

# X-A1

## INTEGRATED AMPLIFIER

### INSTRUCTIONS FOR USE

*Thank you for purchasing the Musical Fidelity X-A1 Amplifier. Used properly and carefully, it should give you many years of outstanding musical reproduction.*

*The X-A1 is the result of a continuous research and development program into the factors that affect Hi-Fi sound quality and has been designed for ultra-high definition performance.*

*Aesthetically and electronically the X-A1 matches perfectly with the X-RAY CD player and the other X-Ponent units. Together, they can form one of the finest hi-fi systems that you can own.*

*The X-A1 has been designed to be switched on continuously. The PSU should be positioned as far away from the X-A1 as possible. We suggest that the PSU is placed on the floor near the mains outlet.*

*Dust regularly with a soft duster or soft brush but be careful when using cleaning or polishing agents - they may harm the surface finish.*

*If you have any questions about anything in your audio system, please consult your dealer who is there to help and advise you.*

## **IMPORTANT!**


This unit is supplied in the UK with a mains lead fitted with a moulded 13 amp plug. If, for any reason, you need to cut off this plug, please observe the following safety precautions. Please dispose of the cut-off plug safely. It ***must not*** be plugged into a mains power supply.

The wires in the mains lead supplied with this appliance are coloured in accordance with the following code:

Green and yellow.....Earth  
Blue.....Neutral  
Brown.....Live

### **WARNING - This appliance must be earthed**

As the colours of the wires of the mains lead of this appliance may not correspond with the coloured markings identifying the terminals in your plug, proceed as follows:

- The wire which is coloured green-and-yellow must be connected to the terminal in the plug which is marked with the letter E or coloured green or green-and-yellow, or by the earth symbol  .
- The wire which is coloured brown must be connected to the terminal which is marked with the letter L or coloured red.
- The wire which is coloured blue must be connected to the terminal which is marked with the letter N or coloured black.
- If connecting to a BS1363 plug, a 10 amp fuse must be used.

### **WARNING - Speaker Terminals**

In order to comply with BSEN60-065 safety regulations, the 4mm. banana plug holes have been fitted with plastic blanking pieces. Removal of these will invalidate any safety approval of this unit.

### **WARNING - Radio Frequency Interference (RFI)**

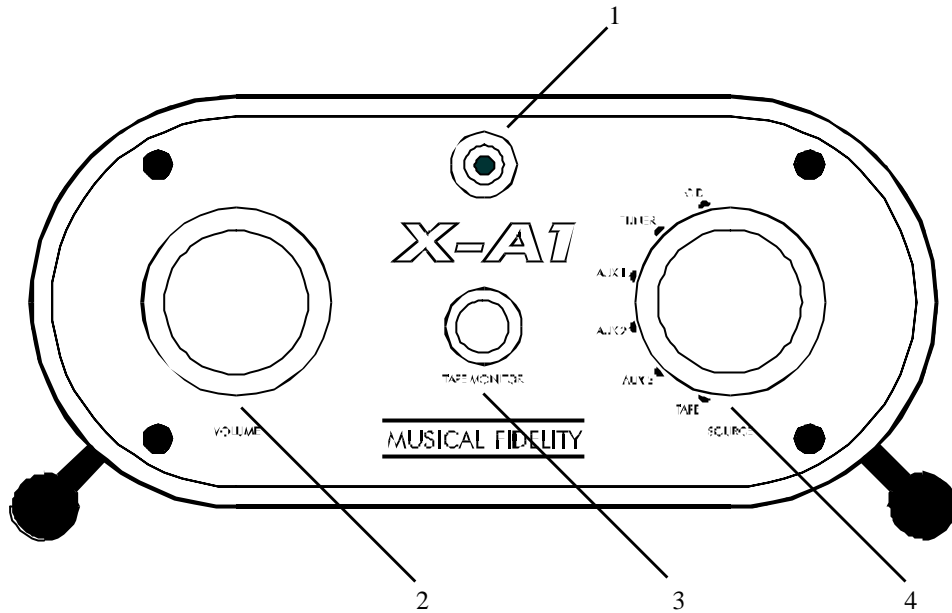
This hi-fi product has been tested to ensure that its operation will not be adversely affected by normal background levels of RFI. It is possible that if this product is subjected to abnormally high levels of RFI the unit may be susceptible and not perform as expected. In the unlikely event of this happening on a regular basis, please contact Musical Fidelity's service department.

The unit has also been tested to ensure that it does not radiate excessive levels of RFI that could affect other pieces of electronic or electrical equipment.

The electronics in modern hi-fi equipment is complex and hence may be damaged by lightning. It is possible that during electrical storms the operation of some equipment may be adversely affected. For complete protection of your hi-fi system during such storms, mains plugs and aerial leads should be disconnected.

Always ensure that when disconnecting and reconnecting your hi-fi equipment the mains supply is switched off.

# CONNECTIONS AND FACILITIES

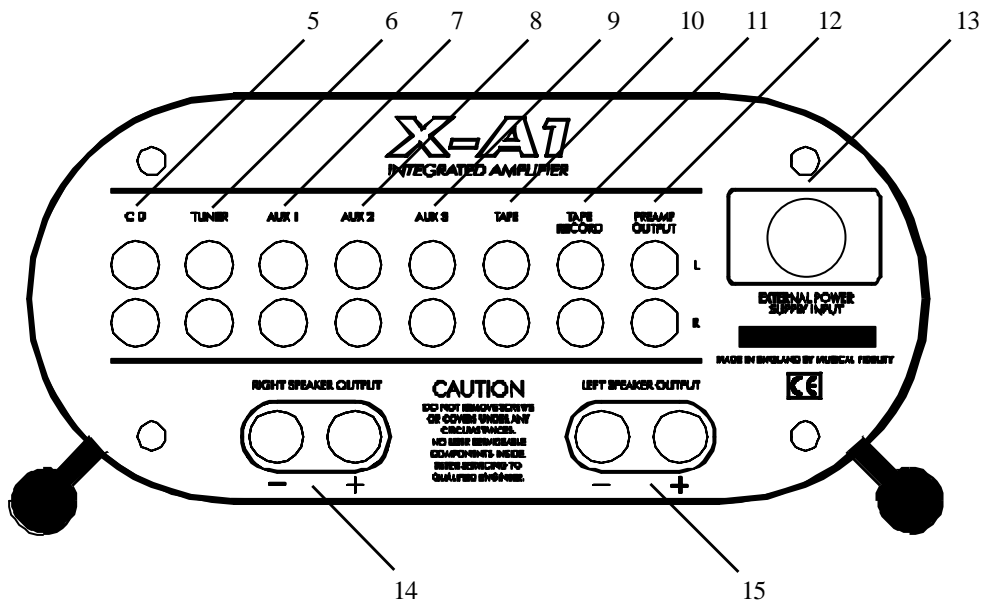


## FRONT PANEL

- 1 Power on indicator LED
- 2 Volume control
- 3 Tape monitor button
- 4 Source selector switch

## BACK PANEL

- 5 CD input
- 6 Tuner input
- 7 Aux 1 input
- 8 Aux 2 input
- 9 Aux 3 input
- 10 Tape input
- 11 Tape record output
- 12 Preamp output
- 13 External PSU input
- 14 Right loudspeaker output
- 15 Left loudspeaker output



## INSTALLATION PRECAUTIONS

Your new X-A1 is designed and built to provide trouble-free performance but as with all electronic devices it is necessary to observe a few precautions. Please ensure that you have complied with them before you connect any AC power to your amplifier. Retain this guide for future reference.

- Heed all warnings on the back of the unit.**
- Place your X-A1 where there is adequate ventilation.**
- Only connect the unit to a power supply of the type marked on the back of the unit.**
- Position the power supply lead and signal interconnect leads where they are not likely to be walked on or trapped by items placed on them.**
- Do not use near water.**
- Do not place the amplifier near direct heat sources such as radiators or other equipment that produces heat.**
- Do not remove any covers or try to gain access to the inside. The warranty will be invalid if the unit has been tampered with. There are no user adjustments within. Refer all service work to an authorised Musical Fidelity agent.**
- There are fuses in the X-A1. In the unlikely event that one blows, take your X-A1 to your audio dealer. Do NOT try to replace the fuse yourself or you will invalidate the warranty.**

### BEFORE YOU SWITCH ON

You should make all connections to the X-A1 before switching on.

Follow this routine before you listen for the first time, and each time you change any connections.

- 1 Check all the inputs and outputs to the X-A1.
- 2 Then check again.
- 3 Turn the volume control to nil.
- 4 Now you can switch on the power and carefully advance the volume to the level you want and enjoy the music.

## LOUDSPEAKERS

To get a realistic soundstage and full dynamic range from your X-A1 use it with loudspeakers of a reasonable efficiency. An average rating for a loudspeaker these days is about 88dB. This should mean that for an input of 1 watt, measured at 1 metre distance, the sound output will be 88dB which is not enough to allow for an adequate dynamic range. For proper realistic dynamic range we recommend a loudspeaker efficiency of about 95dB such as the Kelly Transducers range. These are an ideal match for the X-A1 and are highly recommended.

## CONNECTIONS

**All connections should be made with the power OFF.**

The X-A1 has 6 line level inputs - CD, Tuner, Aux1, Aux2, Aux3 and Tape. All inputs are electrically identical and are suitable for use with any source component with an output voltage in the hundreds of millivolts (mV). This includes CD players, tuners, tape machines and the audio outputs of video recorders, televisions, DVD and LaserDisc players etc.

Users who wish to use a turntable should purchase one of the matching external phono stages, the X-LP or our new monobloc phono stage the X-TRACT.

## TAPE RECORDING

The X-A1 has a single tape circuit with facilities for off-tape monitoring with 3-head cassette decks.

Connection of your tape machine to the X-A1 should be as follows. The tape machine's Tape/Line outputs go to the X-A1's 'Tape' input sockets. The tape machine's Tape/Line inputs go to the X-A1's 'Tape Record' output.

To record simply select the required source with the source selector knob on the front panel. The selected source will now be sent to the 'Tape Record' output for recording by the attached tape machine.

You will also be able to hear the selected source through the loudspeakers.

Note - you can adjust the listening level with the volume control without affecting the recording level.

## OFF TAPE MONITORING

In conjunction with a 3-head cassette deck, off-tape monitoring allows the user to compare the recorded to original sound whilst a recording is made.

To do this first select the required source in the normal way and start recording. The Tape Monitor button on the front panel can now be used to switch between the source signal and the recorded signal allowing direct comparison.

Note that tape (the recorded signal) is selected when this button is in. On some 3-head cassette decks there is an additional 'tape/source' switch which will need to be in the 'tape' position for the above to work - if you are in any doubt consult your tape machine's manual.

## PREAMP OUTPUT

The X-A1 has an additional permanently active preamp output situated on the back panel. This provides extra flexibility for use in multi-room or surround-sound systems etc. or allows easy upgrading by passive bi-amping with a pair of X-A50s or X-A200s.

In this scheme (which requires bi-wirable speakers) an extra pair of X-ponent amplifiers is attached to this permanent preamp output.

The X-A1's built in power amps can then for instance drive the left and right channel tweeters whilst the X-A50s or X-A200s drive the left and right channel bass units.

Passive bi-amping in this way can give noticeable gains in clarity, imaging and bass weight. If you would like further details please contact your dealer or Musical Fidelity directly.

## **EXTERNAL POWER SUPPLY**

We recommend that the Power Supply Unit be positioned on the floor as far away from the X-A1 as possible. This ensures that there is no magnetic interaction between the X-A1 and the power supply unit thus giving best performance.

The X-A1 has been designed so that it may be left switched on indefinitely if desired.

## **WARNING - Heat**

When in use the X-A1 gives off heat from its casework.

**Never put anything on top of your X-A1.**

Always ensure that the unit has adequate ventilation.

Basic troubleshooting of an amplifier is similar to troubleshooting of any other electrical or electronic equipment. Always check the most obvious possible causes first. To give you a few ideas of what to look for, check the following:

<i><b>Problem</b></i>	<i><b>Probable Cause</b></i>	<i><b>Remedy</b></i>
<b>No power when POWER is pressed</b>	Mains plug not inserted correctly	<i>Plug in securely</i>
	PSU unit not connected to main unit	<i>Plug PSU umbilical lead into back of main unit</i>
<b>No sound</b>	Volume control is set to minimum	<i>Turn up the volume</i>
	Mute is selected	<i>Press mute button on remote control</i>
	Preamplifier not connected to Power amplifier	<i>Check phono cable connection between units</i>
	Unit has not yet come out of power-up mute	<i>Wait 10-15 seconds on power-up for unit to un-mute</i>
	Tape Monitor button is depressed	<i>Press Tape monitor button</i>
	Speakers are not connected, or are connected incorrectly	<i>Check speaker cables</i>
<b>Sound is not precise, lacking in bass and stereo image</b>	Speakers are connected out of phase	<i>Make sure that both speakers are connected correctly</i>

If none of these actions effect a cure, please contact your dealer, or an authorised Musical Fidelity service agent. Remember, never open the case of the X-A1 yourself, as this will invalidate the guarantee.

## X-A1 INTEGRATED AMPLIFIER

Power output	50 watts per channel, 8 $\Omega$ (17 dBW)
THD	< 0.007% at 1kHz < 0.03% 20Hz - 20kHz unweighted < 0.003% 20Hz - 20kHz 'A' weighted
Frequency response	10Hz - 35kHz $\pm$ 1dB
Inputs	6 Line
Input sensitivity	300mV
S/N ratio	> -88dB unweighted > -98dB 'A' weighted
Power consumption	260 watts (maximum)
Dimensions	230 x 110 x 315mm (W x H x D) Width and height include feet
Standard accessories	X-A1 power supply unit IEC type mains lead



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