

**LIFESAVER SMOKE ALARM  
ISOLATION RELAY  
Model: LIFSAIR**

**SPECIFICATION:**

Operating Voltage	5V – 10V DC
Secondary Contacts	Normally Open Normally Closed (change-over contacts)
Secondary Contact Rating	240V AC 50Hz @ 5Amps 30V DC @ 5Amps
Contact Switching Time Delay (one smoke alarm connected)	4 seconds once activated
Minimum cable size	1mm <sup>2</sup> Neutral 1mm <sup>2</sup> Switch line
Maximum number of interconnected smoke alarms to a single LIFSAIR unit	24
Maximum number of LIFSAIR relay connected to one smoke alarm	3
Operating Temperature	0° - 50°C

**OPERATION.**

The LIFSAIR Smoke Alarm Isolation Relay is a device designed to provide compatible 240VAC Smoke/Heat/CO with a set of Normally Closed (NC) and Normally Open (NO) change over contacts. This permits the Smoke Alarm to trigger auxiliary devices such as strobe lights, sirens, bells, burglar and fire alarm panels, activate emergency lights, shutting down air conditioners or releasing magnetic door holders.

This isolation relay has a 3 selectable modes of operation.

SM latching Relay	Relay stay latched or activated while smoke and /or heat alarm in alarm condition
SM Pulse Relay	Relay activate momentarily for 2 seconds when the smoke and /or heat alarm in alarm condition
CO Relay	When CO relay is selected, the relay will latch only when CO alarm is in alarm condition.

The LIFSAIR will operate in the absence of mains power and only operates when the detector is in alarm state.

**COMPATIBLE SMOKE/HEAT/CO ALARMS**

This device is intended and designed only for use with the following smoke alarms and devices;

**LIFESAVER** LIF5800/2, LIF5800RL/2, LIF5800ACF, LIFHA240, LIFCO240

Note: Only smoke alarm LIF5800/2 and LIF5800RL/2 have 9VDC output.

**WARNING:** Use with other smoke alarms may damage this device and the smoke alarm(s) and could create a definite shock risk and would not be covered by any warranty.

*The Isolation Relay LIFSAIR must be installed by a Licensed Electrician.*

*Wiring from the Smoke Alarm N and S terminals must be correctly connected to the LIFSAIR N and S terminals.*

*Incorrect wiring will short and damage the isolation relay and the Smoke Alarm and will void warranty.*

The Isolation Relay LIFSAIR is triggered once the Smoke Alarm activates and sends a signal down the switch line. **Note** there will be a 4 second delay before the relay operates the LIFSAIR's Normally Open and Normally Closed contacts. This is to help prevent any unnecessary false alarms from the smoke alarm.

In the above case the changeover contacts of the relay, connected to the output terminals may be used to make or break an external E.L.V. or L.V. circuit operating at up to 240VAC 5A or 30VDC 5A

**WARNING:** Under no circumstances must an insulation resistance test be carried out between the input conductors of this LIFSAIR. such a test could cause irreparable damage to the internal circuitry of the device and make it inoperative and further, the warranty would be void under this condition.

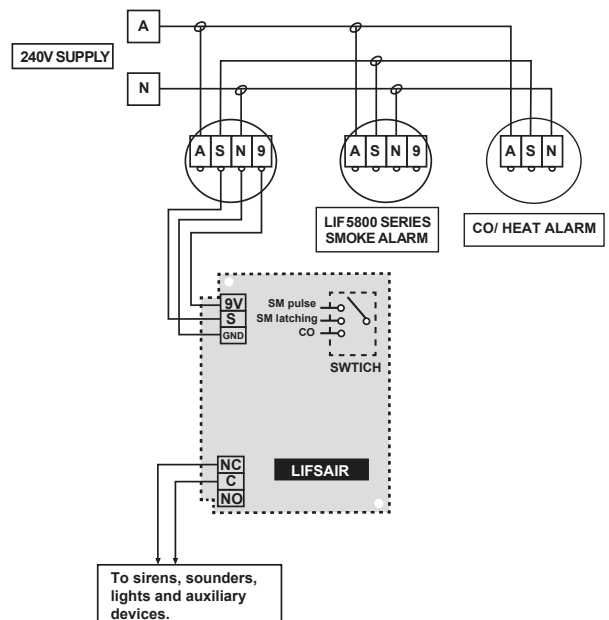
**INSTALLATION.**

**General:**  
The LIFSAIR requires no earthing conductor as it is double insulated. It must be suitably fixed in position and protected from mechanical damage. If the output terminals are connected to low voltage (240V) circuits, the associated wiring must be installed in accordance with the relevant requirements of the SAA Wiring Rules, AS/NZS 3000.

**Warning:** A combination of the N.O. and N.C. contacts is not permissible and will not operate.

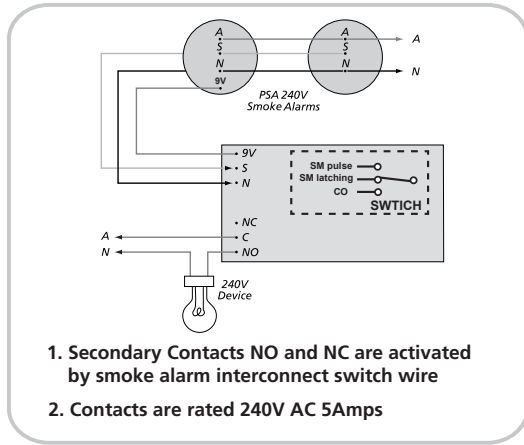
**WIRING DIAGRAM**

**Figure 1: Connecting to Auxiliary Devices with 9V output from smoke alarm**

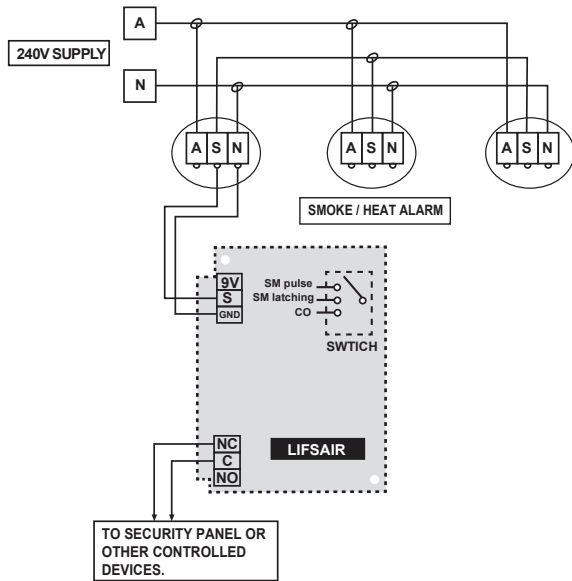


By installing the LIFSAIR in this manner it will allow you to operate such devices such as sirens, strobes, bells, lights, air conditioners or any devices which do not exceed 240VAC @ 5 Amps.

**Figure 1a:**



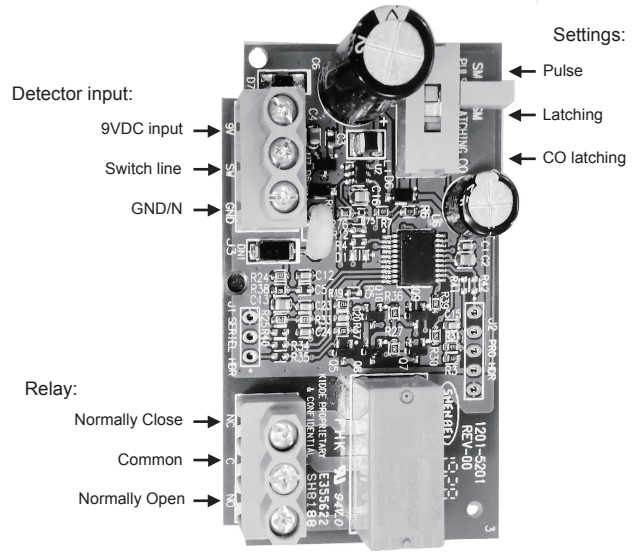
**Figure 2: Connection of LIFSAIR without using 9V input.**



Please note: If the LIFSAIR is used without connecting the 9V input, then only one isolation relay can be used in a interconnected system. If the 9V is connected, then multiple LIFSAIR can be used on one interconnected system. Interconnected system using a CO alarm must use the 9V output from the smoke alarm.

**TECHNICAL NOTE**

The wiring connecting the module with the external device is not supervised. Be sure to test the operation of all the devices controlling the module or controlled by the module. Devices controlled by the module can be tested by pushing the test button on the alarms and verifying that the controlled device responds in the desired manner. Devices controlling the module can be tested by activating the device and verifying that all of the interconnected alarms enter alarm.



**WARRANTY.**

PSA Products Pty Ltd (ABN: 99 076 468 703) of 17 Millicent Street, Burwood 3125 Victoria, Australia warrants this product for a period of 12 months from the date of purchase, as reflected on the Authorised Reseller's or Distributor's invoice / receipt provided to you. PSA Products Pty Ltd will repair or replace the product (at the option of PSA Products) due to any manufacturing defect, at the cost of PSA Products Pty Ltd (excluding any labour costs relating to removal or re-installation of product, and transport costs).

This warranty shall not apply to the product if it has been damaged, modified, abused or altered after the date of purchase, or if it fails to operate due to improper maintenance. To the extent permitted by law, the liability of PSA Products Pty Ltd arising from the sale or under the terms of this limited warranty shall not in any case exceed the cost of replacement and subject to this clause. In no case shall PSA Products Pty Ltd be liable for consequential loss or damages resulting from the failure of the product or breach of this, or: Any other warranty, express or implied, loss or damage caused by failure to abide by the instructions supplied in the leaflets.

To the extent permitted by law, PSA Products Pty Ltd., makes no warranty, expressed or implied, written or oral, including that of merchantability or fitness for any particular purpose, with respect to the consumer replaceable battery if any.

This warranty is provided in addition to other rights and remedies you have under law:

Our goods come with guarantees that cannot be excluded under the Australian Consumer Law. You are entitled to a replacement or refund for a major failure and compensation for any other reasonably foreseeable loss or damage. You are also entitled to have the goods repaired or replaced if the goods fail to be of acceptable quality and the failure does not amount to a major failure. What constitutes a major failure is set out in the Australian Consumer Law.

To make a claim under warranty, take the product (with a proof of purchase) to the store where you purchased the product or contact PSA Products Pty Ltd.

Phone (03) 9888 9889. or Email: enquiry@psaproducts.com.au with details, proof of purchase or expense claim in writing.

Another Quality Product by:

**PSA Products Pty Ltd**  
 17 Millicent Street, Burwood  
 Victoria 3125 Australia  
 Telephone: (03) 9888 9889  
 Facsimile: (03) 9888 9993  
 e-mail: enquiry@psaproducts.com.au  
 web-site: www.psaproducts.com.au

