

LITHEAUDIO V2 All-In-One Wi-Fi Ceiling Speaker Instruction Manual

Home » LITHEAUDIO » LITHEAUDIO V2 All-In-One Wi-Fi Ceiling Speaker Instruction Manual

Contents

- 1 LITHEAUDIO V2 All-In-One Wi-Fi Ceiling Speaker
- **2 IMPORTANT SAFETY WARNING**
- **3 BOX CONTENTS**
- **4 PREPARATION EQUIPMENT YOU WILL NEE**
- **5 KNOW YOUR SPEAKER**
- **6 SPEAKER PLACEMENT**
- **7 INSTALLATION**
- 8 YOUR HOME WI-FI NETWORK
- 9 LITHE AUDIO APP
- **10 STATUS INDICATOR LIGHT**
- 11 ETHERNET CONNECTION
- 12 POE SETUP (OPTIONAL EXTRA)
- 13 WiSA (OPTIONAL EXTRA)
- **14 SETUP FOR APPLE IOS**
- **15 AIRPLAY 2**
- **16 SETUP FOR GOOGLE HOME**
- 17 SPOTIFY CONNECT
- **18 HARD WIRED OPTICAL INPUT**
- 19 CREATE STEREO PAIR
- **20 TROUBLESHOOTING**
- **21 REGULATION INFORMATION**
- **22 2 YEAR GUARANTEE**
- 23 Documents / Resources
- 23.1 References
- **24 Related Posts**



LITHEAUDIO V2 All-In-One Wi-Fi Ceiling Speaker



IMPORTANT SAFETY WARNING

BEFORE USE PLEASE READ COMPLETELY AND USE THE PRODUCT IN ACCORDANCE WITH THESE SAFETY INSTRUCTIONS.

Before commencing any electrical work ensure the supply is switched OFF at the mains. Either by switching off the consumer unit or by removing the appropriate fuse. This product should be installed in accordance with the relevant sections of the building regulations code and in accordance with the latest edition of IEE regulations (BS 7671).

If the unit is to be used as a replacement for an existing product, remove the existing unit from its location and disconnect the wiring. Connect the wires as shown in diagram. Ensure terminals are properly tightened and ensure no bare wires are visible. When fitting the speaker into the ceiling, ensure no wires are trapped.

READ THE INSTRUCTIONS CAREFULLY BEFORE STARTING THE INSTALLATION PROCESS AND KEEP THEM SAFE FOR FUTURE REFERENCE.

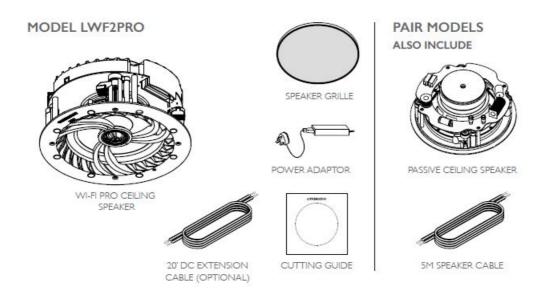
- Failure to follow the instructions in this guide voids all warranties on your speakers.
- Warning: Do not use the product in water.
- Warning: Do not install speaker directly above any heat sources such as radiators, or other apparatus that produce heat.
- Warning: To reduce the risk of fire or electric shock, do not expose this speaker to rain or moisture (directly above bath or shower area) or in Bathroom Zone 0 or Zone 1.
- Protect the power cable from being damaged, do not overstretch cable.
- Only use attachments/accessories specified by the manufacturer Lithe Audio.
- Turn off the power to the speaker when unused for long periods of time.
- · A Fire and Acoustic speaker hood must be used in accordance with UK building and IEE Regulations with a

fire rating of up to 60 minutes, is Parts B, L, C and E compliant. Do not open the back cover to the speaker as this protects the PCB as this will invalidate the warranty and could cause electric shock.

• Ensure speaker location is free from obstructions such as electrical conduit, HVAC ducts or Water lines.

BOX CONTENTS

Please ensure you read the entire instruction anual carefully before you commence any work. Carefully unpack the speakers from the packaging. Please check to ensure all the parts shown below are included. If any parts of the speaker appear damaged, please contact your dealer/reseller immediately or contact www.Litheaudio.com for contact details.



PREPARATION EQUIPMENT YOU WILL NEE

Listed below is the hardware equipment needed to install the speaker, with the addition of a ladder to ensure the installation is done safely. A cutting template is included in the box.

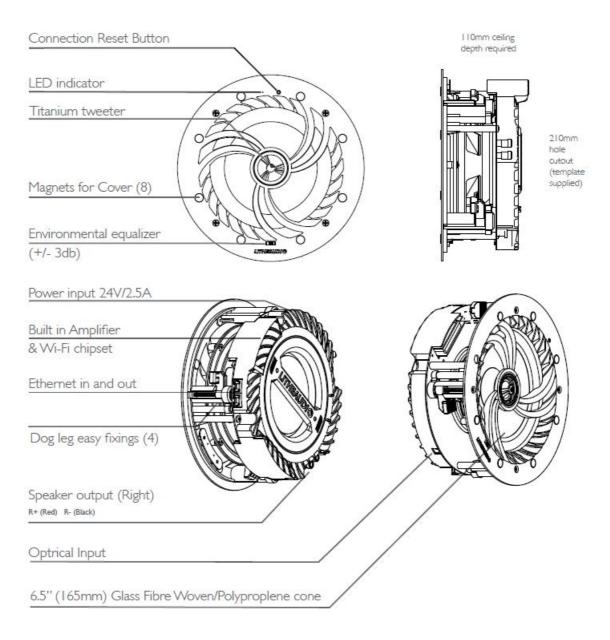


KNOW YOUR SPEAKER

The Lithe Audio LWF2PRO range of Wi-Fi ceiling wireless speakers have various inputs and outputs:

- SPEAKER OUTPUT To connect one additional passive (Slave) speaker (Gold Plated)
- OPTICAL INPUT To connect directly from TV Output, CD Player, DVD Player etc..

• POWER INPUT - To connect (as supplied) transformer



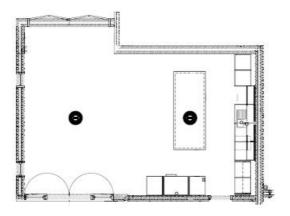
Inbuilt over-voltage, under-voltage, over-temperature, and short circuit protection, if there is an electrical fault, the power supply to the amplifier will cut off automatically and restart when the speaker has stabilized

SPEAKER PLACEMENT

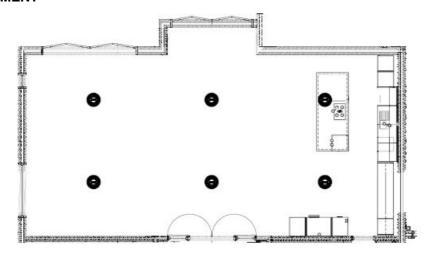
IMPORTANT: BEFORE COMMENCING ANY WORKS, DETERMINE YOUR PRIMARY LISTENING POSITION. IF YOU ARE UNSURE SEEK HELP FROM AN AV INSTALLER FOR OPTIMUM RESULTS.

2 SPEAKER PLACEMENT

In an ideal scenario, the two speakers should be spaced equally apart from the primary listening position. Where posible, place the speakers approx 3° / 1° from the wall



4 SPEAKER PLACEMENT

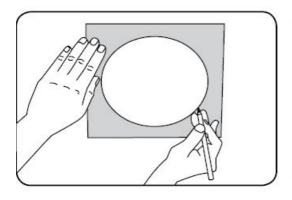


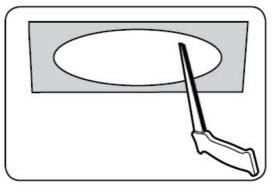
Ideally, the two speakers to the front and two speakers to the rear should be spaced equally apart from the primary listening position to provide balanced listening experience. Where posible, place the speakers approx 3" / 1m from the wall.

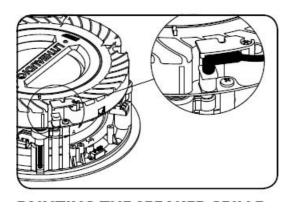
NOTE: For optimal sound when using speaker in vaulted ceilings switch the environmental equaliser switch to +3dB, when using speakers in a tiled environment (Bathroom) switch equaliser to -3d

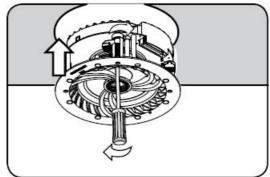
INSTALLATION

IMPORTANT: BEFORE COMMENCING ANY ELECTRICAL WORK ENSURE THE SUPPLY IS SWITCHED OFF AT THE MAINS. IF YOU ARE UNSURE HOW TO FIT SEEK HELP FROM A PROFESSIONAL ELECTRICIAN / AV INSTALLER









- 1. Mark out the position of the speaker using a tape measure and mark using a pencil with the template supplied.

 Check using a stud finder to make sure no obstruction is present prior to cutting
- 2. Drill a pilot hole and cut the speaker hole using a cutting saw. Take caution when cutting to keep fingers away from cutting blade and wear protective eyewear.
- 3. Connect the power lead from the transformer (supplied) to a 13A mains plugn socket or terminate to a dedicated 3A fused spur. Ensure the power lead is not overstretched
- 4. Insert speaker into the ceiling then using a screwdriver lock the 4 dog leg fixings to secure the speaker in place, do not over tighten. Attach the magnetic grille to the speaker front.

PAINTING THE SPEAKER GRILLE

Do not paint the speaker grilles whilst attached to the speaker. Lithe Audio reccomends spray painting using 5 parts thinning agent to 1 part paint. Spray thinly to ensure speaker cover grille holes are not blocked as this will effect the sound quality of the speakers.

INSTALLATIONS IN FIRE-RATED CEILINGS

If you plan to mount your speakers in a fire-rated ceiling, you should purchase a fire hood for the speaker. Visit www.litheaudio.com for more information and reccomended hoods.

YOUR HOME WI-FI NETWORK

To enable the Lithe Audio Wi-Fi ceiling speakers, your device must be on the same network.

- Ensure your network has a high speed internet connection, as the speakers are designed to provide you with free online software/firmware updates.
- High speed DSL / cable modem, or fiber to the home broadband is recommended for best possible playback of music services.
- Lithe Audio communicates over a 2.4GHz & 5GHz Wi-Fi home network supporting 802.11 a, b, g, n, ac wireless technology only
- For larger homes where Wi-Fi signal is not stable, we suggest adding access points/mesh network to strengthen the network or updating your router to a higher specification model to suit the demand OR connect via hard wired ethernet connection.
- For connections to computer or NAS drive for playing personal music library, we recommend for best performance connecting via Ethernet cable.

LITHE AUDIO APP

- To enhance your listening experience download Lithe Audio app via the app store on your device follow the setup procedures within this instruction manual.
- The app will allow you to setup singular rooms, groups of speakers or play in Party Mode.
- You can connect up to 30 speakers simultaneously and control them all from the app.

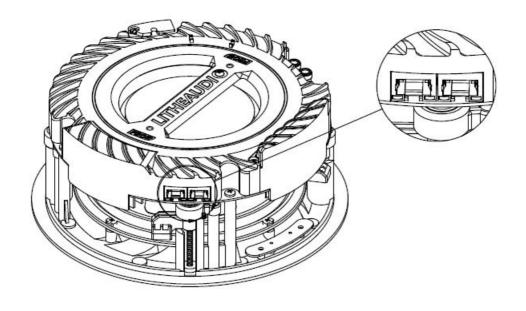
STATUS INDICATOR LIGHT

Located on the front face of the speaker, the LED Indicates the status of your speaker:

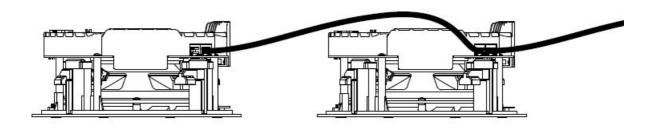
- · Red solid: Speaker booting up
- Red quick flash (1s 4 times): Speaker under restart operation
- Red slow flash (3s 1 time): Speaker under standby mode, waiting for user operation
- · Green solid: Speaker is active and connected to Wi-Fi
- Green slow flash(1s 1 time): Speaker trying to connect to the preconfigured Wi-Fi
- Solid purple: Speaker under WiSA mode
- Green quick flash(1s 4 times): Speaker in WAC/SAC mode, user to configure Wi-Fi

ETHERNET CONNECTION

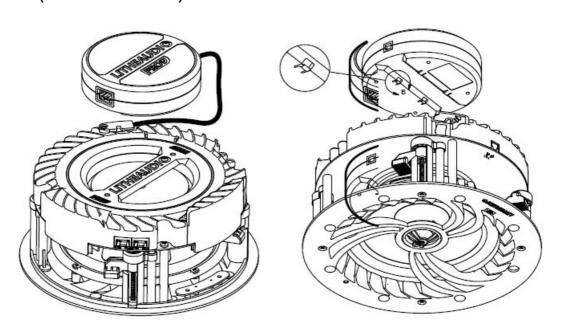
To connect to speaker via ethernet cable use either of the RJ45 ports The WiFi PRO gives you the ability to daisy chain ethernet connections, reducing cable runs, saving time and money. Each speaker shall have its own IP address.



NOTE: IF USING POE IN ADDITION TO ETHERNET CONNECTION THEY ARE SEPERATE



POE SETUP (OPTIONAL EXTRA)



To use PoE Bolt on device with the WiFi PRO speaker you shall need an PoE injector to deliver miniumum of 60W power via IEEE 802.3af/at/bt standard.

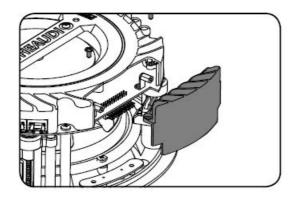
- 1. To power the WiFi PRO speaker via PoE power, you must remove the DC connector which is powered by the mains from the speaker.
- 2. Connect the PoE injector via ethernet cable into the RJ45 port on the PoE bolt on (Ensure a click noise)
- 3. Connect the DC cable connector from the PoE bolt on into the speaker.
- 4. Line up the PoE bolt on with the rear of the PRO speaker and clip in place.
- 5. If required clip the cable into the cable guides to ensure no snags occur for a tidy install
- 6. You are all set. Turn the injector on and wait for a few seconds for the power to boot up.

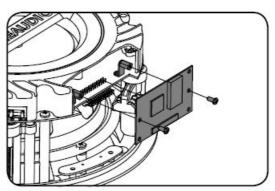
WISA (OPTIONAL EXTRA)

If you have purchased the additional WiSA module please follow the steps below to fit into the PRO WiFI speaker ENSURE THE SPEAKER IS NOT CONNECTED TO THE POWER SUPPLY WHILST INSTALLING **NOTE:** When assembling the WiSA module try to avoid touching the pcba, use the non static packaging to hold and put in place.

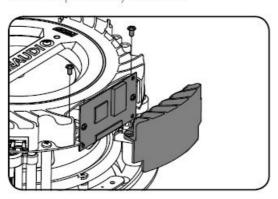
I. Remove the 2 screws from the WiSA cover on the speaker and remove the cover



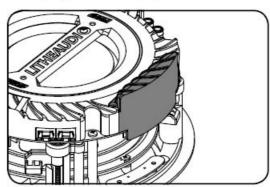




3. Reassembled the cover and fix screws in place and your all set.



 Open the WiSa Setting on your compatible TV or projector to setup speakers.



SETUP FOR APPLE IOS



NOTE: If you are connecting via ethernet cable no setup is necessary

- 1. Ensure the Wi-Fi speaker is connected to the power supply and is turned on, the LED indicator will flash red slowly.
- 2. Press and hold the 'Connection Reset Button' for 5 seconds & release, the LED indicator will flash Green and the speaker is now ready to connect to your Wi-Fi network.
- 3. Open the Wi-Fi setting menu on your phone or tablet



- 4. Select the new AirPlay speaker listed you would like to add to your network
- 5. Select your network and change the 'Speaker Name' to something easily identifiable e.g. Kitchen and click Next
- 6. The Lithe Audio Wi-Fi speaker setup is now complete return to the Lithe Audio app

AIRPLAY 2



To play directly to speaker(s) using a iOS devices (iPad, iMac, iPhone, Apple TV etc) you can connect via AirPlay 2. Please follow the steps below:

ENSURE THE SPEAKER IS CONNECTED TO THE POWER SUPPLY, AND THE WIFI NETWORK.

Note: When using AirPlay 2 the Lithe app grouping and playback functions for mutiple speakers becomes redundant. The ability to play any source is is now possible. As well as playing with other brands in an multi room environment.









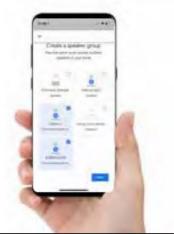
- 1. Swipe down from the top right of the screen
- 2. Click on the right corner icon to show available AirPlay devices
- 3. Audio display screen shall show available devices to play music through as per list
- 4. Select the speaker(s) to play music through open any app and play your music

SETUP FOR GOOGLE HOME

- 1. Download the Google Home app from thhe Google Play store
- 2. Ensure the Wi-Fi speaker is connected to the power supply and is turned on, the LED indicator will flash red slowly.
- 3. Press the + top left hand corner, Click set up device, choose home to start looking for devices on your network, choose Speaker, Next.
- 4. Open Google Home and click the + sign top left hand corner









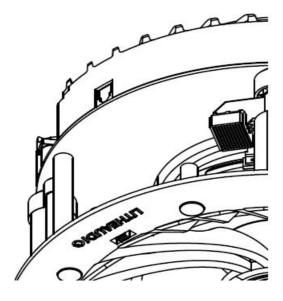
- 5. Click set up device, New devices Setup new device
- 6. Select existing home or create new home to start looking for devices
- 7. Select speaker, Next, click on LitheAudio Speaker all set

SPOTIFY CONNECT

You will need to have the Spotify Premium account, the latest spotify app installed and be connected to the same Wi-Fi network to play via Spotify connect directly. Open Spotify app, on your phone, tablet or laptop. Play a song and select DEVICES AVAILABLE at bottom of player page Select your device and start listening to your spotify music

NOTE: If your connection to speaker is lost, the device may have weak Wi-Fi signal. Please visit: https://www.spotify.com/uk/connect/ for further details

HARD WIRED OPTICAL INPUT



To connect other devices such as TV, CD player, BluRay player etc) to play through the Wi-Fi speakers please follow the steps below:

Optical Connection:

To play music via speaker Optical connection connect an Optical cable to the speaker and play through your device. Within the Lithe Audio App click on source to activate Optical to be able to play through the speaker. Note: To ensure the best posible sound without humming or noise, we recommend a good quality cable be used.

CREATE STEREO PAIR

PLEASE NOTE: LWF2PRO DOES NOT INCLUDE PASSIVE SPEAKER

The Lithe Audio Master Wi-Fi PRO ceiling speaker is able to connect to and power an additional passive speaker via the Right speaker output. Use wire cutters to strip the ends of the speaker cable (if required).

SPEAKER

- Sound Quality THD+N<0.009%, 55Hz-20kHz (+/- 3dB)
- RMS Power: 60W RMS (2x 30W)
- Impedance: 8 Ohms nominal
- Sensitivity (1W/1m): 90dB
- · Line In Analog (Optical), auto-detecting
- Type: Class D (Digital)
- Audio Compression: 192Khz/24bits
- Bluetooth 4.1
- Woofer: 6.5" Woven Glass Fiber cone / Polypropylene Cone (IP44)
- Tweeter: 0.75" Titanium Cone

MUSIC ACCESS

- Audio Formats Supported: MP3, WMA, AAC (MPEG4), AAC+, ALAC, FLAC, APE, WAV, OGG, LPCM
- Audio Sample Rate: up to 192kHz 24bit
- Music Services Supported by Lithe Audio include; Airable Radio, Podcast, Tidal, Deezer, Soundmachine,
 Amazon Music, Napster, Spotify, etc..

 Operating Systems (for stored files) Windows XP SP3 and higher; Mac OS X 10.6.8 and higher; NAS (networkattached storage) devices supporting CIFS

MULTI-ROOM

Expandable up to 30 speakers within same Wi-Fi network

WIRELESS NETWORKING

- Wi-Fi Connectivity: Wi-Fi CERTIFIED™
 - 802.11 a, b, g, n, ac WPA™ Personal
 - ∘ WPA2™ -
 - Personal WMM®, Wi-Fi
 - Protected Setup™
- Wireless connectivity works on your home Wi-Fi network with both 2.4GHz/5GHz broadcast routers
- Internet connection required for access to Internet radio stations, online music services and software updates.

GENERAL

- Power Input Supply: 100 240V, 50/60Hz / 2A
- Transformer Output Supply: DC24V / 2.5A
- Dimensions (W x D) 230 x 110mm (6.5 x 4.3 in)
- Weight 1.75kg (3.85 lbs)
- IP rating: IP44 (Bathroom models only)
- Operating Temperature 0° to 40° C (32° to 104° F)
- Storage Temperature -20° to 70° C (4° to 158° F)
- Standby power: 1.3W / 0.02A
- Connected power: 1.5W / 0.03A
- Playing Music: 2.8W 10.5W / 0.03A 0.09A**

WiSA (Optional Extra)

- Audio Quality: 48kHz/96kHz 24 bit
- Auto Config: 2.0 7.1 & 5.1.2
- Maximum: 8 zones
- · Dolby Atmos Height Channels supported

PoE POWERED (Optional Extra)

- PoE Standard: IEEE 802.3 af/at/bt powered device (PD)
- Power Level: upto 71.3W
- · Max length ethernet Cable

^{*} Specifications subject to change without notice. ** Power Consumption depends on the type of music & volume

- Increased Bass & volume requires more power loading on the amplifier.
- Internet functionality may require payment of separate fee to a service provider

TROUBLESHOOTING

If a problem arises, please try the troubleshooting guide below. If the problem is not listed please contact Lithe Audio Customer Service Support

Q: Speaker has not been found during setup

A: Please check power cord is correctly connected into speaker and transformer, Check the red light is ON. Press reset button for 5 seconds on the speaker (discoverable mode), green light shall flash, follow the instructions for Android or AirPlay 2 setup.

*Before commencing any electrical work ensure the supply is switched OFF at the mains.

Q: Speaker connected to AirPlay 2 but not playing through device

A: Please ensure device has good Wi-Fi strength and battery power, check the led indicator is solid green, if not press reset button for 3 secs. Failing this, turn the speaker power off then on.

Q: Device is connected to Wi-Fi speaker but no sound

A: Ensure your device volume is NOT muted, increase the volume within app and try again. Restart the app which the audio is playing from and try again.

Q: Lithe Audio App not showing connected speakers

A: Ensure your speakers green light are on, and connected as per setup. The app shall automatically find active speakers, if not, restart app or press reset on speaker for 3 secs to wake speaker. to show green status light.

Q: Lithe Audio App not working correctly

A: Ensure your speaker firmware/app are up to date, OR restart/reinstall app fully.

Q: Can the speaker be installed into the bathroom ceiling.

A: The IP rated models 'LWF1/IP' can be installed in zone 2 or 3 of a bathroom. Ensure you read the saftey precautions before installation. Warning: Do not use the product in water or directly above the bath or shower area.

Q: I have a new router and speakers are not visible anymore

A: If you have purchased a new router or reset the router back to defualt, you shall need to install the speakers again. Please follow the setup procedures for IOS or Android. For further queries and support questions please visit www.support.litheaudio.com email us at support@litheaudio.com or via our website's live chat service (during working hours)

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. To assure continued compliance, any
changes or modifications not expressly approved by the party responsible for compliance could void the user's
authority to operate this equipment. (example- use only shielded interface cables when connecting to computer
or peripheral devices).

FCC RADIATION EXPOSURE STATEMENT

This equipment complies with FCC RF radiation exposure limits set forth for an uncontrolled environment. this transmitter must not be co-located or operating in conjunction with any other antenna or transmitter. This equipment should be installed and operated with a minimum distance of 20 centimeters between the radiator and your body. 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. EUROPE

Lithe Audio declares that this product herewith complies with the requirements of the EMC Directive 2004/108/EC, Low Voltage directive 2006/95/EC, Eco-Design Directive 2005/32/EC, RoHS Directive 2011/65/EU and the R&TTE Directive 1999/5/EC when installed and used in accordance with the manufacturer's instructions. A copy of the full Declaration of Conformance may be obtained at www.litheaudio.com/support/policies. Lithe Audio Speakers have a standby mode or remove the power cord from the AC mains.

REGULATION INFORMATION

RECYCLING INFORMATION

This symbol on the product or on its packaging indicates that this product shall not be treated as household waste. Instead please deliver it to the applicable collection point for the recycling of electrical and electronic equipment. By recycling this product correctly, you will help conserve natural resources and prevent potential negative environmental consequences. For more detailed information about recycling of this product, please contact your local council office, your household waste disposal service or the shop where you purchased the product(s) from.

THIS DOCUMENT CONTAINS INFORMATION THAT IS SUBJECT TO CHANGE WITHOUT NOTICE.

No part of this publication may be reproduced or transmitted in any form or by any means, electronic or mechanical, including but not limited to photocopying, recording, information retrieval systems, or computerB network without the written permission of Lithe Audio Ltd

Use of the Works with Apple badge means that an accessory has been designed to work specifically with the technology identified in the badge and has been certified by the developer to meet Apple performance standards. To control this AirPlay 2—enabled speaker, iOS 11.4 or later is required.

Apple, iPad, iPad Air, iPad Pro, iPhone and AirPlay are trademarks of Apple Inc., registered in the U.S. and other countries.

Windows® is a registered trademark of Microsoft Corporation in the United States and other countries. Android™ is a trademark of Google, Inc.

Google, Chromecast built-in are trademarks of Google LLC.

The Bluetooth® word mark and logos are registered trademarks owned by Bluetooth SIG, Inc. and any use of such marks by Lithe Audio Ltd is under license. Other trademarks and trade names are those of their respective owners.

Wi-Fi CERTIFIED™ is a registered trademark of Wi-Fi Alliance® Spotify software is subject to third party licenses found here: http://www.spotify.com/connect/third-party-licenses All other products and services mentioned may be trademarks or service marks of their respective owners.

©2020 by Lithe Audio Ltd. All rights reserved. FCC ID: 2AQOB-LWF1

2 YEAR GUARANTEE

This Ceiling Speaker is of excellent quality and construction. However, if any defects in materials or workmanship do appear during the guarantee period, we will, at our discretion, either repair or replace the defective parts, free of charge, subject to the terms and conditions of our Guarantee shown below.

This Guarantee covers both parts and labour. Carriage is not included. This Guarantee provides benefits which are additional to, and do not affect, your statutory rights. This Guarantee does not cover the cost of returning the product to the dealer from whom it was purchased or to ourselves. This Guarantee applies only to products sold and located in mainland Great Britain. It does not cover liability in respect of or replacement of plugs, cables or fuses and also does not cover defects due to:

- Failure to use or maintain product in accordance with Lithe Audio instructions.
- The product being connected to an unsuitable electricity supply.
- · Accidental damage to or abuse or misuse of the product.
- Product modification, except by Lithe Audio or approved agent.
- Dismantling of or interference with the product. Before returning any product under this Guarantee, please check that:
- You have followed the product instructions correctly.
- Your mains electricity supply is functional.
- The defect is not due to a blown fuse.

If you wish to claim under this guarantee you should:

- Send the product, postage or carriage paid, to the dealer from whom it was purchased or to Lithe Audio direct.
- Ensure that the product is clean and packed carefully (preferably in its original carton).
- Enclose details of your name, address and telephone number and when and where the product was purchased, together with proof of purchase (e.g. a invoice or till receipt).
- Give exact details of the nature of the defect.

This Guarantee does not cover any other claims whatsoever, including, without limitation, any liability for incidental, indirect or consequential damage, nor does it cover any claims for conversion or modification or for the costs of repair carried out by any third party without the prior consent of Lithe Audio. If replacement parts are fitted to the product this will not extend the period of the Guarantee. For further advice contact the Lithe Audio customer services.

Documents / Resources



<u>LITHEAUDIO V2 All-In-One Wi-Fi Ceiling Speaker</u> [pdf] Instruction Manual V2 All-In-One Wi-Fi Ceiling Speaker, V2, All-In-One Wi-Fi Ceiling Speaker

References

- <u>New Mireless Audio Solutions Lithe Audio LTD</u>
- Spotify Connect Spotify