

GB-1



GROUND-LOOP BLOCKER AMPLIFIER

The GB-1 Ground-Loop Blocker is an active amplifier used to eliminate Ground Loop Interference and picture quality problems in new and existing CCTV video installations. The unit is installed at the monitor site where the CCTV signals come together, or at any intermediate point in the CCTV video path. The GB-1 operates with any standard CCTV, NTSC or PAL analog video signal.

This device controls and corrects the video signal with separate adjustable controls for Video Level and Picture Definition. A built-in active ground loop blocker removes the 60 Cycle Bars from the CCTV signal even after they have become part of the video signal. This ground loop isolator will prevent 60 Cycle "Hum Bars" from degrading your CCTV system at the time of installation and prevents a ground loop from appearing later on.

The Level control can be adjusted to overcome losses due to long cable runs up to 4000 feet, poor cable quality, and improper video terminations. Cable runs can be extended beyond 4000 feet by placing additional GB-1 units at intermediate locations.

The Picture Sharpness control can be used to restore Picture quality to its original sharpness due to long cable runs, poor quality coaxial cable, kinked or damaged coaxial cable or twisted pair "Balun" transmission installations. It will also restore the video Color-Burst and Chroma signal level to improve color saturation of the picture on long cable runs.

This device will prevent Ghosting in the picture by absorbing and eliminating the reflected video Ghost signals. It will also restore the Characteristic Impedance of the down-stream video signal to prevent secondary Ghosting in the picture.

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The unit has a secondary video distribution output. This lets the installer add an extra monitor point or drive any other video equipment without affecting the original video signal level.

This single channel unit can also be used as a camera booster to pre-boost the video signal on long runs to prevent noise and interfering signals from cross-talking into the picture. When used as a booster the unit is installed at the camera end of the system.

By installing the GB-1 in your existing CCTV system you can avoid many hours of troubleshooting trial and error associated with video problem installations. It is especially useful for installations requiring lightning protection. Lightning protection devices often induce 60 cycle bars into the video.

INPUT

Level	1 Volt Peak/Peak Nominal
Impedance	75 Ohms
Video Standard	CCTV, NTSC, PAL
Connectors	BNC (Female)
Channels	1 Channel
Power Requirements	24VAC
Current	50 mA

SPECIFICATION

PROCESSING

Clamping	Tip of SYNC
Common Mode Rejection	50 dB Minimum
60Hz Rejection	18 Volts Peak/Peak Minimum
Video Gain	-3 to +4 dB
High Frequency Compensation	0 to +16 dB
RF Bandwidth	30 MHz

OUTPUT

Level	1 Volt Peak/Peak
Impedance	75 Ohms
Connectors	2 BNC (Female)
Channels	2 Channels (Dual Output)
Signal to Noise Ratio	70dB

MECHANICAL

Size	3.3"W x 2.2"H x 5.5"L
Temperature Range	0 - 50 Degrees Centigrade
Humidity	95% Non-Condensing
Indicator	Green LED (Power/Video On)

This Unit is also available for (UTP) Unshielded Twisted Pair Wire input, when ordering specify the GB-1UTP.