

## Using Personal Mixers with Wireless Monitor Systems

Aviom's Pro16® Monitor Mixing System can be used with virtually any output device, from floor wedges to in-ear style monitors (or earbuds). While the simplest and most cost-effective way to set up a Monitor Mixing System with earbuds is to plug the buds directly in to the Personal Mixer, some performers prefer the mobility and flexibility of wireless in-ear monitor (IEM) systems. Integrating any manufacturer's wireless monitor system, without sacrificing any of the benefits of Aviom's Monitor Mixing System, is straightforward.

All Personal Mixing and wireless in-ear systems consist of an Aviom Personal Mixer connected to a transmitter for the wireless in-ears. That transmitter sends the mix (made at the Personal Mixer) wirelessly to a beltpack receiver worn by the performer. The earbuds themselves are plugged in to the belt-pack. How you connect the transmitter to the Personal Mixer is dictated by which Aviom Personal Mixer you use.



**The A-16R Personal Mixer offers simplified connections to wireless in-ear style monitor systems. The optional A-16CS gives a performer remote control over the mix functions.**

### CONNECTING AN A-16II PERSONAL MIXER

If you use an A-16II Personal Mixer, you need a standard Y-cable to connect to your wireless system. Because the A-16II has a single stereo output jack while most transmitters for wireless earbuds have separate left and right inputs, you need the Y-cable to split the stereo output from the Personal Mixer into the separate left and right inputs for the transmitter.

To connect the Personal Mixer and the transmitter, plug the TRS plug of the Y-cable into the A-16II headphone output jack. Next use two cables to connect the left and right ends of the

Y-cable to the left and right inputs of your transmitter. Be sure not to reverse left and right or the pan control on the Personal Mixer will be backwards.

In this setup, the IEM transmitter needs to be placed on stage near the A-16II or you will need to run analog cables from the A-16II on stage to the transmitter offstage.

### CONNECTING AN A-16R PERSONAL MIXER

In situations where this is either impractical or undesirable, the A-16R Personal Mixer is a better choice. Because the A-16R is rack-mountable and can be controlled remotely with the A-16CS Control Surface, the Personal Mixer and wireless transmitter can be placed in the same rack, wherever is convenient (offstage, FOH mix position, wherever). The A-16R also has left and right output jacks, so no Y-cable is required. Simply use two cables to connect the left and right outputs on the A-16R to the left and right inputs on the transmitter.

As an added convenience, the A-16R includes stereo inserts to allow outboard effects, such as a limiter, to be inserted into the signal chain simply.

With the A-16R, all audio connections can be made ahead of time and kept in a single rack. All that's required during setup is running a Cat-5 cable from the A-16R to the A-16CS, placed next to the performer, providing the performer on-stage access to the mix functions on the A-16R.

### AN IMPORTANT NOTE ABOUT LEVELS

As with all audio devices, it is important to set correct gain levels at each gain stage in the signal chain. With a Personal Mixer and a wireless earbud system, check levels at the output of the Personal Mixer, the input of the transmitter, and the output of the beltpack. Verify that the transmitter is receiving as strong a signal (without clipping or distorting) as possible.

In addition, note that some wireless transmitters are mono and cannot reproduce the Personal Mixer's stereo output. The A-16R can be set to output a mono signal, and the A-16II will automatically switch to mono output if you use a mono (TS) cable to connect the A-16II to the transmitter. If you use a stereo cable or forget to set the A-16R to mono, you'll lose half of your mix. Whenever possible, mix in stereo and use a stereo in-ear system for noticeably improved performance.

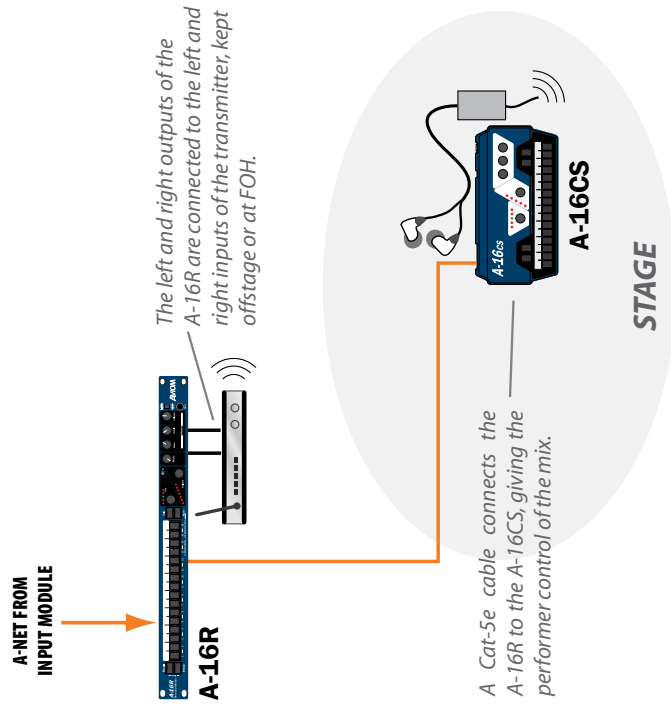
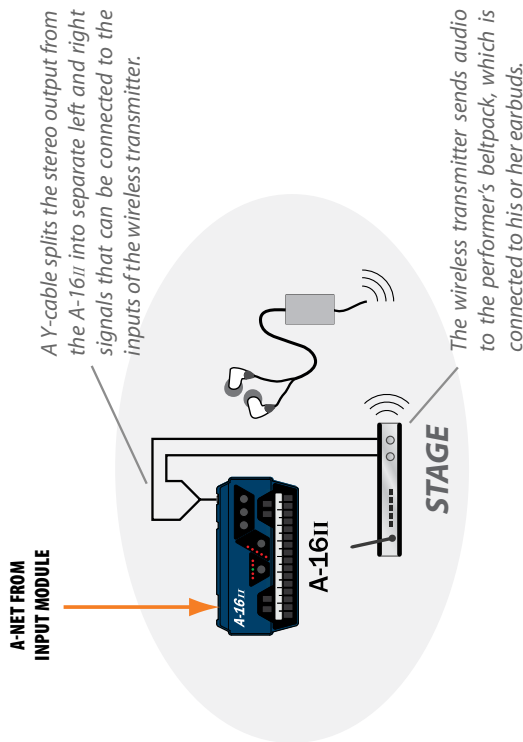
## CHOOSING A PERSONAL MIXER FOR WIRELESS

### A-16R Personal Mixer

- All hardware can be racked together
- No Y-cables or adaptors are needed
- Insert points for effects
- Remote controllable

### A-16II Personal Mixer

- Requires a Y-cable or adaptor
- Requires less hardware



The A-16II and A-16R Personal Mixers can both be used with wireless in-ear style monitors. With the A-16II, all audio connections can be kept on stage, while the A-16R allows you to rack-mount each Personal Mixer with the transmitter for the earbuds.