

PIR HEATING CONTROL (PIR1)

PIR1 is designed to control heating appliances. When a presence is detected by the PIR the heater is turned on if the room temperature is below comfort level. Once comfort level has been achieved PIR1 cycles the heater to maintain comfort temperature, except with DIP switch 1 in the O position, where the heater will switch off after the timed period and will only be re-energised by presence detection.

If a presence is detected during a timed ON period PIR1 checks the time remaining. If there is less than 30 minutes remaining the ON time is extended to a further 30 minutes.

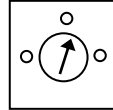
After a selected time period without a presence being detected the room temperature is allowed to fall to a preset set-back level. PIR1 then controls the heater to maintain this temperature.

To facilitate a rapid increase to comfort temperature it is recommended that the capacity of heating appliances are slightly over specified.

SETUP

Before applying mains power to the unit go through the following setup procedure:

Comfort temperature is selected via the trimmer from 19°C to 25°C. Anti-clock will reduce the comfort, clockwise will increase. A small screwdriver should be used. Take care not to force this adjuster.



Setback temperatures and timer are set via the dip switch.

Examples: Switches = 1000 = Setback temperature of Comfort setting less 7°C ie if comfort is 21°C then setback is 14°C. Timer setting is 30 minutes.
Switches = 1101 = Setback is comfort less 13°C ie for comfort of 21°C setback 8°C. Timer setting is one hour.

For different settings please consult the table below.

| DIP SWITCH POSITIONS | | | | SETBACK | | TIMER | | |
|----------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|-------------------|
| 1 ↑ 0 | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | WALKTEST |
| | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | No Setback |
| | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Comfort less 7°C |
| | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Comfort less 13°C |

NOTE: 0 = OFF 1 = ON

ALL OFF = WALK TEST

Having selected the required settings and concluded all the wiring affix the PIR1 to the wall and apply power. Nothing will happen for one minute. **Please allow 90 minutes for the unit to acclimatise before accurate switching temperatures are achieved.**

INSTALLATION AND WIRING INSTRUCTIONS

A standard surface or flush patress box (2 tag, minimum depth 25 mm) should be used to mount the PIR1. It should be wall mounted at a height of around 1.5 metres from the floor.

To ensure correct operation of the control do not mount it directly above or within one metre of a heat source.

Best PIR detection occurs when people walk across the field of view and not when walking directly towards or away from the detector. Another siting consideration.

It is recommended that the mains supply to the PIR1 is wired through a switched fused spur so that it may be isolated if required, ie to change preset switch settings.

AC Neutral is not switched, therefore only one Neutral wire can be taken to the PIR1 if it makes life easier.

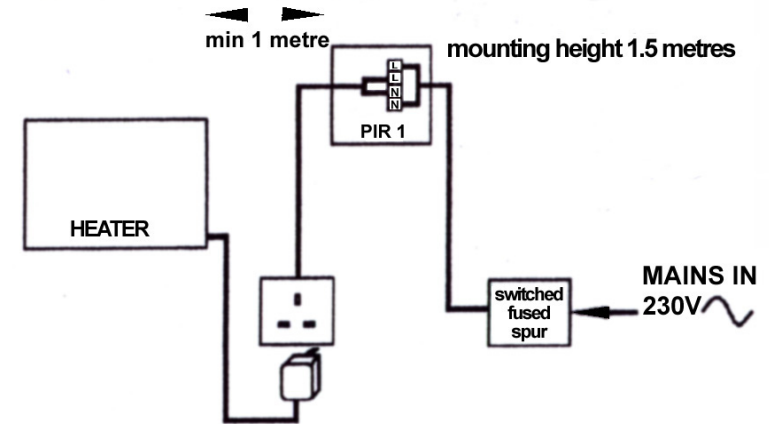


Figure 1. Recommended wiring

PIR1 does not require an Earth connection.

Ensure that patress boxes and heating appliances are properly earthed.


Note: This unit is designed and manufactured to comply with BS EN 60730-2-7 : 1991. Automatic electrical controls for household and similar use. It must be installed correctly as detailed in these instructions, to ensure continued compliance. In the event that installation is not affected in accordance with the instructions contained herein, no liability is accepted for problems which ensure as a result and any difficulties will be deemed to be attributable to the non-conforming installation unless the contrary is proved.


Meets the requirements of EEC directive 89/36/EEC amended by 93/68/EEC.

**DO NOT ATTEMPT TO INSTALL THIS PRODUCT UNLESS COMPETENT TO DO SO.
IF IN DOUBT, CONSULT A QUALIFIED ELECTRICIAN.**


SPECIFICATIONS: PIR10001

Construction of control: Independently mounted electronic control for flush or surface mounting.

Input voltage: 230V  50Hz

Output voltage: 230V  50Hz

Earthing: This is a class 2 device which does not require an Earth.

Switching capacity: 13A resistive @ 230V  50Hz

Type 1B action.

Dimensions: 85 mm x 85 mm x 35 mm

Pollution situation: Normal

PIR detection range: Up to 5 metres.

Detection area: Vertical – 60 degrees

Horizontal – 100 degrees.

Comfort switching temperature range: Approx 19°C – 25°C.
(with preset trimmer to increase or decrease in one degree increments)

Setback temperature settings:

- 1) Nil – No setback temperature – temperature falls to natural low.
- 2) Comfort temperature setting less 7°C.
- 3) Comfort temperature setting less 13°C.

The above temperature settings operate within +/- one degree C assuming correctly specified heating versus room size, losses etc.

Runback timer settings (approx):

The preset length of time the heating will initially come on for after a presence is detected:

- 1) 30 minutes
- 2) 1 Hour
- 3) 2 Hours
- 4) 3 Hours

The above timings operate within a tolerance of +/- 5%.

If a detection occurs when the timer has less than 30 minutes left to run the time period will be extended to 30 minutes.

LED indicators:

- Green = AC mains power ON
Yellow = Timer ON
Red = Heating ON



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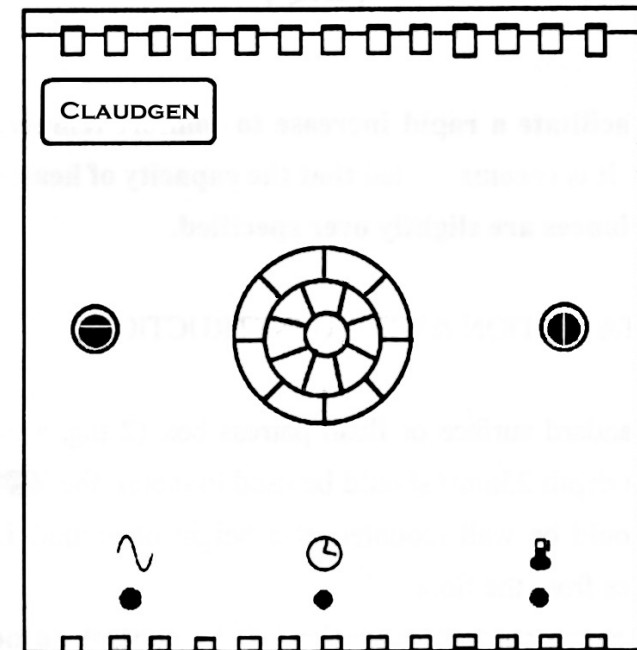
PIR1

PIR Activated Heating Control

Switching capacity 13A resistive @ 230VAC

Install a suitable rated contactor for loads in excess of 13 Amps.

For Quartz heating loads use this product in conjunction with our Quartz Softstart Control (part number QSC 10001).



Automatic room heating with presence detection.