

AXIS Audio Manager Edge

User Manual

AXIS Audio Manager Edge

What is AXIS Audio Manager Edge?

What is AXIS Audio Manager Edge?

AXIS Audio Manager Edge is an onboard application for managing and controlling your audio system in a small or mid-sized local site. It allows you to set up your audio devices in separate zones (up to 20 zones) where you can play different kinds of content, such as live or scheduled announcements or background music – one global set of zones per content type. You can easily set up schedules for your weekly content. Built-in health monitoring ensures that you know the full status of your system.

You can adjust volumes and page messages from your smartphone, using the AXIS Audio Remote mobile app. The app is available on Google Play and App Store. It requires a local Wi-Fi connection to the audio system.

AXIS Audio Manager Edge

Get started

Get started

To use AXIS Audio Manager Edge you need to have your audio devices installed and connected to the network. They should all be running the same firmware version and have a root password set. This can easily be managed by using the *AXIS Device Manager* application.

Note

If you are upgrading a system that is currently using AXIS Audio Player, then we recommend that you reset all the devices to factory default when you upgrade their firmware. Before you do this, you might want to note down what schedules and content you are using, so that you can recreate the same setup with AXIS Audio Manager Edge.

For more information about how to upgrade the firmware, open the help in AXIS Device Manager and go to section **AXIS Device Manager client > Device manager workspace > Upgrade firmware**.

When you open AXIS Audio Manager Edge on a device for the first time, then that device will be defined as the leader device of the site.

1. Choose a leader device.

Note

If you need space for music files, then use a leader device with an SD card. We also recommend that you choose a leader device that is within easy reach, in case you need to replace the SD card.

2. Go to the device webpage for your leader device, by entering the following address in a web browser:
`https://###.##.##.##` where `###.##.##.##` should be the IP address of your leader device.
3. Go to **System > Date and time** and set the time and time zone.
4. Go to **Audio > Overview** and click **Launch AXIS Audio Manager Edge**.

AXIS Audio Manager Edge opens in your browser.

5. Name your site.
6. Go to the **APPS** tab to configure your audio system:
 - You now have a site containing the leader device. All the other devices in your network must be included to the site before you can use them in AXIS Audio Manager Edge.
 - See *Set up physical zones on page 4*
 - Add content and define where and when to play it.
 - See *Schedule content on page 5*
 - Set up paging
 - See *Paging on page 9*
 - Set or calibrate the volume for different devices, content types and physical zones.
 - See *Adjust volumes on page 14*
 - Add users and define their access rights.
 - See *Manage users on page 18*
7. Go to the **DASHBOARD** tab to monitor your system.
 - See how many devices that are online, and if any of them have stopped working.
 - See the status of audio that is currently playing and what is upcoming.

AXIS Audio Manager Edge

Set up physical zones

Set up physical zones

A physical zone is a virtual representation of a location where your devices are located. Devices that are located in the same area can be grouped together virtually by adding them to the same physical zone in AXIS Audio Manager Edge. This makes it possible for you to control a group of devices simultaneously.

Let's say you have several speakers in the same room. As the sound from these devices are heard in the same area, you want them to play the same content. Therefore, you create a physical zone in AXIS Audio Manager Edge and add the speakers in the room to it. Now you can easily make all the speakers play the same music simultaneously by simply sending your music to the corresponding physical zone in AXIS Audio Manager Edge.

Good to know:

- You can create multiple physical zones and populate them with many devices. However, a device can not belong to several physical zones.
- An audio device must belong to a physical zone in order to receive scheduled content or to be used for playback.
- If you delete a zone, then all the devices in that zone will become unassigned.
- You can play the same content in multiple physical zones at the same time, but you can control the volume for each zone individually.

Example

You have a clothing store and want to be able to play music and make announcements in the customer area inside the store. You also want the staff by the cash register to be able to call for staff that are working in the storage room. You also want to play music, advertisement and announcements according to set schedules.

You have four speakers in the customer area and one in the storage room in the back office.



To watch this video, go to the web version of this document.

www.axis.com/products/online-manual/67589#t10152012

Workflow:

1. Go to **APPS > Physical zones**.
2. Create a new zone and name it according to the location it represents.
3. Go to **Unassigned devices**.
4. Add devices to your site, and then close the pane.
5. Rename the devices so that you can identify them easily.

Note

You can use the **Identify** function in the menu to play a test signal. This will help you tell the speakers apart.

6. Drag and drop the devices to the physical zone.

AXIS Audio Manager Edge

Schedule content

Schedule content

Content scheduling is about defining what content to play, where to play it and when to play it.

- What to play:
 - Announcements
 - Advertisements
 - Music
- Where to play:
 - In one or several zones
- When to play:
 - Relative to defined opening hours
 - According to custom schedules or at fixed points in time

If you want to set up paging, see *Paging on page 9*.

Set the opening hours

This feature is used for relative scheduling and displaying opening hours throughout the system. Any schedule that is set relative to the opening hours will automatically adapt to the opening hours schedule.

Example

You want to notify the customers on a daily basis that the shop is closing in 15 minutes. Therefore, you record a message saying "the shop closes in 15 minutes" and define that it should be played 15 minutes before closing time every day. If you ever change the closing hours, you won't need to adjust the time when the message is played.

The **Opening hours** app is only used for setting the opening hours. To set up an announcement that plays a message 15 minutes before closing time, you can use the *Schedule announcements on page 5* app.



To watch this video, go to the web version of this document.

www.axis.com/products/online-manual/67589#t10149863

Workflow:

1. Go to **APPS > Opening hours**.
2. Select what days of the week to include.
3. Select the time interval for the each day.
4. Click **SAVE**.

AXIS Audio Manager Edge

Schedule content

Schedule announcements

You can choose when to play pre-recorded announcements.

Example

Notify the customers every day that the shop is closing in 15 minutes. You also want to play a certain pre-recorded message at 11:30 and 13:30 every Monday, Wednesday and Friday.



Workflow:

1. Go to **APPS > Announcements**.
2. Choose what to play:
 - 2.1 Go to **LIBRARY** and upload clips.
For information about supported file formats, see *Audio files on page 20*.
3. Choose where to play your announcements:
 - 3.1 Go to **PLAN** and add physical zones.
4. Choose when to play your announcements:
 - 4.1 Go to **PLAN** and click **+** to add an occurrence to the schedule.

Schedule advertisements

Advertisement scheduling can be used for any content that you want to play repeatedly for a certain time period.

Example

Play advertisements in a shop, or a repeated security message at a train station.

Workflow:

1. Go to **APPS > Advertisements**.
2. Choose what to play:
 - 2.1 Go to **Playlists**.
 - 2.2 Upload clips to the library.
For information about supported file formats, see *Audio files on page 20*.
 - 2.3 Create playlists and populate them with clips from the library.
3. Choose where to play your advertisements:

AXIS Audio Manager Edge

Schedule content

- 3.1 Go to **PLAN** and add physical zones.
4. Choose when to play your advertisements:
 - 4.1 Go to **PLAN** and add a schedule.
 - 4.2 Click **ADD ITEM** or drag a time interval in the schedule.

Schedule music

You can play the background music of your choice and schedule when to play it.

Example

Play music while the shop is open.



To watch this video, go to the web version of this document.
www.axis.com/products/online-manual/67589#t10149866



To watch this video, go to the web version of this document.
www.axis.com/products/online-manual/67589#t10149866

1. Add music content.
 - 1.1 Go to **APPS > Music**.
 - 1.2 Choose what music to play.
 - Go to **PLAYLISTS** to add clips.
 - Go to **SOURCES** to add a stream, ACAP or line-in.
2. Set up a music plan.
 - 2.1 Choose where to play your music.
 - Go to **PLAN** and choose physical zones.

AXIS Audio Manager Edge

Schedule content

2.2 Choose when to play your music.

- Go to **PLAN** and choose a schedule.

Note

We recommend that you use the opening hours schedule when you want to play music during your normal hours of operation. You can use offset times to start the music a little before opening and after closing.

AXIS Audio Manager Edge

Paging

Paging

You can send messages from a SIP mic, VoIP phone, video management software (VMS) and other sources. The messages can be sent to physical zones as well as individual speakers. For instance if you want to use AXIS Audio Manager Edge together with a VMS such as AXIS Camera Station or AXIS Companion, then you need to set up a paging source.

You can page messages from your smartphone, using the AXIS Audio Remote mobile app. The app is available on Google Play and App Store. It requires a local Wi-Fi connection to the audio system.

Example

I am working at the cash register and there are many customers waiting in line. I want to make a live call-out to ask someone sitting in the back office to join at the register. In this case I can call the individual speaker at the back office.

Set up a paging zone

A paging zone is used for setting up pre-configured targets for all paging purposes. It is recommended that you setup paging zones for all your normal use cases for paging in your site.

1. Go to **APPS > Paging zones**.
2. Create a new paging zone and name it.
3. Add physical zones or individual devices to the paging zone.

Set up a paging source

A paging source is an input for live or pre-recorded audio. The source can be a microphone, pre-recorded audio clips, or another control system.

Create a paging source for every source button on your microphone or corresponding item in your video management software:

1. Go to **APPS > Paging sources**.
2. Click **CREATE** and choose a type of paging source:
 - **Line-in** – for using a device with line-in.
 - **SIP Paging** – for live call-outs from a 2N SIP Mic or any other SIP-compatible device.
 - **SIP Intercom** – for live two-way communication through a SIP-compatible device.
 - **VAPIX Paging** – for live call-outs from a video management system or 2N SIP Mic using the VAPIX protocol.
 - **VAPIX Intercom** – for live two-way communication through a video management system or 2N SIP Mic using the VAPIX protocol.
 - **VAPIX Media Clip** – for playing pre-recorded clips located in the audio devices, from a video management system or 2N SIP Mic.

Note

In case of a 2N SIP Mic, we recommend using VAPIX.

AXIS Audio Manager Edge

Paging

Note

A device can be used for several paging sources. However, it can't be used for more than one of the following options:

- Line-in
- SIP Intercom
- VAPIX Intercom

A device that is already used for line-in or intercom will not appear in the list of available devices when you set up a new paging source with line-in or intercom.

3. Select an intermediary or intercom device that will forward sound to the destination speakers.

Note

In most cases it doesn't matter which device you pick as intermediary device.

4. Select the destination zones and devices that will play the sound.
5. Configure your source device (microphone button or video management system) for paging to the zone, or playback of a media clip using the intermediary device as target address.



To watch this video, go to the web version of this document.


www.axis.com/products/online-manual/67589#t10152010

This example shows how to page a media clip using VAPIX, and how to prioritize between different paging sources.

If you want the buttons on your 2N SIP Mic to reach different speakers, then you need to set up one paging source for every button. Each of these paging sources will use its own intermediary device.

Paging via line-in

You can use a device with line-in for paging. This is useful, for instance, when you connect a device with a button and a mic to an audio bridge.

1. Go to **APPS > Physical zones**.
2. Find the device with line-in and click  .
3. Turn on **Enable line-in**.
4. Go to **APPS > Paging sources**.
5. Click **+ CREATE** and select **Line-in**.
6. Click **SELECT INTERMEDIARY DEVICE** and select the device with line-in connector.
7. Select the zones and devices that the paging sound should be sent to.
8. Click the **Configuration URL** to go to the **Events** page in the device webpage.

AXIS Audio Manager Edge

Paging

9. Click **Add...** to add a new rule.

10. Select a condition.

For instance if you have a device with a button connected to an I/O port, you choose **Input Signal** as trigger.

11. Under **Actions**, select **Source Activation**.

12. Select one of the three options:

- **Activate Line-in while the rule is active:** The button will activate paging while it is pressed down, and inactivates when released.
- **Activate Line-in:** For a button that activates paging.
- **Deactivate Line-in:** For a button that deactivates paging.

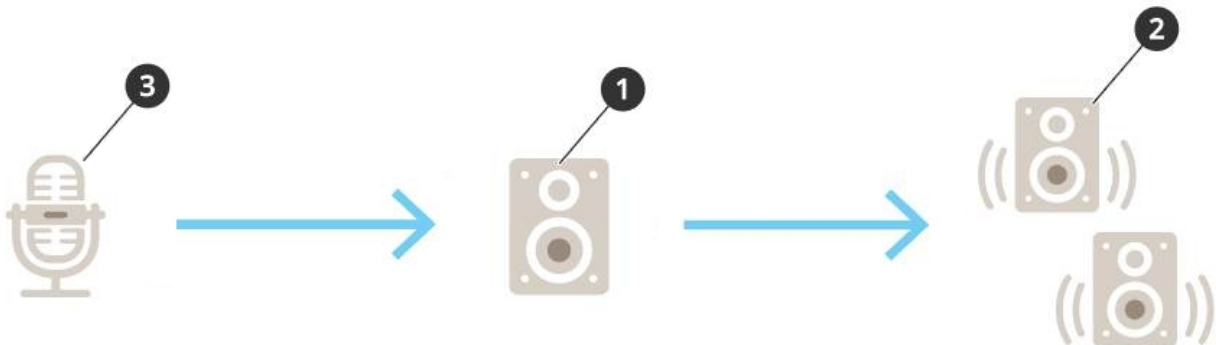
SIP Paging

Setting up a SIP device is similar to when you use VAPIX, but using the SIP protocol instead. You choose an intermediary device that will receive audio from the external source, and assign target zones for the playback. Additionally, you need to configure the SIP parameters in the local settings of the intermediary device.

Next, you configure the SIP source device itself to either send the SIP call directly to the assigned intermediary device, or through a PBX system if you have one.

For information and videos about how to make this configuration for a 2N SIP Mic, visit the *Suggested use cases* chapter in the 2N SIP Mic user manual.

VAPIX Paging



1. Select an intermediary device.

Note down the IP address of the device. It will be used in step 3.

2. Configure the zones and devices to target.

3. Configure your source. This could be an IP microphone or a video management software.

Make the configuration from your device's webpage or from the video management software.

Set the intermediary device from step 1 as the destination address in the IP microphone or software.

SIP and VAPIX intercom

1. Go to **APPS > Paging zones**.

AXIS Audio Manager Edge

Paging

2. Create a paging zone and add your device.

Note

This is the device that will communicate with your 2N SIP Mic. Select a device that has a built-in microphone.

Note

It is not necessary to add the device to a physical zone.

3. Go to **APPS > Paging sources**.
4. Create a paging source.
5. Click **+ CREATE** and select **VAPIX Intercom**.
6. Click **SELECT INTERCOM DEVICE**.
7. Click **SELECT** to add your device.
8. Go to the device interface for your 2N SIP Mic.
 - The device interface is reached by entering the IP address in a web browser.
9. Go to **Zones**.
10. Click the pen icon for a zone.
11. Turn on **State**.
12. Type a name.
13. Under **Destination type**, select **VAPIX destination**.
14. Type a user name and password.
15. Under **Audio codex**, select a codex.
16. Under **Destination address**, enter the IP address of the receiving unit.
17. Click **CHANGE**.
18. Go to **Buttons**.
19. Click the pen icon for a button.
20. Turn on **Button active**.
21. Type a name.
22. Under **Action**, select **Announce to zone**.
23. Under **Select zone**, select the zone you configured.
24. Under **Audio source**, select **Microphone**.
25. Click **CHANGE**.
26. Return to AXIS Audio Manager Edge.
27. Go to **APPS > Physical zones**.
28. Open the context menu for your speaker and select **Advanced device settings**.

The device interface opens up.

29. Go to **Audio > Device settings**.

AXIS Audio Manager Edge

Paging

30. If needed, adjust the gain levels.
31. Under **Input**, select the same codec as you selected for the 2N SIP Mic.
32. To start paging, press the configured button on the 2N SIP Mic.

Note

To optimize sound properties and minimize noise for your use case and environment, go to the device webpage and adjust the input gain.

If you want to use a device with line-in as intercom device, then you need to turn on line-in for the device. For information about how to turn on line-in for the device, see *Paging via line-in on page 10*.

VAPIX Media Clip

Use this setting for playing media clips.

1. Open the device webpage of your intermediary device:
 - Enter the following address in a web browser:
`https://###.##.##.##` (where `###.##.##.##` is the IP address of your intermediary device)
2. On the device webpage, click **Audio clips** to reach the library where you can manage clips.

Note

The clips must be stored on your intermediary device. This is not necessarily the same speaker as the leader in your site.

For information about supported file formats, see *Audio files on page 20*.

AXIS Audio Manager Edge

Adjust volumes

Adjust volumes

Volume configuration and control is divided into two parts:

- The **Sound calibration** app is used by the installer to configure the audio system.
- The **Music volumes** app is used by the regular users that operates the system.

The volumes for paging, announcements and advertisements are expected to be calibrated and volume controls for this are not available to regular users.

Volume for background music is available to regular users (by access control), and users at a site can control the volume for background music in the physical zones.

You can adjust volumes from your smartphone, using the **AXIS Audio Remote** mobile app. The app is available on Google Play and App Store. It requires a local Wi-Fi connection to the audio system.

Set the volume for physical zones

You can adjust the background music volumes for your physical zones:

Workflow:

1. Go to **APPS > Music volumes**.
2. Adjust the music volume for your physical zones.
3. If you have many zones, you can filter the list with the **Search** box.

Calibrate volume

You can calibrate the volumes for different content types and different locations.

Example

You want the speaker located by the cash register to play music at a lower volume than the other speakers in the store.

Example

You want to play soft and discrete background music at a low volume, but announcements to be loud and clear.

Workflow:

1. Go to **APPS > Sound calibration > VOLUME**.
2. Go to **Default site calibration** to set the default volume for the different content types.
3. Adjust the volumes for a specific physical zone:
 - 3.1 Click the physical zone and adjust the volumes for the different content types.
 - 3.2 Turn on **Override default site calibration** if you want to use the volume settings for the zone.
If **Override default site calibration** is turned off, the default volume settings will be used instead.
4. Calibrate the volumes for an individual device:
 - 4.1 Click the physical zone that contains the device.
 - 4.2 Turn on **Individual device volume adjustment**.
 - 4.3 Adjust the volume for the devices.

AXIS Audio Manager Edge

Adjust volumes

Mute a site

There are different ways to mute your entire site. An easy way is to go to the **Music volumes** app and mute each physical zone manually.

You can also create an action rule that will make the site mute based on an external input:

1. Open the site in AXIS Audio Manager Edge.
2. Go to **APPS > System settings > Leader device settings > Go to device settings**.
The device webpage opens.
3. Go to **Management > Action rules** and click **Add...**
4. Under **General**:
 - 4.1 Check the **Enable rule** checkbox.
 - 4.2 Name the rule, for instance to "Mute my site".
5. Under **Condition**:
 - 5.1 In the first **Trigger** dropdown, select **Input signal**.
 - 5.2 In the second **Trigger** dropdown, select the trigger source that you want:
 - **I/O** – if your device is equipped with a physical trigger.
 - **Virtual input** – if you want to configure a custom trigger.
Use the following HTTP requests to activate and deactivate the virtual input:
 - `http://<device IP>/axis-cgi/virtualinput/activate.cgi?schemaversion=1&port=1`
 - `http://<device IP>/axis-cgi/virtualinput/deactivate.cgi?schemaversion=1&port=1`
 - The port number in the URL should reflect the command. For instance, if you choose to trigger on virtual input 2, then change the last part of the URL to `&port=2`.
6. Select a schedule if you want the trigger to apply only at certain times.
7. Optionally, set additional conditions of the trigger.
8. Under **Actions > Type**, select **Mute Audio Site**.
9. Select **Mute while the rule is active**.

Note

This overrides the volumes set in the **Music volumes** app in AXIS Audio Manager Edge.

10. To unmute the sound again:
 - When the condition that triggers the muting is not fulfilled anymore, the sound will be automatically unmuted.
 - To unmute manually:
 - 10.1 From the device webpage, go to **Management > Action rules** and click the rule.
 - 10.2 Deactivate the rule by clearing the **Enable rule** checkbox.

AXIS Audio Manager Edge

Adjust sound properties

Adjust sound properties

Normalize sound levels

If the devices and sources in your site have different gains, they will play with different loudness.

To unify the loudness, go to **APPS > Sound calibration > NORMALIZATION** and adjust the gains.

Example

If you have speakers mounted at different heights, you can make them sound equally loud at ground level.

Example

Avoid loudness differences when switching between sources, for instance a web stream radio and a line-in from a smartphone

Set sound profiles

Sound profiles change the way content sounds by modifying frequency response, perceived loudness etc.

1. Go to **APPS > Sound calibration > SOUND PROFILES**.
2. Go to **Default sound profile, Paging sources** or **Music sources** to select profiles:
 - **Speech (clarity)** – Optimized for speech intelligibility. Recommended for security messages and live announcements.
 - **Speech (neutral)** – Optimized for natural sounding voices. Recommended for information messages and advertisements.
 - **Music** - Optimized for music.
 - **None** - No optimizations. Flat frequency response. Recommended for calibration and testing purposes, or when the input already have desired properties.
 - **Use default** – This option is available when you set the profiles for a paging source or music source. Selecting this option will use the default sound profile instead.

Under **Music sources**, the **Music player** profile will apply to web streams and uploaded content.

Set latency

Latency is the time delay between audio input and audio output. Different sources have different latency needs.

1. Go to **APPS > Sound calibration > LATENCY**.
2. Go to **Default latency, Paging sources** or **Music sources** to select latencies:
 - **Normal** – Low system resources usage and more resilient against network issues. Recommended for non real-time critical application such as music, prerecorded ads and announcements.
 - **Low** – Recommended for talk back applications and paging where the person talking is located in an area apart from the loudspeakers.
 - **Ultra low** - Recommended for live paging, i.e. where the person talking is located in the same area as the loudspeakers. Best effort from a sync and resilience perspective. Heavy system usage.
 - **Use default** – This option is available when you set the latencies for a paging source or music source. Selecting this option will use the default latency instead.

Under **Music sources**, the **Music player** latency will apply to web streams and uploaded content.

AXIS Audio Manager Edge

Manage content

Manage content

Priority order of your content

You can see the overall priority order of the different content type groups. The priority decides what content will sound if two or more content types are playing at the same time.

Workflow:

1. To see the priority order, go to **APPS > Content priority**.
2. You can change the priority between paging sources by reordering the sources in the paging sources app.

Set allowed content

You can set what type of content that is available for scheduling.

Workflow:

1. Go to **APPS > Allowed content**.
2. Select the content that should be available for scheduling

AXIS Audio Manager Edge

Manage users

Manage users

In AXIS Audio Manager Edge you can add users and place them in groups that represents different roles in your organization. You can define what apps each group will have access to, and add members to the groups..

There are three default groups:

- **Administrators** – This group can't be removed or edited. Administrators will always have access to all the apps.
- **Content managers** – By default this group has access to the apps `Music volumes`, `Announcements`, `Advertisements`, `Music` and `Opening hours`.
- **Volume users** – By default this group only has access to the `Music volumes` app.

Example

You manage a store and decide what music and other types of content to play. You want your staff in the store to be able to lower or raise the volume during opening hours, but you don't want them to be able to change the content that is played. Therefore, you add them as members to the **Volume users** group.

Workflow:

1. Go to **APPS > User management**.
2. Go to **Users** and add new users.
You can assign them to one or several groups.
3. Click **CREATE GROUP** if you want to create a new group.
4. Click a group and then click **ADD** to add users as members to groups.
5. Click a group and then click **SELECT** to choose what apps the group will have access to.
6. Under **Contact persons** you can add information that will end up on the dashboard.

AXIS Audio Manager Edge

System settings

System settings

In this app you can set the proxy settings, network configurations and calendar settings for your audio site.

From the **System settings** app, you can reach the device web page:

1. Go to **Leader device settings** > **Go to device settings**.

AXIS Audio Manager Edge

[Learn more](#)

[Learn more](#)

Audio files

An audio file is recorded with a certain gain. If your audio files have been created with different gains, then the loudness will differ when the files are played. Make sure that you use clips that have the same gain.

Supported file formats:

- .mp3 (mpeg1 container with audio layer III codec)
- .wav (wav container with raw data)
- .opus (ogg container with opus codec)
- .ogg (ogg container with vorbis codec)

