

Issue 4 IBDM332
17/09/2009
ECR 2278

BDM 332 & 332M

Operating Instructions

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BALDWIN BOX▲LL
C O M M U N I C A T I O N S

BDM 332

The BDM 332 microphone is designed for use with our MITRE, ADEPT and VIGIL amplifier range and can be desk or wall mounted.

To Operate

1. Select zone(s) needed. 'Zone Select' LED(s) will flash indicating selected zone(s).
2. Press 'Speak' to make an announcement. The 'Speak Now' LED will illuminate indicating that the system is ready for use, along with 'Zone Select' and 'Zone Busy' LED's for any selected zones. If a pre-announcement chime is being used the 'Speak Now' delay function must be selected. The LED will illuminate after approx. 2.5 seconds.
3. If an announcement is required to all zones then simply press 'ALL'.
4. During the announcement the speech volume indicator will fluctuate. Try to keep the indication constant without the yellow segment illuminating. Maintaining a constant level will aid intelligibility.

Additional Features

Several important functions are incorporated into the microphone and may be selected as required. DIL switches are accessed via the side panel, refer to Fig 2.

1. Speak Now Indicator

The 'Speak Now' LED will operate in two different modes.

- a) Instantly illuminates when 'SPEAK' is pressed.
- b) Delayed by 2.5 seconds to allow time for chime to operate and finish.

2. Zone Select Cancel

This facility is selectable between cancel and no cancellation modes.

- a) When 'Speak' key is released, all zone selections will be cancelled. When a fresh announcement is to be made, zones must be re-selected.
- b) When 'Speak' key is released, the zones will remain selected. This is particularly useful when repeat messages to the same zones are made. To cancel zone selection each zone will need to be de-selected. (Default mode)

3. Output Level Option

The balanced audio output can be selected to either microphone (2.5mV) or line level (250mV), switchable by the DIL switch, refer to Fig 2.

Twin screened cable runs, up to 100 metres, generally operates well at microphone levels.

However, if cable runs in excess of 100 metres are encountered or amplifier inputs are required to be wired in parallel, it is advisable to select the line level output and use

amplifiers with line inputs. Using this higher level ensures that any unwanted interference signals induced on the cable are of a low level compared to the speech signal.

If the amplifier only has balanced microphone inputs, it is possible to convert them to line level using three resistors forming an attenuator as shown in Fig 1 below.

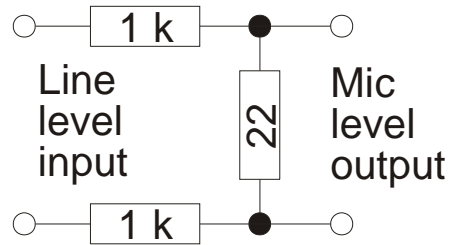


Fig 1

4. Limitter

Selecting the limiter will ensure that the signal level remains fairly constant irrespective of input level changes. Using it will prevent system overload when different personnel use the microphone or speak too close to the microphone.

Note: Sensitivity increases by 12dB when limiter is selected.

BDM332M

The BDM332M has a factory fitted surveillance option to allow for monitoring of the microphone capsule and control lines.

The surveillance frequency is factory set to either 20KHz or 1.5KHz (Default 20KHz).

The output surveillance level can be adjusted by VR1 on the surveillance option, which is located on the rear panel inside the microphone.

Note: 'Zone Busy' indication is not operational on BDM332M.

Technical Specification

	Microphone	Line
Nominal output level	2.5mV	250mV
Maximum output level limiter operating	7mV	700mV
Output impedance	47 Ohms	400 Ohms
Frequency response	250Hz – 10KHz	
Power requirements	BDM332	24V DC 120mA standby 600mA max

BDM332 Connections and Terminations

The microphone is terminated to two 25 way 'D' connectors and is supplied with two BMS25 single gang socket boxes. Connections are made using screw terminals.

Cable no. 1

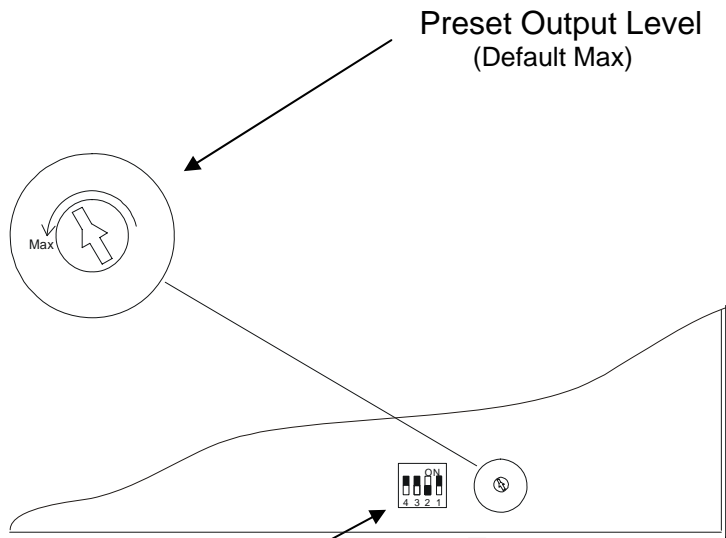
Function		Colour	BMS25 Pin Number
Select Zone 1		Green	1
Select Zone 2		Grey	2
Select Zone 3	NPN open	Pink	3
Select Zone 4	Collector outputs,	Orange	4
Select Zone 5	40v @ 100mA	Turquoise	5
Select Zone 6	max to zone	White / Red	6
Select Zone 7	Select relays etc	White / Blue	7
Select Zone 8		Green / Red	8
Select Zone 9	Connects to 0v	Red / Blue	9
Select Zone 10	When the 'Zone'	Yellow / Blue	10
Select Zone 11	or 'Speak' keys	Yellow / Red	11
Select Zone 12	are selected	Red / Black	12
Select Zone 13	Together, or	Red / Brown	13
Select Zone 14	'All Call'	Blue / Black	14
Select Zone 15		Orange / Blue	15
Select Zone 16		Yellow / Green	24
Spare		Brown	16
Spare		Screen / Green / Yellow	17
Spare		Blue	18
0V (-)		Black	19
24V (+)	Supply Input	Red	20
Spare		White	21
Spare			
Spare		Mauve	22
Spare			23
Spare			25

Cable no. 2

Function		Colour	BMS25 Pin Number
Select Zone 17		Green	1
Select Zone 18		Grey	2
Select Zone 19	NPN open	Pink	3
Select Zone 20	collector outputs,	Orange	4
Select Zone 21	40v @ 100mA	Turquoise	5
Select Zone 22	max to zone	White / Red	6
Select Zone 23	Select relays etc.	White / Blue	7
Select Zone 24		Green / Red	8
Select Zone 25	Connects to 0v	Red / Blue	9
Select Zone 26	when the 'Zone'	Yellow / Blue	10
Select Zone 27	or 'Speak' keys	Yellow / Red	11
Select Zone 28	are selected	Red / Black	12
Select Zone 29	together, or	Red / Brown	13
Select Zone 30	'All Call'	Blue / Black	14
Select Zone 31		Orange / Blue	15
Select Zone 32		Yellow / Green	24
Audio Line	Floating Output	Brown	16
Screen	Connect to 0V	Screen / Green / Yellow	17
Audio Line	Floating Output	Blue	18
0V (-)		Black	19
24V (+)	Supply Input	Red	20
Access (Amplifier)	Connects to 0V when 'Speak' or 'All Call' keys are pressed.	White	21
Busy LED	Switch to 0V to illuminate	Mauve	22
Spare			23
Spare			25

Selector Location and Settings

Remove the two screws from right hand side and remove panel.



Right Hand PCB ONLY

DIL Switch 1 on --- Mic level
 2 on --- Line level
 3 on --- Limiter
 4 on --- Speak Now delay
 (Default: 2 on. 1,3& 4 off)

Both PCB'S

Remove Jumper
 From P11 situated
 behind DIL switch
 for zone cancel mode
 (Default: Jumper fitted)

Note: Ensure that the supply is disconnected before changing switch settings.

Zone Insert Labels

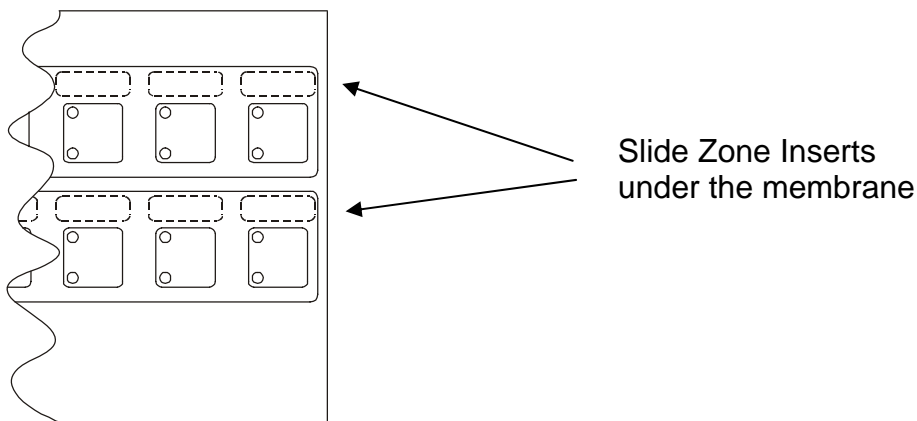


Fig 3

Note: Zone Insert Template is also available to download from www.baldwinboxall.co.uk

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