

Professional Audio Codecs

Tieline[®] 
The Codec Company

Product Catalog



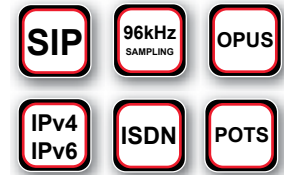
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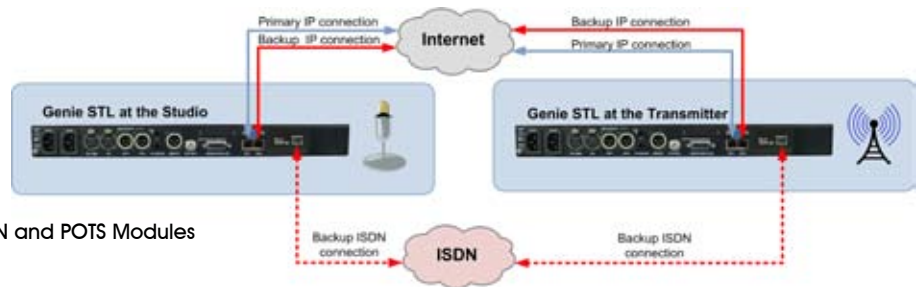
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Genie STL IP Audio Codec (TLR5200S)



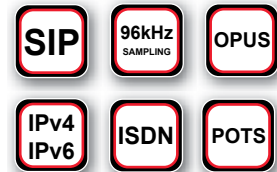
A powerful, rock solid IP audio codec for studio-to-studio and studio-to-transmitter links. Includes dual PSU's plus audio and network backup and much more.



Connect to ISDN and POTS networks with the G5 ISDN and POTS Modules

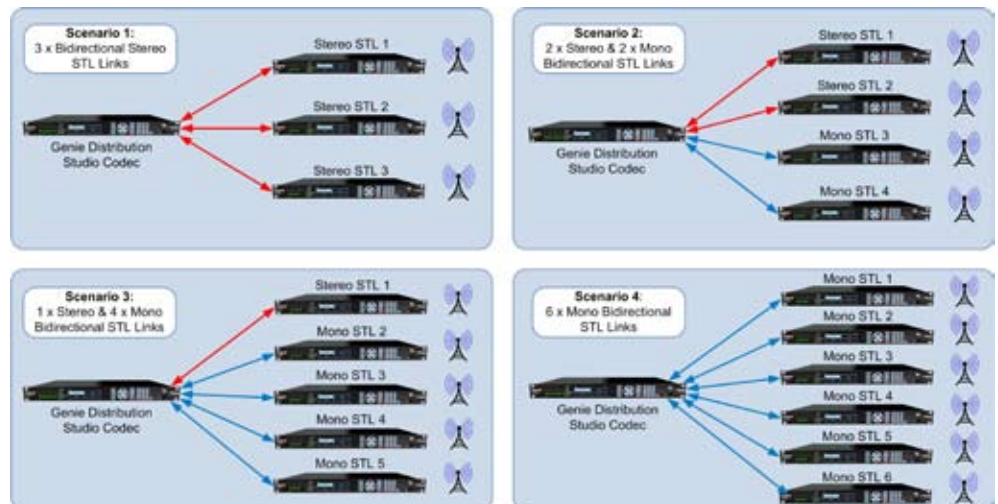
Note: This Product cannot be upgraded for WheatNet-IP compatibility (see Genie Distribution with WheatNet-IP)

Genie Distribution IP Audio Codec (TLR5200D)



Designed for mission critical stereo IP audio distribution.

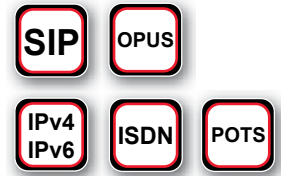
- Connect 3 independent stereo streams or, 2 stereo + 2 mono, 1 stereo + 4 mono or 6 mono streams to 1 or multiple IP addresses
- Connect 6 bidirectional channels point-to-point
- Distribute stereo audio to up to 50 multi-unicast endpoints
- Multicast to unlimited IP codecs.
- Up to 3 simultaneous multi-unicast audio streams
- Up to 3 simultaneous multicast audio streams.



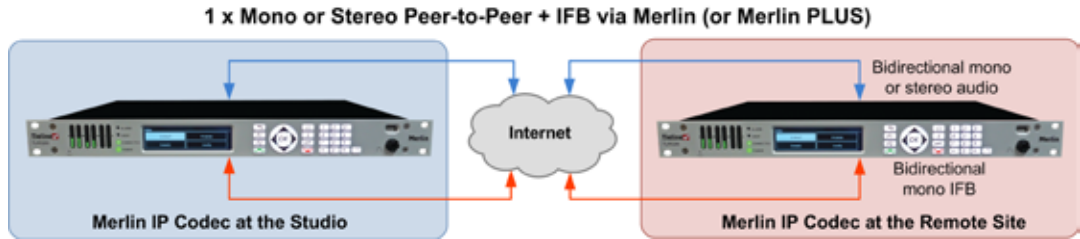
Connect to ISDN and POTS networks with the G5 ISDN and POTS Modules

Note: This Product cannot be upgraded for WheatNet-IP compatibility (see Genie Distribution with WheatNet-IP)

Merlin IP Audio Codec (TLR5200M)



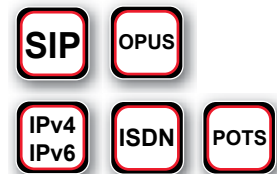
Transmit bidirectional high fidelity IP audio and IFB between the studio and a wide range of Tieline remote codecs, or smartphones using Tieline's Report-IT application.



Connect to ISDN and POTS networks with the G5 ISDN and POTS Modules

Note: This Product cannot be upgraded for WheatNet-IP compatibility (see Merlin PLUS with WheatNet-IP)

Merlin PLUS IP Audio Codec (TLR5200MP)



Create and manage up to 6 simultaneous bidirectional mono connections with IP codecs or smartphones using Report-IT.

Connect 2 x bidirectional stereo remotes, each with a separate bidirectional IFB communications channel.

Note: This Product cannot be upgraded for WheatNet-IP compatibility (see Merlin PLUS with WheatNet-IP)

Connect to ISDN and POTS networks with the G5 ISDN and POTS Module



Bridge-IT Basic IP Audio Codec (TLB5100ED)



Bridge-IT: The ultimate low cost, high-performance, point-to-point stereo IP audio codec solution.

Bridge-IT Pro (TLB5100PRO)



Bridge-IT Pro: The ultimate low cost, high-performance, point-to-point and multi-point stereo IP audio codec solution.

Includes:

- All the features of Bridge-IT Basic
- AAC Algorithm
- Multicasting and the ability to make 6 Multi-unicasts

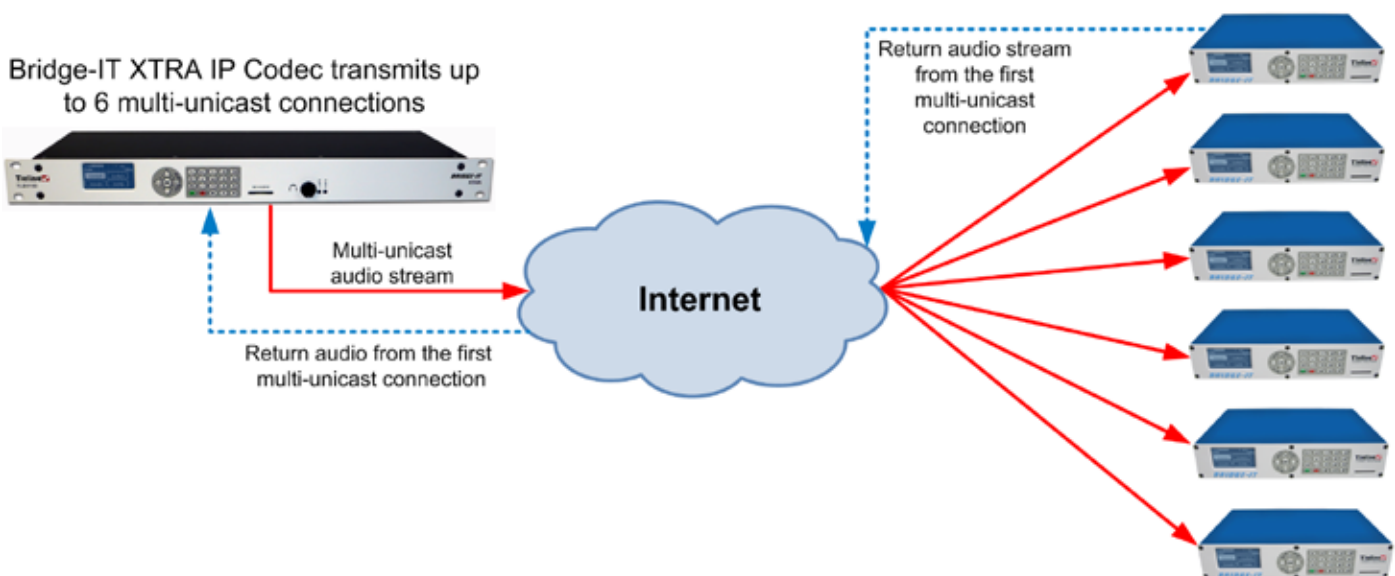
Bridge-IT XTRA IP Audio Codec (TLB5150XTRA)



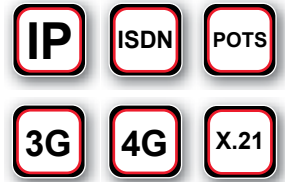
The inexpensive STL + Multipoint IP audio codec.

Includes:

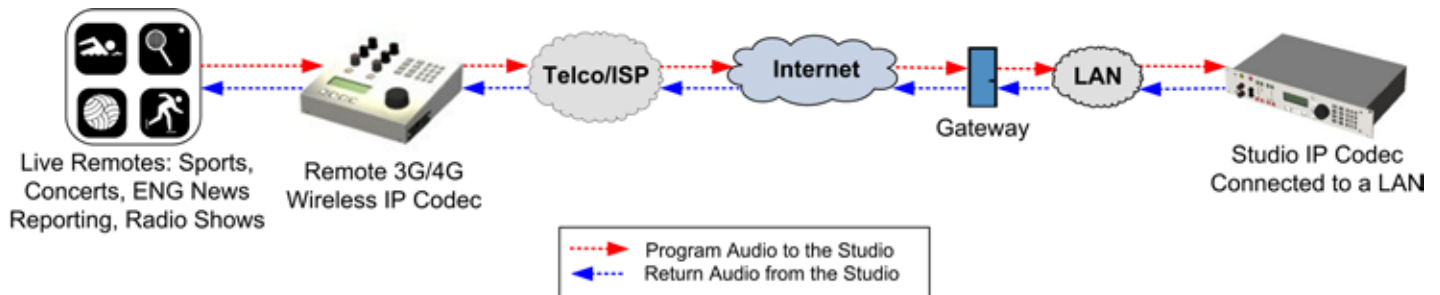
- AAC and aptX® Enhanced Algorithms
- Multicasting and 6 Multi-unicasts
- Dual redundant IEC inlet power supplies
- Audio file backup via SDHC card.



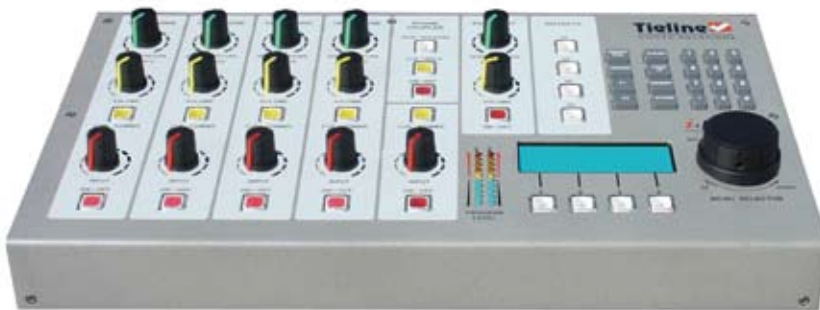
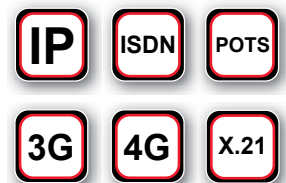
Commander G3 Field (TLF300)



Designed for remotes, the Commander G3 field codec features two module slots, which accept your choice of hardware plug-in modules. This allows broadcasters to send high quality, low-delay live audio over IP, 3G/4G, POTS/PSTN analog telephone lines, ISDN, X.21, GSM and B-GAN satellite networks.



i-Mix G3 (TLM600)



The Tieline i-Mix G3 is the world's most advanced IP codec for Radio and Television, combining six essential live remote broadcast products into one lightweight 16" x 9" box, replacing tens of thousands of dollars of expensive equipment. It is a multi-faceted unit that can be used as a mixer, a commentary control unit and a codec and is ideal for sports broadcasts, talk shows, music and other live events. It integrates bi-directional audio and communications with extensive remote control capabilities to reduce setup time, on-site personnel, wiring requirements and signal distribution costs.

Commander G3 Rack Mount (TLR300B2)



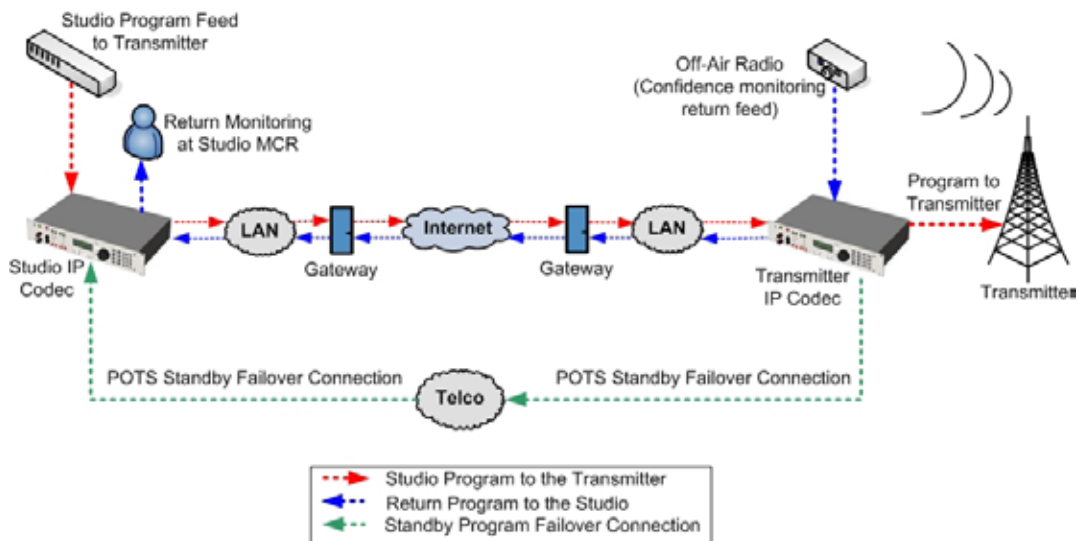
Note: An Analog or Digital output card is included and must be indicated at time of order.



Tieline's Commander G3 IP codec is one of the world's most durable, successful and widely used codecs for remote broadcasts and studio-to-transmitter links. The TLR300B2 Commander G3 is a 2RU studio codec with comprehensive front panel hardware controls

“ Other networks employ an army of people to do what we do and we can do it for a fraction of the cost ”

-Joe Chisholm – Race Time Radio



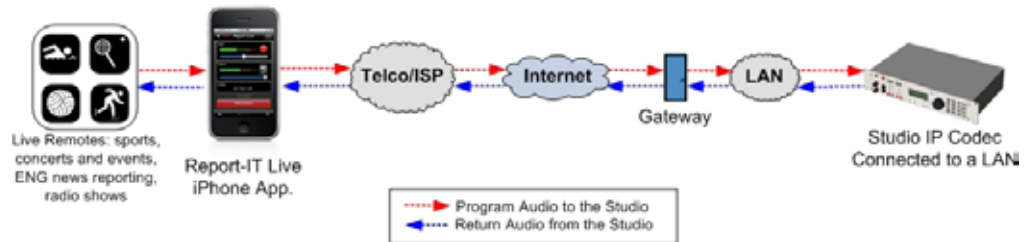


Report-IT Enterprise Edition

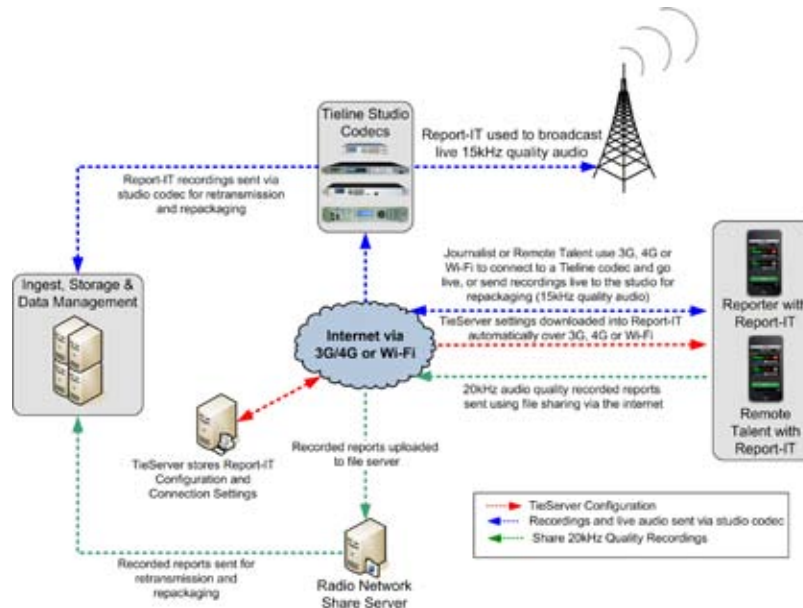
(TLREE10) - Report-IT 10 pack
 (TLREE50) - Report-IT 50 pack
 (TLREE100) - Report-IT 100 pack



Turn your iPhone® or Android™ Smartphone into an IP audio codec with Tieline's Report-IT App. Available in 10, 50 and 100 license packs.



Use Report-IT 10 Pack or Enterprise 50/100 Pack to centrally manage multiple users from the studio. Cloud computing technology allows you to use an administrator login to create unique password and connection settings for each user. Reporters and contributors then simply log in to Tieline's TieServer to download all settings for remotely connecting to specific Tieline studio codecs or share servers. This delivers better network security and makes it very simple for users to connect.

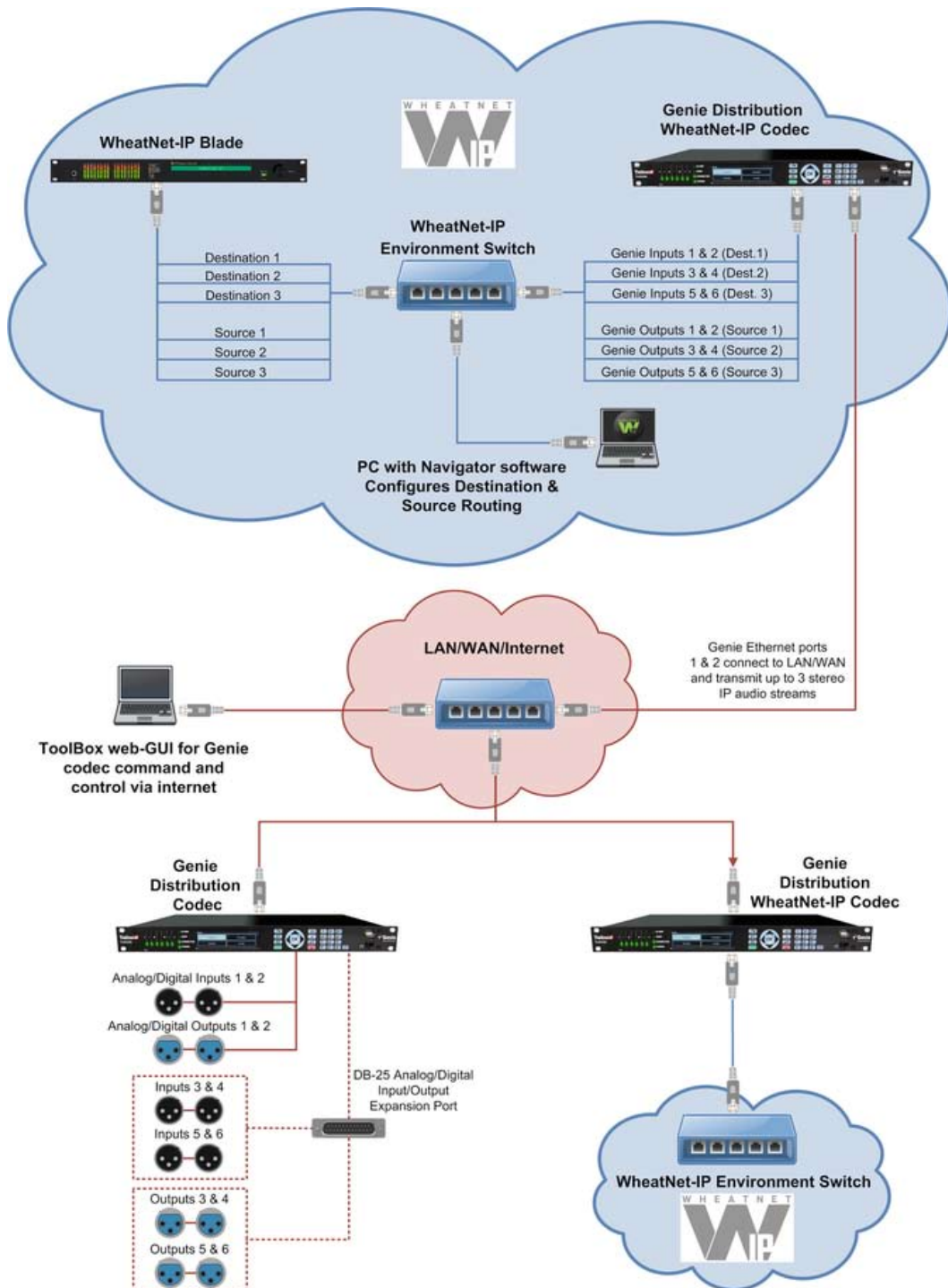


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Connect your Tieline Codec to the WheatNet-IP Environment

The Tieline Genie Distribution with WheatNet-IP and Merlin PLUS with WheatNet-IP products can integrate with Wheatstone's WheatNet-IP Environment and they are capable of routing 3 stereo or 6 mono WheatNet-IP audio channels. The codec's rear panel features a WNET LAN interface for connecting directly to a WheatNet-IP network and distributing audio to another studio over external IP networks like the public internet.

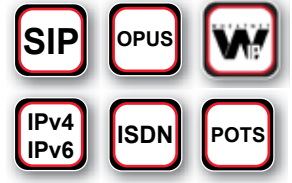
The following diagram provides an overview of how your Tieline codec can integrate with, and operate within, the WheatNet-IP Environment.



WheatNet-IP Compatability

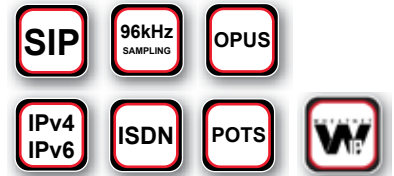


Merlin PLUS with WheatNet-IP IP Audio Codec (TLR5200MPW)

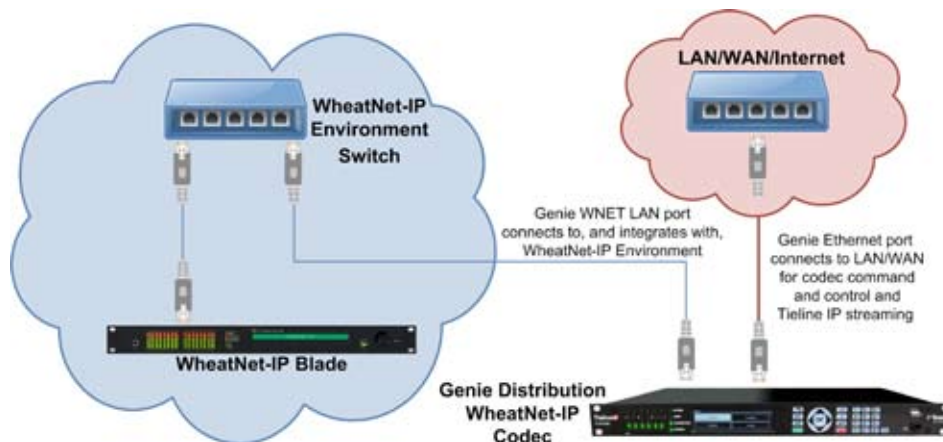


Rapidly expand your remote capability with the award winning Merlin PLUS with WheatNet-IP. The codec includes a LAN interface for connecting to the WheatNet-IP Environment.

Genie Distribution with WheatNet-IP IP Audio Codec (TLR5200DW)



The award winning Genie Distribution codec with WheatNet-IP can distribute 3 stereo channels or 6 mono channels of WheatNet-IP audio via a WheatNet audio card and LAN port. The codec interfaces with the WheatNet-IP Environment to distribute audio between WheatNet-IP studios over external IP networks like the internet.



Integrating with the WheatNet-IP environment (Genie Distribution with WheatNet-IP product pictured)

Specifications

Genie STL IP Audio Codec (TLR5200S)

Key Features

- Bidirectional stereo
- Analog or digital AES3 audio in/out (2 channels via balanced XLR in/out as standard)
- 24 bit 96kHz audio sampling
- Front and Rear Panel 6.35mm (1/4") stereo headphone output
- Simultaneous 2 channel analog and digital audio outputs
- SNMP (Simple Network Management Protocol)

Algorithms

- Linear uncompressed
- Tieline Music and MusicPLUS
- MPEG II and MPEG 3
- G.711 and G.722
- aptX® Enhanced
- LC-AAC, HE-AAC v1 and v2, AAC-LD, AAC-ELD and ELD v2
- Opus

Hardware Features and Network Interfaces

- 6 x Configurable PPMs, Keypad, LCD screen & navigation buttons
- Dual module slots for POTS and ISDN (Sold Separately)
- Dual Gigabit (10/100/1000) LAN ports
- Redundant power and audio with network backup/fail over
- USB Drive backup audio
- RS-232 serial port and 4 x GPIO in/out; BNC Wordclock sync; USB Host port
- Program & remote control via Toolbox Graphical User Interface
- Interfaces with Tieline's Codec Management System (sold separately)
- Automated alarm management and silence detection
- Multilingual codec & GUI menus; IPv4/IPv6 compatible
- SIP-enabled; EBU N/ACIP tech 3326 compliant

Genie Distribution IP Audio Codec (TLR5200D)

Genie Distribution has all the features of the Genie STL (TLR5200S) including the following:

- Connect 3 independent stereo streams or 2 stereo + 2 mono, 1 stereo + 4 mono or 6 mono streams to 1 or several IP addresses
- Up to six bidirectional channels point-to-point, or up to 50 multiple unicasts, or multicasting
- Up to 6 balanced analog or digital AES3 audio in/out (2 channels via balanced XLR in/out as standard; add 4 channels in/out via expansion card)
- Distribute stereo to up to 50 multi-unicast endpoints; 3 x simultaneous multi-unicast audio streaming to a maximum of 50 end-points in total; distribute up to 3 simultaneous multicast audio streams.

Genie Distribution with WheatNet-IP IP Audio Codec (TLR5200DW)

Genie Distribution with WheatNet-IP has most of the features of the Genie Distribution (TLR5200D) with additional features including:

- WheatNet-IP 6 (mono) or 3 (stereo) channels
- WheatNet-IP (10/100) LAN port
- 1 pair of Analog in/out

Important Note: the Genie Distribution features not included are as follows:

- Digital AES3 audio in/out
- BNC Wordclock sync

Merlin IP Audio Codec (TLR5200M)

Key Features

- Bidirectional stereo
- Analog or digital AES3 audio in/out (2 channels via balanced XLR in/out as standard)
- 24 bit 48kHz audio sampling
- Front and rear 6.35mm (1/4") stereo headphone output
- Simultaneous 2 channel analog and digital audio outputs
- SNMP (Simple Network Management Protocol)

Algorithms

- Linear uncompressed
- Tieline Music and MusicPLUS
- MPEG II and MPEG 3
- G.711 and G.722
- aptX® Enhanced,
- LC-AAC, HE-AAC v1 and v2, AAC-LD, AAC-ELD and ELD v2
- Opus

Hardware Features and Network Interfaces

- 6 x Configurable PPMs, Keypad, LCD screen & navigation buttons
- Dual module slots for POTS and ISDN (Sold Separately)
- Dual Gigabit (10/100/1000) LAN ports
- Redundant power and audio with network backup/fail over
- RS-232 serial port and 4 x GPIO in/out; BNC Wordclock sync; USB Host port
- Program & remote control via Toolbox Graphical User Interface
- Interfaces with Tieline's Codec Management System (sold separately)
- Automated alarm management and silence detection
- Multilingual codec & GUI menus; IPv4/IPv6 compatible
- SIP-enabled; EBU N/ACIP Tech 3326
- Bidirectional IFB Communications
- I3P EBU3347 compliant for interoperability of AoIP intercoms.

Merlin PLUS IP Audio Codec (TLR5200MP)

Merlin PLUS has all the features of the Merlin (TLR5200M) Including the following:

- Bidirectional stereo or up to 6 bidirectional mono remote connections with Tieline IP codecs or Report-IT
- 2 x Bidirectional stereo remotes, each with a separate bidirectional IFB communications channel
- Up to six balanced analog or digital AES3 audio in/outs (2 channels via balanced XLR in/outs as standard)

Merlin PLUS with WheatNet-IP IP Audio Codec (TLR5200MPW)

Merlin PLUS with WheatNet-IP has most of the features of the Merlin PLUS (TLR5200MP) with these additional features:

- WheatNet-IP 6 (mono) or 3 (stereo) channels
- WheatNet-IP (10/100) LAN port
- Redundant power and audio with network backup/fail over
- 1 pair of Analog in/outs

Important Note: the Merlin PLUS features not included are as follows:

- Digital AES3 audio in/outs
- BNC Wordclock sync

Commander G3 Field (TLF300)

Key Features

- 2 balanced XLR mic/line inputs
- 2 balanced XLR outputs
- 1 unbalanced RCA in/out
- 12 x 6 cross-point Digital Matrix 8 x 6 Audio Router
- 2 x 6.35mm (1/4") headphone Jacks

Algorithms

- Linear uncompressed
- Tieline Music and MusicPLUS
- MPEG II
- G.711 and G.722

Hardware Features and Network Interfaces

- Dual module slots for POTS, ISDN, X.21, 3G, USB (4G LTE)
- 10/100 LAN port
- Toolbox software for Configuration
- RS-232 serial port and 2 x GPIO in/outs
- Remote control from the studio
- SIP-enabled; EBU N/ACIP tech 3326 compliant
- Transport backup

Commander G3 Rack Mount (TLR300B2)

Key Features

- 2 balanced XLR mic/line inputs
- 2 balanced XLR outputs
- Optional AES3 digital in/outs
- 1 unbalanced RCA in/out
- 12 x 6 cross-point Digital Matrix Audio Router
- 2 x 6.35mm (1/4") headphone Jacks
- 2 x Aux Input

Algorithms

- Linear uncompressed
- Tieline Music and MusicPLUS
- MPEG II
- G.711 and G.722

Hardware Features and Network Interfaces

- 4 x Configurable PPMs, Keypad, LCD screen & navigation buttons
- Wired IP via 10/100 LAN port
- Dual module slots for POTS, ISDN, X.21 transports
- Toolbox software for codec configuration
- RS-232 serial port and 2 x GPIO in/outs
- 6 pin DIN CAN port
- Remote control via TLG3 GUI software
- SIP-enabled; EBU N/ACIP tech 3326 compliant
- Analog interface as standard, with option of Digital AES/EBU3ID

i-Mix G3 (TLM600)

The i-Mix G3 has all the features of the Commander G3 Rack Mount (TLR300B2) Including the following:

- 5 balanced XLR mic/line inputs
- 4 x 6.35mm (1/4") headphone Jacks
- Single module slot for POTS, ISDN, X.21, 3G, USB (4G LTE)
- 6 pin DIN CAN port
- Telephone caller POTS interface (Built In)

Bridge-IT Basic IP Audio Codec (TLB5100ED)

Bridge-IT BASIC Features:

Key Features

- Bidirectional stereo,
- 2 balanced XLR line inputs (input 1 switchable mic/line in)
- 2 balanced XLR analog outs
- Stereo AES3 XLR in/out
- 1 x stereo 6.35mm(1/4") stereo headphone output
- Simultaneous 2 channel analog and digital audio outputs

Optional Features

- Multi-casting and up to 6 multi-unicasts (Optional)

Algorithms

- Linear uncompressed
- Tieline Music and MusicPLUS
- MPEG II, and MPEG 3
- G.711 and G.722

Optional Algorithms

- LC-AAC, HE-AAC v1 and v2, AAC-LD, AAC-ELD v1 and v2 (Optional)
- aptX® Enhanced, (Optional)

Hardware Features and Network Interfaces

- 2 x PPMs, Keypad, LCD screen & navigation buttons
- Wired IP using 10/100 Base T LAN port
- RS-232 serial port and 2 x GPIO in/outs
- USB slave for codec config
- Program & remote control via Toolbox Graphical User Interface
- Interfaces with Tieline's Codec Management System
- Onboard SDHC slot for auto audio backup/failover
- Multilingual codec and GUI menus; IPv4/IPv6 compatible
- SIP-enabled; EBU N/ACIP tech 3326 compliant

Bridge-IT PRO IP Audio Codec (TLB5100PRO)

Bridge-IT PRO has all the features of Bridge-IT Basic (TLB5100ED) with addition of the following:

- Multi-casting and up to 6 multi-unicasts

Optional Algorithms

- aptX® Enhanced (Optional)

Included Algorithms

- LC-AAC, HE-AAC v1 and v2, AAC-LD, AAC-ELD v1 and v2

Bridge-IT XTRA IP Audio Codec (TLB5150XTRA)

Bridge-IT XTRA has all the standard features of the Bridge-IT PRO (TLB5100PRO) including the following:

- 2 x 6.35mm (1/4") stereo headphone out (front and rear panels)
- Dual redundant IEC power supplies
- 2 x PSU status LEDs
- aptX® Enhanced
- RS-232 serial port and 4 x GPIO in/outs

Report-IT (TLREE)

Key Features

- 1 channel
- Bidirectional audio
- 15kHz live audio quality
- 20kHz recorded audio and file sharing capability

Algorithms

- Tieline Music and Opus (Live audio)
- AAC-LC (Recordings)**
- PCM-WAVE and PCM - Broadcast WAVE** (recordings)

Features and Network Interfaces

- TieServer Administration license for remote configuration of user accounts
- Report-IT Live single user version**
- Report-IT 10 pack, 50 pack and Enterprise 100 pack versions for larger networks
- Tieserver Console app for iPhone and Tieserver Console app for Android smartphones available for all Report-IT EE administrators.
- Browser based Tieserver Console available for 50 + 100 pack administrators only.

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^^ Google Play is a trademark of Google Inc.

^^^ Android is a trademark of Google Inc.

* Applicable to Enterprise 50/100

** iPhone only

Codec Management Software

Codec Management System

Part No: TLCMSLIC

Remotely view, configure and control all the codecs in your entire IP network from any computer, anywhere in the world!

Log in and remotely control and configure new generation Tieline codecs, and Tieline Commander G3 rack mount codecs using the TLG3 GUI.

Key Features

- Monitor all licensed codecs in your network: see a complete graphical overview of your entire network and each codec's status
- Create and manage primary and backup connections
- Use the Toolbox and TLG3 software interfaces to manage individual codecs and all connection settings
- Create programs and connections, view connection statistics, adjust algorithms, jitter buffers, bit-rates and more



G5 Toolbox (Genie, Merlin and Bridge-IT)

Genie, Merlin and Bridge-IT IP codecs can be configured using the Toolbox web-GUI.

Toolbox can be connected to a single codec independently over a LAN or USB (Bridge-IT only) connection, or it can be launched within the Codec Management System console to deliver network and device level configuration capabilities.

Key Features

- Create new connection profiles (programs)
- Change codec settings
- Upgrade codec software
- Multilingual
- Adjust input levels
- Adjust connection settings, view connection statistics, adjust algorithms, jitter buffers, bitrates and more
- Store telephone numbers
- Program GPIO input/outputs
- Configure Alarms (Genie/Merlin)
- G5 Toolbox comes free with all Bridge-IT, Merlin and Genie IP codecs.



TLG3 GUI (Commander G3 Rack)

The TLG3 GUI Codec Controller can be used to control the functions of TLR300B rack unit codecs and legacy 1RU rack mount codecs.

Once the Codec Controller is installed on a PC and it is connected to your codec, it can control all normal codec functions.

Key Features

- Navigate menus
- Select profiles
- Dial and hangup connections
- Adjust input levels
- Adjust connection settings, view connection statistics, adjust algorithms, jitter buffers, bitrates and more
- The functions of the Codec Controller and the menus replicate those on a physical codec front panel
- It comes free with all Commander G3 Rack Mount codecs sold



G3 ToolBox

G3 Toolbox software lets you configure Tieline G3 codecs before and during field deployment.

It is a PC compatible software application that works with Commander and i-Mix G3 codecs, providing a convenient way to configure, remotely operate and monitor codec functions.

Key Features

- Create new connection profiles
- Configure connections
- Change codec settings
- Upgrade codec software
- Store telephone numbers
- Operate local and remote CMOS relays and much more



Accessories

Commander, i-Mix and Bridge-IT Range

POTS/PSTN Module

Part No: TLPOISG3



The POTS Module is required for making connections over the POTS/PSTN (Plain Old Telephone Service) Analog Telephone Lines. Simply plug the module into a free expansion slot on your Tieline codec and dial to connect and broadcast studio quality audio.

ISDN Module

Part No: TLISDNEUROG3



BRI 64/128 KB supports G.711, G.722, Tieline Music, MusicPLUS and MPEG 1 Layer 2 Mono, Dual Mono, Stereo and Joint Stereo. Codecs within North America must connect using an NT1B-300TC S/T to U adapter (supplied by Tieline with the Euro ISDN G3 module)

3G Wireless Module

(UMTS/HSDPA)
Part No: TL3GHSDPA



Hardware 3G module which enables connection to 3G cellular broadband networks including UMTS, HSDPA and GSM networks. SIM card is required for operation. Supported by AT&T/Cingular in the US.

3G Wireless Module

(EV-DO for USA)
Part No: TL3GEVDO



Delivers up to 20kHz stereo FM-quality wireless remote broadcasts using Verizon, Sprint, AT&T and Alltel cellular carriers.

X.21

Part No: TLX21



X.21 module for connection to X.21 compatible networks

Digital AES/EBU in/out

Part No: TLAES/EBU3ID



Note: For Commander G3 Rack Mount (TLR300B2) only

AES/EBU (AES3) Digital Input/Output Card with 2 balanced inputs and 2 balanced outputs via balanced AES3 in/out via XLR. Also, unbalanced 2 inputs/2 outputs via BNC AES3 connection (jumper selectable). Includes unbalanced BNC word clock input as AES3 output sync reference.

Analog 2 in/2 Out

Part No: TLANA2IN2OUT



Note: For Commander G3 Rack Mount (TLR300B2) only

Analog Commander G3 Rack Mount codec input card. Featuring 2 balanced inputs and outputs on broadcast standard XLR connectors, plus balanced Aux input/output on 6.35mm (1/4") Jack. Balanced Aux out may also be used as headphone out.

12V in-car Power

Part No: TLG3CARCABLE



Extend your broadcast using this 12 Volt In-Vehicle Power cable. It is suitable for use with Tieline Commander G3 TLF300 and i-Mix G3 TLM600 field codecs. The cable attaches to any regular accessory power outlet in a vehicle.

Software Bundle

Part No: TLSWBUNDLE



G3 software bundle includes IP, Matrix and Failover

Bridge-IT Rack Frame

Part No: TLB5100RFBP



1RU Rack Frame holds up to 2 Bridge-IT codecs side by side. Note: Has removable blanking panel.

Bridge-IT Software

AAC Part No: TLIACC
Multicasting Part No: TLBMULTI
APT Part No: TLAPT



Choose from three different software solutions to add to the Bridge-IT codec.

- AAC algorithm suite:
- E-apt-X algorithm:
- Multicasting/Multi-unicasting:

Merlin and Genie Range

G5 ISDN Module

Part No: TLISDNEUROG5



Note: For Genie and Merlin codecs only

BRI 64/128 KB supports G.711, G.722, Tieline Music, MusicPLUS and MPEG 1 Layer 2 Mono, aptX® Enhanced Stereo and Joint Stereo. Codecs within North America must connect using an NT1B-300TC S/T to U adapter (supplied by Tieline with the Euro ISDN module)

www.savediffusion.fr

Tieline® 
The Codec Company

Merlin, Genie and Bridge-IT Codec Comparison Chart

	Bridge-IT Basic	Bridge-IT Pro	Bridge-IT XTRA	Merlin	Merlin PLUS	Merlin PLUS with WheatNet-IP	Genie STL	Genie Distribution	Genie Distribution with WheatNet-IP
Back- Up									
Dual Redundant Power Supplies			✓	✓	✓	✓	✓	✓	✓
Transport Backup/Fail over				✓	✓	✓	✓	✓	✓
SmartStream/SmartStream PLUS Redundant IP Streaming	SmartStream	SmartStream	SmartStream	SmartStream PLUS	SmartStream PLUS	SmartStream PLUS	SmartStream PLUS	SmartStream PLUS	SmartStream PLUS
Audio File Back-up	✓ SD Card	✓ SD Card	✓ SD Card				✓ USB	✓ USB	✓ USB
Multiple Protocols									
Dual Stack	✓	✓	✓	✓	✓	✓	✓	✓	✓
SIP compatible	✓	✓	✓	✓	✓	✓	✓	✓	✓
EBU N/ACIP 3326 compatible	✓	✓	✓	✓	✓	✓	✓	✓	✓
I3P EBU3347 compliant				✓	✓	✓			
Transports									
10/100 Ethernet Port	✓	✓	✓						
Dual 10/100/1000 Ethernet ports				✓	✓	✓	✓	✓	✓
WheatNet-IP LAN Port									
ISDN module capable*				✓	✓	✓	✓	✓	✓
POTS^ module capable*				✓	✓	✓	✓	✓	✓
Control Ports In/Out (GPIO)									
2 relay inputs/2 opto-isolated outputs	✓	✓							
4 relay inputs/4 opto-isolated outputs			✓	✓	✓	✓	✓	✓	✓
Pro Audio Options									
Stereo XLR In/Out	✓	✓	✓	✓	✓	✓	✓	✓	✓
Stereo AES3 In/Out	✓	✓	✓	✓	✓	✓	✓	✓	✓
Additional 4 Channels In/Out via DB-25					✓	✓			
WheatNet-IP: 6 (mono) or 3 (stereo) channels						✓			✓
6.35mm /¼" Front panel headphone out			✓						
6.35mm /¼" Rear panel Stereo headphone out	✓	✓	✓						
6.35mm /¼" Front panel Stereo headphone out or balanced line out (software switchable)				✓	✓	✓	✓	✓	✓
6.35mm /¼" Rear panel Stereo headphone out or balanced line out (software switchable)				✓	✓	✓	✓	✓	✓
6.35mm /¼" Rear panel Balanced Auxiliary mic/line input				✓	✓	✓	✓	✓	✓
Encoding Options									
32kHz, 44.1kHz, 48kHz sampling linear audio	✓	✓	✓	✓	✓	✓	✓	✓	✓

* Optional Feature
^ Future Release

SmartStream: Rock Solid Audio using Inexpensive IP Links

What is SmartStream?

As an IP audio pioneer, Tieline was the first major codec manufacturer to integrate SmartStream features such as Automated Jitter Buffer management, Forward Error Correction (FEC) and error concealment techniques in all IP codecs. These features dynamically respond to variable conditions over unmanaged IP networks like the public internet to ensure reliable streaming.

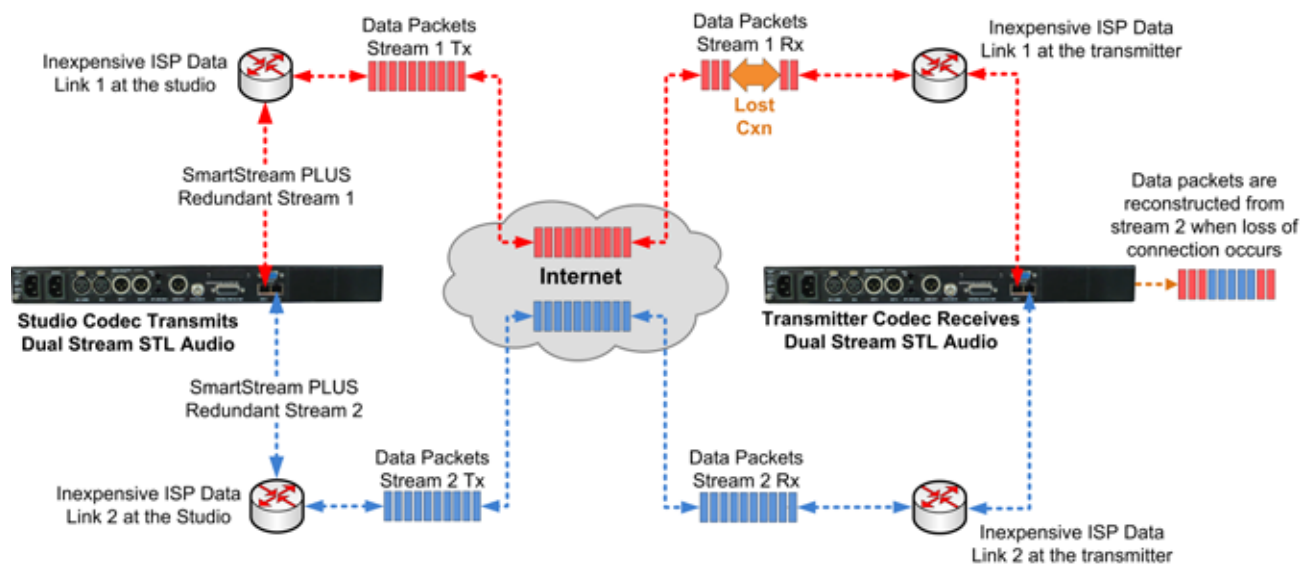


What is SmartStream PLUS?

SmartStream PLUS has revolutionised IP broadcasting by delivering the rock solid and reliable STL-grade audio quality you would expect over a T1/E1 link by using inexpensive unmanaged IP networks like the internet for STLs, audio distribution and remotes.



How is this possible? Connect two inexpensive IP links to codecs with SmartStream PLUS and stream simultaneous redundant data streams from dual Ethernet ports and deliver seamless redundancy by switching back and forth, without loss of audio, from the primary data link to the backup link if one fails and then subsequently recovers. Note: Use IP links from two different IP network providers for optimal redundancy over mission critical STL connections.



SmartStream PLUS Redundant Streaming Reconstitutes Lost Packets from Stream 1 using Stream 2

Save Money Now with SmartStream PLUS Redundant Streaming

Tieline can show you how an investment in new codecs will pay for itself in just a few months by using SmartStream PLUS over inexpensive IP links to transport STL-grade, high fidelity audio at a fraction of the cost of synchronous leased lines. In summary, SmartStream PLUS delivers:

1. **Huge cost savings:** use SmartStream PLUS over inexpensive IP links to transport rock solid, bidirectional, high fidelity audio at a fraction of the cost of synchronous leased lines.
2. **Continuous rock solid reliability:** simultaneous redundant data streams deliver an extra layer of STL-grade redundancy as protection if a connection is lost.
3. **High fidelity audio:** Tieline's renowned suite of high-quality algorithms will all work using SmartStream PLUS.

SmartStream PLUS is available as standard in Tieline Genie STL, Genie Distribution, Merlin and Merlin PLUS codecs.



Americas
Tieline America LLC
PO Box 501788,
Indianapolis, IN 46250 USA

7202 E. 87th Street, #116
Indianapolis, IN 46256

Phone: +1-317-845-8000
Fax: 1-317-913-6915
US Toll-free: 1-888-211-6989
Email: sales@tieline.com

International
Tieline Pty Ltd
PO Box 2092 Malaga
WA 6944 Australia

1/25 Irvine Drive Malaga, WA
Australia 6090

Phone: +61 (0)8 9249 6688
Fax: + 61 (0)8 9249 6858
Email: info@tieline.com

www.tieline.com

Distributeur France
SAVE DIFFUSION
23 rue de la Talaudière
42000 ST-ETIENNE
tel. 04 77 79 46 78
commercial@savediffusion.fr
www.savediffusion.fr