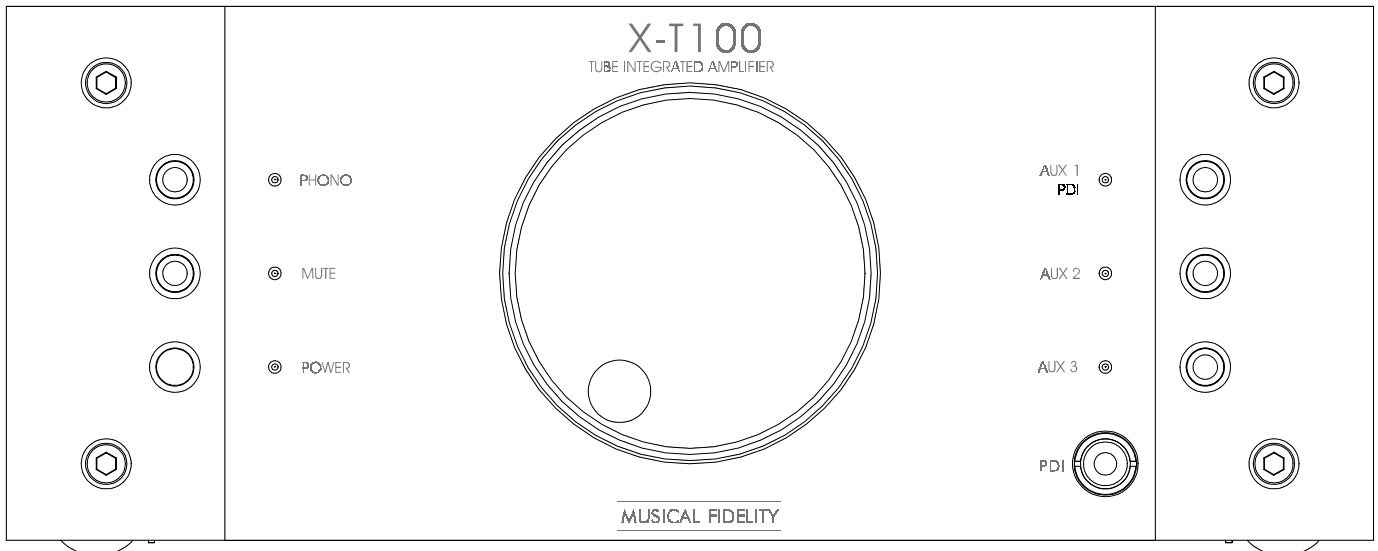


X-T100

X-^{V8} SERIES TUBE INPUT INTEGRATED AMPLIFIER



INSTRUCTIONS FOR USE

Thank you for purchasing the Musical Fidelity X-T100

This integrated amplifier is complimented with a top quality 6922 tube line level preamplifier stage and power amplifiers capable of driving over 50W per channel.

The XT100 is a perfect answer to most high-end amplification requirements in a small, beautifully engineered package.

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

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 your audio system,
Please consult your dealer who is there to help and advise.*

MUSICAL FIDELITY

PAGE		
3	General advice	- Installation precautions - User information
4	Item disposal information	- EU disposal information
5	Installation	- Introduction - Installation - Audio connection - Cleaning
6	Facilities and connections	- Illustrations - front and rear panels
7	Remote control	- Operation and illustration
8	Amplifier operation	- Phono, AUX1, AUX2, AUX3, recording
9	Amplifier problems?	- Basic Amplifier fault finding
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11	Manual history	

INSTALLATION PRECAUTIONS and USER INFORMATION

Your new X-T100 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.

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 X-T100, for example, a flower vase 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 X-T100 is dangerous, and may cause electric shock or fire hazard.**

Do not place the unit near direct heat sources such as radiators, direct sunlight or other equipment.

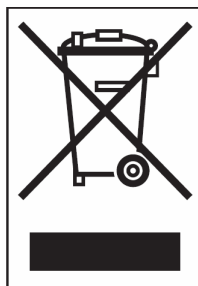
Do not remove any covers or try to gain access to the inside. There are no internal adjustments or fuses you can replace yourself. Refer all service work to an authorised Musical Fidelity agent.

Note: Unauthorised opening of the equipment will invalidate any warranty claim.

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-T100 please quote the serial number located on the rear panel of the unit.



DISPOSAL

The crossed out wheeled bin label that appears on the back panel of the product indicates that the product must not be disposed of as normal household waste. To prevent possible harm to the environment please separate the product from other waste to ensure that it can be recycled in an environmentally safe manner. Please contact your local government office or your retailer for available collection facilities.



DISPOSITION

La poubelle sur roulettes barrées X, qui apparaît en logo sur le panneau arrière du produit, indique que celui-ci ne doit pas être traité comme un déchet domestique commun. Afin de protéger l'environnement, ce produit électronique devra être géré séparément et donc recyclé selon les nouvelles normes Européennes Rohs concernant les déchets d'appareils électroniques. Prière de contacter les services concernés gouvernementaux ou votre point de vente pour l'élimination et l'enlèvement de déchets électroniques équipés de composants électroniques.



DISPOSAL

La etiqueta cruzada hacia fuera del compartimiento que aparece en el panel trasero del producto indica que el producto no se debe reciclar como basura normal de la casa. Para prevenir daños posible al ambiente separe por favor el producto de otras basura para asegurarse de que puede ser reciclada de una manera ambientalmente segura. Entre en contacto por favor a su oficina gubernamental local o a su minorista para las instalaciones disponibles de la colección.



RIFIUTI

L'etichetta del cassonetto barrato riportato sul retro dell'apparecchio indica che il prodotto non deve essere smaltito tramite la procedura normale di smaltimento dei rifiuti domestici. Per evitare eventuali danni all'ambiente, separare questo prodotto da altri rifiuti domestici in modo che possa venire riciclato in base alle procedure di rispetto ambientale. Per maggiori dettagli sulle aree di raccolta disponibili, contattate l'ufficio govenativo locale od il rivenditore del prodotto.



FACHGERECHTE ENTSORGUNG:

Das auf der Geräterückseite angebrachte Label deutet darauf hin, dass das Produkt nicht mit konventionellem Hauskehricht entsorgt werden darf. Um Schäden und Verschmutzungen an Umwelt und Mensch zu vermeiden, muss das Produkt fachgerecht entsorgt und von anderem Abfall getrennt werden. Wenden Sie sich bei Fragen hierzu an Ihren Fachhändler oder an eine öffentliche Informationsstelle.



AFVAL

Het label op de achterzijde van dit apparaat, een afvalbak op wielen met een kruis doorgehaald, geeft aan dat dit apparaat niet samen met gewoon huishoudafval mag worden weggegooid. Om mogelijke schade aan onze leefomgeving te voorkomen dient dit apparaat, gescheiden van gewoon huishoudelijk afval, te worden afgevoerd zodat het op een milieuvriendelijke manier kan worden gerecycled. Neem voor beschikbare inzamelplaatsen contact op met uw gemeentelijke reinigingsdienst of met uw elektronica leverancier.



HÄVITTÄMINEN

Yliuksattua jäteastiaa kuvaava tarra tuotteen takalevyssä kertoo, että tuotetta ei saa käsitellä normaalina talousjätteenä. Ympäristön suojelemiseksi on tuote pidettävä erillään muusta jätteestä ja se on kierrätettävä ekologisesti kestävällä tavalla. Ota yhteyttä laitteen myyjään tai Pirkanmaan Ympäristökeskukseen lähimmän kierrätyskeskuksen löytämiseksi.



AFSKAFNING

Logoet med en skraldespand med kryds over på bagsiden af apparatet indikerer at dette produkt ikke må kasseres som normal husholdningsaffald. For at forebygge mulig skade på miljøet, bedes De separere dette produkt fra andet affald, og sikre at det bliver genbrugt på en miljørigtig måde. Kontakt venligst de lokale myndigheder eller din forhandler for oplysning om nærmeste tilgængelige opsamlingssted for elektronikaffald.



ΔΙΑΔΙΚΑΣΙΑ ΑΠΟΡΡΙΨΗΣ

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ΑΠΟΡΡΙΜΑΤΑ ΩΣΤΕ ΝΑ ΕΞΑΣΦΑΛΙΣΘΕΙ Η ΑΝΑΚΥΚΛΩΣΗ ΤΟΥ ΜΕ ΤΟΝ ΠΡΕΠΟΝΤΑ ΤΡΟΠΟ.

ΠΑΡΑΚΑΛΟΥΜΕ ΝΑ ΕΠΙΚΟΙΝΩΝΗΣΕΤΕ ΜΕ ΤΗΝ ΤΟΠΙΚΗ ΥΠΗΡΕΣΙΑ ΑΝΑΚΥΚΛΩΣΗΣ Η ΜΕ ΤΟ ΚΑΤΑΣΤΗΜΑ ΑΓΟΡΑΣ ΓΙΑ ΠΕΡΙΣΣΟΤΕΡΕΣ ΛΕΠΤΟΜΕΡΕΙΕΣ.

INTRODUCTION

Congratulations on the purchase of your new X-T100 integrated amplifier.

The X-T100 is a compact integrated amplifier which encloses the best elements out of our separates into one convenient box. Its case design complements the X-^{V8} series components which include a DAB/FM tuner and CD player all in the same convenient size.

The preamplifier sections are our finely tuned and tweaked tube input line level preamplifier for smooth tube sound coupled with low noise and virtually no distortion. This also includes our top quality low noise phono stage which caters for MM cartridge users.

The power amplifier consists of two amplifier modules with generously rated supplies for the absolute best in separation and imaging. Rated for 50W nominal, they are enough to drive most loudspeakers with ease, thanks to the high current capacity of the output stage. Low distortion and very quiet they will deliver all music types exactly as the artist originally intended.

The resultant performance achieved by this unit is among the best in the world. It has excellent signal to noise ratio, low distortion, wide bandwidth, great dynamic range, extraordinary resolution and fine detail.

UPGRADE PATH

Early in 2007 two interesting new X-^{V8} series products are coming.

- The TRIPLE-X170 PSU is an upgrade Power Supply Unit. It increases the power of your X-T100 to 85+85 wpc and improves its peak current. The TRIPLE-X170 PSU will power the X-T100, X-RAY^{V8} and X-PLORA^{V8} simultaneously. Any product connected to it will sound better.

- The X-DAC^{V8} is a super-performance Digital to Analogue Converter with a tube output. Its performance is verging on state-of-the-art and sounds extraordinary. The X-DAC^{V8} is self-powered and also has power supply outlets for the X-RAY^{V8} and X-PLORA^{V8}. When the X-RAY^{V8} is paired with the X-DAC^{V8}, what you have is a mini KW25 system (the KW25 Transport/DAC received incredible reviews which recon it's probably the best CD player ever).

INSTALLATION

Position the X-T100 on a stable, horizontal surface where there is no risk of it being knocked, or subjected to vibration such as from loudspeakers.

INPUT CONNECTIONS

Phono:

The X-T100 has a pair of RCA type phono input sockets intended for use with moving magnet (MM) or moving coil (MC) pickups. Some turntable/pickup arm combinations are fitted with an extra wire for chassis earth. This should be connected to the earth terminal on the back panel.

Line level inputs:

The unit also has three stereo pairs of RCA "line level" input sockets controlled by the internal volume setting.

They have the same input sensitivity, and are suitable for use with any source component having a line output of about 200-400mV nominal. The three pairs of sockets on the rear panel are marked **AUX1**, **AUX2**, **AUX3**, corresponding with function selector buttons on the front panel. The **AUX1** input sockets on the back share the same input as the PDI input jack at the front.

Do not connect devices to both the **AUX1** inputs and PDI simultaneously. Please see note P.8

OUTPUT CONNECTIONS

Speakers: Connect your loudspeakers to the terminals on the back panel marked as **LEFT** and **RIGHT SPEAKER** outputs. Make sure both speakers are connected with the same polarity.

PRE-: The X-T100 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. Typically the X-T100 speaker outputs may be used to drive the speaker's "tweeter" (high audio frequencies), and an external higher power stereo amplifier(s) could drive the "woofer" (low frequencies).

TAPE: Tape outputs of nominal line level and are constant volume for recording to tape, CD-R/RW, or any other recordable format. The tape deck's line inputs are connected to the units' **TAPE OUT** sockets to record the material being listened to. The line outs from the tape deck should be connected to an unused **AUX** input on the XT-100.

POWER CONNECTION

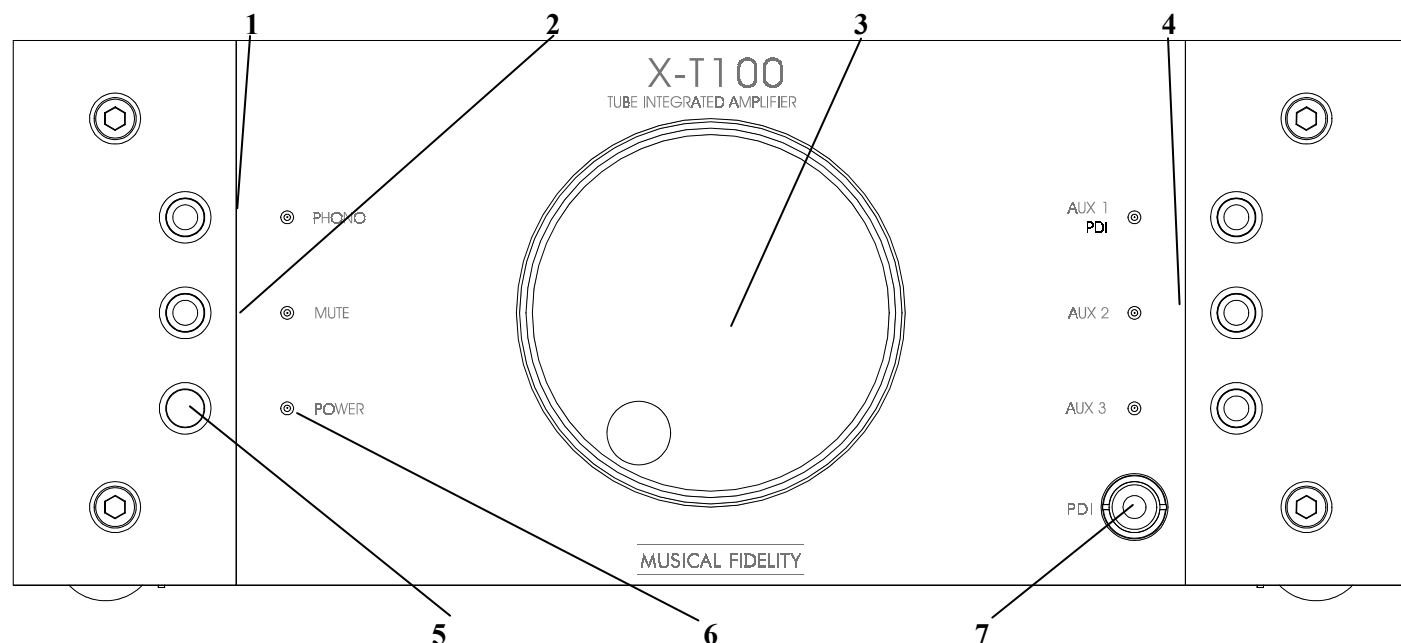
The power lead should be connected to a **Musical Fidelity** power supply unit designed for this product, such as the **TRIPLE-X** (supplied with the XT-100). The connector from this amplifier mates with the 6-way socket labelled **X-T100** on the rear of the power supply unit. The connector should fit comfortably with a small click when properly seated. **Do not force the connector.**

CLEANING

Before cleaning the unit, switch off power at the mains switch and remove the mains plug from the wall socket.

Clean the cabinet and remote control unit using a moist cloth. We do not advise using solvents, white spirit or thinners as they could damage the surface finish.

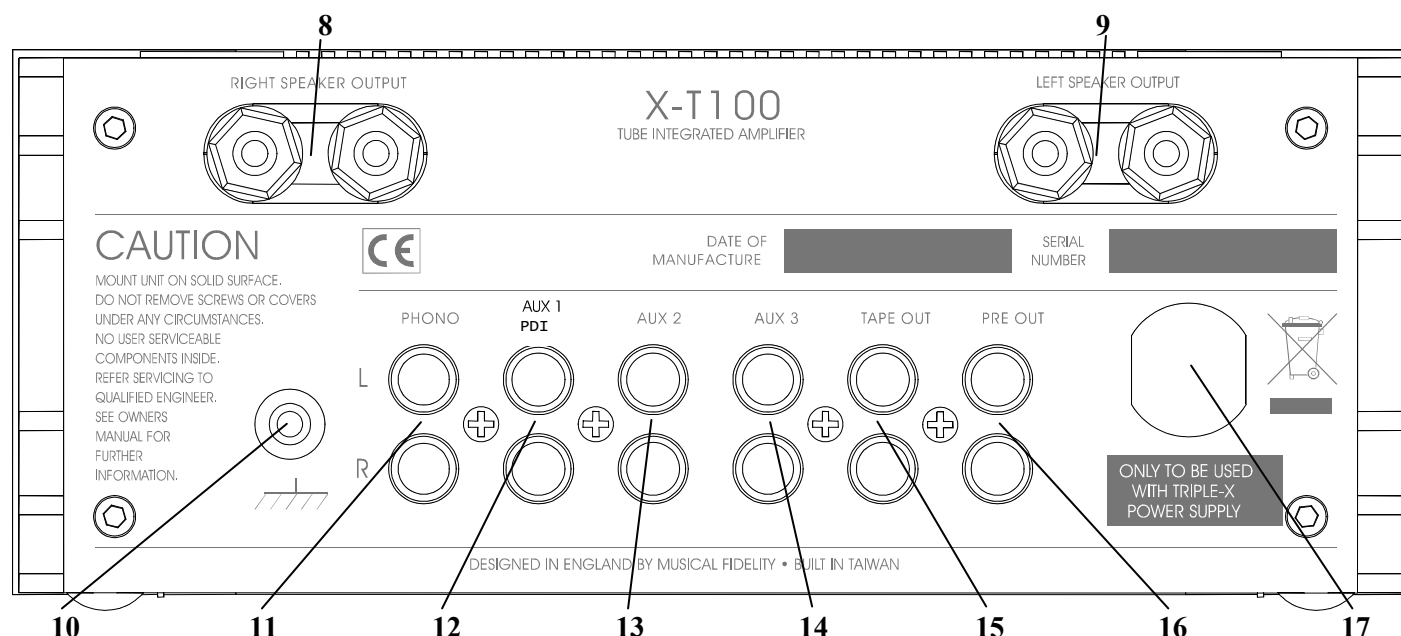
FRONT PANEL



1. **PHONO** Input selector button and indicator LED
2. **MUTE** Button and indicator LED
3. **VOLUME** knob
4. **AUX1/PDI, 2, 3** Line input selectors and indicator LEDs

5. **INFRA RED** receiver lens
6. **POWER** Indicator LED
7. **PDI** (Portable Device Input), 3.5mm jack connector

REAR PANEL



8. **LOUDSPEAKER** Outputs Right hand side
9. **LOUDSPEAKER** Outputs Left hand side
10. **PHONO** Ground 4mm post
11. **PHONO** Inputs
12. **AUX 1** Inputs

13. **AUX 2** Inputs
14. **AUX 3** Inputs
15. **TAPE** Outputs
16. **PREAMP** Outputs
17. **POWER** Lead (Plugs into TRIPLE-X power supply)

The remote control shown below enables functions to be operated from a convenient distance. Equivalent buttons on the remote control have the same functions as those on the front panel of the unit. Other functions are only available by remote control.

As the handset uses an invisible infra-red light beam, the front edge must be pointed directly towards the receiver window at the front of the player, without visual obstruction between them.

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 AAA, LR03 or SUM-4.

Please dispose of used batteries in accordance to local regulations.

Tuner Buttons:

INFO – To access broadcast information

MENU – to choose options

AUTO TUNE – finds previous/next broadcast

MONO/STEREO – Option for weaker FM stations

Amplifier Buttons:

PHONO – Selects Phono input

AUX 1 – Select Source AUX1 or PDI

AUX 2 – Select source AUX 2

AUX 3 – Select source AUX 3

CD Buttons:

TIME – Displays Track Time/Time remaining

0-9 Buttons – Used to select track numbers

CHECK – Check pre programmed tracks

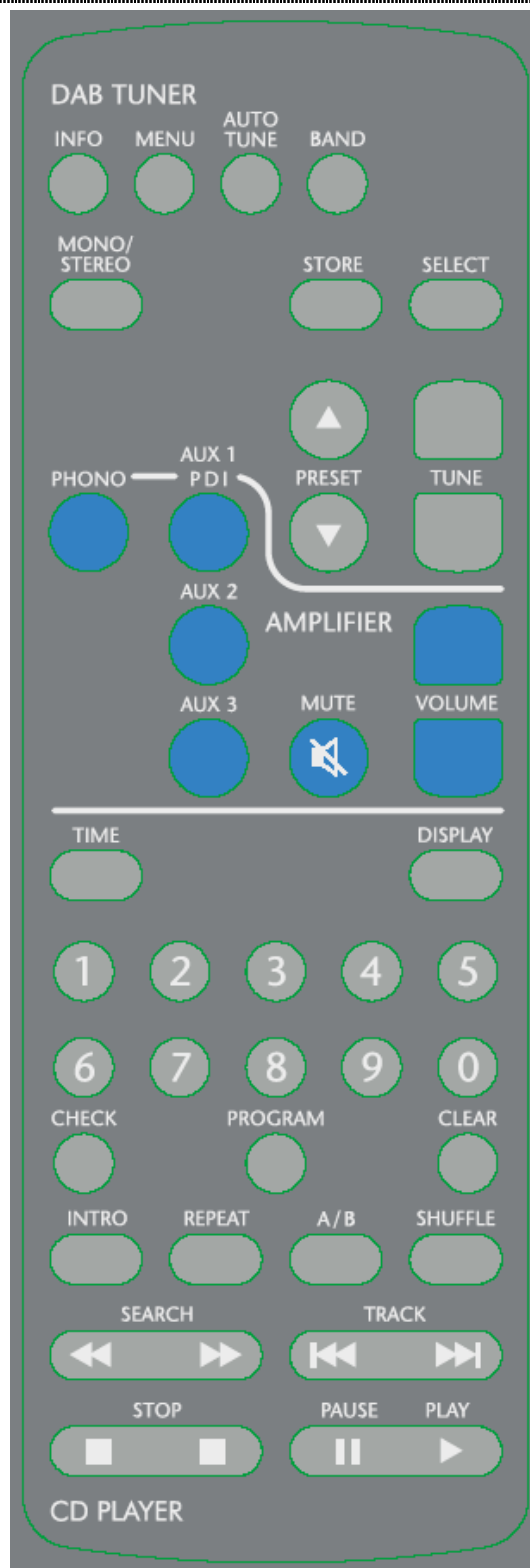
PROGRAM – Programs selection and order of tracks

INTRO – Player plays first 10 seconds of each track

REPEAT – Repeats whole disk or selected tracks

SEARCH – Fast forward/backward through track

STOP – Stop playing/Eject CD



BAND – Selects DAB or FM

STORE – Stores station as preset

SELECT – To choose preset/DAB station

PRESET ↑ ↓ selects preset

TUNE ↑ ↓ steps up/down band

MUTE – Mutes unit until pressed again

VOLUME UP/DOWN – sets volume level

DISPLAY – Dims display

CLEAR – Clears selected pre programmed track

A/B Sets repeat start/end to repeat section of track

SHUFFLE – Plays back tracks in random order

TRACK – Next/previous track

PAUSE/PLAY – Stop/start CD playback

STARTING

Once all connections are made, switch on the unit, using the POWER button on the power supply front panel, a blue **POWER** LED will light on the power supply and the **X-T100** indicating that the units are on. Speaker outputs are muted, for about fifteen seconds, and the red mute LED will be lit, so no sound will be heard from your speakers. This is to allow time for the valves to warm up and settle. Once the fifteen seconds is up, the mute LED is extinguished and sound output is now enabled.

VOLUME

The volume control knob, in the centre of the front panel, should be adjusted for normal listening levels.

PHONO INPUT

To use the **PHONO** input, connect your turntable cartridge outputs to the **PHONO** input sockets (see p.5). Pressing the **PHONO** button selects the corresponding input. The unit is designed to accept Moving Magnet (MM) cartridges of about 2.5-5mV nominal output

MUTE

Pressing the **MUTE** button disables the output to the speakers. The red **MUTE** LED lights to indicate this state. Press the button again to cancel and restore output.

RECORDING

To record, to any format of your choice, simply select the required source with the input selector button on the front panel or remote control. This source will now be routed to the X-T100 **TAPE OUT** for recording by tape deck, cd recorder DAT, minidisk, or computer soundcard input. You will also be able to hear the selected source through the loudspeakers.

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

AUX 1

To use the **AUX1** input, connect your external source to the **AUX1** input. Pressing the **AUX1** button selects the corresponding input.

The **AUX 1** input is also available at the front of the unit in the form of a 3½ mm jack PDI (Portable Device Input) socket to enable personal/portable devices such as MP3 players and minidisk walkman to be played thorough the unit.

TIP: For best listening experience using your portable device, we recommend you set its outputs for “line level” use, as opposed to “headphones”, if the option is available. Please refer to your portable device’s manual, for more details

Note: Please note the sockets PDI at the front and AUX1 at the back are electrically connected together:

If the front PDI socket is used, please ensure you disconnect any devices and wires connected to the rear AUX1 connectors.

If the rear AUX1 connectors are used, please ensure you disconnect any devices and wires connected to the front PDI socket

Failure to do so could result in equipment failure.

AUX 2

To use the **AUX2** input, connect your external source to the **AUX2** input. Pressing the **AUX2** button selects the corresponding input.

AUX 3

To use the **AUX3** input, connect your external source to the **AUX3** input. Pressing the **AUX3** button selects the corresponding input.

Basic problem-solving with an amplifier is similar to troubleshooting other electrical or electronic equipment. Always check the most obvious possible causes first, such as the following examples:

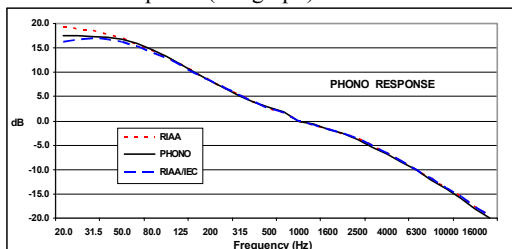
Problem	Probable Cause	Remedy
No power / lights	Power plug is not inserted into psu correctly	Plug in securely fully into power supply's X-T100 rear socket
No sound	Mute function is still active Wrong connections between input sources and the unit Speakers not connected, or incorrectly wired Devices connected to both AUX2 rear connector and PDI front panel input simultaneously	Press the MUTE button on the remote control to cancel Check audio input lead connections Check speaker cables Remove one of the devices
Sound is not precise, lacking in bass and stereo image	Speakers are connected out of phase, i.e., connections to one speaker (+ and -) are reversed	Ensure speakers are connected correctly
Hum	Audio connector plug not fully pushed in	Insert plug securely
Remote control does not work	Power supply's POWER switch is set to off One or more batteries fitted the wrong way round Batteries are flat Remote control is not pointed directly towards the front panel of the amplifier	Set switch to on Insert batteries correctly Change batteries for a new set Ensure there is no obstruction between the remote control and amplifier front
Remote control range has greatly reduced	Batteries are running out	Change batteries for a new set.

If none of these actions affect a cure, please contact your dealer, or an authorised Musical Fidelity service agent. Remember; never open the case of the X-T100 yourself, as this will invalidate the guarantee.

Output: Power 70 Watts per channel into 8 Ohms (18dBW),
100 Watts per channel into 4 Ohms
Voltage, RMS >20 Volts 20Hz to 20 kHz
Voltage, Peak-to-peak 67 Volts
Current peak-to-peak 30 Amps
Damping factor 80
Output devices per channel 2
Pre-out impedance 47 Ohms

Line inputs: THD + noise, 20Hz to 20 kHz < 0.01%
Signal / noise ratio > 98dB 'A'-weighted
Input sensitivity for 70 Watts 172mV
Input impedance 220k Ohms
Overload margin 26dB
Channel separation > 80dB typical
Frequency response 20Hz to 20 kHz, +0, -0.2dB

Phono input: RIAA/IEC combined response (see graph)



Signal / noise ratio > 96dB 'A'-weighted
Input sensitivity 2.5mV (moving magnet)
Input impedance 47k Ohms
Overload margin 24dB

Connections:

Line level inputs: 3 pairs line level RCA connectors,
1 front panel 3.5mm jack socket (sharing AUX1 input)
1 pair phono (MM) RCA connectors,
Line level outputs: 1 pair RCA [preamp] controlled by the volume,
1 pair RCA [tape record] fixed line level output.
Speaker outputs: 1 pair 4mm banana plug/binding posts per channel.
Power requirement: For use only with suitable Musical Fidelity power supply.
(A Triple-X unit is included)

Weight: 3.85 kg, 8.5 lbs unit only, unboxed
11 kg, 24.2 lbs in shipping carton (including triple-X PSU)

Dimensions: 219 mm, 8.6 inches wide.
88 mm, 3.5 inches high (includes feet)
360 mm, 14.2 inches deep (includes terminals).

Standard accessories: Remote control (A5, universal type),
2 batteries size LR03 or AAA, manganese alkaline type
Triple-X PSU

(See **TRIPLE-X** manual for further information on the *power supply unit*)



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

RELEASE	DATE	CHANGES
Issue 1	14 July 2006	1 st release
Issue 2	17 July 2006	Remote control and back panels updated.