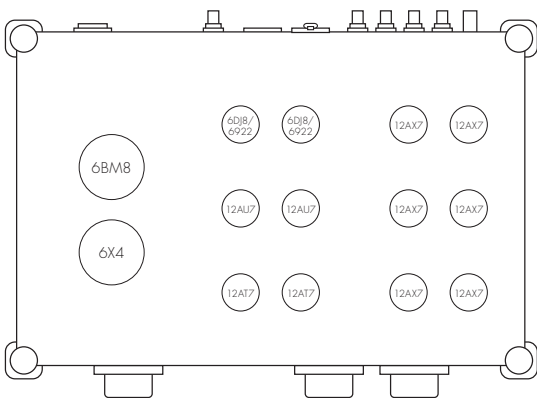


Shadow Reference Preamplifier  
User Guide



Congratulations on your purchase of the 13-tube Shadow Reference Preamplifier and Phono Stage. Locate the preamp with air circulation in mind. The preamplifier features a Tokyo Ko-on 50k ohm motorized volume control or their top-of-the-line stepped-attenuator is available upon request. The preamplifier is tube-rectified with a solid-state power supply and matches well with a wide variety of amplifiers. The phono stage is loaded at 47k ohms for high-output MC (moving-coil) or MM (moving-magnet) cartridges. Standard preamplifier gain is 3dB but can be modified upon request.

## VACUUM TUBE ASSEMBLY DIAGRAM



## PRODUCT DETAIL

### Specifications

Inputs: 1/pr balanced XLR,  
 3/pr single-ended RCA line level, 1/pr singled-ended RCA phono  
 Input impedance phono: 47k ohms  
 Output impedance line-stage: < 200 ohms  
 Output gain: +3dB  
 Dimensions: W 19.4" x D 11.5" x H 5"  
 Weight: 38lbs

### Tube Complement

1 x 6X4 – Rectifies solid-state power supply  
 1 x 6BM8 – Constant voltage regulator  
 2 x 12AT7 – First-stage amplifier  
 2 x 12AU7 – Current supply first-stage amplifier  
 2 x 6DJ8/6922 – Preamp output stage cathode followers  
 6 x 12AX7 – Phono preamp section

### IMPORTANT: USING YOUR VACUUM TUBE AMPLIFIER

- Do not unplug an interconnect while the preamplifier is on
- Do not plug your preamplifier into an ungrounded power socket
- Be sure to turn on source components and preamplifier first
- Allow them to warm up before turning on your amplifier(s)
- Mute the preamp and turn the amp on last
- Mute the preamp and turn the amp off first
- Always use the correct tube types available from Raven

## PLEASE READ AND FOLLOW THESE IMPORTANT SAFETY PRECAUTIONS

### **WARNING: AC Voltage**

Do not plug this Raven Audio device into a power outlet differing in configuration or voltage from the source indicated for safe use on the device. If you don't know the type of electrical power that is supplied to your home, please consult your local power utility company for further information.

### **WARNING: Grounding and Polarization**

Your Raven Audio device has a three-prong grounding-type AC plug. This plug is designed to be inserted into a grounding type outlet only. If this plug doesn't fit directly inside your outlet, do not attempt to force it into the outlet.

Never attempt to disassemble or modify the plug in any way or to use an altered extension cord to make it fit into a two-prong outlet. The grounding feature is a necessary and important safety and design feature.

Do not attempt to circumvent it by using a 3-to-2 prong adapter. If you do not have a properly grounded three prong outlet available, call a local electrician to install one. Proper grounding techniques as specified in section 810 of the National Electrical Code (NEC), AASI/NFPA 70 (in Canada, part 1 of the Canadian Electrical Code). Doing so will provide protection against voltage surges and static charges.

### **WARNING: Cleaning**

The only cleaning necessary for your Raven Audio device is a light, dry dusting. Do not use any type of liquid or aerosol cleaners and unplug the device from the wall before cleaning it.

### **WARNING: Liquid – Avoiding Electrical Shocks**

Do not operate your Raven Audio device if liquid of any kind is spilled onto or inside the unit. Do not operate your Raven Audio device near liquid of any kind spilled, condensed, or contained. Do not operate your Raven Audio device in the bathroom, kitchen or anywhere near a sink or bathtub.

### **WARNING: Power Cord Safety**

If the protective jacket of the power cord begins to wear or fray and any internal wiring is exposed, immediately disconnect it from the Raven Audio and discontinue use. Do not route any of the incoming or outgoing cables from your Raven Audio device place in heavy foot traffic which could cause undue wear, strain or cause a tripping hazard.

### **CAUTION: Exposure to Heat**

Do not expose your Raven Audio device to direct sunlight or place it near heat sources or in any enclosed space prone to uncontrolled high temperature.

### **WARNING: No User Serviceable Parts Inside**

If, for any reason, your Raven Audio device does not operate properly, never open the unit or attempt to service it yourself in any way. There are no user serviceable parts inside. Unplug the unit and contact the manufacturer for further assistance.

### **CAUTION: Proper Power and Protection**

To deliver clean power to your equipment, every single wire Into, or out of your equipment must be connected to an appropriate Raven Audio device. There can be no other pathway into, or out of your system. This includes all power, signal, control, antenna, data, phone, internet, cable or other connection to all components within the system.