

BOSE[®]



PANARAY[®] 802[®]-III Loudspeaker

What is new about the PANARAY[®] 802-III loudspeaker?

The PANARAY 802-III loudspeaker has been improved in the following ways:

- The cabinet and grille have been redesigned to update the look of the speaker.
- The product has met or exceeded strict environmental testing for long life outdoors. We test for durability in heat, cold, salt fog, humidity, and sand and dust conditions.
- The fuse has been removed and the speaker now has an internal protection circuit that trips and resets should the input to the speaker exceed recommended levels.
- The drivers are new. The environmental durability is built-in. The soft parts of the driver are impregnated with Kevlar and other resins for moisture resistance. The hard parts are coated for resistance to damage from harsh weather.
- The rear connectors are now two parallel-wired Neutrik NL4 Speakon receptacles.
- There is now a full line of brackets for wall mounting and flying the 802-III speaker.
- There are new equalizer cards to match the performance of the Series III speaker.
- There is a new PANARAY System Digital Controller loaded with simple-to-use presets for the 802-III in mono or stereo, singles or pairs and crossed over with Bose[®] bass loudspeakers.

What is unchanged about the PANARAY[®] 802-III loudspeaker?

The PANARAY 802-III loudspeaker still provides natural sound and high output from a compact, light-weight enclosure. The 802-III speaker uses innovative design features that have characterized its performance since the first 802 speakers were introduced. Here is a list of these innovations:

- Articulated Array[®] speaker configuration
- 4.5-inch drivers
- Rugged, durable carrying case that doubles as a monitor stand
- Ergonomic handle for easy carrying



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When was the first 802[®] loudspeaker made?

In 1972, Bose[®] entered the professional market by offering the 800 loudspeaker system designed exclusively for the demanding, discriminating tastes of the professional musician. The 800 product used the technologies developed for the 901[®] speaker and created a product for professional use. In 1978, Bose redesigned the 800 speaker to create the 802 Series I loudspeaker. This product re-created the 800 acoustic package in a light and high-impact-resistant case with a unique cover/carrying handle feature. The 802 also improved on the 800 array design and power-handling characteristics of the full-range drivers. The 802 product set the standard for professional loudspeakers for years to come.

What are the benefits of the 4.5-inch drivers?

The 4.5-inch, full-range drivers provide a more consistent sound field than conventional speakers that rely on woofers, tweeters and crossovers. Traditional speakers need to electronically cross their drivers in one or two bands. These crossovers usually cause a dip or a spike in the frequency response of the speaker, adding an unnatural element to the speaker performance. Additionally, these crossovers often occur in the frequency range of voice reproduction, where human ears are most sensitive to discrepancies in sound fidelity. The patented 4.5-inch driver design also dissipates heat more easily than conventional transducers for greater power handling. Cooler drivers have a longer life with greater reliability. Eight full-range drivers in a single 802 enclosure can handle 240-watt continuous or 480-watt peak power. Bose has engineered exceptional durability and reliability into this driver, and is continuously improving on its strength and acoustic clarity.

What does it mean that this can be installed outdoors?

The environmental durability is built-in. The soft parts of the driver are impregnated with Kevlar and other resins for moisture resistance. The hard parts are coated for resistance to damage from harsh weather. It has met or exceeded strict environmental testing for long life. We test for durability in extreme heat, cold, salt fog, humidity, and sand and dust conditions.

What is different about the grille?

The styling on the grille is new and echoes the famous ports of the 802 Series I and II. The grille is now metal for greater environmental durability.

Why did you get rid of the ports?

The ports are not removed, only recessed into the housing. They have the same acoustic performance as the 802-II ports. They were recessed as part of the cosmetic update of the speaker.

What is the purpose of the ring around the grille?

This is called the trim ring. It is a part of the cosmetic update of the speaker. It is very durable and has been shown to withstand active portable use.

PANARAY® 802®-III Loudspeaker

What is an Articulated Array®?

Bose® discovered that by using an array of full-range drivers and a ported enclosure they could create full-range sound reproduction with greater clarity and smoothness. The Articulated Array speaker baffle configures the eight full-range drivers to provide consistent and wide horizontal and vertical dispersion over all bandwidths.

How many can I stack in a column?

The 802®-III can be used as a single, a stacked pair, or stacked vertically as a column. Depending on the application, any number can be stacked to achieve the output desired.

Does the 802-III loudspeaker work with the previous 802C controller?

The 802®C is discontinued. We do not recommend use of the 802-III with the previous revision 802C as this sound will not be optimal. The current PANARAY System Digital Controller is programmed for the 802 Series I, II and III and has easily selectable settings for mono, stereo, and two-way use of the speaker with Bose bass loudspeakers.

Can I mix 802-II and 802-III loudspeakers in the same stack or system?

The sound may not be optimal if series II and III speakers are mixed in a stack. If speakers are used in mono and separated by distance, the acoustic difference between the Series II and III will most likely not be noticed.

What are the connectors on the back?

Two Neutrik NL4 Speakon connectors, wired in parallel.

Where do I cross it over with the MB4? 502®B? Model 1B?

We recommend that you crossover the 802-III speaker at 160 Hz when using it with a Bose® bass loudspeaker. The PANARAY System Digital Controller contains easy-to-use presets for each of these scenarios.

What brackets are available for the 802-III loudspeaker?

The 802-III brackets are optional, come in black and are weather resistant.

- WBP-8 802 Bipivot wall mount bracket
- SB8-802 Single fly bracket
- SB82-802 Stacked pair fly bracket

PANARAY® 802®-III Loudspeaker

Are the brackets environmental?

The steel materials in the brackets are a pre-coated G90 (hot dipped galvanized) material. The products are then powder-coated. We do not recommend these brackets for high salt fog environments, such as cruise ships, but standard outdoor installation is acceptable and the brackets are adequately protected. Thin surface scratches can be tolerated provided they're not too wide or deep. The precoating will provide adequate galvanic protection across thin scratches.

Is the PANARAY® 802®-III loudspeaker actively equalized?

Yes, the 802-III speaker requires active equalization. Active equalization ensures balanced low, mid and high frequencies in the loudspeaker. In addition, it provides high- and low-band pass filtering.

How do I get the proper equalization for the PANARAY 802-III ?

There are two options for 802-III active equalization. There is an 802-III equalizer card available for use with the Bose® M2150, 1600 VI and 1800 VI amplifier input cards. The PANARAY System Digital Controller provides easy, push-button presets for all Bose professional loudspeakers. The PANARAY controller contains 180 presets for mono and stereo operation, as well as three presets for bass arrays. As a bonus, programmable delay, limiting and routing are available in this 2 x 4 controller.

What is happening to the 802C controller?

The 802C controller has been discontinued and is replaced with the PANARAY System Digital Controller that has all the functions of the 802C controller plus programmable delay, limiting and routing. The PANARAY System Digital Controller contains 180 presets for use with all Bose® professional loudspeakers.

What amplifier should I use to drive the 802-III loudspeaker

We recommend that one channel of the Bose 1800 VI amplifier drive each 802-III loudspeaker.

What are the design rules?

The design rules for the 802-III are the same as the series II loudspeaker.

What colors does the PANARAY 802-III loudspeaker come in?

The 802-III comes in black.

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What is the frequency response of the PANARAY[®] 802[®]-III loudspeaker?

55 Hz to 16 kHz \pm 3 dB (same as 802-II)

What is the maximum power handling of the PANARAY 802-III loudspeaker?

240-watts continuous (same as 802-II)

What are the dimensions of the PANARAY 802-III loudspeaker?

33 cm H x 52 cm W x 32 cm D (same as 802 II)

Is the PANARAY 802-III loudspeaker paintable?

No.

What the maximum SPL of the PANARAY 802-III loudspeaker?

114 dB SPL @ 1 m, pink noise

116 dB SPL @ 1 m, IEC noise

How much does one PANARAY 802-III loudspeaker weigh?

14 kg or 31 lbs

What is the warranty on the PANARAY 802-III loudspeaker?

As with all Bose professional loudspeakers, the 802-III loudspeaker has a five-year limited transferable warranty.