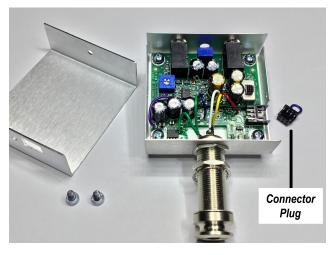
The Amulet M Phantom



The Amulet M Phantom™ has new features as well as the ability to be powered via phantom power. To access these new features, unplug the keyed Connector Plug on the side of the preamp, then remove the two screws on the sides of the preamp and remove the lid. Here you will find the new Gain Trimmer and Phase Switch.

The **Gain Trimmer** allows you to vary the overall gain of the preamp plus and minus 14dB. This allows

Adjustable Gain

Trimmer Center

you to set the output to precisely match your amplifier or signal chain, and also enables you to match output levels

between multiple instruments. This trimmer, combined with the <u>Trim Control</u> located between the two transducer inputs (see P.7 of your *Amulet M User Guide* for more info) gives a wide range of customizable adjustment.

The **Gain Trimmer** can be adjusted with a small flat-bladed screwdriver or a #1 size Phillips head screwdriver. When this **Gain Trimmer** is set to the center of its rotation, the output is the same as a standard Amulet M system. The gain increases as the trimmer is rotated clockwise, and

decreases with counterclockwise rotation. Be careful not to force the trimmer past the built in

mechanical stops at each end of the rotation.

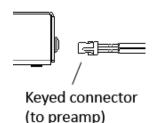


The **Phase Switch** is an internal slide switch that allows you to invert the phase of your signal, so you can perfectly match any additional pickups you might use with your instrument in a multi-system setup. This can also be used to help to increase gain before feedback in difficult monitoring situations.

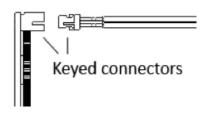
Make sure when setting the **Phase Switch** that it is set completely to one side or the other. *If the switch is set in the middle, then there will be no output from the preamp.* When the switch is set to the <u>Down</u> position (towards the endpin jack) the output is in-phase, the same as a standard Amulet M system. Setting the switch in the <u>Up</u> position (towards the transducer input jacks) will set the preamp output out-of-phase.

The small **EXT Jack** on the side of the preamp is where the controls for the M-V volume control or M-VT volume and tone controls are connected. If you are

using the system with no controls, you must insert the special Connector Plug in this jack, or else there will be no sound from the system. (NOTE: The Connector Plug and M-V/M-VT control cable that connects to the EXT Jack has a keyed design so that it only plugs in correctly with the plug oriented in ONE DIRECTION. If you look at the side of the small black plugs on the connector cable, you will see a small ridge on either side of the plug, closer to one side than the other. If you look closely at the connector (either the EXT jack or the connector on the soundhole thumbwheel controls) that it plugs into,



you'll see a slot cut into each side, that will mate with the ridges on the connector, but ONLY WHEN IT IS PLUGGED IN CORRECTLY. This is called a polarized connector, and it ensures that all of the cable wires get hooked up correctly during installation. Make sure the two are lined up correctly, and don't try to force the plug in. If it won't go, this would be the probable reason!



When you connect the M-V or M-VT controls be sure to use the new, smaller single cable connector instead of the larger dual cable connector that is used by the standard Amulet M systems. The clip on the side of the Amulet M preamp (adjacent to the EXT Connector jack where the cable plugs in) allows you to securely anchor the cable to the preamp and prevent it from being pulled loose or disconnected by vibration or cable routing problems.

Plug the cable into the keyed EXT jack, paying attention to the orientation. Gently make sure the plug is inserted as far as it will go (the rear of it should be about even with the outside of the preamp), then insert the cable into the clip on the side of the preamp, leaving a small loop of wire (as shown on P.14 of the *Amulet M User Guide*). This ensures that any cable tension will not pull or wiggle the plug loose from the connector, which can cause intermittent (or no) operation of the system. (See P. 11-13 of the *Amulet M User Guide* for additional info on installing the soundhole controls)

Using Phantom Power

Each Amulet M Phantom preamp has specific electronics designed to work with <u>48 volt phantom power</u> (it <u>cannot</u> be used with battery power). The Phantom preamp will not work with lower phantom power voltages such as 24 or 12 volts. While this lower voltage might be useful for some types of small microphones, it will not power the Amulet M Phantom correctly, so be sure and check the manufacturer's info for any unit that you are considering for use with our system.

Most modern mixers have 48 volt phantom power built into their microphone preamp channels. This means that you can plug the Amulet M Phantom directly into the mic input of your mixer, turn on 48V phantom power and play. Some devices advertise phantom power capabilities, but actually have lower phantom voltages which will not power our system, so be sure to carefully examine any manufacturers literature for any device you are considering for this purpose. There are also instances where a device may provide 48 volt phantom power, but at a much lower than usual current capability (just enough to power a small microphone) and will not properly power our system. This is usually only the case with very inexpensive gear.

If you're not using a mixer or other device that has the necessary 48 volt phantom power available, there are a number of low-cost standalone phantom power supply units that are available from a variety of sources. These typically have an input and output XLR connector, a connector for a plug in power adapter, and internal electronics to supply phantom power.

A big advantage of this type of system is that you can treat the XLR output of a standalone phantom power supply just as you would an active direct box; since the output is a balanced low impedance signal, you can plug it directly into an XLR stage box or any other XLR input. If you need a standard 1/4" unbalanced output to interface to your amp, pedalboard, or other equipment, an inexpensive XLR to 1/4" adapter can be used to easily provide this type of output.

Cable

The Amulet M Phantom uses a cable that has a stereo TRS 1/4" plug on one end, and a male XLR plug on the other. This type of cable can be easily found at most music stores, or from online retailers. Make sure you buy a good one; a cheap cable may have poor or intermittent connections at one or both ends which can cause noise or pops in the audio. We offer an excellent cable from our Custom Shop, made specifically for this application. It uses high quality Canare™ cable, and has a very rugged metal low profile right angle TRS plug on the instrument end. This is the perfect type of connector as it allows you to easily loop the cable through your strap, and its low profile keeps it out of the way as you move around the stage or place your instrument in a stand. You can plug any standard microphone cable into this cable to extend the length as desired, and the Amulet M Phantom balanced low impedance output will keep your signal clean and interference-free.

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