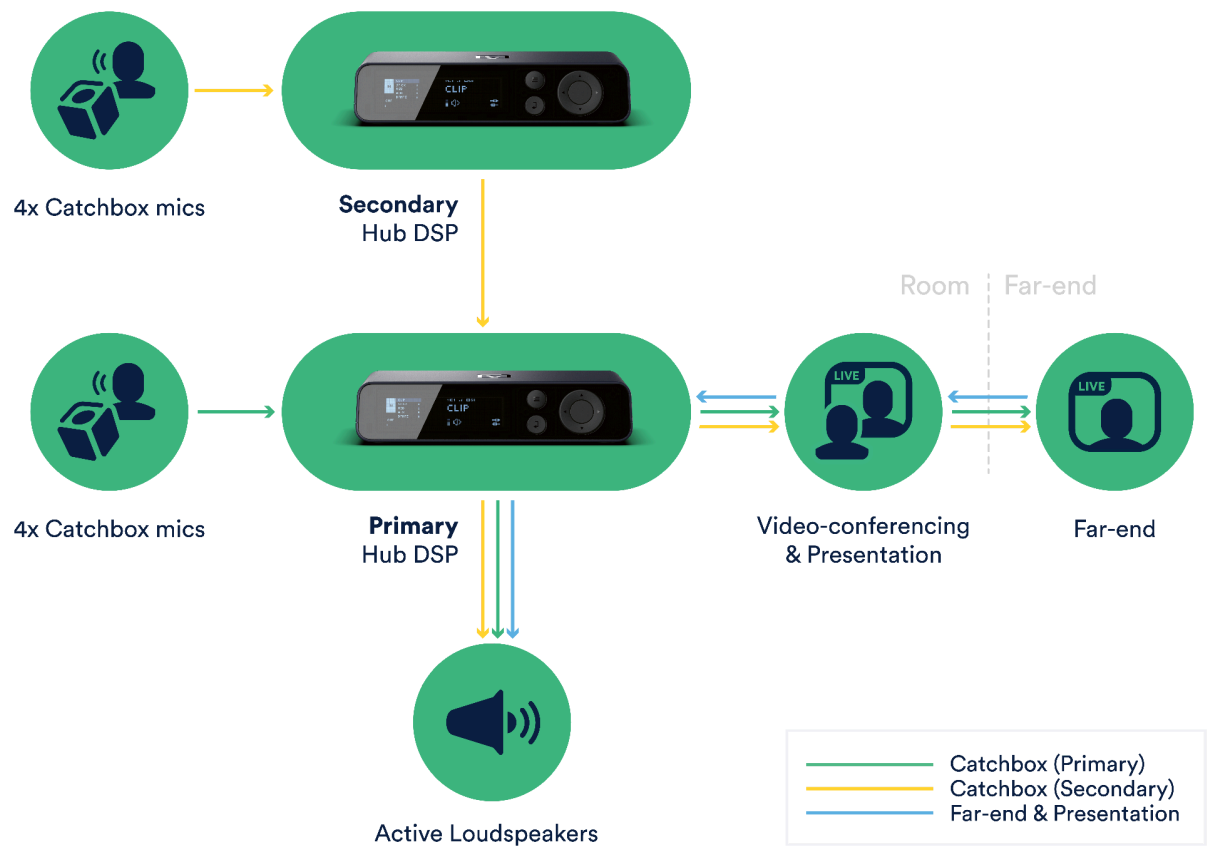# Catchbox Plus with 8 microphones (Daisy-chaining of two Hubs)

What will you get?

- All audio flows mixed and managed from Catchbox Hub DSP
- Catchbox mic audio and far-end audio amplified in the room
- Eight Catchbox microphones automixed on a single audio feed for video-conferencing

4x Catchbox mics   **Secondary** Hub DSP

4x Catchbox mics   **Primary** Hub DSP

Room | Far-end

Video-conferencing & Presentation

Far-end

Active Loudspeakers

——	Catchbox (Primary)
——	Catchbox (Secondary)
——	Far-end & Presentation

What will you need?

- Two Catchbox Plus systems with microphones

   NB! IN this scenario we will use the following naming for the Hubs:
   - **Primary** - connected to the video-conferencing computer
   - **Secondary** - connected to the Primary

- Catchbox 3pin-to-3pin cables - 4 pcs (purchased separately)
- Video-conferencing computer

Step-by-step instructions

1. **Ensure all Catchbox mics are paired with the Hub.**
   - 1.1. In most cases, the mics are pre-paired before shipping. However, if pairing is required, follow the instructions in this Knowledge Base article.

2. **Connect the cables**
   - 2.1. USB for Primary - connect your Primary Hub DSP to your video-conferencing computer using the included USB-C cable to provide power and audio connection.
   - 2.2. USB for Secondary - connect your Secondary Hub DSP to a power source using the included Catchbox USB-C Power Adapter

3. **Configure your Primary Hub**
   - 3.1. Configure FLEX ports to operate as inputs

   GLOBAL SETTINGS → SYSTEM → FLEX MODE → INPUT

3.2. Configure all FLEX ports to MICROPHONE MODE

IN → FLEX → FLEX 1..4 → CHANNEL SETTINGS → MICROPHONE MODE

NB! It is recommended to route the microphone signals via the Automixer (MICROPHONE MODE). If your external device is a media signal (music, soundtrack etc), it is recommended to route it bypassing the Automixer (MEDIA MODE).

3.3. Configure audio mix for video-conference on USB OUT (MIXOUT)

OUT → MIXOUT → USB OUT → CHANNEL SETTINGS → MIX
CONFIGURATION →
MIC 1–4, ENABLED
FLEX IN 1-4 ENABLED

NB! Disable all other signals.

Note: Due to subsequent digital-analog-digital signal conversions, microphones connected to the Secondary Hub will be slightly louder. To mitigate the difference adjust the Input Gain settings on the Primary Hub for all FLEX inputs to -5dB

IN → FLEX → CHANNEL SETTINGS → GAIN → -5dB

4. Configure your Secondary Hub

4.1. Configure FLEX ports to operate as outputs

GLOBAL SETTINGS → SYSTEM → FLEX MODE → OUTPUT

4.2. Make sure that for all FLEX output channels the "CHANNEL CLONING" setting is "DISABLED"

OUT → FLEX → CHANNEL SETTINGS → CHANNEL CLONING → DISABLED

5. Connect the audio cables in both Hubs

5.1. Before connecting the cables - disconnect the USB power from both Hubs

NB! There is no risk of losing the saved settings - the Hubs will store them in the permanent memory that is not erased by power cycling.

5.2. Connect the 3pin connectors - use Catchbox 3pin-to-3pin cables to connect FLEX 1 port on the Primary with FLEX 1 port on the Secondary, FLEX 2 on Primary with FLEX 2 on Secondary and so on.

5.3. Connect the USB connectors to power both devices.

6. Configure your video-conferencing computer

6.1. In the computer's audio settings select "Catchbox Hub DSP" as a source of "Microphone" and "Loudspeaker" (depending on the OS).

6.2. In the video-conferencing platform's audio settings select "Catchbox Hub DSP" as a source of "Microphone" and "Loudspeaker" (depending on the platform).

Wiring and mix diagram

MIC 1
MIC 2
MIC 3
MIC 4

**Secondary
Catchbox Hub DSP**

Catchbox USB-C
Power Adapter
(5V 3A)

FLEX mode:
OUTPUT

MIC 1
MIC 2
MIC 3
MIC 4

**Primary
Catchbox Hub DSP**

USB C

FLEX mode: INPUT
Input mode:
MICROPHONE

POWER

FLEX IN 1–4

USB-OUT
MIC 1..4

**Video-conferencing
computer**