

## MAGPRO-HSD1

Intelligent analogue addressable fire alarm heat and optical smoke detector



15

1293

DoP No: 034

Tested by EVPU: N.B.1293

**Distributor:** Elite Security Products Ltd,  
Unit 7 Target Park, Shawbank Road  
Lakeside, Redditch B98 8YN, UK  
<http://www.espu.com>

**Manufacturer:** Teletek Electronics JSC  
14A Srebarna Str, 1407 Sofia, Bulgaria

EN 54-5: 2000/ A1: 2002,

EN54-7: 2000/ A2: 2006

Detector Class A1/R

## Installation Instructions

**ATTENTION: Read carefully this installation instruction before installing the device.**  
This manual is subject to change without notice errors and omissions accepted.

### GENERAL DESCRIPTION

MAGPRO-HSD1 is an addressable combined temperature and optical smoke detector designed for use with ESP MAGPRO fire alarm panels. The detector is powered from the panel and can be controlled via its communication protocol. The MAGPRO-HSD1 is compatible with detector base MAGPRO-DB.

### INSTALLATION

1. Select a suitable position for installation. *Note: Do not install the detector near sources of steam, condensation or smoke and close to natural heat sources.*
  2. Mount the detector base to the required surface with suitable fixings.
  3. Connect the detector base to the fire panel using the wiring diagram.
- ATTENTION: Disconnect the loop power before installing the detector!**
4. To activate the anti tamper lock option on the detector base carefully remove the small tooth shown in Fig2 using short nose snips.
  5. To locate the detector onto the base align the line mark on the detector with the short line mark on the detector base. Rotate the detector clockwise until the short line mark on the detector coincides with the long mark on the base and a "click" is heard.
  6. If removal of the detector is required after the detectors anti tamper lock function has been selected a small flat blade screwdriver should be inserted into the aperture on the side of the detector base. Lightly press with the screwdriver at the same time as rotating the detector head in a counter-clockwise direction.

### TECHNICAL SPECIFICATIONS TECHNICAL SPECIFICATIONS

Operating Voltage Range . . . . . 15 - 32VDC (Nom. 27VDC)  
 Consumption in quiescent state, no communication . . . < 160µA@27VDC  
 Consumption in quiescent state, with communication . . . < 200µA@27VDC  
 Consumption in alarm state, with communication . . . . 6.5mA  
 Class (in accordance with EN54-5) . . . . . A1/R  
 Sensitivity level (\*in accordance with EN54-7) . . . . . High/ Normal/ Middle/ Low  
 Protected area (in accordance with EN54-5/7) . . . . . up 120m<sup>2</sup>  
 Installation height (in accordance with EN54-5/7) . . . . up 16m  
 Output in alarm state at terminal RI (terminals 4/1) . . . 7.5 mA (max)/ 7.5V  
 Wire Gauge for terminals . . . . . 0.4mm<sup>2</sup> ÷ 2.0mm<sup>2</sup>  
 Relative humidity resistance. . . . . (93 ± 3)% @ 40°C  
 Dimensions (incl. base) . . . . . ø103mm, h 49mm

**! Installation**

**IP30**

**-10°C ÷ +60°C**

**~125g**  
Without base

Indoor

Outdoor

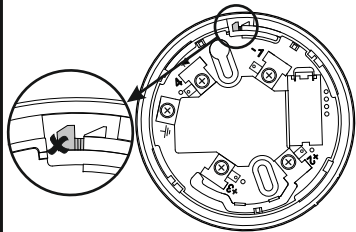
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**>30cm**    **>30cm**

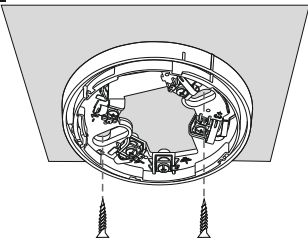
**<7m - MAGPRO-HSD1**  
**<5m - MAGPRO-HD1,**  
**MAGPRO-SD1**

Essential characteristics	Performance
Performance under fire conditions	Pass
Operational reliability	Pass
Durability of operational reliability and response delay: temperature resistance	Pass
Durability of operational reliability: humidity resistance	Pass
Durability of operational reliability: shock and vibration resistance	Pass
Durability of operational reliability: corrosion resistance	Pass
Durability of operational reliability: resistance to ingress	Pass

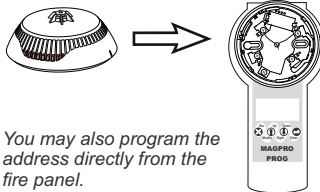
## 1 Base MAGPRO-DB



## 2



## 3 Address programming



You may also program the address directly from the fire panel.

## ! Test and Maintenance

### TESTING THE DETECTOR

1. Apply power to the detector.
2. Wait for 30 sec.
3. Introduce artificially generated smoke (and/ or heat) directly beneath the detector. Within 8 sec the detector will enter into fire condition. Both LEDs will illuminate.
4. Power off the detector for 2 sec minimum. After resetting the detector will enter into duty mode and both LEDs will extinguish.

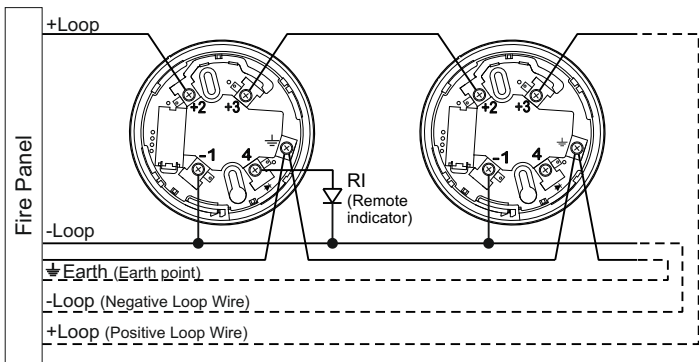
### SERVICE MAINTENANCE

1. Inspection for visible physical damage - weekly.
2. Operational test in real conditions - monthly.
3. Check and clean dust contamination - six months.
4. Check and clean base and head contacts and connections - annually.

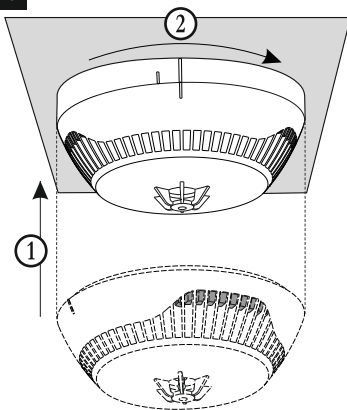
### CLEANING AND MAINTENANCE

1. Remove the detector from its base.
2. Remove the inner protective cover - press the four clips (1) with a plain screwdriver gently down to unlock the cover from the detector's body.
3. Dismount the PCB from the supporting clips (2).
4. Clean the smoke chamber.
5. Mount the PCB back to the detector's body - as a reference point use the side with a cut-out (3). Rotate the PCB until the cut-out coincides with the pin on the inner part from the detector body. Gently press the PCB down to fix in place.
6. Mount the inner protective cover - the mark with a rectangular shape (4) fits with the channel at the inner side of the detector's body and the contact plates on the protective cover. Press gently down until a click is heard.
7. Mount the detector back to its base and test for correct operation and LED indication.

## 4 Connection diagram

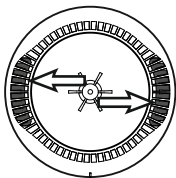


## 5



## 6 LED Indication

The LED indication can be enabled/ disabled from the control panel.



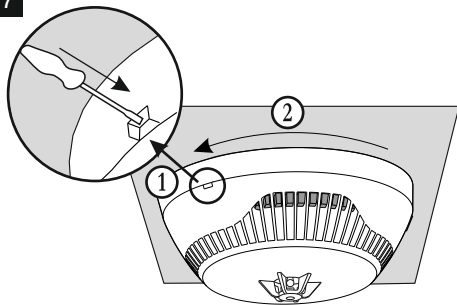
### 1. Blinking is enabled

Blinking	○ → 10 sec → ☀	OK
Light on	☀ → ☀	🔥
Light off	○ → ○	🔧

### 2. Blinking is disabled

Light on	☀ → ☀	🔥
Light off	○ → ○	🔧

## 7



## ! Maintenance

