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dsloibuA

# 8000SE Integrated Amplifier



# **User Instructions**

audiolab

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# 1: Statutory & Safety Information



TO REDUCE THE RISK OF ELECTRIC SHOCK DO NOT REMOVE COVER
NO USER-REMOVEABLE PARTS INSIDE
REFER SERVICING TO QUALIFIED PERSONNEL

ADVERTISSEMENT: RISQUE DE CHOC ELECTRIQUE-NE PAS OUVRIR



This symbol indicates that there are important operating and maintenance instructions in the literature accompanying this unit.



This symbol indicates that dangerous voltage constituting a risk of electric shock is present within this unit.

Read these instructions.

Keep these instructions. In the event that you pass the product to a third party this instruction manual should be provided along with the product.

Heed all warnings.

Follow all instructions.

Do not use this apparatus near water.

Clean only with dry cloth.

Do not block any ventilation openings.

Install in accordance with the manufacturer's instructions.

Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.

Do not defeat the safety purpose of the polarized or grounding type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wider blade or the third prong are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.

Protect the power cord from being walked on or pinched, particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.

Use only attachments/accessories specified by the manufacturer.



Use only with a cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.

Unplug this apparatus during lightning storms or when unused for long neriods of time

Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.

**Warning:** To reduce the risk of fire or electrical shock, do not expose this product to rain or moisture. The product must not be exposed to dripping and splashing and no object filled with liquids such as a vase of flowers should be placed on the product.

No naked flame sources such as candles should be placed on the

**Caution:** Changes or modifications not expressly approved by the manufacturer could void the user's authority to operate this device.

# Mains supply and safety

**Mains Supply:** The mains operating voltage of all Audiolab units is shown on the rear panel. If this does not match the voltage in your area, consult your dealer.

The mains supply fuse is located on the rear panel of the unit. If it has broken, check for any obvious cause before replacing the fuse with one of the correct rating and type. The fuse values are:

220 - 240V (UK, Korea, etc.) 100 - 120V (USA, Japan, etc) T 2.5AL 20mm Slow Blow T 4.0AL 20mm Slow Blow

Fuse Carrier

IEC Mains Connector

The fuse is located in a slide-in carrier which also contains a spare fuse. The fuse carrier can only be pulled out after the IEC power cord is unplugged. When the carrier is opened the first fuse to be seen is the spare fuse. Remove and safely dispose of the fuse with the blown link before replacing it.

Class II construction double insulated. This product must not be connected to earth.

**Power Cord:** An AC power cord is normally supplied with a mains plug suitable for your area. If you have any doubts, consult your dealer about obtaining a suitable power cord.

#### Important notice to UK users

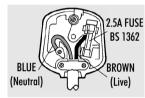
The appliance cord is terminated with a UK approved mains plug fitted with a 5A fuse. If the fuse needs to be replaced, an ASTA or BSI approved BS1362 fuse rated at 5A must be used. If you need to change the mains plug, remove the fuse and dispose of this plug safely immediately after cutting it from the cord.

#### Connecting a Mains Plug

The wires in the mains lead are coloured in accordance with the code: Blue: NEUTRAL; Brown: LIVE:

As these colours may not correspond to the coloured markings identifying the terminals in your plug, proceed as follows:

The BLUE wire must be connected to the terminal marked with the letter N or coloured BLUE or BLACK. The BROWN wire must be connected to the terminal marked with the letter L or coloured BROWN or RED.



# 6: Specifications 8000SE

# Rated Output Power

60 W (18 dBW) per channel into rated load impedance (8 Ohms) with both channels driven

# Inputs

CD, TUNER, AUX, VIDEO, TAPE 1, TAPE 2:

125mV/20kΩ. IHF

POWER AMP:

 $782\,\text{mV}/47\,\Omega$ .

# Gain

PRE-AMP: 9dB@ 1 kHz

**POWER AMP:** 29.0 dB @ 1 kHz.

# Signal To Noise Ratio

CD, TUNER, AUX, VIDEO, TAPE 1, TAPE 2:

Better than 80dB(IHF, rel. 0.5 V pre-amp output) **POWER AMP:** better than 80dB(IHF, rel.  $\bigcirc$  dBW)

# Frequency Response

All Inputs and POWER AMP:

 $20 \text{ Hz} - 20 \text{ kHz} \pm 0.5 \text{ dB}$ : 1 Hz - 65 kHz - 3 dB.

# Total Harmonic Distortion & Noise

Less than  $0.07\,\%$ 

# Channel Balance

Within 1 dB

# Channel Separation

Better than 60 dB @ 1 kHz any input

# Crosstalk

Better than 80 dB @ 1 kHz

# Polarity (phase)

Non-inverting for all inputs and outputs

# Pre-amp Output

Output Impedance:  $100 \Omega$ Maximum Output: >7.3 V RMS

# Headphone Output

Output impedance:  $330 \Omega$ 

(Suitable for headphones  $8\Omega$ . -2 k $\Omega$ . impedance)

# Record Output

VIDEO OUT, TAPE 1 OUT, TAPE 2 OUT:

Output impedance:  $1 k\Omega$ .

Gain from input to record output: 0 dB (x1)

# Muting

Muting controlled manually or automatically

# **Accessories Supplied**

AC Power Cord
Instruction Manual

# Colour

Silver & Black

# Operating Temperature Range

10-35 °C

Power Requirements (Depending on Region) 50-60Hz 100 V, 110-120 V, 220-240 V available Maximum Power Consumption: 440 VA

**Dimensions** (WXHXD)

445x74x335 mm overall

Weight

Net: 7.4 kg Shipping: 8.8 kg

Audiolab reserves the right to alter design and specification without notice. Specification may vary for different countries.

Audiolab is a member of the International Audio Group.

# **Power Amplifier Protection Circuits**

# **Short Circuit Protection:**

If the output terminals are connected together or there is a short caused by a faulty speaker or connecting lead, the amplifier will mute and un-mute until the fault condition is removed.

# DC Offset Protection:

If there is an internal or external fault which may cause DC voltage to be presented to the loudspeaker, the amplifier will mute and stay muted until the fault is removed.

# Thermal Protection:

If the amplifier is driven excessively for long periods, or the output devices are pushed beyond their safe operating area, the amplifier will switch off and then switch back on again when it has cooled down.

In all cases, if the amplifier does not respond to remedial action, consult your dealer.



# 5: Service and Warranty

#### Servicing

Servicing of Audiolab products should only be carried out by authorised service agents. If service is required the equipment should be returned, securely packaged, preferably using original packaging, to your dealer.

In the UK equipment may be returned to the IAG Service Centre. In the USA equipment may be returned to the Service address shown on this

Always telephone before returning any equipment.

A note should be enclosed giving your name, address, telephone number, and a brief description of the reason for return.

If you require Service outside the Warranty period, do not hesitate to contact your dealer.

#### Service Addresses, UK & USA

#### **IAG Service Centre**

Unit 4

St Margaret's Way

Stukeley Meadows Industrial Estate

Huntingdon

Cambs

PE29 6EB

England

Tel: +44 (0)1480 452561

Fax: +44 (0)1480 13403

#### IAG America, Inc.

8440 154th Avenue NE Redmond, Washington 98052

Tel: +1 425 861 3909 Fax: +1 425 861 3906

Audiolab Ltd. warrants this product, subject to the terms and conditions below, to be free from defects in materials and workmanship. During the warranty period Audiolab will repair or replace (at Audiolab's option) this product, or any defective part in this product, if it is found to be defective due to faulty materials, workmanship or function. The warranty period may vary from country to country.

Audiolab limited warranty

#### Terms and conditions:

The warranty starts on the date of purchase (or the date of delivery if this is later).

You must provide proof of purchase / delivery before work can be carried out. Without this proof, any work carried out will be chargeable to you.

All work will be carried out by Audiolab or its authorised agents or distributors. Any unauthorised repair or modification will void this warranty.

If any part is no longer available it will replaced with a functional replacement part.

Any parts that are replaced will become the property of

Any repair or replacement under this warranty will not extend the period of warranty.

This warranty is valid only in the country of purchase, applies only to the first purchaser and is not transferable.

#### The following are not covered:

- Products on which the serial number has been removed, altered or otherwise made illegible.
- Normal wear and tear and cosmetic damage.
- Transportation or installation of the product.
- Accidental damage, faults caused by commercial use, acts of God, incorrect installation, connection or packaging, misuse, neglect or careless operation or handling of the product which is not in accordance with Audiolab's user instructions.
- Equipment that has been operated in conjunction with unsuitable, inappropriate or faulty apparatus.
- Repairs or alterations carried out by parties other than Audiolab or its authorised agents or distributors.

- Products not purchased from an Audiolab authorised dealer.
- Products that were not new at the time of original purchase
- Products sold 'as is', 'as seen' or 'with all faults'.

Repairs or replacements as provided under this warranty are the exclusive remedy of the consumer. Audiolab shall not be liable for any incidental or consequential damages for breach of any express or implied warranty in this product. Except to the extent prohibited by law, this warranty is exclusive and in lieu of all other warranties whatsoever, both express and implied, including, but not limited to, the warranty of merchantability and fitness for a practical purpose.

This warranty provides benefits that are additional to and do not affect your statutory rights as a consumer. Some countries and US states do not allow the exclusion or limitation of incidental or consequential damages or implied warranties so the exclusions in the paragraph above may not apply to you. This warranty gives you specific legal rights, and you may have other statutory rights, which vary from state to state or country to country.

#### How to claim:

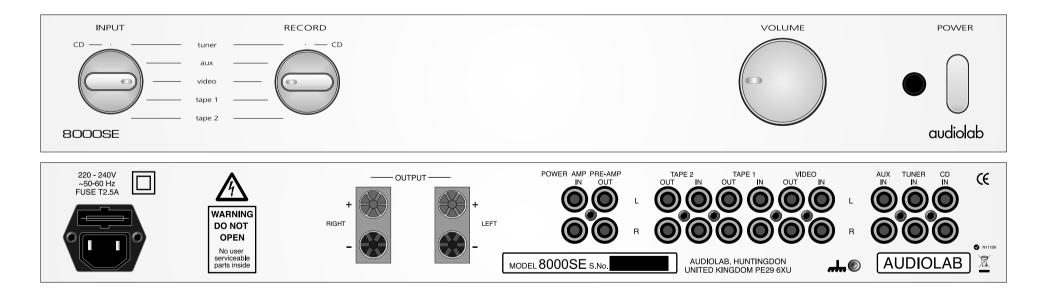
To obtain warranty service contact the Audiolab authorised dealer from which you purchased this product. Do not despatch goods without the prior agreement of the dealer, Audiolab or their authorised distributors.

If asked to return products for inspection and/or repair, pack carefully, preferably in the original cartons or packaging affording an equal degree of protection, and return prepaid. If unsuitable packaging is used, Audiolab may make a charge for the supply of new

Insurance is recommended as goods are returned at owner's risk. Audiolab or their authorised distributors cannot be held liable for loss or damage in transit.

Packing, insurance and freight on the return journey will be paid by Audiolab or their authorised agents or distributor if corrective work proves to be necessary.

# 2: Introduction



# Unpacking

Unpack the product fully. The carton should

- ⊗ The Audiolab 8000SE integrated amplifier
- One IEC power cord suitable for your area
- ⊗ This instruction manual.

If any item is missing or damaged report this to your dealer as soon as possible.

Retain the packing for safe transport of your amplifier. If you dispose of the packing, do so with regard to any recycling regulations in your area.

# **Positioning**

Place the amplifier on a sturdy shelf or table with plenty of room for ventilation. If you are using an equipment rack, place the 8000SE on its own shelf and do not place other equipment immediately on top.

Never operate the amplifier in a very confined space and always ensure that the power on/off switch on the front panel is unobstructed and freely operable.

# **Care and Cleaning**

While cleaning is in progress the AC power cord must be unplugged from the AC power supply socket.

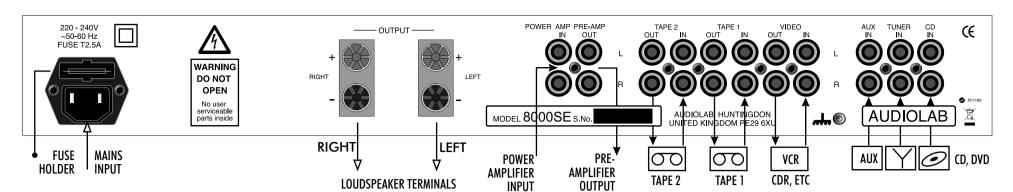
Any grease or dirt on the equipment may be removed with a soft, lint-free cloth slightly moistened with a mild solution of warm water and detergent or washing-up liquid. Do not use any other solutions or solvents.

If you have any queries regarding the use of Audiolab equipment, consult your dealer.

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# 3: Input & Output Connections

# Switch power off to all units before connecting the amplifier!



#### Signal Connections

# CD, TUNER, AUX, VIDEO IN, TAPE 1 IN, TAPE 2 IN

These inputs may be used to connect a line level source.

#### VIDEO OUT, TAPE 1 OUT, TAPE 2 OUT

Three sets of record outputs for connection of up to three stereo audio recorders, e.g. tape recorder, CD recorder, audio recording input of VCR, DVD, MiniDisc etc.

#### PRE-AMP OUT

Low impedance pre-amplifier output for driving subwoofers, external power amplifiers, or signal processors. Long cables may be used if required.

#### **POWER AMP IN**

For driving the power amplifier input directly from an external source. Only operates when internally enabled (see Section 4).

#### **GROUND**

Use only if phono pre-amplifier and turntable are used and both are Class II double insulated (no earth connection). In this case the ground terminal can be connected to the metalwork of these units to eliminate residual hum. The ground terminal must not be used as a safety earth. If in doubt consult your dealer.

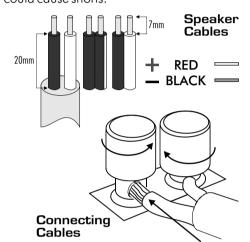
### **Connecting Loudspeakers**

Use quality low resistance loudspeaker cable.

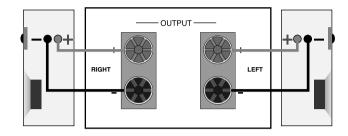
Connect the **Positive RED** (+) terminal of the amplifier to the **Positive** (+) **RED** terminal of the loudspeaker. Connect the **Negative** (-) **BLACK** terminals similarly.

When connecting loudspeakers tighten the terminals securely by hand.

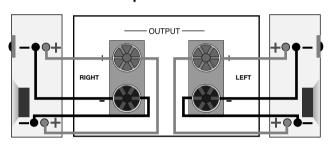
Make there are no loose strands of wire which could cause shorts.



### Standard Loudspeaker Connection

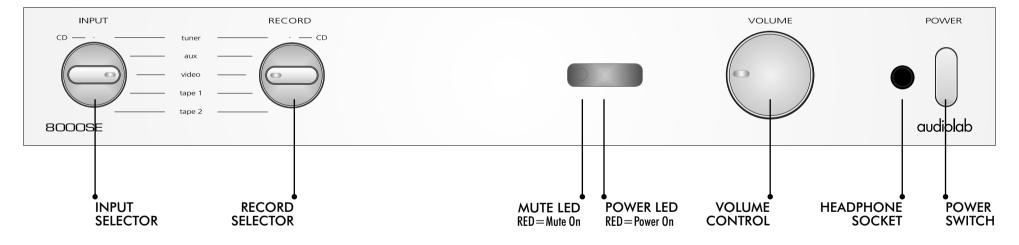


#### **Bi-Wired Loudspeaker Connection**



Loudspeaker bi-wiring offers improved sound quality. Signals are carried individually to the treble and bass terminals of the loudspeaker crossover network.

# 4: Operation



# Switching On

Make sure all the connections to and from the amp are secure and correct.

Plug the power cord into the wall socket and the amplifier. Switch on at the mains and then switch on the 8000SE at the Power Switch and any connected source units. The power indicator on the 8000SE lights and the unit is operational.

# Power Switch

When power is switched on the 8000SE is muted for 8 seconds. Always switch the power off before changing connections.

# Input Selector

Turn to select the listening source. The 8000SE mutes briefly when a new input is selected.

# Volume Control

Turn clockwise to increase and counterclockwise to decrease the volume. Always turn the volume up gradually.

# Record Selector

Turn to select source to record to Tape 1, Tape 2 or Video. The connections can also be used to connect to any recorder with analogue inputs such as a CD, MP3, DAT recorder, etc.

Record selector and input selector operate independently. It is possible to record from any source whilst listening to another.

# Headphone Socket

Socket for connection of headphones. Unplug headphones when not in use. Connecting headphones mutes the loudspeakers and disconnects the pre-amplifier outputs and power amplifier inputs.

# Mute

The Mute light comes on for a short period when the unit is switched on or an input is changed. During operation, power is disconnected from the loudspeakers in mute mode and restored when the mute light goes out.

# Using the 8000SE as a pre-amplifier and a power amplifier.

The 8000SE consists of a pre-amplifier and a power amplifier in one unit. The output of the pre-amplifier is connected internally to the power amplifier, and the sockets labelled **POWER AMP** are not connected.

As supplied the **PRE-AMP OUT** sockets are active and can be used to drive processors and other units.

Some multiple amplifier configurations require the internal link between the preamplifier and the power amplifier to be disconnected. Your retailer can arrange this. When the modification is carried out the sockets labelled **POWER AMP** become the input to the power amplifier. With the unit modified in this way you can connect a signal processor between the pre-amplifier and power amplifier sections.