## **CONTROLS** for Underfloor Heating

## Thermostats

Thermostatic control must be used with all BN Thermic Underfloor Heating Systems. BN Thermic offers a range of thermostats all of which are supplied with a floor probe. The thermostats can be configured for primary control via the built-in air sensor or via the floor sensor.

For larger installations, check that the total load is within the switching capacity of the selected thermostat. When the combined load is greater than the switching capacity of the selected thermostat an appropriately rated contactor must be selected. Alternatively, BN Thermic's Wireless Control System allows larger loads to be controlled without a contactor (see page 18).

### **T16C**

Our latest full colour touch screen thermostats can switch loads of up to 3.6kW and provide ultra-simple 7-day programming. Available with a choice of white, silver or black surrounds, the T16C can be configured for 'air and floor' or 'floor only' control. When required, the air temperature can be controlled via an IP65 rated remote mounted wall-sensor (T16R). This arrangement is particularly well suited for bathroom applications.

The T16C also allows the user to monitor energy usage and running costs.

#### **U16C**

The U16C offers simple 7-day programming with programming buttons hidden behind hinged doors on the thermostat face. Capable of switching loads up to 3.4kW, the U16C is configurable for 'air and floor sensor' or 'floor sensor only'. Features include a backlit screen and a summer switch allowing the heating to be switched off without losing the programme.

#### A16C

Simplicity is the key. The A16C has a smart uncluttered appearance with a dial for temperature adjustment and an on/off switch. Capable of switching loads up to 3.4kW, the A16C is configurable for 'air and floor sensor' or 'floor sensor only'.



U16C Fully programmable control



Simple stylish control



Floor probe and conduit provided with every BN Thermic thermostat



T16CW



**T16CS** 



T16CB Stylish 'state of the art' touch screen control



T16R Optional remote wall sensor for use with T16C thermostat

Thermostats					
Model	Load	Operation	Sensor		
T16CW	16A	Programmable Touch Screen (White)	Air and floor or floor only		
T16CS	16A	Programmable Touch Screen (Silver)	Air and floor or floor only		
T16CB	16A	Programmable Touch Screen (Black)	Air and floor or floor only		
T16R	Optional IP65 remote sensor for use with the T16C touch screen thermostat				
U16C	15A	Programmable Thermostat	Air and floor or floor only		
A16C	15A	Manual Thermostat	Air and floor or floor only		

# **CONTROLS** for Underfloor Heating - Continued

## Contactors

A suitable rated contactor allows a thermostat to control a load larger than its normal switching capacity.

Contactors				
Model	Amperage	Max kW (230V 1ph)		
CON-32	32	7		
CON-50	50	11.5		
CON-80	80	18		
ENCL-D	Enclosure for CON-32 and CON-50			

## **Wireless Control**

Different combinations of three standard components provide a number of convenient, wireless control systems for underfloor heating.

## WSB-1 Relay Box

Generally mounted at low level, the WSB-1 Relay Box will switch an underfloor heating load of up to 16A (3.6kW). Each relay box is supplied with a floor probe for monitoring floor temperature. The WSB-1 will control the heating according to wireless signals received from a WST-1 thermostat and/or a WSP-1 central programmer.

The WSB-1 can be installed in any room, including bathrooms.

## WST-1 Wireless Thermostat

The WST-1 thermostat is battery powered and can be wall-mounted or simply placed in a convenient location using the small stand provided. A WST-1 can send a wireless signal to one, two, three or four relay boxes. The combination of a WST-1 thermostat and the required number of WSB-1 relay boxes allows larger rooms to be controlled by one thermostat without the requirement to install a contactor.

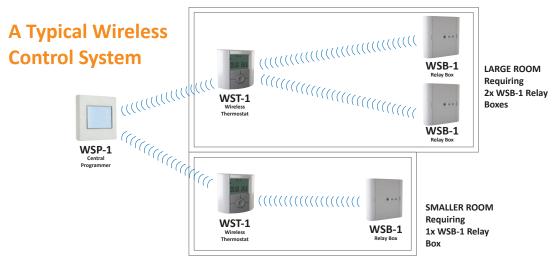
If used with the WSP-1 central programmer, the WST-1's programmable functions are superseded and it acts primarily as a wireless air temperature sensor with a temporary override function.

## **WSP-1 Central Programmer**

The WSP-1 is a compact, touch screen device providing wireless control for up to 24 zones of heating. Generally speaking a heating zone would be an individual room meaning that the WSP-1 can be installed in the largest of properties.

The combination of a single WSP-1 central programmer and the appropriate number of WST-1 thermostats and WSB-1 relay boxes, allows completely flexible control of every room of a house from a central location.

Wireless Control		
Model	Description	
WSB-1	Wireless Relay Box 16A	
WST-1	Wireless Thermostat (for use with WSB-1 relay box)	
WSP-1	Wireless Central Programmer	





#### **CON-32** Contactor



WSB-1 Relay Box



WST-1 Wireless Thermostat



WSP-1 Central Programmer