

**Shure Array Microphone Set up Tips
for Lumens CamConnent Pro**

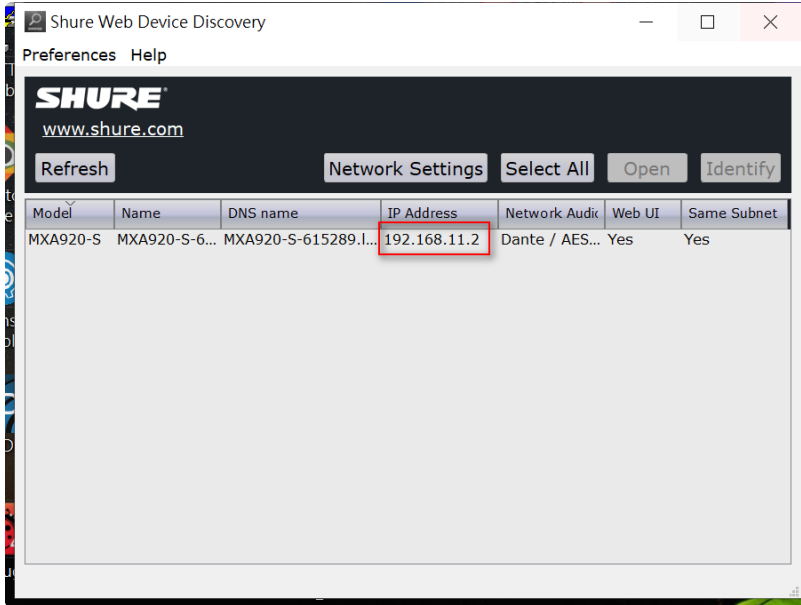
In this Guide

- Integrate Lumens **CamConnent Pro** with **Shure Array Microphones**.
- Optimize **Shure array microphones** for camera tracking
- This document uses **Shure MXA920** as an example microphone, installed above a conference table.

Prepare

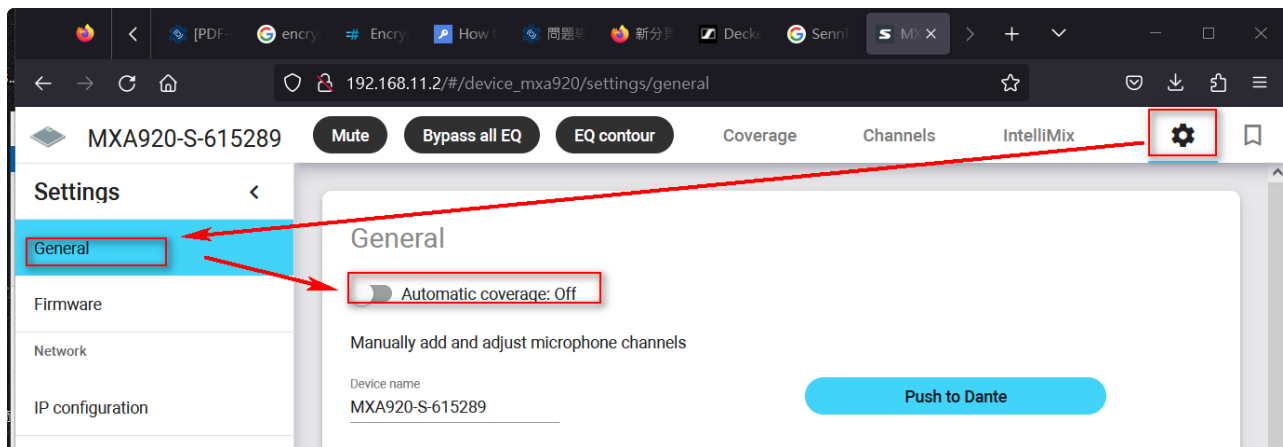
- This document uses **Shure MXA920** as an example of setting.
- Install the Shure microphone, Lumens CamConnect processor and Lumens PTZ cameras on the same Ethernet network.
- For the first installation, turn on the switch's DHCP server.
- Install the Shure MXA920 in the ceiling above the center of a conference table

Device Discovery



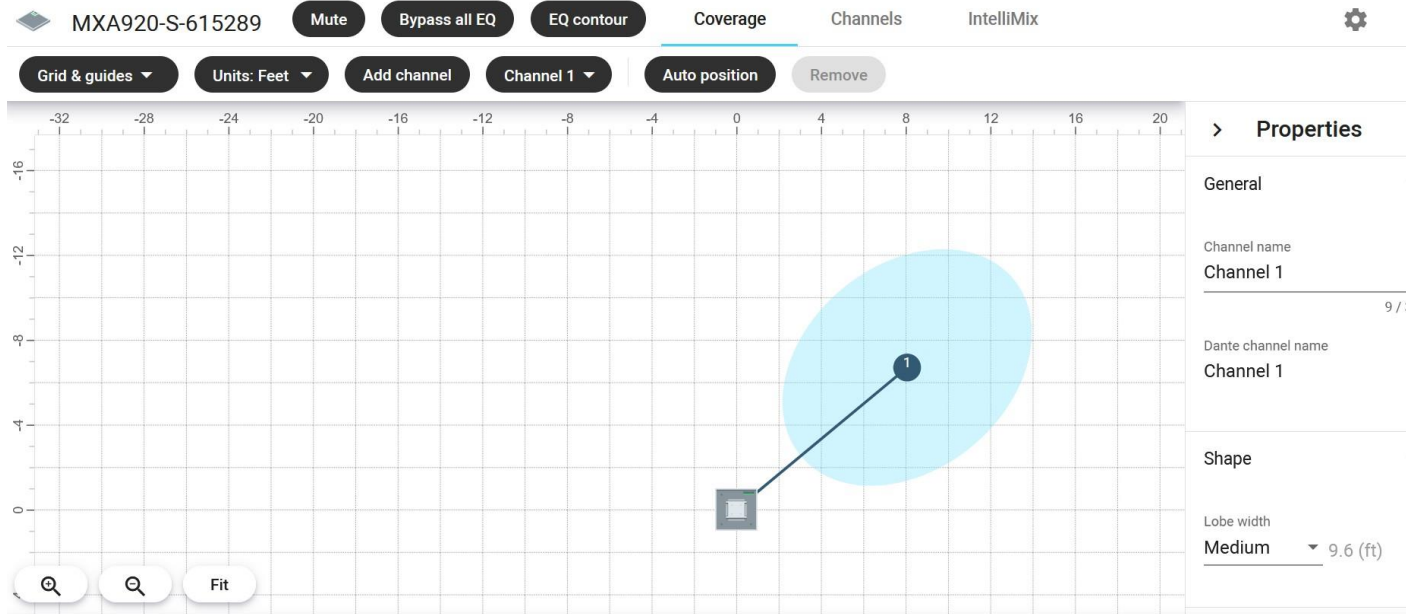
1. Download “**Shure Web Device Discovery**” software from below hyperlink.
https://www.shure.com/en-US/products/software/shure_web_device_discovery_application
2. Install and run this software.
3. You will get the IP address for the Shure ceiling microphone.
4. Open the web browser and enter the webpage of MXA920.

Automatic coverage: off



Set “Automatic coverage” to **off**

Coverage

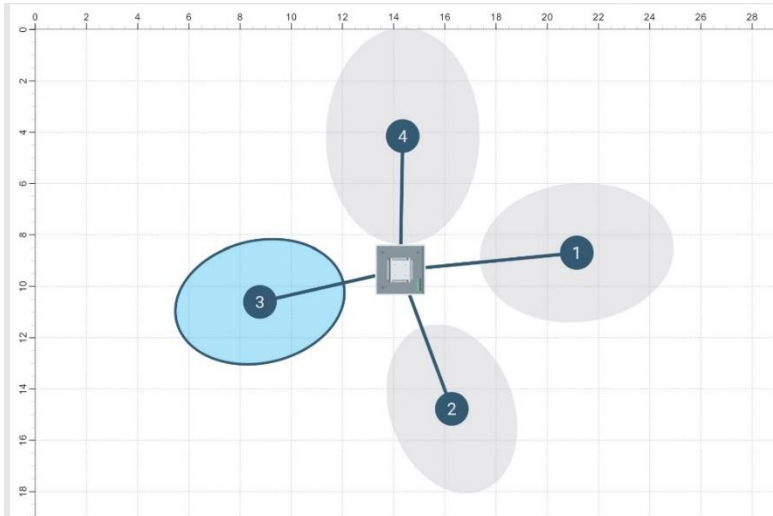


1. Go to the “**Coverage**” page.
2. If channels have previously been set, **remove all channels** with the exception of **channel 1**.

Add channel

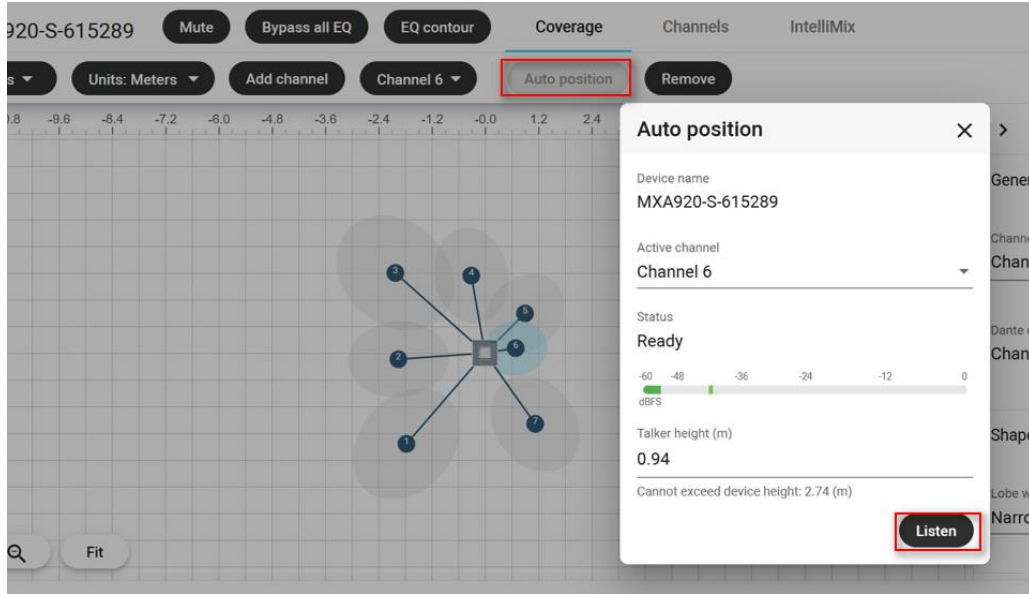
MXA920-S-615289 Mute Bypass all EQ EQ contour Coverage Channels IntelliMix

Grid & guides Units: Meters **Add channel** Channel 3 Auto position Remove



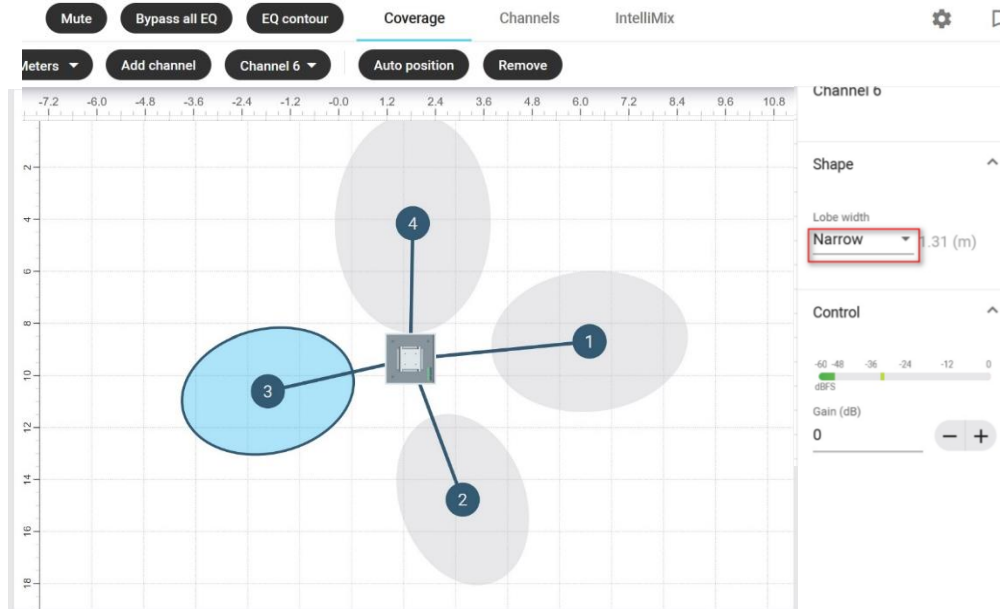
Manually add a channel

Auto position



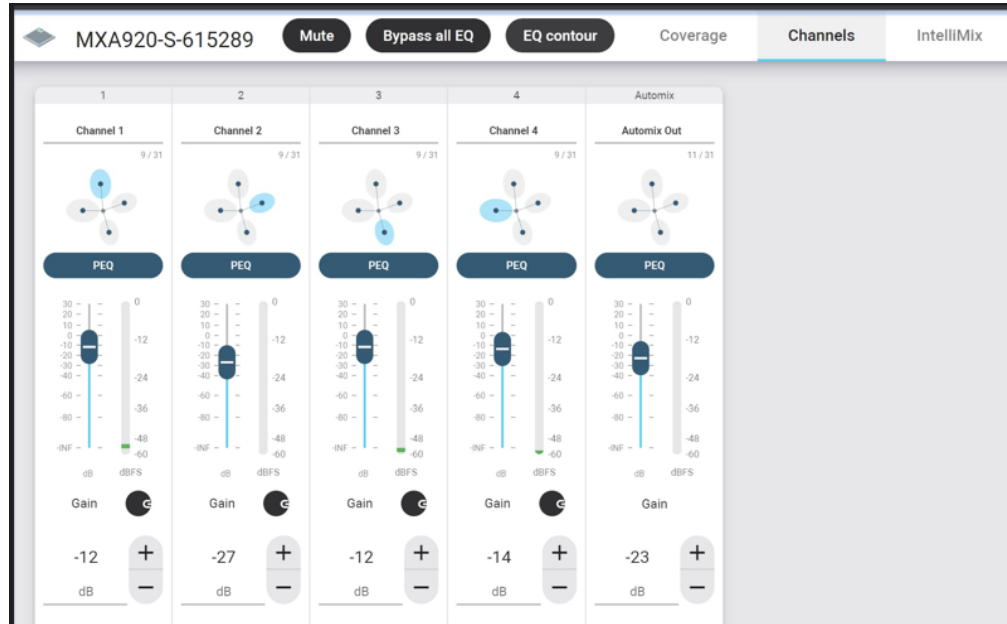
1. Move to a seat and allow the microphone to identify the position of your voice.
2. Select a channel, then press “**Auto position**”.
3. Press “**Listen**” in the Auto position pop-up.
4. The position of the selected channel will be stored automatically as a new lobe.

Lobe width for the channel



Set the **lobe width** of each channel as “**Narrow**” or “**Medium**”. This will reduce the area covered by each lobe and increase the accuracy of voice tracking. Note, there should be **minimal lobe overlap**.

Channel Mix (Automix)



Go to the Automix page. Use the faders to adjust a channel's gain before it reaches the auto-mixer and therefore affects the automixer's gating decision.

Boosting the gain here will make the lobe more sensitive to sound sources and more likely to gate on. Lowering gain makes the lobe less sensitive and less likely to gate on.

IntelliMix

MXA920-S-615289 Mute Bypass all EQ EQ contour Coverage Channels IntelliMix

Bypass IntelliMix Revert to defaults

Gain 10 dB Gain 0 dB Gain 0 dB Gain 0 dB Gain 0 dB Gain 0 dB Gain 0 dB Gain -22 dB

AGC Solo Priority Always on Mute

AEC NR PEQ Comp Delay Mute

Properties

Settings

Automix mode

Gating

- **Disable “Always on”** for all channels.
- When no sound is detected in the room, CamConnect will return to its home position (or a defined camera preset if required).

Leave Last Mic On

IntelliMix

Channel 7

Automix

Automix Out

Gain: -22 dB

Settings

- Automix mode
- Gating
 - Automix gain meter
 - Maximum open channels: 8
 - Leave last mic on
 - Off attenuation (dB): -15
 - Hold time (ms): 400
 - Gating sensitivity: 1, 5, 9

- **Leave Last Mic On**

Keeps the most recently used microphone channel active.

The purpose of this feature is to retain the natural room sound in the signal so that meeting participants on the far end know the audio signal has not been interrupted.

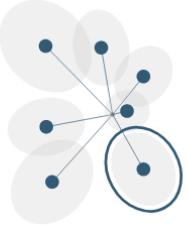
- **Off Attenuation**

Sets the level of signal reduction when a channel is not active.

- **Hold Time**

Sets the duration for which the channel remains open after the level drops below the gate threshold.

Gating Sensitivity



Settings

Automix mode
Gating

Automix gain meter

Maximum open channels
8

Leave last mic on

Off attenuation (dB)
-15

Hold time (ms)
400

Gating sensitivity
1 5 9
Low High

Gating Sensitivity

- Changes the threshold level at which the gate is opened
- Generally, this should be set between 2 and 5. Begin at **level 2** and adjust it to find the most appropriate result for your meeting space.
- The higher the level, the more sensitive the voice-trigger, and the greater the frequency of camera switching.
- The higher the level, the greater the chance of picking up non-vocal sounds.

Voice activation

MXA920-S-615289 Mute Bypass all EQ EQ contour Coverage Channels **IntelliMix**

Bypass IntelliMix Revert to defaults

1 2 3 4 5 6 7 Automix

Channel 1 Channel 2 Channel 3 Channel 4 Channel 5 Channel 6 Channel 7 Automix Out

Send to mix Send to mix Send to mix Send to mix Send to mix Send to mix Send to mix

● On ● On ● On ● On ● On ● On ● On

Gain Gain Gain Gain Gain Gain Gain Gain

0 + 0 + 0 + 0 + 0 + 0 + 0 + 0 +

dB dB dB dB dB dB dB dB

AGC AGC AGC AGC AGC AGC AGC AEC NR PEQ Comp Delay

Solo Solo Solo Solo Solo Solo Solo Solo

Priority Priority Priority Priority Priority Priority Priority Priority

Always on Always on Always on Always on Always on Always on Always on Always on

Mute Mute Mute Mute Mute Mute Mute Mute

Properties

Settings

Automix mode

Gating

Automix gain meter

Maximum open channels

8

Leave last mic on

Off attenuation (dB)

-15 - +

On the IntelliMix page, you can test whether the correct channel is activated when someone speaks.

Priority

The screenshot displays the Shure MXA920-S-615289 IntelliMix interface. At the top, the device name 'MXA920-S-615289' is shown along with control buttons for 'Mute', 'Bypass all EQ', and 'EQ contour'. The 'IntelliMix' tab is active, showing a grid of channel controls. Channel 1 is highlighted, and its 'Priority' control is set to 'Priority' (indicated by a blue bar). The 'Gain' for Channel 1 is set to 10 dB. The 'Properties' panel on the right shows a diagram of the microphone array with Channel 1 highlighted. The 'Settings' panel below shows 'Automix mode' and 'Gating' options. The Shure logo is visible at the bottom right of the interface.

- If we enable “**Priority**” on channel 1. This means that when both channel 1 and channel 2 are talking, the signal of Channel 1 will be sent first
- For example, in a meeting. The main speaker is in the position of Channel 1. Channel 1 can be set with higher priority.

CamConnect Pro Setting

The screenshot displays the CamConnect Processor web interface for IP 192.168.11.15. The interface is divided into several sections:

- Supported Devices & Settings:** Shows a dropdown menu for "Devices" with "Shure MXA920" selected. Other fields include "Device IP" (192.168.11.2), "Port" (2202), and a "Connect" toggle switch.
- Advanced:** Contains settings for "Time To Trigger Preset" (5 Sec), "Back To Home Time" (3 Min), "Back to Home Camera" (VC-A71PN(192.168.11.17)), and "Back To Home Position" (Preset).
- Device & Camera Mapping:** A table mapping Array No. to Camera and Preset No. with dropdown menus for each.
- Camera Control & Status:** Shows resolution (1080i60) and FPS (60) settings, along with a table of camera connections.

Array No.	Camera	Preset No.
1	VC-A71PN(192.168.11.17)	8
2	VC-A71PN(192.168.11.17)	4
3	VC-A71PN(192.168.11.17)	3
4	VC-TR40(192.168.11.11)	2
5	VC-A71PN(192.168.11.17)	3
6	VC-A71PN(192.168.11.17)	8
7	VC-A71PN(192.168.11.17)	7
8	VC-A71PN(192.168.11.17)	6

Camera	IP / USB	Control Status	Operation
VC-TR40	192.168.11.11	Disconnected	PTZ Control AI Setting
VC-A71PN	192.168.11.17	Disconnected	PTZ Control AI Setting
VC-A51PN	192.168.11.18	Connect	PTZ Control AI Setting
VC-A51PN	192.168.11.19	Connect	PTZ Control AI Setting
VC-R30	192.168.11.20	Connect	PTZ Control AI Setting
VC-A51PN	192.168.11.28	Connect	PTZ Control AI Setting

- 1. Select the device as “Shure MXA920”
- 2. Mapping the “**Array No.**” to the Shure “**Lobe channel number**”.
- Refer to Lumens CamConnect set up videos for further settings.

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