BN<u>thermic</u>

SystemX INSTRUCTIONS FOR:-230V INTERFACE Model:- VI

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. Please ensure instructions remain with your customer for their reference.



REGISTER: PLEASE REGISTER THIS PRODUCT ONLINE TO ACTIVATE YOUR GUARANTEE AT www.bnthermic.co.uk



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 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 regulation.

1.2 GENERAL SAFETY INSTRUCTIONS

- ✓ Remove all packaging and store it away from children, check the package for visible damage or tampering.
- ✓ Only use recommended attachments and parts. To use unauthorised parts may be dangerous and will invalidate your warranty.
- X DO NOT use in areas where hazardous gasses or dusts may be present.
- X DO NOT disassemble the interface for any reason. The circuit board has no user serviceable parts on it.
- X **DO NOT** use this interface controller to perform a task for which it has not been designed.

2. INTRODUCTION & SPECIFICATION

This Interface is designed to work in conjunction with SystemX controllers or the SSR controller and allows connection of 230V switching items. These 230V items include PIR's, door or roller shutter switches or a 230V thermostat. It can also act as an interface between a 230V output on a BMS and a SystemX controller.

Model	VI
Dimensions (W x H x D)	80 x 80 x 34mm
Mounting	Surface

3. MOUNTING THE INTERFACE CONTROLLER

To remove the back plate from the front of the controller gently push the bottom of the back plate whilst gently prising the front panel away. The bottom of the controller must be released from the back plate first before gently unclipping the top.

Screw to the wall ensuring the "UP arrows" are pointing the correct way and the green terminal block marked T1, T2 is at the top.

The backplate can also be mounted on a single gang flush wiring box using the 2 x semi-circular slotted holes in the back. DO NOT overtighten the fixing screws as you will deform the box and the connection block in the back will not engage with the circuit board correctly.





4. ELECTRICAL CONNECTIONS

A) Using the interface to connect a PIR controller to either a CX1, 2, 3, or 6 controller.



Wire the CX controller to the VI interface as per wiring diagram above. This connection T1 - T1 and T2 - T2 is low voltage so could be made with doorbell wire.

Now wire the VI interface to the PIR using minimum 0.75mm² cable as per diagram above. Please note that L1 is live when the PIR is operating and has detected the presence of someone.

When the PIR detects someone's presence, the controller will be enabled and operate as per the settings on its front. When the PIR turns off the heater will not operate.

B) Using the interface to connect a 230V door or roller shutter switch to either a CX1, 2, 3, or 6 controller



Wire the CX controller to the VI interface as per wiring diagram above. This connection T1 - T1 and T2 - T2 is low voltage so could be made with doorbell wire.

Now wire the V1 interface to the 230V door switch using minimum 0.75mm² cable as per diagram above.

When the door switch opens, the heater will not operate. When the door switch is closed, the controller will be enabled and operate as per the settings on its front.



Wire the CX controller to the VI interface as per wiring diagram above. This connection T1 - T1 and T2 - T2 is low voltage so could be made with doorbell wire.

Now wire the V1 interface to the BMS system using minimum 0.75mm² cable as per diagram above.

When the BMS system disconnects the 230V live signal, the heater will not operate. When the BMS system sends a 230V live signal, the controller will be enabled and operate as per the settings on its front.

D) Using the interface to connect a PIR controller to a SSR controller.



Wire the SSR controller to the VI interface as per wiring diagram above. This connection T1 - J2 and T2 - J2 is low voltage so could be made with doorbell wire.

Now wire the V1 interface to the PIR using minimum 0.75mm² cable as per diagram above. Please note that L1 is live when the PIR is operating and has detected the presence of someone.

When the PIR detects someone's presence, the SSR controller will be enabled and operate.

If the SSR timer is set to zero when the PIR turns off the SSR will also turn off. If you require additional time for the SSR to be on, just set the SSR timer to the amount of extra time required. The SSR will now stay on the extra amount of time set once the PIR turns off.

5. REFITTING THE FRONT OF THE VI INTERFACE

To refit the front panel to the back

Locate the 2 holes on the top of the front cover onto the two lugs on the top of the back box. Now gently click the bottom of the front cover onto the back box. No force should be applied if the front cover does not fit easily check to ensure no cable is caught. If fitted correctly the 4 pins on the PCB (2 top and 2 bottom) should line up with the green terminal blocks on the back of the enclosure.

6. OTHER APPLICATIONS

The VI Interface has many applications. We have tried to show many of the typical ones in these instructions but cannot include all of them. If you have an instance where you need to convert a 230V signal / supply into a zero volt supply, please talk to us and we can let you know if this interface is suitable.

7. MAINTENANCE

No maintenance of the interface controller is required.

If cleaning of the controller case is required turn of the mains power supply and use a slightly damp cloth with a little soapy water.

Do not use any chemicals / abrasives to clean the interface controller.

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.



This product conforms to EU Directive 2002/96/EC.

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.

BN Thermic Ltd, 34 Stephenson Way, Crawley, RH10 1TN Tel: +44 (0) 1293 547361 Email: sales@bnthermic.co.uk Web: www.bnthermic.co.uk