

AT 8000 phono amplifier



OPERATION MANUAL

6. CE, RoHS and WEEE

If the returned equipment is found not to be faulty, Astin Trew 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 Astin Trew or its distributor or dealer shall be liable for any injury, loss or damage caused to property or products other than the product under warranty.

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

All Astin Trew products comply with CE regulations.

All Astin Trew products comply with the RoHS Directive.

All Astin Trew products can be returned after use in accordance with the WEEE Directive, to the receiving agent. Contact your Dealer for further information.



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ASTINTREW®
True to the source

Operating information for the Astin Trew AT8000 phono amplifier

SECTION	PAGE
1. Setting up	4
2. Getting started	6
3. Trouble shooting	6
4. AT8000 Specifications	7
5. Guarantee	7
6. CE, RoHS and WEEE	8

phono amplifier), ensure that the cartridge is not picking up hum from a transformer in your preamplifier, power amplifier or integrated amplifier. This hum might be confused with positioning of the phono amplifier. Check by moving the tone arm from its rest pillar toward the centre spindle and note if there is a slight difference in pitch or volume of any hum. If there is, it is an indication that a transformer / amplification electronics is positioned too close to the cartridge.

4: AT8000 Specifications

Size:	305mm long x 160mm wide x 115mm high (inc. feet)
Net weight:	1.9Kg
Total boxed weight:	2.4Kg
Inputs:	
Power:	220-240VAC or 110-120VAC (not user switchable)
Signal:	Asymmetrical RCA (phono) sockets, Left/Right
Signal outputs:	
	Asymmetrical RCA (phono) sockets, Left/Right. Symmetrical / balanced XLR, Left/Right.
Gain options:	
Low (+45db), Mid (+52db), High (+60db) @ 1kHz	
Impedance options:	
Moving Magnet:	56kohms / 150pf 56kohms / 300pf
Moving coil:	1000hm 4700hm 20k0hm
RIAA Accuracy:	+/- 0.5 dB

Distortion:	< 0.1%
Signal/Noise ratio:	
Moving magnet:	< -84 dB, shorted inputs
Moving Coil	< -72 dB, shorted inputs.
Channel separation:	> 60 dB
Low frequency roll off:	from 20Hz.
Parts supplied:	
	Mains cable; 3 x dust caps; Operation manual.

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

5. 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, replacement of any parts or non-authorised repair or servicing.
- B.** Liability for damage or loss during transit from the retailer or purchaser back to Astin Trew or its authorised agent for the purposes of repair or inspection.

Carriage costs to Astin Trew or their agents shall be borne by the consignor.

2. Getting started:

Set the gain and impedance adjustment switches to the correct positions for your cartridge. Please now check that all electrical components in your audio system are switched off. Fit the three dust caps supplied into the holes. These can be prised off with a small screwdriver when changing to another setting.

Connect your AT8000 phono-amplifier to your turntable (arm / cartridge) output signal cable and attach the earthing cable from the turntable (if you have one) to the AT8000 earth connection (above the RCA sockets). Now attach output cables (RCA or XLR) from your preamplifier or integrated amplifier to the AT8000 output sockets.

Connect the IEC mains power supply cable to the AT8000 and switch the unit on. Now switch on your amplifier(s).

If you find the sound too bright or too dull it may be that the combined signal cables and cartridge loading require a different impedance setting. Try changing the impedance setting first to one side, then the other, of that recommended by the cartridge manufacturer. This cannot damage your cartridge and another setting may offer a better balanced sound in your system. Remember to switch off the AT8000, remove the power cable and turn off or set the volume control to zero on your amplification, before changing the impedance settings.

Please note:

Never cover or put anything on top of the AT8000 preamplifier, or place the AT8000 on a deep pile rug or carpet. As with all high quality audio equipment, it will perform best if

mounted on a vibration free surface.

3. Trouble shooting:

No power. Ensure the power is switched on at the mains and the switch above the IEC power input socket on the AT8000 is also switched on. The LED on the front fascia will illuminate when there is power to the unit. Check the IEC cable is live with some other electronic equipment.

No LED light when switched on. Check there is power to the AT8000. If there is mains power through the mains cable, the lack of LED light will most likely be caused by the internal mains fuse having blown. In this unlikely event, please take to your local dealer for a replacement fuse fitting. He will check that the fuse has not blown due to an electrical fault in the AT8000.

Hum through the loudspeakers. Mains hum can be caused by system earthing loops or induced hum through one or more parts of the amplification or cabling of the audio system.

It is unlikely, but the AT8000 power supply transformer could possibly induce hum through the cartridge or cartridge cabling if positioned too close. Carefully move the AT8000 away from the turntable to see if this reduces the hum.

Check that the earth cable from the turntable is connected to the earthing point on the AT8000; or, if already fitted, remove the earth cable and see if this reduces or increases hum.

Positioning the AT8000 close to any other amplifier with a big transformer might cause hum.

Note: When positioning the AT8000 (or any

Congratulations and thank you for choosing the Astin Trew AT8000 MM / MC phono-amplifier, a quality product made in the UK to the highest specifications for your listening enjoyment.

The AT8000 RIAA MC / MM phono-preamplifier has been designed for the highest quality analogue music reproduction in mind. The AT8000 uses only the best quality components in both its power supply and thoughtfully designed dual mono RIAA and amplification circuits. Even the heavy gauge copper tracks on the PCB board are gold plated for best sound quality and star earthing is used. This phono amplifier offers a very clear and musical presentation, this being central to the Astin Trew philosophy, summed up in our tag line *'true to the source'*.

AT8000 design features.

The AT8000 has easily adjustable input load and impedance switching, allowing you to select the best operating conditions for virtually all moving magnet or moving coil cartridges available today.

The AT8000 has a power on / off switch on the rear and the blue LED power indication light on the front fascia. We suggest the AT8000 only be switched off when you are disconnecting or changing any components in the audio chain. This assures a constant operating temperature in the unit and the best possible sonic results at all times.

The inputs are through gold plated RCA (phono) sockets and the signal output can be through either gold plated RCA or silver plated XLR balanced sockets. If your integrated

amplifier (such as the Astin Trew AT2000) or preamplifier has XLR balanced inputs, we would urge you to experiment to see if you prefer the sound of the balanced or unbalanced cable option in your system. They do have sonic differences and one may suit over the other in your system set up.

If the signal cable from the AT8000 to your preamplifier or integrated amplifier is over 2.5Mtrs. long, we would recommend you use a balanced XLR cable to keep the noise floor as low as possible. Your Hi-Fi Dealer will be able to suggest a suitable cable for you.

There are seven cartridge load impedance options, five for Moving Coil (MC) cartridges and two for moving magnet (MM); plus three gain settings, all accessible through access ports (with dustproof covers) in the base of the AT8000, without having to open the casework.

The electrical components used in the AT8000 are of high quality and have been carefully selected for their audible qualities – very linear low noise precision resistors and polystyrene capacitors in critical RIAA and feedback stages; audiophile grade polypropylene capacitors and over rated power supplies to the signal circuits. The circuit board uses gold plated thick copper tracks for optimum audible quality.

There is a mains fuse within the AT8000 casing, and the cartridge optimisation switches accessible from the base. If you were to look inside the case however, you would see little more than the power supply components and a solid faraday cage covering the 'delicate' amplification and RIAA stages, offering substantial RF / EMI protection.

1. Setting up.

Because the RIAA and amplification stages are dual mono (none of the I.C.'s operate 2 channels), all cartridge optimisation switching is duplicated on both left and right channels, and required to be switched identically on both channels.

You should use a small flat-headed screwdriver to move the switches. Take care not to push the switch with too much force. They move easily. If you are unsure about this operation or correct selection, please ask your Hi-Fi dealer to make the adjustments.

There are three separate six way DIP switches, two (left and right channel) for the impedance settings; and one six way switch where switches 1,2 and 3 are used for the left channel low, medium and high settings, with switches 4,5 and 6 used for the right channel low, medium and high settings. The high gain setting offers +60dB amplification.

Make sure that all corresponding switches are always set in the same position:

Low output = switches 1 and 4
Medium output = switches 2 and 5
High output = switches 3 and 6

Select the gain option according to the desired output level: For MM cartridges: **Low output** setting is normally correct; high output MC cartridges normally require: **High output** setting.

Make sure one gain switch per channel is always set to "on". When all switches are in the "off" position, the phono preamplifier will

make a buzzing noise, which isn't fatal for the electronics but very unpleasant to hear!

Check your cartridge impedance requirements. Set the left and right 6 way switching to suit:

Moving magnet (MM) cartridge options.

Load impedance, 56kOhm/150pf. Set all switches to the **off** position.

Load impedance, 56kOhm/300pf. Switch **6** on for additional capacitive loading.

Moving coil (MC) cartridge options.

Load impedance settings and switch numbers (for left and right channel switches):

1000hm Switch 1 on
2200hm Switch 2 on
4700hm Switch 3 on
1kOhm Switch 4 on
20kOhm Switch 5 on

IMPORTANT.

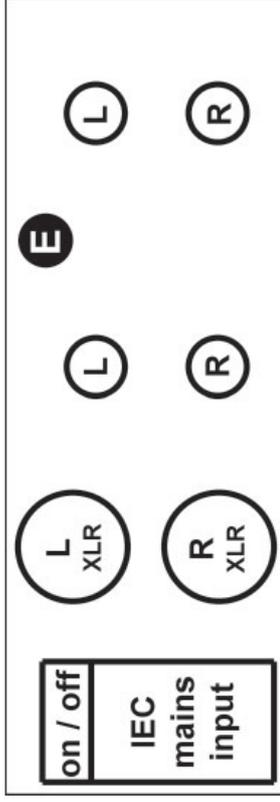
Before removing the plastic dust caps from the access ports in the base of the casing (for cartridge optimisation adjustment) you must first...**disconnect the AT8000 from the power supply cable and all signal cables.**

Switching whilst the unit is mains powered or connected by signal cables could result in damage to the AT8000, or to your other equipment.

ALSO IMPORTANT.

To prevent any possibility of damage to your loudspeakers always ensure your power amplifier is switched off or at zero volume when you are changing signal interconnect cables to or from the AT8000 or turning on the AT8000.

EARTH



OUTPUTS

INPUT

Impedance and gain settings

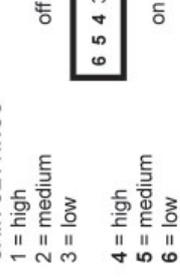
ASTINTREW® AT8000 phono amplifier

Remove covers to expose switches. Consult operating instructions.

LEFT / RIGHT CHANNEL IMPEDANCE SETTINGS



GAIN SETTINGS



UK manufacture.