

Starting Recording

1. Connect the microphone(s) to the **PC-pre**. If they are condenser mics needing Phantom power, press the phantom switch IN. If they are dynamic mics, then don't. If you are unsure of what type you have, here's the rule: **If it works OK without Phantom power, then it's a dynamic microphone**
2. Set the front panel Level controls initially at 0dB. If you know you have a card which is set to +4dB, then turn the output control to that setting. High end cards can have internal jumpers to set the nominal level, so check your documentation.
3. Open up the Control Panel/Sounds and Audio Devices Properties in Windows, (or similar utility on Macs) and check the settings on the Audio Properties/Recording. Set the volume slider at around 75% (¾ way to the Right) as a starting point.
4. Set the **PC-pre** Input Gain at 20 - 30 dB as a starting point, then open up your audio software and start the RECORD process. Make sure you can see the meters.
5. Try the traditional sound engineer's "Check 1 - 2" into the microphone, and watch (a) the levels on the screen, and (b) the Overload LED on the front of the **PC-pre**. If it lights up, reduce the Input Gain. If the levels are too low on the screen, increase the Input Gain slightly until the level improves. If the onscreen levels are still too low, and the Input Gain is around 30-40+, increase the Output level on the **PC-pre** until the level gets better. It's a matter of trial and error initially, until you are used to the interaction between the **PC-pre**, sound card, and the audio software.
6. Different microphones will require different Input Gain settings, as will singers with louder and softer voices, and louder and softer instruments. It's a good idea to create a page of different settings that you can refer back to for speed.
7. You can use the jack input of the combo connector to plug a line input (eg guitar) into the **PC-pre**. You can either go in direct - straight out of the guitar, or through any effects pedals you have. Just be aware of the extra noise these devices can add, which may require some subtle noise-gating once you have the track recorded.

PC-Pre2 Specifications

Input Impedance

Mic 2K Ohms Balanced; XLR type Pin 1 Audio Ground, Pin 2 +, Pin 3-
Line 25 KOhms Balanced, ¼" TRS jack Tip +, Ring- Sleeve Ground

Phantom Power Voltage +48 V DC on XLR Pins 2 and 3

Max Input Level Mic +15 dB, Line +20 dB

Input Gain 6 dB Minimum, variable to 50 dB Maximum

Overload Indicator Measured at all Gain points throughout the circuitry

Output Noise -90 dB Unweighted, -97 dB 'A' weighted

(Measured with Gain at nominal 20 dB)

Frequency Response 20 - 20 KHz ± 0.25 dB

Distortion

100 Hz 0.0085%; 1 KHz 0.008%; 10 KHz 0.0083%

(Measured with Mic Gain 20 dB, Output 0 dB)

Output impedance 150 ohms

Maximum output level +20dB

Distortion Max 0.1% prior to clipping

Output Connectors

Single Mono RCA with Channels A and B mix

Insulated 6.5mm jack with Channels A and B mix.

Wired Tip: +, Sleeve: Ground / Earth

Dual Insulated 6.5mm jacks

Wired Tip: +, Sleeve: Ground / Earth

Power Requirements 12v Connection from computer or external power supply

Size 146mmW x 42mmH x 142mm D (5¼"W x 1¾"H x 5"D)

Weight Under 1 Kilo (2.2 lbs)

8. Don't worry about getting maximum level on to the hard disk. You just need a good sounding clean signal that is loud enough, but not so loud that you risk going into the red/overload state. See 'About Digital Recording' below

About Digital Recording (a VERY short primer!)

If you've ever recorded on to a tape deck or cassette deck, you'll be aware that it's usually OK to let the needles bounce into the red OCCASIONALLY. In fact, it often sounds bigger and fatter this way, thanks to the soft analog tape distortion.

Digital recording is different. Once the level hits the red that's TOO MUCH. Digital audio has no analog type headroom. Maximum level is just that - maximum, which means absolutely no more. Any attempt to go over 0dB will result in a horrible crackling sound, which is probably not the effect you're looking for!

Your mission, Jim, is to get the cleanest, best sounding signal you can onto the hard disk, and leave the audio massaging and sweetening to the mixing/post-production process.

Most audio recording programs have extensive compression, limiting, EQ, pitch control, tube-sound and other filters built in, so you can do and redo all this until you find the magical sound you're looking for.

The ARX **PC-pre** is designed to be there when inspiration strikes, ready and waiting in your computer to capture that magic.

Please Note

Although the PC Pre has been created for easy use with both Mac and PC computers, it is also super easy to use as a front end for any other recording or production system. As long as there is provision for line level signals to be connected, the PC-pre will deliver superb audio

INTERNATIONAL LIFETIME WARRANTY

ARX Systems (ARX) warrants to the first purchaser of this **PC-pre** product 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 to supply parts only for the life of the product to the original purchaser. ARX shall not be responsible for parts that have been discontinued by the original manufacturer

This is our only warranty. It does not cover finish or appearance items, nor does it apply if the unit 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 otherwise than in accordance with the instructions supplied by ARX.

This warranty gives you and us specific legal rights, and you may also have other rights which can vary from state to state.

To obtain warranty service for your **PC-Pre**, call, write, or Email to ARX or the dealer you purchased it from. They will give you the correct address to send your unit to. Have your sales receipt showing date of purchase handy, and include a copy of it with the unit. Please pack it up well - we are not responsible for any damage caused by unsuitable packing during shipment. Send the unit to us pre-paid, by a delivery service like FedEx, UPS, DHL or any other service that can track the shipment. We will return it to you freight paid. If you have any questions, or any part of this is unclear, please write to ARX Systems in the country of purchase, or to the address below.

PO Box 15, Moorabbin, Victoria 3189, Australia. Phone: +61 (0)3 9555 7859 Fax: +61 (0)3 9555 6747

You can Email the factory at: info@arx.com.au

Combo Input connectors. These have both 3 pin Balanced XLR type for Mic input, wired First Ground, 2+, 3-, and a 1/4" TRS (Tip/Ring/Sleeve) balanced jack for Line (will happily accept unbalanced guitar jack)

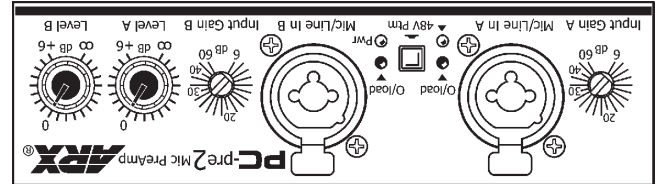
Input Gain controls. Adjust the level of the signals coming into the PC-pre

Phantom Power Switch. Provides global 48V DC on XLR pins 2 and 3 for powering condenser microphones. Is on when switch is pushed in and adjacent LED is lit

Overload LEDs. Will light up if any part of the PC-pre circuit is about to clip (and distort the signal)

Pwr LED. Indicates that 12V DC power is connected and the unit is powered up ready for use

Level controls. Adjusts the level of the signal going out of the PC-pre, from infinity (off) to +6dB



Front Panel

A **Dynamic** microphone needs no phantom power and will just plug into the front panel

A **Condenser** microphone needs Phantom power to make it work, so press in the Phantom switch on the front panel

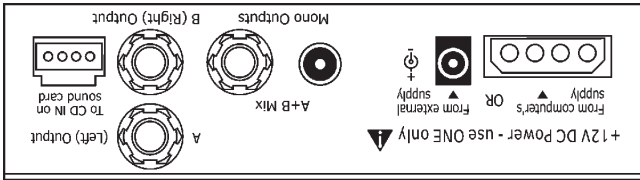
Connecting a microphone

Audio to Soundcard. A lead from this connector can be plugged into the internal CD IN connector of your sound card (if fitted) for a super neat installation with no external leads. Wired summed mono: 1+/2G/3G/4+.

Audio Out. Dual Jack connectors, wired A (Left Out) and B (Right Out) connector or a 6.5mm jack

Mono Outputs Summed mono signals available on either an RCA type connector or a 6.5mm jack

DC connectors. Accepts DC power from either the computer's power supply or 12V wall-wart. (Use one or the other - **NOT BOTH!**)



Rear Panel

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Manufactured in Australia



PC-pre2 Mic PreAmp

Owner's Manual