

This is a Soundcraft Spirit E12, 12-channel mixer. Larger ensembles may need a 16-channel mixer.

MIXING BOARD

The mixing console is the "grand central station" of all your electronic and amplified devices. It controls the main volume output of *all* instruments, as well as the signal volume of each *individual* instrument. Here is where you can really **balance the mix** to your liking. In addition, most mixing boards allow you to adjust the equalization of each input (treble, bass), as well as any effects processing that may be connected (such as reverb). This is the "last stop" before the audio signals are sent to the speakers for your audience to hear.

Mixers come in a variety of configurations. The type of mixer you buy will largely depend on how many channels you want to run, and whether you want to process mono or stereo channels (or most likely a combination of both). If you are connecting stereo devices (samplers, keyboards, other sound modules, etc.) into mono mixer channels, it's important to reserve *two* mono channels for each stereo device. Each microphone in your setup will typically only need one mono channel. Be sure there are enough XLR inputs on your mixer if this is how you intend to connect your microphones. Some mixers only contain a limited number of XLR inputs (like Mackie's 1202-VLZ which is a 12-channel mixer, but only contains 4 XLR mic inputs).

Mackie is well-known for their mixing boards, and you can get a good, low-cost choice with their 1202-VLZ or 1402-VLZ models. Another option would be to check out the Soundcraft Spirit E series, or Yamaha mixers. When shopping for a mixer realize it may be worth some extra expense for added flexibility in the future. Your mixer will be one of the most important elements of your setup.



In this rack configuration, you see the Akai Z8 sampler, Lexicon MPX-200 effects processor, and BBE 882 Sonic Maximizer.

SOUND MODULES/SAMPLERS

Now that you have the ability to amplify acoustic instruments, what about electronic sounds? This is where your **sound sources** come in. Oftentimes, electronic keyboards will come with a slew of on-board sounds – thus making it a "**sound module.**" You can also purchase separate modules (usually mountable in a rack configuration without a keyboard) which will offer you more sounds to choose from. Many of these modules are expandable by adding cards containing even more sounds. **MIDI** (Musical Instrument Digital Interface) will allow all of your modules and controllers (page 74) to communicate, share, and layer sounds. As you can see, the possibilities are endless.

EXAMPLE DIAGRAM FOR CABLE CONNECTIONS

In order to be successful with an electronic setup in the pit, you need to be organized. This example illustrates how percussion instructor Donnie Christian setup the electronics configuration for the Jonesborough High School pit (Jonesborough, Arkansas). In this case, the mixer is stationed within the pit. This type of diagram can also help you organize how many lengths of each type of cable are needed.

