

Wall-Mount Power Vector Modular Amplifiers

Models WV100, WV150,
and WV250



Description

Bogen's Wall-Mount Power Vector modular amplifiers offer a wide range of power from which to choose from, with three models ranging from 100W to 250W. The amplifiers are designed to work with both high- (70/25V) and low- (4/8-ohm) impedance speaker systems.

Each model includes eight module bays for plug-in input modules and allows for up to four levels of priority between modules. Two module bays are capable of accepting signal processing plug-in output modules. Each module is controlled by an independent volume control with an associated signal/clip LED for signal status. An 11-segment LED output meter monitors output signal level.

Each model includes a motorized master volume control that can be controlled using a remote volume control panel (RVCP, sold separately).

Features

- 100-, 150-, and 250-watt models, each with a large power reserve
- Capable of handling 70V, 25V, 8-ohm, and 4-ohm speaker loads
- 8 module bays
- Wide selection of advanced plug-in modules
- 2 module bays capable of handling signal processing plug-in output modules
- 4 levels of priority between modules
- 11-segment LED output level meter monitors the output level of the power amplifier with Peak and Average meter switch
- Adjustable output level limiter with limit indicator
- Tape output available on front of unit
- Optional front-mounted input combo jack with 1/4" stereo phone and female XLR capabilities
- Motorized master volume control can be remotely operated
- Bass and treble controls with center detent
- Two-color LED for each channel indicates input active/clipping
- Switch permits user to select either transformer-coupled outputs or a direct low-impedance output
- Bass and treble control bypass switch (located in module bay 6)
- 125 Hz Lo-cut feature (switch located in module bay 6)
- 5-position barrier strip, with clamping washers, provides connections for speaker loads
- Master mute function overrides all audio from the mixer section of the amplifier
- Screw terminal for master mute and remote volume control functions
- Each of the 8 module bays has an associated independent volume control
- Remote volume control panel (RVCP) (sold separately)
- Requires flush-mount (Model BBF) or surface-mount (Model BBS) back boxes (sold separately)
- Requires front cover door (WMAD sold separately)
- UL and CSA Listed

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Technical Specifications

Power Output (RMS)

WV100:	100W (140W Typical, @1 kHz/0.1%/4Ω)
WV150:	150W (200W Typical, @1 kHz/0.1%/4Ω)
WV250:	250W (340W Typical, @1 kHz/0.1%/4Ω)

Frequency Response

Transformer:	45-20 kHz; 0/-2 dB @ FRP
Direct:	20-20 kHz; 0/-1 dB @ FRP

Distortion

Transformer:	0.5% THD+N, Maximum, Full-rated bandwidth @ FRP
Direct:	0.1% THD+N, Maximum, Full-rated bandwidth @ FRP

Signal-to-Noise

Fundamental:	-94 dB*
With Aux Module:	-70 dB*
With Mic Module:	-60 dB*
With Tel Module:	-70 dB*

Tone Controls

Bass Frequency:	100 Hz (+/- 10 dB minimum)
Treble Frequency:	10 kHz (+/- 10 dB minimum)
Low Cut Frequency:	125 Hz @ -6 dB/octave

Sensitivity: 0.4V (at backplane connector)

Output Regulation: 2 dB or better no load to full load

Output Impedance

Transformer-Coupled:	70V, 25V, 8 ohms; balanced or unbalanced
Direct Coupled:	4 ohms unbalanced

Tape Out

Output Level:	4 VRMS @ FRP
Output Impedance:	50 ohms maximum

Overload Protection: Electronic overload protection (auto reset)

Thermal Protection: Thermistor attached to heat sink

Line Fusing: Resettable circuit breaker

Cooling: Thermally controlled 3-speed fan

Power Consumption:	WV100: 2.0A @ 120V AC, 60 Hz
	WV150: 3.5A @ 120V AC, 60 Hz
	WV250: 5.5A @ 120V AC, 60 Hz

Dimensions:

WV100/150/250:	14-1/8" W x 21" H
BBF:	14-1/2" W x 24-3/4" H x 3-7/8" D
BBS:	16-1/4" W x 26-3/4" H x 3-7/8" D
WMAD:	16-1/4" W x 26-3/4" H x 1" D

Product Weight:

WV100:	27 lb.
WV150:	29 lb.
WV250:	28 lb.
BBF:	14 lb.
BBS:	18 lb.
WMAD:	11 lb.

* Referenced to full-rated power (FRP) output level, 20-20 kHz bandwidth limited.
All specifications subject to change without notice.

Architect and Engineer Specifications

The amplifier shall be a Bogen Wall-Mount Power Vector Amplifier, Model WV100, WV150 or WV250. The amplifier shall be compatible with both high- (70/25V) and low- (4/8-ohm) impedance speakers, with the capability of 100, 150, or 250 watts, respectively.

The amplifier shall provide 8 module bays for plug-in input modules with two of the bays also capable of handling plug-in signal processing output modules. There shall be 4 levels of priority between modules.

Each of the 8 module bays shall have an associated independent volume control. Each independent volume control shall have a signal/clip LED to indicate if a clipping condition is occurring at the module's output. Each amplifier shall also include detented bass and treble controls, as well as a motorized master volume control, which can be remotely operated using the RVCP accessory (sold separately).

The amplifier shall include an adjustable output level limiter with indicator LED. A tape output jack shall be available on the front panel and an optional front panel input combo jack with 1/4" stereo phone and female XLR capabilities may be installed.

Screw terminals shall be provided for invoking a master mute function that will interrupt all audio from the mixer section of the amplifier.

An 11-segment LED output level meter will register either the average or peak level of the amplifier's output level, determined by an Average/Peak switch. Each amplifier shall have a Tone Control Bypass switch and a Low-Cut Filter switch located on the rear of the amplifier in module bay 6.

A switch will permit the selection of transformer-coupled output or direct output for speaker runs. Master mute and remote volume control functions are controlled using a screw terminal.

The amplifier shall be flush-mounted or surface-mounted into a wall using either a BBF or BBS back box (sold separately). A front cover door shall be required (WMAD sold separately). Each model shall measure 14-1/8" W x 21" H. The WV100 shall weigh 27 lb.; the WV150, 29 lb.; and the WV250, 28 lb.

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