CONCEPT
smoke screen

Using a Smoke Screen Deploy

End user guide

(12 April 2020)

Thank you for purchasing a Concept Smoke Screen system. Your choice to protect your property and premises with this equipment has given you the use of one of the most effective security systems currently available. Concept Smoke Screen systems have been in service for over 35 years and have protected many millions of pounds worth of property, defeating criminals and securing premises on an almost daily basis.

Please take the time to read and understand this guide to ensure you achieve the maximum performance from your Smoke Screen. If you have any questions that remain unanswered, please call our experts at Concept Smoke Screen and we will help. Once again, thank you for your decision; we hope that it's one that never needs to be tested.

Matt Gilmartin, Managing Director

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HOW DOES YOUR SMOKE SCREEN WORK?

Your Smoke Screen passes a non-toxic fluid through an efficient heat exchanger to create smoke, or more accurately a thermally generated fog that obscures visibility, discouraging intruders from entering your premises.

This fog is very persistent and will stay suspended in the room for a significant length of time until it is vented by opening the doors and windows.

The Smoke Screen uses a sophisticated electronic control system to ensure it heats up to, and maintains, its ideal operating temperature using a minimal amount of electricity.

The system uses a Passive Infra-Red (PIR) detector to sense a person moving around within its coverage area up to approximately 10m from the sensor.

WHAT'S INCLUDED

Before placing the Smoke Screen in the area to protect ensure that you have all the following equipment supplied in the box:

- 1 x Smoke Screen.
- 2 x Operating fobs

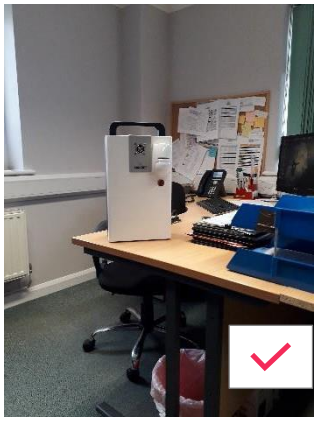
POSITIONING THE SMOKE SCREEN

The aim is to use the Smoke Screen to deter an intruder from entering your premises; therefore, position it to push them back out of the building the way they entered. You should not try to trap the intruder.

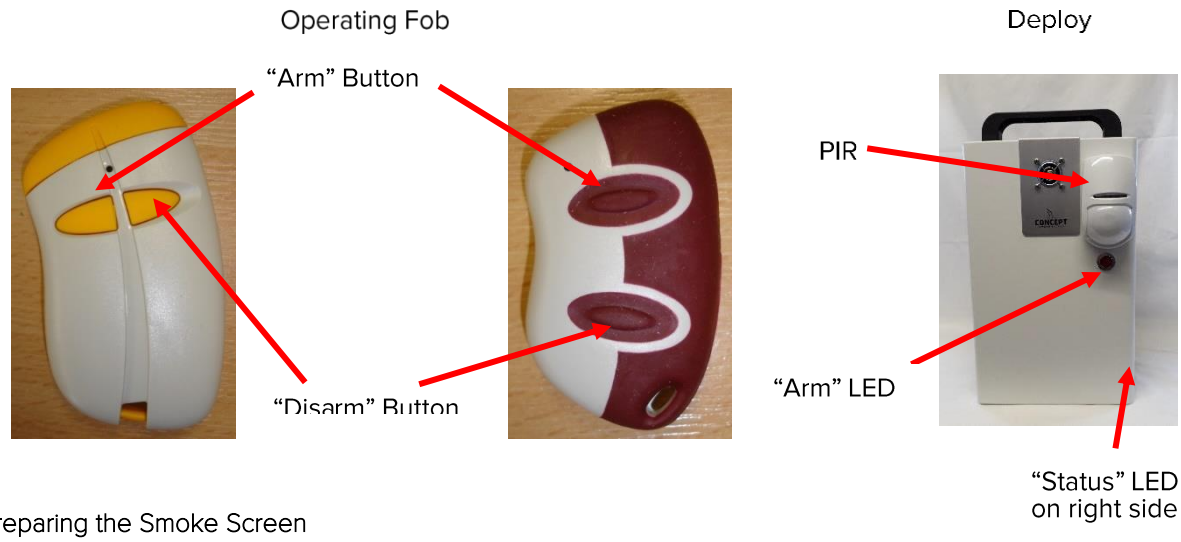
To achieve maximum effect, position the Smoke Screen facing the likely intruder entry point and/or away from the location of valuables.

To ensure the best PIR detection range place the Smoke Screen in a high position i.e. on a desk or a shelf, up to 2m above ground.

DO NOT PLACE THE SMOKE SCREEN ON THE FLOOR.



OPERATION



Preparing the Smoke Screen

1. Plug the Smoke Screen into a suitable socket and wait for 20 minutes for the machine to heat up to temperature. The "Status" LED will light up GREEN when the Smoke Screen is ready.
2. Check the fluid level (see page 6).

To arm the Smoke Screen

1. Press and release the "Arm" button on the Operating Fob:
   - The Smoke Screen will make a buzzing sound for a second.
   - The "Arm" LED on the front will light up RED.
2. The Smoke Screen is now armed and will activate for 60 seconds when it detects movement.

To disarm the Smoke Screen or stop an activation

1. Press and release the "Disarm" button on the Operating Fob:
   - The Smoke Screen will make a buzzing sound for a second.
   - The "Arm" LED on the front will turn off.
2. The Smoke Screen is now disarmed and will not activate.

Re-activating

If the Smoke Screen has stopped activating and the PIR senses movement again the Smoke Screen will re-activate if it is still armed.

AFTER AN ACTIVATION

- Wait until the smoke production has ceased. Do not try to enter the affected area as you will not be able to see through the fog.
- Look for signs of forced entry. If you find any, or you believe that intruders are on the premises, call the Police and wait for them to arrive. Take no further action.
- Where there are no signs of forced entry, open all external doors and wait for the fog to start clearing – this may take 10 to 15 minutes. Keep watch for intruders that may have been screened by the fog.
- As visibility returns open more doors or windows to speed up the venting process.
- Check the fluid level for the Smoke Screen as described in the next section. It is recommended that the fluid is replenished if there have been 2 or more activations of the Smoke Screen.

CHECKING & CHANGING THE FLUID

Checking the fluid

The Smoke Screen has a replaceable 1 litre Swift-Fit fluid bottle that is accessed by removing the cover on the right-hand side of the machine. The fluid level is monitored using sensors in the fluid reservoir to give the following indications on the "Status" LED light on the right side of the Smoke Screen:

- Low Fluid. When the fluid bottle is approximately 50% full the "Status" LED light will flash alternate yellow and green every 5 seconds and there will be a short beep every 5 minutes.
- Empty Fluid. When the fluid bottle is empty the "Status" LED light will flash alternate red and green every 5 seconds and there will be a long beep every 3 minutes.

NB: The Smoke Screen will not produce fog when there is an "Empty Fluid" indication.

Be aware of high voltage in the Smoke Screen. The mains electrical supply should be switched off before changing the fluid consumable.

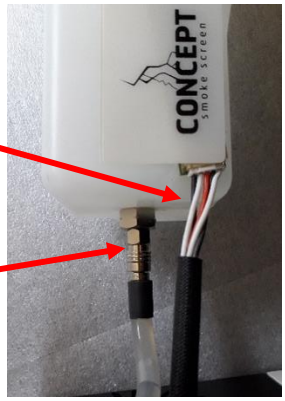
If the generator has been in service the heater block and connected parts will be extremely hot and will cause injury if touched. Switch off and allow the heater block to cool.

Changing the fluid

Get a replacement Swift-Fit fluid bottle from your Smoke Screen supplier. Open the right-hand access panel (Phillips No2 screwdriver). Lift the bottle out of the compartment by removing the upper end first.

Disconnect the fluid monitoring cable.

Disconnect the fluid feed pipe (pull collar to release)



Connect the monitoring cable and feed pipe (push fit) to a new fluid reservoir; ensure both are secure.

Insert the reservoir into the fluid compartment base first feeding the pipe into the lower space.

Make sure the notch in the reservoir is on the outside of the Smoke Screen or the compartment door will not shut.

STATUS INDICATIONS

The Smoke Screen provides external status monitoring via a buzzer and a multicolour “Status” LED light located on the lower part of the right-hand side panel. The indications are:

LED Colour		Buzzer Sound	Meaning	Notes	Action Required
🟡	Permanent.	Nil.	Smoke Screen is heating to operating temperature	This should take up to 20 minutes.	Nil.
🟢	Permanent.	Nil.	Smoke Screen is at operating temperature.	Smoke Screen ready to operate.	
🟢	Flashing.	1 beep every 0.5 sec.	The Smoke Screen is making fog.	Nil.	
🟡🟢	Flash once every 5 sec.	1 short beep every 5 min.	Fluid level low.	Nil.	The fluid bottle will need changing soon.
🔴🟢	Flash once every 5 sec.	1 long beep every 3 min.	Fluid reservoir empty or not installed.	The Smoke Screen will not produce fog in this state.	Change the fluid bottle.
🔴	Permanent or flashing with any other colour except for the empty fluid above.	Any	Critical fault	The Smoke Screen will not produce fog in this state.	Contact Concept Smoke Screen.

SERVICING & FLUID REPLENISHMENT

Service engineer qualification. Please note that it is a requirement of the standards relating to security fogging devices that the Smoke Screen is serviced by an engineer certified by the manufacturer. If you are unsure, ask the engineer for their certification ID card.

Smoke Screen servicing. To ensure the Smoke Screen remains fully operational it must be regularly serviced by a Concept Smoke Screen certified engineer. Failure to service the Smoke Screen may invalidate the warranty.

Service intervals. The Smoke Screen should be serviced annually by a Concept Smoke Screen certified engineer and the following consumables should be replaced as specified:

Fluid: Always ensure that the Smoke Screen has enough fluid, or it will not produce smoke when needed. The fluid consumable should be changed:

- Every 12 months as ‘best-practice’ or, as a minimum, every 2 years.
- If the Smoke Screen displays a Low or Empty Fluid fault in between services.
- If there have been 2 or more activations of the Smoke Screen since the fluid was replenished.

WARNING: Only Smoke Screen fluid should be used as other smoke fluids may cause damage to the unit or noxious fumes.

Concept Smoke Screen Limited

North End Business Park, Station Rd, Swineshead, Lincolnshire, PE20 3PW United Kingdom
Tel: +44 (0) 1205 821111 | Fax: +44 (0) 1205 820316 | info@smoke-screen.co.uk | www.smoke-screen.com