

Datasheet : F-8XLR-HiFi-TxRx



8 Professional High Quality 3-PIN XLR Audio over fiber extender

The **F-8XLR-HiFi-TX/RX** is the HIFI professional Multichannel audio over fiber optical transceiver with 3-PIN XLR interface, performs high-quality 1~8 Channel HIFI audio transmission over an optical line. Fiber Optic Transmitter High Quality audio signals are converted to digital signals and then converted to optical signals for transmission. Fiber Optic Receiver does the photoelectric conversion from modulated light signal to the Analog XLR signal to transfer over fiber.

Our Balanced Audio to Fiber Optic Converter/Extender is used for professional and extremely high-quality audio transmission over the fiber with such a low signal to noise ratio that you'll be blown away by the sound you get from analog sources.

Features :

- **Compact design with 1U height, 19 inch, which can be installed on standard rack**
- **Optical interface**
 - Supports optical signal loss indication
 - ST/PC
- **XLR interface for Audio**
 - The optical transmitter provides up to 8 XLR interfaces for balanced audio input
 - The optical receiver provides up to 8 XLR interfaces for balanced audio output
 - 24 bit quantized accuracy, 192K sampling frequency
 - SNR is better than 98dB
 - THD (Total Harmonic Distortion) <0.03%
- **Provides AC110~220V dual power redundancy**

- **Applications include:**
 - Concerts
 - Churches,
 - Sport events
 - links from studio to the transmitter (STL)
 - studio to studio
 - studio to CATV head-end
 - common carrier,
 - RBOC Telco circuits,
 - Distance learning,
 - Intelligent Transportation Systems
 - back-haul feeds from special events.

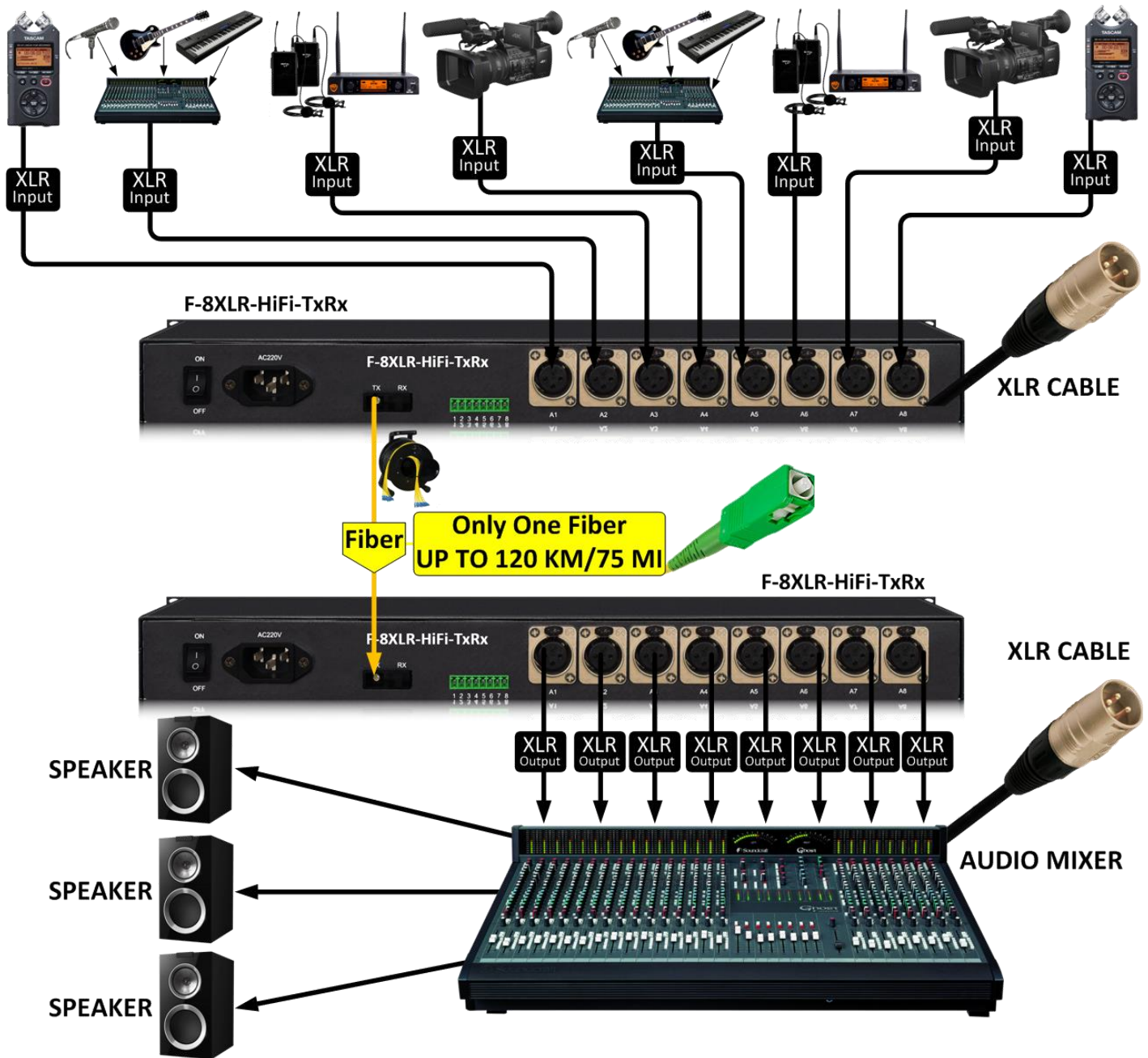
System Architecture :

Each **F-8XLR-HiFi-TxRx** unit operates as a **bi-directional node**:

- **4 XLR inputs → transmitted over fiber**
- **4 XLR outputs ← received from fiber**
- **A pair of identical units** is required to form a complete link
- Audio is transported **uncompressed and in real time**

Drawing:

1- 8 Professional High Quality 3-PIN XLR Audio over fiber extender



Specifications:

Interfaces on Panel		
Name	Description	
OPT	Optical interface, uni-directional, ST/PC connector	
XLR IN/ OUT	XLR interface input/output for Audio	
Power	Support AC110~220V power supply.	
	Power switch	ON: power on; OFF: power off
	AC110~220V AC	AC power input. 100VAC~230VAC
Indicators on Panel		
Name	Description	
PWR1,PWR2	Power1/Power2 indicators, GREEN	
	ON: the power works normally	
	OFF: the power is abnormal or absence.	
LINK (Transmitter)	Optical port status indicator. GREEN	
	ON: Optical port works normally	
	OFF: Optical port works abnormally	
LINK (Receiver)	Optical received status indicator. RED/GREEN/YELLOW.	
	RED ON: Optical signal loss is detected at the port.	
	GREEN ON: Receive a normal signal.	
	GREEN OFF: Optical port works abnormally	
LOCK	YELLOW ON/BLINK: Blink for bit error occurring event, and on for serious bit error.	
	XLR audio channel status indicator, RED/GREEN.	
	OFF: NO signal input or the Vp-p of an input signal is below 0.2Vp-p	
	ON: Input/output normal.	
	GREEN BLINK: the Vp-p of an input signal is between 0.2Vp-p and 5.6VP-P, and the THD is less than 0.03%.	
	RED ON: the Vp-p of an input signal at the transmitter reaches to 5.6V, the signal chopped will occur.	

Technical Specification	
Optical Interface	
Item	Description
Connector	ST/PC
Distance	0-20Km (singlemode fiber) 2000ft (multimode fiber)
Receiving sensitivity	-23dBm
Overload optical power	-3dbm
Output optical power	-5.5-5.6dBm
Wavelength	1310nm
XLR Interface	
Connector	XLR
The maximum differential input level	5.6Vp-p
The maximum differential output level	6.2Vp-p
Power consumption	6W for both Transmitting and receiving
frequency bandwidth	20HZ~50KHZ@-3dB
Adjacent Channel Isolation	>94dB@1KHz (1.228Vrms)
Impedance	Input impedance: 200K Ω , output impedance: 600 Ω
Receiving sensitivity	0.11Vp-p
SNR	>98dB@1KHz (1.228Vrms)
THD (Total Harmonic Distortion)	<0.03% @1KHz
Power Supply	
Power supply	AC110~AC220 (50HZ~60HZ)
input voltage range	100~230V AC
Environment Requirements	
Working temperature	0~65°C
Relative Humidity	≤95°C, no condensation
Storage temperature	-40~85°C
Mechanical Dimension	
Dimension	482mm(L)×44mm(H)×250mm(W)