



SystemX INSTRUCTIONS FOR:-
HEATER CONTROLLER
Model:- CX-BMS

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! Under NO circumstances may you take a 230V supply to this controller. The controller works on low voltage (less than 30V) and to ensure the system is safe 230V supplies MUST be kept away from this controller.

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 controller for any reason. The circuit board has no user serviceable parts on it.
- X **DO NOT** use this controller to perform a task for which it has not been designed.

2. INTRODUCTION & SPECIFICATION

This Controller is designed to work as an interface allowing use of SystemX heaters with building management systems (BMS). It provides direct connection to zero volt systems or, by using additional VI interface, 230V outputs.

Model	CX-BMS
Dimensions (W x H x D)	120 x 80 x 35mm
230V Interface (If Required)	VI

VI – 230V Interface
(Optional Extra)



3. MOUNTING THE CONTROLLER

The CX-BMS should be mounted close to the first heater you wish to connect to it.

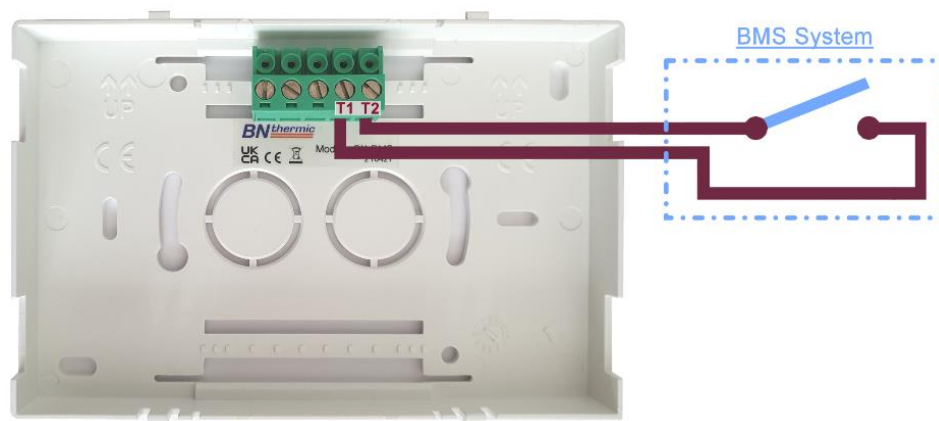
To remove the back plate from the front of the controller gently push the bottom of the back plate whilst gently prising the front panel away. The bottom of the controller must be released from the back plate first before gently unclipping the top.

Screw to the wall ensuring the “UP arrows” are pointing the correct way and the green terminal block is at the top.

The CX-BMS 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. CONNECTING TO A ZERO VOLT OUTPUT ON A BMS SYSTEM



For use when your BMS has zero Volt connections.

Connect the BMS Zero Volt switch / relay between terminals T1 and T2 so that a circuit is made when you require heat.

AT NO TIME MUST A VOLTAGE BE SENT DOWN THESE WIRES.

Now go to Section 6.

5. CONNECTING TO A 230V AC OUTPUT ON A BMS SYSTEM.

You MUST use a VI Interface if you require 230V connections.

Remove the cover from the VI Interface and secure to a suitable surface.

Connect the CX-BMS Controller to a VI Interface. Connect terminal T1 to T1 and Terminal T2 to T2 as shown below.



Connect the L Terminal on the VI Interface to the switchable L terminal on your BMS. Connect the N terminal on the VI Interface to the Neutral connection on your BMS.

To replace the front cover onto the back of the enclosure, 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.

PLEASE CHECK ALL CONNECTIONS BEFORE TURNING ON AS INCORRECT WIRING IS NOT COVERED BY THE GUARANTEE

6. CONNECTING THE BMS CONTROLLER TO THE HEATERS.

A network cable is used to connect the controller to any of the SystemX heaters (read notes below regarding cables)

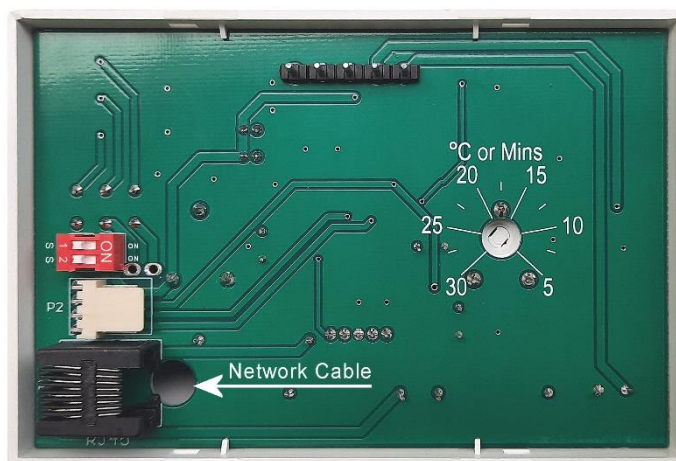
- We recommend you use our network cables as they have been thoroughly tested with all heaters and controllers and are totally compatible.
- Problems arising from using non-standard or inferior network cables are not covered by the guarantee.
- Network cables with "wings" on the boot connections will not fit into the controller socket.

Bring sufficient length of network cable through one of the knock outs in the back plate to allow a lazy loop to be formed before plugging into the back of the circuit board.

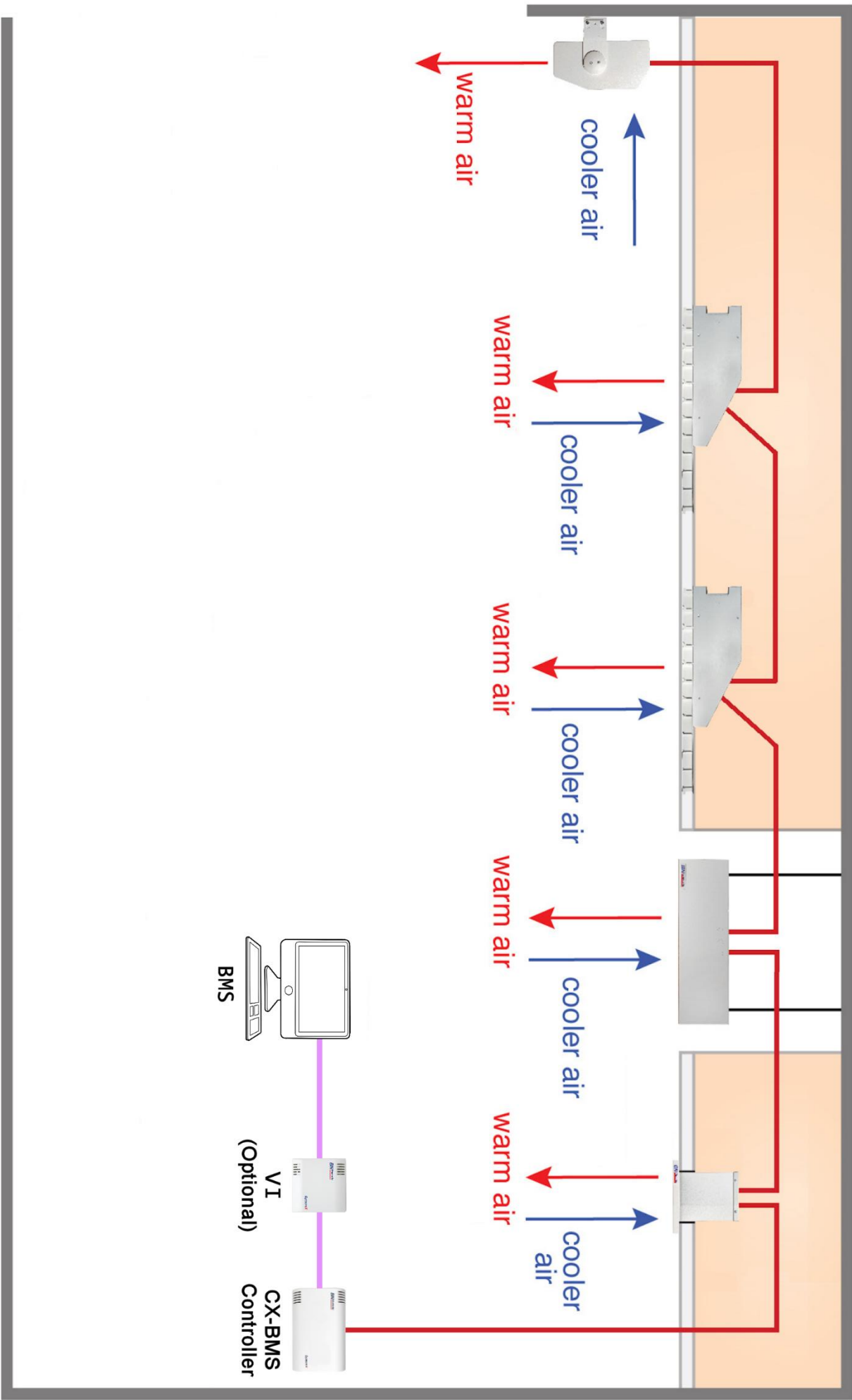
The red switches have been disabled.

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 the network cable is possibly caught please check before trying again.



7. CONNECTING THE CONTROL CIRCUIT OF SYSTEM X HEATERS TOGETHER



8. OPERATION

Ensure all heaters have their power supply enabled.

When the BMS system issues the signal to turn the heaters on all heaters connected together will turn ON.

Please note: -

Should a heater's power supply fail or is turned off the remaining heaters will still operate. This is a design feature of the integral electronic circuit board.

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.

REGISTER: Activate your warranty by registering online at www.bnthermic.co.uk and retain this installation data for future reference.

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