StackAudio

LINK II USER GUIDE

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StackAudio

LINK II User Guide

Contents

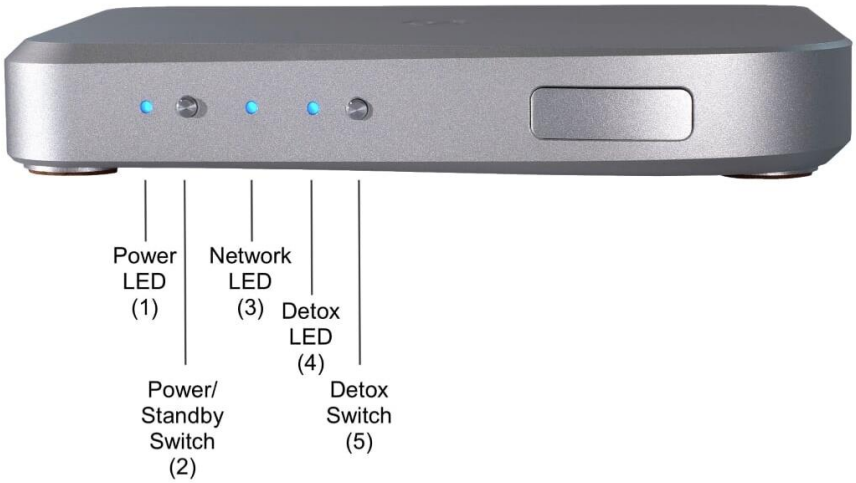
1. Safety Notice
2. Connections & installation
3. Set-Up
4. Configuration
5. Updates & servicing
6. Warranty & Liability
7. Technical Data
8. Support

1. Safety Notice

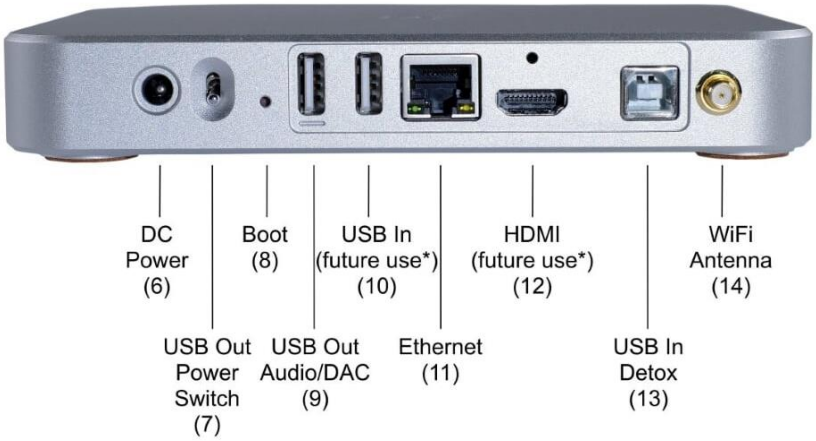
- The LINK is provided with a 110/240v compatible mains 1-1.5amp, 18v DC power supply with a 2.5mm jack. We recommend you use this power supply with the LINK. The power supply connects the LINK to the mains; never handle the power supply with wet or damp hands.
- Do not expose the LINK or the power supply to any liquid, water, or moisture. Never handle the power supply with wet or damp hands.
- Do not open the LINK or try servicing it yourself as this will void the warranty.
- Do not use the LINK in high temperatures (50c+) and near heat sources such as radiators. Ensure it is well ventilated.

2. Connections & installation

LINK Front Panel



LINK Rear Panel



Note: the numbers in brackets (n) alongside the front and rear panel labels on the images above are used in the following sections to aid identification of the switches and connections.

* **USB** In for external storage we likely will add this feature in the future.
HDMI Stack Audio is unlikely to implement an HDMI out interface because the added graphics processing can have a negative impact on the sound. You can always install Volumio and several other programs which do support an HDMI output. Although Wi-Fi wont be supported.

2.1 Mains Power Connection and Power/Standby

The LINK is supplied with a mains DC adaptor with the appropriate plug for different countries. Connect the DC adaptor to the LINK's power socket (6) on the rear panel before connecting to the mains.

Use the Power/Standby Switch (2) on the front panel to turn the LINK on or back into standby. After switching on, the Power LED (1) will change from red to blue. The Network LED (3) will light up blue when the LINK is operational, and the network connection is established. This may take up to 60 seconds. Powering down also takes up to 60 seconds to ensure all files are closed correctly. The Power LED (1) will blink red and blue during the process and show red when in standby.

Do not disconnect from the mains without powering down fully.

2.2 Network Connections

The LINK needs to be connected to a home network (LAN) via Ethernet before it can be used. Once connected via ethernet you can set up Wi-Fi.

The Ethernet port (11) is on the back panel for connecting an Ethernet cable to a router. A wired connection is recommended for maximum reliability. We recommend using a CAT5e, 6 or above cable capable of streaming at 1Gb/s.

The supplied Wi-Fi antenna should be attached to the connector (14) on the rear panel to enable connection to a router via Wi-Fi either for streaming or control purposes.

The Network LED (3) on the front panel will show blue when a stable network connection has been established and the LINK has successfully booted. To follow the set-up instructions and see the LINK on your web browser you will need to find the IP address your router has allocated to the LINK. For instructions on the set-up procedure refer to section 3 on page 7.

2.3 System connections

The LINK is designed to connect various streaming inputs to an existing DAC (Digital to Analogue Converter) in a two-channel hi-fi system.

It has only one output, the USB Type A connector (9) on the back panel. This can be connected to any USB equipped DAC or DAC/Amplifier. A USB cable with a Type A connector for the LINK end and either a Type A or B connector for the DAC should be used.

To the left of the USB Out (9) is a toggle switch (7). This toggle switch is used to off the power going down the USB cable. USB cables consist of both a power line and data line. By switching of the power, it helps prevent cross talk potentially improving audio performance.

If the toggle switch is down the power is on and If the toggle switch is up the power is off.

Our experience is that most DACs require the USB power feet. The best way to find out is to try it. If you don't hear music your DAC requires the power from the USB cable and the toggle switch needs to be down.

2.4 Connecting to music sources

The LINK can be connected directly to a PC or laptop or it can be connected to a home network with an Ethernet cable. It can also stream music from USB flash disks and drives.

- USB connection to PC or laptop

This should be done via the USB Type B input on the rear panel (13), marked DETOX Input on the baseplate. When the USB Detox Switch (5) on the front panel is activated this cleans up the signal from the PC or laptop removing digital noise before passing it through to the DAC. The Detox LED (4) shows blue when the Detox circuitry is activated. To de-activate the Detox when reverting to network streaming, press the Detox Switch (5) again.

- Home Servers, NAS Drives and Router

Connection to music libraries held on home servers, NAS drives and internet-based streaming services. Where possible we recommend a wired Ethernet connection as described in the Network Connections section above.

2.5 Connecting to music sources

The LINK can be connected to a home network either by a wired or wireless connection. For a wired connection attach an Ethernet cable from your router to the LINK's Ethernet port. You need to connect the LINK to a wired Ethernet connection before configuring it wirelessly (for wireless set up refer to page 9).

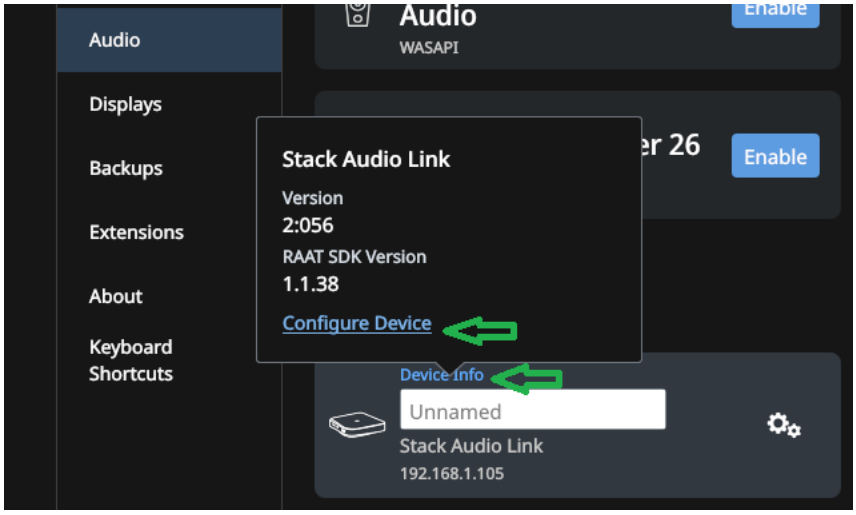
Please note For a wireless connection ensure the supplied antenna is attached to the connector (14) on the rear panel.

3. Configuration

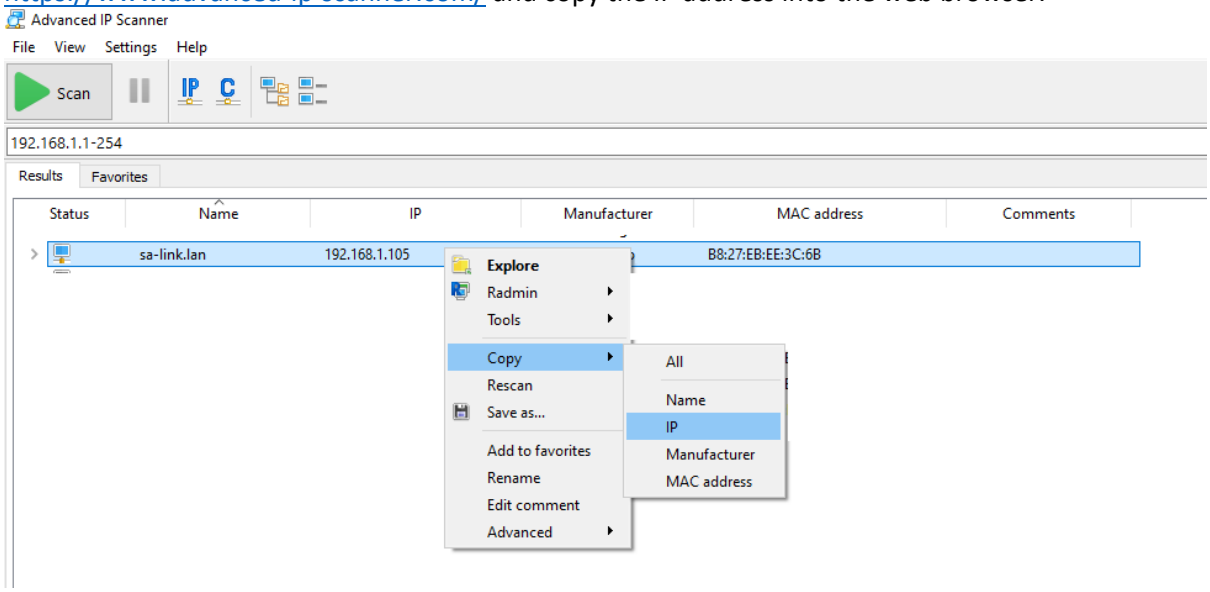
To configure the LINK you need to access the LINK's web interface.

To get started type into your web browser http://sa-link to access the web interface.

You can also access the LINKs web interface through Roon



Please note: If for whatever reason this fails, download Advance IP scanner from here https://www.advanced-ip-scanner.com/ and copy the IP address into the web browser.



Please note: You can also find the IP address of the LINK by looking at the list of devices connected to your router. Use your Home Hub/Router manager or run ipconfig (or a similar utility) and note the IP address of the LINK.

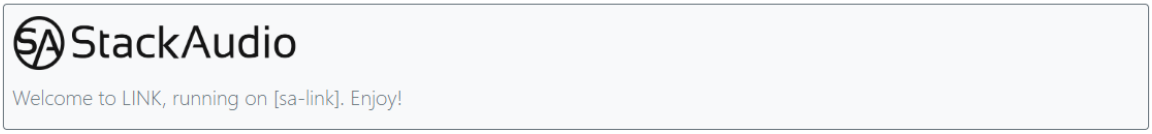
Note: With the exception of roon you need to first activate the streaming services via the LINK's control panel. If you connect the LINK to the network and don does not activate the streaming services, the LINK will not appear.

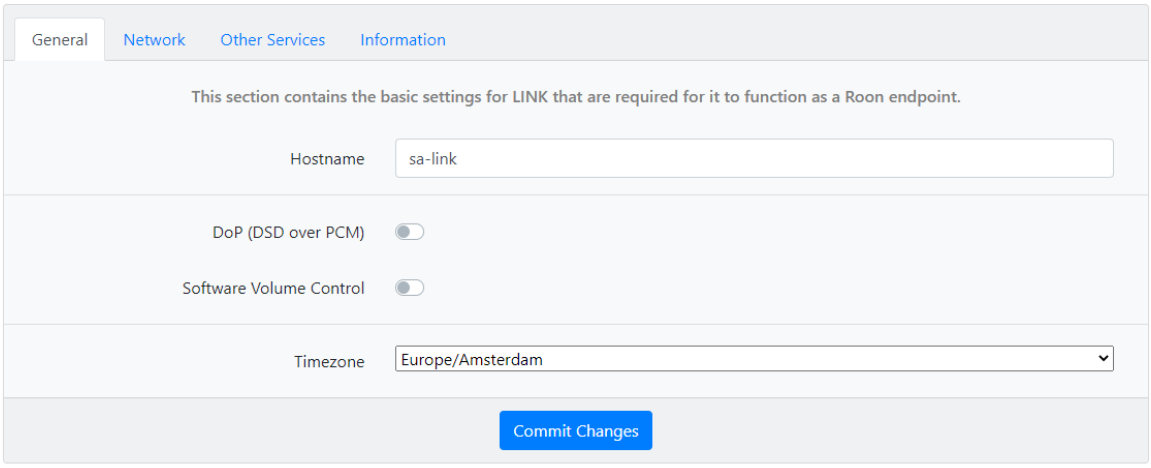
We have chosen to keep our software minimalistic for pure performance. This is the reason Stack Audio insists that users to activate their chosen software individually, this keeps the software streamlined.

DISCLAIMER: We strongly recommend before installing any streaming device that any external devices (such as DACs, HiFi systems etc.) are set to a low volume.

It is essential to keep this in mind with the LINK as the volume is ALWAYS set to 100% when the software volume control is deactivated. Once the software volume control has been activated, you are then able to control volume using your desired control software.

3.1 (General) Roon





Hostname: Changes the display name of your LINK (if you change this it will change the control panels access URL)

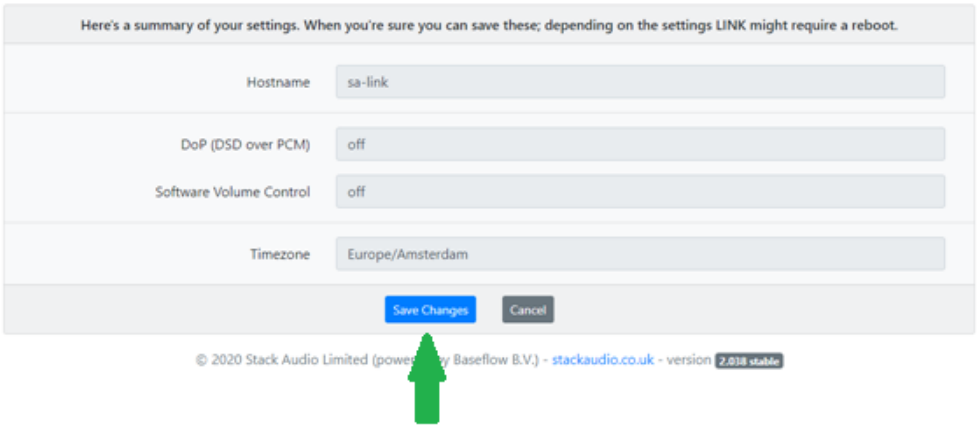
DoP (DSD over PCM): If you wish the LINK to transcode DSD to into PCM switch this on.

Software Volume Control: Switch this on if you want to control the volume via Roon.

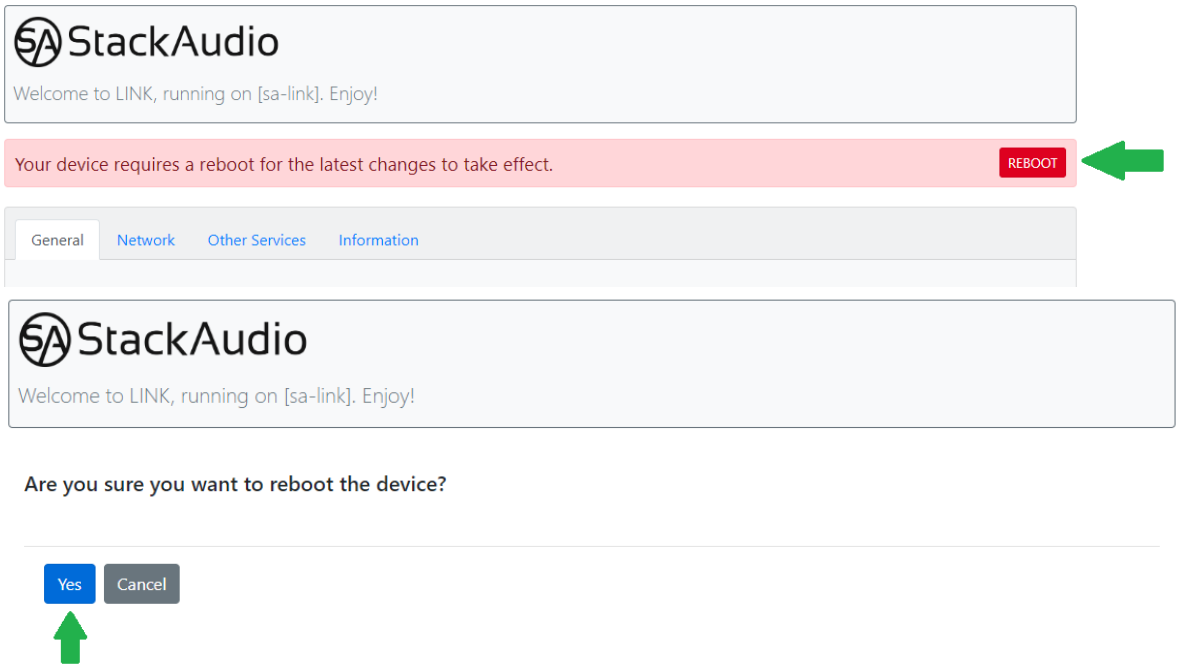
Once you have selected your settings you need to go through the “Commit Changes” process.

Step 1: Select “Commit Changes.”

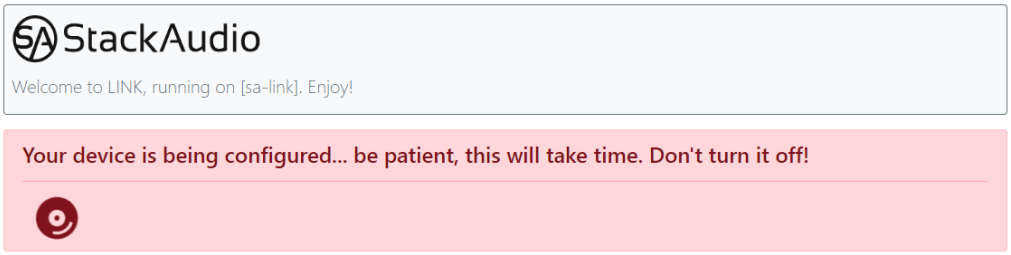
Step 2: Check your selected settings and click “Save changes.”



Step 3: Select “REBOOT” and confirm the reboot when prompted by clicking “Yes.”



Step 4: You will be notified that the device is being configured, this can take up to several minutes. Please do not be tempted to turn off the LINK during this period.



Whenever the settings are altered using the web interface, you will need to repeat the above “Commit Changes” sequences (refer to steps 3 and 4).

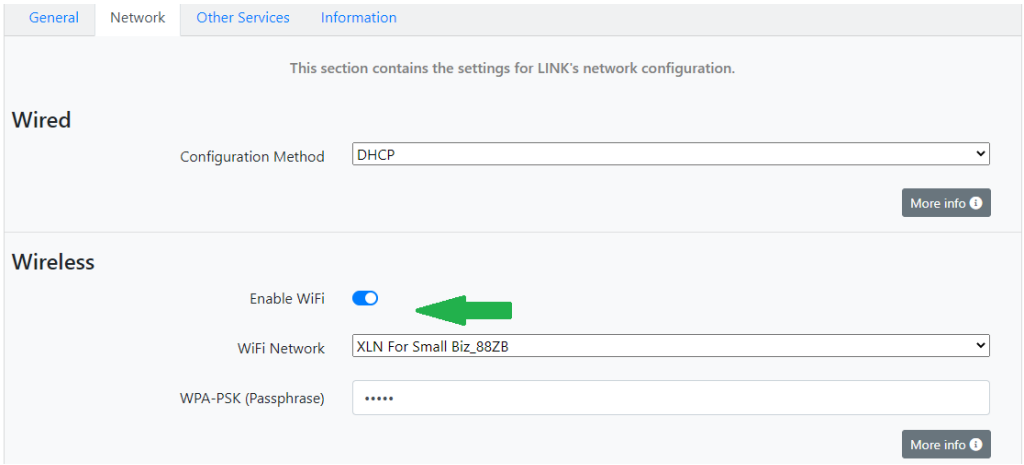
Step 5: Once the LINK has rebooted load up Roon go into settings>audio and enable the LINK.

3.2 Network (wireless)

Only go through this process if you want to set up your LINK via WiFi.
You need to connect the LINK to your router with an Ethernet cable to be able to connect via WiFi.

Step 1: Go to “Network” and select “Enable WiFi.”

Please note that enabling the WiFi will not entail selecting your router and submitting any WiFi passwords (sometimes referred to as WEP keys), this is automatically drawn through the Ethernet cable and saved to the LINK.



Step 2: Select “Commit Changes” and go through the Commit Changes sequences.

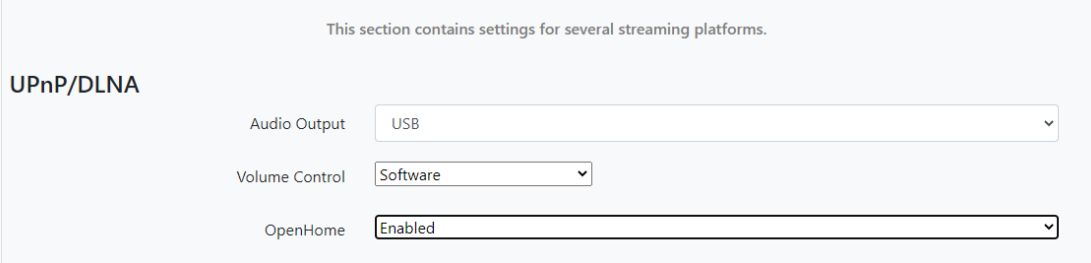
Step 3: Unplug the Ethernet cable. If it still does not work, reset the LINK by pressing the power button.

4. Other Services

Here you can activate the following services

- UpNP/DLNA
- Shairport-Sync (Airplay)
- Liberspot (Spotify)
- Squeezlite

4.1 UPNP/DLNA



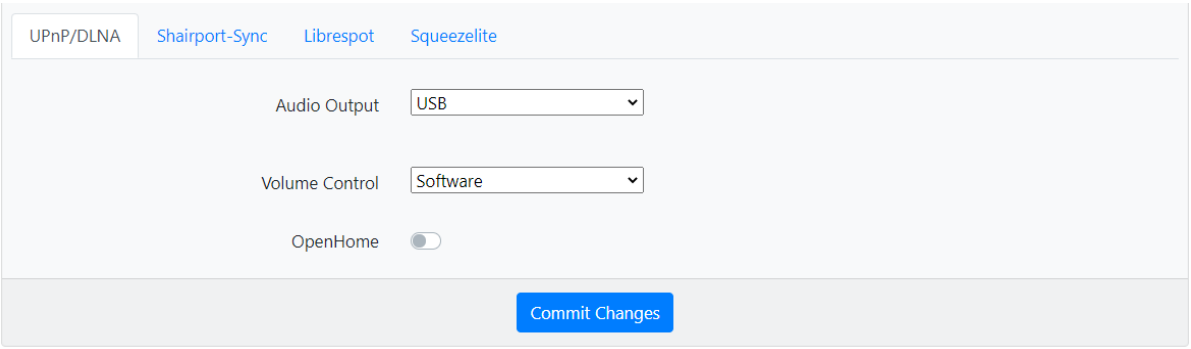
Step 1. Select USB via Audio Output
Step 2. Volume control

- None= Volume will be controlled only by your DAC and not the app or control software
- Software – This enables you to control the volume via your UPnP app or similar

Step 3. Commit changes and reboot

Activate Open Home or not?
We recommend you do not activate Open Home if you use the LINK with Audirvana
If you are using kazoo or bubble UPnP or other Open Home based solutions, we suggest you activate open home.

4.2 Shairport-Sync (Airplay)

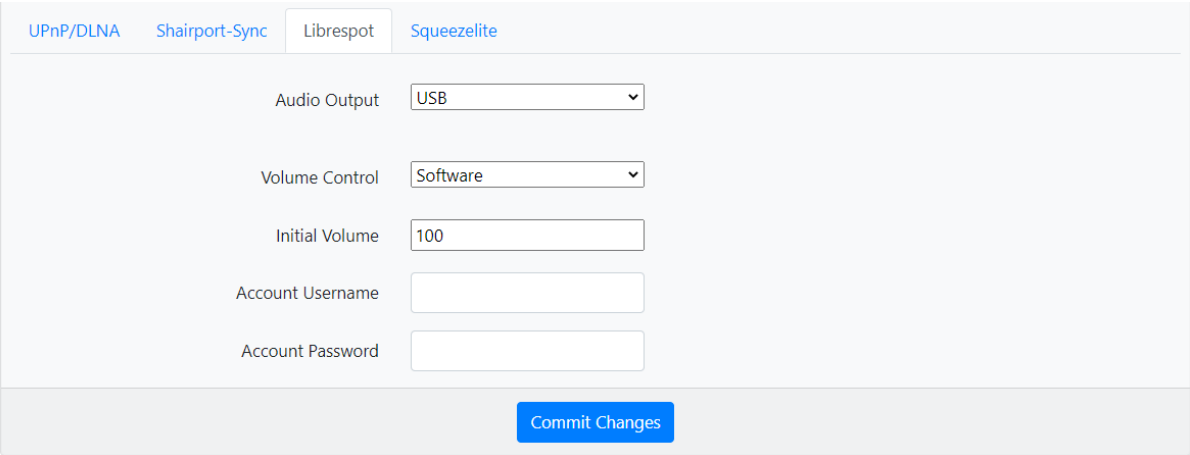


Step 1. Select USB via Audio output
Step 2. Volume control

- None= Volume will be controlled only by your DAC and not the app or control software
- Software = This enables you to control the volume Airplay

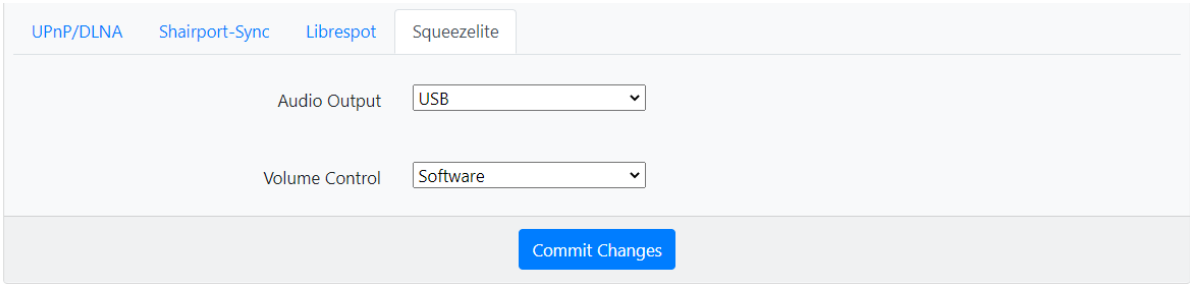
Step 3. Commit changes and reboot

4.3 Liberspot (Spotify)



Step 1. Select Audio output USB
Step 2: Configure Initial Volume
Step 3: Type in your Spotify credentials
Step 4: Commit changes and reboot.

4.4 Squeezlite



Step 1. Select USB via Audio output
Step 2. Volume control

- None= Volume will be controlled only by your DAC and not the app or control software
- Software = This enables you to control the volume Airplay

5. Updates and servicing

The LINK will upgrade and update itself automatically.

There are no user-serviceable parts in the LINK. Updates of the installed software can be downloaded via the SYSTEM menu in the settings.

There is a Boot button on the rear panel (9) which allows experienced users to load different operating systems onto the internal computer. To activate, press the Boot button for 5 seconds (requires a needle or similar fine point to access through the hole) until the red LED (4) on the front panel starts blinking. The LINK can now be used as a storage device and a new operating system can be installed. To exit the boot mode, press the USB Detox switch (5) on the front panel. CAUTION: This will overwrite the installed software. Stack Audio does not take any responsibility for damage or

alterations to the software in the LINK. We are happy to advise how to reinstall the Link software if needed,

6. Warranty & Liability

The Stack Audio LINK is guaranteed for 3 years from the date of purchase against defects in manufacture and design.

This warranty applies to the first owner and is not transferrable.

Proof of purchase from Stack Audio or authorised dealers are required to process the warranty. The serial number found on the base of the LINK must be supplied.

Items must be returned in the original packing with all supplied accessories and fittings.

If returning an item directly to Stack Audio, please ensure they are returned via registered post/delivery service at your cost. We recommend that you use a recognised service and insure all items for the full value as stated on your invoice. Stack Audio will not be held responsible for items that are lost, stolen or damaged in transit.

This warranty is limited to the repair or replacement of the equipment at our discretion.

Exclusions
The following are not covered by the Stack Audio warranty:

- Transportation costs.
- Damage caused by incorrect installation, connection or packing.
- Damage caused by any use other than the correct use described in the User Guide, negligence, modifications, or use of parts that are not made or authorised by Stack Audio.
- Damage caused by faulty or unsuitable ancillary equipment.
- Damages caused by accidents and causes beyond the reasonable control of Stack Audio.
- Products where the serial number has been altered, deleted, removed or made illegible.
- Repairs or modifications that have been carried out by an unauthorized person including to the installed software on the LINK.

If you purchased your Stack Audio product from a dealer or distributor, please contact them first in the event of a warranty claim or technical query. If purchased from the Stack Audio website, please contact Stack Audio directly.

The Stack Audio Moneyback Guarantee and Warranty do not affect your statutory rights.

7. Technical Data

Dimensions
174(W), 140mm (D), 25mm (H), 1kg (without external power supply)

Inputs:

- 2 x USB inputs (Future update)
- 1 x USB B detox input
- Ethernet input
- 18v 1amp- 1.5amp DC input

Outputs

- 1 x dedicated USB audio output
- HDMI output (Not activated and not i2s)

Streaming Protocols and Services

- Roon ready
- Shairport-sync (Airplay compatibility)
- UPnP AV protocol with audio streaming extension (Open Home)
- HQ player
- Squeezlite
- Liberspot (Spotify)

Communication Protocols

- Ethernet
- USB
- Wi-Fi – 802.11 b/g/n/d/e/h/i
- Bluetooth – Classic + EDR v2.1, v3.0, v4.0 and Low Energy (To activated soon)

Supported Audio File formats:

- Lossless: DSF (DSD), DIFF (DSD), DoP (DSD)
- PCM Lossless: FLAC, Apple Lossless (ALAC), WAV, AIFF Compressed (lossy) Audio: MP3, AAC (in M4A container) MQA (only if DAC supports hardware unfolding)

If you encounter a problem with your LINK and need assistance, please email Stack Audio at: info@stackaudio.co.uk

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Android is a trademark of Google Inc. Spotify is a trademark of Spotify

FCC ID: VVXLM811-0451

In line with the Waste Electronic and Electrical Equipment Directive, this product should not be treated as normal household waste. It should be recycled, so please take it to an approved collection facility.

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