

Lumens®

Software Introduction

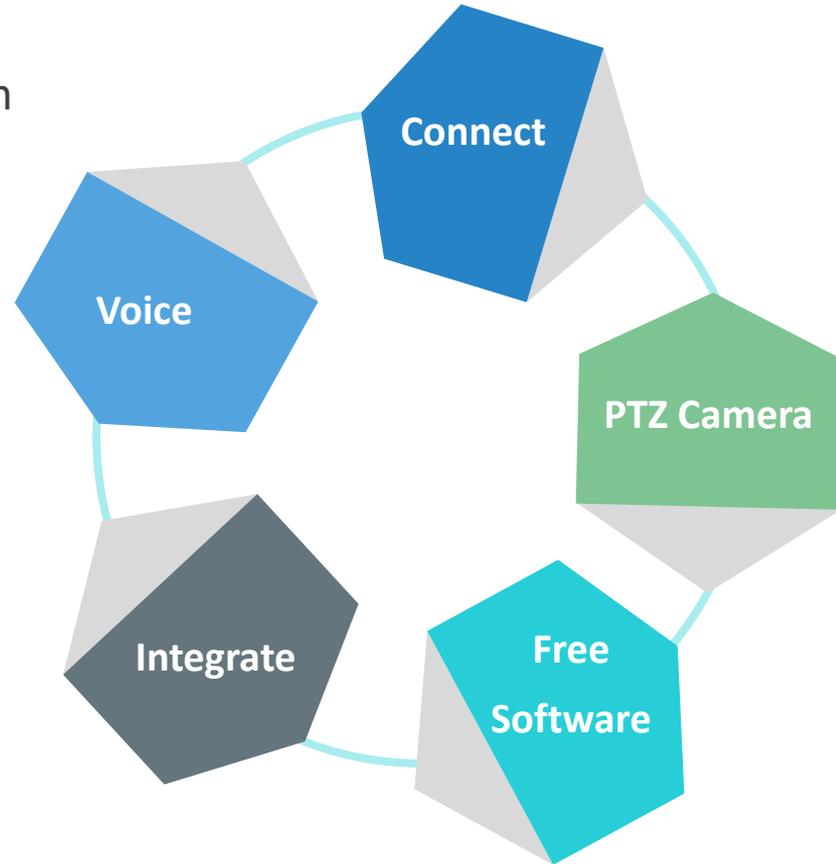
CamConnect

A new application to link your PTZ camera and
Microphone system.



Overview

1. Freely available to all Lumens customers
2. Links your PTZ camera and microphone system
3. Voice-activated solution for meeting rooms
4. Easy to configure
5. Works with camera presets

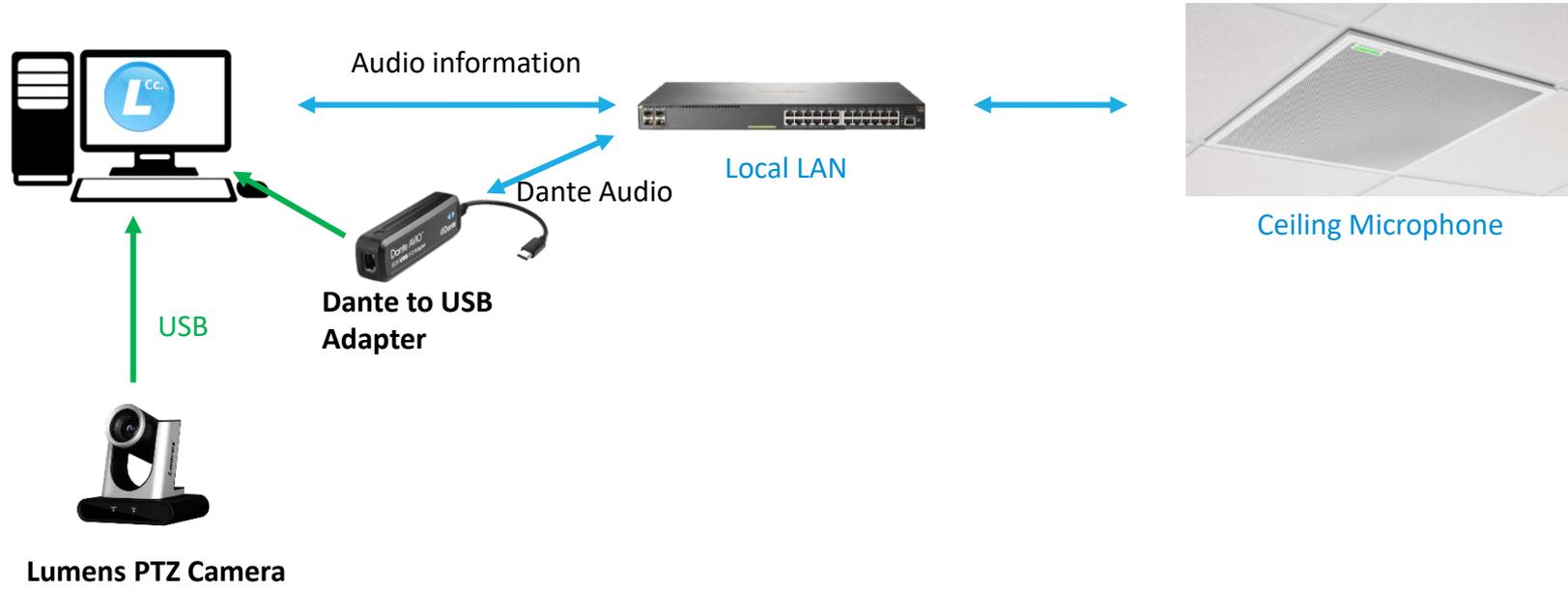


Connection Diagram

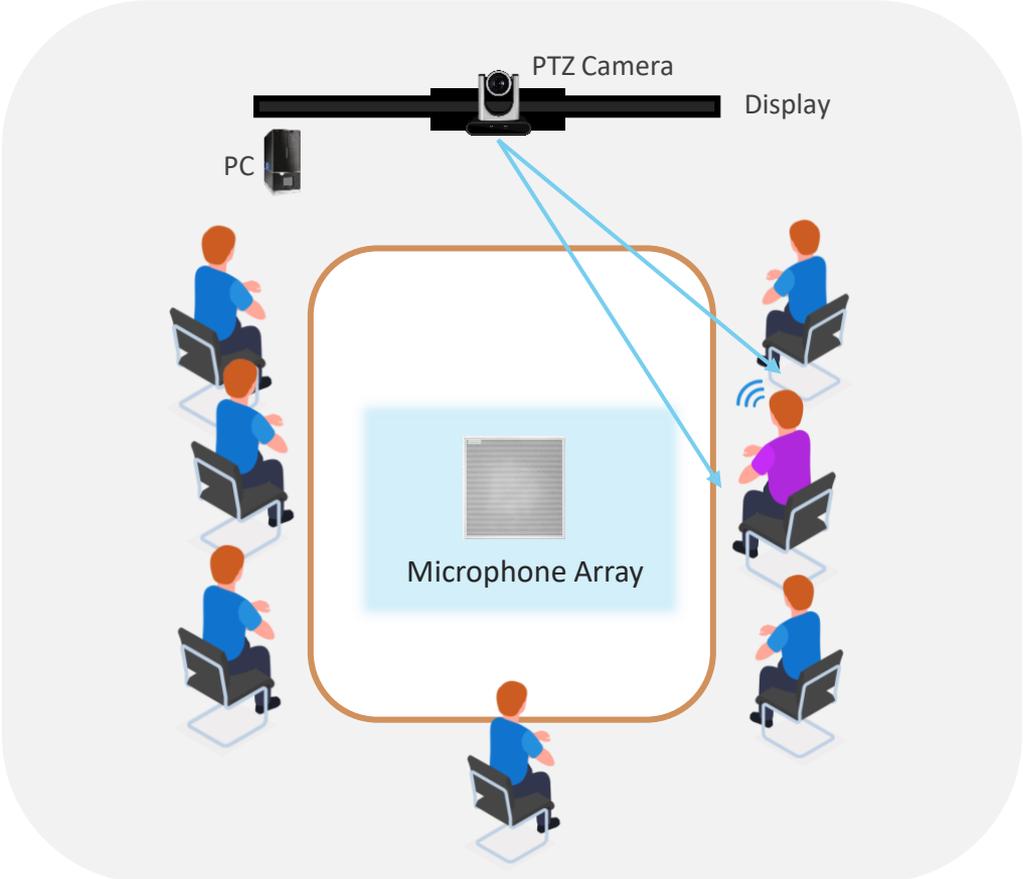
Meeting PC(or laptop) with CamConnect Software and Conference Software

1 PTZ Camera

1 Microphone array



Conference room configuration diagram



Easy Configuration

1. Select the Microphone model name.
Key-in the IP address of Microphone.
Link to the Microphone.

2. Select the PTZ Camera.
Connect the camera.

The screenshot shows the CamConnect software interface. It features a 'Sound Device' section with a dropdown menu for 'Support Device' (set to 'Shure: MXA920'), a text field for 'Device IP' (set to '192.168.11.10'), and a 'Link' toggle switch. To the right is a table for 'Array POS' and 'Cam Preset' with 8 rows. Below this is an 'Apply' button. At the bottom, there is a table for camera configuration with columns for 'Model Name' and 'Connected'. The first row shows 'VC-R30' and 'Disconnect'. A 'PTZ Control' button is located at the bottom right.

Array POS	Cam Preset
1	1
2	2
3	3
4	4
5	5
6	6
7	7
8	8

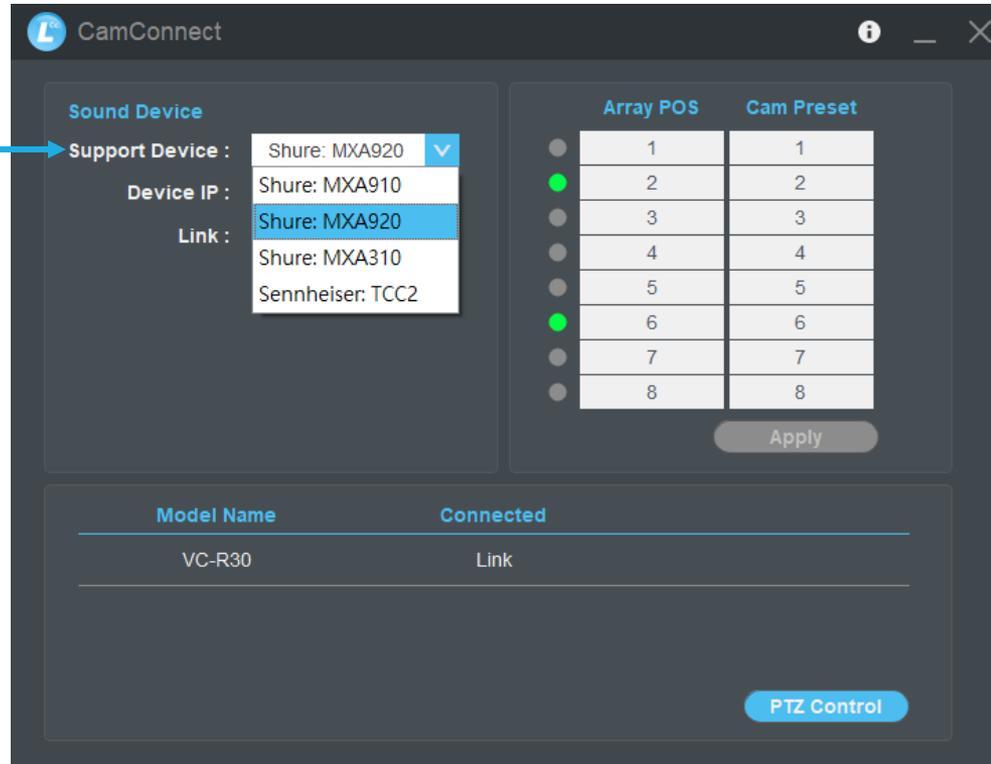
Model Name	Connected
VC-R30	Disconnect

3. Set the PTZ camera presets.

Easy Configuration (1)

– Link to the Microphone

1. Select the Microphone model name.
Key-in the IP address of Microphone.
Link to the Microphone.



The screenshot shows the CamConnect software interface. The 'Sound Device' section is active, displaying a dropdown menu for 'Support Device' with the following options: Shure: MXA920 (selected), Shure: MXA910, Shure: MXA920, Shure: MXA310, and Sennheiser: TCC2. The 'Device IP' and 'Link' fields are empty. To the right, the 'Array POS' and 'Cam Preset' table is visible, with columns for 'Array POS' and 'Cam Preset' and rows numbered 1 through 8. The 'Apply' button is disabled. At the bottom, the 'Model Name' is 'VC-R30' and the 'Connected' status is 'Link'. A 'PTZ Control' button is located at the bottom right.

Array POS	Cam Preset
1	1
2	2
3	3
4	4
5	5
6	6
7	7
8	8

Model Name	Connected
VC-R30	Link

Easy Configuration (2)

– Connect the Camera

- 1. Select the Microphone model name.
Key-in the IP address of Microphone.
Link to the Microphone.

- 2. Select the PTZ Camera.
Connect the camera.

The screenshot shows the CamConnect software interface. It features a 'Sound Device' section with a dropdown menu for 'Support Device' (set to 'Shure: MXA920'), a text field for 'Device IP' (set to '192.168.11.10'), and a 'Link' toggle switch. To the right is a table for 'Array POS' and 'Cam Preset' with 8 rows. Below this is an 'Apply' button. At the bottom, there is a table for camera configuration with columns 'Model Name' and 'Connected'. The first row shows 'VC-R30' and 'Link'. A 'PTZ Control' button is located at the bottom right.

Array POS	Cam Preset
1	1
2	2
3	3
4	4
5	5
6	6
7	7
8	8

Model Name	Connected
VC-R30	Link

Easy Configuration (3)

– Set the camera presets

1. Select the Microphone model name.
Key-in the IP address of Microphone.
Link to the Microphone.

2. Select the PTZ Camera.
Connect the camera.

The screenshot shows the CamConnect software interface. The top section is titled "Sound Device" and includes a "Support Device" dropdown menu set to "Shure: MXA920", a "Device IP" field with "192.168.11.10", and a "Link" toggle switch that is turned on. To the right of this section is a table for "Array POS" and "Cam Preset".

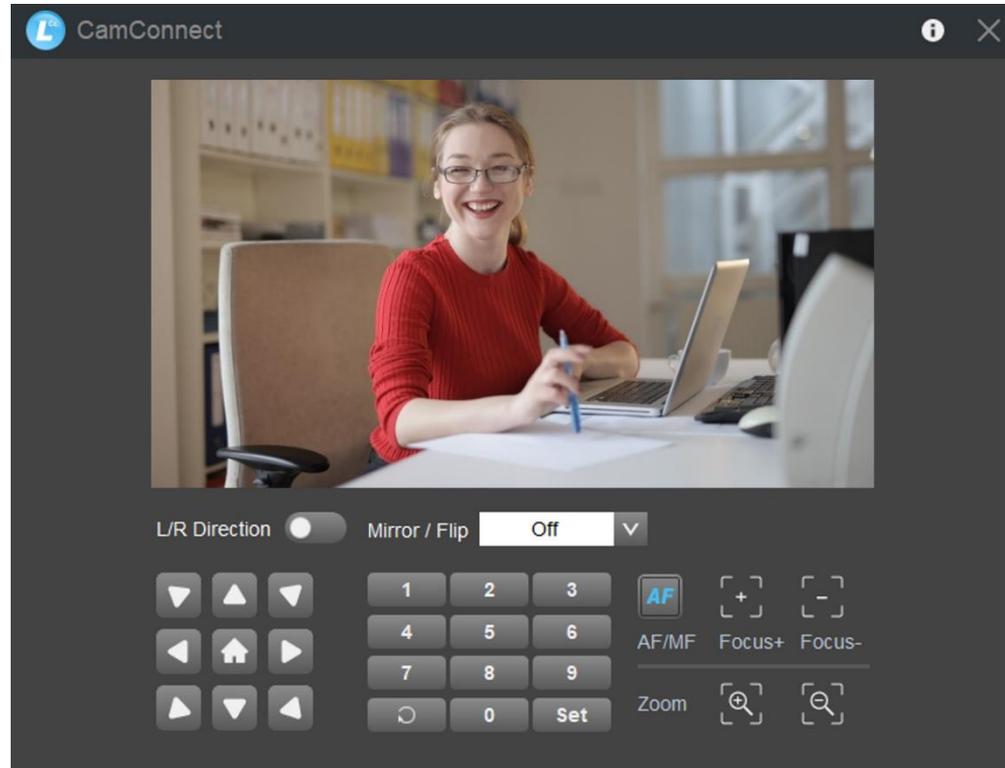
Array POS	Cam Preset
1	1
2	2
3	3
4	4
5	5
6	6
7	7
8	8

Below the table is an "Apply" button. The bottom section of the interface shows a table with "Model Name" and "Connected" columns. The "Model Name" is "VC-R30" and the "Connected" status is "Link". At the bottom right of the interface is a "PTZ Control" button.

3. Set the PTZ camera presets.

Easy Configuration (3)

– Set the camera presets



Preview the live video and set Camera Presets.

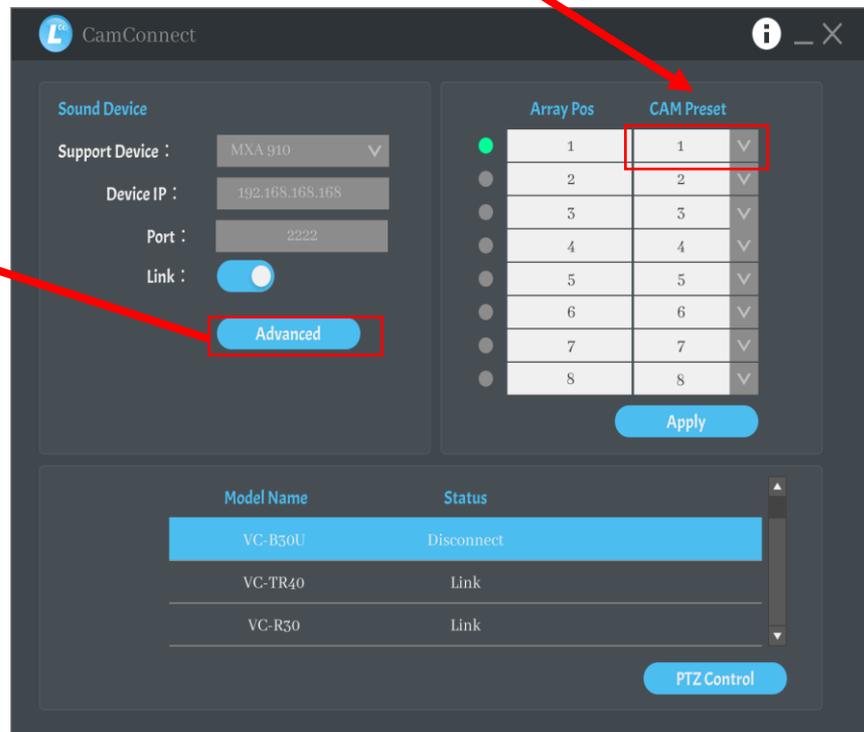
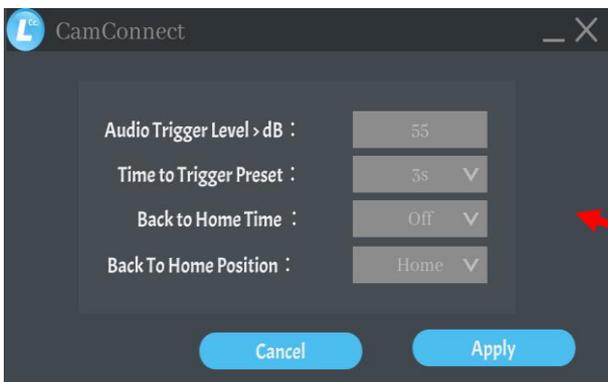


CamConnect v1.0.1

This version will be released before 12/23



Cam Preset can switch to "Off"



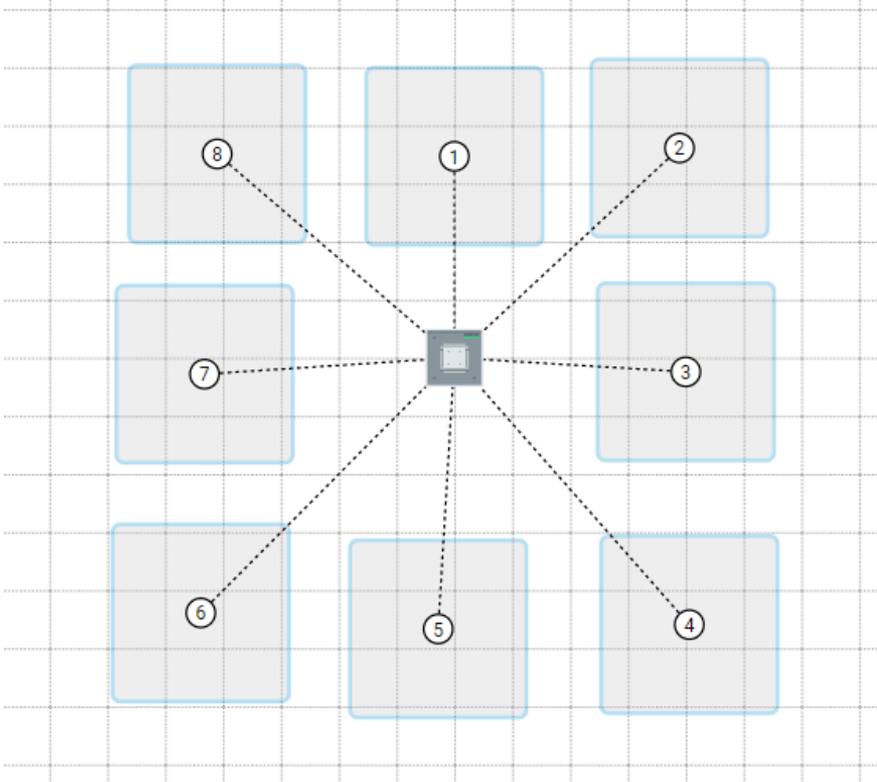
New features for v1.0.1

1. Support Nureva HDL300
2. Cam Preset can switch to "Off": it means when this zone area trigger, camera will no do any action.
3. **Audio Trigger Level:** The threshold for audio level. reduce distractions
4. **Time to Trigger Preset:** The camera preset will be triggered only when the speaker's voice continues to speak for more than this set time.
5. **Back to Home Position:** When no one speaks after XX seconds or minutes, camera will go to home position

Support Microphone with 8 channels

The screenshot shows the CamConnect software interface. A red box highlights the microphone configuration section. On the left, under 'Sound Device', the 'Support Device' is set to 'Shure: MXA920', the 'Device IP' is '192.168.11.10', and the 'Link' toggle is turned on. The highlighted section contains a table with 8 rows, each representing a microphone channel. The first row has a green dot in the 'Array POS' column, indicating it is active. Below the table is an 'Apply' button. At the bottom of the interface, the 'Model Name' is 'VC-R30' and the 'Connected' status is 'Link'. A 'PTZ Control' button is also visible.

Array POS	Cam Preset
1	1
2	2
3	3
4	4
5	5
6	6
7	7
8	8



System Requirement

Support OS	Windows 10 / Windows 11
CPU	Intel 7rd generation Core i3 1GHz above (or equivalent CPU)
Memory	8GB RAM
Free Disk Space	1GB Free Disk Space
Min. Screen Resolution	1920 x 1080

Support PTZ Camera

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VC-R30



VC-B30U



VC-TR40



VC-A71P / VC-A71SN / VC-A71P-HN

Support Shure Microphone

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- Shure MXA910
- Shure MXA920



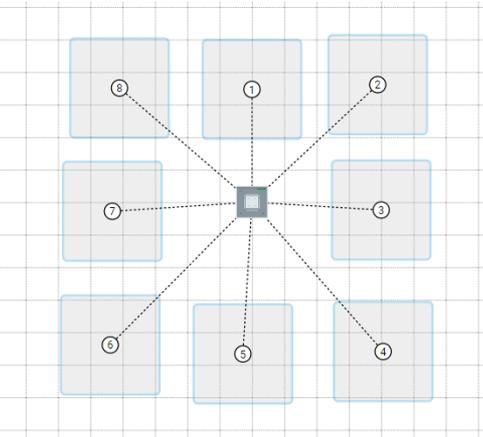
- Shure MXA310

MXA910	MXA920	MXA310
8 audio zone	8 audio zone	4 audio zone
Ceiling	Ceiling	Desktop

Shure MXA910



Steerable Coverage
delivers precise pickup for
up to **8** independent **lobes**

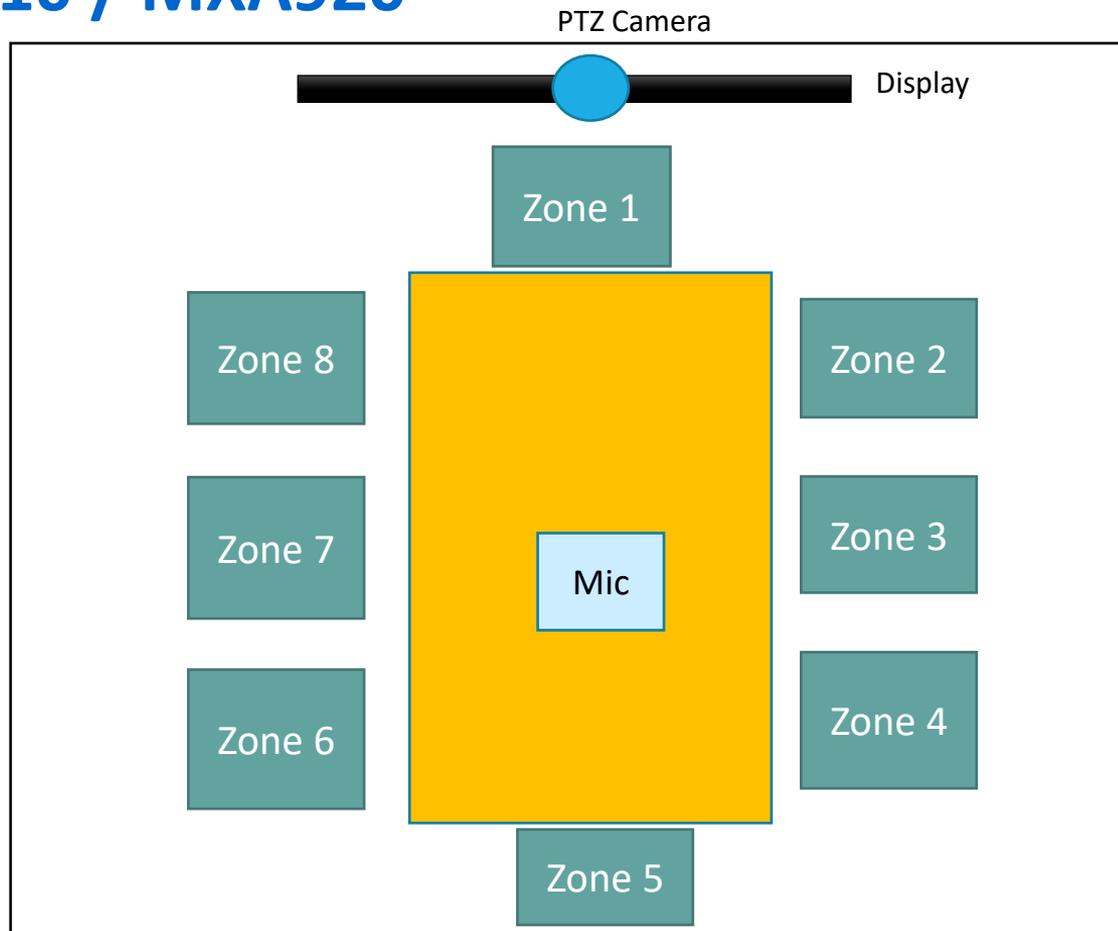


The screenshot displays the iems software interface. At the top, a 3D perspective view shows a microphone array with eight blue beams of light directed towards a conference table with eight chairs, each labeled with a number from 1 to 8. Below this is the 'Coverage View', a 2D grid showing eight overlapping circular lobes, each labeled with a number from 1 to 8. The 'Channels View' on the right shows 'Channel 4' selected, with a PEQ (Parametric Equalizer) control and a Gain slider set to 0.2 dB. The interface also includes a Properties panel for Channel 4, showing X (ft) at -5.4, Y (ft) at 2.1, and a Beam width of Narrow. At the bottom right, there is a 'Dante Output...' button.

Shure MXA910 / MXA920

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Set Camera preset
1~8 to correspond
to Shure
microphone's 1~8
lobes



Support Sennheiser Microphone



- Sennheiser TeamConnect Ceiling 2

Sennheiser's Microphone provides the speaker's angle information, and 8 angle ranges are set through Sennheiser software. Lumens CamConnect sets camera 8 presets to correspond to 8 angles from Sennheiser microphone.



SENNHEISER TCC2

Room dimensions:

Small room ($< 50 \text{ m}^2$)

The TCC2 may also be used effectively in smaller rooms (e.g. meeting rooms $< 50 \text{ m}^2$), depending

on the room acoustics, the ambient noise and

the presenter's speaking volume

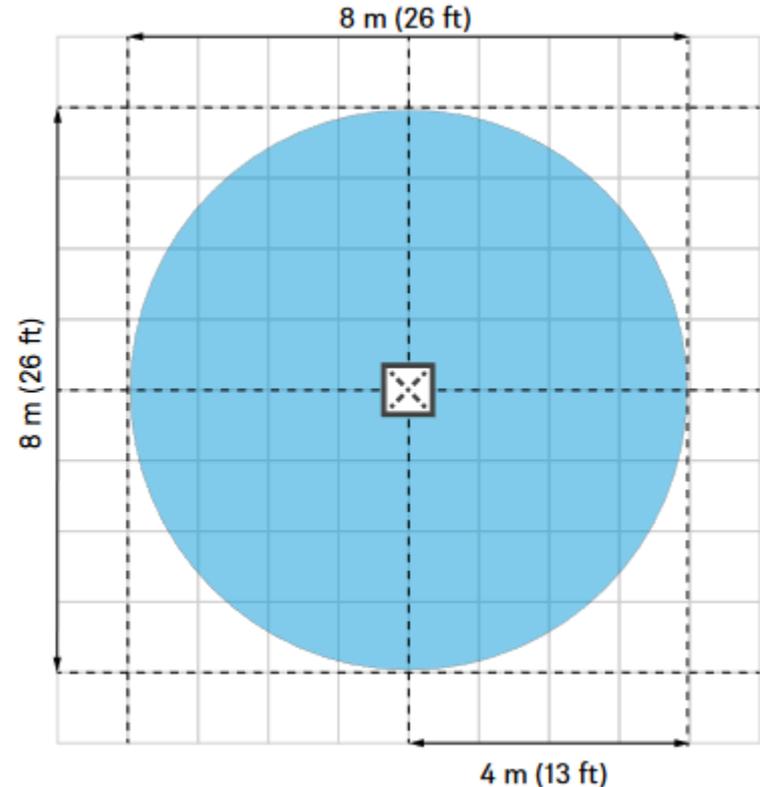
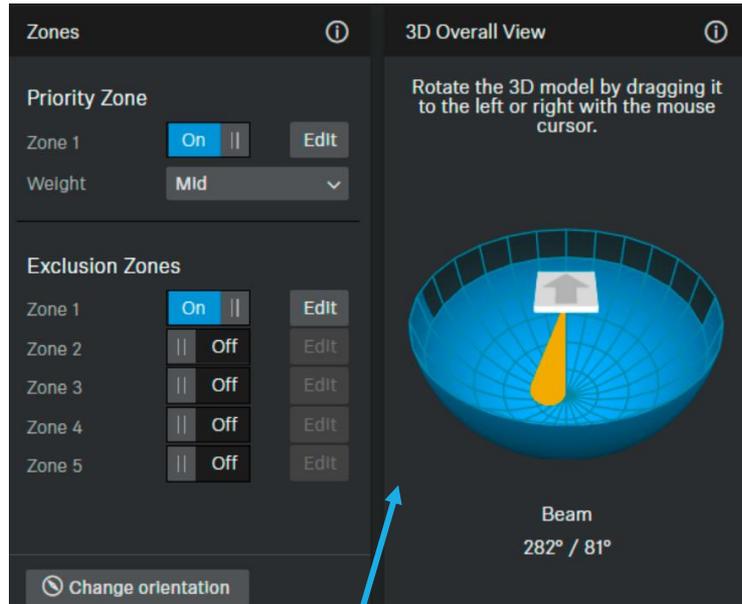


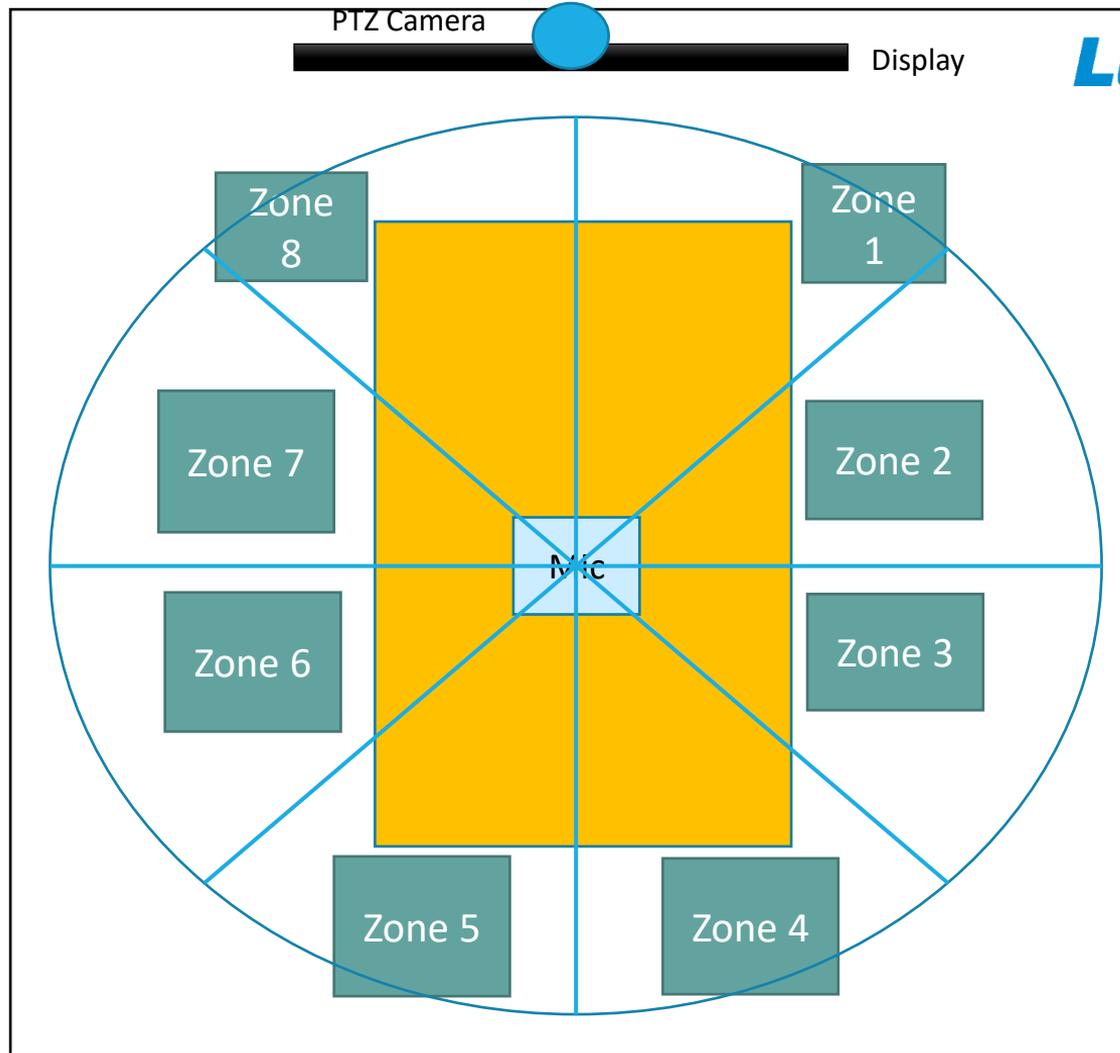
Fig. 1: Two-dimensional coverage of the TCC2

SENNHEISER Microphone

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SENNHEISER Software



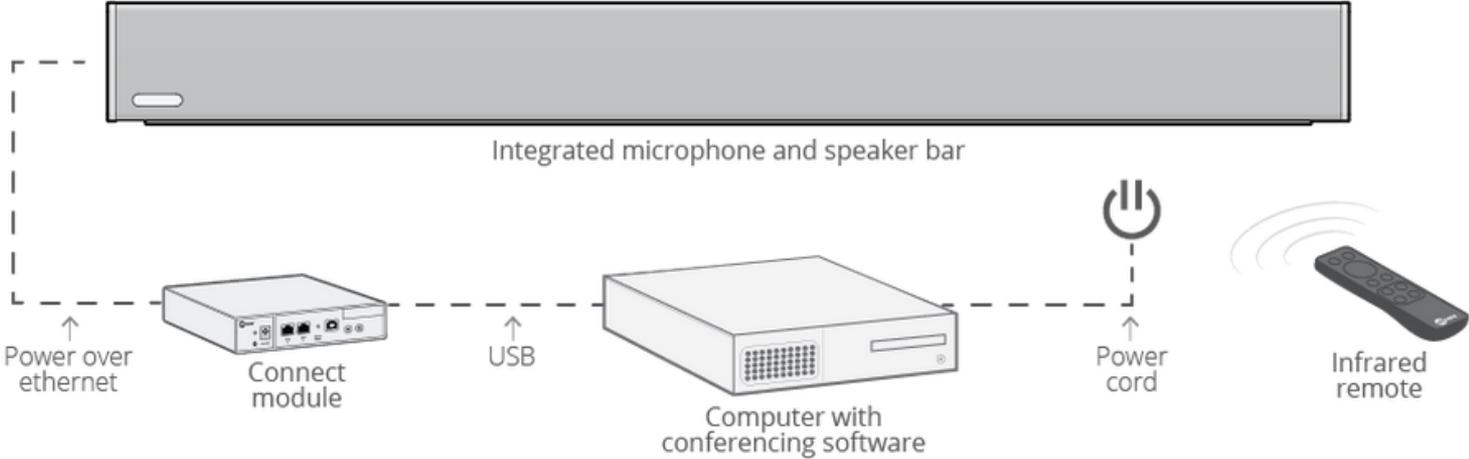
Support Nureva Microphone

CamConnect v1.0.1 will support HDL300

- Nureva HDL300

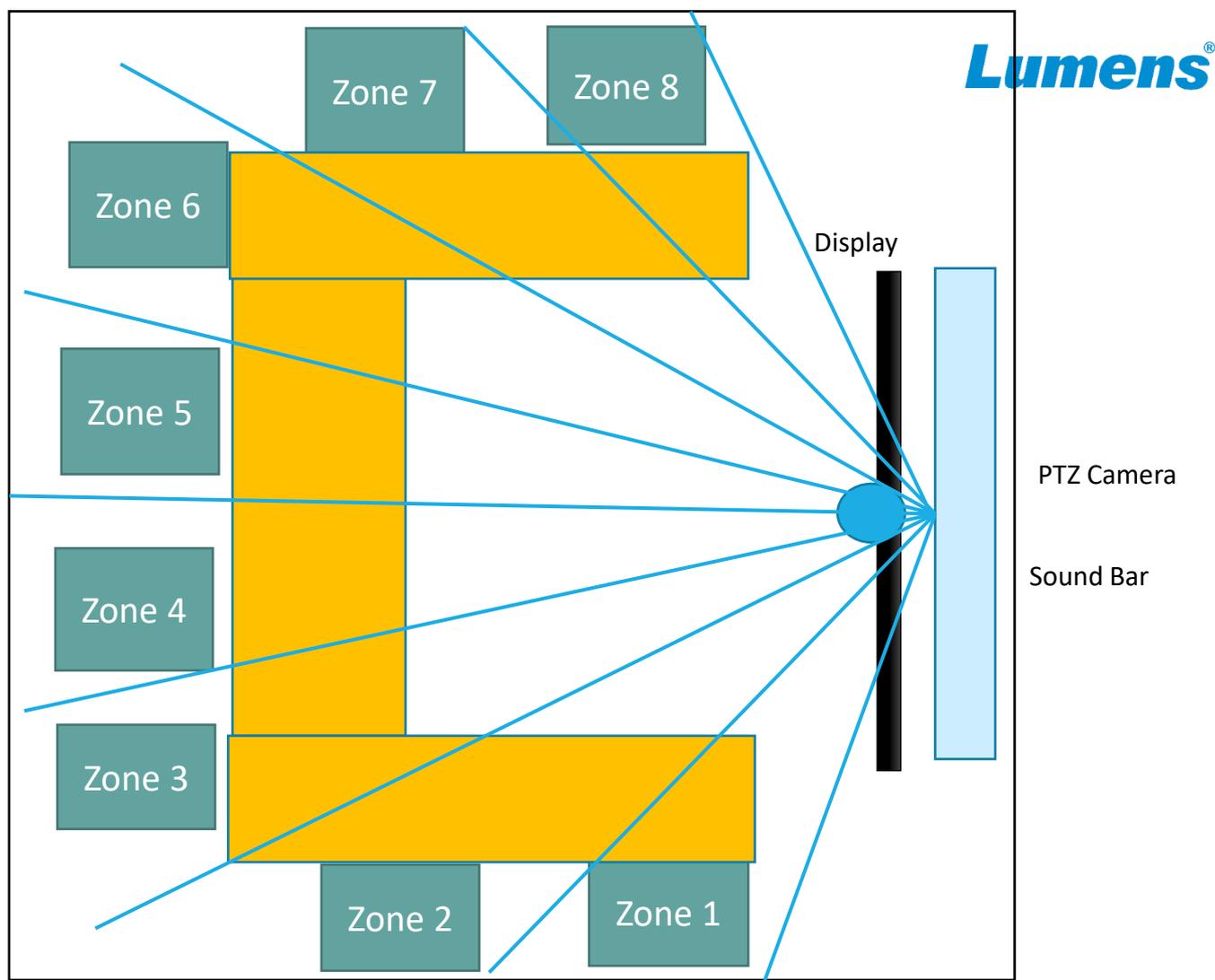


Nureva Sound Bar (Mic + Speaker)



Nureva

Nureva HDL300's Microphone provides the speaker's angle information, and 8 angle ranges Lumens CamConnect sets camera 8 presets to correspond to 8 angles from Nureva microphone.



CamConnect Next Step

Integrate Below Microphone Brand and Model

1. Nureva HDL410
2. ClearOne BMA 360
3. Yamaha ADECIA Ceiling Microphone
4. AudioTechnica ATND1061