

FOX 4G DA8

EIGHT OUTPUT FIBER OPTIC
DISTRIBUTION AMPLIFIER HIGH SPEED DIGITAL
DISTRIBUTION UP TO 4.25 GBPS

- Pixel-for-pixel throughput up to 1600x1200, including HDTV 1080p/60
- Distributes and extends fiber optic A/V and RS-232 control signals very long distances over a single fiber
- Eight active and individually isolated outputs
- Compatible with Extron FOX Series fiber optic transmitters, receivers, switchers, and matrix switchers
- Output muting control
- Alarm notification for fiber link loss
- Available as 850 nm multimode and 1310 nm singlemode models
- RS-232 serial control
- Real-time status LED indicators for troubleshooting and monitoring



The Extron FOX 4G DA8 is an eight output fiber optic distribution amplifier for distribution and long haul transmission of fiber optic A/V and RS-232 control signals over a single fiber. Engineered for reliability and exceptional performance, it supports up to 4.25 Gbps digital distribution for standard definition video, high resolution computer-video, DVI-D, and multi-rate SDI. The FOX 4G DA8 also includes a host of features for enhancing A/V system integration.



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DESCRIPTION

The Extron **FOX 4G DA8** is an Eight Output Fiber Optic Distribution Amplifier for distribution and long haul transmission of incoming fiber optic A/V and RS-232 control signals over a single fiber. It provides eight optical outputs for distribution to FOX Series fiber optic receivers, switchers, or matrix switchers, each via a single fiber link. Supporting rates up to 4.25 Gbps, the FOX 4G DA8 accepts and distributes standard definition video, high resolution computer-video, DVI-D, and multi-rate SDI. It also features active optical signal splitting so that original transmitter power levels are maintained for all outputs. Designed specifically for A/V systems, the FOX 4G DA8 includes a host of integrator-friendly features such as RS-232 control, rack-mount capability, and the ability to mute one or more outputs.

The FOX 4G DA8 is ideal for a wide range of applications requiring long distance transmission of video, HDTV, and high resolution RGB content with the highest quality. Because transmission of content is inherently secure and immune to outside interference, fiber applications are favored in government, military, and medical environments. The FOX 4G DA8 features industry standard LC-type connectivity.

The FOX 4G DA8 MM supports multimode fiber at 850 nm, which is typically used within buildings or facilities with moderate-range transmission distances. The FOX 4G DA8 SM supports singlemode as well as multimode fiber at 1310 nm. Singlemode fiber offers long-range transmission capability over extreme distances of several kilometers or miles. It is used in very large facilities such as airports and stadiums, and for connecting over very long distances between facilities such as university campuses. The FOX 4G DA8 supports distribution of composite video, S-video, RGB, HDTV, multi-rate SDI, and DVI-D signals, as well as stereo audio and RS-232. All receivers must be compatible in fiber optic wavelength and video format with the transmitter feeding the input of the FOX 4G DA8.

The FOX 4G DA8 is ideal for many installations that require long haul distribution of fiber optic A/V and RS-232 control signals from a single location. In digital signage applications, for example, the FOX 4G DA8 can be used to deliver video, audio, and uni-directional control of multiple, remotely located displays in hotels, airports, shopping malls, and casinos. A multi-level building is another ideal installation for a FOX 4G DA8, as it can distribute signals to displays located on multiple floors.

FEATURES

- **High speed digital distribution up to 4.25 Gbps with pixel-for-pixel throughput up to 1600x1200, including HDTV 1080p/60** – The FOX 4G DA8 offers up to 4.25 Gbps digital distribution capability for audio, control, and video signals at high resolution rates and multiple formats with pixel-for-pixel throughput. This level of performance assures compatibility from standard definition video to the highest source resolutions, including RGB computer-video, DVI, and multi-rate SDI signals.
- **Distributes and extends fiber optic A/V and RS-232 control signals very long distances over a single fiber**
- **Eight active and individually isolated outputs** – The FOX 4G DA8 utilizes active signal splitting to maintain equal transmitter power to all outputs, maximizing distance capabilities by ensuring full availability of optical loss budget for each output.
- **Compatible with Extron FOX Series fiber optic transmitters, receivers, switchers, and matrix switchers**
- **Output muting control** – Provides the capability to mute one or more outputs via RS-232 serial control. This feature can be useful in courtroom environments.
- **Industry standard LC connectors provide reliable physical connectivity and precise fiber core alignment**
- **Alarm notification for fiber link loss** – The FOX 4G DA8 can be set up to trigger an external control system for immediate notification when a fiber link has been lost.
- **Available as an 850 nm multimode model for moderate-range transmissions, and a 1310 nm singlemode model for extreme distances up to 30 km (18.75 miles)** – A FOX 4G DA8, connected between a FOX Series transmitter and receiver, effectively doubles the overall transmission distance capability. For singlemode applications, signals can thus be sent up to 60 km (37.5 miles) from transmitter to receiver via the FOX 4G DA8.
- **RS-232 serial control** – The FOX 4G DA8 features front and rear panel RS-232 serial ports for control and configuration.
- **Real-time status LED indicators for troubleshooting and monitoring** – LEDs on the rear panel verify the presence of active input and output fiber links.
- **Rack-mountable 1U, half rack width metal enclosure**
- **Internal universal power supply** – The 100-240 VAC, 50/60 Hz, international power supply provides worldwide power compatibility.

OPTICAL SPECIFICATIONS

NOTE: These amplifiers are class 1 laser products. They meet the safety regulations of IEC-60825, FDA 21, CFR 1040.10, and FDA 21 CFR 1040.11.

Number/type

- Input..... 1 singlemode or multimode fiber optic
- Output..... 8 singlemode or multimode fiber optic
- Connectors 8 LC connectors
- Operating distance..... 30 km (18.75 miles) with singlemode (SM) cables
0.15 km (492') with multimode (MM) cables

NOTE: Operating distance is approximate. These are typical distances. The maximum distance may be greater than these typical numbers depending on factors such as fiber type, fiber bandwidth, connector splicing, losses, modal or chromatic dispersion, environmental factors, and kinks.

Nominal peak wavelength 850 nm for MM model,
1310 nm for SM model

Data rate..... 4.25 Gbps

Transmission power

- Singlemode..... -5 dBm, typical
- Multimode..... -5 dBm, typical

Maximum receiver sensitivity

- Singlemode..... -18 dBm, typical
- Multimode..... -12 dBm, typical

Optical loss budget

- Singlemode..... 13 dB, maximum
- Multimode..... 7 dB, maximum

CONTROL/REMOTE

- Serial control ports**..... 1 RS-232, 3.5 mm captive screw connector, 3 pole (rear panel)
1 RS-232, 2.5 mm mini stereo jack (front panel)

Baud rate and protocol 9600 baud, 8 data bits, 1 stop bit, no parity

- Serial control pin configurations** . Captive screw connector: 1 = TX, 2 = RX, 3 = GND
Mini stereo jack: tip = TX, ring = RX, sleeve = GND

Program control Extron's control/configuration program for Windows®
Extron's Simple Instruction Set (SIS™)

GENERAL

Power..... 100 VAC to 240 VAC, 50-60 Hz, 20 watts, internal

Temperature/humidity..... Storage: -40 to +158 °F (-40 to +70 °C) / 10% to 90%, noncondensing
Operating: +32 to +122 °F (0 to +50 °C) / 10% to 90%, noncondensing

Cooling Convection, vents on top and sides

Mounting

Rack mount..... Yes, with optional 1U, 9.5" deep rack shelf (RSU 129, #60-190-01; RSB 129, 60-604-01)

Furniture mount..... Yes, with optional MBU 125 Under-desk Mounting Kit (#70-077-01) and MBD 129 Through-desk Mounting Kit (70-077-02)

Enclosure type Metal

Enclosure dimensions..... 1.7" H x 8.7" W x 9.5" D (1U high, half rack wide)
(4.3 cm H x 22.1 cm W x 24.1 cm D)
(Depth excludes connectors.)

Product weight..... 2.3 lbs (1 kg)

Shipping weight..... 4 lbs (2 kg)

Vibration..... ISTA 1A in carton (International Safe Transit Association)

Regulatory compliance

- Safety..... CE, CUL, UL
- EMI/EMC CE, C-tick, FCC Class A, FDA Class 1, ICES, VCCI,

MTBF..... 30,000 hours

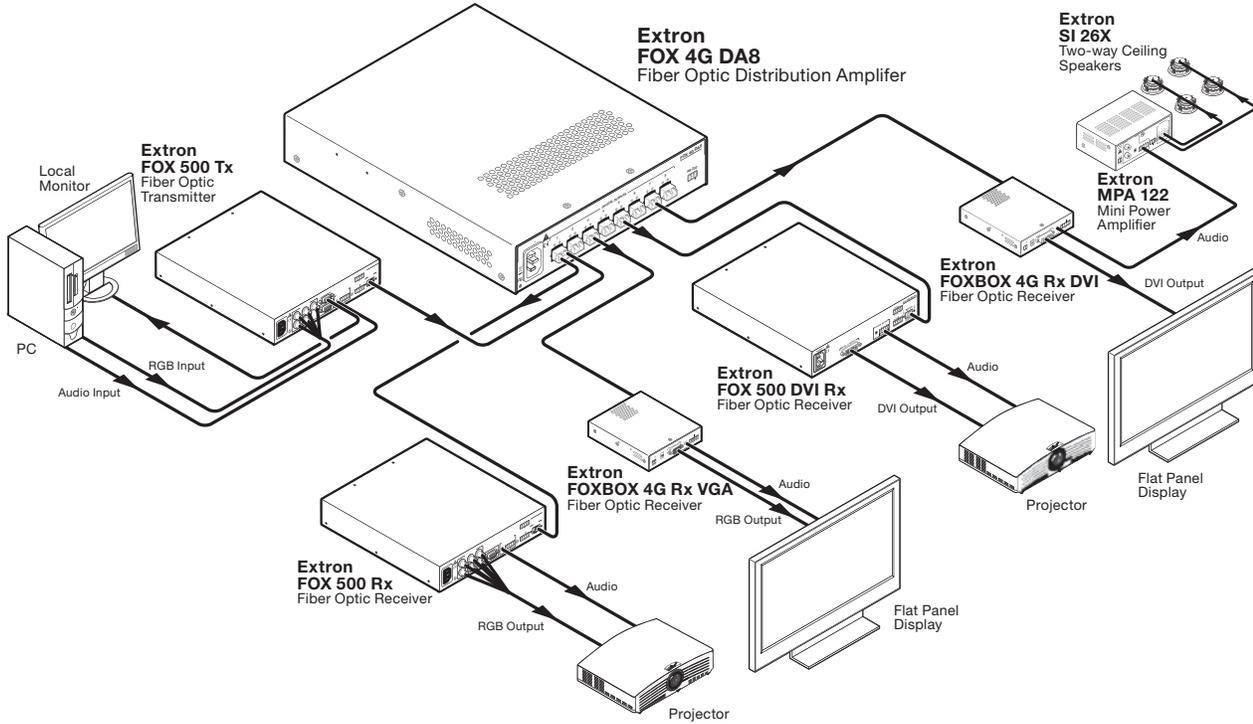
Warranty..... 3 years parts and labor

NOTE: All nominal levels are at ±10%.

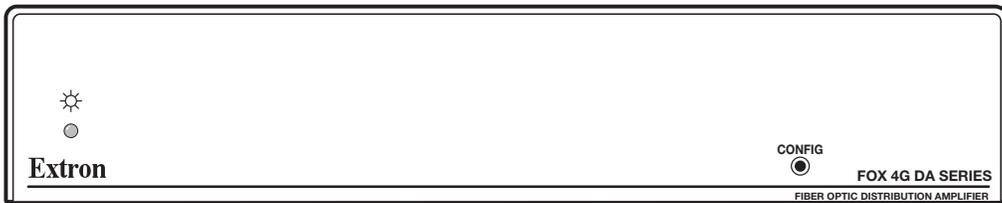
NOTE: Specifications are subject to change without notice.

Model	Version Description	Part number
FOX 4G DA8 MM	Multimode	60-927-01
FOX 4G DA8 SM	Singlemode	60-927-02

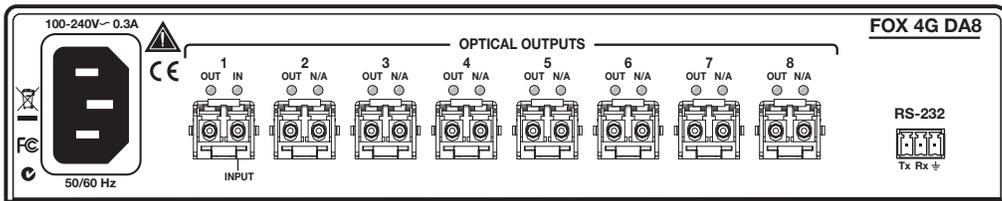
APPLICATION DIAGRAM



PANEL DRAWINGS



Front



Back



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Headquarters
+800.633.9876
Inside USA / Canada Only
+1.714.491.1500
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