Presenting a better choice for system designers…
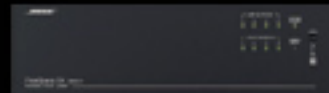
BOSE®

A lot.

A lot easier.

The Bose® FreeSpace® E4 Series II System

The heart of a business music system.
All in a single component.

A lot easier to configure
No multiple components to hand-wire.

A lot easier to stock
One SKU replaces many.

A lot easier to install
Fewer components, fewer wires, less time.

The heart of a business music system in a single component.

The FreeSpace E4-II system has everything you need for most business music system applications. Signal processing, amplification and unique business music system features are all in one component that fits easily on a shelf. There's no need to purchase, configure and mount racks of electronics – providing faster, smoother installation with less business interruption and downtime. The E4-II system delivers music and pages where they're needed – in up to four separate areas – inside or outside. And the system is engineered specifically for the demands of commercial applications like retail, restaurant and hospitality venues.

Run the business, not the music system.

With the E4-II system there are no knobs to adjust. The E4-II system can automatically control the music. You can schedule events like power on/power off, and preset volume levels and source selections by time or day. The E4-II system's innovative design lets you configure a suite of Bose® proprietary and patented technologies to meet the specific needs of each installation.

Busy times or quiet times, the music is never too loud or too soft.

Many business music systems require a separate component to provide automatic volume control – usually one for each zone of music. These conventional components respond to loudness in the room without differentiating between music and noise. As the ambient noise increases, conventional systems increase the volume. This adds to the overall volume, triggering the system to increase volume even more. Eventually, it's too loud in the room.

The FreeSpace E4-II system's Auto Volume uses a proprietary algorithm to maintain a constant relationship between the music in the room and the noise of the crowd – in up to four separate zones. Music volume automatically remains at the desired level relative to the ambient noise in the room.

In addition, the E4-II system distinguishes between sustained changes, like the level of conversation, and short-duration events, like a loud burst of laughter, reducing sudden and unsettling spikes or drops in the music level.

Four areas of sound. One cost-effective solution.

The E4-II system includes a 4-zone 400-watt amplifier with proprietary Power Sharing technology that dynamically allocates the proper amount of power to each zone. For example, a restaurant music system may need 210 watts in the dining room, 110 in the bar, 62 on the patio and 18 in the restrooms. The E4-II system efficiently distributes the power needed to each area – eliminating waste and reducing the need to buy, wire and install additional amplifiers.

A business music system engineered specifically for business.

Now system design, installation and service can be faster, more reliable and more cost effective – creating better solutions for business owners. In addition, the E4-II system is engineered and tested for demanding business environments, and it's backed by a transferable five-year limited warranty.

Quick-scan benefits of the FreeSpace® E4-II system

Proprietary Power Sharing technology allocates the right amount of power to each zone – reducing the need for separate amplifiers.

Auto Volume that's truly automatic maintains a constant relationship between music and noise, setting the volume where you want it – without manual adjustments. Music is never too loud or too soft.

Scheduling lets you pre-assign system on/off, volume, Auto Volume on/off and source selections by time or day – putting the focus on the customers, not the sound system.

Elegant wall-plate controls allow for easy control of system functions such as paging, volume and source selection.

Auto Volume control   *Standard control*   *Multi-zone paging control*

FreeSpace E4 Series II
Business Music System

Music-on-hold shares music sources with the phone system.

Multi-zone paging allows paging in one, some or all four zones.

Opti-source® level management system helps ensure that one source doesn't sound louder or softer than another.

Opti-voice® paging system provides seamless paging over music, to the zones where you want it.

Proprietary signal processing helps ensure music sounds rich and full at all listening levels.

Microphone phantom power provides compatibility with a wide variety of paging mics and eliminates the need for a separate power source.

Signal routing routes any input signal to any output zone.

Proprietary Power Sharing amplifier

Four zones of Auto Volume

Scheduling by time and day

Elegant wall-mounted keypads

Music-on-hold

Multi-zone paging

Opti-source® level management system

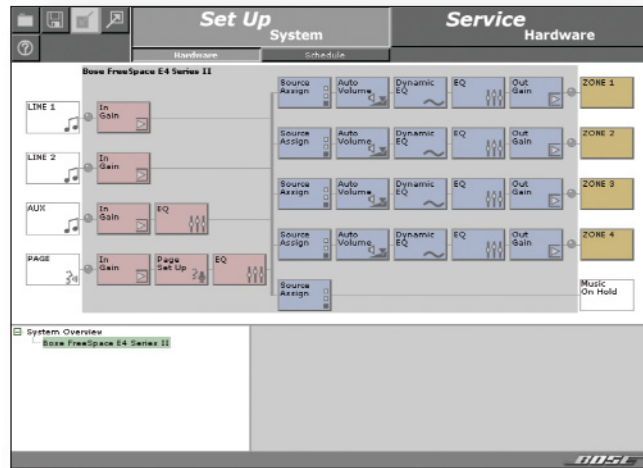Opti-voice® paging system

Microphone phantom power

Signal routing

Loudspeaker EQ

Room equalization

Input/output gains

System error log

FreeSpace® Installer™ software from Bose makes it easy to configure the E4-II system using a Windows® PC.

Loudspeaker EQ provides equalization for FreeSpace loudspeakers, without extra equipment.

Room equalization allows custom sound adjustment for up to four different rooms or areas, to optimize system performance.

Automatic limiter function protects loudspeakers from damaging transient signals.

Input/output gain structure is easily adjusted via PC for more reliable system operation.

System setup data is stored on removable memory card. Data can be easily transferred to a new unit, greatly reducing downtime.

Automatic error log enables service technicians to quickly diagnose and resolve system problems.

BOSE®
Better sound through research®

FreeSpace® E4 Series II System Electronics

Size (H x W x D):
5.25" (3U) x 17.25" x 15.5" (13.3 x 43.8 x 39.4 cm)

Weight:
30 lb. (13.6 kg)

Power Amp Technical Specifications

Power Output
Total shared power available for all channels: 400W
Maximum power per channel: 400W

Frequency Response
20Hz to 20kHz ±1dB

Channel Separation[1]
>70dB @ 1kHz

THD[1]
<1.0% at rated power, 0.1% at half rated power

Signal-to-Noise Ratio[1]
>90dB, A-weighted

Slew Rate
20V/μs

DSP Section Technical Specifications

Sample Rate
44.1kHz

A to D Conversion
24-bit, 128x oversampling

D to A Conversion
24-bit, 128x oversampling

Rear Panel Inputs, Outputs and Controls

Audio Inputs

Line Inputs (2 - unbalanced)
    Connector: Dual RCA (summed to mono)
    Range: -30dBV to +17dBV
    Impedance: 25k ohms
    Max Level: +17dBV

Mic/Line Input (1 - balanced)
    Connector: 3-pin Euroblock
    Range: -60dBV to +17dBV
    Impedance: 3.3k ohms
    Max Level: +17dBV

Mic/Line/Page Input (1 - balanced)
    Connector: 4-pin Euroblock
    Range: -60dBV to +17dBV
    Impedance: 3.3k ohms
    Max Level: +17dBV

Direct Input (1 - balanced)
    Connector: 4-pin Euroblock
    Range: 0dBV
    Impedance: 2.5k ohms
    Max Level: 0dBV

Sense Mic Inputs
Sense Mic 1-4: Euroblock connector

Control Connector: RJ-45

PC Input: RS-232 connector

**400W Power-Sharing Amplifier Outputs
(70V or 100V only)**

4 inverted Euroblock connectors

[1]Tested with AES 17 low-pass filter.

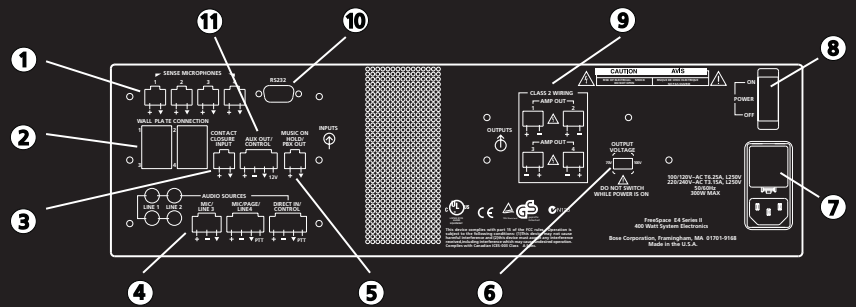# FreeSpace® Installer™ Software

System Requirements

Hardware
• Minimum 200 MHz Pentium-based PC
  (400 MHz recommended)
• 128MB free RAM
• 16-bit audio sound card
• 4x CD-ROM drive
• 60MB of free hard disk space

Display
• 800x600 resolution, 16-bit color (32-bit recommended)

Operating system
• Windows® 98, Windows NT 4.0, Windows 2000,
  Windows ME

❶ Sense Microphone Inputs	❻ Output Voltage Switch, 70/100V
❷ Wallplate Connections	❼ Fuse Box with Voltage Selector
❸ Remote on/off	❽ Power Switch
❹ Audio Source Connections	❾ Amplifier Outputs
❺ Music-on-Hold	❿ RS-232 System Control PC Input
	⓫ Auxiliary Ouput/Control

**For more information
call 877.428.2673**

or contact:
Bose Corporation
Professional Systems
The Mountain
Framingham, MA 01701
pro.bose.com

BOSE®
Better sound through research®