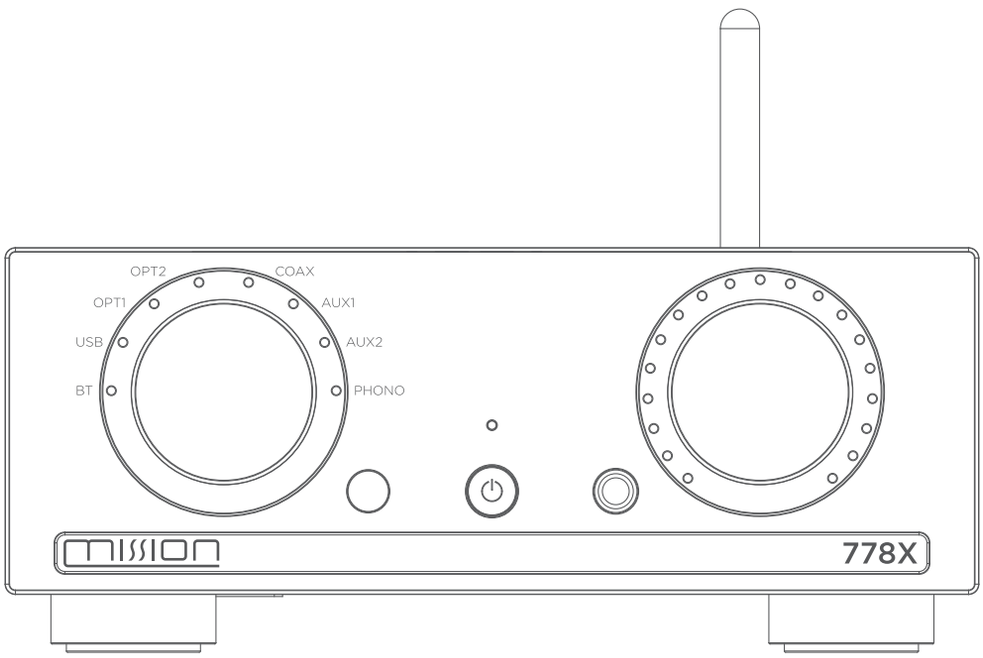
3 YEAR WARRANTY

Scan the QR code using a smart-phone device,
for product warranty registration online.

778X

MISSION



User Manual

Scan the QR code for latest user manuals and more.

Important Safety Instruction

This lightning flash with an arrowhead symbol within an equilateral triangle is intended to alert the user to the presence of non-insulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock.

Warning: To reduce the risk of electric shock, do not remove the cover (or back) as there are no user-serviceable parts inside. Refer servicing to qualified personnel.

The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance instructions in the literature accompanying the appliance.

Read these instructions.

Keep these instructions.

Heed all warnings.

Follow all instructions.

Do not use this apparatus near water.

Clean only with a dry cloth.

Do not block any ventilation openings. Install under the manufacturer's instructions.

Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.

Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding plug has two blades and a third grounding prong. The wide blade or the third prong is provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for the replacement of the obsolete outlet.

Protect the power cord from being stepped on or pinched, particularly at the plugs, convenience receptacles, and at the point where they exit from the apparatus.

Unplug this apparatus during lightning storms or when unused for long periods.

Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power supply cord or plug is damaged, liquid has been spilt or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.

CAUTION: These servicing instructions are for use by qualified service personnel only. To reduce the risk of electric shock, do not perform any servicing other than that contained in the operating instructions unless you are qualified to do so.

Do not install this equipment in a confined or built-in space such as a bookcase or similar unit, and keep well ventilated in an open space. The ventilation should not be impeded by covering the ventilation openings with items such as newspaper, tablecloths, curtains etc.

WARNING: Only use attachments/accessories specified or provided by the manufacturer (such as the exclusive supply adapter, battery etc).

WARNING: Please refer to the information on the exterior panel of the enclosure for electrical and safety information before installing or operating the apparatus.

WARNING: To reduce the risk of fire or electric shock, do not expose this apparatus to rain or moisture. The apparatus shall not be exposed to dripping or splashing and objects filled with liquids, such as vases, shall not be placed on the apparatus.

WARNING: For the terminals marked with the symbol "⚡" may be of sufficient magnitude to constitute a risk of electric shock. The external wiring connected to the terminals requires installation by an instructed person or the use of ready-made leads or cords.

Ground protection terminal. This product should be connected to a power outlet with ground protection.

Denmark: Apparatets stikprop skal tilsluttes en stikkontakt med jord, som giver forbindelse til stikproppens jord.

Finland: Laite on liitettävä suojakoskettimilla varustettuun pistorasiaan.

Norway: Apparatet må tilkoples jordet stikkontakt.

Sweden: Apparaten skall anslutas till jordat uttag.

WARNING: No naked flame sources, such as lighted candles, should be placed on the apparatus.

WARNING: Attention should be drawn to the environmental aspects of battery disposal.

WARNING: Use of the apparatus in tropical climates.

THE FUSE VALUES ARE:
220 – 240V (UK, China, etc.) T2.0AL 250V Slow Blow
100 – 120V (USA, Japan, etc.) T4.0 AL 250V Slow Blow

FCC Statement

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications.

However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

• Reorient or relocate the receiving antenna.

• Increase the separation between the equipment and receiver.

• Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

• Consult the dealer or an experienced radio/TV technician for help.

Caution: Any changes or modifications to this device not explicitly approved by the manufacturer could void your authority to operate this equipment. This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:

1) This device may not cause harmful interference, and

2) This device must accept any interference received, including in terference that may cause undesired operation.

ISED Statement

This equipment complies with FCC/IC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.

-French:"
Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée
aux deux conditions suivantes :
(1)l'appareil nedoit pas produire de brouillage, et
(2)l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement."

Le présent appareil est conforme Après examen de ce matériel aux conformité ou aux limites d'intensité de champ RF, les utilisateurs peuvent sur
l'exposition aux radiofréquences et compliance d'acquérir les informations correspondantes. La distance minimale du corps à utiliser le dispositif est de 20cm.

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Introduction

Welcome to Mission!

Mission is a brand that purveys lifestyle audio that fuses Hi-Fi heritage with contemporary design. Music leads, technology follows.

Mission 778X is a revisit of a classic Mission amplifier concept that was the Mission 778 - an affordable integrated amplifier that offered simplicity in operation but over-performed in the driving of loudspeakers.

Today's Mission 778X maintains the influence of simplistic operation, large tactile controls and a multitude of inputs. It's a compact, '80s-inspired integrated amplifier that is fully equipped to meet the demands of modern music lovers, from vinyl fans to digital streamers. Modern twists, such as LED level indicators and all-encompassing connectivity options, make the 778X a truly contemporary integrated amplifier. Boasting a genuine 65 watts (@4 ohms) of power via an utterly modern and refined signal path, to standards akin to the exemplary standards to which Mission loudspeakers are developed.

Inputs

- One coaxial SPDIF digital input
- Two optical SPDIF digital inputs
- One RCA MM phono input
- Two AUX analogue inputs
- Bluetooth 5.0(aptX) input
- USB 2.0 type-B port for playing digital music files from PC or Mac
- USB 2.0 type-A port for firmware update

Outputs

- Pre-amplifier output
- Loudspeaker output
- Headphone output
- One coaxial SPDIF digital output
- One optical SPDIF digital output

General Information

Please read these instructions carefully before installing your loudspeakers. A few minutes studying this manual will ensure a superb performance from your loudspeakers for many years. Please pay attention to all cautions printed on the pages marked with this symbol.

Unpacking The Equipment

The carton should contain:

- The Mission 778X amplifier
- One IEC power cord suitable for your area
- One remote handset
- One instruction manual

Consult the dealer from whom you purchased the equipment if any item is not present. Carefully unpack the unit and accessories. Take care not to damage the surface finish when undoing the protective polythene sleeve. Retain the packing materials for future use.

Retain the user manual and information concerning the date and place of purchase of your equipment for future reference. If you transfer the unit to a third party, please pass on this instruction manual along with the equipment.

USB Drivers & Firmware Updates

To download Windows Drivers for PC USB, please see the separate user guide included with this package.

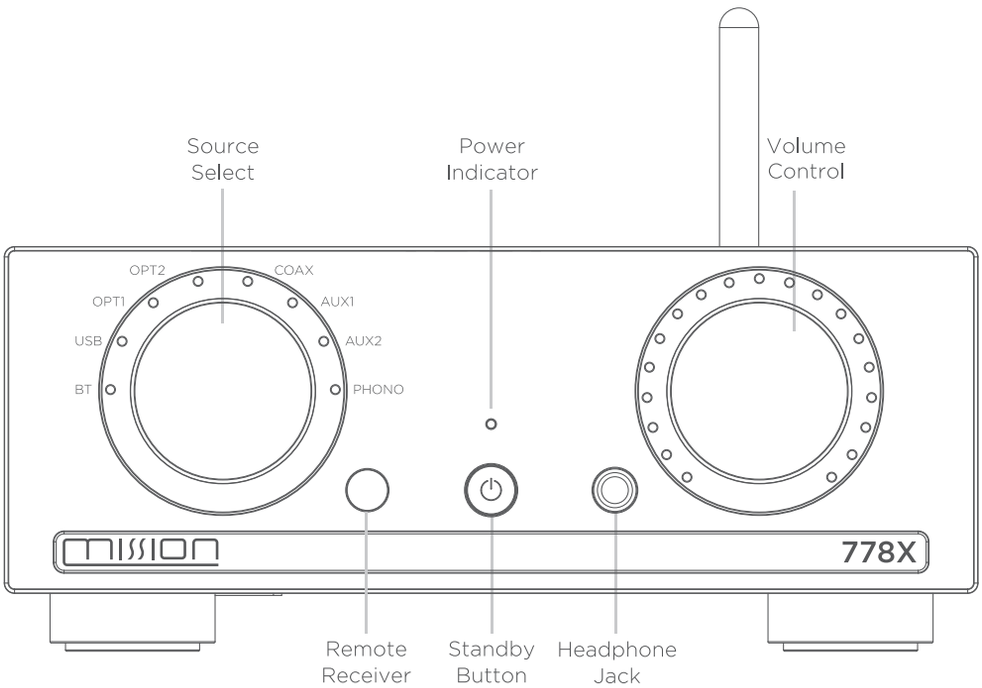
Any firmware updates will also be available from www.mission.co.uk

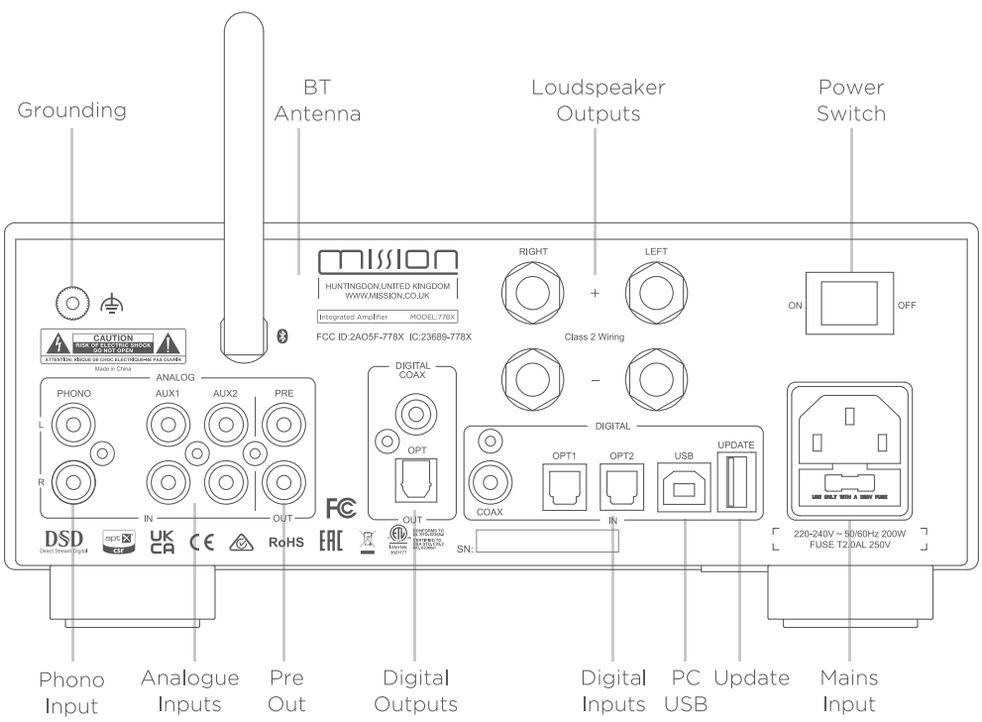
Placement

The unit must be mounted on a solid, level and stable surface.

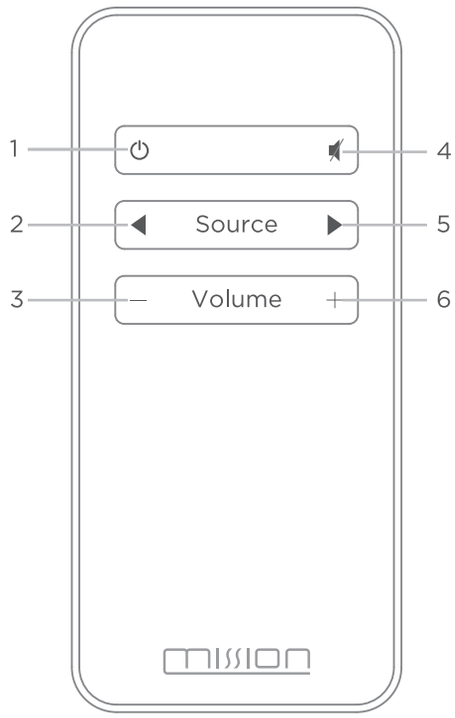
Before you connect the Mission 778X to the AC mains power, ensure your AC mains voltage corresponds to the rating on the rear panel of the product. If in doubt, consult your dealer. If you move to an area that has a different mains voltage, seek advice from a Mission appointed dealer or a competent service technician.

Controls & Functions





Remote Handset



1. ⏻ Press to put the unit in, or bring it out of standby
2. ◀ Navigate back through Source options
3. — Decrease the volume
4. 🔇 Press to mute or unmute the Mission 778X
5. ▶ Navigate forward through Source options
6. + Increase the volume

Remote Controller Preparation

- Unpack the handset
- Invert the handset
- Remove the battery cover
- Insert a new battery (type CR2025, *not supplied)
- Close the battery cover

* Please note: The remote control requires 1 x CR2025 type button battery. Due to international shipping and courier regulations with Lithium-Ion batteries, the remote controller battery is not included in this package.

Caution

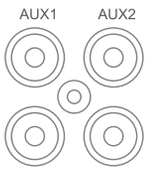
To prevent any burning, fire, or any possible harm to the environment or human health from the depleted batteries, please correctly dispose of the waste batteries in line with the recycling rules in your area. Don't dismantle, crush or puncture the batteries. Never short-circuit the batteries, throw the batteries into water or fire, or try to repair them. This remote control is compatible with CR2025 batteries only.

Connections

Mains Input

Before connecting the AC power cord to the Mission 778X, please make sure the Power Switch is in the OFF position. Switch it to the ON position after connecting the unit to the AC mains.

AUX Inputs



The Mission 778X has two sets AUX (unbalanced) inputs for connection to line level devices. Connect a RCA cable between the AUX of 778X and the line level output of your source unit (such as a CD player or DAC). Interconnects should be of low-noise construction and fully screened to minimise hum and noise transmission.

Phono Input

The Mission 778X has a built-in phono preamplifier and therefore offers a dedicated phono input. Connect the phono output of your turntable to the phono input of the 778X. The Phono input should only be connected to turntables fitted with MM cartridges.

Coaxial Input

The Mission 778X has a coaxial SPDIF input. Connect an RCA digital interconnect between the digital coaxial output of the source unit to the COAX input of Mission 778X.

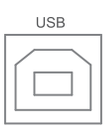
Optical Input

The Mission 778X has two optical SPDIF inputs. Connect an optical (TOSlink) interconnection between the digital optical output of the source unit to the OPT1 or OPT2 input on Mission 778X rear panel.

Bluetooth Input

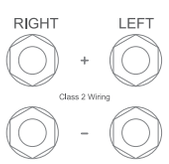
The Mission 778X has a built-in Bluetooth signal processor module which can play audio files transmitted from the source unit via Bluetooth wireless transmission.

PC USB



The Mission 778X has a Type-B USB input which lets you connect a MAC or PC to play audio files stored on your computer.

Loudspeaker Outputs



The Mission 778X has two sets of loudspeaker outputs. There are independent for left and right stereo amplifier outputs. Connect the Positive (+) RED terminals of the amplifier to the Positive (+) RED terminals of the loudspeaker. Connect the Negative (-) BLACK terminals similarly. When connecting loudspeakers tighten the terminals securely by hand. Make sure there are no loose strands of wires which could cause short circuits.

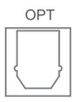
Preamplifier Output

The Mission 778X can work as a preamplifier. Simply connect the RCA cable between the Mission 778X and the input of a power amplifier. This output can also be used for a fixed level output for use with a subwoofer, for example.

Coaxial Output

The Mission 778X has one coaxial SPDIF output. Connect an RCA digital interconnect between the digital coaxial out of the Mission 778X unit and the required input of your equipment.

Optical Output

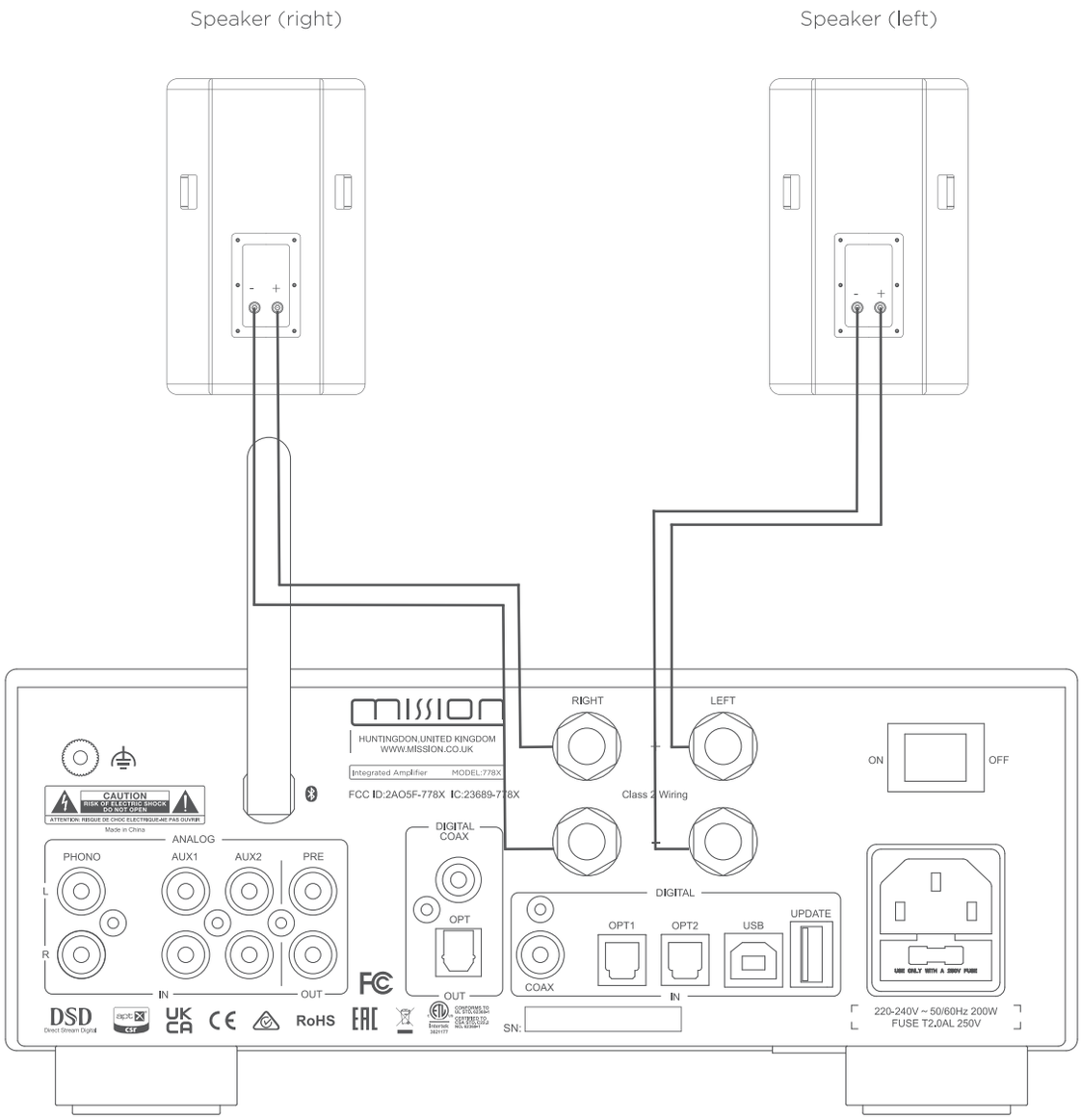


The Mission 778X has one optical SPDIF output. Connect an optical(TOSLink) digital interconnect between the digital optical out of the Mission 778X unit and the required input of your equipment.

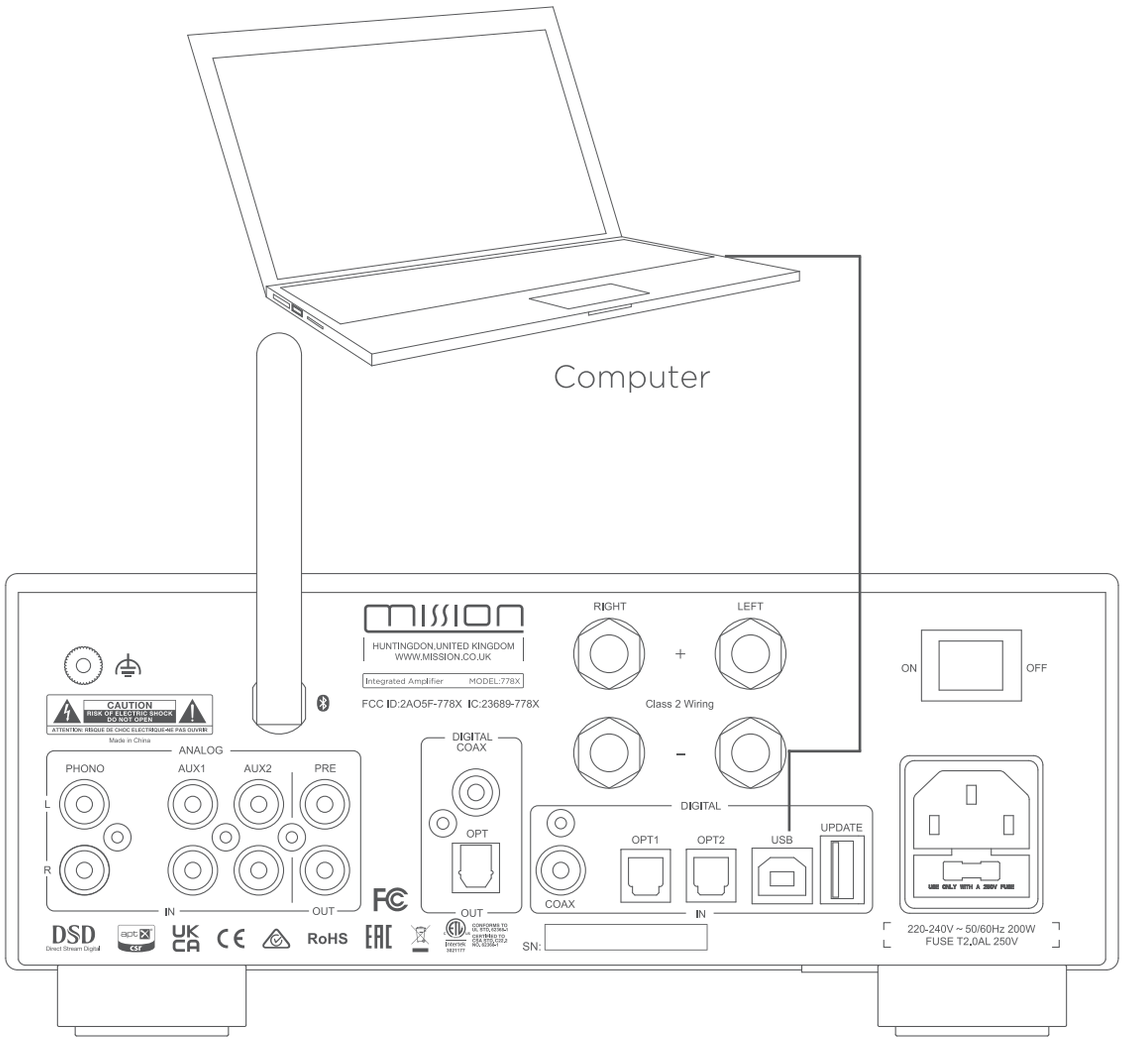
Headphone Jack

The Mission 778X has a stereo 6.3mm (1/4") jack on the front panel for connecting headphones. When headphones are connected it will mute the audio signal to the loudspeakers.

Connecting To The Speakers



Connecting To The Computer



System Operations

Standby Mode

When the Mission 778X is put into standby mode it will remember the unit's last selected input source. So, when the unit is taken out of standby, the previous input selection will automatically be selected.

Note: The input source memory is only applicable to the standby mode. When the mains power supply is disconnected, the Mission 778X will revert to the previously saved input, prior to the last standby session not the input prior to the mains disconnection.

Protection Mode

The Mission 778X is protected by a thermal switch which interrupts the AC power supply if the amplifier is grossly overloaded for some time. To restore operation, simply press the standby button on the front panel. It is thus fully protected against gross overload or short-circuited output, but not necessarily against seriously inadequate ventilation.

Mute Mode

The Mission 778X offers a mute mode which can be activated by pressing the mute button on the remote control or pressing the volume knob on the front panel. To decativate 'mute' simply press mute button or volume knob again.

Volume Control LED Indicators

The Mission 778X volume control is surrounded by LED indicators to offer visual indication of the current volume dial position. The LED indicators will illuminate when the volume control is adjusted and they will remain illuminated for 5s. This feature can be activated or deactivated by pressing and holding the volume knob for 3s.

Note: when the unit is brought out of standby, the volume will default to -7dB gain, or -38dBr, with 5.5 LEDs illuminated on the display.

Playing Music via Analogue Inputs

Connect the analogue signal of a source unit to Mission 778X's AUX1, AUX2 or Phono input. Select the analogue source by use of the knob on the front panel or via the remote control source select buttons. The corresponding LED source indicator will be illuminated and music will be audible when a signal is present.

Playing Music via Digital Inputs

Connect the digital signal of a source unit to the Mission 778X's COAX, OPT1 or OPT2 input (by coaxial cable or optical fibre cable). Select the digital source by use of the knob on the front panel or via the remote control source select buttons. The corresponding LED source indicator will be illuminated and music will be audible when a signal is present.

Playing Music via USB

Connect a PC or Mac via the USB type-B input on the Mission 778X. Select the USB source by use of the knob on the front panel or source select button on the remote control. The 'USB' input indicator will be illuminated and your source music will be audible when the signal is present.

Playing Music via Bluetooth

The Mission 778X can use a Bluetooth connection to be wireless connected to a smartphone, tablet or computer (or any such Bluetooth audio tranmistting device).

To connect a Bluetooth device:

- Ensure the Mission 778X and your Bluetooth device are within a few meters of each other.
- Select Bluetooth as the source on the Misson 778X. The Bluetooth indicator LED will flash to indicate 'pairing mode'.
- Activate the Bluetooth function on your device.
- Select "Mission 778X BT" as the connection option when displayed in the list of available devices to start pairing process.
- If prompted for a password, enter '0000'.
- Select the Mission 778X as a music output device on your Bluetooth device to start playing music. If you have difficulty connecting Mission 778X to a Bluetooth device, please try to selecting 'Forget this device' on your source unit and then go through the connection procedure again.

Warranty Coverage

Mission warrants its products, subject to the following terms and conditions below, to be free from defects in materials and workmanship.

Online Registration

3 YEAR WARRANTY

Scan the QR code using a smart-phone device, for product warranty registration online.

The three (3) year extended warranty is applicable to items purchased from Jan 1st 2021, onwards. Items purchased prior to this date are not eligible for this extended warranty service but are subject to statutory warranty claims and all applicable consumer rights.

To qualify for the extended 3 year warranty, you must register your product within ninety (90) calendar days from the date of purchase. Visit *mission.co.uk/warranty-registration* to complete your online registration. Items not registered online will have a Limited Warranty for one (1) year, or for the period of your country's statutory warranty, whichever is longer.

Warranty can only be offered to products registered with proof of purchase with date, model and details of the authorised dealer clearly stated on the receipt/invoice. Please keep the original receipt/invoice in case it is required for a warranty claim.

This Limited Warranty is non-transferable and is offered exclusively to the original owner.

This Limited Warranty is valid only in the original country of purchase.

Repairs or replacements are provided under this warranty are the exclusive remedy of the consumer. Mission shall not be liable for any incidental or consequential damages for breach of any expenses or implied warranty with any product. Except to the extent prohibited by law, this warranty is exclusive and in lieu of all other warranties whatsoever, both expressed and implied, including but not limited to the warrant of merchantability and fitness for practical purpose.

This warranty provides benefits that are additional to and do not affect your statutory consumer rights.

This Limited Warranty offer is subject to correct information being submitted in your application. Incorrect dates or mismatched purchase receipt dates that are outside of the warranty terms will immediately invalidate any warranty claim.

*Please check with your dealer local distributor for further information.

Exclusions

The following items are excluded from the Mission warranty:

Normal wear and tear and cosmetic damage (including but not limited to any wear from reasonable use, environmental deterioration or neglect)

Products on which the serial number has been removed, altered or otherwise made illegible.

Products not purchased from an authorised Mission dealer.

Products that were not new at the time of original purchase.

Products sold 'as is', 'as seen' or 'with faults'

Product not purchased from an Authorised Dealer/Distributor within the region of the claim (ie parallel imports or grey market products)

Accidental damage or faults caused by commercial use, acts of God, incorrect installation, incorrect connection, incorrect packaging, misuse or careless operation or handling which is not in accordance with the user instructions.

Equipment that has been operated in conjunction with unsuitable, inappropriate or faulty apparatus.

Repairs, alterations or modifications carried out by parties other than Mission or its authorised service partners.

Damage in transit that cannot be attributable to the fault of Mission, the authorised distributor or dealer (ie. claims otherwise covered by transit insurance.)

Faults relating to abnormal or inappropriate power supply voltage or power surges.

Faults relating to extremities in temperature, exposure to heat, water or other liquids, insects, excessive moisture, sand, chemicals, battery leakage or any other contaminants.

Any force majeure events, including but not limited to any acts of God, fire, lightning, typhoon, storm, earthquake, hurricane, natural disaster, tsunami, flood, war, riot, public disturbance.

Any other causes beyond the reasonable control of either Mission and its Authorised Distributor.

Please note items purchased before 1st Jan 2021 are not eligible for the extended warranty claim.

How to Claim

To obtain warranty service please contact the authorised dealer from which you purchased this product and present the limited warranty certificate offered upon registration of your product's extended warranty offer.

Do not dispatch goods without the prior agreement of the dealer distributor or authorised service centre.

If asked to return products for inspection and or repair, please pack carefully preferably in the original carton or packaging affording an equal degree of protection and returned via insured, trackable courier service.

The authorised dealer or distributor will offer full return details and instructions. However, please note if unsuitable packaging is used the warranty may be deemed void due to improper action in return.

Mission or the authorised distributor, dealer or service centre may make a charge for the supply of new packaging for the return of the repaired item. Please note, insurance is recommended as goods are returned at the owner's risk. Authorised distributors or service centres cannot be held liable for loss or damage in transit. insurance and freight charges on the return journey will be paid for by Mission, authorised dealer, distributor or service centre if corrective work proves to be necessary.

In the event of 'no-fault found' or 'no repair necessary', the return shipping charge will be the responsibility of the owner.

Repairs

All repairs will be carried out by the appointed distributor (or locally appointed service centre). Repairs handled or processed without authorisation or approval of the appointed representative will be excluded from this limited warranty. Please note, Mission is not able to supply parts or replacement items to any other entity than the official distributor or authorised service centre.

Other than the warranty and services set out in this warranty, to the fullest extent permitted by law, Mission shall not be liable to you and/or any third party or entity whatsoever for:

- Any loss, damages and/or malfunction caused to any product(s) which is/are connected to any of the products covered by this warranty.
- Any damages, loss and liability, whether direct, indirect, incidental, consequential special, punitive or otherwise, howsoever caused by, arising out of or otherwise, in relation to the installation, delivery, use, service, repair, replacement and/or maintenance of the product;
- Any damages, loss and liability under this warranty in respect of any act, omission, or negligence of any of their technicians, employees, agents, representatives or independent contractors relating to the actual or purported performance of any of the obligations under this warranty.

Service Centre Address

Should a fault occur with your product, please pack it correctly using the original packing, so you can ship it safely. For technical support, servicing or product queries and information, please contact either your local retailer or the office below:

IAG Service Dept.
13/14 Glebe Road
Huntingdon
Cambridgeshire
PE29 7DL
UK

Tel: +44(0)1480 452561
Email: service@mission.co.uk
For information on other authorised service centres worldwide contact Mission International, UK.
A worldwide distributors list is available on the Mission website: www.mission.co.uk

Specifications

Scan the QR code for latest user manuals and more.

Model	778X
General Description	Digital-to-Analogue Converter, Stereo Amplifier
Design Philosophy and Core Technology	• Integrated Amplifier (45 watts @8 ohms, 65 watts @4 ohms) • ESS Sabre32 ES9018K2M Reference Chip • Ultra-low Noise Digital Audio File Compability (384kHz PCM, DSD256) • Bluetooth 5.0 (aptX / AAC) Support • Dedicated High-performance, Low-noise MM Phono Stage • Headphone AMP With High-speed Output Signal Transition • USB Upgrade Support • Large Tractile Controls With LED Level Indicators
Inputs	1 x Coaxial, 2 x Toslink Optical, 1 x PC USB, 1 x Bluetooth (aptX/AAC), 2 x AUX,1 x RCA (Phono MM)
Outputs	1 x Coaxial, 1 x Toslink Optical, 1 x RCA (PRE Out)
Sampling Frequency	Optical / Coaxial: 44.1kHz-192kHz; PC USB:44.1kHz-384kHz(PCM) / DSD64, DSD128, DSD256
Preamplifier Section	
Gain (max.)	+0dB (Line), +47dB (Phono MM)
Input Sensitivity	540mV (Line, Volume = 0dB); 2.5mV (Phone MM, Volume = 0dB)
Input Impedance	10K (AUX); 47K//100pF (Phono MM)
Total Harmonic Distortion (THD)	<0.003%
Frequency Response (ref. 1kHz)	20Hz-20kHz (±0.1dB)
PRE Output Level	2.1Vrms (max.)
PRE Output SNR	>110dB (A-weighted)
DAC	
D to A Converter	ESS Sabre32 ES9018K2M
Resolution	32-bit
Max. Sampling Frequency	Optical/Coaxial: 192kHz; USB: PCM 384kHz / 11.2896MHz (DSD256)
Total Harmonic Distortion (THD)	< 0.001% (1KHz @ 0dBFS)
Output level (0dBFS, 1KHz)	2.1Vrms
Power Amplifier Section	
Gain	+31dB
Rated Power Output	2 x 45W (@ 8 ohms); 2 x 65W (@ 4 ohms)
Frequency Response (ref. 1kHz)	20Hz-20KHz (± 0.5dB)
Total Harmonic Distortion (THD)	<0.005% (30W / 8 ohms)
Input Sensitivity	540mV (RCA AUX In); 2.5mV (Phono MM)
Signal-to-Noise Ratio (SNR)	>108dB (ref. 45W, A-weighted)
Crosstalk @1K	>80dB (ref.1W)
Standby Power Consumption	<0.5W
Headphone Amplifier	
Total Harmonic Distortion (THD)	< 0.01% (1kHz, 50mW)
Output Impedance	4.7 ohms
Load impedance	20-600 ohms
General	
Dimensions (mm) (W x H x D)	236 x 98 x 380.6
Carton Size (mm) (W X H X D)	450 x 392 x 175
Net Weight	6.3kg
Finish	Black / Silver
Power requirements (depending on region)	220-240V ~ 50/60Hz; 100-120V ~ 50/60Hz
Standard Accessories	Power Cord, Remote Control, User Manual, Antenna

Correct Disposal of this product. This marking indicates that this product should not be disposed of with other household wastes throughout the EU. To prevent possible harm to the environment or human health from uncontrolled waste disposal, recycle it responsibly to promote the sustainable reuse of material resources. To return your used device, please use the return and collection systems or contact the retailer where the product was purchased. They can take this product for environmentally safe recycling.

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