

SUGDEN AUDIO

Masterclass FPA-4 Power Amplifier

INSTRUCTION MANUAL

MAY 2015

Designed and manufactured in England by

J E Sugden & Co Ltd
Valley Works
Station Lane
HECKMONDWIKE
West Yorkshire
WF16 0NF
ENGLAND

BEFORE USE

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.

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

ACCESSORIES SUPPLIED

Guarantee Card

Instruction book

IEC mains lead

(Optional remote control)



The FPA-4 is in conformity with the EMC directive and low-voltage directive.

UNPACKING

Your amplifier should reach you in a substantial protective carton. On unpacking please examine the unit for signs of prior use or damage. Check that all the front panel controls function mechanically. The following items should also be in the carton:-

- (1) AC power lead with pre-molded IEC straight connector and plug.
- (2) Owners registration card which should be completed and the bottom section removed and returned to us.

RECYCLING

This products packaging materials are recyclable and can be reused. The product and the accessories packed together are the applicable product to the WEEE directive except batteries. Please dispose of any material in accordance with your local recycling regulations. When discarding the unit, comply with your local rules and regulations. Batteries should never be thrown away or incinerated but disposed of in accordance with your local regulation concerning chemical waste.

INSTALLATION

The Masterclass power amplifier is a class A amplifier design 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 it in a way that will prevent the airflow through the 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 should be used for maximum ventilation and sonic isolation and 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 AND FUSE

Connection to the mains is via the supplied AC cable and connects to the mains input socket at the back of the c.d. player.

Most countries are supplied with a pre-molded AC mains cable. If not supplied with a pre-molded cable the three core cable is colour coded as follows:-

BROWN ~ LIVE BLUE ~ NEUTRAL GREEN/YELLOW ~ EARTH

Some countries are supplied with two core mains cables, the two core cable is colour coded as follows:-
BROWN OR BLACK ~ LIVE BLUE ~ NEUTRAL

LOUDSPEAKER CONNECTION

Loudspeaker connections are made via the four multi-way binding posts provided on the back panel. These are clearly marked L (left) R (right) for identical connection to your loudspeakers. The binding posts are also colour coded black or red for ease of correct phasing.

INPUTS

The FPA-4 has two types of inputs for connection to a pre-amplifier with either single ended RCA outputs or balanced XLR. On the rear of the amplifier between the phono and XLR input sockets there is a switch to select the required input. The inputs are clearly marked left and right for identical connection to the pre-amplifier. If you are not using a matching Sugden Pre-amplifier the pin connections for the XLR inputs are:

Pin One - Ground

Pin Two - Positive

Pin Three – Negative

INPUT SELECTOR

POWER ON

Operating the push switch will turn the mains power to the amplifier on and off, indication of power on is shown by the lamps either side of the switch. When the switch is depressed the power is on.

SWITCH ON DELAY

The amplifier contains a delay circuit, which mutes the loudspeaker outputs for approximately 5 seconds after switching on the mains supply. Once this time period has elapsed, the amplifier will become fully operational. This delay circuit does not operate during switch off.

FUSES

The amplifier is fitted with mains power and L.T. (low tension) fuse protection. Should a fuse blow this is usually an indication that a fault exists either with the amplifier or with the loudspeaker system. It is essential that the fault be located and corrected before any new fuse is inserted.

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.

L.T. FUSES

There are two L.T. Fuses, fast blow (F) 20mm x 5mm cartridge types.

The most common cause of blowing a L.T. fuse is by a short circuit between the loudspeaker connections. **IMPORTANT:** It is therefore recommended that the amplifier should be switched off during the connection or disconnection of a loudspeaker to the amplifier. If bare cables are used instead of plugs in the loudspeaker input sockets, all loose braid should be removed or kept neat to avoid a short circuit. It is also possible for these fuses to blow under high music conditions into low loudspeaker impedance of less than 4ohms. If, after the correction of the fault a new fuse blows immediately after switch on, do not attempt further replacements. Please seek advice from your supplying agent.

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 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.

HOW TO ACCESS YOUR AMPLIFIER

Access for service and L.T. fuse replacement may be gained as follows:-

- 1). DISCONNECT ALL POWER and input leads.
- 2). Unfasten the socket head screws with an appropriate size allen key that secure the ventilated top plate
- 3). Once all screws have been removed the top cover can be removed.

CONSTRUCTION AND FINISH

Your amplifier is constructed from selected high quality materials and is designed to give long, trouble free performance. Careful attention is paid to ensuring that all steel case components are zinc plated and all aluminum 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 very lightly damped cloth and a liquid soap solution, not an abrasive or chemical cleaner.

Masterclass FPA-4 Specification

Facilities	
Inputs	Stereo line level, stereo balanced
Outputs	Stereo pair multi-way locking binding posts
Specifications	
Input Sensitivity	1Volt for full output
Power Output	25 Watts per channel both channels working
Frequency Response	-0.3dB 18Hz-95kHz
Bandwidth	10Hz-125kHz
Signal to Noise	>82dB
Distortion at 1 Watt 1kHz	<0.04%
Gross Weight (packed)	15kgs
Dimensions	143 x 430 x 350mm (hwd)

The manufacturer reserves the right to alter specification without notice