

STORM MEDIUM SMOKE RELAY

DATA

Collection	STORM SYSTEM®
Product	Storm Medium Smoke Relay
Article no.	1A01.0476.xx

SPECIFICATIONS

Weight	230g
Materials	Aluminium, polycarbonate and electronics
IP protection grade	IP20
Labelling	



KM 694336 DoP: 1A01.0476.xx
BS EN 14604:2005/AC:2008



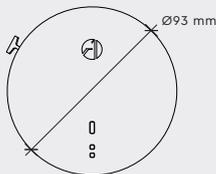
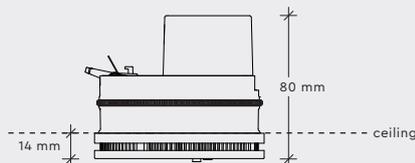
CE 23 2797
DoP: 1A01.0476.xx
EN 14604:2005/AC:2008

STORM SYSTEM®

The Storm Medium Smoke Relay is part of the STORM SYSTEM® MEDIUM collection. A collection that includes a wide range of special designed products. The STORM SYSTEM® collection is carefully designed to flush the surface of any ceiling or wall, and all products will appear with an absolute minimum of tolerance and visibility.

Storm Smoke Relay is a device that can detect smoke particles. In case of a fire or smoke emission the device will sound a loud audible alarm. Storm Smoke Relay is mains powered with a back-up replaceable battery.

In main powered condition the battery lifetime is minimum 10 years. Whereas the battery lifetime is maximum 10 year in battery powered conditions. In addition Storm Smoke Relay has a build-in relay output which enables the device to connect to external alarm devices, such as an extra siren or via an interface it can activate features in a smart house system



The crossed-out wheeled bin symbol indicates that the item should be disposed of separately from household waste. The item should be handed in for recycling in accordance with local environmental regulations for waste disposal

For more information, please contact info@onea.dk

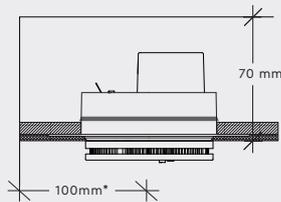
last updated 25 - 05 - 2023

XX - colour codes	01 - white 92 - black pearl
NOTE	It is NOT allowed to paint over the device
Installation ring <i>required</i>	Storm Medium Smoke Relay must be installed on a flat ceiling surface. One of the following Storm System installation rings is required: Storm Medium Plaster Ring - 1A01.0001.01 Storm Medium Back-Mounted Ring - 1A01.0048.xx Storm Medium Concrete Cabinet - 1A01.008x.xx Storm Medium Concrete Halo-X BMR - 1A01.0055.xx NOTE: installation in Storm Medium Extension is NOT allowed (1A01.0017.xx / 1A01.0035.xx)
Device type	Mains powered photoelectric smoke alarm with interconnection, relay output and battery back-up
Voltage	100-240V AC 50-60Hz
Supply cable dimensions	2 x 1,5mm ²
Battery type	EVE 3V CR17450L
Power consumption	AC Quiescent Current:<15mA AC Alarm Current:< 20mA DC Quiescent Current:<15uA DC Alarm Current:< 28mA
Wireless interconnection signals	RF module
Wireless interconnection frequency	433MHz
Operation normal mode	Red LED flash every 48 second, Green LED indicate mains power
Operation Fire mode	Red LED flash every 1 second
Interlink range	Minimum 100m in open field. Building materials can reduce distance and must be tested on site for each installation
Sound	≤85dB at 3 meters
Sound pattern	ISO8201 (BI 0.5s - pause 0.5s - BI 0.5s - pause 0.5s - BI 0.5s - pause 1.5s, with RED LED flashing, this alarm pattern is repeated.)
Wireless or wired interconnection alarm sound pattern	BI - BI pause 1.2s, with the red LED flash, this alarm pattern is repeated
Push button	Hush, self-check, interconnection
Relay output contact	2-way momentary contact zero-voltage (NO)

STORM MEDIUM SMOKE RELAY



SAFETY DISTANCE



Switching voltage	max. 30 VDC / 125 VAC
Switching current	max. 2A DC / 1A AC
Relay output cable dimension	min. 2 × 0,5mm ²
Warrenty	5 years
Approvals	EN14604:2005+AC:2008 EN60065
Declaration regulations	CPR Directive 305/2011/EU EMC Directive 2014/30/EU
CE testing institute	BSI
Notified body	BSI certification
Notified body number	2797
Operation temperature	0°C to 40°C
Operation humidity	≤ 93% RH non condensing
Storage temperature	-20°C to +70°C
Storage humidity	Up to 90% RH non condensing

QUALITY ASSURANCE

Sound level	100% tested
Sensitivity	100% tested
Power consumption	100% tested
Battery voltage and internal resistance	100% tested
Alarm function	100% tested
Interconnection	100% tested
Relay output	100% tested
Visual apperance	100% tested
Packing content	100% tested

DESCRIPTION

The unit is a mains powered photoelectric smoke alarm, with battery backup. It is particularly sensitive for detecting visible micro-particles (associated with smouldering fires) and reacts faster than ionization alarms. An example of such smouldering fires is a cigarette burning on soft furnishings in the dwelling such as a sofa or bedding, (a common cause of devastating blazes). Please note this device does not detect flames, heat, carbon monoxide or other hazardous gases. It has many advanced features and an extended operational life with the included battery.

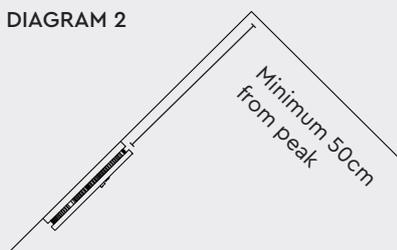
RECOMMENDED LOCATIONS FOR ALARMS

- The location must comply with the applicable building regulations. In general, smoke alarms should be installed in every circulation space such as hallways, landings, bedroom and principal living spaces. Larger spaces may require more than one unit
- Installation on each story
- A central ceiling position is the preferred installation location. The unit must be positioned at least 30 cm away from wall and corners, and 30 cm away from any light fitting or decorative object which may obstruct smoke from entering the Alarm (see diagram 1)
- When installed in a slanting ceiling, the unit must be installed a minimum of 50 cm away from the highest ceiling point (see diagram 2).

DIAGRAM 1



DIAGRAM 2



STORM MEDIUM SMOKE RELAY

LOCATION TO AVOID

- Don't place Alarms in bathrooms, kitchens, garages or other rooms where the Alarm may be triggered by steam, condensation and normal smoke/heat from appliances.
- The alarm must be installed at least 3 meters away from areas with high humidity, like bathrooms or areas near dishwashers or washing machines
- The alarm must be installed at least 1 meter away from ventilation- and heating and cooling vents
- In extremely dusty, dirty, or insect infested areas where particles may interfere/obstruct with Alarm operation.
- Away from air conditioning or ventilation grilles/louvres.

INTERCONNECTING SMOKE ALARMS

- Interconnecting Smoke Alarms are linked wireless/wired together so that if one alarm is activated then all alarms which are linked in the circuit also will sound.
- This Smoke Alarm is capable of providing wired and wireless interconnection functions. Interconnection wired and wireless can be mixed in one circuit
- The Smoke Alarm wireless module uses coded RF signals and need to be paired before use.
- Wired interconnection is recommended if the Smoke Alarm is installed in concrete, metal or other heavy building constructions.
- Wireless interconnection may require additional devices for a successful interconnection, on-site test is required.

RELAY OUTPUT

- Relay output is activated in case of alarm via interconnection.
- The relay output is not addressable, in the alarm mode the relay output of all devices will be activated.
- The relay output can be connected to any device in the circuit.



STORM MEDIUM SMOKE RELAY



Terminal:

- L: Live
- N: Neutral
- I: Interconnect
- 1 & 2: Relay module
- 1 = NO
- 2 = COM

NOTE: L and N have polarity and **MUST** be connected correctly. Before turning the power on, it is necessary to confirm that the wiring is correct, otherwise it may cause damage to the device.



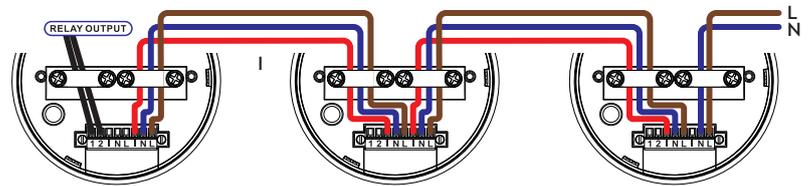
Relay output is NO (normal open) contact

In alarm mode it will activate other relay output in the circuit via the interconnection

CONNECTION DIAGRAM

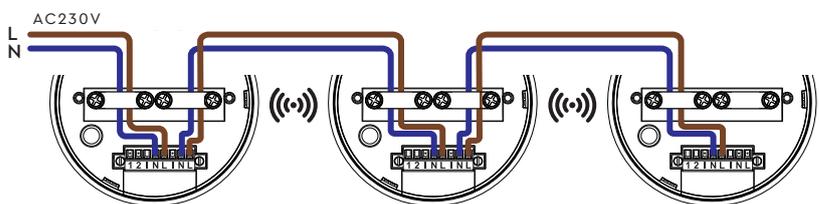
Mains powered | Wired interconnection

- Relay output can be connected to any device



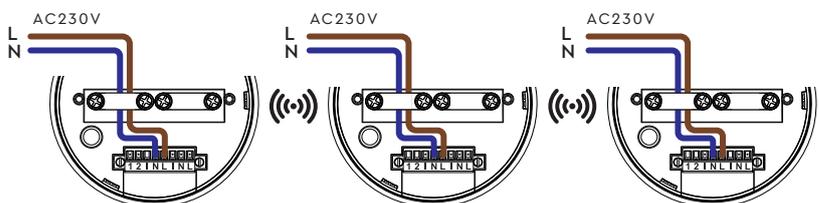
Mains powered | Wireless interconnection

- Relay output can be connected to any device



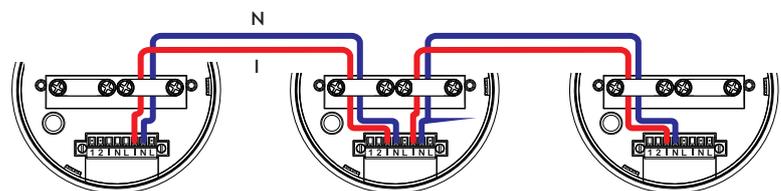
Mains powered | Wireless interconnection

- Relay output can be connected to any device



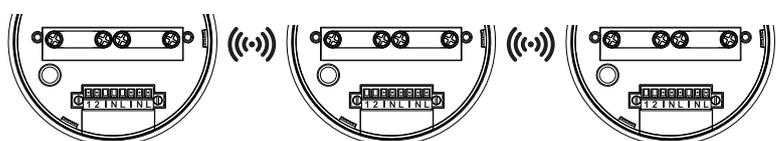
Battery powered | Wired interconnection

- Relay output can be connected to any device



Battery powered | Wired interconnection

- Relay output can be connected to any device



IMPORTANT INFORMATION

Installation and mounting must be performed by professionals only, and instructions must be followed.

CLEANING AND MAINTENANCE:

Clean the alarm at least once a month to remove dust, dirt, or debris.

Use a vacuum cleaner with the soft brush, vacuum all sides and covers of smoke alarm device.

IMPORTANT: Do not attempt to remove the cover to clean inside. This will affect warranty.

WARRANTY:

If the product is defect, please contact your supplier immediately. Please note that warranty will not apply in case of wrongful use or if unskilled personnel attempts to repair.

COMPONENTS

- Storm Medium Smoke Relay
- Battery



STORM MEDIUM SMOKE RELAY

ASSEMBLY INSTRUCTION PAGE 1 OF 2

BATTERY INSTALLATION:

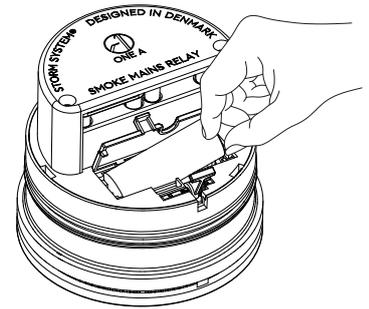
Remove battery cover. Check polarity – mount the battery.

Make sure to insert spring holder before placing the battery.

Mount the battery cover.

Device is delivered with 3V EVE CR17450L battery. Battery lifetime is at least 10 years under normal mains powered operating conditions.

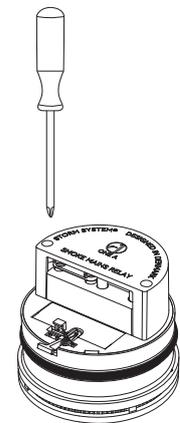
Recommended battery for replacement:
EVE CR17450L / Pairdeer CR17450L



WIRED INTERCONNECTION

STEP 1

Unscrew the screws, and gently lift the lid off.



STEP 2

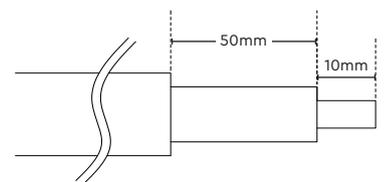
Strip the Live, Neutral and Interconnect (if used) wires back to the strip length shown on the diagram. Connect the wires to the correct terminals on the base and ensure the terminal screws are fully tightened. Check all wires for continuity and correct termination and ensure that the interconnect wires have not been cross connected to either live or neutral terminations.

Wiring must be installed in compliance with local regulations.

Use a minimum of 1.0 mm² 250 V insulated wire for all wiring, including interconnecting wiring

In the UK it is recommended that the following coloured cores are used (for example with triple flat 6243Y cable).

Max. 24 units in one wired circuit



IMPORTANT INFORMATION

Installation and mounting must be performed by professionals only, and instructions must be followed.

CLEANING AND MAINTENANCE:

Clean the alarm at least once a month to remove dust, dirt, or debris.

Use a vacuum cleaner with the soft brush, vacuum all sides and covers of smoke alarm device.

IMPORTANT: Do not attempt to remove the cover to clean inside. This will affect warranty.

WARRANTY:

If the product is defect, please contact your supplier immediately. Please note that warranty will not apply in case of wrongful use or if unskilled personnel attempts to repair.

COMPONENTS

- Storm Medium Smoke Relay
- Battery



CAUTION – WIRED INTERCONNECTION!

RISK OF INJURY AND EQUIPMENT DAMAGE/MALFUNCTION

- All interconnected Smoke Alarms must be supplied from the same circuit
- A common Neutral must be used for the Interconnect to operate
- DO NOT connect the Interconnect wire to Live or neutral
- A maximum of 24 smoke alarms can be installed on one circuit

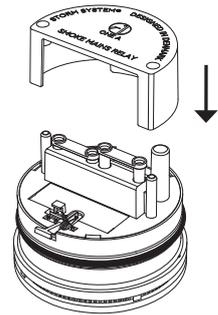
Failure to follow these instructions may result in injury and equipment damage / malfunction.

STORM MEDIUM SMOKE RELAY

ASSEMBLY INSTRUCTION PAGE 2 OF 2

STEP 3

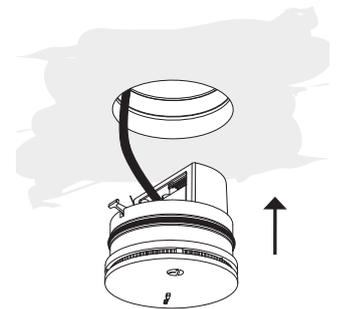
Ensure that the terminal cover is closed to avoid contact with the live terminals.



STEP 4

Mount the fixture into the plaster ring/ back-mounted ring.
Do this by slightly rotating the fixture into the plaster ring/back-mounted ring.

NOTE: When rotating the fixture choose the direction with the least resistance.



STEP 5

Turn on the mains power and check that the smoke alarm Green and Red LED's function:

- a) The Green LED should illuminate to show mains power present.
- b) The Red LED will pulse every 48 seconds to indicate correct operation and that the backup battery proves serviceable



STEP 6

Press the Test/Hush button to check that the smoke alarm works.
Installation is not complete until both LEDs are functioning correctly and the alarm has been checked for correct operation.

IMPORTANT INFORMATION

Installation and mounting must be performed by professionals only, and instructions must be followed.

CLEANING AND MAINTENANCE:

Clean the alarm at least once a month to remove dust, dirt, or debris.

Use a vacuum cleaner with the soft brush, vacuum all sides and covers of smoke alarm device.

IMPORTANT: Do not attempt to remove the cover to clean inside. This will affect warranty.

WARRANTY:

If the product is defect, please contact your supplier immediately. Please note that warranty will not apply in case of wrongful use or if unskilled personnel attempts to repair.

COMPONENTS

- Storm Medium Smoke Relay
- Battery



CAUTION - WIRELESS INTERCONNECTION!

RISK OF INJURY AND EQUIPMENT DAMAGE/MALFUNCTION

- The smoke alarm is designed to be wirelessly interlinked with up to 40 products.
- They are not designed to communicate with wireless alarms from other ranges or manufacturers.
- These alarms need to be "learning" or interlinked in order to communicate with each other. If one alarm activates, all other interlinked alarms will also sound.
- Only successful interconnection units can clear the radio signal. Clearing the radio signal only removes the radio signal from the slave unit. The MASTER unit can not clear the radio signal.

Failure to follow these instructions may result in injury and equipment damage / malfunction.

STORM MEDIUM SMOKE RELAY

ASSEMBLY INSTRUCTION PAGE 1 OF 2

BATTERY INSTALLATION:

Remove battery cover. Check polarity – mount the battery.

Make sure to insert spring holder before placing the battery.

Mount the battery cover.

Device is delivered with 3V EVE CR17450L battery. Battery lifetime is at least 10 years under normal mains powered operating conditions.

Recommended battery for replacement:
EVE CR17450L / Pairdeer CR17450L



WIRELESS CONNECTION

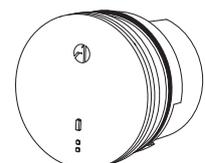
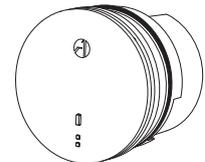
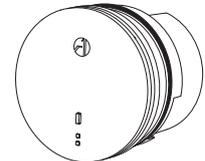
STEP 1

- Align all alarms that are going to be paired
- Select one of smoke alarm as the MASTER unit. Treat all other units as SLAVE units.
- Press the test button on the MASTER unit three times within two seconds, the red LED will flash quickly, the unit is now in sending radio signal mode. This mode will last for 90 seconds.
- While the MASTER unit is in sending radio signal mode. Press the test button on any SLAVE unit three times within two seconds, the SLAVE unit learns this signal and complete the pairing after a sound "beep" with light flash once.
- Repeat step on all other SLAVE units
Repeat the above steps on all other SLAVE units.

Max. 40 units in one wireless circuit

CLEAR RADIO SIGNAL MODE

Press the test button on any SLAVE unit three times within two seconds, the red LED will flash quickly, then press and hold the test button again until the red light goes out the first time and release the button immediately, the red LED will flash slowly, at this time, press the test button again, the SLAVE unit will beep 3 times, which means that the SLAVE unit clears wireless connected successfully.



IMPORTANT INFORMATION

Installation and mounting must be performed by professionals only, and instructions must be followed.

CLEANING AND MAINTENANCE:

Clean the alarm at least once a month to remove dust, dirt, or debris.

Use a vacuum cleaner with the soft brush, vacuum all sides and covers of smoke alarm device.

IMPORTANT: Do not attempt to remove the cover to clean inside. This will affect warranty.

WARRANTY:

If the product is defect, please contact your supplier immediately. Please note that warranty will not apply in case of wrongful use or if unskilled personnel attempts to repair.

COMPONENTS

- Storm Medium Smoke Relay
- Battery



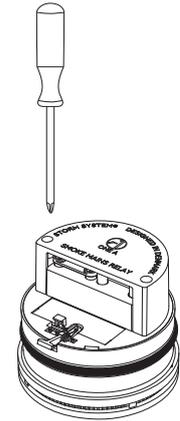
STORM MEDIUM SMOKE RELAY

ASSEMBLY INSTRUCTION PAGE 2 OF 2

STEP 2

This Step is only necessary if you are using a mains powered connection

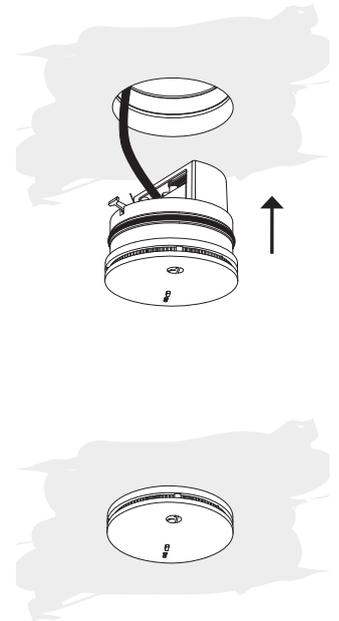
- Unscrew the screws, and gently lift the lid off.
- Connect to mains power and gently replace lid.



STEP 3

Mount the fixture into the plaster ring/
back-mounted ring.
Do this by slightly rotating the fixture
into the plaster ring/back-mounted ring.

NOTE: When rotating the fixture
choose the direction with the least
resistance.



IMPORTANT INFORMATION

Installation and mounting must be performed by professionals only, and instructions must be followed.

CLEANING AND MAINTENANCE:

Clean the alarm at least once a month to remove dust, dirt, or debris.

Use a vacuum cleaner with the soft brush, vacuum all sides and covers of smoke alarm device.

IMPORTANT: Do not attempt to remove the cover to clean inside. This will affect warranty.

WARRANTY:

If the product is defect, please contact your supplier immediately. Please note that warranty will not apply in case of wrongful use or if unskilled personnel attempts to repair.

STORM MEDIUM SMOKE RELAY

OPERATION AND TESTING

TESTING

Test by pushing the test button on the cover. This will sound the alarm if the electronic circuitry, alarm, and battery are working. If no alarm sounds, the unit has defective batteries or other failures.

DO NOT use an open flame to test your alarm, you could damage the alarm or ignite combustible materials and start a structure fire.

NOTE: WEEKLY TESTING IS REQUIRED

NORMAL CONDITION

Main power supply: The green LED light is always on and the red LED should flash every 48 seconds to show that the alarm is active.

Backup battery power: The red LED should flash every 48 seconds to show that the alarm is active.

ALARM CONDITION

When the Alarm senses products of combustion and sounds the audible alarm, the red LED will flash one flash/second. The flashing LED and pulsating alarm will continue until the air is cleared.

LOW POWER PACK CONDITION

IMPORTANT: Your smoke alarm requires the power pack to have sufficient capacity of power to operate correctly.

Should your smoke alarm enter a low power pack condition, the unit will emit an audible chirp once every 48 seconds and at the same time as the red LED flash about every 48 seconds. When this occurs, you must replace the battery immediately. Your smoke alarm will continue to warn of this low power pack condition for approximately 30 days, however, failure to change the alarm after this time would mean your smoke alarm may have insufficient power to alert you in a AC power failure situation.

FAULT INDICATION

The alarm chirp occurs every 48 seconds.

ALARM SILENCE

DANGER: If your smoke alarm emits the full alarm signal and you are not testing the unit, the smoke alarm is warning you of a potentially dangerous situation that requires your immediate attention. Only use the alarm silence function after making sure that there is no ongoing fire emergency situation. Do not block the vents on the alarm or disable the smoke alarm in any way, as this will remove your protection. Smoke alarms can sometimes react to cooking fumes or other non emergency situations. In the event of a known false alarm your smoke alarm can be temporarily silenced by pressing the test button. Your alarm will automatically return to full sensitivity within 8 minutes.

NOTE:

1. Press and release the silence button, the alarm sound will stop.
2. Your alarm will silence and enter into a reduced sensitivity reset cycle for approximately 8 minutes.
3. During the reduced sensitivity reset cycle, the red LED will flash once every 8 seconds.
4. Your alarm will automatically return to full sensitivity on completion of the reset cycle and the red LED will revert to flashing once every 48 seconds.

DANGER: Never ignore any alarm. Ignoring the alarm may result in injury and death. If your smoke alarm activates and alarms and you are not absolutely certain of the source of the smoke, get everyone out of the house immediately.

IMPORTANT INFORMATION

Installation and mounting must be performed by professionals only, and instructions must be followed.

CLEANING AND MAINTENANCE:

Clean the alarm at least once a month to remove dust, dirt, or debris.

Use a vacuum cleaner with the soft brush, vacuum all sides and covers of smoke alarm device.

IMPORTANT: Do not attempt to remove the cover to clean inside. This will affect warranty.

WARRANTY:

If the product is defect, please contact your supplier immediately. Please note that warranty will not apply in case of wrongful use or if unskilled personnel attempts to repair.

STORM MEDIUM SMOKE RELAY

BATTERY REPLACEMENT

The secondary backup power for the smoke alarm is supplied by a 3V lithium battery. Battery lifetime is at least 10 years under normal mains powered operating conditions.

CAUTION: Test the smoke alarm for correct operation using the test facility whenever the battery is replaced.

RECOMMENDED USE THE FOLLOWING 3V BATTERIES FOR SMOKE ALARM BATTERY REPLACEMENT. LITHIUM BATTERY: PAIRDEER CR17450L/EVE CR17450L



ROUTINE MAINTENANCE

- Clean the alarm at least once a month to remove dust, dirt, or debris
- Use a vacuum cleaner with the soft brush, vacuum all sides and covers of the smoke alarm device

IMPORTANT: Do not attempt to remove the cover to clean the inside. This will affect the warranty

Cautions:

- Photoelectric smoke detectors can reduce the likelihood of a disaster, but they cannot guarantee a 100% safety.
- To ensure your maximum security, please install all smoke detectors exactly according to this manual
- Keep the detectors clean. Do not allow dust to accumulate and test them at least once a week
- Replace them immediately if they are not working properly

IMPORTANT INFORMATION

Installation and mounting must be performed by professionals only, and instructions must be followed.

CLEANING AND MAINTENANCE:

Clean the alarm at least once a month to remove dust, dirt, or debris.

Use a vacuum cleaner with the soft brush, vacuum all sides and covers of smoke alarm device.

IMPORTANT: Do not attempt to remove the cover to clean inside. This will affect warranty.

WARRANTY:

If the product is defect, please contact your supplier immediately. Please note that warranty will not apply in case of wrongful use or if unskilled personnel attempts to repair.

STORM MEDIUM SMOKE RELAY

TROUBLE SHOOTING

PROBLEM

TROUBLE SHOOTING

Smoke alarm does not sound when tested.

1. Must activate alarm before installation.
2. Clean smoke alarm device. Please refer to the "cleaning and maintenance" section.
3. If there are still failures during warranty, you can return to your retailer.
4. If the unit is out of warranty please replace another new alarm.

The alarm "chirp" with red LED flashes once every 48 seconds.

The battery is in low battery status, please replace battery, and refer to "replace battery" section.

Smoke alarm chirp occurs every approx 48 seconds (alarm goes into fault mode).

1. Clean smoke alarm device. Please refer to the "cleaning and maintenance" section.
2. Purchase and change another smoke alarm if the problem still exists.

Smoke alarm sounds unwanted alarms intermittently or when residents are cooking, taking showers, etc.

1. Press test button to pause alarm.
2. Clean smoke alarm device. Please refer to the "cleaning and maintenance" section.
3. Move smoke alarm device to new location and press test button.

The alarm sounds different from what it is used to. It starts and stops.

1. Clean smoke alarm device. Please refer to the "cleaning and maintenance" section.
2. If there are still failures during warranty, you can return it to your retailer.
3. If the unit is out of warranty, please replace it with a new alarm.

IMPORTANT INFORMATION

Disassembly must be performed by professionals only, and instructions must be followed.

WARRANTY:

If the product is defect, please contact your supplier immediately. Please note that warranty will not apply in case of wrongful use or if unskilled personnel attempts to repair.

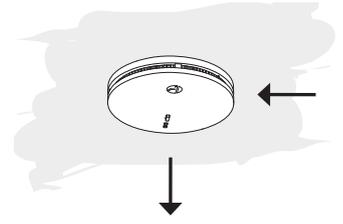
STORM MEDIUM SMOKE RELAY

DISASSEMBLY INSTRUCTION

STEP 1

Take hold of the fixture and pull down gently, whilst slightly rotating.

NOTE: When rotating the fixture choose the direction with the least resistance.



STEP 2

Disconnect cable.

