POWER-1



Owner's Manual

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INTRODUCTION

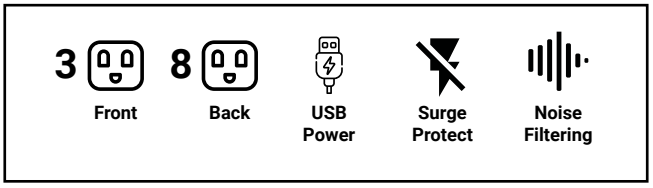
The Radial Power-1 rackmount power supply and surge suppressor gives musicians, engineers, producers, studio owners, commercial facilities, and anyone working with valuable electronic equipment protection from power surges that can damage or destroy music equipment instantaneously.

Unlike competitive products that utilize low quality MOV's (Metal Oxide Varistors) for surge protection, Radial's Power-1 is built using a premium MOV. This critical component has been proven to offer superior thermal protection and have a much longer lifespan than the alternatives. An LED indicator on the front panel illuminates when the MOV is active, giving you visual confirmation that your gear is protected from voltage spikes.

Created with audio professionals in mind, the Power-1 employs shunt mode technology and avoids passing contaminated signals to the ground for lower system noise. Additionally, a high-rejection RF interference filter is used to keep high frequencies and AM radio signals out of the power line, preventing contamination of audio signals.

Eight rear panel outlets are provided (four with wall-wart spacing to accommodate any PSU size), along with three front panel outlets and a USB charging port to easily power personal devices. A heavy-duty power on/off toggle switch, rugged outlet connectors, and steel construction ensure that the Power-1 performs night after night without fail.



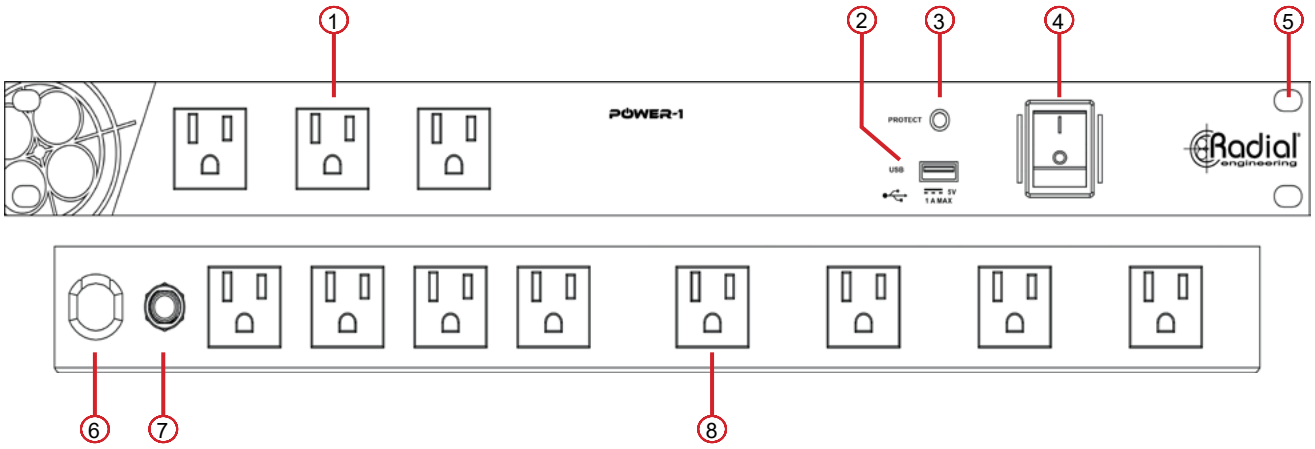


BEFORE YOU GET STARTED

Thank you for purchasing the Radial Power-1 rackmount power supply unit. Before using the Power-1, please read this short manual and heed all warnings and safety precautions listed. Your safety is our top priority! Should you have any questions, please review the FAQ page for this product at www.radialeng.com, or contact us directly at support@radialeng.com.

Note: The Power-1 is a surge suppressor, meaning it blocks high voltage spikes that can damage connected equipment. It does not, however, regulate or stabilize the incoming voltage; this is a task that requires a product called an AC voltage regulator, and may be beneficial for applications where unreliable or unsteady power sources are employed.

FRONT & REAR PANEL FEATURES



1. **FRONT PANEL OUTLETS:** These outlets are always on, even when the front panel on/off switch is set to ‘off’. When using the Power-1 as a power source for equipment racks, this allows you to easily connect and charge devices without powering on the entire rack.

2. **USB CHARGING PORT:** 5V/1A USB charging port for mobile devices such as smartphones and tablets. Type-A USB connection.

3. **FAULT PROTECTION INDICATOR:** This LED illuminates when the Power-1’s Metal Oxide Varistor (MOV) is actively working, providing fault protection against varying resistance and high-voltage spikes from the AC main power source. The MOV is designed to recover from overvoltage events, providing continuous protection for your equipment. Should this LED turn off, immediately remove the Power-1 from the AC main power source and contact Radial technical support for assistance.

4. **ON/OFF:** Large rocker switch with backlit LED activates the eight rear panel power outlets. Raised metal flanges on either side of this control help prevent accidental switching. If the Power-1 is connected to the AC main power source and the LED for the on/off switch doesn’t illuminate, check the circuit breaker on the rear panel.

5. **RACK EARS:** Allow for mounting in standard 19" equipment racks, taking up 1 rack unit (1RU) of space.

6. **POWER CABLE:** Hardwired cable for connection to the AC main 120V power source. 9.5' (290cm approx.).

7. **CIRCUIT BREAKER:** The Power-1 is rated for 15A of current, if this load is exceeded the circuit breaker will pop to help prevent damage to the Power-1 and connected devices. Should the circuit breaker pop, unplug the Power-1 from the AC main power source and press in the circuit breaker to reset it, then power back up as normal with a lower load connected to the Power-1.

8. **REAR PANEL OUTLETS:** Eight rear power outlets are provided, four with additional spacing in between each outlet to accommodate for large ‘wall-wart’ power supplies. These power outlets are controlled by the front panel on/off switch.

SPECIFICATIONS*

IEC POWER PORTS

Voltage Rating:	120V, 50/60Hz
Load Rating:	15A total, 15A per outlet

USB POWER PORT

Voltage Rating:	5V
Load Rating:	1A

GENERAL

Overload Protection:	Premium Metal Oxide Varistor (MOV), 15A circuit breaker
Dimensions (L x W x H):	19" x 6.38" x 1.47" (482.6mm x 162.0mm x 37.4mm)
Weight	6.5lb (5.03kg)
Temperature Range:	5°C to 40°C
Agency Listings:	Conforms to UL Std 1419, 60950-1 and 60065 in USA, CSA Std 60950-1, C22.2 No. 62368 in Canada
Warranty:	Radial 3-year, transferable

*Specifications are subject to change without notice.



CAUTION

RISK OF ELECTRIC SHOCK
DO NOT OPEN



WARNING: TO PREVENT FIRE OR SHOCK HAZARD, DO NOT EXPOSE THIS EQUIPMENT TO RAIN OR MOISTURE.

WARNING - IMPORTANT SAFETY INFORMATION

1. READ INSTRUCTIONS
All the safety and operating instructions of your Power-1 should be read before power is applied to the equipment. Retain this user manual for future reference.

2. HEED WARNINGS AND OPERATING INSTRUCTIONS
All warnings on the equipment and operating instructions are important and should be followed.

3. HEAT, WATER AND MOISTURE
The equipment should be kept away from areas of high temperature, i.e., heater vents, radiators, stoves/ovens, fireplaces, etc. The equipment should not be used in or around water, or in areas prone to flooding.

4. POWER SOURCES
The equipment should be connected only to a power source of the same voltage and frequency as that listed on the rear panel above the power cord entry point.

5. POWER CORD PROTECTION
Power cords should be arranged so they do not interfere with the movement of objects in the room: people, fan blades, utility carts, etc. Also, care should be taken that the cord is not pinched or cut, and placed so it is not in danger of being pinched or cut.

6. POWER CORD GROUNDING
The power supply cord is of a three wire grounded type, designed to reduce the risk of electric shock. It is assumed to be of suitable length for most uses of the equipment. The use of extension cords and power strips is discouraged unless they are of suitable rating to deliver the required total current for safe operation of all connected equipment. Furthermore, extension cords or power strips must provide the same three wire grounded connection. It is important that the blades of the equipment's plug be able to fully insert into the mating receptacle. Never remove the round grounding pin on the plug in an attempt to mate to a two wire ungrounded receptacle.

7. NON-USE PERIODS
During periods of extended non-use, the power cord should be unplugged from the power source.

8. LIQUID ENTRY
Care should be taken so that liquids such as cleaning fluids or beverages are not spilled into the enclosure of the equipment.

9. DAMAGE REQUIRING SERVICE
Equipment should be serviced by qualified service personnel when:

A. The power supply cord or plug has been damaged, B. Liquid has been spilled into the equipment, or the equipment has been exposed to rain, C. The equipment has been dropped, or the enclosure has been damaged, or D. The PROTECT LED on the front panel no longer illuminates when the equipment is connected to a power source.

10. NO USER ACCESSIBLE PARTS
The Power-1 has no user accessible parts inside the device and should only be serviced by a qualified technician.



NOTICE

Radial Engineering Ltd. shall under no circumstances be held responsible for any loss, damage or injury resulting from the use of this product in a manner inconsistent with any of the procedures outlined in this document. The user is responsible for determining whether this product is appropriate for the intended application. Radial Engineering Ltd. is not responsible for any indirect, secondary or ancillary loss or damage, including personal injury, loss of or damage to property or loss of income resulting from the operation or failure of this unit.



L' AVERTISSEMENT

RISQUE DE CHOC ÉLECTRIQUE
NE PAS OUVRIR



AVERTISSEMENT: POUR ÉVITER LES INCENDIES OU LES CHOCS
DANGER, NE PAS EXPOSER CECI ÉQUIPEMENT CONTRE LA PLUIE OU L'HUMIDITÉ.

VERTISSEMENT - INFORMATIONS DE SÉCURITÉ IMPORTANTES

1. LIRE LES INSTRUCTIONS
Toutes les instructions de sécurité et d'utilisation de votre Power-1 doivent être lues avant de mettre l'équipement sous tension. Conservez ce manuel de l'utilisateur pour référence future.

2. RESPECTER LES AVERTISSEMENTS ET LES INSTRUCTIONS D'UTILISATION
Tous les avertissements sur l'équipement et les instructions d'utilisation sont importants et doivent être suivis.

3. CHALEUR, EAU ET HUMIDITÉ
L'équipement doit être tenu à l'écart des zones à haute température, c'est-à-dire des évents de chauffage, des radiateurs, des cuisinières / fours, des cheminées, etc.

4. SOURCES D'ÉNERGIE
L'équipement doit être connecté uniquement à une source d'alimentation de même tension et fréquence que celle indiquée sur le panneau arrière
au-dessus du point d'entrée du cordon d'alimentation.

5. PROTECTION DU CORDON D'ALIMENTATION
Les cordons d'alimentation doivent être disposés de manière à ne pas gêner le mouvement des objets dans la pièce: personnes, pales de ventilateur, chariots utilitaires,
etc. Veillez également à ce que le cordon ne soit pas pincé ou coupé et placé de manière à ne pas risquer d'être pincé ou coupé.

6. MISE À LA TERRE DU CORDON D'ALIMENTATION
Le cordon d'alimentation est de type trois fils mis à la terre, conçu pour réduire le risque de choc électrique. Il est supposé être d'une longueur appropriée pour la plupart des utilisations de l'équipement. L'utilisation de rallonges et de multiprises est déconseillée à moins qu'elles ne soient d'un calibre approprié pour fournir le courant total requis pour un fonctionnement sûr de tous les équipements connectés. De plus, les rallonges ou les barrettes d'alimentation doivent fournir la même connexion à la terre à trois fils. Il est important que les lames de la fiche de l'équipement puissent s'insérer complètement dans la prise correspondante. Ne retirez jamais la broche de mise à la terre ronde de la fiche pour tenter de se connecter à une prise à deux fils non mise à la terre.

7. PÉRIODES DE NON-UTILISATION
Pendant les périodes de non-utilisation prolongée, le cordon d'alimentation doit être débranché de la source d'alimentation.

8. ENTRÉE LIQUIDE
Des précautions doivent être prises pour que des liquides tels que des liquides de nettoyage ou des boissons ne soient pas renversés dans l'enceinte de l'équipement.

9. DOMMAGES NÉCESSITANT UNE RÉPARATION
L'équipement doit être réparé par un personnel de service qualifié lorsque:

A. Le cordon d'alimentation ou la fiche ont été endommagés, B.Un liquide a été renversé dans l'équipement, ou l'équipement a été exposé à la pluie, C. L'équipement est tombé, ou le boîtier a été endommagé, ou D. Le Le voyant PROTECT sur le panneau avant ne s'allume plus lorsque l'équipement est connecté à une source d'alimentation.

10. Aucune pièce accessible par l'utilisateur
Le Power-1 ne comporte aucune pièce accessible par l'utilisateur à l'intérieur de l'appareil et ne doit être entretenu que par un technicien qualifié.



L' AVERTISSEMENT

Radial Engineering Ltd. ne pourra en aucun cas être tenu responsable de toute perte, dommage ou blessure résultant de l'utilisation de ce produit d'une manière incompatible avec l'une des procédures décrites dans ce document. L'utilisateur est responsable de déterminer si ce produit est adapté à l'application prévue. Radial Engineering Ltd. n'est pas responsable de toute perte ou dommage indirect, secondaire ou accessoire, y compris les blessures corporelles, la perte ou les dommages à la propriété ou la perte de revenu résultant du fonctionnement ou de la panne de cet appareil.

Notes

RADIAL ENGINEERING LTD.
3 YEAR TRANSFERABLE WARRANTY

RADIAL ENGINEERING LTD. (“Radial”) warrants this product to be free from defects in material and workmanship and will remedy any such defects free of charge according to the terms of this warranty. Radial will repair or replace (at its option) any defective component(s) of this product (excluding finish and wear and tear on components under normal use) for a period of three (3) years from the original date of purchase. In the event that a particular product is no longer available, Radial reserves the right to replace the product with a similar product of equal or greater value. To make a request or claim under this limited warranty, the product must be returned prepaid in the original shipping container (or equivalent) to Radial or to an authorized Radial repair center and you must assume the risk of loss or damage. A copy of the original invoice showing date of purchase and the dealer name must accompany any request for work to be performed under this limited and transferable warranty. This limited warranty shall not apply if the product has been damaged due to abuse, misuse, misapplication, accident or as a result of service or modification by any other than an authorized Radial repair center.

THERE ARE NO EXPRESSED WARRANTIES OTHER THAN THOSE ON THE FACE HEREOF AND DESCRIBED ABOVE. NO WARRANTIES WHETHER EXPRESSED OR IMPLIED, INCLUDING BUT NOT LIMITED TO, ANY IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE SHALL EXTEND BEYOND THE RESPECTIVE WARRANTY PERIOD DESCRIBED ABOVE OF THREE YEARS. RADIAL SHALL NOT BE RESPONSIBLE OR LIABLE FOR ANY SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES OR LOSS ARISING FROM THE USE OF THIS PRODUCT. THIS WARRANTY GIVES YOU SPECIFIC LEGAL RIGHTS, AND YOU MAY ALSO HAVE OTHER RIGHTS, WHICH MAY VARY DEPENDING ON WHERE YOU LIVE AND WHERE THE PRODUCT WAS PURCHASED.

To meet the requirements of California Proposition 65, it is our responsibility to inform you of the following:
WARNING: This product contains chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.
Please take proper care when handling and consult local government regulations before discarding.

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