SMOKE TESTING FOR ASD SYSTEMS AND HARD-TO-ACCESS POINT DETECTORS






scorpion®

www.scorpion-tester.com

A unique remote detector tester

WHAT IS SCORPION?

Scorpion is an innovative solution for functionally testing any hard-to-access smoke detector, whether that is a point detector or aspirating smoke detection (ASD) system.

A Scorpion head unit is a smoke generator which is installed next to a detector, and when required, generates smoke which is directed towards the detector for a functional test of the device.

Scorpion makes testing detectors in lift shafts, warehouses, factories, or secure areas as simple as testing a detector within easy reach. It aids compliance with international codes and standards, and means that all detectors in a building can be functionally tested at every maintenance interval, regardless of their physical location.

HOW DOES IT WORK?

By introducing smoke right where it is needed, Scorpion is able to activate point detectors or ASD systems with minimal inconvenience.

Scorpion is a micro smoke generator permanently installed adjacent to a point detector or a sampling hole on an ASD pipe – typically at the furthest sampling hole. The smoke generator is connected to a Scorpion Control Panel, or Access Point mounted at a convenient, easy to access location at ground level. Functional testing of the smoke detector is then easily and safely achieved from the Scorpion Control Panel, or Access Point (with an Engineer's Controller) whenever required.

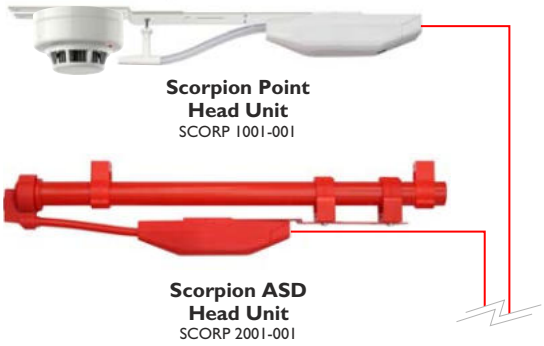
The Scorpion system has an in-built transport timer to help assess the on-going integrity of the ASD system from the end of the pipe right down to the detector itself. A clearing function is used to clear the smoke out of point detectors to reduce the chance of repeat alarms, increasing productivity on site.

Scorpion can be retro-fitted to existing systems or be installed with new systems. Each head unit has a test capability in excess of 240 tests of 15 seconds of smoke each. Up to 8 Scorpion heads can be connected to a single wall mounted Control Panel, or for fewer detectors in multiple locations using Access Points together with Engineer's Controller.

SCORPION can retrofit onto both existing and new fire alarm systems

Scorpion Product Selector

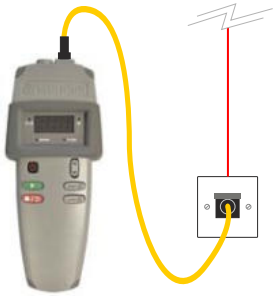
HEAD UNITS



Scorpion Point Head Unit
SCORP 1001-001

Scorpion ASD Head Unit
SCORP 2001-001

CONTROLLER OPTIONS



Scorpion Engineer's Portable Controller
SCORP 7000-001
(includes Scorpion Access Cable SPARE 1054 + Battery Baton Cable SCORP 60)

Scorpion Access Point
SCORP 25-001



Scorpion Wall Mounted Control Panel
SCORP 8000-001

POWER OPTIONS



Scorpion Power Pack
SCORP 50-001

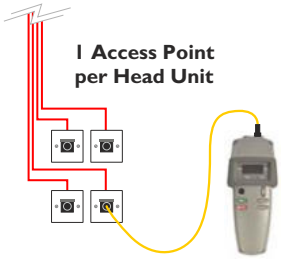


Solo Battery Baton
SOLO 760



Scorpion Battery Cable
SCORP 60

CABLING





ACCESSORIES



Scorpion Battery Cable
(for connecting Solo 760 Battery Baton to Scorpion Control Panel) SCORP 60



Solo Universal Fast Battery Charger
SOLO 726

scorpion®

WHY DO YOU NEED IT?

Scorpion is a unique test solution that solves a problem that has never before been tackled. There are many reasons for installing Scorpion including:

1. When you need to be sure ALL detectors are tested
2. When access to the detector for test and maintenance is costly and/or difficult
3. When Health and Safety risk assessments are slowing you down
4. When you want an innovative, professional, and fit for purpose test solution
5. When accuracy is key
6. When compliance with standards and maintenance schedules is as important as cost efficiency



Physical access costs are eradicated

COST SAVING BENEFITS

Detectors in hard to access locations are often costly to test and maintain. They require specialist access equipment, potentially the presence of a third party company and often more than one engineer. All of which takes time as well as money to arrange.

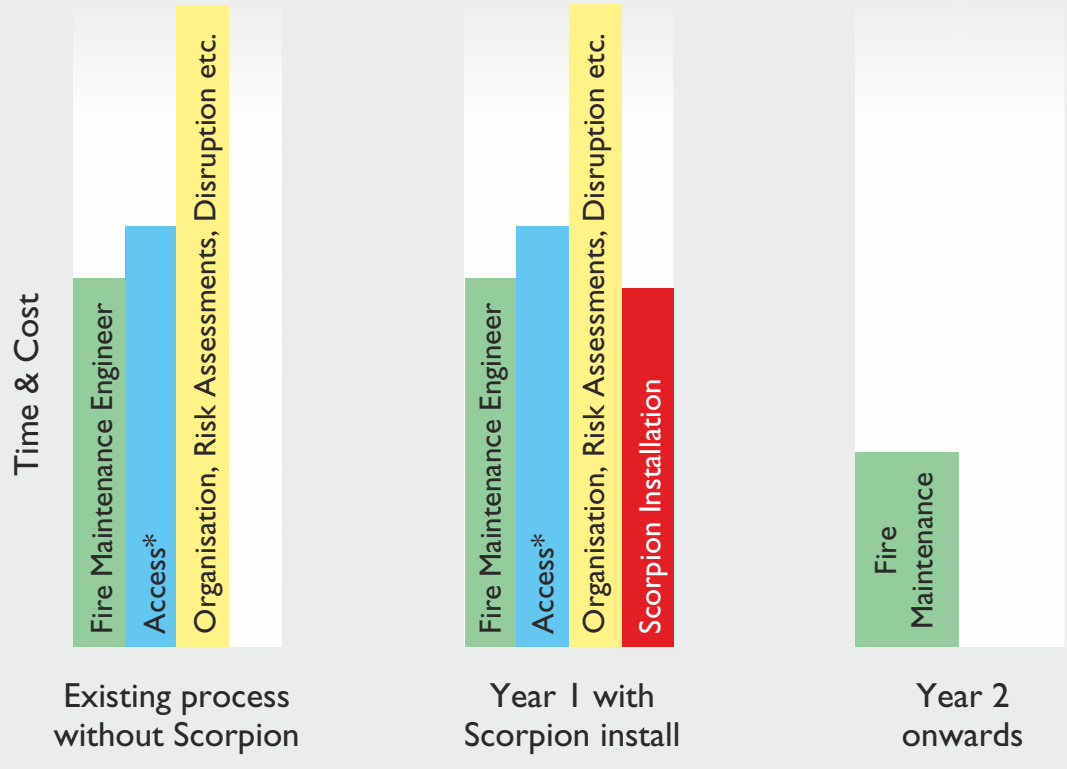
TIME SAVING BENEFITS

Installing Scorpion dramatically reduces the time taken to test hard to access detectors. Scorpion allows these detectors to be tested easily as part of the routine test during the engineer's visit – without the need for a return visit out of hours and without the time taken to directly access the detector.

COMPLIANCE

All detectors, regardless of location, should be tested and maintained in compliance with international codes and standards. Installing Scorpion supports this and eliminates the need for deviations from such standards – offering ultimate peace of mind and proof that all detectors within a building are functioning as expected.

Example of typical cost and time savings using Scorpion

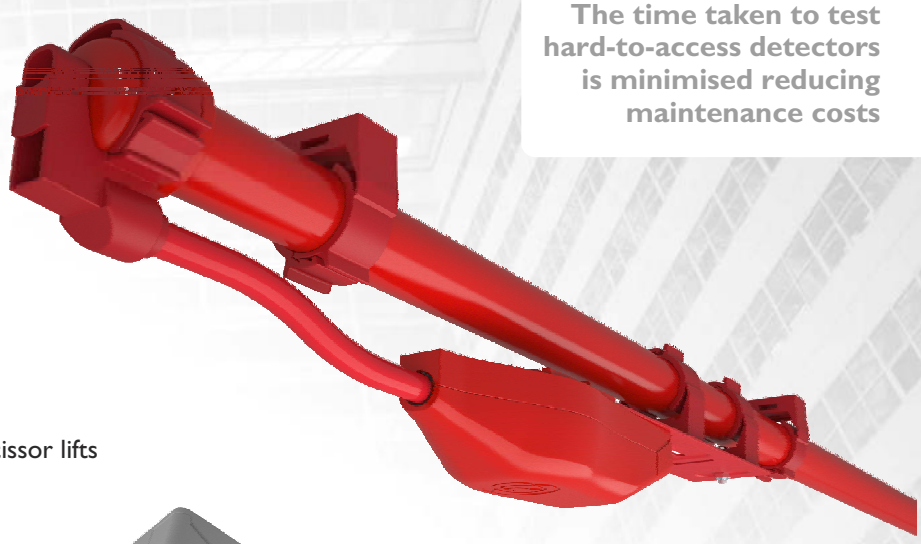


*Access costs may include equipment or a service engineer (in the case of a lift installation).

WHAT APPLICATIONS CAN IT BENEFIT?

Scorpion can, in theory, be installed alongside any point smoke detector or aspirating system. However, you will appreciate the benefits of the product more if you have detectors in areas such as the following:

The time taken to test hard-to-access detectors is minimised reducing maintenance costs





Lift shafts
- Eliminates disruption
- Lift remains available for use during testing
- No third party company required – e.g. lift engineer
- No requirement for out of hours working
- Quicker test period
- No deviations from test standards

IT Server Rooms, Archives
- Keeps secure areas secure
- Eliminates disruption

Warehousing
- No access equipment necessary e.g. cherry pickers, scissor lifts
- All areas remain accessible during testing
- Quicker test period
- No deviations from test standards

High Atria
- No access equipment necessary
- Health and safety issues avoided
- Quicker test period

Void Spaces
- Avoids problems related to access to confined spaces
- Potential damage to building infrastructure avoided
- Quicker test period
- Eliminates disruption
- No deviations from test standards

WHAT FACILITIES BENEFIT FROM SCORPION?

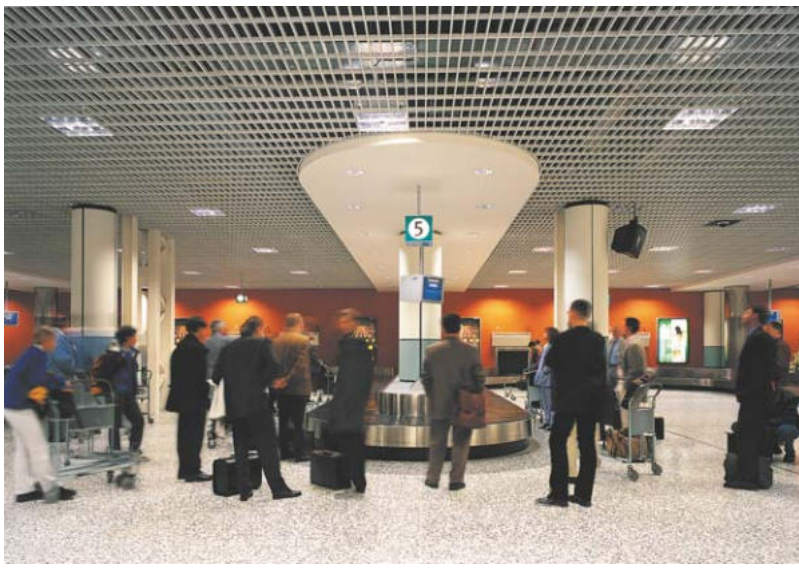
Scorpion brings time benefits in a number of different ways and eliminates disruption caused to businesses and organisations caused by having to close off certain areas, restrict access to customers and members of the public or disrupt 24/7 process. Any facility with the above mentioned applications will benefit from Scorpion.

Installations to date have included:

24/7 public areas such as:
- Shopping centres
- Hospitals
- Hotels
- Nursing homes
- Universities

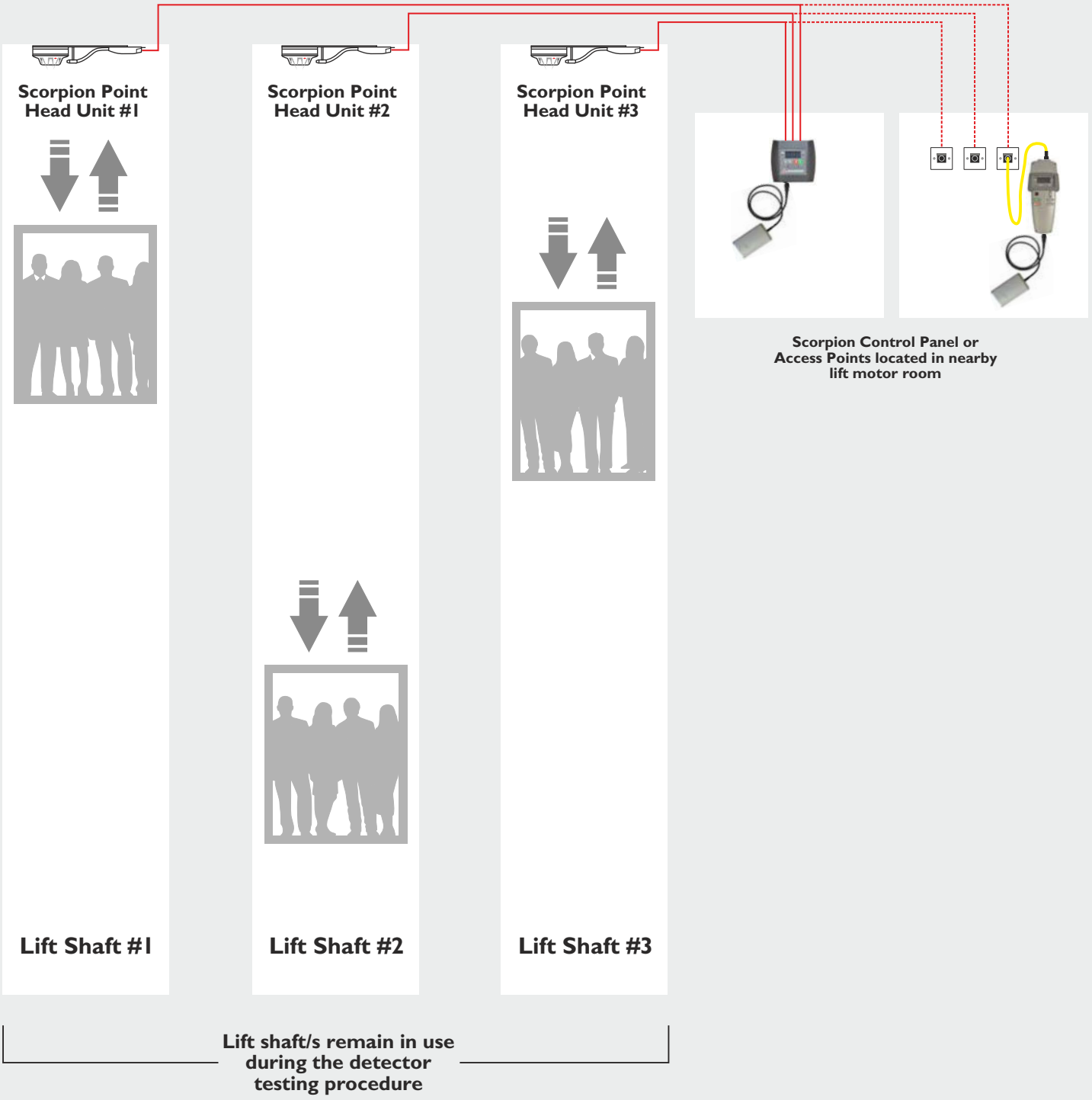
Restricted access facilities such as:
- Airports
- Military premises
- Banks
- Power stations

Continuously operational areas such as:
- Manufacturing plants
- Warehouses
- Call centres



INSTALLATION EXAMPLE USING SCORPION

As with any fire detection system, the smoke detectors in lift shafts need to be tested regularly. This is a complex maintenance issue as each lift shaft has to be taken out of operation to allow access by an approved engineer. The engineer then has to gain access to the detector safely which can require specialist access equipment. Including planning and waiting time, this could easily be half a day's activity/cost for each lift shaft. Scorpion now changes this!



What next?

· Read more case studies and application notes on the website: www.scorpion-tester.com

· Contact us to arrange a demonstration or to discuss your individual requirements: info@scorpion-tester.com
Tel:+44 (0) 1707 282760

Extending a Scorpion System

A Scorpion system can be extended by adding additional Head Units (Point or ASD). These are available to suit the selected Controller (Wall Mounted or Portable).

Optional Point Head Unit Kits		**Scorpion Point Head Unit Kit** (for use with SCORP 8000 Wall Mounted Controller) **SCORP1001-001**
		**Scorpion Point Head Unit Kit -** (for use with SCORP 7000 Portable Controller) **SCORP1011-001**
Optional ASD Head Unit Kits		**Scorpion ASD Head Unit Kit** (for use with SCORP 8000 Wall Mounted Controller) **SCORP2001-001**
		**Scorpion ASD Head Unit Kit -** (for use with SCORP 7000 Portable Controller) **SCORP2011-001**

Technical Specifications

Environment

	Scorpion Head Unit	Scorpion Control Panel	Scorpion Engineer's Controller
Transport / Storage Temperature	-10°C to 70°C (14°F to 158°F)	-10°C to 50°C (14°F to 122°F)	-10°C to 50°C (14°F to 122°F)
Storage Humidity	0-90% RH (non-condensing)	0-90% RH (non-condensing)	0-90% RH (non-condensing)
Operating Temperature	0°C to 60°C (32°F to 140°F)	5°C to 45°C (41°F to 113°F)	5°C to 45°C (41°F to 113°F)
Operating Humidity	0-95% RH (non-condensing)	0-85% RH (non-condensing)	0-85% RH (non-condensing)
Ingress Protection	IP20	IP40	IP20
Weights and Dimensions	<200g 155mm (L) x 54mm (W) x 34mm (H) (excluding nozzle)	<500g 150mm (L) 155mm (W) x 37mm (H)	<500g 220mm (L) 95mm (W) x 40mm (H) (excluding cables)

Note: The Scorpion system is designed for specific applications within the above parameters. For additional information regarding location and installation procedures, please refer to the Scorpion User Manual at: www.scorpion-tester.com

Safety features

- Scorpions energized only at time of test
- Isolation between Scorpion circuit and detection system
- Internal over-current protection on Scorpion circuit
- Battery over-current cut-out

Power source and charge data

- Scorpion Battery Pack (SCORP 50) - NiMH rechargeable nominal 7.2v 2.2Ah
- Solo Battery Baton (Solo 760) - NiMH rechargeable nominal 7.2v 2.2Ah
- Charging time 75 - 90 minutes (when completely discharged) using Solo-726 charger

Note: A Scorpion Power Pack (SCORP 50) or Solo Battery Baton (Solo 760) is required when carrying out testing.

Cabling

- Scorpion circuit wiring: FP200 1.5 mm², Lapp J-Y(ST) Y 0.5 mm², or equivalent - 3 cores per Head Unit
- Maximum cable length per Scorpion Control Panel - 100 metres (depending on cable used)
- 8 Scorpions (max.) per Control Panel
- 1 Scorpion per Access Point

As our policy is one of continuous improvement, details of products described within this publication are subject to change without notice. All information provided here is believed to be correct at the time of going to press. Every effort has been made to ensure the accuracy of information which is provided in good faith but nothing contained herein is intended to incorporate any representation or warranty, either express or implied or to form the basis of any legal relations between the parties hereto, additional to or in lieu of such as may be applicable to a contract of sale or purchase.

This information must be read in conjunction with the Scorpion Installation Manual & User Guide which provides further information on Scorpion applications, compatibility and suitability.

scorpion®

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