



COST EFFECTIVE / HIGHLY  
EFFICIENT VOICE ALARM AND  
PUBLIC ADDRESS SYSTEM

## VIGIL *ECLIPSE 2*



**BALDWIN BOXALL**  
COMMUNICATIONS

## VIGIL ECLIPSE 2 Stand Alone Voice Alarm System

Fully compliant to EN60849, EN54 part 16 and BS5839 part 8, VIGIL Eclipse2 utilises Baldwin Boxall VIGIL components to provide a simple wall-mountable, Voice Alarm/Public Address system, addressing up to seven single circuit or four dual circuit zones.



The VIGIL Eclipse2 is a multi-zone, wall-mountable voice alarm or public address system with a DSP controlled routing matrix at its heart – the VIGIL EVAS BVRD2M. The unit utilises VIGIL2 amplifiers and switch mode power supply with capabilities to house one standard Baldwin Boxall amplifier mainframe to achieve up to either seven single or four dual circuit zones.

The stand-alone system provides a highly-efficient solution to the voice alarm market and its simple design enables straight-forward installation and commissioning. As with all Baldwin Boxall voice alarm products, the Eclipse2 simply connects to leading fire alarm panels via the internal fire alarm interface. Any faults are stored within a fault log which can be viewed either via the front panel or simply downloaded via the USB2 port.

Fully BS5839 part 8, EN60849 and EN54 part 16 compliant, the VIGIL Eclipse2 is smaller than its predecessor measuring only 480mm (W) x 830mm (H) 200mm (D). The whole system is powered by a 230V AC 50-60Hz power supply and comes with battery backup to allow the system to fully function in the event of mains power supply failure.

The unit is ideal for a decentralised network with the ability to link 126 units. The flexibility of the VIGIL Eclipse2 means that it can also form part of a larger VIGIL EVAS voice alarm system.

This innovative voice alarm/public address system can work in almost any situation, whether in an office, shopping centre, airport, factory, school, leisure complex, etc, making it the ideal solution for any small, medium or even large project.

### Features:

- ▲ Parametric EQ on all eight inputs and seven outputs.
- ▲ Ambient noise sensing.
- ▲ Auto amplifier changeover.
- ▲ USB2 port allowing system configuration, message revision via laptop.
- ▲ Fault and history logging.
- ▲ Activity logging.
- ▲ Realtime clock.
- ▲ Eight amplifier surveillance – seven with auto changeover.
- ▲ Line surveillance for eight BEL1 end of line units, with earth leakage fault detection.
- ▲ Ability to change priorities.
- ▲ DC remote volume control.
- ▲ Timer to start messages at required times.

### Facilities:

- ▲ 8 x BEL1 line surveillance with earth leakage fault detection.
- ▲ 8 x amplifier surveillance (7 zones plus one reserve auto changeover).
- ▲ 7 x opto coupled inputs from the fire detection system.
- ▲ 1 x 'evacuate all' failsafe opto coupled input.
- ▲ 1 x common fault volt free changeover relay contact.
- ▲ 12 x analogue voltage sensing inputs for monitored/unmonitored input access, remote volume controls, etc.
- ▲ 4 x analogue voltage sensing inputs (with pull up or pull down internal resistor) for monitored/unmonitored input access, remote volume controls, ambient noise sensors etc.
- ▲ 3 x simple contact closure inputs for unmonitored input access, etc. (Contact I/P one used for PSU/charger fault).
- ▲ Inputs 1 & 2 bypass processor for 'all call' failsafe access.
- ▲ 6 x NPN open collector outputs 40V @ 100mA for busy, etc.
- ▲ 3 x RS485 half-duplex port for communication to control microphones, fire detection systems, network control, fault reporting.

### Audio Inputs:

- ▲ Eight electronically balanced line -20dB audio inputs.
- ▲ Inputs 1 & 2 bypass the processor – 'all call' failsafe.

#### Typical audio inputs:

- ▲ Four fire microphones – 'all call' or zoned.
- ▲ Three paging microphones – zoned.
- ▲ One auxiliary music input – zoned.

### Audio Outputs:

- ▲ Seven electronically balanced 0dBm audio outputs to feed relevant 100V line amplifiers.

### Eclipse2 Termination Box:

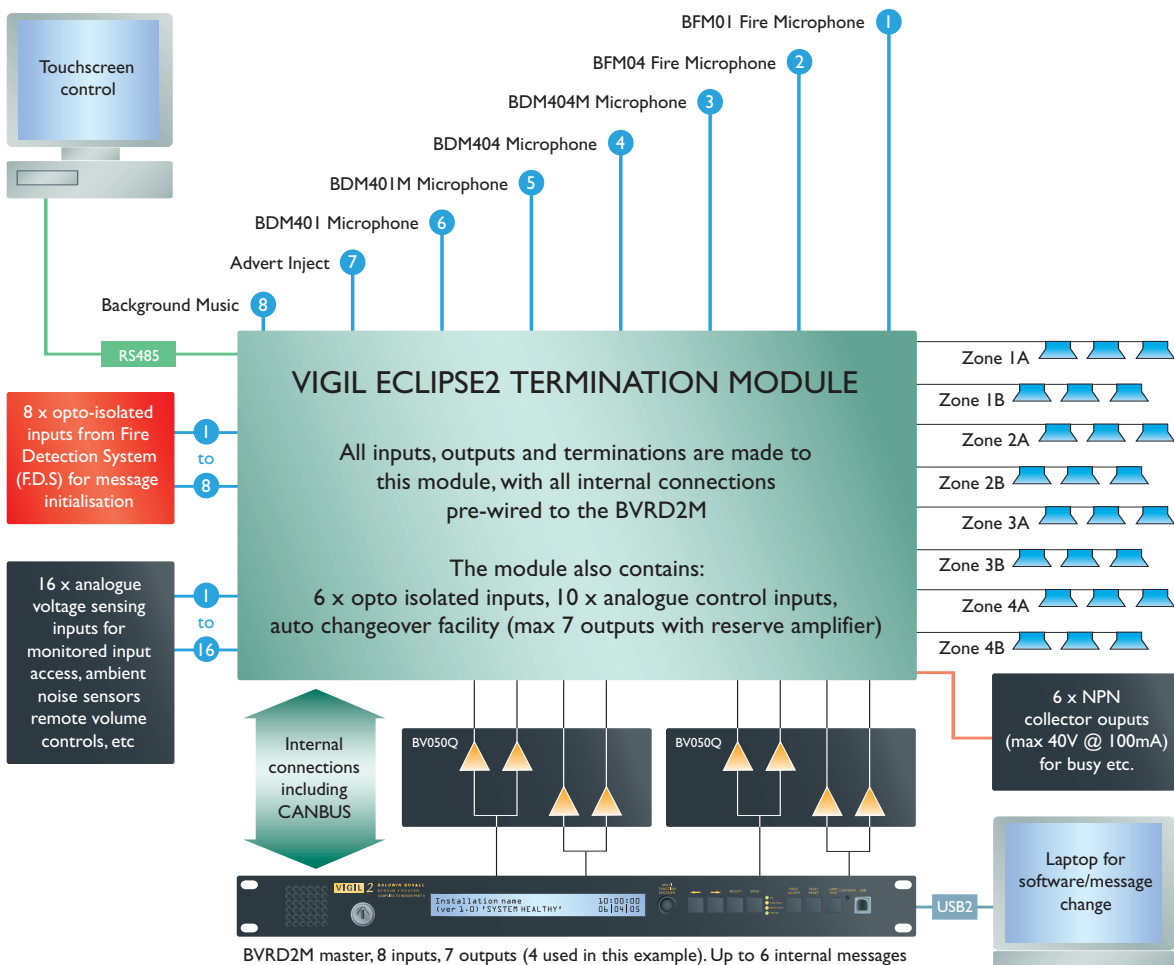
The BVETERM2 (Eclipse2 Termination Box) is an extension box which fits on top of the Eclipse2 case to provide extra termination space. This provides DINrail connections for network/audio cards etc. when Eclipse2 is installed in large decentralised networked systems.

- ▲ 480mm (W) x 305mm (H) x 200mm (D).





## VIGIL ECLIPSE2 Typical 4 Zone, Dual Circuit Voice Alarm System



### Choice and flexibility:

VIGIL Eclipse2 houses one 2U Baldwin Boxall amplifier mainframe, which holds one BVSMP VIGIL2 power supply and your choice of up to two VIGIL2 amplifiers providing you with the following options:

#### Using 2 x BV050Q:

- ▲ 3 zone dual + 1 zone single, with reserve. ▲ 4 zone dual, no reserve. ▲ 5 zone single + 1 zone dual, with reserve.
- ▲ 6 zone single, with reserve. ▲ 6 zone single + 1 zone dual, no reserve. ▲ 7 zone single, no reserve.

#### Using 2 x BV120D:

- ▲ 1 zone dual + 1 zone single, with reserve. ▲ 2 zone dual, no reserve. ▲ 3 zone single, with reserve.
- ▲ 4 zone single, no reserve.

#### Using 2 x BV220:

- ▲ 1 zone dual, no reserve. ▲ 1 zone single, with reserve. ▲ 2 zone single, no reserve.

#### Using 1 x BV440:

- ▲ 1 zone single, no reserve.

Maximum battery size: 44A/H

## VIGIL Eclipse2 hardware specification:

**BVRD2M Input/Output Specification:** Audio input and output processing using DSP Analogue Devices ADSP 2116 operating at 100MHz.

AUDIO INPUTS	
Input sensitivity	80mV (-20dB) to 3V (+12dB).
Frequency response	-3dB @ 30Hz and 20KHz.
Signal to noise ratio	Better than 70dB.
Phantom power	12V
3 Band Parametric Equalisation:	
Frequency	Selectable 50Hz, 63Hz, 80Hz, 100Hz, 125Hz, 160Hz, 200Hz, 250Hz, 315Hz, 400Hz, 500Hz, 630Hz, 800Hz, 1KHz, 1.25KHz, 1.6KHz, 2KHz, 2.5KHz, 3.15KHz, 4KHz, 5KHz, 6.3KHz, 8KHz, 10KHz, 12.5KHz, 16KHz
Bandwidth	0.05 oct, 0.1 oct, 0.2 oct, 0.33 oct, 0.5 oct, 0.66 oct, 1 oct and 2 oct.
Lift and cut	+/- 12dB in 1dB steps.
Low filter:	
Frequency	250Hz, 315Hz, 400Hz, 500Hz, 630Hz, 800Hz, 1KHz, 1.2KHz, 1.6KHz, 2KHz and 2.5KHz.
Slope	3dB/oct and 6dB/oct.
Lift and cut	+/- 12dB in 1 dB steps.
High filter:	
Frequency	500Hz, 630Hz, 800Hz, 1KHz, 1.25KHz, 1.6KHz, 2KHz, 2.5KHz, 3.15KHz, 4KHz and 5KHz.
Lift and cut	+/- 12dB in 1dB steps.
High pass filter:	
Frequency	100Hz, 150Hz, 200Hz, 250Hz and 300Hz.
Slope	18dB/oct, 12dB/oct and 6dB/oct.
Compressor:	
Ratio	1.4:1, 2:1, 4:1, 8:1 and limiter.
Attack	0 to 99ms.
Release	0 to 999ms.
Message (failsafe) EPROM:	
Storage medium	EPROM (non volatile) 20Sec
Frequency response	-3dB @ 100Hz and 12KHz.
Signal to noise ratio	Better than 60dB.
Messages Flash PROM:	
Storage medium	Flash PROM (non volatile) 57Sec
Frequency response	-3dB @ 50Hz and 18KHz.
Signal to noise ratio	Better than 65dB
THD	Less than 0.2%.
AUDIO OUTPUTS	
Nominal output level	0.775V (0dB).
Maximum output level	4.5V (+15.5dB). Bypass 1.5V +6dB DSP
Frequency response	-3dB @ 30Hz and 20KHz.
Output noise ref to 0dB	Better than -85dB
10 Band Parametric Equalisation:	
Frequency	50Hz, 63 Hz, 80Hz, 100Hz, 125Hz, 160Hz, 200Hz, 250Hz, 315Hz, 400Hz, 500Hz, 630Hz, 800Hz, 1KHz, 1.25KHz, 1.6KHz, 2KHz, 2.5KHz, 3.15KHz, 4KHz, 5KHz, 6.3KHz, 8KHz, 10KHz, 12.5KHz, 16KHz
Bandwidth	0.05 oct, 0.1 oct, 0.2 oct, 0.33 oct, 0.5 oct, 0.66 oct, 1 oct and 2 oct.
Lift and cut	+/- 12dB in 1dB steps
Low filter:	
Frequency	250Hz, 315Hz, 400Hz, 500Hz, 630Hz, 800Hz, 1KHz, 1.25KHz, 1.6KHz, 2KHz and 2.5KHz.
Slope	3dB/oct and 6dB/oct.
Lift and cut	+/- 12dB in 1dB steps.
High filter:	
Frequency	500Hz, 630Hz, 800Hz, 1KHz, 1.25KHz, 1.6KHz, 2KHz, 2.5KHz, 3.15KHz, 4KHz and 5KHz.
Lift and cut	+/- 12dB in 1dB steps.
Audio Delay:	Selectable from 0 to 1 second.
FRONT PANEL	
LCD display 40x2 characters back lit.	
Rotary encoder to ease configuration, setting levels, entering text etc.	
Monitor speaker to listen to inputs or outputs.	
Common fault indicator sounder and fault accept key.	
Power:	230V AC 700VA.

Maximum Weight: 39kg excluding batteries | Eclipse2 requires a direct non switchable power supply. Preferably via a class D circuit breaker.






The Company reserves the right to alter the specification without prior warning.

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## BALDWIN BOXALL COMMUNICATIONS

 				THE COMPLETE SPECTRUM OF COMMUNICATION SOLUTIONS
				Low Voltage Directive 73/23/EEC as amended by 93/68/EEC EMC Directive 89/336/EEC as amended by 92/31/EEC and 93/68/EEC Applies only when the items are correctly fitted and operated in or with products of our manufacture and are installed in a recommended enclosure.