

AUDIUM

Sub 12 **Active** / **Air**

User Manual



Thank you very much for your trust in AUDIUM products.

This AUDIUM Sub 12 is the link to fundamental sound bass reproduction. In the Active version, it can be seamlessly connected to stereo and surround sources. In the Air version, it allows a step in the direction of cutting-edge music playback by allowing connection to other music sources via LAN / WLAN, as well as a configuration via computer / smartphone / tablet.

Please read this manual before installing your subwoofer.
It provides all the information and tips you need to set up and get the best music from your AUDIUM subwoofer.

Many Thanks,
Your AUDIUM team!

You'll find enclosed:

- 1x AUDIUM subwoofer
- 1x power cable
- 1x user manual
- 1x warranty card
- 4x spikes (M8 thread)
- 1x WiFi-Antenna (Air-Version only)

Warranty

By registering your product, you extend the warranty to 5 years for speakers and 3 years for electronics. This is independent of your dealer / distributor. Please visit www.audium.com/registration or fill out the enclosed warranty card within 2 weeks after purchase of this device.

Warning - Safety instructions

1. Read this manual and follow the instructions provided.
Keep this manual for future reference.
2. Do not operate this device in damp locations or near water.
3. This device is intended for indoor use only.
Do not operate it outdoors.
4. Do not operate the device near heat sources such as radiant heaters, chimneys, amplifiers, ... or other devices that produce heat.
5. Disconnect the device from the power supply when not using it for a long time and during thunderstorms.

Do not try to repossess the device yourself in case of damage or malfunction. Always contact your dealer or authorized service personnel.

WARNING - RISK OF ELECTRIC SHOCK!

To avoid the risk of electric shock, do not open the device.

Do not expose the device to rain or moisture. There are no parts inside which require service or care.

Burn In Time:

Loudspeakers are equipped with moving parts. Therefore, you need a so-called Einspielzeit until the moving parts can move within their tolerances.

Play back broad-spectrum signals for at least 2 days. It is best to use special burn-in CDs (with "pink noise") or your FM radio after placing it on an unoccupied frequency.

Please note that after a prolonged period of inactivity, the moving parts can return to their original "Rigid". Then give your subwoofer a few hours' warm up time by playing music, and you'll surely notice the increase in fidelity!

Care of the Subwoofer

Please use for cleaning a soft cloth. Do not use aggressive cleaning agents as well as veneer cleaning solutions. Verwenden Sie zur Reinigung ein weiches, leicht angefeuchtetes Tuch.

Terminology

Instructions for the Air Version of the Subwoofer are printed in **blue Colour** (Arrows / Headings).

Unpacking the Subwoofer

Do not use any sharp tools to open the subwoofer packaging. You could damage the contents or the surface of the subwoofer.

Screw the spikes completely into the nuts on the lower side of the subwoofer. Place the sub on a flat, horizontal surface and adjust the spikes that it has a stable position. At last, counter the spikes with the nuts.

Note: To prevent scratches on wooden floors we recommend to use special discs under the spikes. Your HiFi Dealer has some for sure in his portfolio. As a workaround you can use wood metal disks.

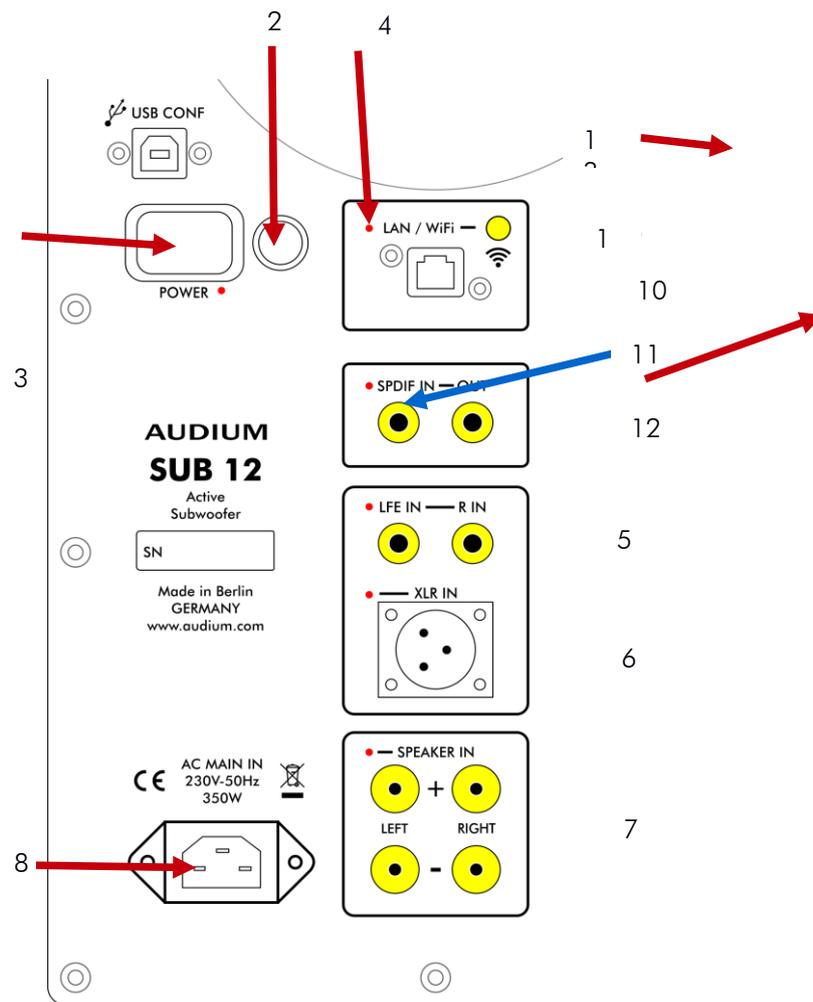
Note: Please store the packaging of the Subwoofer in a dry place. Only with the packaging is it possible to transport the subwoofer in a safe way and prevent it from damage.

Controls and Connectors:

1. Display: OLED graphic display shows the current device status
2. Knob / push button.
3. Power LED: lights red when subwoofer active, dimmed red in standby.
4. Input LEDs: indicate active input
5. Analog Input 1 (Coax LFE / Stereo): Connect these inputs to the PreOut of your pre-amp or the Sub / LFE outputs of your surround pre-amp.
6. Analog input 2 (XLR balanced): If your pre-amp has a balanced LFE output and a longer cable is required because your sub is further away from the system, this input is recommended.
7. Analog Input 4 (Speaker Stereo): if your amplifier has no PreOut or Sub/LFE Out, use this input
8. Power socket: Plug in the power cable here. Make sure that the voltage indicated next to the socket agrees with your mains voltage..

Connectors, only available with Air variant:

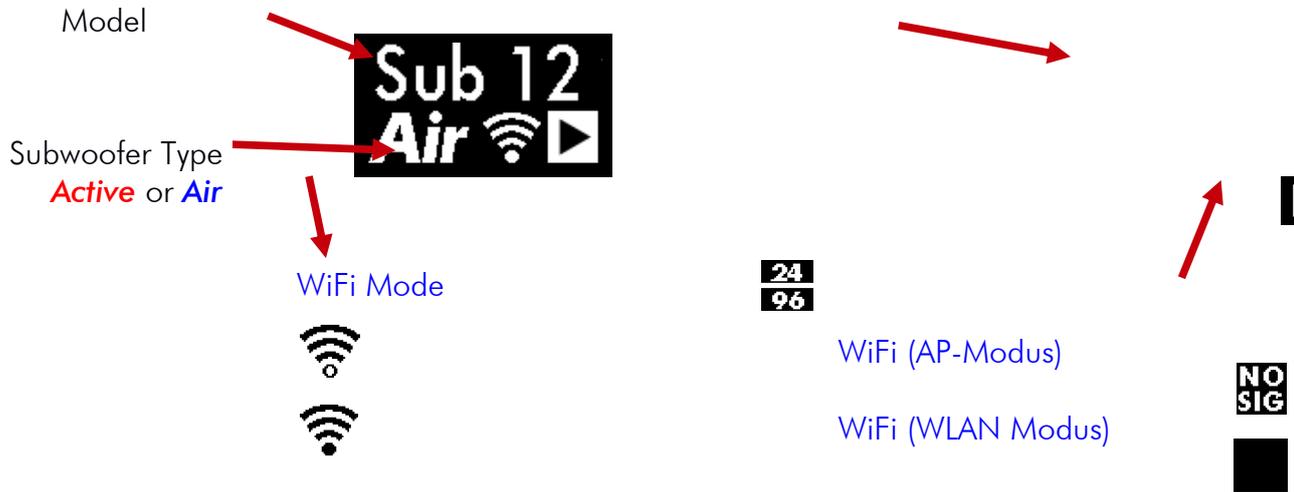
9. SMA socket for WLAN antenna
10. RJ45 Network socket
11. Digital Input (Coax SPDIF)
12. Digital Output (Coax SPDIF)
13. USB-B Socket



Display:

The display shows the current status, settings and the setup menu.

Use the *rotary knob* to make settings on the subwoofer: Turn clockwise or anticlockwise to navigate through the menu / change values. You can also use this feature to lock or mute the subwoofer (see " *Muting and locking the subwoofer*" section). shows the speaker model and the current speaker status:



Mute and lock the subwoofer:

Mute the subwoofer:

If you press the rotary knob while the status is displayed, the subwoofer will be muted. So you can simply stop the playback to hear the difference in music playback with or without subwoofer. Press again to cancel the muting.

This also happens automatically after 10 seconds (this value can be changed in the settings menu).

Lock the subwoofer:

To prevent unwanted changes to the parameters, you can lock the subwoofer. Press and hold the knob while the speaker is displaying the statute. The knob is then locked (preventing you from adjusting the subwoofer by your children!). To unlock, press and hold the knob again. If the power supply is interrupted, the lock is released again.

			
Muted	Unmuted	Locked	Unlocked

Automatic switching on and off.



The subwoofers have built-in music signal detection. If no music is played back, the subwoofer switches to standby after 15 minutes (this value can be changed in the settings menu). If music signal is detected, the subwoofer automatically switches on again.

If you disconnect the subwoofer from the mains you have nothing to consider. Restarting / plugging brings your subwoofer back to its last state. All parameters (except the subwoofer lock - see above) are stored in a long-term memory that does not lose its contents.

The settings menu

Navigation through the menu is extremely straightforward: turn the knob while the status is displayed, then open the settings menu.

Navigate by turning the knob in the menu. When you have found the setting you want to change, press the knob and change the value. Press again to save the value.

Also open submenus by pressing the knob and exit by:



The menu is automatically exited after a certain time (timeout)

Symbol	Menü	Beschreibung	Kommentar
Eingang	Input	Selects the active input for audio signals	Cinch, XLR, LS, LAN/WLAN, SPDIF
Profile	Profile	If you operate your Sub 12 with AUDIUM loudspeakers, you can call up predefined profiles (frequency, slope, high pass) here.	Attention - their current settings will be replaced by these values.
Volume	Volume	Bass playback volume	0...100
Frequ. f_s	Cut-off Frequency	The upper limit frequency of the subwoofer	30...180 Hz
Steilh. f_s	Slope	The steepness of the filter above the cutoff frequency	6, 12, 18 oder 24 dB/Oct.
Hochp. f_{HP}	HighPass	This 12dB filter can be used to reduce the lowest frequencies	20...50 Hz.
Phase	Phase	Changes the phase position. Serves to adapt to the main speakers	0...180 Grad
Polarität	Polarity	Inverts the audio signal	Normal / Invers
EQ	EQ	A customizable EQ filter to reduce the drone slope of a given (room-dependent) frequency.	EIN/AUS Frequency Q 1...10 Gain +3...-20dB

	Memory	Memory for your personal settings	3 memories
	Setup	More Settings	Auto Off, Display, Info, ...
	Air Setup	More Settings for the Air Model	WLAN zurücksetzen, AP/WiFi Modus, ...
	Exit	Exit Menu	

Setup Menü

Symbol	Menü	Beschreibung	Kommentar
	Auto Off	Time after which the subwoofer goes into standby without an audio signal.	Standardwert 15 Minuten.
	Stummschalt Dauer	Duration after which the mute is canceled.	Default value 10sec
	Display Helligkeit	Changes the brightness of the display	Standard ist 5 (Maximum)
	Display Abdünnungs Zeit	Time after which the display is automatically switched to dark.	Standard: Display wird nie abgedunkelt (die liegende 8 steht für unendlich)
	Sprache	Language of the display messages	
	Info	Information about this device	
	Exit	Exit Menu	

Air Setup Menu

Symbol	Menu	Beschreibung	Kommentar
	Channel	Selects the audio channel to be played	Left / Right / Mono.
	WiFi Mode	Switches between AP and WiFi mode	
	Reset	Reset the WiFi receiver	Speaker Settings (bass, position, ...) remain unchanged
	Exit	Exit the Menu	

Profile

The AUDIUM Sub 12 has predefined profiles which simplify a combination with other AUDIUM loudspeakers. To do this, select the menu item "Profiles". In the following submenu you will find an entry for Comp3, 5, 7, 8 and 9. If you select the entry (by pressing the rotary knob) you will be given the option to select the item "Load" or "Back".



"Load" then loads the selected profile. This means that the current values of frequency, slope, high-pass, phase and polarity are overwritten with the values of the profile. The menu entry then changes to "Active" (until you change one of the parameters).

"Back" lets you return to the profile selection.

If you want to save your current settings before loading a predefined profile, save them in one of the 3 user memories

User Memories

The AUDIUM Sub 12 has 3 user memories in which all set parameters can be stored. This means that in addition to frequency, slope, high-pass, phase and polarity, the selected input, volume and all other parameters such as display brightness, mute duration, ...



Select the menu item "Memory". In the following submenu you will find an entry for User1, User2 and User3. If you select the entry (by pressing the rotary knob) you will be given the option to select the item "Load", "Save" or "Back".

"Load" then loads all settings from the user memory.

"Memory" stores all settings in the user memory.

"Back" lets you return to the profile selection.

If a user memory has been loaded or saved, the menu item changes to "Active" (until you change one of the parameters).

Placement Tips

Keep in mind that a wall-mounted setup enhances bass response, a lineup in one corner maximizes you! Try not to place the sub near the corner, if possible.

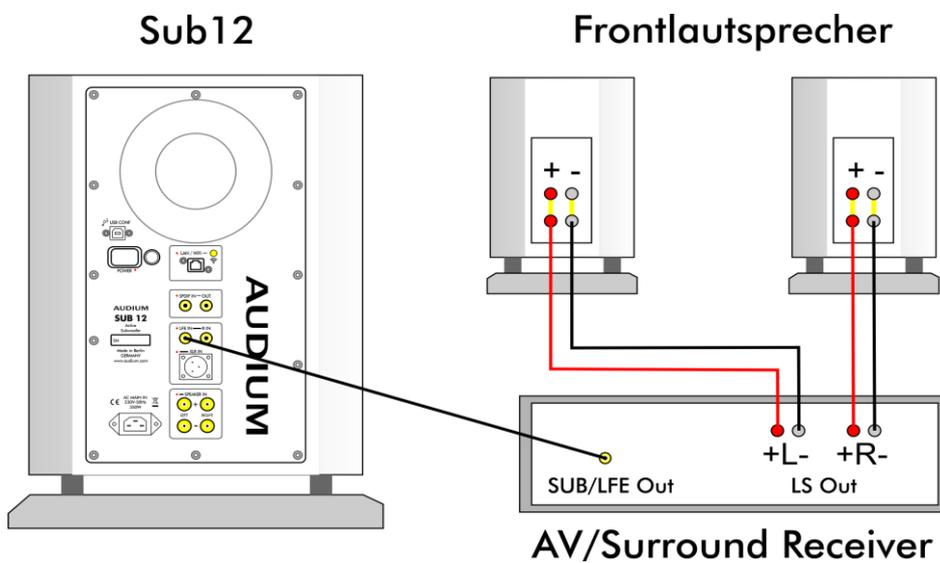
The same applies to your listening position: sit close you will notice an amplification of the bass response.

Connection Tips:

Je nach vorhandener Audio-Ausstattung stehen unterschiedliche Anschlussmöglichkeiten zur Verfügung. Versuchen Sie nach Möglichkeit Kabelwege kurz zu halten und Masseschleifen zu vermeiden.

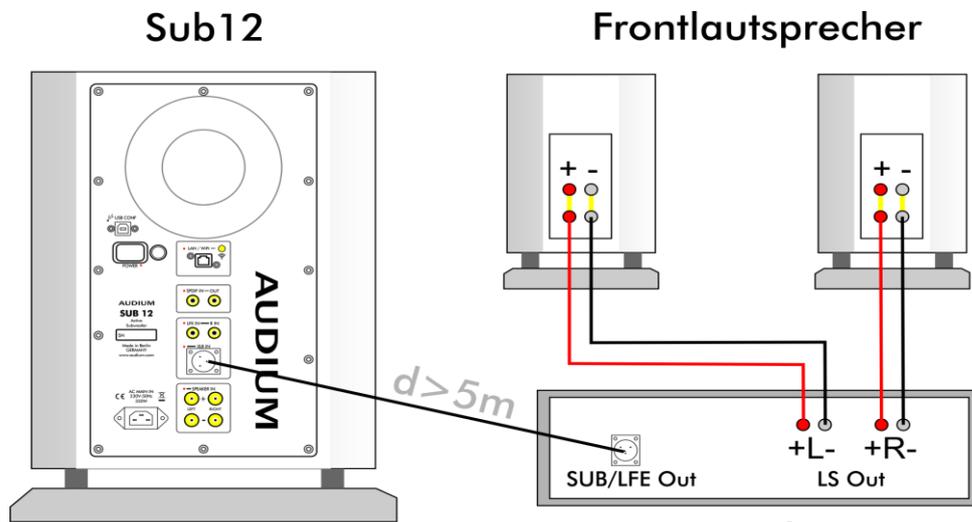
Option 1: AV / Surround / Preamp with Sub / LFE Out as RCA:

This is a standard scenario for home theater applications.



Option 2: AV / Surround / Preamp with Sub / LFE Out as XLR:

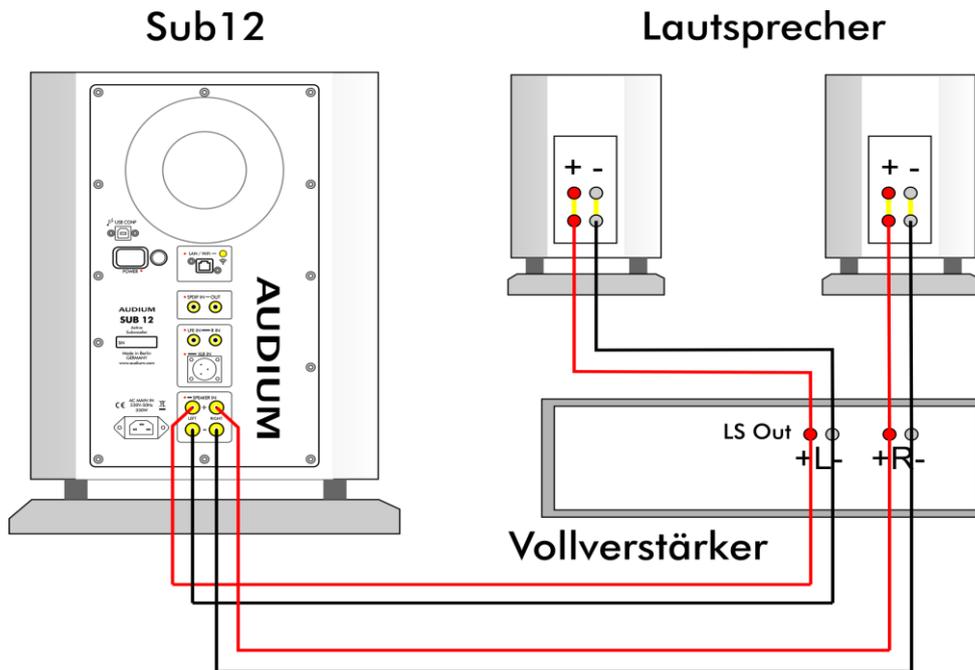
This scenario is recommended in the presence of a balanced sub-output and greater distance between preamp and subwoofer



AV/Surround Receiver Option 3:

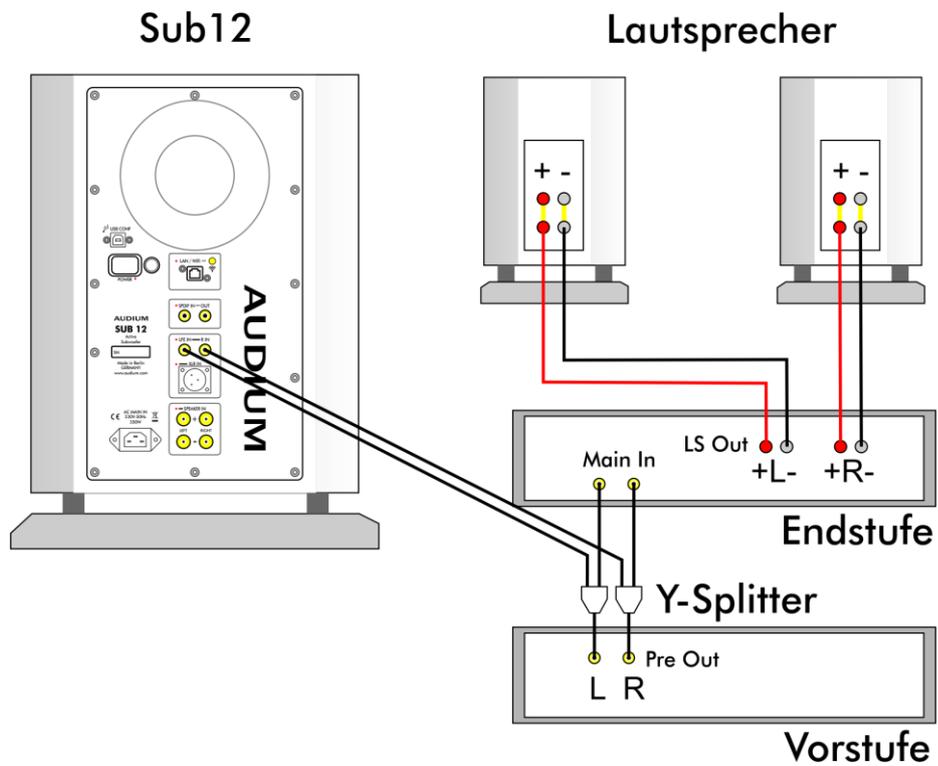
Integrated amplifier without pre-out:

Connect the speaker outputs of the integrated amplifier to the speaker inputs of the subwoofer. These are no additional burden on the amplifier.



Option 4: Pre / final stage combination with only one pre-out:

In this setup, use 2 Y splitters between preamplifier and power amp to divert the signal for the sub Or connect the sub to the power amp as in option 3.



Appendix 1: Glossar

Access Point	" Base Station" for wireless transmission. Gives access to your wireless LAN. Abbreviated as AP. Often included in a router.
AP Mode	" Access Point Mode" - your Air Master Speaker builds a WLAN on its own. No access pointer / router necessary..
AirPlay	Wireless Audio Transmission, developed by Apple Inc Wireless Audio Transmission, developed by Apple Inc..
AUDIUM App	The APP to configure your Air for your home Wi-Fi
Detection circuit	Electronics that detects audio signal
Digital Amplifier	Electronics to amplify music digitally with high efficiency. Low heat production, low space.
DLNA	Digital Living Network Alliance (similar to UPnP) - a standard to stream music over a LAN
DSP	Digital Signal Processor - a computer processor optimized for calculations on digital audio signals
Input Priority	Priority of audio input at the Air Master speaker
LAN	Local area network - cable based local network infrastructure
Master Speaker	The Speaker with the WiFi / WiFi Receiver and coax. SPDIF and Toslink input connector.
Priority Scheme	Assignment of priorities to the inputs
PSU	Power Supply Unit
Router	Device that connects your LAN to the Internet. Often has a Access-Point built inside.
Slave Speaker	The Speaker which has only a single digital in- and output
SPDIF	Sony/Philips Digital Interface: a customer standard for transmission of digital audio signals over a cable
TosLink	Toshiba Link (or optical SPDIF): a customer standard for transmission of digital audio signals via fiber-optics, designed by Toshiba.
UPnP	Universal Plug and Play (similar to DLNA) – a standard to stream music over a LAN
WiFi / WLAN	Wireless LAN – wireless network infrastructure
WiFi Mode	Your Air Master speaker is connected to an existing WLAN.

Appendix 2: Questions and Answers

Q: The subwoofer has 2 RCA inputs (LFE and R), but my surround pre-amp only has a subwoofer output. Is it OK to leave an entrance open?

A: Yes, that is not a problem. You can, however, double the pre-amp signal with a Y-splitter and feed it into both RCA inputs of the subwoofer. The bass reproduction then doubles as a result

Q: My surround pre-amp has both a cinch and XLR output. Which one should I use?

A: If the cable length between the preamplifier and subwoofer is more than 5m, or if you hear interference from the subwoofer with cinch cable connection, you should use a balanced XLR cable.

Appendix 3: Technical Data

Property	Sub 12 Active	Sub 12 Air
Woofer Ø	300mm (12")	300mm (12")
Power Supply	250W	250W
Max Power Woofer	230W	230W
Control	Display+Drehknopf	App auf Tablet, Display+Drehknopf
Inputs analog	2x Cinch, XLR, Lautsprecher	2x Cinch, XLR, Lautsprecher
Inputs digital		Cinch SPDIF
Outputs digital		Cinch SPDIF
Input Network		RJ45, WiFi
Supply Voltage	230V	230V
Dimensions	58 x 50 x 62 cm	58 x 50 x 62 cm
Weight	25kg	25kg

Appendix 4: Disclaimer

iPhone, iPad, iPod, Macbook, MacBook Pro, AirPlay are trademarks of Apple Inc.
DLNA are trademarks of *Digital Living Network Alliance* .

This manual can be subject to change without notice.

You can download the newest version from www.audium.com/downloads .

Version 1.0.0-EN – 20.8.2018