# Wall-Mount Power Vector Modular Amplifiers

# Models WV100,W V150, and WV250



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.

### Description

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)
- UL and CSA Listed



## Technical Specifications

Power Output (RMS)

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

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

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

**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.

# 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 plugin 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 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.



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