

## Overview

The IFS A2100 series audio repeater provides distribution of audio on a common bus (daisy-chain) configuration on two optical fibers. The system operates in a typical 'party line' configuration. By utilizing several modules, multiple nodes can be set up to broadcast on a common audio line. Only one audio node has control of the line at anytime for broadcast to the other nodes on the line. Once the line is released, any other audio node on the line can capture the line and use the line for broadcast. The modules use frequency modulation (FM) for superior transmission of balanced line-level audio (2.2 V pk-pk). Models within this series are available for use with multimode or single mode optical fiber. Plug-and-play design ensures ease of installation requiring no electrical or optical adjustments. The modules incorporate power and carrier detect status indicating LED's for monitoring proper system operation as well as support for push to call. The modules are available in standalone only.

## Application Examples

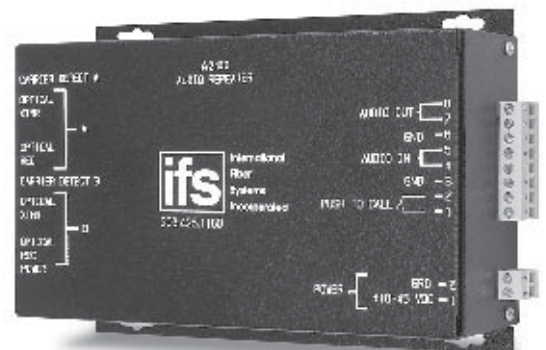
- Transmission of Stage Mics from Pre-amp to Amplifier
- Recording Studios and Post-Production Facilities
- Transmission of Broadcast Audio Feeds
- Elimination of EMI/RFI Interference in Audio Cables
- Optical Isolation for Elimination of Ground Loop Noise

## Standard Features

- FM Audio Transmission
- Up to 40 Repeaters
- 20 Hz - 20kHz Bandwidth
- 600 Ohms Audio Input Impedance
- Transmits Balanced Line-Level Audio (2.2 Volts Peak-to-Peak)
- No In-field Electrical or Optical Adjustments Required
- Power and Carrier Detect Status Indicating LEDs to Monitor System Performance
- Hot-Swappable Rack Modules
- Automatic Resettable Fuses on all Power Lines
- Distances up to 30 miles (49 km) without Repeaters
- Comprehensive Lifetime Warranty

# Audio Repeater

Provides distribution of audio on a common bus (daisy-chain) configuration on two optical fibers.



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gesecurity.com/ifs

Specifications subject to change without notice

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## Specifications

<b>Audio</b>	
Input/Output Signal:	2.2 volts pk-pk
Impedance:	600 ohms
Bandwidth:	20 Hz - 20 KHz
Signal-to-Noise Ratio (SNR):	60 dB
<b>Wavelength</b>	
	850 or 1310nm, Multimode 1310 nm, Single Mode
<b>Number of fibers</b>	
	2 In/2 Out
<b>Connectors</b>	
Optical:	ST
Power and Audio:	Terminal Block with Screw Clamps
<b>Electrical &amp; mechanical</b>	
Power:	10-45 VDC @ 200 mA
Surface Mount:	Automatic Resettable Solid-State Current Limiters
Current Protection:	Meets IPC Standard
Circuit Board:	
Size (in./cm.) (LxWxH)	7.0 x 4.9 x 2.0 in., 17.8 x 12.5 x 5.0 cm
Surface Mount:	
Shipping Weight:	< 2 lbs./0.9 kg
<b>Environmental</b>	
MTBF:	> 100,000 hours
Operating Temp:	-40° C to +74° C
Storage Temp:	-40° C to +85° C
Relative Humidity:	0% to 95% (non-condensing)†

†May be extended to condensation conditions by adding suffix '-C' to model number for conformal coating.

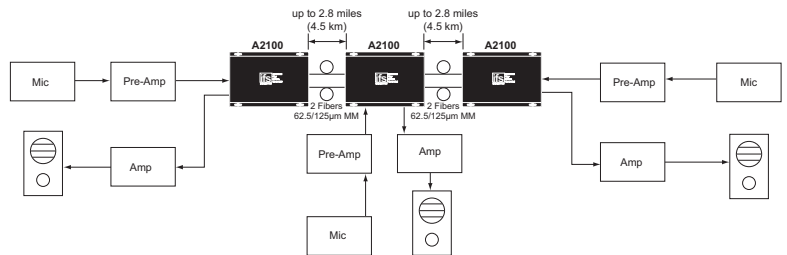
### Agency compliance



### Made in the USA

Complies with FDA Performance Standard for Laser Products, Title 21, Code of Federal Regulations, Subchapter J

## System Design



## Ordering Information

	Part Number	Description	Fibers Required	Opt. Pwr. Budget	Max. Distance*
Multimode 62.5/125µm**	A2100	Audio Repeater (850 nm)	2 In/2 Out	16 dB	2.8 miles (4.5 km)
	A2120	Audio Repeater (1310 nm)			10 miles (16 km)
Single Mode 9/125µm	A2125	Audio Repeater (1310 nm)	2 In/2 Out	17 dB	30 miles (49 km)
Accessories©	PS-12VDC 12 Volt DC Plug-in Power Supply (Included) PS-12VDC-230 12 Volt DC Plug-in Power Supply, 230 VAC Input (Included if specified at time of order)				
Options	Add '-C' for Conformally Coated Printed Circuit Boards (Extra charge, consult factory)				

\* Optical transmission distance is limited to optical loss of the fiber and any additional loss introduced by connectors, splices and patch panels. Distance can also be limited by fiber bandwidth. \*\* For 50/125 Fiber, subtract 4 dB from Optical Power Budget. © All accessories are third party manufactured.

