

TRIGGER INPUT & RELAY MODULE USER GUIDE

IMPORTANT: READ INSTRUCTIONS CAREFULLY AND COMPLETELY BEFORE INSTALLING

This is an AC mains powered battery backup surface mounting relay module. The alarms do NOT mount directly onto this relay; it links into their circuit via hardwiring.

Compatible models: Smoke / Heat Alarms: Firex KF10, KF10LL, KF10R, KF20, KF20LL, KF20R, KF30, KF30LL, KF30R, Slick 1SFW, 1SFWR, 2SFW, 2SFWR, 3SFW, 3SFWR.
CO alarms: 4MCO and 4MDCO.

Operational features:

‘Trigger’

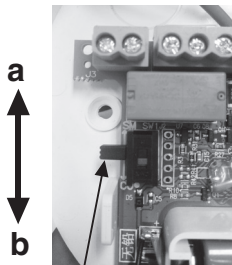
Causes the interlinked Smoke / Heat / CO alarm(s) to sound alarm in the temporal three (smoke alarm pattern) and the relay to activate when the interconnected sprinkler system is activated.

‘Relay’

- a. Operates (activating the relay) when interlinked Smoke / Heat Alarm(s) sound an alarm. (The installer MUST preselect the Selector switch on relay module selected to ‘SMOKE’).

OR

- b. Operates (activating the relay) when the interlinked Carbon Monoxide Alarm(s) sound an alarm. (The installer MUST preselect the Selector switch on relay module selected to ‘CO’).



Selector switch

⚠ IMPORTANT SAFETY DESIGN NOTE: Relay will NOT operate when the CO alarms sound when the selector switch is set to 'SMOKE' or when the Smoke / Heat alarm(s) sound when selected to 'CO'.

The input extra low voltage power supply portion is designed primarily to be connected to suitable sprinkler flow switches.

The relay module can be used for signalling to suitable compatible equipment or to activate auxiliary warning devices such as external bells and sirens, hallway or stairwell lighting. It provides isolated, (no internal connection to 230 volts AC) normally open, and normally closed contacts.

⚠ WARNING! Alarm and relay module wiring installation must comply with the current edition of BS 7671 Wiring Regulations and all appropriate prevailing local regional / national building regulations / codes of practice.


All wiring should be performed by a competent, qualified electrician. Failure to install this product correctly may expose the user to electric shock or fire risk hazards. This relay module is not rated as waterproof and must not be exposed to dripping or splashing. The relay module must be installed correctly in order to function. The electrical circuit used to power the alarms and the relay module must be a permanent supply being a 230 volt AC 50Hz circuit which cannot be turned off by a switch. This relay module has an alkaline battery backup to allow it to function in mains outages.

⚠ WARNING: This product cannot be operated from power derived from a square wave, modified square wave or modified sine wave inverter. These type of inverters are sometimes used to supply power to the structure in 'off grid' installations, such as solar or wind derived power sources. These power sources produce high peak voltages that can damage the device.

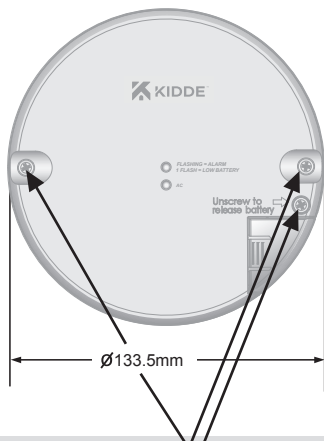
⚠ IMPORTANT: Whenever alarms and relay modules are interconnected they must be powered on a single circuit.

INSTALLATION INSTRUCTIONS:

This relay module should be installed in an appropriate suitable location. Site and select alarm type(s) in accordance with manufacturer literature/user guide shipped with the alarms. Also refer to applicable Building Regulation requirements and codes of practice such as BS 5839 Pt 6 and / or BS EN 50292.

 **Isolate mains power before commencing work.**

Refer to the below diagrams

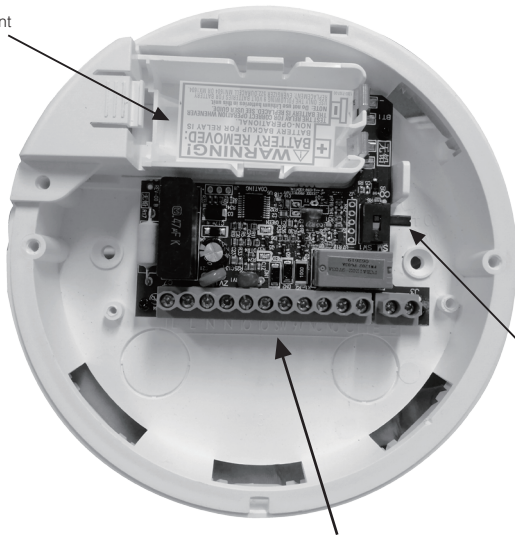


Front and side view of relay module unit

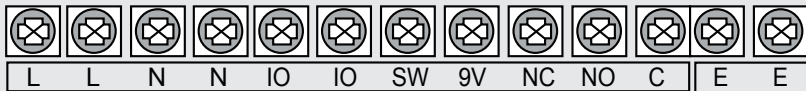
- 1. Remove cover screws to allow access to wire connections. Remove cover and 9V battery.**

2. Connect wires to appropriate terminals.

Battery compartment



Selector switch



Mains 230 Volts AC

Alarm Int

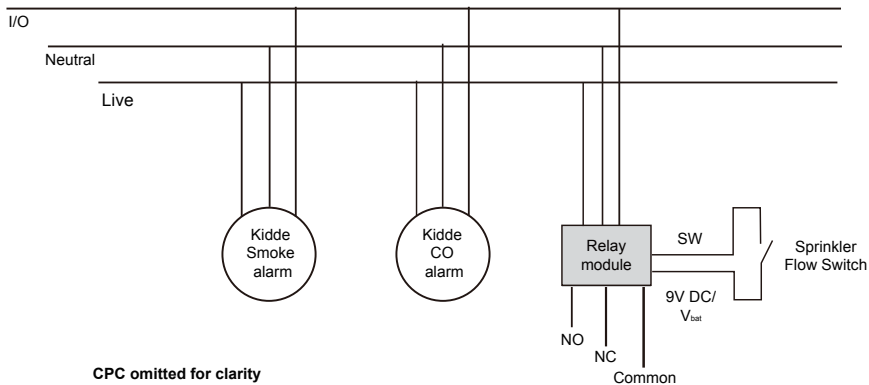
Sprinkler Int

Relay

CPC Connections

Tighten terminal screws to 0.8 N.m max.

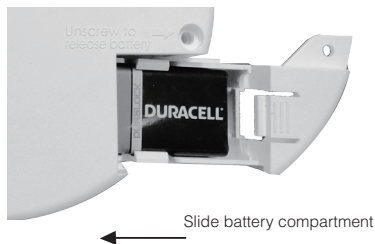
3. The relay module can be connected anywhere in the circuit to suit the application. See diagram below.



4. Replace relay module cover and tighten screws after all wire connections are complete.



5. Insert battery into battery compartment, and slide it into product. Insert and tighten the screw that holds the battery compartment closed.



6. Test Relay Module operation.

Earth terminal is provided to facilitate wiring termination of the CPC wire, which plays no part in the safety protection of the relay module itself.

After all connections are made, replace the cover and test operation.

Do not exceed the total number of devices allowable in the interconnected system, refer to the individual alarm's user guide for the maximum number of units allowed when interconnecting.

Avoid locations where the temperature or humidity limits might be exceeded, such as garages and unfinished attics. See Technical Specifications.

⚠ ATTENTION: Turn off power when replacing battery. Do not remove main relay module cover. Replace battery please refer to section 5.

ENVIRONMENTAL PROTECTION

Waste electrical products should not be disposed of with household waste. Please recycle where facilities exist. Check with your local authority or retailer for recycling advice.



Relay Module Operation and Indications Table

Status	Red LED	Green LED	Smoke relay	CO relay
Normal Operation		On – when AC mains power present Off - when AC mains power not connected	No operation	No operation
Relay module receiving Smoke signal from attached units Note: Selector switch must be set to SMOKE	T3 pattern- Flash 3 times, same as Smoke/Heat alarm unit	NA	Red LED Flash 3 times, same as Smoke/Heat alarm pattern. Relay activates.	No operation
Relay module receiving CO signal from attached units Note: Selector switch must be set to CO	T4 pattern- Flash 4 times, same as CO alarm unit	NA	No operation	Red LED Flash 4 times, same as CO alarm pattern. Relay activates.
Low battery backup in relay module	Flashes every 40 seconds	NA	Flashes every 40 seconds	Flashes every 40 seconds
Sprinkler activated with signal from flow switch. Note: Selector switch must be set to SMOKE	T3 pattern- Flash 3 times, same as Smoke/Heat alarm unit	NA	Red LED Flash 3 times, same as Smoke/Heat alarm pattern. Relay activates.	NA

Technical Specifications

Supply Voltage:	230VAC 50Hz, 50mA Max
Battery Backup:	Alkaline Battery
Replacement Batteries:	Energizer 522, DURACELL MN1604 or MX1604
Battery Lifespan:	1 Year
Alarm Connection:	Via Hard wire Circuit with models listed (see diagram)
Output Relay Contacts:	Contact ratings 230V AC @ 3Amps 24V DC @ 3Amps
Fixing:	Remote fixing separate to alarm units hardwired circuit connection
Temperature Range:	0°C to 40°C
Humidity Range:	0% to 90% RH, non-condensing
Dimensions:	133.5 mm diameter by 31.5 mm depth
Weight:	222 gram
Guarantee:	5 year limited warranty

Approvals:



Guarantee

Kidde guarantees to you as a purchaser that the enclosed unit will be free of defects in material, workmanship or design under normal use and service for a period of 5 years (from the date of purchase), excluding any loose battery supplied. The Guarantee is not assignable. Our liability to you, under this guarantee is limited to repairing or replacing any part which we find to be defective in material, workmanship or design (part replacement only, no installation), free of charge to the customer, who is situated within the UK, upon sending the unit with proof of date of purchase, postage prepaid, to Kidde Safety Europe, Ash House, Littleton Road, Ashford, TW15 1TZ, UK. The terms of this guarantee will not apply in the following circumstances: If unit has been damaged, modified, neglected, dismantled, contaminated, abused or altered after the date of purchase, or if it fails to operate due to incorrect selection, siting, installation, maintenance or inadequate AC or DC electrical power, or damage caused by failure to abide by the instructions supplied. The liability of Kidde, arising from the sale of this alarm or under the terms of this guarantee shall not in any case exceed the cost of replacement of the unit, in no case, shall be liable for consequential loss or damaged resulting from the failure of the alarm or for the breach of this or any other guarantee, express or implied, or for damages caused by failure to abide by the instructions supplied. This guarantee does not affect your statutory rights. Kidde makes no guarantee, express or implied, written or oral, including that of satisfactory quality or fitness for any particular purpose, with respect to the battery.



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