PD-22LF AUXILIARY DETECTOR Installation instructions

Order no.13134, E-nr 13 060 72

Presentation



PD-22LF circuit board mounted in IR detector PD-2200.

The PD-22LF auxiliary detector is intended to be used in combination with the PD-2200 IR detector in closed premises that are difficult to monitor, for the control of HF light fittings with a 1–10V input. It can be used for detection in closed premises (with doors) where it is not possible to monitor the entire premises with a single IR detector. It is designed to be mounted in the IR detector enclosure using the detector's terminal block

The PD-22LF auxiliary detector consists of an acoustic detector that detects low frequencies (LF, 0-3 Hz) and a level selector. The level selector switches between the normal light level of around 80 per cent and a base level of around two per cent.

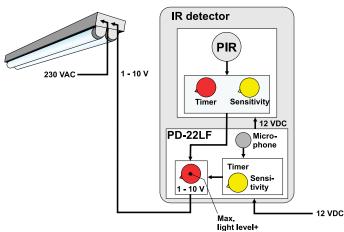
Operation in combination with PD-2200 IR detector

When someone enters the premises the lighting is switched on at the normal level by the acoustic auxiliary detector or by the IR detector. The acoustic auxiliary detector detects the infrasound (0–3 Hz) that is generated when a door is opened. The advantage of the acoustic detector is that it also detects entrance into the stairway through doors that are hidden from the IR detector.

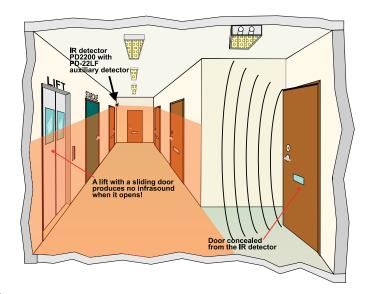
The lighting remains switched on at the normal level for as long as presence is detected by the IR detector, plus a delay that can be adjusted using a jumper on the auxiliary detector (2 sec, 10 sec, 30 sec, 1 min or 5 min). The lighting is then reduced to the base level for the light fittings, which can vary from 1 to 10 per cent. The base lighting remains on until the next time someone enters the premises.

Note!

The photocell in PD-2200 cannot be used. PD-22LF cannot be used in the PD-2400.



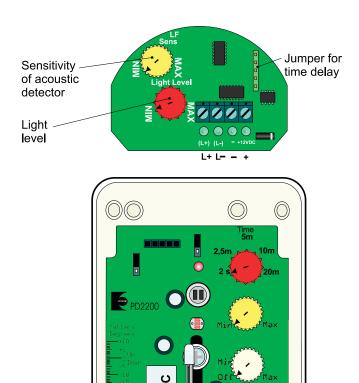
Schematic diagram showing operation in combination with IR detector.



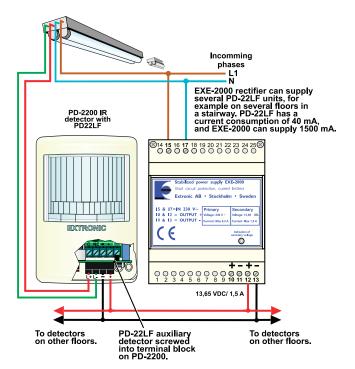
PD-22LF auxiliary detector detects the low-frequency sound that is produced when a door opens.

2. Connecting

The PD-22LF auxiliary detector is connected directly by four pins to the four terminals, "C, NC, -, and +" on the circuit board in the PD-2200 IR detector; see illustrations. Connection is easier if the leads are connected before mounting the auxiliary detector inside the IR detector, see wiring diagram below.



PD-22LF mounted in PD-2200



L+L- - +

3. Setting up and adjusting

Setting levels and times

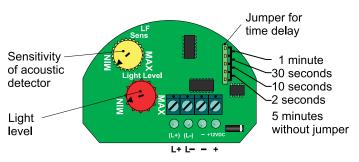
The potentiometers that control the maximum and minimum levels should be adjusted as follows for a standard solution:

Max potentiometer (red) to maximum, 80 per cent. Measure the voltage of the 1–10 V supply to the light fittings and adjust this to a maximum of 8 V, or a suitable lower level. The sensitivity of the acoustic detector must be adjusted. The green LED indicates when low-frequency sound is detected. Test the detector by opening a door in the monitored area. Adjust the sensitivity using the Sensitivity (yellow) potentiometer to give reliable operation at as low a sensitivity as possible.

Also test doors in neighbouring areas that you do not want to monitor, to minimise the risk of spurious detection.

The delay time is adjusted by placing the jumper over the pins for the desired time delay, 2 sec, 10 sec, 30 sec, 1 min or 5 min. This time determines how long the lighting remains on at the higher level after each detection. This time should therefore be kept as short as possible.

See the separate manual for setting up and adjusting the PD-2200 IR detector.



Adjustment for max. light level, sensitivity and delay time.

4. Accessories

EXE-2000 rectifier (13.65 volts)

For installation on a DIN rack that fits a standard enclosure. Current-limited with short-circuit protection, max. 1.5 A, suitable as power supply for PD-2200. Order no. 13140.

PD-2200 IR detector

Passive infrared (IR) detector intended for presence detection. Order no. 18108.

Handbook

The handbook "Energy-saving detection technology", order no. 35100.

Technical specification:

| Voltage: | 10–15 VDC |
|-------------|--|
| Current: | 40 mA at 13.8 VDC, total for PD-22LF |
| | and PD-2200 |
| LED: | Green, indicates detection by acoustic |
| | detector |
| Dimensions: | 62 x 44 x 50 mm |
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