

*User Instructions*  
*Cyrus Power*

# *Cyrus Power Amplifier*

Congratulations on the purchase of your *Cyrus Power*. This piece of equipment is a precision manufactured state-of-art product, constructed to the highest standards and specifications. This manual contains installation and operating instructions to enable you to connect up and operate the amplifier correctly, ensuring the greatest satisfaction and long term use. This instruction manual is divided into seven sections.

- **Cautions**
- **Installation**
- **Operation**
- **Additional Information**
- **Trouble Shooting**
- **Specifications**
- **Guarantee**

To enable you to make full use of the comprehensive facilities of the amplifier we suggest that you read these sections which will explain the fundamental operations of the unit.

**CAUTION****POLARISED CONNECTOR (115V PRODUCTS ONLY)**

To prevent electrical shock, match wide blade of plug to wide slot and fully insert

Attention: Pour éviter les chocs électriques, introduire la lame la plus large de la fiche dans la borne correspondante de la prise et pousser jusqu'au fond.

Your *Cyrus Power* is factory set to operate from a fixed mains supply voltage, which is marked on a label at the rear of the unit. Before connecting, check that this voltage is the same as your mains supply, i.e.

230V Products	Voltage Range 220V-240V
115V Products	Voltage Range 110V-120V

### **UNPACKING**

Always follow the instruction handbook and retain it in a safe place for future reference.

Before proceeding with installing the *Cyrus Power*, ensure that the following items are included in the accessory box:

- Instruction Manual with Guarantee Card
- Power Cable
- 4 Loudspeaker Plugs

After removing these items, please retain the packing for future use.

### **LOCATION**

Install the amplifier in a well ventilated location where it will not be exposed to high temperature or humidity.

Avoid installing the *Cyrus Power* in a location which is exposed to direct rays of the sun, or near to hot appliances or radiators. Placing and using the amplifier for long

periods on heat-generating sources will affect performance and may damage the cabinet. Installation in a damp or dusty environment may result in a malfunction or an accident.

### **RE-LOCATION**

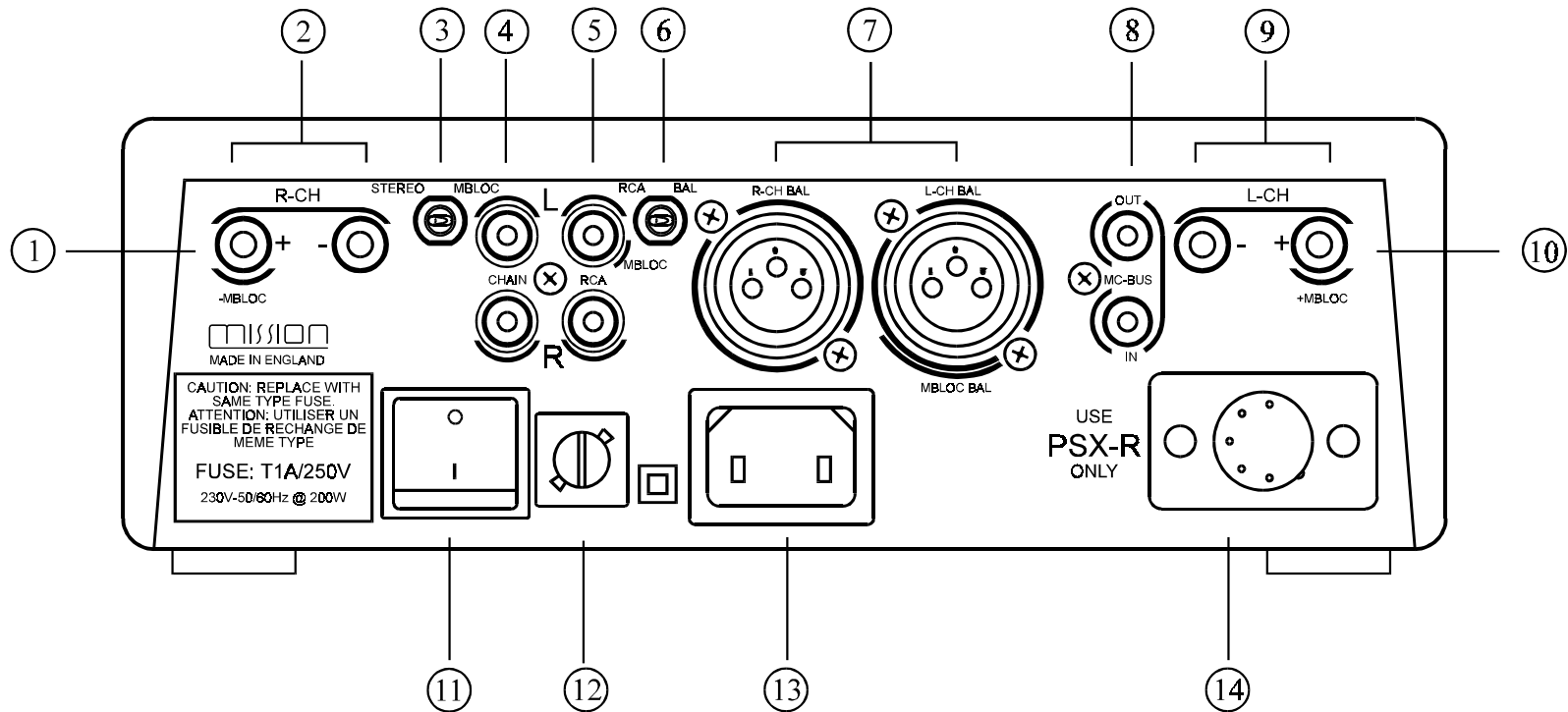
The *Cyrus Power* is supplied ready for use in your location. Care has been taken to ensure that the power supply requirements are correctly set. Consult your Mission distributor to arrange for conversion of your *Cyrus Power* should you move to another area with a different mains voltage supply.

### **PRECAUTIONS REGARDING INSTALLATION**

It is important not to allow any liquid or foreign object fall into this unit. When routing the power cord avoid running it over or near sharp objects.

If the amplifier is not to be used for a long period of time, unplug the unit from the mains power supply.

This unit contains no user serviceable parts, therefore **never** remove any panels from the unit or attempt to service the unit. In the unlikely event of failure, please refer to qualified service personnel.



- 1. -MBLOC Speaker output
- 2. Right Speaker output (Stereo)
- 3. STEREO/MBLOC Selector
- 4. Chain Output
- 5. RCA Input
- 6. RCA/BAL Input Selector
- 7. BAL Input

- 8. MC-BUS System Connection
- 9. Left Speaker output (Stereo)
- 10. +MBLOC Speaker output
- 11. Power switch
- 12. Mains Fuse
- 13. Power Inlet
- 14. PSX-R Connection

**Fig.1 Amplifier (rear view)**

**POSITIONING THE UNIT**

The *Cyrus Power* may be positioned as a free standing unit or alongside another piece of audio equipment. Never stand the *Cyrus Power* under another unit. This may adversely affect the efficient cooling of the *Cyrus Power*. Never place the *Cyrus Power* on a carpet or similar material which may hamper normal ventilation.

**CONNECTING THE UNIT****The Mains Supply**

The moulded IEC connector of the mains lead supplied should be plugged in to the power inlet (13) on the rear of the unit.

The mains fuse (12) is located on the rear panel next to the power switch. It must only be replaced with the following types:

U.K. / Europe - 230V	T1A/20mm
N. America / Far East - 115V	T2A/20mm

In the U.K., the *Cyrus Power* comes with the mains plug fitted. In the unlikely event that the plug fuse should need replacing ensure that it is only replaced with a 3 Amp Fuse.

**IMPORTANT**

NOTE TO USERS OF *PSX-R* WITH *Cyrus Power*

In order to use a *PSX-R* regulated power supply with the *Cyrus Power*, certain internal adjustments must be made to the *Cyrus Power* which can only be carried out by an authorised Mission distributor or his agent. Connection of the *PSX-R* to a *Cyrus Power* which is not correctly adjusted will result in fault condition display on the *Cyrus Power*. The *Cyrus Power* fault indication system is fully described in the *Cyrus Power* handbook.

**Connecting a *PSX-R* Power Supply (Optional)**

If a *PSX-R* is to be used with the *Cyrus Power*, proceed to connect the umbilical cord of the *PSX-R* to the 5-pin Cannon input socket of the *Cyrus Power*. When correctly fitted, the connector will latch into place in the socket. Note that when a *PSX-R* is in use, both the *PSX-R* power supply and the *Cyrus Power* will require mains power.

**Note:**

For more details on the *PSX-R*, please refer to the *Cyrus PSX-R* Instruction Manual.

**STEREO AND DUAL MBLOC MODES**

The *Cyrus Power* can be configured as either a stereo 50W per channel amplifier or as a single channel 100W Mbloc mono amplifier. In Mbloc mode not only is there an increased power advantage but also complete left and right channel separation. The *Cyrus Power* is factory set for stereo operation.

**Note:** In Mbloc mode a *Cyrus PSX-R* regulated power supply is required for each amplifier, in Stereo mode the *PSX-R* is an optional upgrade. Before connecting a *PSX-R* power supply to the *Cyrus Power*, be sure to have your amplifier converted by your dealer or an authorised Cyrus service organisation.

**Caution:** When the *Cyrus Power* is installed for Mbloc operation, connect the loudspeaker cable to the -MBLOC ① and +MBLOC ⑩ speaker terminals. Loudspeaker switch boxes and other equipment should not be connected to the output of the *Cyrus Power* in Mbloc mode.

Refer now to the following section if the *Cyrus Power* is to be used in a Stereo installation or to page 8 for Mbloc system connections.

**Note:** Ensure all equipment is turned off before any connections or disconnection's are made.

**CONNECTION FOR STEREO SYSTEMS****Stereo Input connection options**

Both RCA and balanced input connectors are available to link the *Cyrus Power* to a Preamplifier. Recommended connection options are shown to follow-

1. Bi-amplification with a *Cyrus III*- use a quality RCA phono interconnect.
2. Installed next to a *Cyrus Pre* Preamplifier- use a quality RCA phono interconnect.
3. Installed with a *Cyrus Pre* Preamplifier, but placed next to the speakers- Use Balanced XLR interconnects.
4. Power amplifier for a *Cyrus AV* system- use a quality RCA phono interconnect.

Note: In a system which supports both connection options (such as *Cyrus Pre/Cyrus Power*), the above are recommendations only and the final choice is made at the discretion of the user.

**Input Connection to the *Cyrus Power* using RCA phono cables**

Set the STEREO/MBLOC selector switch ③ to Stereo and the input selector switch ⑥ to RCA. Connect a stereo phono interconnect from the output of the preamplifier to the *Cyrus Power's* RCA inputs ⑤. Be sure to observe

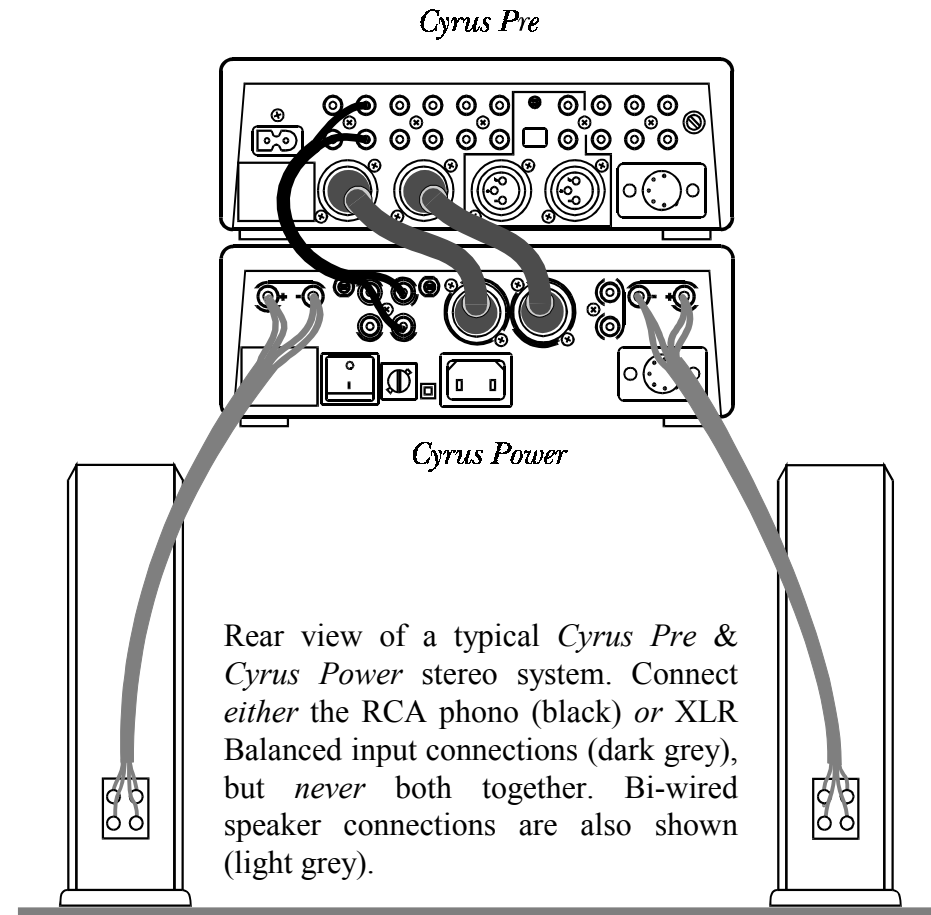
colour coding of the plugs to keep left and right channels correctly ordered.

### **Input Connection to the *Cyrus Power* using Balanced XLR cables**

Set the STEREO/MBLOC selector switch ③ to Stereo and set the input selector switch ⑥ to BAL. Connect two Balanced XLR interconnects, one each from left and right Balanced outputs of the preamplifier to the *Cyrus Power's* BAL inputs ⑦. Ensure that left and right channels are identified and connected at each end.

### **Connecting Loudspeakers for stereo operation**

The left and right loudspeakers are connected to the rear panel sockets ⑨ and ② of the *Cyrus Power* respectively using the plugs provided. First, fit the plugs to the loudspeaker cables. Carefully note that the cable carries marking or colours for polarity (+ and -) and may also be marked for direction with an arrow. For correct operation, it is essential that the (+ and -) terminals of the amplifier are connected to the corresponding (+ and -) terminals of the loudspeakers. When fitting the plugs to the cables be sure to line up (+ and -) at each end using the red plug for the '+' and the black plug for the '-'. The loudspeaker plugs can now be plugged into the amplifier sockets.





**CONNECTION FOR MONOBLOC SYSTEMS****Special considerations for Mbloc operation**

For Mbloc operation, two *Cyrus Powers* are required, one each for left and right channels. Two *Cyrus PSX-R* regulated power supplies must also be installed, one for each *Cyrus Power*. It is therefore essential to ensure that both *Cyrus Powers* have been adjusted by your dealer for *PSX-R* operation before installation. Note also from the diagram opposite- In Mbloc mode, the Mbloc input socket is also the left channel input of both *Cyrus Powers* and that the right channel inputs are not used.

**Connecting the *PSX-R* Power Supplies**

It is advisable to connect the *PSX-R* power supplies before making further connections to the power amplifiers. Proceed therefore to connect the umbilical cords of the *PSX-Rs* to each 5-pin Cannon input socket of the two *Cyrus Powers*. When correctly fitted, the connector will latch into place in the socket. Note that both the *PSX-R* power supplies and the *Cyrus Powers* will require mains power.

**Mbloc Input connection options**

Both RCA and balanced input connectors are available to link the *Cyrus Power* to a Preamplifier.

Recommended connection options are shown to follow-

1. Mbloc Power amplifiers installed next to a *Cyrus Pre*- use a quality RCA phono interconnect.
2. Mbloc Power amplifiers, installed with a *Cyrus Pre*, but placed next to the speakers- use Balanced XLR interconnects.
3. High power installation using *Cyrus III* as a Preamplifier- use a quality RCA phono interconnect.
4. Power amplifier for a *Cyrus AV* system- use a quality RCA phono interconnect.

Note: In a system which supports both connection options (such as *Cyrus Pre/Cyrus Power* Mblocs), the above are recommendations only and the final choice is made at the discretion of the user.

**Input Connection to Mbloc *Cyrus Powers* using RCA phono cables**

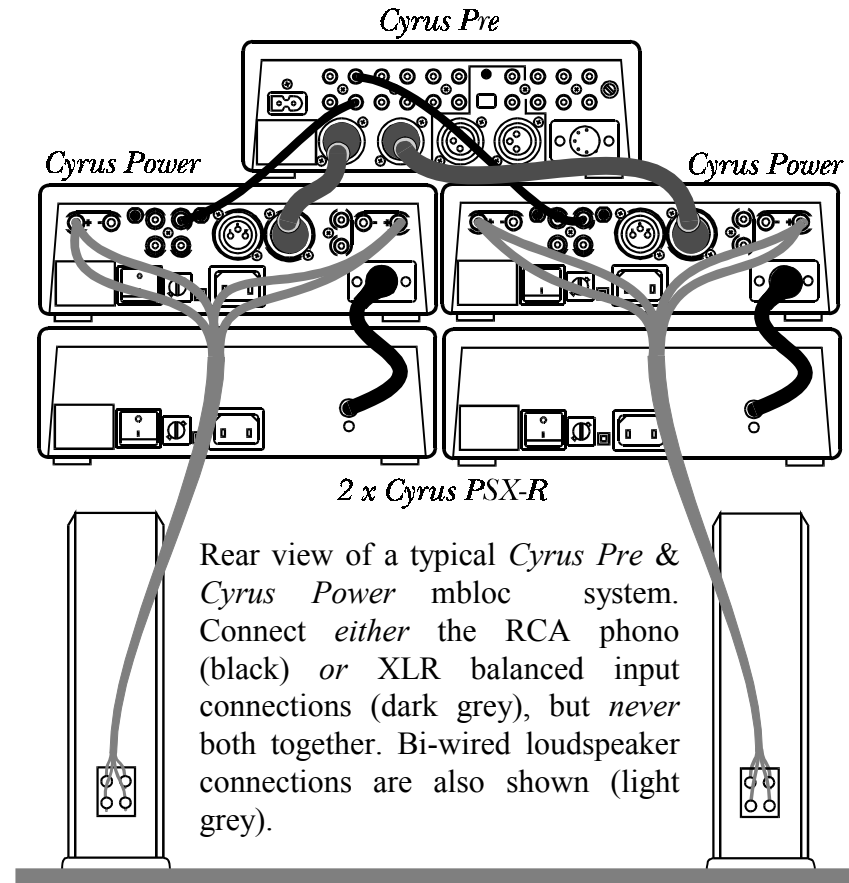
Set the STEREO/MBLOC selector switch of the left *Cyrus Power* ③ to MBLOC and set the input selector switch ⑥ to RCA. Connect a single phono interconnect from the left output of the preamplifier to the MBLOC RCA input of the left channel *Cyrus Power* ⑤ . Repeat this sequence to set the switches and connect the right channel output from the preamplifier to the MBLOC RCA input of the right channel *Cyrus Power*.

## Input Connection to Mbloc *Cyrus Powers* using Balanced XLR cables

Set the STEREO/MBLOC selector switch of the left *Cyrus Power* ③ to MBLOC and set the input selector switch ⑥ to BAL. Connect a Balanced XLR interconnect from the left Balanced output of the preamplifier to the MBLOC Balanced input of the left channel *Cyrus Power* ⑦ . Repeat this sequence to set the switches and connect the right channel output from the preamplifier to the MBLOC Balanced input of the right channel *Cyrus Power* ⑦ .

## Loudspeaker connection for Mbloc operation

Connect the left loudspeaker to the left *Cyrus Power* using only the **red** panel sockets ① and ⑩. First, fit the plugs to the loudspeaker cables. Carefully note that the cable carries marking or colours for polarity (+ and -) and may also be marked for direction with an arrow. For correct operation, it is essential that the (+MBLOC and - MBLOC) terminals of the amplifier are connected to the corresponding (+ and -) terminals of the loudspeakers. When fitting the plugs to the cables be sure to line up (+ and -) at each end using the red plug for the '+' and the black plug for the '-'. The loudspeaker plugs can now be plugged into the amplifier sockets. Repeat for the right channel *Cyrus Power*.



**Chain Output.**

The Chain outputs (4) allow more than one *Cyrus Power* to be connected to a Pre-Amplifier.

**Note:** The chain output is operational whether RCA phono or Balanced XLR input connection is made to the *Cyrus Power*.

**Bi-Amplification**

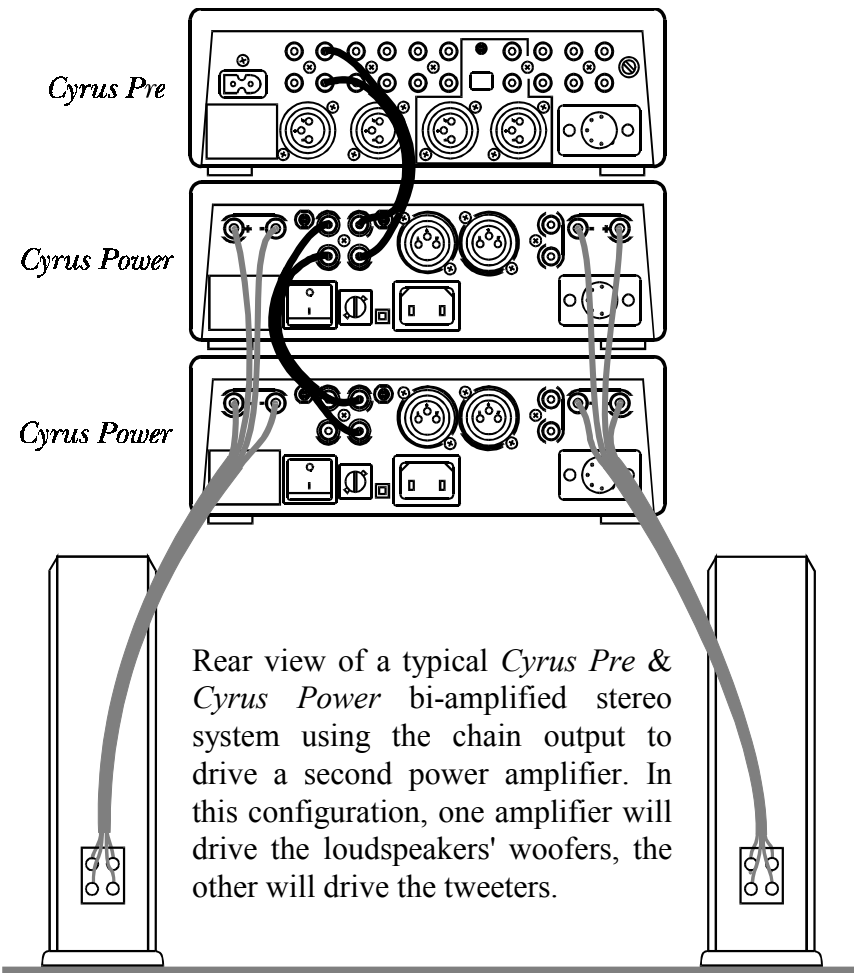
The Chain facility can be used with two or more *Cyrus Powers* for Bi/Tri-amping by connecting the Chain output of the first *Cyrus Power* to the RCA inputs of the next *Cyrus Power*. Such a bi-amplified system provides the sonic benefits of totally separate power amplification for the bass and treble units of the loudspeakers.

**Multi-speaker systems**

In special cases it may be desirable to run more than one set of loudspeakers in a room. The chain output enables multiple *Cyrus Powers* to be used in this application also.

**Chain output connection from a *Cyrus Power***

When adding a second or third *Cyrus Power* to a system, connect a quality RCA phono interconnect from the Chain output RCA jacks (4) to the input (5) of the new *Cyrus Power*. For Mbloc chain installations, connect the left chain output of each Mbloc power amplifier to the MBLOC inputs of the new amplifiers.



**MAINS POWER**

The mains power switch ⑪ is located on the rear panel of the amplifier (refer to the rear panel drawing on page 4). This switch should be left on for normal operation, except when left unattended for a long period. In this case the mains power should then be switched off or the product disconnected from the AC supply.

Refer now to figure 2, front panel drawing on page 12.

When the amplifier is in regular use and power is permanently applied, the STANDBY key ① can be used for power control. The Standby light ② will show red when the amplifier is off and green when operating. A *Cyrus III* or *Cyrus Pre* can also provide remote control of Standby operation for one or more *Cyrus Powers* when included within an MC-Bus system. For more details of MC-Bus connection, refer to page 13.

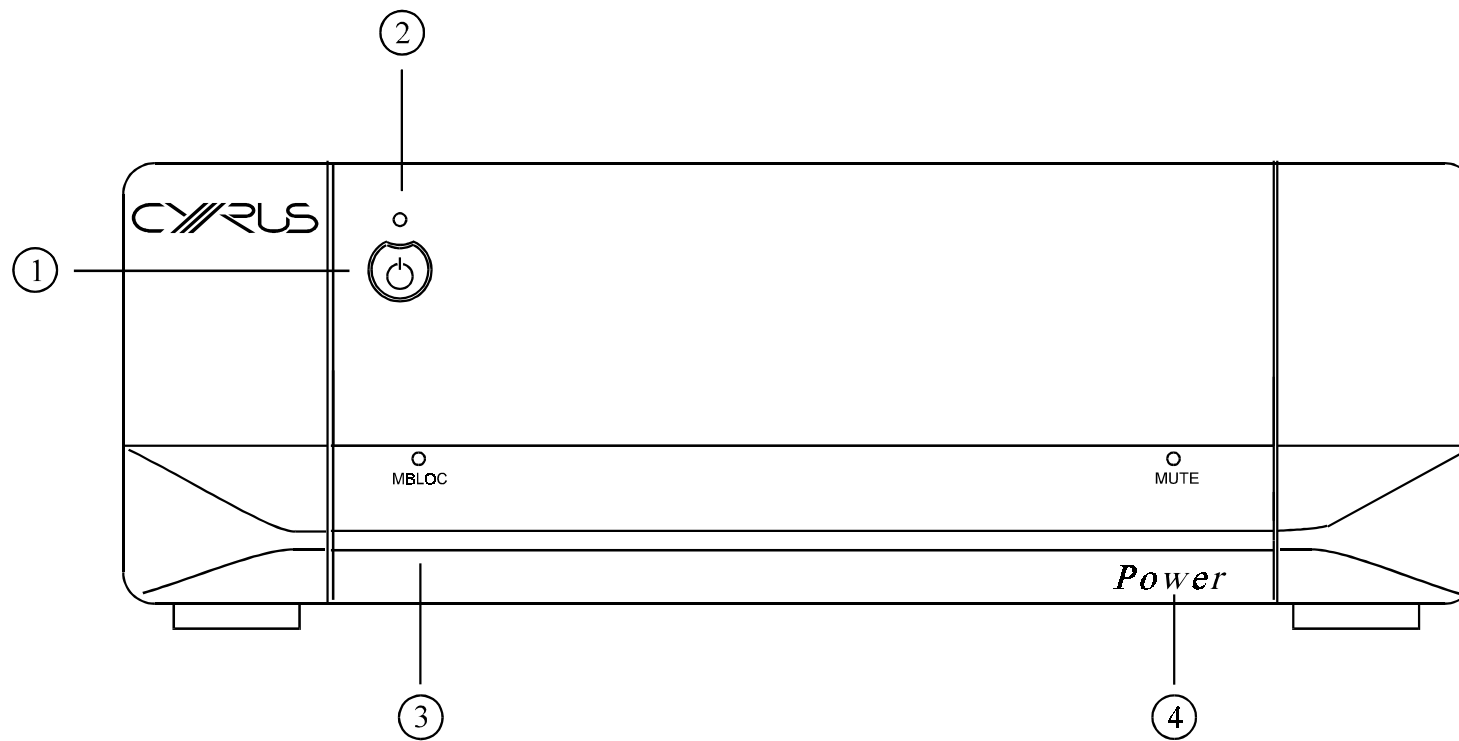
**FRONT PANEL INDICATORS****MBLOC Indicator**

The MBLOC Indicator will glow red if the rear panel STEREO/MBLOC switch is set for Mbloc Operation.

Note: As part of the protection system of the *Cyrus Power*, the rear panel STEREO/MBLOC selector switch can only be operated whilst the *Cyrus Power* is set to Standby. Operation of the switch at any other time will activate the fault indication system. See page 16 for more details of the fault indication system.

**MUTE Indicator**

The MUTE Indicator glows red to indicate that the loudspeakers have been temporarily disconnected by the amplifier protection system. This will occur for a six seconds following Standby operation or should a temporary overload condition arise. If the MUTE Indicator glows continually, refer to the Troubleshooting Guide on page 15 for more details of the protection system.



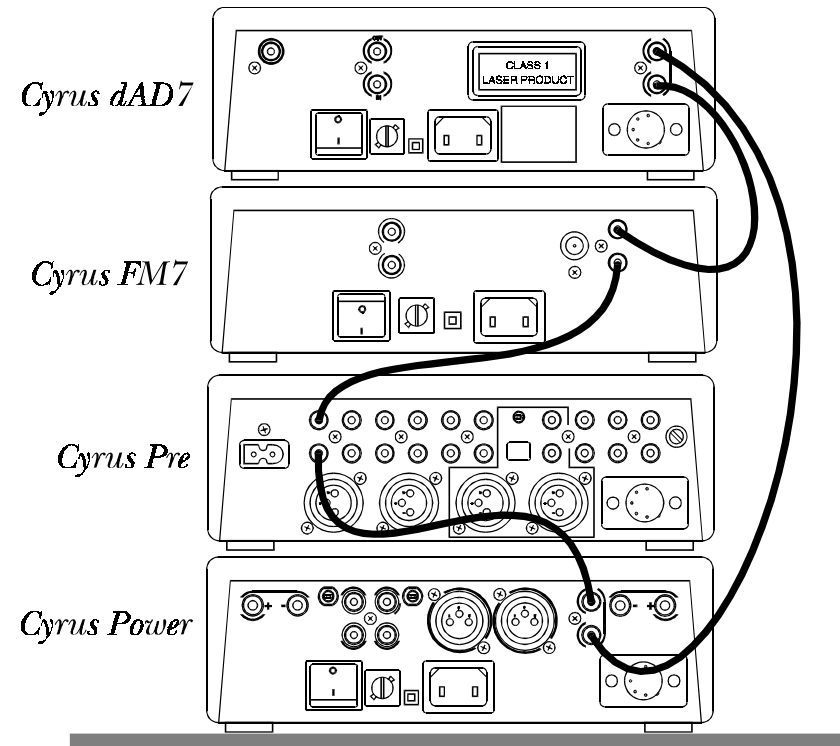
- 1. Standby Switch
- 2. Standby Light
- 3. MBLOC Light
- 4. Mute Light

**Fig. 2 Amplifier (front view)**

**KNOW YOUR *Cyrus Power***

**Power**

- When first powered up from the mains switch on the rear panel, the *Cyrus Power* will run a self-test, checking the internal functions and all the front panel indicators in sequence. After completion of this cycle the amplifier will revert to Standby mode.
- When switched to Standby, the power amplifier section of the *Cyrus Power* is shut down and the loudspeakers are disconnected to ensure minimal power consumption and reduced heat generation.
- If other *Cyrus* products are used with the *Cyrus Power*, they can be connected via the MC-Bus as shown on the right. This will ensure that the power ON/OFF will function in unison between all *Cyrus* products, locally as well as via the remote control handset. For example, if the tuner input - TUN of the *Cyrus Pre* is selected, the *FM7* tuner and *Cyrus Power* will automatically turn on. Conversely if the Standby key on the *Cyrus Pre* is pressed, all *Cyrus* products connected via the MC-Bus will turn off.



Connections for a typical *Cyrus Pre* & *Cyrus Power* system wired with a *Cyrus dAD7* CD player and *Cyrus FM7* tuner using MC-Bus connection for power control.

**External Intelligent Power Supply - *PSX-R***

- The addition of a *PSX-R* which is a highly regulated intelligent DC power supply will upgrade the sonic performance of your *Cyrus Power* as well as enhancing its current drive ability into difficult loudspeaker loads. Should you decide to add this optional extra to your system, be sure to have your *Cyrus Power* converted by your dealer or an authorised Cyrus service organisation
- When a *Cyrus Power* & *PSX-R* combination is installed all analogue and signal related sections of the *Cyrus Power* are powered from this clean and highly stable power source, while the remaining power requirements are supplied internally. This technique ensures complete isolation of the sensitive analogue sections from the control side as well as the AC mains-borne noise and power supply ripple which of course, enhances the delicacy and transparency of the reproduced music programme.

**AMPLIFIER MAINTENANCE**

There are no user serviceable parts in the *Cyrus Power* so there is no reason to remove any of the panels. After disconnecting the mains power supply, the cabinet may be cleaned using a chamois leather, slightly moistened with water. DO NOT use cleaning agents containing alcohol, spirits, ammonia or abrasives.

**THE MISSION/CYRUS GROUP MANUFACTURE**

- Loudspeakers
- Loudspeaker Stands
- Loudspeaker Cables
- Compact Disc Players
- D-to-A Converters
- Amplifiers
- Tuners
- Regulated Audio Power Supplies
- Isoplat (Vibration Isolation Platform)

**TROUBLESHOOTING GUIDE**

If you suspect that your *Cyrus Power* is not operating to specification please read through this section before returning the amplifier to your local dealer.

**Note:** Always switch off all system components before changing any connections.

**No Sound from either Speaker**

- Check that the amplifier is on. The standby light should be green.
- Check that the MUTE light is "OFF".
- Check that the RCA/BAL selector switch is correctly set.
- Check that the loudspeakers are not inadvertently disconnected
- Check that the installation is correct according to the installation guide in this booklet.
- Check that there is not fault indication on your *Cyrus Power* front panel. If so refer to the next section, 'Fault Indication System'.

**No Sound from one Speaker**

- If your loudspeakers are fitted with protection fuses, check that the fuses are intact.

- Check the speaker cable connection integrity of the missing channel.
- Check the interconnect cable integrity between the signal source and the Preamplifier. Check also the interconnect between the Preamplifier and *Cyrus Power*. If possible use another interconnect cable as a test by substitution.
- For Mbloc installations, check that the input and output connections are correctly made to *both* amplifiers.

**If the problem persists proceed as follows:**

- Try another programme source and check if the problem still exists. If the fault is removed by doing this then the original source is at fault.
- Change over the left and right channels of your loudspeaker on the *Cyrus Power* rear panel. If the problem stays in the same channel, then there is a fault in the loudspeaker cable or the loudspeaker. Now switch the cable at the loudspeaker end and if the problem switches then the loudspeaker is faulty, otherwise it is the loudspeaker cable or plug connections which may be defective. Be sure to restore the system to its original configuration after completion of the above series of tests.



**FAULT INDICATION SYSTEM**

The *Cyrus Power* has a powerful protection system and unique fault indication system. This is designed to prevent damage to your *Cyrus Power* or the connected hi-fi system while helping you and the service personnel to diagnose the possible cause of a problem. It is essential that the amplifier be reset via the mains switch on the rear panel, should any fault indication persist on the front panel.

**The Standby light flashing GREEN**

This indicates:

- That a *PSX-R* power supply has been connected to a *Cyrus Power* which has not been correctly prepared for *PSX-R* use. In this case, remove the *PSX-R* connection and re-test the *Cyrus Power*. If the *Cyrus Power* now functions correctly, return the amplifier to a Mission distributor for *PSX-R* adjustment.
- A fault reported from the *PSX-R*. In this case, switch off the power to both the *Cyrus Power* and the *PSX-R* and switch on again. If the problem does not clear, return both units to your Mission distributor for checking.
- That the *Cyrus Power* has been set to Mbloc mode but has not been modified for use with a *PSX-R*. In this case set the *Cyrus Power* to Stereo or arrange for *PSX-R* conversion in a dual Mbloc installation.

- That the *PSX-R* has been disconnected or switched off. In this case check for power to the *PSX-R* and check the *PSX-R* connection to the *Cyrus Power*.

**The Standby light flashing GREEN/YELLOW**

- This indicates an overload condition in at least one channel. If the problem is of a temporary nature (for example excessive volume setting), normal operation will resume after ten seconds. If the fault indication persists, there may be a problem with the loudspeakers or their connections. In this case, switch off the power at the rear of the *Cyrus Power* and disconnect the speaker cables from the rear panel. If the fault indication has now cleared when power is re-applied, check the loudspeakers, cables and plugs carefully for loose strands of wire which may be causing a short circuit.

**The Standby light flashing YELLOW/RED**

- This indicates that the *Cyrus Power* has over heated. In this case check the ventilation around the *Cyrus Power* and allow the unit to cool down before re-applying power.

**The Standby light flashing YELLOW**

- This indicates that there is a DC voltage at the output of the *Cyrus Power*. In this case disconnect all inputs and outputs and switch on again. If the problem does not clear, return the *Cyrus Power* to your Mission distributor for checking.

**The Standby light flashing RED/GREEN**

- This indicates that the RCA/XLR switch has been changed whilst the amplifier is operating. Return the switch to it's original position or if the other input is required set the *Cyrus Power* to Standby before operating the switch.

**The MBLOC light flashing RED**

- This indicates that the STEREO/MBLOC switch has been changed whilst the amplifier is operating. Return the switch to it's original position.

**The MUTE light glowing red**

- This is a normal condition for six seconds after the Standby light changes to green *or* should any of the above faults be detected. MUTE indication at any other time indicates a possible fault condition. In this case, return the *Cyrus Power* to your Mission distributor for checking.

# SPECIFICATIONS

# Cyrus Power Amplifier

## AUDIO PERFORMANCE

Input Sensitivity (50W/8Ω)	RCA .....	381mV
	BAL .....	775mV
Input Impedance	RCA .....	10kΩ
	BAL .....	22kΩ
Slew Rate (i/p filter bypassed)	.....	700v/μS
Channel balance	.....	0.1dB
Frequency Response	(-3dB).....	1Hz-100kHz
Signal to Noise Ratio	(Unwtd).....	100dB
(Ref 50W)	(A-wtd).....	110dB
Signal to Noise Ratio	(Unwtd).....	83dB
(Ref 1W)	(A-wtd).....	94dB
Output Power (Internal PSU)	8 Ohms .....	50W
(Stereo)		
Output Power (PSX-R)	8 Ohms .....	57W
(Stereo)		
Output Power (Mbloc)	8 Ohms .....	110W
THD+N (@ 2/3 full power.)	(20Hz - 20KHz) .....	0.01%
	1kHz.....	0.004%

## POWER SUPPLY

### Voltage

See the plate attached to the rear of unit

### Power Consumption

Standby.....	(12W)
ON (No Signal) .....	(23W)
ON (2 x 50W/Ch).....	(185W)

Safety Requirements ..... EN60065

## ENCLOSURE

Dimensions (WxHxD) ..... 365 x 215 x 75 mm

Weight .....4.3Kg

Material .....Magnesium alloy  
and Aluminium alloy

The company reserves the right to change this specification without prior notice.

This guarantee only becomes effective if the guarantee card enclosed is completed by the Dealer and the purchaser and returned to MISSION or Distributor within 8 days of purchase.

This guarantee excludes:

- i) All damage caused through accident, misuse, wear and tear, neglect or through incorrect installation, adjustment or repair by unauthorised personnel.
- ii) Liability for damage or loss occurring in transit to or from the purchaser.

Claims under this guarantee must, whenever possible, be made through the Dealer from whom the equipment was purchased or if that is not convenient, through another authorised MISSION/CYRUS dealer.

MISSION shall not be liable for any consequential damage, loss or injury whatsoever, arising from or in conjunction with this equipment.

The cost of carriage (to or from the Dealer) shall be borne by the purchaser.

This guarantee is personal to the original Purchaser and is not transferable.

If equipment is found on examination to comply with the published specification, MISSION reserves the right to make a charge for examination and for return carriage.

No Dealer or Distributor has any authority to vary the terms of this guarantee.

Any unauthorised servicing will result in loss of guarantee.

We strongly recommend that you retain the sales receipt for your *CYRUS* equipment in case of any warranty claim.

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

