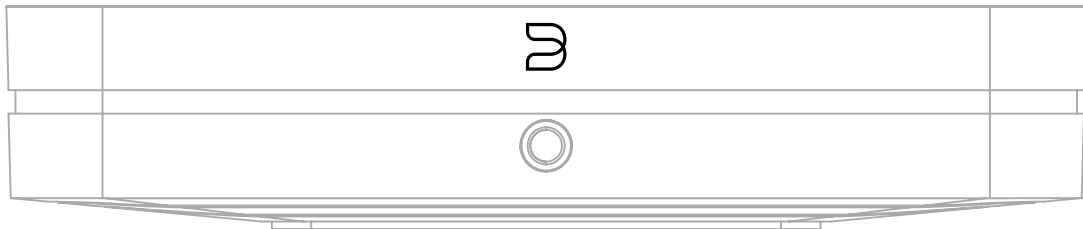# BLUESOUND

NODE

WIRELESS MUSIC STREAMER

OWNER'S MANUAL
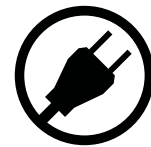
v. N132

Welcome to Bluesound

Thank you for purchasing your NODE. The NODE is a network music streamer that works with any amplifier or active speakers to conveniently bring the enjoyment of hi resolution music to everyday life.
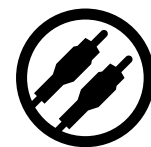
BluOS

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 NODE has music services built right in, so listening to your favorite artist or playlist is simple. Connect the NODE to any audio system by using its class leading analog RCA output or pass the digital signals along with Coax, Optical or USB. Using the BluOS Controller App, group your NODE with other Bluesound players for a whole home listening experience, or simply let it do all the work itself to add hi res streaming to your stereo. Either way, it's easier than ever to enjoy the pleasures of hi res listening on any existing amplifier or powered speakers with the NODE.

This Owner's Manual will provide you with a more detailed overview of your NODE and its features. It also includes some troubleshooting tips and tricks and networking best practices. The Quick Setup Guide included with your NODE will help you get it on the network and ready to listen to your music. If you need more help or information please visit support.bluesound.com or send us an email at support@bluesound.com
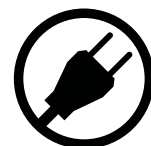
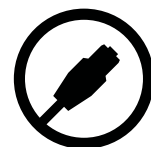## Included Accessories

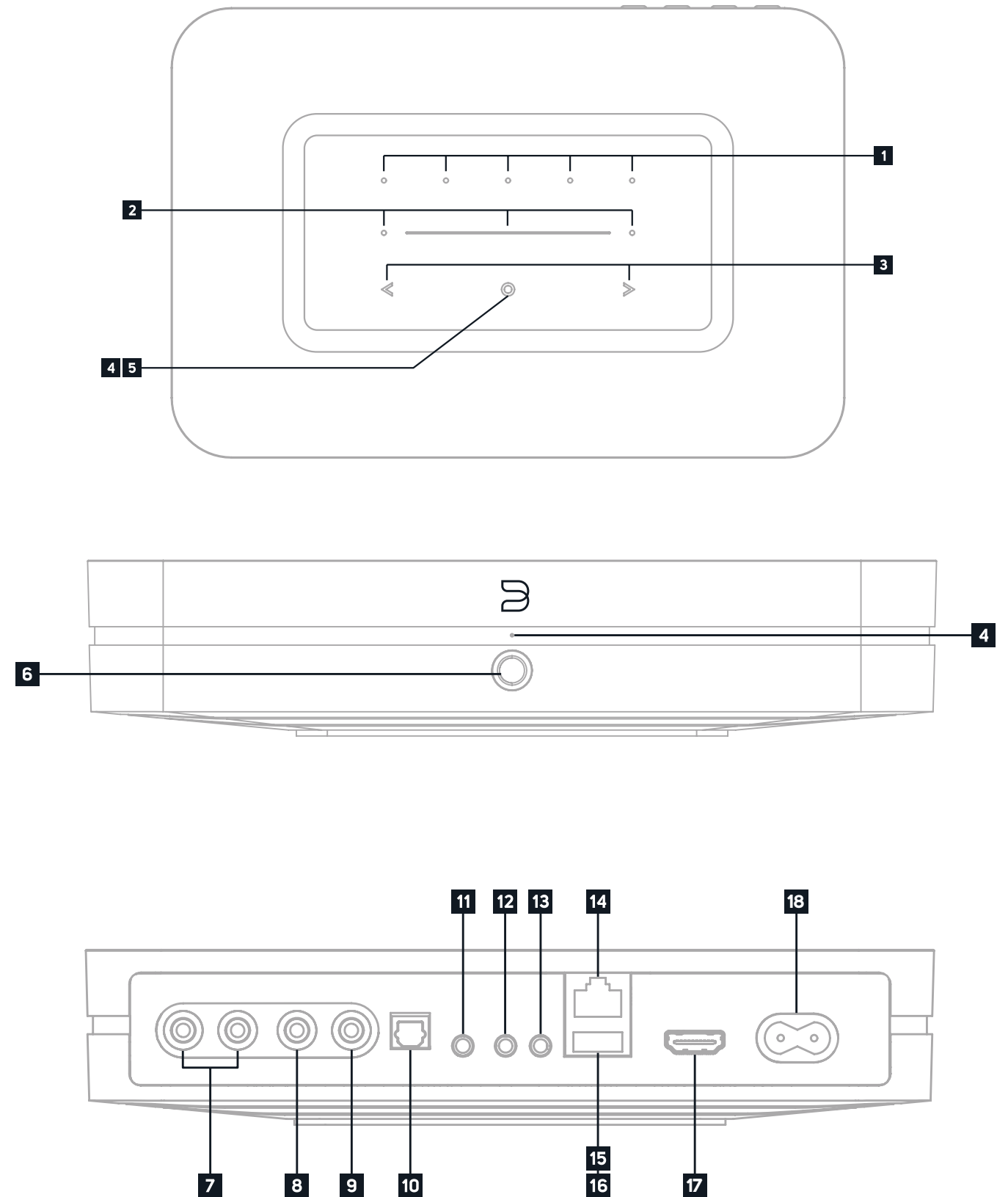120V AC Power Cord

Stereo RCA to RCA Connector

240V AC Power Cord

Mini Jack to Toslink

Ethernet Cable

1 **PRESETS** The NODE 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 stre am. The Player's LED will flash blue when muted. This button is also used for Factory Reset 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 NODE.

7 **AUDIO OUT** Connect to the corresponding analog audio input of an amplifier, receiver, stereo system or active speakers. Connecting via the AUDIO OUT will use the NODE's internal DAC.

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

9 **COAX OUT** Using a coax cable (not provided), connect one end to the COAX OUT of the NODE and the other end to the corresponding coax input of a compatible devices such as receivers, digital to analog converters or other digital processors. Connecting via the COAX OUT will bypass the NODE' s internal DAC.

10 **OPTICAL OUT** Using a digital optical cable (not provided), connect one end to the OPTICAL OUT of the NODE and the other end to the corresponding optical input of a compatible devices such as receivers, digital devices such as receivers, digital-to-analog converters or other digital processors. Connecting analog converters or other digital processors. Connecting via the OPTICAL OUT will bypass the NODE via the OPTICAL OUT will bypass the NODE's internal DAC.

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

12 **TRIGGER OUT** A 12V DC signal is available using the TRIGGER OUT. The 12V DC signal can be used to control or activate other external devices equipped with a corresponding 12V trigger input using a 3.5mm mono audio cable.

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

14 **LAN PORT** The LAN PORT connection can be used with the Ethernet cable provided. This is an optional connection since the NODE can be connected to the network through a Wi-Fi connection to your router. To setup the NODE 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 NODE's LAN port.

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

16 **USB OUTPUT (TYPE A)** The NODE can transfer digital audio (USB Audio 2.0) through to an external DAC via the USB Type A slot. Using a USB cable (not provided), connect one end to the USB output of the NODE and the other end to the corresponding USB input on a separate DAC device. Select your USB DAC from the NODE's Audio settings page in the BluOS App to bypass the NODE's internal DAC via USB audio out. Note: When USB Output is selected, all other outputs (Analog and Digital) are dormant.

17 **HDMI eARC** Using a HDMI cable (not provided), connect one end to the eARC input of the NODE 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.

18 **AC MAINS INPUT** The NODE 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 NODE'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 NODE's AC Mains input socket.

NETWORK

The NODE 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 NODE 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 NODE'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 NODE 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 NODE or from an IR Remote, including the Bluesound RC1 remote (sold separately). Learn more

Audio Settings

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. Tone Control is disabled and not displayed when MQA external DAC is enabled.

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.

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.

MQA EXTERNAL DAC: Enable this option when you require an MQA certified external DAC to handle MQA unfolding rather than the BluOS Player.

Note: To enable MQA external DAC, you should enable the Output level fixed and disable Tone Controls and Replay Gain.
Learn more

OUTPUT LEVEL FIXED: Enable to set and fix the volume of the BluOS Player at the maximum level. This allows you to control the volume using the external device connected to the BluOS Player instead of the BluOS Controller App.

AUDIO CLOCK TRIM: Enable to reduce jitter and increase audio clock timing precision when using an external DAC.

Note: Not all DACs can handle this. If audible clippings or dropouts occur, disable Audio Clock Trim to avoid BluOS's accuracy setting from interfering with the external DAC's firmware.

Settings

IR REMOTE: Setup an IR Remote, either by teaching your Bluesound Player 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 Bluesound Player. 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

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: Settings for Bluetooth visibility and functionality.

- **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.
- **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 NODE 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 NODE 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 NODE.

You will know the factory reset is successful if the NODE 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).

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