

OWNER'S MANUAL

4 Channel
48V Phantom
Power
Supply

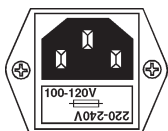
Phantom Plus

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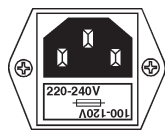


IMPORTANT PLEASE READ THIS FIRST

The Phantom Plus is a dual voltage unit. It is essential that you check that the voltage on the fuseholder cover below the AC connector on the rear of the chassis is set correctly before connecting it to the AC power.



**THIS IS SET FOR 100 V AC
TO 120 V AC OPERATION**



**THIS IS SET FOR 220 V AC
TO 240 V AC OPERATION**

To change, pull fuseholder out and rotate 180°, then push in again. Do not insert power cable into unit until voltage has been correctly set. Do not plug power cable into AC power until voltage has been correctly set

WARNING SYMBOLS USED ON THIS EQUIPMENT

This symbol is intended to alert you to the presence of important operating instructions contained in this owner's manual

This symbol is intended to alert you to the presence of uninsulated dangerous voltage within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock.

This symbol indicates that a Slow Blow fuse is used in this equipment. Replace with same type and value only



CAUTION



TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER OR BACK OF UNIT.
THERE ARE NO USER-SERVICEABLE PARTS INSIDE.
REFER ALL SERVICING TO QUALIFIED PERSONNEL.
TO PREVENT FIRE OR FURTHER SHOCK HAZARD, DO NOT EXPOSE THIS UNIT TO RAIN OR MOISTURE

Introduction

Thank you for choosing the Phantom Plus - a 48 V 4 channel Phantom Power Supply. As with all ARX equipment, it has undergone extensive factory calibration and 'burn in' before shipping. To ensure continued trouble free use, please familiarise yourself with the contents of this manual before using your Phantom Plus.

About the Phantom Plus

Many condenser microphones require Phantom power to operate, and many active Direct boxes have the ability to be run from Phantom power and thus avoid the need for unreliable batteries.

The correct voltage for Phantom power is a rock steady 48 VDC. Sadly many otherwise excellent consoles fall down in this respect, with a Phantom power supply that either doesn't reach the required voltage and thus reduces the device's headroom, or sags to a lower voltage after a short period of time.

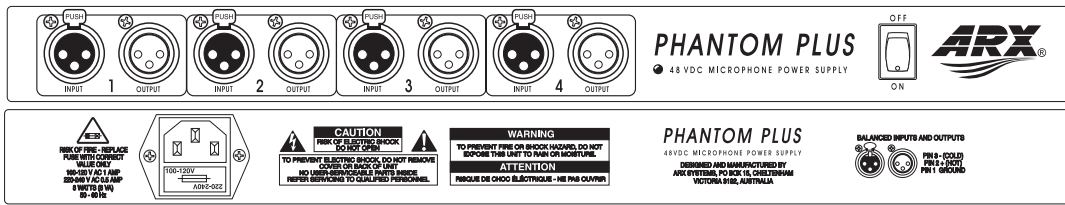
To solve both these problems, ARX design engineers have developed the all new Phantom Plus, a 4 Channel 48VDC Phantom Power Supply Unit. Its Four channels of clean, ultra stable Phantom power are ideal for consoles that either have no Phantom power supply or a deficient one.

Each unit is hand calibrated before it leaves the factory to ensure its performance meets all professional requirements. Behind the deceptively simple front panel, each Phantom Plus contains some sophisticated power circuitry.

Ripple free DC Voltage is sourced from a ultra low impedance, fully short circuit proof regulated Power Supply with a passively buffered grounding system between channels to ensure that there is no grounding interaction or loops.

The Phantom Plus is housed in a stand alone all steel chassis for maximum EMR rejection and has an inbuilt multi-voltage AC power supply. For maximum flexibility in use each unit comes complete with optional rack mounting ears.

The Phantom Plus is ideal for any situation requiring clean and stable Phantom Power.



Front Panel Connectors and Controls

- Balanced XLR type input for channels 1, 2, 3 and 4.
- Balanced XLR type output for channels 1, 2, 3 and 4.
- AC Power switch

Rear Panel Connectors and Controls

- Dual voltage IEC 3 pin AC Power connector with integral fuseholder. **WARNING - RISK OF FIRE!** Replace fuse with correct value only. 90 - 120 V AC 1 amp; 220 - 240 V AC 0.5 amp

Using the Phantom Plus

Phantom Plus operation is simplicity itself, with Balanced XLR 3 pin Input and Output connectors mounted side by side for easy patching.

1. Reduce all levels.
2. Plug the lead from the microphone (or DI box) into the Channel 1 Female XLR input, and connect a lead from the Male XLR output to the Female XLR input of your console.
3. Switch the AC power switch of the Phantom Plus on.
4. Bring the levels back up.

That's it - that's all there is to it. Once you have done Channel 1, you can continue on to do the same to the others.

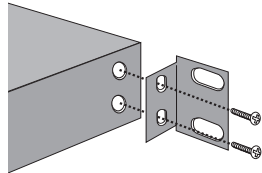
Optional Rack Mount ears

With the Phantom Plus you have the option of racking it, or keeping it as a standalone unit, perhaps packed in with the mixing console.

Should you want to rack mount it, inside the packing there is a small envelope containing 2 rack mounting ears and 4 x 3mm screws.

- Place the unit on a level surface.
- Place a rack ear next to the front of the unit, insert the two 3mm screws into the holes on the side, and tighten.
- Repeat for the other side.

NOTE: There is no need to remove the lid of the unit.



Phantom Plus Specifications

Noise

Immeasurable

Frequency Response

DC to daylight

Distortion

Immeasurable

Input Connector

Female XLR, with +48VDC applied to Pins 2 + 3. Pin 1 GROUND, Pin 2 + (HOT), Pin 3 - (COLD)

Output Connector

Male XLR

Input/Output Coupling

Capacitor Coupled

Power Requirements

100 - 240 VAC, 8 watts (8 VA) 50 - 60 Hz

Construction

All steel monocoque chassis with removable lid

Size

17" W x 5" D x 1 3/4" H
432 x 130 x 44mm

Accessories

Optional rack mounting kit included

INTERNATIONAL LIMITED WARRANTY

ARX Systems (ARX) warrants to the first purchaser of any ARX equipment that it is free from defects in materials and workmanship under normal use and service. ARX's sole obligation under this warranty shall be to provide, without charge, parts and labour necessary to remedy defects, if any, which appear within twelve (12) months from date of purchase, and for a further twelve (12) months supply parts only.

This is our only warranty. It does not cover finish or appearance items, or if the equipment has been, in ARX's sole judgement:

- Subjected to misuse, abuse, negligence or accident;
- Repaired, worked on, or altered by persons not authorized by ARX;
- Connected, installed, adjusted or used for a purpose other than that for which it was designed.

This warranty gives you and us specific legal rights and you may also have other rights which may apply.

Warranty Service Procedure

Should it become necessary to have your equipment serviced under the terms of the warranty, please follow these steps:

1. Call ARX for a Return Authorization (RA) number;
2. **Carefully** repack the unit, in its original packaging where possible, including a note with a description of the problem, and a copy of the receipt showing date of purchase. Attach these to the actual unit itself. Don't forget to write your name and address clearly, and include a phone number where you can be contacted during normal business hours. Make it easy for our service technicians to contact you if they have a question. Also, use **plenty** of packing material especially around the rack mount ears - better to be safe than sorry.
3. Send the unit freight prepaid to ARX Systems, at the address given you with your RA number. We will pay the return freight when the serviced unit is returned to you.
4. We strongly recommend you insure the package. We can't fix it if it gets lost! Send it by UPS, Fedex, or any similar service that can track the package. Parcel Post is *not* recommended!

If Warranty Registration Card is missing, please write to ARX in the country of purchase, stating model and where purchased, or to ARX, PO Box 15, Cheltenham, Victoria 3192, Australia. Or Email us at: info@arx.com.au



Complies with 89/336/EEC Electromagnetic Compatibility Directive, amended by 92/31/EEC and 93/68/EEC and meets the following standards: EN 55013 : 1990, Sections 3.2 and 3.5 EN 55020 : 1988, Sections 4.3, 5.4, 6.2, 7.0, 8.0.