Power Vector Modular Amplifiers



Models V35, V60, V100, V150, and V250

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.

Description

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.

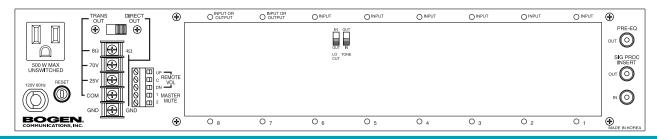
Each model includes a motorized master volume control that can be controlled using a remote volume control panel (RVCP, sold separately).

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")





Technical Specifications

Power Output (RMS): V35 V60 V100 V150 V250 60W 35W Rated: 100W 150W 250W Typical @ 1 kHz:* 85W 140W 200W 340W

Frequency Response

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

Distortion

Transformer: 0.5%**

Direct: 0.1%** (.05 typical @ 1 kHz)

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 module bay connector)
Output Regulation: 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.): <u>V35 V60 V100 V150 V250</u>

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 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. 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 transformercoupled 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 \times 3-1/2" H \times 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/4 Ω)

^{**} THD+N, Maximum, Full bandwidth @ FRP

[†] Referenced to FRP output level, 20-20 kHz bandwidth limited.