



Power Station

Rechargeable Battery Supply

Operation Manual V1.0
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Professional Sound Corporation

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Thank you for purchasing the Professional Sound Corporation Power Station Rechargeable Battery Supply. PSC is confident that the Power Station has set a new standard in portable battery supplies. Please feel free to contact us at the address below if you have any comments, suggestions, or questions about your new PSC Power Station. Additionally, we are always open to suggestions for new products you would like to see developed.

PSC extends a one year parts and labor warranty to all Power Station owners who return their warranty cards at the time of purchase. The warranty gives you specific rights which are stated on the card and enables us to keep you informed of product updates.

The PSC Power Station provides all the various voltages required to power your entire digital sound recording package. Its rugged design allows complete confidence that you will have uninterrupted power throughout your recording sessions.

PLEASE BE SURE THAT YOU HAVE READ AND UNDERSTOOD THIS ENTIRE OPERATIONAL MANUAL AND THE WARNING STICKER APPLIED TO THE POWER STATION BEFORE OPERATING THE PSC POWER STATION!

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DESCRIPTION:

The Professional Sound Corporation Power Station has been designed and built specifically for use with your RDAT recorders. This new power supply easily handles the heavy power requirements of today's digital tape recorders. It outputs 12Vdc at up to 5 amps continuous, as well as 18Vdc to power your audio mixer and wireless receivers. In addition, it outputs 6Vdc for use in powering consumer RDAT recorders and other equipment.

CHARGING:

The self contained, onboard battery charger operates from 90 to 260Vac so it can be used worldwide without adjustment or modification. You can expect a typical recharge time of six hours. Actual time will vary from two to eight hours depending on the batteries state of discharge. The charging function is automatic and thus, you can feel confident to leave the unit plugged in overnight without the fear of overcharging the battery. Extended charging time of over 72 hours is not recommended, and more specifically, not needed. Additionally, the charger may be operated while the unit is in use, although the charging time will be increased.

The PSC Power Station contains a sealed lead acid battery that does not have the "memory" effects associated with NiCad batteries. Unlike NiCads, The sealed lead acid batteries life is based upon how deeply it is discharged, how long it stays in this state, and how many times it is discharged. Thus if you want the most number of charge/discharge cycles from your new battery, it is important that you not over discharge it or allow it to remain in a discharged state for long periods of time. To help alleviate these problems, the PSC Power Station has a built in low voltage warning LED and a built in low voltage shut off system to prevent this from happening. As the battery discharges down to approximately 11.3 volts, the low voltage LED will light warning you that the battery is nearing the end of its usefulness. As the battery voltage continues to drop to approximately 10.7 volts, the PSC Power Station will automatically turn off. You will get the longest life from any sealed lead acid battery by keeping it fully charged as often as possible. The Power Station should be recharged after every use even if it has not been fully discharged.

STORAGE:

It is recommended that if the unit is to be stored for any period of time, it must first be fully charged and then turned off before storing the unit. The Power

Station should then be recharged after every two months of storage. This will ensure that the battery never self discharges to a damaging low voltage. As the battery used in this supply is of considerable cost, following these simple recommendations will greatly lengthen the life of your battery.

USE:

The Professional Sound Corporation Power Station is designed for use in powering your entire digital sound recording package. The unit's four, 4 pin XLR output connectors provide all of the various output voltages at all times when the unit is turned on. Thus all power cables wired for use between the PSC Power Station and your equipment must be wired correctly and professionally.

OUTPUT OVERLOAD PROTECTION:

The Professional Sound Corporation Power Station is equipped with Raychem PolySwitch™ Resettable Fuses to protect the outputs of the Power Station. These solid state devices act like an ordinary fuse or circuit breaker. They interrupt the flow of dangerously high electrical current in the case of a fault condition in the equipment being powered. A front panel "Fault" LED will light if any of these PolySwitches have been activated. The Polyswitch will only reset after the fault has been removed and the PolySwitch has time to cool down (30 Seconds). The Polyswitch requires no manual resetting or replacement thus eliminating the need to carry spare fuses in the field. These output protection devices should not trip during normal use of the Power Station! If you experience tripping of these devices on any continuing basis, something is wrong and your equipment and cables should be checked by a qualified technician.

CABLES:

PSC recommends that you use only two conductor unshielded 16AWG stranded power cable for use with the Power Station. The use of shielded cable for power distribution is not recommended as the shield may cause short circuits between adjacent pins on the connectors.

Use only the pins required for the correct voltage to operate your specific piece of equipment! I.E. if your RDAT recorder operates on 12Vdc use only pin 1 (ground) and pin 4 (+12Vdc) Do not use pins 2 and 3! There is no reason to have all of the other voltages running through your power cables. Many pieces of equipment use these remaining pins for other functions such as charging and they may not be compatible with the PSC Power Station!

All cables should be built by qualified personnel and tested prior to being used with the PSC Power Station. All power cables should be clearly labeled on both ends as to what they are to be connected to. I.E. "POWER STATION" and "RDAT RECORDER". This will help prevent inadvertently connecting the cables to the wrong piece of equipment. We cannot stress enough the importance of good quality power cables. Poorly constructed and/or labeled cables can result in equipment damage!

WARNING !

THIS POWER SUPPLY OUTPUTS MULTIPLE VOLTAGES AT SUBSTANTIAL CURRENT! ALL AUXILIARY EQUIPMENT SHOULD BE REVERSE POLARITY PROTECTED AND PROPERLY FUSED TO MANUFACTURES RECOMMENDATIONS AT ALL TIMES!

DO NOT DISASSEMBLE THE PSC POWER STATION! IT CONTAINS NO USER SERVICEABLE PARTS. HIGH VOLTAGE AND CURRENT MAY BE PRESENT. REFER ALL SERVICE TO QUALIFIED PERSONNEL ONLY.

TERMS OF USE:

THE IMPROPER CONNECTION OF THIS POWER SUPPLY TO AUXILIARY EQUIPMENT MAY RESULT IN DAMAGE TO SAID EQUIPMENT. THE OPERATOR OF THIS POWER SUPPLY ASSUMES ALL RESPONSIBILITY AND LIABILITY! PROFESSIONAL SOUND CORPORATION AND/OR ITS EMPLOYEES AND OFFICERS ASSUME NO RESPONSIBILITY OR LIABILITY FOR PERSONAL OR PROPERTY DAMAGE INCURRED DUE TO ACCIDENT, CARELESS HANDLING, ABUSE OR MISUSE, IMPROPER CONNECTION AND/OR INSTALLATION, IMPROPER ELECTRICAL CONTACT OR

GROUNDING. OWNERSHIP AND/OR USE OF THE PSC POWER STATION
CONSTITUTES AGREEMENT WITH THESE TERMS.

SPECIFICATIONS:

- Size: 8.2"x5.5"x11"
- Weight: 32 Lbs
- Input Power: 90-260Vac
- Battery: 12V 33Ah
- Output Power: Pin 1 Ground
 - Pin 2 +6Vdc @ 2.5 Amps
 - Pin 3 +18Vdc @ 1.6 Amps
 - Pin 4 +12Vdc @ 5.0 Amps
- Charging Time: 4 to 10 Hours
- Warranty: 1 Year P & L