

# Elegant design, eloquent performance

Introducing Microflex® Advance™ networked array microphones: versatile and elegant AV conferencing solutions that discreetly and precisely capture the richness of the human voice.



Shure Microflex Advance array microphones feature patent-pending new technologies that fundamentally change voice coverage and capture in AV conferencing environments.

Microflex Advance Ceiling Arrays provide configurable and invisible coverage from above for rooms of any size, shape or application.

Microflex Advance Table Arrays provide versatile and adjustable coverage areas in elegant, low-profile tabletop solutions.

Both feature new Shure software tools that enable AV conference room designers to be more creative and conference managers to be more productive.

#### Microflex Advance

Celling Array microphone
Table Array microphone



# Ultimate AV flexibility

Ceiling Arrays use Steerable Coverage<sup>™</sup> technology to position pick-up areas throughout a room with coverage more precise

than shotgun microphones.

# Configurable Coverage

Configure up to eight pick-up patterns in three dimensions and adjust them for uniform acoustic performance throughout the room. Each Ceiling Array lobe can be steered toward a participant using the Auto Configuration mode in the control software for quick audio setup and capture.

# Flexible Networking

Mix, route and manage the signals from up to eight coverage areas as discrete channels on a Dante<sup>™</sup> network over a single Ethernet cable. An individual automix channel provides added flexibility.

# Workflow Efficiency

The microphone includes multiple templates to speed initial set-up and ten presets for importing or exporting array configurations.

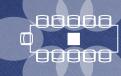
# Digital Signal Processing

Microflex® Advance™ Ceiling arrays feature the new Shure IntelliMix® DSP Suite for precise coverage settings, automatic mixing, equalization, and echo reduction.

# Application Profile

A Ceiling Array microphone is ideal for formal boardrooms where a clean work surface is preferred. This microphone is configured to capture seven discrete listening areas with coverage for an 11-seat meeting.

Under average room conditions, at a height of 10 feet with seated participants, the recommended coverage diameter is 30 feet.



### Coverage Map

11 Chairs 1 Rectangular Tab

# Agile tabletop performance

Table Array microphones use Steerable Coverage<sup>™</sup> technology to capture pristine audio around conferencing tables of different sizes, shapes and uses.

# Configurable Coverage

Set the coverage geometry for up to four areas in 15° increments, and specify the polar pattern for each configuration including cardioid, supercardioid, hypercardioid, omnidirectional, bi-directional and a patent-pending toroid pattern.

# Flexible Networking

Mix, route and manage the signals from up to four coverage areas as discrete channels on a Dante network over a single Ethernet cable. An individual automix channel provides added flexibility.

# Mute Controls

Program the touch-sensitive mute button for toggle, push-to-mute, push-to-talk or disable settings or to send controls to external devices.

# LED Displays

The configurable multi-colored LED light ring shows the mute status of the microphone in use and displays lighted segments during set-up to confirm coverage areas and automix settings.



#### Exclusive Toroid Patter

Rejects overhead noise from HVAC, projectors and other sources, optimizing the voices of seated or standing meeting participants.



#### Color LED Choice

Specify one of 8 LED colors to communicate microphone mute states, room security levels or other conditions.



# **Application Profile**

Table Arrays are ideal for meeting rooms where the number of attendees varies and an uncluttered table is preferred.

The image above shows the MXA310 with two cardioid patterns and one bi-directional pick-up pattern to capture the voices of six participants. Note that this application scenario is one of many that can utilize up to four channels.



# overage Map

Chairs I I Round Table Bi-Directional Pattern Cardioid Patterns

# Simply smarter solutions

Both arrays include the Shure IntelliMix® DSP Suite, an expanded toolset of proprietary DSP tools that optimize voice quality by reducing room noise and improving speech intelligibility.

# Shure IntelliMix® DSP Suite

#### Steerable Coverage<sup>™</sup>

Configure and control incredibly accurate polar patterns captured from participants in any location of a meeting space. Pre-configured templates in the control software simplify setup.

### **Echo Reduction** (Ceiling Array only)

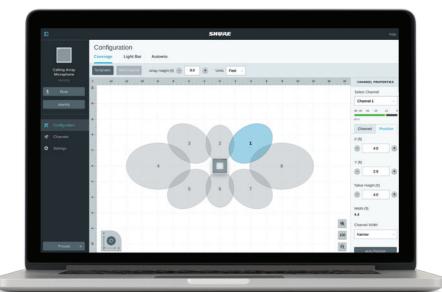
Employs a simple way of reducing acoustic echo by preventing far end participants from activating local microphone channels. Very effective as a front end to codecs with single channel AEC.

#### **Automatic Mixing**

Increases clarity and reduces noise. This yields improved quality, intelligibility and seamless interaction between conference sites.

#### Parametric Equalization (PEQ)

Each Ceiling Array and ANI4 channel features a 4-band PEQ for the precise control of sound, while Table Arrays feature a 4-band PEQ that is assignable to any channel including the Automatic Mixer output channel.



#### **Browser-Based Tools**

Both array microphones and the ANI4s feature browser-based tools that make it easy to remotely monitor and control microphones, configure capture areas using convenient templates, set polar pattern and specify mixing preferences.

#### Elegant Modern Desig

Seamlessly integrate arrays within room designs via flush mounting (standard tile dimensions), slightly

# Rich Third-Party Controls

Both microphones work seamlessly with audio conferencing processors, video conferencing codecs, and PC-based conferencing.

They also offer an extensive API for versatile integration and control of muting, presets, LED states and other settings via third-party control systems.

# Application flexibility

Match single or multiple arrays to the AV conferencing needs of rooms of any size, configuration or activity: formal presentations, intimate discussions, distance learning or collaborative work.

# Table Array Coverage Maps

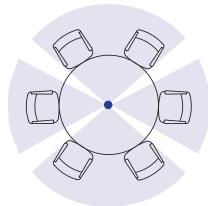
#### **Small Round Table**

1 Table Array

#### Profile

6 Chairs 1 Round Table

#### 1 Bi-directional Pattern 2 Cardioid Patterns



#### **Medium Round Table**

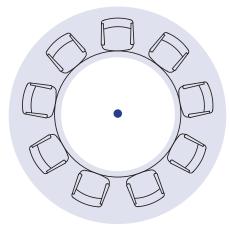
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#### Profile

9 Chairs 1 Round Table

1 Table Array

1 Toroid Pattern



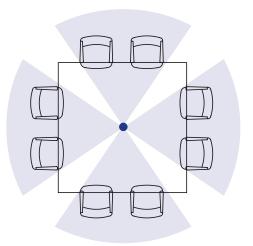
### **Square Table**

1 Table Array

#### Profile 8 Chairs

1 Square Table

**4 Supercardioid Patterns** 



### **Rectangular Table**

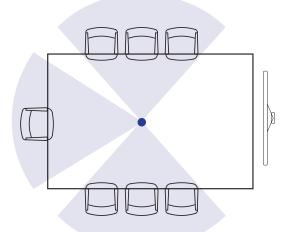
1 Table Array

#### Profile

5 Chairs

### 1 Rectangular Table

1 Supercardioid Pattern 2 Cardioid Patterns



# Ceiling Array Coverage Maps\*

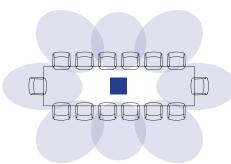
### **Medium Conference Room**

1 Ceiling Array

#### Profile

14 Chairs 1 Rectangular Table

**8 Coverage Areas** 



# **Videoconference Room**

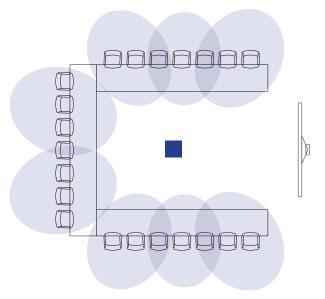
1 Ceiling Array

#### Profile

21 Chairs

3 Rectangular Tables

**8 Coverage Areas** 



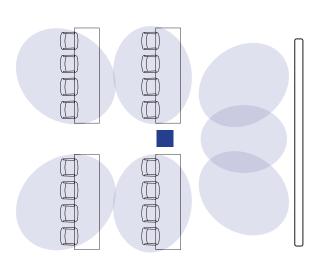
### **Classroom/Presentation Room**

1 Ceiling Array

#### rofile

16 Chairs 4 Rectangular Tables

7 Coverage Areas



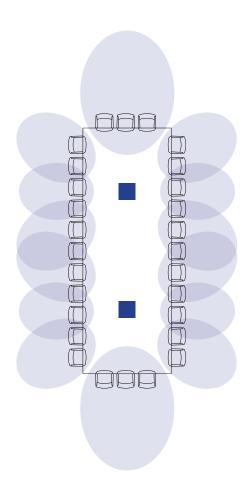
# **Large Conference Room**

2 Ceiling Arrays

#### Profile 28 Chairs

28 Chairs 1 Rectangular Table

#### **14 Coverage Areas**



#### \* Coverage Capabilities

Installed at a height of ten feet (3 meters), Ceiling Arrays capture audio from seated participants to a recommended area of 30 feet (9 meters) in diameter, meeting the STIPA "A" intelligibility rating. Note: Ceiling Arrays are capable of picking up participants beyond 30 feet.

† Room conditions: RT60 (reverb time) = 500 ms @ 1kHz, weighted room noise = 40dBSPL(A). IEC-602682-16.

# Shure networked systems

Wired or wireless, analog or digital, Shure components work together as an ecosystem of enterprise-scale microphone solutions for managed AV conferencing environments.

# Microflex® Advance™ I MXA

Both new Microflex Advance array microphones are fully digital for networked set-up, management and control on Dante<sup>™</sup> networks.

MXA910 Ceiling Array Microphone MXA310 Table Array Microphone

#### Connectivit

Dante™



#### **Both Arrays Feature**

Shure Intellimix® DSP Suite Single Ethernet cable connectivity Software-based configuration templates 10 configuration presets Browser-based remote control Third-party control string compatible Per Channel 4-Band Parametric Equalization Black, white & aluminum Finishes

# **Audio Network Interfaces**

ANI4IN and ANI4OUT devices can bring up to four analog wired microphones, including Microflex boundary and gooseneck models, onto or from Dante network for easy audio routing and convenient browser-based remote control.



# Common LED signals for ANI Input and

#### **Features**

Browser-based remote control Logic Pin state settings (ANI4IN-BLOCK) Single Ethernet connectivity 10 configuration presets Third-party control system compatible XLR and Block connectivity Power over Ethernet (PoE) **Audio Summing** Per Channel 4-Band Parametric Equalization



#### 4-Channel Dante Mic/Line Audio Network Interface with XLR or Block Outputs



#### 4-Channel Dante Mic/Line Audio Network Interface with XLR or Block Inputs

# **@**Dante™

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

# Microflex® Wireless I MXW

Microflex wireless systems include digital network compatible transceivers and charging stations.

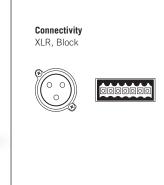


#### **Networkable Wireless Systems**

Networked Charging Stations | MXWNCS2 / MXWNCS4 / MXWNCS8 2-, 4- and 8-Channel Access Point Transceivers | MXWAPT2 / MXWAPT4 / MXWAPT8

# Microflex® | MX

Microflex wired microphones feature the highest standard of quality and efficiency for installed audio applications.



#### **Network Compatible Microphones** Low Profile Boundary Microphone | MX395

Multi-Element Boundary Microphone I MX396 Modular Gooseneck Microphone | MX405 / MX410 / MX415

# Networking Devices

Existing Shure Dante-compatible interface devices can provide network connectivity for any Microflex Advance conferencing solution.



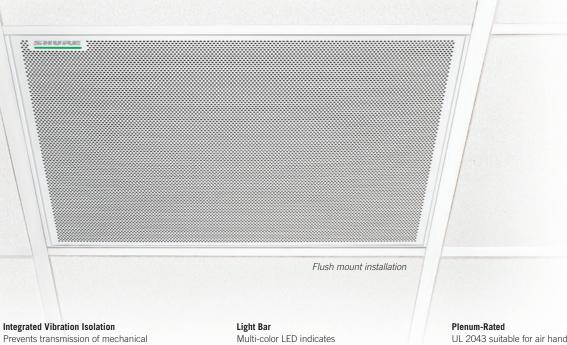
8-Channel Digital Intellimix® Automatic Mixer SCM820 also provides Dante connectivity and versatile configuration options



4- and 8-Channel Audio Network Interfaces MXWANI4 / MXWANI8

# Architectural details

Ceiling Array microphones are designed for suspension, pole and flush mounting in imperial or metric formats.



UL 2043 suitable for air handling spaces and plenum compliant when used with supplied FyreWrap® accessory.





VESA-format pole mount

#### Available Ceiling Adapters

Configures a 600 mm Ceiling Array for a 625 mm grid.

Allows the Ethernet cable connected to the array to be installed inside flex

# Installation solutions

Audio Network Interface units are 1/3 rack mountable and can also be mounted under-the-table or on a wall. Table Array microphones also feature through-the-table mounting kits.



Mounts a single Mic/Line ANI under a table or on a wall (included).

noise through the microphone.



on a wall, or in a rack.



Table Arrays include cable management solutions for on-the-table or through-the-table applications.

# Expressive finishes

Ceiling and Table Array microphones are available in black, white and aluminum finishes to match room aesthetics or the finishes of other AV system components. The Ceiling Array microphone can also be custom-painted to fit your environment.







**Aluminum** 

Weight 362 g (0.8 lbs) 3.6 x 13.4 x 13.4 cm (1.4 x 5.3 x 5.3 in.)



