

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

Baldwin Boxall Communications Ltd
Wealden Industrial Estate, Farningham Road,
Crowborough, East Sussex, TN6 2JR, United Kingdom

T: +44 (0) 1892 664422 F: +44 (0) 1892 663146
E: mail@baldwinboxall.co.uk
W: www.baldwinboxall.co.uk