

FOI-7282 / TD-7282

2-WIRE AUDIO TRANSCEIVER WITH SERIAL DATA AND CONTROLS



Overview

The FiberPlex Technologies TD-7282 is an innovative fiber conversion unit which allows for the creation of point-to-point or daisy chained connections utilizing your current inventory of 2-wire party-line intercom systems such as RTS and ClearCom. The unit converts 2-wire duplex analog audio to fiber for long or short haul transport. In addition to the audio, a multi-format serial data connection and a bidirectional pair of contact closures are included. The combination of audio and signaling also provides a seamless solution for 2-wire E&M applications.



As part of the FiberPlex 7200 series of converters, the TD-7282 is optically compatible with other units in the series. For example, the TD-7282 can be paired with a TD-7280 to create a 2-wire to 4-wire conversion over fiber.

What's the difference between the FOI and the TD versions?

Functionally, the FOI-7282 and TD-7282 are identical. The only differences are the packaging and power supply. The FOI-7282 is part of the FOI line of products designed for ruggedized military applications while the TD-7282 is housed in the commercial 'Throw Down' packaging.

	FOI-7282	TD-7282
Standalone Power	Requires a PSQ-4909 AC supply or PSQ-4920 DC supply	Power Supply included
Power Connection	High Reliability Lemo™ connector	Both circular DC connector and 3-position Phoenix™ quick connect
Chassis Mounting	Uses the RMC series chassis for up to 9 units in 2U or 8 units with redundant power supply	6 units in a 1U with the optional TDR-01-AC
Case	Mil-style sealed steel can enclosure	Durable anodized brushed aluminum

Features:

Audio Interface:

- Supports 2-Wire Full and Half Duplex Audio I/O
- High Quality 24-bit audio
- Supports both RTS™ and ClearCom™ signaling
- Supports Ultrasonic Signaling

Serial Interface:

- RS-232, RS-422, RS-485 (2/4 wire)
- Data Rates from 0 to 1 Mbps

Contact Closures:

- 'Form C' Contacts
- Supports Push to Talk

Advanced Routing:

- Point to Point
- Broadcast Mode
- Intercom/Loop
- Multichannel Add/Drop

Power:

- TD includes power adapter as well as a 3-position Phoenix™

Applications:

- Party-Line Intercom
- 2-Wire to 4-Wire Conversion
- Push To Talk
- E&M

Routing

Various advanced routing and networking options are available via DIP switch setting. These include the following:

Point to point mode

Basic configuration. Audio inputs one unit map directly to audio outputs on the other unit. Serial data and contact closures are a direct connection.

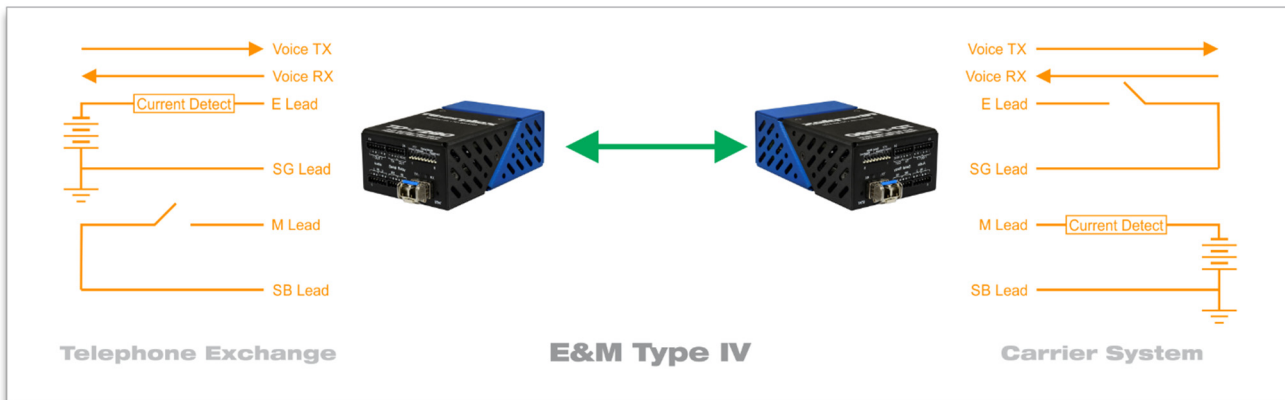
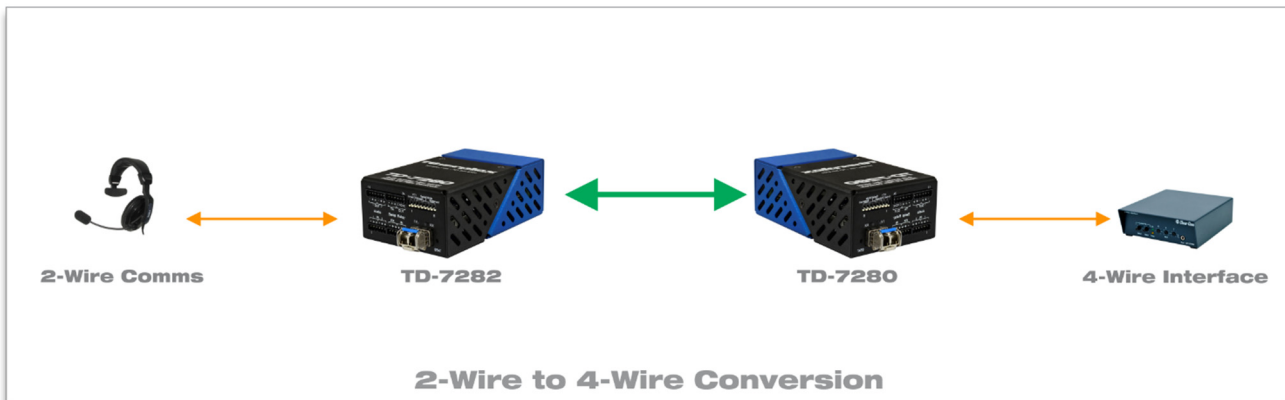
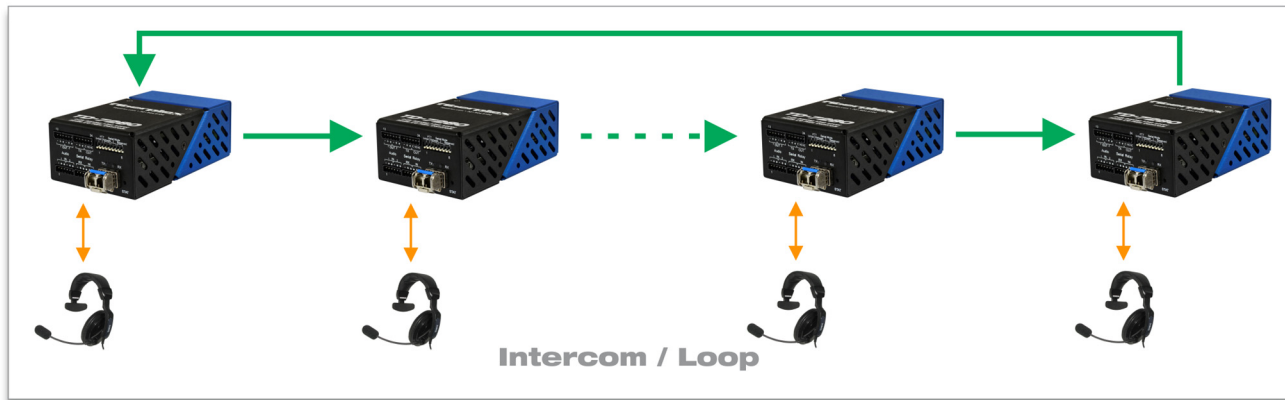


Intercom / Loop mode

One unit is configured as the master, which sets the clock and sampling rate. It polls the loop, with each unit in the loop adding its own input to the aggregated sample, gated by its push to talk, if enabled. When the sample returns back to the master, it then sends out that aggregated sample as the output for all units in the loop. All units forward the aggregated output around the loop until it returns to the master, which discards it. Serial data from the master is replicated on all slaves, and serial data from the slaves is aggregated to output on the master.



Typical Applications



Ordering Information

FOI-7282 Accessories		Part Number	
PSQ-4909	Power Supply for size 4 FOI type isolator stand-alone configuration	TD-7282 - L5B 	Optical Interface: L22 = multimode, 1310nm, 2km, LC L5B = singlemode, 1300nm, 20km, LC C = SFP cage, no optical module <i>Other Optical interfaces available on our custom Catalog</i>
WMA-3002	Wall mount adapter for FOI type isolators		
RMC-3101	19" Rack mount chassis, 5 1/4" (3U) for FOI type isolators		
CMA-3002	Chassis Mounting Adapter for FOI type isolator		
TD-7282 Accessories			
TDR-01-AC	6 Position Rear Connect Powered Rack for TD Series Modules	Series: FOI = Rugged Mil-Grade Housing TD = "Throw Down" Aluminum Housing	
TDP	6 Position Front Connect Powered Rack for TD Series Modules		
TTM	6 Position Truss Mount AC Powered Rack for TD Series Modules		
For a complete list of chassis and accessories see http://fpx.lc/all_accessories			