

Thank you for purchasing a BN Thermic product. Manufactured to a high standard, this product will, if used according to these instructions and properly maintained, give you years of trouble free performance.



IMPORTANT: PLEASE READ THESE INSTRUCTIONS, NOTE THE SAFE OPERATIONAL REQUIREMENTS, WARNINGS, AND CAUTIONS. USE THIS PRODUCT CORRECTLY, AND WITH CARE FOR THE PURPOSE FOR WHICH IT IS INTENDED. FAILURE TO DO SO MAY CAUSE DAMAGE AND/OR PERSONAL INJURY AND WILL INVALIDATE THE WARRANTY.

1. SAFETY INSTRUCTIONS

1.1 ELECTRICAL SAFETY

WARNING! It is the responsibility of the owner and the operator to read, understand and comply with the following:

You must check all electrical products, before use, to ensure that they are safe. You must inspect power cables, plugs, sockets and any other connectors for wear or damage. You must ensure that the risk of electric shock is minimised by the installation of appropriate safety devices. A Residual Current Circuit Breaker (RCCB) should be incorporated in the main distribution board. If in any doubt consult a qualified electrician.

You must also read and understand the following instructions concerning electrical safety.

- The Health & Safety at Work Act 1974 makes owners of electrical appliances responsible for the safe condition of those appliances and the safety of the appliance operators. If in any doubt about electrical safety, contact a qualified electrician.
- Installation should always be carried out by a qualified electrician or a competent person in accordance with current electrical regulations.
- The PIR must not be used as an isolator and a separate isolator must be provided between the fuse board and the PIR.
- This PIR is IP65 rated and is suitable for indoor or outdoor use.
- Suitably rated cable glands must be used to maintain the IP65 rating (two are supplied with the PIR).
- As with all outdoor electrical equipment we recommend you try and avoid bringing the cable connections into the top of the enclosure. If unavoidable pay special attention to ensuring a waterproof seal between cable connections and the enclosure.
- Important: Ensure that the voltage marked on the PIR matches the power supply to be used.
- The unit should be protected by a suitably rated isolator and type C (also known as type 3) MCB.

1.2 GENERAL SAFETY INSTRUCTIONS

- ✓ Remove all packaging and store it away from children, check the package and controller for visible damage or tampering.
- ✓ Familiarise yourself with the applications and limitations of the PIR.
- ✓ Isolate from mains before removing the cover to adjust the time on setting.
- ✓ **Do not use this PIR to control a contactor or electric fan heater. Use model number:- PIR26C which is designed specifically for contactors and fan heaters.**

2. INTRODUCTION & SPECIFICATION

The PIR26 soft start electronic waterproof PIR is designed to save energy by only switching on the heater when the area is occupied. "Soft starting" incorporated in the PIR, prolongs the life of your infrared lamps it also reduces the stress on the mains supply and false tripping of MCB's due to inrush currents. This product needs a minimum total load of 250W to operate and it cannot be used to switch loads below this.

The PIR must NOT be used as a safe way of isolating heaters from the mains supply and additional isolation must be used. If mounted on collapsible parasols, ensure you isolate the power supply going to the PIR and allow the heaters to cool before folding up the parasol.



Model: -	PIR26	Sensing Range (distance):-	3-7m (Adjustable)
Input supply: -	230V AC 50Hz	Sensing Range (angle):-	Max 120 Degrees
Max Power:-	6000W (26A)	Dimensions (W x H x D): -	124 x 124 x 82mm
Minimum Power Rating:-	250W (1A)	IP Rating: -	IP65
Time On Delay: -	5 – 90 Minutes	Weight: -	350g

3. MOUNTING / ELECTRICAL CONNECTIONS

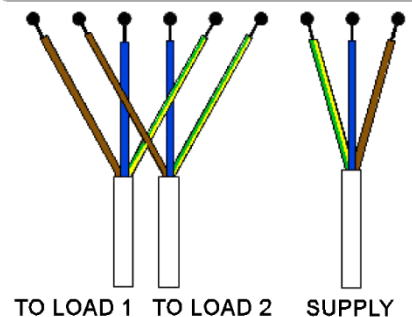
1. Remove front cover by undoing the four corner screws. Remove lid with care as there is a flexible cable link between the PIR sensor and the main circuit board.
2. Do not hang the lid by the flexible cable. To remove the lid from the back box disconnect the plug from the circuit board by gently pulling the white plug towards you.
3. Use the 4 holes in the corners to attach the controller to a suitable surface as these will maintain the IP65 rating.
4. Drill box to accept cable glands. We supply 2 x M20 IP65 cable glands with each controller these require a 20mm hole to be drilled for them. If you need to drill additional holes remember to waterproof these holes or use suitable IP rated cable glands to maintain the IP65 waterproof rating.
5. Connect wiring as shown in diagram.
6. Do NOT use power tools to tighten up the terminal screws but ensure the screws are correctly tightened before replacing the lid.
7. Supply and output are 230V 50Hz and output is rated 6 kW maximum.
8. You can have 2 output cables with 3kW and 3kW or 2kW and 4kW etc if total load on both cables does not exceed 6kW or just one output cable with a maximum load of 6kW.
9. Adjust the time knob to give required "ON" time.

Please note:- On this model minimum "ON" time is 5 minutes so if PIR is turned fully down "ON" period will still be 5 minutes.
10. If flexible cable from lid needs re-connecting, ensure plug is the correct way around and push into the socket on the circuit board.
11. Fit cover securely ensuring flexible cable from lid does not get trapped between the lid and base.
12. When the mains power is first turned ON the PIR starts a 60 second calibration cycle before automatically starting and detecting movement.

Controller's link
Set Time On
Sensor connection



LLNNEENL Heaters / Power OUT 230V ac 50Hz Max 6kW (26A)		Power IN 230V ac 50Hz
DANGER - Isolate mains power before adjusting		Not suitable for Contactors BN^{thermic} Model: PIR26



4. OPERATION

After the initial 1 minute self-calibration when the mains power is first turned on the PIP will operate when it detects a moving body in its detection zone.

The heater will remain ON whilst the PIR detects a moving body of heat.

Once the PIR does not detect anything moving for the number of minutes set inside the controller it will turn off the heater.

The PIR when turning ON will soft start Halogen heaters so prolong the life of your lamps.

Adjusting time "ON" – Only to be performed by qualified electrician

1. Isolate PIR from the mains supply.
 2. Remove the front cover and rotate potentiometer to the required time.
 3. Replace the front cover.
 4. Turn back on mains supply. Rember there is now a 1 minute self-calibration before the PIR will start working.
- Warning - Do not remove cover unless the unit is completely isolated from the mains supply.

5. ADDING A THERMOSTAT OR A 7 DAY TIME SWITCH

You can add a thermostat or a 7 day time switch to the soft start PIR.

Typical use of thermostat could be to disable the heater from working if ambient temperature was above the set point.

7 day timer could be used to stop the heater being used "out of hours".

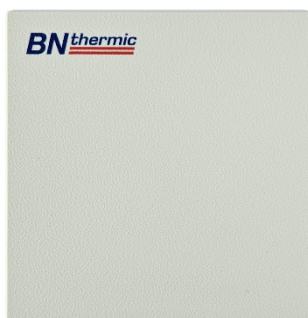
Warning: - If adding controllers that will be positioned outside, please make sure they are suitably IP rated for their application.

Warning: - These added controllers **HAVE** to be zero-volt thermostats or timers (also known as volt free, meaning that the relays or switch inside the added controllers must not give out 230V). Please check in controller's instructions as you are not covered by the guarantee should you connect 230V to the soft start PIR control circuit.

Thermostats in the BN Thermic range that can be used



RST3-IN – Thermostat



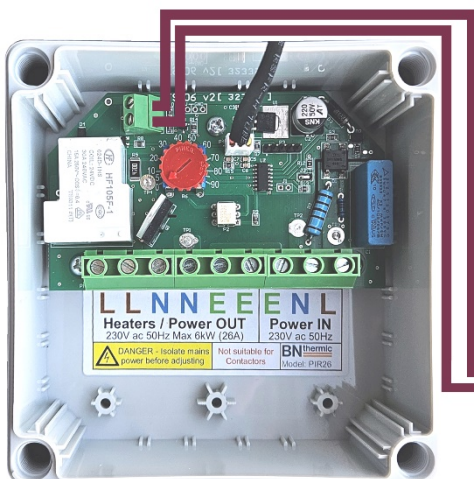
RST3-TP – Thermostat
Tamper Resistant



RST-RS - Thermostat Tamper
Resistant 5°C - 30°C



FST3-EX - Thermostat Tamper
Resistant IP66 -12°C - 26°C

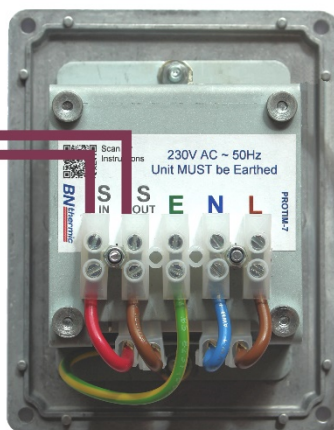
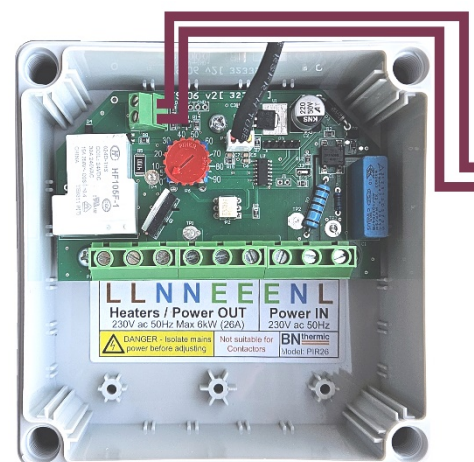


ADDING A THERMOSTAT

To connect a thermostat to the PIR, remove the link wire between the two internal green terminals (located just above the time "ON" set wheel). There is only 5V DC on this link and no current. Wire in the thermostat as shown to the right. Under no circumstances should the thermostat be connected to mains voltage.

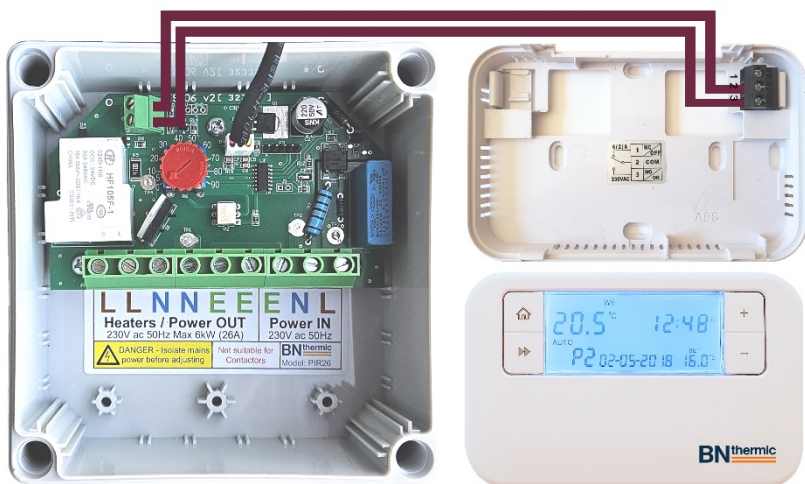
Once the temperature drops below the set point of the thermostat the PIR will operate.

ADDING A 7 DAY TIMER (PROTIM-7)



To connect a 7 Day Timer to the PIR, remove the link wire between the two internal green terminals (located just above the time "ON" set wheel). There is only 5V DC on this link and no current. Wire in the Timer as shown above. Live, Neutral and earth on the Timer need to be connected to a 3A fused spur. Under no circumstances should Sin and Sout of the Timer be connected to mains voltage. Once the timer turns "ON" the PIR will operate. If you wish to add both a timer and thermostat add them in series. We also supply a 0V all in one indoor thermostat and timer – See over.

6. CONNECTING TO A TIMER THERMOSTAT – PROSTAT2



The PIR may be connected to a PROSTAT2 (indoor battery operated thermostat and timer).

To connect the PROSTAT2 to the PIR, remove the link wire between the two internal green terminals (located just above the time “ON” set wheel). There is only 5V DC on this link and no current. Wire in the thermostat as shown to the left. The two cables should go into terminals 2 and 3 on the thermostat.

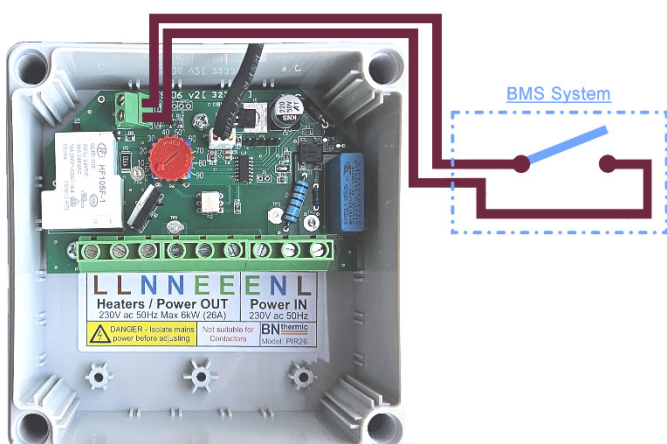
When the thermostat switches ON it allows the PIR to operate. The thermostat can also be electronically locked to stop certain buttons from operating, useful if in a public area.

7. CONNECTING TO A BMS SYSTEM

The PIR may also be connected to a Building Management System (BMS)

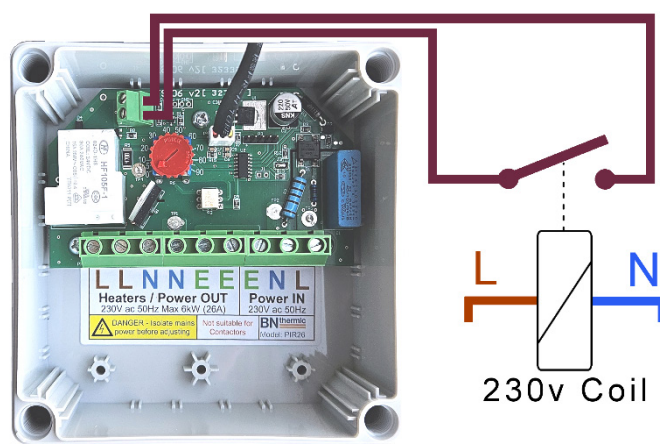
Method 1

Method 2



If the BMS has 0V (zero Volt) switching, remove the link wire between the two internal green terminals in the PIR and then connect as shown.

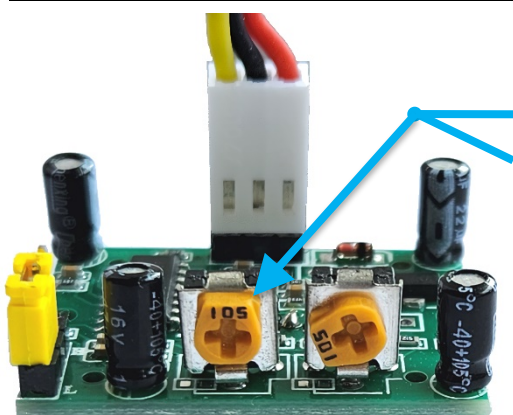
AT NO TIME MUST A VOLTAGE BE SENT DOWN THESE WIRES FROM THE BMS TO THE PIR.



If the BMS has 230V switching you will need to use a relay, remove the link wire between the two internal green terminals in the PIR and then connect as shown.

AT NO TIME MUST A VOLTAGE BE SENT DOWN THESE WIRES FROM THE BMS TO THE PIR.

8. ADJUSTING THE SENSING DISTANCE



The PIR sensor in the front cover can be adjusted to allow a sensing distance between 3 and 7 meters approximately, at an angle of 120°.

To increase sensitivity (up to 7m) turn this pot clockwise.

To decrease the sensitivity (down to 3m) turn this pot anticlockwise.

DO NOT ADJUST THE OTHER POT THIS SHOULD BE LEFT IN A FULLY ANTICLOCKWISE DIRECTION.

Do not move the yellow jumper as this will also affect the working of the PIR.

NOTE: It is our policy to continually improve products and as such we reserve the right to alter data, specifications and component parts without prior notice.



WEEE REGULATIONS:

This appliance bears the symbol of the crossed waste bin. This indicates that, at the end of its useful life, it must not be disposed of as domestic waste but must be taken to a collection centre for waste electrical and electronic equipment. It is the user's responsibility to dispose of this appliance through the appropriate channels. Failure to do so may incur penalties established by laws governing waste disposal.

IMPORTANT: No liability is accepted for incorrect use of this product.

WARRANTY: Your BN Thermic product is guaranteed for one year from date of purchase. We will repair or replace at our discretion any part found to be defective. We cannot assume any consequential liability. This guarantee in no way prejudices your rights under common law and is offered as an addition to consumer liability rights.

PIR26INSv01

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