

## Signal Processing Modules

When signal processing output modules are installed into the Power Vector's last two module bays, they automatically insert themselves into the mix bus signal path leading to the power amplifier stage. When two of these output modules are installed, their effects are cascaded with the second to last bay's module processing the signal first and then passing it to the module in the last bay. Two benefits are gained by this innovation: (1) the effects insert jacks are still available for use by external processing equipment. (2) the signal processing output modules act on the signal on the raw mix bus signal before any other user controls, like volume, bass, and treble can affect it. This then ensures that signal level dependent processors, such as the CMP1R Compressor / Limiter and the ANS1R Ambient Noise Sensor modules perform as intended regardless of front panel control changes.

## Remote Volume Control

The master volume control is motorized. By using a motor to physically move the control knob, a new level of remote control adjustability is achieved.

Regardless of where the master volume control is set on the amplifier, the remote can move it, up or down. Since the remote control signal is now the drive signal to the motor, noise on the remote control leads cannot mix in with the amplifier signals. This gives the Power Vector a fully functional and clean way of remotely controlling overall system level.

Traditionally, remote volume control was accomplished by having the remote control vary an analog control signal to an opto-resistor in the amplifier. This opto-resistor would further attenuate the signal level in the amplifier, based on the remote control setting. This approach has two drawbacks: (1) the maximum volume that can be achieved by changing the remote control was limited by the master volume control setting on the amplifier, or vice-versa pending on how the amplifier was designed. The remote could lower volume, but could not further increase it. (2) the control signal, because it is analog, is vulnerable to noise. If a 60 Hz hum was picked up by the long remote volume leads, it could cause the opto-resistor to modulate the volume level at the hum frequency.

# Modular Amplifiers

## Power Vector Modular Amplifiers V35, V60, V100, V150, V250



Bogen's Power Vector modular input amplifier series offers a wide range of power levels 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 input channel has an associated signal/clip LED for signal status. An 11-segment LED output meter monitors output signal level, which is controlled by a motorized volume master that can be remotely controlled.

### Product 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 (modules sold separately)
- 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 with Peak and Average switch
- Motorized master volume control that can be remotely operated (requires RVCP)
- Bass and treble controls
- Two-color LED for each channel indicates signal active/signal clipping
- Lockable switch permits user to select either transformer-coupled outputs or a direct low-impedance output
- Master mute function mutes all audio from the mixer section of the amplifier
- Bass and treble control bypass switch
- 125 Hz Lo-cut feature
- 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
- Security cover to protect volume, bass, and treble controls (PVSC) (sold separately)
- Rack mountable (mounting kit RPK87) (sold separately)
- 2 rack spaces high (3-1/2")

## Accessories

**PVSC**  
Power Vector  
Security Cover



**RVCP**  
Remote Volume  
Control Panel



**RPK87**  
Rack  
Mounting Kit



Input Modules  
& Signal-Processing  
Output Modules  
See Page 23



ALL MODULES  
SOLD SEPARATELY

Technical Specifications, Dimensions,  
and Weights can be found on Page 67