



Extending the Usage of Polycom Speakerphones via the AUX IN Connection

This information applies to:

- All SoundStation2™, SoundStation VTX1000, or SoundStation IP 7000 phones used in situations that involve special microphone requirements.
-

INTRODUCTION

The SoundStation external mic is the best choice for its intended application, which is extending the pickup range within a room where several people are participating in a teleconference. There are applications that do not fit this description, however, and that is where the AUX input shows its value. One application is where the principal speaker is walking around, such as a presenter—an excellent choice here is the Polycom wireless lapel mic, which is compatible with North American requirements and interfaces to the conferencing system via the AUX IN jack. For those applications that fall outside of these categories, the user will need to do something else.

One common application is where there are one or more speakers who need the best possible pickup, as good as or better than anyone else in the room, such as a conference moderator. In this case, you may be dealing with room noise, or a speaker who is too far from the mic or is trying to reduce keyboard noise by having a mic he can direct more precisely. These are all legitimate goals, and are all much more important when the connection is in narrowband, because so much of the voice is being blocked out to begin with—you have to preserve what you have. In these situations, it is not uncommon for the SoundStation to be used with just one person in the room, the speaker, who is looking for best possible sound over a phone line, with reliable operation and easy hookup.

This technical note describes a solution for this requirement, providing the user with a setup that is similar to that of a radio announcer: A directional microphone on a desk stand, pointed directly at the speaker, and operating as the principal microphone for the SoundStation conference phone.

SET UP

The complete kit consists of a directional microphone, an amplifier to boost it to the line level used by the AUX input, and a couple of cables. There are numerous choices available for each of these, but a typical example is shown below. These can all be purchased through an A-V dealer, a music store, or online through a company such as Sweetwater.

For example:

- A directional microphone (with clip). A cardioid response is the most common directional response, and usually the most versatile.



Figure-1: Shure SM58 directional (cardioid) dynamic (unpowered) mic

- A microphone stand.



Figure-2: SDS7200B desk stand

- A preamp to boost the low microphone output to line level for the AUX input.



Figure-3: Rane MS-1B Preamp



- Two cables (cable length will vary according to application)



Figure-4: Mic to Preamp Cable (XLR-Female to XLR-Male connection)



Figure-5: Preamp to AUX IN Cable (Preamp XLR output to RCA input of the Polycom AUX input)

Note: A different preamp may have a different connector style than XLR. A different cable may be necessary.

Note: It is likely that the installer will want to put the preamp close to the power adapter (wall module).

CONCLUSION

Once everything is connected, check the console configuration to be sure the correct input has been selected (the appropriate Users Guide will guide you through this). The SoundStation VTX1000 can disable all other mics on the console, for maximum ambient noise rejection, but even the SoundStation 2 will automatically select this external mic when the speaker is speaking, thereby quieting the room.