

# **SUGDEN AUDIO**

## **Masterclass IA-4** Integrated 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

Remote control



The IA-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 or completed online at [www.sugdenaudio.com/warranty-registration](http://www.sugdenaudio.com/warranty-registration).
- (3) Remote Control

### **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.

## UNPACKING

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- (2) Owners' registration card, which should be completed, and the bottom section removed and returned to us or completed online at [www.sugdenaudio.com/warranty-registration](http://www.sugdenaudio.com/warranty-registration).
- (3) Remote Control

## INSTALLATION - IMPORTANT

There are three points that must be considered carefully when installing your amplifier.

- 1) Adequate ventilation.
- 2) Proximity to low level gain stages.
- 3) Proximity to heat source and direct sunlight

Because the Masterclass is a pure class A design, a large amount of heat will be generated from the amplifier heatsink. It is VERY IMPORTANT that the amplifier must not be confined in a space that will produce a build up or re-circulation of heated air. We recommend a clearance of approx. 10cm (four inches) either side and above the unit. This will allow a free circulation of air when situated in an open back cabinet.

## CONNECTING TO A MAINS SUPPLY

Before connecting your amplifier to a mains supply ensure that the mains voltage rating on the inspection ticket and packing carton is the same as your countries supply. Connection to the mains is via the A.C. cable supplied with your amplifier and connects to the mains input socket at the back of the amplifier.

## SIGNAL CONNECTIONS

Always ensure that your amplifier is switched off before any connections are made to associated equipment.

### Loudspeakers

The loudspeaker connections are made via the four gold plated WBT binding posts at the rear of the amplifier these are marked R(right) and L(left) for identical connection to your loudspeakers. Both left and right speakers have a positive (+) and negative (-) connection which are also for identical connection to your loudspeakers. We recommend that loudspeakers of 4-16 Ohms impedance should be used with your amplifier.

### Input Signals

There are three line level inputs, tape input, phono input and a balanced input.

### Phono Input

This caters for moving magnet cartridges.

### Balanced Input

The XLR sockets are for connection to a source with a balanced output such as the Masterclass CD player.

The pin configuration is the professional standard:

Ground	Pin One
Positive (hot)	Pin Two
Negative (cold)	Pin Three

### Outputs (low level)

There are two pairs of signal outputs, one is fixed, and the other is variable working from amplifiers main volume control.

The fixed output can be connected to a tape recorder and is labeled Tape Output. The output should be high enough to work with most analogue tape inputs and the analogue interface of most digital recorders.

The variable output is called Pre-out and is designed for operating another power amplifier. It can also be used to feed an active subwoofer or surround sound processor in a home theatre system.

## FRONT PANEL CONTROLS

### Input selection

The rotary selector switch located on the right of the front panel selects the relevant input signal i.e., Phono, Tape and are associated with the signal input sockets on the rear panel.

### Volume control

The volume control adjusts the power delivered to the loudspeakers and hence controls listening level. Zero volume is at anti-clockwise position or 'six 'o' clock'. The volume control can be operated by a Sugden RC5 System remote control.

### Tape monitor control

Use this control to allow true post recording monitoring on a three-headed tape machine or recorder with monitoring facilities. What is heard is taken directly from the tape immediately after recording. This allows A: B comparisons to achieve the desired recording.

### Record on/off control

Although the tape circuit is relay switched, the purist can switch off the tape output signal to avoid any possible signal degradation

## **ADDITIONAL INFORMATION**

### EARTHING

One of the most common problems with high performance audio equipment is an audible hum through loudspeakers. Your amplifier has been tested for noise at the factory and you should not be able to detect any obtrusive noise when the amplifier is connected to a pair of loudspeakers. If you can hear an unreasonable level of noise that detracts from the music it is probably caused by a hum loop associated to an ancillary piece of equipment. The most common cause of this is ancillary equipment connected to the earth mains.

Should you remove the earth connections in ancillary equipment mains plugs remember:  
LEAVE THE EQUIPMENT PERMANENTLY CONNECTED TO THE AMPLIFIER INPUTS. IF THE EQUIPMENT IS TO BE REMOVED FOR ANOTHER USE IT MUST BE UNPLUGGED FROM MAINS POWER BEFORE REMOVING FROM THE PHONO SOCKET INPUTS. NEVER DISCONNECT THE MAINS EARTH FROM YOUR AMPLIFIER.

The amplifier should be switched off when not in use. Warm up time is about 15mins.

### FUSES

Should a fuse blow this is usually an indication that a fault exists. It is important that the cause of the fault is determined and rectified before replacing a fuse. If in doubt, consult your local dealer or our distributor for assistance.

NEVER by-pass any fuse in your amplifier. NEVER replace a fuse with one of a different specification or value.

### HT FUSES

There are two fast blow 2.5AMP fuses located on each of the power board modules. These protect the amplifier from a short circuit on the loudspeaker outputs or over load.

### MAINS FUSE

The mains Fuse is located at the rear of the amplifier and is externally accessible. It is combined in the mains input socket together with a spare fuse of the correct value.

### **SUGDEN MASTERCLASS IA-4 Specification @ 230Volts setup.**

<b>Facilities</b>	
Inputs	Three line level, one tape, one phono (mm), one Balanced
Outputs	One pair pre-out, one tape out, two pair multi way locking binding posts
<b>Phono Input Sensitivity</b>	2mV MM
<b>Input Sensitivity</b>	125mV for maximum output
<b>Power Output</b>	33 Watts into 8 ohms
<b>Frequency Response</b>	14Hz to 200kHz +/- 1dB
<b>Bandwidth</b>	6Hz-300kHz +/- 3dB points
<b>Signal to Noise Ratio</b>	>84dB
<b>Input Impedance</b>	50K
<b>Nett Weight</b>	19kg
<b>Dimensions</b>	165 x 430 x 440mm (hwd)

The manufacturer reserves the right to alter specification without notice