

BRIDGE-IT XTRA



Affordable, High Quality STL or Multi-point IP Audio

Tieline's 1RU Bridge-IT XTRA is a cost effective, high-performance, point-to-point and multi-point stereo IP audio codec with all the features of the Bridge-IT IP codec and more!

Bridge-IT XTRA includes additional features such as all algorithms as standard, dual power supplies, a front panel stereo headphone output and 4 GPIO in/outs. It also includes SD/SDHC card audio backup.

IP Audio Applications

Bridge-IT XTRA is capable of transporting audio streams reliably, simply and effectively over IP data networks such as wired and wireless LANs, WANs, the internet, satellite IP, Wi-MAX and Wi-Fi. It is perfect for:

- Studio-to-Transmitter Link (STL) applications
- Studio-to-Studio Links
- IP Multi-unicasting
- IP multicasting on compatible IP networks
- Simple remote broadcast links

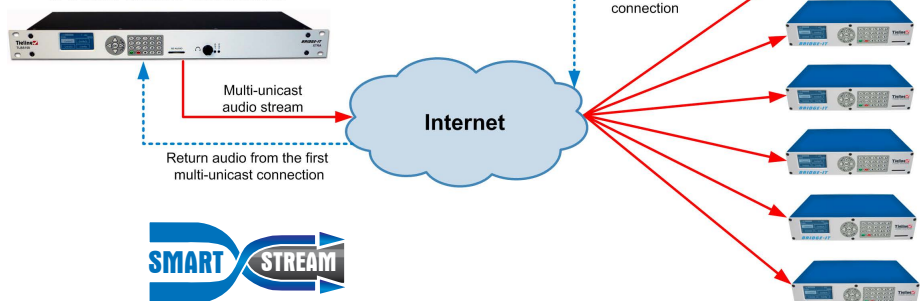
Affordable IP Audio

Bridge-IT XTRA is inexpensive and allows broadcasters to expand their IP network at a fraction of the cost of competing IP codecs without compromising on broadcast quality features. Unlike most low cost IP audio codecs, Bridge-IT XTRA has all the broadcast input connectors you would expect on a full-featured codec. Simultaneous analog and digital AES/EBU audio outputs are provided on XLR connectors and it includes front and rear panel 1/4" (6.35mm) stereo headphone outputs.

Simple to use...

Compare Bridge-IT XTRA's superior programming functionality and simple user interface with other low cost 1RU codecs. Bridge-IT XTRA features a full hardware front panel interface including navigation buttons, LCD display, PPM metering and dialing key pad. It can also be configured and controlled remotely using the Toolbox web-GUI interface.

Bridge-IT XTRA IP Codec transmits up to 6 multi-unicast connections



Algorithm Technology

Bridge-IT XTRA comes with 16 or 24bit, 48kHz linear audio for crystal clear, low-latency uncompressed sound. Standard broadcast algorithms available include:

- AAC-LC and AAC-HE v.1 and v.2
- AAC-LD, AAC-ELD
- aptX® Enhanced
- MPEG Layer 2
- Tieline Music (15kHz)
- Tieline MusicPLUS (22kHz) which delivers stereo audio with 20 ms encode delay at 96Kbps, offering huge savings on your data bills.
- G.711 (u-law and a-law)

- G.722
- MP3 playback from an SD/SDHC card.
- Opus

Compatibility

Bridge-IT XTRA will connect to any SIP-enabled IP codec brand with industry standard algorithms like LC-AAC, HE-AAC, MPEG Layer 2, G.711 & G.722. Bridge-IT XTRA is also

EBU N/ACIP Tech 3326 compatible using SIP for connecting to other codec brands and devices. It is also internet/satellite streaming and HD radio compatible.

Broadcast Multiple Connections

Multicast stereo audio over compatible networks to unlimited end-points, or send up to 6 stereo multi-unicast audio streams over WANs like the internet.

Tieline[®]
The Codec Company

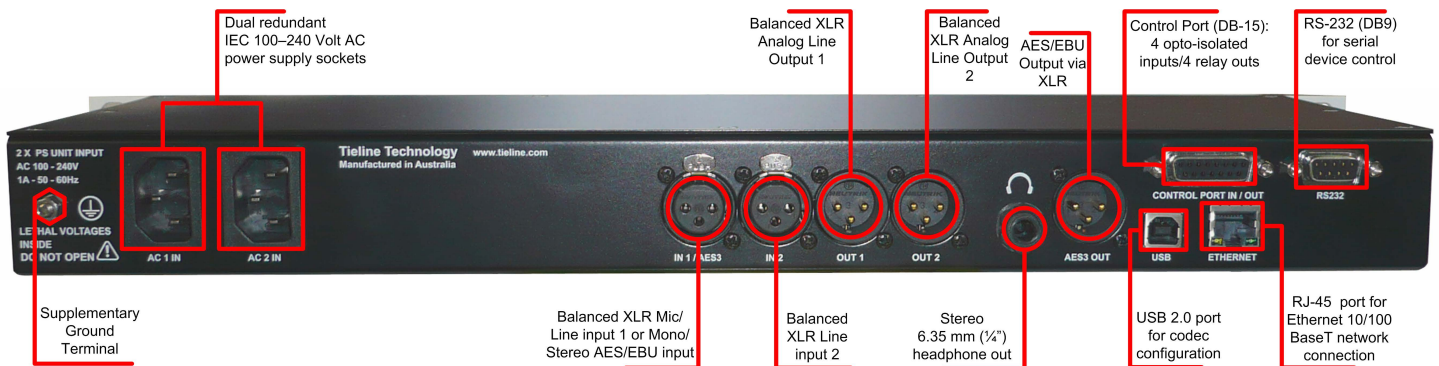
Audio Backup

Insert an SD/SDHC card with MP3 or linear backup audio and Bridge-IT XTRA will automatically play out the audio if your IP service fails.

Remote Control Interfaces

4 control inputs and outputs (DB-15) are provided and the ToolBox web-GUI enables custom control of relay functionality and ancillary RS232 data connections.

Input/Output Specifications	
Analog Audio Inputs	2 x Female XLR (Channel 1 mic/line; channel 2 line only)
Analog Audio Outputs	2 x Male XLR
AES3 In	1 x female XLR (Channel 1 in; shared with Ch1 analog input)
AES3 Out	1 x male XLR
Headphones	1 x 6.35mm (1/4") Jack on rear and front panels (Drives one output)
Audio Input Impedance	High Impedance > 5K ohm
Output Impedance	<50 ohm Balanced
Clipping Level	+22dBu (input and outputs)
A/D & D/A Converters	24 bit
Frequency Response	20Hz to 22kHz
Total Harmonic Distortion	<0.0035% at +4dBu unweighted
Signal To Noise Ratio	>90dB at +22dBu, unweighted
Sample Frequencies	
IP Sample Frequencies	8kHz (G.711), 16kHz (G.722), 32kHz, 44.1kHz, 48kHz
Algorithms	
IP	Tieline Music, Tieline MusicPLUS, G.711, G.722, MPEG Layer 2, Opus AAC-LC, AAC-HE v1 and v2, AAC-LD, AAC-ELD, 16/24 bit Enhanced apt-X, MP3 Playback, Linear PCM16/24 bit (uncompressed)
Data and Control Interfaces	
USB	USB 2.0 (Type B) Host port on the rear panel
LAN	10/100 RJ45 connector
GPIO Control Ports	4 opto-isolated inputs and 4 solid state relay outputs via a DB-15 connector
Serial	RS232 up to 115kbps with or without CTS/RTS flow control via female DB9 connector, can be used as a proprietary data channel
Front Panel Interfaces	
Display	128 x 64 monochrome LCD
SD/SDHC Card Slot	Supports SDHC Flash Cards for program and fail over to audio backup
Keypad	20 button keypad
Navigation	5 button keypad
General	
SmartStream IP	Auto Jitter Buffer, Forward Error Correction and error concealment strategies
Dimensions	19" x 1.75" x 6.42" [482mm (W) x 44mm (H) x 163mm (D) including rear connectors]
Weight	3lb 8oz/1.6Kg
Power Consumption	~12W one PSU, ~18W both PSU at 240VAC dual IEC Power Inlets
Operating Temperature	0°C to 50°C (40°F to 115°F)
Humidity Operating Range	20% ≤RH ≤70% (0 to 35°C), non-condensing



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