

Amplifiers

Certified to BSEN54



Our Vigil2 Class D power amplifiers are proven and robust. They are LPCB certified to BSEN54.

The amplifiers form part of our Vigil2 voice alarm system and their modular style provides great flexibility when designing voice alarm systems.

VIGIL 2

FEATURES:

- Designed for quick and simple connection and configuration.
- Class D rated output power is attainable using a 22V battery supply.
- Sleep mode - automatically reducing the standby requirements to 50mA per amplifier when operating on batteries.
- Audio inputs are presented on separate RJ45 connectors; each connector provides a balanced audio input and ground.
- Protected against overload conditions (ie short circuits) by means of a voltage controlled attenuator (VCA); ensuring continual safe operation without creating unnecessary distortion.
- Over temperature protection is also provided. Should the amplifier temperature exceed 90°C the VCA attenuates the input signal to a safe level and illuminates a warning LED. If the system is under surveillance (a requirement of BS5839-8:2008) a fault condition will be indicated due to the gain reduction.
- 24V DC inputs are presented on two-way crimp connected sockets.

BVMF MAINFRAME:

Three amplifier modules (or two amplifiers and one BVSMP power supply) may be mounted in one BVMF mainframe.

BV225:

- 225W class D power amplifier with a single 500mV balanced line audio input and 100V line output.
- Can either be used as an independent amplifier module, can be one of two amplifiers wired as an A/B dual circuit using a single input signal or can be paralleled with other BV225 units to enable higher power outputs.
- BV225 units are easily paralleled via RJ45 connectors.

BV125D:

- Contains two independent 125W class D power amplifiers, each with a single balanced line audio input and 125W 100V line output.
- Can either be used as two independent amplifier modules or two amplifiers wired as an A/B dual circuit using a single input signal.

BV050Q:

- Contains four independent 50W class D power amplifiers, each with a single balanced line audio input and 50W 100V line output.
- Can either be used as four independent amplifier modules or four amplifiers wired as an A/B dual circuit using a single input signal.
- Channel gain may be individually set using the potentiometers on the board behind the front panel.

Specifications:

	BV225	BV125D (value per amplifier)	BV050Q (value per amplifier)
Rated output power less than 0.2% THD	225W RMS @ 44.5 ohms	125W RMS @ 80 ohms	50W RMS @ 200 ohms
Output regulation	better than 1.5dB	better than 2dB	
Output voltages obtainable	50 & 100V		
Frequency response (-3dB)	35Hz-20kHz		
Input sensitivity and impedance	500mV @ 40K ohms balanced		
Input common mode rejection ratio	(50Hz-20kHz) Better than 40dB: typically 60dB		
Output noise reference to rated output	Better than 85dB		Better than 80dB
Cross talk between amplifiers @ 1kHz	N/A	Better than 70dB	
Supply voltage	22-35V DC		
Supply current			
Sleep mode 26V (battery supply)	50mA		
Quiescent 30V (mains supply)	160mA		
Rated output power	10A		
Output stage protection			
Thermal	Output stage above 90°C		
Load	Excessive output stage current		
Action	Reduces input to safe level using low distortion VCA		
Front panel indicators per amplifier			
Supply (green)	DC supply connected		
Active (green)			Amplifier is active, not in sleep mode
Temp alert (yellow)			Output stage above 90°C
Overload (yellow)	Protection circuit operating		
100% (yellow)	100V output voltage		
10% (green)	10V output voltage		
Terminations			
Loudspeaker line output	3-way cage clamp	2 x 3-way cage clamp	2 x 6-way cage clamp
Balanced line inputs	RJ45 connectors		
DC supply input	2 pin crimp connectors		



BALDWIN BOXALL
LEADING THE WAY TO SAFETY

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