

# Ambient Noise Sensing

Certified to BSEN54



When designing a voice alarm system for areas of variable levels of ambient noise, which could cause problems with audibility, noise sensor(s) should be included. Correctly placed ambient noise sensors will ensure that all announcements are clearly heard.

## VIGIL Microphones

### FEATURES:

- Two versions are available:
  - BVRAMB - standard version.
  - BVRAMBIP - IP65 rated version.
- Monitors the ambient noise in a given area.
- Automatically adjusts the power of the amplifiers, depending on noise level.
- When the area is at its quietest the level of the announcements, or music, will reduce.
- During busy/noisy periods the volume level adjusts to suit.
- Used in conjunction with a BVRDCI (CANBUS interface module) which connects to the VIGIL EVAS routers.
- Uses a dynamic microphone capsule, the output of which is amplified and converted to produce a variable current.
- This output is used by the BVRDCI module to produce a voltage that is proportional to the ambient noise.
- Band pass filtering ensures that the system only responds to ambient noise affecting the intelligibility of announcements.
- An on-board surveillance tone generator permanently monitors the microphone capsule. A system fault will be

indicated should the microphone capsule or on-board amplifier fail.

- The BVRAMB includes an option to allow one of three response speeds to be selected:
  - SLOW - the system will only respond to an average change of ambient noise.
  - MEDIUM - suitable for most installations.
  - FAST - the system will react to short duration changes in ambient noise.
- Two units can be wired in parallel on the same input to monitor the ambient noise over a larger area.

### SYSTEM DESIGN:

System design is part of our commitment to provide a complete service from the initial planning stage through installation to after-sales technical support.

Our extensive range of standard products has been designed to accommodate most installation requirements. However our experienced design team often cater for projects that require bespoke solutions.

If you require any assistance with our products, or help with system design, please contact [sales@baldwinboxall.co.uk](mailto:sales@baldwinboxall.co.uk).

## Specifications:

	BVRAMB	BVRAMPIIP
Maximum number BVRAMB units per input	2	
<b>BVRD2M attenuator increase / decrease time</b>		
For 10dB change - Fast / Medium / Slow	2 seconds / 9 seconds / 26 seconds	
For 20dB change - Fast / Medium / Slow	4 seconds / 18 seconds / 52 seconds	
<b>Output pre-set busy freeze detector</b>		
Sensitivity	-48dB	
Release	1.6 seconds	
<b>Surveillance output with no ambient noise</b>		
Surveillance output with no ambient noise	Minimum 250mV DC	
Maximum output	Approx 13V DC	
<b>Power requirements</b>		
Power requirements	Nominal 24V DC @ 20mA	
Dimensions mm WxHxD	141 x 81 x 44	116 x 116 x 60



**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](mailto:mail@baldwinboxall.co.uk)  
W: [www.baldwinboxall.co.uk](http://www.baldwinboxall.co.uk)