

## Overview

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Portable PA system equipped with a 100 W power amp, coaxial compression driver with 1.4" voice coil HF and 6.5" cone LF, a 3-channel mixer.



## Features

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- 100 W Class-D amplifier
- 1.4" HF + 6.5" LF high-quality coaxial compression driver using an FIR filter for the crossover
- 3-channel mixer (2 monaural mic/line + 1 line)
- Equipped with a 2-band master EQ
- Compatible with Hi-Z input (Channel 2 only)
- Equipped with mix-out
- Carrying handle doubles as an adjustable stand
- Compatible with audio accompaniment over Bluetooth
- Optional carry bag (BAG-STP100) available for convenient transport
- Internal lithium-ion battery (STAGEPAS 100BTR only)

## Specifications

### Outline

		STAGEPAS 100BTR	STAGEPAS 100
Type		2-way Bi-amp Powered Speaker with mixer	2-way Bi-amp Powered Speaker with mixer
I/O	Inputs	INPUT 1: Combo (mic/line), INPUT 2: Combo (mic/line, Hi-Z), INPUT 3: Stereo Mini x 1 (line)	INPUT 1: Combo (mic/line), INPUT 2: Combo (mic/line, Hi-Z), INPUT 3: Stereo Mini x 1 (line)
	Outputs	OUTPUT: XLR3-32 (INPUT 1-3 mix)	OUTPUT: XLR3-32 (INPUT 1-3 mix)
	Bluetooth	Ver.5.0, A2DP (SBC, AAC), Class 1	Ver.5.0, A2DP (SBC, AAC), Class 1
Processors		2 Band EQ	2 Band EQ

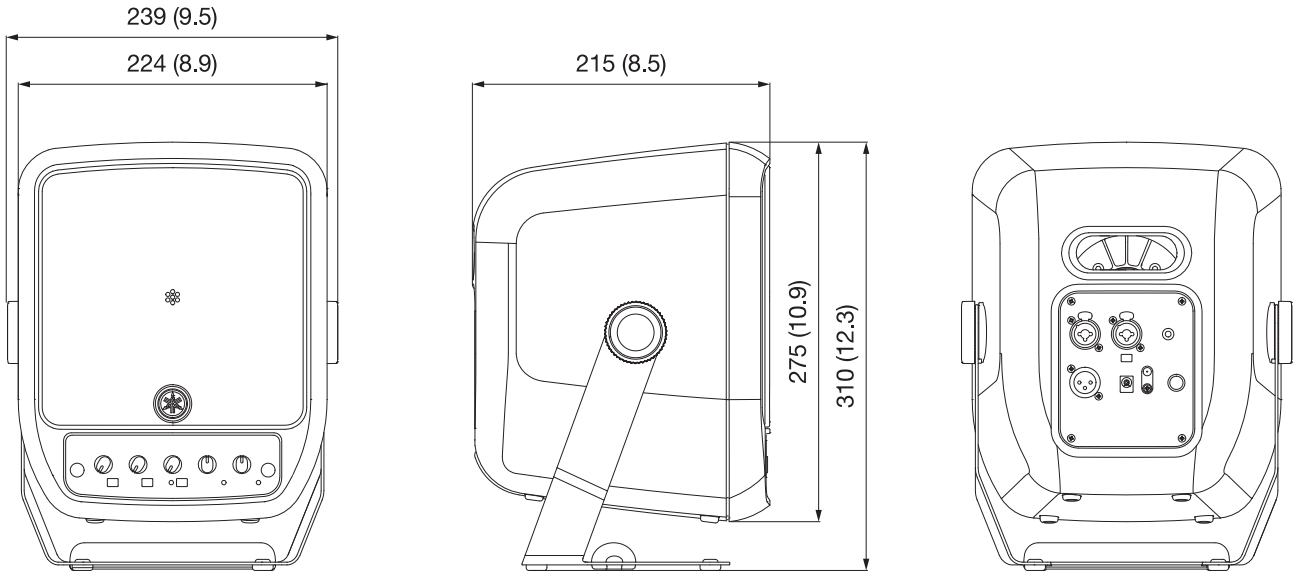
### General Specifications

		STAGEPAS 100BTR	STAGEPAS 100
Speaker Type		Coaxial speaker with compression driver	Coaxial speaker with compression driver
Frequency Range (-10 dB)		70 Hz – 20 kHz	70 Hz – 20 kHz
Coverage Area		H90° x V90°	H90° x V90°
Crossover		1.8 kHz (FIR-X)	1.8 kHz (FIR-X)
Maximum Output Level (1 m; on axis)		120 dB SPL *1	120 dB SPL *1
Components	LF	6.5" cone, 1.7" voice coil	6.5" cone, 1.7" voice coil
	HF	1" throat compression driver, 1.4" voice coil	1" throat compression driver, 1.4" voice coil
Amplifier Class		Class-D	Class-D
Power Rating	Dynamic	100 W (LF: 93 W, HF: 7 W)	100 W (LF: 93 W, HF: 7 W)
Cooling		Natural convection (no fan)	Natural convection (no fan)
Power Consumption		10 W (Idle), 30W (1/8 power)	10 W (Idle), 30W (1/8 power)
Power Requirements		100 - 240 V 50/60 Hz	100 - 240 V 50/60 Hz
Battery	Type	Rechargeable Lithium ion battery pack	-
	Capacity	60 Wh	-
	Operating Time	Maximum 6 hours, 1/16 power continuous 5 hours	-
	Charging Time	Approx. 2.5 hours	-
Cabinet Material		Plastic (PP)	Plastic (PP)
Handle		Bottom x 1 (Rotatable)	Bottom x 1 (Rotatable)
Mounting Hardware		1 x 3/8", depth 12 mm (center of handle)	1 x 3/8", depth 12 mm (center of handle)
Dimensions (W x H x D)		239 mm x 310 mm x 215 mm (9.5" x 12.3" x 8.5") (with handle)	239 mm x 310 mm x 215 mm (9.5" x 12.3" x 8.5") (with handle)
Weight		5.5 kg (12.1 lbs) (without AC adaptor)	5.2 kg (11.5 lbs) (without AC adaptor)
Accessories		Power Cord x 1, AC Adaptor (PA-500) x 1	Power Cord x 1, AC Adaptor (PA-500) x 1
Options		Carrying Bag: BAG-STP100	Carrying Bag: BAG-STP100

\*1 Measured peak SPL with pink noise @1 m.

## Dimensions

Unit: mm (inch)



## Options

- Carrying Bag BAG-STP100

## Architectural and Engineering Specifications

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The Yamaha STAGEPAS 100BTR/STAGEPAS 100 shall be a compact, portable PA system designed for live music and events. The STAGEPAS 100BTR/STAGEPAS 100 system shall integrate a bi-amplified coaxial powered loudspeaker with a built-in 3-channel mixer. Two models shall be available: the STAGEPAS 100 shall be powered by an external AC adapter only, and the STAGEPAS 100BTR model shall be powered by an external AC adapter that also charges a built-in rechargeable lithium ion battery that can power the unit for up to 6 hours when AC power is not available.

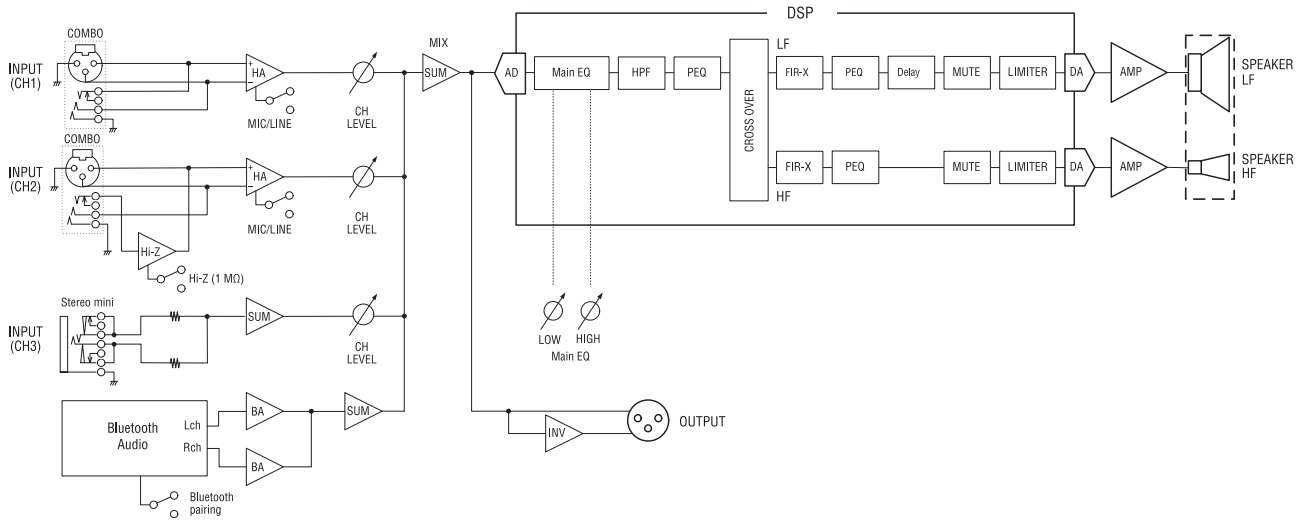
The STAGEPAS 100BTR/STAGEPAS 100 mixer section shall have 3 analog input channels (2 mono microphone/line + 1 stereo line that is mixed to mono). All channels shall have LEVEL controls. Channels 1 and 2 shall additionally include MIC/LINE input selectors. Channel 2 shall include a Hi-Z switches to allow direct input of musical instruments. A 2-band EQ section with LOW and HIGH controls that affect the overall program signal shall also be provided. A power indicator LED shall be provided on the control panel. A battery status indicator LED shall additionally be provided on the STAGEPAS 100BTR control panel. A Bluetooth switch and indicator shall allow pairing with up to eight Bluetooth audio source devices, one of which can be wirelessly connected to the STAGEPAS 100BTR/STAGEPAS 100 at a time. Bluetooth input shall be routed to the mixer's stereo input 3.

The STAGEPAS 100BTR/STAGEPAS 100 shall provide balanced XLR/TRS combo connectors for input to mono channels 1 and 2. A stereo mini phone jack shall be provided for mono or stereo input to INPUT 3. Stereo signals applied to INPUT 3 shall be internally mixed to mono. An XLR OUTPUT connector shall be provided for connection to a powered speaker for monitoring. The amplifier section shall be an efficient class-D type capable of delivering 100 watts dynamic output.

The STAGEPAS 100BTR/STAGEPAS 100 loudspeaker system shall include a coaxial (two-way) speaker unit with a 6.5" low-frequency cone and high-frequency compression driver with a 1.4" dome and 1" throat. The loudspeakers shall meet the following performance criteria: Maximum SPL shall be 120 dB at 1 meter, frequency range shall be 70 Hz to 20 kHz at 10 dB below rated sensitivity, and the crossover frequency shall be 1.8 kHz via an FIR-X filter that ensures linear phase response.

The STAGEPAS 100BTR/STAGEPAS 100 loudspeakers, mixer, and power amplifier shall be built into an integrated plastic enclosure with a handle that doubles as a stand for floor placement. The stand shall be provided with a 3/8" screw hole for microphone stand mounting. Adjustment screws on either side of the unit shall allow the unit to be adjusted to any angle. The STAGEPAS 100 system shall be supplied with a universal AC adapter (100V – 240V, 50/60 Hz) and owner's manual. The STAGEPAS 100BTR shall additionally include a built-in rechargeable 60 watt-hour lithium ion battery that is capable of powering the STAGEPAS 100BTR for up to 6 hours (5 hours continuous operation at 1/16th power). The built-in battery shall be charged to full by the supplied AC power adaptor in approximately 2.5 hours. A dedicated carrying bag shall be available as an option. Overall dimensions including handle/stand shall be 239 (W) x 310 (H) x 215 (D) mm. STAGEPAS 100 weight shall be 5.2 kg. STAGEPAS 100BTR weight shall be 5.5 kg.

## Block Diagrams



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