

Performance. Flexibility. Aesthetics.

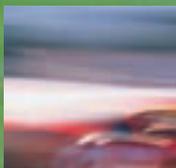




"I didn't think that it would be possible to achieve sound like that."

## **Engineered for performance. Designed for aesthetics.**

The Panaray® LT Series III loudspeaker family delivers high SPLs and a choice of dispersion patterns to meet the unique demands of medium and large venues worldwide. These loudspeakers are designed to meet the aesthetic requirements of many different venues and facilities. As a result, Panaray LT loudspeakers deliver the acoustic performance and visual appeal you need to exceed your customers' expectations in a variety of applications such as: **Stadiums • Arenas • Houses of worship • Auditoriums • Performing arts facilities • Municipal multipurpose spaces**



Lars Richt, Stadium Manager, Råsunda Stadium, Stockholm, Sweden

## Performance. Flexibility. Aesthetics.

### The high-SPL solution from Bose.

Whether your design requires the high SPLs demanded by sports facilities, or clear, intelligible speech for houses of worship and auditoriums, Panaray LT loudspeakers deliver a wide range of output levels to faithfully reproduce live and prerecorded program material.



### Advanced V2 mid-frequency engine.

Each LT mid/high model uses a Bose® proprietary V2 mid-frequency engine. These innovative 4.5-inch drivers are engineered specifically for professional applications, and provide smooth response and high reliability. The design also includes an integrated heat sink which improves heat dissipation and helps extend speaker life.

### Improved speech intelligibility and overall system performance.

The four mid/high Panaray LT models deliver a high degree of pattern control. When properly arrayed, the unique, tightly focused coverage of each Panaray LT loudspeaker helps minimize the overlap zones often found in conventional arrays. The result is a clearer sound image, and reduced interference throughout the coverage area of the array. Listeners can hear more intelligible speech and more natural music reproduction.

enclosures. Sixteen threaded stainless steel rigging points (4 top, 4 bottom and 4 on each side) allow for convenient rigging using industry-standard suspension hardware. Each loudspeaker is manufactured with a textured black finish and contoured stainless steel grille. Both cabinet and grille can be painted to match the surroundings.

### A better solution for designers, installers and listeners.

For sound designers and consultants, Panaray LT loudspeakers provide the coverage, performance and flexibility you need to exceed your clients' expectations. For dealers and installers, Panaray LT loudspeakers offer convenient rigging, sturdy construction

### Rugged construction. Easier rigging. Improved aesthetics.

Panaray LT loudspeakers are built with 10-ply marine-grade Baltic birch wood

**Quick-scan benefits of Panaray LT loudspeakers**

A variety of SPLs up to 134dB\*

High degree of directivity control

Deep bass without audible port noise

Multiple dispersion patterns

\*Pink noise at one meter

and complete technical and installation specs online. For venue owners, congregations and audiences, Panaray® LT loudspeakers reproduce music and speech with clarity and power. And their visually pleasing design helps them blend unobtrusively into the surroundings.

**Panaray LT MB24 III modular bass loudspeaker.**

This powerful, high-SPL bass source provides low-frequency reinforcement for medium- and large-venue engineered systems.

**Proprietary bass technology.**

The Panaray LT MB24 III loudspeaker uses an exclusive Bose® design that configures two 12-inch woofers in a proprietary acoustic enclosure. This



enables the Panaray LT MB24 III loudspeaker to deliver high SPL and wide bandwidth without audible port noise. This bass loudspeaker is designed – acoustically and aesthetically – to work with Panaray LT mid/high loudspeakers.

**Engineered and built for professional applications.**

The compact size of the Panaray LT MB24 III loudspeaker enables it to be used in a variety of bass arrays, including end fire and broadside configurations. This gives system designers the

ability to control bass directivity and focus bass energy on audience areas to reduce unwanted reverberation.

The Panaray LT MB24 III loudspeaker includes the same durable cabinet construction as the Panaray LT mid/high loudspeakers. It can be used for indoor and most outdoor applications. Sixteen threaded stainless steel rigging points (4 top, 4 bottom and 4 on each side) provide for convenient rigging using industry-standard suspension hardware. The black finish and stainless steel grille can also be painted.

**Five-year warranty.**

All Panaray LT loudspeakers are engineered and tested for demanding professional environments, and backed by a transferable five-year limited warranty.



Designed for optimum arrayability

Ten-ply marine-grade Baltic birch enclosure

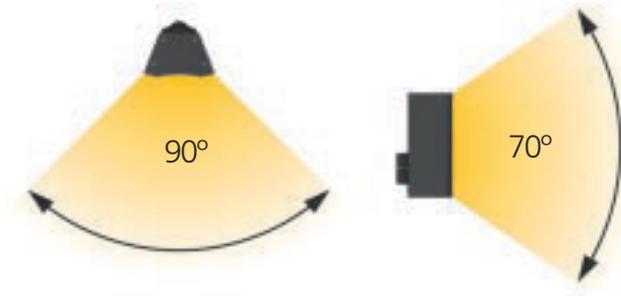
Sixteen stainless steel rigging points

Paintable cabinet and stainless steel grille

Transferable 5-year limited warranty

Horizontal

Vertical



Representative dispersion patterns

## Specifications

### Dimensions:

14.4" D x 22.5" W x 34.6" H (368.2mm x 571.9mm x 878.8mm)

### Weight:

96 lb. (43 kg)

### Driver complement:

Two 4.5-inch full-range V2 drivers and one 1.4-inch high-frequency compression driver

### Maximum acoustic output (pink noise):

Passive: 126dB-SPL @ 1m

Bi-amplified:

Mid-frequency: 127dB-SPL @ 1m

High-frequency: 123dB-SPL @ 1m

### Impedance:

Passive: 8  $\Omega$

Bi-amplified:

Mid-frequency: 8  $\Omega$

High-frequency: 8  $\Omega$

### Long-term power handling (with active EQ):

Passive: 140W

Bi-amplified:

Mid-frequency: 140W

High-frequency: 75W

### Sensitivity (pink noise):

Passive: 104dB, 1W @ 1m

Bi-amplified:

Mid-frequency: 105dB, 1W @ 1m

High-frequency: 104dB, 1W @ 1m

### Frequency range:

Passive: 180Hz to 16kHz  $\pm$  3dB

Bi-amplified:

Mid-frequency: 180Hz to 1.6kHz  $\pm$  3dB

High-frequency: 1.6kHz to 16kHz  $\pm$  3dB

### Internal crossover frequency:

1.6kHz

### Beamwidth (-6dB angle, average 800Hz – 5kHz):

92° horizontal, 61° vertical

### Cabinet:

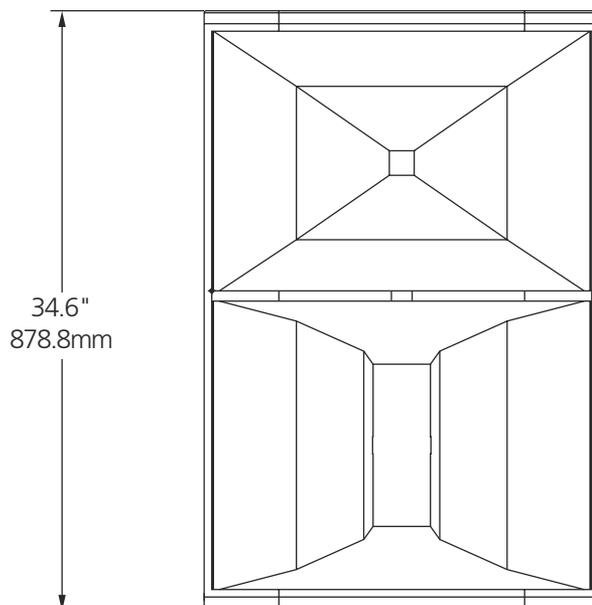
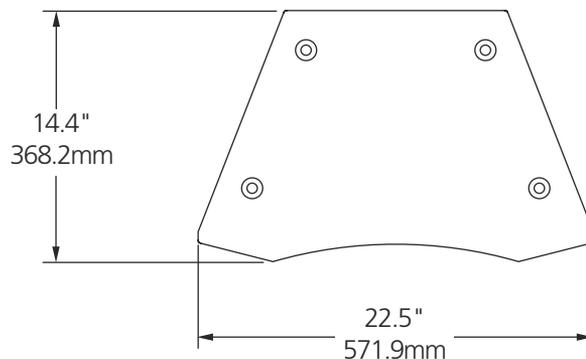
Ten-ply marine grade Baltic birch

### Connectors:

Dual NL4 connectors

### Color:

Black



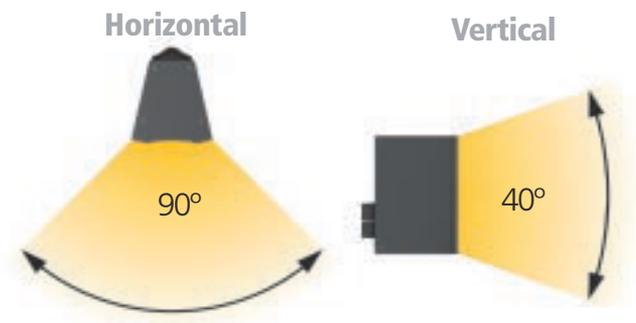


# Panaray<sup>®</sup> LT 9702<sup>®</sup> III Loudspeaker

Horizontal dispersion

90°  
70°

Vertical dispersion



**Representative dispersion patterns**

## Specifications

**Dimensions:**

23.7" D x 22.5" W x 34.6" H (604.3mm x 572mm x 878.8mm)

**Weight:**

113 lb. (51 kg)

**Driver complement:**

Two 4.5-inch full-range V2 drivers and one 1.4-inch high-frequency compression driver

**Maximum acoustic output (pink noise):**

Passive: 128dB-SPL @ 1m

Bi-amplified:

Mid-frequency: 128dB-SPL @ 1m

High-frequency: 125dB-SPL @ 1m

**Impedance:**

Passive: 8 Ω

Bi-amplified:

Mid-frequency: 8 Ω

High-frequency: 8 Ω

**Long-term power handling (with active EQ):**

Passive: 140W

Bi-amplified:

Mid-frequency: 140W

High-frequency: 75W

**Sensitivity (pink noise):**

Passive: 106dB, 1W @ 1m

Bi-amplified:

Mid-frequency: 106dB, 1W @ 1m

High-frequency: 106dB, 1W @ 1m

**Frequency range:**

Passive: 180Hz to 16kHz ± 3dB

Bi-amplified:

Mid-frequency: 180Hz to 1.6kHz ± 3dB

High-frequency: 1.6kHz to 16kHz ± 3dB

**Internal crossover frequency:**

1.6kHz

**Beamwidth (-6dB angle, average 800Hz – 5kHz):**

95° horizontal, 39° vertical

**Cabinet:**

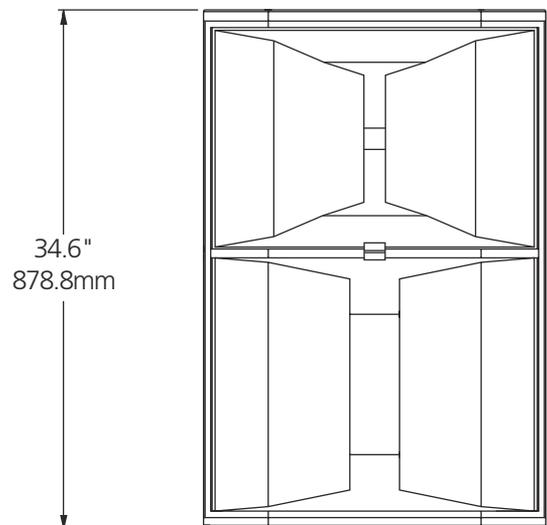
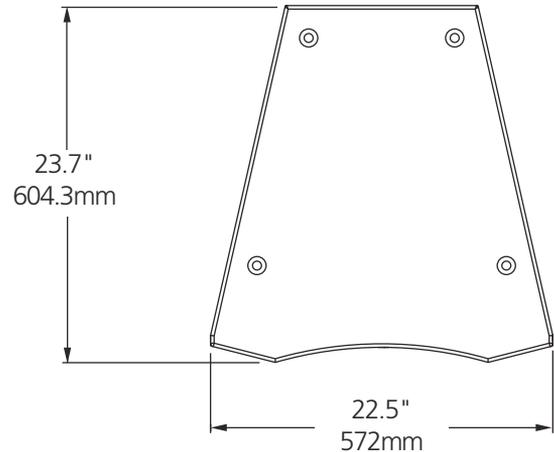
Ten-ply marine grade Baltic birch

**Connectors:**

Dual NL4 connectors

**Color:**

Black





# Panaray<sup>®</sup> LT 9402<sup>™</sup> III Loudspeaker

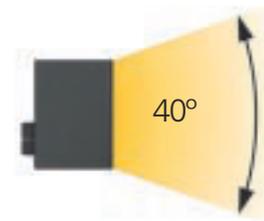
Horizontal dispersion

90°  
40°

Vertical dispersion

Horizontal

Vertical



Representative dispersion patterns

## Specifications

### Dimensions:

24" D x 18.5" W x 34" H (610.3mm x 471mm x 883.6mm)

### Weight:

111 lb. (50 kg)

### Driver complement:

Two 4.5-inch full-range V2 drivers and one 1.4-inch high-frequency compression driver

### Maximum acoustic output (pink noise):

Maximum acoustic output:

Passive: 130dB-SPL @ 1m

Bi-amplified:

Mid-frequency: 128dB-SPL @ 1m

High-frequency: 126dB-SPL @ 1m

### Impedance:

Passive: 8 Ω

Bi-amplified:

Mid-frequency: 8 Ω

High-frequency: 8 Ω

### Long-term power handling (with active EQ):

Passive: 140W

Bi-amplified:

Mid-frequency: 140W

High-frequency: 75W

### Sensitivity (pink noise):

Passive: 108dB, 1W @ 1m

Bi-amplified:

Mid-frequency: 106dB, 1W @ 1m

High-frequency: 107dB, 1W @ 1m

### Frequency range:

Passive: 180Hz to 16kHz ± 3dB

Bi-amplified:

Mid-frequency: 180Hz to 1.6kHz ± 3dB

High-frequency: 1.6kHz to 16kHz ± 3dB

### Internal crossover frequency:

1.6kHz

### Beamwidth (-6dB angle, average 800Hz – 5kHz):

44° horizontal, 38° vertical

### Cabinet:

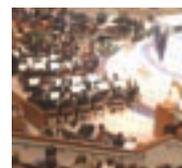
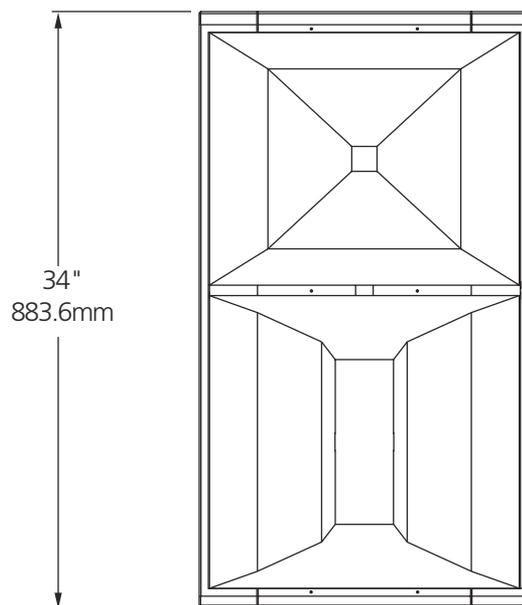
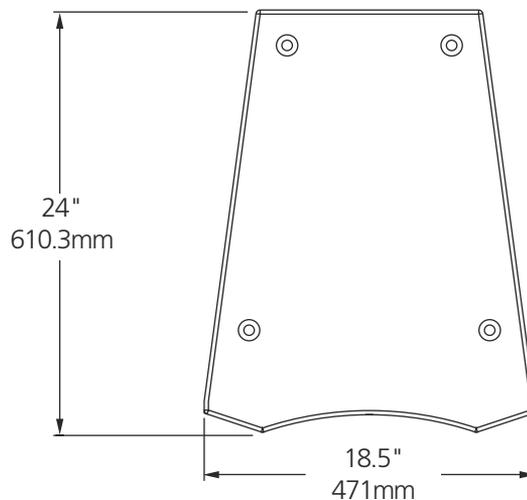
Ten-ply marine grade Baltic birch

### Connectors:

Dual NL4 connectors

### Color:

Black





# Panaray<sup>®</sup> LT 4402<sup>®</sup> III Loudspeaker

Horizontal dispersion

40<sup>°</sup>

Vertical dispersion

40<sup>°</sup>

Horizontal

Vertical



## Specifications

**Dimensions:**

35.9"D x 22.5"W x 42.2"H (913mm x 572.6mm x 1072.5mm)

**Weight:**

194 lb. (88 kg)

**Driver complement:**

Four 4.5-inch full-range V2 drivers and one 1.4-inch high-frequency compression driver

**Maximum acoustic output (pink noise):**

Passive: 134dB-SPL @ 1m

Bi-amplified:

Mid-frequency: 132dB-SPL @ 1m

High-frequency: 130dB-SPL @ 1m

**Impedance:**

Passive: 16 Ω

Bi-amplified:

Mid-frequency: 16 Ω

High-frequency: 8 Ω

**Long-term power handling (with active EQ):**

Passive: 280W

Bi-amplified:

Mid-frequency: 280W

High-frequency: 75W

**Sensitivity (pink noise):**

Passive: 110dB, 1W @ 1m

Bi-amplified:

Mid-frequency: 107dB, 1W @ 1m

High-frequency: 111dB, 1W @ 1m

**Frequency range:**

Passive: 200Hz to 16kHz ± 3dB

Bi-amplified:

Mid-frequency: 200Hz to 1.6kHz ± 3dB

High-frequency: 1.6kHz to 16kHz ± 3dB

**Internal crossover frequency:**

1.6kHz

**Beamwidth (-6dB angle, average 800Hz – 5kHz):**

36° horizontal, 22° vertical

**Cabinet:**

Ten-ply marine grade Baltic birch

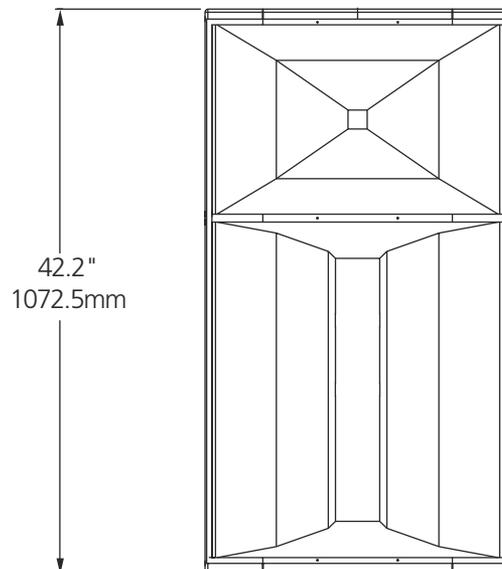
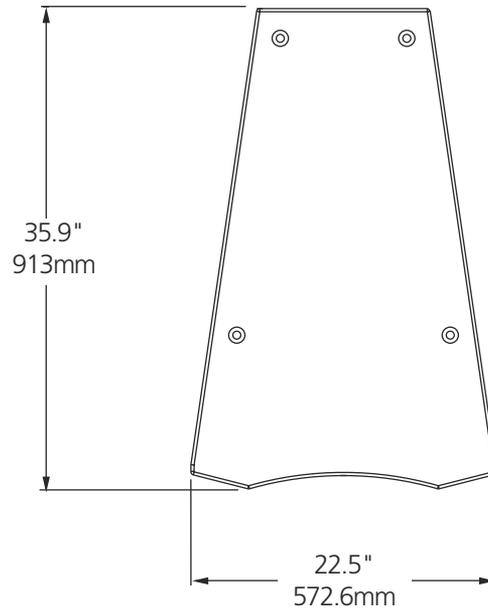
**Connectors:**

Dual NL8 connectors

**Color:**

Black

Representative dispersion patterns





# Panaray<sup>®</sup> LT 3202<sup>®</sup> III Loudspeaker

Horizontal dispersion

30°

Vertical dispersion

20°

## Specifications

**Dimensions:**

25.5" D x 20" W x 28.1" H (646.4mm x 508mm x 712.6mm)

**Weight:**

129 lb. (59 kg)

**Driver complement:**

Two 12-inch woofers

**Maximum acoustic output (pink noise):**

Parallel: 123dB-SPL @ 1m

Discrete:

Driver 1: 117dB-SPL @ 1m

Driver 2: 117dB-SPL @ 1m

**Impedance:**

Parallel: 4  $\Omega$

Discrete:

Driver 1: 8  $\Omega$

Driver 2: 8  $\Omega$

**Long-term power handling (with active EQ):**

Parallel: 800W

Discrete:

Driver 1: 400W

Driver 2: 400W

**Frequency range:**

Parallel: 40Hz to 250Hz  $\pm 3$ dB

Discrete: 40Hz to 250Hz  $\pm 3$ dB

**Sensitivity (pink noise):**

Parallel: 94dB SPL, 1W @ 1m

Discrete:

Driver 1: 91dB, 1W @ 1m

Driver 2: 91dB, 1W @ 1m

**Cabinet:**

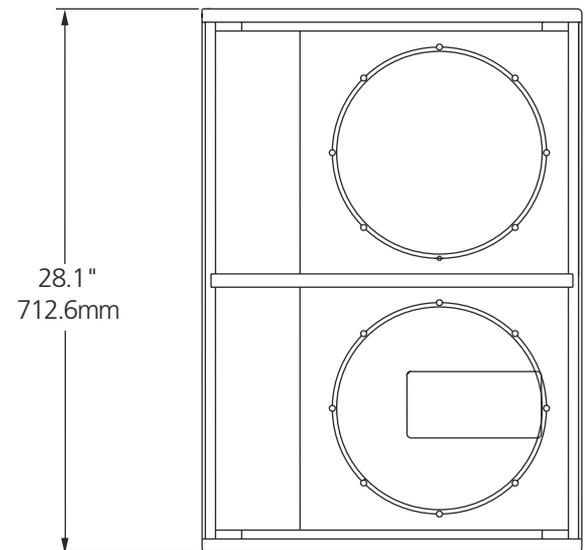
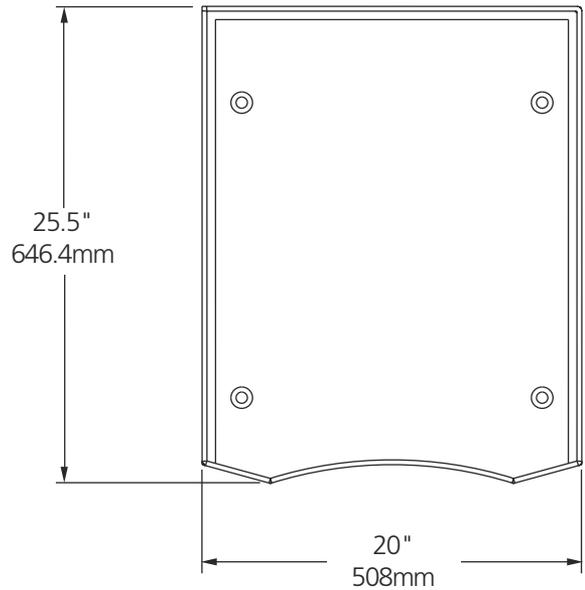
Ten-ply marine grade Baltic birch

**Connectors:**

Dual NL4 connectors

**Color:**

Black



Specifications subject to change without notice.





**Panaray<sup>®</sup> LT MB24 III Modular**  
**Bass**  
**Loudspeaker**

## Panaray LT Loudspeaker Cluster Arrays



### **Two-tier cluster (LT 4402® loudspeakers)**

This complex cluster consists of three Panaray LT 4402 loudspeakers on the top tier to cover approximately 132 degrees. The bottom tier of three LT 4402 loudspeakers is used for down fill.



### **Three-tier cluster (LT 3202® and LT 4402 loudspeakers)**

Two LT 3202 loudspeakers on top provide long throw and cover approximately 60 degrees. The middle tier of two LT 4402 loudspeakers covers approximately 88 degrees. Two LT 4402 loudspeakers on the bottom tier provide down fill.

**When arrayed as shown, Panaray LT loudspeakers significantly reduce the interference that causes**



**Simple cluster  
(LT 4402 and LT 9402™ loudspeakers)**

Two LT 4402 loudspeakers on the top tier cover approximately 88 degrees. The LT 9402™ loudspeaker on the bottom tier provides down fill.



**LT MB24 compound bass array**

This compound bass array uses a total of six LT MB24 loudspeakers and provides 100° horizontal and 30° vertical dispersion at 125Hz.

**uneven sound coverage. In addition, the focused sound beams help minimize reverberation.**



## **Bose® Professional Systems**

Engineered sound systems demand an uncommon expertise and specialized products. Bose is dedicated to developing products and technologies that help acoustic designers and consultants create more accurate, more reliable and more cost-effective solutions for their clients.

Bose Professional Systems provide product and technical information, marketing and demonstration materials, design resources and other support to a worldwide network of dealers and installers. We help these carefully selected professionals take projects from start to finish and provide a high level of service after the job is done.

**Panaray®** LT Series III Loudspeakers



**For more information:**

1-877-428-2673

Outside North America call +508-879-7330

[pro.bose.com](http://pro.bose.com)

**Performance. Flexibility. Aesthetics.**

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call toll free  
1-877-428-2673.  
Outside North America  
call +508-879-7330  
or contact  
Bose Corporation  
Professional Systems  
The Mountain  
Framingham, MA 01701  
[pro.bose.com](http://pro.bose.com)

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Better sound through research<sup>®</sup>