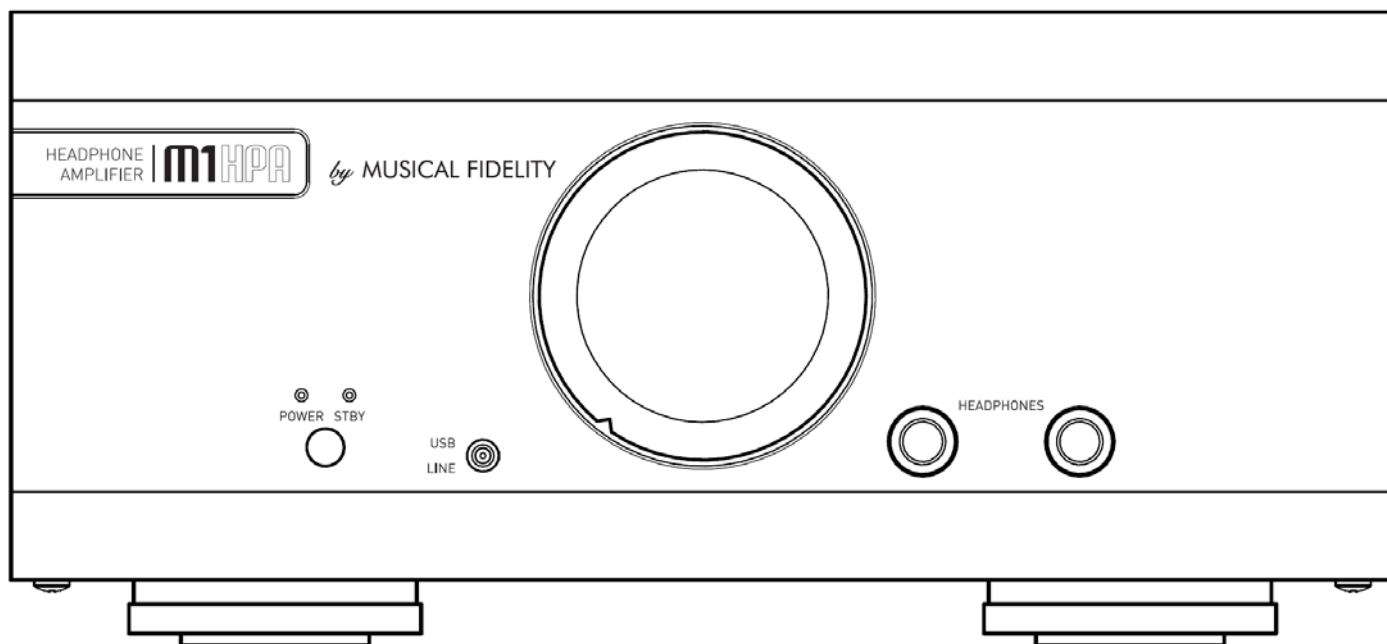


# HEADPHONE AMPLIFIER | M1HPA



## Instructions for use

*Thank you for purchasing the Musical Fidelity M1 HPA.*

*The M1 HPA consists of a pure class A circuit giving exceptional performance into virtually any impedance headphones. It features a line as well as a USB input, and a line (loop) output. It also features two headphone sockets and a set of volume-controlled outputs to enable use as a preamplifier. It is complemented with a generous power supply circuit, allowing astounding imaging, detail and transparency, to deliver all music types exactly as the artist originally intended.*

*The M1 HPA has been carefully designed to be partnered with M1 series, and also matches well with M3 and M6 series products. These combinations will yield one of the best high-fidelity systems available at any price.*

*Used 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 there are any questions about the audio system, please consult the dealer who is there to help and advise.*

<b>Section</b>		<b>Page</b>
<b>Safety Information</b>	– Mains plug (UK only), modification warning	3
<b>General advice</b>	– Installation precautions	4
<b>Disposal information</b>	– EU disposal information	5
<b>Installation</b>	– Introduction, cleaning, installation, power connections, audio connections, digital connections	6
<b>Facilities and connections</b>	– Illustrations - main unit front & rear panels	7
<b>Operation</b>	– RCA inputs – USB input	8
<b>Problems?</b>	– Basic fault finding	9
<b>Specifications</b>		10
<b>Manual history</b>		11

**IMPORTANT! (U.K. only)**

This unit is supplied in the U.K. with mains lead fitted with a moulded 13 amp plug. If, for any reason, it is necessary to remove the 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:

<b>Green and yellow</b> .....	<b>Earth</b>
<b>Blue</b> .....	<b>Neutral</b>
<b>Brown</b> .....	<b>Live</b>

**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 the 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:**

**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.**

## Installation, Precautions & User Information

This new M1 HPA 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 M1 HPA 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 M1 HPA, 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 the dealer, who should then check the unit before further use. Entry of liquid into the M1 HPA 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 user adjustments or fuses to change without qualification. 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 the audio system during electrical storms, remove the mains plugs.

If after-sales service is required, to help the dealer identify the M1 HPA 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 local government office or 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 reciclarse 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 kestäväällä 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**

ΤΟ ΣΗΜΑ ΜΕ ΤΟΝ ΔΙΑΓΕΓΡΑΜΜΕΝΟ ΤΡΟΧΗΛΑΤΟ ΚΑΔΟ ΑΠΟΡΡΙΜΑΤΩΝ ΣΤΗΝ ΠΙΣΩ ΟΨΗ ΤΟΥ ΜΗΧΑΝΗΜΑΤΟΣ

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## Introduction

Congratulations on the purchase of the new M1 HPA. This unit will give top quality performance when used as a top quality headphone amplifier, delivering the best performance possible from any source. It is also designed to allow use as a single-input (two inputs, if the USB input is included) preamplifier.

## 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. Using solvents, white spirit or thinners is not advised, as they could damage the surface finish.

## Installation

Position the M1 HPA on a stable, horizontal surface where there is no risk of it being knocked, or subjected to vibration such as from loudspeakers.

### Important note:

**In normal operation, the unit dissipates a quantity of power at all times, and it is important that it is adequately ventilated. The M1 HPA must be protected from humidity – if the unit is moved from a cold place to a warm room, leave the unit for an hour or so to allow sufficient time for the moisture to evaporate.**

*Please note: Musical Fidelity currently do not make any interconnecting cables, nor do we endorse any particular manufacturer's cables. If necessary, please refer the dealer who can advise on quality cables for any particular setup.*

## Power Connections

The M1 HPA is supplied with a standard IEC mains cable which plugs into the IEC socket at the back of the unit

## Output connections

**RCA pre-outputs:** Use good quality RCA phono audio cables (fully connected signal and ground), for optimum signal transfer.

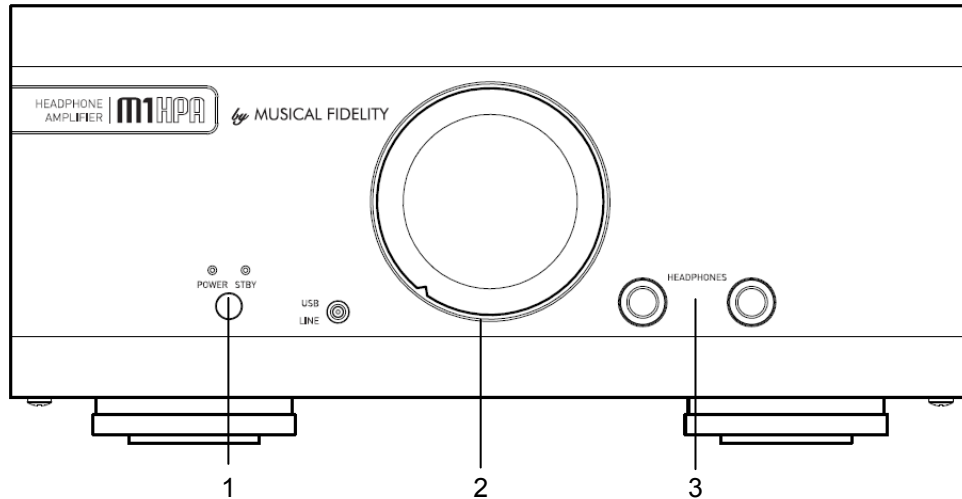
**6.25mm 1 ¼" Jack headphone outputs:** Use good quality headphones for absolute optimum sound quality. Use either Jack socket to connect a pair of headphones, or use both Jack sockets for two pairs, if required.

**Please note:** different headphone types will almost certainly have quite different output levels and possible sonic characteristic differences when directly compared. This is due to each headphone's individual design. Volume control settings may vary appreciably, depending on the headphone's sensitivity, original source material recording levels, and user listening comfort level.

## Input connections

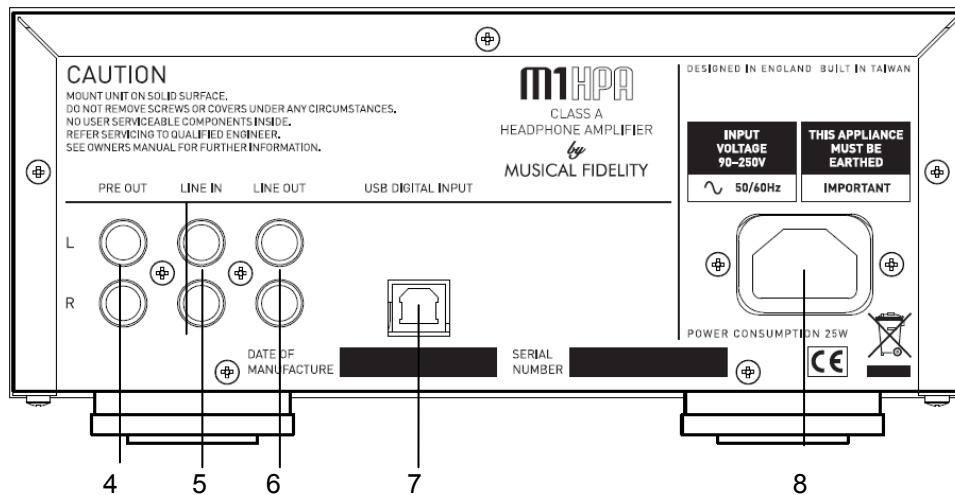
**LINE (RCA) input:** Connect line level source to LINE input socket. Use good quality RCA phono audio cables (fully connected signal and ground) for optimum signal transfer.

**USB input:** Connect computer or similar USB "host" source to USB input socket. Use a good quality USB 1.1 or 2.0 "A to B" type cable, for optimum signal transfer.



- 1 **POWER/STBY** button and LEDs
- 2 **VOLUME** control

- 3 **HEADPHONES** output 1 1/4" jack sockets



- 4 **PRE OUTPUTS** right and left
- 5 **LINE INPUTS** right and left
- 6 **LINE OUTPUTS** right and left

- 7 **USB** digital input (type "B")
- 8 **IEC MAINS INPUT**

**LINE input**

This input accepts LINE level (nominally anything between 0.03V-3V RMS) signals from any hi-fi source. It may be connected directly to the stereo outputs of a CD player, DVD, Tape, Minidisk, and TV or similar. Signals from a normal turntable with moving coil or moving magnet cartridge, (and no *internal* amplification), will need a *PHONO preamplifier* connected before the M1HPA.

Alternatively, it may be used to add headphone output to an existing integrated or pre-power amplifier setup. To do this, simply identify the LINE outputs from the integrated or preamplifier. These are used for TAPE RECORDING, and usually labeled TAPE OUT, TAPE REC or similar. Simply connect these outputs to the M1 HPA LINE IN sockets. If you had anything originally connected to the TAPE OUT or REC OUT sockets, reconnect it to the LINE OUT sockets on the M1 HPA. See **LINE output** section below.

To use the LINE input, move the input select switch on the front panel to the LINE position (down).

**USB input**

To use the USB input, move the input select switch on the front panel to the USB position (up).

Plug in one or two pairs of headphones and adjust the volume control for comfortable listening.

**LINE output**

The LINE OUT sockets pass on the LINE INPUT totally unaffected. They are in fact directly connected to the LINE INPUT RCA sockets to allow reconnection of a recording device (if the M1HPA is using the TAPE REC output of an Integrated/Pre-Amplifier).

*Note: volume control has no effect on LINE OUT levels, and USB source is not available on LINE OUT sockets*

**PRE output**

The PRE OUT sockets give an output that is affected by volume control. They are in fact directly connected to the output JACK sockets to allow connection of a power amplifier. This allows the M1HPA to be used as a preamplifier with one line, and one USB input. When used as a preamplifier, any unused headphones should be disconnected from the unit.

The USB input source may be selected for the PRE OUT sockets by selecting USB on the front panel switch.

The M1 HPA is a self contained unit. Therefore it does not mute the speakers in a system (even if using the unit as a preamplifier). If listening through headphones on a system with speakers, please turn down the speakers using the system volume control, or switch off the power amplifiers.

**It is recommended** in such a setup to switch on the power amplifiers AFTER switching on the HPA, and to switch off the power amplifiers BEFORE switching off the M1 HPA.

**Computer settings for USB**

A good quality USB A to B cable is required to connect the unit to the computer.

Plug the B (square) end into the socket in the back of the unit, and the A (rectangle) end into a free USB socket on the computer.

The computer should now detect the new hardware and install a generic driver automatically (No setup or driver disk should be required).

CD, MP3, WAV, AAC, FLAC, and all other audio file types played on any software should now play through the unit. This device has been designed to work with PC Windows 98, ME, 2000, XP, Vista and 7, as well as Apple Macintosh OS X, Snow Leopard and later.

**PC users-**

Check the computer has picked up the device and is currently using it by clicking: (most Windows versions)

- Start
- Settings
- Control panel
- Sounds and Multimedia
- Audio

Check that "USB audio device" appears under PREFERRED AUDIO DEVICE tab

A second mixer will now be available which will be the default mixer whenever the unit is plugged in. Use this mixer to select the source or adjust levels if required.

**Mac users-**

Check the computer has picked up the device and is currently using it by clicking: (MAC OS X)

- System preferences
- Hardware
- Sound

Check that "USB audio DAC" is selected under the OUTPUT tab.

If the computer's warning sounds/chimes are to be played through the unit, make sure it is selected under the

SOUND EFFECTS tab too.

Note: USB may also be selected as an output in some individual programs.

*Please note: This device is a high speed serial data processor, and by its nature, requires a very high volume of USB band width. It will benefit greatly from being the only device connected on its USB 'bus'. Sharing the same bus with other devices may cause unwanted artifacts such as dropouts or temporary loss of signal. This especially includes the use of the unit on a USB hub/splitter alongside other USB components*



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:

<b>Problem</b>	<b>Probable Cause</b>	<b>Remedy</b>
No power	Mains power supply is not fully inserted into mains socket Mains power supply lead is not fully inserted into rear socket	Plug in securely
No sound	Wrong connections between input sources and the unit	Check audio input lead connections
Sound is not precise, lacking in bass and stereo image	Headphone(s) connector plug not fully pushed in Lead fault in headphones	Check plug is inserted fully and securely Check phones on Headphone output of a different unit
Hum	Audio connector plug not fully pushed in Cable Fault Unsuitable Cable (e.g. cable grounds not connected)	Insert plug securely Check cable is connected at both ends. N.B. some esoteric cables have internal wiring intentionally disconnected/modified. For best results on all inputs analogue AND digital, please use good quality screened coax; signal and screen directly connected both ends.
No audio output, or too low level output	Incorrect or missing connections USB Driver not selected (PC or MAC)	Check connections and make sure they are secure. See P.8 <b><u>PC users</u></b> or <b><u>MAC users</u></b> section
No audio output from USB input	USB Cable not connected USB Driver not selected (PC or MAC)	Check connections and make sure they are secure. See P.8 <b><u>PC users</u></b> or <b><u>Mac users</u></b> section
Not detected when connected to USB	USB Cable faulty USB not working/enabled on computer Correct USB drivers not installed (can happen particularly with factory-preinstalled Windows operating systems)	Check and replace cable Check USB port functions with another device. Please check with the computer manufacturer. Enquire about USB driver or update.
Dropouts in sound (USB input)	Shared USB port with another device Computer busy with another application Computer low on resources	Avoid sharing the USB port with other devices, if possible. At times an application (program) may intervene, sometimes invisibly e.g. a virus scanner. When this happens, computer resources are temporarily used up, and playback may suffer. This is not a fault. Try running fewer applications if possible.

If none of these actions affect a cure, please contact the dealer, or an authorised Musical Fidelity service agent.  
**Never open the case of the X-CAN V8P, as this will invalidate the guarantee.**

**Output**

Output Power	1.1W into 32Ω
Output impedance	less than 1Ω
Output level	5.2V rms max
Frequency response	15Hz to 75kHz -3dB max.
Signal to noise	>109dB "A"- wtd
Total harmonic distortion	<0.008% 10Hz to 20kHz

**Connections**

Line level input	1 pair RCA line in left and right
Line level outputs	1 pair RCA line out left and right 1 pair RCA pre-out left and right
Digital input	1 USB type 'B' connector for computer/PDA

**Power requirement**

Mains voltages	90-250VAC 50/60Hz
Consumption	25 Watts

**Weight**

Unit only, unboxed	3.4 kg (7½ lbs)
In shipping carton & inc. accessories	4.1 kg (9 lbs)

**Dimensions**

Wide	220 mm (8⅔")
High, including feet	100 mm (4")
Deep (front to back)	300 mm (12") including terminals

**Standard accessories**

IEC type mains lead (10-Amp type)

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



<b>RELEASE</b>	<b>DATE</b>	<b>CHANGES</b>
M1HPA issue 1	April 6 <sup>th</sup> 2010	1 <sup>st</sup> issue