aricAUDIO

MOTHERLODE II

PREAMPLIFIER

ARIC AUDIO TUBE GEAR

CONTENT

INTRO

The Motherlode II features a two-chassis design with a separate power supply and “twist-lock” umbilicals. The power supply employs a split toroidal power transformer, Hybrid bridge rectifier, all film capacitor filtering, multiple chokes, Vishay wire-wound resistors, and a 5U4GB rectifier and (2) OD3 regulators and copper shielding housed in a solid hardwood chassis. The preamplifier uses 6SN7s and features Vishay resistors throughout, all copper internal wiring, a Khozmo remote volume controller, Jupiter copper foil, paper in oil coupling capacitors, tube isolation damper plates, a resistor-based output level control, and Neutrik connectors.

The Motherlode II features a two-chassis design with a separate power supply and “twist-lock” umbilicals. The power supply employs a split toroidal power transformer, Hybrid bridge rectifier, all film capacitor filtering, three chokes (the latter provide additional channel isolation), Vishay wire-wound resistors, and a 5U4G rectifier and (2) OD3 regulators and copper shielding housed in a Purpleheart chassis with Maple and Walnut accents. The preamplifier uses paralleled Vishay resistors throughout the tube signal path, Mogami internal wiring, a Khozmo remote volume controller, Miflex PIO coupling capacitors, tube isolation damper plates, a resistor-based output level control, and Neutrik connectors in the same Purpleheart chassis.

Aric Kimball
Owner

IN THE BOX

- Aric Audio Motherlode II
- Power Cord
- Umbilical Cable
- (2) 6SN7 tubes
- 5U4GB rectifier tube
- (2) OD3 regulator tubes

FRONT & TOP PANELS

1. OA3 Regulator Tube
2. 5U4GB Tube
3. OD3 Regulator Tube
4. On/Off Toggle
5. 6SN7 Tube
6. 6SN7 Tube
7. Volume
8. Volume Display
9. Input Selector

REAR PANELS

1. Power Chord
2. Umbilical Output
3. Inputs
4. Outputs
5. Output Level
6. Umbilical Input

REMOTE

1. Display Control
2. Volume Down
3. Volume Up

OPERATION

Operation is fairly straightforward- with the unit turned off (OFF is to the back and ON is flipped to the front for the power switch on the front of the power supply), make sure that the power supply has the rectifier tube (5U4, 5U4G or 5U4GB) installed in the center position, flanked by a pair of OD3 regulators on each side and that the preamplifier chassis has either a pair of 6SN7s or 6SL7s installed in the sockets that reside in the tube damper plates. Note: All tube sockets are oriented so that the center “guide pin” key faces the front dead center of the chassis. Keep in mind that some new production tubes will have “loose” (or slightly smaller) guide pins, and it may be possible to insert them incorrectly. It is recommended to visually observe the position of the center guide pin on the bottom of the tube before inserting it into these jacks. Inserting a tube incorrectly can incur damage to the unit.

Also, make sure that both umbilical cables are inserted and twisted so that the metal release tab is clicked forward toward the chassis (locked in place). When correctly inserted, the metal tab will face the top-dead-center position.

NOTE: After the unit has been left OFF for a period of time, the digital display may default to “OFF.” In this case, simply press the DIMMER button on the remote to engage the digital display.

Inputs/Outputs

On the rear of the preamplifier, starting from the left-hand side, are inputs 1, 2, 3, and 4, respectively. The rotary selector switch on the right-hand side of the unit starts all of the way counter-clockwise on Input 1. Each turn clockwise accesses the next set of Inputs- 2, 3, and 4, respectively (note that there is one additional switch position- the last one, which is not connected and will act as a MUTE). The last two sets of RCA jacks are paralleled output jacks- meaning they both output the same audio signal and can be used for connection to multiple amplifiers or an amplifier and a pair of mono subwoofers (or a single stereo subwoofer). Note that the signal between these outputs is shared, so when an additional amplifier of the same type is connected, the apparent level of these outputs will be cut in half.

OPERATION (CONT.)

Output level control
The output level control is a 5-position resistor-based attenuation switch using Vishay metal film series and shunt resistors. The positions are (starting fully clockwise and rotating counterclockwise) 100% level, 80%, 60%, 40%, and 20% gain, respectively. This control can be adjusted to taste while the preamplifier is turned on.

Umbilical cable
The umbilical cable carries all of the high-voltage, low-voltage, and ground connections from the power supply to the signal stage. Please ensure this cable is fully twisted and locked into place on both ends prior to operating the units. Also, please ensure that this cable is only disconnected after the unit has been powered off for a full five minutes to ensure residual current is drained from the power supply.

Signal stage
This preamplifier can use either 6SN7 (gain of 20) tubes or the 6SL7 (gain of 60). Since the gain of these tubes is so substantially different, each one may require input and output level adjustments to ideally match the levels of your amp. For example, where a 6SN7 can fully drive your amp with the output level set to 100%, the 6SL7 would likely need to have the output level set to the 50% (or even 25%) mark to give close to the same drive levels due to the 6SL7 having a much higher gain than the 6SN7.

Differences between these tubes: In general, the 6SN7 is known for having a robust and “meaty” midrange and being a very linear tube. In some systems, this may have a slightly “dark” or rolled-off sound depending on the character of sound that the downstream components exhibit. However, in a very revealing system, the 6SN7 will typically sound very linear and balanced with an excellent midrange and low end. The 6SL7 is known for having a “faster” or leaner type of attack and can liven up a dull or dark-sounding system. However, in a very revealing or fast-sounding system, the 6SL7 may add a bit of accentuated brightness or stridence to the signal, leaning towards tube rolling for “tamed down” sounding 6SL7s or moving back to the 6SN7.

SPECS & FEATURES

- 6SN7 based preamplifier
- Exclusive film capacitor power supply
- Multiple chokes for excellent noise rejection
- Toroidal power transformer
- Tube rectified using a 5U4. 5U4G or 5U4GB
- Tube regulated using a pair of OD3 tubes
- Copper lined solid wood chassis
- 100% hand-made in the USA
- Khozmo remote volume controller with digital display
- Jupiter copper foil paper-in-oil capacitors
- All copper wiring used throughout
- Vishay resistors used throughout
- Gain between Unity-18Db depending on output level controller position
- 5-40,000 hz +/-1 db
- Single-ended inputs (4 sets)
- Single-ended outputs (2 sets)
- 5 position output level control
- Input impedance: 50 kOhm
- Output impedance: 300 Ohms
- Remote control included: Yes for volume and display dimming