



The PA4 is a 4 button confirmable panic alarm that comes with inbuilt resistors for EOL installations. **It requires a nominal 12V power supply and two independent zones to operate.** There are currently two versions of the PA4. These instructions apply to both as they are electronically identical:

PA4S – Black unit with stainless steel fascia

PA4W – White unit with plain fascia

INSTALLATION

For reference, see the diagram overleaf. Due to the complexity of the unit, you may wish to configure the PA4 before mounting it on the fitting surface. Else, lift the cover by removing two screws on the front of the unit and pulling the cover away. Drill appropriate holes in the mounting surface for the unit. Ensure that a fitting screw passes through the back tamper hole in the PCB when mounting – **Do not over tighten this screw as it will break the PCB tamper – rendering the unit inoperable.**

CONFIGURATION

To configure the behaviour of the unit, see the below table:

Link	Position	Operational Effect
Confirm	ON	Alarm A will activate regardless of which button pair is pushed first (side or top). The blue LED will light on the unit and a 12 hour timer is started. If the alternate button pair is pressed in this time window, Alarm B will activate and the red LED will light to show the confirmed alarm. The unit can be reset from both states with the supplied key – turn clockwise.
	OFF	Both outputs are completely independent. The side pair of buttons activates Alarm A. The top pair of buttons activates Alarm B. In this mode, it is determined by the panel whether a sequential activation has taken place or not.
LED	ON	The blue LED will flash every 10 seconds as a comfort feature in addition to showing PA outputs / insufficient power.
	OFF	The PA will only light in response to button presses & insufficient power
Latch	ON	When a button pair is pressed, its output will stay active.
	OFF	When a button pair is pressed, its output will activate for ~1 second and then deactivate. It is recommended to use the confirm & latch links together.

RESISTOR SELECTION

Use the table below to select the appropriate resistors for your panel. These settings should be applied to both outputs. Simply fit jumper links to the pin pairs shown below. These are marked on the PCB.

Control Panel	Value		Jumper	
	EOL	Alarm	EOL	Alarm
Honeywell (Ademco/Microtech)	1k	1k	A	1
Cooper (Scantronic, Menvier, Texecom, Pyronix, Castle)	2k2	4k7	B & C	2
Siemens, Aritech, HKC	4k7	4k7	C	2
RISCO (Gardtec)	4k7	6k8	C	3
Guardall	4k1	4k1	B	2 & 4
DSC	5k6	5k6	D	3 & 4
Europlex	2k2	2k2	B & C	5
Inner Range	2k2	6k8	B & C	3

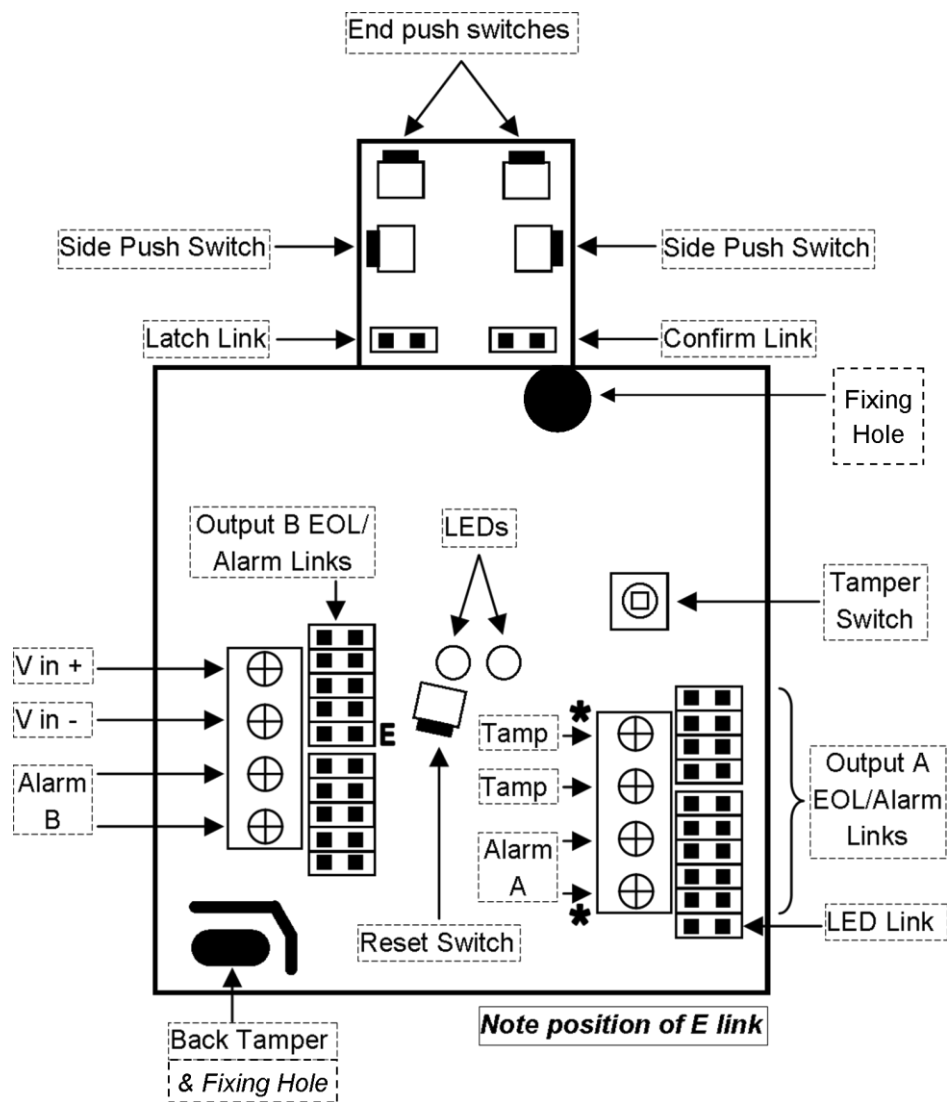
NOTE

If you prefer to wire your own resistors or use the traditional '4-wire' method, fit a link to Output B over the pins marked E.

Do not fit any other (A-D, 1-5) resistor links. The confirm link must also be OFF to ensure correct operation of both zones in this state.

DIAGRAM

The diagram below can be used as a reference when configuring the unit:



FITTING NOTE

When screwing the unit to the mounting surface, use only the fixing holes marked on the diagram.

Using any of the other holes (cable entry etc) can result in the PCB snapping or warping – causing a tamper fault on the unit.

If the PCB is broken in this way, the unit will need to be replaced.

WIRING

For EOL installations, wire Alarm A to a zone in the panel using the terminals marked with an asterisk in the above diagram. This output will then carry a tamper signal to the panel as well as the EOL/Alarm resistance. Wire Alarm B to another zone in the panel using its pair of terminals. Finally, connect the 12V power supply, taking care to use the correct polarity. Configure your zones in the panel appropriately.

If using 4-wire, ensure that the confirm link is OFF and that the E link is ON. Wire the tamper terminals to a common panel tamper and each output to its own individual zone.

NOTES/TROUBLESHOOTING

The PA4 requires a 12V power supply to operate correctly. If the voltage of the power supply drops below 10.2V, the red LED will flash repeatedly to indicate the issue. The PA will outputs will continue to operate until the supply reaches ~4.5V – at which point the unit will completely lose power.

6 core cable is recommended for EOL installations. 8 core cable is recommended for 4-wire installations.

When the unit is unpowered, both outputs are considered activated (open circuit/alarm resistance depending on configuration).

Ensure the cover is replaced for testing – the unit will detect a tamper otherwise.

Markings for links D & E on output B are obscured by the reset switch. Extra markings can be seen right of the switch on the PCB for reference

The back tamper is designed to break if the unit is pulled from its fitting surface. If this happens, the unit must be replaced.