

# POWER-XR USER GUIDE

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## **IMPORTANT! Read before operating this equipment!**

**CAUTION:** The exclamation mark is to draw your attention to important instructions and safety procedures in this manual.



**ATTENTION:** The lightning flash warns you of the risk of electrical shock presented by components inside this product. Unauthorised personnel must not open this unit.



**WARNING:** To reduce the risk of electrical shock do not remove any unit covers or panels. There are no user serviceable parts in this product.

**WARNING:** To reduce the risk of electric shock, do not expose this equipment to rain or moisture.

**HEED WARNINGS:** All warnings on the product and in the operating instructions should be adhered to.

**READ ALL THE INSTRUCTIONS:** All the safety and operating instructions should be read before the product is operated.

**RETAIN INSTRUCTIONS:** The safety and operating instructions should be retained for future reference.

**FOLLOW INSTRUCTIONS:** All operating and use instructions should be followed.

**CLEANING:** Unplug this product from the mains before cleaning. Do not use liquid or aerosol cleaners. Use a damp cloth for cleaning.

**WATER AND MOISTURE:** Do not use this product near water - for example, near a bath tub, wash bowl, kitchen sink, or laundry tub, in a wet basement; or near a swimming pool and the like. The product must not be exposed to dripping or splashing and no objects filled with liquids, such as vases, shall be placed on the product.

**HEAT:** The product should be situated away from heat sources such as radiators, stoves, or any other products (including amplifiers) that produce heat.

**VENTILATION:** Slots and openings in the cabinet are provided for ventilation, to ensure reliable operation of the product and to protect it from overheating and these openings must not be blocked or covered. The openings should never be blocked by placing the product on a bed, sofa, rug or similar surface. This product should not be placed in a built-in installation such as a bookcase or rack unless proper ventilation is provided or the manufacturer's instructions have been adhered to.

**OBJECT OR LIQUID ENTRY:** Never push objects of any kind into this product through openings as they may touch dangerous voltage points or short-out parts that could result in a fire or electric shock.

**ACCESSORIES:** Do not place this product on an unstable cart, stand, tripod, bracket, or table. The product may fall, causing serious injury to a child or adult, and serious damage to the product. Use only with a cart, stand, tripod, bracket or table recommended by the manufacturer, or sold with the product. Any mounting of the product should follow the manufacturer's instructions, and should use a mounting accessory recommended by the manufacturer.

**ATTACHMENTS:** Do not use attachments not recommended by the product manufacturer as they may cause hazards.

**MOVING THE PRODUCT:** A product and cart combination should be moved with care. Sudden stops, excessive force, and uneven surfaces may cause the product and cart to overturn.



**POWER SOURCES:** This product should be operated only from the type of power source indicated on the marking label. If you are not sure of the type of power supply to your home, consult your product dealer or local power company. For products intended to operate from battery power, or other sources, refer to the operating instructions.

**OVERLOADING:** Never overload wall outlets, extension cords, or integral convenience receptacles. This can result in an increased risk of fire or electric shock.

**POWER CORD PROTECTION:** Power supply cords should be routed so that they are not likely to be walked on or pinched by items placed upon or against them, paying particular attention to cords at plugs, convenience receptacles, and the point where they exit from the product.

**NAKED FLAMES:** No naked flame sources, such as candles, must be placed on this product.

**LIGHTNING:** For added protection for this product during a lightning storm, or when it is left unattended or unused for long periods of time, unplug it from the wall outlet and disconnect the antenna or cable system. This will prevent damage to the product due to lightning and power-line surges.

**BATTERIES:** Warning: Batteries shall not be exposed to excessive heat such as sunshine, fire or the like.

### **CAUTION! POLARISED CONNECTOR (CANADA and USA):**

To prevent electrical shock, match wide blade of plug to wide slot, fully insert. Do not alter or remove this plug if it does not fit your mains power socket. Have a suitable socket installed by a competent electrician.

**ACCESS TO THE MAINS PLUG:** The means to disconnect this product from the mains supply is the mains plug. Ensure that the mains plug is accessible at all times.

## Power supply

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Connect the moulded IEC connector of the supplied AC cord into the power inlet on the rear of the unit.

The mains supply requirement of your amplifier is marked on a label on the rear panel. Before connecting, check that this voltage is the same as your mains supply.

220-230V Products: Voltage Range 220V-240V

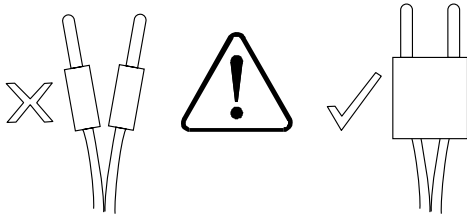
115V Products: Voltage Range 110V-120V

If you move to an area with a different mains voltage, contact your local Cyrus distributor to have your product converted.

There are no user replaceable fuses in this unit.

## Speaker plugs

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The Power-XR is supplied with a pair of dual speaker plugs. To ensure safe operation of this amplifier, the speaker cables must be terminated with the supplied speaker plugs, assembled in accordance with the instruction supplied with the plugs.

Never terminate the cables with separate 4mm/banana plugs.

## Servicing

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Do not attempt to service this product yourself as opening or removing covers may expose you to dangerous voltage or other hazards. Refer all servicing to qualified service personnel.

**CONDITIONS REQUIRING SERVICE:** Unplug this product from the wall outlet and refer servicing to qualified service personnel when:

- When the power supply cord or plug is damaged.
- If liquid has been spilled, or objects have fallen into the product.
- If the product has been exposed to rain or water.
- If the product has been dropped or damaged in any way.
- If the product does not operate normally by following the operating instructions. (Adjust only those controls that are covered by the operating instructions. Improper adjustment of other controls may result in damage requiring extensive work by a qualified technician to restore the product to its normal operation).
- When the product exhibits a distinct change in performance.

**REPLACEMENT PARTS:** When replacement parts are required, be sure the service technician has used replacements specified by the manufacturer or have the same characteristics as the original part. Unauthorised substitutions may result in fire, electric shock, or other hazards.

**SAFETY CHECK:** Upon completion of any service or repairs to this product, ask the service technician to perform safety checks to determine that the product is in proper operating condition.

## Product service centres

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For product service or technical advice, contact only authorised Cyrus service centres. Contact details for Cyrus distributors may be found on the Cyrus website at [www.cyrusaudio.com](http://www.cyrusaudio.com).

### **FCC Notice\***

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NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try and correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Any changes or modifications not expressly approved by the manufacturer could void the user's authority to operate the equipment.

\*115V products

## **Welcome to the world of Cyrus**

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Congratulations on your choice of Cyrus Hi-fi products. Our state-of-the-art design technology and outstanding quality of manufacture has won countless awards around the world. We are confident that you will derive great pleasure from owning a product from one of the most recognised and respected manufacturers of hi-fi equipment.

Now is a good time to register your new Cyrus product.

To register, click [here](#) or visit - [www.cyrusaudio.com/support/warranties](http://www.cyrusaudio.com/support/warranties).

Please read these instructions carefully before commencing installation. They provide full guidance to help you install your amplifier safely and correctly.

## **Preparations for Installation**

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Before installing your Cyrus amplifier check that the following items are included in the accessory box.

- Power Cable
- Kit of 2 x dual speaker plugs
- 1 x Firmware update cable
- 2 x Phono leads for MC-BUS connection
- Quick-start guide

After removing these items, please retain the packaging.

Install the amplifier in a well ventilated location away from sources of high temperature, dust or humidity. Never stand the amplifier under another unit or on any surface likely to obstruct its cooling or ventilation.

## **Adjustable feet**

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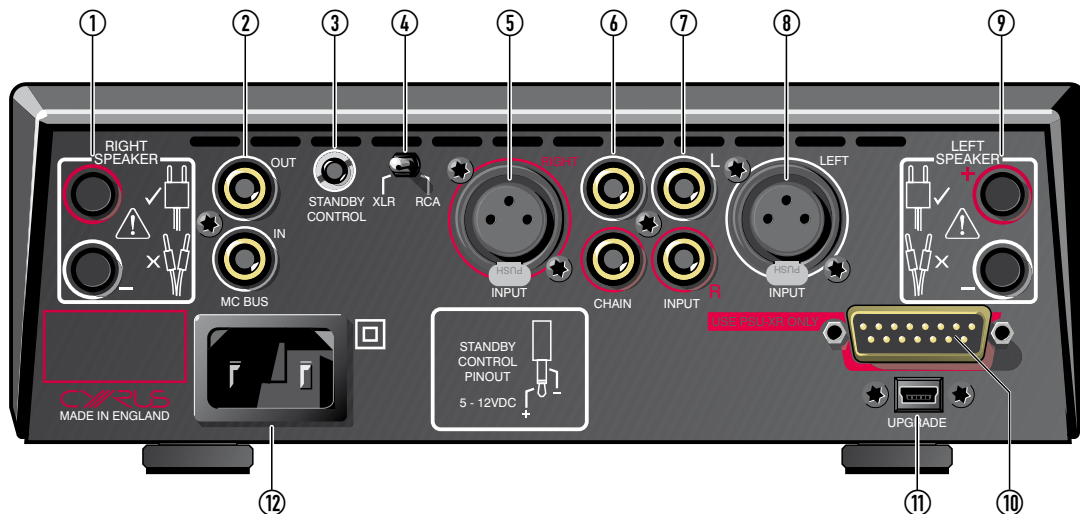
The product feet are adjustable for height. As supplied, all feet are set for minimum height.

If required, one or more of the feet may be adjusted to level the product when placed on an uneven surface.

- Determine which foot will require adjustment.
- Raise the chassis slightly.
- Grip the foot and unscrew it slightly from the baseplate.
- Re-check the stability of the product and adjust further if necessary.

**CAUTION:** Never unscrew any of the feet by more than a half-turn to avoid any possibility of the foot becoming detached from the baseplate. This would leave an exposed thread under the product which may damage furnishings etc.

## Installation



### Key to the rear panel drawing

- |                                   |                              |
|-----------------------------------|------------------------------|
| 1. Right speaker output           | 7. RCA (unbalanced) input    |
| 2. MC-BUS system connection       | 8. Left XLR (balanced) input |
| 3. 12V trigger input              | 9. Left speaker output       |
| 4. XLR (default)/RCA input switch | 10. PSU-XR connection        |
| 5. Right XLR (balanced) input     | 11. Upgrade port             |
| 6. Daisy chain output             | 12. Mains inlet              |

## Important – read before making any audio connections



To avoid possible damage to your amplifier, it is essential to disconnect all system components from the mains supply before connecting or disconnecting audio interconnects.

### Connecting a pre-amplifier or streamer

NOTE: When connecting a streamer (such as the Cyrus Stream-XR) to a Power-XR, ensure that the output is set to variable.

Unbalanced (RCA) and balanced (XLR) input connectors are available to link the Power-XR to a pre-amplifier or streamer.

If your amplifier is a long distance from the pre-amplifier / streamer, or beside a loudspeaker, then balanced (XLR) connections may give improved performance.

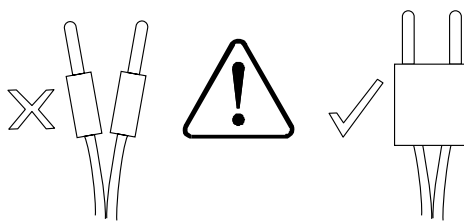
### Connecting via unbalanced (RCA) interconnects

Connect a stereo phono interconnect from the output of the pre-amplifier to the left and right inputs of the Power-XR. Be sure to observe colour coding of the plugs to keep left and right channels correctly ordered, as well as any directionality indicated on the cables.

### Connecting via balanced (XLR) cables

Connect a 3-pin XLR cable from the balanced outputs of the pre-amplifier the left and right balanced inputs of the Power-XR. Be sure to observe colour coding of the plugs to keep left and right channels correctly ordered, as well as any directionality indicated on the cables.

## Connecting loudspeakers



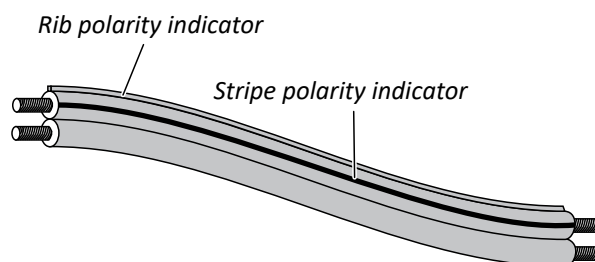
The Power-XR is supplied with a pair of dual speaker plugs. To ensure safe operation of this amplifier, the speaker cables must be terminated with the supplied speaker plugs, assembled in accordance with the instruction supplied with the plugs.

Never terminate the cables with separate 4mm/banana plugs.

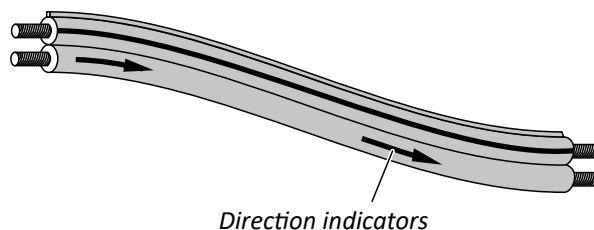
NOTE: Additional plug kits are available from Cyrus if required.

- Following the instructions supplied with the speaker plugs, assemble the plugs to the speaker cables.

Observe polarity. The + and - speaker terminals of the amplifier must be connected to the corresponding + and - terminals of the speakers. To identify polarity at each end of the cable, most cables have polarity indicators. This is usually a stripe or a rib on one conductor as shown in the examples below. The polarity marking indicates the + cable.



Your cables may also be marked for directionality with arrows. In this case, the arrows should always point in the direction of signal flow towards the speakers.



- Once the plugs are fitted to the cables, Plug each cable into the speaker sockets on the back panel and into the speaker.



## Daisy chain output

### Bi-amplification

If your pre-amplifier only has a single set of pre outputs, the Chain output can be used to connect additional Cyrus power amplifiers to each channel for bi/tri-amping. Such a bi-amplified system provides the sonic benefits of totally separate power amplification for the bass and treble units of the loudspeakers.

Note: to set up bi-amplification, the loudspeakers must have bi-wirable terminals to enable separate connection the bass and treble units.

Note: the Chain output is operational whether the unbalanced (RCA) or balance (XLR) input connection is made to the Power-XR.

### Gain matching

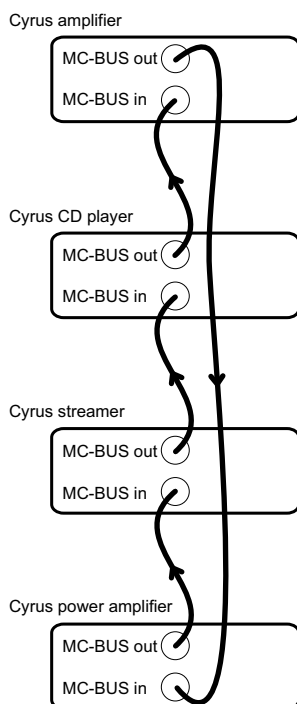
All Cyrus power amplifier and all power amplifier stages in Cyrus integrated amplifiers have all the same voltage gain characteristics. This means you can use the Power-XR in conjunction with any Cyrus amplifier for bi-amping, etc. without any set-up adjustments being required.

## MC-BUS System & 12V trigger

Connecting the MC-BUS sockets in an MC-BUS system provides unified system control.

An MC-BUS loop is established by connecting single phono cables from the MC-BUS output of one unit to the MC-BUS input of another in a daisy-chain. Complete the loop by returning the MC-BUS output of the final component to the MC-BUS input of the first.

With MC-BUS connection established you can control the power function of the entire system from the front panel or remote control of the main Cyrus amplifier.

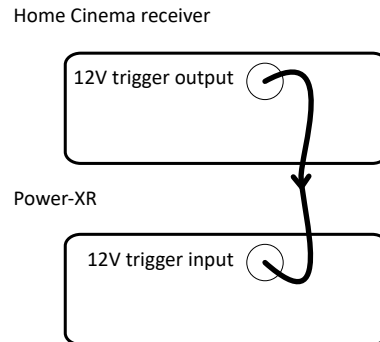


## Connecting to a 12V trigger equipped system

The Power-XR also includes a 12V trigger input for Home Cinema, multi-room and other non-Cyrus systems that use a 12V trigger signal to switch components to and from Standby.

A 3.5mm jack cable will be required to set up 12V trigger operation. These are available in standard lengths or can be made up to a custom length.

Once the cable is available, connect it between the 12V Trigger input on the back of the Power-XR and a 12V trigger output on the Home Cinema receiver or other component that is controlling system power.



## **External power supply - PSU-XR**

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The PSU-XR is a unique DC power supply that will upgrade the sonic performance of compatible products in the Cyrus range including the Power-XR.

### **Connecting a PSU-XR**

- Disconnect both components from the mains.
- Plug the connector on the umbilical cord of the PSU-XR into the Multi-Pole PSU-XR socket on the back panel. You will need a mains supply for both units.

NOTE: Connection of a PSU-XR is detected automatically, so no internal adjustments are required.

### **How it works**

When a PSU-XR is connected to a Cyrus product, the power feeds to the internal circuitry are split two ways with the clean, stable power source of the PSU-XR feeding sensitive circuit sections while other requirements are supplied internally. This ensures complete isolation of control circuits and sensitive analogue sections reducing AC mains-borne noise and power supply ripple.

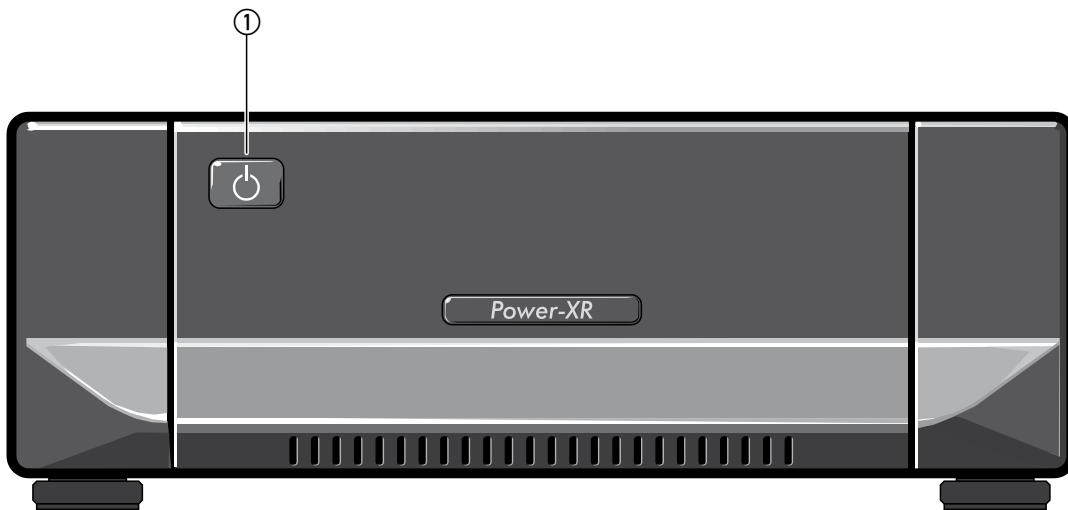
### **Connecting to the AC mains supply**

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- Connect the socket on the AC Power cable to the power inlet on the back panel of the amplifier.
- Now connect the cable to a suitable AC power point.

NOTE: The means to disconnect this product from the mains supply is the mains plug. Ensure that the mains plug is accessible at all times.

## Operation



### Key to the front panel drawing

1. Standby/Status indicator

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### **Mains power**

In regular use mains power can be left connected permanently.

When unattended for a long period (holidays etc) mains power should be disconnected.

### **Standby**

When mains power is connected, press the standby/status indicator to switch the unit on and off.

*When switched on the standby indicator will be white, when in standby the indicator will be red.*

### **Standby/Status indicator colour and brightness**

The Standby/Status indicator brightness and colour settings will automatically be set to match the indicator brightness and colour settings if connected via MC-BUS to another Cyrus product installed with v2.3 firmware (or above).

## Selecting an input

Unbalanced (RCA) or balanced (XLR) inputs can be selected using the toggle switch on the rear of the Power-XR.

## TROUBLESHOOTING GUIDE

If your Power-XR is not operating properly, disconnect the power and check all connections using the notes in this handbook. If problems persist, the checklist below may be helpful.

If you are in doubt, consult your retailer.

No sound from one or both speakers	
Check that the pre-amplifier and the Power-XR are switched on.	The standby lights should be white (or set by MC-BUS).
Check that the correct amplifier input is selected.	The INPUT switch will be at XLR for balanced input, RCA for unbalanced input.
Check that the loudspeakers are connected.	The connection at the terminals of the loudspeakers and the Power-XR should be checked.
Distorted sound at very low volume	
The wrong input may be selected.	The INPUT switch will be at XLR for balanced input, RCA for unbalanced input.

## Error indicators

Your amplifier has a unique fault indication system to help you to diagnose problems. Fault condition messages will be displayed via the Standby indicator in the event of a system fault.

STANDBY indicator flashing red/green	
The amplifier has overheated.	The amplifier will mute then set to Standby. The error indication will clear when the amplifier cools.
STANDBY indicator flashing orange/green	
The amplifier has been overloaded or the speaker connections have been short-circuited. NOTE: The Power-XR can detect a short-circuit whether music is playing or not.	Check that the speaker connections are correctly made with no possibility of a short-circuit. To return to normal operation, set the amplifier to Standby to clear the fault indication and switch back on. If the problem persists when playing music, the speaker impedance may be too low. Ensure that only speakers are connected to the speaker outputs. Switch boxes and other accessories are not suitable for connection.
STANDBY indicator flashing red, green or red/orange	
The amplifier has detected an error.	Switch off the amplifier, disconnect it from the mains, wait 10 seconds and reconnect it. Check if the problem has cleared.

If a fault condition still remains, return the amplifier to your Cyrus appointed retailer or an authorised Service Centre.

## Specifications

All voltage and power specifications in this section are RMS unless stated otherwise.

### Power Supply

Voltage: ..... As plate on rear of unit

### Power Consumption

Standby..... <0.5W

Maximum ..... 750W

### Enclosure

Size (HxWxD) ... 75 x 215 x 355 mm (2.95" x 8.46" x 13.98")

Weight ..... 7.3kg (16lbs)

Material ..... Die cast chassis

### Audio performance

Without PSU-XR:

Power Output (2 ch driven) ..... 4 Ohms ..... 144W

Power Output (2 ch driven) ..... 6 Ohms ..... 110W

Power Output (2 ch driven) ..... 8 Ohms ..... 87W

With PSU-XR:

Power Output (2 ch driven) ..... 4 Ohms ..... 161W

Power Output (2 ch driven) ..... 6 Ohms ..... 121W

Power Output (2 ch driven) ..... 8 Ohms ..... 95W

THD+N (1kHz, 2/3 power) ..... 6 Ohms ..... <0.002%

Input Sensitivity (110W/6Ω) ..... 450mV RCA / 900mV XLR

Input Impedance ..... 28kΩ

Frequency Response (-3dB) ..... <0.5Hz, >100kHz

S/N Ratio (unwtd) ..... >100dB

Cyrus reserves the right to change all specifications without notice. E &OE

## Warranty

The warranty period is three years. No retailer or distributor may vary the terms of this warranty, which is personal to the original purchaser and is not transferable.

Please retain the sales receipt as proof of purchase.

Warranty claims must wherever possible be made through the retailer from whom the equipment was purchased.

This warranty excludes:

- Damage caused through neglect, accident, misuse, wear and tear, or through incorrect installation, adjustment or repair by unauthorised personnel. Any unauthorised servicing will result in loss of warranty.
- Liability for damage or loss occurring in transit to or from the purchaser.
- Consequential damage, loss or injury, arising from or in conjunction with this equipment.

Equipment for attention under warranty should be consigned return carriage paid. If returned equipment is found to comply with the published specification, CYRUS reserves the right to raise a charge.

The above conditions do not affect your statutory rights as a consumer.

## WEEE

This logo means that this product is not to be disposed of with your household waste. This product should be handed over to a designated collection point to be recycled. Your cooperation in the correct disposal of this product will contribute to the effective usage of natural resources. For more information on collection points, contact your local government for more information about recycling.



# CYRUS

BUILDING A BETTER  
MUSIC EXPERIENCE

[www.cyrusaudio.com](http://www.cyrusaudio.com)



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v1.0