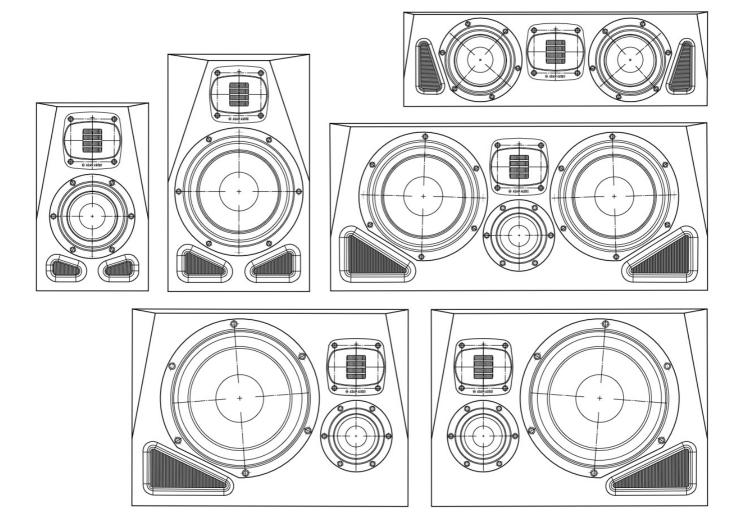


ADAM AUDIO A Series A44H Active Studio Monitors User Manual

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ADAM AUDIO A Series A44H Active Studio Monitors



Thank you for choosing ADAM Audio!

We've put a lot of passion into this product and we hope you enjoy your new A Series studio monitors. They were designed and manufactured to very high standards so you can enjoy and creatively use them for many years.



To protect your investment, ADAM Audio offers a two year warranty that is extendable to five years. To activate this extended warranty all you have to do is register at: → www.adam-audio.com/myadam/

Again, thank you and greetings from Berlin,

Christian Hellinger Managing Director

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IMPORTANT SAFETY INSTRUCTIONS

The intended use of this product means having read this operating manual and then following the instructions contained herein.

General

- Read the following safety instructions before setting up your system.
- Keep the instructions for further reference.
- · Heed the warnings and follow the instructions.

Electrical



Caution Risk of electrical shock Do not open Risque de choc électrique Ne pas ouvrir



Caution: to reduce the risk of fire or electric shock, do not remove back cover or any other part. No user-servicable parts inside. Do not expose this equipment to rain or moisture. Refer servicing to qualified personnel.

Explanation of Graphical Symbols



The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.



The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance [servicing] instructions in the literature accompanying the appliance.

- Caution: To reduce the risk of electric shock, do not open the loudspeaker, except to rotate the tweeter waveguide (see section 3.2). There are no user-serviceable parts inside. Refer servicing to qualified service personnel.
- This product, as well as all attached extension cords, must be terminated with an earth ground three-conductor AC mains power cord like the one supplied with the product.
- To prevent shock hazard, all three components must always be used.
- Never replace any fuse with a value or type other than those specified. Never bypass any fuse.
- Ensure that the specified voltage matches the voltage of the power supply you use. If this is not the case do not connect the loudspeakers to the power source.
- Always switch off your entire system before connecting or disconnecting any cables, or when cleaning any components.
- To completely disconnect from AC mains, unplug the power supply from the power socket. The loudspeaker should be installed near the mains connection, and it should be easy to access the socket and disconnect the device if necessary.
- Protect the power cord from being walked on or pinched particularly at plugs, sockets, and the point where it exits from the apparatus.

- Unplug this apparatus during lightning storms or when unused for long periods of time.
- Always keep electrical equipment out of the reach of children.
- Always use fully checked cables. Defective cables can harm your loudspeaker. They are a common source for any kind of noise, hum, crackling etc.
- Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged
 in any way, for example if the power-supply cord or plug is damaged, liquid has been spilled or objects have
 fallen into the device, or if the device has been exposed to rain or moisture, does not operate normally, or has
 been dropped.

Mounting and moving

- Some parts of the product protrude on the front and rear panels. Never place the loudspeaker face down or face up on a surface. When moving the loudspeakers on a trolley to avoid injuries, take care and do not overbalance the trolley.
- Condensation may occur if you have moved the loudspeaker from a cold to a warm environment. Allow time for this condensation to evaporate before using the product.
- · Only use this product indoors.
- Install in accordance with the manufacturer's instructions.
- The loudspeaker must be positioned on a solid surface or a stand.
- Only suitably qualified installers should mount this product.
- Only use mounts, attachments, and accessories specified by the manufacturer.
- Ensure free airflow behind the loudspeaker to maintain sufficient cooling by keeping a distance of at least 10 cm [4"] to the wall.
- Do not install near any heat sources such as radiators, hot air vents, stoves, or any other equipment [including amplifiers] that produces heat.
- The driver magnets emit a magnetic field. Keep magnetically sensitive items, such as hard drives and magnetic storage media, away from the loudspeaker.

Liquids, chemicals and environmental

- Do not expose this product to rain or moisture, never wet the product with any liquid and never pour or spill liquids directly onto this unit. Do not put any objects filled with liquids [e.g. vases, etc.] onto the loudspeaker.
- Never use flammable or combustible chemicals for cleaning audio components.
- Never expose this product to extremely high or low temperatures.
- Do not place product in direct sunlight.
- Never operate this product in an explosive atmosphere.
- No naked flame sources, such as lit candles, should be placed on the loudspeaker.
- Only suitable for safe use in areas less than 2000 meters above sea level.
- Only for safe use in non-tropical climate conditions.
- Ventilation or acoustical ports should not be impeded by covering the openings with items, such as newspapers, tablecloths, curtains, etc.
- · Only use a dry lint-free cloth for cleaning.

Health

- This loudspeaker can generate sound pressure levels in excess of 85 dB(A). High sound levels may damage your hearing! Sound exposure is a function of time and level. Longer times and lower levels can be equivalent to shorter times and higher levels. Exercise caution when using this product and do not get close to the loudspeakers when using them at high levels.
- The product generates a strong magnetic field which may affect pacemakers or implanted defibrillators.
- The tweeter has a strong magnetic grille in front of the folded diaphragm. Never place metal objects or particles near the tweeter.
- Never touch the tweeter diaphragm or allow large particles (especially metal ones) near the tweeter.

OVERVIEW









Major parts:

- ①Port(s)
- ②Woofer(s)
- 3Midrange driver
- 4 Tweeter
- ⑤Waveguide
- **6**Status LED

Status color scheme and functionality:

Color	Function
Green	Power on Dim (flashing) Sleeping (pulsing)
Red	Booting up Shutting down Muted (flashing)
Gold	Short term limiter active (flash) Firmware update (slow blinking) Factory reset (fast blinking)
Violet	Long term limiter active (on whilst active)
White	Identify function in ADAM Audio A Control



Note: There are two versions of the A8H denoted left and right. See section 3.3 for further information about installing them in your room.

Backplate:



- **②IEC mains power connector** to connect to AC mains power.
- **®Mains power switch** to switch the loudspeaker on and off.
- **®RJ45 Ethernet connection** brings remote control functionality when used with ADAM Audio A Control software (see section 5). The loudspeaker's firmware can also be updated using ADAM Audio A Control via the Ethernet connection.
- Level control knob for gain adjustment.

Press buttons to cycle between Room Adaptation options for Bass, Desk, Presence and Treble.

Press button to cycle between **Voicing** options.

XLR balanced analog audio input.

RCA unbalanced analog audio input.

Press button to cycle the two analog inputs.



Note: All the elements described above are present on all the products. However the position of the back panel elements varies on each product.

PACKAGE CONTENTS

- Loudspeaker (depends on product)
- Mains power cable (type depends on regional version)
- Quick start guide

INSTALLATION

Planning



Read the safety instructions at the start of this operating manual before installing the lou dspeaker.

Consider these factors when planning the installation of the loudspeakers in the room:

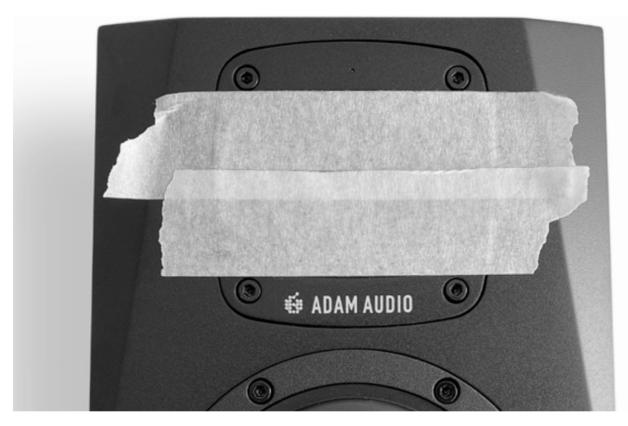
- With respect to the walls, the loudspeakers should be placed symmetrically in the room to ensure a good stereo image.
- The furniture and equipment in the room should be placed symmetrically (left/right) to ensure a good stereo
 image. If the loudspeaker is close to a desktop, the Desk control should be used to compensate for the desktop
 loading see section 4.1
- Reflecting surfaces should be acoustically treated to reduce the effect of the reflection at the listening position.
- Avoid placing loudspeakers near room corners as there will be two reflecting surfaces near to the loudspeaker
 which will create comb filtering unless well treated. Also, there may be strong coupling of the loudspeaker to
 the room which can lead to strong audible resonances.
- The front wall should be very close to the loudspeaker (<0.3 m / <1' from the back panel) or very far away from the loudspeaker (>2 m / > 6'). Loudspeakers placed between these distances to the wall may suffer from strong cancellations resulting in reduced bass at the listening position. If the loudspeaker is bass managed, the "far away distance" can be reduced to >1 m / 3'. If the loudspeaker is close to the wall the Bass control should be used to compensate for the wall loading see section 4.1
- Side walls, and the ceiling should be far from the loudspeaker (>2 m / > 6').
- The rear wall should be at least 2 m / 6' from the listening position, and ideally > 4 m / >12' to avoid bass cancellations at the listening position.
- In general, the further away walls are from the loudspeakers and the listening position, the better the sound quality will be.

Rotating the Tweeter & Waveguide Module

All ADAM Audio A Series models can be placed on the left or right in a stereo pair, and all have a rotatable tweeter and waveguide module which allows for flexibility when deciding on loudspeaker orientation (horizontal / vertical). We advise rotating the tweeter and waveguide module as required before mounting an ADAM Audio A Series loudspeaker so it is easier to do.

Follow these steps to rotate the tweeter and waveguide module:

1. Cover the tweeter with masking tape, as shown in the picture below, to prevent particles entering the ④ tweeter diaphragm:



- 2. Using a standard hexagonal or "Allan" key, gently loosen all four screws on the frontof the ⑤ waveguide.
- 3. Taking care not to detach the audio or LED cables, gently remove the tweeter and waveguide module and rotate to the desired orientation.
- 4. Reinsert the tweeter and waveguide module, and gently tighten the four screws.



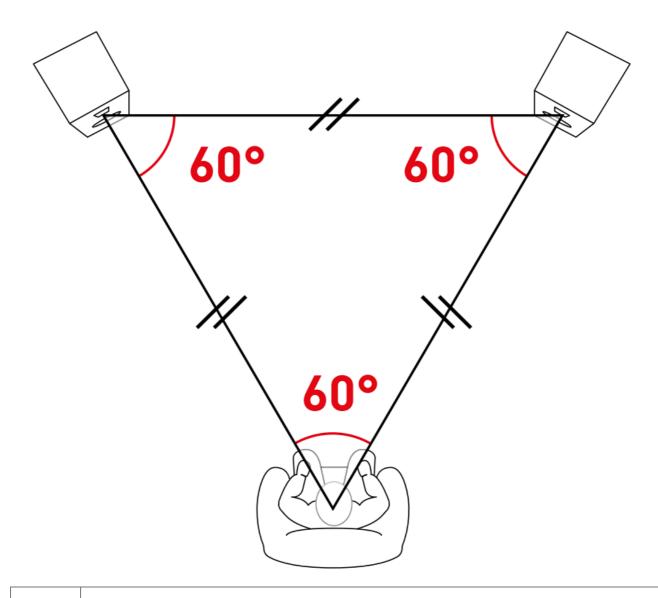
Note that repeated removal of the tweeter and waveguide may damage the wooden cabinet. Only carry out this procedure when necessary. Do not use an electric screwdriver to tighten the screws.

Loudspeaker Placement Advice

• For two-channel stereo audio production, your head should be placed at one corner of an equilateral triangle, with the two loudspeakers at the other two corners – see diagram below.

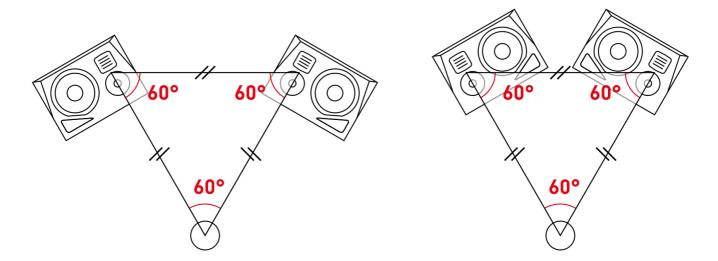
The acoustical axis is the midpoint between ④ tweeter and ② woofer in a two-way system or ④ tweeter and ③ midrange driver in a three-way system.

• Ensure that the acoustical axis of your loudspeakers points towards the listening position in the horizontal plane – see diagram below.





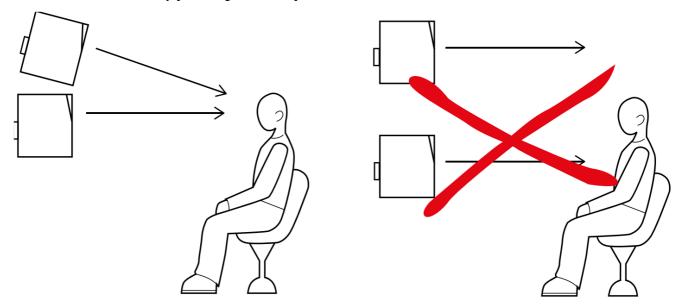
The A8H comes in two versions: left and right. Usually, they are positioned according to the naming (left picture below), however if space is limited, for example in a very narrow room, it is OK to swap the loudspeakers (right picture below). When doing this ensure that the acoustic axis is still positioned with a 60° spacing so that the stereo imaging is unaffected.



- Ensure that the acoustical axis of your loudspeakers is at the same height in the vertical plane. The exception to this guideline is 3D systems where the height loudspeakers will be positioned above the head.
- The desktop reflection can affect the midrange response at the listening position, so experiment with vertical

positioning to reduce the effect.

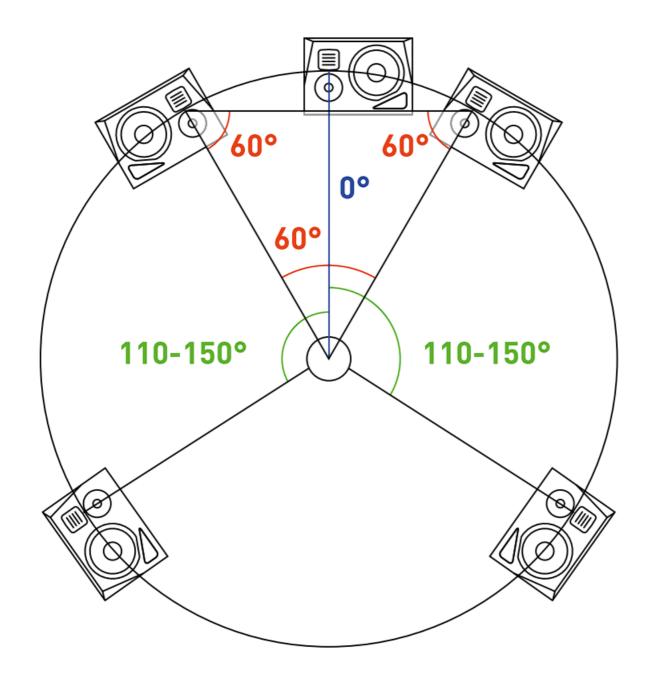
• If a loudspeaker is placed higher or lower than your ears, the cabinet should be tilted accordingly, but ensure tilts can be achieved safely [see diagram below].



- Never place objects between the loudspeaker and the listening position that obscure the loudspeaker. It is not good for audio quality if you cannot see the loudspeaker!
- For 5.1 / 7.1 and 3D systems the loudspeaker positions depend on the format. Refer to the standardization body or manufacturer to find details on loudspeaker placement accordingly, but note that the positioning advice given above still applies.



The A8H comes in two versions: left and right. This does not mean it cannot be used as a centre I oudspeaker. Take a left or right version and align the acoustical axis at 0° relative to the listening position in the room. This results in the bass driver being positioned slightly to the left or right of c entre. It may look a little strange at first but acoustically it works very well. The picture below sho ws a "right" version used as a centre loudspeaker and the bass drivers positioned to the outside f or the left and right loudspeakers.



Cable connections

Two or three cables (power, audio signal and in some cases a network cable) should be plugged into the loudspeaker:

- Mains power cable: The supplied IEC mains power cable should be used. The switchedmode power supply can accept any mains electricity voltage in the range 100-240 Vac, 50/60 Hz ②. Switch on the loudspeaker using the adjacent ® mains power switch. It is recommended that the mains power connector is unplugged if the loudspeaker will not be used for a long time.
- XLR balanced audio cable: A correctly wired shielded XLR microphone cable should be used for balanced audio signals. Press the "Input Select" button so the "XLR bal." LED is lit. The maximum cable length is 100 m.

Pin	Signal
1	Audio ground
2	+ audio signal
3	– audio signal

• RCA unbalanced audio cable: A correctly wired and shielded RCA terminated audio signal cable should be used for unbalanced audio signals. Press the "Input Select" button so the "RCA unbal." LED is lit. The maximum cable length is 10 m. If the option is available, it is better to use balanced cables and the XLR input or a DI box to convert the unbalanced signal into a balanced signal.

Pin	Signal
Shield	Audio ground
Pin	+ audio signal

• **RJ45 IP network cable:** Any standard CAT5 or better network cable can be used. Crossover cables should not be used. The network cable should then be plugged (a) into a computer (PC or Mac) ethernet port, or a switch or router if there is more than one loudspeaker in the system. The maximum cable length is 100 m.

The signal on the audio cable should match the loudspeaker's position in the room, e.g., the left signal should go to the left loudspeaker.

Audio and network cables are not supplied with the loudspeaker.

CONFIGURATION

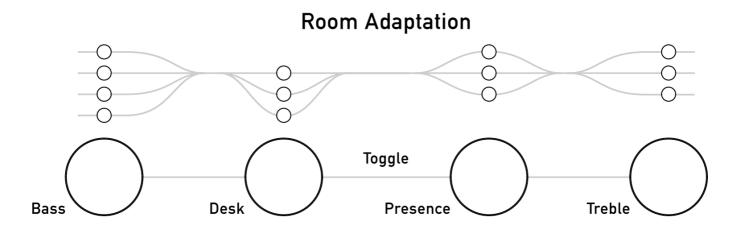
Room Adaptation

Room Adaptation refers to adjusting the response of the loudspeaker to compensate for the room acoustics and the position of the loudspeaker in the room. Room Adaptation can compensate for acoustical loading caused by nearby boundaries. It cannot compensate for cancellations caused by reflections, so these must be treated acoustically.

On the backplate (and replicated in ADAM Audio A Control – **see section 5**) basic filters are available to compensate for wall loading (Bass) and desktop loading (Desk). The other two controls can be used to compensate for harshness in the midrange sound (Presence) and high frequency damping in the room (Treble). The frequency bands and gain adjustment options are as follows:

Filter	Bass	Desk	Presence	Treble
Gain	+ 2 dB		+ 1 dB	+ 1.5 dB
	0 dB	0 dB	0 dB	0 dB
	– 2 dB	– 2 dB	– 1 dB	– 1.5 dB
	– 4 dB	– 4 dB		

Press the appropriate button until the correct LED is lit. The setting cycles around continuously from top to bottom and then back up to the top again.



ADAM Audio A Control can also be used to adjust these settings remotely

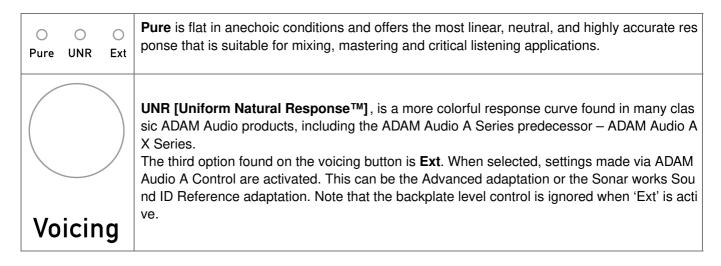
The table below contains suggested settings for various environments, but note the acoustical properties of every space are different, so these should be considered as a good place to start for further experimentation after some listening:

Positioning	Bass	Desk	Presence	Treble
Listening Environment				
Very small room	– 4 dB	_	- 1 dB	_
Free standing – live ro om	– 2 dB	-	-	– 1.5 dB
Free standing – well-da mped room	_	-	-	-
Next to a gypsum wall	– 2 dB	_	_	_
Next to a brick or concrete wall	– 4 dB	-	-	-
Corner	– 4 dB	– 2 dB	_	_
Additional settings based on nearby surfaces				
Large desktop or reflec ting surface	_	– 4 dB	_	-
Small desktop or reflec ting surface	_	– 2 dB	_	_

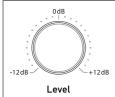
Further room adaptation options are available via ADAM Audio A Control – see section 5.

Voicing

Voicings are variations of ADAM Audio factory tunings. There are two options which can be selected on the backplate or via the ADAM Audio A Control software.



Level



The overall loudspeaker output level is @ adjustable from -12 dB to +12 dB and can be used to balance all the loudspeakers in a system to have the same replay level at the listening position.

Try to use the lowest level of this control to minimize noise from your signal chain. Note that this level control is ignored when **Ext** is active.

REMOTE CONTROL

ADAM Audio A Control is a dedicated software application for adaptation and remote control of ADAM Audio A Series loudspeakers. Using ADAM Audio A Control, you can also apply filter sets generated with Sonarworks SoundID Reference directly to the loudspeakers.

You can get ADAM Audio A Control free of charge from → www.adam-audio.com by following these steps:

- 1. Register your loudspeakers at → <u>www.adam-audio.com/my-adam/</u>
- 2. ADAM Audio A Control can be found free of charge download within the MyADAM area.
- 3. Download and install **ADAM Audio A Control**, launch the application, and familiarize yourself with the user interface.

The **ADAM Audio A Control** application can be described in four key sections:

1. Network Section

This section shows devices discovered on the network. Here you can identify and rename devices, and manage which devices are used for a specific setup.

2. Setup Section

In this section you can calibrate the individual devices in the frequency-, time- and leveldomain. For calibration in the frequency domain, ADAM Audio A Control offers three adaptation modes:



Backplate: Here you can remotely control the settings as seen on the backplate of our loudspeaker. You can choose between **UNR** and **Pure** voicings, and then further adjust the sound using **4 bands of equalization.**



Advanced: Here you can tune your loudspeakers across **6 bands of equalization.** Frequency, Gain, Q and Filter Type can be changed in each band for very precise tunings.



SoundID Reference: Here you can import room correction filters from Sonarworks' SoundID Reference application. To get an importable file, you will first need to generate a filter set using the **Sonarworks SoundID Reference** application. Once generated and exported, the filter set can be imported into ADAM Audio A Control and pushed directly to the loudspeakers in your system. The filter set will remain active on your loudspeaker until it is replaced by another SoundID Reference filter set or the adaptation mode is changed to **Backplate** or **Advanced**.

Additionally, you can apply delay and gain to individual loudspeakers, and select the input connector.

3. Monitoring Section

Here you can make changes to the level of all devices within your system, and mute or dim the complete system.

4. Global Operations

Once all settings have been chosen for a specific purpose, you can save them for later recall.

This allows the entire system to be repurposed at the touch of a button. When a new version becomes available, loudspeaker firmware can also be updated here very easily.

More features will be added in future updates to A Control.

USE

In the source equipment, set the level of the audio output to the loudspeaker to the minimum level. Switch on the loudspeakers, start audio playback, and then gradually increase the output level of the audio source. Note that between switching the speaker on and audio playing, there is a five second period when the loudspeaker is muted. You should now start to hear sound through your ADAM Audio A Series loudspeakers. If this is not the case, see **section 7** for troubleshooting.

Despite the adjustments you have already made using one of the three adaptation methods described above, after some listening you may wish to further adjust their sound to suit your personal audio preferences and specific listening environment.

Factory reset & firmware update

- A factory reset is possible via ADAM Audio A Control.
- The firmware can be updated via ADAM Audio A Control. Each loudspeaker takes less than 2 minutes to update.

Maintenance

- Switch off your loudspeakers and disconnect from the AC mains power before cleaning.
- Liquids should not be used to clean the loudspeaker.
- Only use a clean dry lint free cloth to clean the cabinet.

Do not touch the drivers.

TROUBLESHOOTING

Should you experience problems with your monitors, for example loss of signal, unwanted interference or noise, it's worth running through the following basic checks before contacting the team here at ADAM Audio or our local representatives.

The loudspeakers are producing no signal, or only a distorted signal:

- Use the input select press button to select the correct input signal.
- Consider where the problem is. If all the loudspeakers in your system are exhibiting the same lack of signal or a distorted signal, it's more likely that the problem lies with the audio source equipment. If, on the other hand, only a single loudspeaker is affected, the problem could be with that specific loudspeaker, the cable running to it or something on that specific channel in the signal chain.
- Check your signal source, connecting the loudspeakers as directly as possible to the source. Could the fault lie with another component, for example a mixer or processor which is in the signal path before the loudspeakers?
- Check your wiring and cables and, if needed, swap them for others that you know are working without any problems. If you only have one pair of cables, see if the fault changes loudspeakers when you swap the cables. If so, the problem is likely to be found in the cable or source audio.

The loudspeakers are producing a signal, but it is affected by occasional unwanted noise, such as buzzing, humming or crackling:

- Check your wiring and cables and, if needed, swap them for others that you know are working without any problems. If you only have a pair of cables, see if the fault changes loudspeakers when you swap the cables. If so, the problem is likely to be found in the cable or source audio.
- Check that there are no sources of electromagnetic interference close to the loudspeakers that could be causing problems, such as mobile phones, wireless routers, power supplies, electrical motors, heaters, etc.



If none of the above can be identified as the source of the problem, your speakers may require service, in which case contact ADAM Audio or the local representative/distributor [see \rightarrow www.adam-audio.co m for a list].

There is a very low level in the bass region:

 Check your wiring and cables, particularly unbalanced-to-balanced cables. These cables should be wired like this:

Unbalanced source	XLR Pin
Ground	Pin 1 & Pin 3
Signal	Pin 2

- The most common error is that pin 3 in the XLR is not connected to anything and the result is a loss of bass.
- · Acoustical cancellations in the room can reduce bass level significantly, so review the loudspeaker and

listening positions relative to the room walls and adjust positioning as suggested in section 3.

There is no front panel LED lit up and no audio can be heard:

• Check the fuse on the back panel. If it is broken, replace it with EXACTLY the same type. Contact your nearest service centre if it breaks a second time.

SHIPPING

Keep your loudspeaker packaging in case your loudspeakers ever need to be transported. Without the original packing it is extremely difficult to protect your loudspeakers so that they can be shipped without damage. **ADAM Audio cannot accept responsibility for transit damages caused by improper packaging.**

REGULATORY DOCUMENTS

Certificates for type approvals, declarations of conformity and environmental statements can be found on the ADAM Audio A Series product pages at → www.adam-audio.com

TECHNICAL DATA

For detailed technical specifications and graphs, see the ADAM Audio A Series product pages at → www.adam-audio.com

ACCESSORIES

Compatible accessories the ADAM Audio A Series can be seen on the product pages at \rightarrow <u>www.adam-audio.com</u>

NOTES		

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All specifications are subject to change without notice.

WWW.ADAM-AUDIO.COM



Documents / Resources



ADAM AUDIO A Series A44H Active Studio Monitors [pdf] User Manual A Series, A44H, A4V, A7V, A77H, A8H, Active Studio Monitors

References

- # ADAM Audio High Precision Studio Monitors from Berlin, Germany
- ADAM Audio MyADAM User Area Log In And Registration

Manuals+,