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FlareSafe is an essential piece of kit for today's global traveller, keeping them protected and prepared wherever in the world they find themselves. Lightweight, water-resistant and shockproof military-grade plastics have been combined with the latest LED technology and extensive independent testing to ensure that they are carrying the most reliable personal safety device.

FlareSafe was conceived by veteran backpackers Dave Potter and Robert Carmichael, who were appalled at the loss of life in the Childers hostel fire in Australia in June 2000. Fifteen backpackers died in the blaze after staff disarmed the building's fire detection system.

They developed FlareSafe – which combines a smoke detector, an SOS/distress alarm and an LED torch – as a personal safety device that travellers could take with them to avoid a similar catastrophe. The smoke detector and electronics were designed by one of the United Kingdom's most experienced optical smoke chamber designers.

FlareSafe weighs just 200 grams, is only 14.5 centimetres long and is 4.5 centimetres in diameter. The exterior design is by an award-winning London-based agency. Designed and developed in the UK, FlareSafe has gone through independent testing (BRE) where it was shown to meet the fire performance requirements of the British Standard for smoke detectors BS 5446/1. FlareSafe has passed EMC testing and carries the CE mark.



optical optica



Technical

The smoke detector in FlareSafe is a revolutionary compact design, necessary to provide reliable opera-tion in challenging conditions. The detector uses infrared optics, NOT radioactive materials, to look for smoke entering the smoke chamber.

Although optical detectors are substantially more expensive to manufacture than the radioactive ionizing detectors, US studies have shown that they are much more reliable in detecting fires than ionizing detectors. Furthermore, radioactive items are banned by many airlines, leaving an optical detector as the only viable option for travellers.

FlareSafe meets the fire performance requirements of the British Standard for smoke detectors, BS5446/1.

Functional

The smoke detector works when you arm the unit. To arm Flare-Safe, the user simply twists the plastic cap at the back-end of the unit. This pops up, exposing the detector underneath the cap. At the same time, the unit emits a single beep which tells the user the unit is armed.

When the unit detects smoke, the 110dB siren sounds and the torch light automatically turns on, allowing the user to grab FlareSafe and find their way out of the building.



110 dB • SOS / distress alarm



Technical

FlareSafe uses a Kingstate 20mm Piezo-type sounder to generate the alarm for both the smoke alarm and the distress alarm. The sound output is up to 120dB.FlareSafe's piercing siren can be heard up to 300 metres away. Tests using fresh batteries show that the siren will sound for more than 60 hours.

Functional

In the event that the user is attacked, they simply push the two orange buttons on the casing. The pierc-ing alarm will sound, and at the same time the torch light will start flashing. This provides an audible and visual sign of distress. The alarm can be disabled by pressing the same two buttons, holding them down for two seconds.

Otherwise, the unit can be disarmed by opening the unit. This disconnects the batteries. Pushing the rear orange button on its own will generate the SoundFlare – in this mode the siren will sound and the torch will strobe, but only for as long as the user keeps the button pushed.



brilliant () LED flashlight



Technical

LED bulbs are rugged, compact and long-lasting. The four LEDs used in FlareSafe generate a powerful beam, with three settings to choose from: Full Beam, Half Beam, and Strobing. Rescue visibility is up to two kilometres. Tests using fresh batteries show that the full beam lasts 15 hours, the half beam almost 60 hours, while the strobe will flash for more than 90 hours.

Functional

The torch is operated using the front orange button. Pressing this repeatably will cycle the torch through its functions. If it is left in any one setting for more than 5 seconds, the next push will turn the torch off.

Software & Power Management

The two AA Alkaline batteries power FlareSafe at all times. The lithium is purely a back-up for the emergency functions. When the AA batteries are running low the torch beam is diminished. When the AA batteries are exhausted the torch will not function. This is to ensure that the back-up battery lasts as long as possible.

The bespoke software will warn the user when the lithium battery is running down. This is vital because the emergency functions (smoke detection and distress alarm) will operate in the absence of AA batteries.

