



PSU Operational Manual. V 2.0

SAFETY INSTRUCTIONS

The Power Supply (PSU) has been designed to operate at the highest level of efficiency and performance in any normal operating situation; however, there are a few important use and care principles that must be kept in mind when operating the device:

- Read these instructions.
- Keep these instructions.
- Follow all instructions.
- Do not expose the PSU to rain, moisture, or excessively damp conditions.
- Do not block any ventilation openings.
- Due to auto-ranging circuitry and dual-stage voltage regulation, the audio performance will
 not be affected by any voltage fluctuations within the operating voltage range. The PSU can
 be operated at any mains voltage over the range of 85 to 265 VAC without any adjustments
 necessary.
- The PSU must not be modified in any way, other than according to official service bulletins from JRDG (Jeff Rowland Design Group). Otherwise, the factory warranty will be immediately voided.
- When operating the PSU, a properly grounded AC receptacle should be used. A potential shock hazard may result if the supplied 3-wire, grounded AC cable ground terminal is defeated or lifted or the unit is connected to a 2-wire ungrounded AC outlet.
- The PSU is designed to perform optimally with no adjustments or maintenance for the lifetime of the product. Do not attempt to open the bottom or top cover of the PSU and refer all service issues to qualified personnel. The voltages inside the PSU can be hazardous.

PROTECTIVE SYSTEMS

The PSU is equipped with internal fuses for protection against excessive AC current draw; however, since no protection circuitry or system can completely protect a product from every electrical hazard, certain precautions should be observed. In the event of severe voltage hazards such as lightning or when the system will not be used for extended periods of time, the PSU should be unplugged from the AC mains to avoid potential damage to the internal circuitry. All other audio/video system components should also be disconnected from AC mains power as hazardous voltages can easily travel throughout an interconnected system.



The crossed-out wheeled bin is the European Union symbol for indicating separate collection for electrical and electronic equipment. This product contains electrical and electronic equipment which should be reused, recycled or recovered and should not be disposed of with unsorted regular waste. Please return the unit or contact the authorized dealer from whom you purchased this product for more information.



This product complies with European Low Voltage (2006/95/EC) and Electromagnetic Compatibility (89/336/EEC) Directives when used and installed according to this instruction manual. For continued compliance servicing must be referred to qualified service personnel.

LIMITED WARRANTY

Jeff Rowland Design Group, Inc. warrants the materials, workmanship, and proper functioning of this product for a period of five years from the date of purchase as long as the product was operated in accordance with its operating manual, the products was not altered or improperly serviced or prepared, or if the product failed to function from the beginning. In the event of such a failure, the product will be repaired or replaced by Jeff Rowland Design Group, Inc. through one of its dealers. This warranty is extended to the original purchaser only and is non-transferable to any secondary or other purchaser.

In order to have this product repaired or replaced, the original purchaser must first obtain the prior authorization of Jeff Rowland Design Group, Inc. or one of its dealers. Purchaser must then return the product, PACKAGED IN ITS ORIGINAL CARTON, FREIGHT PREPAID to: Jeff Rowland Design Group, Inc., 2911 North Prospect Street, Colorado Springs, Colorado, 80907, or to one of its dealers.

Jeff Rowland Design Group, Inc. reserves the right to inspect any product which is subject to any warranty claim prior to repairing or replacing it. Final determination of warranty coverage lies solely with Jeff Rowland Design Group, Inc. Said determination shall be made as soon as possible following receipt of the product. Jeff Rowland Design Group, Inc. may, at its option, require from the purchaser, valid proof of purchase (dated copy or photocopy of dealer's original invoice). Out-of-warranty claims will be billed for labor, materials, return freight, and insurance as required. Any product for which a warranty claim is accepted will be returned to the purchaser and costs of shipping and insurance will be factory prepaid within the boundaries of the USA. Units to be shipped outside of the USA will be shipped freight collect only. This warranty gives the holder specific legal rights. The purchaser also has implied warranty rights, and may also have other rights which may vary from state to state. Jeff Rowland Design Group, Inc. strives to manufacture the very finest possible equipment and therefore reserves the right to make changes in design and improvements upon its previously manufactured models.

THE ABOVE WARRANTY IS THE SOLE WARRANTY GIVEN BY JEFF ROWLAND DESIGN GROUP, INC. AND IS IN LIEU OF ALL OTHER WARRANTIES; ALL IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE SHALL BE STRICTLY LIMITED IN DURATION TO FIVE YEARS FROM THE ORIGINAL DATE OF PURCHASE AND UPON THE EXPIRATION OF THIS FIVE YEAR WARRANTY PERIOD, JEFF ROWLAND DESIGN GROUP, INC. SHALL HAVE NO FURTHER OBLIGATION OF ANY KIND WHETHER EXPRESSED OR IMPLIED.

Jeff Rowland Design Group, Inc. does not authorize any third party, including any dealer or representative, to assume any liabilities on its behalf or to make any warranties on its behalf unless

authorized to do so.

Warranty registration cards must be completed and mailed to Jeff Rowland Design Group, Inc. within thirty (30) days of the date of purchase. If this product is used in a commercial or industrial application, then special warranty exclusions may apply. Contact your dealer or Jeff Rowland Design Group, Inc. for information regarding our commercial warranty policies.

GUIDE USE

This guide is designed to make installing and using this product as easy as possible. Information in this document has been carefully checked for accuracy at the time of printing; however, Jeff Rowland Design Group, Inc.'s policy is one of continuous improvement, therefore design and specifications are subject to change without prior notice. If you notice any errors please feel free to email us at: support@jeffrowlandgroup.com.

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NOTE FROM JEFF ROWLAND DESIGN GROUP

elcome to the Jeff Rowland Design Group "family" and congratulations on your purchase of what is unquestionably one of the world's finest axillary Power Supplies. With its combination of features such as precision electronic circuitry, exceptional efficiency, and accurately machined chassis components throughout, your MODEL PSU will offer you many years of musically satisfying enjoyment.

Please take a few minutes to read the remainder of this Owner's Manual before proceeding with the installation of the amplifier. A thorough understanding of the operational features will allow you to gain the maximum performance and ease of use for which this amplifier was designed.

Please note that your PSU serial number begins with the letters "PE". Please include this number with any correspondence regarding your PSU. It has been my joy to create an audio component of enduring value that reflects the highest ideals of musical and artistic expression. It is my hope that these qualities will enrich your experience and pride of ownership.

If you have any additional questions regarding the installation or operation of the MODEL PSU, please contact your authorized Jeff Rowland Design Group dealer or check the Jeff Rowland Design Group web site at:

http://jeffrowlandgroup.com.

Enjoy the music!

Jeff Rowland

President, Jeff Rowland Design Group

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SPECIAL DESIGN FEATURES

MACHINED ALUMINUM CHASSIS: Precision-machined chassis with integrated heat-sinks, milled from a solid block of aircraft grade aluminum, provides exceptional thermal heat transfer/dissipation during the charging cycles.

4 LAYER CIRCUIT BOARDS: All circuits are implemented on mil-spec, 4 layer circuit board substrate for extremely low output impedance and noise. Large low impedance ground plane areas for extended internal star-grounding.

HIGH-PRECISION SURFACE MOUNT COMPONENTS: Extensive use of Lead (Pb)-free, low temperature coefficient, active and passive surface-mount components results in significantly smaller loop areas, reduced circuit capacitance and inductance, and introduces less noise than conventional leaded components.

POWER FACTOR CORRECTION: Power Factor Correction (PFC) in the power supply reduces AC line harmonic noise pollution and increases AC line power utilization to 99% during the capacitor recharge cycles.

REMOTE ON/OFF: A 1/8" (3.5mm) mini plug connector on rear panel permits PSU operation with a 12 V dc remote signal.

MAINTENANCE AND CARE

All Jeff Rowland Design Group products are designed to provide a lifetime of enjoyment and listening pleasure.

The chassis is sealed to prevent dust from entering the interior of the chassis and thus should never need interior cleaning during the lifetime of the product. All internal circuitry is maintenance-free such that no adjustments of any kind are necessary over the lifetime of the product. If the amplifier is ever in need of service, updating, or upgrading, it should only be returned to an authorized repair facility or technician for servicing.

The front panel of the unit is precision-machined in a unique process that incorporates a diamond tipped cutting tool. This process was refined over many years to produce an attractive and unique appearance. Because the surface is not finished in the typical fashion of most audio and video equipment, there are a few rules that must be kept in mind when cleaning the equipment.

NOTE: PLEASE ALLOW THE FRONT PANEL, WHICH IS COATED WITH AN AUTOMOTIVE-GRADE POLYURETHANE FINISH, TO CURE FOR 6 MONTHS BEFORE ATTEMPTING TO CLEAN IT. THIS WILL PREVENT SMALL SCRATCHES FROM MARRING THE SURFACE BEFORE THE SURFACE COATING HAS HAD A CHANCE TO HARDEN COMPLETELY.

WARNING: THE FRONT PANEL OF THE UNIT SHOULD NEVER BE CLEANED WITH ANYTHING OTHER THAN A VERY SOFT COTTON CLOTH AND PLAIN WATER OR FINE OIL-BASED FURNITURE POLISH. BECAUSE OF THE FINE FINISH OF THE FRONT PANEL, USE OF ANY OTHER CLEANING AGENT MAY PERMANENTLY SCRATCH THE FINISH.

The top and bottom cover, sides and bottom are protected by a durable black anodized finish and can be cleaned with a soft cotton cloth (such as an optical lens or microfiber cleaning cloth) dampened with plain water. Water should be applied directly to the cloth and not the chassis. A very mild plastic or glass cleaner that does not contain ammonia may also be used. If a mark has been left on the chassis, do not use any type of abrasive or chemical cleaner to remove the mark.

If you have any questions about the care or cleaning of your MODEL PSU, please contact your dealer before attempting to clean the chassis. The use of a cleanser or abrasive to clean the chassis that has not been approved by the factory will almost certainly damage the finish and will not be covered under warranty.

UNPACKING AND PLACEMENT INITIAL INSPECTION

Inspect the shipping container for damage. If any portion of the shipping container, packing material, PSU, or accessories are damaged or missing, notify your dealer and the shipper (if a claim is to be made) immediately.

NOTE: MANY SHIPPERS REQUIRE NOTIFICATION AND INSPECTION WITHIN 24 HOURS OF DELIVERY TO DETERMINE THE NATURE OF DAMAGES INCURRED.

Your MODEL PSU has undergone extensive performance evaluations, quality control inspections, and a minimum 72-hour burn-in period prior to shipment and should therefore be in perfect operating condition upon delivery. If the PSU does not operate correctly, please notify your dealer immediately.

We strongly suggest that you save all of the packing materials. If the amplifier is returned to your dealer or Jeff Rowland Design Group, the original packing materials must be used for shipment to avoid possible damage. Neither Jeff Rowland Design Group nor the shipper can be held responsible for damages incurred during transit if the original factory packing is not used. All factory returns require that Jeff Rowland Design Group issue a Return Authorization (RA) number prior to shipment.

UNPACKING

Carefully unpack amplifier chassis and power supply from original packing box. Remove all accessory items from the accessory box. Accessories include:

- 1 Detachable IEC AC Power Cord
- Operational Manual
- Warranty Card

IMPORTANT: RETAIN ALL PACKING MATERIALS FOR FUTURE TRANSPORT. SHIPPING PRODUCT IN INADEQUATE PACKING MATERIALS MAY VIOLATE THE JEFF ROWLAND DESIGN GROUP MANUFACTURER'S WARRANTY.

PLACEMENT

Your PSU should be placed on top of the JRDG Corus Preamplifier or Conductor Phono Stage, or on an adjacent shelf to minimize any stray electrical interference between units.

FRONT PANEL



Figure 1

- FRONT PANEL POWER BUTTON. Press this button to operate and start the PSU. The internal capacitors will commence charging. The LED lamp will slowly 'breathe' on and off for approximately 3 minutes. During this initial 'breathing' time, all DC outputs will be off and any connected units will not be powered up. After the initial "breathing' time, the front panel LED will then revert to a constant 'on' state, and all DC output connectors on the rear panel will supply DC power to the connected units.
- If the front panel button is pressed again, the LED lamp will turn off and DC power to the rear panel output connectors and connected units will be powered off. The PSU will revert to Standby mode.
- Pressing the front panel power button again will operate the PSU by supplying DC power to output
 connectors and connected components. If the rear panel AC power switch is turned off or the
 power cord is disconnected for an extended period of time, the PSU will have to repeat the initial
 start up procedure as described above.
- The PSU can be left powered ON continuously, but it is advised to turn the PSU off or unplug from AC power during extended periods of non-use.

REAR PANEL



- 1. AC Mains connector
- 2. DC OUTPUTS, right and left channel, for JRDG Corus Preamplifier
- 3. AUXILIARY OUTPUTS, JRDG Aeris DAC and/or Conductor Phono Stage
- 4. 12V REMOTE INPUT, 3.5 mm connector, for remote On operation. 5 volt to 12 volt DC required to turn PSU ON.

NOTE: There is no advantage gained by using after market power cords to power the PSU. There will be no sonic improvement. Use of some after-market power cords with non-standard connectors can disconnect power intermittently resulting in loss of power to the PSU with the result of anomalous operating conditions. Our advise is to use the supplied power cord.

SPECIFICATIONS

Minimum to Maximum Charge Time	4 Minutes
PSU Dimensions	3.3" x 15.5" x 11"
	88mm x 394mm x 279mm
PSU Weight	27 lbs / 15.9 kg
PSU Shipping Weight	30 lbs /13.6 kg
AC Operating Voltage	85 to 265 Volts AC, auto-ranging
AC Input Power	Initial "breathing" period- 220 watts Capacitor charge cycle- 140 watts Capacitor discharge cycle- 12 watts Standby 0.3 watts
DC Output Voltages	+5Vdc +15Vdc -15Vdc
DC Output Connectors	2@10 pin Hirose Circular
	2@ 8 pin Neutrix Circular
Maximum DC Output current, each output connector	Max 0.50 Amp
Maximum Storage Capacity , 5V outputs	90 Farads, 90 million mfd.
Maximum Storage Capacity , 15V outputs	36 Farads, 36 million mfd
Maximum Storage Capacity , -15V outputs	36 Farads, 36 million mfd.