

VIGIL ECLIPSE

(Compact Software Version COMP4)

Integrated Voice Alarm System

Installation and Operating Instructions

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BALDWIN BOXALL
C O M M U N I C A T I O N S

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Note Attachments supplied depending on system configuration.

GENERAL DESCRIPTION

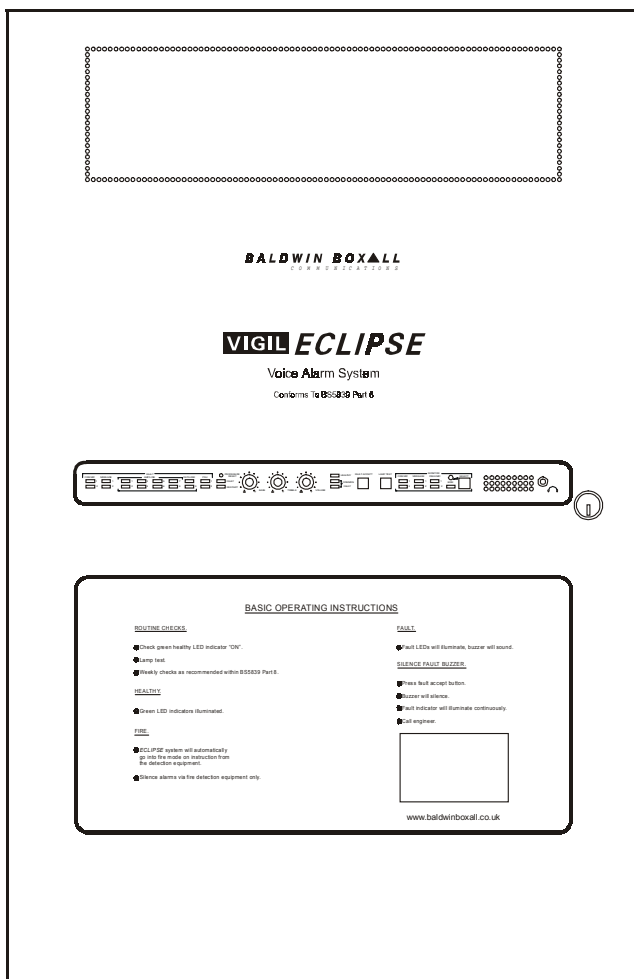
The VIGIL Eclipse is a purpose-built wall-mountable Voice Alarm or Public Address system. It boasts simple design that enables straightforward installation and commissioning, along with facilities to connect with most leading Fire Alarm Panels via the unique internal Fire Alarm Interface.

The VIGIL Eclipse uses the versatile VIGIL Compact along with the VIGIL amplifiers and BVSMF (power supply/charger) products and is fully BS5839 part 8 compliant. The VIGIL Eclipse is available in various combinations that can handle up to four dual circuit zones.

The whole system is wall mountable, completely stand alone and compact in design measuring only H856 x W556 x D364 mm.

It is recommended that the unit be fitted in a well-ventilated area using the Wall Mounted Bracket supplied.

The system is powered by a 230V AC 50-60Hz power supply with internal battery backup. The VIGIL Eclipse is supplied with the necessary number of BEL1 end of line monitoring devices to provide full monitoring.



Front Panel View
of Eclipse

FIG 1

MOUNTING INSTRUCTIONS

When delivered from the factory, the Eclipse will be supplied on a pallet with a Wall Mounting Bracket, and depending on the version with Amplifier frames, Microphones (if ordered), batteries, and BEL1 modules packed separately.

The mounting bracket should be fixed to wall first using suitable bolts for the required loading. (Centres shown in fig below). The Eclipse then can be fixed on to the mounting bracket using the 10mm nuts and washers supplied.

Care must be taken to ensure that the wall is strong enough to support the unit, which when assembled can weigh up to approximately 75KG without batteries.

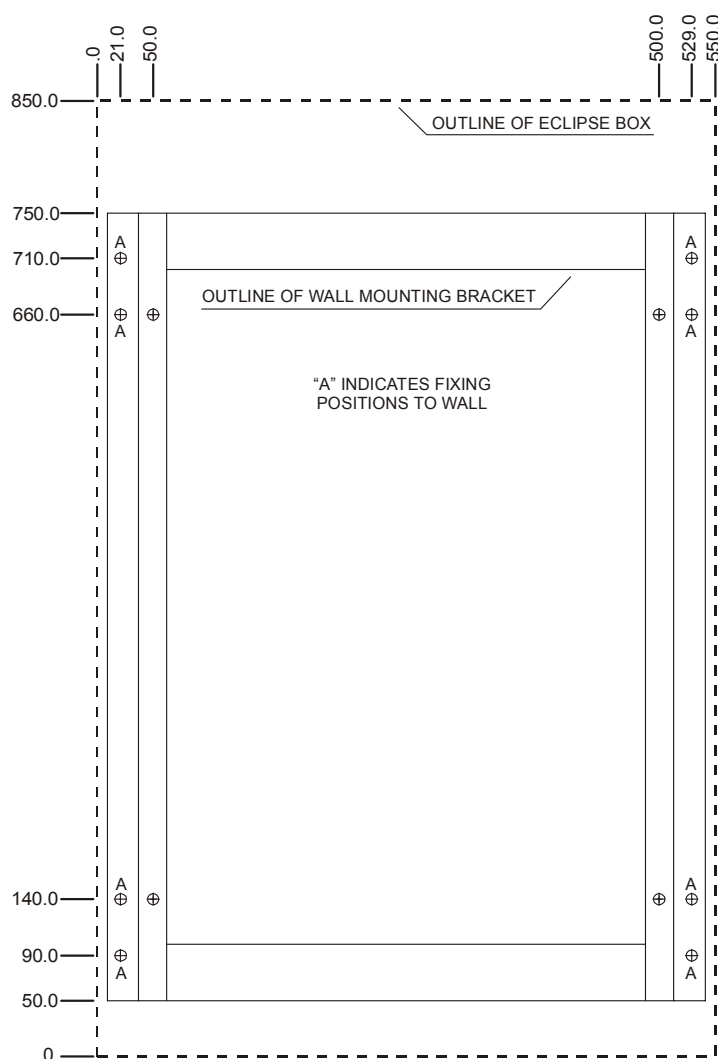


Diagram Showing Hole Centres For Mounting Bracket.

FIG 2

There are a number of 'knock-outs' along the top of the box for cable entry, and two in the base when external batteries are used.

It should be noted that when used for PA only the system is not supplied with any batteries. It is recommended that the unit is fitted to the wall before the amplifier mainframe(s) and batteries are installed.

INSTALLATION INSTRUCTIONS

Mainframe Assembly

Fit mainframe(s) into Eclipse and connect up as indicated on all cable looms. Make sure flying lead from mainframe power loom is connected to BVSMP chassis earth point.

Microphone(s) Installation

Connect suitable (i.e. fire resistant) cable from the microphone(s) to the connections on the Termination Board inside the Eclipse.

Refer to the relevant Instruction Manuals for connection details of each specific Microphone type and pages 7-9 of this manual for terminations inside the Eclipse.

Note : When using Fire Microphones (e.g. BFM01 / 04 etc) ensure any unused Zone Select Outputs are linked to "+VE REF" on the connector block inside the microphone box. This prevents incorrect fault indications.

Also ensure that for any unused "Fire Microphone Zone Select Lines" the relevant DIL Switch (SW2.X) on the Termination Board is set to "ON". See Fig 3 for further details.

Loudspeaker Connections

Ensure all loudspeaker connections are made using suitable cable for the installation. This includes adequate power rating and for VA installations the cable must be fire resistant.

When BEL1 End of Line Surveillance modules are used the Earth Return from each BEL1 must be connected to the relevant 0V connection on the Termination Board.

Power Up

Remove battery fuses from fuse box and then install batteries into Eclipse. Connect mains to Eclipse and power on. Refit battery fuses in fuse box.

Setting up the Line Surveillance

The BVCOM can monitor up to 8 (plus one reserve) line outputs. To prevent incorrect fault indications any unused "Amp/line fault inputs" should have the relevant switch (DIL SW1.X) on the Termination Board set to "ON". See Fig 4 for further details.

Set DIL Switch(SW1) to on for Continuous Surveillance mode. See Fig 4 for further details.

Adjust each pre-set in turn through the "Cut Out" in BVCOM lid to produce a 10V surveillance signal on the relevant zone (measured on the 100V loudspeaker line). See Fig 5 for details.

If there are no line faults all Amp/Line fault indicators on the front panel of the Eclipse should be extinguished.

Return DIL Switch (SW1) to 'OFF' to set the surveillance to intermittent mode. Fig 4.

Note The system should always be returned to intermittent surveillance mode once any setting up or maintenance has been completed.

Sending out the surveillance signal once every minute instead of continuously minimises the power consumption of the system, which increases battery standby time and reduces the heat generated by the power amplifiers.

INSTALLATION INSTRUCTIONS Continued

Switch Any Unused Fire Mic Select Lines To 'ON'.

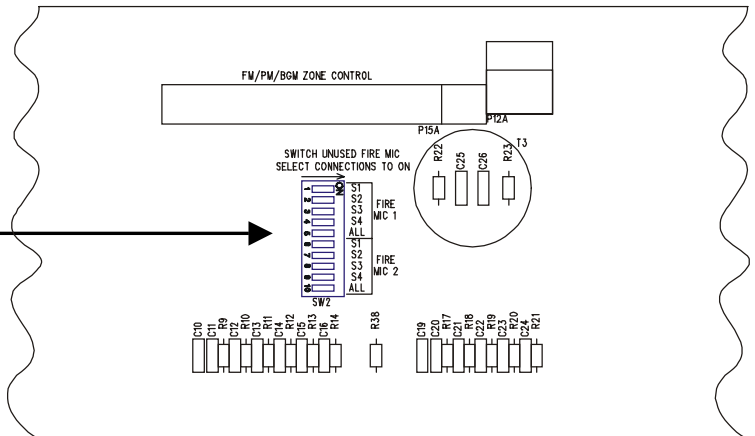
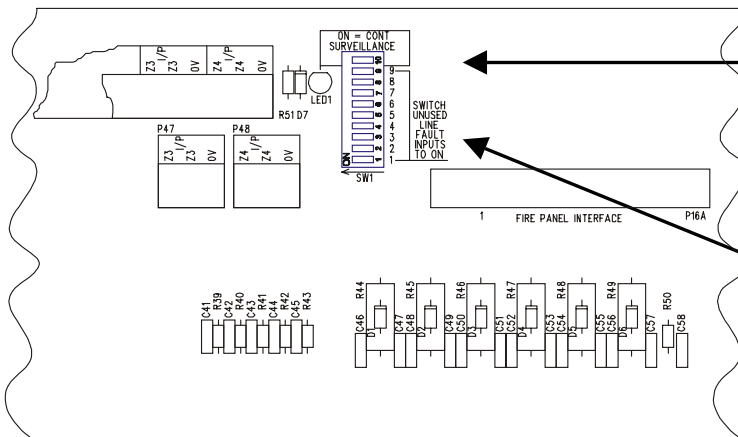


FIG 3



Switch To 'ON' For Continuous Surveillance.

Switch Any Unused Line Fault Inputs To 'ON'.

FIG 4

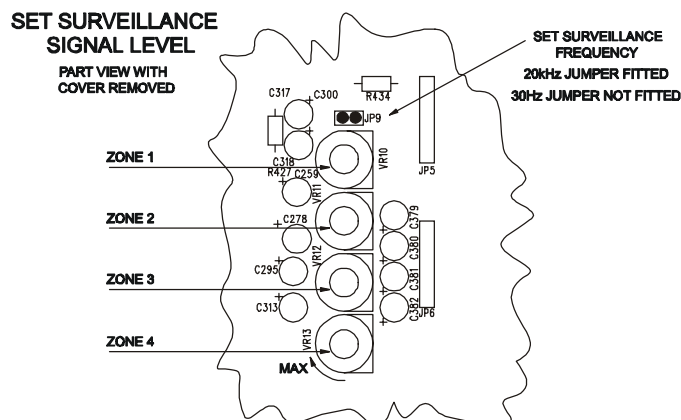


Fig 5

TERMINATIONS AND CONNECTIONS

Termination Board		Function	Description	Compact Terminal
1	FM 1	+24V	+24V @ 0.5A max via resettable fuse F1	P1 pin10
2	FM 1	Busy	Closes to 0V if any zone is in use	P1 pin 9
3	FM 1	Access All	Close to 0V via 1k2 to call all zones	P1 pin 8
4	FM 1	Zone 4 select	Close to 0V via 1k2 to call zone 1	P1 pin 7
5	FM 1	Zone 3 select	Close to 0V via 1k2 to call zone 2	P1 pin 6
6	FM 1	Zone 2 select	Close to 0V via 1k2 to call zone 3	P1 pin 5
7	FM 1	Zone 1 select	Close to 0V via 1k2 to call zone 4	P1 pin 4
8	FM 1	Ground 0V		P1 pin 3
9	FM 1	Audio line -	(balanced line input	P1 pin 2
10	FM 1	Audio line +	80 mV @ 80K ohms)	P1 pin 1

11	FM 2	+24V	+24V @ 0.5A max via resettable fuse F2	P2 pin10
12	FM 2	Busy	Closes to 0V if any zone is in use	P2 pin 9
13	FM 2	Access All	Close to 0V via 1k2 to call all zones	P2 pin 8
14	FM 2	Zone 4 select	Close to 0V via 1k2 to call zone 4	P2 pin 7
15	FM 2	Zone 3 select	Close to 0V via 1k2 to call zone 3	P2 pin 6
16	FM 2	Zone 2 select	Close to 0V via 1k2 to call zone 2	P2 pin 5
17	FM 2	Zone 1 select	Close to 0V via 1k2 to call zone 1	P2 pin 4
18	FM 2	Ground 0V		P2 pin 3
19	FM 2	Audio line -	(balanced line input	P2 pin 2
20	FM 2	Audio line +	80 mV @ 80K ohms)	P2 pin 1

21	PM 1	+24V	+24V @ 0.5A max via resettable fuse F3	P3 pin 8
22	PM 1	Busy	Closes to 0V if any zone is in use	P1 pin 9
23	PM 1	Zone 4 select	Close to 0V to call zone 4	P3 pin 7
24	PM 1	Zone 3 select	Close to 0V to call zone 3	P3 pin 6
25	PM 1	Zone 2 select	Close to 0V to call zone 2	P3 pin 5
26	PM 1	Zone 1 select	Close to 0V to call zone 1	P3 pin 4
27	PM 1	Ground 0V		P3 pin 3
28	PM 1	Audio line -		P3 pin 2
29	PM 1	Audio line +		P3 pin 1

30	PM 2	+24V	+24V @ 0.5A max via resettable fuse F4	P4 pin 8
31	PM 2	Busy	Closes to 0V if any zone is in use	P1 pin 9
32	PM 2	Zone 4 select	Close to 0V to call zone 4	P4 pin 7
33	PM 2	Zone 3 select	Close to 0V to call zone 3	P4 pin 6
34	PM 2	Zone 2 select	Close to 0V to call zone 2	P4 pin 5
35	PM 2	Zone 1 select	Close to 0V to call zone 1	P4 pin 4
36	PM 2	Ground 0V		P4 pin 3
37	PM 2	Audio line -		P4 pin 2
38	PM 2	Audio line +		P4 pin 1

TERMINATIONS AND CONNECTIONS Continued

Termination Board		Function	Description	Compact Terminal
39	BGM	Zone 4 select	(Close to 0V to access or	P5 pin 7
40	BGM	Zone 3 select	via 4k7 potentiometer	P5 pin 6
41	BGM	Zone 2 select	if remote volume control	P5 pin 5
42	BGM	Zone 1 select	Is required)	P5 pin 4
43	BGM	Ground 0V		P5 pin 3
44	BGM	Audio line -		P5 pin 2
45	BGM	Audio line +		P5 pin 1
46	BUSY	Zone 1 busy	Closes to 0V if zone 1 is in use	P7 pin 1
47	BUSY	Zone 2 busy	Closes to 0V if zone 2 is in use	P7 pin 2
48	BUSY	Zone 3 busy	Closes to 0V if zone 3 is in use	P7 pin 3
49	BUSY	Zone 4 busy	Closes to 0V if zone 4 is in use	P7 pin 4
50	BUSY	Common busy	Closes to 0V if any zone is in use	P7 pin 5
51		Link to unused fire microphone select inputs		P7 pin 7
52		Surv Sync	Close to 0V for continuous surveillance sync.	P7 pin 8
53	F/P	Evac zone 1 +		P8 pin 1
54	F/P	Evac zone 1 –	(Sounder circuit interface with internal	P8 pin 2
55	F/P	Evac zone 2 +	end of line Resistors. Reverse polarity	P8 pin 3
56	F/P	Evac zone 2 -	for alarm condition. + - shown for the active	P8 pin 4
57	F/P	Evac zone 3 +	i.e. alarm condition.)	P8 pin 5
58	F/P	Evac zone 3 –		P8 pin 6
59	F/P	Evac zone 4 +	** See note below re EOL resistor values **	P8 pin 7
60	F/P	Evac zone 4 –		P8 pin 8
61	F/P	Reset +		P9 pin 7
62	F/P	Reset -		P9 pin 8
63	F/P	Alert all +		P9 pin 5
64	F/P	Alert all -		P9 pin 6
65	F/P	Aux O/P	Closes to 0V if either fire mic or alarm is in use	P9 pin 4
66	F/P	Common fault relay output n/o		P9 pin 1
67	F/P	Common fault relay output common		P9 pin 2
68	F/P	Common fault relay output n/c		P9 pin 3
69		RS 485 data +		
70		RS 485 data –		
71		Ground 0V		
72		Ground 0V		

Note The total End Of Line resistor value is a combination of two resistors in series - one is fitted on the Termination Panel and the other is fitted inside the BVCOM.
By Default, the resistor fitted inside the BVCOM is 2K2.

For values larger than 2K2, the resistor on the termination panel should be changed (i.e. fitting a 2K7 on the panel would give approximately 5K overall).

For values smaller than 2K2 the resistor on the termination panel should be linked out and the resistor in the BVCOM changed to the required value.

TERMINATIONS AND CONNECTIONS Continued

Termination Board	Function	Description
AMP1	O/P	100V line loudspeaker output 1
AMP1	0V	Earth for BEL1
AMP1	O/P	100V line loudspeaker output 1
AMP2	O/P	100V line loudspeaker output 2
AMP2	0V	Earth for BEL1
AMP2	O/P	100V line loudspeaker output 2
AMP3	O/P	100V line loudspeaker output 3
AMP3	0V	Earth for BEL1
AMP3	O/P	100V line loudspeaker output 3
AMP4	O/P	100V line loudspeaker output 4
AMP4	0V	Earth for BEL1
AMP4	O/P	100V line loudspeaker output 4
AMP5	O/P	100V line loudspeaker output 5
AMP5	0V	Earth for BEL1
AMP5	O/P	100V line loudspeaker output 5
AMP6	O/P	100V line loudspeaker output 6
AMP6	0V	Earth for BEL1
AMP6	O/P	100V line loudspeaker output 6
AMP7	O/P	100V line loudspeaker output 7
AMP7	0V	Earth for BEL1
AMP7	O/P	100V line loudspeaker output 7
AMP8	O/P	100V line loudspeaker output 8
AMP8	0V	Earth for BEL1
AMP8	O/P	100V line loudspeaker output 8

L	Live	Mains Input)
E	Earth	Mains Input) Max 1400 VA, fuse at 13A
N	Neutral	Mains Input)

The above termination list should be used in conjunction with the relevant wiring diagrams found in their respective Operating Instruction Manual.

CE 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

