Cyrus 1 and Cyrus 2 Manual

CYRUS AMPLIFIERS

INTRODUCTION

Congratulations on your purchase of the Cyrus integrated stereo amplifier.

The Cyrus range of amplifiers are precision manufactured to the highest standards and specifications. This results in a highly consistent and reliable product.

This manual contains installation and operating instructions to enable the user to connect up and operate the amplifier correctly, thus ensuring the greatest satisfaction and long term use.

WARNINGS

Your Cyrus amplifier is factory set to operate from a fixed mains supply voltage. This voltage is marked on a label on the rear of the unit. Before connecting, check that this voltage is the same as your mains supply.

BEFORE CONNECTING to the mains supply ensure that the On/Off switch is set to off (down).

DO NOT remove the amplifier cover under any circumstances.

DO NOT make any connections to, or disconnections from the amplifier unless the amplifier is OFF and the VOLUME control is set to "MIN".

DO NOT change the position of the Selector switches unless the VOLUME control is set to "MIN".

DO NOT ever select tape on both selector switches at the same time.

DO NOT allow the positive and negative speaker leads to touch.

DO NOT obstruct the ventilation grille on the top of the amplifier. Ensure the unit has adequate all round ventilation.

DO NOT expose your amplifier to excessive cold or heat, direct sunlight, humidity or water.

DO NOT use any chemicals for cleaning your Cyrus amplifier. Only a slightly damp, soft cloth should be used.

The original packing should be retained and always used when transporting the unit.

INSTALLATION

MAINS SUPPLY

A label at the rear of your Cyrus amplifier shows the appropriate mains supply voltage and fuse rating of the unit. If the Tnains supply voltage in your area is different, contact your dealer or a Mission service organisation.

The amplifier is connected to the mains supply via an IEC socket and the mains cable. The IEC socket has an integral mains fuse. When connecting the mains supply, ensure that the cable is connected to the amplifier first.

MAINS CABLE

The mains cable supplied with the unit is a three core type, and has an integral plug attached. Units supplied for the UK market do not have a mains plug, and therefore, an appropriate plug must be wired according to the colour-code below and on the label attached to the lead.

All types of mains lead supplied (all countries), have a moulded IEC plug which matches the IEC socket of your amplifier.

FITTING A MAINS PLUG (UK ONLY)

The mains supply cable should be attached to a standard 13 Amp mains plug fitted with a 3 Amp fuse.

The wires in the mains supply cable are colour coded as follows;

- BROWN = Live

- BLUE = Neutral
- GREEN/YELLOW. = Earth

The Brown wire must be connected to the terminal that is marked "L" or coloured RED. The Blue wire must be connected to the terminal that is marked "N" or coloured BLACK. The GREEN/YELLOW wire must be connected to the terminal that is marked with the letter "E" or coloured GREEN or coloured GREEN AND YELLOW.

MAINS FUSE

Cyrus I:

- UK/Europe – 220/240V = T1A/20mm
- N.America/Far East – 100/120 = T1.6A/20mm

Cyrus II:

- UK/Europe – 220/240V = T1.25A/20mm
- N.America/Far East– 100/120V = T2.5A/2Omm

SITING THE AMPLIFIER

Your Cyrus amplifier can be sited as a free standing unit or stacked with other units in an audio rack. However, since the power amplifier produces a substantial amount of heat, positioning the unit at the bottom of the rack should be avoided. Convected heat from the amplifier could adversely affect other units stacked above, as well as overheat and damage your amplifier.

The amplifier must NOT be sited near a source of heat or in a position exposed to direct sunlight.

CONNECTIONS

Before making any connections to your amplifier, ensure that all units are switched OFF, and disconnected from the mains.

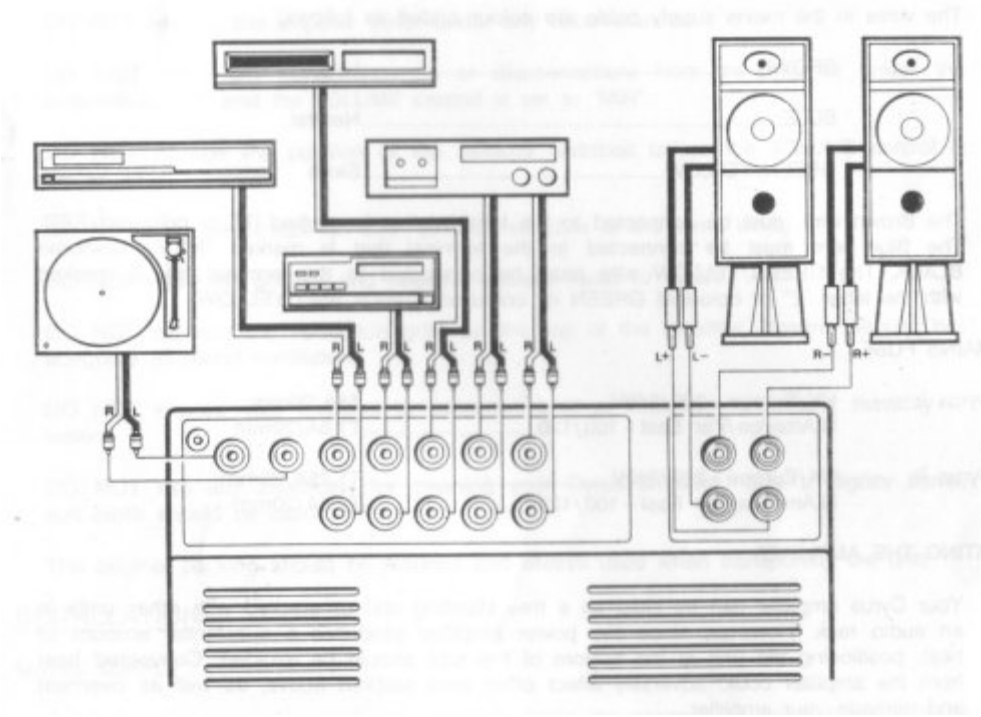
Refer to the wiring diagram of your particular Cyrus amplifier for connection details.

For best results, the loudspeaker cables used should be of high purity copper and as short as possible. We strongly recommend our own Mission or Cyrus loudspeaker cables.

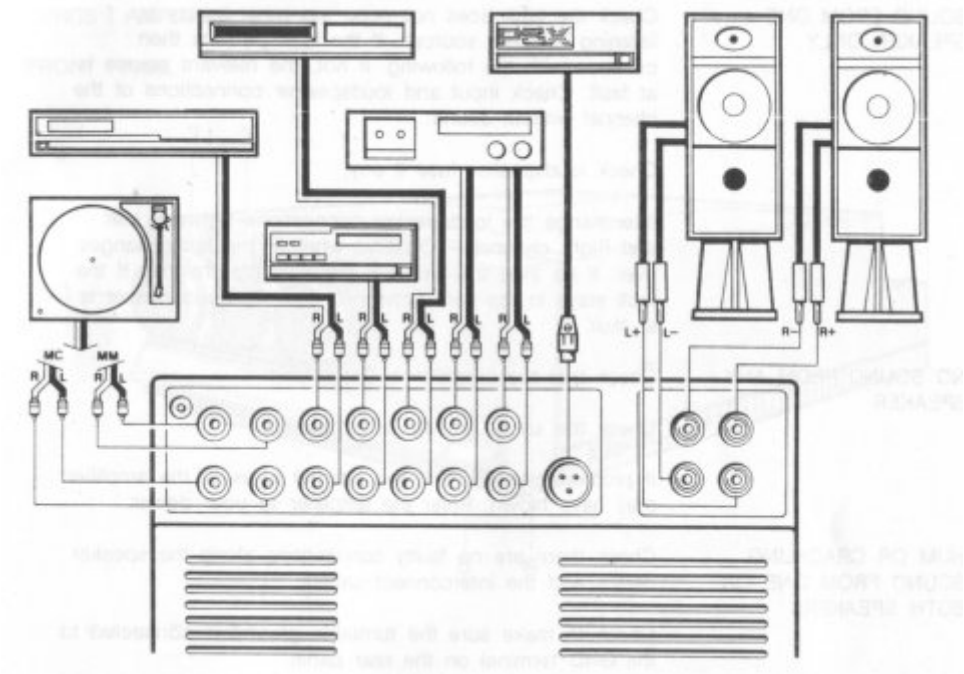
The phono ground terminal (GND), on the rear panel, is provided for connecting to the appropriate ground wire from your tonearm/turntable. This will minimise the possibility of hum being induced in the phono circuitry.

All the RCA phono sockets are colour-coded WHITE for the left and RED for the right channel.

In the case of the Loudspeaker output terminals, RED is for positive and BLACK is for negative.



Cyrus One Installation Diagram



Cyrus Two Installation Diagram

IN CASE OF TROUBLE

CYRUS I AND CYRUS II

THE POWER L.E.D. DOES NOT ILLUMINATE AND THERE IS NO SOUND

Check that the unit is plugged into the mains socket, and the power, switch is ON.

Check the mains fuse.

AS ABOVE BUT THERE IS SOUND FROM THE SPEAKERS

The LE.D. is faulty.

SOUND FROM ONE SPEAKER ONLY

Check the fault does not occur on other inputs by listening to other sources. If the fault persists then continue with the following. If not, the

relevant source is at fault. Check input and loudspeaker connections of the channel without sound.

Check loudspeaker fuse if any.

Interchange the loudspeaker connections between Left and Right channels. Observe whether the fault changes over. If so then the amplifier has a faulty channel. If the fault stays in the same channel, then the loudspeaker is at fault.

NO SOUND FROM ANY SPEAKER

Check that the amplifier is On.

Check the sound on the other sources.

If problem persists then the internal fuses of the amplifier may have blown. Refer the amplifier to your dealer.

HUM OR CRACKLING SOUND FROM ONE OR BOTH SPEAKERS

Check there are no faulty connections along the speaker cables and the interconnect cables.

Check to make sure the turntable ground is connected to the GND terminal on the rear panel.

Check that the turntable interconnect is not dressed next to any mains leads.

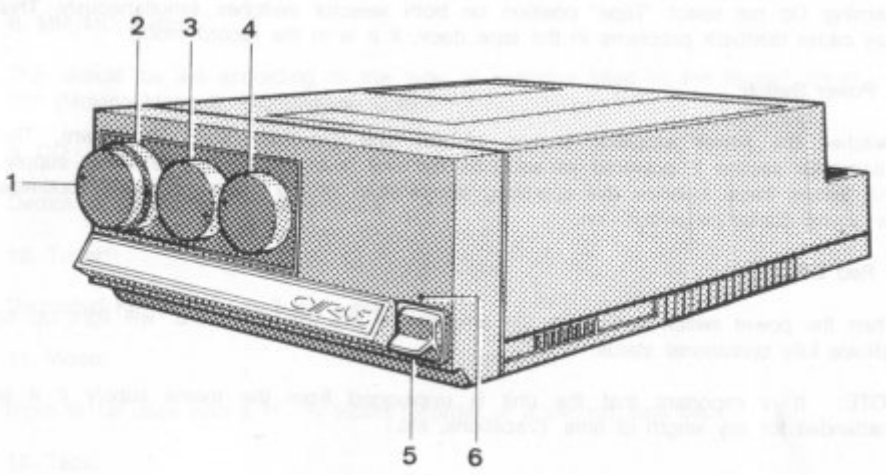
MUSIC REPRODUCTION SOUNDS HOLLOW AND STRANGE

Check the speaker cables are connected to the amplifier and speakers correctly.

If in Phono mode, check the cartridge has been wired correctly.

OPERATING INSTRUCTIONS

CYRUS I AMPLIFIER



1. Volume Control: Adjusts the power amplifier output level to the Loudspeakers from zero to the maximum level.

2. Balance Control: Adjustment of the Balance Control knob swings the output level to the left or right Loudspeaker by a maximum of 5 dB.

3. "Listen" Selector Switch: Selects the desired source for listening. Starting from the fully clockwise position, the sources which may be selected are as follows:

- Phono: Record Player; Moving Coil or Moving Magnet Cartridge.
- Mute: No source selected. May also be used to erase recorded tape.
- CD: Compact Disc Digital Audio Player.
- Tuner: FM/AM Hi- Fi Tuner.
- Video: Hi-Fi Video Recorder, a second Tape Deck (playback only).
- Tape: Tape Recorder used for record and playback (Including R-DAT).

4. "Record" Selector Switch: Selects the desired source for recording via the 'Tape-out" socket. Starting from the fully anti-clockwise position, the sources which may be selected are identical to those on the "Listen" Selector Switch.

Warning: Do not select 'Tape" position on both selector switches simultaneously. This may cause feedback problems in the tape deck, if it is in the record mode.

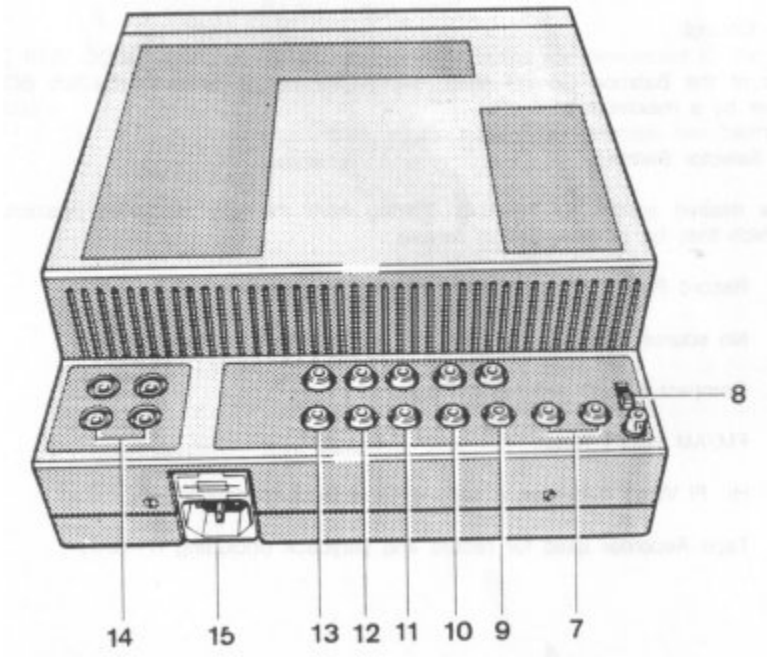
5. Power Switch: Switches the power amplifier section of the unit On (up) and Off (down). The preamplifier section is powered as soon as the unit is connected to the mains supply. This feature helps stabilize the operating temperature of the preamplifier, and optimize the sound quality on switch-on.

6. Red LE.D.: When the power switch is up (i.e the amplifier is on)"the red LED. will light up to indicate fully operational status.

NOTE: It is important that the unit is unplugged from the mains supply if it is unattended for any length of time. (Vacations, etc.)

REAR PANEL

All inputs plus the tape output are colour coded as follows: RED for the right channel and WHITE for left channel.



7. Phono Input: Dedicated Input to accept the signal from a Record player.

8. MM/MC Switch: This should be set according to the type of cartridge fitted to the Record player, i.e. MM (Moving Magnet), MC (Moving Coil).

9. CD: Dedicated Compact disc player input.

10. Tuner: Dedicated FM/AM Hi-Fi Tuner input.

11. Video: Input to be used with a Hi-Fi Video recorder or a second tape deck.

12. Tape: Input suitable for use with a cassette deck, open reel tape deck, or R-DAT recorder.

13. Tape Out: Carries the signal to be recorded. This should be connected to the input of the tape recorder.

14. Loudspeaker Outputs: Loudspeakers are connected to the outputs of the power amplifier at these terminals. These are colour-coded, RED for positive and BLACK for negative. 4mm banana plugs are used to connect loudspeaker cables at these points. A set is supplied with the unit.

15. IEC Mains Socket: The mains supply is connected to the unit via this socket. It has an integral fuse which can only be removed after the mains lead is disconnected.

TECHNICAL DATA

(REFERENCE TO IHF202)

CYRUS I INTEGRATED AMPLIFIER

Input Sensitivity
(Ref. 1W O/P)
Phono MC 0.04 mV
Phono MM 0.40 mV
Line (CD,Aux,etc.) 65 mV

Input Overload

Phono MC 31 dB
Phono MM 31 dB
Line Infinite

Maximum Output Level
Tape out 11 Vrms
Power Amp out 17 Vrms

Input Impedance
Phono MC 47 KOhms
+100 pF
Phono MM 47 KOhms
+100 pF
Line 14 KOhms

Output Impedance
Tape out 150 Ohms
+2.2 MF
Power Amp 0.08 Ohms

Frequency Response
Phono(Ref.New RIAA) 20Hz - 20KHz
+/-0.2 dB
Line 1Hz - 50KHz
-3 dB

Distortion ('T'H D)
Phono MC 0.01%
Phono MM 0.003%

Distortion (SMPTE IMD)
Phono MC 0.01%
Phono MM 0.003%

Signal to Noise Ratio
(A- Weighted 1W output)

Phono MC 67 dB
Phono MM 84 dB
Line 86 dB

Minimum Speaker Impedance Load Specification
8 Ohms

Continuous Average Power (Per Channel)
8 Ohms 25 W
4 Ohms 40 W

Damping Factor (20Hz - 20KHz)
100

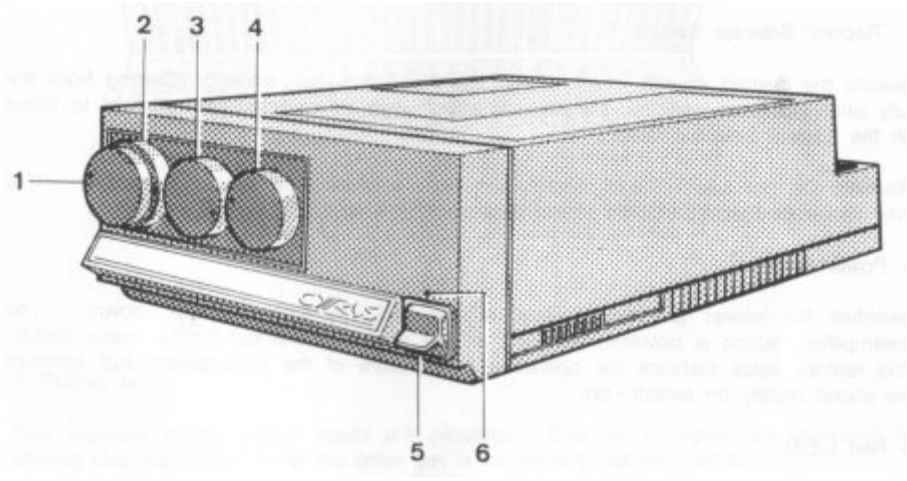
Dynamic Headroom
1.4 dB

Slew Factor (Input Filter by-passed)
10

Distortion (THD)
1KHz full power
8 Ohms 0.003%
4 Ohms 0.004%
20KHz full power
8 Ohms 0.015%
4 Ohms 0.025%

OPERATING INSTRUCTIONS

CYRUS II AMPLIFIER FRONT PANEL



1. Volume Control: Adjusts the power amplifier output level to the Loudspeakers from zero to the maximum level.

2. Balance Control: Adjustment of the Balance Control knob swings the output level to the left or right Loudspeaker by a maximum of 5 dB.

3. "Listen" Selector Switch: Selects the desired source for listening. Starting from the fully clockwise position, the sources which may be selected are as follows:

- Phono: Record Player; Moving Coil or Moving Magnet Cartridge.
- Mute: No source selected. May also be used to erase recorded tape.
- CD: Compact Disc Digital Audio Player.
- Tuner: FM/AM Hi-Fi Tuner.
- Video: Hi-Fi Video Recorder, a second Tape Deck (playback only).
- Tape: Tape Recorder used for record and playback (Including R-DAT).

4. "Record" Selector Switch: Selects the desired source for recording via the "Tape-out" socket. Starting from the fully anti-clockwise position, the sources which may be selected are identical to those on the "Listen" Selector Switch.

Warning: Do not select 'Tape" position on both selector switches simultaneously. This may cause feedback problems in the tape deck, if it is in the record mode.

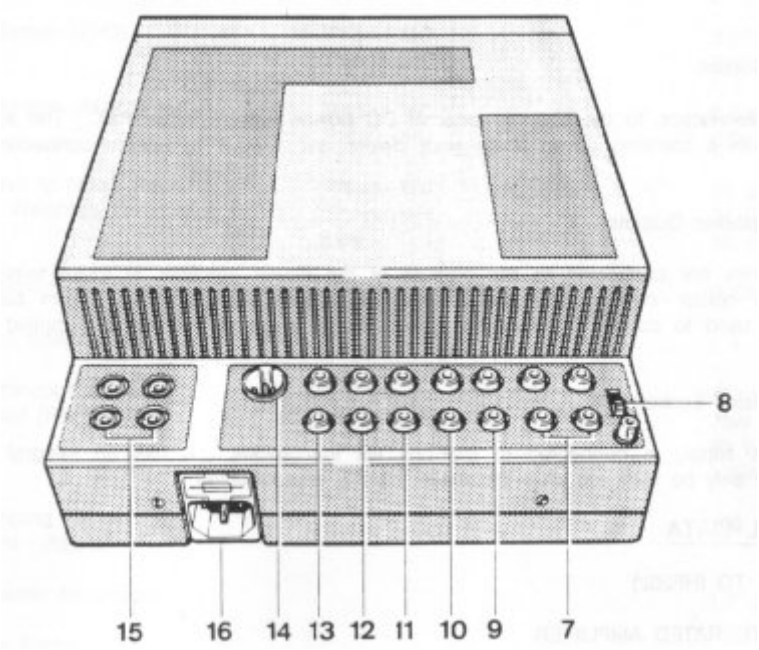
5. Power Switch: Switches the power amplifier section of the unit On (up) and Off (down). The preamplifier section is powered as soon as the unit is connected to the mains supply This feature helps stabilize the operating temperature of the preamplifier, and optimize the sound quality on switch-on.

6. Red LE.D.: When the power switch is up (i.e. the amplifier is on) the red L.F_.D. will light up to indicate fully operational status.

NOTE: It is important that the unit is unplugged from the mains supply if it is unattended for any length of time (Vacations, etc.).

REAR PANEL

All inputs plus the tape output are colour ceded as follows: RED for the right channel and WHITE for left channel,



7. Phono Input: Two separate record player inputs are provided. One set of inputs are dedicated to Moving Coil cartridges, while the other set is for Moving Magnet cartridges.

8. MM/MC Switch: Selects between MM (Moving Magnet) and MC (Moving Coil) pick-up cartridge inputs.

9. CD: Dedicated Compact disc player input.

10. Tuner: Dedicated FM/AM Hi-Fi Tuner input.

11. Video: Input to be used with a Hi-Fi Video recorder or a second tape deck.

12. Tape: Input suitable for use with a cassette deck, open reel tape deck, or R- DAT recorder.

13. Tape Out: Carries the signal to be recorded. This should be connected to the input of the tape recorder.

14. PSX Socket: Input for connection to the optional external DC power supply, Cyrus PSX. The socket is fitted with a blanking cover which your dealer will remove to enable connection of your PSX.

15. Loudspeaker Outputs: Loudspeakers are connected to the outputs of the power amplifier at these terminals. These are colour-coded, RED for positive and BLACK for negative. 4mm banana plugs are used to connect loudspeaker cables at these points. A set is supplied with the unit.

16. IEC Mains Socket: The mains supply is connected to the unit via this socket. It has an integral fuse which can only be removed after the mains lead is disconnected.

TECHNICAL DATA

(REFERENCE TO IHF202)

CYRUS II INTEGRATED AMPLIFIER

Input Sensitivity
(Ref. 1W O/P)
Phono MC 0.02 mV
Phono MM 0.30 mV
Line (CD,Aux,etc.) 50 mV

Input Overload
Phono MC 31 dB
Phono MM 31 dB
Line Infinite

Maximum Output Level
Tape out 11 Vrms
Power Amp out 24 Vrms

Input Impedance
Phono MC 100 Ohms + 6.8 nF
Phono MM 47 KOhms + 100 pF
Line 14 KOhms

Output Impedance
Tape out 150 Ohms + 2.2 MF
Power Amp 0.08 Ohms

Frequency Response
Phono(Ref.New RIAA) 20Hz- 20KHz +/-0.2 dB
Line 1Hz - 50KHz - 3 dB

Distortion (THD)
Phono MC 0.005 %
Phono MM 0.003%

Distortion (SMPTE IMD)
Phono MC 0.005 %
Phono MM 0.003%

Signal to Noise Ratio (A - Weighted 1W output)
Phono MC 75 dB
Phono MM 84 dB
Line 86 dB

Minimum Speaker Impedance Load Specification

8 Ohms

Continuous Average Power (Per Channel)
8 Ohms 50 W
PSX added
70W
4 Ohms 80 W
PSX added 125W

Damping Factor (20Hz - 20KHz)
100

Dynamic Headroom
1.4 dB
Slew Factor (Input Filter by-passed)
10

Distortion (THD)
1KHz full power
8 Ohms 0.003%
4 Ohms 0.004%
20KHz full power
8 Ohms 0.015%
4 Ohms 0.025%

CYRUS PSX POWER SUPPLY

INTRODUCTION:

The PSX unit can be connected to either a Cyrus II or 767 LFAU providing a separate DC power supply to the power amplifier section of that unit. The internal power supply of the Cyrus II or LFAU will now be totally dedicated to the preamplifier section, enhancing its performance, while the highly regulated DC supply and the increased current delivery of the PSX will improve the power amplifier's load handling capability.

The PSX, via a separate 4-pin DIN plug, may also be connected to the Mission PCM II compact disc player. In doing so, the analogue section of this unit will be provided with a highly regulated and clean DC power supply, which will in turn enhance its aortic quality. With this arrangement the internal power supply of the unit will be dedicated to other sections, such as the Servo, Digital circuitry, and the Display control.

The PSX is housed in a similar case to that of your amplifier. The only control provided is the power on/off switch, situated on the front panel. On the rear panel there is an umbilical cord for connection to the Cyrus II or 767 LFAU dedicated PSX input. There is also a 4-pin DIN socket for connection to the PCM II.

NOTE:

1. To ensure satisfactory system upgrade, it is essential that your dealer or the Mission service organisation make certain adjustments to your Cyrus II or 767 LFAU before connecting the PSX power supply.

2. Once the Cyrus II or 767 LFAU has been adjusted for use with the PSX, the power amplifier will not function without the PSX connected and switched on.

3. Upgrading the PCM II with the PSX does not require any prior adjustments.

INSTALLATION

MAINS SUPPLY

A label at the rear of your PSX power supply shows the appropriate mains supply voltage and fuse rating of the unit. If the mains supply voltage of your area is different contact your dealer or the Mission service organisation.

The PSX is connected to the mains supply via an IEC socket and the mains cable. The IEC socket has an integral mains fuse. When connecting the mains supply, ensure that the cable is connected to the PSX first.

MAINS CABLE

The mains cable supplied with the unit is a three core type, and has an integral plug attached. Units supplied for the UK market do not have a mains plug, and therefore, an appropriate plug must be wired according to the colour-code below and on the label attached to the lead.

All types of mains lead supplied (all countries), have a moulded IEC plug which matches the IEC socket of your PSX power supply.

FITTING A MAINS PLUG (UK ONLY)

The mains supply cable should be attached to a standard 13 Amp mains plug that must be fitted with a 5 Amp fuse.

The wires in the mains supply cable are colour coded as follows;

- BROWN = Live
- BLUE = Neutral
- GREEN/YELLOW = Earth

The Brown wire must be connected to the terminal that is marked "L" or coloured RED. The Blue wire must be connected to the terminal that is marked "N" or coloured BLACK. The GREEN/YELLOW wire must be connected to the terminal that is marked with the letter "E" or coloured GREEN or coloured GREEN AND YELLOW.

MAINS FUSE

- UK/Europe - 220/240V = T3.15A/20mm
- N.America/Far East- 100/120 = T4A/20mm

SITING THE PSX

As with your Cyrus amplifier, the PSX may be free standing or stacked in an audio rack. The PSX must be sited in a position which allows adequate, unrestricted airflow around the unit. It should never be placed in a position close to a source of heat, or exposed to direct sunlight for long periods of time.

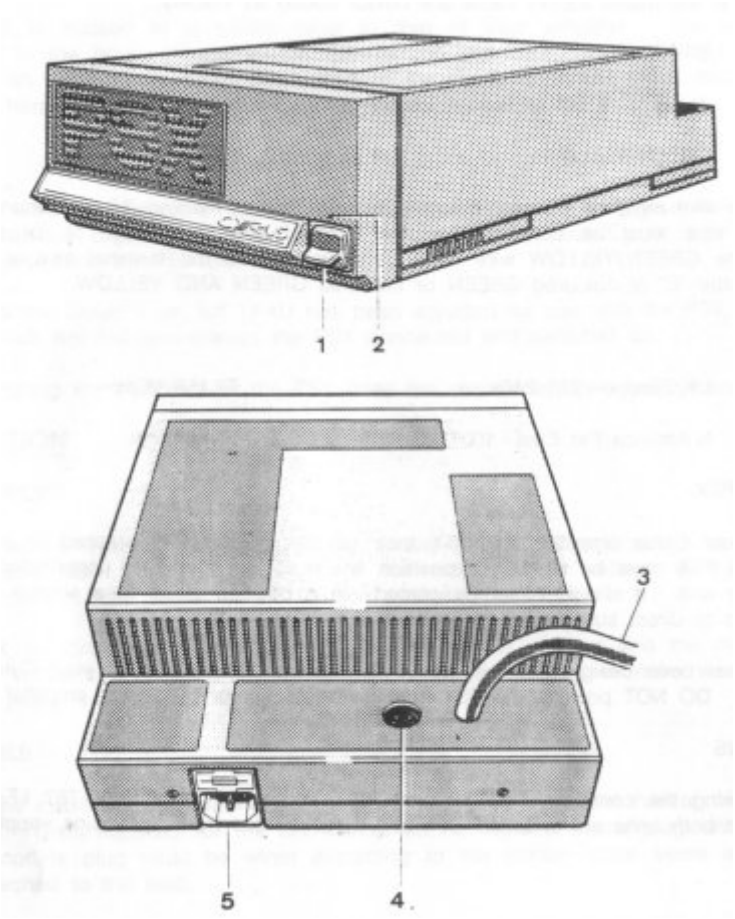
The unit has been designed to be placed on the right hand side of your Cyrus II or 767 LFAU, DO NOT position the PSX immediately above or below the amplifier.

CONNECTIONS

Before making the connection between the PSX and your Cyrus II or 767 LFAU, first ensure that both units are switched OFF and disconnected from the mains supply.

OPERATION

When the PSX has been added to your system, you will notice that the power switch on your Cyrus II or 767 LFAU is ineffective in turning your system on. The reason for this is, that the PSX is now in control of power to the power amplifier section of that unit, and the On/Off switch on the PSX unit should be used to switch the amplifier On or Off.



1. Power Switch

2. Red LE.D.

3. Lead for connection to Cyrus II or LFAU

4. Socket for connection to Cyrus PCM II

5. I.E.C mains socket

IN CASE OF TROUBLE

CYRUS II OR 767 LFAU/PSX COMBINATION

NOTE: In Cyrus II or 767 LFAU/PSX combination, the power switch of the Cyrus II or 767 LFAU' is ineffective, as far as the operation of the system is concerned. The power switch may be turned on (up) to illuminate the L.E.D. on the unit if so desired.

PSX L.E.D. DOES NOT ILLUMINATE AND THERE IS NO SOUND

Check that the PSX is plugged into the mains socket, and the power switch is On.

Check the mains fuse of the PSX.

AS ABOVE BUT THERE IS SOUND FROM THE SPEAKERS

The L.E.D. on the PSX is faulty.

SOUND FROM ONE SPEAKER ONLY

Check the fault does not occur on other inputs by listening to other sources. If the fault persists then continue with the following. If not the relevant source is at fault.

Check input and loudspeaker connections of the channel without sound.

Check loudspeaker fuse if any.

Interchange the loudspeaker connections between Left and Right channels. Observe whether the fault changes over. If so then the amplifier has a faulty channel, if the fault stays in the same channel, then the loudspeaker is at fault.

NO SOUND FROM ANY SPEAKER

Check that the PSX is On.

Check the sound on the other sources.

If problem persists then the internal fuses of the PSX may have blown; Refer the amplifier and the PSX to your dealer.

NO SOUND FROM ANY SPEAKER WHEN PHONO MODE IS SELECTED

Check that the Cyrus II is plugged in the mains socket, and the power switch is On.

HUM OR CRACKLING SOUND FROM ONE OR BOTH SPEAKERS

Check there are no faulty connections along the speaker cables and the interconnect cables.

Check to make sure the turntable ground is connected to the GND terminal on the rear panel.

Check that the turntable interconnect is not dressed next to any mains leads.

MUSIC REPRODUCTION SOUNDS HOLLOW AND STRANGE

Check the speaker cables are connected to the amplifier and speakers correctly.

If in Phono mode, check the cartridge has been wired correctly.