

Third Party Microphone Systems with SX20



[Enrico Conedera](#) 84 posts since Sep 16, 2014

Third Party Microphone Systems with SX20 Jun 30, 2015 1:58 PM

The question has come up: "Can I use third party microphones or digital audio mixers with an SX20?"

The answer is yes, you can, with an adapter from XLR to 4-conductor 3.5mm mini. The pinout for the microphone input is listed in the SX20 Admin Guide.

One important note: it is necessary to disable the HDMI audio input, in the web interface: **Configuration / System Configuration / Audio / Input / HDMI 1 Mode: Off**

- * The adapter from XLR to 4-conductor 3.5mm mini is available from Revolabs, and can be purchased inexpensively from B&H Photo: [B&H Photo Video](#)
- * Revolabs has certified their wireless HD Microphones to work with the C20, some time ago. This same solution can be used for the SX20.
- * Other third party wireless or wired microphone systems can be used as well. This requires TC7.0 or later software on the SX20, which has improved support for third party microphone systems: input level adjustment, echo canceler on/off, and noise reduction on/off.
- * Audio DSPs such as Biamp and ClearOne can be used. Simple analog microphone mixers can also be used.
- * The API changes that support this improvement are documented in the TC7.0 version of the SX20 Admin Guide.

* Another important note: although the SX20 will supply sufficient phantom power to run a Cisco AudioScience ceiling microphone, it does not reliably provide phantom power to third party condenser microphones. For that reason it is necessary to specify a phantom power supply when using condenser microphones with the SX20, that are plugged directly into the codec.

Tags: [dsp](#), [sx20](#), [wireless mics](#)



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Re: Third Party Microphone Systems with SX20 Jul 8, 2015 12:13 AM

More information on this subject:

Improvements have been made in the SX20 for third party microphone connectivity, as of TC7.0 software.

These are described on page 55, in the SX20 Quick Set Administrator Guide (TC7.0) which can be downloaded here: <http://www.cisco.com/c/en/us/support/collaboration-endpoints/telepresence-quick-set-series/products-maintenance-guides-list.html>

In particular, it states the following:

New configurations

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Audio Input Microphone [n] Level: <0..24>

Audio Input Microphone [n] EchoControl Mode: <Off/On>

Audio Input Microphone [n] EchoControl NoiseReduction: <Off/On>

Audio Input Microphone [n] EchoControl Dereverberation: <Off/On>

These changes allow for the use of a variety of directly-connected standards-based microphones, including wireless, as well as the use of external audio DSPs. In particular, the AudioScience microphone is now supported.

Important things to note:

- * All microphone audio should be input through the 3.5mm connectors. There are two, and each one has an independent echo canceler.
- * (Do not use the RCA inputs for microphone audio. These inputs are for program audio only.)
- * A balanced audio adapter cable is required. This cable should be XLR Female to 3.5mm Male 4-conductor. An example of such an adapter cable is the Revolabs 07-XLRTO35M4-01, which is available from B&H Photo Video for under \$30 US. This cable was purposely designed by Revolabs to support Cisco codecs.
- * For condenser microphones that are directly connected, a phantom power supply is required. Although the SX20 uses a type of phantom power for the provided Table Microphone 20, it is meant only for that specific microphone. An example of such a power supply is the Behringer PS400.
- * For connecting an AudioScience microphone, the adapter cable is needed, but a phantom power supply is *not* needed. The phantom power on the SX20 is sufficient to drive the AudioScience microphone.

NOTE FOR 2.5X CAMERA:

There is a bug in TC7 software that disables audio from third party microphones when the 2.5X camera is used with SX20. The workaround is to run this command in the web interface or API: *xConfiguration Audio Input HDMI 1 Mode: Off*