Audiolab 7000A

User Manual

1: Important Safety Information

This lightning flash with an 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.

Read these instructions. Keep these instructions. Heed all warnings.

Follow all instructions.

Do not use this apparatus near water. Clean only with a dry cloth.

Do not block any ventilation openings. Install under 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 the replacement of the obsolete outlet.

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

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 spilt 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 an open space. The ventilation should not be

impeded by covering the ventilation openings with items such as newspaper, tablecloths, 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: 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 that objects filled with liquids, such as vases, shall not be placed on the apparatus.

WARNING: For the terminals marked with the 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 use of ready-made leads or cords.

Ground protection terminal. This product should be connected to a power outlet with ground protection.

Denmark: Apparatets stikprop skal tilsluttes en stikkontakt med jord, som giver forbindelse til stikproppens jord.

Finland: Laite on liitettävä suojakoskettimilla varustettuun pistorasiaan.

Norway: Apparatet må tilkoples jordet stikkontakt.

Sweden: Apparaten skall anslutas till jordat uttag.

WARNING: No naked flame sources, such as lighted candles, should be placed on the apparatus.

WARNING: Attention should be drawn to environmental aspects of battery disposal. WARNING: Use of the apparatus in tropical climates.

THE FUSE VALUES ARE:

220 – 240V (UK, China, etc.) T3.15AL 250V Slow Blow

100 – 120V (USA, Japan, etc.) T6.3AL 250V Slow Blow

FCC Statement

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide

reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Caution: Any changes or modifications to this device not explicitly approved by manufacturer could void your authority to operate this equipment.

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

- FCC Radiation Exposure Statement:

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the transmitter & your body.

ISED Statement

This device contains license-exempt transmitter(s)/receiver(s) that comply with Innovation, Science and Economic Development Canada's licence-exempt RSS(s). Operation is subject to the following two conditions:

(1) This device may not cause interference.

(2) This device must accept any interference, including interference that may cause undesired operation of the device.

The device is compliance with RF exposure guidelines, users can obtain Canadian information on RF exposure and compliance. The minimum distance from body to use the device is 20cm.

-French:"
Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes :
(1)l'appareil nedoit pas produire de brouillage, et
(2)l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement."

Le présent appareil est conforme Après examen de ce matériel aux conformité ou aux limites d'intensité de champ RF, les utilisateurs peuvent sur l'exposition aux radiofréquences et compliance d'acquérir les informations correspondantes. La distance minimale du corps à utiliser le dispositif est de 20cm.

The digital apparatus complies with Canadian CAN ICES-3 (B)/NMB-3(B).

This device meets the exemption from the routine evaluation limits in section 2.5 of RSS 102 and compliance with RSS 102 RF exposure, users can obtain Canadian information on RF exposure and compliance.

This equipment complies with Canada radiation exposure limits set forth for an uncontrolled environment.

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Being Roon Tested means that IAG Group Ltd and Roon have collaborated to ensure you have the best experience using Roon, software and IAG Group Ltd equipment together, so you can just enjoy the music.

MQA (Master Quality Authenticated)

MQA is an award-winning British technology that delivers the sound of the original master recording. The master MQA file is fully authenticated and is small enough to stream or download. Visit mqa.co.uk for more information. 7000A includes MQA technology, which enables you to playback MQA audio files and streams, delivering the sound of the original master recording.

The audiolab 7000A LED on screen glows green or blue to indicate that the unit is decoding and playing an MQA stream or file, and denotes provenance to ensure that the sound is identical to that of the source material. It glows blue to indicate it is playing an MQA Studio file, which has either been approved in the studio by the artist/producer or has been verified by the copyright owner

2: Contents

Audiolab 7000A

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Control and Function
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1.Getting Started

Introduction of 7000A

Welcome to the Audiolab 7000A. ESS9038

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

Please read through this manual to obtain the very best performance from your 7000A.

Features

- Full DAC (ESS 9038) and preamp facilities
- High-performance phono pre-amp
- Analogue and digital source connectivity
- Bluetooth aptX, aptX HD receiver
- Powerful stereo amplification
- Dedicated headphone amplifier
- 480x640 large size full view IPS LCD

Inputs

- 4 unbalanced analogue inputs
- One unbalanced analogue power-amp input
- Two coaxial SPDIF digital inputs
- Two optical SPDIF digital inputs
- One 12V Trigger input
- Bluetooth 5.0(aptX/aptX HD) input
- USB 2.0 port for replaying stereo from a compatible host
- 1 xHDMI ARC input

Outputs

- Pre-amplifier output
- Loudspeaker output
- Headphone output
- 12V Trigger output

Unpacking the Equipment

The carton should contain:

- The Audiolab 7000A
- One IEC power cord suitable for your area
- One remote handset
- One instruction manual

Please note: The remote control requires 2 x AAA type batteries. Due to international shipping and courier regulations with Lithium-Ion batteries, the remote controller battery is not included in this package.

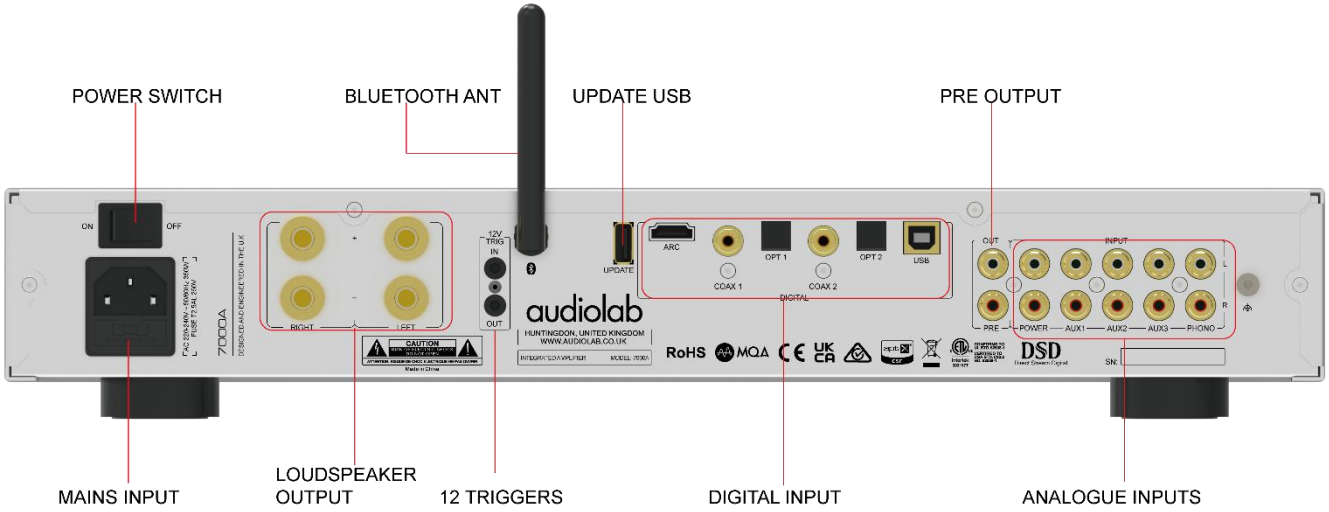
Consult the dealer from whom you purchased the equipment if any item is not present. Carefully unpack the unit and accessories. Take care not to damage the surface finish when undoing the protective polythene sleeve. Retain the packing materials for future use. Retain the user manual and information concerning the date and place of purchase of your equipment for future reference. If you transfer the unit to a third party, please pass on this instruction manual along with the equipment.

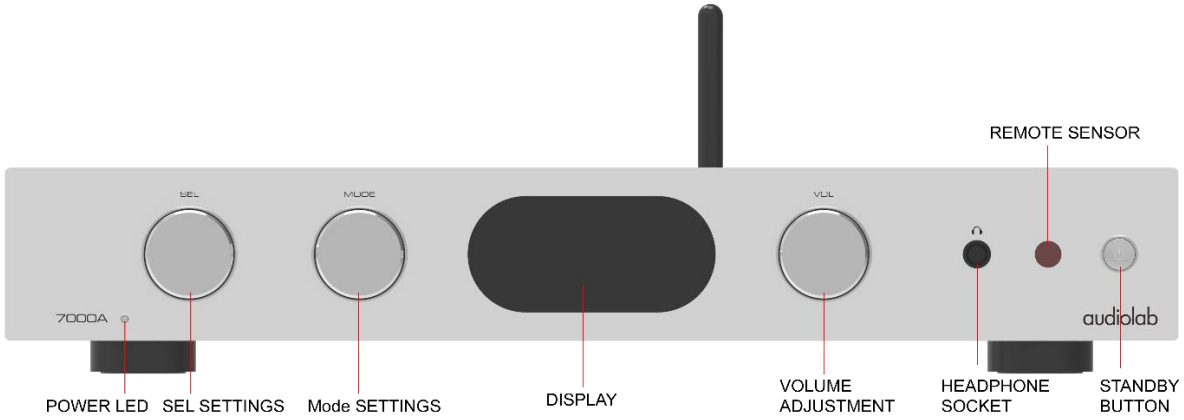
Placement

The unit must be mounted on a solid, level and stable surface.

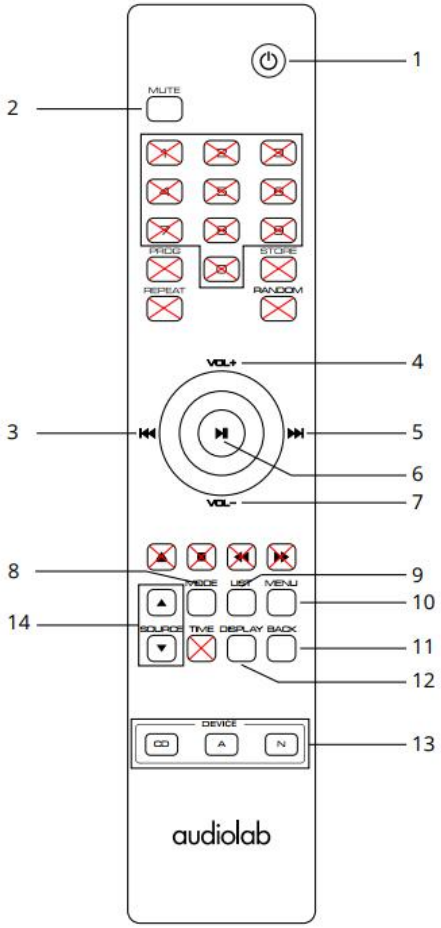
Before you connect the Audiolab 7000A to the AC mains power, ensure your AC mains voltage corresponds to the rating on the rear panel of the product. If in doubt, consult your dealer. If you move to an area that has a different mains voltage, seek advice from an Audiolab appointed dealer or a competent service technician.

2.Controls and Functions



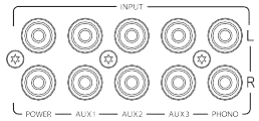


3.Remote Handset



1. STANDBY	Press to bring the unit in/out of Standby
2. MUTE	Press to mute and unmute the sound
3. ⏮	Move to the previous track
4. VOL+	Increase Volume/Menu settings previous option
5. ⏭	Move to the next track
6. ⏯	Press to start/pause /Press to confirm setting selected in menu
7. VOL-	Decrease Volume/Menu settings next option
8. MODE	Press to select Pre/Integrated/Pre-Power
9. LIST	Press to enter Playlist
10. MENU	Press to enter menu mode
11. BACK	Press to back
12. DISPLAY	Press to toggle the display on/off,Select different display modes
13. CD/A/N.	Press to select the device - CD/A/N
14. SOURCE	Press to cycle source inputs

4.Connections



Analogue Inputs(Line)

Connect your analogue sources to one of the three line-level inputs, AUX1, AUX2 or AUX3.

Phono Input(MM)

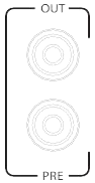
Connect your turntable (moving magnet cartridge) to the phono input. Connect the earth lead from your turntable (if available) to the ground terminal.

Coaxial Digital Input

Connect your coaxial digital sources to either COAX1 or COAX2.

Optical Digital Input

Connect your optical digital sources to either OPT1 or OPT2.



Pre-Amplifier Output

Pre-amplifier output for driving external power amplifiers, subwoofers or signal processors.

Loudspeaker Terminals

One set of loudspeaker output terminals.

Headphone Output

A stereo 6.3mm (1/4”) jack is provided on the front panel for connecting headphones. When headphones are connected the audio to the loudspeakers terminals will be cut off.

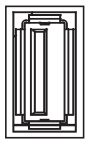
Bluetooth Connection

Select BT source on the 7000A, on your mobile device search for 'audiolab 7000A-xxxx' and connect.

Once paired, the Bluetooth icon will appear on the 7000A display. If you switch to another input on the 7000A your mobile device will be disconnected after 60 seconds. To reconnect, select BT on the 7000A and it will connect to the last paired device, or select ' audiolab 7000A-xxxx ' on your mobile device in the Bluetooth menu and it will reconnect.

USB Update

Put the update file into the USB drive, plug in the UPDATE USB interface, press the STANDBY button on the front panel then POWER ON, your 7000A will upgrade automatically. After the completion, unplug the USB drive and restart 7000A, now it can be used.



12V Trigger Connection

The 7000A features two 12V trigger connections, one output and one input. Use the output to control other products. Use the input when the 7000A is to be controlled. The trigger connections are made using "3.5 to 3.5mm" jack interconnects (not include).

Mains Input

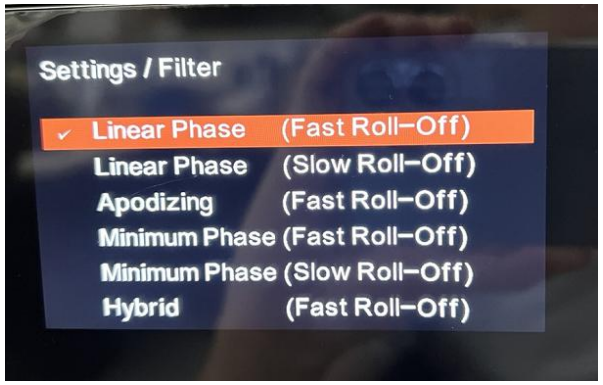
Before connecting the AC power cord to the 7000A, please make sure the Power Switch is in the OFF position. Switch it to the ON position after connecting the unit to the AC mains.

5.Menu Options

Filter

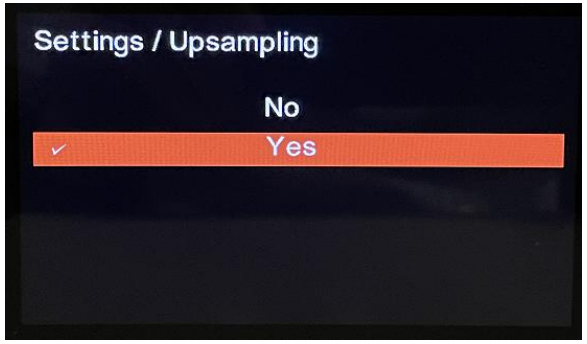
Configure the digital filter for the audio DAC. Linear Phase (Slow Roll-Off) is the default setting. Someone may prefer one type of filter over others.

- Linear Phase (Fast Roll-Off) – Select the Select the Linear Phase Fast Roll-Off filter.
- Linear Phase (Slow Roll-Off) – Select the Linear Phase Slow Roll-Off filter(default).
- Apodizing (Fast Roll-Off) – Select the Apodizing Fast Roll-Off filter.
- Minimum Phase (Fast Roll-Off) – Select the Minimum Phase Fast Roll-Off filter.
- Minimum Phase (Slow Roll-Off) – Select the Minimum Phase Slow Roll-Off filter.
- Hybrid (Fast Roll-Off) – Select the Hybrid Fast Roll-Off filter.



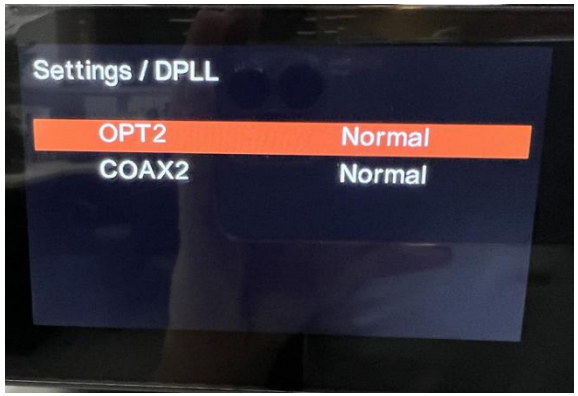
Upsampling

7000A will extend the sampling rate to 352.8/384kHz by default. You can set OFF as you prefer.



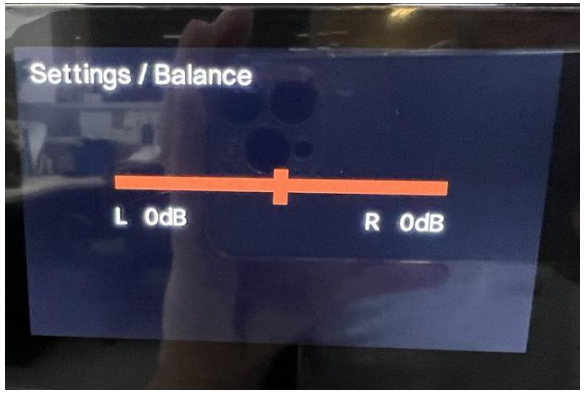
DPLL

This setting is used for changing the bandwidth of the digital phase lock loop of the D/A converter to accommodate different levels of jitter on the incoming SPDIF signal. Normal mode should be selected for signals with low jitter, while Wide mode should be selected for signals with abnormal jitter. For best audio quality leave this setting at the default value Normal, only use Wide for a given input if the system is having problems locking onto the source.



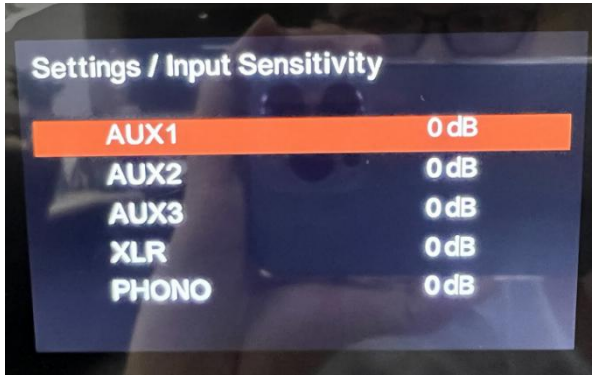
Balance

Adjust the Left and Right balance of the 7000A output stage.



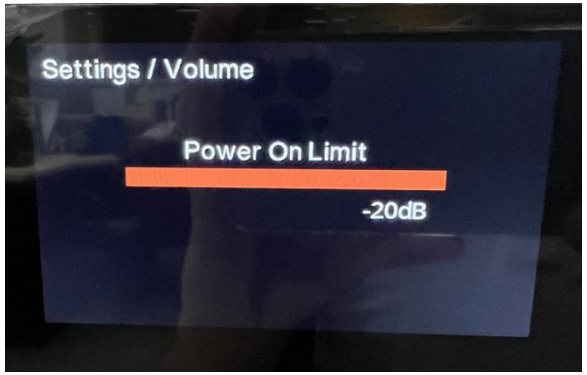
Input Sensitivity

It provides additional volume control offset values for AUX/XLR/PHONO. You can enter the sub menus to set the value by remote control or MODE knob.



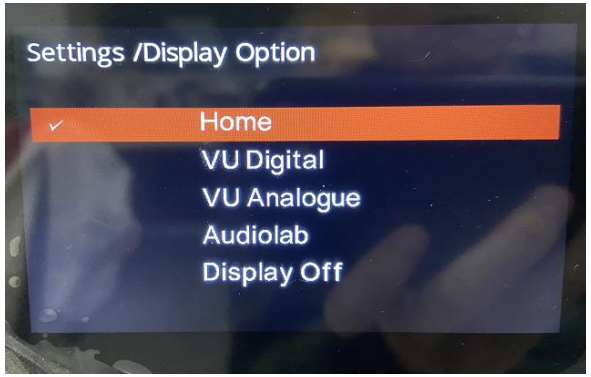
Volume/Power On Limit

Power On Limit sets the maximum out of standby volume level. When coming out of standby the volume will be set to the level used at the end of the previous session or to the Power On Limit value whichever is lowest. This will avoid a sudden loud signal at the beginning of a new session.



Display Option

Access the various display options for the 7000A front panel display.

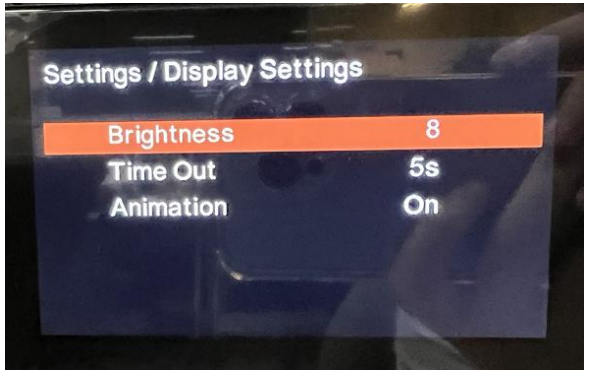


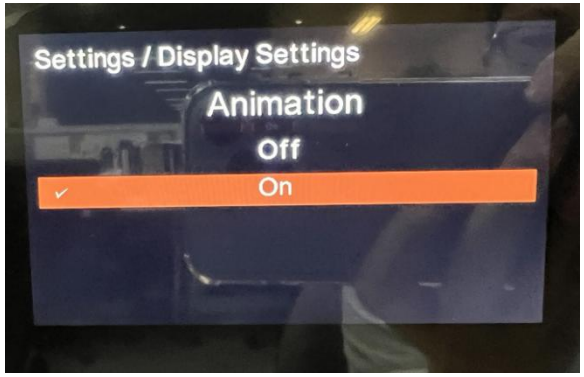
Display Settings

Brightness: Adjust the brightness of the 7000A front panel display.

Display Time Out: Adjust the time at which the 7000A display will revert to your chosen display option, from the home screen, after performing volume adjust and other operations.

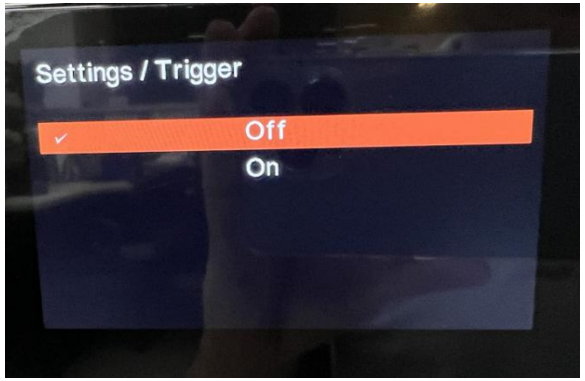
Animation: Turn ON/OFF the animation of the playback interface





Trigger

Activate or deactivate the 12V trigger function of the 7000A.

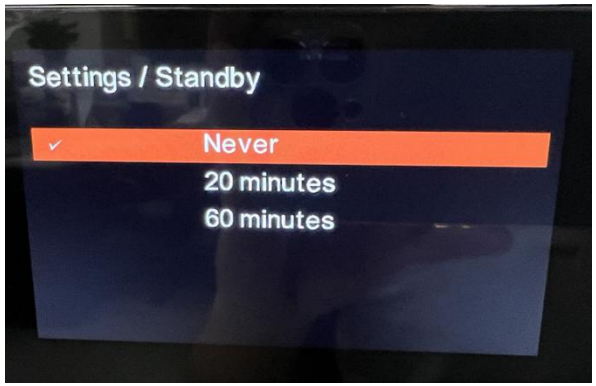


Language

There are multiple different languages you can choose from to display your system so you can view information in your preferred language. Default language is English.

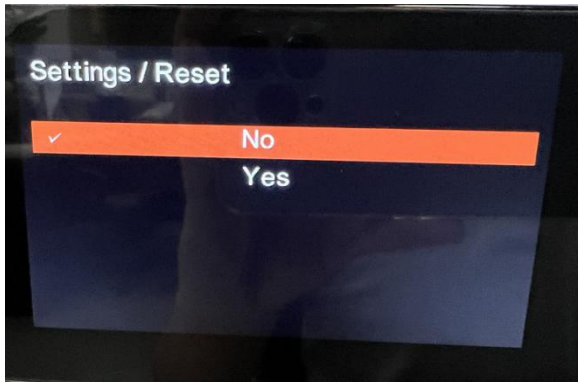
Standby

The auto standby feature will by default put the unit into standby after 20 minutes of inactivity. This feature can be configured and set to 20 minutes, 60 minutes or Never.



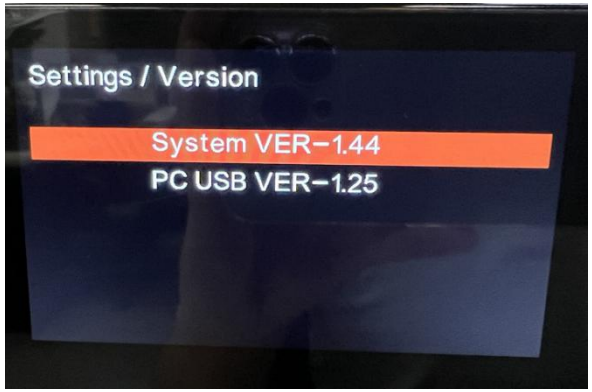
Reset

Reset the 7000A to the factory default settings.



Version

Check the current operation firmware version of System and PC USB.



6.System Operations

Switching on and off

Switch on all source units before switching on power 7000A. When switching On: the power LED illuminates. When switching Off: switch off 7000A before the source units.

Standby Mode

The 7000A will enter standby mode after being powered on. Press the “Standby” button to bring the 7000A out of standby, the power indicator LED becomes brighter and the display shows “Audiolab” welcome screen while the unit is getting ready for operation.

Source Select

Rotate the SELECT knob on the front panel or use the source (▼or▲) buttons on the remote handset to select different source inputs. In addition, you can press the SELECT knob or press and hold the source (▼or▲) buttons on the remote handset to enter the channel selection page, select a channel by rotating the SELECT knob or the navigation buttons on the remote handset, and press the SELECT knob or the ⏯ button on the remote handset to confirm.

Volume Control

Rotate the VOL knob on the front panel, or use the Volume up/ down keys on the remote control, to set the volume level. The range is -78dB to +8dB, the factory default volume setting is -30dB. When coming out of standby the 7000A will be set to the previous used volume setting, except if louder than -20dB, in which case the volume will default to -20dB.You can change the limit, please see the Menu options for Power On Limit feature.

Mute

Press the VOL knob on the front panel or MUTE button on the remote handset to mute / un-mute the sound.

Display Setting

Press the DISPLAY key on the remote control, or select the Display Options in the menu to have the different display modes (Home, VU Digital, VU Analog, audiolab, Display Off). When the display is off, press any key to turn on the display. The display will be off again after about 5 seconds, by default. You can change the duration to 10, 15 and 30 seconds from the Display Time Out in the menu.

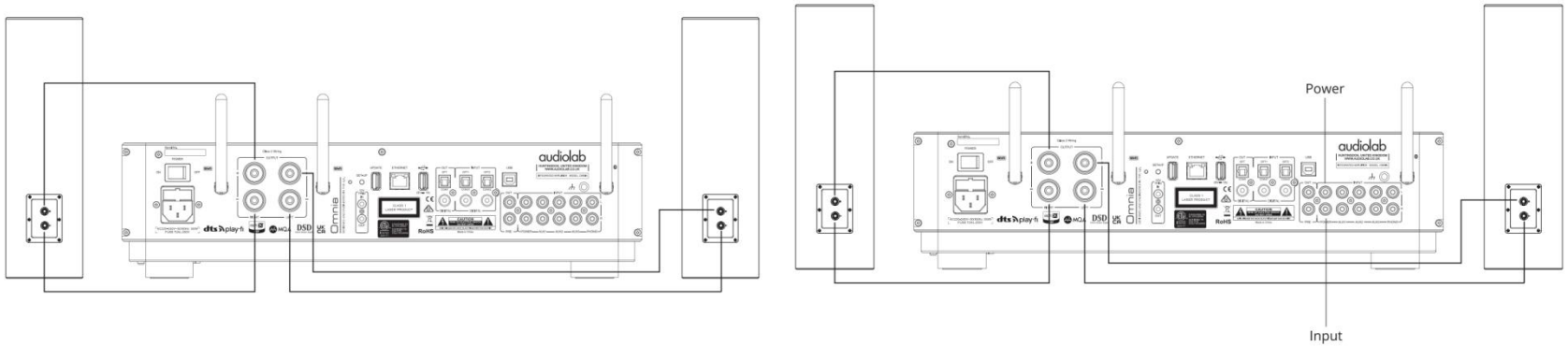
Operating Mode

Although the 7000A is an integrated amplifier it can function as a separate pre and power amplifier. Rotate the MODE knob on front panel or press the MODE key on the remote control to select different operating modes.

MODE	POWER AMP IN	PRE OUT	HEADPHONE OUT	LOUDSPEAKERS
PRE	DISABLE	ACTIVE	ACTIVE	DISABLE
PRE POWER	ACTIVE	ACTIVE	ACTIVE	ACTIVE
INTEGRATED	DISABLE	ACTIVE	ACTIVE	ACTIVE

Integrated Mode

The pre-amplifier section is internally connected to the power amplifier, pre-amplifier output is also operational in this mode. A second power amplifier can be connected for bi-amplification as shown in the diagram. **下图仅供参考，详情按 Omnia 修改**



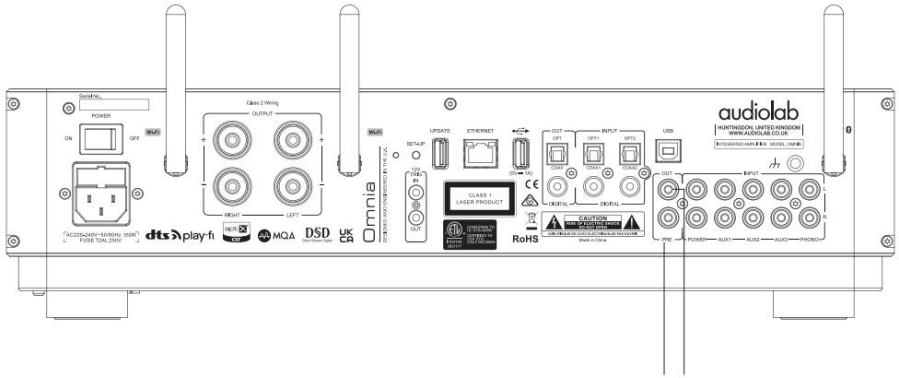
Pre-power Mode

The pre-amplifier section is internally disconnected from the power amplifier. The 7000A can be used as a stand alone power amplifier (ie. part of an AV setup). This mode can also be used if additional signal processing is required, connecting the pre-out to an external signal processor and then take the output from the processor to the 7000A Power-IN.

参考 Omnia 修改

Pre-Mode

All signals to and from the power amplifier of the 7000A are disconnected. In this mode, the 7000A functions as a stand-alone pre-amplifier. The pre- amplifier section of the 7000A can be connected to a stereo power amplifier, or to two mono-block amplifiers. **图参考 Omnia 修改**



The Menu

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

7000A has 13 different menu pages. Press the MENU key on the remote to enter menu mode,and then press VOL- or VOL+ to turn to different setting, confirm to the sub menu. You can also press MODE knob on the front to enter the menu, then rotate it to turn to different setting, press to the sub menu. Press again to confirm.

7.Playing Operations

Playing PC USB input

USB DRIVERS

To download Windows Drivers, please see the separate manual. Any firmware updates will also be available from www.audiolab.co.uk

Connect your computer to 7000A via USB cable (type A to Type B), change the source to PC USB using the handset or the SELECT button on the front panel.

“No Input Signal “will be displayed if there is no input signal to the USB input. When you play a file the digital inputs will lock onto the digital signal as soon as there is an input signal for USB. The display screen will then show the output sampling frequency of the music file in your computer.

8.Warranty(参照 Omnia 增加保修二维码内容)

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 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 county of purchase, applies only to the first purchaser and is not transferable.

The following are not covered:

1. Products which the serial number have 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 limit 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 county to county.

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.

We may refer to a local service centre. For international regions, please contact:

IAG House, 13/14 Glebe Road, Huntingdon, Cambridgeshire, PE29 7DL, UK.

Tel: +44 (0) 1480 452561 Eml: service@audiolab.co.uk

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.

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9.Specification

BRAND	Audiolab
Model	7000A
General description	Integrated Amplifier
Design philosophy and core technology	2x70W(8ohm) / 2x110W(4ohm) Class AB ES9038Q2M 32-bit DAC 2.8" 480x640 large size full view IPS LCD Built in certified hardware MQA Full decoder (PC USB,Coax/Optical) Support Bluetooth 5.0(aptX/aptX LL) streaming Low Noise Moving Magnet Phono stage Dedicated Current-Feedback Headphone AMP Integrated / PRE-POWER / PRE only Modes VU Digital/VU Analogue Meter Support USB Upgrade
Inputs	3 x Analogue ,1 x Phono (MM) , 1 x Power Amplifier, 2 x SPDIF (Coax), 2 x SPDIF (Optical), 1 xHDMI ARC, 1xPC USB(USB B),, 1 x Bluetooth(aptX/aptX LL),1 x 12V Trigger
Outputs	1 x PRE Amplifier,1 x Stereo Speaker,1 x Headphone,1 x 12V Trigger
Sampling Frequency	Optical/Coaxial:44.1kHz ---192kHz PC USB:44.1kHz-768kHz(PCM)/DSD64,DSD128,DSD256,DSD512
Preamplifier Section	
Gain	+8dB (Line)
	+55dB (Phono MM)
Input Sensitivity	870mV (Line, Volume = 0dB)

	4.5mV (Phone MM, Volume=0dB)
Input Impedance	10K(Line)
	47K // 100pF(Phono MM)
Total Harmonic Distortion (THD)	< 0.0005% (1KHz @ 2V, Volume = 0dB)
Frequency response	20Hz-20kHz (+/-0.1dB)
Output voltage	2.3V max. (Volume = 0dB)
Output impedance	100 ohm
Signal-to-Noise ratio	> 110dB (Line,A-weighted)
	> 76dB (Phono MM,A-weighted)
DAC	
D to A Converter	ES9038Q2M
Total Harmonic Distortion (THD)	< 0.0006% (1KHz @ 0dBFS)
Output level (0dBFS, 1KHz)	2.05Vrms
Max. Sampling Frequency	Optical,Coaxial:192KHz Ethernet,WiFi:192KHz USB A：48kHz PC USB :PCM768kHz,DSD512
Signal-to-noise ratio (S/N)	> 112dB (A-weighted)
Power Amplifier Section	
Gain	+29dB
Rated Power Output	2 x 70W (8 ohm, THD<1%)
	2 x110W (4 ohm, THD<1%)
Frequency Response	20Hz-20kHz (+/-0.3dB)
Total Harmonic Distortion (THD)	<0.003% (1kHz @ 50W/8ohm)
Input Sensitivity	720mv

Signal-to-Noise ratio (S/N)	> 110dB (A-weighted)
Max. Output Current	9A
Headphone Amplifier	
Total Harmonic Distortion (THD)	< 0.01% (1kHz, 50mW)
Output Impedance	4 ohm
Load impedance	20-600 ohm
General	
Standby Power Consumption	<0.5W
Net weight	9.7KG
Gross weight	11kg
Dimensions (mm) (W x H x D)	440 x156 x 327
Carton Size (mm) (W x H x D)	540 x 412 x 210
Finish	Black/Silver
Power requirements (depending on region)	220-240V ~ 50/60Hz
	100-120V ~ 50/60Hz
Standard accessories	Power Cord, Remote Control, User Manual, Antennas, etc.