

## 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, DHL 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](mailto:info@arx.com.au)*

# AmbiDrive MicroDrive

## Three Channel Integrated Power Amplifiers

## 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](http://www.arx.com.au)  
Email: [info@arx.com.au](mailto:info@arx.com.au)



**IMPORTANT - This amplifier is designed to be connected ONLY to the AC voltage ticked  below**



**100 V AC, 50 - 60 Hz**

*It is essential that you check that this voltage is correct for your area before connecting it to AC power. Do not plug power cable into AC power until voltage has been checked. If incorrect, contact your ARX distributor.*

**120 V AC, 50 - 60 Hz**

**220-240 V AC, 50 - 60 Hz**

**240 V AC, 50 - 60 Hz**

*Your warranty does not cover connecting the amplifier to the wrong voltage AC power!*



These amplifiers have a removable AC power lead that connects to an IEC connector (See Picture at Right) with built in fuse. Replace fuse with correct value as marked on the rear of the amplifier

### 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

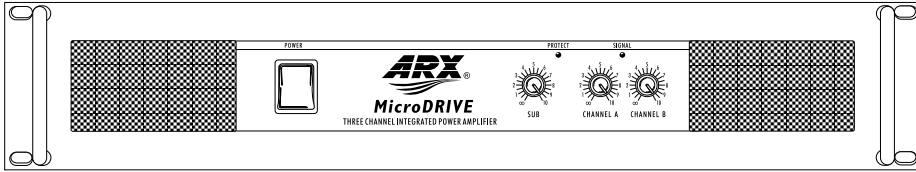


Complies with 89/336/EEC EMC Directive, amended by 92/31/EEC and 93/68/EEC and meets the following standards: EN 55013 : 1990, Sections 3.2 and 3.5 EN 55020 : 1988, Sections 4.3, 5.4, 6.2, 7.0, 8.0.

Complies with Australian Standard AS/N25 1053

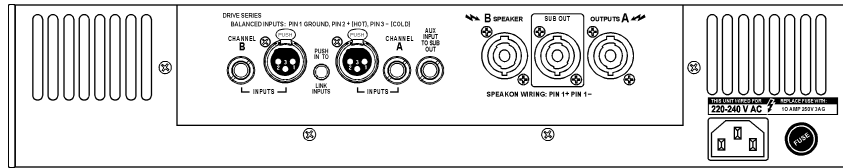
### Specifications

Input Impedance	40 Kohms electronically balanced
CMRR	> 70 dB, @ 1 KHz
Cnannel Separation	-88 dB, unweighted
Distortion (THD)	.04% @ + 4 dB, 1 KHz
Crossover Frequency	100Hz (to SUB channel)
HighPass Filters	35 Hz SUB output 45 Hz A/B outputs
Input Connectors	XLR and Jack
Output Connectors	Neutrik Speakon
Power Requirements	100, 120, 220, 240V AC, 50-60 Hz, supplied Zone Specific
Output Power - AmbiDrive	
<i>Channels A and B</i>	140Watts/8 ohms, 180Watts/4 ohms
<i>Sub Channel</i>	160Watts/8 ohms, 210Watts/4 ohms
Output Power - MicroDrive	
<i>Channels A and B</i>	180Watts/8 ohms, 250Watts/4 ohms
<i>Sub Channel</i>	230Watts/8 ohms, 320Watts/4 ohms
Maximum Units Driven	
<i>AmbiDrive:</i>	2 x Ambience 1 or 5 per side from Channels A and B; 1 x Ambi SUB from Sub Channel
<i>MicroDrive:</i>	2 x MicroMedia per side from Channels A and B; 1 x M-SUB from Sub Channel
Weight	AmbiDrive: 12 Kg (26 lbs) MicroDrive: 13 Kg (28 lbs)
Front Panel Controls	Power switch, Level controls for Channels A, B and Sub.
Construction	All steel monococque construction



### Front Panel (MicroDrive illustrated)

- EasyGrip Handles
- Detented Level controls for Channels A, B, and Sub
- Protection and Signal present LEDs
- 4 mm steel front panel
- Non-scratch Lexan printed panel
- Illuminated power switch
- Fan filters



### Rear Panel (MicroDrive illustrated)

- Air Outlets - do not block
- Balanced XLR and Jack Inputs
- Input Link switch (for parallel mono)
- Neutrik Speakon speaker connectors.
- Aux input to Sub Channel
- Removable AC Power Lead and fuse
- Rear rack ears for four point racking

### Input Link Switch

Pressing this switch in makes the same signal appear at both inputs without having to use a Y lead. Also known as Parallel Mono mode

### Aux Input to Sub Channel connector

This balanced jack connector lets you use the Sub channel as an extra full range channel when a Sub is not required. To use it as a monitor channel, for example, plug your monitor send output from the console in here, and you can connect up 2 x 8 ohm monitor wedges

### ⚠ Things to check before you plug the amplifier in ⚠

Main AC power - check that the voltage on your amplifier is the same as the voltage at the power point. It is a really good idea to check this **before** plugging the amplifier into the power point. Be especially careful of plugging into unchecked 'piggyback' plugs, power distribution boxes or extension cables.

### ⚠ Your warranty does not cover damage caused by incorrect wiring. ⚠

Make sure the amplifier is connected to the same AC power supply and Earth/Ground as the rest of the system, otherwise you may set up an Ground loop hum.

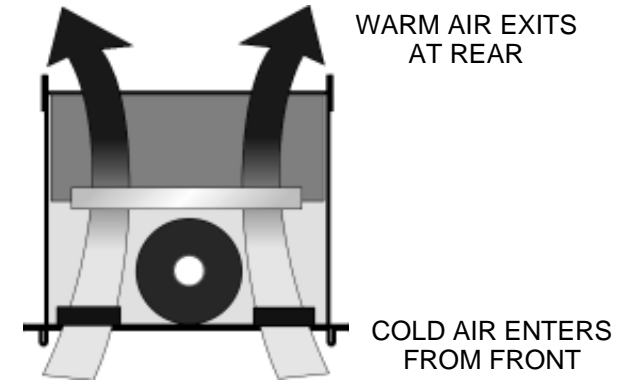
The AmbiDrive weighs approximately 12 kilos/26 lbs, the MicroDrive 13 kilos/28 lbs, and the PowerDrive LITE 14 kilos (30 lbs). We **strongly** recommend that you use the rear mounting slots as well as those on the front panel.

There are 2 cooling fans that circulate air around and through the heatsink. ⚠

It is **extremely** important that you ensure that there is **unrestricted** air access to these fans, and also **unrestricted** air exit path.

Clean the fan filters regularly or at the first sign of becoming clogged. ⚠

### Air flow diagram



These amplifiers have sufficient fan cooling capacity built in, and need no extra external fan cooling to operate normally. Their compact 'UltraFin' heatsinks provide massive surface areas for rapid cooling and stable temperatures.

### BUT... ⚠

When racking up these amplifiers, you **MUST** allow space for the air to exit from the **rear** of the amplifier. Remember that Power = Heat, and Maximum air flow = successful heat management.

The easy way to handle it is to follow the Air Flow diagram above, and have an open back to the rack. Don't let anything block the air exit paths - the air must have a way out.



**THERE ARE NO USER SERVICEABLE PARTS INSIDE THE AMPLIFIER, SO PLEASE DON'T TAKE THE LID OFF AND POKE AROUND!**

Amplifiers run on DC voltages provided by the amplifier's internal power supply. These amplifiers have separate + and - DC fuses for both channels, mounted internally on the power supply circuit board. The power Mosfets used in the amplifiers are extremely rugged devices, and the correct rating fuses in the power supply ensure that the amplifier circuitry is protected from short circuit damage.



A blown DC fuse will be indicated by a very distorted low volume output from that side of the amplifier. A blown AC fuse will be indicated by nothing working at all - check to see if the fans are turning.



Any blown fuse should be investigated. It doesn't necessarily mean that something is wrong with the amplifier, but indicates that there is something wrong in the complete signal path, from the mixing console to the speakers.



**If an AC fuse blows:**

- Switch the power off, replace the fuse with another of the same rating.
- Switch the power back on.
- If it blows again, switch the power off and disconnect the Input and Speaker leads from the amplifier. Replace the fuse with another of the same rating.
- If it doesn't blow when you switch it back on, then the fault is somewhere else. Time to start checking those leads.
- If the fuse does blow again, then contact your nearest ARX service centre or the dealer where you bought the amplifier.



**If a DC fuse blows:**



- Get a qualified service person to inspect inside the amplifier. Please don't do it yourself! There are **very** dangerous voltages inside amplifiers, even when they have been turned off!

## **Introduction**

Thank you for choosing this ARX three channel power amplifier. We hope you enjoy using it as much as we enjoyed creating it. It is a precision engineered product designed for professional use in all pro-audio applications, and as such, a working knowledge of basic electronic safety procedures is assumed on the part of the operator.

Like all ARX equipment, it has undergone extensive factory calibration, 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 AmbiDrive, MicroDrive and PowerDrive LITE amplifiers**

Based on multiple channels of the rugged ARX 'ZR' Series, these amplifiers are truly the systems of the future!

They have everything you need to run either a complete sound system, in one compact 2 RU package. Channel A and B, plus a powerful Sub channel. Award winning ARX ISC speaker processing is built in. Simply connect your mixer outputs and your speaker leads and that's it - there's nothing else to wire up!

The Rear Panel includes a choice of Balanced XLR or Jack inputs, and Neutrik 'Speakon' insulated speaker connectors for fast 'plug and play' setups.

There is also an Auxiliary input for the Sub channel, used when you do not need Sub output. This means the Sub channel can then be used full range, typically for say, a monitor system.

These amplifiers are further examples of the ARX commitment to produce amplifiers that will survive the toughest musical environment, day after day, night after night, because we know that audio professionals like yourself depend on them to earn a living.