

# Installation

## micro Distributed Amplifier Unit (COMPACT-DAU)



A micro Distributed Amplifier Unit also called micro-DAU (COMPACT-DAU) connects to the analogue (device) loop and audio loop circuits of Vigilon Compact VA panel. The unit can accommodate two speaker circuits, each having up to 5 high efficiency speakers connected in parallel. The unit has local message store for output to its speaker circuits for announcement of emergency and auxiliary event messages. Announcement of a centrally stored message or live speech from the control panel via the emergency microphone is routed to the micro-DAUs via the audio loop for output to their speaker circuits. The micro-DAU is remotely powered by the control panel via a loop circuit.

The micro-DAU is supplied in two assemblies:

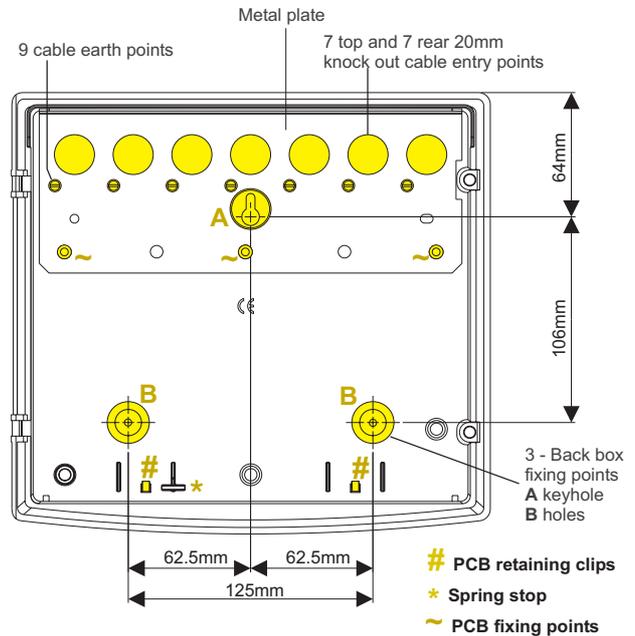
- Backbox with front cover
- micro-DAU PCB assembly

Parts in the spares pack		Quantity
Allen key		1
M4 Socket head screw (for door)		2
Cable entry bungs		3
Screw (PCB fixing)		1
Washer (use with PCB fixing screw)		1

Open the outer door using the allen key.

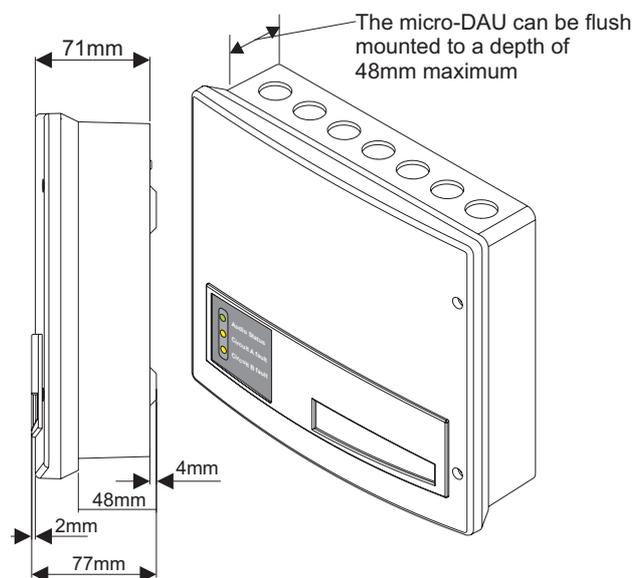


### Backbox



### Flush fixing the micro-DAU

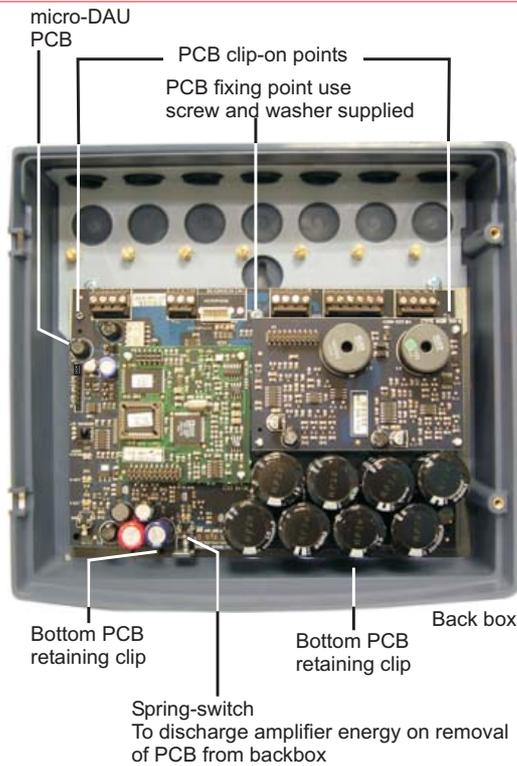
The micro-DAU can be flush fixed.



**To install backbox and micro-DAU PCB**

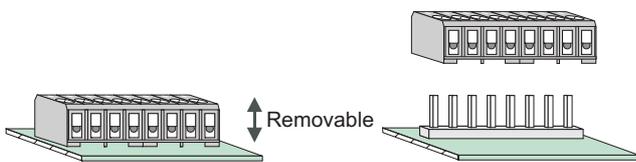
Mount the backbox to a flat wall surface using suitable fixings. Fit the micro-DAU PCB into the backbox using the fixing screw and washer provided.

**When fitting micro-DAU PCB into the backbox ensure the spring on the bottom edge of the board engages into the spring stop and the bottom edge of the board fits under the retaining clips.**



**Removable terminal block**

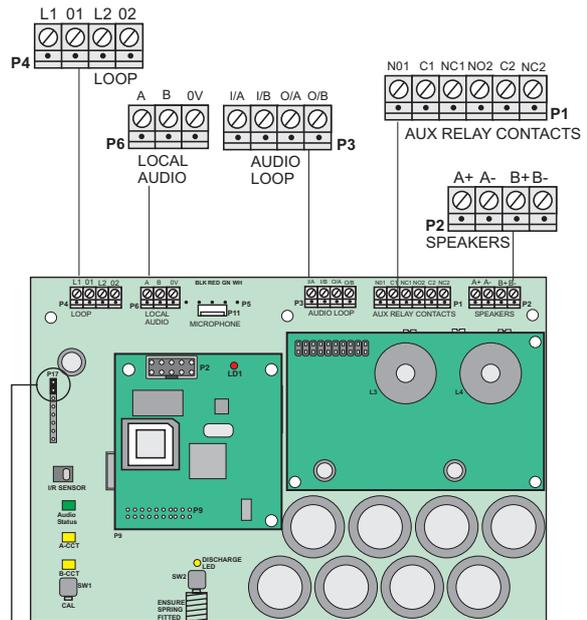
For ease of wiring the micro-DAU, the terminal blocks on the PCB can be unplugged.



**Terminals for external wiring**

The micro-DAU has terminals for the connection of device loop circuit, audio loop circuit, speaker circuits, local audio (for local background music) and local test microphone.

**Always connect the micro-DAU on the MAIN DEVICE LOOP (analogue loop) and not on a Spur circuit off the main loop. There MUST be at least one speaker connected to each speaker circuit.**



**P17** During commissioning this link must be removed from connector P17. The link must be replaced after commissioning the micro-DAU.

**After all the wiring is complete fit the bungs supplied in the spares pack to cover up the unused cable entry holes. Close the outer door and use the socket head screws to lock the door.**

For details on wiring, see the Vigilant Compact Voice Alarm Installation instructions booklet supplied with the control panel.

**WEEE Directive:**  
At the end of their useful life, the packaging, product and batteries should be disposed of via a suitable recycling centre. Do not dispose of with your normal household waste. Do not burn.

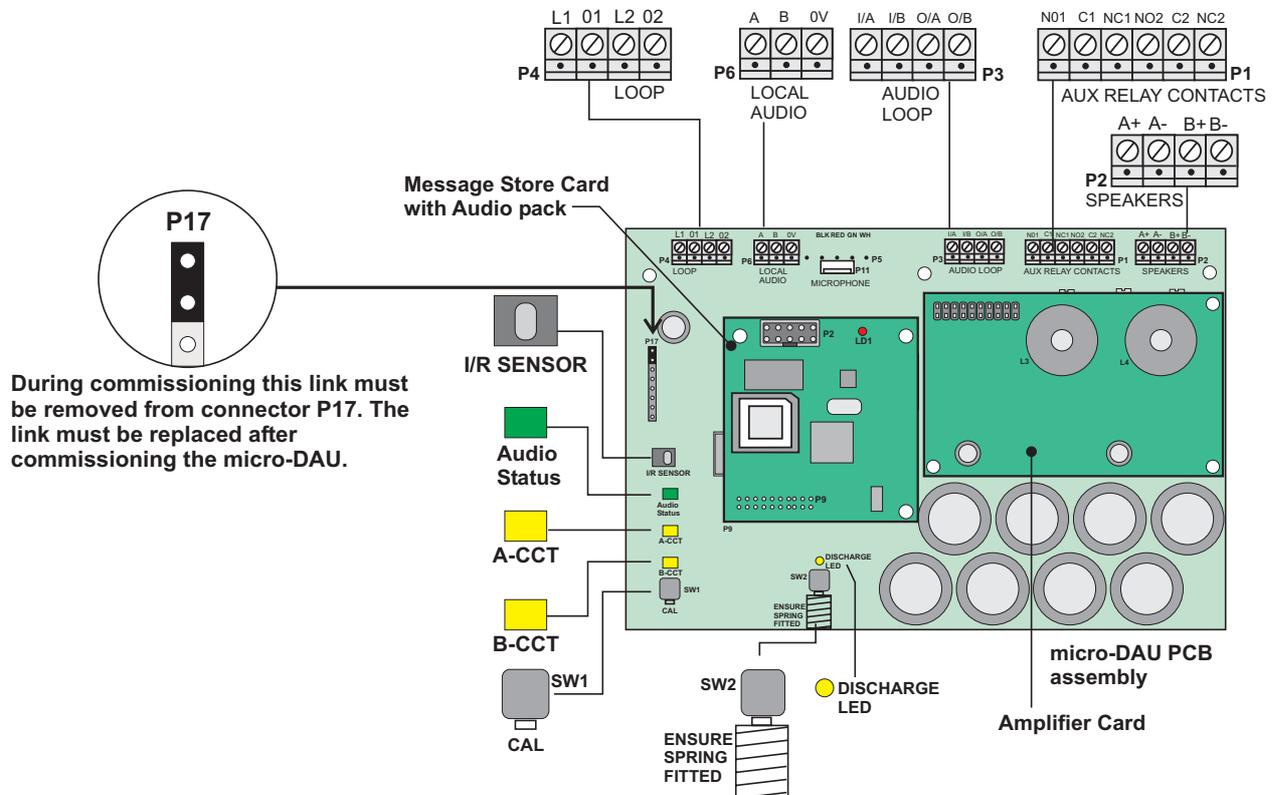
**At the end of their useful life, the packaging, product and batteries should be disposed of via a suitable recycling centre and in accordance with national or local legislation.**

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# Commissioning information micro Distributed Amplifier Unit (COMPACT-DAU)

## Terminals and main components



Terminals	Description
L1 & 01, L2 & 02 device loop circuits 1 and 2	These terminals are used to wire the device loop circuits, LOOP IN terminals are L1 & 01 and LOOP OUT are L2 & 01.
A B local audio	These terminals accept most audio source, such as background music for broadcast to the local speaker circuits.
I/A & I/B O/A & O/B audio loop	These terminals accept the audio loop circuit. Here the O in O/A and O/B signify output, while the I in I/A and I/B signify input.
NO1, C1, NC1 and NO2, C2 and NC2 auxiliary relay contacts	These are auxiliary relay contacts, rated at 1A 24Vdc. The relay can be configured to operate with: <ul style="list-style-type: none"> <li><input type="checkbox"/> central emergency microphone</li> <li><input type="checkbox"/> local message activation</li> <li><input type="checkbox"/> central message activation</li> <li><input type="checkbox"/> central PA activation</li> <li><input type="checkbox"/> Background music</li> <li><input type="checkbox"/> local audio input (background music)</li> <li><input type="checkbox"/> local test microphone.</li> </ul> The relay can be configured to operate with any of the above conditions, in any combination.
A+, A- and B+, B- Speaker circuits	These terminals accept the connection of two speaker circuits. Each speaker circuit can have up to 5 x 64ohms speakers.

# Audio Pack 1

The Vigilon Compact VA Control panel, micro-DAU and Mains Powered DAU each have an Audio Pack 1 installed that contains the following messages and tones. **# from Vigilon Compact VA panel only.**

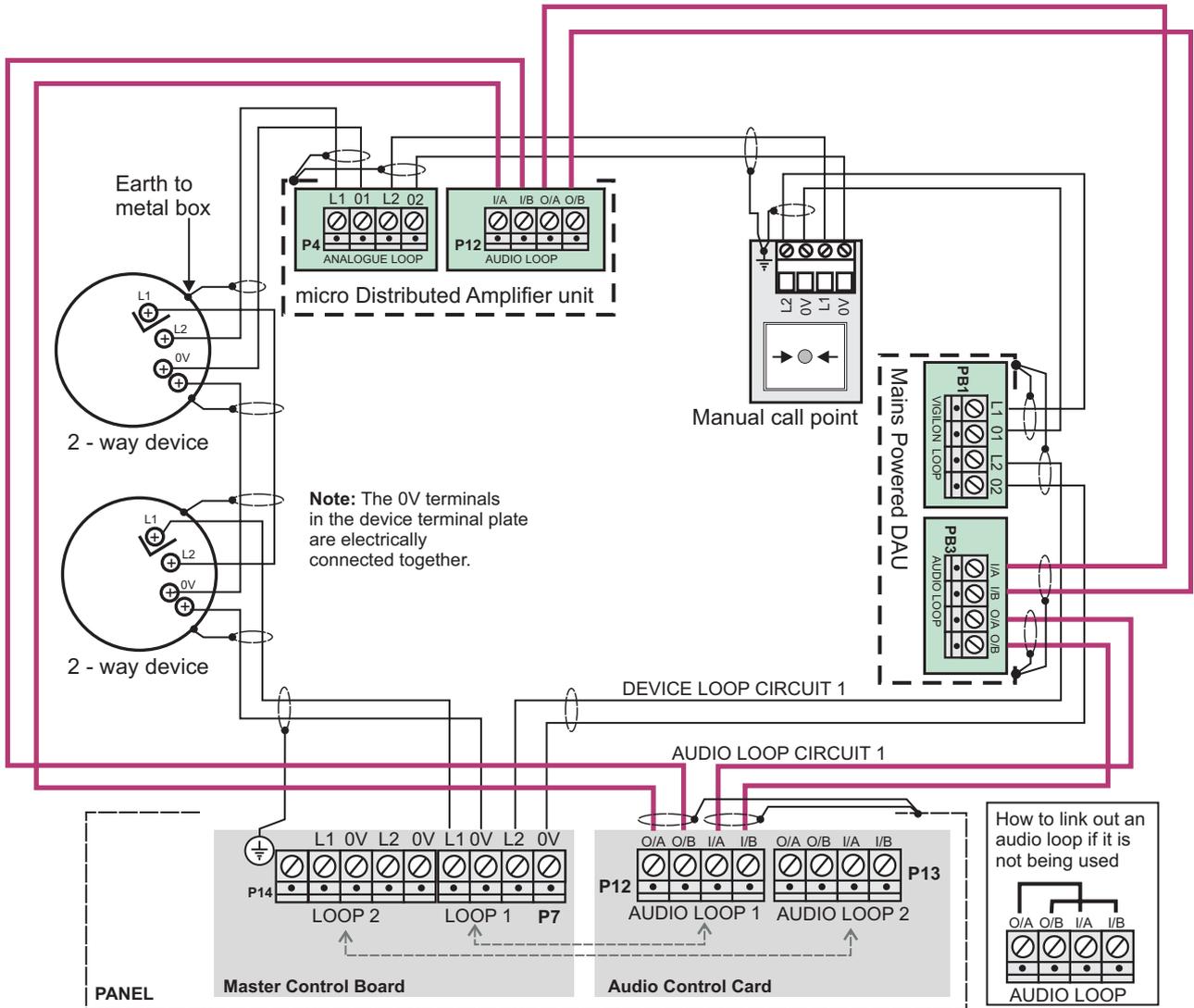
No.	Type of message	Voice	Message
1	Test	Male	The voice alarm volumes are being adjusted there is no need to take any action.
2	Alert (default - Emergency 1)	Female	Your attention please, the fire alarm has been activated in another area, please remain where you are and await further instructions.
3	Evacuate (default - Emergency 2)	Male	Attention please, attention please, this is an emergency, please leave the building by the nearest available exit. Do not use the lifts or escalator.
4	Bomb (default - Emergency 3)	Female	May I have your attention please, an incident has been reported in the area, as a precaution please move away from the windows, I repeat, please move away from all windows, further information will follow shortly.
5	Alert (alternative)	Female	May I have your attention please, may I have your attention please, an incident has been reported in the building, whilst this report is being investigated, please remain at your workplace.
6	Evacuate (alternative)	Male	Ladies and gentlemen, due to unforeseen circumstances we are required to evacuate the building, please leave the building immediately by the nearest available exit.
7	Gas Carbon Monoxide	Male	May I have your attention please, may I have your attention please, excessive carbon monoxide levels have been detected, please leave the area immediately by the nearest available exit.
8	Gas Fixed Extinguishant	Male	May I have your attention please, may I have your attention please, extinguishant gas release imminent, please evacuate the area immediately by the nearest available exit.
9 #	Fire alarm test (default - Auxiliary 1)	Female	Attention please, attention please, this is the test of the fire and voice alarm system, there is no need to take any action.
10 #	Fire alarm test end (default Auxiliary 2)	Female	The test of the fire and voice alarm system has now been completed.
11 #	Coded message	Female	Would Mr Sands please report to reception.
12 #	Class change	Female	Class change
13 #	Gent Limited advertisement	Female	Ladies and gentlemen this speech message is produced by Gent Limited's Vigilon Compact Voice Alarm system. This product integrates voice alarm functions into an analogue fire alarm system ideal for small to medium sized buildings.
14 #	Stand down (default - Auxiliary 3)	Female	May I have your attention please, the cause of the alarm has been investigated and the system reset. There is no cause for concern. Thank you.
15 #	Navy radiological attack	-	Beep beep beep (950Hz 80ms beep every 420mS)
16 #	Navy bandit attack	-	Beep beep beep (950Hz 50ms beep every 80mS)
17	Nursery Rhyme 1		Boys & Girls
18	Nursery Rhyme 2		Twinkle Twinkle
19	Factory test	-	Frequency sweep (300Hz to 10KHz in 3s)

## Attention tone

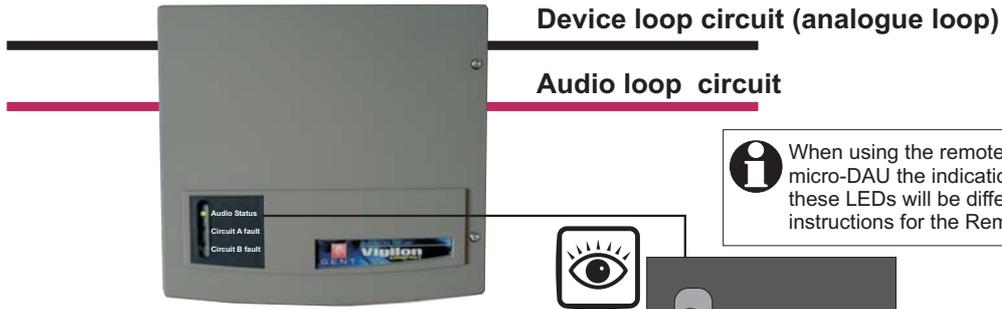
No	Description of tone	No	Description of tone
1	Neer Naw x 8	6	Pulse
2 #	Two tone (Bing bong)	7 #	Continuous
3	Four Tones - ascending	8 #	Bong
4	Four Tones - descending	9 #	Chopin
5	Bell	10 #	Jingle

**How to connect the Device and Audio Loop circuits**

The audio loop may be commissioned once the device (analogue) loop has been satisfactorily powered up with addresses allocated to all the devices on loop circuits. The Audio loop wiring is routed from the control panel with connection to each micro-DAU and Mains Powered DAU on the associated loop with return connection at the panel, that is Audio loop 1 is used with Device loop 1 and Audio loop 2 is used with Device loop 2.



**Indications at the micro-DAU**



**i** When using the remote control on a micro-DAU the indications given by these LEDs will be different, see instructions for the Remote control.

**LED Keys**

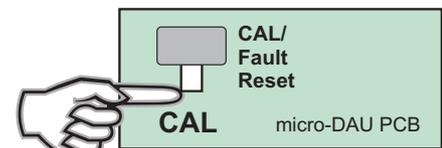
- - Off
- - blink - 1 blink (quick flash) every 1s
- - slow - 1 slow flash (every 0.5s - On 0.5s Off) every 1s
- - x2 - 2 flashes (single occurrence)
- - fast - 8 quick flashes (blinks) every 1s
- ☀ - steady On
- - Don't care

	green LED	yellow LED	yellow LED
No Power to micro-DAU	○	○	○
Amplifiers and Speaker circuits healthy	Quiescent	● - blink	○
	Audio On	☀	○
	micro-DAU in Fall back mode	● - fast	○
	During Speaker calibration	● - x2	○
Fault on Speaker Circuit A	-	● - slow	○
Wiring Short or Open circuit on Speaker Circuit A	-	☀	○
Fault on Speaker Circuit B	-	○	● - slow
Wiring Short or Open circuit on Speaker Circuit B	-	○	☀
Amplifier A fault	-	● - blink	○
Amplifier B fault	-	○	● - blink
Audio and Device loop circuits disconnected. For example when the micro-DAU is discharging the stored energy.	● - fast	● - fast	● - fast

It may be possible to recover from these faults by calibrating the speaker circuits, see 'How to calibrate speaker circuits'.

It may be possible to recover from an Amplifier fault

**i** The panel MUST NOT be in 'Test Mode' when attempting an Amplifier fault recovery.

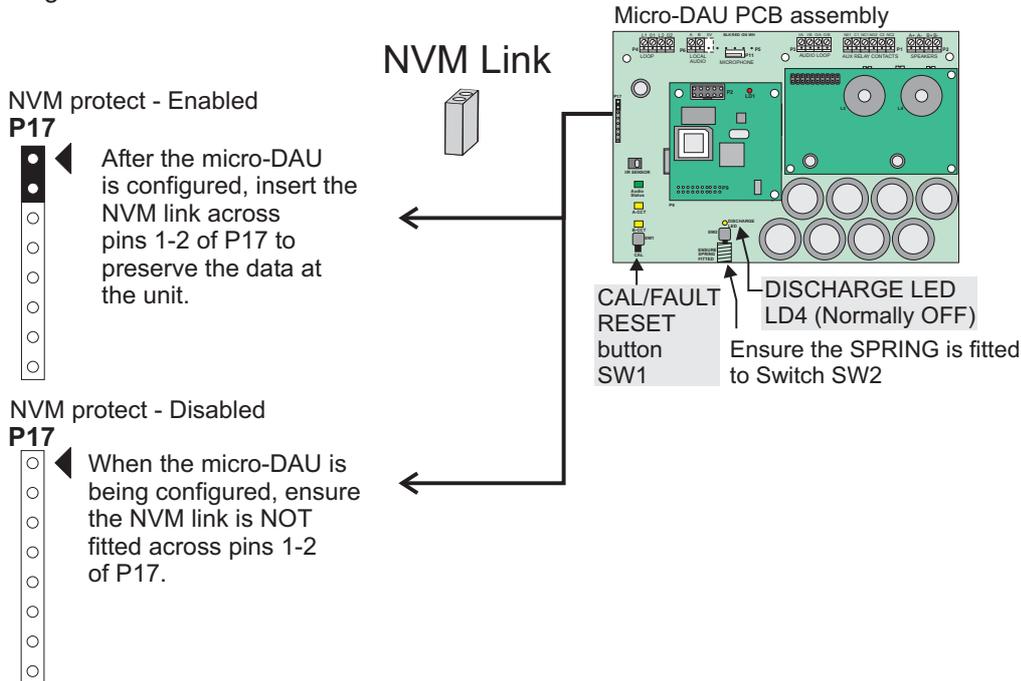


**1** Press the CAL button on micro-DAU PCB.

If the amplifier is still faulty then the indication will reappear.

**The NVM Link**

Before calibrating the speaker circuits or when configuring the micro-DAU always remove the NVM link from pins 1 and 2 on connector P17 and replace the link after speaker circuit calibration and micro-DAU configuration.



**To calibrate the Speaker circuits at the micro-DAU**

Ensure the speaker circuits are connected to the terminals on the micro-DAU, the circuits may be calibrated by pressing the CAL button.

**i** Before calibrating the speaker circuits ensure the NVM link is removed from connector P17.

**Key**  
 -●- x2 - 2 flashes (single occurrence)

- Switch On the Test Mode at the Control panel.
- Press the **CAL** button on micro-DAU PCB to calibrate both speaker circuits. Start of calibration you will get single indication:  
 -●- x2 Audio Status

You may need to wait for up to 2 minutes for the end of calibration.

The amber LEDs 'A-CCT' and 'B-CCT' are lit and then extinguish during calibration with a panel message 'Speaker circuit restored'.

- Ensure the panel Test Mode is switched Off.

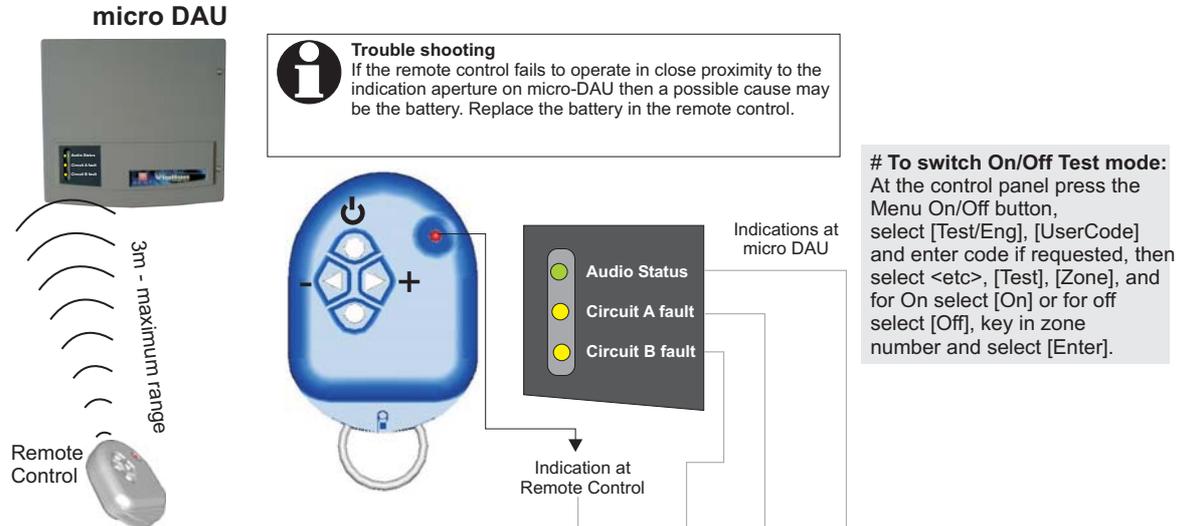
**i** You can also calibrate the speaker circuits by using the remote control.

**To calibrate the speaker circuits using the Remote control (S3-CONTROL)**

The preferred method of calibrating the speaker circuits is by using the CAL button on the micro-DAU PCB, however it is possible to calibrate the speaker circuits using a remote control .



Before calibrating the speaker circuits ensure the NVM link is removed from connector P17.



**To calibrate the speaker circuits**

1	Switch On the Test mode at the control panel, see #.	○	○	○	● - blink
2	Press and hold the <i>f</i> button and make a short press on the  Power button and then release the <i>f</i> button. This will start the calibration of both the speaker circuits of the micro-DAU.	● - x3	○	○	● - x2
3	Wait for 2 minutes You may also hear a popping sound from the speakers during calibration.	● - x3	○	○	● - blink
4	Make a short press on the  button and release it to power off the remote control.	○	○	○	● - blink
4	Switch Off the Test mode at the control panel, see #.	○	○	○	● - blink

**Keys for Remote Control**

○	- Off
● - x1	- 1 flash every 2s
● - x3	- 3 quick flashes every 2 seconds
☀	- steady On

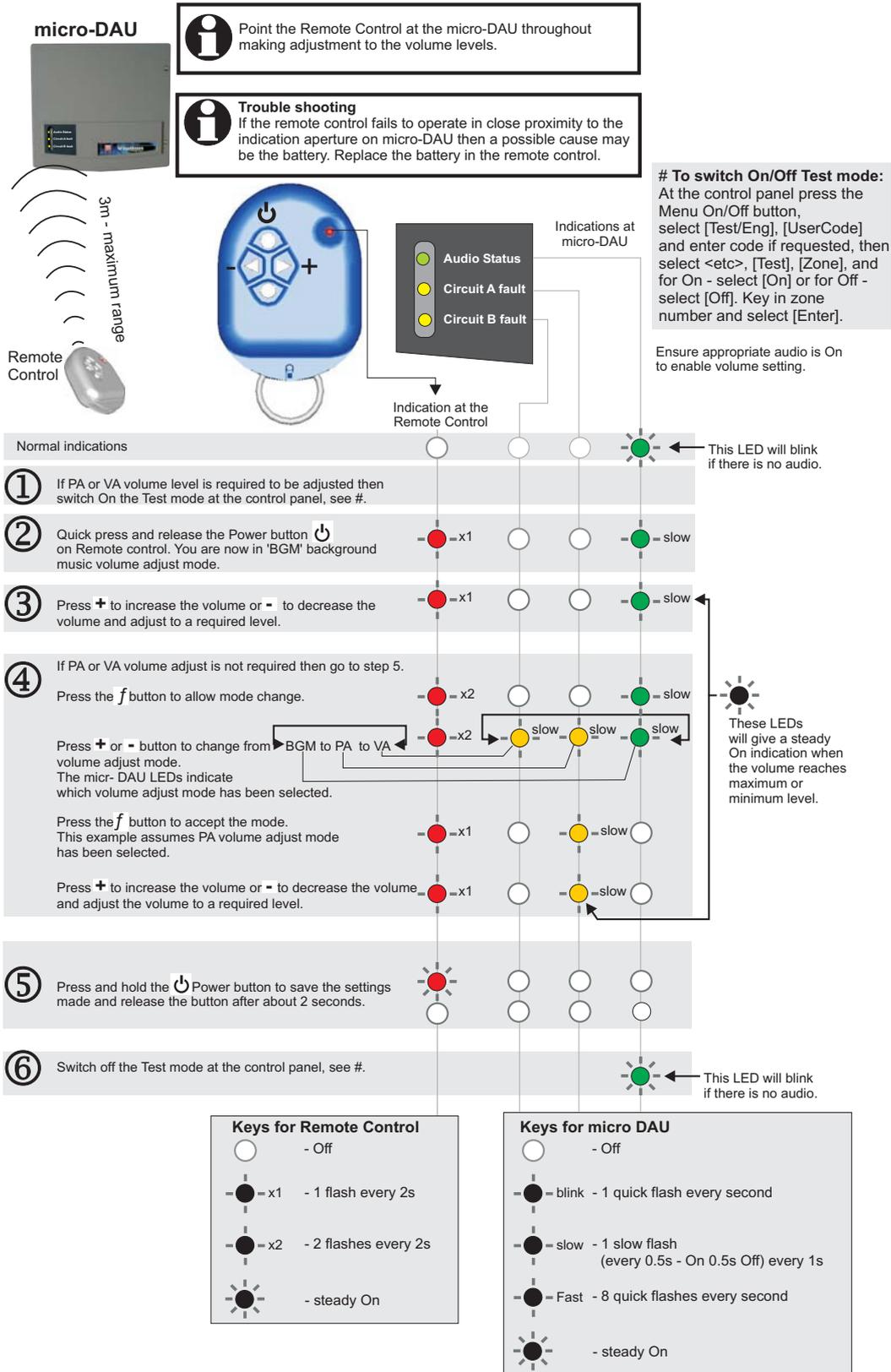
**Keys for micro DAU**

○	- Off
● - x2	- 2 flashes single occurrence
● - blink	- 1 blink (quick flash) every 1s
● - slow	- 1 slow flash (every 0.5s - On 0.5s Off) every 1s
☀	- steady On

**To adjust the volume level of PA, V A and background music using the remote**

For certain types of applications, such as in a hospital, there may be a requirement to set the volume levels of a micro-DAU using the remote control (S3-CONTROL).

**! To comply with the requirements of EN54:Part 3 the minimum volume of an alarm sounder for voice alarm application should be no less than 65dBA at 1m.**



**To test the audio to speaker circuits**

The audio to speaker circuits can be tested by making announcements via:

- Emergency microphone
- PA microphone
- activating the central emergency and auxiliary messages at the control panel
- and by switching on the Background music system.

**How to enable or disable Background music or PA**

The background music and PA can be enabled or disabled, to do this press the Menu On/Off button and then select [Control] followed by [Enable] / [Disable] and then momentarily press <etc> and select [Audio], now select either [PA] or [Music] followed by [Enter].

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