

IQOYA

IP AUDIO SOLUTIONS FOR BROADCAST

With IQOYA, Digigram offers a range of hardware and software solutions that changes the way broadcasters hear IP audio transport. For local, national or global audio transport needs, Digigram helps broadcasters make the move to IP infrastructure with confidence.

More than just point-to-point solutions, IQOYA devices and software constitute the elements of a highly flexible and manageable professional IP audio infrastructure for contribution, delivery and distribution.

STUDIO-TO-TRANSMITTER AND STUDIO-TO-STUDIO LINKS WITH IQOYA *LINK



THE CHALLENGE

Today, studio-to-transmitter (STL) or studio to studio (SSL) transmissions are achieved via dedicated satellite links, Telecom leased lines or microwave links. While usually reliable, these are extremely expensive solutions and severe weather conditions (strong winds, heavy snow...) may still degrade or break the link.

In the case of link problems, secondary backup ISDN lines are used at a lower audio quality. Using this technology for permanent transmissions would be far too expensive.

Total cost of ownership (TCO), potential technical glitches and reduced availability of ISDN lines in some regions such as Northern Europe, together with cost-effective IP networks with QoS have sparked demand for more affordable and flexible solutions.

FLUIDIP™

IQOYA solutions are based on FluidIP™, a rock-solid N/ACIP (EBU Tech 3326) compliant IP audio codec engine developed by Digigram.

This provides interoperability with third-party IP codec devices, while adding unrivaled robustness, QoS optimization, stream integrity and audio quality.

FluidIP™ runs seamlessly on dedicated IQOYA devices, or within easy-to-integrate software on Windows™ PC platforms.

Current set of audio compression algorithms includes PCM linear 16/24 and ITU G.711/722, ISO MPEG-1/2 Layer I, II and III. Optional audio compression algorithms: MPEG-4 AAC, MPEG-4 AAC-LD, MPEG-4 HE-AACv2, AAC-ELD.

THE SOLUTION

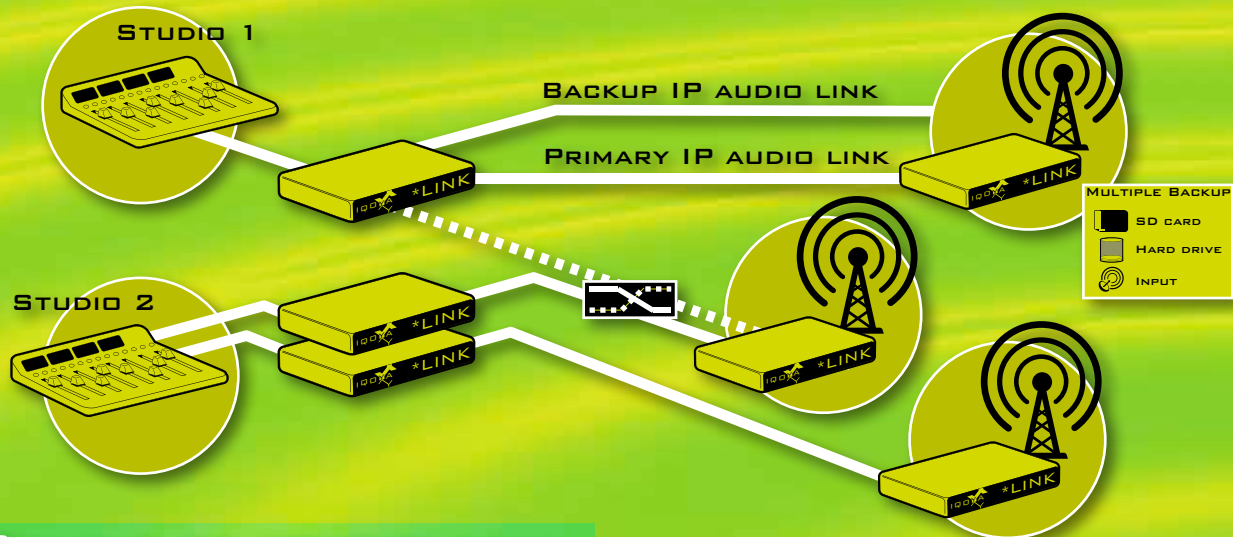
With the ubiquity of worldwide mission critical IP networks, the IP audio approach for program distribution makes sense as it brings a more flexible solution at a much lower TCO.

Advocates of the traditional approach – use of dedicated satellite links and switched telecom circuits – have argued that the reliability of their system may be unmatched by IP audio. This might have been true in the past.

With dedicated, robust IP audio transmissions such as Digigram's FluidIP™ -based devices and available professional IP offerings from Telco providers, broadcasters are now able to build links they can trust.

Since the STL or SSL cannot suffer from any dropout, Digigram offers the IQOYA *LINK, a 2-channel IP Audio Distribution Codec using FluidIP™ with multiple fail-over options, and built on a rock-solid, dedicated hardware platform.

STUDIO-TO-TRANSMITTER LINK



STUDIO-TO-STUDIO LINK



BENEFITS

No other device on the market offers as many fail-over solutions on such a field hardened hardware and software combination:

- Ethernet connectors for RJ45
- Secondary backup IP network connection
- Local backup on SD card
- Backup NAS hard-drive
- Local Input
- Hardware bypass in case of power failure
- Full remote administration and management

Broadcasters may of course re-order the fail-over backups as they want. Should anything still happen on the device, a simple SNMP, SMTP history log file will help them track the problem. Note also that the IQOYA *LINK can send a stream back to the studio in another audio format for logging or monitoring purposes.

The core of the IQOYA *LINK is based on Visiblu®, enabling third party developers to integrate the device in custom integrated wide scale systems and applications.

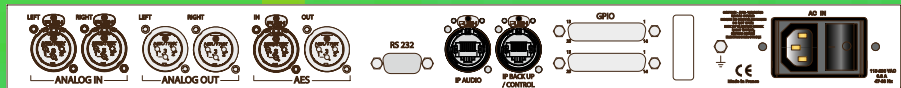
IQOYA*LINK is the only codec allowing cross-fades between two IP audio streams.

Because the codec should match the overall audio quality in the broadcast chain, the IQOYA *LINK is based on Digigram sound card audio standards:

- Output < -98dB THD
- Input < -92 dB THD
- SNR < -100 dB

IQOYA *LINK

- Stereo IP Audio Distribution Codec
- 2 mono analog inputs & outputs / 1 stereo AES3 digital input & output
- Specialized, non PC-based, fan-less components
- 2 Ethernet network ports for redundancy and control
- RTP/UDP IP audio, EBU Tech-3326 (N/ACIP) compliant
- 16 GPIOs and RS232 serial data ports
- GPIOs, SNMP and SMTP (e-mail) real time alarm management
- Intuitive user interface on color TFT LCD display + keypad
- Local inserts stored on SD cards
- Headphone monitoring



The IQOYA range of IP audio devices and Visiblu-based radio automation systems developed by Digigram's development partners offer a direct, low latency connectivity to Axia Livewire™ networks.