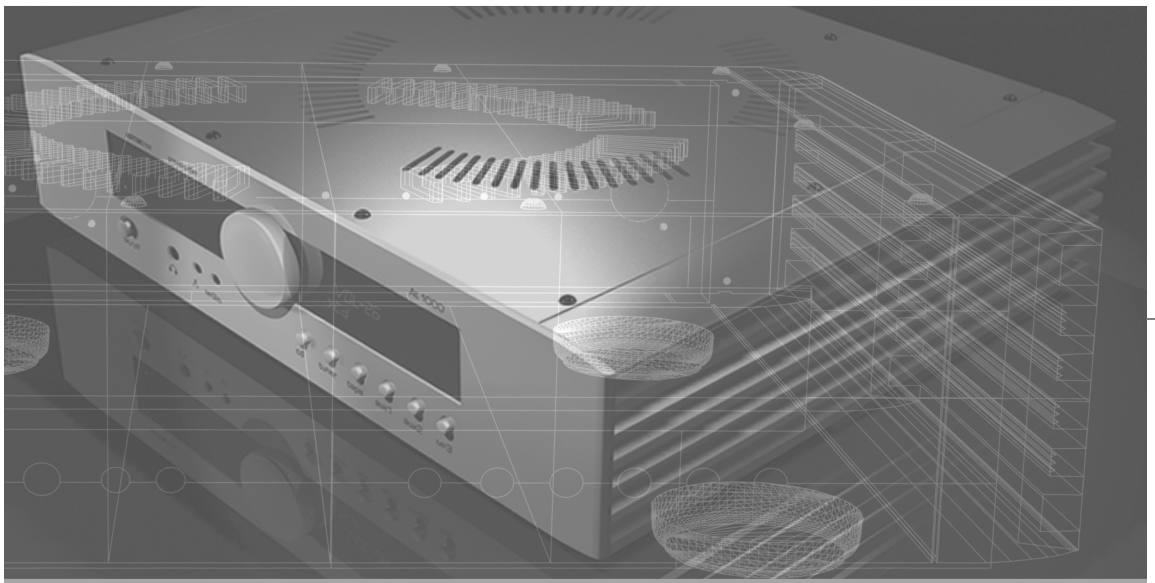
ASTINtrew

AT 1000
stereo valve
pre-amplifier



OPERATION MANUAL

ASTINtrew
6 Varnell Terrace
Hambleden Oxfordshire RG9 6SA

Telephone: +44 [0]1491 414494
Facsimile: +44 [0]1491 413303
Email: sales@astintrew.co.uk

Website: www.astintrew.co.uk

ASTINtrew
True to the source

Operating infomation for the ASTINtrew AT 1000 stereo valve pre-amplifier

1. Introduction

Congratulations on your purchase of the ASTINtrew stereo pre-amplifier. The AT1000 pre-amplifier has been designed and manufactured to a very high specification making it a true audiophile product. It will give you many years of listening pleasure. The following notes explain all aspects of its function and use, to help you get the very best from it.

The ASTINtrew line-stage pre-amplifier uses valve amplification devices to offer an involving musical experience. The headphone output uses a high quality single ended 'class A' amplifier.

The other components you use within the chain will also affect the fidelity of the sound you experience. This pre-amplifier deserves to be used with high quality ancillary components to give its best and works particularly well with other AT range products.

2. Unpacking

Included with your AT1000 stereo pre-amplifier:

One mains lead with plug fitted

One remote control with batteries

One Alan key

One Operation Manual.

One spare fuse, located within fuse holder, see section 7

Please retain all packing materials. Re-packing may be necessary to transport your pre-amplifier in the future without risk of damage to the equipment.

3. AC mains supply

This pre-amplifier is designed to work on a 220-240VAC supply only.

4. Safe use

This pre-amplifier generates some heat when switched on. Do not place on a carpet or any material where the feet and may sink into the surface obstructing the ventilation slots on the underside.

Do not place anything on the top of the amplifier which may obstruct the ventilation slots. Do not allow liquids or objects to fall into the ventilation slots.

The pre-amplifier should be located in a well ventilated area and kept away from sources of heat, dust, humidity and direct sunlight.

Do not open the equipment at any time with the mains cable attached to the amplifier. See section 7 for full details on opening.

Do not attempt to change or alter any component or part of this pre-amplifier

except for those which are user replaceable (see sections 6 and 7). Unauthorised adaptations will void the warranty and may cause damage.

5. Set up

The mains lead supplied with this product has an IEC mains plug end which fits into the IEC socket located on the rear panel. The other end is fitted with an appropriate mains plug of your country. In the UK this is the standard UK13A plug.

The performance of this pre-amplifier will be impaired if the electrical supply is in poor condition. We recommend that you use a high quality wall socket directly, or a multi-way socket unit designed for audio use. You may also wish to try a combined multi-socket and power supply conditioner designed for audio to optimize fidelity.

We recommend that you place the pre-amplifier on a suitable rack, table or platform support, offering maximum isolation from mechanical vibration.

We recommend that the pre-amplifier is turned on half an hour or more before use. Most audio electronics sound better once they have 'warmed up'. We do not recommend that you leave it on all the time but it will come to no harm if you do. From new, you will find that the pre-amplifier will need about 100 initial hours use to achieve its optimum audiophile sound.

All RCA (phono) input and output sockets are mounted on the rear panel and are of quality construction. We recommend that you use high-quality signal cables for optimum performance. The MP3 input and headphone outputs are described in Section 6.

Two pairs of RCA output sockets allow you to bi-amp from the pre-amplifier if you wish.

Refer to the illustration on page 4.

6. Operation and remote control.

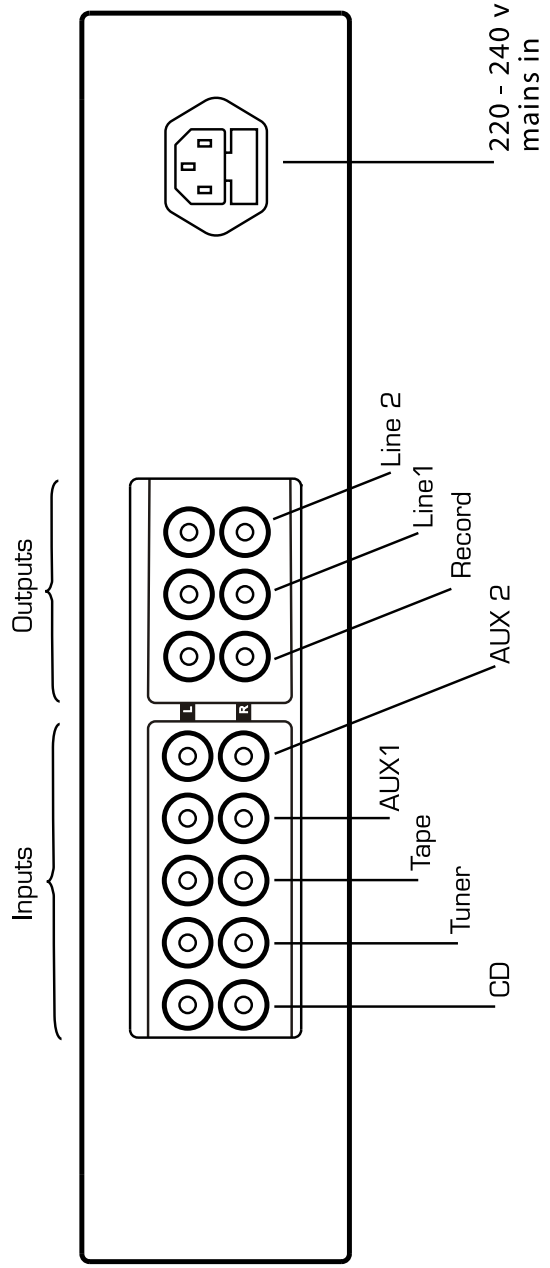
Controls and input/output sockets on facia.
Refer to the illustration on page 5.

The power on-off switch illuminates a blue LED when on. The LED flashes for about 2 seconds when first turned on.

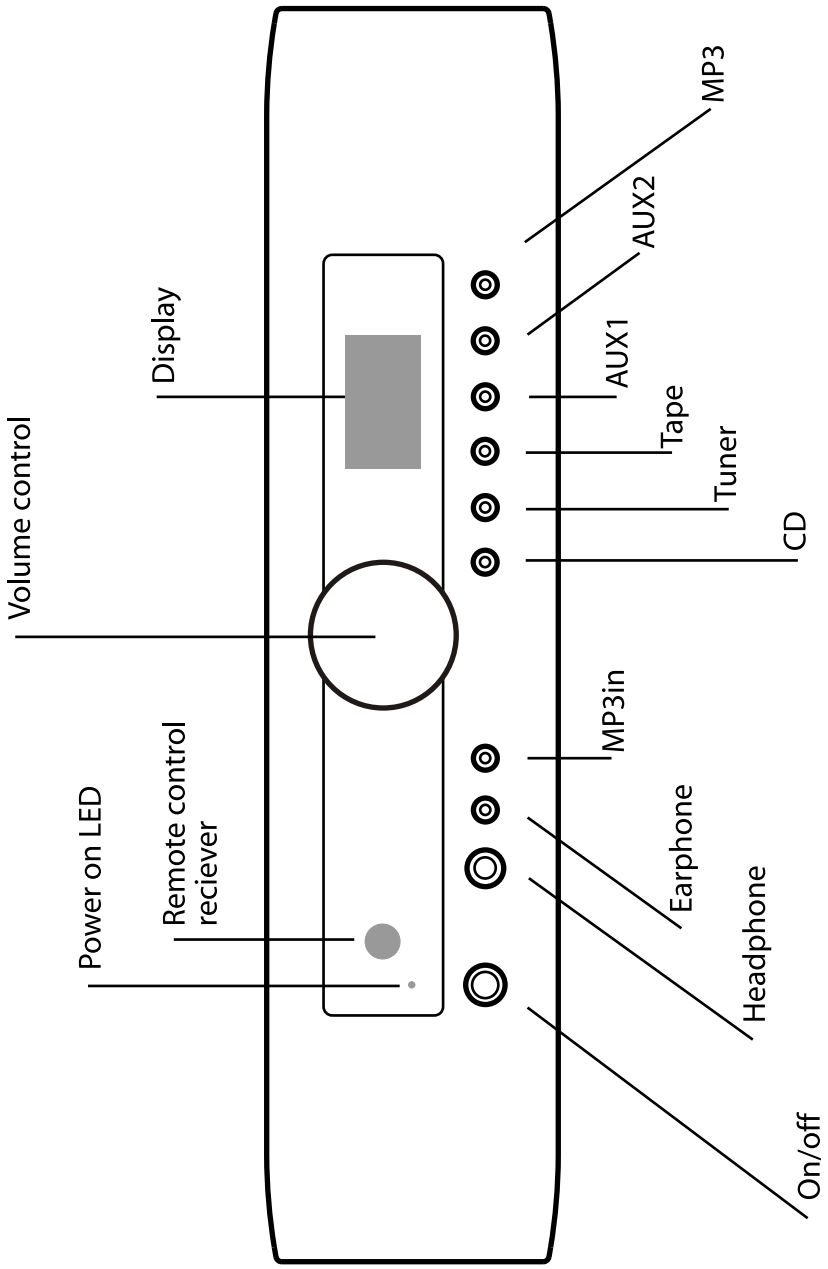
The rotary volume control is used in conjunction with display to show volume level.

The six push buttons to the right of the volume control switch inputs. The display above the switches indicates which one is in use – **cd tuner tape aux1 aux2 MP3 and MP3 signal input.**

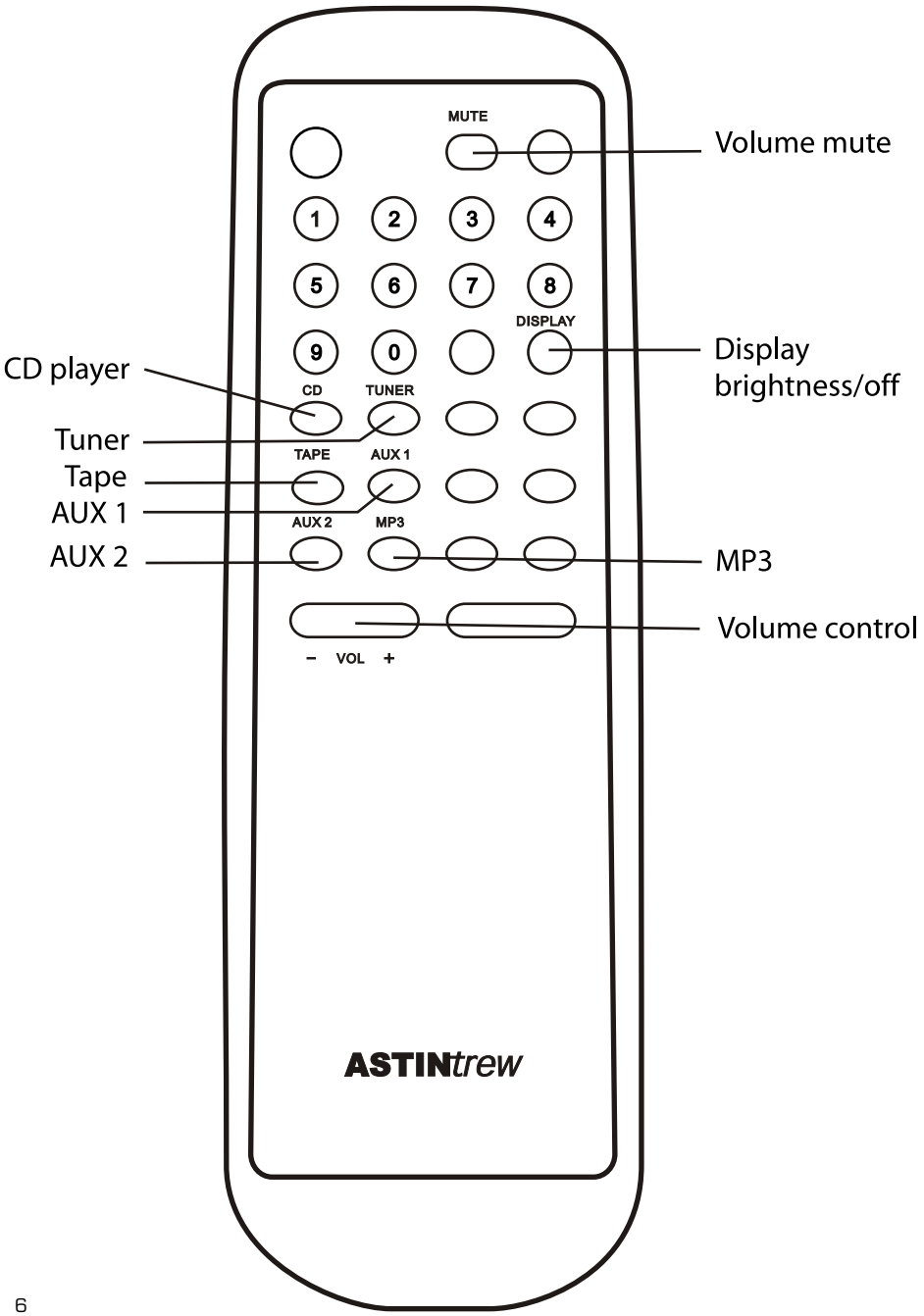
AT 1000 rear view



AT 1000 front view



AT 1000 remote control function



The switched MP3 dedicated input (3.5mm jack socket) allows quick connection to your iPod™ (or similar device with an analogue output) using a suitable interlink cable.

When the 6.4mm or 3.5mm headphone / earphone sockets are used, other signal outputs are automatically switched off.

Remote control.

The remote control allows you to adjust the volume, mute the sound, dim or turn off the visual display; and change from one RCA Phono (or MP3) input source to another. Point the remote at the facia panel when using. It will work up to 10Mtrs. from the pre-amplifier up to a 30 degree angle either side of front.

The remote will also operate the AT3000 CD Player but no other equipment. If you are also using the ASTINtrew CD Player, the mute function will mute both.
Refer to the illustration on page 6.

In the unlikely event of the pre-amplifier failing to work properly when first switched on please refer to troubleshooting in section 8.

7. Valve and fuse replacement.

The valves supplied and fitted in this pre-amplifier have been selected to offer a high quality neutral sound. If you wish to experiment with alternative manufacturers' valves after the warrantee period has expired, ensure that the factory fitted valves are replaced with ECC82 (12AU7) types only. Other valve types may damage the pre-amplifier and also void the warrantee.

Replacing or substituting the valves can be carried out by your dealer or distributor, or you can replace them yourself, with care. If you attempt to replace the valves yourself, the following instructions must be adhered to exactly.

Note: Dangerously high voltages are present inside the unit when powered from the mains that can KILL.

NEVER open the pre-amplifier when attached to the mains supply.

A. Disconnect the pre-amplifier from all equipment and the mains supply. Place on a table or work bench with plenty of space around.

Note: Wait at least 1 hour before opening the top cover to allow the valves time to cool down and the capacitors to dissipate their charge.

B. Undo the 10 x M3 Alan screws holding the top plate in position with the Alan key supplied. Put the screws somewhere safe.

C. Remove the top plate, place on a non-scratch surface to prevent marking.

You are now ready to change the valves.

Valve life.

We recommend the valves are replaced every 20,000 hours. At end of life, valves start to make the sound 'soft' or 'out of focus'. Valves rarely just stop working. Occasionally they will start to audibly buzz before end of life and it is necessary to change them.

As a guide, using this amplifier four times a week for an average four hours a session for 48 weeks a year; we would be recommended to change the valves once every 15 - 20 years. If you leave your equipment on all the time, we recommend changing them every two years.

This pre-amplifier is designed to use the ECC82 (12AU7) valve.
There are a number of manufacturers of this valve and a large quantity of 'new old stock' (NOS) types also available. Spare ASTINtrew valves can be purchased through your dealer or distributor.

Changing valves: Remember, valves run hot when in use. Wait an hour after switching the amplifier off and removing the mains / signal cables before changing valves.

The valve holders are attached to the printed circuit board, and the spring terminals that hold the valve pins are strong, so care has to be taken not to damage the board or valve when removing or replacing them.

Do not force the valve into / out of the holder. This could bend the circuit board and may result in damage.

The correct way to remove / insert a valve is to pull / push gently whilst rocking slightly in a circular way, so as each of the nine valve pins is pulled /pushed in turn (gently).

When inserting a valve, first ensure the pins are not bent on the valve, then locate the pins onto the valve holder correctly, by aligning the 'spacing position' on both valve and holder.

Remove white teflon valve damper and replace on new valve in same position.

Ensure no items such as tools or spare parts are left inside, replace the top plate, noting the front and back screw positions are different, re-fit all 10 Alan screws. Do not to over tighten and damage the screws or key.

Changing the fuse:

The fuse holder is located on the back plate within the IEC mains socket casing. A spare 20mm glass 500mA fuse is located within the fuse carrier. The UK 13A plug is also fused.

8. Troubleshooting

If the pre-amplifier fails to work or you suspect it is not working properly, first check all connections to and from the other equipment. Check all the simple and obvious things first: power supply on at wall, power amplifier and source components are switched on, loud-speaker cables are secured at both ends.

Below are some common problems with suggestions for the possible cure. The list is not exhaustive; if you cannot resolve the problem yourself, please consult your appointed ASTINtrew dealer or distributor.

No power, LED fails to illuminate:
Check the wall and pre-amplifier power switches are on; and that the power cable is secure in the back of the amplifier. Check fuses.

No output, no sound from loud-speakers:
Check there is a source signal and you are switched to the correct input. Check the power amplifier and speakers are working correctly.

Loud audible hum:
Check all component earthing in your hi-fi system.

Low volume:
Check volume control setting. Check input compatibility with source equipment.

Output distortion:
Check input compatibility with source equipment; signal may be set too high. Mains voltage may be unstable or 'dirty'.

9. Specifications

Gain:	+18db.
Maximum output:	20V (RMS)
Frequency response: +0 / - 3 db 10-20,000 Hz	
Total Harmonic Distortion: 0.3% at 5v (RMS) 20-20,000 Hz	
Input impedance:	47K ohm
Output impedance:	600 ohm
Signal to noise ratio: 95 db A weighted	
Valve 1 x ECC82 (12AU7) Electro-Harmonix make, per channel (20,000 hrs recommended replacement period)	
Mains voltage: 220-240V at 50Hz.	
Power consumption:	50W
Dimensions: W 430mm D 340mm Ht 110mm inc. feet.	
Boxed Weight:	9.1 Kg.

ASTINtrew reserves the right to make improvements or changes which may result in specification or feature changes without notice.

10. Guarantee

A two year guarantee is given and is valid from the date purchase, against any defect in materials or workmanship. Retain your receipt as proof of purchase. All claims should be made through your dealer or distributor under this guarantee.

The two year guarantee excludes:

A. All damage caused by accident, misuse, neglect, incorrect installation, adjustment, non-authorised repair, servicing or valve replacement

B. The valves.

C. Liability for damage or loss during transit from the retailer or purchaser back to ASTINtrew or its authorised agent for the purposes of repair or inspection.

Carriage costs to ASTINtrew shall be borne by the consignor.

If the returned equipment is found not to be faulty, ASTINtrew reserves the right to make a charge for both the examination and return carriage.

In the event of a failure, neither Air Audio Ltd. t/a ASTINtrew or its distributor or dealer shall be liable for any injury, loss or damage caused to property or products other than the product under warrantee.

This guarantee does not affect your consumer rights under English law.

11. CE, RoHS and WEEE

All ASTINtrew products comply with CE regulations.

When implemented into UK Legislation, all ASTINtrew products will comply with the European RoHS Directive.

When implemented into UK legislation, all ASTINtrew products can be returned after use in accordance with the WEEE Directive. Contact your Dealer for further information.