

8300A

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 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 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 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.

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

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: The battery (battery or batteries or battery pack) shall not be exposed to excessive heat such as sunshine, fire or the like.

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

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.



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.

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.) T2.5AL 250V Slow Blow

100 – 120V (USA, Japan, etc.) T4.0AL 250V Slow Blow



2: Getting Started

Welcome to Audiolab 8300 Series.

8300A is the latest in a long line of Audiolab integrated amplifiers with a pedigree that stretches back to the very first 8000A that made Audiolab an overnight sensation.

Inside 8300A you'll find the latest discrete technology from designers that understand analogue circuitry inside out. Delivering a balance of refined musical detail and powerful transient performance, 8300A packs far more weight than its svelte looks would indicate.

Designed to drive any loudspeaker load with absolute stability and finesse, 8300A is the perfect partner for other Audiolab sources such as 8300CD.

We hope you will enjoy its performance for many years to come.

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

Inputs:

- Six unbalanced analog inputs.
- One unbalanced analog power input
- One balanced analog input

Outputs:

- Two pre-amplifier outputs
- Loudspeaker outputs

Operating Features:

- Maintains absolute fidelity with the straightest possible signal path.
- Separate Pre-Power sections for flexibility of operation.
- Dedicated high performance MC and MM Phono Input (selectable via the menu).
- Automatic equipment activation via 12V trigger input and output.
- Three display brightness available with on/off options.
- Auto standby function with function on/off options.

Unpacking

Unpack the product fully. The carton should contain:

- The Audiolab 8300A
- One IEC power cord suitable for your area.
- One Remote handset with two AAA batteries
- This instruction manual.

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

Placement

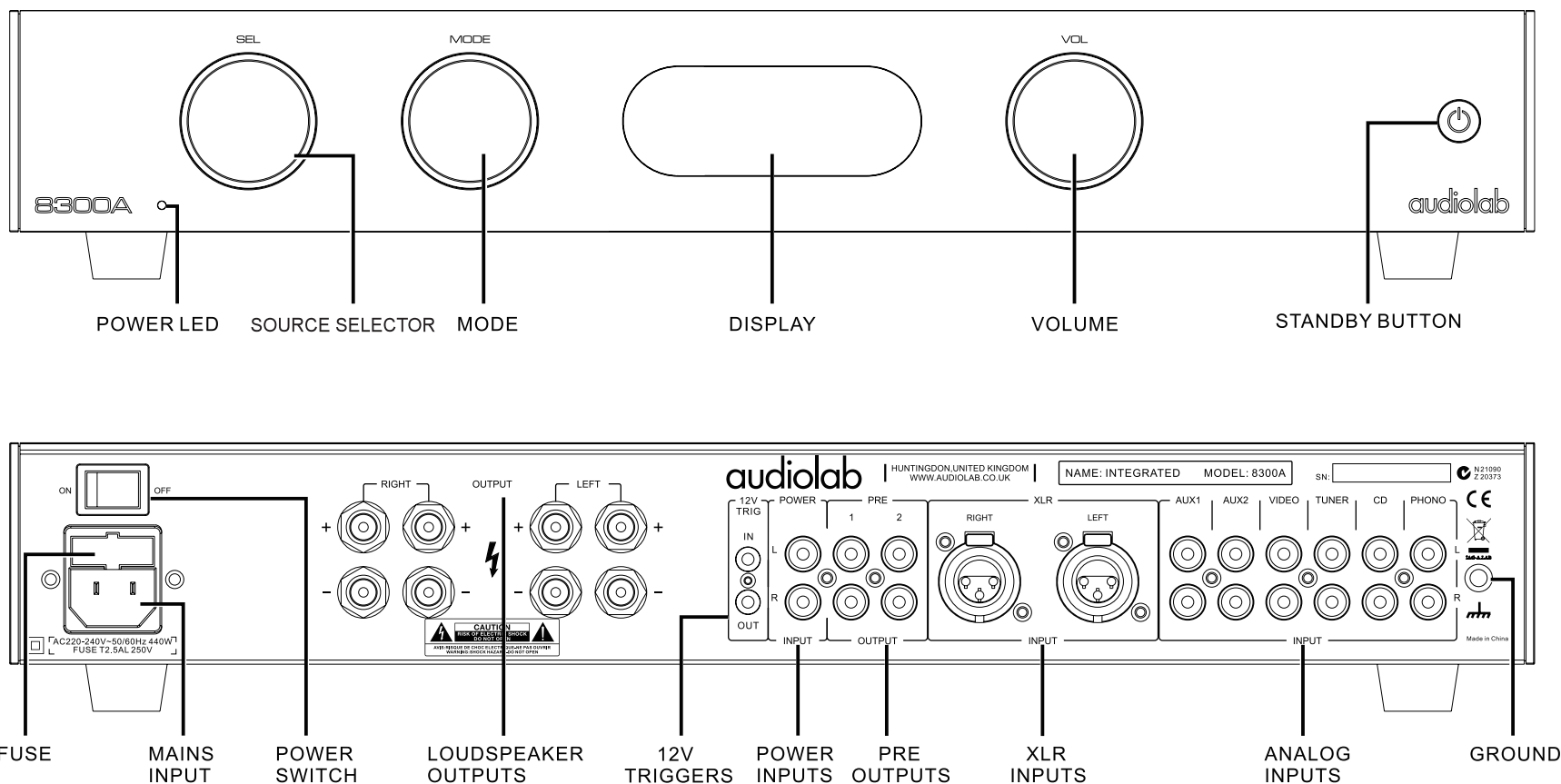
The unit is designed to run warm during normal operation but ensure you do not block any ventilation openings.

Place the unit on a sturdy shelf or table. If you use an equipment rack, ensure the unit has adequate ventilation and is on its own shelf. To minimize any interference place the power supply in a stable location as far from sensitive analogue input as possible.

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.

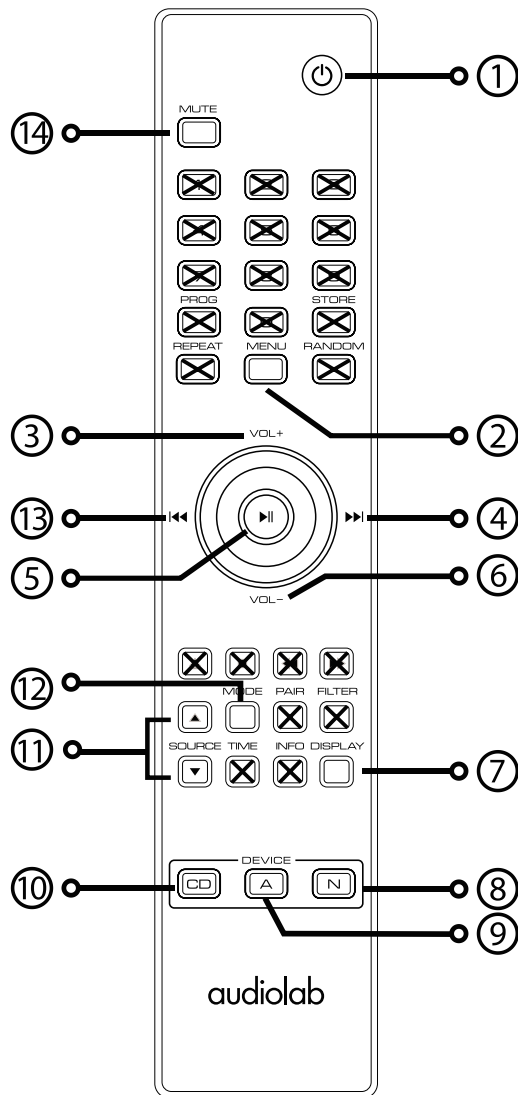


3: Controls and Connectors



4: Remote Handset

NOTE : the handset buttons shown crossed out are for use with other Audiolab units like Audiolab 8300CD and are not operational when used with the 8300A



- | | | |
|----|---------|--|
| 1 | STANDBY | Press to bring the unit in/out of Standby |
| 2 | MENU | Press to enter menu mode |
| 3 | VOL+ | Increase Volume |
| 4 | ▶▶ | Move to next menu page or setting |
| 5 | ▶▶ | Press to next menu page or setting |
| 6 | VOL- | Decrease Volume |
| 7 | DISPLAY | Press to toggle the display on/off |
| | | Press and hold to select display brightness levels |
| 8 | N | Press to select 8300N remote mode |
| 9 | A | Press to select 8300A remote mode |
| 10 | CD | Press to select 8300CD remote mode |
| 11 | SOURCE | Press to cycle source inputs |
| 12 | MODE | Press to select 8300A operating mode |
| 13 | ◀◀ | Move to last menu page or setting |
| 14 | MUTE | Press to mute and unmute the sound |

Fitting Batteries

Open the cover, unwrap the supplied AAA batteries and place them in the battery compartment the correct polarity replace the cover.

Always use AAA batteries and always replace them in sets. Never mix old and new batteries. Very weak batteries can leak and damage the handset. Replace them in good time!

There is a risk of fire and burns if a battery is handled improperly. Do not disassemble, crush, puncture, short external contacts, or dispose of in fire or water.

Do not attempt to open or service a battery. Discard used batteries in full accordance with recycling regulations in force in your area.

Handset Operation

The handset operates several Audiolab components. The handset buttons shown crossed out are for use with other Audiolab units and are not operational when used with the 8300A.

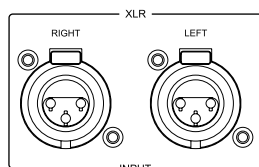
Point the handset at the remote receiver and press the relevant key. The handset should be within 15 meters of the player and there must be a clear line of sight between the two units.

5: Connections

Signal Input

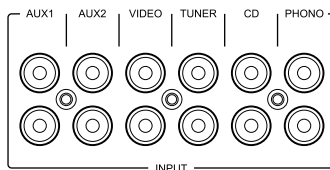
Balanced Input

Balanced connections provide greater dynamic range and lower noise. If your source unit has balanced outputs please connect them to the balanced input. You will need one XLR balanced cable per channel.



Unbalanced Input

If you cannot use the balanced input, connect a high quality stereo screened RCA phone lead from the unbalanced input of the 8300A to a suitable output of the source unit. 8300A has AUX1, AUX2, VIDEO, TUNER and CD as line level inputs. The PHONO input should only be connected to turntables fitted with MM or MC cartridges.



Power AMP Input

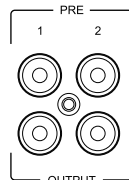
For driving the power amplifier input directly from an external source. Only operates when Pre-Power mode is selected.



Signal Output

PRE-AMP Output 1&2

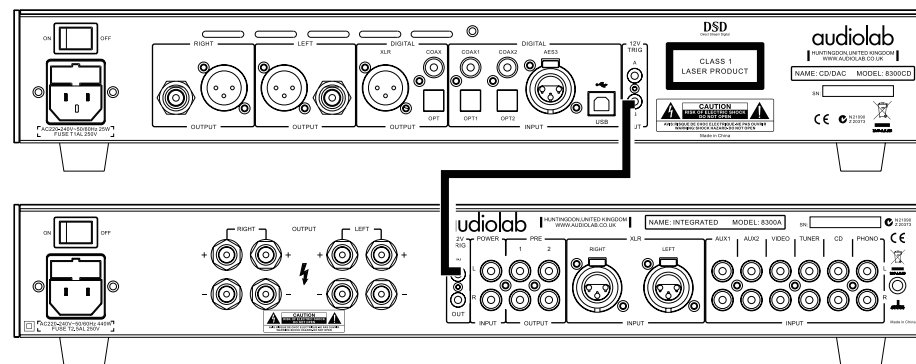
Low impedance pre-amplifier outputs for driving external power amplifiers, sub-woofers or signal processors.



Trigger Connections

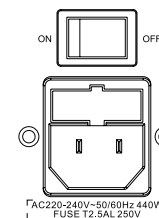
Audiolab 8300A has one pair trigger connections on the rear panel, can be activated by 8300CD's or any other source's trigger output. 8300A can also provide a trigger signal to another 8300A's or any other amplifier's trigger input. If you have an 8300 system, we advise connecting the triggers. This will enable all 8300 units to be brought in and out of standby using 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, this will be a 3.5mm to 3.5mm interconnect.



Mains Input

Before connecting the 8300A to the mains supply make sure that all the other connections to your system have been properly and securely made. Make sure the ON/OFF switch on the 8300A is switched off. Switch the mains supply off at the wall socket, and then, using the cable supplied, connect the socket on the back of your 8300A to an AC supply outlet. The 8300A is now ready for operation.





6: Operation - 1



Switching On and Off

Connect power to all system units. Switch the mains on. Switch on all source units, switch on the 8300A amplifier.



When switching off: switch off the amplifier 8300A first before switching off the source unit unless they are trigger enabled.

When switching on: The power LED illuminates, 8300A enters standby mode.

Standby Mode

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

Protection

The Audiolab 8300A is equipped with over-current and over-temperature protection circuitry. If the amplifier is overloaded it will enter protection mode and the display will show PROTECTION for 3 seconds, the display is then turned off and the power indicator LED will flash. To restore operation, simply press the  button to bring unit into standby and then press the  button again to activate the unit. If the over-temperature protection is activated the display will turn off and the amplifier output will be cut off. The amplifier will activate again once the temperature is back to normal.

Note: please make sure the amplifier has adequate ventilation.

Source Select

Rotate the SEL knob on the front panel to select different source inputs. 8300A has AUX1, AUX2, VIDEO, TUNER, CD, PHONO, and XLR - in total 7 signal inputs.

Altering the Volume Level

Rotate the VOL knob on front panel to alter the volume level.

The range is -80dB to +8dB, the factory default volume is -20dB. If the volume is set to lower than -20dB when unit is switched to standby, the default volume will be the last used value when the amplifier is next activated. If the volume is set to higher than -20dB, the default volume will be -20dB when the amplifier is next activated.

Mute

Press the VOL knob on the front panel or the MUTE button on the remote handset to toggle the sound on/off.

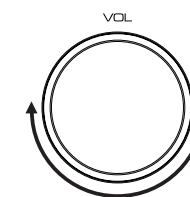
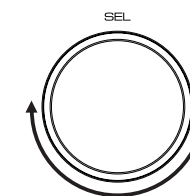
Selecting the Display brightness level

Pressing the DISPLAY button on the remote control cycles through the display settings.

Press the DISPLAY button to select between Display High, Display Low and Display Off. Each press of the DISPLAY button will select the next display setting.

When the display is OFF: Pressing any key will momentarily switch the display on. After a few moments the display will go off.

Note: switching the 8300A off and on again restores the display setting to High.



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PROTECTION
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Display High

Display Low

Display Off

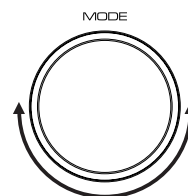
6: Operation - 2

Operating Modes

Although 8300A is an integrated amplifier, it can function as a separate pre-amplifier and power amplifier. Rotate the MODE knob on the front panel to select different operating modes.

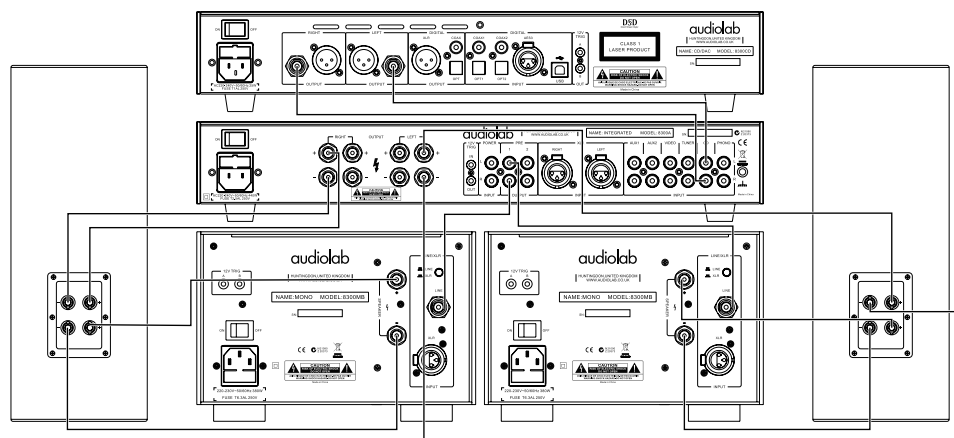
NOTE: When switching modes, the making and breaking of connections may momentarily operate the muting function on the 8300A.

MODE	POWER AMP IN	PRE-AMP OUT1&2	PRE-POWER INTERNAL LINK	LOUDSPEAKERS
PRE	DISABLE	ACTIVE	DISABLE	DISABLE
PRE-POWER	ACTIVE	ACTIVE	DISABLE	ACTIVE
INTEGRATED	DISABLE	ACTIVE	ACTIVE	ACTIVE



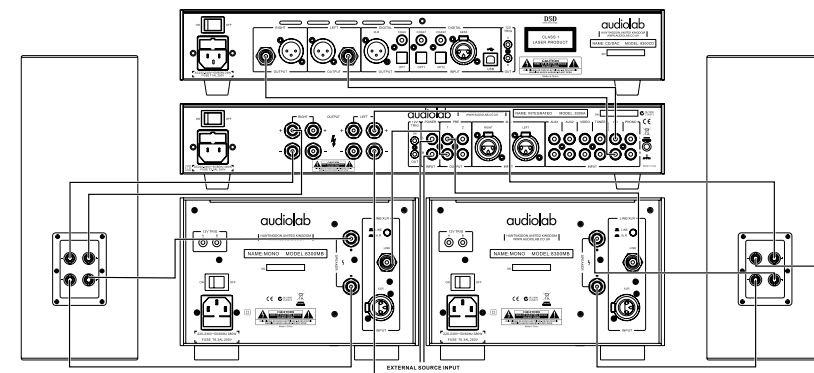
Integrated mode

The pre-amplifier section is internally connected to the power amplifier. Pre-Amp outputs are not operational. 8300A acts as an integrated amplifier, has amplifier output, can drive speakers directly.



Pre-Power mode

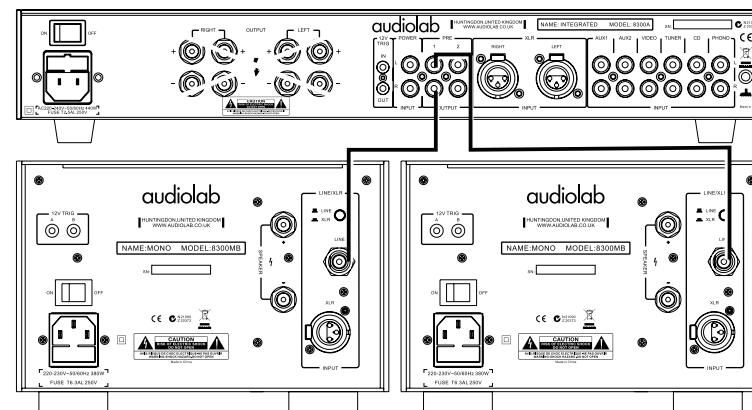
The pre-amplifier outputs are operational. A second power amplifier can be connected for bi-amplifying as shown in the diagram. An additional power amplifier can also be connected to drive a second pair of speakers.



Pre Mode

All signals to and from the power amplifier of the 8300A are disconnected. In this mode, the 8300A functions as a stand-alone pre-amplifier.

The pre-amplifier section of the 8300A can be connected to a stereo power amplifier, or to two monobloc amplifiers





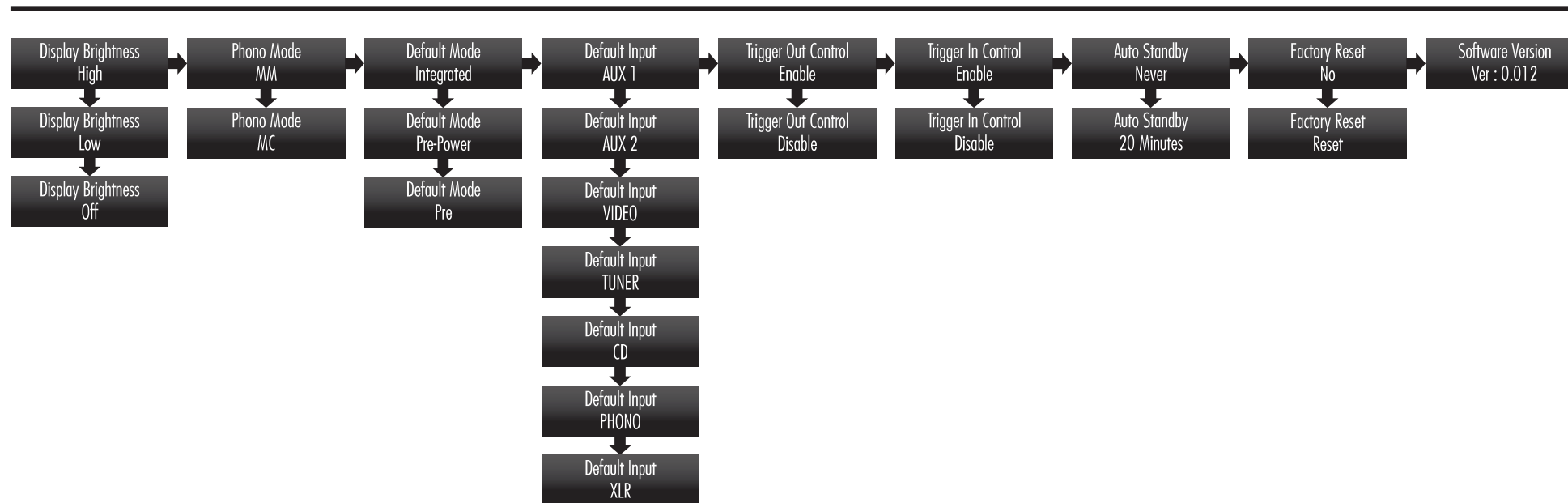
7: The Menu

The menu enables you to customize the unit and optimize the interface with other equipment in your system.

8300A has 9 different menu pages. Pressing the MODE knob on the front panel can also enter the menu mode, rotating this knob turns through the menu pages, press the MODE knob again to enter any menu page and rotate the knob to change the setting, press the MODE knob again to select a setting. No operation for 5 seconds will exit the menu mode automatically. The settings will not take effect if the MODE knob is not pressed.

The Menu Tree

The chart shows the menu options, main menu with default settings are at the top.





8: Warranty

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.

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 authorized agents or distributors.

Any unauthorized repair or modification will void this warranty.

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

Any parts that are replaced will become the property of Audiolab.

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:

1. Products where the serial number has been removed, altered or otherwise made illegible.
2. Normal wear tear and cosmetic damage.
3. Transportation or installation of the product.

Accidental damage, fault caused by commercial use, acts of God, incorrect installation, connection or packing, misuse, neglect or careless operation or handling of the product which is not in accordance with Audiolab's user instructions.

1. Repairs or alterations carried out by parties other than Audiolab or its authorized agents or distributors.
2. Products not purchased from an Audiolab authorized dealer.
3. Products that were not new at the time of original purchase.
4. 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 U.S. 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 authorized dealer from which you purchased this product. Do not dispatch goods without the prior agreement of the dealer, Audiolab or their authorized distributors.

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

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



9: Specifications

Measurement made with 230V power supply

Pre-amplifier Section

Gain	0dB (Volume=0dB, Line/XLR) +48dB (Phone MM, Volume=0dB) +68dB (Phono MC, Volume=0dB)
Input Sensitivity	865mV (Line, Volume = 0dB) 1.7V (XLR, Volume = 0dB) 3.3mV (Phone MM, Volume=0dB) 330uV (Phono MC, Volume=0dB)
Input Impedance	50K (Line) 10K (XLR) 47K (Phono MM) 100R (Phono MC)
Output Voltage	3.0V max. (Volume = 0dB)
Output Impedance	120R
Signal-to-Noise Ration (S/N)	> 107dB (Line/XLR) > 109dB (Line/XLR, A-Weighted) > 73dB (Phono MM), > 78dB(Phono MM, A-Weighted) > 68dB (Phono MC), > 73dB(Phono MC, A-Weighted)

Power Amplifier Section

Gain	+29dB (@ 1KHz)
Rated Max. Power Output	2 X 75W (8 ohm, THD<1%) 2 X 115W (4 ohm, THD<1%)
Input Impedance	50K
Frequency Response	+/- 0.2dB (10Hz ~ 20kHz) -1.0dB (55kHz)
Input Sensitivity	865mV (Volume = 0dB)
Total Harmonic Distortion (THD)	<0.003% (50W / 8ohm @ 1kHz)
Crosstalk	<80dB (@ 10kHz)
Max. Power Consumption	440W
Standby Power Consumption	<0.5W
Power Requirements	240V ~ 50 - 60Hz 230V ~ 50 - 60Hz 115V ~ 50 - 60Hz 100V ~ 50 - 60Hz
Dimensions (mm) (W x H x D)	444 x 80 x 330.3 - including feet, terminals and controls
Carton Size (mm) (W x H x D)	500 x 140 x 455
Weight	7.8kg (Net) 9.0kg (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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