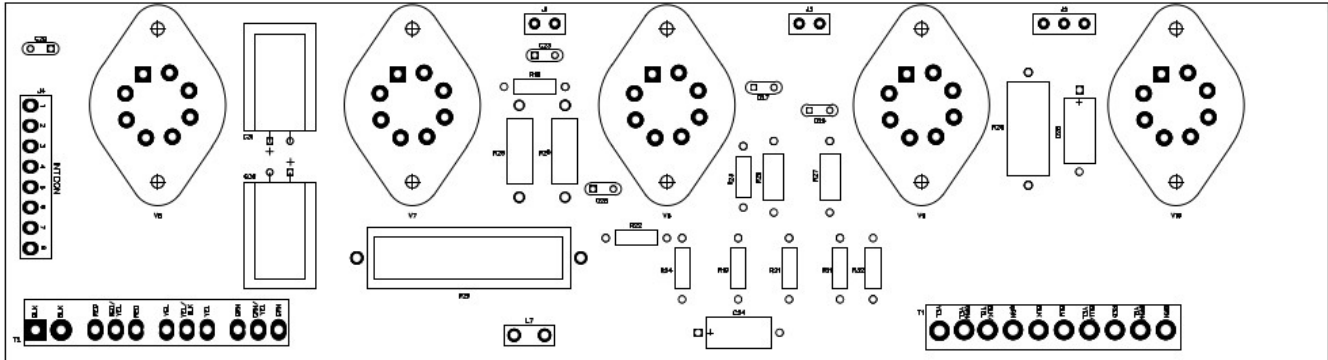


# BUILD NOTES

## Music From The Ether MK-1 Power Supply/Audio Amplifier Board Vers. 1.0



The above diagram shows the top side of the PS/AMP PCB with component locations. Refer to the accompanying schematic for the complete circuit diagram. Component selection is not super critical however, it is strongly encouraged that you use the components listed on the BOM as there are specific lead spacings and component sizes to take into account to fit in the space allocated on the PC Board. Specifically the components that are mounted in cut-out sections of the board. The cut-outs were done to save space between the top of the PC board and the bottom of the chassis as in the case of capacitors C30 and C31 or for cooling in the case of R29. If you choose components other than those specified pay attention to the lead spacing and component size requirements.

This board contains the Power Supply which provides +150 VDC to the electronics and houses an audio amplifier capable of driving 10 watts into an 8-Ohm speaker.

The PC Board is mounted to the chassis by way of the five octal tube sockets. Referring to the picture of the populated PS/AMP PC Board, mount the 10 aluminum spacers on the top side of the PC Board using #4-40 x 1/4" screws and an internal tooth #4 lock washer on the bottom side of the board leaving the screws slightly loose. Place the octal tube sockets in their respective locations (V6 through V10) on the top side of the PC Board seated on the top of the spacers. Place the board into the bottom of the PS/AMP chassis with the sockets protruding from the socket holes and secure the socket flanges and spacers to the bottom side of the chassis first using #4-40 x 1/4" screws. Next, tighten the #4-40 screws located on the bottom of the PC board, solder all of the tube socket pins to the PC board and clip off the excess leads. This will assure that you can now remove the PC board assembly by removing the screws on the top of the chassis and everything will remain in alignment for replacing the PC board onto the underside of the chassis.

As a secondary chassis ground it is also recommended to place a Keystone Electronics #7311 terminal lug on a mounting screw under the Interconnect socket before securing it with the nut and placing a wire jumper from the terminal lug to ground via Pin #5 on the interconnect socket.

There are two issues on version 1.0 of the PS/AMP PC board having to do with traces.

Issue 1: The trace connecting pin #5 and pin #7 on tube V7 the 0D3 regulator are missing. Solder a jumper where indicated on the board.

Issue 2: An auto-router issue caused a trace to be placed under one of the aluminum spacers used for mounting tube V9 which could cause a short. The location is indicated by a black circle on the PC board. The solution is to place the supplied red fiber washer between the aluminum standoff and the top of the PC board. Both issues will be addressed in the next version.