

# **A220 CLASS A INTEGRATED AMPLIFIER**

## ***INSTRUCTIONS FOR USE***

*Thank you for purchasing the Musical Fidelity A220 Class A Integrated Amplifier. Used properly and carefully, it should give you many years of outstanding musical reproduction.*

*The A220 operates in Class A which in our experience offers the ultimate in musical accuracy and pleasure. The A220 is based on ideas and principles developed in the legendary A1000 Class A Integrated.*

*Aesthetically, the A220 is a perfect match for the Elektra tuner and CD players. Together, they form one of the finest hi-fi systems that you can own today.*

*Dust regularly with a soft duster or soft brush but be careful 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)**

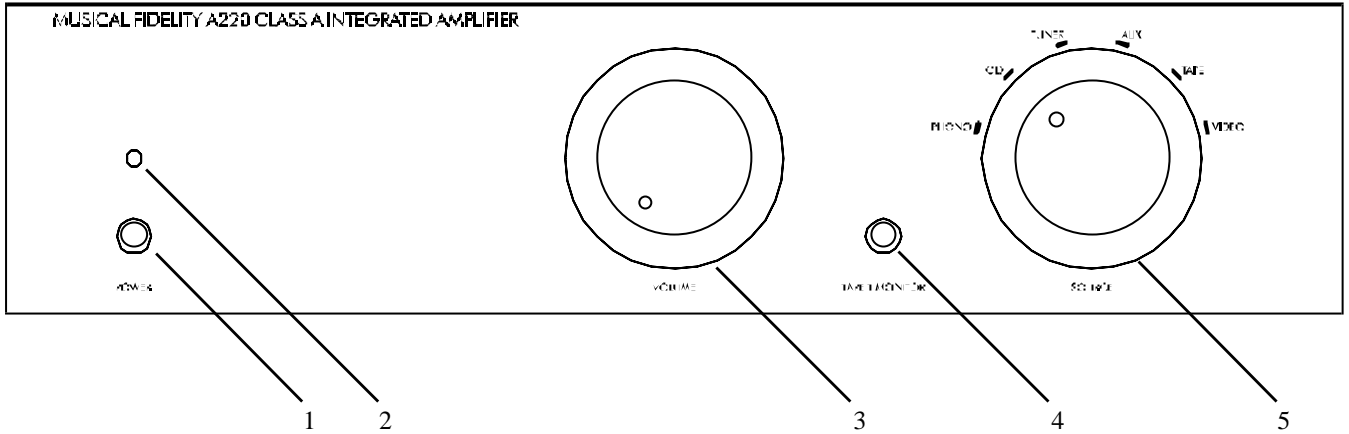
This hi-fi product has been tested to ensure that its operation will not be adversely affected by normal background levels of RFI. It is possible that if this product is subjected to abnormally high levels of RFI the unit may be susceptible and not perform as expected. In the unlikely event of this happening 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 should be removed and aerial leads disconnected.

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

# CONNECTIONS AND FACILITIES

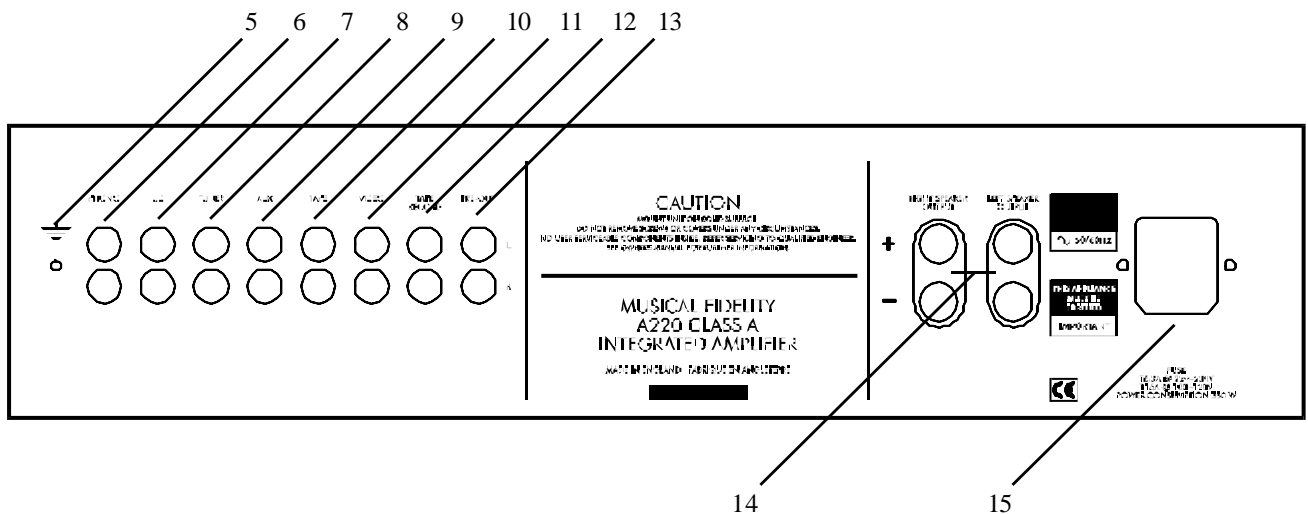


## FRONT PANEL

- 1 On/off switch
- 2 Power indicator LED
- 3 Volume control
- 4 Tape monitor button
- 5 Source selector knob

## BACK PANEL

- 5 Earth terminal
- 6 Phono (MM) Input
- 7 CD Input
- 8 Tuner Input
- 9 Aux Input
- 10 Tape Input
- 11 Video Input
- 12 Tape Record Output
- 13 Preamp Output
- 14 Outputs to loudspeakers
- 15 IEC mains inlet / fuseholder



## INSTALLATION PRECAUTIONS

Your new A220 is designed and built to provide trouble-free performance but 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 A220 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 tripped 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 A220. In the unlikely event that one blows, take your A220 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 A220 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 A220.
- 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 the best from your A220 for a realistic soundstage and full dynamic range, use it with loudspeakers of a reasonable efficiency. An average rating for a loudspeaker these days is about 87dB. This should mean that for an input of 1 watt, measured at 1 metre distance, the sound output will be 87dB. This is actually a reasonably loud sound, and daily listening will not use much more power than this. Note that changing to a pair of speakers with a rating of 90dB is equivalent to doubling the power of your amplifier. To give some comparisons, a full concert orchestra will touch 105 to 110dB for short periods during a crescendo. Concorde at take off measures over 130dB, which is the threshold of pain, and positively dangerous.

## CONNECTIONS

All connections should be made with the power OFF.

The A220 has inputs for Phono (MM), Compact Disc, Tuner, Auxiliary, Tape and Video. Each input is clearly labelled on the back panel. All inputs other than the phono stage are at the same level and are interchangeable, any source with an output level in the hundreds of millivolts (mV) can be used into these sockets. This includes CD players, tuners, and the audio outputs of video recorders, televisions and LaserDisc players etc.

## PHONO

The A220 has an MM phono input for turntables fitted with a moving magnet cartridge. Some turntable/pick-up arm combinations are fitted with an extra wire called a chassis earth, which should be connected to the green earth terminal on the back of the amplifier.

## TAPE CONNECTIONS

The A220 has a single tape circuit with facilities for off-tape monitoring with 3-head cassette decks. Connection of your tape machine to the A220 should be made as follows:-

- connect the tape machine's Tape/Line outputs to the A220's 'Tape' input sockets

- connect the tape machine's Tape/Line inputs to the A220'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' outputs 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.

## TAPE RECORDING - 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. First select the required source in the normal way and start recording. Then use the 'Tape Monitor' select button in the middle of the front panel to switch between Source (the source signal) and Tape (the recorded signal) allowing direct comparison. On some 3-head cassette decks there is an additional 'tape/source' switch on the cassette machine itself 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 A220 has a permanently active preamp output situated on the back panel. This provides extra flexibility for use in multi-room or surround-sound systems etc. This signal comes from the A220's internal preamp and its output level is thus controlled by the front panel volume control.

## **WARNING - heat**

Because the A220 is strongly biased into Class A operation it gives off heat through the slots in the lid.

**Never put anything on top of your A220.**

If you wish to stack your Hi-Fi equipment make sure that the A220 is the topmost component.

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:

<b><i>Problem</i></b>	<b><i>Probable Cause</i></b>	<b><i>Remedy</i></b>
<b>No power when POWER is pressed</b>	Mains plug not inserted correctly	<i>Plug in securely</i>
<b>Hum when listening to turntable</b>	Incorrect earthing of pickup arm cable	<i>Either connect or disconnect the pick-up arm earth wire to the earth terminal on back panel</i>
<b>No sound</b>	Volume control is set to minimum Tape/Source Selector set to Tape Speakers are not connected Wrong input is selected	<i>Turn up the volume</i>  <i>Press Tape/Source selector button</i>  <i>Check speaker cables</i>  <i>Check input selection</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 A220 yourself, as this will invalidate the guarantee.

## A220 CLASS A INTEGRATED AMPLIFIER

Power output	50 watts per channel into 8 $\Omega$ 100 watts per channel into 4 $\Omega$
THD	< 0.01% at 1kHz
Frequency response	10Hz - 20kHz $\pm$ 1dB
Inputs	MM Phono, 5 Line
Input sensitivity MM phono	3.5mV 47 k $\Omega$ .
Input sensitivity line inputs	300mV 47 k $\Omega$
S/N ratio line inputs	-77dB Unweighted -88dB A weighted
S/N ratio MM phono	-65dB Unweighted -73dB A weighted
Dimensions	440 x 120 x 360mm (W x H x D) Height includes feet, depth includes terminals
Power requirements	100/115/230V AC 50/60Hz (Factory preset)
Power consumption	350 Watts
Weight	12 kg (unpacked)



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