

Fiber Optic System  
LearningLink™ Classroom Distribution System  
Model LL100B

# installation instructions



## GENERAL

The LL100B LearningLink Systems provide transparent transmission of video and monaural audio. The system design combines video and AM audio for routing signals through a video-only routing switch. This eliminates the expense of using a traditional video/audio follow routing switcher.

A typical system configuration is shown below. Connection information is provided on page 2.

## ABOUT THE SYSTEM

Rack-mounted units may be installed in *Fiber Options' Series 515R Card Cage* or *517R Racking System*, each unit occupying one rack slot. Rack-mount units are powered from the rack.

### Switcher Input Rack Units

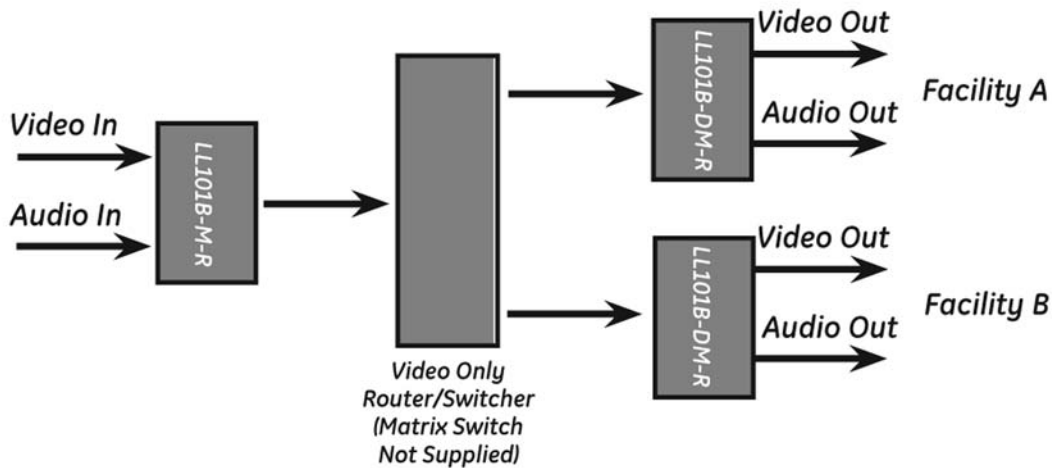
LL101B-M-R Video/Audio MUX (Monaural)

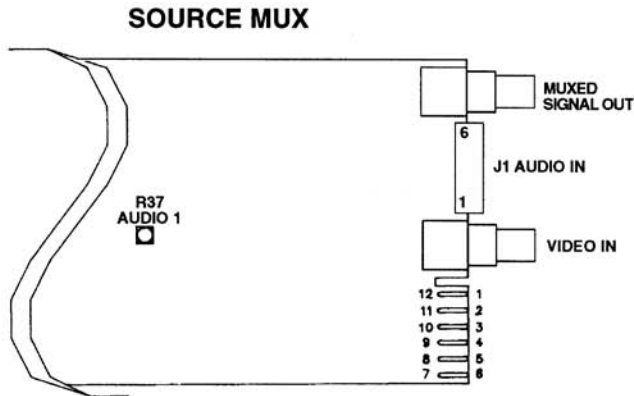
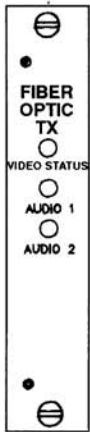
### Classroom or Lecture Hall Rack Units

LL101B-DM-R Video/Audio DEMUX (Monaural)

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Use high-quality, properly terminated coax for the connections and shielded twisted pair for the audio lines. For best performance, audio shields should be grounded. The system will support either balanced or unbalanced audio.





LL101B-M-R (Monaural)

Cutaway view provided to show location of adjustment potentiometers.

**SOURCE MUX**

**BALANCED AUDIO**

**AUDIO INPUT SIGNALS**

- J1-1 + Audio 1
- J1-2 - Audio 1
- J1-3 Audio 1 Shield

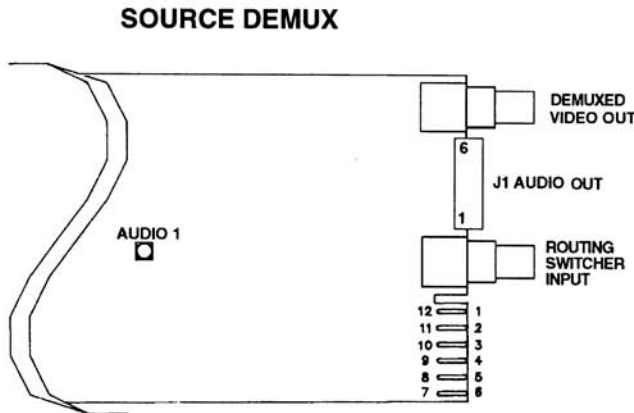
- J1-4 + } Not Used
- J1-5 - }
- J1-6 }

**UNBALANCED AUDIO**

**AUDIO INPUT SIGNALS**

- J1-1 Audio 1
- J1-2 Install jumper to J1-3.
- J1-3 Audio 1 Shield

- J1-4 } Not Used
- J1-5 }
- J1-6 }



LL101B-DM-R (Monaural)

Cutaway view provided to show location of adjustment potentiometers.

**SOURCE DEMUX**

**BALANCED AUDIO**

**AUDIO OUTPUT SIGNALS**

- J1-1 + Audio 1
- J1-2 - Audio 1
- J1-3 Audio 1 Shield

- J1-4 + } Not Used
- J1-5 - }
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**UNBALANCED AUDIO**

**AUDIO OUTPUT SIGNALS**

- J1-1 Audio 1
- J1-2 Install jumper to J1-3.
- J1-3 Audio 1 Shield

- J1-4 } Not Used
- J1-5 }
- J1-6 }

Failure to follow recommendations may result in the presence of significant interference.

Refer to the centerfold of this instruction sheet for the proper connections. Power ground is common with signal and video grounds.

### **OPTICAL INDICATORS**

All of the modules include LED indicators. (See drawings page 2 indicating the various types of LEDs and their location on the modules.)

The VIDEO STATUS indicator (or simply the STATUS indicator on the LL100B units) monitors the presence of valid video signals. It is connected to the input of the video channel. When a valid signal is connected, this LED will glow green. If no signal is present or if the level drops below 40 IRE, it will glow red suggesting that either the source (camera, VCR, etc.) is off or inoperative, or that the coaxial cable from the source is defective.

AUDIO 1 indicators monitor audio input levels. If levels are within the input range of the module, LEDs will glow green. If LEDs flicker red and continue to glow red, this indicates a potential overload condition which will occur if the input exceeds 7V peak-to-peak.

### **USER ADJUSTMENTS**

LL101B units are factory set for unity gain, but the user may reset these levels if desired.

On rack-mount cards, the adjustment pots are located on the component side of the circuit card. Refer to the drawings on page 2 of this instruction.

Care should be taken not to attempt to increase audio levels beyond unit specifications as this may cause clipping of the audio signal.

## Customer Support

For assistance in installing, operating, maintaining, and troubleshooting this product, refer to this document and any other documentation provided. If you still have questions, please contact technical support during normal business hours (Monday through Friday, excluding holidays, between 6 a.m. and 5 p.m. Pacific Time).

### GE Security

Call: 888 437-3287 (US, including Alaska and Hawaii; Puerto Rico; Canada)

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