TECHNICAL SPECIFICATION Ei166RC Optical Smoke Alarm

For use with Ei1529RC Remote System Control Switch, MCP401RC Manual Call Point & Ei168RC RadioLINK Base

- 1. The Smoke Alarm carries the BSI Kitemark to indicate type testing to BS 5446: Pt. 1: 2000. It will meet the requirements of Grade D (and exceed the requirements of Grades E and F) as defined in BS 5839: Pt.6: 2004. It carries the CE mark to indicate conformance to Low Voltage and Electromagnetic Compatibility Directives.
- 2. Optical (photoelectric) sensor with large volume chamber and large high sensitivity photodiode. Insect resistant fine mesh screen with holes less than 0.030 inches.
- 3. 230V AC Mains Power Supply with built-in tamper proof Rechargeable Vanadium Pentoxide Lithium standby cells, capable of lasting at least 10 years and powering the alarm initially for at least 6 months in the event of mains power failure. The Lithium cell manufacturer endorses a minimum 10 year life expectation for the rechargeable cells.
- 4. Alarm is supplied with an `Easi-fit` built-in surface mounting plate, with integral terminal block and cable cover. The Smoke Alarm connects to the mains and interconnect/control connections automatically as it slides on to the mounting plate. The Smoke Alarm disconnects from the mains and interconnect/control connections as it slides off the mounting plate, without the need for a lead and connector.
- 5. All mains wiring is covered by a cable cover so that the mains cable is not visible when the Smoke Alarm is removed from the ceiling, obviating the need for a ceiling pattress or dry lining box.
- 6. Encased horn assembly gives a minimum sound output of 85dB(A) at 3 metres. The diameter of the piezo disc in the sounder measures 35mm, and is securely held with silicone mastic to prevent creepage and premature horn failure. Additionally, soldered contacts are used in order to eliminate failures due to corrosion and arcing that are associated with commonly used pressure contacts.
- 7. Interconnection capability such that if one alarm sounds all interconnected alarms sound. Up to 36 RC alarms, ionisation, optical or heat can be interconnected in this way providing a relay is not used.
- 8. Automatic self-test feature test the chamber every 40 seconds and unit bleeps (without red LED flash) if it is degraded.
- 9. Manual integral test/hush button to test circuitry, sensor and horn and activates all interconnected alarms in the system. Also operates 'Hush' feature to silence nuisance alarms. Red LED on alarm cover will flash every 10 seconds to indicate that alarm is in 'hush' mode and will automatically reset after approximately 10 minutes.
- 10. Remote test facility via Ei1529RC Remote System Control Switch to test circuitry, sensor and horn (red LED will flash rapidly) and to activate all interconnected alarms in the system. Remote alarm activation can also be achieved by using a manual call point MCP401RC. See separate specification sheets for more information on these options.
- 11. Remote 'Locate' facility via Ei1529RC Remote System Control Switch to audibly identify source of alarm signal when system is sounding. All units except the alarm that has triggered and sent out the interconnect signal will be silenced.
- 12. Remote 'Hush' facility for false alarm control via Ei1529RC Remote System Control Switch. Pressing the 'Hush' switch will silence nuisance alarms. Red LED on the alarm cover will flash every 10 seconds to indicate that alarm is in 'hush' mode. Automatically resets in approximately 10 minutes.
- 13. Alarm has an RF interconnect capability when used with an RF base. In this case other RF products e.g Ei169RF & Ei405TY can be connected. Control via an optional wall-mounted Ei411H Remote Control Switch is also available.
- 14. Separate green LED mains indicator light on the alarm cover to confirm integrity of mains power supply.
- 15. Separate red LED on the alarm cover will flash every 40 seconds to indicate full auto test of circuitry and the rechargeable cells. The red LED will flash rapidly in alarm condition and flash once every ten seconds whilst the unit is in a de-sensitive (hush) condition.
- 16. Low power cell warning signal operates with or without mains power present.
- 17. Anti tamper locking device prevents unauthorised removal of the alarm without the use of a tool.
- 18. Foam gasket built into surface mount plate to prevent dust ingress into the rear of the unit.
- 19. Ambient temperature range: 0°C to 40°C (32°F 104°F). 0% to 95% (non-condensing) relative humidity.
- 20. Identification label, "10YR+", on the alarm cover to differentiate between Ei140 and Ei160 Series models.
- 21. Dust cover is fitted to the alarm to protect it from contamination during installation.
- 22. Supplied with two separate sets of instructions one for the installer and one for the user.
- 23. Dimensions: 140mm dia. x 54mm depth. Weight inclusive of packaging: 380g.
- 24. 5 Year Guarantee.
- 25. Manufactured in the EC.

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