



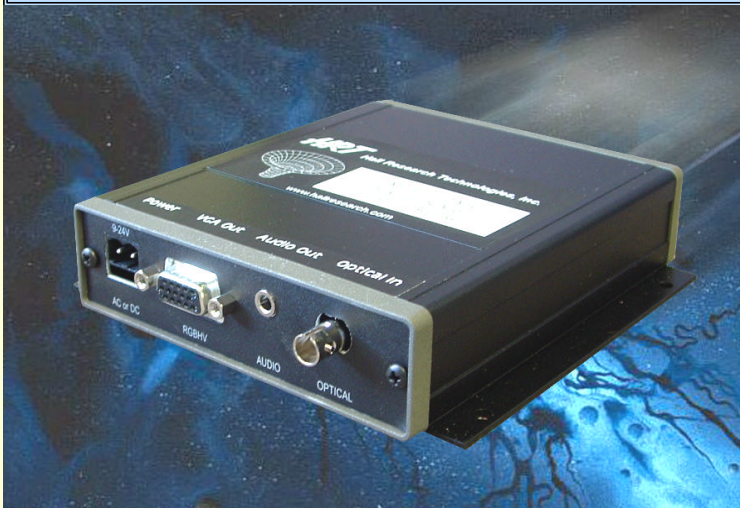
Hall Research Technologies, Inc

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Product Bulletin

Model HR-722A

PC Video & Audio Transmission System Over a Single Fiber Optic Cable



Description:

The Hall Research Model HR-722A Fiber Optic Communication System allows direct connection of VGA computers for signal transmission over Fiber Optic cable spanning distances to 2500 ft (0.75 kilometers) on multi-mode or 35 kilometers on single-mode fiber (approximate based on loss budget). The HR-722A features excellent audio & picture quality with bright and sharp images. Gone are the usual signal degradation and smearing of coax or twisted pair video transmission at extended lengths. Signal integrity is also maintained through fiber optic cables' immunity to electrical interference and cross talk. The lightweight and small diameter fiber reduces installation time, particularly since only 1 fiber is needed. Fiber optic cable also has certain intrinsic benefits for installation success including resistance to electromagnetic interference (EMI), lightning, and the elimination of ground loops through electrical isolation. The HR-722A Series includes the HR-722A-T Transmitter and HR-722A-R Receiver, both with a 15 pin HD female connector and 3.5 mm Stereo Audio jack. Power supplies are also included in the package for the transmitter and the receiver.

The system is generally used with standard Multimode Fiber (62.5/125 um or 50/125 um) with common St- connector type. System integration allows all other Hall Research Technologies, Inc. VGA compatible products to be used in conjunction with the Fiber Optic system including Distribution Amplifiers, Switches, and VGA Breakout Cables.

Features:

- Transmit VGA, SVGA, XGA and WXGA at native resolution (pixel-by-pixel digital transmission)
- Supports HDTV resolutions of 480p, 720p and 1080i (RGBHV format only)
- Uses all digital processing and transmission for crystal clear signals and no color pixel skewing, no ghosting!
- Requires no adjustments, equalization or de-skewing during installation
- Transmits signals over one single mode or multimode fiber optic core at 1310 nm
- Virtually no audio/video skew
- Ideal for digital signage, broadcast or corporate studios, auditoriums, stadiums and theaters, airport or transportation hubs, distance learning, or medical imaging
- Small, lightweight, low power
- Use of Existing Fiber Lines
- Elimination of Ground Loops
- Secure Transmission for Tactical and Military Installations
- Immunity to Electromagnetic Interference

Specifications:

Video Specifications:

Number of Video Channels	1 RGBHV
RGB Processing	24 bits, no compression or scaling
Input Impedance	RGB: 75 Ohms; H & V: Hi-Z
Input Level	RGB: 714 mV p-p; H & V: 3 to 5 V p-
H Sync Frequency Range	15 to 60 kHz
V Sync Frequency Range	30 to 85 Hz
RGB Format Supported	RGB with separate H and V

Audio Specifications:

Number of Audio Channels	2, unbalanced
Frequency Response	+0/-0.5 dB, 20 Hz - 20 kHz
Bits-per-Sample/Sampling Rate	24 bits; 54 kHz
Maximum Audio Level.....	+10 dBu
SNR (A-Weighted).....	95 dB
Input Impedance.....	>24 k Ohms
Output Impedance	< 1 Ohm
Audio to Video Diff. Delay (skew)	<300 uSec

General Specifications:

Power Requirements	9-24 vDC, 5 watts (Universal power supply is included)
Operating Temperature Range	-20 to +60 degrees C
Optical Connectors.....	ST
Operating Wavelength	1310 nm
Physical Size	5 W x 1.15 H x 5.25 L (inches)
Weight	approx. 10 oz.; 0.284 kg

Kit/System Configuration:

The Model HR-722A kit includes the transmitter with video and audio cables, receiver, and universal power supplies for each.