SHURE NETWORKED AUDIO PROCESSING

COLLABORATE WITHOUT COMPROMISE.
The new IntelliMix™ P300-IMX Audio Conferencing Processor was developed to seamlessly integrate with the Shure MXA910 Ceiling Array and the MXA310 Table Array Microphones. Working in perfect synergy, the P300-IMX processor and Microflex™ Advance™ microphones deliver a hassle-free, cost-effective conferencing audio system. The P300-IMX offers pre-defined templates that enable set up literally in seconds, and an unobtrusive form factor for discreet installations. Versatile features and connectivity options provide freedom of choice when joining a room video system, soft codec, or connecting laptops and mobile devices.

Shure Networked Audio Processors and Interfaces enhance collaboration by offering a high-quality audio conferencing solution and the most intelligible meeting sound.
The IntelliMix P300-IMX Audio Conferencing Processor offers DSP algorithms optimized for A/V conferencing applications with Microflex Advance and Microflex Wireless microphones, for a complete, high-quality audio experience from Shure. Featuring acoustic echo cancellation, noise reduction and automatic gain control for up to 8 Dante channels, the P300-IMX ensures echo- and noise-free conference room audio that facilitates communication and collaboration. Easy to install and configure, the P300-IMX provides Dante, analog, USB and mobile connectivity options that make joining room systems and collaborating with laptops and mobile devices easier than ever.

- Supports up to 8 Dante microphone channels, connected over a single network cable
- Proprietary Shure IntelliMix DSP algorithms improve speech intelligibility and enable full duplex communication:
  - Per-channel Acoustic Echo Cancellation
  - Noise Reduction
  - Automatic Gain Control
  - Parametric Equalization
  - IntelliMix Automatic Mixing and Matrix Mixing
- BYOD support for USB and mobile devices allows soft codec audio/video conferencing
- Browser-based user interface with pre-defined templates simplifies programming and reduces setup time
- Power-over-Ethernet (PoE+) eliminates need for outboard power supply
- Compact form factor is easy to mount under table or in credenza, without need for equipment rack and long cable runs

The ANIUSB-MATRIX Audio Network Interface provides a versatile hub for collaboration in small and medium-size meeting rooms, suitable for both room video conference systems and soft codec applications. Where high audio quality is important, the ANIUSB-MATRIX presents a budget-friendly companion to premium microphone solutions, while leveraging the integrated processing functionality of existing video codecs in the room.

- Connects 4 Dante audio inputs and 1 analog input to a room audio/video conferencing system or PC-based A/V conferencing app
- USB connectivity allows use of soft codec A/V conferencing applications like BlueJeans, Skype for Business etc.
- Matrix Mixer provides flexible signal routing, while PEQ (Parametric Equalization) and Limiter allow precise control of meeting audio
- Browser-based user interface for remote control of device functionality
- Single network cable connectivity, with Power-over-Ethernet (PoE) to eliminate outboard power supply
- Included mounting tray installs easily and allows to secure the device under a table
This medium-sized meeting space is equipped with a Microflex Advance MXA910 Ceiling Array Microphone to capture high-quality audio for meetings and collaboration with remote team members. The P300-IMX processes the audio from the Ceiling Array and sends it to the far end via the room video conference system. It also provides connectivity for USB and mobile devices at the table, allowing meeting participants to bring in additional remote attendees. The P300-IMX uses advanced DSP algorithms that eliminate echo and noise to provide a high quality audio experience for natural and interactive conversations.

This huddle room is designed for small team meetings and collaboration with remote team members. To ensure a high-quality audio experience for the far end, the ANIUSB-MATRIX routes audio from a permanently installed Microflex Advance MXA310 Table Array Microphone to the room video conference system, or to a soft codec video conferencing app on a participant’s own device. Audio from the far end is heard through the TV which is connected to the laptop or VC system through HDMI cable.
Audio Network Interfaces

**ANI22 | ANI4IN | ANI4OUT**

The ANI Audio Network Interfaces provide simple connection of Dante and analog microphones, for seamless integration into existing AV/IT infrastructures.

- **ANI22**: Connects up to 2 mic/line analog signals to a Dante Network + 2 Dante digital audio signals to mic/line analog signals
- **ANI4IN**: Connects up to 4 mic/line analog signals to a Dante Network
- **ANI4OUT**: Converts up to 4 Dante digital audio signals to mic/line analog signals
- Available with Block and XLR connectors

- Summing Modes mix multiple sources down to a single channel for easier installs
- Browser-based user interface allows remote control of hardware settings
- Third party control system compatible
- Power-over-Ethernet (PoE) eliminates need for outboard power supply
- Compact form factor is easy to mount under table or in credenza
- LEDs on the front panel indicate hardware status

**MXWANI4 & MXWANI8**

Converts Dante Microphone systems to analog for connection to downstream devices.

- With 4 or 8 block connector channel outputs
- Versatile 4 port gigabit Ethernet switch
- Browser-based user interface
- Rack mountable, with front panel controls for easy adjustment of input and output levels
- Provides Power over Ethernet (PoE) to Microflex Advance
- MXWANI4 converts 1 analog signal to Dante / MXWANI8 converts 2 analog signals to Dante

**IntelliMix Automatic Mixing**

**SCM820**

*Digital IntelliMix Automatic Mixer*

Easiest way to operate many microphone channels simultaneously.

- Multiple I/O configurations and networking options provide analog and digital connectivity between devices
- Two independent mixers provide greater flexibility and allow for use in advanced and complex applications
- Smart, simple controls with intuitive hardware interface and informative LED metering
- Patented Shure Digital Feedback Reduction (two channels)
- Convenient browser-based, remote control
Technology Overview

**Automixing Functionality**

The proprietary Shure IntelliMix™ automixing technology features a unique collection of algorithms that deliver clear, intelligible sound for productive conferences. Completely automatic, with no user interaction required for perfect operation.

- **Noise Adaptive Threshold (NAT)**
  Automatically makes adjustments to the activation threshold when the room becomes noisier or people become more active.

- **Number of Open Microphones Attenuation (NOMA)**
  Attenuates system gain as additional channels are opened, providing consistent output levels and better gain before feedback.

- **Last Mic Lock-On (LMLO)**
  Keeps the most recently activated microphone open until another microphone is activated.

- **MaxBus**
  Ensures that only one channel is open per sound source, while picking up multiple talkers simultaneously.

IntelliMix Modes offer Gating, Gain Sharing or Manual Mixing modes, along with modes specifically designed for Microflex Advance microphones with Steerable Coverage™.

**DSP Functionality**

The DSP algorithms used in the Shure Networked Audio Processors and Interfaces increase clarity and improve speech intelligibility by optimizing voice quality and reducing room noise.

- **Acoustic Echo Cancellation**
  Eliminates echo in conference rooms to make conversations more natural and interactive.

- **Noise Reduction**
  Removes unwanted background noises from interfering with your meeting.

- **Automatic Gain Control**
  Makes real-time adjustments to microphone levels to accommodate loud and soft talkers.

- **Matrix Mixing**
  Allows any input to be sent to any or all outputs for ultimate installation flexibility.

- **Parametric Equalization**
  Customizes the sound signature by adjusting the frequency response, including attenuation or boost of signals within a customizable frequency range.

**Networkable Shure Microphones**

**Microflex™ Advance™ Array Microphones**

Microflex Advance Ceiling and Table Array Microphones offer a versatile and elegant A/V conferencing solution that discreetly and precisely capture the richness of the human voice, featuring proprietary Steerable Coverage™ technology to accurately capture sound sources from any location in a meeting room.

Networkable Microphones:
- Ceiling Array Microphone | MXA910
- Table Array Microphone | MXA310

**Microflex™ Wireless Microphone Systems**

Microflex Wireless brings vivid, lifelike sound and wireless flexibility to managed AV environments. Easy to configure and expand, the system scales from custom boardrooms to networked enterprises, with comprehensive software tools for remote system management.

Networkable System Components:
- Networked Charging Stations
  - MXWNC52 | MXWNC54 | MXWNC58
  - 2-, 4-, and 8-Channel Access Point Transceivers
  - MXWAPT2 | MXWAPT4 | MXWAPT8

Microphone Form Factors
- Hybrid Bodypack Transmitter | MXW1
- Handheld Transmitter | MXW2
- Boundary Transmitter | MXW6
- Gooseneck Base Transmitter | MXW8

**Dante™**

Dante Audio Networking enables delivery of low-latency, multi-channel, uncompressed digital audio over a standard Ethernet network.