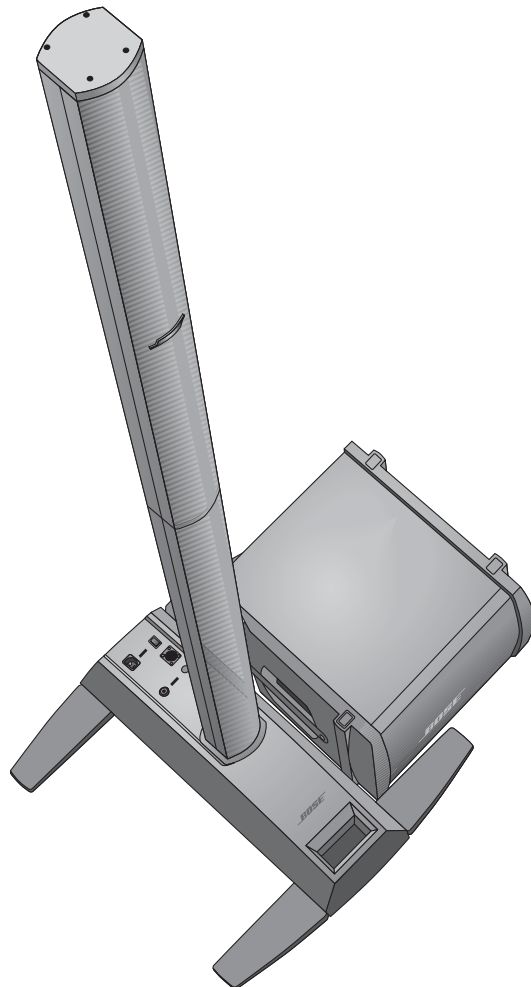


BOSE[®]

L1[®] model 1S system with ToneMatch[®] port



Owner's Guide
Guía de usuario
Notice d'utilisation

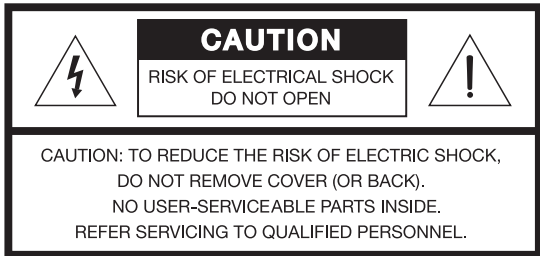


SAFETY INFORMATION

Please read this owner's guide

Please take the time to follow the instructions in this owner's guide carefully. It will help you set up and operate your system properly and enjoy its advanced features. Please save this owner's guide for future reference.






-  **WARNING:** To reduce the risk of fire or electrical shock, do not expose the system to rain or moisture.
-  **WARNING:** To reduce the risk of electric shock, do not disassemble this system unless you are qualified. Refer servicing to qualified service personnel.




The lightning flash with arrowhead symbol within an equilateral triangle alerts the user to the presence of uninsulated, dangerous voltage within the system enclosure that may be of sufficient magnitude to constitute a risk of electrical shock.



The exclamation point within an equilateral triangle, as marked on the system, is intended to alert the user to the presence of important operating and maintenance instructions in this owner's guide.

-  **CAUTION:** This product shall be connected to a mains socket outlet with a protective earthing connection.
-  **CAUTION:** Make no modifications to the system or accessories. Unauthorized alterations may compromise safety, regulatory compliance, and system performance.
-  **CAUTION:** Do not place any naked flame sources, such as lighted candles, on or near the apparatus.
-  **CAUTION:** Where the mains plug or appliance coupler is used as the disconnect device, such disconnect device shall remain readily operable.
-  **Note:** The product must be used indoors. It is neither designed nor tested for use outdoors, in recreation vehicles, or on boats.

 This product conforms to all applicable EU requirements. The complete Declaration of Conformity can be found at: www.Bose.com/compliance.

Please complete for your records


Now is a good time to record the serial numbers of your system here and on your product registration card. You can register your product online at www.Bose.com/register or call (800) 905-1044. Failure to do so will not affect your warranty rights.

L1® model 1S power stand: _____

Top array and bottom extension: _____

B1 or B2 bass module: _____

IMPORTANT SAFETY INSTRUCTIONS

1. Read these instructions.
2. Keep these instructions.
3. Heed all warnings.
4. Follow all instructions.
5. Do not use this apparatus near water.
6. Clean only with a dry cloth.
7. Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.
8. Do not install near any heat sources, such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
9. 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 wider blade or third prong is provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
10. Protect the power cord from being walked on or pinched, particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
11. Only use attachments/accessories specified by the manufacturer.
12. Use only with the cart, stand, tripod, bracket, or table specified by the manufacturer or sold with the apparatus.  When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.
13. Unplug this apparatus during lightning storms or when unused for long periods of time.
14. Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.
15. To prevent risk of fire or electric shock, avoid overloading wall outlets, extension cords, or integral convenience receptacles.
16. Do not let objects or liquids enter the product – as they may touch dangerous voltage points or short-circuit parts that could result in a fire or electric shock.
17. See product enclosure bottom for safety-related markings.
18. Use proper power sources – Plug the product into a proper power source, as described in the operating instructions or as marked on the product.
19. Apparatus shall not be exposed to dripping or splashing, and no objects filled with liquids, such as vases, shall be placed on the apparatus.

Information about products that generate electrical noise

NOTE: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at their own expense.

Changes or modifications not expressly approved by Bose Corporation could void the user's authority to operate this equipment.

This Class A digital apparatus complies with Canadian ICES-003.

Initial turn on inrush current: 32 Amps

Inrush current after AC mains interruption of 5 seconds: 32 Amps

This product meets all EN55103-2 immunity requirements for E2 electromagnetic environment.

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INTRODUCTION

Welcome

Thank you for purchasing the Bose® L1® model 1S system with ToneMatch® port. Based on a revolutionary new technology, this system brings the benefits of an intimate acoustic concert to amplified performance.

This owner's guide provides detailed setup and operating instructions for your L1 system and explains how to connect equipment to it.

For additional information on using this system, including tips, techniques, and frequently asked questions, please visit www.Bose.com/livesound on the Internet.

Features and benefits

- **You control the sound** – Just as in an unamplified performance, you control the sound. You will no longer wonder how you sound to your fellow musicians or to your audience because you will hear what they hear.
- **Quick and easy setup** – The L1 system is easy to carry and can be set up in minutes, not hours. This frees you from the time-consuming and often frustrating effort required to properly set up conventional sound equipment.
- **Dramatically improved performance** – Compared to using conventional equipment, performance and enjoyment dramatically improve because the struggle to hear yourself and the other musicians is diminished.
- **Creates excitement and emotion** – Enhanced performance of the musicians creates the kind of excitement and emotion that is valued by music lovers.
- **You hear what the audience hears** – For the first time, musicians hear what their audiences hear and thus, are less likely to play at uncomfortable sound levels.
- **The music is naturally dynamic** – The softest to the most intense passages can be heard and enjoyed.
- **Improves your appearance** – There is less equipment on the stage and more room.
- **Sound reproduction unlike before** – Audience members report that the clarity and excitement that come from hearing the accurate reproduction of sound from each instrument, and from hearing the sound of each instrument in its position on stage (as opposed to mono or even stereo mix of all instruments), is unlike anything they have heard before in an amplified performance.

Product overview

The L1® model 1S system – with ToneMatch® port consists of: the power stand, bottom extension, top array, and a B1 or B2 bass module. The system also comes with a padded carrying bag for each of its parts.

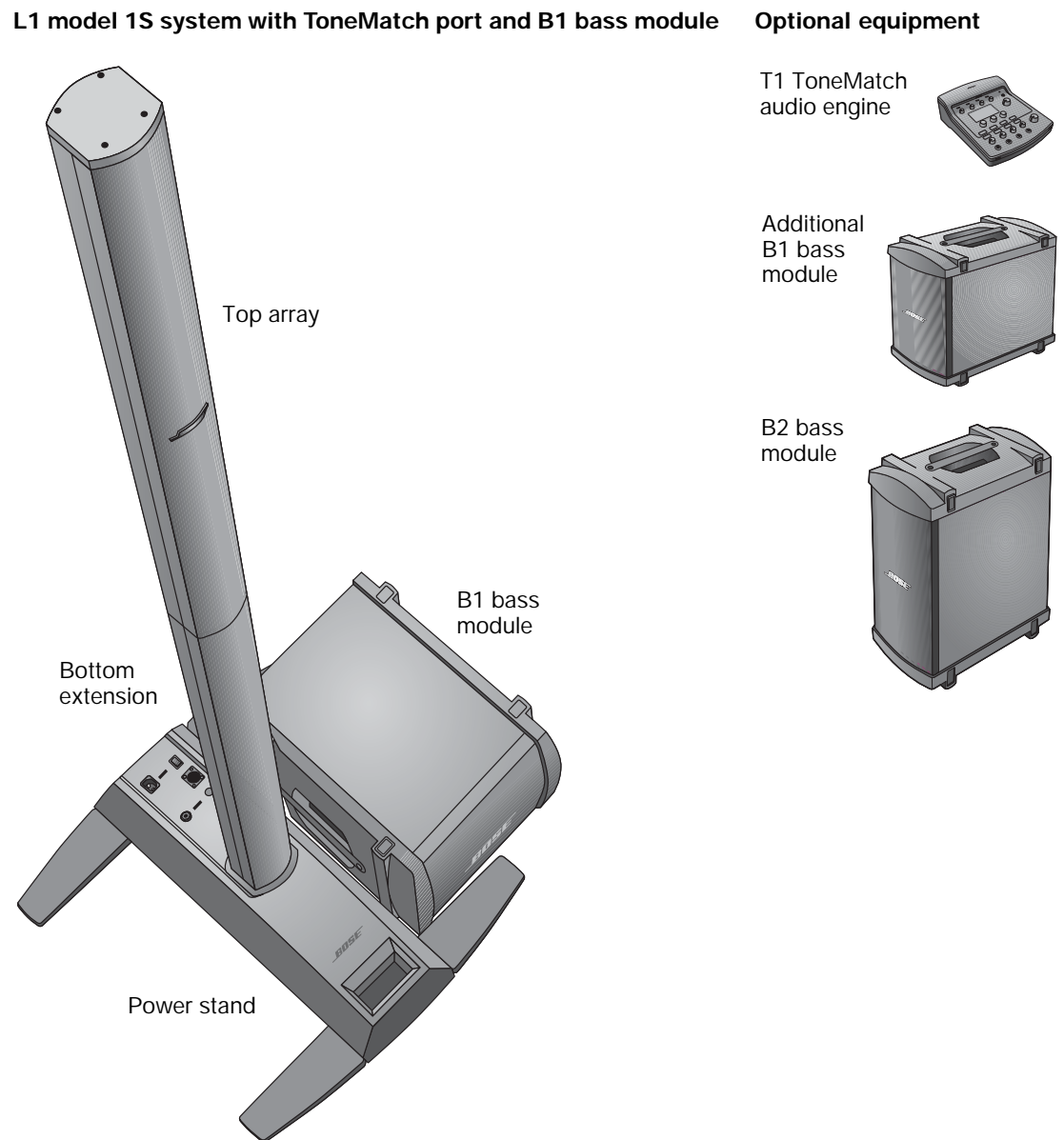
To expand your system and enhance performance, you can add:

- A second B1 bass module for bass guitar, kick drum, or organ. Each power stand can power up to two B1 bass modules.
- A T1 ToneMatch audio engine for digital signal processing, additional inputs and user-interface control.

For a complete list of optional equipment and accessories, please visit: www.Bose.com/livesound.

Figure 1

L1 model 1S system and optional equipment

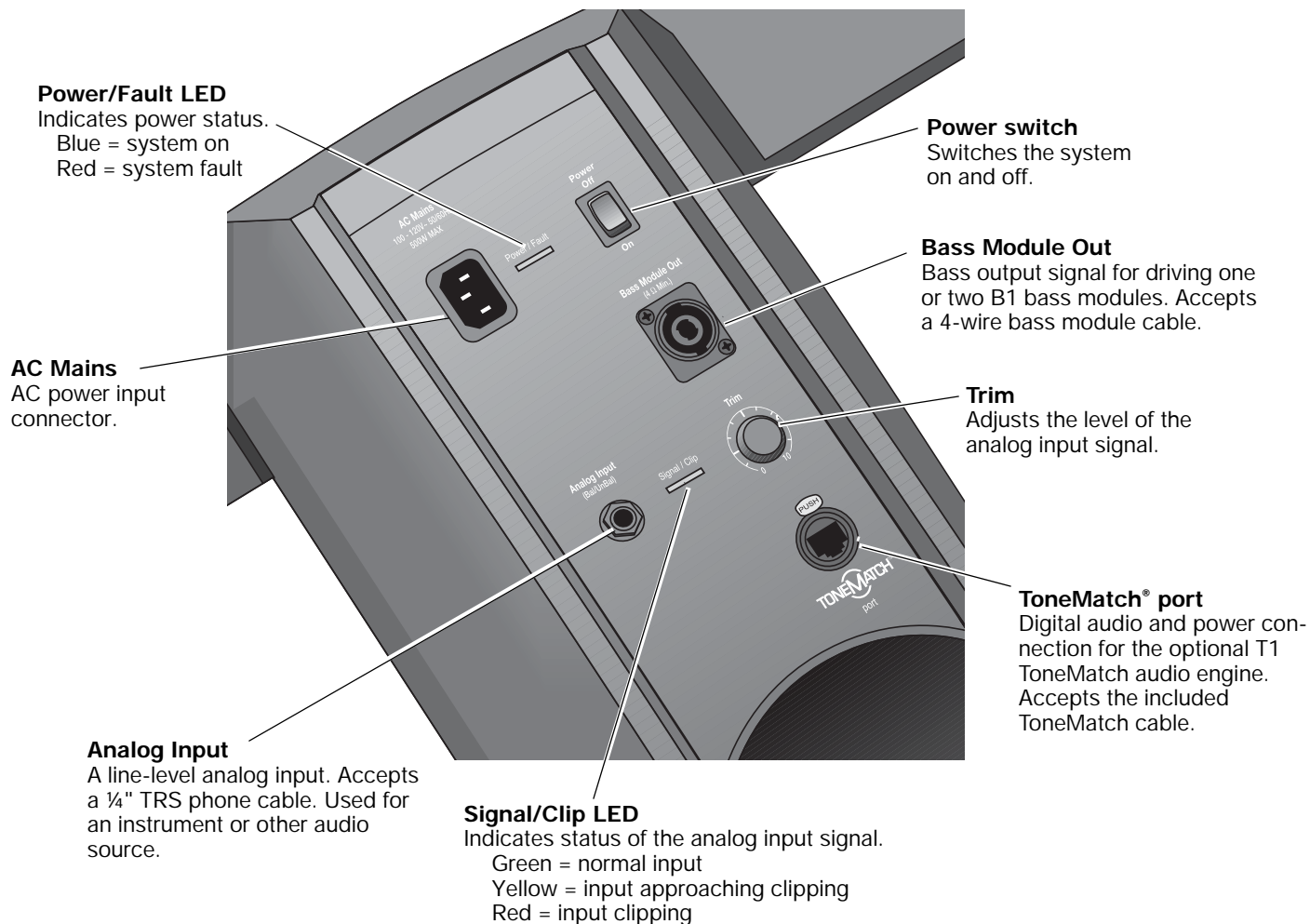


Connections and controls

The top panel of the power stand provides system connectors and controls (Figure 2).

Figure 2

Power stand top panel

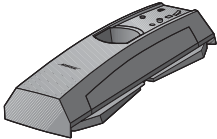
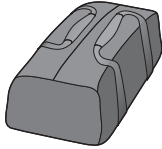




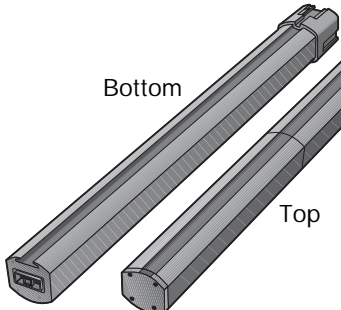
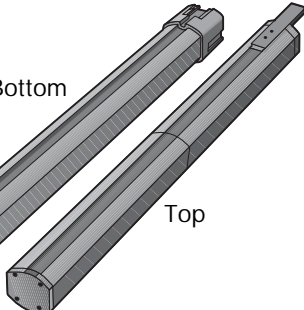
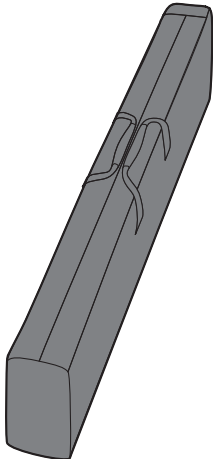


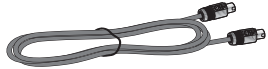




SYSTEM SETUP

Parts list

The L1® system is shipped in three cartons. Carefully unpack the cartons and check that you have all the items listed on this page.

WARNING: To avoid danger of suffocation, keep the plastic bags out of the reach of children.

Power stand carton	Array and extension carton	B1 or B2 bass module carton
<p>L1 power stand</p>  <p>Carrying bag</p>  <p>AC power cord</p>  <p>Quick setup guide</p>  <p>Owner's guide</p>  <p>Product registration card</p> 	<p>L1 model 1S top array and bottom extension</p> <p>Bottom</p>  <p>Top</p>  <p>Carrying bag</p> 	<p>B1 or B2 bass module</p>  <p>Cover</p>  <p>Bass module cable (4-wire)</p>  <p>Adhesive rubber feet (for B2 only)</p>  <p>B1 or B2 bass module owner's guide</p> 

Positioning your system

Placing the power stand in the right location is an important part of setting up this product. Determining the best location for your performance depends on several things.

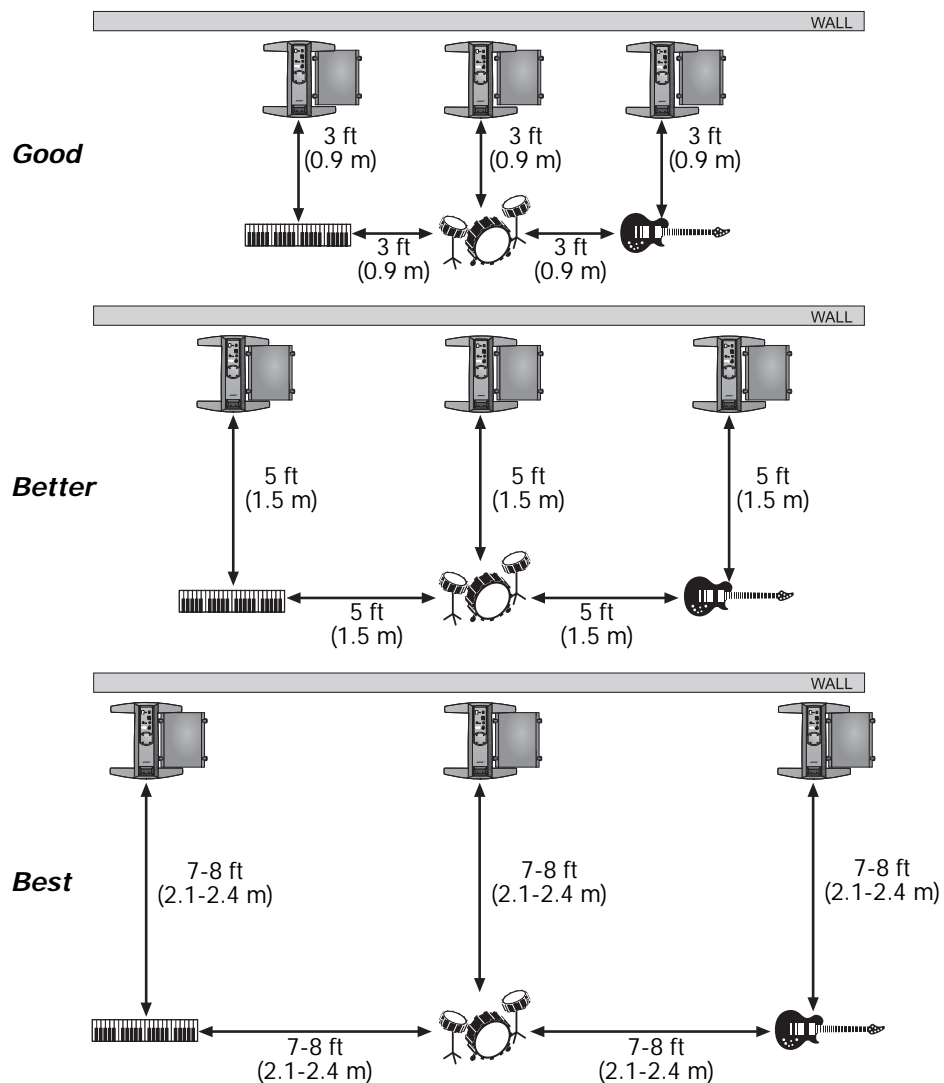
- Size of staging area
- Number of performers
- Shared system (adding a T1 ToneMatch® audio engine and multiple instruments)

The following guidelines should get you started in setting up for a concert or show.

- Set up your system in the rear area of the performance stage.
- If possible, position your system behind the performer(s).
- If you are part of a group, avoid crowding together on stage. Allow some distance, ideally 7-8 feet (2.1-2.4 m), between you and the L1® system and another performer. This allows the sound to wrap around performers and reflect off adjacent surfaces of the room, creating a more pleasing room-filling sound.

Figure 1

Placement recommendations

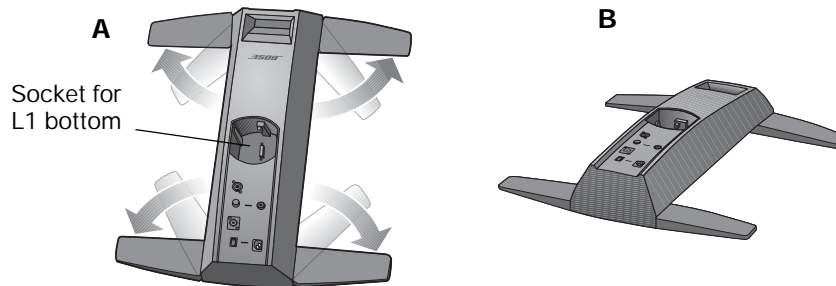


Setting up the power stand

1. Holding the power stand vertically on the foot (Figure 2A), grasp one leg and swing it out as far as it will go. Notice that the other legs swing out automatically. **The legs must be fully open before you can plug the extension into the power stand.**
2. Lay the power stand flat on the floor in the desired position (Figure 2B).

Figure 2

Putting the power stand on the floor



WARNING: DO NOT move the completely assembled system as a unit. This could result in personal injury and/or damage to the product. Position the power stand on the floor in the chosen location before assembling the system.

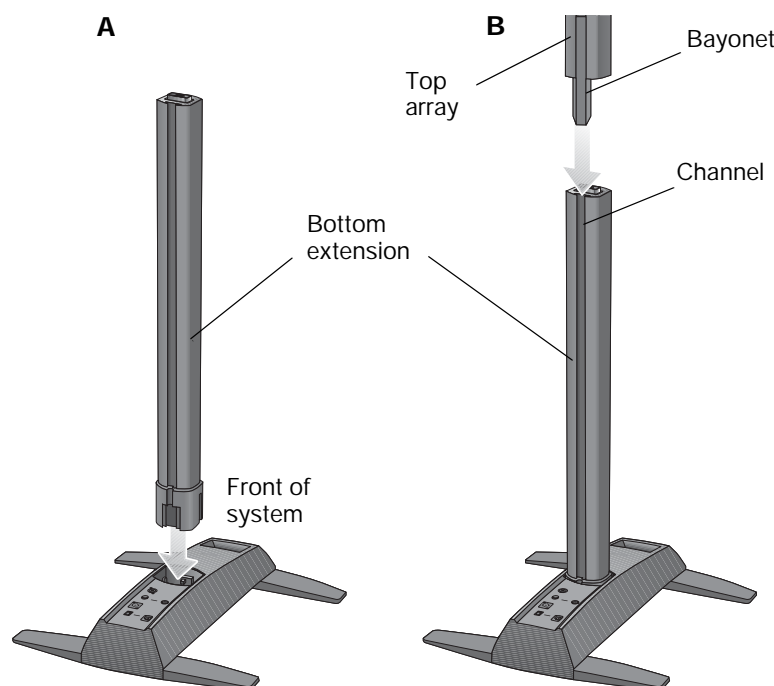
Assembling the L1® model 1S system

This procedure tells you how to set up the loudspeaker sections in the power stand. If you plan to mount the T1 ToneMatch® audio engine on the L1 model 1S system, see “Adding a T1 ToneMatch® audio engine (optional)” on page 13 before installing the top array of the loudspeaker.

1. Hold the bottom extension so that the cover faces front and plug it into the power stand (Figure 3A). Be sure to fully insert it into the socket to assure stability and a good connection.
2. Align the bayonet on the top array with the channel on the back of the bottom, and lower the top onto the bottom until it is flush (Figure 3B).

Figure 3

Setting up the system

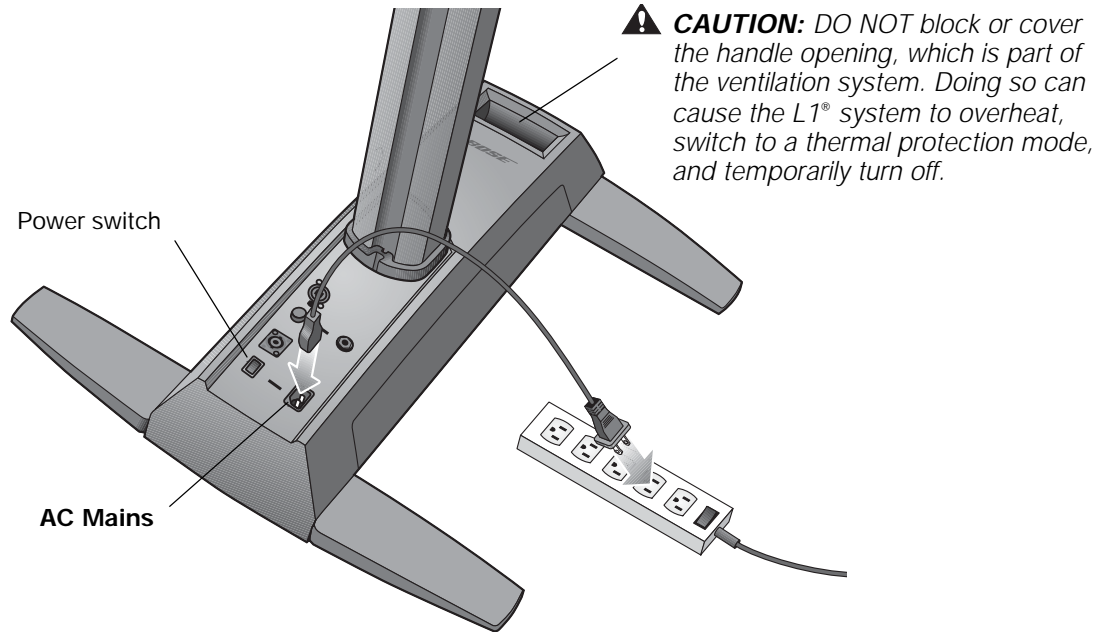


Connecting to AC power

1. Make sure the power switch is off.
2. Plug one end of the AC power cord into the **AC Mains** connector on the power stand.
3. Plug the other end into a live AC (mains) receptacle (Figure 4).

Figure 4

Power connections



CAUTION: Bose recommends using a quality surge suppressor on all electronic equipment. Voltage variations and spikes can damage electronic components in any system. A quality suppressor, which can eliminate the vast majority of failures attributed to surges, may be purchased at electronics stores.

Connecting the B1 or B2 bass module

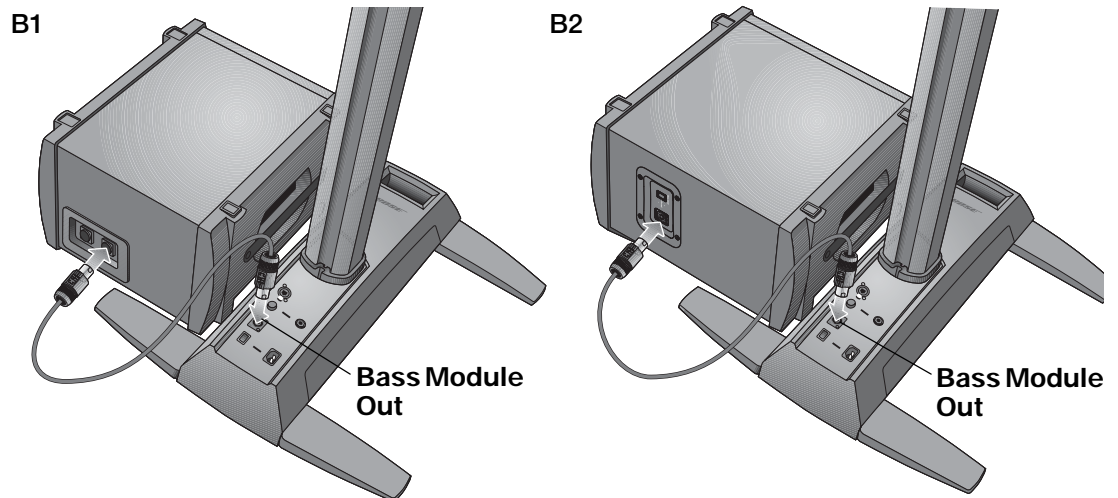
You can place the B1 or B2 bass module either vertically or horizontally on the floor. It fits neatly between the legs of the power stand.

1. Plug one end of the B1 or B2 bass module cable into one of the bass connectors. Rotate the plug clockwise to lock it in place. You should hear a soft click as it locks.
2. Plug the other end of the cable into the **Bass Module Out** connector on the power stand. Rotate the plug clockwise to lock it.

🎵 **Note:** To disconnect a B1 or B2 cable, slide back the metal tab on the body of the plug, rotate the plug counterclockwise, and pull it out of the connector.

Figure 5

B1 and B2 bass modules



⚠️ CAUTIONS:

- DO NOT connect any bass module other than the B1 or B2 to the power stand.
- DO NOT substitute the supplied cable with a 2-wire speaker cable. Use only the supplied B1 bass module 4-wire cable to connect the B1 bass module to the power stand. The power stand uses the signals on two of the wires to automatically sense how many B1 or B2 bass modules are connected.
- DO NOT connect a B1 or B2 bass module to two power stands at the same time.

Adding a T1 ToneMatch® audio engine (optional)

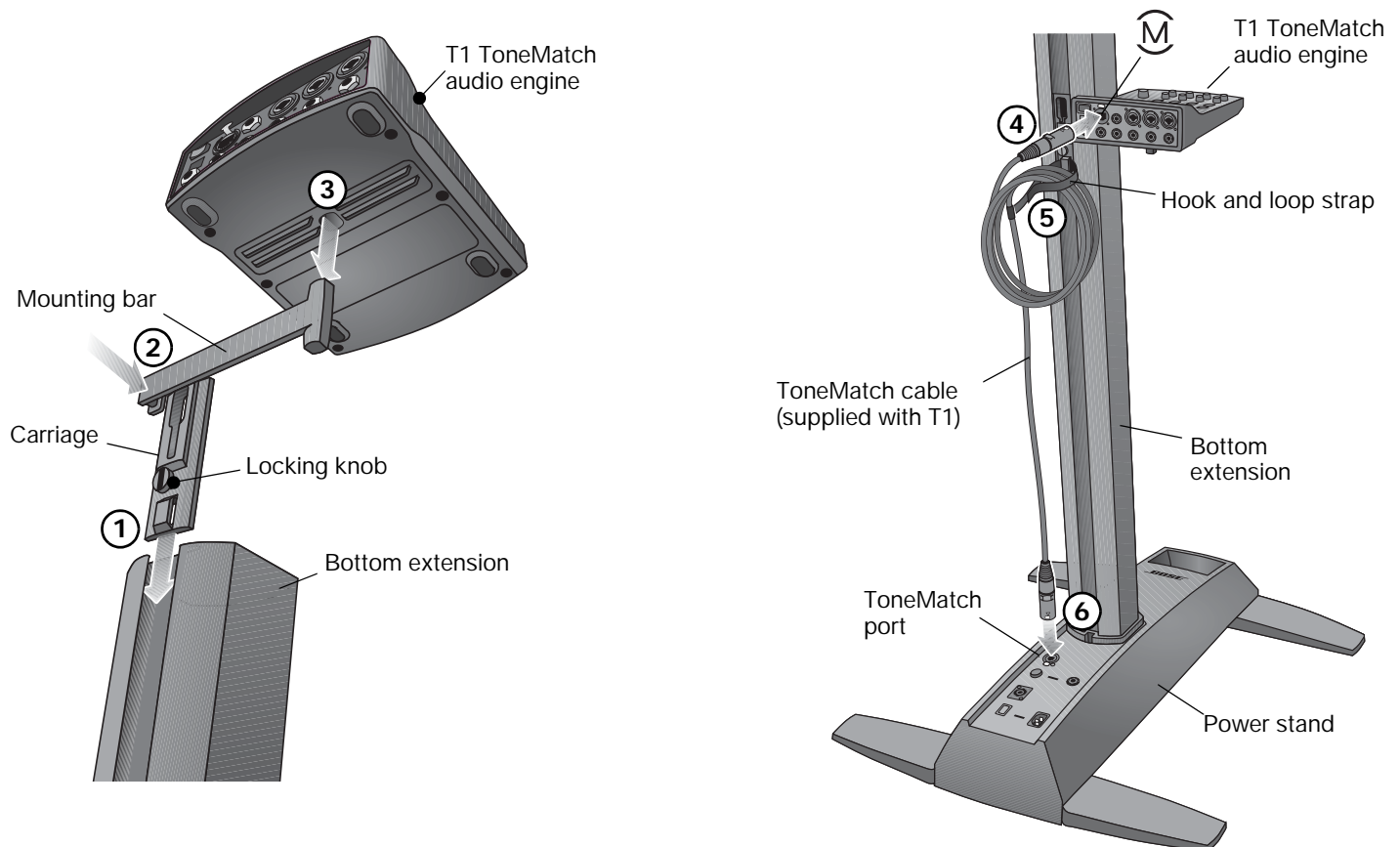
The T1 ToneMatch® audio engine provides additional input/output capabilities to your system, plus digital signal processing to customize the way you sound. The audio engine comes with hardware for mounting it on the left or right side of the bottom extension.

🎵 **Note:** The audio engine mounts on the bottom section of the loudspeaker and requires removal of the top section before starting this procedure.

1. Slide the carriage into the channel on the rear of the bottom extension and turn the knob clockwise to lock it in place (Figure 6).
2. Insert the mounting bar into the slot in the carriage and push it downward.
3. Place the T1 on the mounting bar as shown.
4. Plug one end of the ToneMatch cable (supplied with the audio engine) into the ToneMatch output port (M) on the T1.
5. Using the hook and loop strap, secure the cable to the carriage.
6. Plug the other end of the cable into the ToneMatch port on the power stand.

Figure 6

Mounting the T1



Adding a second B1 bass module (optional)

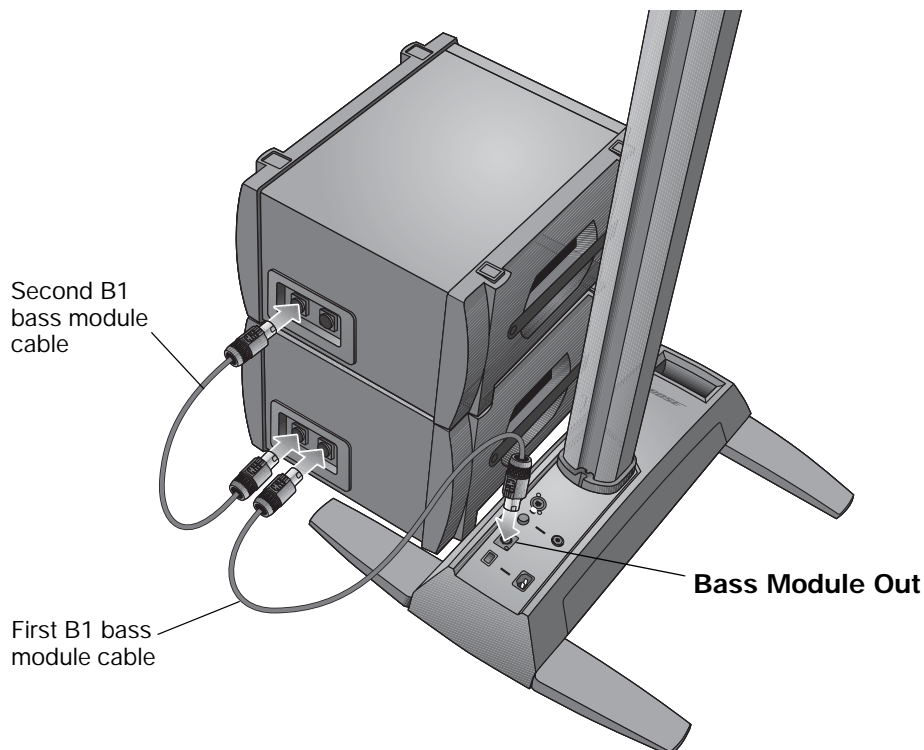
The bass module output of the power stand can adequately drive one or two B1 bass modules. When placed horizontally, the modules are stackable (Figure 7).

⚠ CAUTION: Do not connect more than two B1 bass modules to the **Bass Module Out** connector on the power stand. Driving more than two B1 bass modules from this output improperly loads the amplifier in the power stand, resulting in less than full system performance.

1. Connect the first B1 to the **Bass Module Out** connector on the power stand.
2. Plug one end of the second B1 cable into the unused connector of the first B1. Plug the other end of the cable into one of the connectors of the second B1.

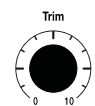
Figure 7

Installation of two B1 bass modules



OPERATING INFORMATION

Setting the analog input level



When connecting an audio source to the **Analog Input**, follow these steps to adjust the input **Trim** control.

1. Set the **Trim** control on the power stand to the 0 (zero) position.
2. Connect the audio source to the **Analog Input**.
3. Adjust the volume of the audio source to the desired level.
4. While playing the source, increase the **Trim** level until the **Signal/Clip** indicator glows green or yellow.
5. If the **Signal/Clip** indicator glows red, decrease the **Trim** level so that it glows only green or yellow.

Using a T1 ToneMatch® audio engine and an analog input source

The L1® model 1S system can operate with both a T1 ToneMatch® audio engine and an analog audio source connected to the power stand. However, keep in mind that the volume level of the audio engine and the analog audio source is adjusted independently.

- The power stand **Trim** control only affects the volume level of the analog audio source connected to the **Analog Input**. Therefore, the **Signal/Clip** indicator indicates the status only of the analog input signal.
- The T1 ToneMatch audio engine has a **Trim** control and signal/clip indicator for each input, a **Volume** control for each output channel, and a **Master** volume control that adjusts the level of the ToneMatch output sent to the power stand. These controls have no effect on the signal fed to the **Analog Input**.

User scenarios

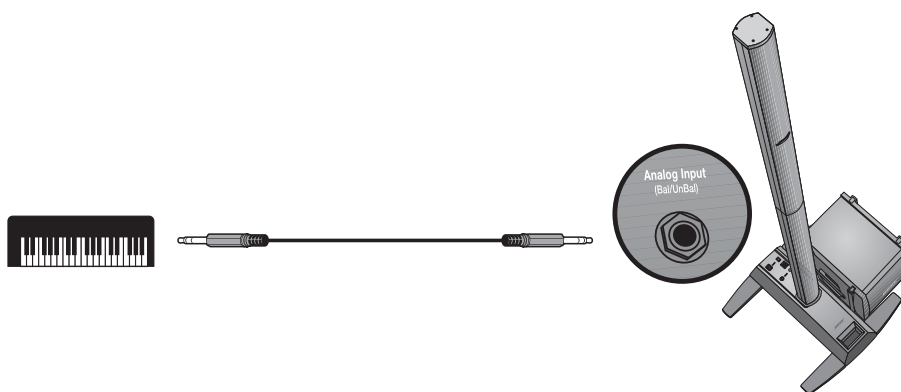
There are many ways to set up and use this system with and without the T1 ToneMatch audio engine. The following pages show examples of some typical user scenarios. When using the T1 ToneMatch audio engine, refer to its owner's guide for more information on setup and operation.

Single musician

A solo musician might play a single instrument through the L1 model 1S system (Figure 1). A solo musician also might play an instrument and use a microphone for vocals (Figure 2 on page 16).

Figure 1

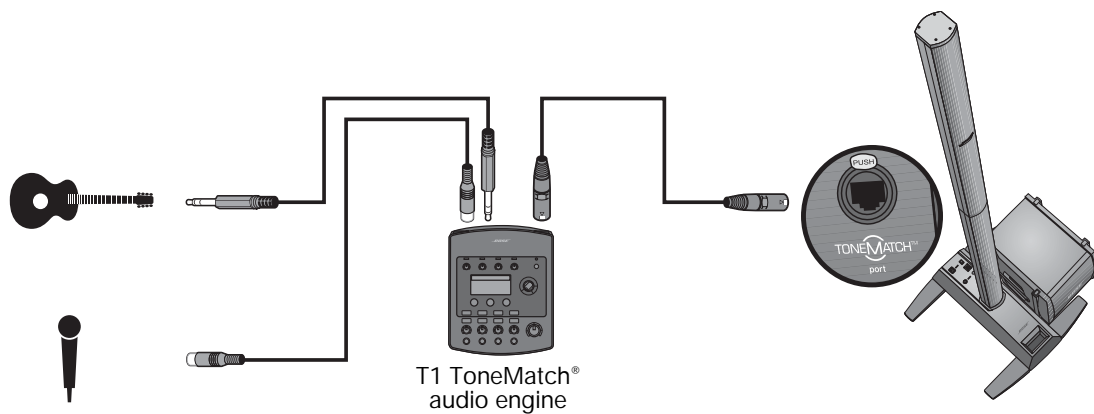
Single system with keyboard



OPERATING INFORMATION

Figure 2

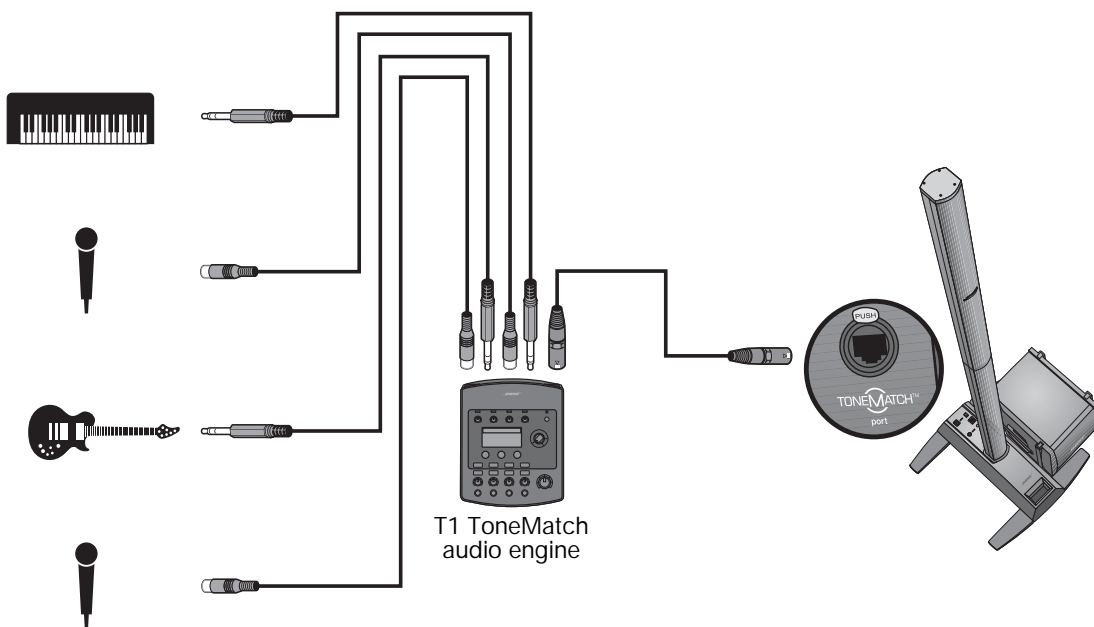
Single system with
guitar and microphone

**Multiple musicians**

In this scenario, a keyboard-guitar duo sings and plays through a single T1 ToneMatch audio engine and an L1® system.

Figure 3

Single system with
multiple instruments and
T1 ToneMatch audio engine

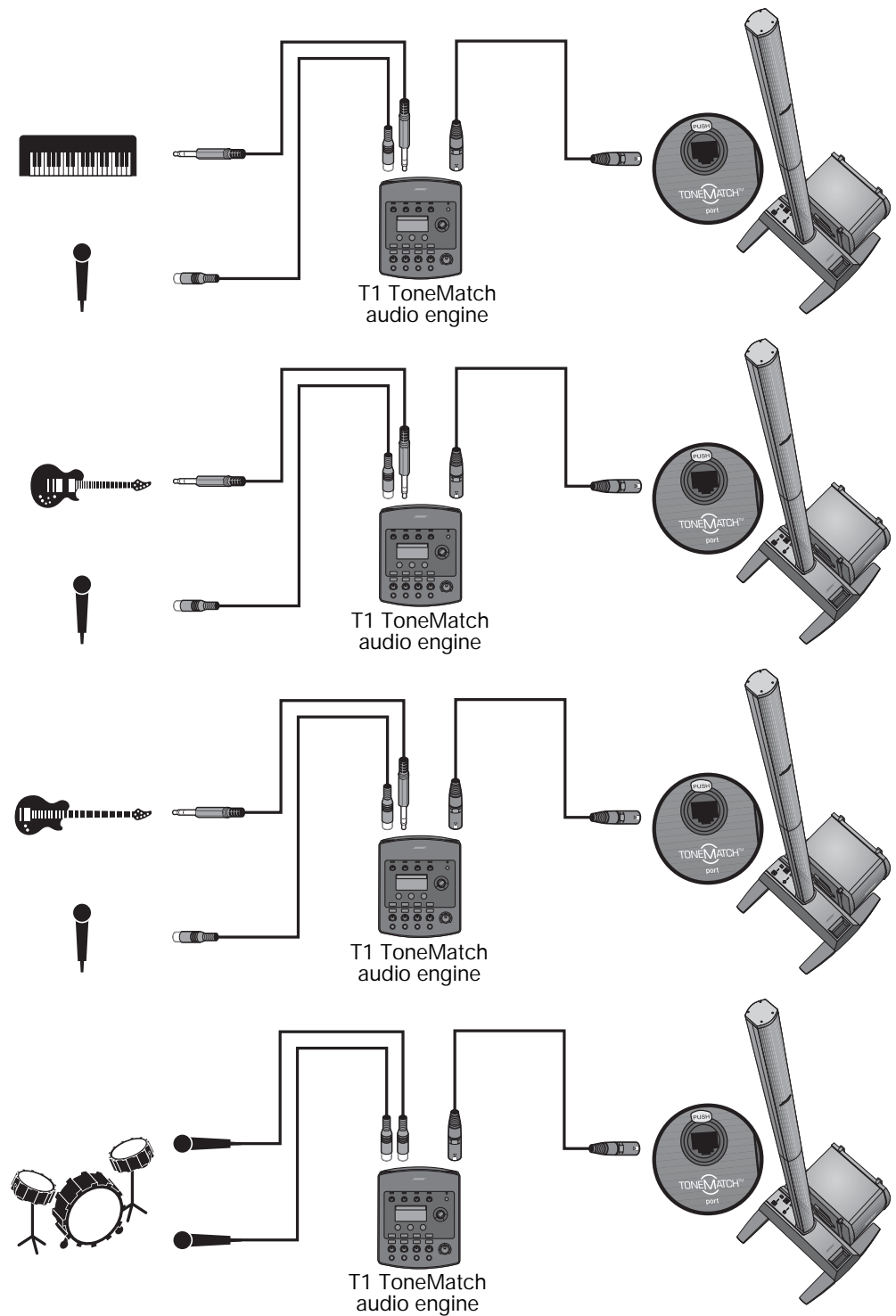


Full band

A full band scenario is built around multiple T1 ToneMatch® audio engines and L1® systems. Each musician plays and sings through a single T1 ToneMatch audio engine and L1 system.

Figure 4

Multiple systems, each with a T1 ToneMatch audio engine

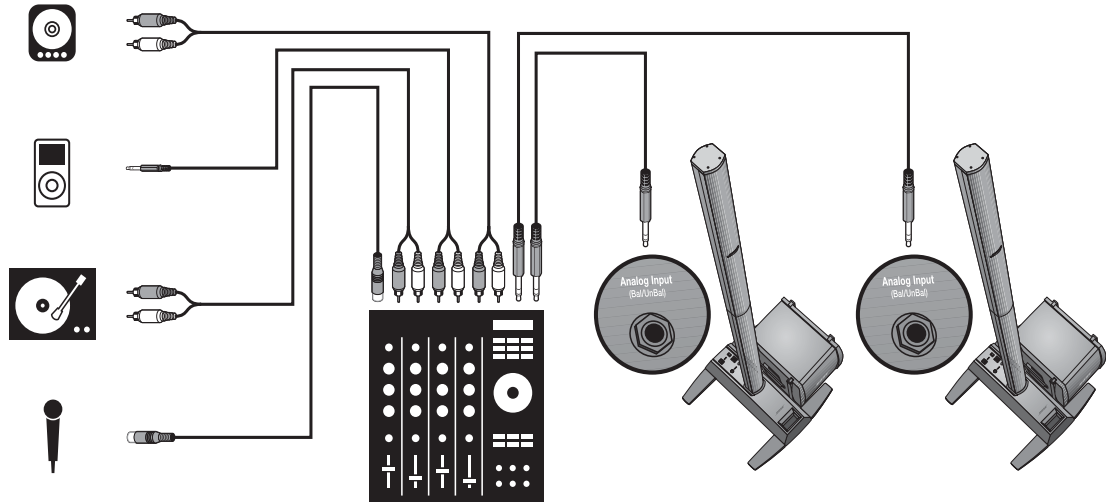


DJ events

DJs use many types of input sources (CD player, turntable, MP3 player, etc.) plugged into a mixer. In this scenario, two mixer outputs can be fed into two L1® systems for stereo sound.

Figure 5

Two systems, a mixer, and input devices



CARE AND MAINTENANCE

Caring for your product

Cleaning

- Clean the product enclosures using only a soft, dry cloth.
- Do not use any solvents, chemicals, or cleaning solutions containing alcohol, ammonia, or abrasives.
- Do not use any sprays near the product or allow liquids to spill into any openings.
- If necessary, you may carefully vacuum the grille of the L1® loudspeaker.

Getting service

For additional help in solving problems, contact Bose® Live Music Customer Service Product and Technical Support Team at (877) 335-2673 or visit our support area online at www.Bose.com/livesound.

Troubleshooting

If you experience problems while using this product, try the following solutions. If you still can't solve the problem, please call the Bose Live Music Product and Technical Support Team direct at (877) 335-2673 to arrange for service.

Recommended troubleshooting tools

- Portable voltmeter
- Cable tester
- AC outlet tester
- XLR and ¼" phone plug cables
- B1 bass module 4-wire cable
- Spare AC power cord

<i>Problem</i>	<i>What to do</i>
System is plugged in, power switch is on, but power LED is off	<ul style="list-style-type: none"> • Make sure you have power at the AC outlet. Try operating a lamp or other equipment from the same AC outlet or test the outlet using an AC outlet tester. • Make sure the power stand's power cord plug is fully inserted into the AC outlet.
Power LED is on (green), but no sound	<ul style="list-style-type: none"> • Make sure volume control is turned up on your instrument. • Make sure the Trim level control is turned up on the power stand. • Make sure your instrument is plugged into the Analog Input jack. • Connect your instrument to the power stand using a different cable. • Plug your instrument into a different amplifier to make sure the instrument is working.
Power LED is red while the power stand is on	<ul style="list-style-type: none"> • Please call Bose Live Music Customer Support at (877) 335-2673 for assistance.
House circuit breaker keeps tripping	<ul style="list-style-type: none"> • If more than one power stand is plugged into the same AC circuit, stagger the turn-on times. Each power stand has an inrush current of about 32 amps when turned on. • If you have more than three power stands plugged into a single 15 amp circuit, move some systems to another AC circuit. Each power stand can draw 5 amps or more when playing at high volumes for long periods of time.

CARE AND MAINTENANCE

<i>Problem</i>	<i>What to do</i>
With nothing plugged into the power stand, a slight <i>hum</i> or <i>buzz</i> is heard	<ul style="list-style-type: none"> Using an AC outlet tester, test the AC outlet that the power stand is plugged into for reversed or open (hot, neutral, and/or ground) contacts. If using an extension cord, make sure that the cord is also tested as above.
B1 or B2 bass module is plugged in, but no bass audio is heard	<ul style="list-style-type: none"> Make sure you are using the included 4-wire B1/B2 bass module cable. Make sure the B1 or B2 bass module cable is plugged into the Bass Module Out connector and the cable plug is fully engaged in the connector. Try a different 4-wire cable. If available, try a different B1/B2 bass module.
B1 bass module sounds out of balance with the system	<ul style="list-style-type: none"> Make sure you are using the B1/B2 bass module 4-wire cable included with the B1 bass module package. Make sure that the B1 or B2 bass module grille is facing forward toward the musicians and audience.
No mid/high sounds heard from the L1® top array	<ul style="list-style-type: none"> Make sure the L1 top array and bottom extension are firmly seated in their connectors. Make sure connections are not bent or broken. Try cleaning the contacts on the loudspeaker top and bottom with electronic contact spray cleaner.
Instrument or audio source sounds distorted	<ul style="list-style-type: none"> Make sure the Signal/Clip LED is not constantly red. If it is, lower the trim level. Try a different source or instrument. Try your source or instrument on another power stand.
Microphone is encountering feedback	<ul style="list-style-type: none"> Orient the microphone so that it is not pointing directly at its respective L1 system. Try a different microphone. Try a different position for the loudspeaker and/or vocalist on stage. Increase the distance from the loudspeaker to the microphone. If using a vocal effects processor, make sure it is not contributing to the feedback problem.

Limited Warranty and Registration

Your product is covered by a limited warranty. Details of the warranty are provided with your product. Register your products online at www.Bose.com/register or call (800) 905-1044. Failure to do so will not affect your warranty rights.

Accessories

Visit www.Bose.com/livesound, or call (800) 905-0886 for accessory information.

Technical Information

Mechanical

<i>Component</i>	<i>Dimensions</i>	<i>Weight</i>
Power stand:	5"H x 10"W x 27"D (12.8 cm x 26.2 cm x 69.2 cm)	23.7 lb (10.7 kg)
Top array:	43½"H x 3½"W x 4"D (111.0 cm x 9.0 cm x 10.5 cm)	16.3 lb (7.4 kg)
Bottom extension:	39.63"H x 4.15"W x 4.13"D (100.6 cm x 10.6 cm x 10.5 cm)	8.5 lb (3.8 kg)
B1 bass module:	15"H x 10¼"W x 17¾"D (38.0 cm x 26.0 cm x 45.0 cm)	25.1 lb (11.4 kg)
B2 bass module:	23.4"H x 13.31"W x 18.9"D (59.4 cm x 33.8 cm x 48 cm)	45 lb (20.41 kg)

Electrical

- AC power rating:
100-120V ~ 50/60Hz 500W (USA/Canada); 220-240V ~ 50/60Hz 500W (Europe)
- Peak inrush current:
32A @ 120V ~ 60Hz (USA/Canada); 61A @ 230V ~ 50Hz (Europe)

<i>Component</i>	<i>Impedance</i>
L1® model 1S loudspeaker:	4Ω
B1 bass module:	8Ω
B2 bass module:	4Ω

Audio Input/Output

- T1 ToneMatch® port: DC output/data input Ethercon/RJ45 connector for a T1 ToneMatch audio engine
- Analog Input: Line-level input channel for ¼" TRS phone plug
- Bass Module Out: Neutrik® NL4 output for one or two B1 bass modules

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