40 PPA USER GUIDE

BUILDING A BETTER MUSIC EXPERIENCE

MADE IN BRITAIN

CONTENTS

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

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.

100-230V Products: Voltage Range 90V-240V

There are no user replaceable fuses in this unit.

Servicing

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

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.

FCC Notice

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.

Welcome to the world of Cyrus

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.

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

Preparations for Installation

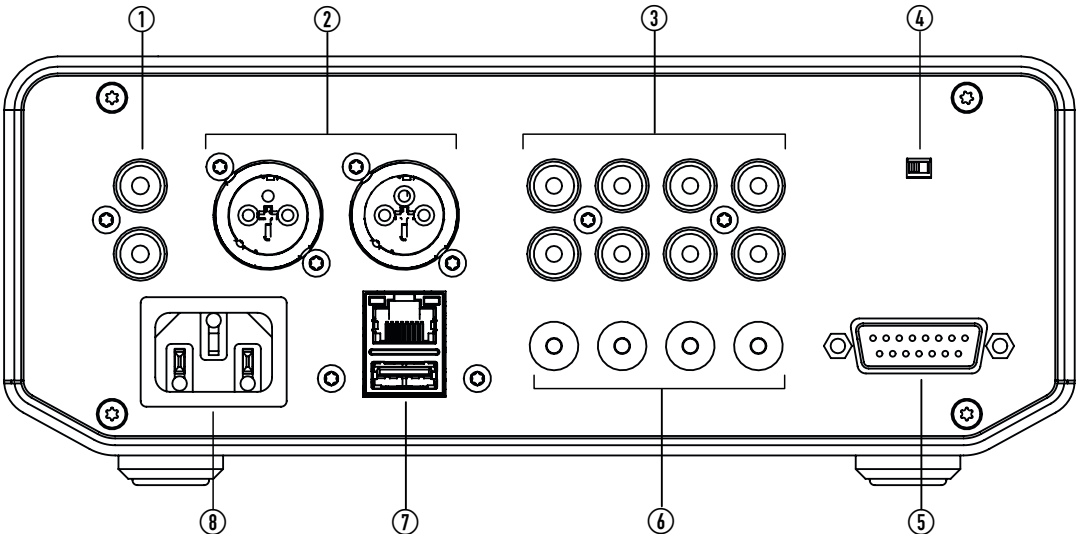
Before installing your Cyrus amplifier check that the following items are included in the accessory box.

- Power Cables for UK, US, Europe
- Remote Handset with Batteries
- Quick-Start guide

After removing these items, please retain the packaging.

Install the phono preamplifier 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.

Installation



Key to the rear panel drawing

1. Unbalanced phono output
2. Balanced XLR output
3. Inputs 1-4
4. Ground lift switch
5. 40 PSU connection
6. Ground terminals
7. RJ45 control / upgrade
8. Power inlet

Important – read before making any connections

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

Connecting turntables

Turntables may be connected to any of the four available inputs as each input is separately programmable for use with moving coil or moving magnet cartridges.

- Connect the left and right plugs from the turntable audio cable to the left (white) and right (red) connectors of the input you are using.
- Connect the ground wire from the turntable to the corresponding ground terminal.

Setting the ground lift switch

The chassis of the 40 PPA is connected to circuit ground. The Ground Lift switch enables the circuit of the 40 PPA to be linked to circuit ground or isolated. The setting of this will be system dependent.

The factory setting for the switch is to the 'LIFT' position. If any hum or buzz noises are apparent when playing a turntable, setting the switch to the 'GND' (grounded) position may cure the problem.

If hum or noise problems persist when playing a turntable and the switch setting does not cure the problem, contact your retailer to check the ground connection arrangements on your turntable and other system components.

Connecting the output

There is a choice of balanced (XLR) or unbalanced (phono) outputs to connect to your system preamplifier/amplifier.

NOTE: The 40 PPA does not include a volume control so it is not suitable for direct connection to a power amplifier. It must be connected to an amplifier that includes a volume control.

Connecting balanced XLR outputs

The XLR outputs are compatible with balanced audio inputs on a preamplifier.

- Connect left and right XLR cables between the left and right XLR outputs of the 40 PPA and the corresponding inputs of the preamplifier.

Connecting unbalanced phono outputs

The phono outputs are compatible with unbalanced audio inputs on a preamplifier.

Connect a dual phono cable between the left and right phono outputs of the 40 PPA and the corresponding inputs of the preamplifier

External power supply - 40 PSU

The 40 PSU is a unique DC power supply that will upgrade the sonic performance of compatible products in the Cyrus range.

CAUTION:

- Disconnect both the 40 PSU and 40 PPA from the mains.
- Plug the multi-pin interconnect from the 40 PSU into the 40 PSU socket on the back panel.

  CAUTION: Use only the interconnect supplied with the 40 PSU. Other interconnects may damage the 40 PSU and the phono pre-amplifier.
- Connect a mains supply to both units.

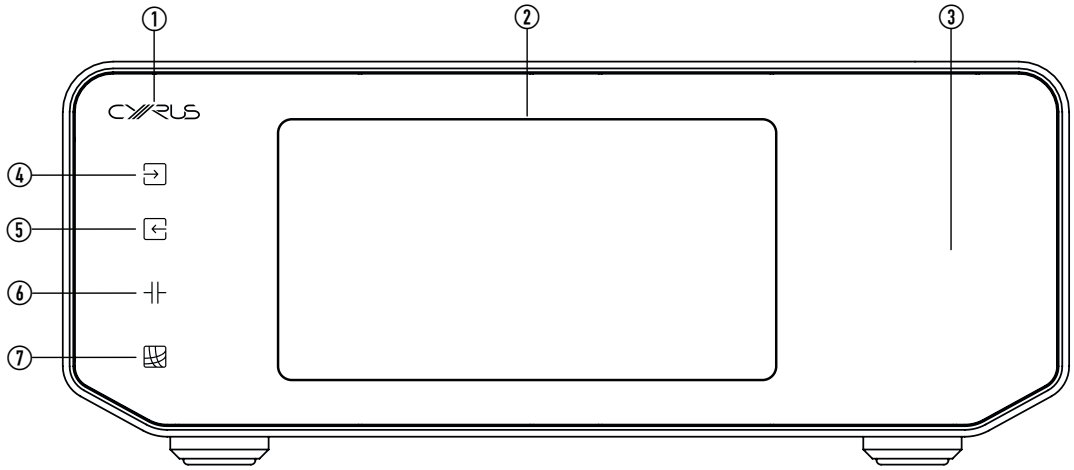
NOTE: Connection of a 40 PSU is detected automatically, so no internal adjustments are required.

Connecting to the AC mains supply

Connect the socket on the AC Power cable to the power inlet on the rear 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 and indicator
2. Display window
3. IR / proximity sensors
4. Input +
5. Input -
6. Capacitance (MC cartridges)
7. Warp

Touch pad controls

The front panel controls are touch sensitive. There is no need to press the controls, just lightly touch or hold a finger on the touchpad to select a function.

Power

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, the standby touchpad (CYRUS) is used for power control.

When in standby, the touchpad colour will be red.

When set to standby, all settings in use are retained.

Auto-standby

To save energy, standby will set automatically 20 minutes after music last played. If required, the auto-standby feature may be adjusted in the setup menu.

Selecting an input

Inputs may be selected from the front panel touchpads.

- Touch Input + & Input -.
- The input names will step through on the display.

Settings display

The display will indicate the input number selected and whether the input is set for MM or MC operation.

The display will also indicate the gain setting in dB, the input resistive load setting (MC), the input capacitive load setting (MC) and warp filter status.

The bargraph display shows a graphic indication of the left and right channel levels. This can assist with setting MC gain.

MM/MC cartridge type selection

Each input can be set to be compatible with either Moving Magnet or Moving Coil cartridges within the setup menu, with additional settings available for MC cartridges.

Cartridge matching

Moving magnet cartridges

For inputs set for moving magnet cartridges, the gain, resistive load and capacitive load settings are pre-optimised to standard values.

Moving coil cartridges

When an input is configured to play a Moving Coil cartridge, the gain, resistive load and capacitive load settings may be individually set to best match the requirements of different pickup cartridges.

Checking the current settings

The settings displayed apply to the input that is currently selected.

Manufacturer's specification

Some cartridge manufacturers will provide output voltage and optimum loading specifications for their cartridge. If these specifications are available, this is the best starting point for input configuration. A typical cartridge specification may read -

Output voltage 150µV

Load resistance.....>50Ω

Load capacitance.....Not specified

These specifications can be used to choose initial settings for gain and load.

Gain can be manually set from the table in the next section, load resistance should be set to a value above the manufacturer's recommended minimum and load capacitance should be set to the closest value or to the minimum 220pF when not specified.

If no specification is available

If no manufacturer's data is available for the cartridge, start with the default settings for resistance and capacitance loading and an initial setting of 30dB for gain.

The gain setting can then be determined using the bargraph.

Setting MC gain

Manual gain setting

The gain settings for the 40 PPA can be matched to a cartridge output voltage range as shown in the following table as a general guide.

Gain	Cartridge output voltage range
30dB	7mV or more
50dB	600µV - 2mV
60dB	250µV - 600µV
65dB	less than 250µV

The default is 30dB to reduce the possibility of input overload. The gain can be increased if required for a lower output cartridge.

In the 'Manufacturer's recommendation' example above, the 65dB gain setting would best match the cartridge.

Setting gain using the bargraph

The display bargraph can also be used to optimise the gain setting for a moving coil cartridge. The limit mark on the bargraph corresponds to an output level equivalent to a CD player which should ensure compatibility with most preamplifiers. Levels exceeding this may cause some preamplifiers to overload.

- Play a record that includes loud passages of music.

  The bargraph will show the level of the music as it plays. Music peaks will hold briefly.

Experiment with different gain settings to achieve a bargraph display that has the largest amplitude without exceeding the limit mark.

NOTE: If you hear any distortion when playing loud passages of music, check that the signal level displayed on the bargraph is not exceeding the limit line and reduce the gain setting if necessary.

Setting MC cartridge loading

Resistive load setting

In the 'Manufacturer's recommendation' example, the 100Ω setting would best match the cartridge shown. The default is 1kΩ. Select the best match for your cartridge from 11Ω, 16Ω, 33Ω, 47Ω, 100Ω, 150Ω, 333Ω, 500Ω, 1kΩ, 47kΩ.

Capacitive load setting

In the 'Manufacturer's recommendation' example above, the lowest 100pF setting would best match the cartridge shown. The default is 100pF. Select the best match for your cartridge from 100pF, 1nF, 2nF, 3nF.

Fine tuning cartridge load settings

Changing cartridge load settings will not damage a cartridge and you may find a combination of settings that you prefer by changing the settings while listening.

The effects of changing load resistance and capacitance will be quite subtle, though setting load resistance to the lower values will also reduce the output level from the cartridge. The gain may be increased to compensate if necessary.

Increasing the load resistance may also provide a subtle tonal correction to benefit older records that have been played very regularly.

Warp filter

The warp filter will assist in removing very low frequency information caused by warps in the vinyl. In a high quality record playing system these large amplitude signals may overload a preamplifier or cause large bass unit excursions for the loudspeakers.

- Press the WARP key to switch in the warp filter (alternatively, this can be turned on/off in the setup menu for each input).

  The WARP indicator will be displayed.

  Low frequency signals caused by warps will be reduced.

Press again to cancel the warp filter.

Remote control operation

Remote control introduction

The 40 remote control will send commands to Cyrus amplifiers, CD players and audio streamers.

Remote control backlight

The remote control keypad includes a back-light on the mode keys. The back-light will switch on automatically when a command is sent to show which mode the remote is in.

Fitting batteries to the remote control

The battery compartment is on the back of the remote control.

1. Turn over the remote and slide off the cover.
2. Fit two AAA batteries into the battery compartment.
3. Replace the battery cover.

Replace the handset batteries only with AAA batteries of the same voltage and type.

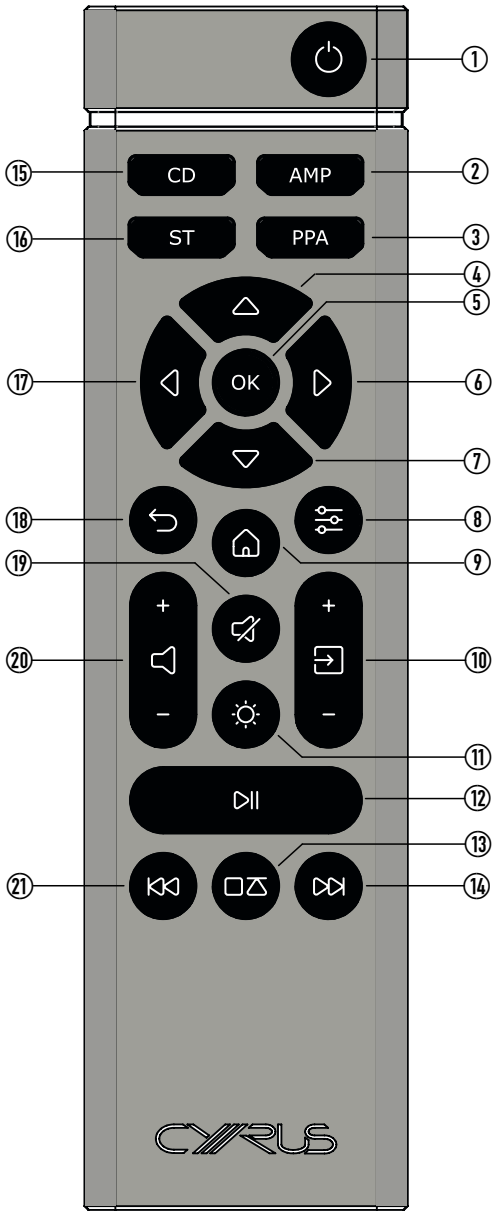
Discard used batteries in accordance with recycling regulations in force in your area.

Sending commands to Cyrus components

- Press the AMP key to switch on a Cyrus amplifier. The remote control will now send commands to a Cyrus amplifier.

Switching on Cyrus source components

- Press the CD key to switch on a Cyrus CD player and send commands to the CD player and an amplifier.
- Press the ST key to switch on a Cyrus audio streamer and send commands to the streamer and an amplifier.
- Press the PPA key to switch on a Cyrus audio phono preamp and send commands to the phono preamp and an amplifier.



Cyrus remote commands

1. Set Cyrus amplifiers, CD players, phono preamplifiers and audio streamers to standby.
2. Set the handset to send commands to Cyrus amplifier.
3. Set the handset to send commands to Cyrus phono preamplifier.
4. Navigate up.
5. OK.
6. Navigate right.
7. Navigate down.
8. Access settings menu.
9. Home.
10. Input +/ -.
11. Access brightness menu.
12. Play/Pause.
13. Stop/Eject.
14. Skip track forward
15. Set the handset to send commands to Cyrus CD.
16. Set the handset to send commands to Cyrus streamer.
17. Navigate left.
18. Return.
19. Mute.
20. Volume + / -.
21. Skip track back.

Menu maps

- Menu
  - Audio
    - Default Input
      - Last Input (default)
      - AN1
      - AN2
      - AN3
      - AN4
    - Inputs
      - Cartridge Type
        - MC (default)
        - MM
      - Warp
        - Yes
        - No (default)
      - Gain (MC only)
        - 30dB (default)
        - 35dB
        - 40dB
        - 45dB
        - 50dB
        - 55dB
        - 60dB
        - 65dB
      - Resistance (MC only)
        - 11Ω
        - 16Ω
        - 33Ω
        - 47Ω
        - 100Ω
        - 150Ω
        - 333Ω
        - 500Ω
        - 1kΩ (default)
        - 47kΩ
      - Capacitance (MC only)
        - 100pF (default)
        - 1nF
        - 2nF
        - 3nF
      - Enabled
        - Yes (default)
        - No
  - Display
    - Auto Hide
      - Yes (default)
      - No
    - Brightness
      - Level 1
      - Level 2
      - Level 3 (default)
      - Level 4
      - Level 5
    - LED Brightness
      - Level 1
      - Level 2
      - Level 3 (default)
      - Level 4
      - Level 5
  - System
    - About
      - (Displays Device Information)
    - Auto Standby
      - Off
      - 20 minutes (default)
      - 30 minutes
      - 1 hour
      - 2 hours
      - 4 hours
    - Factory Reset
      - Yes
      - No
    - Upgrade
      - Check for USB Upgrade
      - Check for OTA Upgrade
      - Silent OTA Check
      - Install Upgrade
      - Clear Supressed Upgrade
    - Time Zone
      - (Set Time Zone)
    - Cyrus Devices
      - Device Group
        - Unlinked
        - Group A
        - Group B
        - Group C
        - Group D
      - Cyrus Devices
        - (Lists devices)
    - PSU
      - (Displays 40 PSU information)

Troubleshooting guide

If your 40 PPA is not operating properly, disconnect the power and check carefully all connections.

If you are in any doubt, consult your retailer.

No sound	
The preamplifier is switched off or set to Standby	Bring the unit out of Standby
The wrong input is selected	Check that the input is connected correctly and re-select if necessary.
Connection problems	Check that the turntable is connected correctly. If so, check that the connections to the pickup cartridge are correct. Check the output connections from the Classic PHONO to the system amplifier.
Other system component settings	Check that the system amplifier is switched on and set to the correct input.
No sound from one loudspeaker	
Connection problems	Check that the turntable is connected correctly. If so, check that the connections to the pickup cartridge are correct.
Other system components	If possible, check the system with another source. Check that the balance control is not set to one channel.
Speaker cables / interconnects faulty	Check connections, cables - replace if needed
Hum or buzz	
Ground loop	Change the position of the ground lift switch. If this doesn't resolve the problem, there may be a ground loop via the turntable and some other components in your system. Take the turntable to your retailer to get this checked.
Hum pickup	Ensure that the turntable and connection cables are positioned away from any equipment that could radiate a magnetic field, particularly large power amplifiers. Re-positioning the turntable and cables temporarily will help to identify if this is the problem.
Distortion	
Distorted sound on loud passages when using a moving coil cartridge	The output signal level may be too high for the system preamplifier. Reduce the gain setting.

Your phono preamplifier has a unique error indication system to help you to diagnose problems. If an error is detected in use, the display will show 'Error' with indication of the type of error as shown in the table.

Muted (DC)	
DC is present at the output of the amplifier	If this is a constant indication, switch off the preamplifier and disconnect all inputs and outputs. Switch on with no input or output connections. If the indication persists, return the unit for service.
PSU Service	
A problem has been detected with the power supply.	If a 40 PSU is connected to the preamplifier, disconnect it and re-test. If the indication persists, return the unit for service.

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

Specifications

Power Supply

Voltage: 100-230V

Power Consumption

Standby..... <0.5W
Maximum 30W
Safety Compliance..... CE
EMC (230V)..... CE
EMC (115V)..... FCC

Audio performance

Output voltage 9V
RIAA filter accuracy .....±0.5dB

Audio performance (MM)

Input Sensitivity..... 4mV
Input Impedance .....47kΩ setting 47kΩ
THD (for 400mV output)..... 0.001%
S/n ratio..... -87dBA
Channel separation ..... -90dB

Audio performance (MC)

Input sensitivity (MC) ..... 120µV - 4mV
Input Impedance .....11Ω setting 11Ω
16Ω setting 16Ω
33Ω setting 33Ω
47Ω setting 47Ω
100Ω setting 104Ω
150Ω setting 150Ω
333Ω setting 335Ω
500Ω setting 505Ω
1kΩ setting 979Ω
47kΩ setting 47kΩ
THD (for 400mV output)..... 0.0018%
S/N ratio (60dB gain) ..... -79dBA
Channel separation (1kHz) ..... -95dB

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

Enclosure

Size (HxWxD) ... 88 x 220 x 365 mm (3.46” x 8.66” x 15.16”)
Weight 4.8kg (10.6lbs)
Material .....Anodised aluminium chassis

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

Acknowledgements

This product uses the LVGL graphics library.

See https://lvgl.io

Warranty

The warranty period is five 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.

www.cyrusaudio.com/products/40-PPA