

## L1™ Model II system



### Product Overview

Feature	Function	Benefit
Musicians are in control of their sound for the stage and audience	The system is located behind each player, evenly distributing their sound to the stage and audience.	No more struggling to be heard. Artistic control is in the hands of the musicians. There is no need for separate mixes for the audience or musicians.
Localization	Sound projects from behind each musician, enabling audience members to visually identify with a particular player.	Solos or articulation of notes draw the listeners' attention, heightening the listening experience. Musicians can enjoy improved ensemble interaction and group dynamics.
Small, lightweight components	The system separates into small individual components, making it easy to transport.	No more heavy amplifiers or speakers to lift. Compact design allows for transporting of multiple systems in a standard-sized vehicle.
Clean, sophisticated design	Sleek and attractive design with few system components.	Blends nicely into event décor and minimizes sight line issues.
Customer support	Bose staff are dedicated to building customer relations, with a focus on providing the tools and knowledge to help you enjoy the benefits of your system.	Our courteous and knowledgeable staff are dedicated to quickly resolving your inquiries.
Thriving user community	Bose users and employees collaborate to discuss and document usability questions associated with the L1™ product family.	Easily obtain answers to your questions, benefiting from the collective experience of our user community.
	<a href="http://Bose.infopop.cc/6/ubb.x">http://Bose.infopop.cc/6/ubb.x</a>	The content is organized into categories and easily navigated.

## L1™ Model II Cylindrical Radiator®

Feature	Function	Benefit
Cylindrical Radiator® loudspeaker design	The orientation of 24 small drivers mounted vertically in a tall, slender column helps deliver wide, consistent sound coverage.	<ul style="list-style-type: none"> <li>• Sound is evenly distributed from behind each musician, allowing audiences and musicians to enjoy the same consistent sound.</li> <li>• Musicians and audience members closest to the system are not overpowered by excessive volume levels in an effort to reach audience members in the back of the room.</li> <li>• Eliminates the need for monitors, PA gear or other excessive equipment.</li> </ul>
Articulated Array® speaker technology	The system's drivers are angled in an alternating fashion, allowing the system to reach a wider listening area with greater consistency.	Increased tonal balance, lyrics and instrument sounds are distinct even when the listener is positioned to the sides of the system.
Reduction in excessive reverb	The speaker projects sound in a very wide wedge-like pattern, with very little sound projected above or below the speaker.	Few reflections from the ceiling or floor help maintain a smooth, consistent sound that is less likely to induce feedback.
Upper and lower latching mechanisms	The L1™ Cylindrical Radiator® loudspeaker can be dismantled into two sections using two latches, one between the upper and lower L1 and the footswitch latch on the power stand.	The system is extremely quick and easy to set up, saving the musician valuable time. There are no external cables to purchase or configure.

## L1™ Model II Power Stand

Feature	Function	Benefit
Convenient folding legs	Power stand legs easily retract in and out of the unit for setup or transporting.	Set up or breakdown of the system takes only minutes.
Small, compact design	The power stand has a small, attractive housing that contains the power amplifiers and system electronics.	The small, lightweight power stand is easily transported and occupies only a small footprint on stage.
Integrated system design	Matches the electronics and power amplifiers to the speakers for increased acoustical performance.	Consistent acoustic quality without the inconvenience or worry of configuring multiple external components.
ToneMatch™ port	A digital connection that provides both audio and power.	A single wire connection that provides digital audio quality, without complex wiring to configure.
Bass Module Out	The power stand is equipped with built-in amplification for one or two B1 bass modules.	There is no inconvenience of transporting or configuration of heavy external amplification. The amplifier and bass module are voiced to produce deep impactful bass response.
Analog input	The line-level analog input accepts either a ¼" or TRS phone cable to accommodate a wide range of sources.	This single-wire connection is compatible with the output from DJ mixers, soundcards or other instruments. There are no complex adjustments to obtain great sound, simply adjust the level control until desired level is achieved.
Ergonomic carry handle	Molded carry handle is ergonomically friendly, providing a stable means to carry the power stand.	Convenient access to easily lift and transport the power stand with minimal effort.
Bass Line Out	A specially conditioned ¼" TRS output that may connect to a PackLite® power amplifier.	Adding additional bass modules is easy the single wire connection does not require additional tonal adjustments.

## ToneMatch™ Audio Engine

Feature	Function	Benefit
T1 ToneMatch™ audio engine	The T1 ToneMatch™ audio engine is Bose's versatile multichannel audio device designed for musicians to use with L1™ Model I and Model II systems, containing our largest library of ToneMatch presets, proprietary zEQ and a complete suite of studio-class effects and processing.	The T1 ToneMatch audio engine was carefully designed with the needs of musicians and performers in mind. Its powerful features are easy to navigate and alleviate common challenges associated with live performances.
ToneMatch™ presets	ToneMatch™ presets make it easy to get exceptional amplified tone from any voice or instrument when used with the L1™ Model I and Model II systems.	ToneMatch™ presets instantly bring you closer to the true sound of your voice or instrument – all at the touch of a button. When you select a proprietary ToneMatch preset for your microphone or instrument, you are tapping into a powerful new technology available only from Bose. ToneMatch presets are available for each channel.
Proprietary zEQ technology	As part of the selected ToneMatch™ preset, proprietary zEQ technology automatically shifts the range in which the tonal controls for low, mid and high frequencies operate. This enables them to correspond directly to the range of your voice or instrument.	Proprietary zEQ automatically adjusts the range of the tone controls to match your voice or instrument, making it easy to fine-tune your sound. Instead of adjusting the entire musical spectrum, zEQ automatically focuses on just those frequencies that are within the range of your voice or instrument. When you make tone adjustments with zEQ, you can be sure that they relate to your voice or instrument.
Integrated dynamics processing	Provides compression, limiting, de-esser, noise gates and kick drum gates, which can be applied to any or all channels. See Appendix A for more details.	Setup is simplified, as there is no external gear or cabling required.
Integrated effects processing	Provides access to multiple types of modulation, reverb and delay effects.	Setup is simplified, as there is no external gear or cabling required.
Bose® scenes	The T1 contains five Bose® scenes, which contain specific default processing configurations for various applications. The Bose scenes are Factory Settings Singer/Songwriter DJ/Playback Drums and Bass and Electric Works.	Serves as a great starting point for achieving your desired sound.
User-defined scenes	These let you store, recall and edit performance scenes (a snapshot of the complete state of the unit) into five user-defined scenes. See Appendix B for a listing of what is saved in a scene.	Quickly reset the T1 to your preset configuration to suit your application.
Shared scenes	You can store or upload five user-defined shared scenes between multiple T1s. This is achieved via a USB connection to a PC.	Enjoy the flexibility of the T1 by sharing your customized scenes with other users or uploading their uniquely created scenes to your T1.
Aux output	Each channel can be routed to the Aux output with the following options: Dry (after preamp), Pre (with EQ & FX), or Post (after fader).	Easily create a specialized submix for connecting to an additional L1™ system or recording device.
Integrated tuner	The display provides a tuning reference for A 440.	Ensure instruments are in tune, without the need for an external tuner.
Phantom power	Applies +48V power to input Channels 1-3. A red LED indicates that phantom power is enabled.	Provides voltage to drive condenser microphone amplifiers, eliminating the need for additional power supplies.

## ToneMatch™ Audio Engine *(contd.)*

Feature	Function	Benefit
Combination inputs	Inputs 1-3 feature analog inputs with a combination input that supports both balanced XLR audio cables or ¼" TS unbalanced phone plug cables.	Easily connect your sources to the T1, without the need for adapter cables.
Display	Provides function menus and system status displayed at 128 x 64 pixels.	The display text provides guidance when making adjustments, while the powerful backlit display ensures visibility in low-light applications.
ToneMatch™ port	Digital audio connection to Model II system. Provides power to the T1 when connected to the Model II system.	Enjoy the benefits of digital quality audio while alleviating the need for an additional power supply and excessive wiring when used with the L1 Model II system.
Master output	User-selectable analog output determined by the Preferences menu Master Out setting: pre- or post-Master volume analog output. This connection accepts a ¼" TRS balanced phone plug cable.	Easily connect to a L1™ Model I system or other device.
Preamp outputs 1-3	Preamp outputs for Channels 1-3. Accepts a ¼" TRS balanced phone plug cable.	A direct, dry output that may be connected to other amplifiers or a recording device.
Preferences	Provides access to the following global system utilities:	
	Status – Displays the effects assigned to each input channel.	Central location to quickly view effect status for all channels.
	Input level – Displays input level meters for all input channels.	Central location to quickly view input levels for all channels.
	Output level – Displays output level meters for all outputs: Master, Aux, and USB left/right.	Central location to view output signal levels. Especially useful in confirming levels when connecting into external recording devices.
	Version – Displays DSP and USB firmware versions.	Confirms which versions of DSP and USB firmware the system is equipped with.
	ToneMatch – Displays preset version.	Confirms which interchangeable ToneMatch preset banks are loaded on the system. Check <a href="http://www.Bose.com/musicians">www.Bose.com/musicians</a> for periodic updates on preset availability.
	Power stand – Displays power stand firmware version. (Not implemented currently.)	Displays the version of firmware the system is equipped with for troubleshooting or determining if an update is required.
	USB to PC – Provides easy integration to a PC.	Connects your T1 ToneMatch audio engine to your PC to download custom presets or back up scenes.
	USB from PC – A single wire connection for directing USB left and right channels from your PC to selected audio engine input channels.	Enjoy the benefits of the T1 when listening to music on your PC. One simple USB connection carries multichannel information.
	Master Out – Lets you configure the Master output for Source or Post-Master volume operation.	Designate the characteristics of the output signal to match your application.
USB port	A USB interface that allows you to connect the T1 to your PC using a standard USB device cable.	Lets you stream audio to or from your PC, update the T1 and back up user-defined scenes and configurations.
Optional mounting bracket	Secure mounting option for the T1.	Conveniently mounts the T1 to a microphone stand, making it easy to make adjustments.

## B1 Bass Module

Feature	Function	Benefit
Small and compact enclosure	With its compact design, built-in handle, and a weight of only 30 lb, the B1 bass module is ergonomically friendly.	Transport multiple B1s in a single trip. The small footprint of the B1 bass module takes up considerably less space than traditional bass enclosures.
Extremely efficient design	The B1 bass module includes two high output, high excursion 6.5" drivers. When connected to an L1™ Model I or Model II power stand, the signal is conditioned by active equalization circuitry.	Enjoy full bass response from a small, compact enclosure without colorization of tone.
Scalable bass solution	The Bass Line Out features a ¼" TRS output that may be used to feed to a PackLite® power amplifier.	Easily add a Packlite amplifier and additional B1 bass modules to achieve desired bass output.
B1 carrying bag	Slips over the B1 bass module and is included with purchase.	Protects the B1 bass module from most common dings or scratches while allowing access to the carry handle.

## Packlite® Power Amplifier Model A1

Feature	Function	Benefit
Powerful and compact design	Weighing only 3 lb, it easily provides amplification for up to two additional B1 bass modules.	The PackLite® power amplifier features an unmatched combination of power, weight and size. This rugged power amp can be easily carried in one hand or slipped into a gear bag.
Automatic equalization and efficiency	Gain-matched with the electronics in the power stand and B1 bass modules.	Add desired number of B1 bass modules to achieve powerful bass reinforcement without sacrificing tone.
General-purpose use	The amplifier can power any passive loudspeaker with a minimum load of 4 ohms and a power handling capability of at least 250 watts.	The flexibility, power handling, and lightweight design make the Packlite amplifier a great stand-alone amplifier.
Automatic input sensing and control	Intelligent design allows the system to sense whether the input signal is balanced or unbalanced. Performs appropriate gain adjustment.	Connect either balanced or unbalanced cables without having to make additional adjustments.
Protection limiter	Protects connected loudspeakers from amplifier-induced distortion.	Reduces the opportunity for damage to loudspeakers. Eliminates the need for outboard limiter and additional cable routing.
Rugged and durable scratch-resistant chassis	Protects internal components.	The PackLite® power amplifier can withstand most abuses of road travel.

## Appendix A: Effects Descriptions

The effects listed below have multiple uses, depending on your application. The powerful processing ability of the T1 allows you to easily integrate many types of effects to cover a wide variety of applications, while alleviating the need for outboard effects units.

Feature	Function
Dynamics processing	Provides gate, compression, limiter, de-esser and kick drum gates.
	<b>Compressor 1: Light</b> – Compressor featuring a preset low compression ratio with variable threshold and gain parameters. Works well as a general-purpose compression for most instruments and microphones that require minimal level control.
	<b>Compressor 2: Medium</b> – Compressor featuring a preset moderate compression ratio with variable threshold and gain parameters. Works well on basses, guitars, keyboards, and vocals.
	<b>Compressor 3: Heavy</b> – Compressor featuring a preset high compression ratio with variable threshold and gain parameters. Well-suited for loud instruments such as horns and drums, vocals or other instruments that require more aggressive level control.
	<b>Noise gate</b> – Adjustable threshold and speed independently assignable for each channel.
	<b>Limiter</b> – User-adjustable threshold and gain settings are independently assignable for each channel.
	<b>De-Esser</b> – User-adjustable threshold and gain settings are independently assignable for each channel.
	<b>Kick gate</b> – regular and fast gate types with user-adjustable threshold and tight settings, which are independently assignable to each channel.
Reverb	Lets you assign reverb to desired channels with control over the mix and brightness controls for each channel.
Reverb type	Lets you select a global reverb type that can be applied to all channels. The reverb types are plate, small, medium, large and cavern. Control decay time and level of reverb signal sent master output.
	<b>Plate</b> – Creates the ambience of a medium-sized space. Features adjustable time and balance (ratio of early/late reflections) parameters. Works well with guitar, horns, percussion instruments, and vocals.
	<b>Small</b> – Creates the ambience of a small space. Features adjustable time and balance (ratio of early/late reflections) parameters. Works well with guitar, horns, percussion instruments, and vocals.
	<b>Medium</b> – Creates the ambience of a medium-sized space. Features adjustable time and balance (ratio of early/late reflections) parameters. Works best on guitar, horns, percussion instruments, vocals, or other instruments.
	<b>Large</b> – Creates the ambience of a large space. Features adjustable time and balance (ratio of early/late reflections) parameters. Works well with guitar, horns, percussion instruments, or vocals.
	<b>Cavern</b> – Creates the ambience of an extremely large space. Features adjustable time and balance (ratio of early/late reflections) parameters.

## Appendix A: Effects Descriptions *(contd.)*

Feature	Function
Modulation	Provides access to several modulator effects including chorus, flange, phaser and tremolo. Independently assign and adjust the type of modulation for desired channels with discrete control over designated parameters for each channel.
	<b>Chorus 1: Brite</b> – Shimmering chorus that works well with acoustic instruments. Includes adjustable mix, depth and speed parameters.
	<b>Chorus 2: Warm</b> – Similar to Chorus 1, but with less emphasis on the high frequencies. Includes adjustable mix, depth and speed parameters. Works well with electric guitars/basses or other instruments.
	<b>Chorus 3: Dark</b> – Similar to Chorus 2, but with reduced high frequencies for a darker tone. Includes adjustable mix, depth, and speed parameters. Works well with electric guitars, basses or other instruments.
	<b>Flanger 1: Tape</b> – Tape-style flanger with no feedback. Includes adjustable mix, depth and speed parameters. Works well on electric guitars, basses or other instruments.
	<b>Flanger 2: Feedback</b> – Same as Flanger 1 but with preset Feedback effect.
	<b>Phaser 1: Stomp</b> – Classic “stomp box”-style phaser. Features a preset-wide speed with variable speed and feedback parameters. Works well as an effect on electric guitars, basses, keyboards or other instruments.
	<b>Phaser 2: Rack</b> – Classic “rack”-style phaser. Features a positive mix type with variable speed and feedback parameters. Well-suited as an effect for electric guitars, keyboards or other instruments.
	<b>Phaser 3: Warm</b> – Vintage-style phaser. Features a positive mix type with variable speed and feedback parameters. Works well on electric guitars, basses and keyboards.
	<b>Phaser 4: Bright</b> – Phaser with no bass. Features a positive mix type with variable speed and feedback parameters. Works well on electric guitars, keyboards or other instruments.
	<b>Tremolo</b> – Vintage-style tremolo effect with variable speed and depth parameters. Works well on guitars, keyboards or other instruments.
Delay	Choose from analog, digital or tape delay. Independently assign and adjust the delay settings for desired channels with discrete control over the mix and feedback time parameters for each channel. For example, you can select a tape delay for the vocal on Channel one and an analog delay for the guitar on Channel two.
	<b>Digital delay</b> – Digital delay effect where the repeats remain uncolored. Features adjustable mix, time and feedback parameters. Well-suited for guitars, drums or vocals.
	<b>Analog delay</b> – Classic analog delay effect where the repeats continuously deteriorate. Features adjustable mix, time and feedback parameters. Works well on guitars, drums or vocals.
	<b>Tape delay</b> – Vintage-style tape delay effect where the repeats deteriorate even more than with Analog delay. Works well on guitars, horns, harmonica or vocals.

## Appendix B: What's in a scene?

Feature	Function
Scene	A scene stores all ToneMatch™ audio engine settings, and the status of the Mute, FX Mute and CH Edit buttons.
	A scene does not store channel trim and channel volume levels, Master volume level or the Phantom power switch position.