

## Overview

The B742AV and B7742AV series high performance broadcast-grade fiber transmission system supports one composite video channel and two channels of line-level audio. The all-digital processing platform features 24-bit audio processing.

## Selectable Audio Levels

For added flexibility, dual range audio levels for the audio channel can be configured for -10 dB to +8 dB or 0 dB to +18 dB operation.

## Built-in Diagnostics

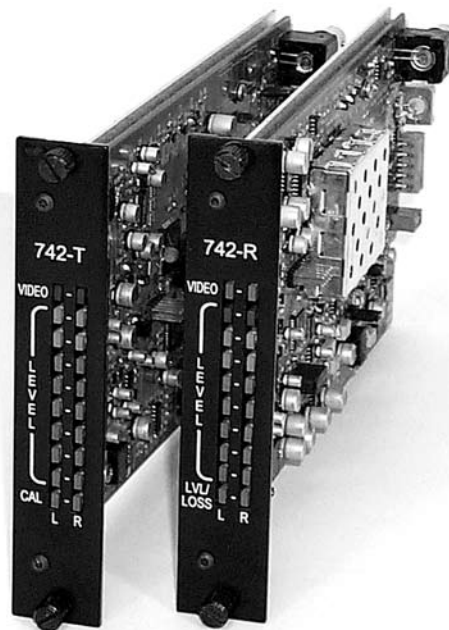
Two multi-segment LED displays provide complete monitoring of input video, output video, audio input and audio output levels and the received optical signal. When switched to the test mode on the receiver, the front panel LEDs have the capability to display the received optical level. This built-in test feature aids in the installation process as it easily measures the actual optical loss in the fiber run from the transmitter.

## Standard Features

- One-way video and audio transmission over one single mode or multimode fiber
- Exceeds EIA-250C Short Haul Standard
- 10-bit video processing
- 24-bit audio processing
- 20 Hz to 20 kHz frequency response
- Balanced or unbalanced audio
- 13 dB optical budget
- Video SNR >67 dB
- 90 dB audio SNR
- Built-in 1.0 kHz test generator
- Built-in optical power meter

# Video and 2-Channel Audio

B742AV and B7742AV



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Latin America  
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F 305-593-4300

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## Specifications

Video	B742AV (Multimode)	B7742AV (Single Mode)
Channels	1 simplex	
Format	NTSC and PAL	
Input/Output Signal	1.0 V pk-pk	
Bandwidth	7.5 MHz	
Signal-to-Noise Ratio	>67 dB	
Input/Output Impedance	75 ohms	
Differential Phase	<0.7°	
Differential Gain	<2%	

Audio		
Channels	2 simplex	
Input Signal Level	-10 dBm to +8 dBm or 0 dBm to +18 dBm	
Input Impedance	600 ohms or 30 k ohms (balanced or unbalanced)	
Frequency Response	20 Hz to 20 kHz	
Sampling Rate	48 kHz	
Output Signal Level	8 dBu or 18 dBu maximum	
Output Impedance	<30 ohms unbalanced, <60 ohms balanced	
Signal-to-Noise Ratio	90 dB	
Total Harmonic Distortion	<0.03%	
Test Signal	1 kHz @5 dBu	

Optical	Multimode	Single Mode
Mode	Multimode	Single Mode
Optical Budget*	13 dB	18 dB
Emitter	Laser	
Wavelength	1300 nm	1310 or 1550 nm
Operating Distance**	3.7 mi (6 km)	Up to 37 mi (60 km)
(depending on model)		

Modulation Type	Digital
Gain Control	Optical Automatic Gain Control (OAGC)

Electrical	
Input Power	13.5 VDC regulated
Current Requirement	600 mA
Power Consumption	6 W
Power Factor	5
Protection	Solid-state short circuit protection

Environmental	
Operating Temperature	-40 to 167 °F (-40 to 75 °C)
Maximum Humidity	95% relative, noncondensing

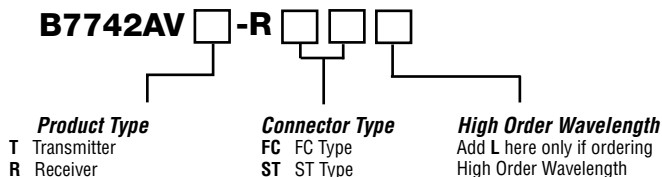
Mechanical	
Dimensions	1 slot (1.0")
Weight	0.6 lbs (0.27 kg)
Construction	Aluminum

### AGENCY COMPLIANCE

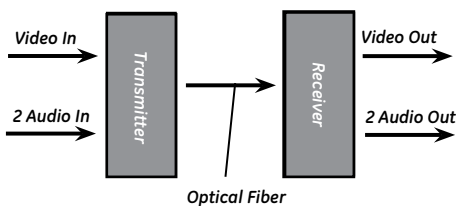
**FCC** PART 15 COMPLIANT **CE** **UL** US

### MADE IN THE USA

Complies with FDA Performance Standard for Laser Products, Title 21, Code of Federal Regulations, Subchapter J



## Related Diagram



## Ordering Information

Use the Configurator below to select the options available for this product.

**B742AV**  -RSTL

### Product Type

T Transmitter  
R Receiver

\* Optical Budget based on 62.5 μm fiber, for 50/125 μm fiber subtract 3 dB.

\*\* Operating distance is approximate and assumes best fiber. It will be affected by the type and number of splices in the fiber. Refer to update No. TB00-005, which can be found at www.gesecurity.com

As a company of innovation, GE Security reserves the right to change product specifications without notice. For the latest product specifications, visit GESecurity online at www.GESecurity.com or contact your GE Security sales representative.  
B742AV-2006-09-2



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