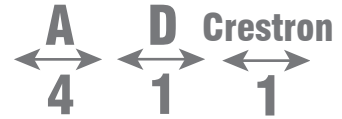




## Digital Fiber Optic Audio and Data Transmission System



**“Two Way Audio/Data”**

**“Line or Mic Audio”**

**“Crestron Control”**



**“For the same cost as analog links, why not use digital.”**

### Applications

- Remote Multimedia Studio
- Audio/Data Retrieval and Distribution
- Audio/Data Communication

### Features

- Digital Encoded Fiber Optic Links
- Line, Mic, Mic/Phantom Audio
- Crestron RS-485 Control
- Standalone and Card-cage Packaging
- 1 Fiber Solution also Available (WDM)**
- CWDM Optics Available**

The 288 Series is a high-performance Digital Fiber Optic Audio and Data Transmission System, providing simultaneous transmission of digitized audio and serial data. The standard 288 system is designed to transmit four (4) bi-directional audio channels and two (2) serial data (RS-232/ RS-422 and Crestron control) channels over one pair of multimode or singlemode fiber. Many versions of optical transmitter and receiver combinations are available to address different distance requirements.

The 288 features a digital fiber optic transmission technology, capable of providing crisp audio, little or no maintenance, high functional reliability, and low operating costs. The quality of audio and data transmission in BCI's digital designs is superior to the analog transmission (based on amplitude or frequency modulation) designs by other manufacturers. No user adjustments are required in the 288 system, enabling quick setup and trouble-free operation.

The 288 comes with two packaging options: a rugged, standalone, and compact unit, or a plug-in card for a card cage system. Panel connectors are provided for audio (XLR and RCA connectors), RS-232 (DB-9 connector), a Crestron control (terminal block connector) and fiber connection (SC-type for singlemode and multimode fiber). The 288 can be easily monitored by LED indicators for power, optical link, and audio/data activity. The standalone units are powered by +12 VDC.

Due to its digital transmission design, the 288 is capable of addressing a variety of non-standard configurations. Contact us to discuss your custom, OEM/private brand and high volume requirements.



**Doing More With One Fiber**





### Audio

Channel Capacity	4 Bi-directional
Operating Mode	Line, Mic, Mic/Phantom (selectable)
Input/Output Impedance	Low-z 600/600 Ohms (XLR) High-z 10K/300 Ohms (RCA)
Frequency Response	20 Hz to 20 kHz (at line level)
SNR (Weighted)	> 70 dB at 1 kHz (at +10 dBm line level)
Connector	XLR and RCA

### Serial Data

Channel Capacity	1 Bi-directional
Signal Format	RS-232 or RS-422 (switch selectable)
Data Rate	Up to 115 kbps (RS-232)
Bit Error Rate	< 10 <sup>-9</sup>
Connector	DB-9
Interface	DCE

### Crestron Compatible RS-485 Data

Channel Capacity	1 Bi-directional
Signal Format	Crestron RS-485
Data Rate	38.4 kbps
Bit Error Rate	< 10 <sup>-9</sup>
Connector	4 Pin Female Mini Phoenix (Terminal Block)
Power	+12VDC, 20 Watts Max.

### Physical

Dimension: (H x W x D)	
Standalone module	1.72" x 8.58" x 12.0"
Card-cage plug-in card	5.24" x 2.81" x 11.6"
Power Level	+12 VDC @ 3.0 A
Power Connector	2.5mm Jack
Operating Temperature	0 to +50°C (extended range is also available)
Humidity	0 to 95% RH, non-condensing
Status Indicators	Power, Optical Link

### Optical

Fiber Type	Multimode and Singlemode
Number of Fibers	2 or 1
Wavelength	1310 and/or 1550 nm
Fiber Optic Connector	SC (Multimode) SC (Singlemode)

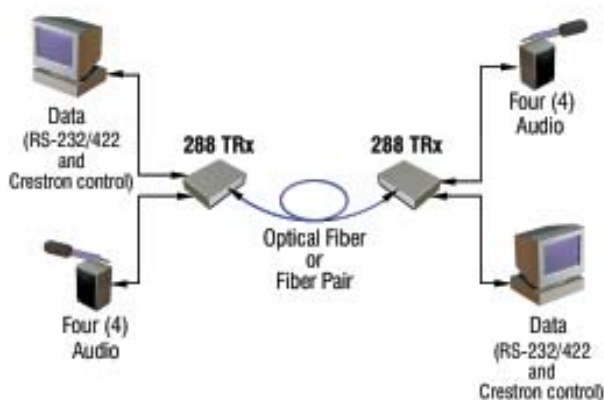
### Typical Power Budget and Transmission Distance

Application	Power Budget (1)	Typical Distance KM (2)	Typical Distance Miles (2)
Multimode Fiber	6	2	1.2
Singlemode Fiber	16	40	25

(1) These are typical values for the 288 Series. The actual values may vary.

(2) These are typical distance coverage figures. The maximum distance coverage may be greater than these typical numbers, depending on fiber type, fiber bandwidth, connector splicing losses, chromatic dispersion, environmental factors, etc.

### Applications



### Doing More With One Fiber

Subject to continued product enhancement, we reserve the right to change the above specifications and description without notice.

