

User's Guide



GLI 2000 5BNC
GLI 2000 2BNC

Passive Ground Loop Inhibitors

Introduction

The GLI 2000 5BNC and GLI 2000 2BNC are heavy-duty, passive ground loop inhibitors. Ground loop inhibitors eliminate hum bars (as shown below) and common mode noise caused by improper video equipment grounding. Ground loop problems can be caused by using AC power sources with different ground levels or by plugging high-current equipment into the same power source as video equipment.



Hum bars

The GLI 2000 series consists of the following models:

GLI 2000 5BNC — The GLI 2000 5BNC inhibits ground loops on RGBHV, RGSB, or RsGsBs video signals. The unit has five female BNC connectors for input and five for output.

GLI 2000 2BNC — The GLI 2000 2BNC inhibits ground loops on S-video or composite video signals. The unit has two female BNC connectors for input and two for output.

Both models feature high bandwidth, high core saturation voltage to handle even the worst ground loop problems, and guardrails to protect the connectors.

Installation

The GLIs can be mounted on a standard universal 2U rack shelf.

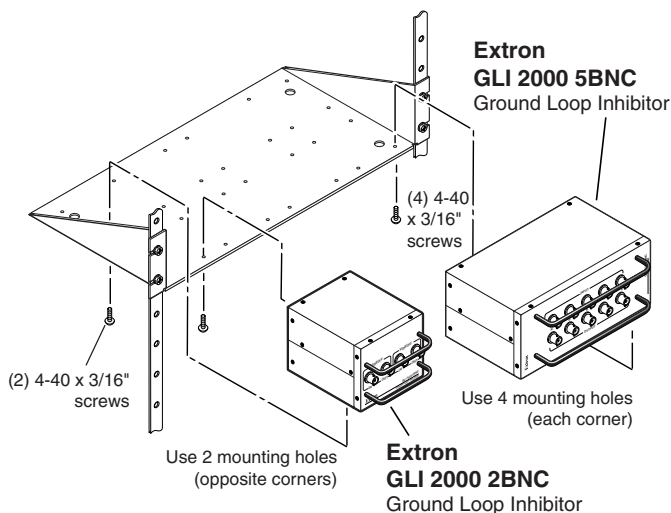
Rack mounting

Mount the GLIs on a standard universal 2U rack shelf (Extron part #60-032-01). The GLI 2000 5BNC mounts in one of four locations at the front or the rear of the rack. The GLI 2000 2BNC mounts in one of eight locations at the front or rear of the rack.

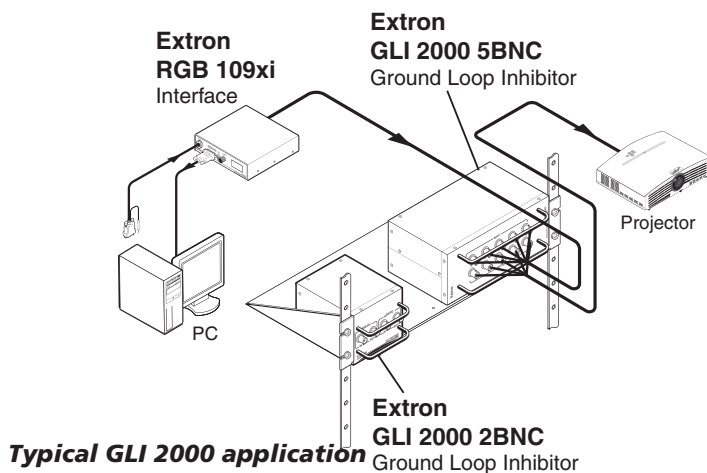
1. Remove rubber feet if they were previously installed on the bottom of the GLI.
2. To mount the GLI 2000 5BNC on the shelf, use four 4-40 x 3/16" screws in the corners to secure the GLI to the shelf.

To mount the GLI 2000 2BNC on the rack shelf, use two 4-40 x 3/16" screws in opposite (diagonal) corners to secure the GLI to the shelf.

3. Install blank panel(s) or other unit(s) on the rack shelf.
4. Attach the rack shelf to the rack using the supplied bolts.

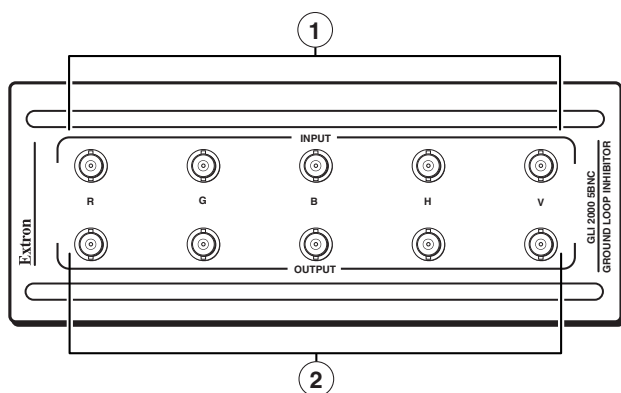


Mounting the GLI on a standard 2U rack shelf



Connections

GLI 2000 5BNC

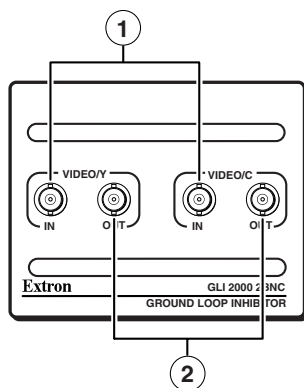


GLI 2000 5BNC connectors

- ① **Input connectors** — Connect an RGBHV, RGBS, RGsB, or RsGsBs video source to these five BNC connectors.
- ② **Output connectors** — Connect an RGBHV, RGBS, RGsB, or RsGsBs video display to these five BNC connectors.

NOTE

The H and V channels on the GLI 2000 5BNC have a bandwidth of 200 MHz, rather than 425 MHz, and should not be used for high-resolution signals.

GLI 2000 2BNC**GLI 2000 2BNC connectors**

- ① **Input connectors** — Connect an S-video source or two composite video sources to these two female BNC connectors.
- ② **Output connectors** — Connect an S-video display or two composite video displays to these two female BNC connectors.

Specifications

Video

Gain	Unity
Core saturation voltage	>10V

NOTE *See the Extron Web site for details on core saturation test conditions.*

Bandwidth	
GLI 2000 5BNC	>425 MHz (-3dB) for RGB, >200 MHz (-3dB) for HV
GLI 2000 2BNC	>100 MHz (-3dB)
CMRR	
GLI 2000 5BNC	>58dB @ 50 Hz or 60 Hz
GLI 2000 2BNC	>53dB @ 50 Hz or 60 Hz

Video input

Number/signal type	
GLI 2000 5BNC	RGBHV, RGBS, RGsB, RsGsBs
GLI 2000 2BNC	1 S-video or 2 composite video
Connectors	
GLI 2000 5BNC	5 female BNC
GLI 2000 2BNC	2 female BNC
Nominal level	1V p-p for Y of S-video, and for composite video 0.7V p-p for RGB 0.3V p-p for C of S-video
Minimum/maximum levels	Analog: -15V to +15V p-p with no offset
Impedance	75 ohms
Horizontal frequency	10 kHz to 2000 kHz
Vertical frequency	15 Hz to 180 Hz
Return loss	
GLI 2000 5BNC	<-27dB @ 1 MHz to 100 MHz
GLI 2000 2BNC	<-28dB @ 1 MHz to 100 MHz

Video output

GLI 2000 5BNC	RGBHV, RGBS, RGsB, RsGsBs
GLI 2000 2BNC	1 S-video or 2 composite video
Connectors	
GLI 2000 5BNC	5 female BNC
GLI 2000 2BNC	2 female BNC

Nominal level	1V p-p for Y of S-video, and for composite video 0.7V p-p for RGB 0.3V p-p for C of S-video
Minimum/maximum levels	Analog: -15V to +15V p-p with no offset
Impedance	75 ohms
Horizontal frequency	10 kHz to 2000 kHz
Vertical frequency	15 Hz to 180 Hz
Return loss	<-30dB @ 0 to 100 MHz
DC offset	±10 mV maximum

Sync — GLI 2000 5BNC unless otherwise indicated

Input type	RGBHV, RGBS, RGsB, RsGsBs
Output type	RGBHV, RGBS, RGsB, RsGsBs
Standards (GLI 2000 2BNC)	NTSC 3.58, NTSC 4.43, PAL, SECAM
Input level	-15V to +15V p-p
Output level	-15V to +15V p-p, unterminated
Input impedance	75 ohms
Output impedance	75 ohms
Max. propagation delay	
GLI 2000 2BNC	52 ns
GLI 2000 5BNC	26 ns
Polarity	Positive or negative (follows input)

General

Power	Not powered
Temperature/humidity	Storage -40° to +158°F (-40° to +70°C) / 10% to 90%, non-condensing Operating +32° to +122°F (0° to +50°C) / 10% to 90%, non-condensing
Rack mount	Yes, with optional 2U rack shelf, part #60-032-01
Enclosure type	Metal
Enclosure dimensions	
GLI 2000 5BNC	3.4" H x 8.6" W x 5" D (2U high, half rack width) 8.6 cm H x 21.8 cm W x 12.7 cm D
GLI 2000 2BNC	3.4" H x 4.3" W x 5" D (2U high, one quarter rack width) 8.6 cm H x 10.9 cm W x 12.7 cm D (Depth excludes connectors/guards and handles.)

Specifications, cont'd

Product weight

GLI 2000 5BNC 6.2 lbs (2.8 kg)

GLI 2000 2BNC 3.1 lbs (1.4 kg)

Shipping weight

GLI 2000 5BNC 10 lbs (5 kg)

GLI 2000 2BNC 5 lbs (3 kg)

Vibration ISTA/NSTA 1A in carton (International Safe Transit Association)

Listings UL, CUL

Compliances CE

MTBF 30,000 hours

Warranty 3 years parts and labor

NOTE *Specifications are subject to change without notice.*

Part Numbers

GLI 2000 5BNC 60-601-01

GLI 2000 2BNC 60-603-01

Optional Accessories

2U rack shelf 60-032-01

BNCM-RCAF adapter 10-264-01

SVHSM-BNCF adapter 26-353-01

SY 15 VGAM-RGBHVM 6' 26-533-02

SY MAC/QUADRA 35 6' 26-171-01

SU 13W3-61 26-241-01



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