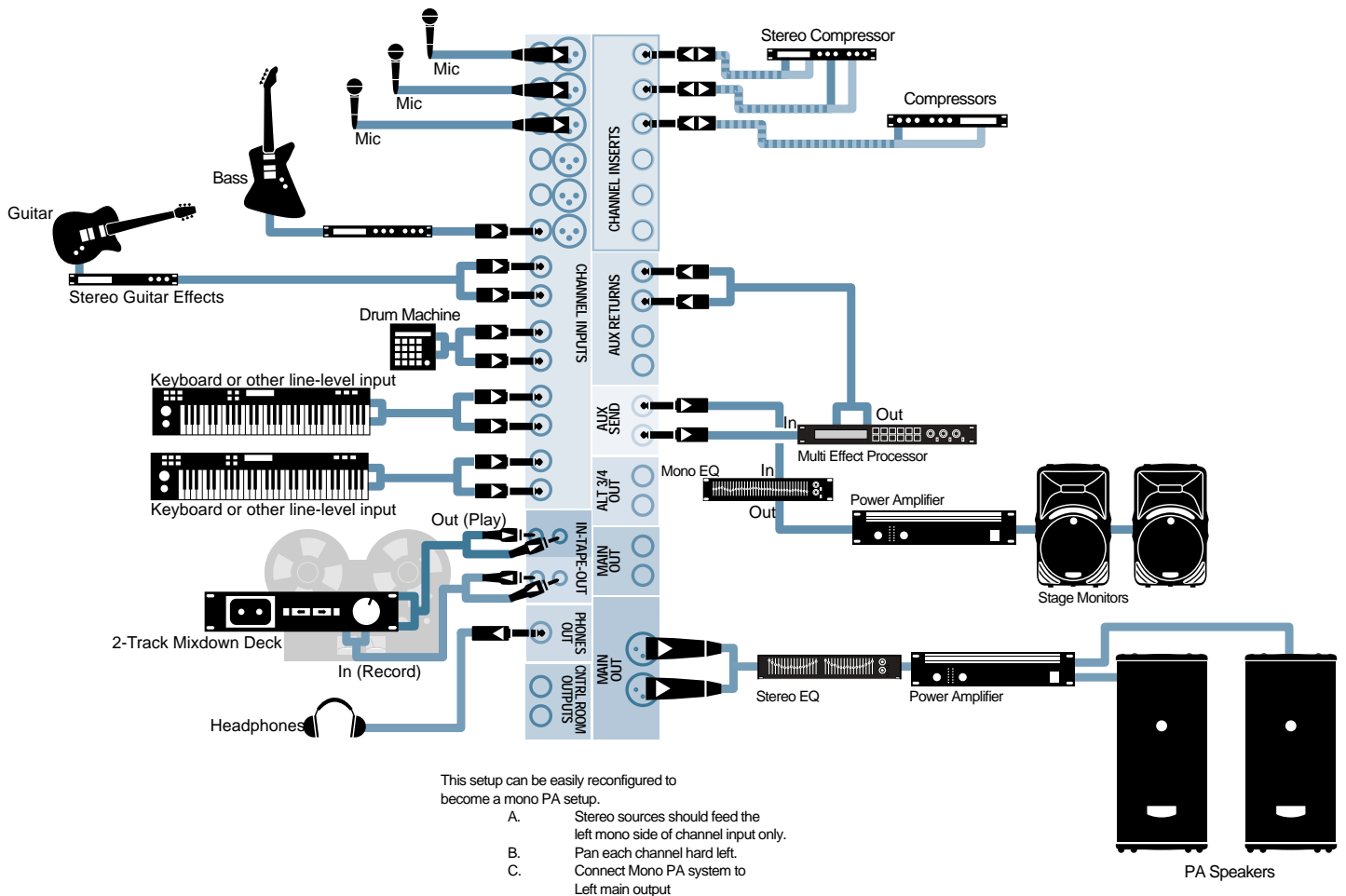


# 1202/1402-VLZ PRO, Onyx 1220 and 1620 PA



This application is very similar to the 1604-VLZ PRO PA setup. The Onyx mixers have a switch-selectable high impedance instrument pickup input on channels 1 and 2, so the bass and guitar can go directly into those channels without a processor. They're particularly good for acoustic guitars with a built-in pickup, an instrument you're likely to have in a small group.

The PA is set up in stereo in this example, but here are some tips for scaling your system down in size if that's appropriate for your venue.

## Mono PA

When working with a small mixer in small clubs, you may find it advantageous to operate the PA in mono rather than stereo.

A common setup is to use one channel of a stereo power amplifier for the main speakers and the other channel for the monitors. Since there's only one pre-fader AUX send on the smaller VLZ PRO mixers, you're likely to be using only a single monitor mix anyway.

### Mono MAIN Output

The simplest way to get a mono output to the main speakers is to pan all the input channels to one side and simply use that one MAIN output to feed the speakers. You could also pan all inputs to the center and use either output.

You can also use a Y-cable to combine the mixer's LEFT and RIGHT MAIN OUTPUTs (either the XLR or 1/4" jacks) without harming the mixer.

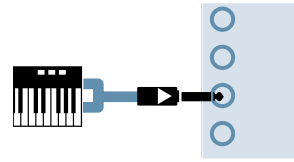
### Stereo Sources in Mono



True stereo sources can be a bit of a problem. Turning the PAN knobs fully to one side will send only one channel of the stereo source to the panned output. That could mean that you won't hear one end of a keyboard or won't hear the normal balance of drums from a drum machine. Panning to the center and using only one output will provide a true mono mix of stereo inputs.

Fortunately, most stereo electronic instruments provide a mono output by plugging into only one of the outputs. Check the manual or look at how the jacks are labeled. If you can get a mono output from your stereo keyboards or drum machine, simply plug it into the LEFT input of a stereo channel. Then you can pan the mono source wherever necessary.

If the instrument doesn't provide a mono output from one jack, you can use a Y-cable to parallel the two outputs.



Listen closely to your synth patches when running the PA in mono. Some synths have stereo effects or patches that rely on out-of-phase material in the two channels. They sound gloriously spacious in stereo, but the effect, or even the entire sound, can disappear when the two channels are summed to mono.

## Using Subgroups

The ALT 3-4 bus can be used as a subgroup in these mixers. You may find it handy to group a bunch of keyboards or background vocals, and control the level of that submix in the main mix.

Assign the keyboards to a submix by pressing the MUTE buttons on those channels. By pressing the ALT 3-4 and ASSIGN TO MAIN MIX buttons in the Master section of the mixer, you can control the level of the keyboard mix in the main mix by using the CTL ROOM/SUBMIX fader or knob on the VLZ PRO mixers, or the CONTROL ROOM knob on the Onyx.

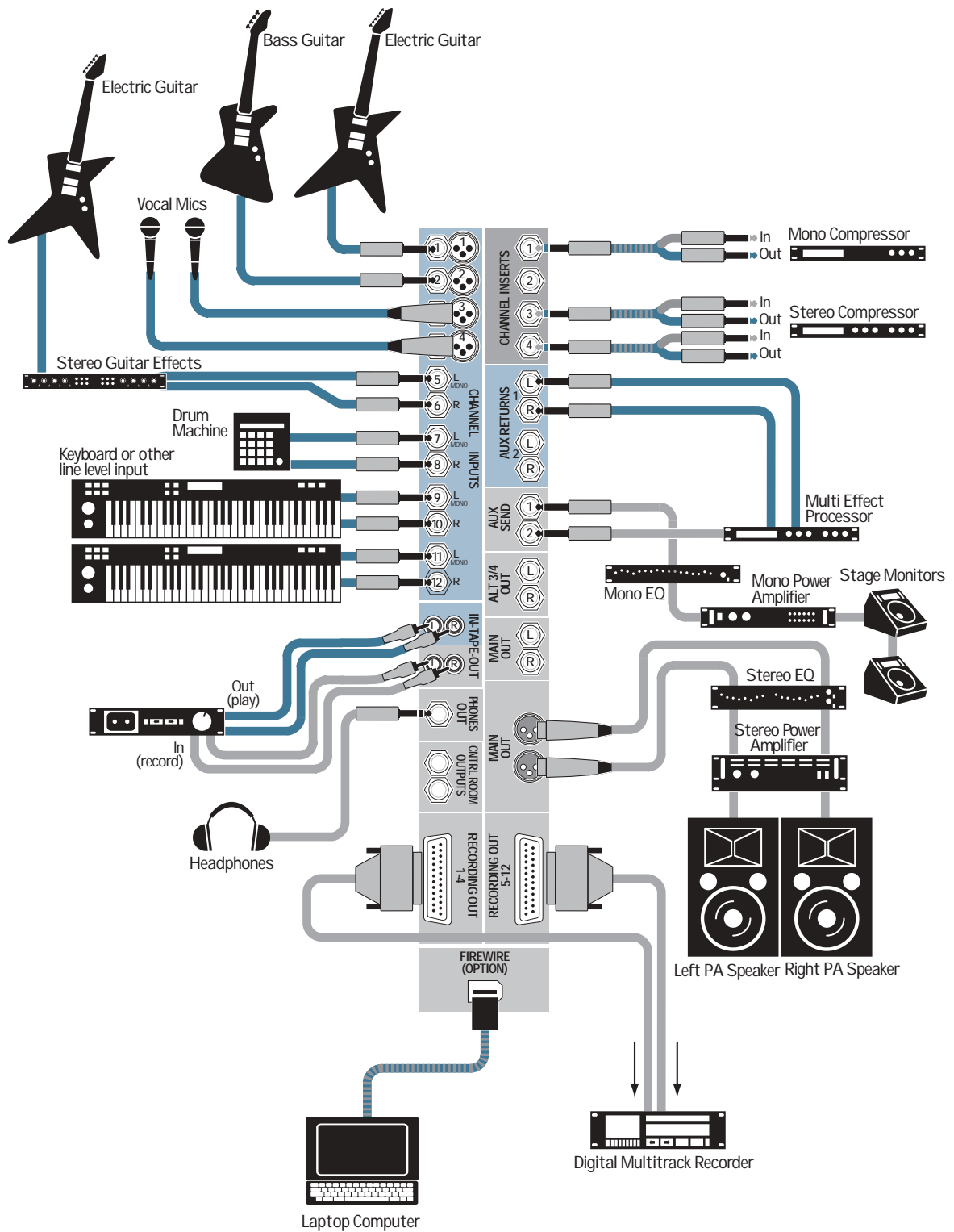
## Recording

The diagram on the previous page shows a 2-track recorder connected to the TAPE OUT jacks to record the full mix. The Onyx series offers the same capability, plus a couple more.

The Onyx Recording Direct outputs from each of the Onyx channels (on a pair of 25-pin D-Subminiature connectors) can be used to connect each track's source directly to a multitrack recorder. As long as you watch your levels so you don't clip the mic preamps or overload the recorder inputs, you'll bring home a fine clone of your performance that you can mix later.

The Onyx series also offers an optional FireWire card which, when installed, converts those direct outputs to digital format and sends them out of a standard FireWire connector. With the proper drivers installed on a computer connected to that FireWire port, the mixer appears to the computer as a multi-input sound card. If you have a multitrack DAW recording program (such as Tracktion, which Mackie

supplies with the optional FireWire card) you can record each channel on a separate track and mix it later using the DAW program's mixing capability. The MAIN L/R outputs are also sent through the FireWire interface, so if you choose, you can record the stereo PA mix.



## Notes

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