

# **SUGDEN AUDIO**

**A21SE** Signature

## **INSTRUCTION MANUAL**

**MAY 2015**

Designed and manufactured in England by

J E Sugden & Co Ltd  
Valley Works  
Station Lane  
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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



The A21SE 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.
- (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.

### INSTALLATION - IMPORTANT

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

- 1) Adequate ventilation.
- 2) Proximity to low level gain stages and magnetic tape recorders.

Because the A21SE is a pure class 'A' design a large amount of heat will be generated from the amplifiers heatsinks, this is normal. 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 10cm (four inches) either side and above the unit. This will allow a free circulation of air when situated in an open-back cabinet. Never stand equipment on top of the amplifier. The amplifier should be kept away from any heat sources such as direct sunlight or radiators.

The amplifier should be switched off when not in use.

### 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 AC cable supplied with your amplifier and connects to the mains input socket at the back of the amplifier.

### MAINS CABLES AND POWER SUPPLIES

We do not recommend the use of specialist mains blocks or power supplies as this can degrade the sound quality and reduce the dynamic range of your amplifier.

### SIGNAL CONNECTIONS

Always ensure that your amplifier is switched off before any connections are made to associated equipment. We recommend that good quality cables and plugs are used with your Sugden amplifier. Your retailer or Sugden Audio can advise you on cables that offer good performance and match Sugden products.

### L . T . V . S socket (Stage One No Longer Available)

This provides a Low Tension Voltage Supply for the Sugden A21SE Stage One phono Amplifier. **No other equipment should be connected to the L.T.V.S Socket.**

The Stage One Phono Amplifier is a high quality, value for money design and has a single input for both Moving Magnet and Moving Coil cartridges, with automatic impedance matching.

The Stage Two Phono Amplifier is also now available, it is a more sophisticated design catering for both MM and low output MC Cartridges. This is mains powered and split into two boxes separating the gain stages from the regulated power supply.

### Loudspeakers

Loudspeaker connections are made via the gold plated multi-way 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 -16ohms impedance should be used with your amplifier.

If bi-wiring please follow the instructions supplied by the manufacturer of your loudspeaker carefully, incorrect wiring can damage your amplifier or blow channel fuses.

### Input Signals

All input connections are via standard RCA type gold-plated phono sockets. The inputs are clearly marked left and right for identical connection to your source components. The input sensitivity of your amplifier makes it suitable for connection to any line-level component. These include CD Player, Tuner, SACD/DVD-A player.

### Output Signals

There are two stereo outputs on your amplifier, one fixed and one variable.

- 1) Tape Output - This is a fixed output and is live at all times supplying an output suitable for the tape-In of a tape recorder. This allows a tape recording to be made of the input you have selected from the input selector switch on the front of your amplifier. Other uses include connection to an external headphone amplifier like the Sugden Headmaster
- 2) Pre-amp Output – This is a variable output and is supplied from the A21SE pre-amplifier circuit. As the output is the same level as the signal supplied the power amplifier stages of the A21SE, it is possible to drive an additional stereo power amplifier in a bi-amplified system. Other uses include connection to an external slave amplifier for additional loudspeakers.

### Volume control

The volume control adjusts the power delivered to the loudspeakers and hence controls listening level. Zero volume is at fully anti-clockwise position or 'six 'o' clock'. A high quality motorised volume control has been selected for your amplifier and this can be operated from a Sugden RC5 System control.

### Input Selector

The input selector switch is located at the far right of the amplifier when viewed from the front. There are five inputs, with the selector switch turned anti-clockwise you are at input one. Fully clock wise is input five. The switch requires a minimum amount of effort to rotate and should not be forced. The switch will rotate 45 degrees either side of its central detent at '12 o'clock'.

### Additional information

#### FUSES-Replacement should be carried out by a suitable technician

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. All fuses used in Sugden equipment have the specification on them. NEVER bypass 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

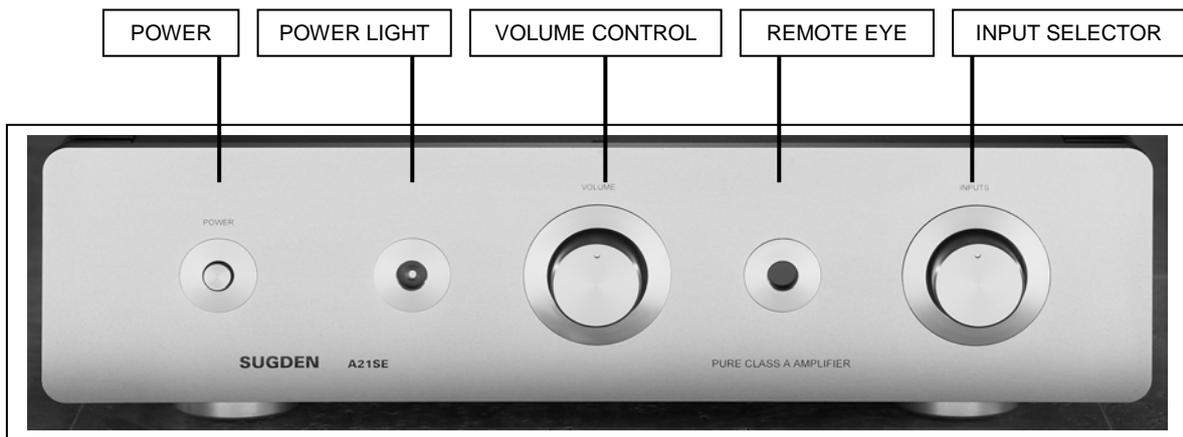
The mains Fuse is located at the rear of the amplifier and is externally accessible. It is combined in the mains input socket together with a spare fuse of the correct value.

**A21SE Signature Specification @ 220Volts setup.**

Specification	
Max Power Consumption	300 Watts
Power Output	40 Watts Pure Class A (4 Ohms)
	30 Watts Pure Class A (8 Ohms)
Frequency Response	12Hz to 141kHz
Bandwidth (wide)	6Hz-280kHz
Signal to Noise Ratio	>90dB
Input Sensitivity	110mV @ Zero Attenuation For
	Full Output
Input Impedance	50K

The manufacturer reserves the right to alter specification without notice

A21SE Integrated Amplifier Front Panel Controls



A21SE Integrated Amplifier Back Panel and Controls

