

### **CLEAR-COM ENCORE**

PK-7 POWER SUPPLY

INSTRUCTION MANUAL

PK-7 Power Supply Instruction Manual Part Number: 810503Z Rev. 2

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# IMPORTANT SAFETY INSTRUCTIONS

1. Read these instructions.

- 2. Keep these instructions.
- 3. Heed all warnings.
- 4. Follow all instructions.
- 5. Do not use this apparatus near water.
- 6. Clean only with dry cloth.
- 7. Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.
- 8. Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
- 9. Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades, with one wider than the other. A grounding-type plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
- 10. Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
- 11. Only use attachments/accessories specified by the manufacturer.
- 12. Use only with the cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.
- 13. Unplug this apparatus during lightning storms or when unused for long periods of time.
- 14. Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.
- 15. **WARNING:** To reduce the risk of fire or electric shock, do not expose this product to rain or moisture.

Please familiarize yourself with the safety symbols in Figure 1. When you see these symbols on this product, they warn you of the potential danger of electric shock if the main station is used improperly. They also refer you to important operating and maintenance instructions in the manual.

Please read and follow these instructions before operating this product.





This symbol alerts you to the presence of uninsulated dangerous voltage within the product's enclosure that might be of sufficient magnitude to constitute a risk of electric shock. Do not open the product's case.



This symbol informs you that important operating and maintenance instructions are included in the literature accompanying this product.

Figure 1: Safety Symbols

### **EMC AND SAFETY**

The PK-7 Power Supply meets all relevant CE, FCC and CSA specifications set out below:

EN55103-1 Electromagnetic compatibility. Product family standard for audio, video, audio-visual, and entertainment lighting control apparatus for professional use. Part 1: Emissions.

EN55103-2 Electromagnetic compatibility. Product family standard for audio, video, audio-visual, and entertainment lighting control apparatus for professional use. Part 2: Immunity.

CAN/CSA-C22.2 No.60065-3, IEC 60065-7 Safety requirements.

And thereby compliance with the requirement of Electromagnetic Compatibility Directive 2004/108/EC and Low Voltage Directive 2006/95/EC

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

## OPERATION

### INTRODUCTION

Congratulations on choosing this Clear-Com product. Clear-Com was established in 1968 and remains the market leader in providing intercoms for entertainment, broadcast and industrial applications. The ruggedness and high build-quality of Clear-Com products defines the industry standard. In fact, many of our original beltpacks and main stations are still in daily use around the world.

We recommend that you read through this manual completely to better understand the functions of the PK-7 power supply. If you encounter a situation or have a question that this manual does not address, contact your dealer or call Clear-Com directly at the factory on (510) 337-6600 for answers to any questions that are not covered in this manual.

Our applications support and service people are standing by to assist you. (Refer to Chapter 3: "Warranty" for contact information.) Thank you for selecting Clear-Com for your communications needs.

### **BEFORE YOU BEGIN**

The PK-7 power supply supports a system containing up to 8 Clear-Com beltpack stations. This compact unit supplies 22 to 30 volts DC at 400 milli-amperes, terminates the system, and incorporates short-circuit protection.

Compact and rugged, the PK-7 is ideal for portable applications especially when they require speedy set-up and break-down. The mains supply is a universal input model with a standard IEC inlet and simply plugs into the rear of the PK-7. Enclosed in a heavy-duty metal box are three separate 3-pin XLR connectors for intercom output to the headset stations. Red and green LEDs provide status information on the operation of the unit.

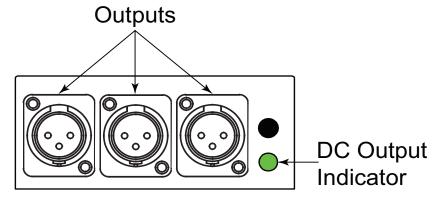


Figure 1-1: PK-7 Front Panel

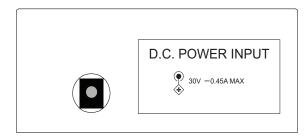


Figure 1-2: PK-7 Rear Panel

### **OPERATING THE PK-7 POWER SUPPLY**

Under normal operating conditions, the green status LED will be on, indicating that the output voltage is available.

If the power supply is overloaded or shorted the green LED will extinguish and the red LED will illuminate red, indicating that the power supply is not operational. Removing the overload condition should permit the power supply to recover. This recovery time could be up to 4 seconds.

Under some conditions when a short occurs in a large system, the supply will not recover when the short is removed. In this instance the power supply will need to be momentarily turned off by removing the AC source or reducing the load to below five beltpacks.

### **INSTALLING THE PK-7 POWER SUPPLY**

Connect the cord from the AC transformer to the connector on the front of the power supply enclosure. Plug the AC transformer into a wall outlet. The PK-7 has no power switch so the power indicator LED should show green immediately.

Connect the intercom system into the PK-7.

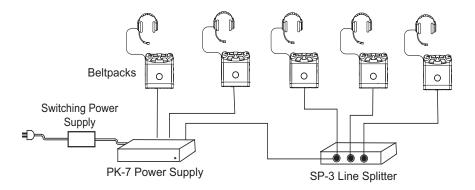


Figure 1-3: Typical System

# 2 SPECIFICATIONS

### PK-7 POWER SUPPLY TECHNICAL SPECIFI-CATIONS

Mains Input

Input Voltage 100-240 VAC Input Frequency Range 50-60Hz

Power Output

Output Voltage 22-30 VDC
Output Current: >=400mA

Rear Connectors

Output Connectors: (3) XLR-3F

Front Panel Connectors and Indicators

Input Connector (1) 2.1mm Co-axial connector Indicators: (2) LEDs: red (overload), green

(normal)

Environmental

 $32 - 122^{\circ} F (0 - 50^{\circ} C)$ 

**Dimensions** 

Width 3.8in. (97 mm) Height: 2 in. (50.8 mm) Depth: 4.7 in. (119 mm)

Weight

1.0 lbs. (0.457 kg)

Transformer: 0.90 lbs. (0.41 kg)

Specifications subject to change without notice.

### **Notice About Specifications**

While Clear-Com makes every attempt to maintain the accuracy of the information contained in its product manuals, that information is subject to change without notice. Performance specifications included in this manual are design-center specifications and are included for customer guidance and to facilitate system installation. Actual operating performance may vary.

## LIMITED WARRANTY

Clear-Com warrants that at the time of purchase, the equipment supplied complies with any specification in the order confirmation when used under normal conditions, and is free from defects in workmanship and materials during the warranty period.

During the warranty period Clear-Com, or any service company authorized by Clear-Com, will in a commercially reasonable time remedy defects in materials, design, and workmanship free of charge by repairing, or should Clear-Com in its discretion deem it necessary, replacing the product in accordance with this limited warranty. In no event will Clear-Com be responsible for incidental, consequential, or special loss or damage, however caused

Return Material
Authorization (RMA)
numbers are required for
all returns.

Both warranty and non-warranty repairs are available.

### WARRANTY PERIOD

The product may consist of several parts, each covered by a different warranty period. The warranty periods are:

- Cables, accessories, components, and consumable items have a limited warranty of 90 days.
- Headsets, handsets, microphones, and spare parts have a limited warranty of one year.
- UHF wireless IFB products have a limited warranty of one year.
- UHF wireless intercom systems have a limited warranty of three years.
- All other Clear-Com and Drake brand systems and products, including beltpacks, have a limited warranty of two years.

The warranty starts at the time of the product's original purchase. The warranty start date for contracts which include installation and commissioning will commence from the earlier of date of the Site Acceptance Test or three months from purchase.

### TECHNICAL SUPPORT

To ensure complete and timely support to its customers, Clear-Com's User Support Center is staffed by qualified technical personnel. Telephone and email technical support is offered worldwide by the User Support Center.

The User Support Center is available to Clear-Com's customers during the full course of their warranty period.

WARRANTY

Instructions for reaching Clear-Com's User Support Centers are given below.

Americas and Asia-Pacific Headquarters California, United States Tel: +1.510.337.6600 Email: CustomerServicesUS@clearcom.com

**Europe, Middle East, and Africa Headquarters Cambridge, United Kingdom** Tel: +44 1223 815000 Email: SalesSupportEMEA@clearcom.com

Canada Office Quebec, Canada Tel: +1 (450) 653-9669

China Office Beijing Representative Office Beijing, P.R.China Tel: +8610 65811360 / 65815577

Once the standard warranty period has expired, the User Support Center will continue to provide telephone support if you have purchased an Extended Warranty.

For latest contact information please refer to the Service and Support section at www.clearcom.com.

### WARRANTY REPAIRS AND RETURNS

Before returning equipment for repair, contact a User Support Center to obtain a Return Material Authorization (RMA). Clear-Com representatives will give you instructions and addresses for returning your equipment. You must ship the equipment at your expense, and the support center will return the equipment at Clear-Com's expense.

For out-of-box failures, use the following contact information:

Americas and Asia-Pacific Headquarters California, United States Tel: +1.510.337.6600 Email: CustomerServicesUS@clearcom.com

**Europe, Middle East, and Africa Headquarters Cambridge, United Kingdom** Tel: +44 1223 815000 Email: SalesSupportEMEA@clearcom.com

Canada Office Quebec, Canada Tel: +1 (450) 653-9669

China Office Beijing Representative Office Beijing, P.R.China Tel: +8610 65811360 / 65815577

Clear-Com has the right to inspect the equipment and/or installation or relevant packaging.

i i WARRANTY

For latest contact information please refer to the Service and Support section at www.clearcom.com.

### NON-WARRANTY REPAIRS AND RETURNS

For items not under warranty, you must obtain an RMA by contacting the User Support Center. Clear-Com representatives will give you instructions and addresses for returning your equipment.

You must pay all charges to have the equipment shipped to the support center and returned to you, in addition to the costs of the repair.

### **EXTENDED WARRANTY**

You can purchase an extended warranty at the time of purchase or at any time during the first two years of ownership of the product. The purchase of an extended warranty extends to five years the warranty of any product offered with a standard two-year warranty. The total warranty period will not extend beyond five years.

**Note**: Clear-Com does not offer warranty extensions on UHF wireless intercom systems, or on any product with a 1-year or 90-day warranty.

### LIABILITY

THE FOREGOING WARRANTY IS CLEAR-COM'S SOLE AND EXCLUSIVE WARRANTY. THE IMPLIED WARRANTY OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE AND ANY OTHER REQUIRED IMPLIED WARRANTY SHALL EXPIRE AT THE END OF THE WARRANTY PERIOD. THERE ARE NO OTHER WARRANTIES (INCLUDING WITHOUT LIMITATION WARRANTIES FOR CONSUMABLES AND OTHER SUPPLIES) OF ANY NATURE WHATSOEVER, WHETHER ARISING IN CONTRACT, TORT, NEGLIGENCE OF ANY DEGREE, STRICT LIABILITY OR OTHERWISE, WITH RESPECT TO THE PRODUCTS OR ANY PART THEREOF DELIVERED HEREUNDER, OR FOR ANY DAMAGES AND/OR LOSSES (INCLUDING LOSS OF USE, REVENUE, AND/OR PROFITS). SOME STATES DO NOT ALLOW THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES OR THE LIMITATION ON HOW LONG AN IMPLIED WARRANTY LASTS, SO THE ABOVE LIMITATIONS MAY NOT APPLY TO YOU. IN ANY EVENT. TO THE MAXIMUM EXTENT PERMITTED UNDER APPLICABLE LAW, CLEAR-COM'S LIABILITY TO CUSTOMER HEREUNDER SHALL NOT UNDER ANY CIRCUMSTANCES EXCEED THE COST OF REPAIRING OR REPLACING ANY PART(S) FOUND TO BE DEFECTIVE WITHIN THE WARRANTY PERIOD AS AFORESAID.

This warranty does not cover any damage to a product resulting from cause other than part defect and malfunction. The Clear-Com warranty does not cover any defect, malfunction, or failure caused beyond the control of

WARRANTY

Clear-Com, including unreasonable or negligent operation, abuse, accident, failure to follow instructions in the manual, defective or improperly associated equipment, attempts at modification and repair not approved by Clear-Com, and shipping damage. Products with their serial numbers removed or defaced are not covered by this warranty.

This warranty does not include defects arising from installation (when not performed by Clear-Com), lightning, power outages and fluctuations, air conditioning failure, improper integration with non-approved components, defects or failures of customer furnished components resulting in damage to Clear-Com provided product.

This limited warranty is not transferable and cannot be enforced by anyone other than the original consumer purchaser.

This warranty gives you specific legal rights and you may have other rights which vary from country to country.

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