

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, burned voice coils, 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 includes running a speaker system with the ISC leads disconnected, or with a non-ARX crossover, or with the wrong processor.

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 your ARX distributor 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 - 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, Moorabbin, Victoria 3189, Australia.

Or you can Email us at: info@arx.com.au

8-pre™

Eight Channel Microphone pre-amp

OWNER'S MANUAL



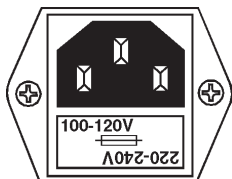
ARX Systems Pty Ltd, PO Box 15,
Moorabbin, Victoria 3189, Australia
Phone: (03) 9555 7859 Fax: (03) 9555 6747
International Fax: +61-3 -9555 6747
On the Web: www.arx.com.au
Email: info@arx.com.au



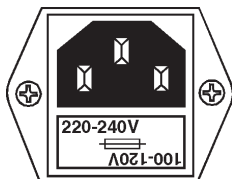
IMPORTANT - PLEASE READ THIS FIRST



This 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 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

RISK OF ELECTRIC SHOCK
DO NOT OPEN



TO PREVENT ELECTRIC SHOCK, DO NOT REMOVE COVER OR BACK OF UNIT
NO USER-SERVICEABLE PARTS INSIDE
REFER SERVICING TO QUALIFIED PERSONNEL

WARNING

TO PREVENT FIRE OR SHOCK HAZARD, DO NOT EXPOSE THIS UNIT TO RAIN OR MOISTURE.

ATTENTION

RISQUE DE CHOC ÉLECTRIQUE - NE PAS OUVRIR

CE N1819

Complies with 89/336/EEC EMC 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.

Complies with Australian Standard AS/N25 1053

8 Pre Specifications

Input Gain	20dB to 60dB
Input Pad	-20dB
Input Impedance	4 KOhm
Input Headroom	+23dB
Output Impedance	300 Ohm
Output Level (Max)	+23dB
Frequency Response	20Hz to 20KHz ±0.2 dB
Signal to Noise ratio	
Gain set @ 20 dB	-93dB Unweighted -99dB 'A' weighted
Distortion @ Unity Gain	.004%, 20 Hz to 10 KHz
Dynamic Range	116 dB
Phantom Power	48 VDC
Input Connectors	Balanced XLR
Output Connectors	Balanced TRS jack
Clip Indicator	Illuminates 1 dB prior to clipping
Power Requirements	100/120 V AC or 220/240 V AC
Weight	5 lbs/2.2 Kg
Dimensions	19"W x 1¾"H x 6"D 482 x 44 x 155mm

Complete online documentation is available at our website:

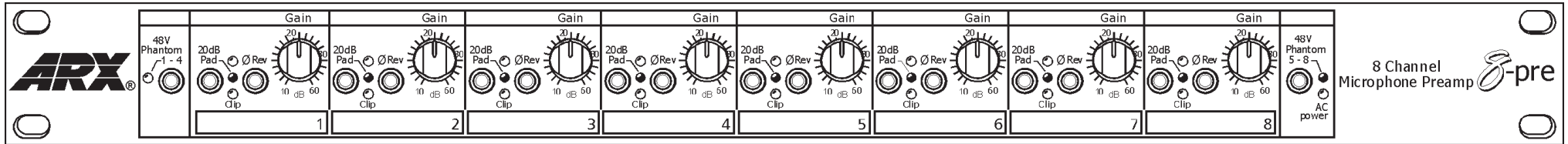
www.arx.com.au/8-pre.htm

Specific queries can be emailed to the factory at info@arx.com.au



Our policy is one of continuous improvement, and therefore designs may change without notice. However, unless otherwise stated, specifications will always equal or exceed those previously given. ARX® is a Registered Trade Mark of ARX Systems Pty Ltd. The 8-pre logo device is a trade mark of ARX Systems Pty Ltd. Any other names and trademarks are used for information purposes only, and no other intent is expressed or implied

Front Panel



48 V Phantom 1 - 4. Provides 48V DC on XLR pins 2 and 3 for powering condenser microphones on Channels 1 through 4

Pad switch. Reduces the incoming signal by 20 dB

Gain trim control. Adjusts the level of the signal coming into the δ -pre

Clip LED. Will light up 1 dB before any part of the δ -pre channel is about to clip (and distort the signal)

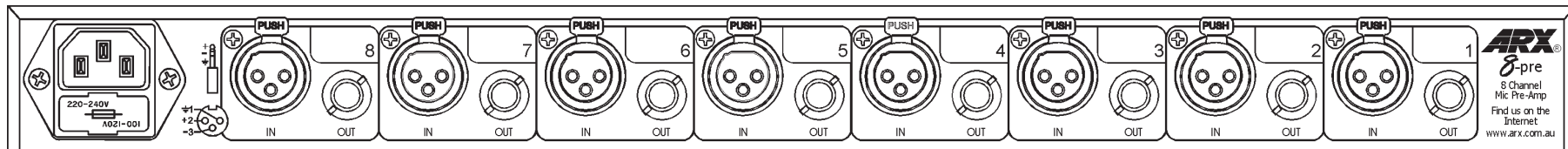
Ø Reverse switch. Flips the phase of the incoming signal 180 degrees

Numbered Marker Panel. A 'scribble-strip' for writing down channel assigns

48 V Phantom 5 - 8. Provides 48V DC on XLR pins 2 and 3 for powering condenser microphones on Channels 5 through 8

AC Power LED. Indicates the 8 PRE is connected to AC Power

Rear Panel



XLR Input connectors. Balanced Input connector wired Pin 1 Ground, Pin 2+ (Hot), Pin 3 - (Cold)

Jack Output Connectors. A 1/4" TRS (TipRingSleeve) balanced output jack (will happily accept unbalanced guitar jack). Wired Tip +, Ring -, Sleeve Ground

IEC 3 pin AC connector and integral fuseholder. Replace fuse with correct value only: 100 - 120 V AC 1 amp, 220-240 V AC 0.5 amp. Please also refer to voltage details on Page 2

Architects' and Engineers' Specifications

The unit shall consist of 8 independent microphone pre amplifiers, mounted in a standard 1 RU all steel chassis with extruded aluminium front panel.

Each pre-amplifier shall have a balanced female XLR input connector and a balanced Tip-Ring-Sleeve output connector mounted on the rear panel.

Each pre-amplifier shall have a Gain trim control on the front panel, variable from 20 dB through to 60 dB. Each pre-amplifier shall also have -20 dB Pad switches and Phase change switches.

48 V DC Phantom power shall be available on each input, switchable in banks of four, ie: Channels 1 through 4, and Channels 5 through 8.

The Signal to Noise ratio @ 20 dB shall be -93dB unweighted. Input impedance shall be 4 KOhms, and the output impedance shall be 300 Ohms.

Maximum Output Level shall be +23dB

AC power range shall be switchable 100 to 120V or 220 to 240V AC, and shall be connected to the unit via a standard three pin IEC connector, with built-in fuse and voltage change switch.

The unit shall be the ARX δ -pre

Using the δ -PRE

Applications

The δ -pre has applications wherever multiple mic preamps are required: as a console extender for time when you need more mic inputs on your compact Digital / Analog mixer, and also for direct recording to digital multi-track recorders and sound cards

Setting Up

Setting up your δ -pre is very straightforward and intuitive.

Firstly, connect the unit to AC power.



Please Note:

This 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 AC power. See Page 2 for more details on this.



Ensure that the faders for the mixer channels you wish to use are pulled right down, then connect the 8 balanced microphone leads you wish to use to the balanced XLR input connectors.

Connect the jack outputs to the line inputs of your mixer (or the inputs of your ADAT / DA 88, computer sound card or similar device).

If you are using **Dynamic** microphones there is no need to switch in either Phantom power switch. If you are using a **Condenser** microphone it will need Phantom power to make it work, so press in the Phantom switch for channels 1 - 4 or 5 - 8 on the δ -pre front panel. Note that if you have any dynamic microphones connected to the same bank of channels they will be unaffected by the Phantom power.



Important: Turn down all mixing console channel faders **before** switching in any Phantom power.

Adjust the Gain controls on the δ -pre front panel to a setting that doesn't make the Clip LED light up. This is a critical operation - you want the Gain to be high enough for a clean, noise free signal, but low enough to not overload the pre-amp.

So take your time!

Switch in the Pad switch if the lowest point on the Gain control still causes the Clip LED to light up. Otherwise leave the Pad switched Out, as unnecessary use of it will considerably worsen your signal-to-noise ratio.

Slowly bring up the levels of the individual console channels as required.

Congratulations - You've just installed your ARX δ -pre, increased the number of mic channels on your console by 8, and you're ready to go!

Introduction

Thank you for choosing this **ARX δ -PRE**. We hope you enjoy using this unique product as much as we enjoyed creating it. As with all ARX equipment, it has undergone extensive factory testing and 'burn in' before shipping. To ensure continued trouble free use, please familiarise yourself with the contents of this manual before using.

About the δ -PRE

Innovation

If you love your compact Digital (or Analog) mixing console, but wish it had more microphone inputs, the **ARX δ -pre** is the solution: eight channels of superb sounding Microphone Pre-amps in a compact 1 RU chassis.

It's the ideal console extender for those times when you need more microphone inputs. Now you can put those unused line inputs to good use, and who knows - the δ -pre pre-amps sound so good you'll probably end up using them all the time instead of the ones that came with your mixer!

Superb Audio Quality

The δ -pre's ultra low noise figures come from extensive use of premium components plus care and attention to board design and layout. The result is superb, transparent audio quality and the headroom to handle anything that a mic can throw at it.

Gain is adjustable from 20 db through to 60 dB via a trim control on the front panel, plus we've included a -20dB **Pad** switch to tame the hottest condenser mic output if required. The **Clip** status LED lights up 1 dB before the onset of clipping, just to warn you that you're getting close.

Phantom power is switchable in banks of four channels: 1 through 4, 5 through 8. A Phase reverse switch is also provided on each pre-amp channel to eliminate any close miking problems.

In short, the ARX δ -pre is the mic Pre-amp that you'll wish the console manufacturer had used.

Every day, ARX Audio interface products solve audio problems for thousands of people around the world. We don't make digital or analog mixers and we don't have to cut any corners on quality.

We're obsessive about audio quality because we're betting that you are, too.

The ARX δ -pre provides a unique solution to today's multiple Mic Pre-amp requirements.