REZNOR

INSTALLATION AND OPERATING MANUAL

CRX2 Single Zone

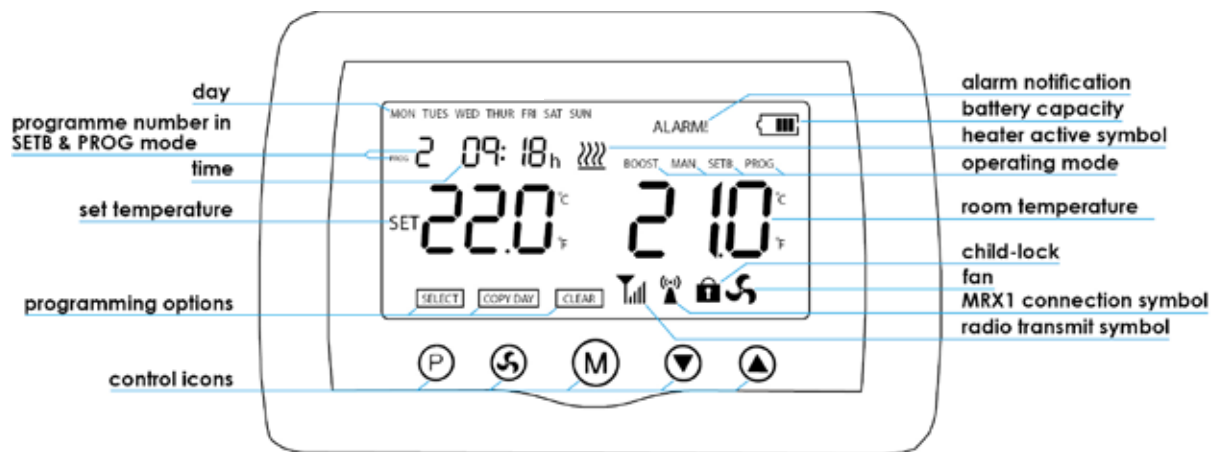## Wireless Controller

NORTEK GLOBAL HVAC

ErP 2018 — ErP Lot 20 Seasonal Efficiency and NOx compliant

An illustration of functions available on CRX2

Ⓟ : set time, day and accessing programming menu
Ⓢ : activate fan function (for fan heaters only)
Ⓜ : select operating mode
Ⓐ : increase value
Ⓥ : decrease value
ALARM!: flashes to indicate error in temperature settings for the day e.g. the timing set for 2nd temperature setting precedes the 1st temperature setting.

Getting to know your CRX2 wireless controller

1.   Pairing CRX2 with heaters

This must be done, otherwise the heaters will not work.

Power up the CRXSL (see section 'Power options' for details). There are 2 different sequences used for pairing. The sequence used will depend on the heater.

To find out which sequence to use, check the heater rating label and identify the model number.

If the heater is 'RX' and the last two digits are lower than 10 use sequence 1.

If the heater is 'RX' and the last two digits are 10 or higher use sequence 2.

If the rating label is not visible, follow the steps below:

- Ensure the heater is switched OFF.

- Switch the heater ON and observe the LED status light.

- If the LED flashes red then goes green use sequence 1.

- If the LED is solid green use sequence 2.

Sequence 1

Set heater into pairing mode as follows:
1. Locate the heater LED status light.
2. Turn power to the heater ON. Count 4 seconds, or count 5 red flashes of the status light on the heater.
Turn power OFF.
3. Turn power back ON. The heater status light should be flashing green. (If the light is not flashing green, the 4 second timing

was incorrect. Repeat step 1.)
4. The heater is now ready for pairing with CRXSL.
The next 3 steps must be done within 30 seconds. After 30 seconds the heater will return to normal operating mode. Set the CRXSL into pairing mode as follows:
1. Touch and hold Ⓟ and Ⓜ icons together for 5 seconds.

2. The display will show CRXSL identification code.
3. Touch the Ⓟ button while the light on the heater is flashing green.
If the pairing was successful, the light will stop flashing and the heater is paired with CRXSL. This has to be done within 30 seconds. After 30 seconds, the CRXSL will return to normal operating mode.

Sequence 2

Set heater into pairing mode as follows:
1. Locate the heater status light.
2. Turn power to the heater ON. The light should be solid green.
The next step must be done within 20 seconds. After 20 seconds, the heater will return to normal operating mode. Set the CRXSL into pairing mode as follows:

1. Touch and hold and icons together for 5 seconds.
2. The display will show CRXSL identification code.
3. Touch the Ⓟ button and the CRXSL will beep & flash 3 times.
If the pairing was successful, the light will show red and the heat output will switch on

and stay on if the CRXSL is signalling the heat output to be on. If the CRXSL is signalling the heat output to be off, the heat output will only switch on for a short period of time to show pairing was successful.

2. Basic Operation

Before you can use CRX2, it has to be activated by tapping any control icons. The LCD screen back-light will turn on.

To operate any control icon, tap within 2 seconds of CRX2 activation.

3. Time and day setting

- To enter time setting touch and hold (P) for 5 seconds.

- The minutes will flash.

- Use (▼) or (▲) to set minutes.

- Tap (P), the hours will flash.

- Use (▼) or (▲) to set hours.

- Tap (P), the MON will flash.

- Use (▼) or (▲) to select day.

- Once you are happy with the settings, leave the CRX2 for 20 seconds.

- The settings will be saved and CRX2 will return to the main screen.

4. Selecting operating mode

CRX2 has four operating modes:

BOOST, MANUAL, **SET BACK** and **PROGRAM**.

Each mode can be selected by activating the CRX2 and tapping (M) to cycle through the options. The cycle sequence will always start with **BOOST** mode followed by **MANUAL**, **SET BACK** and **PROGRAM**.

5. MAN - Manual Mode

In manual mode, the heater maintains the set temperature.

- Tap (▼) or (▲) to set the temperature.

To amend the set temperature, tap any control button once to activate, then tap (▼) or (▲) to change the temperature. Once the temperature is set, leave the thermostat and the settings will be saved.

6. BOOST - 15 minutes

The boost feature temporarily increases the room temperature. It can be used from any mode.

- Tap (▼) or (▲) to set the temperature.

To amend the set temperature, tap any control button once to activate, then tap (▼) or (▲) to change the temperature.

Once the temperature is set, you can leave the thermostat and the settings will be saved. After 15 minutes, the CRX2 will return to previous operating mode.

7. PROG - Automatic time mode

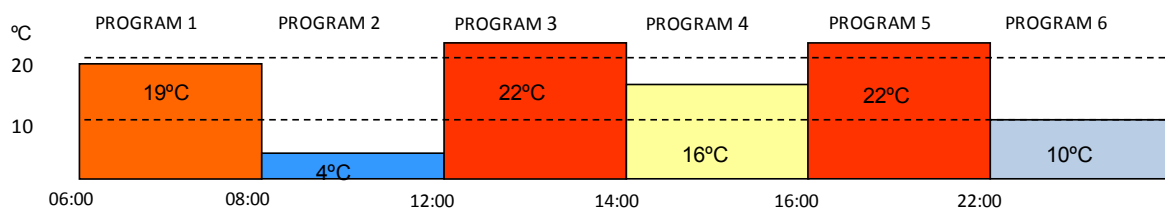In this mode, the CRX2 will follow the week's time / temperature programme.

You can override the temperature in **PROG** mode by simply activating the CRX2 and using the (▼) or (▲) icon to set the new temperature. The new set temperature will be then maintained until the next program step.

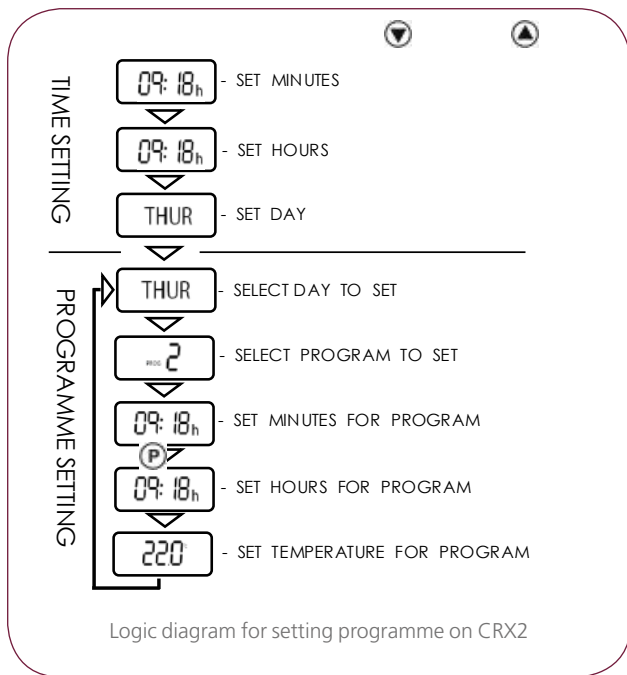- Tap (P) to **ADVANCE** program, tap again to go back.

8. SETB - ECONOMY automatic time mode

In the setback (ECONOMY) mode, CRX2 lowers all temperatures in the 7-day programme by a set value.

9. Set 7-day programme

An example of one day programme on CRX2

TIME SETTING

09:18ₕ	- SET MINUTES
09:18ₕ	- SET HOURS
THUR	- SET DAY

PROGRAMME SETTING

THUR	- SELECT DAY TO SET
2	- SELECT PROGRAM TO SET
09:18ₕ	- SET MINUTES FOR PROGRAM
09:18ₕ	- SET HOURS FOR PROGRAM
220	- SET TEMPERATURE FOR PROGRAM

Logic diagram for setting programme on CRX2

day
programme number in SETB & PROG mode
time for programme 1
temperature for programme 1
programming options

1. Touch and hold (P) for 5 seconds to enter the time setting.
2. The minutes will flash.
3. Tap (▼) or (▲) to set the minutes.
4. To set hour, tap (P) and the hour will begin to flash.
5. Tap (▼) or (▲) to set the hour.
6. To set day, tap (P) and the day will begin to flash.
7. Tap (▼) or (▲) to select the day.
8. Tap (P) to access the 7-day programming mode.
9. Tap (▼) or (▲) to select the day you want to set.
10. Tap (P) to set programme 1 for selected day (Indicated by the flashing number).
11. Tap (P) to select minutes.
12. Tap (▼) or (▲) to set minutes.
13. Tap (P) to select hour.
14. Tap (▼) or (▲) to set hour.
15. Tap (P) to select temperature setting.
16. Tap (▼) or (▲) to set temperature.

9. Set a 7-day programme (continued)

The CRX2 has a 7-day timer with up to 6 programming steps available for each day. In the programming you can set a start time and a temperature for each programme.

Each programme has to be used or set inactive.

10. Set a programme inactive

To deactivate a programme, enter the programming mode. Select the programme you want to make inactive and tap (M). The time and temperature will now be dashes to indicate that the programme has been deactivated. In order to re-activate the temperature setting, tap (M) again.

11. Copy day function

The CRX2 allows you to copy a day's heating programme to save time re-entering the same time and temperature settings for a day.

1. To use a copy day function, enter the programming mode.

2. To skip time setting, tap (P) to cycle through hour and day.

3. On the next tap, the Programme mode is activated and the day will flash.

4. Tap (⟳) to activate the COPY DAY function.

5. Tap (P) to select the day you want to copy the temperature settings from.

6. Tap (▼) or (▲) to select the day you want to copy the temperature settings to.

7. Tap (⟳) to confirm the selection. The 'to' word will flash to indicate that the day programme has been copied to the day selected.

8. Tap (M) to go back to the Programme mode.

12. Fan function (Only available for fan heaters)

Tap any control icon to activate the CRX2. Tap (⟳) to activate or deactivate the fan function.

13. Advance mode

Tap (P) from **SETB** or **PROG** mode to bring forward next programme. To clear advance mode, tap (P)

14. Keys locking

Tap and hold (▼) (▲) together for 5 seconds. The display will show 🔒 symbol. Repeat the step to unlock.
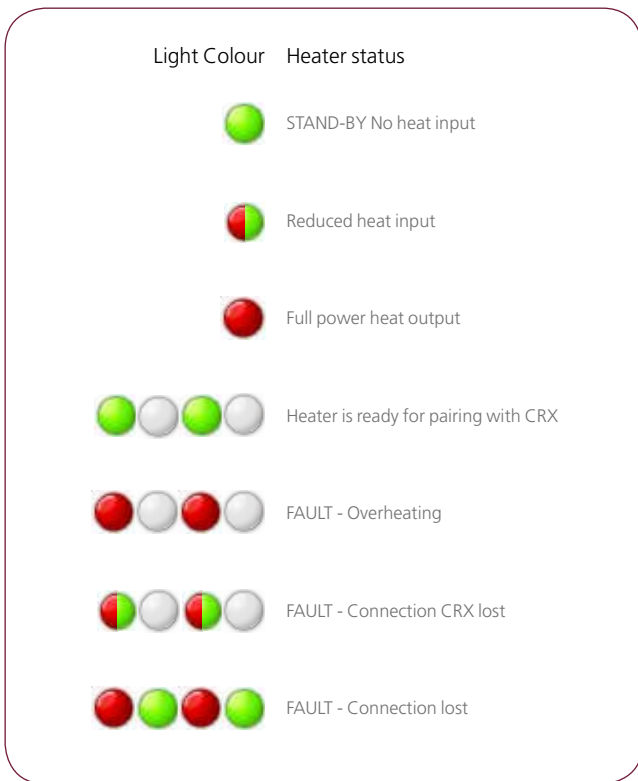
15. Head symbol on the display

Every time there is a demand for heat, the display will show the heat icon.

§§ Reduced heat output when the room temperature is close to the set temperature.

§§§ Full heat output

16. Status light on heater

Light Colour	Heater status
🟢	STAND-BY No heat input
🔴	Reduced heat input
🔴	Full power heat output
🟢⚪🟢⚪	Heater is ready for pairing with CRX
🔴⚪🔴⚪	FAULT - Overheating
🔴⚪🔴⚪	FAULT - Connection CRX lost
🔴🟢🔴🟢	FAULT - Connection lost

Power option, installation guide and setup menu

The CRX2 is a wireless thermostat giving high precision room temperature control. It is also a 7 day programmer with up to 6 temperature settings per day. Each CRX2 can control any number of heaters in the same room (zone).

17. Choosing a position in a room

The CRX2 should be fixed to the wall or used with the table top bracket. Avoid areas with draft or direct sun.

Do not position CRX above or close to the heaters or other heat sources. Damp areas or areas where CRX2 can be mechanically damaged should also be avoided.

18. Power options

The CRX2 controller can be powered either by a 5V power adapter with a micro USB connector, supplied power adapter via USB port or 4 AAA batteries. There are 2 available USB ports for power. One port is located on the bottom and one at the back of the controller.

19. Batteries

Remove the CRX2's battery cover and insert 4 new high quality alkaline AAA batteries.

Warning: Nortek is not responsible for damage due to corrosion. Battery leakage will cause permanent damage. Do not use batteries when unit is powered on with mains.

To help avoid battery leak:

- Replace the batteries annually, even if there is not a low battery warning. Remove failing or flat batteries immediately.

- Always fit a pair of new high quality alkaline batteries from the same pack. Never mix new and old batteries, or batteries of different brands or types.

- Never attempt to revive alkaline batteries by heating, crushing or recharging.

Note: The clock has to be set after replacing the batteries, or if the USB power cable has been removed from the CRX2.
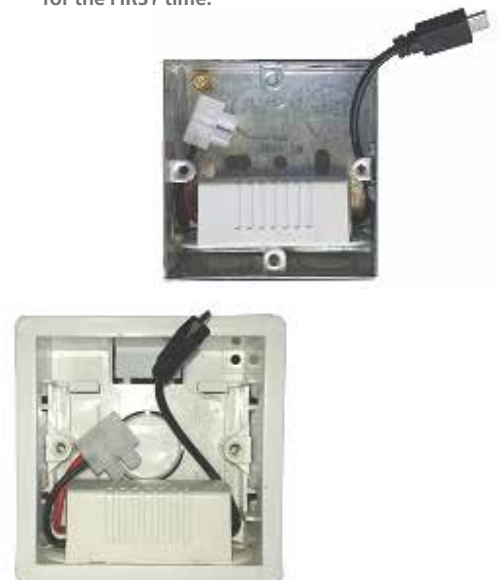
20. Power adapter for fixed installation

The CRX2 controller is supplied with a power adapter that will fit a 35mm or a 25mm metal or dry lining back box. The power adapter should only be connected to a wiring protected by a 6A fuse or 6A circuit breaker.
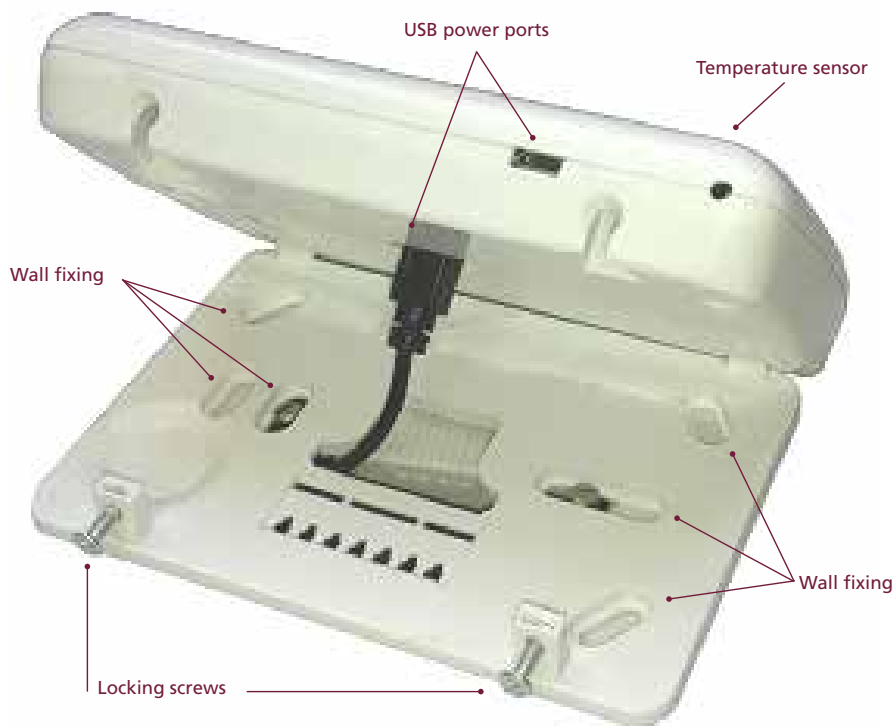
Connect line and neutral conductors to the terminal block. Please note that the adaptor supplied with the controller must be installed exactly as the figures show, otherwise the USB connector will not fit correctly. The centre of the back box must be kept clear to allow room for the USB connector.

When fitting the wall bracket, ensure that the adaptor is installed properly and feed the cable through the centre of the bracket. Screw the bracket to a back box taking care not to damage the power adaptor or leads by long screws. Connect the USB cable into the power port at back of the controller as shown on the photo.

Check that the CRX2 is working. Attach top of the CRX2 to the wall bracket and slowly tilt it to place observing that the USB connector is moving in to the opening freely. Once the controller is in place secure the two screws on the bottom of the controller.

Please note that the controller screen will take up to one minute to display after powering up for the FIRST time.

USB power ports

Temperature sensor

Wall fixing

Wall fixing

Locking screws

Power adapter for fixed installation

21. Open window detection

Ensuring you don't waste energy on heating the outside world, the heater is equipped with optional open / closed window detection.

The heater recognises sudden drops in temperature when a window or a door is opened and turns the heating off to save energy. When the window is closed, the heater will automatically detect a temperature rise, and switch itself back on.

Once enabled in the setup menu, the open window detection is fully automatic and does not require any human intervention to be activated.

22. Setting-up Open Window Detection

The system has been factory set to default time and temperature values. If necessary, all values can be adjusted.

When the heating is on, open window detection sensor will automatically switch the heater off when it detects a fall in temperature of 2°C in less than 10 minutes (this temperature can be changed in menu 7 and time in menu 6).

If a temperature rise of 2°C in less than 30 seconds is detected, the heater will switch itself back on (this temperature can be changed in menu 9 and time in menu 8).

23. Setup menu

1. Touch and hold (S) and (M) icons together for 10 seconds.

2. The CRX2 will enter the setup menu.

3. Use (▼) and (▲) to change a value.

4. Use (M) to scroll between the settings.

5. Temperature calibration

The temperature reading has been factory calibrated but if for any reason it needs adjusting (better accuracy required, to suit different position in the room etc.), the reading can be recalibrated in 0.5 degrees steps.

Please note that if the unit is powered by the power adapter, the temperature reading REQUIRES recalibration. Lower the value by 1.5 degrees.

6. Change between degrees Celsius or Fahrenheit

7. Set minimum temperature (- - - = heating OFF, 4deg = frost protection)

8. Set maximum temperature

9. Information about the software version

10. 0 or 1 manual mode enable / disable

11. Open window detection 0 = off, 1 = on

12. 600 - open window detection time 600 seconds

13. 2 - temperature drop of 2°C in the detection time

14. 30 - closed window detection time of 30 seconds

15. 2 - temperature rise of 2°C in the detection time

Should you need any advice on the use of your new Nortek product, or should you require service or repair, please contact our Helpline:

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