

## MT-X Expansion Box User Guide

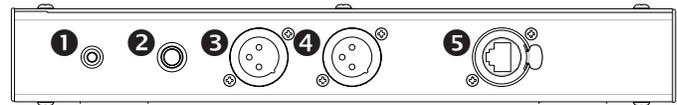
Thank you for purchasing the **MT-X Expansion Box**, designed for use with the A-16 or A-16II Personal Mixer in combination with its MT-1 Mic Stand Mount in a Pro16® personal mixing system. The MT-X Expansion Box attaches easily to the personal mixer using the same mounting holes used by the MT-1, which is required when using the MT-X. Only a Phillips screwdriver is required for installation.

### Features

When added to a Personal Mixer, the MT-X Expansion Box provides robust protection to the personal mixer's case and connectors as well as additional audio connectivity options.

All connectors are located on the underside of the MT-X, with an internal wire harness that connects to the Personal Mixer's existing audio output jack and A-Net® input jack. Audio connections include both 1/8-inch and 1/4-inch stereo headphone jacks along with separate XLR left/right unbalanced line-level audio outputs, simplifying connections to nearly any monitoring device. The A-Net In on the MT-X utilizes a heavy-duty locking EtherCon® connector. If connected to an A-16CS Control Surface, the MT-X audio jacks duplicate the A-16CS foot switch jack (for preset up/down) while the MT-X EtherCon connector is used to connect A-Control from the host A-16R Personal Mixer to the A-16CS.

✓ **NOTE** Personal Mixers equipped with an MT-X must be powered over the Cat-5 cable from an A-16D or A-16D Pro A-Net Distributor.



Connectors on the MT-X include: (1) 1/8-inch Phones/Line Out, (2) 1/4-inch Phones/Line Out, (3) Left XLR Line Out, (4) Right XLR Line Out, (5) A-Net In

### Assembling and Attaching the MT-X

The MT-X attaches to the built-in mounting holes on the underside of the Personal Mixer along with an MT-1 Mic Stand Mount. Longer mounting screws (size 6-32, 5/16-inch long) are supplied with the MT-X Expansion Box to accommodate the extra thickness of the MT-1 plus the MT-X.

If you are installing the MT-X on a Personal Mixer with an MT-1 Mic Stand Mount already attached, start by removing the three 6-32, 1/4-inch screws that hold the MT-1 in place. Set them aside in a safe location in case the installation process needs to be reversed in the future. Set the MT-1 aside until the audio and network connections have been made.

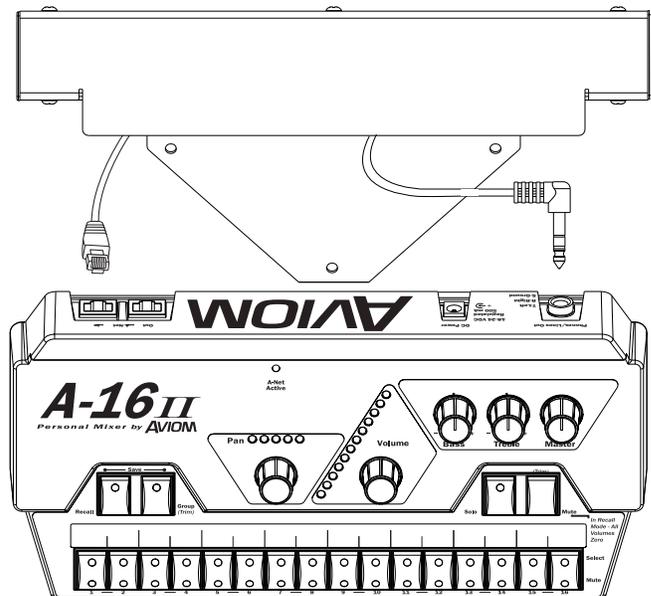
### Cable Connections

The MT-X Expansion Box comes with pre-attached TRS stereo audio and Cat-5e jumper cables that plug into the existing audio output and A-Net In jacks on the Personal Mixer. The first step is to attach these jumper cables to the Personal Mixer.

Start with the Personal Mixer sitting upright on a flat surface. Position the MT-X behind the Personal Mixer with the Expansion Box's Aviom logo facing rear. Plug the 1/4-inch TRS jumper cable from the MT-X assembly into the **PHONES/LINE OUT** jack on the Personal Mixer. Then plug the Cat-5e jumper cable from the MT-X assembly into the **A-NET IN** jack on the Personal Mixer. The **A-NET OUT** and **DC POWER** jacks on the rear of the Personal Mixer are left unused and will be covered by the MT-X.

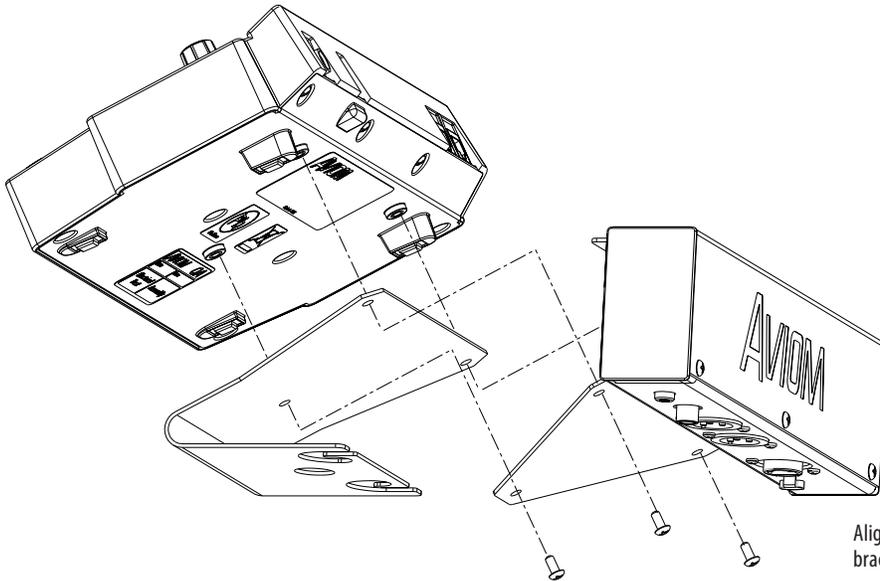
### Mounting the MT-1 and MT-X

Carefully turn over the Personal Mixer and MT-X assembly (with the jumper cables attached) on the work surface to access the mounting holes on the bottom of the Personal Mixer. Place the MT-1 under the MT-X, aligning the screw holes in the MT-1 Mic Stand Mount and the MT-X Expansion Box with the threaded mounting holes in the Personal Mixer. Attach both brackets to the Personal Mixer with the supplied 5/16-inch 6-32 screws using a Phillips screwdriver. (See the diagram that follows.)



Connect the Cat-5e jumper cable from the MT-X to the A-Net In jack and the TRS jumper cable to the audio output on the Personal Mixer.

Do not over tighten the screws, as damage to the Personal Mixer case can result. The assembly process is complete and the Personal Mixer is now ready to be mounted on a mic stand or optional EB-1 Extension Bracket.



Align the screw holes in the MT-X and MT-1 and secure both brackets to the Personal Mixer using the screws provided.

## Audio and Network Connections

Once assembled and mounted on a stand, the Personal Mixer and MT-X combination is ready to use. Connect the Personal Mixer to a Pro16 personal mixing system by running a Cat-5e cable (with or without an EtherCon connector) from a powered **A-Net OUT** jack on an A-Net Distributor (A-16 D or A-16D Pro) to the **A-Net IN** jack on the MT-X.

Plug headphones or earbuds into the 1/4-inch or 1/8-inch headphone outputs on the MT-X; both outputs receive the same stereo mix. The 1/8- and 1/4-inch stereo outputs also function as unbalanced stereo line-level outputs and can be connected to stereo sources such as desktop speaker systems (use a TRS to dual TS adapter cable for this application). To connect to a line-level source such as a power amplifier, processor, or mixing console, use the XLR left/right audio outputs (remember, these are unbalanced connections).

All audio outputs on the MT-X are active at all times while a Personal Mixer is connected to a Pro16 monitoring system. While it is possible to connect audio devices to all of the MT-X outputs simultaneously, note that there will likely be an impedance difference amongst the different types of audio devices that would be connected to each output. This may cause the output level to be different at each device. If you need to connect two sets of headphones, for example, try to use devices with similar impedances to minimize volume differences for each user.

## Cautions

The 1/4-inch stereo plug from the MT-X wire harness that is permanently attached to the Personal Mixer audio output jack defeats the stereo/mono auto detect feature of the A-16II Personal Mixer (this does not apply to the original, discontinued A-16 Personal Mixer). Do not connect a mono (TS) 1/4-inch or 1/8-inch plug to the MT-X headphone outputs—while you will not harm the Personal Mixer, low output level and/or distortion may occur. Use one of the unbalanced XLR audio outputs if you need a mono output.

For applications such as connecting the Personal Mixer to a single powered speaker or monitor, do not connect a TRS plug from the 1/4-inch or 1/8-inch stereo audio outputs to the mono *balanced* input of another audio device—use the one of the unbalanced XLR outputs instead. Connecting the left/right TRS headphone output to a balanced input will cause a low signal level output at the connected audio device because a balanced signal is differential—it subtracts the positive (+) signal from the negative (-) signal in the balanced circuit to eliminate noise.

## MT-X Expansion Box Specifications

<b>Audio Outputs</b>	1/4-inch TRS stereo, headphone or line level; 1/8-inch TRS stereo, headphone or line level; XLR left/right audio outputs, unbalanced
<b>A-Net I/O</b>	1 A-Net In, EtherCon RJ45 connector
<b>Mounting</b>	Requires MT-1, and attaches to the same mounting holes on the Personal Mixer; longer screws included (size 6-32, 5/16-inch long)
<b>Dimensions</b>	11" (279.4 mm) wide x 1.5" (38.1 mm) deep; 2.5" (63.5 mm) high
<b>Weight</b>	1.0 lb. (0.45 kg)
<i>All Aviom products are designed and manufactured in the USA.</i>	

