

# Power Vector Modular Amplifiers

Models V35, V60,  
V100, V150, and V250



## Description

Bogen's Power Vector modular amplifiers offer a wide range of power from which to choose from, with five models ranging from 35W 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 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

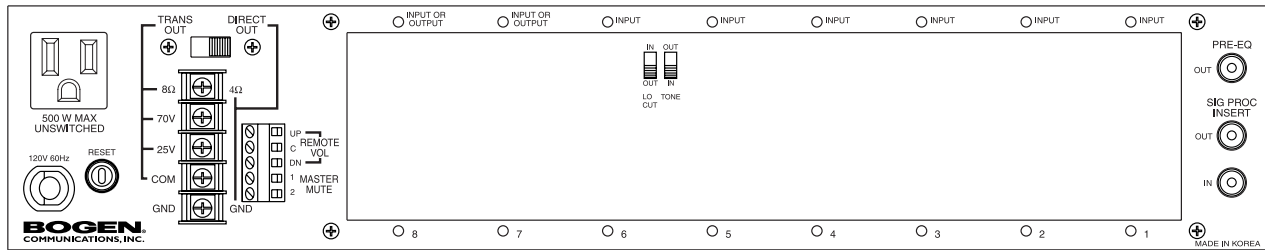
- 5 models ranging from 35W to 250W with a large power reserve
- Capable of handling 70V, 25V, 8-ohm, and 4-ohm speaker loads
- 8 module bays
- Wide selection of advanced plug-in modules
- 2 module bays capable of handling signal processing plug-in output modules
- 4 levels of priority between modules
- 11-segment LED output level meter monitors the output level of the power amplifier with Peak and Average meter switch
- Motorized master volume control that can be remotely operated
- Bass and treble controls
- Two-color LED for each channel indicates input active/clipping
- Lockable switch permits user to select either transformer-coupled outputs or a direct low-impedance output
- 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
- Bass and treble control bypass switch (located in module bay 6)
- 125 Hz Lo-cut feature (switch located in module bay 6)
- Signal processing insert jacks allow external equipment to be inserted between the pre-amp output and the power amp input
- Pre-EQ unbalanced buffer output signal "post" all unit controls, but "pre" any external signal processing equipment connected
- Grounded, unswitched AC convenience receptacle with a 500W maximum capacity provided for external equipment
- Remote volume control panel (RVCP) (sold separately)
- Security cover to protect volume, bass, and treble controls (PVSC) (sold separately)
- Rack mountable (rack mounting kit RPK87 sold separately)
- 2 rack spaces high (3-1/2")

**BOGEN**®

Specifications subject to change without notice.

© 2002 Bogen Communications, Inc.

Part No. 54-8013-01R2 elec Printed in U.S.A. 0210



## Technical Specifications

Power Output (RMS):	V35	V60	V100	V150	V250
Rated:	35W	60W	100W	150W	250W
Typical @ 1 kHz:*	45W	85W	140W	200W	340W
<b>Frequency Response</b>					
Transformer:	45-20 kHz; 0/-2 dB				
Direct:	20-20 kHz; 0/-1 dB				
<b>Distortion</b>					
Transformer:	0.5%**				
Direct:	0.1%** (.05 typical @ 1 kHz)				
<b>Signal-to-Noise†</b>					
Fundamental:	-94 dB				
With Aux Module:	-70 dB				
With Mic Module:	-60 dB				
With Tel Module:	-70 dB				
<b>Tone Controls</b>					
Bass Frequency:	100 Hz (+/- 10 dB minimum)				
Treble Frequency:	10 kHz (+/- 10 dB minimum)				
Low Cut Frequency:	125 Hz @ -6 dB/octave				
<b>Sensitivity</b>	0.4V (at module bay connector)				
<b>Output Regulation:</b>	2 dB or better, no load to full load				

## Output Impedance

Transformer-Coupled: 70V, 25V, 8 ohms (bal or unbal)  
 Direct Coupled: 4 ohms

## Inserts

Insert "OUT" Level: 1VRMS (@FRP)  
 Insert "OUT" Impedance: 50 ohms maximum  
 Insert "IN" Sensitivity: 1VRMS  
 Insert "IN" Impedance: 10k ohms minimum

## Pre-EQ Output

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

## AC Power Receptacle:

500 watts maximum power, unswitched

## AC Voltage:

120V AC, 60Hz

## AC Current:

V35	V60	V100	V150	V250
0.6A	1.3A	2.0A	3.5A	5.5A

## Product Weight (lb.):

V35	V60	V100	V150	V250
24	28	32	35	40

## Dimensions:

16-1/2" W x 3-1/2" H x 12" D  
 (all models)

## Architect and Engineer Specifications

The amplifier shall be a Bogen Power Vector Amplifier, Model V35, V60, V100, V150 or V250. The amplifier shall be compatible with both high- (70/25V) and low- (4/8-ohm) impedance speakers, with the capability of 35, 60, 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. Each amplifier shall also include bass and treble controls, as well as a motorized master volume control, which can be remotely operated using the RVCP accessory (sold separately).

Two screw terminals shall be provided for invoking a master mute function that will interrupt all audio from the mixer section of the Power Vector 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 Power Vector 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 lockable 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.

Signal processing insert jacks (RCA connectors) will allow external equipment to be inserted between the pre-amp output and the power amp input.

Each model will have a Pre-EQ unbalanced (RCA jack) buffer output whose signal is post all volume controls, tone controls, and output module signal processing, but before (pre-EQ) any external signal processing equipment connected to the Signal Processing Insert jacks.

Each amplifier will include a 500W maximum, unswitched AC power receptacle.

The amplifier shall fit into a 19" rack and fit in two rack spaces. It shall allow the attachment of feet for tabletop placement. Each model shall measure 17" W x 3-1/2" H x 13-1/2" D. The V35 shall weigh 24 lb., the V60 - 28 lb., the V100 - 32 lb., the V150 - 35 lb., and the V250 - 40 lb.

\* Typical. @1 kHz/0.1% THD/4Ω  
 \*\* THD+N, Maximum, Full bandwidth @ FRP  
 † Referenced to FRP output level, 20-20 kHz bandwidth limited.

**BOGEN**  
 COMMUNICATIONS, INC.

50 Spring Street, Ramsey, New Jersey 07446, U.S.A.  
 201-934-8500 FAX: 201-934-9832  
 Web Site: www.bogen.com