Smoke Alarm

MAINS POWERED 230V~
Rechargeable Battery Back-Up

Model Ei166R Optical

- **Remote control capability**
- **Easi-Fit base**
- **Tamper proof rechargeable lithium battery back up**
- **High performance optical chamber with integral insect screen**
- **Test/Hush button**
- **Advanced suppression and calibration technology**
- **Interconnectable to other Ei mains powered alarms**
- **Built in auto self test feature**
- **Low power cell warning**
- **Kitemarked to BS5446-1:2000**
- **5 year guarantee**

Product Description

The Ei166R is an Optical Smoke Alarm that runs on 230V AC mains power, and has built in tamper proof rechargeable lithium cells that act as a battery back up in the event of mains failure. These rechargeable lithium cells are designed to have a ten year life and outlast the life of the smoke alarm itself, whilst providing up to six months of smoke alarm operation without mains power.

The Ei166R is supplied with the Easi-Fit base that allows very quick and simple installation of the smoke alarm, combined with simple detector head removal and replacement. The Easi-Fit base automatically connects both mains power and battery as the detector head slides on to the Easi-Fit base.

The Ei166R allows the detector to be controlled remotely by either a "Test/Hush" Switch (Ei152), a "Locate" Switch (Ei159) or a Manual Call Point (MCP400). If the Ei166R is also interconnected to other Ei mains powered alarms then the whole system can be controlled remotely.

The Ei166R has other advanced features such as integral insect screens to reduce the chances of false alarms, as well as the ability to interconnect up to twelve alarms.

The Ei166R has built in circuitry to aid suppression of voltage transients and RF interference to further reduce

Operation

- The green indicator will illuminate to show mains power is present

- The red indicator will flash every 40 seconds to show that the detector has performed an automatic self test

- The red indicator will flash rapidly to show an alarm condition for the smoke detector

- The "Test/Hush" button will either silence false alarms or perform a unit self test

- In "Test" mode the alarm will perform a self test and sound the horn

- In "Hush" mode the alarm enters a ten minute period of reduced sensitivity to overcome false alarm conditions, and will then automatically reset itself

- When interconnected to other Ei mains powered alarms, an alarm on one detector will trigger all other interconnected alarms within one second (only the triggered alarm will flash a red indicator)

- The smoke detector will emit a beep and flash the red light every 40 seconds to indicate that the battery back up is depleted and needs recharging
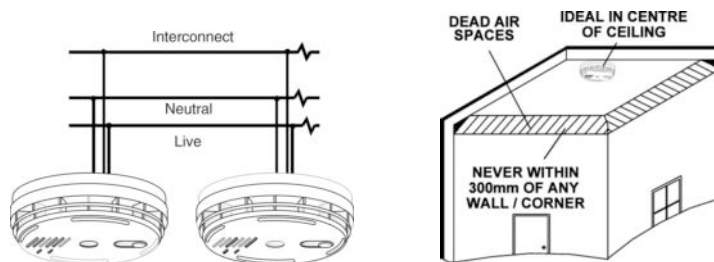
Model **Ei166R Optical**

Technical Specification

Sensor	Optical, uses light scatter from smoke	**Power-On Indicator:**	Continuous green LED
Sensitivity:	Complies with BS 5446 Part 1: 2000	**Alarm:**	Electronic Piezoelectric horn
Source:	Contains no radioactive material	**Alarm Sound Output:**	85dB (minimum) at 3m
Airspeed:	Essentially immune to the effect of airspeed.	**Alarm Status:**	Red LED flashes every second on unit sensing fire
Button Test:	Simulates the effect of smoke and checks chamber, electronics and horn.	**Temperature Range:**	0 to 40°C
		Humidity Range:	15% to 95% Relative Humidity
Ambient Light:	Chamber housing design and compensation overcomes problems with stray light.	**Remote Control:**	Ei152, Ei159 or MCP400
Automatic Self-Test:	Smoke Chamber is tested every 40 Sec. and unit beeps (without LED flash) if it is degraded.	**Interconnect:**	Up to 12 interconnected EI140/141/143/144/145/146/161/164/166 smoke or heat alarms, along with an EI128 relay base
Insect Screen:	Prevents insects or debris entering chamber (1.00mm mesh size)	**Fixing:**	Easi-Fit mounting base
		Plastic material:	UL94VO flame retardant
Supply Voltage:	240V AC	**Dimensions:**	152mm diameter x 50mm depth
Battery back up:	Rechargeable lithium cells	**Weight:**	385g
		Warranty:	5 year (limited) warranty
Specifications are subject to change		**Approvals:**	Kitemarked to BS5446-1:2000, CE Approved

Installation & Placement

Wiring for Interconnected Alarms

Be very careful about correctly wiring the alarms as mixing Live and Neutral will blow/damage interconnected alarms.

Alarms should be placed in accordance with the general guidelines shown in the diagram above. These recommendations are based on the problem of areas of "dead air" close to corners of rooms and apexes of ceilings, which could result in the prevention of smoke reaching the smoke detector

Please consult instruction booklet for specific installation details

Important Precaution:

Do not install the actual smoke/heat alarm itself in new or renovated buildings until all work is completed (including floor coverings) and the building has been fully cleaned. The wiring can be installed when appropriate. (Excessive dust and debris from building work can contaminate the smoke chamber and cause problems, and it will also invalidate the guarantee). If it must be installed, cover it completely, particularly around the edges, with a dust cover (eg. a plastic bag), until all cleaning is finished.. Connect wires to the unit as in wiring diagram. All wiring must comply with local codes.