BN thermic

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.

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

PART 1 – USER INSTRUCTIONS.

For installation instructions and drilling template see separate leaflets

1. INTRODUCTION & SPECIFICATION.

The CS-WIFI Wi-Fi Thermostat is an easy to install and use 7 Day, 6/1 Day or 5/2 Day Programmable Room Thermostat which offers six time and temperature changes per day. It is designed to provide automatic time and temperature control for heating using its inbuilt air temperature sensor or a remote sensor (optional extra). The thermostat works in conjunction with an app available on Google Play or the App Store. All settings are stored in the controller with battery back-up.

CS-WIFI- Programmable Heater Controller	
Programming	7 Day, 6+1 Day or 5+2 Day (Default 5+2 Day)
Power Supply	230V (Fed directly from the heaters control connection enclosure (Battery back-up for settings)
Remote Sensor (Optional)	CXS, CXSIP, BBS and BBSIP (IP versions are IP65 rated)
Temperature Range	1°C to 45°C (Default 5°C to 30°C)
Display	LED + Standby brightness setting.
No. Events Per Day	6
Tamper Resistant	Facility for locking the screen or the screen except "On / Off".
Dimensions	145mm (H) x 95mm (W) x 66mm (D).
Mounting	Surface mounting comes pre-drilled with holes in the back that allow direct mounting to single or double recessed boxes or for screws to secure to a wall. Also includes 1 x M20 White cable gland.
Electrical Protection	Class II IP20
Complies with:	EN 301489-1, EMC Directive 2014/30/EU, EN60950-1:2006 + a11:2009 + a1:2010 + a12:2011 + a2:2013 CE UKCA

Week Day Number	Wi-Fi Connection
Time Period	Time
	Actual Temperature
External Sensor	
Holiday Mode	When Lit Heating On
Auto Mode	Thermostat Locked
Manual Mode	Turn On / Off
Set	Increase
Time	Decrease

Touch Sensitive Area

Connecting Thermostat to Android or iPhone App

1) You will need a 4G or 5G mobile phone and wireless router.

2) Download "Smart RM" app from Google Play (Android users) or the App Store (iPhone users).

3) If you cannot find "Smart RM" or already have "Smart Life" app the thermostat can also be used with this.

If you are intending to use the thermostat with your mobile phone, we recommend you set up the app as soon as possible. Adjusting the settings of the thermostat is much quicker using your phones display and buttons. Most settings are available on the app. The time and day number are automatically sent from the app once paired.

Instructions for pairing your phone to the app are included separately but if you require a digital version or the latest update, just scan the correct QR code below for your phone type.

Android Phones

Apple Phones

MANUAL SETTING OF THE THERMOSTAT- When app is not available or not used

To Set Time and Week Day Number

a) Turn thermostat on by pressing the screen in the touch sensitive area until all the buttons light up.

b) Press the 🕒 button and the minutes will start to flash. Adjust the minutes by pressing the ∨ or ∧ buttons. When correct, press 🕒 button and the hours will flash. Set these by pressing the ∨ or ∧ buttons. When correct, press 🕒 button and the day number will flash. Set this by pressing the ∨ or ∧ buttons. When correct, press 🕒. Note that Monday is 1, Tuesday 2 etc. If you don't press a button for 5 seconds, display returns to standby mode and you will need to repeat section b above.

Programming - The controller is pre-set to the following times and temperatures:-

| 🏠1		🏠2		🏠3		🏠4		🏠5		🏠6	
Period 1		Period 2		Period 3		Period 4		Period 5		Period 6	
06:00	20ºC	08:00	15ºC	11.30	15ºC	13.30	15ºC	17:00	20ºC	22:00	15ºC

By default, the controller is set to 5+2 days. This means when programming Monday – Friday settings will all be the same and you can then program different settings for Saturday – Sunday. If you require 7 day or 6+1 day settings, go to "default settings" and adjust parameters first (See section 4).

To adjust or program the time & temperature periods

a) Make sure the thermostat is on or turn on by pressing the screen in the touch sensitive area until all the buttons light up.

b) Press and hold the ⊞ button for 3-5 seconds until the time starts to flash, display will also show "5" underneath the date symbol and the first period symbol will show. Adjust the hours by pressing the ∨ or ∧ buttons. When correct, press ⊞ button and the minutes will flash. Set these by pressing the ∨ or ∧ buttons. When correct, press ⊞ button and the temperature will flash. Set this by pressing the ∨ or ∧ buttons. When correct, press ⊞ and the second period symbol will show, and the hours will flash. Now repeat the above to set all 6 periods. Once set, the days will change to 2 and you repeat the above procedure to program Saturday and Sunday. Note " 5 " on the display while programming means you are setting all 5 weekdays "2" on the display while setting means you are programming Saturday & Sunday. If you change the default to 6+1, "6" on the display means you are setting Mon – Saturday and "1" is for Sunday. Lastly if you change the default settings to 7, "7" on the display means you are setting Mon – Sunday. If you don't press a button for approx. 5 seconds the controller will automatically store the settings and exit programming mode.

Run Modes

1 – Turn thermostat On or Off by pressing the ⏻ button.

2 – When "ON" press ⊞ to toggle between Auto mode ⟳ and Manual mode 🖐 .

3 – When in Auto mode ⟳ you can override the set temperature by pressing the ∨ or ∧ buttons. This override will last until the next program period and is shown by both the ⟳ and 🖐 symbols.

4 – When in Manual mode 🖐 you can override the set temperature by pressing the ∨ or ∧ buttons. Note:- The thermostat will stay in Manual mode with the same set temperature until you switch it to Auto mode or turn the thermostat off.

At any time, you can return to the auto temperature set point by pressing the ⊞ button until only the Auto mode ⟳ shows.

Locking the controller

The controller has 2 lock settings selected in the default settings (see section 4). Half lock, when set only allows the On/Off ⏻ button to be pressed. Full lock, when set disables all buttons except the unlock sequence. Putting the controller in lock mode, indicated by a 🔒 symbol on the screen is done by pressing and holding the ∨ button until the 🔒 symbol appears. Unlocking is the reverse process.

Holiday Mode – Note: 1 day = 24 hours count down

Holiday days (count down) and temperature set point can be set so that the heating runs at a lower temperature whilst you are away and reverts back to normal when you return. To access, make sure controller is on and then press 🕐 button for 3-5 seconds until the screen displays "Off". Change to "On" by using the ∨ or ∧ buttons. Then press 🕐 button to set the number of days you are away by using the ∨ or ∧ buttons. Then press 🕐 button to set the temperature required while you are away by using the ∨ or ∧ buttons. Finally press 🕐 button to set. Holiday mode is shown by a 🧳 symbol displayed on the screen. Once set and counting down, to exit holiday mode early press the ⊞ button.

3. CONTROL SWITCHES.

SWITCH MODES

The large switch on the right hand side of the controller allows the following modes:

OFF (**0**) – When in this position both the fan and the heat are turned off.

FAN (**–**) – When in this position the fan will operate regardless of the thermostat settings. Useful in the summer for moving air around.

HEAT (**=**) – When in this position the heater will turn on and start warming up BUT only when the thermostat is asking for heat. This is shown by a ♨ flame symbol near the bottom of the display. This heat switch does not over-ride the thermostat settings.

When **HEAT** is selected and the thermostat is ON shown by the flame ♨ symbol it will allow the right hand switch to operate giving the following settings:

LOW HEAT (**-**) – When in this position the heater runs in low heat mode.

HIGH HEAT (**=**) – When in this position the heater runs in its maximum heat mode.

4. CHANGING THE MASTER / DEFAULT SETTINGS.

There are various master / default settings that can be changed by entering the default settings.
To enter these settings, turn off the thermostat by pressing the ⏻ button. Now press the screen in the touch sensitive area until all the buttons light up. Then press and hold the ⊞ button for 3-5 seconds until the A1 appears on the screen. You are now in settings mode and if you don't press any button for 5 seconds the display reverts back to off mode. If this happens just repeat the above instructions.

Press ⊞ button to switch to next option (A1, A2, A3 etc) and press ⋁ or ⋀ buttons to adjust the data. If you wish to exit the settings without waiting 5 seconds press the ⏻ button.

No.	Setting Options	Data Setting Function	Default
A1	Temperature calibration.	-9ºC to +9ºC in 0.5ºC steps. (Can be used to fine tune temperature reading so it matches another thermostat).	0ºC
A2	Differential between set point and On and Off.	0.5ºC - 2.5ºC in 0.5ºC steps.	0.5ºC
A3	lock settings.	0 = half lock 1 = full lock	0
A4	Power Cut function.	0 = Power heating as per controller memory. 1 = Shut down controller after power cut. 2 = Shutdown heating but turn controller on after power cut.	0
A5	Display Standby Brightness.	0 = Off 1 = Half brightness 2 = Full brightness	1
A6	Programming selection.	0 = 5 + 2 (same settings Mon-Fri + Sat-Sun) 1 = 6 + 1 (same settings Mon-Sat + Sun) 2 = 7 days same	0
A7	Minimum set point of internal sensor if BN set to N1 or N3 or external sensor if BN set to N2.	1ºC - 10ºC	5ºC
A8	Maximum set point of internal sensor if BN set to N1 or N3 or floor sensor if BN set to N2.	20ºC - 45ºC	30ºC
A9	Minimum set point of external sensor if BN set to N3.	1ºC - 10ºC or ▬ ▬ (▬ ▬ = Not active)	5ºC
AA	Maximum set point of external sensor if BN set to N3.	20ºC - 70ºC or ▬ ▬ (▬ ▬ = Not active)	27ºC
AB	External sensor differential only used if BN set to N3.	1ºC - 9ºC in 1ºC steps.	1ºC
AC	Window Opening detection.	▬ ▬ = Not active 10 - 20ºC = Sudden drop set point at which heating turns off.	▬ ▬
AD	Window Opening OFF period.	10 - 20 minutes (only if AC above is set to a temperature and not ▬ ▬).	10
AE	Factory Reset.	Press & hold ⏱ key until whole digital screen shows. Note: - This also resets the Wi-Fi Connections.	

5. ADVANCE DEFAULT SETTINGS.

To enter the advance settings, turn off the thermostat by pressing the ⏻ button. Now press the screen in the touch sensitive area until all the buttons light up. Then press and hold the 🕐 button for 3-5 seconds until the advance options appears on the screen. You are now in settings mode and if you don't press any button for 5 seconds the display reverts back to off mode.

Press ⊞ button to switch to next option and press ∨ or ∧ buttons to adjust the data. If you wish to exit the settings without waiting 5 seconds press the ⏻ button.

No.	Setting Options	Data Setting Function	Default
BN	Sensors used.	N1= Built in sensor only. N2= External sensor only. N3= Built in sensor and external sensor. NOTE.- N3 only used for specialist applications if recommended by BN Thermic.	N1
BC	DO NOT USE - leave this set at 0	DO NOT USE - leave set at 0.	0
BO	Product Version	Cannot be changed.	

6. USING AS A CONVENTIONAL THERMOSTAT.

It is easy to set up your CS-WIFI thermostat to operate as a simple, conventional thermostat without the need to programme different times and temperatures. There are 2 steps.

1. Set the temperature required – Refer to "Run Modes" on page 4 and use manual mode, then select the required temperature by using the ∨ or ∧ buttons.
2. Lock the thermostat - Refer to "Locking the controller" on page 4. Locking the thermostat will disable all the buttons except the on/off button. If you want to disable the on/off button as well, you will need to change the default lock settings before starting this process (see section 4, Number A3).

7. USING WITH OVERDOOR HEATERS MODELS 830, 860 & 890

When you use the CS-WIFI controller with the 830, 860 or 890 overdoor heaters the switch on the front of the heater MUST be left ON for the controller to operate. If you turn the switch OFF the controller will turn OFF and the thermostat will not operate.

8. SENSOR FAULT CODES.

E1 or E2 fault codes are displayed if the sensors are faulty or are not connected. The thermostat will stop heating until the fault is corrected. E1 = Internal sensor faulty. E2 = External sensor faulty or not present.

If in the advance default settings shown above, you have selected N3 for option BN (Sensors used) you will get a fault code and the thermostat will not work, please select either N1 if you are using the internal sensor or N2 if you are using an external mounted sensor.

9. MAINTAINANCE

The thermostat has been designed to be maintenance free and as such there are no serviceable parts inside but before removing the cover to the controller make sure you have isolated all sources of power. Please Note: There may be more than one power source entering the enclosure.

Only use a soft slightly damp cloth to clean the thermostat.

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.

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

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.

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CS-WIFIINS-v01