



**INTERCOM &** 



Audio, Video and Communications for Broadcasters













# **Product** Catalogue





















## Consoles, routers and digital interfaces for broadcasting

A complete range of audio mixing consoles, routers and digital interfaces for broadcasting and production that places AEQ in a leading position in terms of design and manufacturing. AES67 IP connectivity based on DANTE™ makes installation and use easy and flexible.





#### **ATRIUM**

#### Digital audio console for radio and TV

Up to 96 motorized faders and 1000 audio channels. X\_CORE engine with connectivity: micro, line, AES3, AES67, MADI, Dante™, Ravenna, SMPTE 2110-30, SMPTE 2110-31, SDI embedded audio, and more. Mono, stereo, 5.1 signals. Audio process: frequency, dynamics, reverb, delay. Autogain, automix. X\_CORE Engine.



#### **FORUM IP**

#### Modular digital console

Can be adapted to all user scenarios. 32 summing and processing buses. 8 N-1 buses. Multichannel connectivity through AoIP or MADI. Options: Telephone hybrids, virtual control surface and touch screen for control and monitoring.

Forum IP Compact: The chassis (up to 12 or 20 faders) of the control surface incorporates the engine or Core. Up to 180 channels.

Forum IP Split: 3RU modular engine or Core FR\_CORE. Up to 24 faders in modules of 4. Up to 180 channels.

Forum IP Lite: 2RU compact engine or Core M\_CORE. 12 faders in modules of 4. Up to 92 channels.

## **CAPITOL IP**

#### Digital console with fixed composition

Digital mixer with multi-channel connectivity via AoIP or MADI. The control surface comes with 8 or 12 faders. Very compact and ergonomic, with great capacity for programming functions. Optional integration of telephone hybrids. Available virtual control surface and touch screen for control and monitoring. 2RU compact engine or Core M CORE.

### **NETBOX 32AD, NETBOX 8AD and NETBOX 4 MH**

## **Audio connection interfaces for Audio over IP**

Interfaces for analogue and digital audio signals to/from AoIP multi-channel network transmission, AES67 or DANTE™ formats. Essential to be able to insert audio signals coming from remote sources, cabins, central controls and other studios.

 $\underline{\text{\bf Netbox 32 AD}}$  features 16 mono analog line and 8 digital stereo inputs and outputs.

Netbox 8 AD features 4 mono analog line and 2 digital stereo inputs and outputs. One of the digital I/O's can be configured as a USB port.

**Netbox 4 MH** features 4 mic/line switchable inputs and 4 headphones/ analog line outputs. It also provides support for the studio signaling and remote control STUDIOBOX.

# NETBOX 32 AD MX and NETBOX DSP

#### **TDM matrices with IP inputs and outputs**

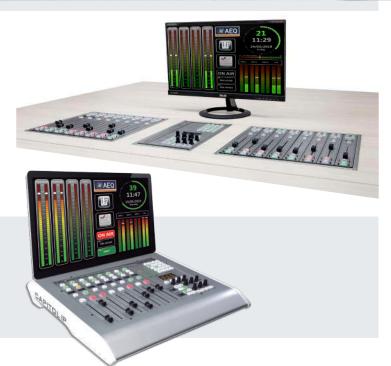
Netbox 32 AD MX is a summing and distributing matrix of 64x64 inputs and outputs: 32 IP, 16 analog, and 16 digital.

<u>Netbox DSP</u> is a summing, distributing and processing matrix, in versions of between 64 and 160 IP inputs and outputs.

#### **X\_CORE ROUTER**

#### TDM audio matrix up to 5.120 x 5.120 circuits

Connectivity: mic, line, AES3, AES67, MADI, DANTE™, Ravenna, SMPTE 2110-30, SMPTE 2110-31, SDI embedded audio, and more. Mono, stereo, 5.1 signals. Audio process: frequency, dynamics, reverb, delay.











## **Communications**

Our long and extensive track record in the Broadcasting industry is a priceless asset when developing broadcast communication equipment for all types of telecommunication infrastructures and applications, including outdoor broadcasts.

#### **SYSTEL IP**

#### **IP Call-in System**

VoIP Talk-show system, connecting with most SIP Service providers, local switchboards and even audiocodecs and conventional telephony. Available SYSTEL IP TV for coordination and technical intercommunication. DANTE™/ AES67 connectivity. Control by SYSTELSET+, a VoIP telephone set with touch screen. Systel IP 16 for 16 lines and 4 IP telephones, Systel IP Básic, for 8 lines and 4 IP telephones.



#### **TALENT**

#### Ultra-compact IP audioCodec

For personal use with a mic input and an analog stereo line and Bluetooth inputs. A headphone, analog stereo line and Bluetooth outputs. HELP function. IP connectivity. It allows you to use a smartphone to control the unit, add calls to the program or to connect with the studio. SIP protocol and EBU N/ACIP standard and includes OPUS algorithms. Also included, tools for configuration and remote control assistance.

#### **PHOENIX ALIO**

#### Portable IP AudioCodec

4 mic inputs or 3 mics and a stereo line inputs, bass and treble controls on all inputs, tone generators, one or two bidirectional mono or stereo channels. Two pairs of headphones and a stereo line output. HELP function. IP connectivity. SIP protocol and EBU N/ACIP standard and includes OPUS algorithms. Also included, tools for configuration and remote control assistance.

#### **SMARTALK**

## **Cloud-based Codec system**

This Service generates web links for PCs or Smartphones to instantly download an OPUS audiocodec from the cloud and automatically connects to an AEQ AudioCodec at the Station through a SIP server.

# PHOENIX VENUS 4 and VENUS 4+

## **Dual line IP AudioCodec**

Twin IP Codecs for broadcast quality audio contributions and optional AoIP connectivity. Two simultaneous, full duplex stereo transmissions with different audio formats and qualities. SIP protocol and EBU N/ACIP standard. Includes OPUS encoding algorithms. Applications for comprehensive Configuration and remote control. Balanced analog inputs and outputs on XLR connectors and dedicated connectors for AES/EBU digital I/O's. Double network port, double RS232 auxiliary data link and optional redundant power supply. Version with 48 volt DC sources available. Optional local DANTE™/AES67 AoIP Network connectivity with an additional network port. Compatible with SMARTALK option.

<u>VENUS 4+</u> adds front panel controls for the basic operation of the equipment including status indication and on-screen VU-meters. It also provides a menu to initiate and accept calls, execute presets and to edit/modify settings.





#### **PHOENIX MERCURY**

#### **IP AudioCodec**

IP connectivity. Two-way stereo transmission. SIP protocol and in compliance with the N/ACIP recommendation of the EBU and includes OPUS algorithms. Also included, tools for configuration and remote control assistance. Balanced analog inputs and outputs on XLR connectors and optional dedicated connectors for AES/EBU digital I/O. RS232 auxiliary data link. Compatible with SMARTALK option.



#### **TH-03**

#### **Dual Digital Telephone Hybrid**

For analogue telephone lines (POTS). Automatic adjustment of the line impedance. Exclusive voice bandwidth expansion system. Optional Digital I/O's.







## Intercom Systems

The AEQ Intercom Systems are based on the KROMA heritage, incorporate the latest technologies, and are the perfect choice for audio communication solutions. Our systems reach up to 1024x1024 broadcast quality audio sources. They can also be very simple and very practical, like the Xpeak matrix-free system, easy to set up, even in different locations, or as the Xplorer wireless system that adds mobile terminals to the other systems.

#### **CONEXIA SYSTEM**

#### Modular Intercom audio platform up to 1024 ports

New concept in intercom, which elevates the systems to the category of global audio solution. Capacity of up to 1024 x 1024 cross-points and is based upon a modular system of audio I/O cards. Possibility to integrate intercom and broadcast audio sources into the same matrix, with 48 KHz 24 bits sampling and a 100 % redundant system. Compatible with all AEQ / KROMA intercom panels, and expands the interface options with Interface cards from KROMA (telephone, GSM) and AEQ (Mic, Line, AES3, AES67, MADI, DANTE™ Ravenna, SMPTE 2110-30, SMPTE 2110-31. SDI embedded audio, etc.) as well as AEQ communications equipment (Systel IP TV and Phoenix Audiocodecs).



#### **CROSSNET SYSTEM**

#### Compact Intercom audio platform up to 168 ports

Compact intercom matrix with AoIP multi-channel connectivity. Provided in versions from 40 up to 168x168 ports, 128 of them can be AoIP featuring DANTE™ technology, compatible with AES67 standard, which can easily be connected using existing Ethernet networks through conventional routers and switches. In addition, there can be up to 32 other ports for AoIP inputs and outputs apart from intercom user terminals. The system also has 12 analog ports, 8 digital ports, and 20 AoIP ports with KROMA Standard low bit-rate, enabling the connection of wireless intercoms, ancillary equipment and AEQ/KROMA user panels.



#### **XPEAK SYSTEM**

#### A matrix-less Intercom System ready for remote production

XPEAK supports up to 28 user terminals in different formats: desktop, rack, wired and wireless belt-pack, and PC application. All terminals interconnect with maximum operational flexibility and without the need for a matrix. XPEAK interconnectivity is very simple, it is only required that the devices have access through the Internet. This makes it very easy to set up for the coordination of remote productions. Its wired user terminals have Bluetooth and USB connections, admitting all types of headsets with these interfaces and facilitating connection with smartphones and PCs. Stationary user terminals have 8 keys and the belt-packs 4 keys. These units also can work as user panels or terminals in large systems with AEQ Conexia or Crossnet matrix. XPEAK\_IF interface and format converter provides for analogue inputs and outputs, digital USB, and AoIP AES67/DANTE™.



#### **TP9000 TERMINALS**

#### **New family of wired User Panels**

Compatible with CONEXIA and CROSSNET matrices. With the same outstanding features as the 8000 series, but with the most comfortable operation based on 4-way levers and full color screens. TP9116 user panel has talk and listen functions and individual volume control for each communication point, through a lever-type 4-way key. 16 crosspoint keys, four pages. Information is presented on four RGB graphic displays. 1RU.



#### **TP8000 TERMINALS**

#### **Wired User Panels**

User panels, offering broadcast audio quality. Audio is digitized and processed using 24 bits at a sampling frequency of 48 kHz. Bandwidth from 20Hz to 20kHz with negligible distortion and noise levels. The panels feature ports for Analog, Kroma-Digital, VoIP Kroma and high-quality DANTE™, AES67 compatible, connectivity. Digital audio processing: acoustic echo cancelling, automatic power and tone adjustment to each user's voice. Expander and ambient noise gate. Very elaborate acoustics design for optimal sound intelligibility and clearness. 16 user keys, rack-mounted or desktop versions. Expansion panels can be cascaded to build panels with up to 80 physical keys with 4 pages. Compatible with any AEQ and Kroma intercom matrix.



#### **XPLORER**

#### **Wireless Intercom System**

Xplorer is an authentic wireless user panel. Based on Wi-Fi technology, it is equipped with a 4 shortcut keys user interface -arranged in pages-, two programmable keys, and a multifunction screen. It operates with Conexia or CrossNET matrices, or within the Xpeak system without matrix.

#### **Xvirtual**

For computers with iOS and Windows operating systems. Compatible with Conexia and Crossnet systems. By means of an Ethernet connection, we can have the app. installed in a PC. On an Apple Iphone, Ipod or Ipad with Wi-Fi connection that allows us to access the matrix.









## **Broadcast Monitors**

KROMA by AEQ Broadcast Monitors have been designed to meet a very wide range of requirements for video monitoring, especially in production centres or distribution of programs.

#### **SERIES LM9000. 4K Monitors**

The series LM9000 Broadcast Monitors from KROMA by AEQ are designed with a 10 bit Quad processor and allows us to display UHD/4K Signals on the monitors. The available Monitor sizes are 55" (3840 x 2160), 31" (4096 x 2160) and 24" (3840 x 2160). The Monitors can reproduce 4K signals in Single and Quad-Link with Square-division and 2-SI formats. They are also incorporating HDR technology in order to be able to reproduce Video Signals with really high levels of Contrast, Luminance and Sharpness. High brightness versions available. With Waveform and Vectorscope tools.



#### **SERIES LM8000. FHD Monitors**

LM8000 series monitors are top of the range instruments to measure and verify video signals in broadcast and production centres, with FULL HD resolution, available in 9", 18.5" and 24" sizes. LM8000 Series monitors are compatible with all types of audio and video inputs, including 3G-SDI and HDMI. They process video with 10-bit resolution and have the option of plugging in sfp FO transceivers with IP video inputs, or activating special inputs. Precision VU meters, phasemeter, IMD and on-screen tally, waveform, vectorscope, Picture-in-Picture (PiP) and Picture-by-Picture (PbP) and Dual-Split. They are also incorporating HDR technology in order to be able to reproduce Video Signals with really high levels of Contrast, Luminance and Sharpness.



#### **SERIES QS7000. Quad Split Monitors**

QS series monitors with built-in quad-split and 10 inputs features Waveform and Vectorscope tools, IMD (In-Monitor Display) and high resolution VU-meters, onscreen clock and the option to turn 4 video inputs into active loop outputs. They have two DVI-I inputs (YPbPr, VGA and DVI video modes) and 8 multi-format auto-detecting video inputs (composite and 3G/HD/SD-SDI signals). 18,5" and 24".



#### VF7000. View Finder

7" Full HD monitor adapted to be mounted on camera, for professional image taking. Includes rear and front tally, tripod support, adapter for Anton Bauer format battery and 12V/24V power supply.



#### **SERIES LM7500. Preview Monitors**

LM7500 series, feature a wide variety of audio and video inputs and outputs, including the 3G-SDI option. It has implemented the identification and calibration of the signal, precision Vu-meters and headphones output, In-Monitor display (IMD), tally on screen, Waveform and Vectorscope. There are different models available with different input configurations: 2x9", 2x7", 3x5" and 4x4".







#### **AUDIOPLUS AUTOMATION SYSTEM**

#### For the production and broadcasting of audio for radio and TV

Automation tool for Play-Out, editing and automatic programming of audio broadcast for radio and TV. With Analogue, AES/EBU Digital USB Digital and DANTE™ AoIP Multichannel Protocol.



#### **VISUAL RADIO SYSTEMS**

Seamless integration of AEQ digital consoles and the AEQ NETBOX AoIP Interfaces as command sources for the broadcast automation switches and camera controls of Broadcast Pix, to generate a complete content of visual radio over the internet or even by a TV channel. With social media option.



#### **OLYMPIA 3**

#### Commentary unit for sports events

State-of-the art Digital Commentary Unit and Intercom User Panel with AoIP Connectivity, PoE powered, IP video transport, local mix and processing.

#### **EVENT REFERENCES**

Among our references you will find both Summer and Winter Olympics, Athletics World and Continental Championships, Basketball, Handball, Ice Hockey, Skiing, Cycling, Swimming and Formula 1 GP. Systems have also been delivered for OB Vans and also fixed installations in sporting arenas.



#### **TURN-KEY SYSTEMS**

The feedback between product developments, product testing and practical implementation in complex environments is vital when designing equipment with continually increasing requirements in regards to usefulness and reliability. At the same time, the support from our factory provides security and peace of mind to our customers who trust us with their projects. We are regularly being trusted with the responsibility of designing, engineering, planning and execution of turnkey projects for broadcast studios, central controls, OB vans and radio automation systems. Turnkey equipment for complete radio stations, recording studios or broadcast production centers.



















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