

SFX Pro Audio IP Network Audio Decoder

Features

- Dual & Quad decoder versions
- MPEG-4 AAC (HE and LC)
- SMPTE ST 2022-1 FEC
- SMPTE ST 2022-7 Seamless Protection Switching
- MISTiQ Compatible
- Analog and AES Outputs
- Ad Insertion
- Async data outputs for RDS
- 4 Form-C GPO per decoder
- Remotely Manageable
- MPEG LayerII and AAC audio decoding
- Full control front panel
- Remote control via Web browser
- Two network Interfaces

The SFX-PA-IP Network Audio Decoder provides operators an idea solution to distributing radio programing over managed and unmanaged IP networks. Broadcast quality audio, along with asynchronous data for RDS, GPO for remote triggering, in-band network management and ad-insertion are protected with industry standardized Forward Error Correction and Seamless Protection Switching using SMPTE ST2022-1 & ST2022-7.

IP Network Compatability

The SFX-PA-IP network audio decoders are designed to deliver broadcast quality audio for demanding radio network implementations using managed and unmanaged IP networks.

Fault tolerant IP Network Protection

All IP networks lose packets and have outages. The SFX-PA-IP audio decoders all incorporate SMPTE ST 2022-1 Forward Error Correction (FEC) and SMPTE ST 2022-7 Seamless protection switching both designed to help overcome IP network weaknesses.

Interoperability

The SFX-PA-IP Network Audio Decoders are integrated with Production Manager, MISTiQ Cloud Distribution, Datacast XD & Event Managers for synchronized ad and trigger insertion.

Commercial/Program Insertion

The SuperFlex Pro Audio Series is specially designed to allow commercial/program insertion on any channel. Datacast XD client is used to download advertisement files or programs into the receiver via satellite. Copy Split permits real-tme triggering of commercials/programming overlays on a receiver-by-receiver basis and can be done in an event or time scheduled manner.

Headend Management

The SuperFlex Pro Audio Series can be managed at the headend by various IDC products: Production Manager for content management, Datacast XD Server for file transmission, Event Manager for synchronized trigger insertion, and Net Manager for network management.



TECHNICAL SPECIFICATIONS

MODEL	Description
SFX-PA-2IP SFX-PA-4IP	<ul style="list-style-type: none"> SFX-PA-2IP Dual Network Audio Decoder with FEC & Seamless Protection Switching SFX-PA-4IP Quad Network Audio Decoder with FEC & Seamless Protection Switching

AUDIO	
Audio Encoding Types	MPEG-1 Layer II and III MPEG-2 AAC MPEG-4 AAC MPEG-4 AAC LC MPEG-4 HE V1
Audio Transport Formats	RTP/UDP/IP bit stream and DVB, MPEG
Audio Sample Rates	32, 44.1, 48 kHz 16, 22.05, 24 kHz (not all data rates supported)
MPEG Layer 2	32, 48, 56, 64, 80, 96, 112, 128, 160 192, 224, 256, 320, 384 kb/s
MPEG Layer 3	32, 40, 48, 56, 64, 80, 96, 112, 128, 160, 192, 224, 256, 320 kb/s
AAC (LD and HE)	24-320 kb/s in 8 kb/s steps
Encoding Formats	Discrete stereo, intensity coded stereo (joint stereo), single mono, dual mono
Relays	4x Form-C per decoder
Program Associated Data	1x RS232 per decoder
Audio Output	+18 dBu (software adjustable)
Audio Output	AES
Impedance	<100 ohms (into a high impedance load)
Frequency Response	+/- 0.5 dB @ 1 kHz
THD + N	Better than -70dB @ 1 KHz
Crosstalk	Better than 85 dB, between decoders
Dynamic Range	Better than 80 dB (A-weighted)
Signal to Noise	Better than 90 dB

POWER REQUIREMENTS	
Supply Voltage	100 to 240 VAC, +6%, -10%, 50 or 60 Hz
Power Consumption	180 Watts maximum
PHYSICAL PARAMETERS	
Chassis	1RU Rackmount
Dimensions (H, W, D)	4.5 cm x 48 cm x 36cm (1.75" x 19" x 14")
Weight	5.4 kg (11 lbs)

Operating Temperature	0° to 45° C (32° to 113° F)
Storage Temperature	-20 to 70 degrees C (-4 to 158 degrees F)
Humidity	Maximum 90% relative, non-condensing

FRONT PANEL INDICATORS	
LCD display	Provides metrics and setup menus
Input 1 / Input 2	Indicates Ethernet Connection on Eth0 & Eth1 flashing indicated data activity
Status LED	Indicates authorization and data activity of the Net Manager Network CControl channel
Audio LEDs	Indicates audio channel activated

NETWORK AND TRANSPORT	
Fully addressable and controllable via Net Manager	
MPEG-2 Transport (ISO/IEC 13818) per per ETSI EN 201 192	
MPE and ULE decapsulation	
STATUS AND CONTROL INTERFACES	
Web browser based	
SNMP (MIB support)	
Password protected, allows for local setting of configuration parameters	
LCD display/keypad	

Rear PANEL CONECTORS	
Audio CH1/CH2/CH3/CH4	DE-9P (male) with balanced analog audio & AES digital audio
Relay CH1/Ch2/CH3/CH4	DA-15S (female) with Form-C relay contacts & GND
Eth0 / Eth1	RJ-45 Ethernet 10/100/100 baseT
USB 1/2/3/4 Terminal Video, Keyboard, Mouse	Not activated

International Datacasting Corporation is a technology provider for the world's premiere broadcasters in radio, television, data and digital cinema. IDC's products and solutions are in demand for radio and television networks, targeted ad insertion, digital cinema, 3D live events, VOD, and IPTV. IDC is headquartered in Ottawa, Canada, has installations in over 100 countries, and a strong world-wide network of value-added partners and distributors. For more information visit: www.datacast.com.

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