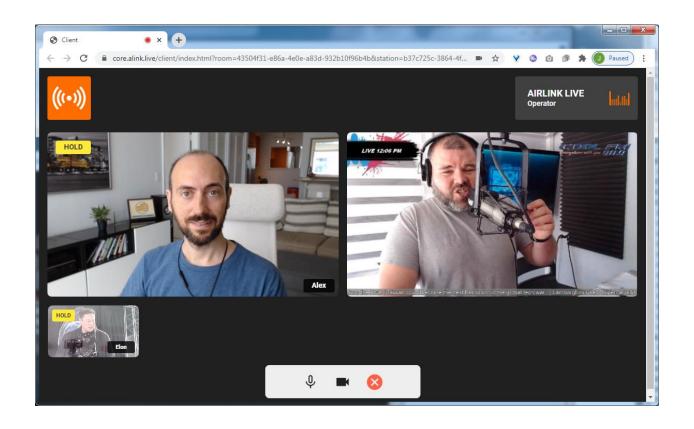


INSOFT, LLC

North Miami, FL 33179
Tel: +1 786 292 2811
HDVMixer.com

AirLink User Guide

Rev.A



1. OVERVIEW

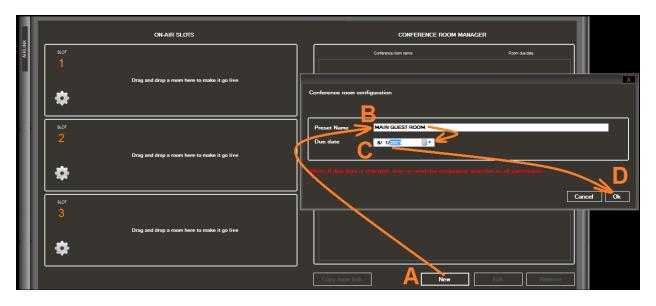
This document covers operation and user good practices regarding HDVMIXER's AirLink Live remote broadcasting tool. For installation and configuration information please refer to AirLink's Installation Guide.

AirLink is a virtual studio solution. It bridges the gap between remote team members and the studio.

There is no need to install software. AirLink is browser based; uses broadcast bidirectional audio codecs, handles mix-minus feeds to every participant, and feeds on-air video from HDVmixer and of each participant for easier on-air interactions.

2. CREATING AN AIRLINK ROOM

To be able to share room links with guests and remote hosts, we'll need to first create at least one room. Proceed as follows:

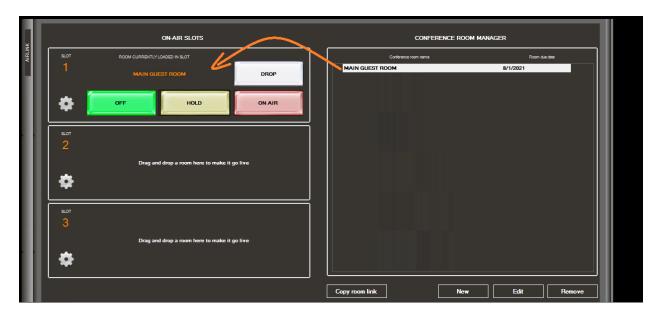


Each room has an expiration date. This allows the broadcaster to share links that will automatically expire soon after an interview has ended. Limiting any potential misuse.

NOTE: The maximum due date for any room is one year into the future.

3. ASIGNING AN AIRLINK ROOM TO A SLOT

To be able to use a room on-air the user will need to drag&drop the room he intends to use to one of the AirLink Slots. In the following example we see how room 'MAIN GUEST ROOM' was dragged to Slot #1:

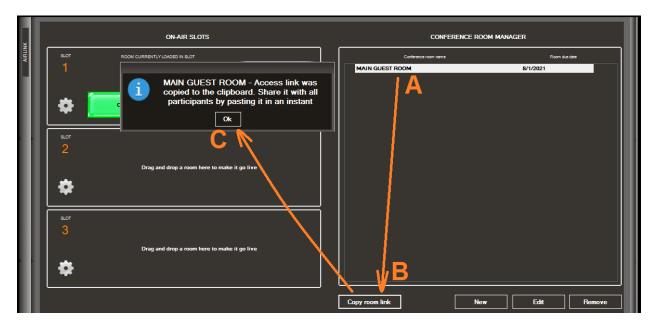


Once a room is assigned to a slot the user can control the state of room as follows:

- OFF: Studio end will have audio of all the remote guests in the room. Remote guests will only hear and see each other.
- HOLD: Remote guests will have audio and video return from the studio. They
 only see each other, no audio or video feed from other AirLink Slots that may be
 on-air.
- ON AIR: Same as HOLD, but remote guests will also have audio & video feed from all other AirLink Slots that are also on-air.
- DROP: Once the room is no longer in use, this button will unload the room from the Slot.

4. SHARING AN AIRLINK ROOM

Finally we need to share an AirLink ROOM with remote users. This is done by following these steps:



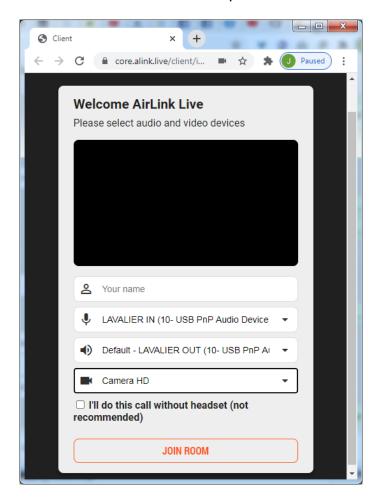
After Step C the link to the room can be pasted using Ctrl-V or by right-clicking and selecting 'Paste'. These links can be shared by instant messenger, email or any other text communication medium.

5. OPENING AIRLINK LINKS

The remote user should open these links in an approved web browser. As of this writing we support: Google Chrome, Safari, Microsoft Edge and Firefox.

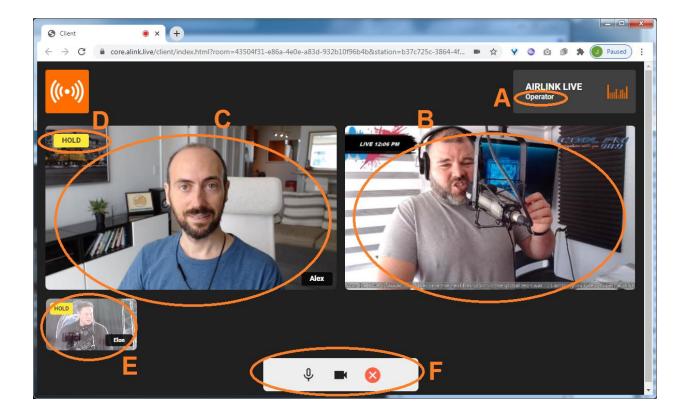
The remote user will be asked for permission to use his camera and microphone. This security configuration does change from device to device. We suggest that producers experiment on various devices so that they can help diagnose how to disable these security configurations when remote users ask them for help.

Finally he will be asked to confirm his name (optional), audio device selection and the camera that he would like to use. This is an example of what the remote user will see:



Once he is ready to connect, he must press the JOIN ROOM button.

Upon connection, the remote user will then login to the room with the following UI:



Where:

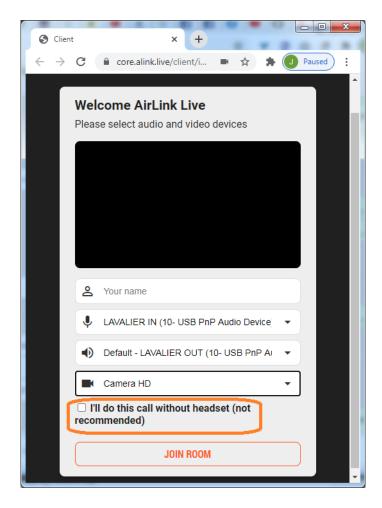
- A: Shows 'Operator' if the room is assigned to an AirLink slot on the station's end
- B: Shows low bitrate PGM video output from HDVmixer to the remote users
- C: Each remote user will see himself here to adjust his camera angle and lighting
- D: Shows the remote users the current room's status: OFF/HOLD/ON-AIR
- E: All other room participants will show up in the lower portion of the frame. When multiple Slots are on-air simultaneously, then all participants that are on-air will show as well.
- F: user control panel. Mic Mute button, camera privacy button and disconnect button.

6. AUDIO CONSIDERATIONS FOR REMOTE USERS

AirLink is a professional broadcast codec device. Therefore, it expects the remote user to be wearing headphones. This allows for the use of a true two-way high quality audio link. Avoiding the audio artifacts produced by echo canceling algorithms.

Nevertheless, we do know that sometimes the remote user may not have ear buds or a headset at hand. To cope with this emergency situation we've implemented echo canceling algorithm that can be enabled on a user by user case.

When the remote user is going to use a phone in speakerphone mode, then make sure he checks the option 'I'll do this call without headset (not recommended)' as per the following picture:

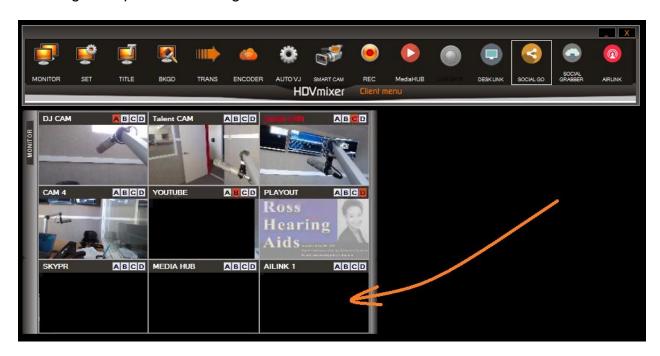


NOTE: When this option is checked, the echo canceling will be enabled. Thus AirLink's audio quality will be only marginally better than any other Internet conferencing app. We discourage its use whenever is possible.

7. AIRLINK VIDEO SOURCES

Customers can configure 1, 2 or even all 3 of the AirLink slots as video sources in HDVmixer.

If multiple AirLink Slots will be used, then multiple video sources will be needed. In the following example we are using Video Source 009 for AirLink's Slot 1 video:



As soon as AirLink's Slot 1 is assigned to a room, then the MONITOR panel will show the video of any participants in that room:

