

MT300 Matrix Tracking Box

— User Manual —

Federal Communication Commission

NOTE: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radiofrequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

FCC Caution: Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

This device complies with part 15 of the FCC Rules.

Operation is subject to the following two conditions:

- (1) This device may not cause harmful interference, and
- (2) this device must accept any interference received, including interference that may cause undesired operation.

This Class A digital apparatus complies with Canadian ICES-003. Cet appareil numérique de la classe A est conforme à la norme NMB-003 du Canada.

PSTI Statement of Compliance

Please refer to the following website: <https://www.aver.com/product-security-advisory>

Warning

This is a class A product. In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures.

Caution

Risk of Explosion if Battery is replaced by an Incorrect Type. Dispose of Used Batteries According to the Instructions.

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The information contained in this documentation is subject to change without notice.

More Help

For FAQs, technical support, software and user manual download, please visit:

Non-USA

Download Center: <https://www.aver.com/download-center>

Technical Support: <https://www.aver.com/technical-support>

USA

Download Center: <https://www.averusa.com/pro-av/support/>

Technical Support: <https://averusa.force.com/support/s/contactsupport>

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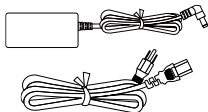
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Overview

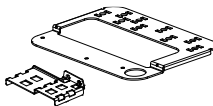
Package Contents



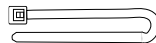
MT300
Matrix Tracking Box



Power Adapter &
Power Cord



Cable Fixing Plate
(x2)



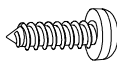
Cable Ties (x13)



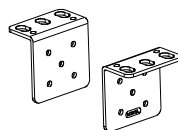
3.0 x 5mm
Flat Head Screw (x5)



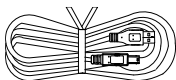
3.0 x 5mm
Truss Head Screw
(x4)



M3 x 10mm
Screws (x4)



Rack Mount Bracket
(x2)



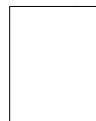
USB 3.0 Cable (x2)
1.5 m/4.92 ft



RS-422 Cable

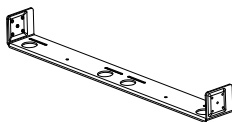


Quick Start Guide



Warranty Card
(Japan only)

Optional Accessories



Server Rack Mount

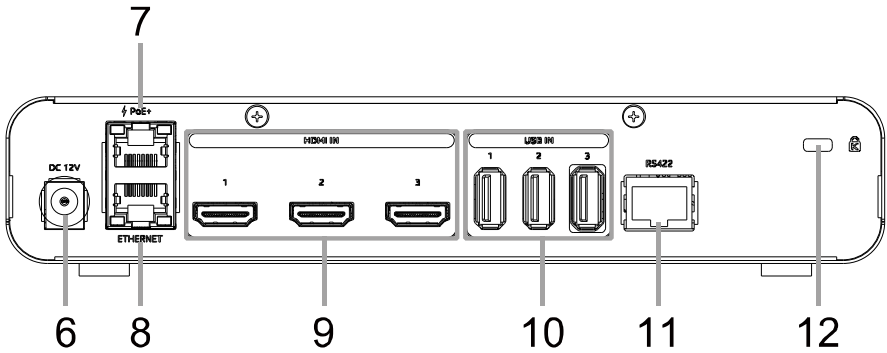
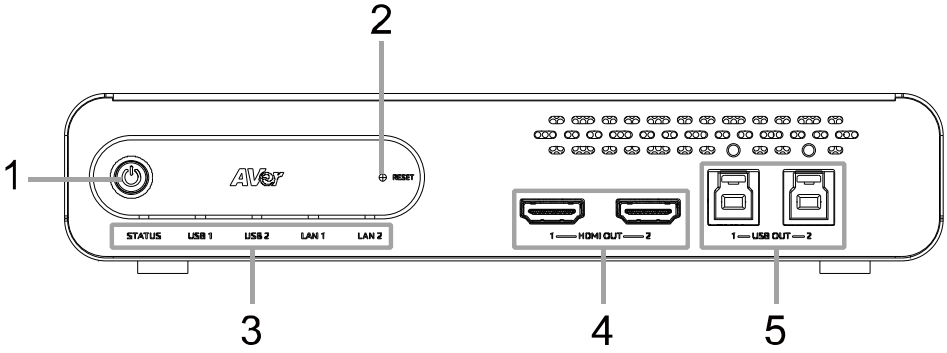


3.0 x 5mm
Flat Head Screw (x3)



3.0 x 5mm
Truss Head Screw (x2)

Parts Info



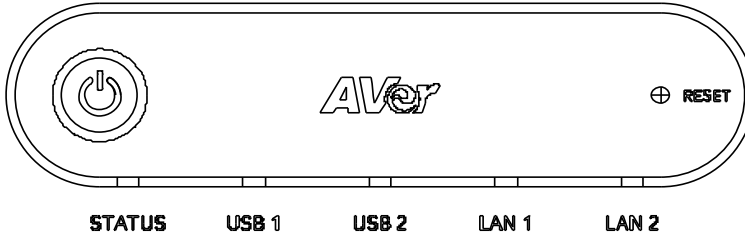
Front Panel

1. Power Button
2. Reset Button
3. LED Indicators
4. HDMI Out Port (x2)
5. USB Out 3.0 Type-B Port (x2)
(single USB out port per use only)

Back Panel

6. DC Power Jack
7. PoE+ Port IEEE 802.3AT
8. Ethernet Port
9. HDMI In Port (x3)
10. USB In 2.0 Type-A Port (x3)
11. RS-422 Port
12. Kensington Lock

LED Indicators



STATUS

Color	Status
Solid orange	Standby
Solid green	Normal
Flashing green	Firmware upgrade

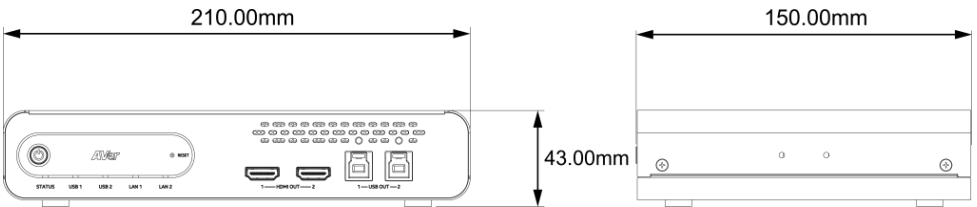
USB 1, USB 2

Color	Status
Solid green	Connected
Flashing green	Streaming

LAN 1, LAN 2

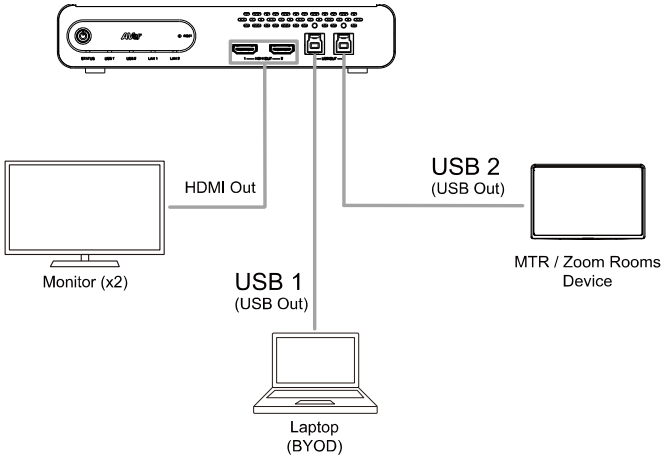
Color	Status
Solid green	Connected

Dimensions

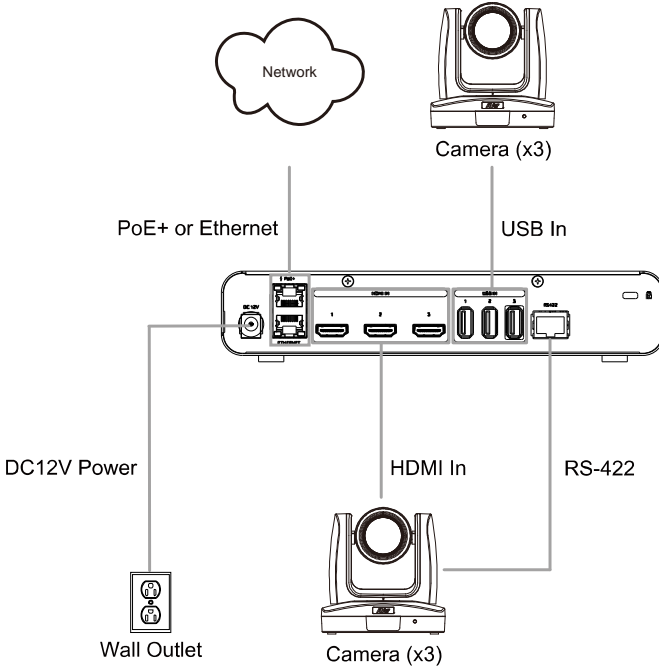


Connections

Front Panel



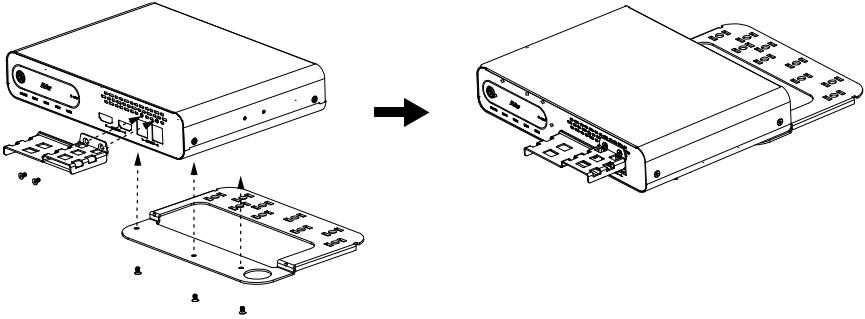
Back Panel



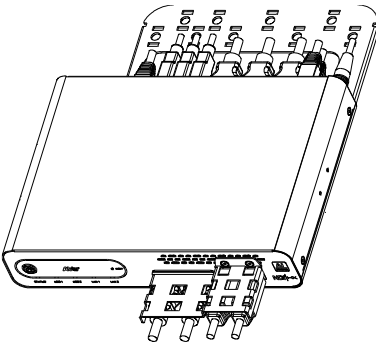
Installation

Cable Fixing Plate Installation

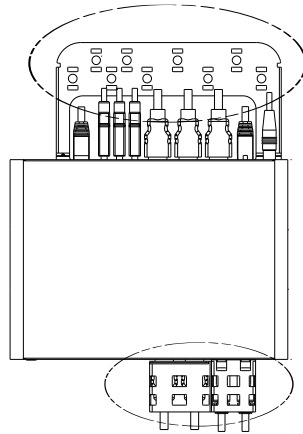
1. Secure the cable fixing plates to the tracking box with 5 flat hat 3.0 x 5 mm screws in the package.



2. Plug in cables.

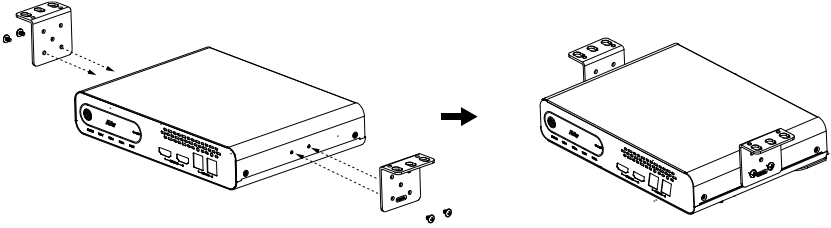


3. Use 13 cable ties in the package to secure the cables and cable fixing plates.

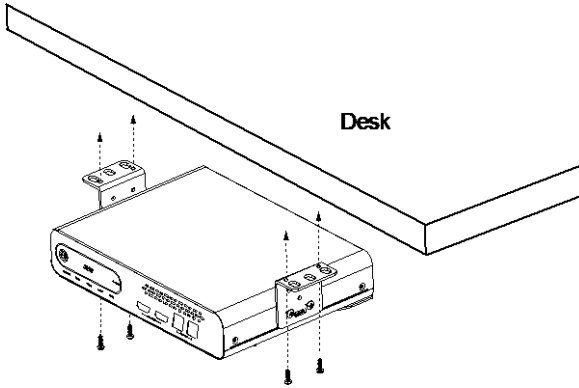


Desk Mount Installation

1. Secure the mount brackets on the tracking box.
Screw: 4 truss head screws, 3.0 x 5 mm

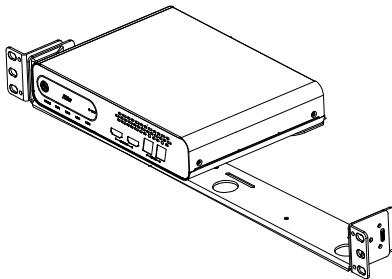


2. Install the mount brackets and the tracking box under the desk.
Screw: 4 screws, M3 x 10 mm



Server Rack Mount (Optional Accessories)

For details on optional accessories, consult your local dealer.



Get Started

Access the Web Interface

To access the web interface of the Matrix Tracking Box, you can use any of the following software to find its IP address:

- AVer IPCam Utility
- AVer PTZ Management

Note:

- The PoE+ port defaults to a static IP address of 192.168.1.168, while the Ethernet port uses DHCP.
- The MT300 default username and password is **admin/admin**.

AVer IPCam Utility

The screenshot displays the AVer IPCam Utility v2.7.1029.34 interface. At the top left, there is a 'Network Device' section with a dropdown menu set to 'Realtek PCIe GbE Family Controller' and a 'Search' button. To the right is a 'Login' section with 'User ID' and 'Password' input fields. Below these are tabs for 'Network Setting', 'Date/Time Setting', 'Maintenance', and 'Import/Export Config'. The 'Network Setting' tab is active, showing a 'Search Result' table with columns: No., Status, Progress, Model Name, Device Name, FW version, IPv4 Address, MAC Address, and IPv6. The table contains six rows of device information. Below the table is a 'Settings' section with a 'Device Name' input field, radio buttons for 'DHCP' and 'Static IP', and a 'Start IP Address' section with input fields for 'Start IP Address', 'End IP Address', 'Subnet Mask', 'Gateway', 'Primary DNS', and 'Secondary DNS'. A note at the bottom states '*Auto search will start after settings changed!' and a checkbox for 'Don't start auto search this time'. An 'Apply' button is located at the bottom right.

No.	Status	Progress	Model Name	Device Name	FW version	IPv4 Address	MAC Address	IPv6
1	Working		TR535	TR535	0.0000.33	10.100.105.56:80	00:18:1a:00:00:00	
2	Working		TR535	AVer	0.0.0000.06	10.100.105.44:80	00:18:1a:01:02:03	
3	Working		TR535	TR535	0.0.0005.05	10.100.105.91:80	00:18:1a:33:12:99	
4	Working		MD330U	MD330U	1.1.0001.0	10.100.105.71:80	00:18:18:18:54:51	
5	Working		AN-VC22BA	AN-VC22BA	1.1.2030.0	10.100.105.125:80	00:18:1a:09:77:3b	
6	Working		NH720UIS	NH720UIS	1.1.2000.1	10.100.105.17:80	8e:9b:a5:d1:25:0e	

To access the web interface:

1. Download IPCam Utility from AVer Download Center (<https://www.aver.com/download-center>) and launch the software.
2. Click **Search** to see available devices on the same local area network (LAN).

Note:

- Make sure your MT300 is connected to the internet.
- IPCam Utility and camera must be on the same LAN.

3. Double-click on your MT300's IP address in the **IPv4 Address** column to open the web interface in your browser.

When you log in for the first time:

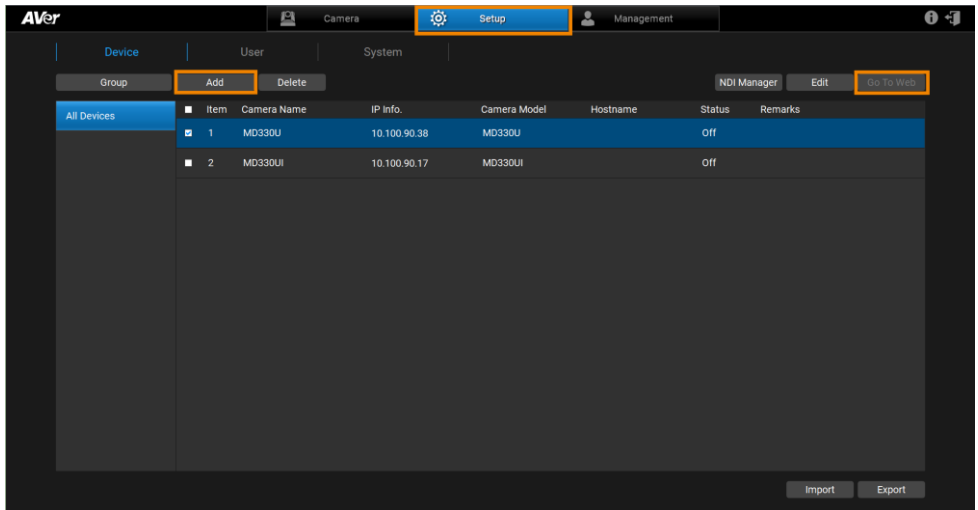
Change the username and password before logging in to the web interface.

- Username: Use 1-32 characters.
- Password: Use 8-32 characters and a combination of uppercase letters, lowercase letters, numbers, and symbols (%+=, -_ ^/ @ . ~). The password cannot be the same as the username.

To change your network to DHCP or static IP:

1. Select the checkbox of your camera.
2. Enter the default or changed username and password in the **Login** field.
3. Select **DHCP** or **Static IP**, then enter your network settings if applicable in the **Settings** section.
4. Click **Apply**.

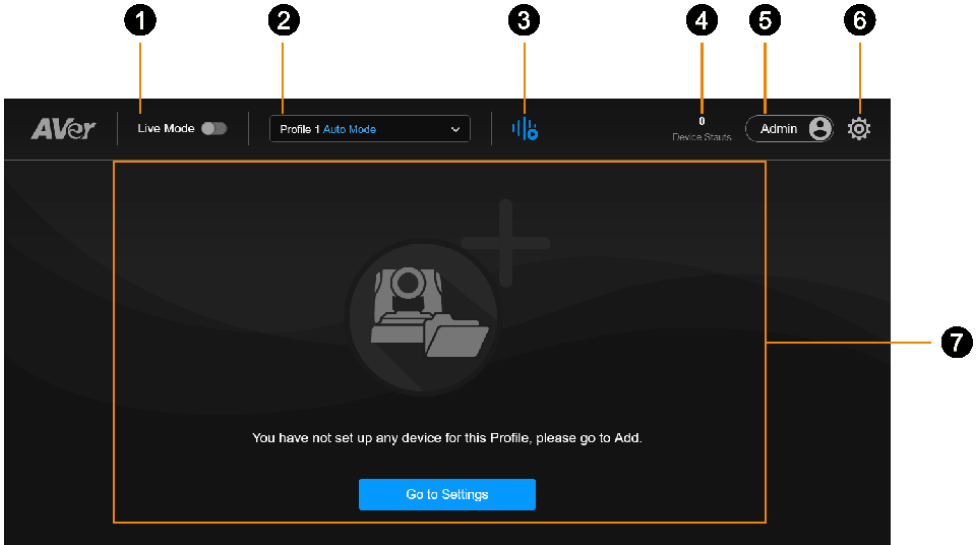
AVer PTZ Management



Note: The PTZ Management default username and password is **admin/admin**.

1. Download PTZ Management from AVer Download Center (<https://www.aver.com/download-center>) and launch the software.
2. Log in with the PTZ Management default username and password **admin/admin**.
3. Go to **Setup > Add**, then click **Auto Search** to see available devices on the same local area network (LAN).
4. Click to select your camera, enter the default or changed camera username and password, then click **Save** to add the camera to the device list.
5. Select the checkbox of your camera, then click **Go to Web** button to open the web interface in your browser.

Main Page




1. Live Mode

Toggle Live Mode on or off.

2. Select profile

Choose a defined profile.

- While you can save Auto Mode and Manual Mode settings in the same profile, only one mode is applied per use.
- To switch modes, click the **Settings** icon  on the main page > **Profile**.

3. Pause / Resume Voice-Tracking

Click to pause or resume voice-tracking.

4. Device Status

Displays the number of online devices and the number of all added devices.

5. Account

Switch between Admin and User accounts.

- A User can use voice-tracking function without editing the settings.

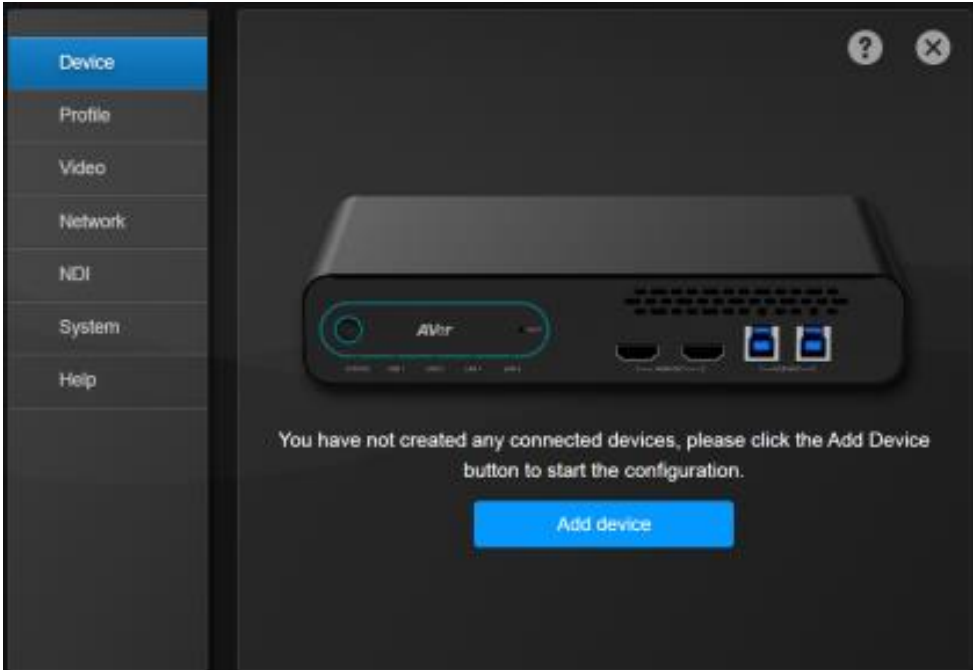
6. Settings

Click to enter the settings menu.


7. Live view

Displays the camera live view.

Add a Device



To add cameras and microphones:

1. Click the **Settings** icon  on the main page > **Device** > **Add device**.
2. Fill out the **Add New Device** dialog box.

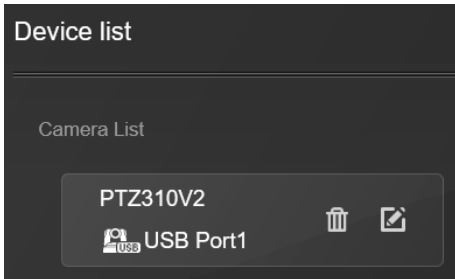
Item	Description
Select Camera or Microphone	Add a camera or a microphone.
Connect Camera via IP Connect Camera via USB Port Connect Camera via HDMI Port	<ul style="list-style-type: none">● IP: Connect the camera via Ethernet or PoE+ port.● USB: Port 1 and 2 is used for video streaming, while Port 3 is used for video and audio streaming. Enter a name to be displayed in the device list.● HDMI: Select Control via IP or Control via RS-422. When Control via RS-422 is selected, turn Support Human Tracking on or off and enter a name to be displayed in the device list.
Microphone Brand	When adding a microphone, select a microphone brand from the drop-down list.
IP Address	Automatically search or manually enter the IP address.
Camera Account	Enter your camera's account and password.

Camera Password	
Streaming via RTSP Streaming via NDI	<ul style="list-style-type: none"> ● Real-Time Streaming Protocol (RTSP): Make sure your camera and receiving device or application support RTSP. ● Network Device Interface (NDI): Make sure your camera and receiving device or application support NDI. Enter a name for your NDI group (optional).
Device Name	Enter a name to be displayed in the device list.

3. When finished, click **Save**. You can add up to 25 cameras and 25 microphones through USB, HDMI and IP.

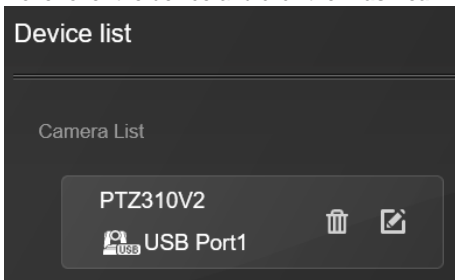
To edit devices:

1. Hover over the device and click the **Pencil** icon.
2. Edit device in the dialog box and click **Save**.



To delete devices:

Hover over the device and click the **Trash can** icon.



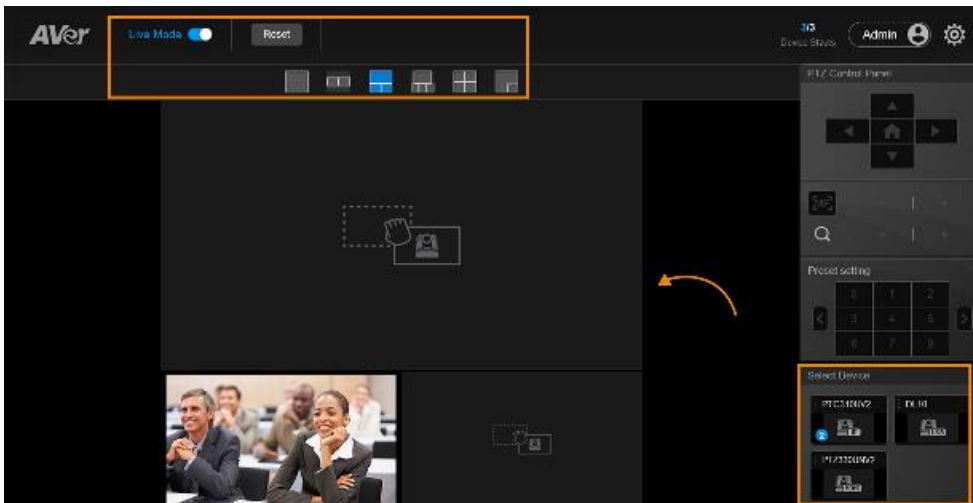
Set up Your MT300

The modes built into your MT300 help you present video feeds in a single stream composited gallery, follow the presenter in real time as they move, or frame the active talker. Choose from Live Mode, Manual Mode and Auto Mode.

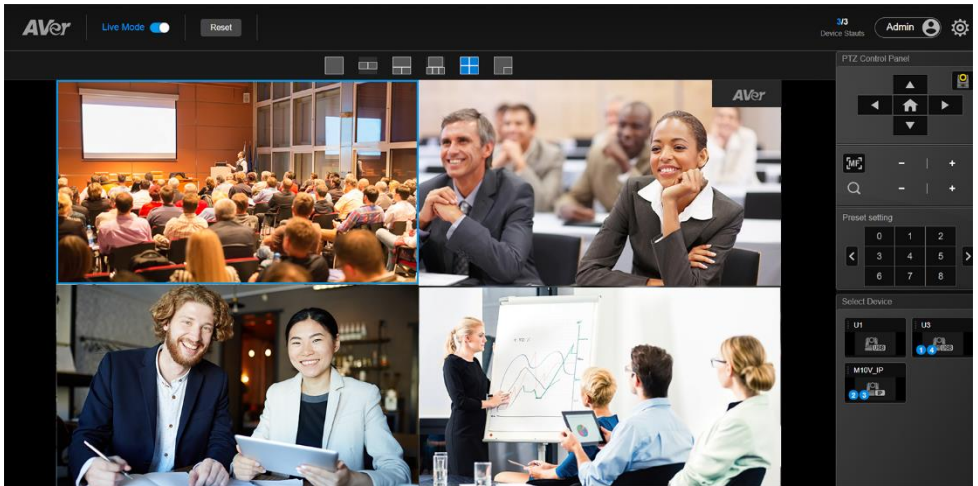
Before you start, make you have added your devices.



Live Mode

Live Mode requires no setup. Both Admin and User can see live views of added cameras, change layouts and use pan-tilt-zoom functionality.



1. Toggle on **Live Mode** to enter Live Mode.
2. Select a layout.
3. Drag a camera block from the **Select Camera** section and drop to a live view grid. A blue circled number will appear on the camera icon to indicate the grid position.



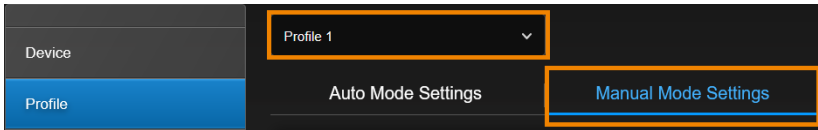
4. Click to select a live view. The selected live view will be in a blue frame.
5. Use the pan-tilt-zoom control panel to position and focus the camera, or click a number to call preset.
6. When a TR535 series camera is connected, click the Camera Switch Button  to switch between the PTZ camera and the Wide Angle camera.
7. Toggle off **Live Mode** to exit Live Mode. Live Mode settings are saved automatically. Your last selected profile in **Setting**  > **Profile** will be applied when you return to the main page.
8. To clear settings, click **Reset** to reset Live Mode to factory default settings.


Manual Mode

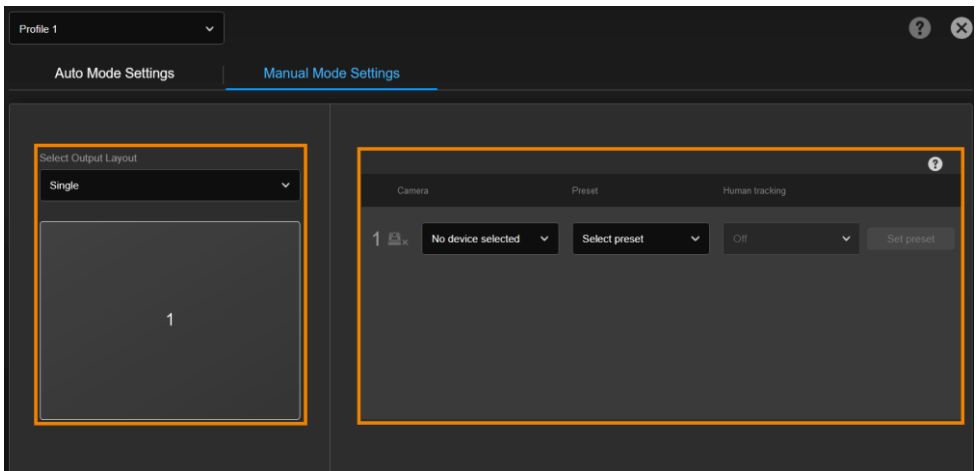
Follow the presenter in real time as they move using presets and Human Tracking modes.

Create up to 36 profiles to save your Manual Mode settings.

- You can rename a profile.
- While you can save Manual Mode and Auto Mode settings in the same profile, only one mode is applied per use.
- Switch to Manual Mode by clicking the **Manual Mode Settings** tab.
- A profile is saved and applied automatically when leaving the **Profile** page.

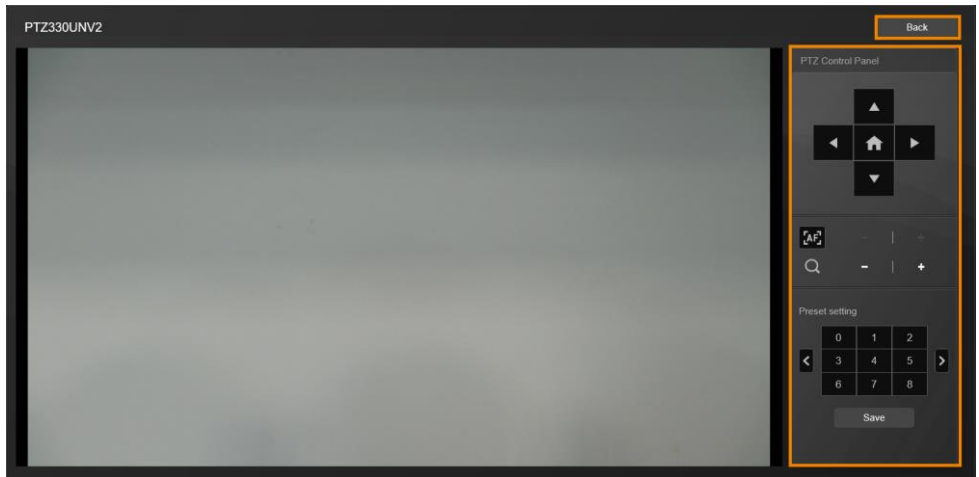



1. Click the **Settings** icon  on the main page > **Profile** > **Manual Mode Settings**.
2. Choose a profile from the **Profile** drop-down list to save your settings.



3. Select a layout from the **Select Output Layout** drop-down list for up to 4 cameras.
4. Select **Camera, Preset, Human Tracking** mode. Refer to <[Human Tracking](#)> for details.

Set a Preset



1. If you haven't defined presets for your camera, click **Set preset** to add presets.
2. Position your camera using pan, tilt, zoom and focus controls.
3. Click a number and click **Save** to save that position.
4. Click **Back** to return to the **Profile** page.
5. Click the cross icon  on the upper right corner to return to the main page.

Human Tracking

- For supported AVer cameras, refer to [Supported AVer Cameras](#).
- For camera settings, refer to your AVer camera's user manual.

Human tracking includes the following four modes:

- Presenter
- Zone
- Hybrid
- Segment (TR535 Only)

Presenter Mode example:

1. Both microphone channel 1 and preset 1 are set to the whiteboard.
2. Select **Presenter** from the **Human tracking** drop-down list.
3. When microphone channel 1 picks up audio from the presenter, the camera moves to preset 1. Presenter Mode frames the presenter on screen and continues to follow them.

Channel 1 detects voice

Camera moves to preset 1

Presenter Mode is turned on



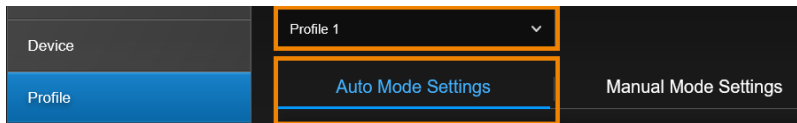
Auto Mode (Channel)


Frame the active talker with voice-tracking functionality by linking AVer cameras with third-party microphone systems (supported models) from Audio-Technica, Biamp, Bosch, ClearOne, Nureva, Sennheiser, Shure and Yamaha.

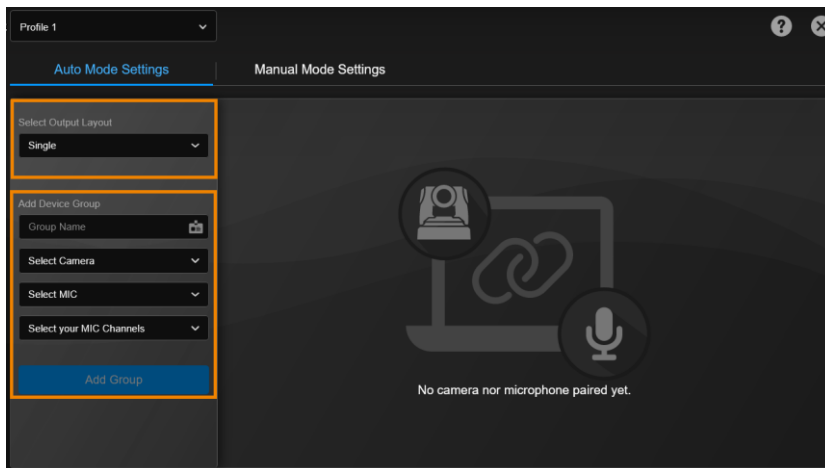
Third-party microphone systems may require setup in their manufacture software. For details on settings, please refer to <[Supported Microphones](#)>.

Create a Profile and a Device Group:

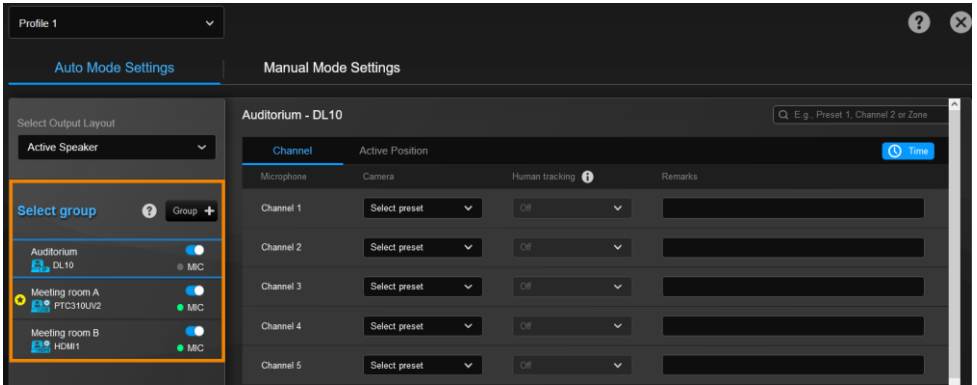
- You can rename a profile.
- While you can save Manual Mode and Auto Mode settings in the same profile, only one mode is applied per use.
- Switch to Auto Mode by clicking the **Auto Mode Settings** tab.
- A profile is saved and applied automatically when leaving the **Profile** page.



1. Click the **Settings** icon  on the main page > **Profile** > **Auto Mode Settings**.
2. Choose a profile from the **Profile** drop-down list to save your settings.

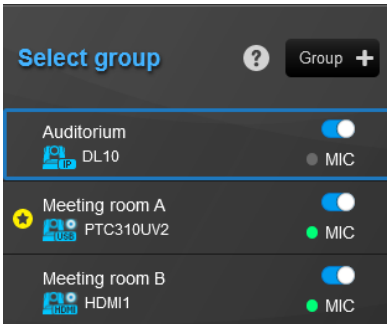


3. Select a layout from the **Select Output Layout** drop-down list for up to 3 cameras.
4. Add up to 25 groups of AVer camera and microphone pairs in the **Add Device Group** dialog box.



5. View your device groups in **Select group**.

Select Group



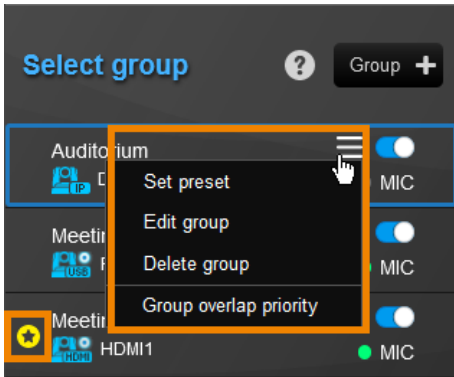
The **Select group** menu includes:

- **Device status:** Click the question mark icon for reference.

	Camera is sending data to MT300
	Device online
	Device offline
	Incorrect account or password

- **Group +:** Add a camera and microphone group.
- **Toggle switch:** Enable or disable a group.
- **MIC indicator:**

	Green	Online
	Gray	Offline



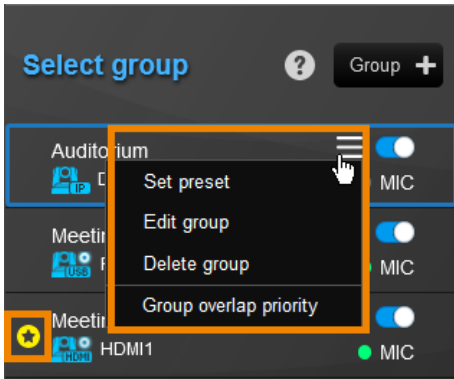
Hover over a group to display the hamburger menu. Click the menu to:

- Set presets
- Edit a group
- Delete a group
- Set a group overlay priority


This is designed for the groups sharing one camera. When these microphones receive the same sound source, the camera moves to the preset defined in the priority group.

Set a Priority Group and Default Camera

When multiple microphone groups share one camera and receive the same sound source, the camera goes to the preset defined in the priority group.



- **Priority Group**

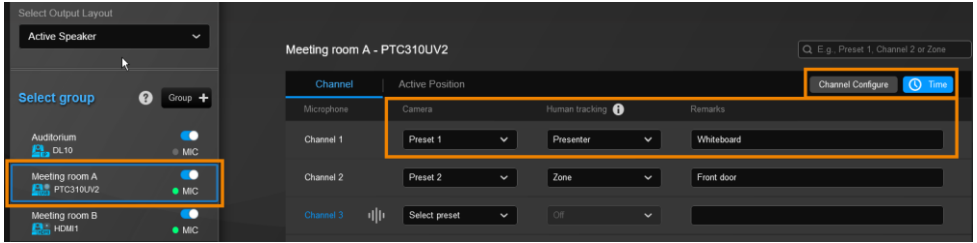
Select **Group overlap priority** on the hamburger menu to set a priority. To cancel, deselect. The star icon  indicates a priority group.

- **Time to go to Preset 0**

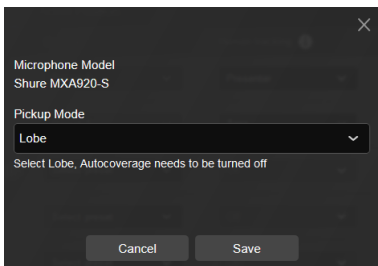
Click the **Time** button , select **Enable after below time interval** in Time to go to Preset 0 and enter interval time (minutes/seconds).

When the microphone detects no sound, the camera will go to preset 0, and the live view will switch to the priority group's camera view. Please refer to [<Set a Preset>](#) chapter if you haven't set up a preset position.

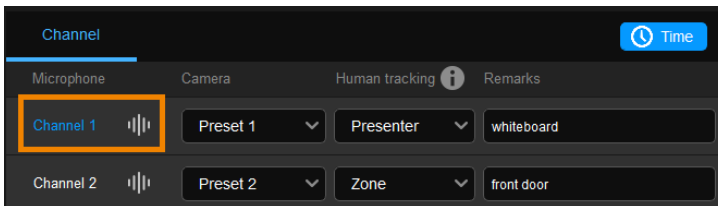
Pair Microphone Channels with Presets



1. Select a device group in **Select group**. A blue frame indicates that it is selected.
2. Select a preset from the **Select preset** drop-down list under **Camera** for each microphone channel.
3. Select a **Human Tracking** mode. Please refer to [<Human Tracking>](#) for details.
4. Add notes in the **Remarks** field, such as “whiteboard” to identify the location.





5. Click **Channel Configure** to select a pickup mode based on your microphone setting.
6. When finished, click **Save**.



7. Click the **Time** button  to set a duration.

Item	Description
Time to trigger Preset	Move to a preset after the microphone detects a sound.

Multiple Speakers Mode behavior	Select Back to Preset 0 for 3 or more multiple sound sources. Then set up Time to trigger and Time to quit Multiple Speaker Mode.
Time to go to Preset 0	Select Enable after below time interval , and set a time interval for the camera to move to Preset 0 when it detects no sound. The camera view will switch to the camera of the priority group  .
Far end speakers trigger Preset 0 (Sennheiser microphones only)	During video conferencing, when the local microphone detects remote sound played by the computer, the local camera will go to Preset 0 and display the live view.

8. The pairing is complete. The voice-tracking icon  next to a channel indicates that it detects a voice. The blue channel marks the current preset.

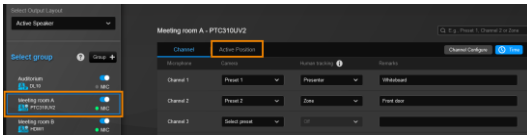
Auto Mode (Active Position)

Active Position reports active talker positions from supported microphones in the form of X, Y, Z coordinates to deliver enhanced camera tracking.

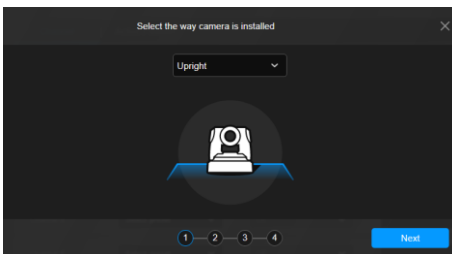
Active Position supports:

- USB-connected AVer cameras
- IP-connected AVer cameras
- Shure MXA920 Ceiling Array Microphone

To set up Active Position:

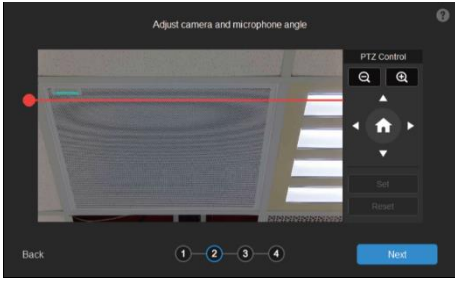


1. Make sure the USB-connected AVer camera has been paired with a Shure MXA920 in [Add a Camera and Microphone Group](#).
2. Select a device group in **Select group**. A blue frame indicates that it is selected.
3. Click the **Active Position** tab. For first-time setup, calibrate the camera and microphone as prompted.




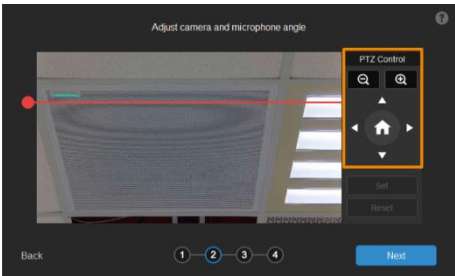
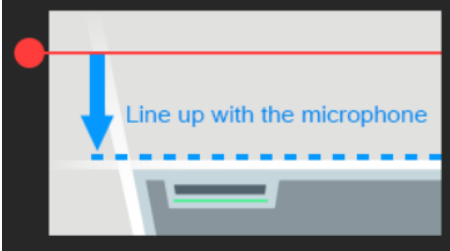
Step 1

4. Select the way camera is installed from the drop-down list and click **Next**.

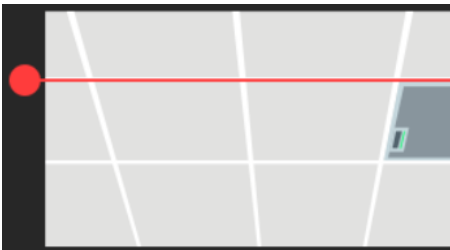


Step 2

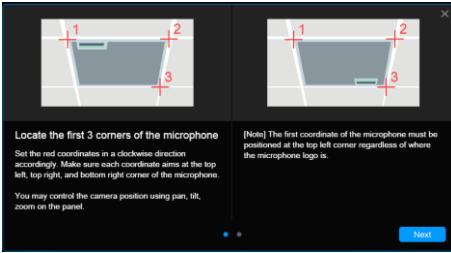
5. Align the red line with the top or bottom edge of the microphone by dragging the red dot.
 - Click the question mark  for reference.



6. Adjust the camera angle using pan, tilt and zoom controls, if the microphone appears at a slight angle.
 - Zoom controls here are for alignment only and don't affect the zoom ratio of the camera.



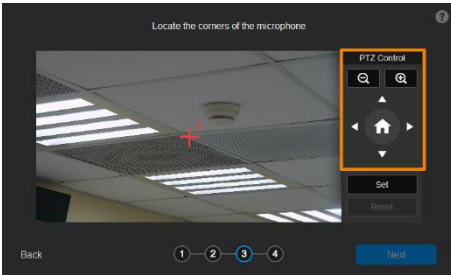
- The microphone doesn't need to be in the center of the live view, as long as the red line is aligned with the edge.
7. Click **Next**.



Step 3

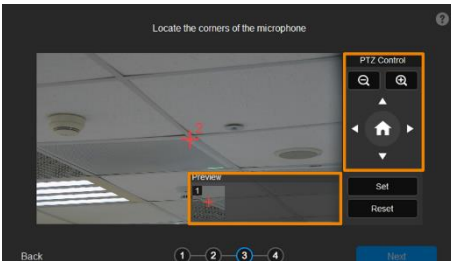
8. Starting with the upper left, locate 3 microphone corners in a clockwise direction.

- Click the question mark for reference.

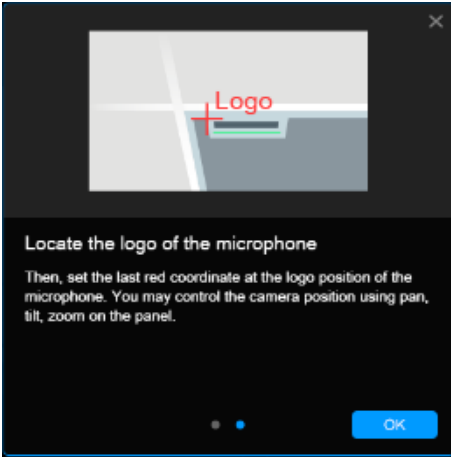


9. Move the red cross to the 1st corner (upper left) in the live view using pan, tilt and zoom controls.

10. Click **Set**. The saved location will appear in the thumbnail.



11. Repeat the steps to location the 2nd (upper right) and 3rd corners (lower right).

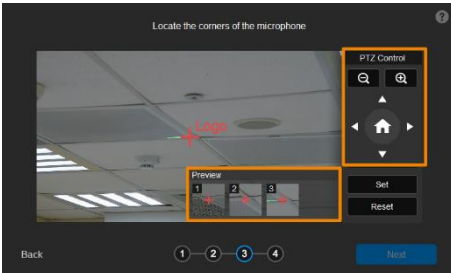


12. Finally, locate the logo on the microphone to indicate its orientation. Move the red cross to the logo in the live view using pan, tilt and zoom controls.

- Depending on the microphone orientation, the logo corner may be the same as one of the 3 corners.

13. Click **Set**. The saved location will appear in the thumbnail.

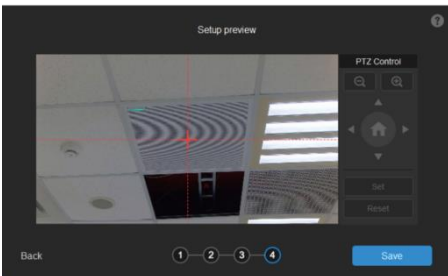
14. Click **Next** after locating 3 corners and the logo. Or click **Reset** to relocate all of them.



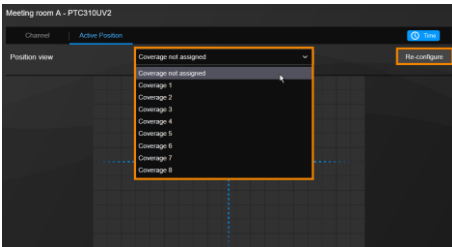
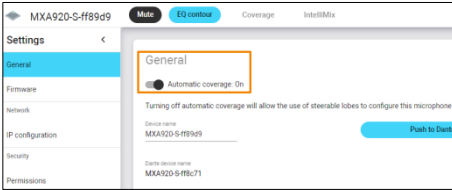
Step 4

15. Make sure the red cross appears in the center of the microphone, and click **Save**.

16. To reconfigure, click **Back**.




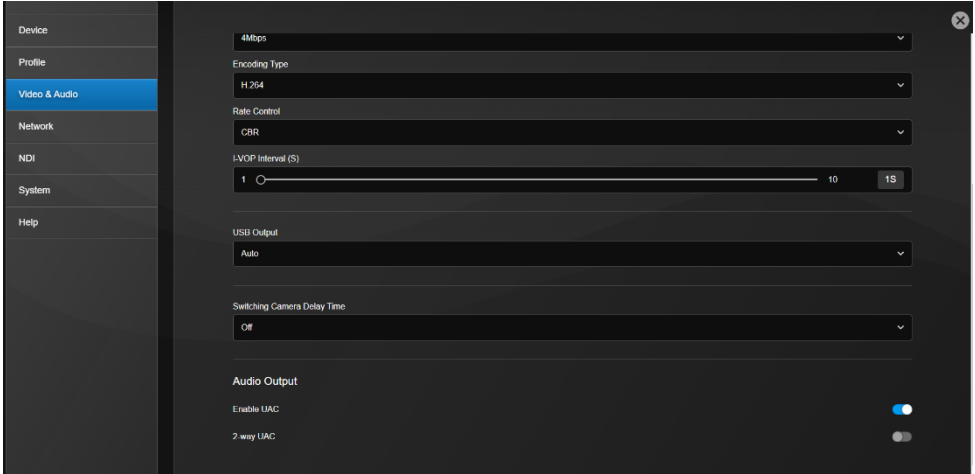
To adjust or add a coverage area:



1. Open the MXA920 web application.
2. Go to **Settings > General > Automatic coverage**.
3. To add a mix of up to 8 dynamic and dedicated coverage areas, turn on **Automatic coverage**.
 - The default setting is a 30 by 30 foot (9 by 9 meter) dynamic coverage area.
4. To add more coverage areas, go to **Coverage > Add coverage**.
5. On the **Active Position** tab, select **Coverage not assigned** to use all MXA920 coverage areas.
6. Or select a coverage area that you have added in the MXA920 web application from the drop-down list.
 - Talker positions outside of the selected coverage area won't be picked up by the tracking box.
7. To change coverage areas, click **Re-configure**.

Video & Audio

Select the **Settings** icon  on the main page > **Video & Audio**.



Video Output

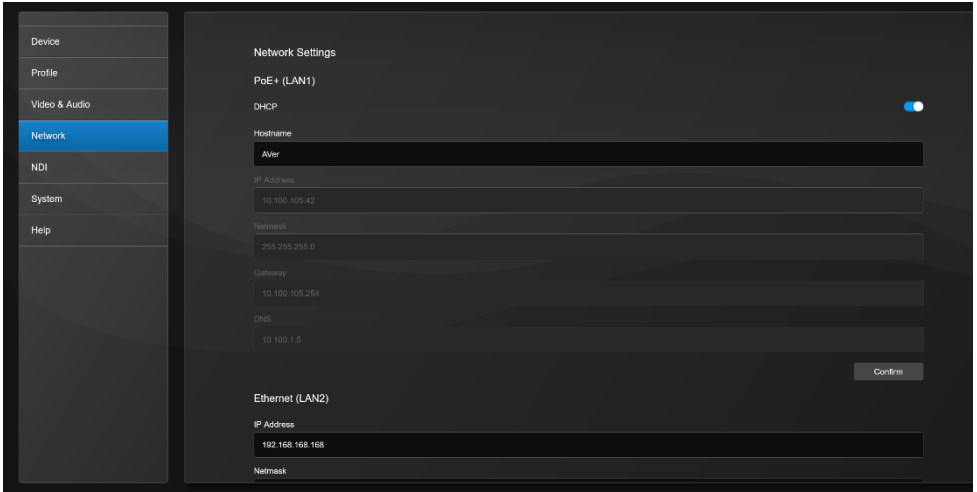
Item	Description
HDMI Video Output Resolution	Choose a video output resolution.
Stream Video Output	Choose a streaming output resolution for the live view.
Framerate	Choose a framerate.
Bitrate	Choose a bit rate.
Encoding Type	Choose H.264 or H.265 .
Rate Control	Choose Variable Bit Rate (VBR) or Constant Bit Rate (CBR).
I-VOP Interval (S)	Drag the slider to choose how often I-VOPs appear in a video stream. <ul style="list-style-type: none">● Shorter I-VOP intervals result in higher video quality but also larger file sizes.
USB Output	Choose a USB output source. <ul style="list-style-type: none">● Auto: Automatic detection.● USB #1: USB out port 1.● USB #2: USB out port 2.
Switching Camera Delay Time	Choose a delay time to avoid displaying the live view when the camera is in motion; it will refresh once the delay time is up.

Audio Output

Item	Description
Enable UAC	Enable 1-way audio input from the camera to the computer.
2-way UAC	Enable audio input from the computer to speaker connected to the USB port 3 on the MT300(N).

Network

Select the **Settings** icon  on the main page > **Network**.



PoE+ (LAN1)

Item	Description
DHCP	Toggle DHCP on or off.
Hostname	Enter a hostname that is displayed on devices such as an IP router. ● The default is AVer.
IP Address	Enter your network settings to set up a static IP connection. Toggle off DHCP first.
Netmask	
Gateway	
DNS	

Ethernet (LAN2)

Item	Description
IP Address	Enter your network settings to set up a static IP connection.
Netmask	
Gateway	
DNS	

RTMP Settings

Stream live video to a video platform such as YouTube.

To enable live streaming on YouTube:

1. Go to YouTube.
2. From the top right, click **Create > Go live**.
3. Copy and paste your YouTube server URL and stream key into the web interface.
4. Click **Start Stream** to start streaming, **Stop** to stop streaming.

RTSP Settings

Turn on Real-Time Streaming Protocol (RTSP) Security to protect your video stream on media players such as VLC, PotPlayer and QuickTime by ensuring that only authorized users can access it.

- When RTSP Security is turned off, enter your camera's RTSP URL into the media player.
RTSP URL: rtsp://[camera IP address]/live_st1
- Example: rtsp://192.168.1.100/live_st1
- When RTSP Security is turned on, enter your camera's RTSP URL and username/password into the media player.
RTSP URL: rtsp://[username:password]@[camera IP address]/live_st1
- Example: rtsp://1:1@192.168.1.100/live_st1
- username/password: camera's username/password (web interface login)

HLS Settings

Configure HTTP Live Streaming (HLS) settings to provide adaptive bitrate streaming, which ensures smooth playback and minimizes buffering.

1. Enter the stream URL obtained from the streaming service or server.
2. Click **Start Stream** to start streaming, **Stop** to stop streaming.

HTTP Settings

Set a **TCP Command String Control Port** number. The default is 1315.

HTTPS

Enable HTTPS to establish a secure connection between your browser and your camera. To enable HTTPS access on your camera:

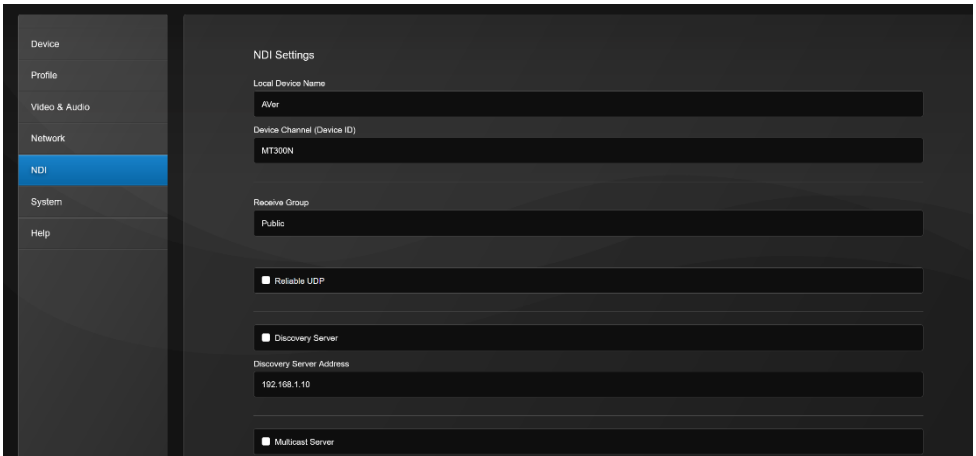
1. Obtain a SSL certificate for encryption and decryption in base-64 encoded format and use a private key in PKCS#8 format (unencrypted).
2. Package the required certificate content into PEM format. The SSL certificate uploaded to the camera must be in PEM format.
3. Click **Browse** to select the certificate file, and then click **Upload**.
4. Turn on **HTTPS**.

NDI

Network Device Interface (NDI) is a protocol that transmits high-quality, low-latency video and audio streams over IP networks.

Tracking box comes in two models: MT300 (without NDI) and MT300N (with NDI). To purchase NDI|HX upgrade, please visit NewTek Online Store (<https://store.newtek.com/ndi-hx-upgrade-for-cameras.html#>).

Select the **Settings** icon  on the main page > **NDI**.

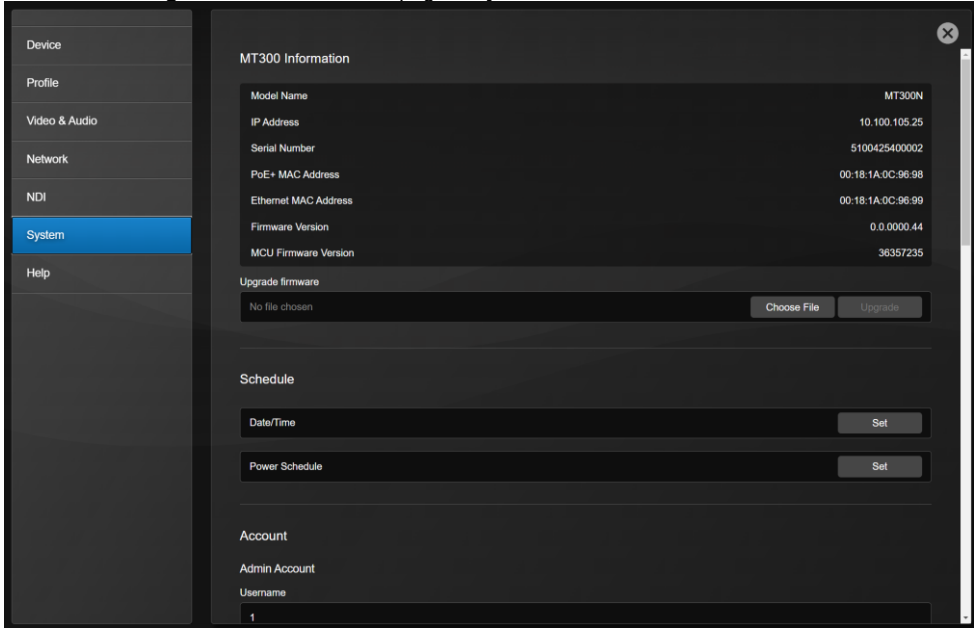


Item	Description
Local Device Name	Enter a name that identifies your camera group on the NDI software.
Device Channel (Device ID)	Enter a name that identifies your camera on the NDI software. <ul style="list-style-type: none">● The default is MT300 or MT300N.● Use no more than 10 characters, upper and lowercase letters, numbers and punctuation marks (! @ % ^ , . / : + ? [] { } - _ ~).
Receive Group	Enter a name for a receive group. <ul style="list-style-type: none">● All devices in the receive group receive the same NDI streams.● The receive group should remain public. If this is changed, you will need to join the group through NDI® Access Manager.
Reliable UDP	Enable Reliable User Datagram Protocol (RUDP) to improve streaming quality.
Discovery Server	Select the checkbox to enable discovery server to allow devices to discover and connect to each other on a network

	automatically.
Discovery Server Address	Enter the IP address of a server running a discovery server application.
Multicast Server	Select the checkbox to enable multicast server to allow efficient distribution of NDI streams to multiple receivers without overwhelming the network.
Multicast Server Address	Enter the IP address of a group of recipients that receive NDI streams from a multicast server.
Multicast Server Mask	Enter the network mask to specify the range of IP addresses that are eligible to receive NDI streams.
Multicast TTL	Enter a multicast time to live (TTL) value between 1-255 to control the distance multicast packets can travel.

System

Select the **Settings** icon  on the main page > **System**.



MT300 Information

Model Name	MT300N
IP Address	10.100.105.25
Serial Number	5100425400002
PoE+ MAC Address	00:18:1A:0C:96:98
Ethernet MAC Address	00:18:1A:0C:96:99
Firmware Version	0.0.0000.44
MCU Firmware Version	36357235

Upgrade firmware

No file chosen Choose File Upgrade

Schedule

Date/Time Set

Power Schedule Set

Account

Admin Account

Username

1

Item	Description
MT300 Information	Display MT300 information such as the IP address.
Upgrade Firmware	Download the latest firmware from AVer Download Center (https://www.aver.com/download-center).
Schedule	Date/Time: Set date and time for your tracking box. Power Schedule: Schedule specific times for your tracking box to start up, reboot, or shut down.
Account	Edit your admin and user account for login. <ul style="list-style-type: none"> ● Admin: The default username/password is admin/admin. ● User: The default username/password is user/user.
General	<ul style="list-style-type: none"> ● Language: Change the web interface language. ● Help us improve: Opt-in or opt-out of providing anonymous usage data. ● Factory default: Erase all data and settings and reset your tracking box to factory default settings. ● Reboot: Restart your tracking box.
Export / Import Settings	Export or import your tracking box settings and save debug files.
Shortcuts Key Setting	Set shortcuts for your USB keyboard or computer keyboard. You may set up to 36 shortcut keys.
Watermark Setting	Show or hide watermark on camera view. You may upload your

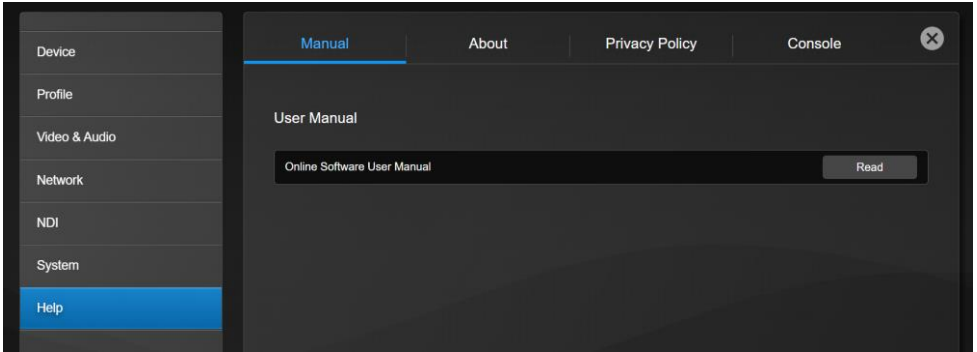
	<p>own watermark image, and select a watermark position from the drop-down list.</p>
--	--

- Support file format: PNG only.
- File size: Max. 2MB.

Help

View our user manual, terms and conditions, privacy statement, and the console.

Select the **Settings** icon  on the main page > **Help**.



Item	Description
Manual	View software user manual online.
About	View software terms and condition.
Privacy Policy	View software privacy policy.
Console	View and download real-time data on the camera-microphone action status for debugging purpose.

Specifications

DC Power	12V/1.5A
PoE+	42.5-57V / 0.6A
Reset Button	Yes
USB Inputs	3, Type-A for peripherals input #1,#2 are UVC only #3 can be UVC or UAC
USB Outputs	2, Type-B for user application Non-simultaneous output Automatic switch to the port that is connected to host. Port #1 has higher priority if both ports are connected to host (PC or MTR),. Resolution, providing 4K, 1080p FPS: 15, 30, 60
HDMI Inputs	3 Input resolution: up to 1080p per channel
HDMI Outputs	2 Simultaneous display, same configuration 1080p, 25Hz / 1080p, 50Hz / 1080p, 30Hz / 1080p, 60Hz / 4K, 25Hz / 4K, 50Hz / 4K, 30Hz / 4K, 60Hz
Ethernet	2, 1 PoE+, 1 RJ-45 Max connection number: 5 (Web/RTSP/RTMP) Resolution, providing 1080p and 4K FPS: 1, 5, 10, 15, 30, 60
LED Indicators	Yes Status, USB 1, USB 2, network 1, network 2
Security	Kensington security lock
RS-422	Yes
Operating Temperature	0-50°c
Dimension	4.3 x 21 x 15 cm (1.7 x 8.3 x 5.9 in.)
Installation	2, mountable in a rack or under a table

Specifications are subject to change without prior notice.

Troubleshooting


No human tracking.

- Make sure your camera supports human tracking. For supported AVer cameras, see [Supported AVer Cameras](#).
- If your camera is connected via HDMI and controlled via RS-422, make sure you select "Support Human Tracking" from the drop-down list. Hover over the device in the Device list and click the Pencil icon to edit.

Camera is too sensitive and flickering between presets.

- Select a longer length of time for [Time to Trigger Preset](#).
- If your camera is shared among several camera and microphone groups, set a priority group in [Group Overlay Priority](#).

Stop voice-tracking.

- Click the voice-tracking icon  on the main page to pause voice-tracking for the current profile.
- Mute the microphone by pressing its physical button or accessing its web interface.
- Use the toggle switch to disable the group in the [Select group](#) section.
Single video output: Audio is muted while video is still transmitting.
Multiple video output: Both audio and video stop transmitting.

Appendix

Supported AVer Cameras

Professional Tracking Cameras (US model name in italics)

TR200/300 Series	PTC300 V2 Series	PTC300 Series	PTC500 Series
TR211	PTC330U(N)V2 <i>TR333(N)V2</i>	PTC330 <i>TR331</i>	PTC500S <i>TR530</i>
TR315(N)	PTC320UV2	PTC330N <i>TR331N+</i>	PTC500+ <i>TR530+</i>
TR335(N)	PTC310UV2 <i>TR313V2</i>	PTC330U <i>TR333</i>	
	PTC310HWV2 <i>TR311HWV2</i>	PTC310(N) <i>TR311(N)</i>	PTC115 Series
		PTC310U(N) <i>TR313(N)</i>	PTC115 <i>TR320</i>
		PTC310H(N)	PTC115+ <i>TR320+</i>

Professional PTZ Cameras (do not support human tracking)

PTZ300 V2 Series	PTZ300 Series	PTC Series
PTZ330UV2	PTZ330	PTC500S
PTZ330UNV2	PTZ330N	PTC500+
PTZ310UV2	PTZ310	PTC115
PTZ310UNV2	PTZ310N	PTC115+
PTZ211		
PTZ231		

Distance Learning Camera

DL Series
DL30

Supported Microphones

Turn on **Multicast** on your router before setting up.


Some models may require setup in their manufacture software before using MT300.

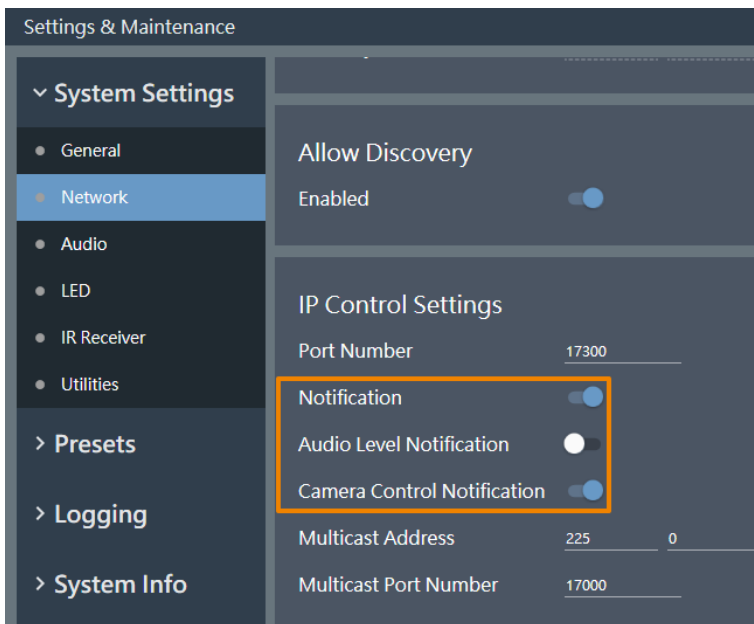
Audio-Technica

ATND1061LK/DAN

ATUC-50

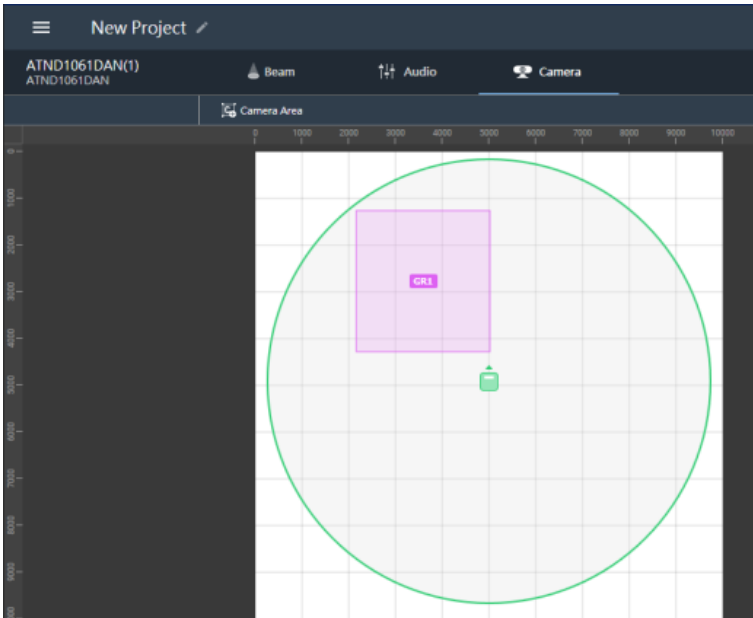
ATND1061LK Beamforming Ceiling Array Microphone Setup:

1. Open Digital Microphone Manager. Go to **Settings & Maintenance**  > **System Settings** > **Network** > **IP Control Settings**.
2. Turn on **Notification** and **Camera Control Notification**.



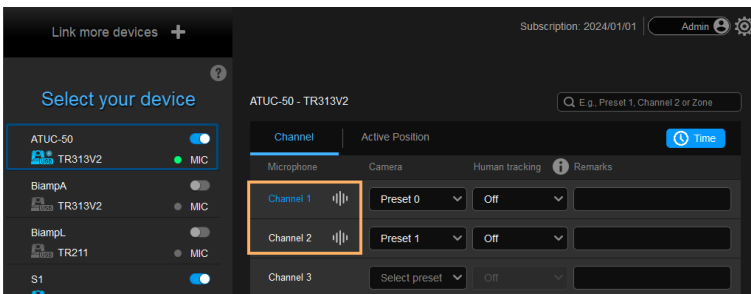
3. Select a microphone in the main area.

4. Go to **Camera > Camera Area**. Add a Camera Area by dragging it within the microphone pickup area.
 - Each Camera Area group corresponds to MT300 channel 1-8.



Pairing ATUC-50 with AVer camera presets for voice tracking :

- Each ATUC-50CU wired control unit supports a total of 100 ATUC-50DU discussion units.
- Each ATUC-50DU discussion unit corresponds to AVer PTZ Link channel 1-100.
- A discussion unit whose talk button is pressed first takes priority over others until it is mute. For example, Channel 1 (pressed first) takes priority over Channel 2 whose talk button is also pressed.



Biamp

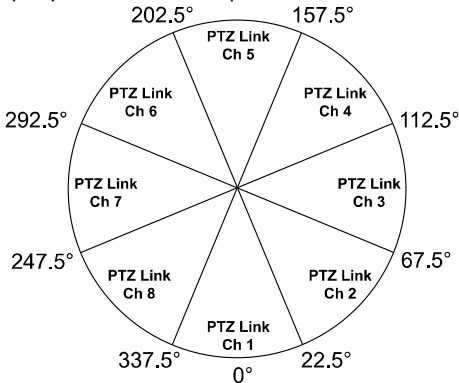
Tesira Digital Signal Processor
Parlé Ceiling Microphones

Hardware and Channels Overview

Tesira Digital Signal Processor	Tesira Forte X, Tesira Forte Rackmount, Tesira Server IO, Tesira Server.
Parlé TCM-X	Plenum network box + one ceiling-mount microphone array
Parlé TCM-XA	Plenum network box with built-in amplifier+ one ceiling-mount microphone array
Parlé TCM-XEX	One expansion ceiling-mount microphone array

Up to 2 ceiling microphone arrays are permitted per network box (one TCM-X or TCM-XA with TCM-XEX).

Each ceiling microphone array has 8 channels. MT300 divides the microphones' horizontal angles into 8 equal parts, which correspond to MT300 Channel 1 - 8.

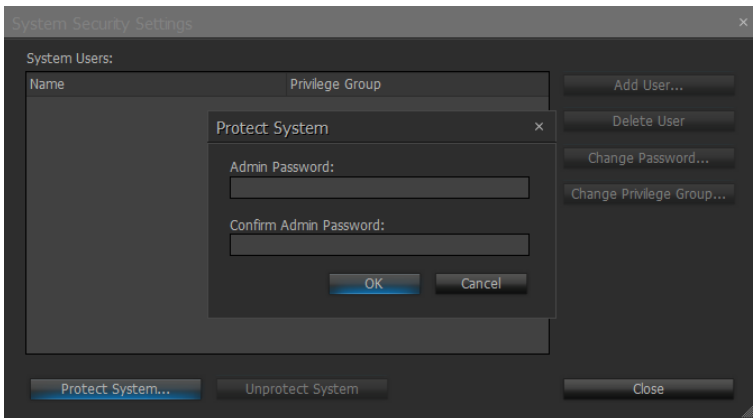


Microphone	Channel Start/End
AVerParleMic1	1-8 (ceiling mic 1) 9-16 (ceiling mic 2)
AVerParleMic2	17-24 (ceiling mic 1) 25-32 (ceiling mic 2)
AVerParleMic3	33-40 (ceiling mic 1) 41-48 (ceiling mic 2)
AVerParleMic4	49-56 (ceiling mic 1) 57-64 (ceiling mic 2)

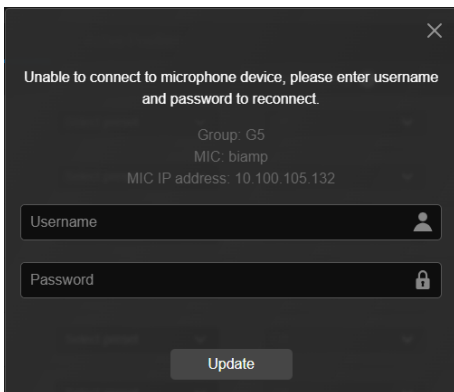
You can protect 3rd party media control access for the Tesira system using username and password.

To enable system security:

1. After the DSP has been configured, connect to the unprotected Tesira system with Tesira Designer Software.
2. Open the **System** menu > **Security** menu > **Manage System Security...**
3. Click the **Protect System...** button to create the admin user and password.



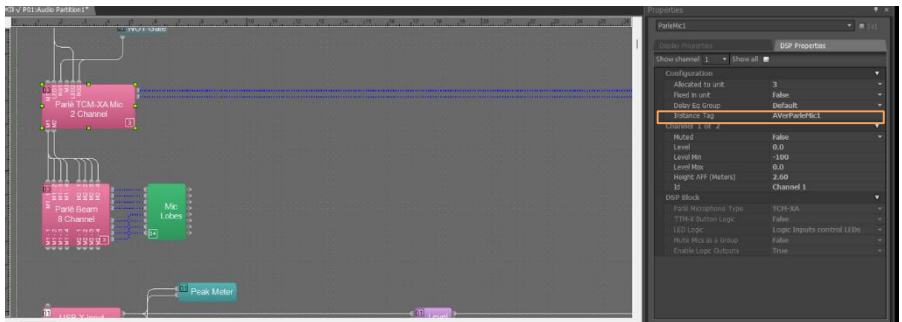
4. You'll be prompted to enter the same set of username and password when connecting to Biamp microphones in MT300.



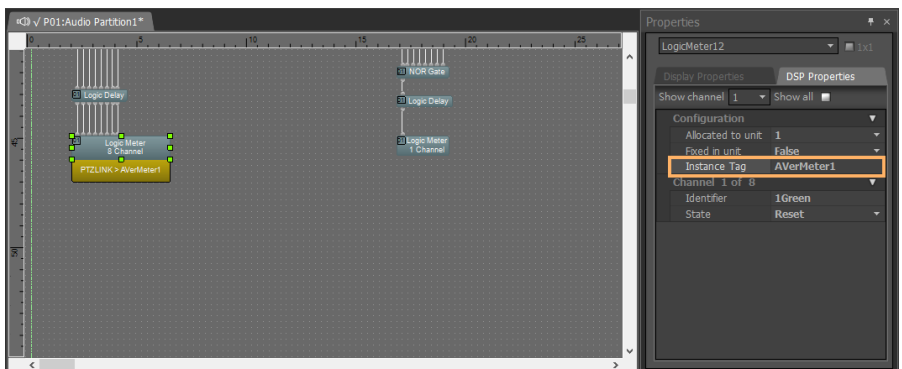
To set up Parl  TCM-X microphones:

1. Open Tesira Design Software.
2. After the TCM-X microphone has been added to the layout, the instance tag of the Parl  microphone block or Logic Meter block to be controlled must be the following.
To check or rename the instance tag of a specific block, click on that block, go to **Properties** panel > **DSP Properties** tab > **Instance Tag**.

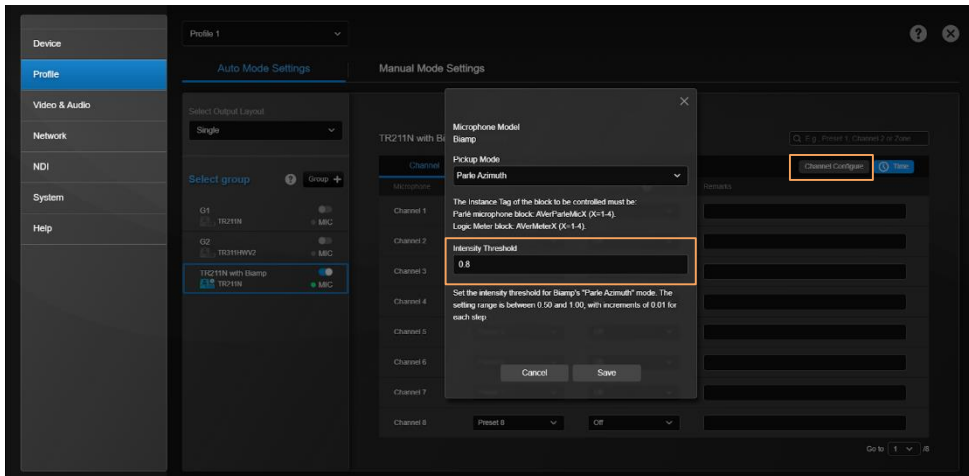
- Parl  microphone block: **AVerParleMicX** (X=1 - 4).



- Logic Meter block: **AVerMeterX** (X=1 - 4).



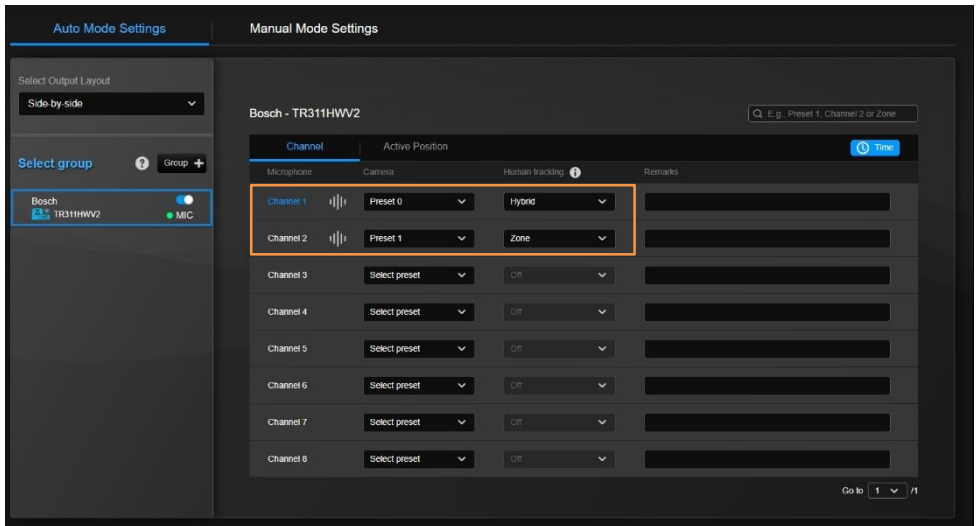
3. Click on **Channel Configure** and select a pickup mode in MT300 web interface. In **Parle Azimuth** mode, set the intensity threshold from 0.50 to 1.00 in increments of 0.01.
4. When finished, click **Save**.



Bosch

CCS 1000 D Control Unit
CCS 1000 D Discussion Device

- Each CCS 1000 D Control Unit supports up to 80 Discussion Devices.
- Assign each CCS 1000 D Discussion Device to one MT300(N) channel by changing the seat name.
- A discussion unit whose talk button is pressed first takes priority over others until it is mute. For example, Channel 1 (pressed first) takes priority over Channel 2 whose talk button is also pressed.



To set up CCS 1000 D:

1. Connect to the CCS 1000 D Control Unit through IP. Access the web interface with an administrator account.
2. Go to **User settings**, create a user for MT300(N) with the default username/password **ptzlink/ptzlink**. The password can be changed later. For **User rights**, select **Manage meeting**.

The screenshot shows the 'User settings' page with a list of users. A '+' icon is circled in orange, indicating the 'Add new user' action. The 'Add new user' dialog box is open, showing the following fields and options:

Field	Value
First name	AVer
Last name	Information
Username	ptzlink
Password	ptzlink
Confirm password	ptzlink

User rights:

- Manage meeting
- Configure
- Prepare meeting
- Prepare system
- Modify users

Buttons: Cancel, Save, Change password

3. Go to **Network and general settings > General settings**, deselect **Automatically shut down the system when not used** to avoid entering standby mode.

The screenshot shows the 'Network and general settings' page. The 'General settings' section is highlighted with an orange box, showing the following options:

Setting	Value
Hostname	ccs1000d
Wired	
Fixed IP	No
Automatically shutdown the system when not used	<input type="checkbox"/>

Buttons: Change network settings, Factory default

4. Go to **System Settings > Seats**, rename the **Seat name** ending with a space and a number to assign each discussion device to one MT300(N) channel of the same number.

Seat settings

(2-2)	Seat name	Mode	Camera	Pre-position
<input type="checkbox"/>	Seat 1	Normal	None	
<input type="checkbox"/>	Seat 2	Normal	None	

Selection mode De-init Remove disconnected seats

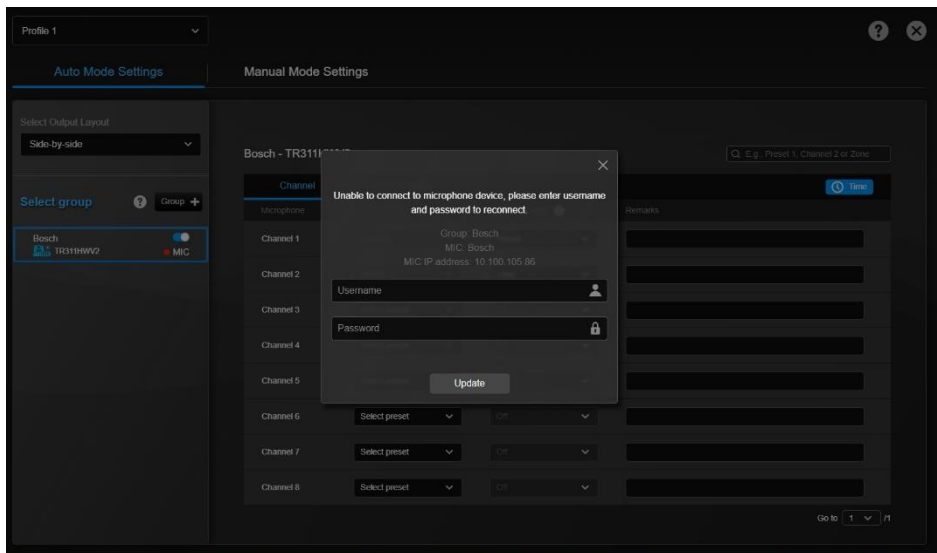
Home Back

Seat 1 corresponds to channel 1, seat 2 to channel 2, and so on.

5. You'll be prompted to enter the same set of username and password when connecting to Bosch microphones in the web interface.

Note:

CCS 1000 D Control Unit allows one login at a time. When connecting CCS 1000 D Discussion Devices to MT300 (N) web interface, make sure you are not logged in anywhere else.



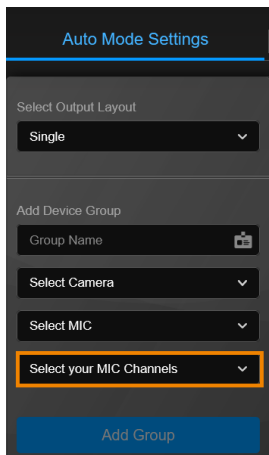
ClearOne

BMA 360 + CONVERGE® Pro 2 DSP Mixers

- CONVERGE® Pro 2 connects up to 3 daisy-chained BMA 360 microphone arrays.
- MT300 assigns 12 channels to each BMA 360. Unused channels are retained in the assigned BMA 360.

Daisy-Chained	Channel Start/End
1 st BMA 360	1-12
2 nd BMA 360	13-24
3 rd BMA 360	25-36

- When adding your device in MT300, select your MIC channels in the drop-down list according to the number of BMA 360 daisy-chained.



The screenshot shows the 'Auto Mode Settings' screen in the MT300 application. It features several configuration options:

- Select Output Layout:** A dropdown menu currently set to 'Single'.
- Add Device Group:** A section containing:
 - Group Name:** A text input field with a calendar icon for date selection.
 - Select Camera:** A dropdown menu.
 - Select MIC:** A dropdown menu.
 - Select your MIC Channels:** A dropdown menu, which is highlighted with an orange border in the image.
- Add Group:** A blue button at the bottom of the settings panel.

BMA 360D

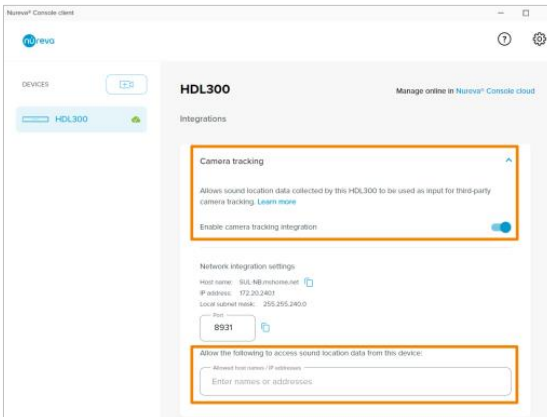
- Use CONSOLE AI Lite software to select preset beam patterns for common room or custom pattern for unique floorplans of up to 12 beams.
- Each microphone beam corresponds to one MT300(N) channel of the same number.

Nureva

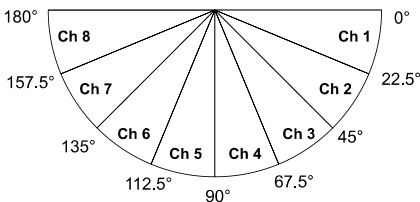
HDL300
HDL310
Dual HDL300
HDL410

To set up HDL microphones:

- Nureva Console Client:
 1. Turn on **Enable camera tracking integration**.
 2. Enter the IP address of the computer running MT300 in the **Allowed host names / IP addresses** field.

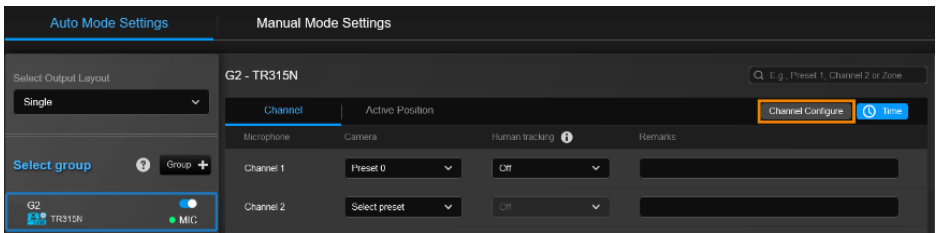


- MT300:
 - MT300 divides HDL microphones' horizontal angles into 8-24 equal parts, which correspond to MT300 channel 1-24.
 - When adding microphones in MT300, enter the IP address of the computer running Nureva Console Client in the **IP Address** field.

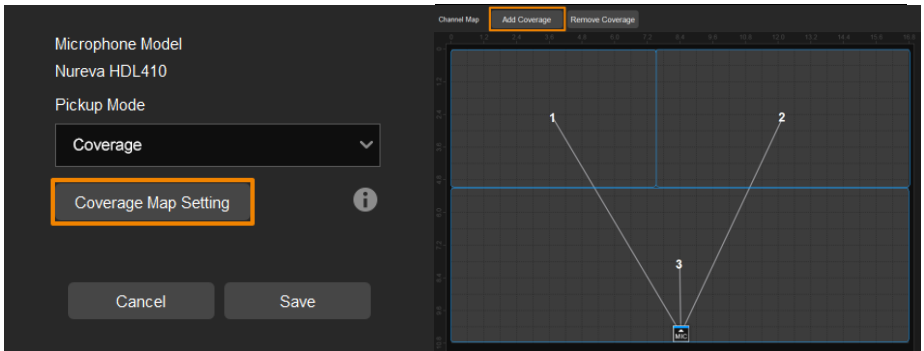


To add a coverage area for HDL410 in MT300:

1. Go to **Auto Mode Settings > Channel > Channel Configure**.



2. Select **Coverage** from the **Pickup Mode** drop-down list.
3. Click **Coverage Map Setting** > Click **Add Coverage**.



4. Add a coverage area by dragging it.
 - You can add up to 8 coverage areas per microphone.
 - When coverage areas overlap, the microphone will default to the area with the smaller number.

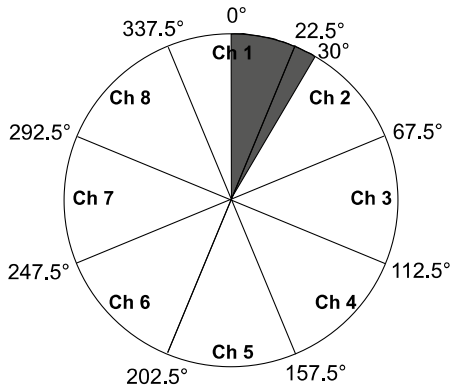
Sennheiser

TeamConnect Ceiling 2
TeamConnect Ceiling Medium

MT300 divides TeamConnect Ceiling 2's and TeamConnect Ceiling Medium's horizontal angles into 8-24 equal parts, which correspond to MT300 channel 1-24.

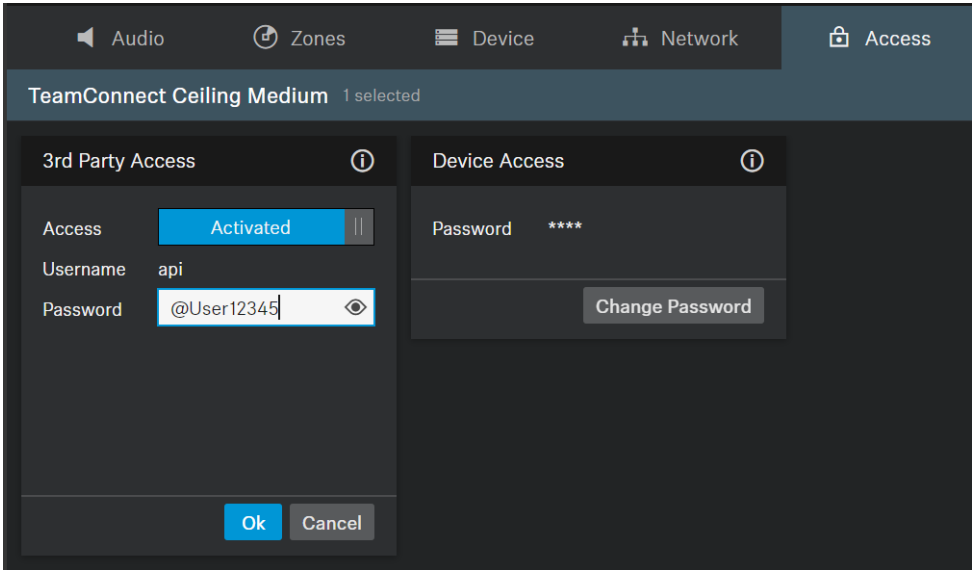
● TeamConnect Ceiling 2

An Exclusion Zone set in Sennheiser Control Cockpit also affects the corresponding channel in MT300.



● TeamConnect Ceiling Medium

The 3rd party media control access for TeamConnect Ceiling Medium is encrypted and protected using username and password. It has to be enabled using Sennheiser Control Cockpit before use.



To set a 3rd Party device control password:

5. Open Sennheiser Control Cockpit. Go to the **Access** tab in the device configuration page.
6. Activate the toggle switch.
7. Enter a password.
8. You can use the username "api" and configured password for your API calls.

Note:

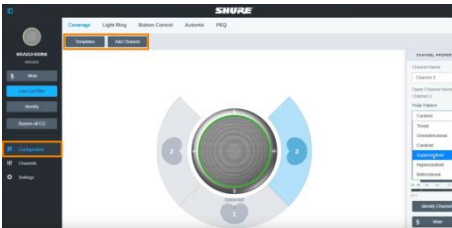
- If you deactivate 3rd party access, the previously set password will be deleted.
- Password must be at least 10 characters and no more than 64 characters. Use at least one lowercase letter, one uppercase letter, one number and one special character (!#\$%&()*+,-./:;<=>@[^_{|}~)-).

Shure

Microflex® Complete Wireless
IntelliMix® P300 Audio Conferencing Processor
MXA710 Linear Array Microphone
MXA310 Table Array Microphone
MXA910 Ceiling Array Microphone
MXA920 Ceiling Array Microphone

● MXA310 Table Array Microphone

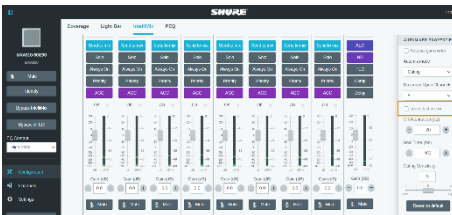
Web Application



1. Open the **Configuration** tab.
2. Select a template from the multi-channel options. Or select **Add Channel** to add more than 1 channel.
 - MT300 does not support single channel for the MXA310.

● MXA910 Ceiling Array Microphone

Web Application



1. Go to **IntelliMix > Automixer Properties > Deselect Leave last mic on.**

- **MXA920 Ceiling Array Microphone**

Web Application



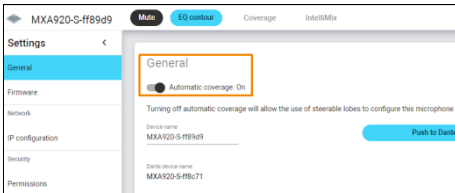
To manually position up to 8 lobes:

1. Go to **Settings > General > Automatic coverage**.
2. Turn off **Automatic coverage**.
3. Go to **IntelliMix > Automixer Properties > Deselect Leave last mic on**.



To add a mix of up to 8 dynamic and dedicated coverage areas:

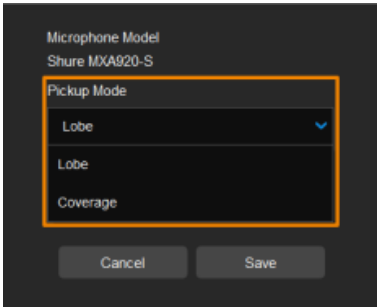
1. Go to **Settings > General > Automatic coverage**.
2. Turn on **Automatic coverage**.
 - The default setting is a 30 by 30 foot (9 by 9 meter) dynamic coverage area.
3. To add more coverage areas, go to **Coverage > Add coverage**.



MT300



4. Go to **Auto Mode Settings > Channel**.
5. Click **Channel Configure** to choose a **Pickup Mode**.

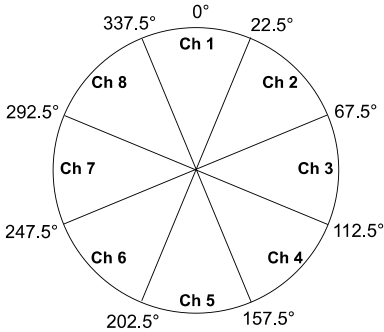


6. Select a **Pickup Mode** from the drop-down list:
 - **Lobe:** The lobes you have positioned in the MXA920's web application. They correspond to MT300 channel 1-8.
 - **Coverage:** The coverage areas you have added in the MXA920's web application. They correspond to MT300 channel 1-8.
7. To integrate with supported AVer camera tracking system via active talker positions, please refer to <[Auto Mode \(Active Position\)](#)>.

Yamaha

- RM-CG Ceiling Array Microphone
- RM-TT Tabletop Array Microphone
- RM-CR Remote Conference Processor
- RM-W Wireless Microphone System

- MT300 divides RM-CG's horizontal angles into 8-24 equal parts, which correspond to MT300 channel 1-24.



- MT300 voice tracking function requires linking more than one RM-TT or RM-W microphones for location data.
- When linking RM-TT or RM-W microphones to the RM-CR Remote Conference Processor, enter the processor's IP address in the **IP Address** field when adding microphones in MT300.

	bin?Set=sys_reboot_time_en,3,0 http://[account]:[password]@[IP Address]/cgi-bin?Set=sys_reboot_time_en,3,1	
Get auto reboot time	http://[account]:[password]@[IP Address]/cgi-bin?GetString=sys_reboot_time	"02:00"
Set auto reboot time	http://[account]:[password]@[IP Address]/cgi-bin?SetString=sys_reboot_time,"02:00"	
Get 2-way UAC	http://[account]:[password]@[IP Address]/cgi-bin?Get=TrkBox_Two_way_uac_on	0: disable 1: enable
Set 2-way UAC	http://[account]:[password]@[IP Address]/cgi-bin?Set=TrkBox_Two_way_uac_on,3,0 http://[account]:[password]@[IP Address]/cgi-bin?Set=TrkBox_Two_way_uac_on,3,1	0: disable 1: enable
Get USB output	http://[account]:[password]@[IP Address]/cgi-bin?Get=TrkBox_Usb_output_switch	0: Auto 1: USB#1 2: USB#2
Set USB output	http://[account]:[password]@[IP Address]/cgi-bin?Set=TrkBox_Usb_output_switch,3,0 http://[account]:[password]@[IP Address]/cgi-bin?Set=TrkBox_Usb_output_switch,3,1 http://[account]:[password]@[IP Address]/cgi-bin?Set=TrkBox_Usb_output_switch,3,2	0: Auto 1: USB#1 2: USB#2
Get device status	http://[account]:[password]@[IP Address]/request=queryDeviceStatus	Device Info: name=device name, type=camera or microphone, port=USB1~3, HDMI1~3, or IP status=online or offline
Get general mode	http://[account]:[password]@[IP Address]/request=getGeneralMode	0 (profile mode), 1 (live mode)
Set general mode	http://[account]:[password]@[IP Address]/request=setGeneralMode&generalMode=[generalMode ID]	generalMode ID: 0 (profile mode), 1 (live mode)
Enable live mode	http://[account]:[password]@[IP Address]/request=enableLiveMode	

Disable live mode	http://[account]:[password]@[IP Address]/request=disableLiveMode	
Get live mode layout	http://[account]:[password]@[IP Address]/request=getLiveLayout	liveLayout: PIP(0), Single(1), Side-by-side(2), Main Speaker(3), Main Speaker(4), Quad View(5)
Set live mode layout	http://[account]:[password]@[IP Address]/request=setLiveLayout&liveLayout=[liveLayout ID]	liveLayout: PIP(0), Single(1), Side-by-side(2), Main Speaker(3), Main Speaker(4), Quad View(5)
Query all profile info	http://[account]:[password]@[IP Address]/request=queryAllProfileTblInfo	response profile data array. array item: { "currentGroup":1, // current group ID "enableVoiceTracking":1, // pause or resume "isCurrent":1, // is current profile "layoutAuto":4, // auto mode layout "layoutManual":3, // manual mode layout "mode":0, // auto mode or manual mode "pid":1, // profile ID 1~36 "profileName": "", // profile name naming by user "profileOrder":1 }
Get current profile mode	http://[account]:[password]@[IP Address]/request=getMode	auto or manual mode
Set current profile mode	http://[account]:[password]@[IP Address]/request=setMode&mode=[mode ID]	mode ID=0(auto mode), 1(manual mode)

Query device status	http://[account]:[password]@[IP Address]/request=queryOnlineDevice	
Query live mode all layout settings	http://[account]:[password]@[IP Address]/request=queryLiveModeData	<p>response live mode data array.</p> <p>array item:</p> <pre>{ "camView":0 // camView: 0 (Single lens camera), 1 (The first lens of multi-lens camera), 2 (The second lens of multi-lens camera), ... "deviceTbCamDid":43, // camera ID "liveModeLayout":1, // layout ID: 0~5 "sourceOrder":1 // source order: 1~4 }</pre>
Reset live mode data	http://[account]:[password]@[IP Address]/request=clearLiveModeData	
Get live mode device list	http://[account]:[password]@[IP Address]/request=queryLiveModeDeviceInfo	<p>response live mode device array.</p> <p>array item:</p> <pre>{ "camLensCount":1 // 0(Unknown), 1(Single lens camera), 2(Dual lens camera), ... "deviceTbCamDid":1, // camera ID "name":"USB1", // device name "port":"USB1", // device port or IP address(IP cam) "type":"camera" // device type }</pre>

		}
Set camera to live mode layout source	http://[account]:[password]@[IP Address]/request=setLiveModeSource&liveLayout=[liveLayout ID]&srcOrder=[sourceOrder]&camDid=[deviceTbCamDid]&camView=[camView Index]	liveLayout ID: 0~5 sourceOrder: 1~4 deviceTbCamDid: camera ID camView: 0(Single lens camera), 1 (The first lens of multi-lens camera), 2 (The second lens of multi-lens camera), ...

PTZ Control Panel

HOME	http://[account]:[password]@[IP Address]/request=ptzHome&camDid=[deviceTbCamDid]&camView=[camView Index]	deviceTbCamDid: camera ID camView: 0(Single lens camera), 1 (The first lens of multi-lens camera), 2 (The second lens of multi-lens camera), ...
PanLeftStart	http://[account]:[password]@[IP Address]/request=ptzLeftStart&camDid=[deviceTbCamDid]&camView=[camView Index]	deviceTbCamDid: camera ID camView: 0(Single lens camera), 1 (The first lens of multi-lens camera), 2 (The second lens of multi-lens camera), ...
PanLeftStop	http://[account]:[password]@[IP Address]/request=ptzLeftStop&camDid=[deviceTbCamDid]&camView=[camView Index]&camView=[camView Index]	deviceTbCamDid: camera ID camView: 0(Single lens camera), 1 (The first lens of multi-lens camera), 2 (The second lens of multi-lens camera), ...
PanRightStart	http://[account]:[password]@[IP Address]/request=ptzRightStart&camDid=[deviceTbCamDid]&camView=[camView Index]	deviceTbCamDid: camera ID camView: 0(Single lens camera), 1 (The first lens of multi-lens camera), 2 (The second lens of multi-lens camera), ...
PanRightStop	http://[account]:[password]@[IP Address]/request=ptzRightStop&camDid=[deviceTbCamDid]&camView=[camView Index]	deviceTbCamDid: camera ID camView: 0(Single lens camera), 1 (The first lens of multi-lens camera), 2 (The second lens of multi-lens camera), ...
TiltUpStart	http://[account]:[password]@[IP	deviceTbCamDid: camera ID

	Address)/request=ptzUpStart&camDid=[deviceTbCamDid]&camView=[camView Index]	camView: 0(Single lens camera), 1 (The first lens of multi-lens camera), 2 (The second lens of multi-lens camera), ...
TiltUpStop	http://[account]:[password]@[IP Address)/request=ptzUpStop&camDid=[deviceTbCamDid]&camView=[camView Index]	deviceTbCamDid: camera ID camView: 0(Single lens camera), 1 (The first lens of multi-lens camera), 2 (The second lens of multi-lens camera), ...
TiltDownStart	http://[account]:[password]@[IP Address)/request=ptzDownStart&camDid=[deviceTbCamDid]&camView=[camView Index]	deviceTbCamDid: camera ID camView: 0(Single lens camera), 1 (The first lens of multi-lens camera), 2 (The second lens of multi-lens camera), ...
TiltDownStop	http://[account]:[password]@[IP Address)/request=ptzDownStop&camDid=[deviceTbCamDid]&camView=[camView Index]	deviceTbCamDid: camera ID camView: 0(Single lens camera), 1 (The first lens of multi-lens camera), 2 (The second lens of multi-lens camera), ...
ZoomInStart	http://[account]:[password]@[IP Address)/request=ptzZoomInStart&camDid=[deviceTbCamDid]&camView=[camView Index]	deviceTbCamDid: camera ID camView: 0(Single lens camera), 1 (The first lens of multi-lens camera), 2 (The second lens of multi-lens camera), ...
ZoomInStop	http://[account]:[password]@[IP Address)/request=ptzZoomInStop&camDid=[deviceTbCamDid]&camView=[camView Index]	deviceTbCamDid: camera ID camView: 0(Single lens camera), 1 (The first lens of multi-lens camera), 2 (The second lens of multi-lens camera), ...
ZoomOutStart	http://[account]:[password]@[IP Address)/request=ptzZoomOutStart&camDid=[deviceTbCamDid]&camView=[camView Index]	deviceTbCamDid: camera ID camView: 0(Single lens camera), 1 (The first lens of multi-lens camera), 2 (The second lens of multi-lens camera), ...
ZoomOutStop	http://[account]:[password]@[IP Address)/request=ptzZoomOutStop&cam	deviceTbCamDid: camera ID camView: 0(Single lens

	Did=[deviceTbCamDid]&camView=[camView Index]	camera), 1 (The first lens of multi-lens camera), 2 (The second lens of multi-lens camera), ...
FocusInStart	http://[account]:[password]@[IP Address]/request=ptzFocusInStart&camDid=[deviceTbCamDid]&camView=[camView Index]	deviceTbCamDid: camera ID camView: 0(Single lens camera), 1 (The first lens of multi-lens camera), 2 (The second lens of multi-lens camera), ...
FocusInStop	http://[account]:[password]@[IP Address]/request=ptzFocusInStop&camDid=[deviceTbCamDid]&camView=[camView Index]	deviceTbCamDid: camera ID camView: 0(Single lens camera), 1 (The first lens of multi-lens camera), 2 (The second lens of multi-lens camera), ...
FocusOutStart	http://[account]:[password]@[IP Address]/request=ptzFocusOutStart&camDid=[deviceTbCamDid]&camView=[camView Index]	deviceTbCamDid: camera ID camView: 0(Single lens camera), 1 (The first lens of multi-lens camera), 2 (The second lens of multi-lens camera), ...
FocusOutStop	http://[account]:[password]@[IP Address]/request=ptzFocusOutStop&camDid=[deviceTbCamDid]&camView=[camView Index]	deviceTbCamDid: camera ID camView: 0(Single lens camera), 1 (The first lens of multi-lens camera), 2 (The second lens of multi-lens camera), ...
GoPreset	http://[account]:[password]@[IP Address]/request=ptzGoPreset&camDid=[deviceTbCamDid]&presetNum=[preset number]&camView=[camView Index]	deviceTbCamDid: camera ID presetNum: 0~255 camView: 0(Single lens camera), 1 (The first lens of multi-lens camera), 2 (The second lens of multi-lens camera), ...
SavePreset	http://[account]:[password]@[IP Address]/request=ptzSavePreset&camDid=[deviceTbCamDid]&presetNum=[preset number]&camView=[camView Index]	deviceTbCamDid: camera ID presetNum: 0~255 camView: 0(Single lens camera), 1 (The first lens of multi-lens camera), 2 (The second lens of multi-lens camera), ...
GetFocusMode	http://[account]:[password]@[IP	deviceTbCamDid: camera ID

	Address]/request=ptzGetFocusMode&camDid=[deviceTbCamDid]&camView=[camView Index]	focusMode: 0:AF 1:MF -1:NO Focus function device camView: 0(Single lens camera), 1 (The first lens of multi-lens camera), 2 (The second lens of multi-lens camera), ...
SetFocusMode	http://[account]:[password]@[IP Address]/request=ptzSetFocusMode&camDid=[deviceTbCamDid]&focusMode=[0:AF 1:MF]&camView=[camView Index]	deviceTbCamDid: camera ID focusMode: 0:AF 1:MF -1:NO Focus function device camView: 0(Single lens camera), 1 (The first lens of multi-lens camera), 2 (The second lens of multi-lens camera), ...

TCP Commands

A TCP command string starts with AVER:[account]:[password]:/request=X, and ends with \r\n. X is as HTTP requests above. For example, AVER:[account]:[password]:/request=pause\r\n, AVER:[account]:[password]:/request=resume \r\n, and so on.

VISCA Command Table

MT300(N) also can be controlled via below VISCA over IP commands, but does not support VISCA RS422 commands.

Payload:

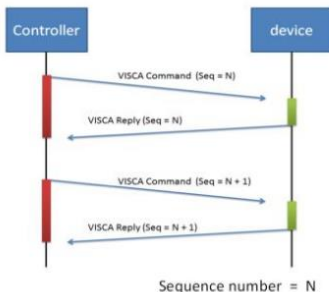
VISCA over IP

PORT	Internet protocol	IPv4
	Transport protocol	UDP
	Port address	52381

FORMAT	byte 0	byte 1	byte 2	byte 3	byte 4	byte 5	byte 6	byte 7	byte 8 ~ byte 23	
	func	Payload type	Payload length	Sequence number	Sequence number					Payload (1 to 16 bytes)
	data	Value1	Value2	1~16 (0x0001~0x0010)	0X00000000 ~ 0XFFFFFFF					VISCA Packet (see page VISCA)

Payload type	Name	Value1	Value2	Description
	VISCA command	0x01	0x00	Stores the VISCA command.
	VISCA inquiry	0x01	0x10	Stores the VISCA inquiry.
	VISCA reply	0x01	0x11	Stores the reply for the VISCA command or VISCA inquiry

Sequence number



Commands:

Command Set	Command	Command Packet	Comments
Power	OFF	8x 01 04 00 03 FF	Power off MT300
Voice Tracking	Pause	8x 01 04 7D 03 00 FF	Pause voice tracking
	Resume	8x 01 04 7D 02 00 FF	Resume voice tracking
System	Change Profile	8x 01 04 40 01 YY FF	YY = profile num(0x01~0x24)
		8x 01 04 3F 02 YY FF	Preset recall, YY = profile num(0x01~0x24)
	Reboot	8x 01 04 A4 FF	Reboot MT300
	Switch USB Output	8x 01 7E 03 01 FF	USB port 1
8x 01 7E 03 02 FF		USB port 2	

Command samples:

Command Set	Command	Command Packet	Comments
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Power	OFF	01 00 00 07 00 00 00 01 81 01 04 00 03 FF	Power off MT300
Voice Tracking	Pause	01 00 00 07 00 00 00 01 81 01 04 7D 03 00 FF	Pause voice tracking