

# 8300MB

## User Instructions

audiolab

# 1: Important Safety Information



## IMPORTANT SAFETY INFORMATION

Read these instructions.

Keep these instructions.

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 plug. A grounding plug has two blades and a third grounding prong. The wide blade or the third prong is 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 the plugs, convenience receptacles, and at the point where they exit from the apparatus.

Use only with the cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart or rack 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 periods 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.

**Mains Supply:** The mains operating voltage of Audiolab 8300 series units is shown on the rear panel. If this voltage does not match the mains voltage in your area, consult your Audiolab dealer about converting the unit.

The mains supply fuse on the rear panel is accessible when the IEC mains plug has been removed. In the rare event that 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, China, etc.) T4.0AL 250V Slow Blow

100 – 120V (USA, Japan, etc.) T8.0AL 250V Slow Blow

**WARNING:** Only use attachments/accessories specified or provided by the manufacturer (such as the exclusive supply adapter, battery etc.).

**WARNING:** The mains plug/appliance coupler/direct plug-in adapter is used as disconnection device; the disconnection device shall remain readily operable.

**CAUTION:** These servicing instructions are for use by qualified service personnel only. To reduce the risk of electric shock, do not perform any servicing other than that contained in the operating instructions unless you are qualified to do so.

Do not install this equipment in a confined or built-in space such as a bookcase or similar unit, and keep well ventilated in open space. The ventilation should not be impeded by covering the ventilation openings with items such as newspaper, table-cloths, curtains etc.

**WARNING:** To reduce the risk of fire or electric shock, do not expose this apparatus to rain or moisture. The apparatus shall not be exposed to dripping or splashing and ensure that objects filled with liquids, such as vases, shall not be placed on the apparatus. No naked flame sources, such as lighted candles, should be placed on the apparatus.

This equipment is a Class II or double insulated electrical appliance. It has been designed in such a way that it does not require a safety connection to electrical earth.

## 2: Getting Started

### Welcome to Audiolab 8300 Series

The 8300MB is a pocket powerhouse, housing 250W of pure, balanced amplification in a casing no bigger than a shoebox.

8300MB's full power output is delivered into any loudspeaker load – unconditionally. Massive reserves of power are available for high current drive capability to power and control the mightiest of speakers.

This latest development of the Audiolab range now features a fully balanced power stage making the most of the balanced XLR inputs. This makes 8300MB a perfect match for the 8300CD using its balanced outputs, even over long cables.

If you prefer you can position 8300MB close to each loudspeaker and use long, balanced cables to transfer the signal from 8300CD or a preamplifier. This puts 8300MB in even closer contact with your loudspeaker for improved transient starts and stops.

However you use 8300MB we are certain that you will love the pure sound quality and unrestrained dynamics that this amplifier brings to your hi-fi system.

Please read through this manual to obtain the very best performance from 8300MB.

#### Inputs:

- Loudspeaker output
- 12V trigger in

#### Outputs:

- Line analog input
- XLR balance analog input
- 12V trigger out

### Operating Features:

- RCA/XLR Line input selector
- 250W full power output
- Support 4 ohm or 8ohm loudspeaker
- 0.5W ErP standard standby power consumption
- Low THD Hi-end amplifier
- Standby key control function
- True balanced design for high-end sound quality

### Unpacking

Unpack the product fully. The carton should contain:

- The Audiolab 8300MB
- One IEC power cord suitable for your area
- This instruction manual

If an item is missing or damaged, report this to your dealer as soon as possible. Remain the packing for safe transport of your unit. If you dispose of the packing, please do so with regard to any recycling regulations in your area.

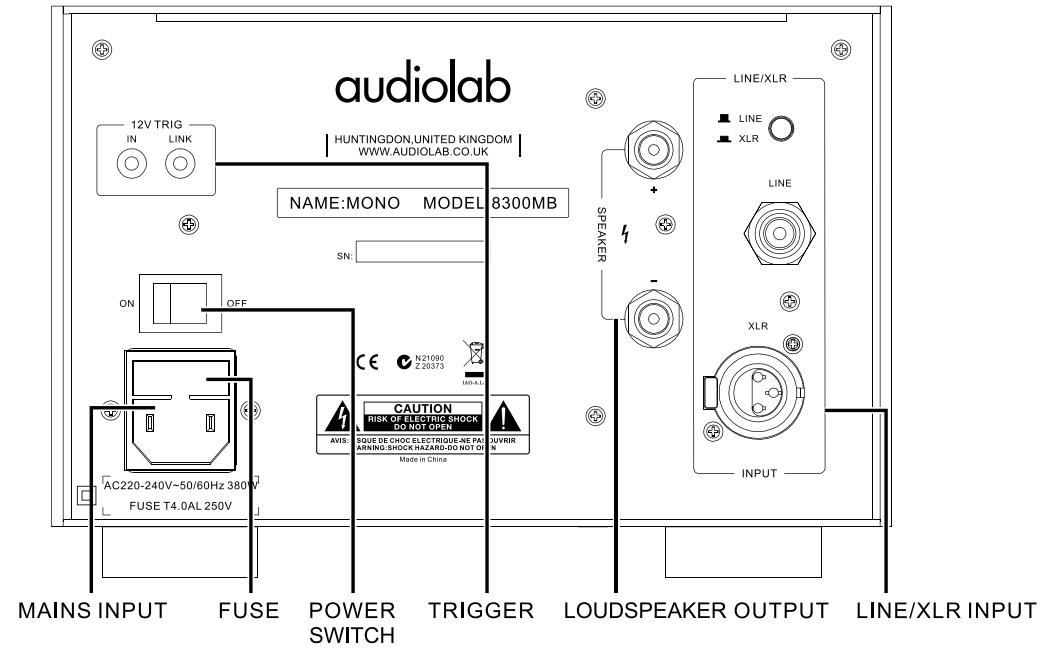
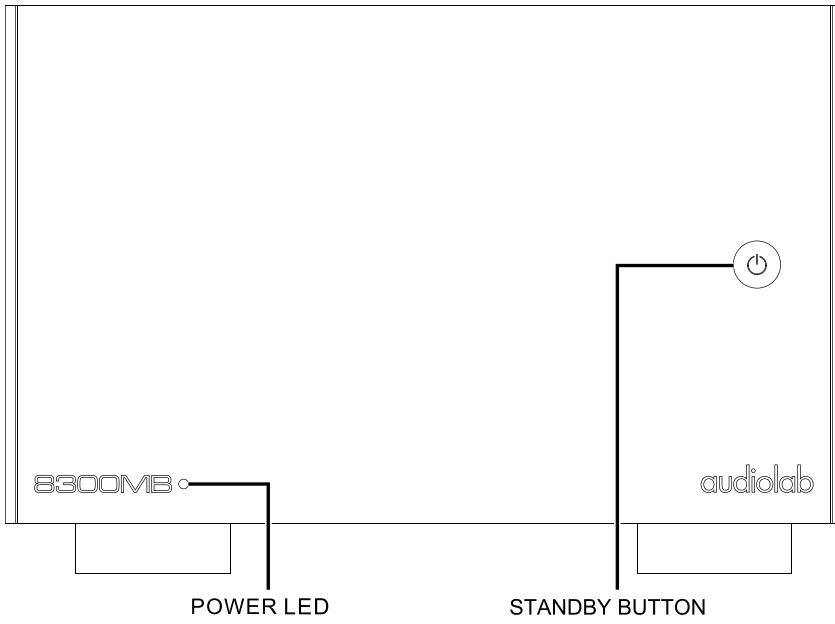
### Placement

The unit is designed to run warm during normal operation but ensure you do not block any ventilation openings.

Place the unit on a sturdy shelf or table. If you use equipment racks, ensure the unit has adequate ventilation and is on its own shelf.

Ensure your mains voltage corresponds to the rating plate on the rear of the product's power supply. If in doubt, consult your dealer. If you move to an area with a different mains voltage, seek advice from an Audiolab appointed dealer or a competent service technician.

### 3: Controls and Connectors



# 4: Connections - 1

You should read the following useful notes carefully before you begin to install and use the equipment.

There are no user adjustable parts inside the equipment. You should refer to a qualified engineer or return the equipment to either the dealer or the Audiolab distributor for any servicing requirements.

Important notice: Please do not connect loudspeakers or source components to the amplifier when switched on. Always switch 8300MB off before making connections!

The Audiolab 8300MB mono amplifier will be warm when running, the actual temperature depending on the power output. A resettable current trip will automatically switch the amplifier off under gross overload or short circuit output etc. The fins of the heat sink should be kept clear of obstruction to allow adequate ventilation in normal use.

## Connecting to the AC power supply

The Audiolab 8300MB mono amplifier is supplied in four versions suitable for connection to 240V, 230V, 115V or 100V AC power supplies. Before connecting the amplifier check that you have the correct version. If the amplifier is connected to a lower voltage than marked, the maximum output power will be lower than specified.

Please check with the dealer if you have any doubt as to the voltage in your area or intend to use the equipment in regions which use different mains voltages.

The Audiolab 8300MB mono amplifier is provided with a mains cable fitted with an appropriate mains plug. This plug should not be cut from the cable. If for any reason, the plug is removed it must be safely disposed. It must never be plugged into a mains outlet.

Any replacement plug should be wired to the supplied mains cable as follows:

The **BROWN** wire must be taken to the **LIVE** terminal

The **BLUE** wire must be taken to the **NEUTRAL** terminal

## Signal Input Connections

**Balanced XLR Connections:** If you are connecting a Audiolab 8300MB mono power amplifier to the Audiolab 8300CD CD player, we strongly advocate the use of the balanced XLR connections. XLR inputs use 3 conductors, one for ground and two for the voltage plus and minus signals. In this way the signal transmitted to the amplifier is thus 'cleaner' and free from earth-induced currents and other air-borne interference.

XLR interconnects should be of screened, twisted pair construction. Refer to your dealer if in doubt.

**Unbalanced Connections:** If you cannot use the XLR inputs, connect an RCA phono interconnect between the unbalanced inputs on the 8300MB rear panel with the matching output of the source unit.

**Input Selector:** When connecting the signal input, ensure the Input Selector is switched to the appropriate input.

- In the normal (extended) position the balanced XLR input is selected.
- Press the selector in for unbalanced RCA phono input.

## Trigger Connections

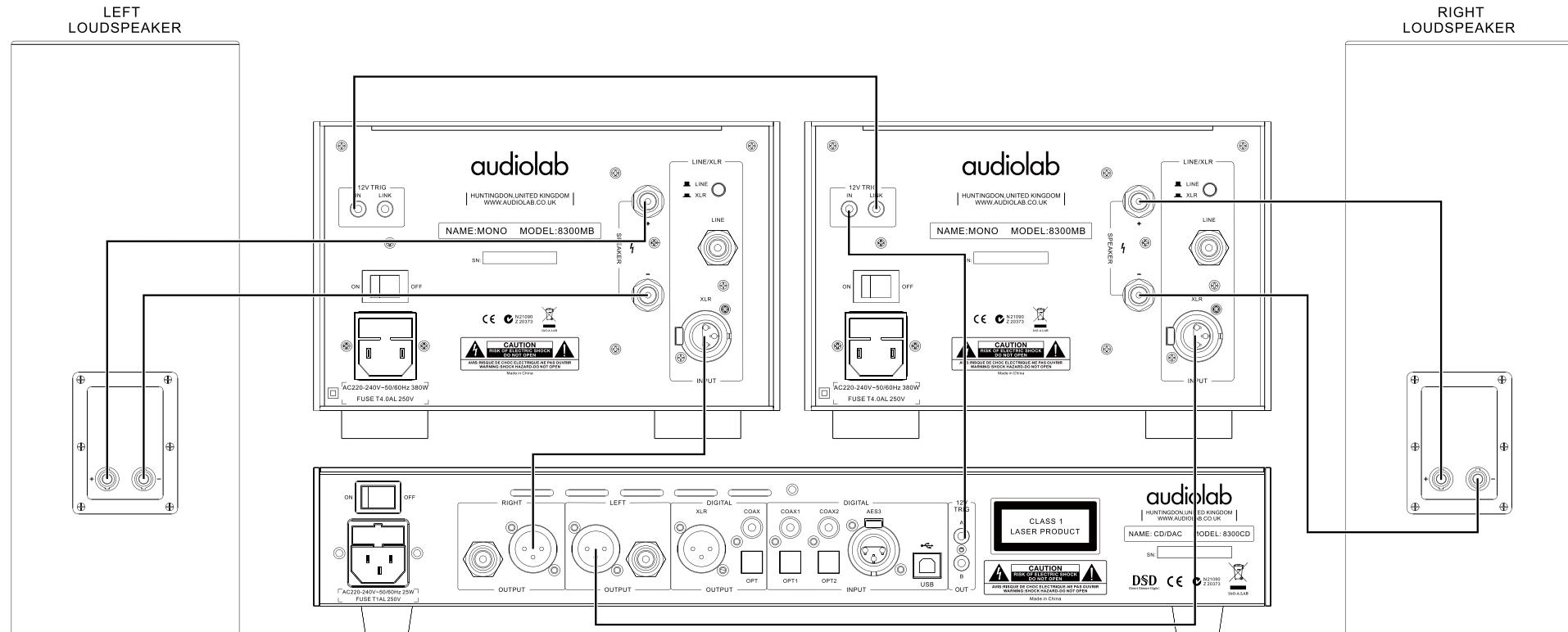
Audiolab 8300MB mono amplifier has one pair trigger connections at the rear panel, can be activated by 8300CD's or any other source's trigger output. 8300MB can also bypass the source's trigger signal to another 8300MB, then one source can trigger two 8300MB . If you have a 8300 system, we advise connecting the triggers. This will enable all 8300 units to be brought in and out of standby along with the trigger connections.

To connect to your control unit, you will need a cable with one end to match the trigger output of the control unit and other terminating in a 3.5mm jack plug. For Audiolab 8300 series units, this will be a 3.5mm to 3.5mm interconnect.

Connect the either of the trigger of Audiolab 8300MB to the TRIG OUT of 8300CD or any other control unit having a 12V master trigger out, and then connect the output trigger of 8300MB to another 8300MB's trigger.

## 4: Connections - 2

Connecting the 8300MB Mono Amplifier



# 5: Operation

The performance of amplifiers tends to stabilize after a period of use due to a number of factors associated with the physical and chemical properties of the components. We recommend that the system be run with a music signal for several hours when it is first installed. Although the changes can be quite subtle, after a few days the sound quality becomes smoother and more natural.

## Switching On

The Audiolab 8300MB mono amplifier Mains on/off switch is on the rear panel. Press the switch to power 8300MB on/off.

The power LED will glow red when the amplifier is powered on.

The Mains On/Off switch should be switched off when the amplifier is not in use.

Note: Always switch on the power amplifier after the rest of the system and switch it off before powering down any source component. Ensure the system volume control is at minimum when switching your equipment on or off.

## Standby Mode

Audiolab 8300MB mono amplifier will be in standby mode when power on. Press the  $\odot$  button to bring 8300MB out of standby, the power indicator LED becomes brighter. You can activate the 'auto standby' function by holding the  $\odot$  button down for 3 seconds. Using this 'auto standby' function, 8300MB will automatically go into standby mode when there is no signal input or operation for 20 minutes, and the power indicator LED becomes dim.

## Amplifier Protection Trip

The Audiolab 8300MB mono amplifier is protected by a thermal fuse which interrupts the audio output if the amplifier is grossly overloaded for a period of time. The LED on front panel will flash when 8300MB is in protection mode. To restore operation, simply power the unit off for a while and then power on again.

## Loudspeaker Phasing

Make sure that both channels are connected in phase. The positive (red) output terminal of each channel should be connected to the positive (red) terminal of the speaker. Special care should be taken when bi-wiring as phase becomes critical.

If there is a doubt about the way the loudspeakers are connected, check their phasing by playing a mono source - the sound should appear from a point midway between the two loudspeakers. If this position is unfocused, reverse the connections to one of the loudspeakers. Correctly connected loudspeakers give a defined center sound source with fuller bodied midrange and bass registers.

## Maintenance

The surface of the equipment may be cleaned with a barely damp cloth provided the power has been switched off. Solvent based cleaners should not be used.

# 6: Specifications

(Measurement made with 230V supply)

Rated Output Power	255W 8 ohm (<1% THD,1kHz)
Total Harmonic Distortion	<0.005% (100W 1kHz) <0.01% (100W, 20Hz-20kHz)
Frequency Response	-0.5dB (20Hz-20kHz, ref. 1kHz) -3dB (0.1Hz-150kHz, ref. 1kHz)
Input Sensitivity	1500mV (RCA line in)
Input Impedance	44 kohm (Balanced) 22 kohm (Unbalanced)
Signal to Noise Ratio (S/N)	115dB (A Weighted, ref. 250W)
Power Requirement	240V~50-60Hz 230V~50-60Hz 115V~50-60Hz 100V~50-60Hz
Maximum Power Consumption	400W
Standby Power Consumption	<0.5W
Dimensions(mm) (W x H x D)	216 X 150 X 370
Carton Size(mm) (W x H x D)	350 X 285 X 495
Weight	9.5kg (Net) 11.5kg (Gross)



Correct disposal of this product. This marking indicates that this product should not be disposed with other household wastes throughout the EU. To prevent possible harm to the environment or human health from uncontrolled waste disposal, recycle it responsibly to promote the sustainable reuse of material resources. To return your used device, please use the return and collection systems or contact the retailer where the product was purchased. They can take this product for environmental safe recycling.

**Audio lab  
IAG House,  
13/14 Glebe Road,  
Huntingdon,  
Cambridgeshire,  
PE29 7DL,  
UK**

Tel: +44(0)1480 452561  
Fax: +44(0)1480 413403  
<http://www.audiolab.co.uk>  
CODE: AH14-MNL0004a