

CA 35



CA 35 STEREO VALVE PRE-AMPLIFIER

INTRODUCTION

Please take the time to read this manual before attempting to install or use this unit. There are several points you need to know prior to operation.

To obtain the best results from your CA 35 Pre-Amplifier, we strongly recommend that you choose ancillary equipment of the highest quality.

When first switched on the Pre-Amplifier will sound somewhat hard with a closed sound stage. This is quite normal. It will require an initial burn-in period of approximately 50 hours normal use. Even after the initial burn-in period, the Pre-Amplifier will not perform at its best for at least one hour after switching on from cold.

PACKAGING

Immediately upon receiving your CA 35 Pre-Amplifier, inspect the carton for possible damage. If the carton is visibly damaged, a claim must be filed with the carriers as soon as possible.

Carefully unpack the unit and save all packing materials for future shipment, in case it proves necessary to return the unit to the distributor or manufacturer.

INSTALLATION

1. The CA 35 Pre-Amplifier is a valve unit utilising six valves. As a result it requires adequate ventilation. Do not install it in an enclosed area or cover the ventilation slots on the top of the unit. A free circulating area of approximately six inches (150mm) around the unit will be sufficient.
2. The CA 35 Pre-Amplifier will work very well with high quality valve or solid-state power amplifiers. BUT in terms of quality and design its perfect partner is the BEARD P 35 Power Amplifier.
3. Make all connections to your ancillary equipment using high quality interconnects. Ensure good contact, to avoid hum loops.
4. Check that the volume control is set to minimum position.
5. Switch on the CA 35. The red LED will light up, but there is a time delay on this unit. No signal will pass through whilst the delay is on. After approximately two minutes, the delay will automatically switch off. The CA 35 is now ready to operate.
6. Switch on your power amplifier ensuring that the output from the CA 35 is properly connected and that the speakers are correctly wired up.
7. With no other ancillary equipment switched on, turn up the volume to check for hum and other incidental noise. Noise levels should be as follows:—
LINE AMP volume turned up to max; the level of noise should almost be inaudible.
PHONO STAGE volume turned up to half way; you will detect thermal noise from the valves, but this will always be below the surface noise level from records.

If all is not well, refer to the FAULT/REMEDY section of this manual, then try again.
8. Never under any circumstances attempt to change any interconnect leads whilst the Pre- or Power Amplifiers are switched on, as this may cause permanent damage to your speakers.

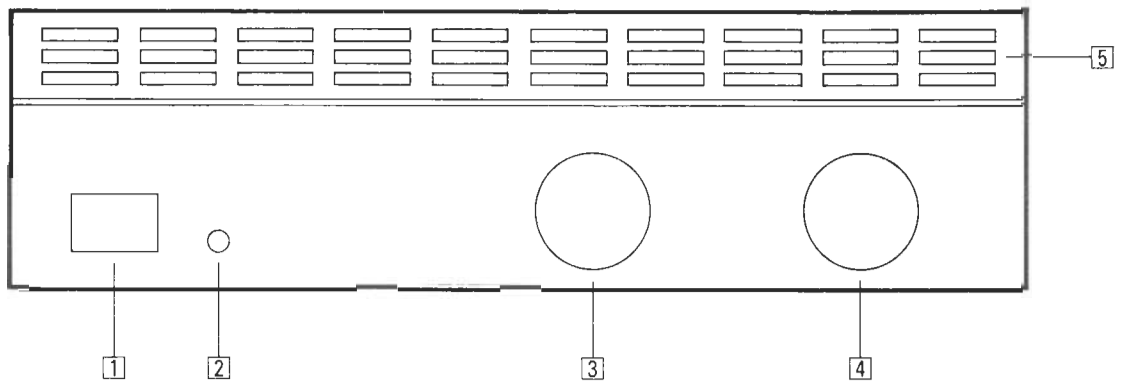
WARNING

This equipment operates at high voltages, so take care to avoid electric shocks. The power supply capacitors are large and take 15 minutes to discharge.

We strongly recommend that all servicing, with the exception of valve replacement, be left to a qualified audio engineer or agents appointed by Beard Audio Ltd. Unauthorised 'tampering' can cause damage and may invalidate the Warranty given with the equipment.

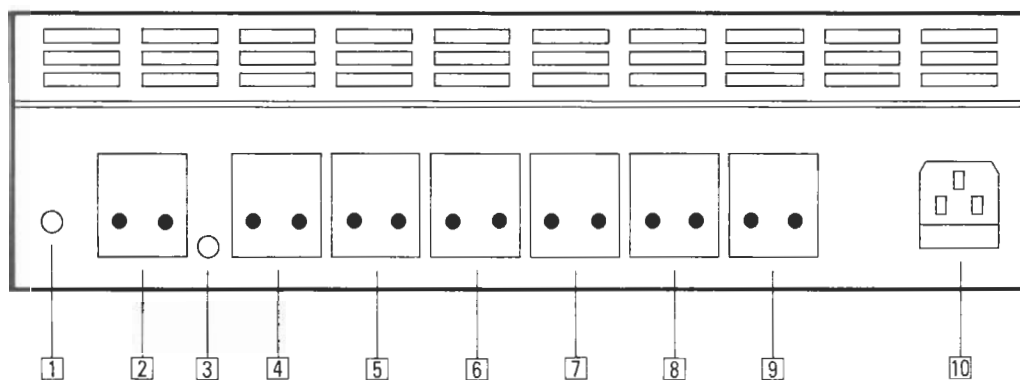
To gain access for replacing valves, the top mesh cover is removable. For safety purposes the mesh is a tight push-on fit. It is designed this way to prevent accidental removal.

CA 35 FRONT PANEL



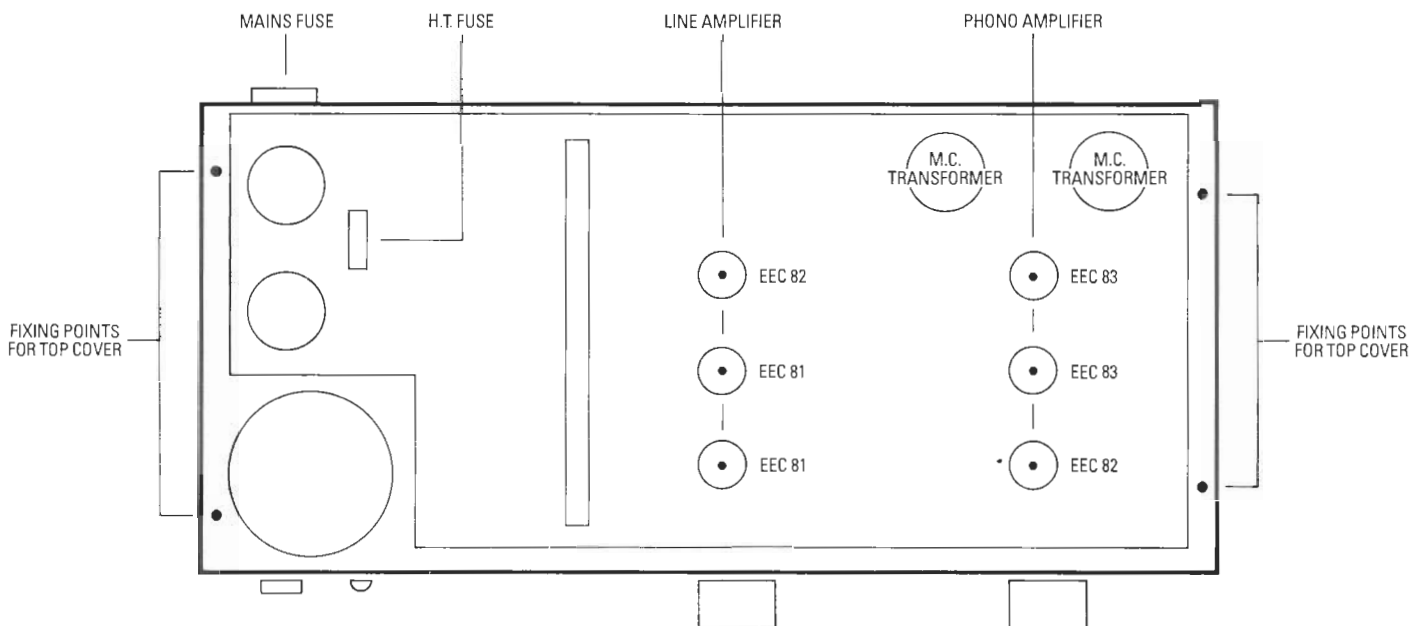
- 1 ON-OFF SWITCH** When first switched on, no signal will pass through for approximately two minutes as there is a built in time delay.
- 2 POWER LED-RED** The red LED should always glow when the unit is switched on.
- 3 SELECTOR**
PHONO For selecting a turntable fitted with either magnetic or moving coil cartridges.
CD For selecting a compact disc machine
TUNER For selecting a tuner
TAPE For selecting either a reel-to-reel tape or a tape cassette machine
- 4 VOLUME** This control should always be turned to minimum after use.
- 5 MESH COVER** The top mesh cover is removable to enable access for valve replacement. For safety purposes the mesh cover is a tight push on fit. It is designed this way to prevent accidental removal, as there are very high dangerous voltages inside this unit.

CA 35 REAR PANEL



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|----|-------------|---|
| 1 | EARTH | Most turntable arm leads will need earthing at this point. |
| 2 | PHONO MC | For connecting turntables with moving coil cartridges. |
| 3 | MM/MC | Switch for selecting moving coil or magnetic cartridges. |
| 4 | PHONO MM | For connecting turntables with magnetic cartridges OR the higher output moving coil cartridges. |
| 5 | CD | Compact disc play input. |
| 6 | TUNER | Tuner input. |
| 7 | TAPE OUT | Connection to tape input. |
| 8 | TAPE IN | Connection to tape output. |
| 9 | MAIN OUTPUT | Connect to the input of the power amplifier. |
| 10 | MAINS FUSE | Only replace fuse with the same type as fitted. |

CA 35 INTERIOR VIEW SHOWING VALVE LAYOUT



CHECK LIST

FAULT

1. Amplifier completely dead after switch on.
2. Amplifier switches on but no signal passes through.
3. Loss of sound on left or right hand channel on Line Amp (with selector set for CD, tuner or tape).
4. Loss of sound on left or right hand channel on Phono Amp (with selector set for Phono).
5. Incidental noise, such as whistling or crackling on left or right channel on Phono or Line Amps.
6. Hum.

REMEDY

WARNING: Some remedies require internal access to the pre-amplifier. PLEASE ensure that the unit is disconnected from the mains for at least 15 minutes, so that the unit can discharge.

- 1a Check to see that the mains voltage printed on the back of your amplifier matches the line voltage in your area.
 - 1b Check for blown mains fuse (only replace with same type of fuse). Also check fuse in mains lead.
 - 1c Remove top mesh cover by levering at the four fixing points, using a flat, blunt instrument. Check the HT fuse (only replace with same type of fuse).
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- 2a No signal will pass through for at least two minutes until the delay relay is activated.
 - 2b Check that all interconnect leads are making good contact and are in the correct position.
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- 3a Check that all interconnect leads are making good contact and are in the correct position.
 - 3b Check that all the valves in the Line Amp are on (both heaters of each valve are glowing). If not, replace faulty valve with a new one of the same type.
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- 4a Make the same checks as for the Line Amp (section 3).
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- 5a This problem is nearly always associated with a faulty valve. To identify which valve is causing the problem go through the same procedure as in sections 3 & 4.
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- 6a Make sure that the wiring to the mains is sound and without fault.
 - 6b Mains hum is most probably due to an 'earth loop'. It can be eliminated by making sure that the earth-to-mains supply comes from a single point (i.e. remove the earth from the pre-amplifier mains plug, but make sure that the earth to the power amplifier mains lead is positively connected).
 - 6c Hum on the phono stage is usually caused by poor earth contact on the cartridge/arm leads or the turntable/arm leads to the pre-amplifier. With some turntable/arm leads it can be cured by not connecting the earth to the pre-amp.
 - 6d Hum can be caused by non-shielded interconnect leads. One solution is to use a standard shielded type of cable or connect a separate earth from the pre-amplifier to the power amplifier.

CA 35 SPECIFICATIONS

SPECIFICATIONS	■ Sensitivity for IV out	Phono MC Phono MM Line Stage	.15mV into 7 Ω 1.2mV into 47k Ω 80mV into 250k Ω
	■ Frequency Response	Phono MM Phono MC Line Stage	20Hz-20kHz 0.1dB 20Hz-20kHz +0.0, -1.5dB 2Hz-80kHz +0, -3dB
	■ Distortion: THD	Phono MM, MC Line Stage	0.05% IHF 0.015% IHF
	■ Input Overload	Phono MM, MC Line Stage	45dB @ 1HF 1kHz unlimited
	■ Noise	Phono MM, MC Line Stage	-72dB 1HF -78dB unweighted
	■ Maximum Output	45V RMS 100k load	
	■ Dimensions	W:445mm H:80mm D:230mm	
	■ Weight	6kg including packaging	

WARRANTY

- ★ The two year limited warranty covers parts and labour.
- ★ The warranty is transferable to subsequent owners.
- ★ The vacuum tubes are warranted for twelve months.
- ★ Burn-in testing and individual listening test for each unit prior to packaging and shipment.

NOTICE

As our policy is one of continuous improvement, all specifications may be subject to alteration without prior notice.

BEARD

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