Radio Frequency Alarm

TEN YEAR BATTERY POWERED 9V RF Communication

Model Ei405TY RF Optical

- RF wireless interconnect
- Unique house coding feature
- Visual RF transmission indicator
- High performance optical chamber with integral insect screen
- Test/Hush button
- Advanced suppression and calibration technology
- Radio transmitter and receiver in each alarm
- Built in auto self test feature
- Powered for life with lithium batteries
- Low power cell warning
- Kitemarked to BS EN 14604:2005
- 5 year guarantee



Product Description

The Ei405TY is an Optical Smoke Alarm powered by long lasting lithium batteries designed to last the life of the product. It is part of the RadioLINK range of RF alarms. The RF signal will wirelessly interconnect the Ei405TY to other RadioLINK products

The Ei405TY uses advanced radio transciever technology with unique software coding to transmit and receive the radio signals. The transmissions are frequency modulated (FM) and use Manchester coding to ensure robust signal integrity and avoid signal noise interference

The RF range can be extensively improved by converting the alarm into a "repeater" i.e. re-transmission of the RF signals. The Ei405TY series alarms can be used as a stand alone wireless interconnect system or be incorporated into existing home security systems

The Ei405TY has other advanced features such as high performance optical chambers fitted with integral insect screens to reduce the chances of false alarms, as well as the ability to wireless interconnect up to twelve alarms to allow all alarms to sound if just one of the interconnected alarms should be triggered.

The Ei405 has built in circuitry to aid suppression of voltage transients and RF interference.

Operation

- The red indicator will flash every 40 seconds to show that the detector has performed an automatic self test
- In normal standby mode the blue indicator will light to indicate transmission of an RF signal
- In code mode, the blue indicator will flash to indicate the number of other RF alarms that have been "learned" in the system
- 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 "Hush" mode the alarm enters a ten minute period of reduced sensitivity and the red light flashes every 10 seconds and then resets
- 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 the red light flashes every 40 seconds to indicate that the battery is depleted and needs to be changed



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Model Ei405TY RF Optical

Technical Specification

Sensor	Optical, uses light scatter from smoke
Sensitivity:	Complies with BS 5446 Part 1: 2000
Automatic Self-Test:	Smoke Chamber is tested every 40 Sec. and unit beeps (without LED flash) if it is degraded.
Supply Voltage:	9V sealed lithium batteries
RF Range ¹ :	150 meters (min) free space
RF Visual Indicator:	Blue light flashes continuously for 1.5 to 3.5 seconds while transmitting RF signal
RF Frequency:	868.499MHZ (1% duty cycle)
RF Power:	+5dBM
Dimensions:	152mm diameter x 50mm depth
Weight:	321g

 Any obstructions of any sort will result in a reduction in range from the free space specification. As such, the actual range will vary depending on installation.

Installation & Placement



Place the mounting plate on the ceiling/wall and mark the screw holes. Drill with a suitable drill bit, insert the screw plugs and screw the plate into position. Simply slide the alarm into position on the mounting plate (this also activates the battery connection).

The RF alarms should be house coded to prevent possible interference from neighbouring installations – see instructions for more details.

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

Power-On Indicator:	Red light flashes every 40 seconds
Alarm:	Electronic Piezoelectric horn
Alarm Sound Output:	85dB (minimum) at 3m
Alarm Status:	Red LED flashes every second on unit sensing fire
Temperature Range:	0 [°] to 40 [°] C
Humidity Range:	15% to 95% Relative Humidity
Interconnect:	Up to 12 RadioLINK products
Plastic material:	UL94VO flame retardant
Warranty:	5 year (limited) warranty
Approvals:	Kitemarked to BS EN 14604: 2005, CE Approved

Specifications are subject to change

House Code Procedure

- 1. Connect the battery (by sliding onto the plate)
- Hold the house code switch (with a small screwdriver) until the blue light turns on and then release
- 3. Similarly, place other alarms into house code mode
- Check that the number of blue flashes (on each alarm) corresponds to the number of alarms in your system
- 5. Remove all alarms from house code
- 6. Button test each alarm to check your system



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