

Overview

The Protec 6000PLUS/HT is a loop powered fire sensor which reports back thermal levels in its installed location to the fire alarm control panel.

Technical Specification

Loop protocol	Protec Algo-tec™ 6000PLUS
Loop isolator fitted	No
Loop voltage range	18 to 27V Algo-tec™ Protocol
Loop quiescent current (24V average loop)	0.2 mA
Loop alarm current (maximum)	2.0mA
Analogue values	Thermal
	Normal 80 to 180 bits
	Fault Low <25 bits Fault High>250 bits
Indications	On-board red indicating LED
Environmental operational limits	-10 to 50 degrees C (95% RH no condensation or icing)

Installation

- | | |
|------------------------------------|---|
| 1. Base options: 6000PLUS/BASE | LPCB Approved as part of product approval |
| 6000PLUS/FFBASE | LPCB Approved as part of product approval |
| 28-075-01 (Plug and Play Fast Fix) | LPCB Approved as part of product approval |
| 28-075-02 (Plug and Play Surface) | LPCB Approved as part of product approval |


Note See individual information sheets for base wiring details.

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

Commissioning

1. 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/HT will be incorrect when commissioned.
2. Commission the device onto the system as detailed in the installation and commissioning manual for the fire alarm panel being used.

6000PLUS/HT Certification Details

EN/CEA Standards Compliance/ Approvals table
 0 8 3 2 Protec Fire Detection plc, Nelson, Lancs 10 0832-CPD-1169
EN 54 - 5: Point type Heat Detector Class A1/A2 6000PLUS/HT
Technical Data included in this datasheet. DEL 2088 Issue 4

High Sensitivity	Medium Sensitivity	Low Sensitivity
EN 54-5: 2000 + A1: 2002 Class A1	EN 54-5: 2000 + A1: 2002 Class A2	Not approved. Equivalent to EN 54-5: 2000 + A1: 2002 Class B

6000PLUS Range 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.

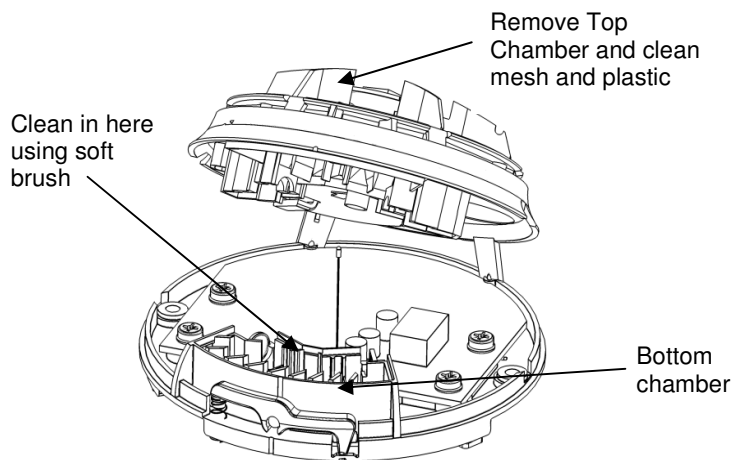
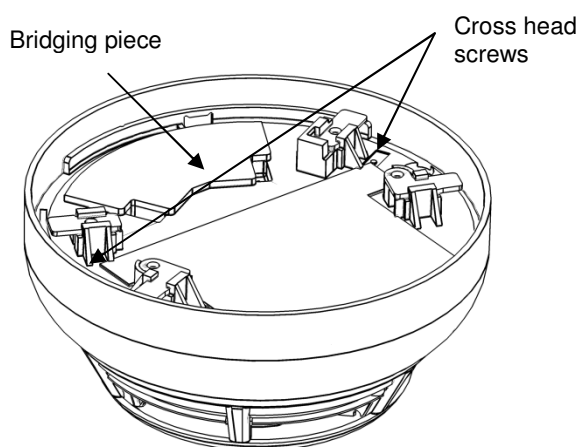


Diagram 1 - Locking bridging piece and cross head screw position

Diagram 2 - Outer case removed exposing optical chamber

6000PLUS/HT 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. Note the position of thermistor, and remove mouldings with care so as not to damage thermistor.
- Clean all mouldings and mesh with a soft brush, clean inside the bottom chamber with soft brush (see Diagram 2).
- Clean thermistor with soft brush.
- 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.
- Fit top chamber/deflector assembly to bottom chamber. Note: Be aware, small bead thermistor should be carefully inserted through central hole.
- Once top chamber/deflector is in place ensure thermistor is vertical and straight. The thermistor bead should be vertical, see diagram 3.
- 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 to ensure thermistor is visible in correct position.
- Fit back onto base.
- Once detector logged back onto panel, wait for confirmation LED flash, then apply heat to the detector ensuring activation of control panel. Confirm A/D value of thermal channel is correct. Remove old service label and fit new label to detector.

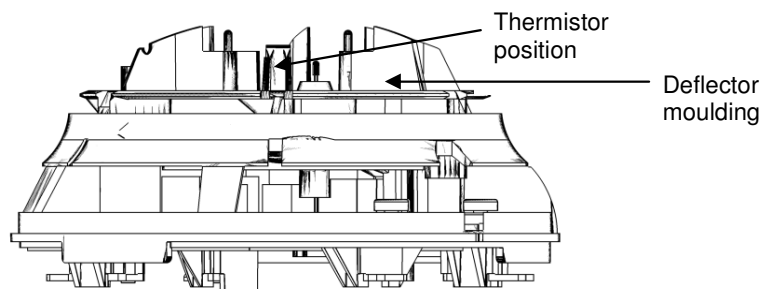


Diagram 3 - Re Assembly showing correct thermistor position