

Overview

The Protec 6000PLUS/OP/S is a loop powered fire sensor, which reports smoke in its installed location to the fire alarm control panel. The sensor is also equipped with an integrated loop powered programmable electronic sounder and an integrated loop isolator.

Technical Specification

| | |
|---|---|
| Loop protocol | Protec Algo-tec™ 6000PLUS |
| Loop isolator fitted | Yes |
| Loop voltage range | 18 to 27V Algo-tec™ loop |
| Loop average quiescent current (24V loop) | 0.4mA |
| Loop average alarm current (24V loop) | 5mA |
| Analogue values | Smoke |
| | Normal 40 to 60 bits |
| | Fault Low <35 bits Fault low High>90 bits |
| Indications | On-board red indicating LED |
| Environmental operational limits | -10 to 50 degrees C (95% RH no condensation or icing) |
| Sounder Frequencies | Continuous 990Hz, Warble 730Hz to 990Hz, Pip 990Hz |
| Sounder synchronisation | Sounder synchronisation is achieved by panel control |
| IP rating | IP21C |
| Isolator Specification | Please see Protec DEL2110 for details |

Installation

- | | |
|--|--|
| <ol style="list-style-type: none"> Base options: 6000PLUS/BASE 6000PLUS/FFBASE 28-075-01 (Plug and Play Fast Fix) 28-075-02 (Plug and Play Surface) | LPCB Approved as part of product approval LPCB Approved as part of product approval LPCB Approved as part of product approval LPCB Approved as part of product approval |
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Note: See individual information sheets for base wiring details.

- Install the detector in the base, turn firmly clockwise.

Commissioning

- Each 6000PLUS detector has a unique serial number which will be used as part of the commissioning of the fire alarm system. It is necessary to remove one of the 'peelable ' bar code labels present on the product and place it in the commissioning booklet supplied with each Protec addressable control panel. The bar code sticker should be placed at the relevant loop and address position intended. It is important that serial numbers are not mixed otherwise the addressing of the 6000PLUS/OP/S will be incorrect when commissioned.
- Commission the device onto the system as detailed in the installation and commissioning manual for the fire alarm panel being used.

6000PLUS/OP/S Certification Details

| | | |
|---|---|---|
| EN Standards Compliance/ Approvals table | | |
|  | | |
| Protec Fire Detection plc, Nelson, Lancashire, England, BB9 6RT 10 0832-CPD-1185 | | |
| EN 54 - 3: 2001 + A1 + A2 Alarm devices - Sounder Type A: For indoor use 6000PLUS/OP/S | EN 54 - 7 Point type smoke detector 6000PLUS/OP/S | EN 54 - 17: 2005 Short-circuit isolator 6000PLUS/OP/S |
| Technical Data included in this datasheet DEL2093 Issue 4 | | |

| | | |
|-------------------------|---------------------------------------|------------------------|
| High sensitivity | Medium Sensitivity | Low Sensitivity |
| Not approved. | EN 54 - 7: 2000 + A1: 2002 + A2: 2006 | Not approved. |

6000PLUS Locking Mechanism

The 6000PLUS detector range has a break off bridging piece shown in diagram one. Removing the small plastic bridging piece will enable the locking mechanism, and when the detector is fitted on a base, it will lock the detector. See diagram 1.

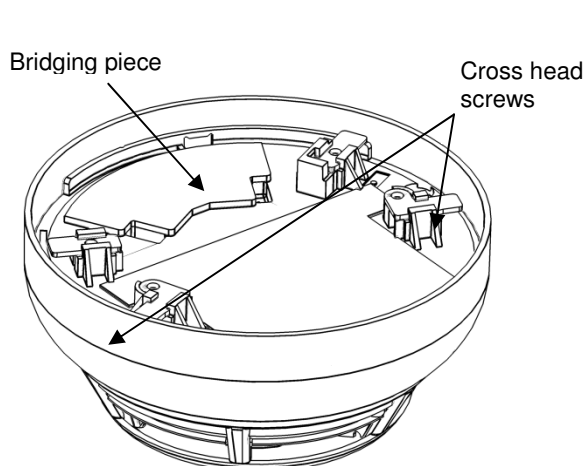


Diagram 1 Locking bridging piece and cross head screw position

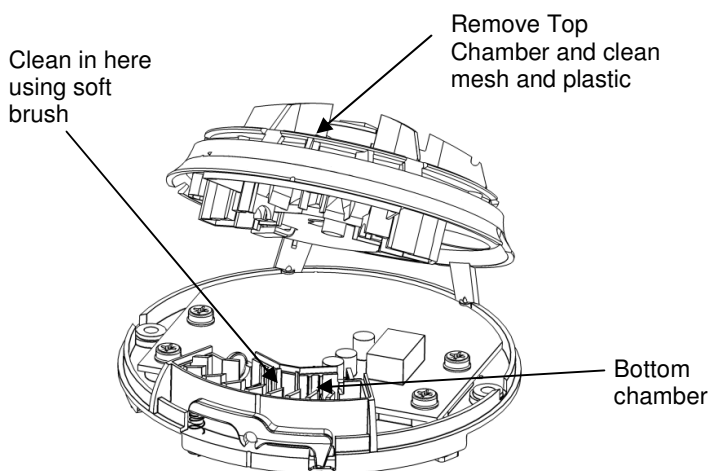


Diagram 2 Outer case removed exposing optical chamber

6000PLUS/OP/S Service and Maintenance details

- Remove Detector from its base, check panel for Zone fault.
- Remove two cross head screws shown in diagram 1.
- Remove detector outer case.
- Remove Deflector and top chamber moulding, keeping mesh in place on top chamber. Ensure light pipe does not get lost, and be careful of sounder connection.
- Clean all mouldings and mesh with a soft brush, clean inside the bottom chamber with soft brush (see Diagram 2).
- Clean detector outer case with a cloth.
- To rebuild, first fit deflector to top chamber noting arrow position to centre of optical chamber. Ensure mesh is flat to top chamber moulding. Ensure Light pipe is in place.
- Ensure both lenses are in place on bottom chamber moulding.
- Fit top chamber/deflector assembly to bottom chamber.
- Fit detector outer case, using light pipe as orientation guide.
- Fit the two cross head fixing screws, tighten sufficiently to compress mouldings, but be aware over tightening may strip the thread on the outer case. Visually inspect.
- Fit back onto base.
- Once detector logged back onto panel, wait for confirmation LED flash, then apply smoke to the detector ensuring activation of control panel.
- Test the operation of the integral sounder.
- Remove old service label and fit new label to detector.

Polar outputs and profiles (sounder)

