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 transformercoupled 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 surfacemount (Model BBS) back boxes (sold separately)
- · Requires front cover door (WMAD sold separately)
- · Listed to UL Standard 60065 for US and Canada



Technical Specifications

Power Output (RMS)

 WV100:
 100W (140W Typical, @1 kHz/0.1%/4W)

 WV150:
 150W (200W Typical, @1 kHz/0.1%/4W)

 WV250:
 250W (340W Typical, @1 kHz/0.1%/4W)

Frequency Response

Transformer: 45 Hz to 20 kHz; 0/-2 dB @ FRP *Direct:* 20 Hz to 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

WV150: 3.5A @ 120V AC, 60 Hz WV250: 5.5A @ 120V AC, 60 Hz

Thermal Emissions: WV100: 495.2 BTU/hr.

WV150: 696.7 BTU/hr. WV250: 911.9 BTU/hr.

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: 12 lb. BBS: 16 lb. WMAD: 9 lb.

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 occuring 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 transformercoupled 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.



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