# **SUGDEN**

**Masterclass SPA-4** Stereo Power Amplifier *Instruction Manual* 

Designed and manufactured by

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

www.sugdenaudio.com

Masterclass SPA-4 Stereo Power Amplifier

## **INSTALLATION**

## **IMPORTANT**

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 that will prevent the airflow through the heatsinks our 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 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-moulded AC mains cable. If not supplied with a pre-moulded 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

## **LOUDSPEAKERS**

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

## **INPUTS**

Connection of a suitable single ended pre-amplifier is via the two phono sockets located above the loudspeaker binding posts. These are marked right (red) and left (black). For the ultimate in sound quality there are also a pair of balanced input sockets. These are located at the side of the phono sockets and selected by the input selector switch mounted between the two sockets.

The pin configuration for the balanced sockets are: **Pin One** - *Ground* **Pin Two** - *Hot* **Pin Three** - *Cold*.

## **POWER ON**

Operating this switch will turn the mains power to the amplifier on and off, indication of power on is shown the red lamps either side of the switch.

## **TURN ON DELAY**

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. 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 of 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 OF YOUR AMPLIFIER AND DISCONNECT FROM MAINS SUPPLY BEFORE ATTEMPTING TO REPLACE ANY FUSE.

## L.T. FUSES

There are four L.T. Fuses, which are 5 amp 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 a low loudspeaker impedance of less than 40hms. 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 5 amp 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.

## 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 six socket head screws with an appropriate size allan key that secure the ventilated top plate
- 3). Once all six securing 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 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 **very lightly** damped cloth and a liquid soap solution, not an abrasive or chemical cleaner.

## SUGDEN MASTERCLASS SPA-4 Specification @ 230Volts setup.

| Facilities            |   |
|-----------------------|---|
| Inputs                | Stereo line level, Stereo balanced              |
| Outputs               | Stereo pair WBT multi way locking binding posts |
|                       |   |
| Input Sensitivity     | 1 Volt for full output                          |
| Power Output          | 75 Watts into 4 ohms both channels working      |
|                       | 50 Watts into 8 ohms both channels working      |
|                       |   |
| Frequency Response    | 15Hz to 30kHz +/- 0dB                           |
|                       |   |
| Bandwidth (wide)      | 2Hz-200kHz +/- 3dB points                       |
|                       |   |
| Signal to Noise Ratio | >85dB   |
|                       |   |
| Nett Weight           | 25kgs   |
|                       |   |
| Dimensions            | 250 x 430 x 360mm (hwd)                         |
|                       | ( ,   |

The manufacturer reserves the right to alter specification without notice

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