

8300XP

User Instructions

audiolab

1: Important Safety Information



This lightning flash with arrowhead symbol within an equilateral triangle is intended to alert the user to the presence of non-insulated “dangerous voltage” within the product’s enclosure that may be of sufficient magnitude to constitute a risk of electric shock. Warning: to reduce the risk of electric shock, do not remove the cover (or back) as there are no user-serviceable parts inside. Refer servicing to qualified personnel. The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance instructions in the literature accompanying the appliance.

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 manufacture’s instructions.

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 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 the 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.

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: Excessive sound pressure from earphones and headphones can cause hearing loss.

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

CAUTION: Danger of explosion if battery is incorrectly replaced. Replace only with the same or equivalent type.

WARNING: The battery shall not be exposed to excessive heat such as sunshine, fire or the like.

WARNING: Please refer to the information on the exterior panel of the enclosure for electrical and safety information before installing or operating the apparatus.

WARNING: For the terminals marked with symbol of “⚡” may be of sufficient magnitude to constitute a risk of electric shock. The external wiring connected to the terminals requires installation by an instructed person or the used of ready-made leads or cords.

Mains Supply: The mains operating voltage of 8300XP 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, EU, Korea, etc.) T6.3AL 250V 20mm Slow Blow

100 – 120V (USA, Japan, etc.) T10AL 250V 20mm Slow Blow



2: Getting Started

Welcome to Audiolab and congratulations in your investment in this 8300XP Power Amplifier.

In the Audiolab 8300XP, our engineers have worked hard to combine the highest performance power amplifier modules into a single, stereo unit that is a veritable powerhouse capable of driving even the most demanding loudspeakers.

Whatever speakers you choose to use, and whichever source material you feed to the 8300XP, your power amplifier will deliver a thrilling and emotionally charged performance that will have you enthralled in the music no matter how long you listen.

Signal Inputs:

- RCA analog input
- Balance analog input

Signal Output:

- Speakers output

Operating Features:

- Low noise amplifier
- Low distortion
- Stereo and bridged operations
- Up to 480W RMS in bridged operation
- Output short protection
- High temperature protection
- Auto standby function with function on/off options.

Unpacking

Unpack the product fully. The carton should contain:

- The Audiolab 8300XP
- One 8300XP power supply 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

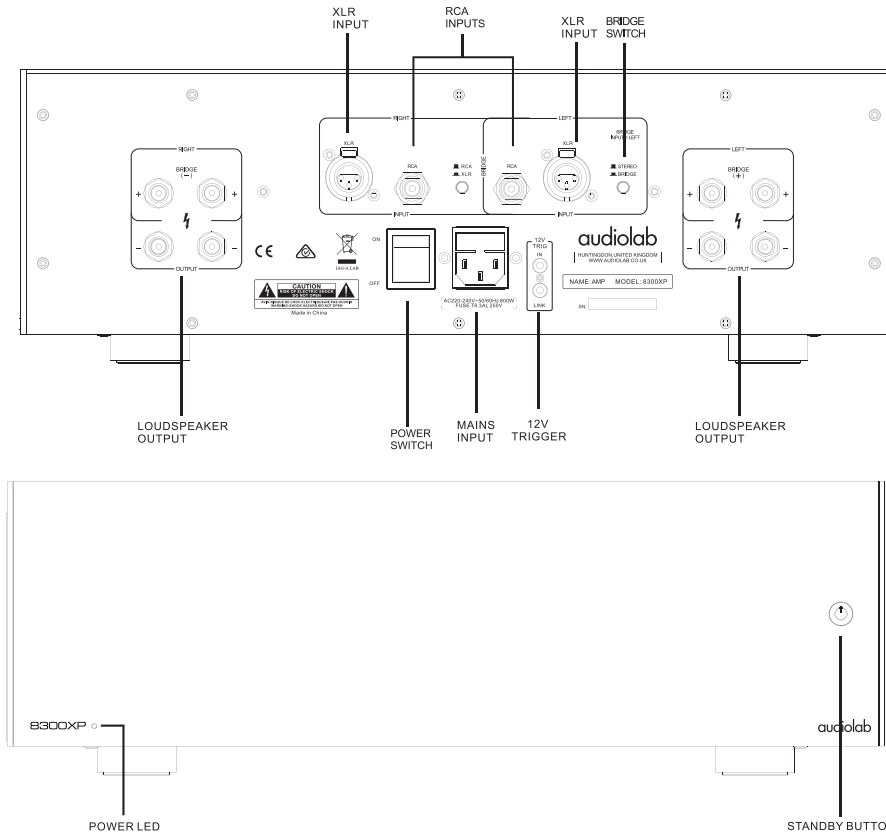
The unit is designed to run warm during normal operation but ensure you do not block any ventilation openings.

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



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 Quad distributor for any servicing requirements.

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

The Audiolab 8300XP Stereo 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.

Checking the AC power supply

The Audiolab 8300XP Stereo 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.

If you are in any doubt of the correct operational voltage, ask a qualified electrician before applying power to the equipment. The 8300XP Amplifier will work correctly within standard tolerances of this voltage.

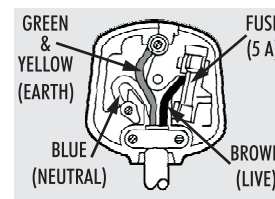
Connecting to the AC power supply

The Audiolab 8300XP Stereo 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



4: Connections-2

In the UK a fused 13 Amps mains plug should be fitted with a fuse link rated to 13 Amps which conforms to BS1362. In other countries a value between 10 Amps and 15 Amps should be used at either the wall socket or at the mains distribution board. If you are in any doubt you should consult a qualified electrical engineer.

Use of correct connectors and cables

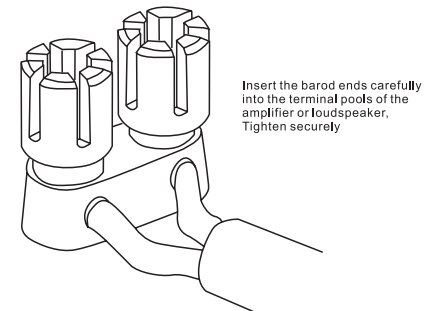
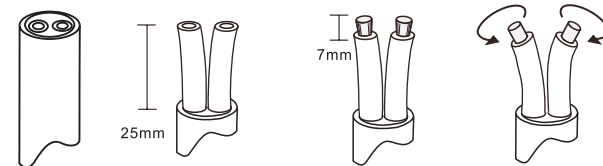
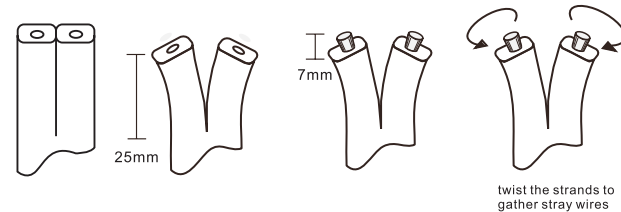
You should ensure that any cables which are used with Audiolab 8300XP Stereo Amplifier are properly terminated and that the cable is appropriate to the task. This is particularly important with loudspeaker cables and connections. If you are in any doubt you should consult your dealer.

Loudspeaker Cables

Loudspeaker cables should be carefully prepared. The following sketches show the preparation of a speaker cable for use with Audiolab 8300XP Stereo Amplifier and loudspeakers. When stripping the insulation, be careful not to cut into the wire. Make sure that you collect together all the strands of wire as stray wires may cause shorting which could result in damage or cause a fire.

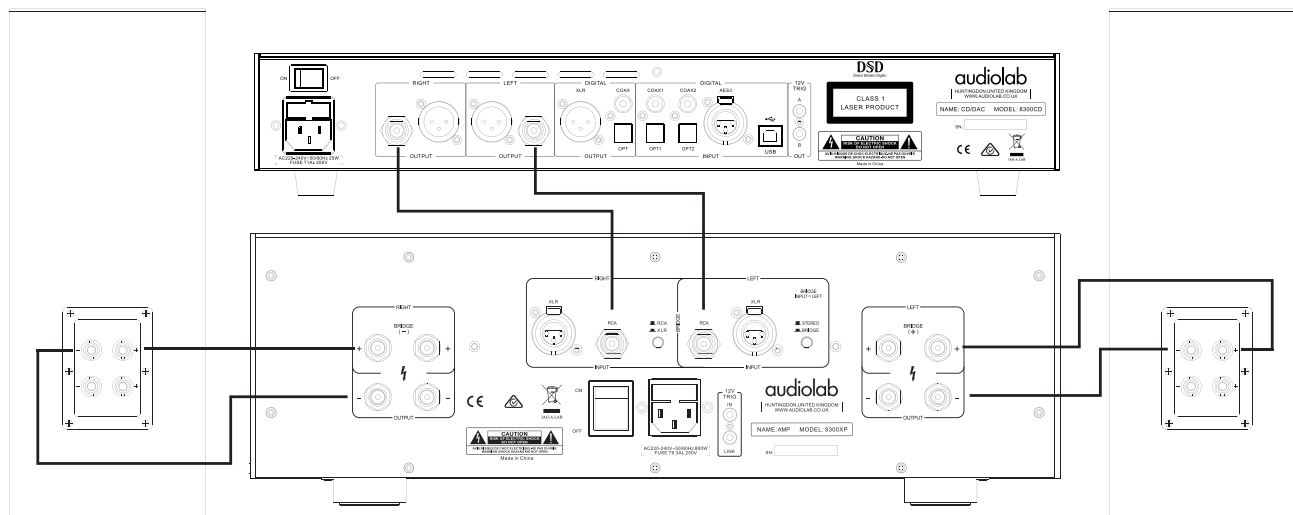
When estimating the length, provide sufficient loudspeaker cable to enable easy access and tidy securing. Some cables are quite heavy and you should be careful to place your cables so that they do not cause undue strain on the binding posts of the amplifier or loudspeaker.

Note: Ensure that cables used with Audiolab 8300XP Stereo Amplifier are appropriate to the task and correctly terminated.



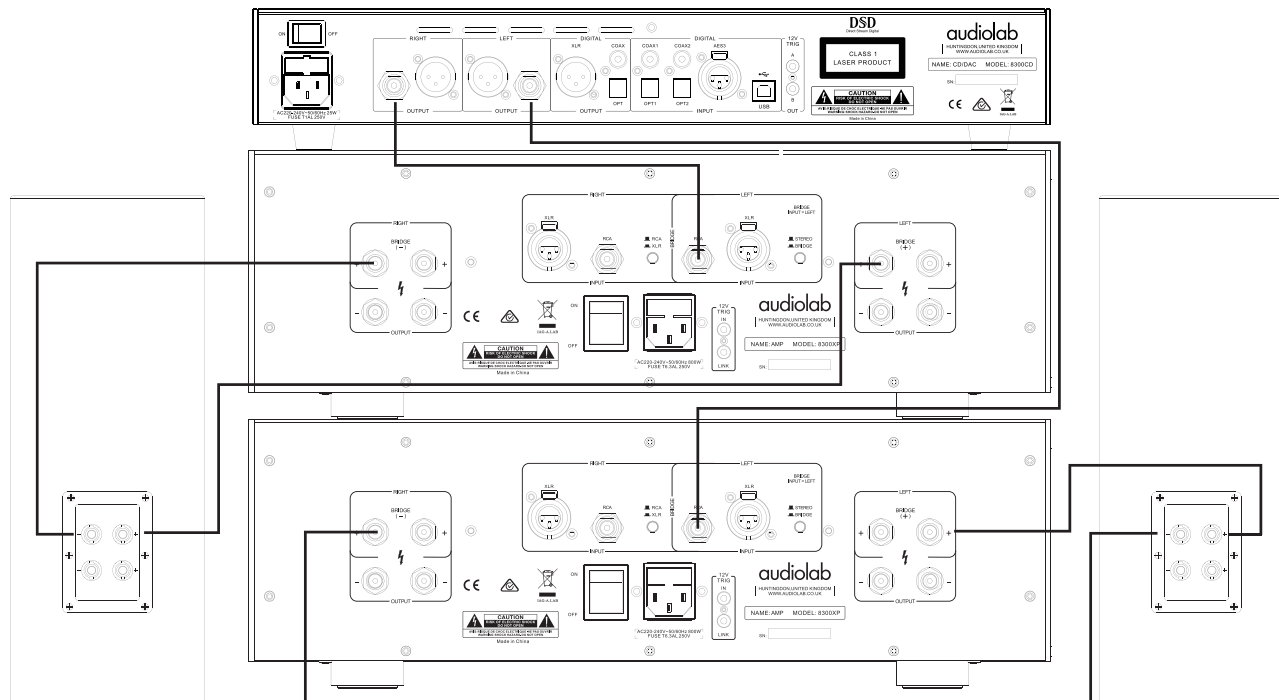
4: Connections-3

8300XP Stereo Setup



4: Connections-4

8300XP Bridged Setup





5: Operation

The performance of amplifiers tends to stable 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 8300XP Stereo Amplifier Mains on/off switch is on the front panel. Press the switch to power 8300XP 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.

Amplifier Protection Trip

The Audiolab 8300XP Stereo 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 8300XP is in protection mode. To restore operation, simply power off unit for a while and then power on again.

Standby Mode

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

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 centre sound source with fuller bodied tenor 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, one channel driven and applied to either channel)

Rate power output	140W RMS (8Ω <1% THD,1kHz stereo)
	230W RMS (4Ω <1% THD,1kHz stereo)
	480W RMS (8Ω <1% THD,1kHz bridge)
Gain	29dB @ 1kHz (stereo)
	36dB @ 1kHz (bridge)
Input sensitivity	1100mV
Input impedance	15K (balanced)
	10K (unbalanced)
Frequency response	-3dB 20Hz-80KHz
	+/-1dB 20Hz-30KHz
Total harmonic distortion (THD)	0.04% (20W, ref. 1kHz)
Intermodulation distortion (IM)	0.04% (20W,ref. 7kHz+60Hz)
Transient intermodulation distortion (TID)	113dB (A Weighted, ref. 140W)
Signal-to-noise ratio (S/N)	140W /113dB
Damping factor	160
Power Requirement	240V~50-60Hz
	230V~50-60Hz
	115V~50-60Hz
	100V~50-60Hz
Dimension(mm) (W x H x D)	444 x149 x 367
Carton Size(mm) (W x H x D)	550 x 260 x 580
Weight	16Kg (Net)
	18.5Kg (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.





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