive device for coaxial control systems, including Vicoax
- Small compact design
- Easy installation

Specifications

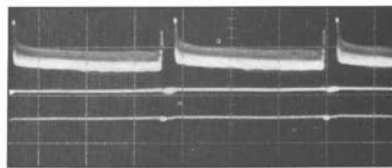
Electrical

Common Mode Ground Loop Rejection Rate:	90 dB at 50/60 Hz.
Input Impedance:	75 ohms.
DC Input Impedance:	75 ohms (+/-5%).
Bandwidth (± 3 dB referenced to 100 KHz):	10 Hz to 10 MHz at 1 V p-p. 25 Hz to 10 MHz at 2 V p-p.
Connectors:	Insulated BNC.
Dielectric Withstanding Voltage:	500 VDC from connectors to case and to each other.
Signal Level Loss:	30% (3 dB).

Elimination of Ground Loop



Video signal with ground loop current.



Normal video signal as restored by V235GLTA-1

The V235GLTA-1 Ground Loop Transformer is a passive ground loop correction device for coaxial control systems such as Vicoax®. It differentially nullifies the AC current that can occur in the video cable shield as a result of differing voltage potentials at each end of the shield.

The difference in potential can arise from bridging of two power distribution systems supplying the camera and monitor in which the level of electrical ground varies. The result is the production of an AC current in the cable shield. See Figures 1 and 2.

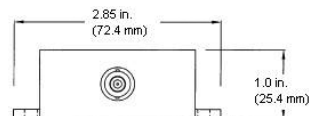
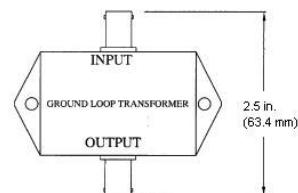
The V235GLTA-1, designed specifically for a coaxial control system, protects and restores the video signal. Waveforms showing the effect of this restoration are shown in Figure 1.

Ground loops are a common cause of video distortion. Undesirable symptoms include "hum" that appears on one or more horizontal bars, horizontal tearing or pulling, and vertical rolling.

Note: Signals are attenuated by approximately 30% (3 dB) by the V235GLTA-1.

Mechanical

Mounting:	Two mounting tabs.
Dimensions:	Height: 1.00 in. (25.4 mm). Width: 2.85 in. (72.4 mm). Depth: 2.5 in. (63.4 mm).
Weight:	0.1 lb (0.05 kg).
Construction:	Plastic.
Finish:	Black.



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