

Interfacing a Lifesize 220 System with SymNet DSP



SymNet provides cutting edge acoustic echo cancellation (AEC) for audio conferencing and video conferencing applications. With only 11ms of latency, the SymNet AEC algorithm is one of the fastest acoustic echo cancelling algorithms in the conferencing market. Couple the speed of the AEC algorithm with the pristine, high fidelity, audio SymNet provides, including Dante digital bussing capabilities, there is little wonder why for many A/V Integrators SymNet is becoming the preferred DSP system for small to larger conferencing systems.

SymNet provides AEC and audio conferencing options native to the system; however, when video conferencing is needed, a 3rd party video codec system will be integrated with a SymNet system. As such, it is important that the correct inputs and settings are used on the Lifesize system to provide the best audio possible during the video conference.

Lifesize 220 Input to Use with SymNet Output:

All Lifesize 220 models have several inputs; however, when a Lifesize codec is integrated with SymNet, the SymNet system will provide the AEC. As such, it is important to use the (No AEC) inputs on the Lifesize codec for receiving the microphone and media sources from SymNet. Using an input on the Lifesize codec with AEC can cause artifacts associated with processing the already “echo free” audio with AEC a second time.

Below is a chart with the Lifesize models and “No AEC” input options. The SymNet mix that has the audio for the far end caller should be connected to one of these No AEC inputs.

From the Lifesize User Guide:

Selecting the Active Microphone

Lifesize systems can connect to more than one microphone device for audio input during calls; for example, your Lifesize phone, Lifesize Focus, and on codecs with a microphone in connector, Lifesize MicPod. Only one of these devices can function as the active microphone during a call.

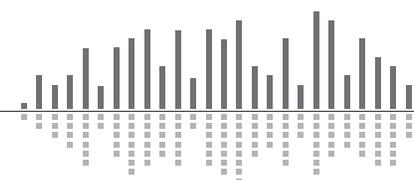
Select a device to serve as the active microphone during initial configuration or in **Administrator Preferences : Audio : Active Microphone**. Options that are available for **Active Microphone** depend on the Lifesize system model:

Model	Active Microphone Options
All models	Auto (default) Phone Microphone In Microphone In (no AEC)
Lifesize Express 220	Line In Line In (no AEC)
Lifesize Room 220 Lifesize Team 220	Line In 1 Line In 1 (no AEC) Line In 2 Line In 2 (no AEC) Camera 1

Use the *Microphone In (no AEC)* and *Line In (no AEC)* options to connect microphones that have their own acoustic echo canceller.

Lifesize 220 Output to Use with SymNet Input:

The Lifesize codec is providing the audio from the far end to the SymNet system. This far end audio is used as the reference (REF) as well as being sent to the local speakers. The “Line Out” of the Lifesize codec should be connected to an analog input on the SymNet device. When using a Radius AEC, one of the four line inputs should be used. If a Lifesize phone is used in conjunction with the system, the Voice Call Audio Output should be routed to the Lifesize Line Out as well.



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From the Lifesize User Guide:

Selecting Audio Output

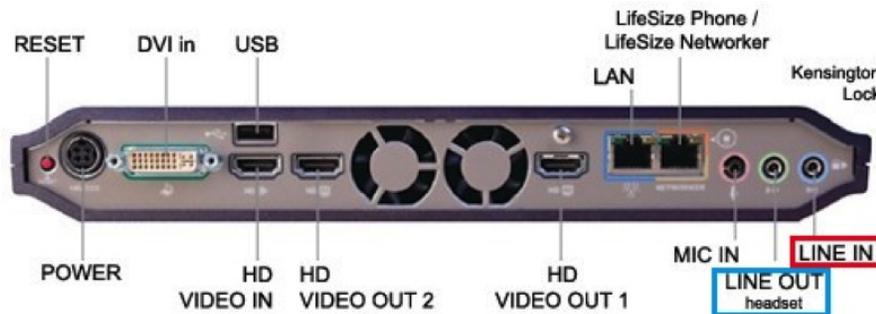
Select audio output during initial configuration or in **Administrator Preferences : Audio**.

By default, audio in a video call is sent to your display (*HD Out*). If you wish audio in a video call to be sent to the attached phone, set **Video Call Audio Output** to *Phone*.

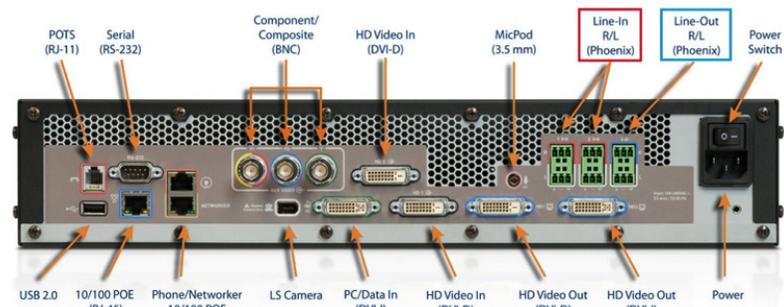
By default, audio in a voice call is sent to the LifeSize phone attached to the LifeSize codec. If you want the audio in a voice call to be sent to the line out or your display, set **Voice Call Audio Output** to *Line Out* or *HD Out*. If the LifeSize phone is not connected to the LifeSize codec, audio in a voice call is sent to the line out regardless of the preference selected.

Below are pictures of the Lifesize 220 models. The correct Lifesize input to connect SymNet's output which will carry the local audio to the far end is highlighted in red on each model. The correct Lifesize output, also known as the reference or "REF", to connect to SymNet's input is highlighted in blue.

Lifesize Express 220:



Lifesize Team 220:



Lifesize Room 220:

