Design | Performance | Support

# L1<sup>TM</sup> Model II System

# **Frequently Asked Questions**

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# The Technology

#### What is the L1<sup>TM</sup> Model II system?

The L1™ Model II system represents a new approach to amplification. This approach was designed to address the root cause of complaints by musicians and audience members regarding the quality of live amplified musical performances.

### How does this approach work?

In the new approach mixer, PA speakers, monitors and backline amplifiers (e.g. guitar amps) are replaced by special Cylindrical Radiator® loudspeakers, which are located behind the musicians. These speakers have the unique ability to radiate sound evenly across the stage and into the audience with very little change in sound level.

The approach is naturalistic in that it mimics an acoustic instrument performance: Each player has control over his or her individual sound, and the sound comes from the multiple directions that correspond to the musician's positions on stage – a property of acoustic music known to enhance our ability to hear and appreciate individual instruments and voices in ensemble passages. The new approach has many integrated features that allow the user to set up the system in just minutes.

Is this technology better-suited for seasoned musicians who already have tons of gear, or for musicians that are just getting started and need a simple solution?

The system is equally valuable for the seasoned musician and the beginner. Experienced performers immediately will recognize that they can hear better and therefore play better, and they instantly appreciate the easy setup. Musicians who are starting will enjoy playing more because they'll spend more time playing and less time hassling with equipment. They will develop as better players because they can hear themselves and each other. All will benefit from the knowledge that the sound they produce on stage is what is radiated to the audience. Never again will they hear and think one thing only to find out the audience heard something completely different when they asked "How did we sound?" after the performance.



# What are some of the details of the electronics in the L1<sup>TM</sup> Model II power stand?

Powerful amplification is enclosed in the Model II power stand – enough to drive the L1<sup>TM</sup> Model II system and up to two B1 bass modules to output levels required by bands in venues up to about 500 people.

### Why does the Model II power stand contain only a single analog input?

Based on customer feedback, Bose provides a single analog input, which is suitable for many applications and is compatible with outputs from standard mixing consoles, DJ mixers, laptop computers and many other devices. This enables the layout of the power stand to be less cluttered with connectors that ultimately may not be used for many applications. The end result is a clean and compact design.

Musicians who require more inputs can purchase the T1 ToneMatch<sup>TM</sup> audio engine, which is specifically designed to work with the L1<sup>TM</sup> Model II system. The T1 is a powerful multichannel audio device designed for musicians to use with the Model II system. It includes our largest library of ToneMatch<sup>TM</sup> presets, proprietary zEQ, a complete suite of studio-class effects and processing, and five channel inputs.

# Are there similarities between the L1<sup>TM</sup> Model II system and line arrays currently in use?

Line arrays have been used for large concert performances as the PA component of a traditional triple amplification system. Unlike these large-venue systems, the L1<sup>TM</sup> Model II system is designed as a portable implementation of a line or pole-shaped source. It is designed to be positioned behind each musician, providing accurate coverage for musicians and audiences.

<u>In nightclubs, you normally see very large loudspeakers for bass. How do your smaller bass enclosures compare?</u> What makes them so special?

Bose has a number of propriety technologies for bass and has a long history of developing systems that produce high output in the bass range from smaller enclosures. The B1 bass module is no exception. The fact that it is used in an integrated system (with amplification and signal processing) means that performance can be enhanced in ways that a conventional component-based solution can't. Large signal performance, for example, can be greatly improved with the use of a dedicated digital signal processor, which is built into the T1 ToneMatch<sup>TM</sup> audio engine.

At the same time, the B1 bass module has been made modular, so that higher bass output can be created for instruments and styles that require it. An upright bass in a jazz trio might use only one bass module. On the other extreme, the electric bass in a 10-piece funk band might use four.

# **Functionality**

### Is this really a "plug and play" solution? How long does it take to set up?

The L1<sup>TM</sup> Model II system is designed to disassemble into easy-to-carry pieces. Everything can be carried by hand without the need for special equipment. Moreover, the products are designed to assemble in just minutes, and because the approach requires no mixing, the complex task of wiring each instrument to the mixer and then from the mixer to the amplifiers and speakers is eliminated. The musicians simply plug in, and they're ready to play.

Are sound operators required in the new approach?

No. Just as acoustic-instrument ensembles (such as a string quartet) are able to balance their own sound, so too can a group playing amplified music using the new approach. The reason is that when musicians are in total control, and know that the sound they are creating on stage is what is radiated outward to the audience, they are best-suited to creating the required balance of voices and instruments.

What happens if a musician is blocking the view of the L1<sup>TM</sup> Model II system? Doesn't that block the sound?

Sound diffracts (bends) around objects. So long as the musician is not standing literally against the L1<sup>TM</sup> Model II system, the sound diffracts around the musician or other objects such as a keyboard or other musical instrument.

Connectivity:

What is the proper method for setting the gain on the L1<sup>TM</sup> Model II power stand when connected to an analog source?

Play source material at the loudest volume that will be present in the performance and adjust the trim level until you achieve the desired volume. Refer to the signal clip LED on the power stand while adjusting the trim level until you see the LED go from yellow to red in color. Back the trim level off until the signal LED is predominantly yellow with brief peaks into the red.

What is the proper method for setting the gain on the L1<sup>TM</sup> Model II power stand when connected to a T1 ToneMatch<sup>TM</sup> audio engine?

Adjust output volume of source to normal operating volume. Make sure that the Master volume and the channel volume on the T1 is set to 0. While playing your instrument/audio sources as loudly as you would during a performance, turn the Trim control on applicable channel of the T1 clockwise until the signal/clip indicator glows green or yellow. If the indicator flashes red or glows steady red, turn the trim control counter-clockwise to decrease the level.

Can I use the bass-line-out on the L1<sup>TM</sup> Model II power stand to connect to a bass amplifier and cabinet?

The bass-line-out connector provides a flat 40-Hz to 180-Hz bandpass signal when no B1 bass modules are used with the power stand. We recommend unplugging the B1 bass modules to ensure correct EQ compensation of the Bass Line OUT jack, and phase consistency.

<u>Do the mic inputs of the T1 ToneMatch<sup>TM</sup> audio engine have phantom power?</u> Phantom power +48v can be applied to Channels 1-3.

How many B1 bass modules can you connect?

One power stand can power up to two B1 bass modules.

Can this product be used in other countries?

There are two voltage versions of the power stand and the A1 PackLite® amplifier. 120V versions are available in the U.S., Canada and some Latin American countries. The 230V versions are available in Europe and Australia. Please visit www.Bose.com/musicians for up-to-date information about product availability.

How do I know which half of the Cylindrical Radiator® to insert into the power stand first?

The upper and lower halves of the L1<sup>TM</sup> Model II system are not identical. The bottom half is easily identifiable because it has a large end cap, which gets inserted first into the power stand. The upper half contains the Bose® logo and uses a tongue-and-groove mechanism to ensure a solid mechanical and electrical connection to the lower half. Both halves are clearly labeled on the back, indicating proper insertion.

### Can you use 2-wire Speakon® cables for the B1 bass modules?

No. Only 4-wire Speakon® cables should be used with the power stand. The additional two wires (+2 and -2) in the connector are used for sensing purposes. Upon connection, the power stand is able to sense and adjust (EQ and level) for 0, 1 or 2 B1 bass modules connected to the bass-module-out Speakon® connector.

### How can I tell if I'm using the correct Speakon® cable?

If you plug in a 4-wire Speakon® cable to the bass-module-out connector with music playing through, you will clearly hear the L1<sup>TM</sup> Model II system mute for a moment. If you are using an incorrect cable, such as a 2-wire Speakon® cable, the momentary muting will not occur.

Can the system be used with just one half of a L1<sup>TM</sup> Model II system in instances where the ceiling may not be tall enough for assembly of the full loudspeaker?

Using only one half of the L1<sup>TM</sup> Model II system will significantly impact the performance. The EQ would be incorrect and your ears still need to be at the same height as some part of the loudspeaker, which is difficult at 3.5 feet tall. While there should not be any damage to the system by using it like this, it is not recommended.

# Can I use the system outside?

Yes. You may use your system for outdoor gigs, provided that it is protected from extreme elements. The system has been tested to operate in 0°C to 50°C temperatures and be stored in -30°C to 70°C temperatures. In cases of light rain outside, take precautions to cover the back panel of the power stand. Water must not get into the air inlet slits inside the back panel, on the loudspeaker drivers or inside the L1<sup>TM</sup> cavity on the power stand.

#### Why doesn't Bose Corporation publish full system specifications?

Most of the specifications that are used to describe sound systems can be very misleading.

They pretend that relatively complex physical or perceptual properties can be condensed to a single number (or a small set of numbers) that determines somehow the quality of a product. These numbers then are used to compare or rank different products. In many cases, these numbers only loosely relate to what a user would experience in a real-world application. Furthermore, there are quite a number of variations in the details of how a specific measurement can be carried out. We believe it serves our customers better to describe the product in terms that they can more directly relate to, and to enable and encourage our customers to experience the product directly either through a demonstration or through actual real-world trials they conduct themselves.

Bose Corporation publishes technical data whenever we think it is helpful. For example, for our products that are used primarily in installed sound systems, detailed technical specifications are available. This data is normally used by professional sound system engineers, who are well-trained to interpret the data correctly and put it into the right context. While some specifications add value in comparing two products that are otherwise very similar, they are mostly meaningless for a product that is fundamentally different or new, such as the L1<sup>TM</sup> Model II system.

# How prone is the system to feedback?

The L1<sup>TM</sup> Model II system is resistant to, but not immune from, feedback. Its performance in this critical dimension has been shown, in the vast majority of cases, to be significantly better than the traditional triple system amplification approach of backline instrument amplifiers, monitor system and PA system.

# Can I connect a passive sub woofer to the Bass Module Output?

No. We do not recommend that you connect anything except the B1 bass module to this output, as the internal amplifier and B1 bass modules are designed to properly equalize the system when connected. Use the **Bass Line Out** connection to feed a powered subwoofer or additional amplifier.

# **Applications**

### Where can the L1<sup>TM</sup> Model II system be used?

The L1<sup>TM</sup> Model II system is suitable for amplified music performances in venues with occupancies up to 500 people. Typically, this translates to maximum listener distances of about 150 feet (45 meters). Thus the system will fill auditoriums, places of worship, gymnasiums, ballrooms, dance clubs, coffeehouses and more – places where the vast majority of live music performances take place. In larger venues, a musical group can use the new approach on stage and enjoy all the benefits that allow musicians to hear themselves and each other better. Signals from the stage can be fed to speakers that supply sound to distant seating areas.

# What kinds of musical groups can use the new technology?

There are no restrictions in this regard. Any instrument, any group size and any genre will benefit from the advantages of hearing themselves better, of being in complete control of their music, of having their audiences hear them better, and of being able to set up and play in a small fraction of the time it takes to set up a conventional system.

You talk about excessive loudness. Are you saying the new system isn't capable of playing loud? How loud can it play?

The new approach can compete with the maximum levels created by most conventional systems. What's changed is that a band will rarely, if ever, play at the kind of sustained or persistently high sound levels, because the struggle to hear oneself and one's fellow musicians – the reason to increase the volume in the first place – is gone. With the new approach, therefore, the dynamics are vastly improved, one of the major contributors to musical quality. In testing at Bose, musical groups plagued by the problem of excessive loudness were delighted to find that within a very short time (one or two sessions), their average level had dropped drastically while their peak level remained the same. They expressed an enormous increase in the enjoyment of playing, and audiences expressed their appreciation of music that was exciting but not overwhelmingly loud.

#### Does every musician in the band need his or her own L1<sup>TM</sup> Model II system?

No. In the fullest embodiment of this new approach, each musician in a group has a L1<sup>TM</sup> Model II system. In some situations – a larger ensemble on a small stage, for example – testing showed that two or more musicians could share one L1<sup>TM</sup> Model II system without a significant erosion of the benefits of the concept when the musicians were standing or sitting directly next to each other. Two horn players standing side by side or three support vocalists standing next to each other can use one L1 Model II system, as an example.

# Can one musician use an L1<sup>TM</sup> system while the rest of the band plays through a conventional system?

Yes. There are two ways that the musician can use the L1<sup>TM</sup> Cylindrical Radiator® loudspeaker onstage with a band using the conventional triple system setup.

A performer can use the system onstage without connecting to any other house reinforcement equipment, including the main front speakers (sometimes known as "house mains") and stage monitors. However, only some of the benefits of the new approach are enjoyed in this case. The musician using the L1<sup>TM</sup> Model II system will hear him or herself better, will be heard better by the other musicians and will be heard better by the audience. However, the full potential of this new system is not realized because only the performer and not the complete band is equipped and engaged to perform with the benefits of this new amplification approach.

Performers can also use L1™ Model II systems to enhance their sound onstage, and use the available Line Output jacks on the primary channels to send the audio signal(s) to a house PA. In this case, the musician and the band enjoy the benefits from the musicians' sound onstage and only onstage. There are no advantages for the audience. Loss of the benefits of the "cocktail party" effect, lack of eye-ear coordination, the potential for excessive reverberation, and the problems of bulky and complex equipment all exist if the remainder of the band plays through a triple system.

## Can DJs use this system?

Yes. The system has important advantages over conventional systems. One problem with portable PA systems is the use of stand-mounted speakers, which are very loud close to the speaker and not loud enough away from the speaker. The L1<sup>TM</sup> Cylindrical Radiator® loudspeaker is unusual in that you can adjust for the desired level on the dance floor and in the audience, and then walk literally right next to the speaker without it getting excessively loud. This translates into much greater comfort for the guests.

The system also has a sleek, elegant profile that fits nicely into event décors and minimizes sight-line issues.

### Can L1<sup>TM</sup> systems be used as a traditional PA system?

Yes. L1<sup>TM</sup> Model II systems can be used to replace PA speakers. Their unique radiation properties help them deliver more even sound coverage and a larger stereo field – a benefit that has been confirmed in listening tests. The benefits of compactness for transportation and rapid assembly also will be enjoyed.

#### Can musicians really mix themselves?

Yes, when they are in complete control of their sound. Musicians know how to play together acoustically and have done so countless times, regardless of whether they also play with amplification. All musicians know how to alter their playing in order to create a balance when playing with others. In extensive testing at Bose, it was found that this skill is quickly revived when using the L1<sup>TM</sup> system.

Does the new approach work for electric guitar? Aren't guitarists particular about their guitar amplifiers?

Yes. For most electric guitarists, the guitar amplifier is considered a part of their instrument, as inseparable from the sound of their instrument as is the wood and body shape of an acoustic guitar. For example, the distortion

created by the electronic tubes in some guitar amplifiers produces tones essential to many guitarists' sound. Even the speaker transducers and speaker cabinets used in guitar amplifiers produce unique tone essential to some players' sound.

How can these elements of the electric guitar's tone be included in the L1<sup>TM</sup> system approach?

There are at least three ways this can be done, and each has been extensively tested by guitarists participating in the Bose® research that led to the new approach. The advantage gained in these approaches constitutes what is arguably the most important gain in electrical guitar sound since the invention of the guitar amplifier itself. The reason is that the Cylindrical Radiator® loudspeaker overcomes the problem of uneven radiation of sound to the stage and audience from traditional guitar amplifiers. This is of particular interest for the electric guitar because the radiation pattern of typical guitar amplifiers is so harshly directional as to be painful to listeners on-axis, and dull and muddy off-axis. Before, guitarists could create the desired "sweet spot" sound in one location (theirs), while all others were blasted on-axis or couldn't hear the detail well off-axis.

- 1) A number of companies have in the past 10 years produced electronic devices that model the tone produced by tubes, guitar transducers and guitar amplifier speaker cabinets. These modeling amps initially helped to solve the problem of recording electric guitar and have become increasingly popular on stage. The electric guitarist simply plugs into one of these devices and the output of the device is then plugged into the L1<sup>TM</sup> Model II system. This is the most convenient and elegant way to use electric guitar with the L1 system.
- 2) One of a number of tube-based or solid-state guitar preamplifiers can be used. The output of these preamplifiers is plugged directly into the power stand.
- 3) The third way is for purists who are not satisfied that the modeling amps (first solution above) capture all of the nuances of a traditional guitar amplifier. These guitarists can use a tube amplifier with a microphone in front of the amplifier. Exceptional results have been obtained with the use of one of a growing number of low-wattage tube amplifiers. This class of guitar amplifier is becoming popular with players who want the tone of a tube amplifier but do not want to produce extremely high sound levels in order to get that tone.

How does the output of an L1<sup>TM</sup> Model II system compare to a loud stack of guitar amplifiers and cabinets?

The full stack is considered a standard by many guitarists, both in terms of tone and output. An L1<sup>TM</sup> Model II system can compete effectively with the output of a full stack. However, there are other benefits, such as the radiation pattern of the L1 Model II system, that distinguish it from the full stack's acute directional beam. Moreover, the Model II system can be used to amplify other instruments at the same time. The full stack is for one thing only: electric guitar.

Can you create distortion for guitars using the L1<sup>TM</sup> system?

No. Distortion must be produced first and then fed into the power stand as a clean, non-clipping signal. To achieve distortion, the guitarist can use a few methods:

- Inline devices: One popular method would be to use any of the effects pedals on the market or use a DSP-based amplifier modeler, such as the Line 6 "Pod," which models the tone produced by amplifier tubes, guitar transducers and guitar amplifier speaker cabinets.

- Miking a guitar amplifier: Another method would be to use a guitar amplifier and mic the speaker as closely as possible. The trick here is to run the amplifier at the lowest possible level at which the correct tone is attainable but does not diminish the benefits of the L1<sup>TM</sup> Model II system. Louder amplifiers can be located and miked offstage. Miking small, low-watt amplifiers is a better technique for this method.
- Use a loading device. Some electric guitarists may prefer to use their amplifier's output as an input signal into the power stand. Before doing this, they must use a load device such as a "Plate Soak" or a "Hot Plate" to give a line-level output suitable for the input stage of the power stand.
- Use the "line output" of a guitar amplifier. Some amplifiers have this option and may be suitable for some guitarists. The only suggestion here is to turn the volume of the amplifier down so only the L1<sup>TM</sup> Model II system is heard.

Refer to the Bose® website and Musicians Community Forum at <a href="http://www.Bose.com/musicians">http://www.Bose.com/musicians</a> to learn how to interface additional instruments with the system.

### Can acoustic instruments be amplified with the L1<sup>TM</sup> Model II system?

Yes. When a T1 is not connected, an acoustic instrument equipped with a pickup system may connect directly into the Model II power stand. In cases where pickups are not present, a microphone may be used. When a T1 is not being used, you may connect directly into the Model II system's analog input. However, in this instance, a microphone cable must be used in conjunction with a direct box or a transformer to adapt to the power stands \(^{1}\)4 "analog input connector.

#### How many B1 bass modules can I stack up on stage or when transporting?

Up to four B1 bass modules may be stacked in a column using the integrated alignment tabs on the sides of the enclosures.

#### General

### I already own a L1<sup>TM</sup> Model I or Model II system. Can I purchase the T1 separately and use it with the system?

Yes. The T1 is available for purchase separately and may be used with either an L1<sup>TM</sup> Model I or Model II system. When used with a Model II system, the audio is connected digitally via the ToneMatch<sup>TM</sup> ports. When used with a Model I, a separate power supply is required to power the T1 and the audio is analog. When using with a Model I, simply connect the T1's Master Output jack to the analog input of Channel 3 or 4 on the Model I power stand. The T1 power supply is available through Bose or authorized dealers of the L1 family of products.

### What are the weights and dimensions of the L1<sup>TM</sup> Model II system?

- L1<sup>TM</sup> Model II 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)
- L1<sup>TM</sup> Model II Cylindrical Radiator® loudspeaker top: 43½"H x 3½"W x 4"D (11.1 cm x 9.0 cm x 10.5 cm) 16.3 lb (7.4 kg)
- L1<sup>™</sup> Model II Cylindrical Radiator® loudspeaker bottom: 43½"H x 3½"W x 4"D (11.1 cm x 9.0 cm x 10.5 cm) 17.4 lb (7.9 kg)

• B1 bass module: 15"H x 10<sup>1</sup>/<sub>4</sub>"W x 17<sup>3</sup>/<sub>4</sub>"D (38.0 cm x 26.0 cm x 45.0 cm) 25.1 lb (11.4 kg)

## Does the system ship with carrying cases?

Yes. The Model II power stand and Model II Cylindrical Radiator® loudspeaker both ship with padded carrying bags. The B1 bass module ships with a carrying case.

# Are hard-shell cases available for the products?

No. Although Bose does not offer hard shell cases directly, visit <u>www.Bose.com/musicians</u> to view user comments on this topic.

### What is the limited warranty?

The limited warranty on the electronic components in the U.S. is one year (the power stand and PackLite<sup>TM</sup> amplifier) and five years on loudspeakers (both the L1<sup>TM</sup> Model II system and B1 bass module). For limited warranty information in other parts of the world, please visit <a href="https://www.Bose.com/musicians">www.Bose.com/musicians</a> for more information.

# The L1<sup>TM</sup> Model II product family

### When was the L1<sup>TM</sup> Model II system first available for consumers to purchase?

On March 28, 2007, Bose Corporation introduced the L1<sup>TM</sup> Model II system. It will be available for sale May 1, 2007, through authorized dealers.

### Do the new products compete with Bose's other portable professional systems?

Yes. There are some situations where in the past we would have recommended a Bose® solution comprised of our other portable products, where today we would recommend the L1<sup>TM</sup> Model II system instead. Live music performance is the most obvious application where we would do so. There remain a number of applications where our other portable products are an excellent choice.

## How does the cost of the L1<sup>TM</sup> Model II compare to traditional PA equipment?

Because of the enormous reduction in complexity, the new system compares favorably with the cost of a high-quality conventional amplification system for a four piece band. However the enormous reduction in transportation and set up costs mean that the new system is much less expensive to own and operate. Superiority is achieved when this cost advantage is combined with what we feel is a quantum improvement in sound quality.

### What products are available in the L1<sup>TM</sup> Model II family? What is included in the box?

The L1<sup>TM</sup> Model II system includes the following:

- Cylindrical Radiator® loudspeaker
- L1<sup>TM</sup> Model II power stand
- B1 bass module

- Padded carrying bags for L1, power stand and B1
- 4 conductor bass module cable
- AC power cord
- Demonstration DVD
- $L1^{TM}$  Model II Owners Guide, B1 bass module Owner's Guide, Quick setup guide and product registration card

The L1<sup>TM</sup> Model II system with T1 ToneMatch<sup>TM</sup> audio engine includes the following:

### L1<sup>TM</sup> Model II system

- Cylindrical Radiator® loudspeaker
- L1<sup>TM</sup> Model II power stand
- B1 bass module
- Padded carrying bags for L1, power stand and B1
- 4 conductor bass module cable
- AC power cord
- Demonstration DVD
- L1<sup>TM</sup> Model II Owner's Guide, B1 bass module Owner's Guide, Quick setup guide and product registration card

# T1 ToneMatch<sup>TM</sup> audio engine

- T1 ToneMatch<sup>TM</sup> audio engine (with protective top)
- Soft carry bag
- ToneMatch cable
- Carriage
- Mounting bar
- DVD-ROM

The T1 ToneMatch<sup>TM</sup> audio engine includes the following:

- T1 ToneMatch<sup>TM</sup> audio engine (with protective top)
- Soft carry bag
- ToneMatch cable
- Carriage
- Mounting bar
- DVD-ROM

#### PackLite® power amplifier Model A1

Designed for instruments that require additional headroom and increased output in the deep bass range, such as electric bass, bass drum and high-output playback of recorded dance music. The PackLite® power amplifier can power up to two additional B1 bass modules.

### PackLite® Extended Bass Package

The PackLite® Extended Bass Package includes:

- PackLite power amplifier
- 1/4-in TRS cable (18 in)
- Nylon carry pouch for the amplifier
- Power cord
- Two B1 bass modules
- Two B1 bass module 4-wire cables (5 ft)

- Two B1 bass module soft covers

What are the available accessories for the L1<sup>TM</sup> family of products?

#### B1 bass module

This compact, powerful bass enclosure is designed to be used with L1<sup>TM</sup> systems helping to deliver the depth and impact of such instruments as bass guitar, drums and low voices. Low-pitched wind or stringed instruments, guitars and keyboards also can benefit from the additional low-end output that the B1 provides. Includes professional padded gig bag, and one cable to connect the B1 bass module to the power stand and slip cover.

#### Standard B1 carrying cover

A standard carrying cover for the B1 bass module. Cover is a direct replacement for the cover included with a new  $L1^{TM}$  Model II system package.

#### **B1** cable 5.5ft (1.7m)

Heavy-duty 4-pin cable connects B1 bass modules to L1<sup>TM</sup> Model II or II power stands. Longer B1 cables may be obtained from <a href="https://www.audiopile.net">www.audiopile.net</a>.

## Heavy-duty B1 gig bag

Custom designed to hold your B1 bass module. Incorporates our high-end construction features to protect from scuffs and scrapes on all six sides.

#### PackLite® power amplifier Model A1

Designed for instruments that require additional headroom and increased output in the deep bass range, such as electric bass, bass drum and high-output playback of recorded dance music. The PackLite® power amplifier can power up to two additional B1 bass modules.

#### Carry pouch for Model A1 amplifier

Standard nylon protective pouch for the A1 PackLite power amplifier.

### 1/4" TRS Cable for A1 amplifier 18-in (0.5m)

Standard, balanced tip-ring-sleeve 1/4" cable connects the A1 PackLite® power amplifier to a power stand.

### Heavy-duty power stand/L1<sup>TM</sup>/duffle carrying bag set

Durable and form-fitted, the heavy-duty gig bag set will help protect the L1<sup>TM</sup> loudspeaker and power stand components during transport. Telescoping travel handle and roller wheels makes for a very easy transport of the power stand. The L1<sup>TM</sup> bag, lined with extra padding, comes with a shoulder strap. A rugged duffle bag contains convenient pockets and can hold the R1 remote control with plenty of room for cables and accessories.

### Standard power stand/L1<sup>TM</sup> carrying bag set

Standard carrying bags for the power stand and L1<sup>TM</sup> loudspeaker. Set of three bags is a direct replacement for the set included with a new L1<sup>TM</sup> Model II or II system package.

### L1<sup>TM</sup> Model II power stand cord (120 volt only)

Designed to connect a 120 volt power stand to an AC outlet.

For product codes and part numbers, please see Appendix A.

# **Support**

Where can I collaborate with Bose® staff and existing owners to learn more on how the L1<sup>TM</sup> Model II system can work for my specific application?

We host a public forum that allows our helpful user community to share their experiences and collaborate in real time on topics that are important to them. You will find extensive application specific documentation and helpful hints. The forum is fully searchable and can be accessed at <a href="http://Bose.infopop.cc/6/ubb.x">http://Bose.infopop.cc/6/ubb.x</a>.

You also may contact our product support team and speak with our knowledgeable staff of musicians. They may be reached at 877-335-2673.

### What is the limited warranty?

The limited warranty on electronic components in the U.S. is one year (the power stand and PackLite® amplifier) and five years on loudspeakers (both the L1<sup>TM</sup> Model II system and B1 bass module). For limited warranty information in other parts of the world, please visit <a href="www.Bose.com/musicians">www.Bose.com/musicians</a> for more information.

#### There is a buzz in the system. Any suggestions on how to fix it?

Noise and buzzing is a typical problem with pro audio gear. The new Bose® approach is very much immune to noise because it is a simple, independent system. The typical buzzes and hums associated with ground loops are gone when you use an independent system that is not interconnected electronically to other pieces of equipment. This is not a comprehensive guide to noise troubleshooting, but will offer a suggestion. One of the most important suggestions to alleviate buzz and hum in a system is to plug all interconnected gear into the same electrical circuit. Guitar players or vocalists with effects should plug those units into the same electrical outlet as their power stand is plugged into. This normally fixes all problems.

### Can I use this 120-volt system in another country?

The unit does not have a universal power supply; use the 120V version only in 120V countries. Use the 240V version in countries with 220,230 or 240V systems at 50 Hz. We do not have a 100V system.

#### I need a longer NL4 cable for my B1 bass module. What are my options?

It is generally good practice to locate the B1 bass modules near the L1. If you require more length, ensure that it is a 4-conductor NL4 speaker cable. One vendor that we have used is www.audiopile.net.

### Are there any user-replaceable parts?

Yes. Certain user-replaceable parts are available for the product family. U.S. customers can contact our support department at 877-335-2673 for details.

#### Are the products repairable? To what extent?

Yes. The products are repairable. The power stand is currently repairable at the board level. Drivers, end caps, and grills can be replaced on the L1<sup>TM</sup> and B1 units.

# What are the replacement costs?

U.S. customers may call 877-335-2673 or e-mail <a href="mailto:support@Bose.com">support@Bose.com</a> for further details.

# **Appendix A: Accessories**

The following accessories are available for the  $L1^{\text{TM}}$  family of products.

Accessories	<b>Product Coc</b>
B1 bass module	
B1 bass module	032494
B1 cable 5.5" (1.7m)	035404
Standard B1 carrying cover	035025
Heavy-duty B1 gig bag	041785
A1 amplifier	
PackLite® power amplifier Model A1	039057
Model A1 amplifier carry pouch	039860
Model A1 <sup>1</sup> / <sub>4</sub> " TRS cable 18-in (0.5m)	039861
Model I	
Power stand power cord	035393
R1 remote control	035394
R1 7-pin cable (5m)	035403
Accessories	<b>Product Code</b>
R1 7-pin cable (10m)	035411
L1 carry bags	034273
Power stand fuse kit (120V)	035408
Power stand protective plug	035410
Heavy-duty power stand/L1 <sup>TM</sup> /duffle carrying bag set	041784
Standard L1 <sup>TM</sup> Model I power stand/L1 <sup>TM</sup> carrying bag set	034273
Model II	
L1™ Model II Cylindrical Radiator® carry bag	044023
L1™ Model II power stand carry bag	044024
Heavy-duty power stand/L1 <sup>TM</sup> /duffle carrying bag set	041784
Standard L1 <sup>TM</sup> Model I power stand/L1 <sup>TM</sup> carrying bag set	034273
T1 ToneMatch <sup>TM</sup> audio engine	
T1 ToneMatch <sup>TM</sup> audio engine power supply	042533
ToneMatch <sup>TM</sup> audio engine microphone stand bracket	042535