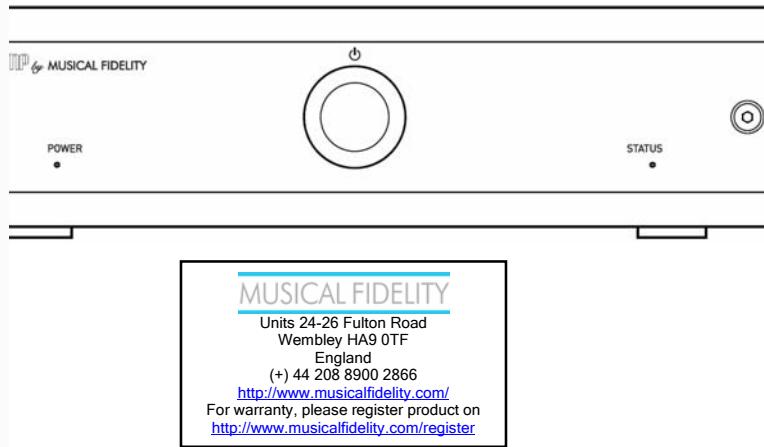


V90-AMP Digital Power Amplifier with 24 bit/48kHz Asynchronous USB DAC

Instructions



ction
n be used as a volume controlled amplifier or a ver amplifier.

the front panel volume control, slide the volume ch (back panel) to the **on** position. The knob on nel now controls volume to speakers.

the front panel volume control, slide the volume ch (back panel) to the **off** position. The knob on nel is now defeated and volume control will need ed from within the source, for example by a multimedia mixer settings.

will switch inputs automatically dependant on ence or absence.

ng (i.e. signal is present) through the USB input edence over anything plugged into the 3.5mm So the unit will automatically select the USB

to the OPTICAL/ANALOGUE input STOP the player on the computer and/or remove the USB

ill then switch to OPTICAL/ANALOGUE input

between analogue and optical input is simply a plugging the required lead into the ANALOGUE input and the V90-AMP is internally automatically.

Status LED summary

RED - (temporary) mains switched off or lead disconnected.
(permanent) Internal failure - switch off and check wiring for short circuits before switching on again.

GREEN (analogue input) analogue connection made but not necessarily playing.

GREEN (digital/USB inputs) digital audio signal present and playing

AMBER (analogue) displayed briefly when plugging in analogue cable as unit switches to analogue input.

AMBER (digital/USB inputs) digital connection made but no signal being played.

Off - No sources connected or unit is switched off.

Use

Switch unit on and adjust the volume control for a comfortable listening level, sit back and enjoy the music.

Introduction

Thank you for purchasing the V90-AMP power amplifier.

It is designed to add power and drive, for example, to multimedia listening with computers, tablets and other similar arrangements.

We sincerely hope that it will bring you many years of outstanding listening pleasure.

Installation Precautions

Your new V90-AMP is designed and built to provide trouble-free performance, but as with all electronic devices, it is necessary to observe a few precautions:

Do not use the V90-AMP near water. The unit must not be exposed to dripping or splashing liquids.

Keep the V90-AMP away from heat such as radiators. No naked flame sources should be placed on the unit.

Product Note:

This Hi-fi product has been tested to ensure that its operation is not adversely affected by normal background levels of Radio Frequency Interference (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.

The V90-AMP will operate in accordance with its specifications within the following environmental range:

Temperature 5 to 45 degrees Celsius

Humidity 10 to 90% non condensing

WARNING: NEVER open the case of the V90-AMP. There are POTENTIALLY LETHAL HIGH VOLTAGES CONTAINED within this unit even on standby or switched off. There are no user adjustments inside. Please refer all service work to an authorised Musical Fidelity agent. Unauthorized access also invalidates all guarantees.

Connections

All connections must be made before the unit is plugged in. Always switch off the equipment attached to the V90-AMP before connecting or disconnecting power, changing leads or inputs.

Inputs

Choose which inputs the unit will be using. It will switch automatically dependant on which input is currently "playing".

USB - Using a good quality USB (1.1 or 2.0) "A" to "B" lead (not supplied), connect the USB input to a spare USB port on computer/host device. This unit is automatically detected in all Microsoft, Apple and Linux based computers and similar which support "USB audio class 1.0 or later".

Digital - Use a normal TOSLINK cable (not supplied) with TOSLINK to 3.5mm adaptor (supplied) for best quality connection from other digital audio devices.

Analogue - Use standard 3.5mm Jack cable (or RCA cables in conjunction with supplied adaptor) to connect analogue signals from other sources.

Outputs

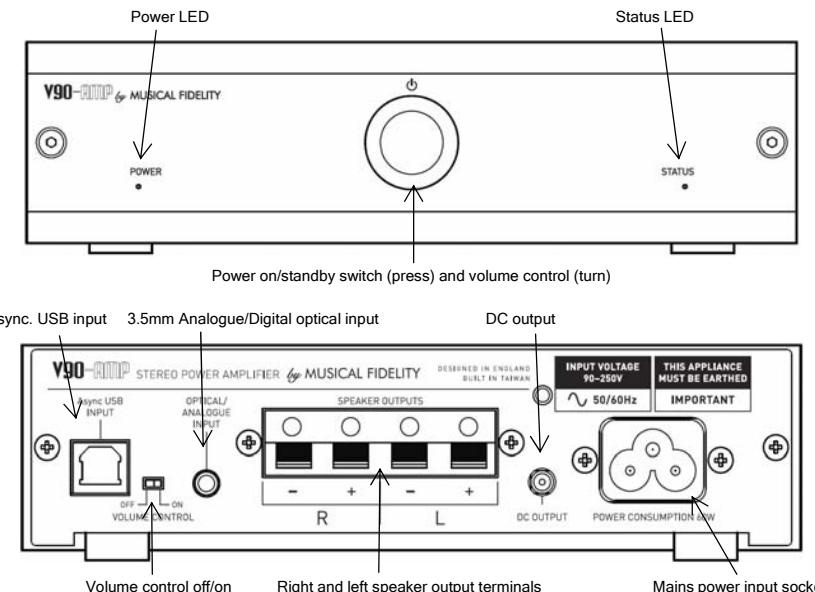
Two pairs of sprung speaker terminals are provided for connection to a pair of speakers. Use normal stranded speaker cable and make absolutely sure there are no stray strands that could short circuit and cause the amp to shut down prematurely.

DC output

A DC output socket is provided for future MF product only.

Power

Plug the mains connector lead from the unit into a convenient wall mains outlet. The blue LED will light to confirm the unit is now on and ready for use. To turn unit off or on again, press the volume knob.



USB input

Only USB A to B cable is required to connect the computer.
(square) end into the socket in the back of the Plug the A (rectangle) end into a free USB our computer.

USB information

st computer, a new device will be available, he V90-AMP is plugged in. Use this device to usic stored or played from this host computer. WAV files played on any software should now in the internal USB DAC.
e works any device that supports USB audio later. USB Class 1.0 "drivers" are supplied with systems such as Windows XP, VISTA, 7, 8 and OS-X and later and Linux kernel 2.6.33 or later. ster drivers for the USB input of the V90-AMP all automatically. If they do not, please consult **ystem administrator/technical support**.
fidelity does not supply or support any third party rivers for this device.

orrect installation follow these steps:

VS users

computer has detected the device and is ing it by clicking: (most Windows versions)

Start

Settings

Control panel

Sounds and Multimedia

Audio

"Musical Fidelity V90-AMP" appears under ED AUDIO DEVICE tab.

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 "Musical Fidelity V90-AMP" is selected under the OUTPUT tab. If the computer's warning sounds/chimes are to played through the internal DAC, make sure it is selected under the SOUND EFFECTS tab too.

This device is a high speed serial data processor, and by its nature, requires a very high volume of USB bandwidth. It will benefit greatly from being the only device connected on its USB port. Sharing the same port with other devices may cause unwanted artefacts such as dropouts. This especially includes the use of the unit on a USB hub/splitter alongside other USB components.

With the USB cable plugged in, the internal USB DAC is automatically recognised no matter what input is currently selected. When INPUTS selector switch is set to USB, the green LOCK LED will light to show that the USB DAC is correctly setup. The green LOCK LED goes out when the INPUTS switch is set to LINE position but the internal USB DAC is still connected and ready to use whenever required.

ications:	Power	20W /channel	into 8 Ohms (Suitable for speakers 6 ohms minimum).
	THD	<0.1% typical	'A' weighted
	Signal/noise ratio	>85dB	'A' weighted
	Input impedance	47kΩ	
	Frequency response	+0, -3dB	10Hz to 20 kHz
	Power requirement:	90-250Vac universal mains	
ctions:	Line level input:	1 stereo 3.5mm "jack" connector	
	Optical input	1 optical 3.5mm "jack" combined with line level input above	
	USB input	1 Type "B" asynchronous, 16-24 bits, up to 48kHz sample rate	
	Speaker outputs	2 pairs spring loaded speaker terminals	
	DC output	For future MF product only.	
	Power input	3-way "cloverleaf" mains power socket	
sions:	Length	117mm	4½"
	Width	170mm	6½"
	Height	47mm	1½"
t:	Unit alone	710g	1½lbs
	Total packed carton	1.38Kg	3lbs
ories (ed)	Optical adaptor	Toslink	to 3.5mm jack 1 off
	Analogue adaptor	2xRCA	to 3.5mm jack 1 off
	Mains lead	3 way	"cloverleaf" 1 off
	Leaflet	V90-AMP	Instructions 1 off

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

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Basic problem-solving with an amplifier is similar to troubleshooting other electrical or electronic equipment.

Problem	Probable Cause	Remedy
No power	Mains supply not switched on. Power plug is not fully inserted	Check mains supply is plugged in and unit switched on (blue LED lit) Plug into rear socket securely
No sound - analogue	Wrong connections between input source and the V90-AMP Volume turned right down	Check speaker leads are connected and secure Check other source is not playing and lead connections. Check volume is adjusted accordingly. Take care not to turn up too high!
No sound - USB	USB device not working	Check USB input lead is securely connected. Green LOCK LED will light when an active digital/USB stream is detected. See "Additional USB Information section" to check computer has recognised and is using "V90-AMP 24/96" for playback.
Hum	Audio connector not secure	Insert plug so full contact is made.
If none of these actions affect a cure, please contact the dealer, or an authorised Musical Fidelity service agent. Remember; never open the case of the V90-AMP, as this will invalidate the guarantee.		

Item disposal information for Europe



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 barrée X, qui apparaît en logo sur le panneau arrière du produit indique que le produit ne doit pas être jeté avec les déchets domestiques communs. Afin de protéger l'environnement, ce produit électroacoustique 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 des déchets électroniques équipés de composants électroniques.



DISPOSAL

La etiqueta cruzada hacia fuera del compartimento 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 posibles al ambiente separar por favor el producto de otras basuras 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 cassettono 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 governativo locale od il rivenditore del prodotto.



FACHGERECHTE ENTSORGUNG:

Das auf der Gerätetrennwand angebrachte Label deutet darauf hin, dass das Produkt nicht mit dem konventionellen Haushaltswaste entsorgt werden darf. Um Schäden und Verschmutzungen an Umwelt und Mensch zu verhindern, 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 het 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.



HÄLYTÄMINEN

Yleinen jätekuvaus kuvaa tällä tuotteella ei saa käsitellä yleisen talousjätteenä. Ympäristöön suojaamiseksi on tuote jätettävä erillään ja myyvästä tarkoitettavaksi. Ota yhteyttä latteen myyjään tai Pirkkalan Ympäristökeskuksen lähiin lähetyskeskuksiin jätettävän elektronikan mukana.



AFSKAFNING

Logot med en skrädelapp med kryss över på baksidan av apparaten indikerar att detta produkt inte mås kasseras som normal hushållningsaffald. För att förhindra miljöfarlig skräde på miljöet bedes De separaera 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 elektronikkaffad.



ΔΙΑΔΙΚΑΣΙΑ ΑΠΟΡΡΗΜΑΤΟΣ

Το Σήμα με τον Διαγραμμένο τροχό και την απόρριψη στην πίσω όψη του μηχανήματος δηλώνει ότι το πρόϊόν αυτό δεν πρέπει να διαχειρίζεται ως παραδοσιακά απόρριμμα. Επιβεβαύεται ότι το πρόϊόν δεν αποτελεί ηλεκτρονικό απόρριμμα καθώς δεν έχει επιβεβαιωθεί η απόρριψη του με την παραδοσιακή τρόπο. Παρακαλούμε να επικοινωνήσετε με την τοπική γηπέτωμα ή με το κατάσθιμα αγορά για περισσότερες.