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:

**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.
From the Lifesize User Guide:

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:**