ENGLISH

B170S Network Stereo Zone Amplifier

Owner's Manual



BLUESOUND
PROFESSIONAL

IMPORTANT SAFETY INSTRUCTIONS

ENGLISH

- **Read instructions** - All the safety and operating instructions should be read before the product is operated.
- **Retain instructions** - The safety and operating instructions should be retained for future reference.
- **Heed Warnings** - All warnings on the product and in the operating instructions should be adhered to.
- **Follow Instructions** - All operating and use instructions should be followed.
- **Cleaning** - Unplug this product from the wall outlet before cleaning. Do not use liquid cleaners or aerosol cleaners. Use a dry cloth for cleaning.
- **Attachments** - Do not use attachments not recommended by the product manufacturer as they may cause hazards.
- **Water and Moisture** - Do not use this product near water-for example, near a bath tub, wash bowl, kitchen sink, or laundry tub; in a wet basement; or near a swimming pool; and the like.
- **Accessories** - Do not place this product on an unstable cart, stand, tripod, bracket, or table. The product may fall, causing serious injury to a child or adult and serious damage to the product. Use only with a cart, stand, tripod, bracket, or table recommended by the manufacturer, or sold with the product. Any mounting of the product should follow the manufacturer's instructions, and should use a mounting accessory recommended by the manufacturer.
-  **Cart** - A product and cart combination should be moved with care. Quick stops, excessive force, and uneven surfaces may cause the product and cart combination to overturn.
- **Ventilation** - Slots and openings in the cabinet are provided for ventilation to ensure reliable operation of the product and to protect it from overheating. These openings must not be blocked or covered. The openings should never be blocked by placing the product on a bed, sofa, rug, or other similar surface. This product should not be placed in a built-in installation such as a bookcase or rack unless proper ventilation is provided or the manufacturer's instructions have been adhered to.
- **Power Sources** - This product should be operated only from the type of power source indicated on the marking label and connected to a MAINS socket outlet with a protective earthing connection. If you are not sure of the type of power supply to your home, consult your product dealer or local power company.
- **Power–Cord Protection** - Power-supply cords should be routed so that they are not likely to be walked on or pinched by items placed upon or against them, paying particular attention to cords at plugs, convenience receptacles, and the point where they exit from the product.
- **Mains Plug** - Where the mains plug or an appliance coupler is used as the disconnect device, the disconnect device shall remain readily operable.
- **Outdoor Antenna Grounding** - If an outside antenna or cable system is connected to the product, be sure the antenna or cable system is grounded so as to provide some protection against voltage surges and built-up static charges. Article 810 of the National Electrical Code, ANSI/NFPA 70, provides information with regard to proper grounding of the mast and supporting structure, grounding of the lead-in wire to an antenna discharge unit, size of grounding conductors, location of antenna discharge unit, connection to grounding electrodes, and requirements for the grounding electrode.
- **Lightning** - For added protection for this product during a lightning storm, or when it is left unattended and unused for long periods of time, unplug it from the wall outlet and disconnect the antenna or cable system. This will prevent damage to the product due to lightning and power-line surges.
- **Power Lines** - An outside antenna system should not be located in the vicinity of overhead power lines or other electric light or power circuits, or where it can fall into such power lines or circuits. When installing an outside antenna system, extreme care should be taken to keep from touching such power lines or circuits as contact with them might be fatal.
- **Overloading** - Do not overload wall outlets, extension cords, or integral convenience receptacles as this can result in a risk of fire or electric shock.
- **Flame Sources** - No naked flame sources, such as lighted candles, should be placed on the product.
- **Object and Liquid Entry** - Never push objects of any kind into this product through openings as they may touch dangerous voltage points or short-out parts that could result in a fire or electric shock. Never spill liquid of any kind on the product.
- **Headphones** - Excessive sound pressure form earphones and headphones can cause hearing loss.
- **Damage Requiring Service** - Unplug this product from the wall outlet and refer servicing to qualified service personnel under the following conditions:
  - When the power-supply cord or plug is damaged.
  - If liquid has been spilled, or objects have fallen into the product.
  - If the product has been exposed to rain or water.
  - If the product does not operate normally by following the operating instructions. Adjust only those controls that are covered by the operating instructions as an improper adjustment of other controls may result in damage and will often require extensive work by a qualified technician to restore the product to its normal operation.
  - If the product has been dropped or damaged in any way.
  - When the product exhibits a distinct change in performance-this indicates a need for service.
- **Replacement Parts** - When replacement parts are required, be sure the service technician has used replacement parts specified by the manufacturer or have the same characteristics as the original part. Unauthorized substitutions may result in fire, electric shock, or other hazards.
- **Battery Disposal** - When disposing of used batteries, please comply with governmental regulations or environmental public instruction's rules that apply in your country or area.
- **Safety Check** - Upon completion of any service or repairs to this product, ask the service technician to perform safety checks to determine that the product is in proper operating condition.
- **Wall or Ceiling Mounting** - The product should be mounted to a wall or ceiling only as recommended by the manufacturer.

WARNING



THE LIGHTNING FLASH WITH ARROWHEAD SYMBOL, WITHIN AN EQUILATERAL TRIANGLE, IS INTENDED TO ALERT THE USER TO THE PRESENCE OF UNINSULATED "DANGEROUS VOLTAGE" WITHIN THE PRODUCT'S ENCLOSURE THAT MAY BE OF SUFFICIENT MAGNITUDE TO CONSTITUTE A RISK OF ELECTRIC SHOCK TO PERSONS



THE EXCLAMATION POINT WITHIN AN EQUILATERAL TRIANGLE IS INTENDED TO ALERT THE USER TO THE PRESENCE OF IMPORTANT OPERATING AND MAINTENANCE (SERVICING) INSTRUCTIONS IN THE LITERATURE ACCOMPANYING THE APPLIANCE.



CAUTION REGARDING PLACEMENT

To maintain proper ventilation, be sure to leave a space around the unit (from the largest outer dimensions including projections) than is equal to, or greater than shown below.

Left and Right Panels: 10 cm
Rear Panel: 10 cm
Top Panel: 10 cm

Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.

Do not defeat the safety purpose of the polarized or grounding - type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong is provided for your safety. When the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.

The apparatus should only be used in moderate climates.

FCC STATEMENT

This equipment has been tested and found to comply with the limits for 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.

CAUTION

- Changes or modifications to this equipment not expressly approved by Bluesound Professional for compliance could void the user's authority to operate this equipment.
- 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.
- This device contains licence-exempt transmitter(s)/receiver(s) that comply with Innovation, Science and Economic Development Canada's licence-exempt RSS(s). Operation is subject to the following two conditions:
  1 This device may not cause interference.
  2 This device must accept any interference, including interference that may cause undesired operation of the device.
- Under Industry Canada regulations, this radio transmitter may only operate using an antenna of a type and maximum (or lesser) gain approved for the transmitter by Industry Canada. To reduce potential radio interference to other users, the antenna type and its gain should be so chosen that the equivalent isotropically radiated power (e.i.r.p.) is not more than that necessary for successful communication.
  1 The device for operation in the band 5150-5250 MHz is only for indoor use to reduce the potential for harmful interference to co-channel mobile satellite systems;
- To prevent electric shock, match wide blade of plug to wide slot, fully insert.
- Marking and rating plate can be found at the rear panel of the apparatus.
- To reduce the risk of fire or electric shock, do not expose this apparatus to rain or moisture. The apparatus shall not be exposed to dripping or splashing and that no objects filled with liquids, such as vases, shall be placed on apparatus.
- Mains plug is used as disconnect device and it should remain readily operable during intended use. In order to disconnect the apparatus from the mains completely, the mains plug should be disconnected from the mains socket outlet completely.
- Battery shall not be exposed to excessive heat such as sunshine, fire or the like.
- Danger of explosion if battery is incorrectly replaced. Replace only with the same or equivalent type.
- An appliance with a protective earth terminal should be connected to a mains outlet with a protective earth connection.
- Operating temperature: 0~35 degrees

RESPONSIBLE PARTY

Lenbrook International
633 Granite Court
Pickering, ON L1W 3K1
Canada
Tel: 1 905 8316555

MPE REMINDER

To satisfy FCC/IC RF exposure requirements, a separation distance of 20 cm or more should be maintained between the antenna of this device and persons during device operation. To ensure compliance, operations at closer than this distance is not recommended.

IF IN DOUBT CONSULT A COMPETENT ELECTRICIAN.

CE This product is manufactured to comply with the radio interference requirements of EEC DIRECTIVE 2004/108/EC.

NOTES ON ENVIRONMENTAL PROTECTION

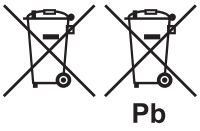


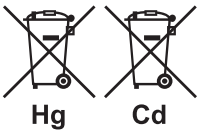
At the end of its useful life, this product must not be disposed of with regular household waste but must be returned to a collection point for the recycling of electrical and electronic equipment. The symbol on the product, user's manual and packaging point this out.

The materials can be reused in accordance with their markings. Through re-use, recycling of raw materials, or other forms of recycling of old products, you are making an important contribution to the protection of our environment.

Your local administrative office can advise you of the responsible waste disposal point.

INFORMATION ABOUT COLLECTION AND DISPOSAL OF WASTE BATTERIES (DIRECTIVE 2006/66/EC OF THE EUROPEAN PARLIAMENT AND THE COUNCIL OF EUROPEAN UNION) (FOR EUROPEAN CUSTOMERS ONLY)





Batteries bearing any of these symbols indicate that they should be treated as "separate collection" and not as municipal waste. It is encouraged that necessary measures are implemented to maximize the separate collection of waste batteries and to minimize the disposal of batteries as mixed municipal waste.

End-users are exhorted not to dispose waste batteries as unsorted municipal waste. In order to achieve a high level of recycling waste batteries, discard waste batteries separately and properly through an accessible collection point in your vicinity. For more information about collection and recycling of waste batteries, please contact your local municipality, your waste disposal service or the point of sale where you purchased the items.

By ensuring compliance and conformance to proper disposal of waste batteries, potential hazardous effects on human health is prevented and the negative impact of batteries and waste batteries on the environment is minimized, thus contributing to the protection, preservation and quality improvement of the environment.

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INTRODUCTION

GETTING STARTED

WHAT'S IN THE BOX

Packed with your B170S you will find

- Two detachable mains power cord
- 1 piece of 4-position terminal block (for SPEAKER OUT)
- 1 piece of 6-position terminal block (for LINE/MIC IN)
- 1 piece of 3-position terminal block (for Subwoofer OUT)
- 1 piece of 2-position terminal block (for IR IN)
- Quick Setup Guide

QUICK START

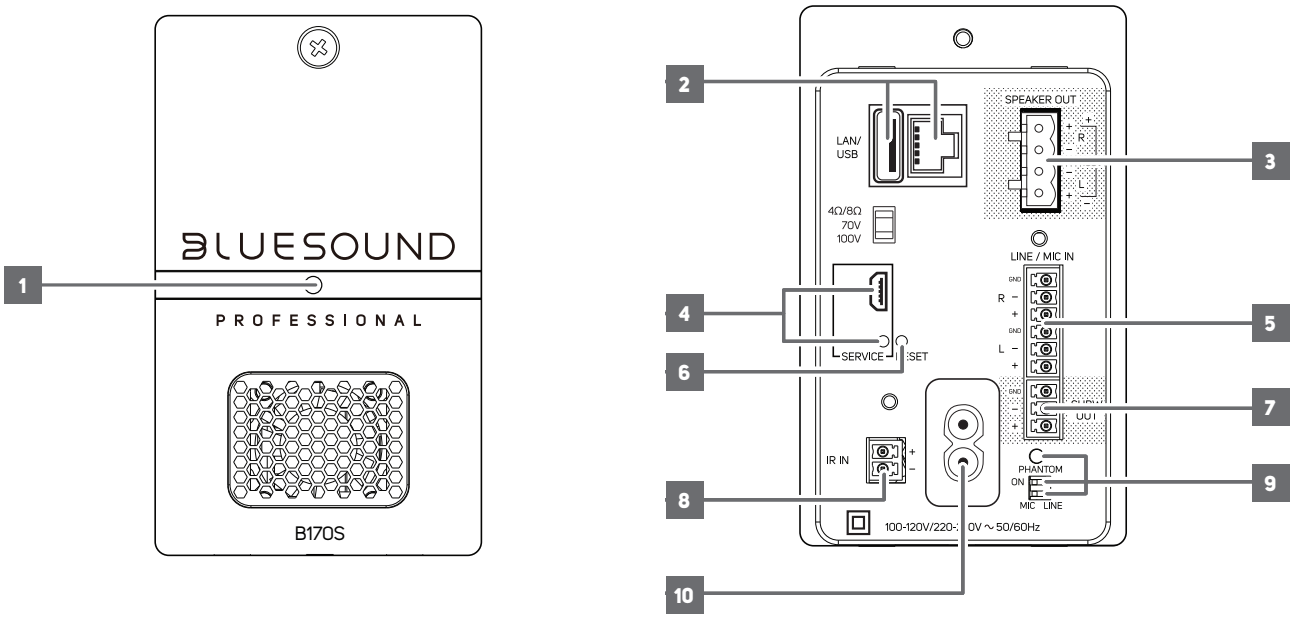
Refer to the supplied B170S Quick Setup Guide for basic instructions in setting up your new Bluesound Professional B170S. The following important notes must also be observed when setting up your B170S.

IMPORTANT SETUP NOTES

- Before setting up or making connections, ensure that the B170S and other devices to be connected to B170S are unplugged or powered down.
- Bare wire or loose strands of wires must not touch the rear panel or other adjacent terminals in the terminal block.
- Ensure that terminal block's R +/-, L +/-, +, -, GND are connected accurately to corresponding terminals of the external devices they are being hooked up.
- Connect corresponding end of the AC power cord to B170S' AC mains input and the AC power cord's plug connected to mains power outlet.
- Tablets, smartphones and other applicable devices that support iOS (Apple) or Android operating system can be used as mobile device controller. These devices are not supplied with your B170S.
- Download and install the corresponding "BluOS Controller" App for your device.
- The BluOS App is available as a Mobile App for Android, iOS, Kindle and Desktop App for Windows and macOS Computers.
- Mobile Apps are handled by the respective Application Stores of the Mobile devices.
- Desktop Apps are available to download directly from the Bluesound homepage **www.bluesound.com**

SAVE THE PACKAGING

Please save the box and all of the packaging in which your B170S arrived. Should you move or otherwise need to transport your B170S, this is by far the safest container to do so. We've seen too many otherwise perfect components damaged in transit for lack of a proper shipping carton, so please: Save that box



ATTENTION!

Please ensure that the B170S is powered off or unplugged from the mains power outlet before making any connections. It is also advisable to power down or unplug all associated components while breaking any signal or AC power connections.

1 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
Alternate flashing red and green	Upgrading...
Flashing green	Connecting to network shares
Solid red	Cannot boot; drive error
	Upgrade mode
Red pulse	No internet gateway
Flashing red	Factory reset in progress
Solid white	Indexing
White pulse	Software update available
Solid blue	Connected to Network – ready to use with Bluesound App
Flashing blue	Mute mode
Continuous flashing red	Over/under DC voltage, overheat

2 LAN/USB

LAN

- LAN connection must be setup for wired connection to be established. Set up a Wired Ethernet broadband router with broadband internet connection. Your router or home network should have a built-in DHCP server to consummate the connection.
- Using a standard straight-through Ethernet cable (not supplied), connect one end of the Ethernet cable to the LAN port of your wired Ethernet broadband router and the other end to B170S' LAN port.

NOTES

- *Bluesound Professional is not responsible for any malfunction of the B170S and/or the internet connection due to communication errors or malfunctions associated with your broadband internet connection or other connected equipment. Contact your Internet Service Provider (ISP) for assistance or the service bureau of your other equipment.*
- *Contact your ISP for policies, charges, content restrictions, service limitations, bandwidth, repair and other related issues pertinent to internet connectivity.*

USB

- Connect to this USB port USB mass storage devices formatted as FAT32, NTFS or Linux ext4. The connected USB device appears as a Local Source (USB) in the BluOS App.
- Access and playback music stored in the connected USB device by selecting "USB" from the BluOS App

3 SPEAKER OUT

- Connect external speaker cables to supplied SPEAKER terminal block ensuring that the connections match B170S' SPEAKER OUT terminal markings.
- Ensure that SPEAKER OUT "R+" is connected to the "+" terminal of your external right speaker and SPEAKER OUT "R-" connected to the speaker's "-" terminal. Connect SPEAKER OUT terminals marked "L+" and "L-" to the external left speaker in the same way.
- Install the wired up SPEAKER terminal block to B170S' SPEAKER OUT terminal.

IDENTIFICATION OF CONTROLS

SPEAKER OUT SETTING

- 4 / 8 ohms
- 70V - Maximum 100 W per channel - recommended load to 80 W per channel
- 100V - Maximum 100 W - recommended load to 80 W

IMPORTANT NOTE

For the 100V Speaker Out setting, connect your speaker to B170S Speaker Out terminals marked "L+" and "R+" ensuring that "L+" is connected to the "-" terminal of your speaker and "R+" is connected to your speaker's "+" terminal.

4 SERVICE

- These USB port and tact switch are for servicing purposes only. Not for consumer use.

5 LINE/MIC IN

- Ensure that the supplied LINE/MIC IN terminal block's "+, -, GND" are wired accurately to corresponding output terminals of external analog device or source for locally attached microphone that requires phantom power.
- Install the wired up LINE/MIC IN terminal block to B170S' LINE/MIC IN terminal.

6 RESET

- Use the RESET button to switch B170S from operating mode to standby mode.
  Switch from operating mode to standby mode: While at operating mode, press and hold RESET button until the illuminated blue LED status indicator turns off. B170S is not accessible via BluOS app while at standby mode.
  Switch from standby mode to operating mode: While at standby mode, short press RESET button – LED status indicator will turn red to flashing green if there is no wired internet connection or turn to red, flashing green and then solid blue with wired internet connection.

- Use the RESET button to restore B170S to its factory default settings.
- Factory Reset is recommended if your B170S is not functioning or internet firmware upgrade has failed. All customization, configuration, file shares and saved playlists will be lost. They have to be re-created once factory reset is completed.

FACTORY RESET PROCEDURE

a Disconnect AC power cord's plug from the mains power outlet.
b Press and hold rear panel RESET button and while doing so reconnect the AC power cord's plug to the mains power outlet.
c The front LED indicator turns red, immediately turns green and then back to red - do not release hold of the RESET button.
d After about 30 seconds of holding down the RESET button, the front LED indicator blinks red.
e Release the RESET button as soon as the front LED indicator blinks red.
f Factory reset is completed once the front LED indicator turns solid blue.

IMPORTANT NOTE

Releasing the RESET button at any time before the front LED indicator starts flashing red will cancel the factory reset and leave the B170S at Upgrade Mode. Just start again the procedure for Factory Reset.

7 SUBWOOFER OUT

- Ensure that the supplied SUBWOOFER OUT terminal block's "+, -, GND" are wired accurately to corresponding low level input terminal of corresponding powered subwoofer.
- Install the wired up SUBWOOFER OUT terminal block to B170S' SUBW OUT terminal.

8 IR IN

- This input is connected to the output of an IR (infrared) repeater (Xantech or similar) or IR output of a compatible device to allow control of B170S from a remote location.
- To program IR Remote commands into your B170S via IR IN, go to the **Settings** menu of the BluOS App, select **Player** and then **IR remote**. Simply select the function desired from the IR Remote menu, point an IR remote control at the IR repeater and press the button to perform that function. Once successful, a check-mark will appear beside the programmed function. You can now use the IR remote control to command the B170S with the programmed functions.

9 PHANTOM

- B170S is equipped with switchable Phantom power.
- With LINE/MIC switch set to MIC and Phantom switch at ON position, +48V Phantom power is supplied to a connected microphone that requires phantom power for operation. The adjacent LED is also illuminated red to indicate that +48V Phantom power is being supplied. Set Phantom switch to OFF position for microphones that do not require Phantom power.
- Retain default settings of LINE/MIC switch set to LINE and Phantom switch at OFF position in the absence of microphone input.

10 AC MAINS INPUT

- The B170S comes supplied with two separate AC power cords. Select the AC power cord appropriate for your region.
- Before connecting the AC power cord plug to the mains power source, ensure that it is firmly connected to B170S' AC Mains input socket first.
- Always disconnect the AC power plug from the mains power source first, before disconnecting the other end of the AC power plug from the B170S' AC Mains input socket.

MAKING THE MOST OF YOUR B170S

Download the BluOS Controller App from the respective App stores of Apple iOS devices (iPad, iPhone and iPod), Android devices, Kindle Fire and Windows or Mac desktops.

Launch the BluOS Controller App and explore everything from your streaming music services, internet radio stations, networked music collections and favorites with quick and easy single-search discovery.

Visit **support.bluesound.com** for more information about setup and operation guidelines of your B170S.

AUDIO	
Rated power	2 x 80 W at 4 / 8 ohms
	2 x 100 W at 70V
	1 x 100W at 100V
Signal-to-Noise Ratio, A-weighted	>110 dB (ref. 1W 8 ohms)
Total Harmonic Distortion (THD+N)	<0.005% (ref. 20 Hz – 20 kHz at rated power)
Sample rate	32-192 kHz
Bit depth	16-24 bit
Supported audio file formats	Please refer to **support.bluos.net/hc/en-us/articles/360000191327-What-Formats-are-Supported-by-BluOS-**

CONNECTIVITY	
Input	Balanced LINE/MIC IN (Phoenix)
	IR IN (Phoenix)
Output	Balanced SUBWOOFER OUT (Phoenix)
	SPEAKER OUT (Phoenix)
USB	1 x Type-A port for connection to USB memory stick (FAT32 or NTFS formatted) and supported peripherals
	1 x Type-B (mini) for product servicing
Network	Gigabit, Ethernet RJ45
Album art	JPG

USER INTERFACE	
Supported operating systems [1]	Music playback from network shares on the following desktop operating systems: Microsoft Windows XP, 2000, Vista, 7, 8 to current Windows Operating Systems and macOS versions
Mobile Applications	Free BluOS Controller App available for download from the respective App stores of Apple iOS devices (iPad, iPhone and iPod), Android devices, Kindle Fire and Windows or macOS desktops

SUPPORTED SERVICES	
Supported Radio, Music Services, Integration and Digital Assistants	Please refer to **support.bluos.net/hc/en-us/articles/360000199908-What-Music-Services-does-BluOS-Support**

GENERAL	
AC power supply	100-240V 50/60 Hz
Standby power	0.5 W
Gross dimensions (W x H x D) [2]	70 x 120 x 343 mm
	$2\,{}^{13}/_{16}$ x $4\,{}^{3}/_{4}$ x $13\,{}^{9}/_{16}$ inches
Unit weight	2.3 kg (5.1 lbs)

1 Some features will be available via future software update.
2 Gross dimension include extended rear panel terminals

Specifications are subject to change without notice. Check out **www.bluesoundprofessional.com** for updated documentation or latest information about B170S.

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www.bluesoundprofessional.com

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