

SUGDEN AUDIO

FBA-800 Floating Bridge Pure Class A Power Amplifier

INSTRUCTION MANUAL



MAY 2024

Designed and manufactured in England by

J E Sugden & Co LTD
Valley Works
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ENGLAND

FBA-800 Power Amplifier

This section must be read before connecting to the mains supply

MAINS CONNECTION INFORMATION

Your SUGDEN amplifier has been designed to comply with the domestic power and safety requirements that exist in your area. This amplifier can be powered by AC ONLY.

IF YOU NEED TO ADJUST THE GAIN SETTING OF YOUR AMPLIFIER TO MATCH YOUR CARTRIDGE YOU MUST ALWAYS DISCONNECT THE MAINS LEAD FROM THE MAINS SUPPLY.

CHOOSE A SAFE AND SUITABLE LOCATION - Your amplifier is a class A design and therefore requires good ventilation .

- DO NOT: Expose to direct Sunlight
- DO NOT: Position next to a heat source such as a radiator
- DO NOT: Use in places with high humidity or poor ventilation
- DO NOT: Subject to mechanical vibration
- DO NOT: Place on an unstable or inclined surface
- DO NOT: Stand other equipment on top of the amplifier
- Never block the ventilation holes or stand directly on a carpet

GUARANTEE

To **activate your guarantee**, please complete the owner registration form on our website www.sugdenaudio.com/warranty-registration within 60 days of purchase. It is in your best interests to register your ownership to ensure you benefit fully from our warranty. Your details are not shared with any other company.



The FBA-800 is in conformity with the EMC directive and low-voltage directive.



INSTALLATION

The Sapphire FBA-800 power amplifier is a class A amplifier so it is important to situate the unit in an area where a free circulation of air is available. Never enclose the amplifier in a cupboard or stand that will prevent the airflow through the heatsinks or ventilation holes on the top or base plate. Never stand the amplifier near a heat source or in direct sunlight. Do not sit the amplifier on a soft surface such as a carpet. Sugden recommend that a dedicated piece of audio furniture or stand should be used for maximum ventilation and sonic support.

POWER SUPPLY SETTING

Check that the voltage rating on the rear of the amplifier indicated is the correct supply voltage for your country.

CONNECTIONS (rear panel layout)

MAINS INPUT

Connection to the mains is via the supplied AC cable and connects to the mains input socket at the back of the amplifier. Countries are supplied with a pre-moulded AC mains cable of the correct fuse and electrical rating. The supplied cable has been tested and approved for use with your amplifier and should not be replaced without making sure the new cable is suitable.



FBA 800 Rear View

LOUDSPEAKERS

There are two pairs of loudspeaker binding posts on the back of the amplifier and these are marked left and right for identical connection to the loudspeakers. Each pair of loudspeaker binding posts are also marked + positive (red) and – negative (white or black). This is to make sure the polarity and phase are correct and are for identical connection to your loudspeakers. The binding posts will accept the following type of loudspeaker connections:

6mm plugs Spade connectors Bare wires

If using bare wires it is important not to let these come in to contact with the amplifier chassis as this might short circuit and damage your amplifier. At no time should the positive and negative outputs from your amplifier touch. It is always recommended that the amplifier is switched off before removing or re-connecting loudspeaker cables.

INPUTS

Before connecting any signal leads to your amplifier make sure it is switched off. Connection of a suitable single ended pre-amplifier is by the two RCA phono sockets located above the loudspeaker binding posts. These are marked right (red) and left (black or white). There is one pair of balanced input sockets for connection to a pre-amplifier with balanced XLR connectors these are located at the side of the phono sockets and selected by the input selector switch on the front panel labelled balanced input.

If using another brand of pre-amplifier with your FBA-800 you will need to make sure the XLR pin configuration is to the normal standard. The pin configuration for the balanced sockets are:

Pin One - Ground Pin Two - Positive Pin Three – Negative

FRONT PANEL CONTROLSPOWER ON

The power switch is located in the centre of the front panel and will turn the mains power to the amplifier on and off. Indication of power on is shown by the illumination of the LED lamps either side of the switch. The amplifier contains a special delay circuit, which mutes the loudspeaker outputs for approximately 5 seconds after turning on the mains supply. Once this time period has elapsed, the amplifier will become fully operational and the two LED lights will come on. This delay circuit does not operate during switch off.

BALANCED INPUT

The FBA-800 has two pre-amplifier inputs, balanced and single ended. When the Balanced input switch is depressed then the balanced input is selected. When released the single ended input is selected.

INPUT GAIN

This is a useful feature that attenuates the input gain of the FBA-800 by 6dB. By making the input less sensitive it is possible to enjoy better control of the volume levels when using a variety of loudspeakers and pre-amplifiers. If using a pre-amplifier with a high output depressing the input gain switch will attenuate the output to the loudspeakers.

FUSES

The amplifier is fitted with mains power and internal AC fuse protection. Should a fuse blow this is usually an indication that a fault exists either with the amplifier, mains supply or with the loudspeaker system. It is essential that the fault be located and corrected before any new fuse is inserted. The fuse rating will depend on the mains voltage in your country.

ALL FUSES MUST BE REPLACED WITH A FUSE OF THE CORRECT TYPE. ALWAYS SWITCH OFF YOUR AMPLIFIER AND DISCONNECT FROM MAINS SUPPLY BEFORE ATTEMPTING TO REPLACE ANY FUSE.

MAINS POWER FUSE

This is a slow blow (S.B.) 20mm x 5mm cartridge type fuse, which is located in the mains power inlet socket at the rear of the amplifier. To replace the fuse first disconnect the amplifier from the mains supply. Locate the fuse tray holder, which forms part of the mains inlet socket on the rear panel of the amplifier. Pull the tray out to its full extension and two fuses will become visible. The back fuse is normally in line with the mains power and the front fuse is a spare replacement. Simply swap the two fuses and close the tray. If a fault persists consult your agent.

INTERNAL FUSES

Each channel is protected by two pairs of PCB mount fuses. These are T rated AC fuses and should only be replaced with the same type and rating.

CONSTRUCTION AND FINISH

Your amplifier is constructed from selected high quality materials and is designed to give a lifetime of trouble free performance. Careful attention is paid to ensuring that all steel case components are zinc plated and all aluminium components are anodised for maximum protection against corrosion. All steel case components are finished in a power-coated paint, which is both smooth and durable. It can be cleaned with a lightly dampened cloth and a liquid soap solution, not an abrasive or chemical cleaner.

The manufacturer reserves the right to alter specification without notice