

The FT 800 Series is a technological break-through in the Public Address System industry capable of transmitting CD quality audio over long distances. The FT Series is designed for Star topology configuration where damage to any component of the sub-system would not affect the overall operation of the Public Address System.

The FT Series models come in a combination of transmitter and receiver. They are mainly categorised by the number of audio channels and serial data support. The transmitter is capable of transmitting multichannel digital audio along with serial data in a single fibre. The receiver will work in tandem to receive and decode the digital transmission back into its original analog form with the serial data.

The FT 800 Series caters for the designing and implementation of long distance solutions. This series is mostly used in university campuses, airports, seaports, convention centers and oil and gas refinery plants.

- Extremely low-distortion audio signal transmission
- Wide bandwidth supporting high speed transmission
- Impervious to electromagnetic and electrostatic interference
- Integrated RF rejection circuit for protection against RF noise interference
- Real-time communication state indicator & power indicator
- Capable of transmission distances up to 2 km
- Individual gain control for audio input
- Digital processing with auto signal tracking mechanism



FT 810T / FT 810R



FT 820T / FT 820R



FT 840T / FT 840R



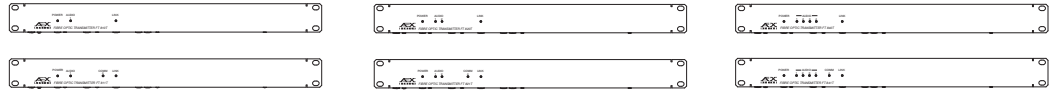
FT 811T / FT 811R



FT 821T / FT 821R



FT 841T / FT 841R

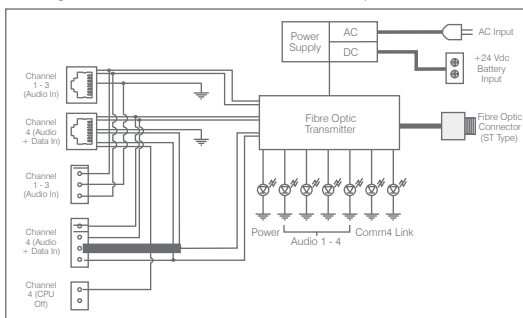


Technical Specifications

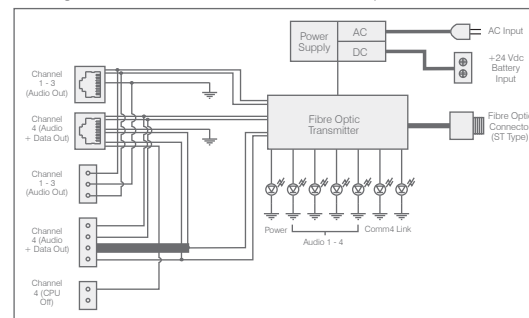
	FT 810T FT 811T	FT 810R FT 811R	FT 820T FT 821T	FT 820R FT 821R	FT 840T FT 841T	FT 840R FT 841R
Audio Input	1 Channel: 0 dB, 10 k Ω	-	2 Channel: 0 dB, 10 k Ω	-	4 Channel: 0 dB, 10 k Ω	-
Audio Output	-	1 Channel: 0 dB, 600 Ω	-	2 Channel: 0 dB, 600 Ω	-	4 Channel: 0 dB, 600 Ω
Serial Data Input	RS485 (FT 811T only)	-	RS485 (FT 821T only)	-	RS485 (FT 841T only)	-
Serial Data Output	-	RS485 (FT 811R only)	-	RS485 (FT 821R only)	-	RS485 (FT 841R only)
ADC Sampling Rate	24-bit, 48 kHz	24-bit, 48 kHz	24-bit, 48 kHz	24-bit, 48 kHz	24-bit, 48 kHz	24-bit, 48 kHz
Indicators	1 no. LINK Indicator 1 no. CHANNEL Indicator 1 no. POWER Indicator 1 no. COMM Indicator	1 no. LINK Indicator 1 no. CHANNEL Indicator 1 no. POWER Indicator 1 no. COMM Indicator	1 no. LINK Indicator 1 no. CHANNEL Indicator 1 no. POWER Indicator 1 no. COMM Indicator	1 no. LINK Indicator 1 no. CHANNEL Indicator 1 no. POWER Indicator 1 no. COMM Indicator	1 no. LINK Indicator 1 no. CHANNEL Indicator 1 no. POWER Indicator 1 no. COMM Indicator	1 no. LINK Indicator 1 no. CHANNEL Indicator 1 no. POWER Indicator 1 no. COMM Indicator
Frequency Response	20 Hz ~ 20 kHz	20 Hz ~ 20 kHz	20 Hz ~ 20 kHz	20 Hz ~ 20 kHz	20 Hz ~ 20 kHz	20 Hz ~ 20 kHz
S/N Ratio	> 70 dB	> 70 dB	> 70 dB	> 70 dB	> 70 dB	> 70 dB
THD + Noise	< 0.1%	< 0.1%	< 0.1%	< 0.1%	< 0.1%	< 0.1%
Multimode Fibre Cable						
- Core Diameter	62.5 μ m	62.5 μ m	62.5 μ m	62.5 μ m	62.5 μ m	62.5 μ m
- Cladding Diameter	125 μ m	125 μ m	125 μ m	125 μ m	125 μ m	125 μ m
Transmission Range	max. 2 km	max. 2 km	max. 2 km	max. 2 km	max. 2 km	max. 2 km
Power Requirement	220 ~ 240 Vac, 50/60 Hz	220 ~ 240 Vac, 50/60 Hz	220 ~ 240 Vac, 50/60 Hz	220 ~ 240 Vac, 50/60 Hz	220 ~ 240 Vac, 50/60 Hz	220 ~ 240 Vac, 50/60 Hz
Dimensions (W x H x D)	483 x 44 x 220 mm	483 x 44 x 220 mm	483 x 44 x 220 mm	483 x 44 x 220 mm	483 x 44 x 220 mm	483 x 44 x 220 mm
Material and Finish	Mild Steel; Epoxy Coated Steele Blue (RAL 5011)	Mild Steel; Epoxy Coated Steele Blue (RAL 5011)	Mild Steel; Epoxy Coated Steele Blue (RAL 5011)	Mild Steel; Epoxy Coated Steele Blue (RAL 5011)	Mild Steel; Epoxy Coated Steele Blue (RAL 5011)	Mild Steel; Epoxy Coated Steele Blue (RAL 5011)
Weight	2.8 kg	2.8 kg	3.0 kg	3.0 kg	3.2 kg	3.2 kg

Block Diagram

Block diagram of the FT 841T, 4 Channel Audio & Data Fibre Optic Transmitter Unit



Block diagram of the FT 841R, 4 Channel Audio & Data Fibre Optic Receiver Unit



Engineers' Specifications

The fibre optic transmitter unit shall be able to accept 1/2/4 channel(s) of audio signal and RS485 serial data signal and be able to transmit these signals over a single fibre. The fibre optic receiver unit shall be able to accept the encoded transmission from the transmitter unit and decode the transmission back into its original channel(s). Wiring of the units shall be in star topology for improved system operation reliability. The unit shall utilise ADC sampling rate of 24-bit, 48 kHz with auto signal tracking mechanism for connectivity monitoring. The frequency

response of the unit shall be at least 20Hz ~ 20kHz (± 3 dB) with a THD + Noise of less than 0.1% and S/N Ratio of more than 70 dB (IEC A). Transmission shall be in real time mode with a range of at least 2 km. The unit shall have both proprietary hardware & software data encapsulation built-in to prevent unauthorised data interception. The unit shall be 1U EIA standard 19" rack mountable. The dimensions of the unit shall not exceed 483 x 44 x 220 mm (W x H x D) and weigh not more than 3.2 kg.

