# Programming Guide v<sub>1.2</sub>

#### Specifications

Operating Frequency	869.2125 MHz radiating less than 10mW (Other custom frequencies possible)
Dimensions	H90 x W90 x D58 mm
Power Supply	Sealed lithium battery
Transmitter Battery Life	Up to 5 years
Device Life	10 years
Wireless Range	Up to 600m line of sight
Compliance	CE / RoHS 2 / RED
Warranty	24 months

## Batteries / Lifespan of Alarm

The smoke alarm contains a non-user replaceable lithium battery, which should last up to 10 years, dependent upon use and the environment in which it is located. Extended periods in alarm mode will significantly reduce the life of the battery. In the event of a low battery, the unit will beep every 60 seconds. When the smoke alarm battery becomes low, the complete smoke alarm unit must be replaced.

Irrespective of the battery life, the smoke alarm has a fixed 10 year lifespan indicated by the date printed on the side of the alarm. The alarm must be replaced by this date.

The radio transmitter within the pattress contains a 3V lithium coin cell battery which is also not replaceable by the user. Typically, the battery will last up to 5 years dependent upon the application. When the battery depletes, the complete transmitter unit must be replaced. It is also recommended that the entire smoke alarm is replaced.

## Packing for shipment

The equipment containing cells or batteries must be packed in strong rigid packaging and must be secured against movement within the outer packaging to prevent accidental activation. The sender's name and return address must be clearly visible on the outer packaging.

#### Safety

Do not dismantle or alter the unit. Do not open the case. Indoor use in dry location only.

#### Disposal

All electronic waste should be disposed of in accordance with the latest legislation.

It must be disposed of within the electrical and electronic waste stream and not be disposed of in the normal waste stream. Recycling electrical waste products (including the lithium batteries contained within) help to conserve natural resources and prevent adverse effects on the environment. Contact your supplier should you require more information.

## **Declaration of Conformity**

Hereby, Cair (UK) declares that the radio equipment type Smoke Alarm is in compliance with Directive 2014/53/EU.





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Smart Technology, Made to Care

# Smoke+

Interlinked Smoke Alarm



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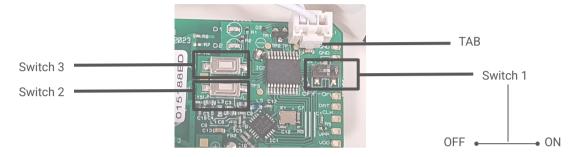
The Smoke+ is an intelligent, discreet, compat interlinked smoke detector. It can be easily programmed to interlinked with other Smoke+ or Heat+ sensors, ensuing all connected devices alert when needed.

The Smoke+ provides the earliest warning of a developing fire whilst being highly resistant to nuisance alarms.

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The Smoke+ is a discreet, compact unit which is particularly sensitive to slow, smouldering fires typically originating in living rooms, bedrooms and hallways whilst being highly resistant to nuisance alarms. If smoke is detected, a loud audible alert will be emitted and a radio message will be sent to the alarm receiving device. The Smoke+ is an interlinked smoke detector, and can be connected to other Smoke+ or Heat+ devices, so that each of them alerts when one of the devices is activated. This guide will explain how to connect and disconnect these devices. **Note:** This is a supplementary guide to the manufacturer's User Manual. Please read both documents before installing and using the smoke alarm.

#### Switching On



Firstly, unpack the unit and separate the sensor from the mounting plates. Turn Switch 1 on the PCB into the ON position (see picture). The LEDs will flash rapidly red and orange. There are two methods that can be used to interlink the devices. Tip: A suitable tool such as a head of a pin/tweezers can be used to change the position of the switch.

#### Interlinking Devices - PCB Method

Place the Smoke+ and Heat+ devices that are to be paired close together, within 0.3m. To pair the devices, press Switch 2 on the PCB on one of the devices to be connected. The red LED will rapidly flash on all devices. The detectors will be paired when the LEDs cease flashing on all units; this can take up to a minute depending on the number of devices being paired. The sensors can now be positioned and secured into the mounting plate. Please make sure the tab on each device is pushed in fully and twist to complete the connection.

#### Interlinking Devices - Unit Method

To pair, position and secure the sensors into their mounting plates. Please make sure the tab on each device is pushed in fully and twist to complete the connection. Press the 'Test' button on any of the devices and the sensor will emit a series of clicks. When all the clicks cease the devices have been paired; this can take up to two minutes

## Test Pairing

In order to test the pairing, press the test button on any connected Smoke+ or Heat+ detector. The unit will beep three times then fall silent. All other detectors will sound until the test is stopped. To stop the test, press the test button on any Smoke/Heat+ detector. The sensors will emit a series of clicks. When all clicks cease the test is complete. Important: During routine manual testing of the Smoke+ and paired devices, the detectors will not be receptive to physical smoke for up to 2 minutes and then for a further 45 seconds after the manual test has completed. If genuine smoke has raised an alarm and the hush button is pressed, the Smoke+ will not be sensitive to smoke for up to 10 minutes.

#### Pair Additional Devices

To pair another Smoke+ or Heat+, place the new device close to any device that has already been installed and put Switch 1 into the ON position. Press the test button on a paired device. All the devices in the paired group will now sound. The new device is paired when the red LED stops flashing.



#### **Unpair Devices**

To unpair a device, turn Switch 1 to the OFF position. Now press and hold down Switch 2. Whilst still holding down Switch 2, return switch 1 to the ON position and then release. The LEDs will flash and the device has now been unpaired. Note: Ensure this is carried out for each individual device you wish to unpair.

#### Registering Devices

Once all devices have been paired as desired, you are now ready to assign and install the Smoke+ and Heat+ devices. To assign the device to a an alarm receiving device, press the test button when the receiving device is in registration mode. Important: Each individual device must be programmed to the alarm receiving unit individually.

#### Changing the Protocol

The Smoke+ is an interoperable device with two built-in radio protocols: Tunstall and TeleAlarm. To check the protocol currently programmed, ensure Switch 1 is in the ON position and press Switch 3. Two flashes indicate it is programmed to the TeleAlarm protocol, whilst three flashes indicate it is programmed to the Tunstall protocol. To change the protocol, turn Switch 1 to the OFF position. Press Switch 2 and Switch 3 simultaneously. Turn Switch 1 to the ON position then release Switch 2 and Switch 3. The LEDs will flash once to confirm the protocol has been changed. Press Switch 3 to confirm the protocol has been changed, indicated by 2 flashes for TeleAlarm and 3 for Tunstall.

#### Positioning & Installation

Please refer to the manufacturer's manual included with this alarm for full information on how to position correctly. The smoke alarm should be mounted on the ceiling in the middle of a room or hallway, and at least 300mm away from walls, light fittings, doors, windows, vents and bathrooms/shower rooms. If it is necessary to mount it on a wall, ensure it is at least 150mm below the ceiling and 300m away from a corner. Ensure the chosen location is also within range of the alarm receiving device and any other connected devices. The pattress can be secured to the ceiling/wall using the enclosed fixings. Once the pattress is mounted, the wire from the smoke alarm should be plugged into the radio interface, ensuring that the plug is orientated correctly and a click is heard.

To assemble the smoke alarm, first ensure that the wire is folded neatly into the pattress. Align the line on the head with the arrow on the base, then turn the head clockwise until the locking tag clicks into place. This action will also switch the smoke alarm on. The smoke alarm can now be activated using the test button on the front surface of the unit to ensure that it's functioning correctly and that the radio transmitter operates. To separate the smoke alarm from the pattress, depress the locking tag and turn the head anti-clockwise. This action will also switch the smoke alarm off.

#### Status Indications

The smoke alarm features a sounder and a red LED indicator which can be seen on the front of the unit. The flashing LED and/or associated beeps indicate the following conditions:

- Power One brief flash every minute with no beep confirms the unit is powered correctly
- **Low Battery** One flash every minute with one beep indicates a low battery
- Test Button Jammed A single beep every 11 seconds indicates the test button is stuck
- Fault A double beep every minute indicates a fault or malfunction
- Test Repeated flashing of the LED and a single series of 3 beeps
- Alarm Repeated flashing of the LED every second and a series of 3 beeps sounding every 4 seconds
- Alarm Silenced Brief flash every 12 seconds indicates an alarm condition if the alarm has been silenced



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#### Testing

Testing should take place weekly to ensure correct operation, and also to check that the link to the alarm receiving device is still working. Testing can be carried out by simply pressing and holding the test button for a few seconds. The alarm should sound three times with a flashing LED and the radio transmitter should activate.

Important: When the test button is pressed, the alarm radio protocol is transmitted from that sensor, but thereafter for a two minute period pressing the sensor test button will not send any further radio protocol transmissions

Note: The electronic test button provides a full test of the alarms functionality. Do not try to test the alarm using smoke, heat or naked flame as damage will occur.

#### Silencing

The smoke alarm can be silenced by momentarily pressing the test button. This is ideal for non-emergency situations where nuisance alarms may have been created, for example, by steam. The red LED will flash every 12 seconds to remind you that the smoke alarm has been silenced and will automatically reset to quiescent mode after 10 minutes. Low battery warnings can also be silenced. As low battery alerts often arise during the night, the audible warning can be temporarily silenced for ten hours by momentarily pressing the test button.

#### Cleaning

The smoke alarm should be cleaned regularly to ensure it works properly. The pattress can be cleaned with a very lightly damped cloth. Do not use an abrasive material, any chemical cleaning agents or any other liquids to clean the pattress as these may damage the unit. Avoid using aerosol based cleaning agents as these may cause false alarms. The use of a vacuum cleaner with soft brush to remove dust is advisable and will help to keep the unit working efficiently and prevent false alarms in more dusty environments.

