



Vidyo[™]
Personal Telepresence

TECHNICAL NOTE

Integrating Audio Devices with the VidyoRoom[™]

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Integrating Audio Devices with VidyoRoom Endpoints

Tune your VidyoConference™ audio experience to your application and taste

Applications for our VidyoConferencing™ system vary almost as widely as the people who use them. Different users may desire different levels of audio performance based on their respective applications and personal taste. That's why Vidyo has certified a variety of devices for use with our VidyoRoom™ system that may be sourced independently, in addition to the ClearOne Chat 50 and Chat 150 conferencing microphones that can be purchased through Vidyo. Any of the devices that do not directly connect to the VidyoRoom via USB can be connected to the Audio Line In/Line Out at the back of the VidyoRoom system. (Adaptors may be required.) This technical note provides the information you'll need to connect audio devices to your VidyoRoom system and make intelligent choices about which devices will satisfy your individual needs.

Making the connection

Leveraging its widely adopted USB standard input ports, the VidyoRoom supports a wide variety of audio sources that are USB in nature, such as, USB conferencing microphones. The VidyoRoom also supports non-USB audio sources, such as, conferencing microphones, high-end echo canceling audio mixers and speakerphones, through the use of Audio Line In/Line Out.



Illustration of VidyoRoom appliance using USB or Audio Line In/Line Out on VidyoRoom

Finding the right fit

When considering your audio needs, first answer the following questions:

- Will you have multiple microphones in the room and require echo cancellation?
- Are you okay with a low-end microphone or do you need something with better frequency response and noise cancelation?
- Do you need a wireless system?
- Do you need to connect to a POTS line?

Once you have an idea of the application and type of experience you are looking for, use the following list of devices certified with the VidyoRoom system to choose the devices that best meet your needs.

Device Type	Brand	Model	Typical Pricing	Reference	Remarks
Conference Mic	ClearOne	Chat 50	\$245.00	Can be purchased as part of the VidyoRoom system	Available from Vidyo. Connect to USB.
Conference Mic	ClearOne	Chat 150	\$399.00	www.clearone.com	Available from Vidyo. Connect to USB.
Conference Mic Extension	ClearOne	CHATAttach	\$79	www.clearone.com	Available from Vidyo. Use with 2 Chat 150
Conference Mic Extension	ClearOne	VC Breakout Box	\$120	www.clearone.com	Use with Chat 150. Connect to Audio I/O
Conference Kit	ClearOne	Rav 600	\$2105.00	www.clearone.com	Connect to Audio I/O
Conference Kit	ClearOne	Rav 900	\$2495.00	www.clearone.com	Connect to Audio I/O
Conference Kit	ClearOne	Converge 560/590	\$2735.00	www.clearone.com	Connect to Audio I/O
Conference Phone with Microphone Ext	Konftel	300	\$1100.00	www.konftel.com	Available from Vidyo. Connect to USB
Wireless Mic Kit	Revolabs	Fusion 8	\$5403.00	www.revolabs.com	Connect to Audio I/O

Extending Conference Mic for larger conference settings

The ClearOne CHATAttach is an extension kit that connects 2 separately sold CHAT 150 to extend audio coverage to a larger space in the same conference room. The extension kit includes the cabling and power supply.



Illustration of VidyoRoom appliance connecting to 2 CHAT 150 using CHATAttach

Connecting CHAT 150 with the VC Breakout Box

The CHAT 150 VC Breakout Box can be used as the interface between the CHAT 150 and the VidyoRoom appliance. It can be used in cases where the CHAT 150 has to be placed too far away from the VidyoRoom for the USB cable to work.

To use the CHAT 150 VC Breakout Box, enable the line in/out on the VidyoRoom under Settings->Audio on the VidyoRoom's GUI. Connect the VidyoRoom line in/out to the Audio in/out of the VC Breakout Box.

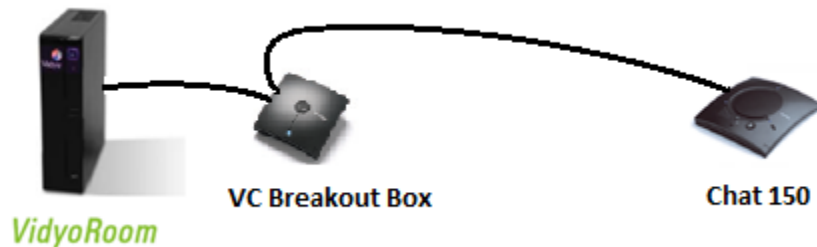


Illustration of VidyoRoom appliance connecting to VC Breakout Box and CHAT 150

VidyoRoom Audio In/Out

To use the VidyoRoom Audio In/Out, go to Settings->Audio and select "Line In" for Microphone Input and "Line Out" for Speaker Output.

The Audio In/Out on the VidyoRoom are unbalanced with TRS connectors of 3.5mm. Note that you may also need a stereo 3.5mm to mono RCA adapters (Radio Shack part number 274-378) for connecting to the audio device.

The VidyoRoom Audio In/Out Line Level:

- Nominal level -10 dBV
- Nominal level VRMS: 0.316
- Peak Amplitude, VPK: 0.447
- line out impedance is around 100 Ω , the voltage can reach 2 volts peak-to-peak with levels referenced to -10 dBV (300 mV) at 10 k Ω .
- line input has a high impedance of around 10 k Ω , "Hi-Z" input

Conclusion

We hope this information has helped you to customize the audio experience in your VidyoConferences™ – easily and cost effectively. For more information or additional ideas on how to get the most out of your VidyoRoom system, please contact your local Vidyo sales engineer.

For more information: www.vidyo.com 1.866.99.VIDYO