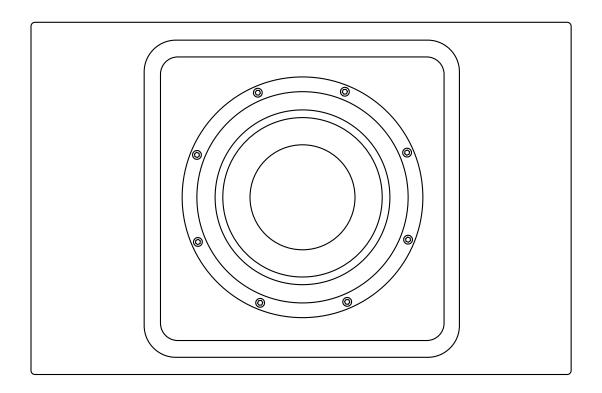
# BLUESOUND

# **PULSE SUB+**

# **WIRELESS POWERED SUBWOOFER**



**OWNER'S MANUAL** 

# **WELCOME TO #LIVINGHIFI**

Thank you for purchasing your PULSE SUB+. It's the perfect addition to your wireless or wired Bluesound system. Created to be a modern, robust, and integral part of your listening experience, the SUB+ brings deep, tight, and expressive musicality to any Bluesound setup.

**JUST ADD BASS.** It's really that simple. Use the BluOS App to quickly setup and pair the SUB+. With BluOS onboard, you benefit from letting the world's leading hi-res multiroom system help you connect your SUB+ wirelessly to any other Bluesound Player, with simple and intuitive App controls for volume, crossover, and phase delay. Easy software control means better options and more precision as you dial in the best settings for your ideal listening experience.

**PLACE IT ANYWHERE.** We truly believe that a subwoofer doesn't have to be as large as the furniture you sit on. The SUB+ is a from-scratch design created to pair practicality and performance in one elegant product. The design approach focuses on maximum output from minimal footprint, built to blend into any room and any décor. The result is a sleek, compact, and incredibly versatile product that satisfies in both performance and aesthetics.

**ADD IT ALL UP.** When you add up the BluOS smarts, the 8" driver, the 150W Smart DSP Amplifer, and the versatility in placement and connection options, it's not hard to see the SUB+ as a fundamental addition to your entertainment setup. With tight, dynamic power and a depth that evokes pure emotion, listening to your favorite music, movies, shows, and videos has never felt so good.

This Owner's Manual will provide you a more detailed overview of PULSE SUB+ features. It also includes some troubleshooting tips and tricks and networking best practices. The Quick Setup Guide included with your SUB+ will help you get it on the network and paired with another Player.

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

# Included Accessessories



120V AC Power Cord



230V AC Power Cord



Magnetic Rubber Feet



Wall Mount Bracket

# IMPORTANT SAFETY INSTRUCTIONS

- 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.
  - 图
- **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.

# IMPORTANT SAFETY INSTRUCTIONS

#### 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. This device may not cause interference.
  - 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.



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

#### NOTES ON ENVIRONMENTAL PROTECTION



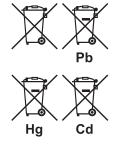
At the end of its useful life, this product must not be disposed of with regular household waste but must be returned to a collection point for the recycling of electrical and electronic equipment. The symbol on the product, user's manual and packaging point this out.

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)

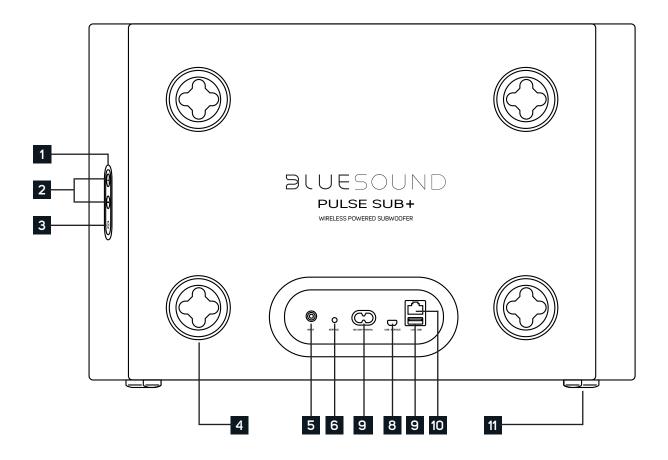


Batteries bearing any of these symbols indicate that they should be treated as "separate collection" and not as municipal waste. It is encouraged that necessary measures are implemented to maximize the separate collection of waste batteries and to minimize the disposal of batteries as mixed municipal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



# 1 STATUS INDICATOR

Below is a table of the LED blink codes and their corresponding descriptions.

Short blue flash, then red	Powering up, rebooting the unit
Solid green	Hotspot Mode
Flashing green	Connecting to Network
Long blue flash, short purple flash	Connected to Network - ready to be paired
White pulse	Software update available
Solid red	Upgrade mode
Alternate flashing red and green	Upgrading
Flashing blue	Mute mode
Solid blue	Connected to Network – ready to use with BluOS App
Flashing red	Factory reset in progress

**+/- VOLUME :** Toggle either button to vary volume level. When the SUB+ is network-paired to another Player, the volume buttons act as a +/- dB trim in relation to the primary Player's volume level. When the SUB+ is not network-paired to another Player, the volume buttons control the full volume range of the SUB+.

### **3** FUNCTION BUTTON:

- A) TOGGLE SUB ON/OFF: When the PULSE SUB+ is network-paired to another Player, pressing the Function Button once will toggle the Player's Subwoofer ON/OFF switch in the BluOS App. With the switch set to ON, a crossover is engaged: the SUB+ will handle the low frequency while the paired Player will handle the higher frequency content, as dictated by the crossover level. With the switch set to OFF, the crossover is disengaged and the paired Player handles the full frequency range. The SUB+ will be silent in this case. Note that using this toggle does not unpair the SUB+ from a Player. Further, this function does not work when multiple SUB+ are paired to a Player.
- B) STANDBY: Press and hold the Function button for 5 seconds to place the SUB+ into Vacation Mode (0.5W Standby). In Vacation Mode, all network activity will cease and the subwoofer will not appear in the BluOS App. Press the Function button again to restore the SUB+ to Ready Mode.
- C) UPGRADE MODE: To manually place the SUB+ into Upgrade Mode, first disconnect it from electrical power. Wait a moment, then reconnect power. Press and hold the Function button until the LED turns Green and then back to RED, then release. The LED will immediately turn Green and then back to Red. The SUB+ is now in Upgrade Mode. This is only necessary in specific cases with authorization from a Bluesound support representative.
- D) FACTORY RESET more information on Factory Reset is available on page 9 of this manual.
- MOUNTING FOOT: The PULSE SUB+ can be placed in several orientations, including (but not limited to) laying flat on its back or mounted to the wall. The back panel Mounting Foot (x4) provides the necessary cushion to help prevent unwanted vibrations when the SUB+ is laying on its back. The Mounting Foot is also the attachment point for wall mounting; the shaped groove in the Mounting Foot slides onto the rubber foot on the supplied wall mount bracket and uses gravity to lock into place.
- **LOW/LINE LEVEL INPUT:** For connecting the PULSE SUB+ via wire to another Bluesound Player that has a wired SUB OUT, or alternatively to a separate component preamplifier, integrated amplifier, or receiver, at line level.
- **SERVICE:** Use the Service port in conjunction with USB (Type B Mini) to load firmware on the PULSE SUB+. This is not for consumer use. Only Authorized Bluesound Service personnel can access this USB port and Service control button.
- AC MAINS INPUT: Select the AC power cord appropriate for your region (included). Before connecting the plug to the wall outlet, firmly connect the other end of the AC power cord to the PULSE SUB+ AC Mains input socket. Never force the plug into a wall outlet. An adaptor may be necessary in certain regions. Always disconnect the plug from the wall outlet first, before disconnecting the cable from the SUB+ AC Mains input socket.
- **USB (TYPE B):** Use the Service port in conjunction with USB (Type B Mini) to load firmware on the PULSE SUB+. This is not for consumer use. Only Authorized Bluesound Service personnel can access this USB port and Service control button.
- **USB (TYPE A):** Use the USB (Type A) port for manual software upgrades. This is only necessary in specific cases with authorization from the Bluesound Support Crew.
- LAN PORT: The LAN port connection is used with an Ethernet cable (not provided) for network connection and control. This is an optional connection since the PULSE SUB+ can be connected to the network through Wi-Fi. If you are using wired Ethernet for network, connect one end of the Ethernet cable to the SUB+ LAN port, and the other end directly to your router or switch.
- MAGNETIC RUBBER FEET: When the PULSE SUB+ is placed in a standing position, use the supplied magnetic rubber feet (x2) to help prevent unwanted vibrations. The magnets are mounted inside the cabinet of the SUB+. Simply place the magnetic rubber feet near the required location and they will snap into place.

### **CHOOSE PLACEMENT**

#### **Room Acoustics**

If you are critical about low-frequency response, there's quite a bit of useful experimentation you can do, especially in combination with the crossover, level, and phase controls of the PULSE SUB+.

Begin by considering the size of the listening room. The larger the volume of air a speaker must move, the more acoustic output is required to achieve the sound levels you want. In smaller rooms, sound attenuation tends to be offset by reinforcement from wall reflections. In larger spaces, sound has to travel to reach the reflecting surfaces and then to your ears, which means it has to be louder to begin with.

After size, the most important aspect of a listening room is its shape. In any room, sound reflects off the walls, ceiling, and floor. If the distance between two opposite parallel surfaces is a simple fraction of the wavelength of a particular frequency, notes of that frequency will bounce back and forth in perfect phase—an effect called a standing wave or room mode. At some point in the room, this note will be reinforced substantially; at others it will cancel out almost entirely. If the prime listening seat is placed at either of these locations, the note will be a horrible boom or virtually non-existent. Almost all rooms are susceptible to some standing waves at low frequencies, but careful positioning of the speakers and the listening seat can minimize the effects. The only way to find out what works best is by experimentation. Positioning of a bass speaker has almost no impact on imaging, so the PULSE SUB+ can be positioned almost anywhere.

### Subwoofer Placement

The loudest bass output from a subwoofer comes from corner placement. The outward flaring of walls from a corner focuses low frequencies, giving them no place to go but toward the listener.

If you are seated in a null spot where sound from the PULSE SUB+ is cancelled or diminished by outof-phase reflections, you will have to move either the subwoofer or your listening position until you get the desired bass. Adjusting the phase control 180 degrees may make a difference, especially if the null is a product of cancellations caused by interaction with low frequencies from your main speaker(s). If the opposite is happening, where direct and reflected bass waves converge in phase and produce too strong a peak at your listening position, you can change position or change your sub's level control (or possibly the crossover frequency chosen).

The best method for positioning the PULSE SUB+ is to put it in your listening chair, then play music with lots of bass through the system (something with steady and obvious low frequencies). Move around the room and note where the bass sounds best; if you place the SUB+ in that location, you should get the same bass performance. This test only works if you have your ears at the same height as where the SUB+ will be, so you may have to get down low. A recommended starting point for placement would be in either of the front corners of the room.

# Multiple Subwoofers—Why Two Subs Are Better Than One

Sometimes the listening room is not conducive to achieving satisfying amounts or quality of bass. There are rooms with troublesome dimensions, especially those that are more cubical. In such a case, two subwoofers placed carefully to work with each other are recommended to handle acoustical anomalies. This can also be applied when the problem is too much, or too uneven, bass. The overall system benefits from each subwoofer correcting the acoustic problems caused by the other.

A very good starting point for positioning two subwoofers is to place one each on the centre of opposing walls. Experimenting with positioning as previously described should be used for determining the location of the second subwoofer, except in this instance one is listening for the minimum amount of bass output.

#### CONNECT FOR SOUND

There are several ways to connect the PULSE SUB+ to your audio system.

#### Wireless Connection

The SUB+ is designed first and foremost as a wireless subwoofer solution to be used with other Bluesound Players. To use the SUB+ wirelessly, you need to connect it to your desired network. A simple App-based process will help you connect your SUB+ and pair it with another Bluesound Player.

Follow the steps in the Quick Setup Guide to get your SUB+ positioned and powered on. Open the BluOS App on your phone or tablet. In the right-hand Player Drawer, select Add A Player, and when prompted, select Add Subwoofer. Follow the guided wizard to add your SUB+ to the network via Wi-Fi and ensure it upgrades to the latest BluOS firmware. This can take a few minutes.

Once connected and updated, your SUB+ will show up as 'Unpaired' in the My Subwoofers section of the Player Drawer. The LED indicator on the SUB+ flashes long Blue and short Purple when it is on the network and ready to be paired. Select the Link/Pairing icon  $\gtrsim$  to open the Pairing wizard and select the Player you want to pair with your SUB+.

The PULSE SUB+ is now paired and ready to use. You can access advanced audio controls through the Audio Settings menu of its paired Player.

#### Wired Network Connection

To use the PULSE SUB+ wired to your network, you need to connect it via Ethernet to your router or switch. An ethernet cable is not included in the box.

Follow the steps in the Quick Setup Guide to get your SUB+ positioned and powered on. Open the BluOS App on your phone or tablet. In the right-hand Player Drawer, select Add A Player, and when prompted, select Add Subwoofer. Follow the guided wizard to add your SUB+ to the network and ensure it upgrades to the latest BluOS firmware.

Once connected and updated, your SUB+ will show up as 'Unpaired' in the My Subwoofers section of the Player Drawer. The LED indicator on the SUB+ flashes long Blue and short Purple when it is on the network and ready to be paired. Select the Link/Pairing icon  $\aleph$  to open the Pairing wizard and select the Player you want to pair with your SUB+.

The PULSE SUB+ is now paired and ready to use. You can access advanced audio controls through the Audio Settings menu of its paired Player.

# Analog Low/Line Level Connection

The PULSE SUB+ has been designed to allow you to use an analog RCA cable to connect for sound, instead of sending audio over your network. If you are using your SUB+ with a receiver or integrated amplifier with preamplifier outputs, or if you are using a separate preamplifier, the best connection is from the Preamplifier Output of your electronics to the RCA Input of the SUB+.

The SUB+ will work with a simple low/line level RCA. However, to pair with another Player and use the advanced audio controls via the BluOS App, you must connect it to the network via Ethernet or Wi-Fi, even if you will transmit audio to the SUB+ via RCA cable.

Please see the previous Wireless and Wired connection information for more details on setting up your subwoofer via WiFi or Ethernet.

# **NEXT-LEVEL CALIBRATION**

The settings in the PULSE SUB+ have been set to default levels in order to work well with your Bluesound Player in most listening environments. However, you may still require some adjustments to the settings based on placement and personal preference.

The following procedure assumes your SUB+ is installed, connected to the network, and paired with a Player. If you are using the SUB+ as a non-networked, powered subwoofer, your ability to do next-level calibration will be limited.

With the Subwoofer audio settings menu open in the BluOS App, use these steps to fine-tune your subwoofer setup.

- Set SUB+ volume to the lowest possible level. Set the crossover frequency to the lowest level, meaning the crossover slider is set all the way to the left side. Set any special audio features, bass and treble, or EQ controls on your paired Player to their nominal (midpoint or off) positions.
- 2. Play a familiar music source that includes substantial deep-bass content over an extended section.
- 3. Gradually turn up the volume of the SUB+ until you achieve natural balance between the subwoofer's deep-bass output and your speaker(s).
- 4. Gradually adjust the crossover up to reach the best mid-bass blend with your speaker(s). This will be the point at which the upper bass retains solid impact and fullness. Boom or muddiness is the result if the crossover is too high. A thin, 'reedy' quality to the mid-bass such as deep male voices (FM announcers; Darth Vader) is the result if the crossover is too low.
- 5. Toggle the Phase control between 0° and 180° several times, leaving it in the position that yields the fullest low to mid-bass output. You will now likely want to repeat steps 3 and 4 to check your subwoofer blend.

Cycling through steps 3 and 4 several times with slightly different settings of both the volume and crossover controls will help you get the most musical performance from your PULSE SUB+. The best combination is one that yields the most solid very-low bass sounds, without mid-bass boom or a gap in response between the SUB+ and other speaker(s).

The crossover and volume controls are interactive. Raising the latter while lowering the former can have the effect of extending deep-bass response somewhat, with a small sacrifice in overall loudness capability. In general, for well-recorded acoustic music the lowest crossover setting that still yields a smooth transition between subwoofer and the main speaker(s) is often the best choice, and will promote deeper low-bass extension.

Note: The PULSE SUB+ volume control is not intended as a bass boost or daily volume control. It is designed as a set-and-forget adjustment, and not for day-to-day use.

# **TROUBLESHOOTING**

Symptom	Action
No sound	Ensure the power cord is connected to the subwoofer and plugged into a live AC outlet.
	The PULSE SUB+ utilizes signal sensing auto on/off circuitry. If no signal is sent to the subwoofer, it will not power up. When using the subwoofer output of a receiver or processor, no signal may be immediately present in this output. The subwoofer will only power up when bass signal appears at the subwoofer input.
	If the wireless connection or low level cable is poor or has been severed, the subwoofer may not make a sound.
Sounds distorted	Lower volume if the subwoofer begins to sound distorted to determine if playback at a lower level solves the problem. If a slight reduction in level solves the problem, then the subwoofer level was too high. If the distorted sound remains at a low level, the driver may be damaged.
Hum	Hum that appears when using the PULSE SUB+'s low level input(s) is usually caused by using an inferior, damaged, exceptionally long low level cable or cables routed near high current wiring/appliances. Replace/shorten the low level cable connecting the subwoofer to the source equipment (receiver or processor). Low level cable runs of longer than 20 feet may require the use of a line driver (not available from Bluesound).

See your dealer if you require service. Authorized Bluesound dealers are equipped to handle almost all problems. You may locate your nearest Bluesound authorized dealer online at www.bluesound.com. If the problem is not resolved, please contact us, providing the model name, serial number, date of purchase, dealer name, and a full description of the problem.

# 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 player from electrical power.
- 2. Wait 30 seconds.
- 3. Reconnect the power.
- **4.** Once the LED turns Red, press and hold the Function button on the side of the player. 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 Bluesound player will be removed and restored to factory settings.

**IMPORTANT:** Removing your finger from the Function 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 player.

You will know the factory reset is successful if the player returns to Hotspot mode (wireless connection – the LED will turn solid green). If the player 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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