# **GB464**



GROUND-LOOP BLOCKER AMPLIFIER

The GB464 Ground-Loop Blocker is an active device 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 where video signals are monitored. The GB464 operates with any standard CCTV, NTSC or PAL video signal.

This device controls and corrects four channels of CCTV video, each channel is separately adjustable for Video Level and Picture Sharpness. 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 time of installation and beyond.

The Level control can be adjusted to overcome losses due to long cable runs up to 3000 feet, poor cable quality, and improper video terminations. Cable runs can be extended beyond 3000 feet by placing additional GB464's 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 on a color camera to improve color camera operation on long cable runs.

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

# **GB464**

### **GROUND-LOOP BLOCKER AMPLIFIER**

An optional secondary video distribution output can be ordered (GB464/D). This lets the installer add an extra monitor point or drive any other video equipment without affecting the original video signal.

By installing the GB464 in your existing CCTV system you can avoid the many hours of troubleshooting and trial/error associated with problem installations. For some installations you will find it advantageous to install a GB464 on each group of four channels. It is especially useful in installations requiring lightning protection. Lightening protection devices often induce 60 cycle bars into the video signal because they use a connection to ground that does not equal the video ground at the monitor point.

#### INPUT

Level Impedance Video Standard Connectors Channels Power Requirements

Current

Card-Cage Requirements

#### PROCESSING

Clamping Clamping Tip of SYNC
Common Mode Rejection 40 dB Minimum
60Hz Rejection 2 Volts Peak/Peak Minimum
Video Gain -3 to +4 dB Video Gain -3 to +4 dB High Frequency Compensation 0 to +16 dB RF Bandwidth

#### OUTPUT

Level Impedance Connectors Channels Distribution Out (optional) 4 Channels (E-H) Signal to Noise Ratio

#### MECHANICAL

Size Temperature Range Humidity

### RMS-400 REQUIRED CARD-CAGE

Card Slots Power Requirement

#### SPECIFICATION

1 Volt Peak/Peak Nominal 75 Ohms CCTV, NTSC, PAL BNC (Female) 4 Channels (A-D) +/- 12 VDC (RMS-400 Card Cage) 100 mA RMS-400 Pwr Supply & Mainframe

Tip of SYNC 30 MHz

1 Volt Peak/Peak 75 Ohms BNC (Female) 4 Channels (A-D) 70dB

1.00" W X 4.87" H X 10.00" L 0 - 50 Degrees Centigrade 95% Non-Condensing

## 9 Slots

24VAC 100mA Each

GB464.doc