

# Heating System User Guide



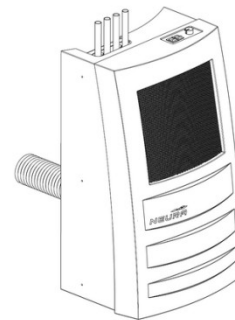
# HEATING SYSTEM USER GUIDE

The purpose of this guide is to provide you with all the information you need to make the most of your heating system. In it you will find details on how the system operates most efficiently, useful tips on system operation and troubleshooting as well as contact details should you ever have a problem.

## About your -Heating System

- The heating system should operate at a constant, gentle heat with radiators warm but NOT hot to touch. We recommend that the temperature of your home is kept at an even stable temperature continually by leaving the heat pump on at all times, the system **should not be turned on and off.**
- The heat pump system works at its most efficient level when the unit is left to run continuously. Turning it on and off will reduce its efficiency, will make it more expensive to run and risks break downs

NDB PICO® compact



## About your Heat Pump - Hot water

- The temperature on your hot water cylinder will be set to approximately 50°C to ensure system efficiencies are maintained.
- Once a week the temperature of the hot water will automatically rise to approximately 62°C to prevent legionnaire's bacteria forming in the hot water. This is normal practice and will happen during the night on the same day each week; the temperature of the water during this pasteurisation cycle will be much hotter than normal so extra care should be taken when using it. When this will happen will be marked in your utility cupboard.



## About your heating system - General

The heating system provides all of your heating and hot water needs; it will prioritise hot water when there is a demand for it and then revert back to heating when it completes your hot water requirements.

## Safety information

- To ensure the reliable, safe and trouble-free operation of the heat pump the correct settings must be used as described in the System Controls section of this guide
- All maintenance and repair measures and opening of the heat pump must only be carried out by qualified personnel

## System and Temperature Controls

When the system has been installed there will be two ways for you to control the temperature of the different rooms in your home. You will have a Neura Control Thermostat (TRS14) installed in your living room, this guide will explain how to use the thermostat to control the temperature of the whole property. You will also have Thermostatic Controls (TRV's) on all of the radiators in your home with the exception of the living room.



### Neura TRS14 Control Thermostat.

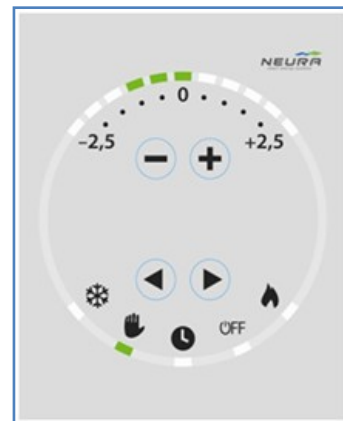
During the commissioning of your new heating system the commission engineer will set up the system to standard requirements, you will then be able to make any necessary adjustments to the temperature of the system to make you comfortable by using the Thermostat which will be wall mounted in your living room. You will receive guidance on how to do this by an engineer or your Housing officer, but also see below for a general guide on how to make these adjustments.








### Operating the TRS14 Thermostat

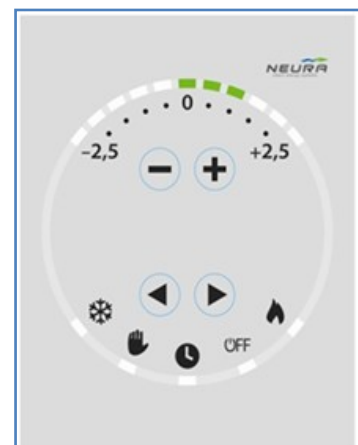
#### Temporarily changing the room temperature

- By using  and  you have the option to change the room target temperature (depending on the temperature set on the existing time program which will have been set up by the commission engineer).
- This setting is reset when the time program starts the next time.
- Figure 8 shows a temporary temperature increase of 1.0K relative to the active set point. This leads to a heating of the room.






#### Permanently changing the room temperature

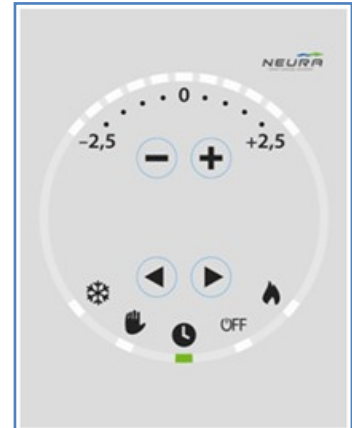
- Use button  and  until the LED at  (manual mode) lights to activate 'permanent mode'. This allows you to change the room temperature permanently.
- Now use button  and  to adjust the desired room temperature offset to the current active time program.
- For example, if in the time program a target temperature of 20°C is specified, and the LED is set to be +1.0K, the space is heated to a room temperature of 21.0°C.
- The permanent mode is active until the user actively quits the permanent mode by activating automatic mode.
- Figure 9 opposite shows a permanent temperature decrease of 1.0°C relative to the active set point.





## Neura TRS14 Control Thermostat... (Cont'd)

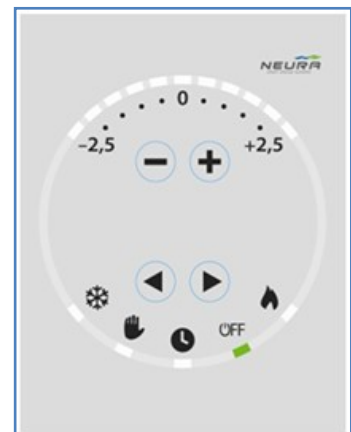
### Activate Automatic Operation

- Press  and  until the LED at  (automatic mode) lights.
- In automatic mode the assigned heating circuit operates with the time programmes that have been programmed for your heating circuit.
- A system running in automatic mode is shown in Figure 10 opposite.




### Shut down the heating circuit

- Remember that for efficiency reasons it is best to leave your heat pump on at all times however should you need to shut down the heating system then please use button  and  to the 'OFF' position to disable the heating circuit.
- Figure 11 opposite indicates the display of a TRS 14 when the heating circuit has been de-activated.



### Status LED

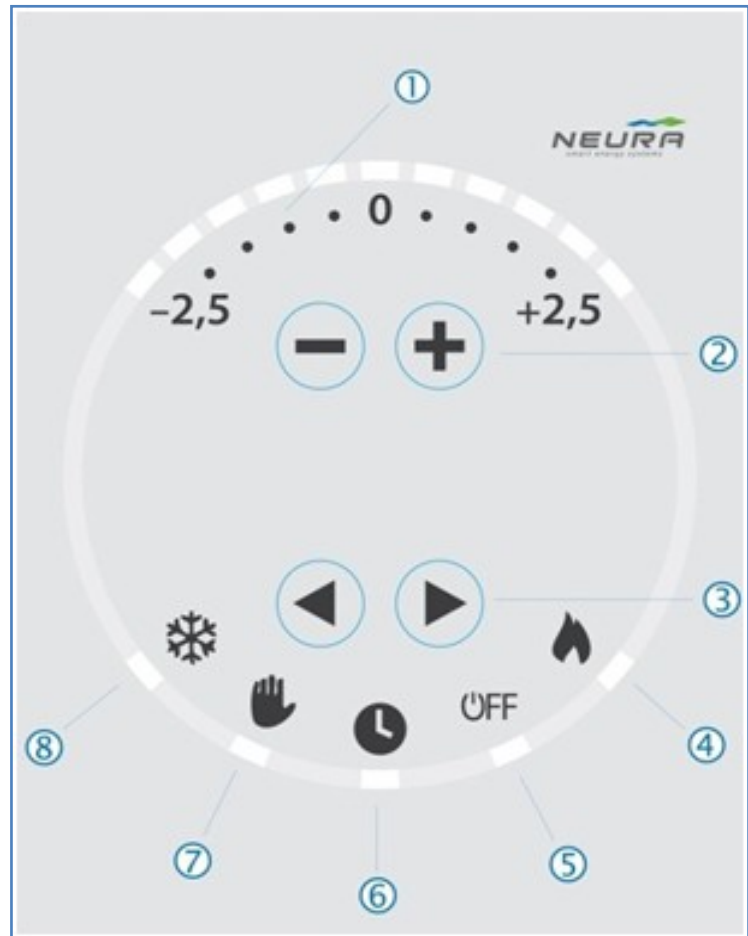
The status LED  shows the status of the heating system:

- **Red** Heating system in standby mode
- **Green** Heating system is in operation mode
- **Red flashing:** Error\*

*\*If the Status LED is flashing red please call Queens Cross Housing Association on 0808 143 20025 or check the status of the N-Touch - Note that there is further detail on the N-Touch Panel later in this guide.*

## Summary of the Control panel for the TRS 14 Thermostat

- 1) Temperature offset
- 2) Adjusting the temperature
- 3) Changing the Operating mode
- 4) Status LED
- 5) Disable Heating circuit
- 6) Automatic Mode
- 7) Permanent Mode
- 8) Cooling mode (Not applicable)



## Thermostatic Radiator Valves (TRV's)

- There will be a radiator installed to each usable room. With the exception of the Living Room all of the radiators will have Thermostatic Valves fitted, these control valves enable you to adjust the temperature of the individual radiator to suit your requirements. If you want to have a cooler bedroom for example turn the TRV down, when you do this in any room also close the door to that room stop extra heat entering from the landing or hallway. If you want the whole property to be cooler then use the Thermostat in the Lounge.
- **It is important to note that you should NOT turn all TRV's down to zero, they must remain open even if only at level 1 or 2. Most TRV's have settings 1 - 5 or I - IIIII.**



## N-Touch Controller (ENGINEER OPERATION ONLY)

You will also notice that there is another controller fitted near the heat pump that is positioned in the cupboard at your home. This controller is used by the engineer during the commissioning of the heat pump, it is used to set up all of the system parameters of your new heating system, it is also used as a tool for performance and fault diagnosis. In summary via the N-Touch the engineer will;

- Configure and commissioning of the heating system
- Heating system settings during operation
- Hot water settings
- Capturing the indoor and outdoor temperatures
- Status information & error messages



You should not need to interact or use the N-Touch unless specifically asked to do so by Queens Cross Housing Association.

## Frequently Asked Questions...

### What is the best temperature for hot water?

*Hot water is set about 50°centigrade. Any hotter would use more electricity and you would need to add cold water before being able to use the hot water. It is a waste of energy to heat up water to a point that is too hot to use.*

### Is the water hot enough to remove bugs or bacteria?

*You will notice that once a week the hot water may be hotter than normal. This is because the system has just undergone its pasteurisation cycle where it automatically raises the hot water temperature to approximately 62°C to kill off any bacteria.*

### What is the best temperature for the heating?

*The best temperature is one that you are comfortable with. It is better to start at a lower temperature setting (about 18°C) then make small adjustments until you find a setting you are happy with. Once the comfortable setting has been found leave the system to maintain this comfort.*

### How much will it cost me to run?

*This is one of the hardest questions to answer because there are many different factors that can affect how much it costs. In the winter months it will cost more to keep warm so if you are on a budget you can turn down the temperature to suit via the thermostat and also reduce room temperatures by turning down the 'TRV's as previously detailed in this guide. These systems work by providing heating to all areas of the house and not just one room.*

### Can I turn up the heat if I am cold?

*One of the strangest things to get used to is the whole property being at an even temperature. If you have just come in from the cold it's a good idea to wait a short*

*while before making any adjustments. If you are still cold you can turn up the room temperature via the thermostat.*

### Consider removing completely?

#### How do I turn the heating off when I don't need heating in the summer?

*The system will automatically switch off when the outside temperature is high enough to maintain the temperature inside the property.*

#### The radiators are not warm - is everything OK?

*That's very normal. The first thing to ask yourself is are you cold and is it cold outside? The system works by only adding small amounts of heat and if the property is reasonably insulated the radiators don't get hot just luke warm. Check to see if you have hot water and check to see if there are any alarms or warning lights showing. If there is no alarm or warning light on and there is hot water it could just be the system is doing its job. Wait for a while and see if the temperature inside actually drops before calling your Housing Association.*

#### What happens if the power goes off?

*The system has a memory when the power comes back on it will remember all the settings.*

#### Do I need to bleed my radiators?

*If you find cold area on your radiators then they may need bleeding, although bleeding the radiators is a relatively simple task the system will require topping up and this should be carried out by a competent and trained person. Contact Queens Cross or let your liaison officer know if you are experiencing this.*

**In the unlikely event that you have a fault or other issue with your heating system, please contact Queens Cross Housing Association**

**0808 143 2002**

