

Power Vector Modular Input Amplifiers

Models V35, V60,
V100, V150, and V250



Description

Bogen's Power Vector modular input amplifier series offers 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-impedance (4/8-ohm) speaker systems.

Each model includes eight module bays for input modules and allows up to four levels of priority between modules. Two module bays are also capable of accepting signal processing 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.

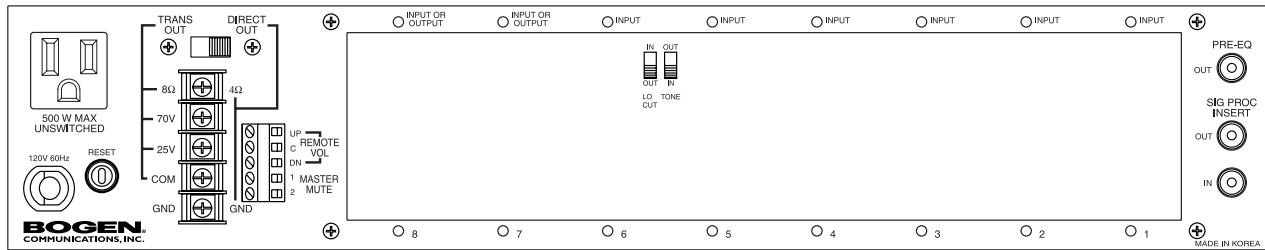
Each model includes a motorized master volume control that can be controlled using a remote volume control panel (RVCP, sold separately).

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 input module bays
- Wide selection of advanced input modules
- 2 module bays capable of handling signal processing 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 signal present/signal 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 inputs is controlled by an independent volume control
- Bass and treble control bypass switch (located in module bay 6)
- 125Hz 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. 54-8013-01R1 Printed in U.S.A. 0203



Technical Specifications

Power Output (RMS):	V35	V60	V100	V150	V250
Rated:	35W	60W	100W	150W	250W
Typical @ 1kHz:*	45W	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 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.):

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-impedance (4/8-ohm) speakers, with the capability of 35, 60, 100, 150, or 250 watts, respectively.

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

Each of the 8 inputs shall be controlled by an 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 16-1/2" W x 3-1/2" H x 12" 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. @1kHz/0.1% THD/4Ω

** THD+N, Maximum, Full bandwidth @ FRP

† Referenced to FRP output level, 20-20kHz 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