

X-150 SPECIFICATIONS

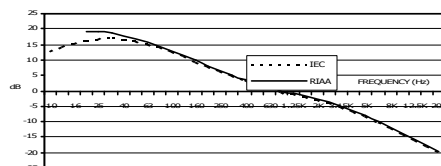
Output : Voltage RMS : 29 Volts 20Hz to 20kHz, one channel loaded
 Peak : 82 Volts
 Power : 105 Watts one channel into 8 Ohms (20dBW),
 141 Watts one channel into 4 Ohms
 Peak-to-peak output current : 50 Amps
 Damping factor : 80
 Output devices per channel : 4
 Pre-output impedance : 50 Ohms

Line inputs :

Total harmonic distortion + noise : < 0.01% 20Hz to 20kHz
 Signal / noise ratio : > 98dB 'A'-weighted
 Input sensitivity for 105Watts, 8 Ohms : 250mV
 Input impedance : 220k Ohms
 Overload margin : 26dB
 Channel separation : > 70dB typical
 Frequency response : 20Hz to 20kHz, + 0, - 0.2dB

Phono input :

Frequency response reference
 IEC RIAA - see graph . . .



Signal / noise ratio : > 94dB 'A'-weighted
 Input sensitivity : 2.5mV Moving Magnet
 Input impedance : 47k Ohms
 Overload margin : 24dB

Input facilities : 3 pairs line level RCA connectors,
 1 pair phono RCA connectors

Output facilities : 2 amplifier channels via 1 pair per channel binding posts.
 1 pair RCA audio outputs controlled by the volume,
 1 pair RCA tape record fixed line level output.

Power requirement : 100 / 115 / 230Volts AC 50 / 60Hz (factory pre-set),
 320 Watts maximum into 8 Ohms, 32 Watts idle

Dimensions : 218mm, 8.6 inches wide
 98mm, 3.8 inches high (including feet)
 377mm, 14.9 inches deep
 (including knob and rear terminals)

Weight : 6.5 kg, 14.3 lbs unit only, unboxed
 8 kg, 17.7 lbs in shipping carton

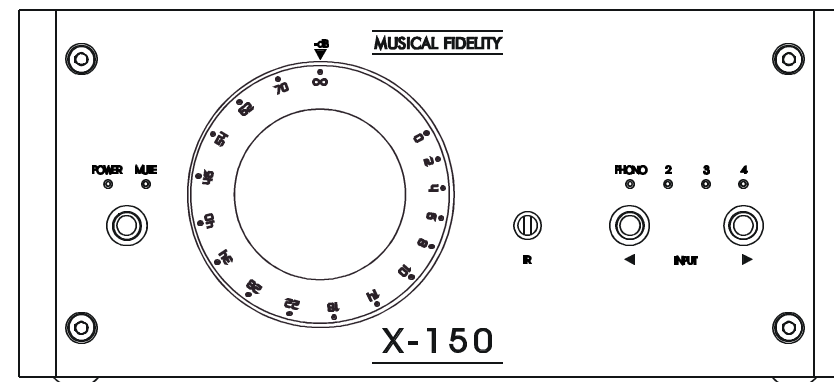
Standard accessories : IEC type mains lead (10-Amp), remote control,
 2 batteries size LR03 or AAA, manganese alkaline type



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

X-150

DUAL MONO INTEGRATED AMPLIFIER



INSTRUCTIONS FOR USE

*Thank you for purchasing the Musical Fidelity
 X-150 Integrated amplifier.*

*Used properly and carefully, it should give you many years of
 outstanding musical reproduction.*

*Aesthetically, the X-150 Integrated amplifier is a
 perfect match for the X-RAY Version 3 CD player.*

Together, they form one of the finest hi-fi systems available.

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

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

MUSICAL FIDELITY

IMPORTANT! (U.K. only)

This unit is supplied in the U.K. with a mains lead fitted with a moulded 13 amp plug. If, for any reason, you need to cut off this plug, please remove the fuse holder and dispose of the plug safely, out of reach of children. **It must not be plugged into a mains outlet.**

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 13 amp fuse must be used.

WARNING:

The X-150 is a powerful amplifier and must necessarily supply high voltages through the loudspeaker terminals. Therefore, to avoid any possibility of an electric shock DO NOT TOUCH THE SPEAKER TERMINALS when the unit is being used. To comply with BSEN60065 safety regulations, the 4mm “banana” plug holes have been fitted with plastic blanking pieces. Removal of these will invalidate any electrical safety approval of this product.

WARNING:

Any modifications to this product not expressly approved by Musical Fidelity who is the party responsible for standards compliance could void the user's authority to operate this equipment.

BEFORE SWITCHING ON

Plug the accessory IEC mains lead into the rear panel socket, then the other end into a wall outlet.

Turn the volume control on the front panel to minimum (anticlockwise).

STARTING . . .

Press the **POWER** button on the X-150 amplifier - the blue power LED on the front panel will light indicating that the unit is ready for use. However, for about six seconds no sound will be heard from your speakers, and the red mute LED will be lit, confirming initial mute action.

If PHONO input was selected when previously powered off, there will be an additional muting period of about 10 seconds before sound can be heard.

Select the required audio input source by pressing the < or > function button on the front panel one or more times.

Alternatively, direct access can be obtained by pressing buttons 1, 2, 3 or 4 on the remote control. In either case, a corresponding blue indicator LED on the front panel will light to confirm your choice.

Now adjust the volume control to obtain the preferred sound level.

TAPE RECORDING

To record, simply select the required source with the input selector button on the front panel. This source will now be routed to the X-150's **TAPE RECORD** output for recording by the external tape deck. You will still also be able to hear the selected source through the loudspeakers.

Note - adjustment of the volume control has no effect on the recording level.

All input, output and power connections should be made with the mains power switched OFF.

INPUT CONNECTIONS

The X-150 Integrated amplifier has a pair of RCA inputs on the rear panel marked **PHONO** which are intended for moving magnet (MM) pickups.

Some turntable/pickup arm combinations are fitted with an extra wire for chassis earthing. This should be connected to the earth terminal on the back panel.

The X-150 also has three “line level” inputs controlled by the internal volume setting. They all have the same input sensitivity, and are therefore suitable for use with any source component having an output of at least 300mV. The three pairs of sockets on the rear panel are marked **INPUT 2, 3 and 4** corresponding with the blue function indicator LEDs on the front panel.

Connect the left and right outputs from your audio components to each of the three sets of RCA sockets, to suit your own order of preference.

Connect the the X-150's **TAPE RE**CORD output sockets to the line input sockets of your tape deck.

OUTPUT CONNECTIONS

Connect your loudspeakers to the pairs of terminals on the back panel marked as **LEFT** and **RIGHT SPEAKER** outputs.

Note: the combined load impedance must not be less than 4 ohms.

PRE-AMPLIFIER OUTPUT

The X-150 amplifier has its pre-amplifier output available from RCA sockets on the back panel marked **PRE-OUT**, and is controlled by the volume adjustment.

This is to allow “bi-amplification” using suitable external amplifiers and crossover networks to power the speaker drive components separately, giving noticeable improvement in clarity, imaging and bass weight.

In this arrangement, typically the X-150's speaker outputs are used to drive the speaker's “tweeter” (high audio frequencies), and an external stereo amplifier drives the “woofer” (low frequencies). The X-150's **PRE OUT** RCA sockets would therefore be connected to the input of the external “woofer” amplifier in this example.

If you are in doubt about bi-amplification, please contact your dealer for advice.

INSTALLATION PRECAUTIONS and USER INFORMATION

Your new X-150 Integrated amplifier is designed and built to provide trouble-free performance, but as with all electronic devices it is necessary to observe a few precautions:

Heed all warnings shown on the back of the product.

Only connect the X-150 Integrated amplifier to a mains outlet having the same voltage as marked at the back of the unit.

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

Position the mains lead and signal interconnects where they are not likely to be walked on or trapped by items placed on them.

*Do not use near water, or place water-filled containers on the amplifier, for example, flower vases or potted plants. **If water does spill inside, immediately pull out the mains plug from the wall socket and inform your dealer, who should then check the unit before further use. Entry of liquid into the amplifier is dangerous, and may cause electric shock or fire hazard.***

Do not place the unit near heat sources such as radiators, direct sunlight or other equipment. The case of this amplifier can run at high temperatures - operate the unit in a well ventilated area, and do not touch the cabinet sides or top after periods of use at high output power.

Do not remove covers or try to gain access to the inside. There are no internal user adjustments. Refer all service work to an authorised Musical Fidelity agent.

NOTE: Unauthorised opening of the equipment will invalidate any warranty claims.

There are fuses inside the X-150 amplifier. In the unlikely event that one blows, refer the unit to your audio dealer. Do NOT try to replace the fuses yourself as this will invalidate the warranty.

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

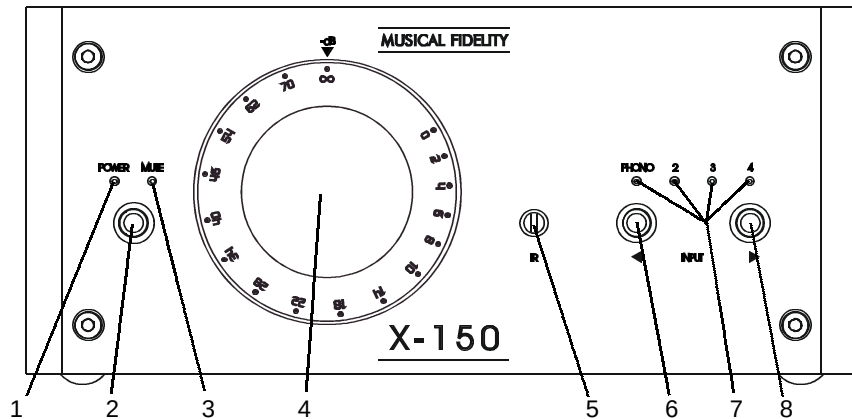
The electronics in modern hi-fi equipment is complex and may, therefore, be adversely affected or damaged by lightning. For protection of your audio system during electrical storms, remove the mains plugs and disconnect any aerial lead.

If after-sales service is required, to help your dealer identify the X-150 Integrated amplifier please quote the serial number located on the rear panel of the unit.

RADIO FREQUENCY INTERFERENCE (R.F.I.)

This product has been tested to ensure that its operation is not adversely affected by normal background levels of R.F.I., and that it does not itself generate excessive amounts of interference. However, if a problem persists, please contact your Musical Fidelity agent.

CONNECTIONS & FACILITIES

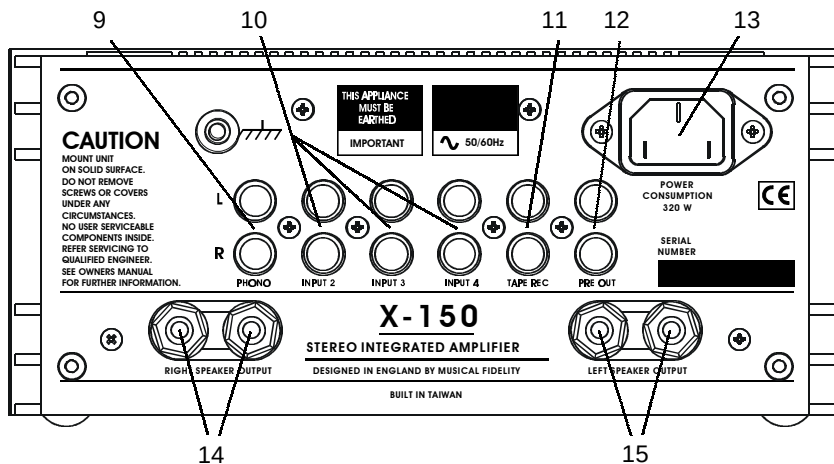


Front panel layout

- 1 POWER-on indicator LED (blue)
- 2 POWER on/off switch
- 3 Audio MUTE indicator LED (red)
- 4 Volume control
- 5 Infra Red Receiver for remote control
- 6 Input select button - up
- 7 Input indicator LEDs (blue)
- 8 Input select button - down

Back panel layout

- 9 PHONO input sockets (input 1)
- 10 Line level INPUT sockets, 2 to 4
- 11 TAPE REcOrd output sockets
- 12 PRE-amplifier OUTput sockets
- 13 IEC mains power inlet
- 14 RIGHT SPEAKER OUTPUT terminals
- 15 LEFT SPEAKER OUTPUT terminals



REMOTE CONTROL

REMOTE CONTROL

Buttons on the remote control with blue-grey surround enable main functions of the amplifier to be operated from a convenient distance. Remaining buttons on this universal handset are for use with other Musical Fidelity products, and have no effect on the X-150 Integrated amplifier.

As the remote control uses an invisible infra-red light beam, the transmitter must be pointed directly towards the receiver window on the front of the amplifier, without visual obstruction between them.

Pressing button numbers 1, 2, 3 or 4 selects a corresponding amplifier input.

Pressing the **MUTE** button mutes the **SPEAKER** output and **PRE-OUT** sockets, but has no effect on the **TAPE OUT** sockets for recording. To show that the amplifier is muted, the red LED on the front panel lights. Press the **MUTE** button again to cancel mute function, and the red LED will go out.

Pressing the volume-up or -down buttons on the remote handset will advance the motorised volume control in the required direction. This action also cancels the mute function.

If the range of the remote control greatly decreases, replace the batteries with new ones. Do not mix old and new batteries - two are required, size LR03 or AAA, manganese alkaline type. Do not dispose of used batteries in a fire.

