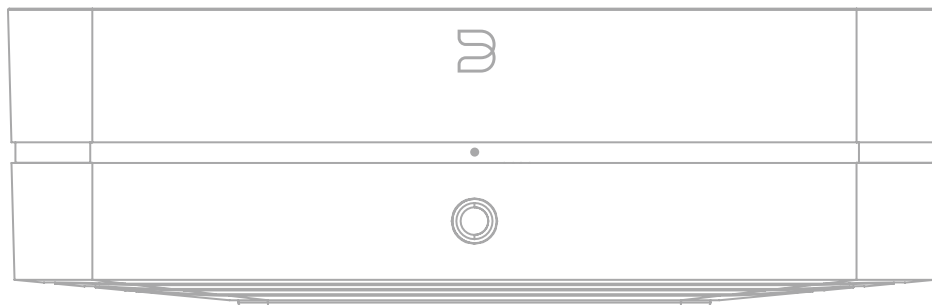# BLUESOUND

POWERNODE

MULTI-ROOM MUSIC STREAMING AMPLIFIER
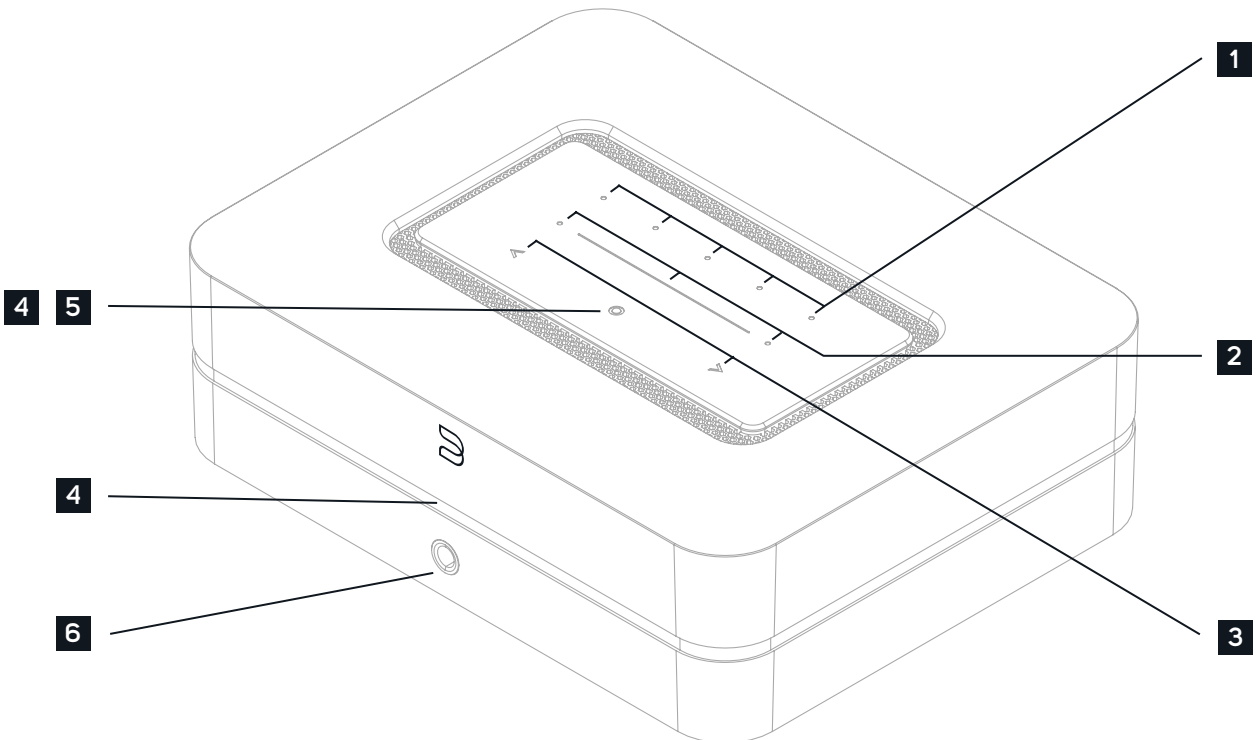

OWNER'S MANUAL

v. N331

Welcome to Bluesound

Thank you for purchasing your POWERNODE. It is a network music streaming amplifier that conveniently brings the enjoyment of hi-resolution audio to everyday life. Simply add loudspeakers to create the ultimate two-channel or three-channel system, which can also be grouped with other Bluesound players to create multi-room listening experiences.

BluOS

The BluOS multi-room music streaming platform, the world's leading ecosystem for hi-res streaming audio, is the backbone of Bluesound product performance. The POWERNODE has music services built right in, so listening to your favorite artist or playlist is simple. Using the BluOS Controller App, group your POWERNODE with other Bluesound players for a whole-home listening experience, or simply let it be your complete stereo system by connecting it to your audio source (like a TV) and your favorite set of speakers. Either way, it's easier than ever to enjoy the pleasures of hi-res listening with the POWERNODE.

If you need help or information please visit support.bluesound.com or send us an email at
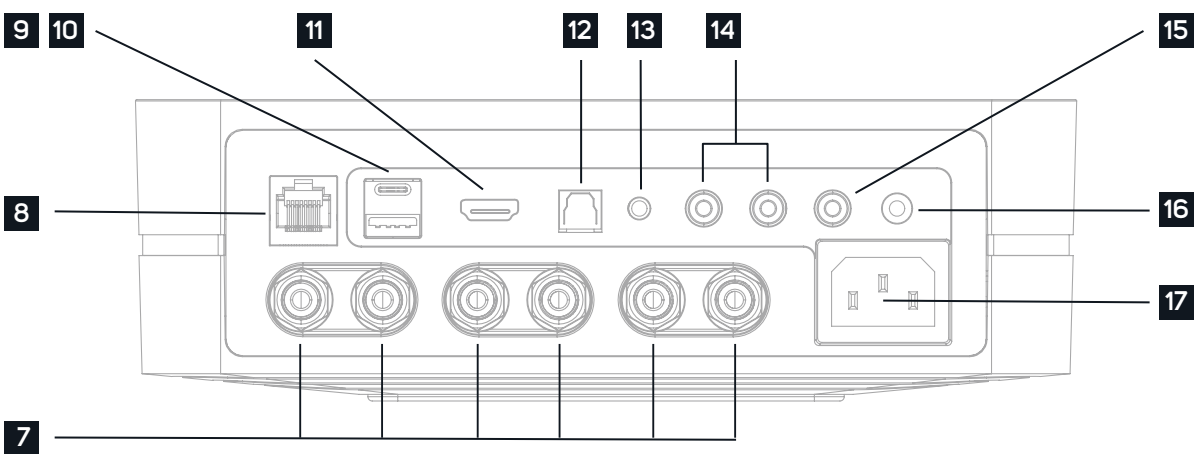support@bluesound.com

Accessories

120V AC Power Cord

Ethernet Cable

230V AC Power Cord

Mini Jack to Toslink Adapter

1 **PRESETS** The POWERNODE has 5 programmable preset buttons. These are configured using the Presets menu in the BluOS App.

2 **VOLUME SLIDER/TAP** Use the LED slider to vary volume level. Tap the • buttons at either end of the slider to vary the volume level in 1db intervals, or tap the slider in the direction you wish to adjust to vary the level by 3db intervals. These volume tap methods allow you to fine-tune your volume setting.

3 **PREVIOUS TRACK/NEXT TRACK** These buttons can be used to go back to the previous track or skip to the next track in your current play queue.

4 **STATUS INDICATOR** Below is a table of the LED blink codes and their corresponding descriptions

LED BLINK CODE	DESCRIPTION
Short blue flash, then red	Powering up rebooting the unit
Solid green	Hotspot Mode
Flashing green	Connecting to Network
White pulse	Software update available
Solid red	Upgrade Mode
Alternate flashing red and green	Upgrading
Flashing blue	Mute Mode
Solid white	Indexing
Solid blue	Connected to Network - ready to use with BluOS App
Flashing red	Factory Reset in process
Solid Purple	Hotspot Mode timed out

5 **PLAY/PAUSE BUTTON** This button has multiple functions – a visual indicator of network connectivity and a PLAY/PAUSE button. For a full listing of LED Blink Codes, please see #4 – Status Indicator. For an ungrouped Player, press the button to Play or Pause the stream. If listening to an internet radio stream, the Pause- function will work for 30 seconds. At this point, the buffer is full, and the stream will Stop. When a Player is grouped, pressing the PLAY/PAUSE button will Mute the Player while other Players continue the stream. The Player's LED will flash blue when muted. This button is also used for Factory Rest functions. See steps for Factory Reset later in the manual.

6 **HEADPHONE JACK** A 6.35mm headphone jack is located on the front of the POWERNODE.

7 **SPEAKERS** Connect the right speaker to the terminals marked "R+" and "R-" ensuring that "R+" is connected to the "+" terminal on your loudspeaker and "R-" is connected to the loudspeaker's "-" terminal. Repeat for the left speaker using "L+" and "L-". If you are using a center speaker, repeat for the center speaker using "C+" and "C-". Use extra care to ensure that no stray wires or strands cross between posts or terminals at either end.

8 **LAN PORT** The LAN PORT connection can be used with the Ethernet cable provided. This is an optional connection since the POWERNODE can be connected to the network through a Wi-Fi connection to your router. To setup the POWERNODE using the LAN Port a Wired Ethernet connection is required. Connect one end of the Ethernet cable to the LAN port of your wired Ethernet Broadband router and the other end to the POWERNODE's LAN port.

9 **USB INPUT (TYPE C)** Connect a PC or Mac to the USB C input, to start streaming content from the computer. You may need to select POWERNODE from the audio settings menu on your computer.

10 **USB INPUT (TYPE A)** Connect a USB mass storage device to the USB input. Typical USB mass storage devices compatible with the POWERNODE include portable flash memory devices and external hard drives (FAT32 or NTFS formatted). [Read about Server Mode in Settings]

11 **HDMI eARC** Using an HDMI cable (not provided), connect one end to the eARC input of the POWERNODE and the other end to an ARC/eARC-enabled HDMI output on your television. You may be required to enable ARC/eARC in your TV settings. Consult your TV user manual for more information. The source will appear as HDMI ARC or eARC in the BluOS App.

12 **OPTICAL IN 1** Using a digital optical cable (not provided), connect one end to the OPTICAL IN of the POWERNODE and the other end to the corresponding optical output of other compatible devices. The source will show as an Optical Input 1 in the BluOS App.

13 **OPTICAL IN 2/ANALOG IN 2** Using a 3.5mm Stereo Audio Cable (not provided), connect one end to the Analog In of the POWERNODE and the other end to the corresponding analog output of other compatible devices. The source will show as an Analog Input 2 in the BluOS App. Using the 3.5mm Mini Jack to Toslink adaptor (included with the POWERNODE), a digital optical source can also be added. This will appear as Optical Input 2 in the BluOS App.

14 **ANALOG IN 1** Using an RCA Stereo Audio Cable (not provided), connect one end to the ANALOG IN of the POWERNODE and the other end to the corresponding analog output of other compatible devices. The source will show as an Analog Input 1 in the BluOS App.

15 **SUBW (SUBWOOFER) OUT** A subwoofer can be connected directly to the POWERNODE. Connect SUBW OUT to a powered ("active") subwoofer. Alternatively, you can pair the POWERNODE to a Bluesound subwoofer over the network.

16 **IR IN** An infrared extender can be connected to allow for programmable learning remotes to control volume and source selection when a POWERNODE is stored in a way that the front panel IR sensor is not visible.

17 **AC MAINS IN** The POWERNODE comes supplied with two separate AC power cords. Select the AC power cord appropriate for your region. Before connecting the plug to the wall outlet, connect firmly the other end of the AC power cord to POWERNODE's AC Mains input socket. Never force the plug into a wall outlet. An adapter may be necessary in certain regions. Always disconnect the plug from the wall outlet first, before disconnecting the cable from the POWERNODE's AC Mains input socket.

NETWORK

The POWERNODE is a network audio player and relies on a well-implemented local area network to operate correctly. Internet access is required for software updates and to use many of the player's features, like cloud-based music streaming. Learn more

Once the POWERNODE is connected to your equipment and AC power, you need to add it to your network. Watch for the front panel LED to turn Solid Green, indicating it is ready for network connection in 'Hotspot' mode. You can add your player to the network via wired Ethernet, or wirelessly via Wi-Fi. If using Ethernet, simply plug in an Ethernet cable to the POWERNODE's LAN Port. The LED will turn Solid Blue, indicating network connection. If using Wi-Fi, open the BluOS App on a phone or tablet, and use the 'Add A Player' wizard to guide you through the steps. Whether connecting via Ethernet or Wi-Fi, you must finalize setup by initializing your POWERNODE within the BluOS App.

PRESETS

You can set presets for your favorite radio stations, music streams or playlists using the BluOS Controller app. Presets can be recalled from the five preset buttons on the POWERNODE or from an IR Remote, including the Bluesound RC1 remote (sold separately). Learn more.

Audio Settings

LISTENING MODE (COMING SOON via SOFTWARE UPDATE) Adjust settings within these listening modes to create separate listening profiles for Music, Movies and Late night – you can select a Listening Mode to enjoy different listening experiences quickly.

BALANCE Adjust to balance audio volume on the left and right channels.

CENTER CHANNEL Enable to activate the center channel speaker output.

CENTER CHANNEL TRIM Enable to get access to the center channel trim slider, and adjust the center channel level from -10dB to +10dB. Raising the trim makes the center clearer by lowering the left and right channels, while lowering the trim reduces only the center channel.

Note: Only available when CENTER CHANNEL is enabled.

TONE CONTROL Enable to adjust your Player's Treble and Bass output levels.

Note: When enabled, the total volume of your Player is reduced by 6dB to allow adjustment of the bass and treble outputs from -6dB to 6dB.

SUBWOOFER Enable subwoofer to get access to the crossover slider, and adjust the crossover frequency between your player and the attached subwoofer.

REPLAY GAIN Select any of the following to configure consistent volume levels between tracks in the play queue:

- **Track gain** – To use the track gain value from the song's metadata to have the current track's volume be more consistent with other tracks.
- **Album gain** – To use the album gain value from the metadata to provide a consistent volume level between all audio tracks on a particular album.
- **Smart gain** – To allow the BluOS to automatically choose between track gain and album gain values to provide the best replay gain option for your current listening.

Note: BluOS uses the metadata of the selected audio track to configure consistent volume levels between tracks.

STEREO SURROUND Enables two-channel content to be played through all available speakers. The stereo signal is mixed into the center channel and rear surrounds to create a more immersive and natural-sounding surround field.

Note: This option is only available when CENTER CHANNEL is enabled or when the Player is part of a BluOS Home Theater Group.

ENHANCED STEREO (COMING SOON via SOFTWARE UPDATE) Enables two-channel content to be played in stereo through all available speakers. Left and right signals are distributed across the center and surround channels, expanding the soundstage and creating a more enveloping listening experience.

Note: This option is only available when CENTER CHANNEL is enabled or when the Player is part of a BluOS Home Theater Group.

OUTPUT MODE Select any of the following to configure the channel output on the BluOS Player:

- **Left/Right** – Outputs only the Left or Right audio channel.
- **Mono** – Outputs single-channel audio out.
- **Stereo** – Outputs both Left and Right audio channels.

VOLUME LIMIT (dB) Set the upper and lower limit of volume controls in the BluOS Controller App. Modifying the upper or lower volume limits of the BluOS Player allows more fidelity when adjusting the volume.

Settings

IR REMOTE Setup an IR Remote, either by teaching your NODE ICON to work with one of your old remotes or by using the Bluesound RC1 remote which works out-of-box.

- **BluOS Remote:** Enable/Disable the Bluesound RC1 Remote if you have multiple Bluesound Players in the same room, and only want the remote to control one of them. If you have multiple remotes, you can change the IR Channel for each Player. Learn more
- **IR Learning:** Program your own remote to work with your NODE ICON. Learn more

INDICATOR LIGHT Adjust the brightness of the light on your Bluesound Player

- **Normal** – Default brightness
- **Dim** – Lower the brightness
- **Off** – Turns off the light

Note: If Proximity is turned off, the Indicator Light OFF function gets disabled.

PROXIMITY Turn the proximity ON or OFF for the top panel user-interface. Adjust the timeout timing when proximity is ON.

CUSTOMIZE SOURCES Most inputs can be adjusted from this menu. It is possible to change the name, icon of the individual input.

BLUETOOTH: Settings for Bluetooth visibility and functionality.

- **Manual** – This mode allows you to manually switch between Bluetooth as a local source in the Inputs section of the Music Tab.
- **Automatic** – (Default mode) This mode automatically switches to the Bluetooth source when a Bluetooth-connected device starts playing audio.
- **Guest** – This mode switches the Bluesound player to the Bluetooth source when your connected Bluetooth device starts playing audio. However, switching sources disconnects the Bluetooth connection. The Bluetooth source is not displayed under the Inputs section of the Music tab. This configuration is ideal for streaming audio from multiple Bluetooth-enabled devices.
- **Disabled** – This mode turns off the Bluetooth receiver on the player.

Analog Input/Optical Input/HDMI ARC/USB C

- **Name** - Change the name of the input.
- **Icon** - Change the icon of the input.
- **Auto Sense** – Turn it ON if you want the input to override other inputs whenever it receives a signal. Turn it OFF if you want to change input yourself or encounter issues with specific inputs.
- **Auto Sense Ungroup** – Turn it ON if you want to remove this Player from a group when Auto Sense detects a valid input signal.
- **A/V mode** – Enable A/V mode when using the Player with real-time audio sources such as a TV signal. Disable it when using audio-only sources like a turntable or CD player to prioritize quality over speed.
- **Compressed Grouped Audio** – Enable this when using inputs with grouped players to help reduce network load and increase the reliability.
- **Hide Source** – Toggle if you don't want to see the input listed in the Music tab.

SERVER MODE To make your USB library accessible in the BluOS Controller app, plug the USB drive (in NTFS or FAT32 file format) into the USB port at the back of the BluOS Player and follow the onscreen prompts on the BluOS Controller app.

- **[Yes] Server Mode enabled** - USB drive is shared with other players on the network from the local Library.
- **[No] Server Mode disabled** - USB drive access is restricted to the USB-connected Player.

Note: After the connection, the player's Status Indicator LED turns white, indicating that it is indexing the connected library. Depending on the size of your music library, the indexing process may take some time to complete. The indexing process is complete when the Status Indicator LED returns to solid Blue. Learn more

WARNING!

THIS IS A FACTORY RESET OF YOUR PLAYER. ALL CUSTOMIZATION INCLUDING WI-FI NETWORK CONFIGURATION, FILE SHARES AND SAVED PLAYLISTS WILL BE LOST. YOU WILL HAVE TO RE- CREATE THESE ONCE COMPLETE. THIS PROCESS IS ONLY RECOMMENDED IF YOUR PLAYER IS NOT FUNCTIONING AND AN INTERNET FIRMWARE UPGRADE HAS FAILED. FOR ANY QUESTIONS OR CONCERNS CONTACT AN AUTHORISED BLUESOUND CUSTOMER REPRESENTATIVE BEFORE PROCEEDING!

Steps to Factory Reset:

1. Disconnect the POWERNODE from electrical power.

2. Wait 30 seconds

3. Reconnect the power

4. Once the LED turns Red, press and hold the PLAY/PAUSE button. The LED will immediately turn Green and then back to Red - continue to hold the button for 30 seconds

5. After 30 seconds, the LED will begin to blink red – then release the button

6. All customization to the POWERNODE will be removed and restored to factory settings

IMPORTANT Removing your finger from the PLAY/PAUSE button at any time before the LED begins flashing red will cancel the factory reset and leave the player in Upgrade Mode. Just start the steps again to factory reset the POWERNODE.

You will know the factory reset is successful if the POWERNODE returns to Hotspot mode (wireless connection - the LED will turn solid green). If it is connected to your network through a wired Ethernet connection, it will simply connect as if it was a new player (LED will turn solid blue).

Dolby
AUDIO

BLUESOUND®