TECHNICAL DATA

Veritas 250BL

smart mixer amplifier



Product Overview

The award-winning Veritas series from Bose Professional delivers superior background/foreground music, paging and multimedia for commercial applications. *Bluetooth*® 5.0 wireless input and user-intuitive OLED screen with quick-start QR code simplify setup—whether you're a pro installer or a DIYer. With four models to choose from, Veritas amplifiers offer the perfect combination of power, performance and flexibility.

The 250BL is perfect choice for DIYers looking for professional-grade audio without the complexity. A flexible choice for low-impedance 4/8-ohm systems, the 250BL is ideal for smaller rooms, boutique shops, and localized sound installations. Weighing just 4.4 pounds, its compact half-rack design allows for easy, discreet mounting virtually anywhere.

Key Features

Premium amplification with advanced DSP for optimized performance

***Bluetooth* connectivity** and RCA connectivity—no wire splicing required

Intuitive front-panel OLED screen for easy setup and control

Included bracket accessory for mount-anywhere flexibility

Embedded quick-start QR code in the OLED screen simplifies installation

Supports low-impedance (4–8Ω) applications

Remote level control with Bose Professional or third-party wall controllers

Dynamic EQ adjusts bass levels to achieve a fuller sound even at low volumes

Up to 30 selectable EQ presets ensure Bose Professional signature sound performance and long-term reliability

Opti-Voice paging feature ensures clear speech intelligibility

Convection cooling for fanless operation in quiet installs such as offices and conference rooms

Applications

Retail stores

Restaurants and bars

Hospitality venues

Conference centers

Schools

Auxiliary zones

For additional specifications and application information, visit BoseProfessional.com. Specifications are subject to change. 05/2025

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Technical Specifications

POWER RATING		
Amplifier Power	2 × 50 W at 4 Ω / 2 × 25 W at 8 Ω	
AUDIO PERFORMANCE		
Frequency Response	40 Hz – 18 kHz (+0/-3 dB, @ 1 W reference 1 kHz)	
THD+N	≤0.3 % (at full rated power)	
Channel Separation (Crosstalk)	≤-60 dBV (below rated power, 1 kHz)	
Dynamic Range	88 dB	
INTEGRATED DSP		
A/D & D/A Converters	24-bit, 48 kHz	
Processing Functions	Volume, tone controls, Opti-Voice paging, loudspeaker EQ, Dynamic EQ	
Loudspeaker Presets	Flat, 80 Hz high-pass filter, AMU105, AMU108, DesignMax (all models), EdgeMax (all models), FreeSpace FS (all models), subwoofer	
Audio Latency	10.4 ms (any input to speaker output or aux output)	
AUDIO INPUTS	**Line Inputs**	**Page Inputs**
Input Channels	(2) unbalanced line, (1) balanced mic/line	(1) balanced mic/line
Connectors	(2) RCA stereo pairs, (1) XLR/¼-in	(1) 4-pin Euroblock
Input Range	-10 dBV to +10 dBV	-60 dBV to +10 dBV
Adjustment Range	-20 dB to +20 dB	0 dB to +50 dB
Input Impedance	20 kΩ	2.4 kΩ
Maximum Input Level	+10 dBV	+10 dBV
Sensitivity	-10 dBV	-58 dBV
Nominal Input Level	0 dBV	-40 dBV
AUDIO OUTPUTS	**Loudspeaker Outputs**	**Auxiliary Outputs**
Output Channels	(2) loudspeaker	(1) unbalanced line
Connectors	(2) 2-pin inverted Euroblock	(1) RCA stereo pair
Output Impedance	4 Ω	400 Ω
Nominal Output Level	2 × 50 W @ 4 Ω (min); 2 × 25 W @ 8 Ω	0 dBV (max)
INDICATORS & CONTROLS		
Power LED	Solid blue (powered on)	
Input Clip LED	Green (-34 dBu to +10 dBu), red (> +10 dBu). Input gain level set to 5.	
Bluetooth LED	Off (no *Bluetooth* device connected), blinking blue (ready to pair to a *Bluetooth* device), solid blue (connected to a *Bluetooth* device)	
Display	OLED, 16-bit grayscale, 96 × 96 resolution	
Controls, Front Panel	Power on/off switch, input select switch (A/*Bluetooth*/B), input gain knob (XLR/¼-in), rotary encoder	
Controls, Rear Panel	Input gain knobs (A, B, page), mute connector, ControlCenter port	

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ELECTRICAL	
Mains Voltage	100 VAC – 240 VAC (±10%, 50/60 Hz)
AC Power Consumption	15 W idle, 200 W maximum
Mains Connector	Standard IEC (C14)
Overload Protection	High temperature, output short
PHYSICAL	
Cooling System	Natural convection
Product Dimensions (height × width × depth)	44 mm × 214 mm × 310 mm (1.7 in × 8.4 in × 12.2 in)
Net Weight	2.0 kg (4.4 lb)
Shipping Weight	2.9 kg (6.4 lb)
Package Contents	(1) Veritas 250BL, (2) mounting brackets, (6) screws, (4) mounting feet with pins, (1) 4-pin Euroblock connector, (3) 2-pin Euroblock connectors, (1) power cord, (1) installation guide
Optional Accessories	Rack mounting kit, ControlCenter CC-1, ControlCenter CC-2
PRODUCT CODES	
Veritas 250BL, 120 V, US	892120-1110 VERITAS 250BL 120V US
Veritas 250BL, 230 V, EU	892120-2110 VERITAS 250BL 230V EU
Veritas 250BL, 230 V, UK	892120-4110 VERITAS 250BL 230V UK
Veritas 250BL, 100 V, JP	892120-3140 VERITAS 250BL 100V JP
Veritas 250BL, 230 V, CN	892120-2140 VERITAS 250BL 230V CN
Veritas 250BL, 240 V, AU	892120-5110 VERITAS 250BL 240V AU
Rack mounting kit	892122-0100 VERITAS AMP RACK MOUNT KIT BLACK
ControlCenter CC-1, US, black	768932-0110 CONTROLCENTER CC-1 US BLACK
ControlCenter CC-1, US, white	768932-0210 CONTROLCENTER CC-1 US WHITE
ControlCenter CC-1, EU, black	768932-2110 CONTROLCENTER CC-1 EU BLACK
ControlCenter CC-1, EU, white	768932-2210 CONTROLCENTER CC-1 EU WHITE
ControlCenter CC-1, JP, black	768932-3110 CONTROLCENTER CC-1 JP BLACK
ControlCenter CC-1, JP, white	768932-3210 CONTROLCENTER CC-1 JP WHITE
ControlCenter CC-2, US, black	768938-0110 CONTROLCENTER CC-2 US BLACK
ControlCenter CC-2, US, white	768938-0210 CONTROLCENTER CC-2 US WHITE
ControlCenter CC-2, EU, black	768938-2110 CONTROLCENTER CC-2 EU BLACK
ControlCenter CC-2, EU, white	768938-2210 CONTROLCENTER CC-2 EU WHITE
ControlCenter CC-2, JP, black	768938-3110 CONTROLCENTER CC-2 JP BLACK
ControlCenter CC-2, JP, white	768938-3210 CONTROLCENTER CC-2 JP WHITE

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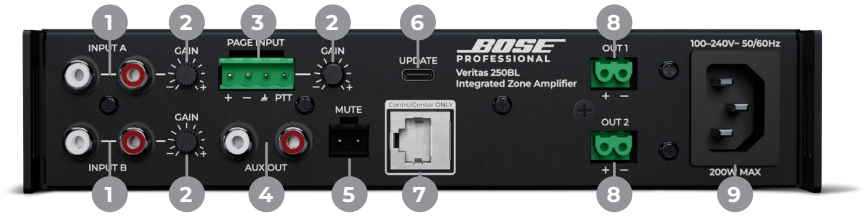
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Hardware Details



1. **Power switch:** Turns amplifier on or off
2. **Power LED:** Illuminates blue when amplifier is on
3. **Input/clip LED:** Illuminates red whenever input source approaches the threshold value of +10 dBu. If the indicator illuminates frequently, reduce input signal level.
4. **Mic/line input:** XLR/¼-inch TRS combo jack for connecting a dynamic microphone.
5. **Gain knob:** Allows for fine-tuning of the mic/line input level. If the input/clip indicator is red, reduce the input gain. The adjustment range is 0 dB to +50 dB.
6. ***Bluetooth* LED:** LED is off when no device is connected to *Bluetooth* technology. LED blinks blue when ready to pair with a *Bluetooth*-enabled device. LED is solid blue when a *Bluetooth* enabled device is connected.
7. **Input selection switch:** Allows you to choose between rear line inputs A/*Bluetooth* and B from the front panel of the amplifier.
8. **Display:** 16-bit grayscale OLED display, 96 × 96 resolution.
9. **Rotary encoder:** Controls the menu interface as well as adjusts volume, bass, and treble levels.



1. **Line input:** Unbalanced line-level input connectors (processed as stereo signals).
2. **Gain knob:** Allows for -20 dB to +20 dB of adjustment to each Input A/B. Allows for 0 dB to +50 dB of gain control of page input signal.
3. **Page input:** Euroblock mic/line input that supports dynamic microphones with a trigger contact closure for use with push-to-talk (PTT) microphones.
4. **Aux output:** Variable or fixed, unbalanced line-level output signal for routing the signal to additional audio equipment.
5. **Mute connector:** Contact closure connection that upon trigger will mute all outputs (including aux output).
6. **Update port:** USB-C port for software updates.
7. **ControlCenter port:** Input connector for either a CC-2 zone controller for volume control and A/B source selection or a CC-1 zone controller for volume control only.
8. **Loudspeaker output:** Inverted 2-pin Euroblock connectors for 4–8 Ω loudspeaker connections.
9. **Power input:** Standard IEC power cord receptacle.

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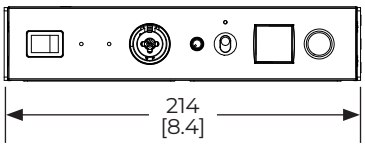
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AC Current Draw & Thermal Dissipation

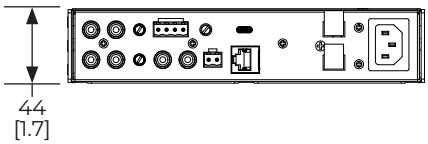
	Test signal & power level [6]	Load configuration (both channels driven)	Total audio output (W)	Current Draw (A)	Thermal dissipation, maximum (W)	(BTU/h)	(kcal/h)
120 VAC	Power on, idle	—	0	0.21	25	85	21
	1/8 rated power	8 Ω/channel	6	0.35	36	123	31
	1/3 rated power	8 Ω/channel	17	0.56	50	171	43
	1/8 rated power	4 Ω/channel	13	0.35	29	99	25
	1/3 rated power	4 Ω/channel	33	0.89	73	249	63
230 VAC	Power on, idle	—	0	0.15	34	116	29
	1/8 rated power	8 Ω/channel	6	0.24	49	167	42
	1/3 rated power	8 Ω/channel	17	0.36	65	222	56
	1/8 rated power	4 Ω/channel	13	0.33	62	212	53
	1/3 rated power	4 Ω/channel	33	0.55	93	318	80

Dimensions [7]

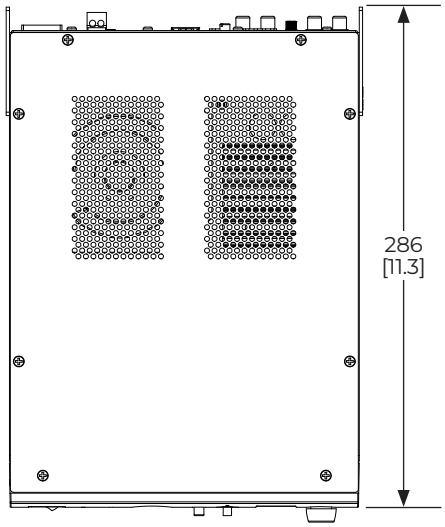
Front View



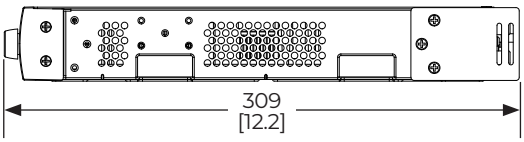
Rear View



Top View [8]



Right View [8]



6. IEC 268 band-limited pink noise, 6 dB crest factor, with flat amplifier EQ preset.
7. Dimensions are shown in millimeters over inches.
8. Dimensions also apply to opposite side.

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