

# EXODUS FEATURES

	Exodus OH/4W	Exodus RR/4W	Exodus FT64/4W	Exodus FT90/4W
12V/4-WIRE OPERATION	•	•	•	•
BUILT-IN ALARM RELAY	•	•	•	•
COMPLIMENTARY CEILING BASE	•	•	•	•
MICROPROCESSOR TECHNOLOGY	•	•	•	•
DIGITAL TECHNOLOGY DETECTION ALGORITHMS	•	•	•	•
LATCH INPUT ENABLES AUTO RESET OR LATCHING OPERATION	•	•	•	•
ALARM SIMULATION TEST BUTTON	•	•	•	•
OPTICAL & THERMAL DETECTION FOR OPTIMUM SENSITIVITY	•			
DIGITAL DRIFT COMPENSATION	•			
DESIGNED TO COMPLY WITH EN54-5	N/A	•	•	•
DESIGNED TO COMPLY WITH EN54-7	•	N/A	N/A	N/A
LABEL COLOUR	BLUE	GREEN	ORANGE	RED

## Chamber & Thermistor Test Button

Each *Exodus* detector incorporates a test button. Pressing this causes the unit to perform a FULL functional test which confirms that the microprocessor, relay, thermistor and optical chamber (where appropriate) are functioning correctly.



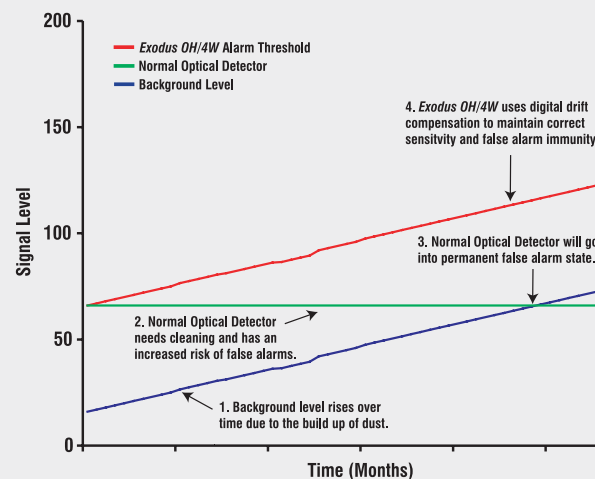
## Latch Input

The latch input enables the detectors to operate in auto-reset or latching mode. This can either be set by fixed wiring in the ceiling ring, or switched remotely from the alarm control panel.



## Digital Drift Compensation

The Optical part of the *Exodus OH/4W* works on the photo-electric principle. Over time dust will inevitably build up inside the chamber raising the base threshold. Digital drift compensation raises the alarm thresholds at the same rate as the base threshold, reducing the need for cleaning and greatly improving false alarm immunity.



## Locking Screw

All *Exodus* detectors contain a discreet hexagonal screw which may be used to lock the detector head to the ceiling ring.



## Specifications

Supply Voltage:	9 - 16Vdc.
Current Consumption:	15mA typical.
Alarm Output:	Built-in normally closed relay, open on alarm <24Vdc 50mA, 18Ω.
Dimensions:	107mm x 55mm.
Packed Weight:	200g (approximately).
EMC:	Independently certified to EN50130-4 : 1996.
Design:	Microcontroller based signal analysis. Electronic drift compensation.
RF Immunity:	No false alarms from 80MHz to 1GHz at 30V/m.

## EUROPEAN STANDARDS

Conforms to European Union (EU) Electro-Magnetic Compatibility (EMC) Directive 89/336/EEC (amended by 92/31/EEC and 93/68/EEC). Approved to BS EN 55022 Class B and BS EN 50130-4 : 1996. The CE mark indicates that this product complies with the European requirements for safety, health, environmental and customer protection.



Certificate Number: FM 35285



British Security Industry Association



E4W.EU1

# Exodus 4W Series

## SMOKE & HEAT DETECTORS



The *Exodus 4W Series* of heat and smoke detectors brings world-leading fire sensing technology into the security marketplace. Featuring a dedicated built-in relay for connection to security control panels, ceiling connector base, low profile aesthetics and designed to comply with EN54 Parts 5 & 7, the *Exodus 4W-Series* delivers outstanding performance.

### Outstanding features include:

- ✓ 12V/4-WIRE OPERATION
- ✓ BUILT-IN ALARM RELAY
- ✓ CEILING CONNECTOR BASE
- ✓ MICROPROCESSOR DESIGN
- ✓ DIGITAL TECHNOLOGY DETECTION ALGORITHMS
- ✓ ALARM SIMULATION TEST BUTTON
- ✓ LATCH INPUT ENABLING AUTO-RESET OR LATCHING OPERATION

### Optical & Heat Multisensor additional features:

- ✓ OPTICAL & THERMAL DETECTION
- ✓ DIGITAL DRIFT COMPENSATION
- ✓ DESIGNED TO COMPLY WITH EN54-7

### Heat Detectors additional features:

- ✓ DIGITAL THERMAL DETECTION
- ✓ DESIGNED TO COMPLY WITH EN54-5





Detachable Detection Modules



Optical & Thermal Chamber



Cable Entry Knockouts



Corrosion Resistant Terminals for Maximum Contact Reliability



12V Connection with Built-in Relay

# Exodus 4W Series

## State of the Art Smoke & Heat Detectors

The *Exodus 4W-Series* of smoke and heat detectors uses state of the art microprocessor designs to provide the most reliable fire detection yet maintains maximum false alarm immunity.



## 12V/4-Wire for Connection to Security Control Panels

Because the *Exodus 4W-Series* detectors have a built-in normally closed relay and operate from 12V, connection to any standard security panel is quick and simple. The relay opens on detection of fire, loss of power or removal of detector.



## Range of Detectors for Different Installations

Different environments require different types of detectors to provide the best detection yet maintain maximum false alarm immunity. The *Exodus 4W-Series* comprises:

- OH/4W Optical Smoke & Heat Multisensor;
- RR/4W Rate of Rise Heat Detector;
- FT64/4W 64°C Fixed Temperature Heat Detector;
- FT90/4W 90°C Fixed Temperature Heat Detector.



## Important Facts to Consider Before Choosing the Type of Smoke or Heat Detector

Historically, smoke detectors have used either ionisation or optical (photo-electric) detection. Both of these technologies on their own suffer from problems. "Ionisation only" detectors have a poor response to large smoke particles e.g. a slow smouldering fire. They are also very sensitive to fumes (e.g. from cooking), this often leads to false alarms. Additionally there are increasing environmental concerns over the use of radioactive sensors.

"Optical only" detectors do not react well to fast flaming fires and so often have their sensitivity increased. This can lead to false alarms.

To achieve maximum false alarm immunity and excellent fire detection Texcom recommend the use of optical smoke and heat multisensors or heat detectors.

DETECTOR PERFORMANCE	Hot Flaming Fire	Dense Smoke	False Alarm Immunity
Ordinary Ionisation Detectors	✓	✗	✗
Ordinary Optical Detectors	✗	✓	✓
<i>Exodus OH/4W</i> Multisensor	✓	✓	✓

Advantages of Multisensor Design

## Why Exodus Detectors are Safer Than Battery Powered Smoke Detectors

Stand-alone battery powered smoke detectors are required to emit a loud warning signal when the battery is losing power. Inevitably this will often happen in the middle of the night causing annoyance to home owners. Unfortunately many people remove the battery to silence the alarm and then forget to replace it - this can lead to loss of life. People also routinely "borrow" batteries from smoke detectors (e.g. because the TV remote control has stopped working), again, however well intentioned, it is all too easy to forget to replace the missing battery. A further reason people remove batteries is because the alarm goes off when they are cooking. This is because most battery powered detectors use the ionisation technique which is very sensitive to cooking fumes and therefore prone to false alarms.

Many countries are now recognising the problems with battery powered detectors and are introducing requirements for smoke detectors to derive their power from mains electricity, ideally with an additional back up battery in case of mains failure. *Exodus* heat and smoke detectors fully comply to these requirements as well as providing greatly improved false alarm immunity.



Ceiling Connector Base



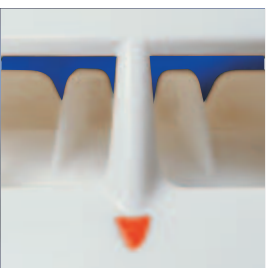
Optical Chamber with Micro-fine Smoke Mesh



Slim Aesthetic Design



Test Button Feature



High Visibility LED Indication

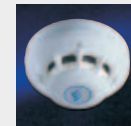
## *Exodus OH/4W* Optical Smoke & Heat Multisensor

Detects: 1. Large smoke particles e.g. from smouldering fires OR  
2. Small Smoke particles AND a small increase in temperature e.g. from a fast flaming fire.  
DOES NOT alarm on heat only.

Suitable For: Fast detection for widest range of fires. Gives improved false alarm immunity compared to ionisation or optical only.

Not Suitable For: Smoky, dusty or steamy environments e.g. kitchens, bars, bathrooms.

Label Colour: Blue.



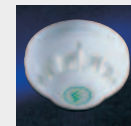
## *Exodus RR/4W* Rate of Rise Heat Detector

Detects: 1. Rapid Increases in temperature OR  
2. Temperatures above 58°C (136°F).

Suitable For: Fast fire detection in smoky or dusty environments e.g. bars or attics, where normal temperatures do not exceed 38°C (100°F).

Not Suitable For: Environments where the temperature may change rapidly, e.g. kitchens, bathrooms.

Label Colour: Green.



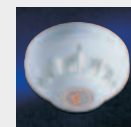
## *Exodus FT64/4W* 64°C Fixed Temperature Heat Detector

Detects: Temperature above 64°C (147°F).

Suitable For: Fire detection in smoky environments where rapid temperature changes might occur e.g. kitchens, bathrooms, where normal temperatures do not exceed 44°C (111°F).

Not Suitable For: Fast detection of slow burning or smouldering fires, or for use where the normal temperature exceeds 44°C (111°F).

Label Colour: Orange.



## *Exodus FT90/4W* 90°C Fixed Temperature Heat Detector

Detects: Temperatures above 90°C (194°F).

Suitable For: Environments where temperatures up to 70°C (158°F) occur normally e.g. boiler rooms.

Not Suitable For: Fast detection of slow burning or smouldering fires.

Label Colour: Red.

