

SUGDEN AUDIO

Masterclass IA-4 Integrated Amplifier

INSTRUCTION MANUAL

MAY 2024

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

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.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) 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.

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.

SWITCHING ON – IMPORTANT

As your IA-4 is a pure class A design it is important to wait 30 Seconds before operating any controls to let the quiescent current reach its correct operating level. It is also recommended to switch the amplifier on with the volume control at zero (0).

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.

Facilities	
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
Phono Input Sensitivity	2mV MM
Input Sensitivity	125mV for maximum output
Power Output	33 Watts into 8 ohms
Frequency Response	14Hz to 200kHz +/- 1dB
Bandwidth	6Hz-300kHz +/- 3dB points
Signal to Noise Ratio	>84dB
Input Impedance	50K
Nett Weight	19kg
Dimensions	165 x 430 x 440mm (hwd)

The manufacturer reserves the right to alter specification without notice