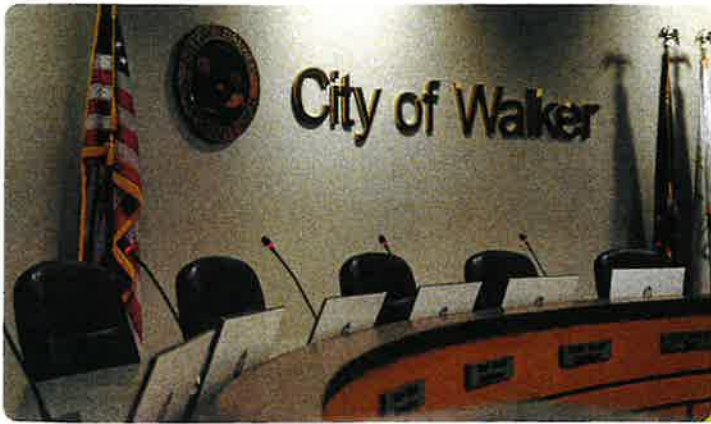


# Smart Audio & Control – Beyond Traditional Conferencing

For decades, Televic Conference has provided solutions for large scale institutions for managed meetings at the United Nations, U.S. Department of State, European Union, NATO and many world Government institutions. Most of these institutions require “traditional conferencing” features, such as Voting, Agenda, Request-to-Speak, Speech Timers and Simultaneous Language Interpretation.

Today, the Televic Discussion Microphone has become a new solution for standard AV installations, helping acoustic challenges with tall ceilings, glass or concrete walls, and expanding flex/divided rooms. The Televic Discussion Microphone with a built-in audio speaker at each station became especially valuable during the 2020 Pandemic. It helped to overcome social distance requirements and limitations imposed by Plexiglass workstations. Moreover, the Televic Discussion Microphone system is ideally suited for hybrid meetings as it connects seamlessly with remote platforms such as Teams and Zoom.



## City Government

Hybrid meeting compatibly with City Government application features, including Voting, Agenda, Camera Control, etc.

## Corporations

Alternative to ceiling microphones with local audio in front of each participant. Options include flush mount, desktop, and video consoles with built-in web cam.



## Courts

New microphone modes to support court applications. In-room and remote audio distributed throughout the courtroom and integrated with any court-recording platform: FTR, Liberty, Soniclear, etc.

## Lecture Halls

Televisic audio distribution streamlines the installation with redundant loop technology, while maintaining the DSP design requirements and control.





# Smart Audio & Control

Presenting the Televic Smart Audio & Control platform - a set of new microphone modes and audio processing and routing technologies, offering:

- + Optimized intelligibility for both in-room and remote participants
- + Consistent audio coverage in any room configuration
- + Reduced acoustic feedback for standalone and integrated systems
- + Hands-free discussion mode for in-person and remote audio
- + Ability to integrate current system with Confero Audio routing and DSP mode

## Dynamic Mix Minus

The Dynamic Mix-Minus feature creates a true standalone system. Whether your participants are right next to you or remote on Teams or Zoom, you can count on consistent audio coverage in the entire meeting room so all can hear and be heard.

Traditionally, the built-in loudspeaker of a conference unit is muted when the microphone is activated. Televic has now added Dynamic Mix-Minus capability that allows the audio speaker to remain active when you turn on your microphone to engage the people in the room and remote participants. In other words, the Televic loudspeaker is still active without that local microphone audio and hence preventing feedback.

Having Dynamic Mix-Minus in the system creates more consistent coverage throughout the room regardless of the size of the room.

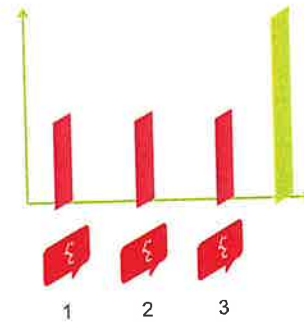
# Gain Sharing

All open microphones are dynamically calculated such that the total gain of all open microphones always remains constant, even if at some point more people begin to talk.

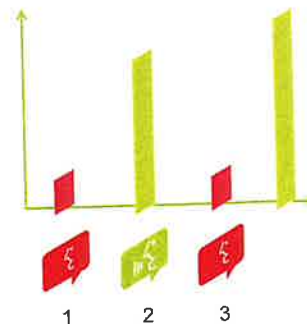
This means that if only one person is speaking, this person has the full gain of the system, while the other microphone gains decrease. This can be seen in the pictures below. Any background noise picked up by the 'silent' microphone does not get amplified as much as a traditional AV system where each microphone has a fixed gain.



**If no one is speaking, each microphone gets equal gain.**

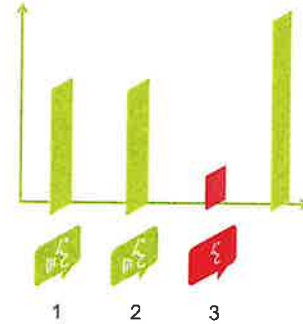


**If a participant starts speaking, this speaker gets more gain, while the other microphones are reduced.**





**If two people are speaking at the same volume, they each get the same gain allocation. The total gain always remains constant.**



Applying the Gain Sharing principle offers several benefits:

- + There are often multiple participants speaking at different volumes or distances from the microphone. The Gain Sharing algorithm can automatically adjust the gain of each microphone in real-time, ensuring that the audio levels are consistent and that the loudest and clearest sound sources are prioritized. This results in greater gain before feedback and a more natural and seamless listening experience for conference meeting attendees.
- + A Televic Conference system is often used in settings where clear communication is essential, such as business meetings, council debates, or educational events. Using Gain Sharing, background noise and other distractions are reduced, ensuring that attendees can hear and understand the speakers more easily.
- + A typical system involves many microphones and can be complex to configure, taking into account varying factors such as the number of microphones, room acoustics, and microphone proximity. Televic systems with the Gain Sharing algorithm can help simplify this process by reducing the need for DSP configuration and programming.

## Speech Detection

Guarantee vivid engagement without confusing your listeners. With the Televic Speech Detection feature, you will always know exactly who is speaking. Even in discussions with multiple people, you can ensure only the person speaking is displayed. It significantly improves video capture (no need to trigger cameras with a microphone button) and ensures more accurate transcriptions and data reports.

# Hands-free Mode 🖐️🖐️

Televic is the first manufacturer to enable true handsfree mode to push-to-talk microphone systems. This is a major step, taking into account that most in-person meetings are conducted informally whereby pushing a button feels unnatural.



**Hands-free Mode =  
Dynamic Mix Minus + Gain Sharing + Speech Detection**

**Increased efficiency:** participants can speak freely and spontaneously without interrupting the flow of the conversation by pressing a button to speak. This leads to more productive and efficient meetings, as participants can share their thoughts and ideas more easily and seamlessly.

**Improved collaboration:** Removing the need to push a button can foster a more collaborative environment, where participants feel more comfortable and empowered to speak up and contribute to the discussion. This leads to a more inclusive and dynamic exchange of ideas.

**Better engagement:** With a more natural conversation flow, participants are more likely to remain engaged and attentive throughout the meeting. This leads to better comprehension, retention, and follow-through on the topics discussed.

In Hands-free Mode, the microphone button can be configured as a hold-to-mute button, when you need to suppress a cough or want to have a side conversation. Televic wired systems can support up to 32 microphones with Hands-free capability, allowing all microphones and speakers to be active. These can also be easily integrated with remote meeting platforms.

For many years, Voice Activated (VOX) circuitry has been criticized as a poor solution for interactive meetings. The VOX system would chop off the beginning of sentences or not trigger the microphone from someone leaning back in their chair.

Furthermore, VOX often results in disturbances due to noise-triggered activations or poor intelligibility due to slow activation of the microphone. Gain Sharing allows for a natural conversation flow with consistent audio quality.

## Voice Activated (VOX) Versus Gain Sharing

Feature	Voice Activated (VOX)	Gain Sharing
<b>Microphone Activation</b>	Only when energy is detected	Active all the time
<b>Background Noise Reduction</b>	False interruption due to noise	Noise is reduced by gain sharing algorithm without microphone cutoff
<b>Audio Quality</b>	Inconsistent audio quality due to microphone cutting	Consistent audio level for all participants
<b>Response Time</b>	Slow response time	Instantaneous gain adjustment, resulting in natural conversation flow





# Microphone Modes

Meeting rooms serve a variety of purposes, catering from those focused on decision-making to those centered around collaboration. These spaces are designed to provide a suitable environment for people to come together, discuss ideas, share information, and work towards a common goal.

The Televic Conference solution consists of tools to facilitate effective communication and enhance productivity. Pick the microphone mode that suits the type of meeting you're having any time you want. Simply change it with a click of a button in our built-in browser web page.



## Open Microphones

All microphone modes, with the exception of hands-free mode, can limit the number of open microphones at one time. While hundreds of Televic wired stations could be deployed in one system, the maximum number of open microphones is 25 versus 32 in Hands-free mode.

## Direct Speak Mode

This mode mimics the action of unmuting your microphone by pressing the microphone button, speaking as needed, then remuting your microphone with another push of the microphone button. This is similar to everyone's experience with Teams and Zoom (latch on/latch off).

### Activation Mode Option:

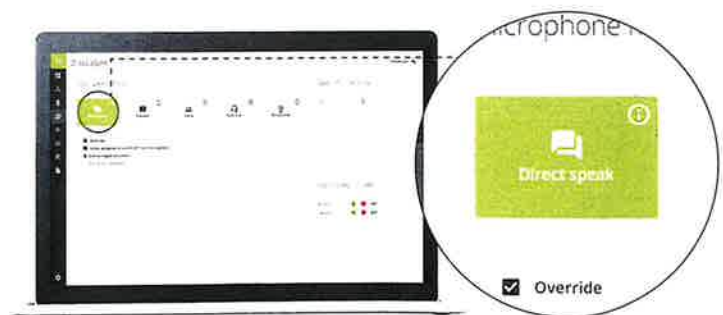
Sets the activation of a microphone to either push and hold while speaking or on/off toggle.

### Hold to Mute Option:

A new microphone mode option when in Hands-free mode. The microphone is always live until you press and hold to mute (momentary latch).

### Override Option:

When the designated number of open microphones is reached, the next participant pushing the microphone button to join the conversation will be added. This will automatically deactivate the first microphone in the group (first in/first out).





# Request Mode

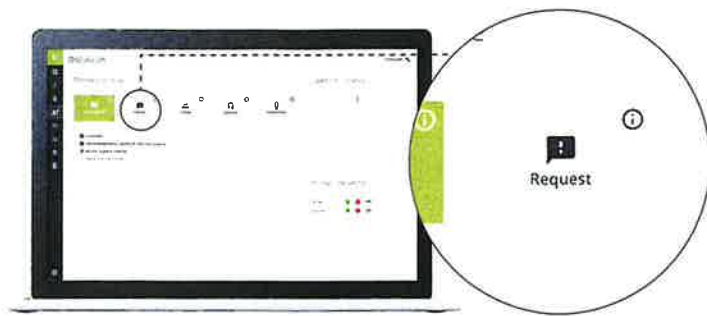
This mode is typically used for meetings that require more structure or have a certain protocol to follow. These types of meetings require moderation capabilities and request mode suits this need perfectly.

With Request activated, participants don't have a live microphone and their microphone lights up a different color as they are put into the request queue.

A chairperson or operator can add participants to the conversation by pressing the "next-in-line" button, resulting in adding the person who is on top of the Request queue.

With the use of Televic's software, a chairperson can decide to add a participant from the complete queue list to the conversation, also called "jump the queue". The reordering of the request list is also possible using a simple drag and drop principle.

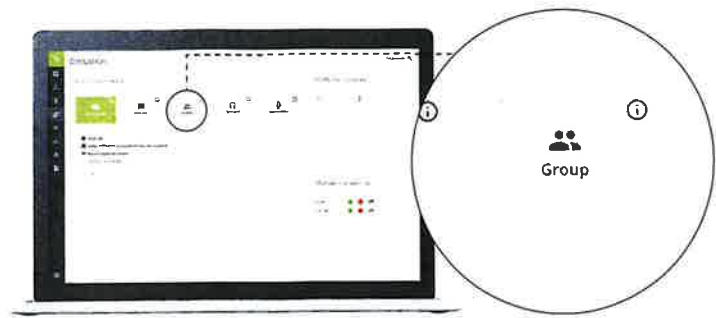
Optionally, you can notify the person on top of the queue to be ready to join the conversation. The LED of the microphone blinks, giving an indication of who will speak next. It will change color when the microphone is activated.



# Group Mode

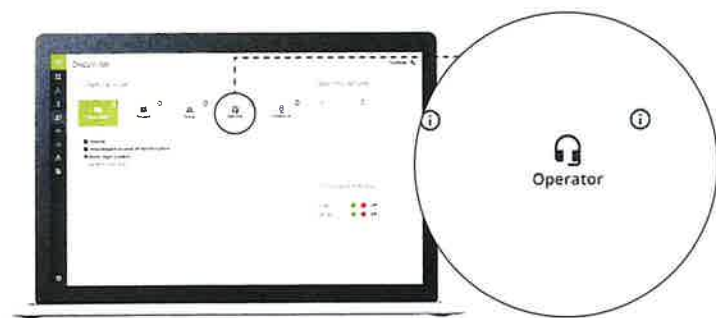
Group Mode is a semi-automatic mode for meetings that need focused conversations but less protocol, or are conducted without an operator.

Pressing the microphone button adds participants to the conversation unless the maximum amount of open microphones is reached. If that's the case, the next participant will be added to the request queue. When any participant with an active microphone turns it off, the participant on top of the request queue will be added automatically.



# Operator Mode

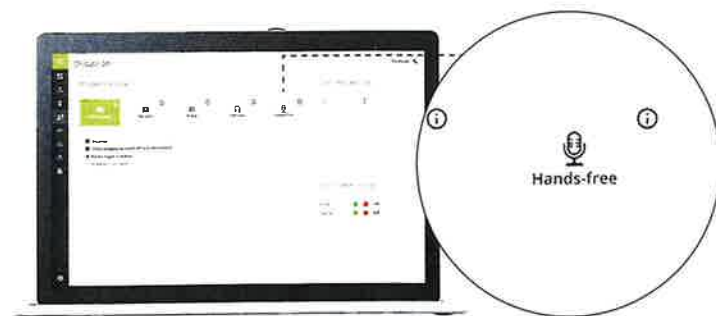
In Operator Mode, participants cannot activate their own microphone. Only a chairperson or Operator using the Confero 360 web-based software can activate microphones. In the software, a representation of the room layout can be built, making it easy to navigate for smoother flow of specific participants. Participants can decide to leave the conversation by pressing the microphone button.



# Hands-free Mode **NEW**

This is an automatic mode where no buttons need to be pushed. All microphones are active and gain is automatically controlled and optimized based on the ongoing conversation.

Moreover, an algorithm defines who actively speaks so this information can be used for signage applications, reporting, fine grained time stamping and automatically trigger the camera system in the room to take the speaker into picture without the need for a camera operator. Participants can mute their microphone in order to suppress a cough or have a side conversation with the mute-to-hold feature.



\*Gooseneck microphone recommended for Hands-free Mode

# Microphone Status Mode

The conference units have LED status indicators on the microphone button, the backside of the unit, and microphone ring. These indicators can be programmed to be off, red, or green to represent the active, muted, or request state of a microphone station. The web browser gives you full flexibility to configure LED configurations.

LED indication operates with push-to-talk or Hands-free Mode.

