

INSTALLATION – CONTROLLERS

CONTROLLERS

The Rheem 874 and 876 series can be installed with Rheem controllers to enable the user to control the temperature of the delivered water from the outlet of the water heater. There are two families of Rheem controllers suitable for installation with this water heater; the standard controllers and the Deluxe controllers.

Standard Controllers

There are three types of standard controller. They are the Kitchen controller (Rheem AU - Part 299850, NZ - Part A299850), Bathroom 1 controller (Rheem AU - Part 299851, NZ - Part A299851) and the Bathroom 2 controller (Rheem AU - Part 299852, NZ - Part A299852). These part numbers include the controller cable supplied with the controller.

The standard controllers are suitable for use on all 874 and 876 series models.

The standard controllers are identified by a 'K' (Kitchen controller), 'B1' (Bathroom 1 controller) or 'B2' (Bathroom 2 controller) located on the front bottom left hand corner of the standard controller.

Deluxe Controllers

There are three types of Deluxe controller. They are the Kitchen Deluxe controller (Rheem AU - Part 299858, NZ - Part A299861), Bathroom 1 Deluxe controller (Rheem AU - Part 299859, NZ - Part A299862) and the Bathroom 2 Deluxe controller (Rheem AU - Part 299860, NZ - Part A299863). These part numbers include the controller cable supplied with the controller.

The Deluxe controllers are suitable for use on all 874 and 876 series models.

The Deluxe controllers are identified by a 'K' (Kitchen Deluxe controller), 'B1' (Bathroom 1 Deluxe controller) or 'B2' (Bathroom 2 Deluxe controller), located under the front panel, to the bottom left hand corner adjacent to the BATH FILL VOLUME label.

The standard and Deluxe controllers are designed to be hard wired into the water heater using either the Kitchen controller cable (Rheem PN 299856) or the Bathroom controller cable (Rheem PN 299857).

Notes:

- Temperature controllers are only suitable for single water heater installations or where two water heaters are installed and linked together using the Rheem EZ Link system. They are not suitable if multiple water heaters are manifolded together.
- Where more than one controller is installed, the second or third controller must be of the same family.
- A standard controller can only be installed with another standard controller(s) and a Deluxe controller can only be installed with another Deluxe controller(s). A standard controller(s) and a Deluxe controller(s) cannot be connected to the same water heater.
- One, two or three controllers can be installed. Only one of each type of controller can be connected to the water heater. Therefore, a maximum of three controllers only can be connected to each water heater.
- A Bathroom 2 controller can only be installed if a Bathroom 1 controller is installed and a Bathroom 2 Deluxe controller can only be installed if a Bathroom 1 Deluxe controller is installed.
- An additional Kitchen controller cable or Bathroom controller cable can be used if an extension of the cable length is required.

It will be necessary to cut an opposite end off both cables to be installed in order to wire them together. Alternatively, the cables may be extended using two-core flex with a minimum cross-sectional area of 0.5 mm².

- Other manufacturers' controllers are not suitable to and cannot be installed with this water heater.

⚠ Warning: Temperature controllers **must not** be fitted to this water heater (874 series) if it is installed as an in-series gas booster with a solar water heater system because water at a temperature much higher than the controller setting can be delivered. If a solar water heater is installed to an existing water heater installation, then all controllers **must be** disconnected and removed.

Location – The controllers must be installed in dry, shaded and clean locations.

Do not install the controllers:

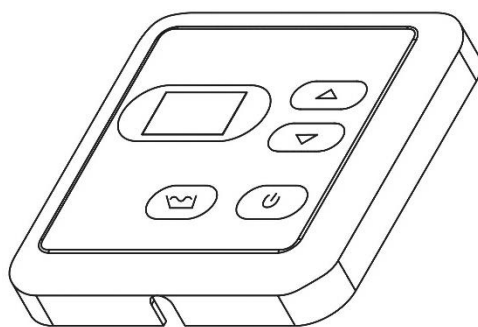
- Near a heat source, such as a cook top, stove or oven. Heat, steam and smoke will interfere with the electronic components of the controllers.
- In direct sunlight.
- In or near a wet area. The controllers are not waterproof. Water may damage the controllers.
- Outdoors. The controllers are not weatherproof.

KITCHEN CONTROLLER

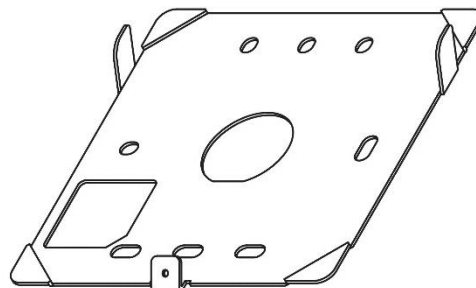
The standard Kitchen controller (Rheem AU - Part 299853, NZ - Part A299850) or Kitchen Deluxe controller (Rheem AU - Part 299861, NZ - Part A299861) is to be installed in the kitchen or laundry only. It has a minimum temperature setting of 37°C and a maximum temperature setting of:

- 874 series 60°C – AU 55°C – NZ
- 876 series 50°C

Choose a suitable location for the Kitchen controller, away from water, heat and sunlight.

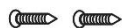


Kitchen controller (standard)



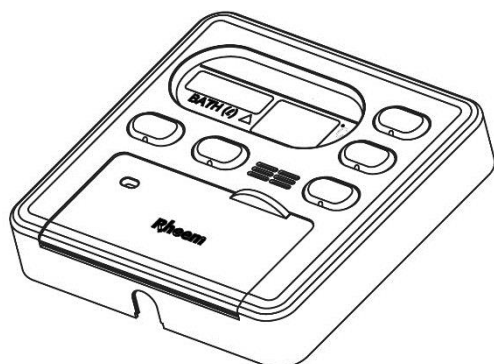
base plate

screw x 2

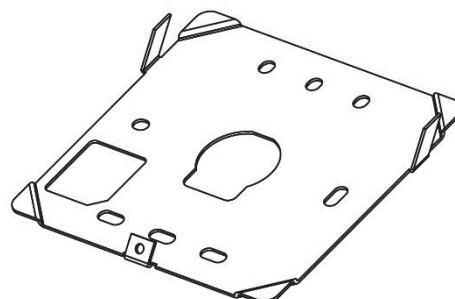


controller screw

Kitchen Controller (Standard) Components

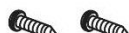


Kitchen Deluxe controller



base plate

screw x 2

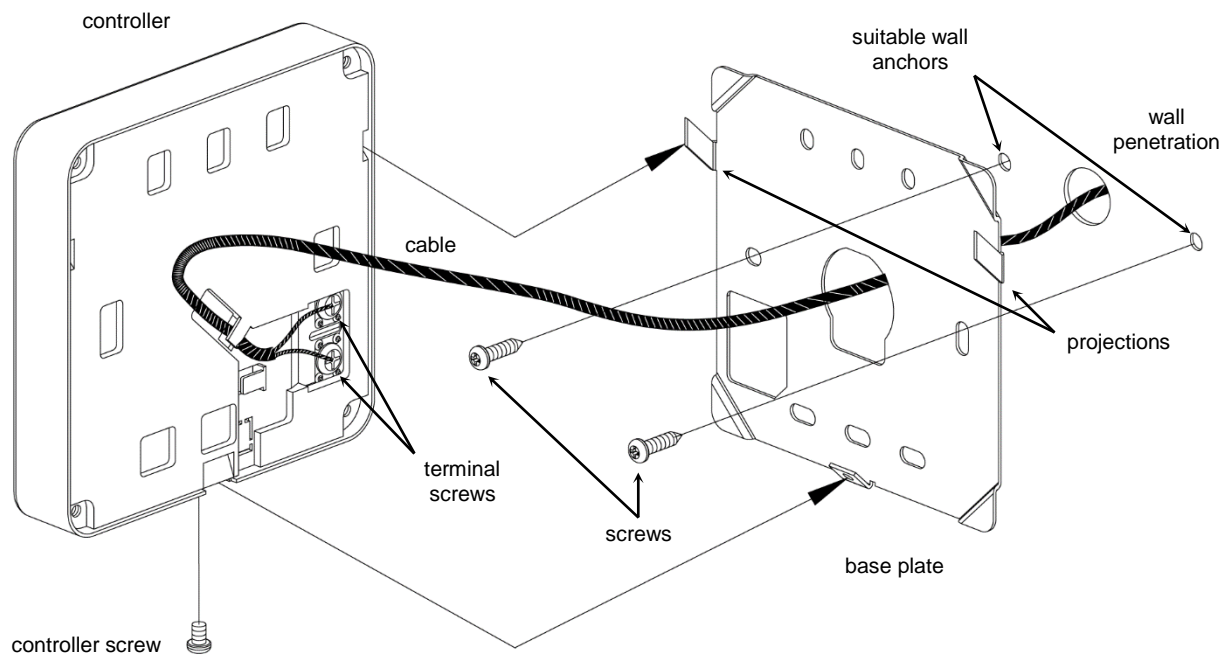


controller screw

Kitchen Deluxe Controller Components

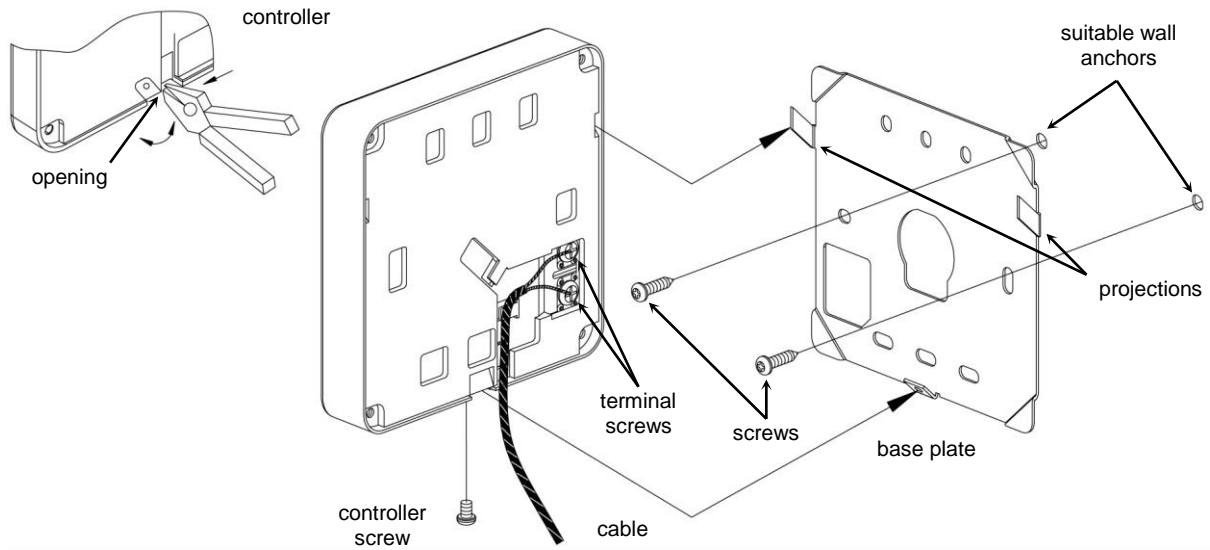
Wiring installation:

1. Penetrate the wall with a 30-35 mm hole at the controller location.
2. Install the Kitchen controller cable between the location of the controller and the water heater.
3. Remove the base plate from the controller.
4. Draw the cable through the central hole in the base plate.
5. Fix the base plate to the wall using suitable screws and wall anchors.
Ensure the projections in the base plate are pointing upwards.
6. Connect the cable to the two terminals on the back of the controller (connections are not polarity sensitive).
Ensure the connecting screws are seated tightly.
7. Place the controller over the base plate.
Ensure the projections in the base plate fit into the housings in the controller.
8. Fix the controller to the base plate at the bottom of the controller, using the controller screw provided.
9. Proceed to [“Connecting the Controller\(s\) to the Water Heater”](#) on page 75.



**Kitchen Controller (Standard and Deluxe) Installation
Concealed Cable**

If it is necessary to have an exposed wiring installation, follow this procedure omitting Steps 1 and 4, and make an opening in the thin section in the underside of the controller to accommodate the cable (as shown in the diagram), prior to Step 6.



**Kitchen Controller (Standard and Deluxe) Installation
Exposed Cable**

BATHROOM 1 AND BATHROOM 2 CONTROLLERS

If only one Bathroom controller is to be installed, the standard Bathroom 1 Controller (Rheem AU - Part 299854, NZ - Part A299851) or the Bathroom 1 Deluxe controller (Rheem AU - Part 299862, NZ - Part A299862) must be used. If two Bathroom controllers are to be installed, one must be a standard Bathroom 1 controller and the other must be a standard Bathroom 2 controller (Rheem AU - Part 299855, NZ - Part A299852) or one must be a Bathroom 1 Deluxe controller and the other must be a Bathroom 2 Deluxe controller (Rheem AU - Part 299863, NZ - Part A299863).

They have a minimum temperature setting of 37°C and a maximum temperature setting of:

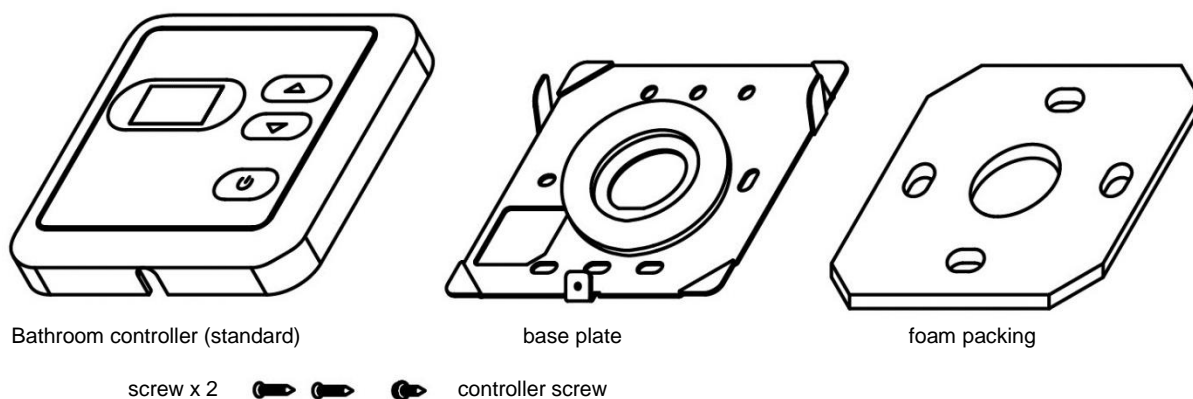
- 874 series 50°C
- 876 series 50°C

The method of installation for the standard Bathroom 1 and Bathroom 2 controllers and the Bathroom 1 Deluxe and Bathroom 2 Deluxe controllers is identical.

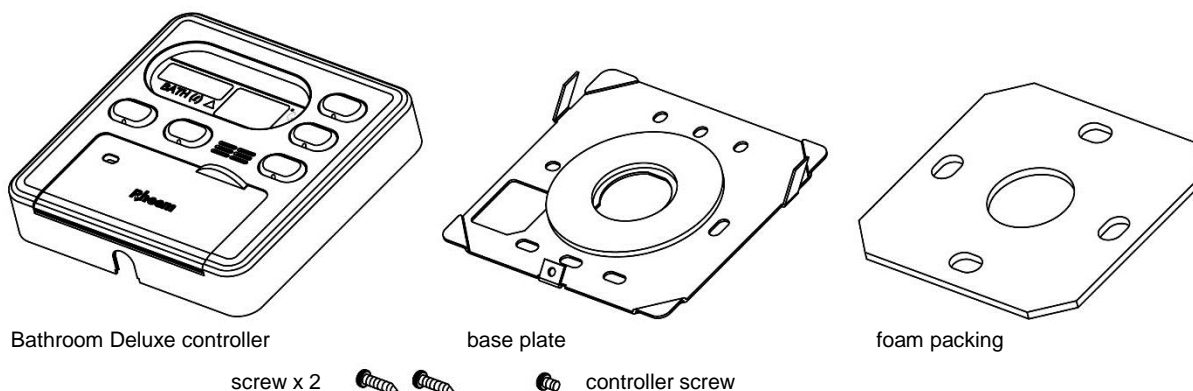
Choose a suitable location for each Bathroom controller, away from water, heat, and sunlight. The Bathroom controllers are supplied with a 250 mm length of wire with connectors to mate with the Bathroom controller cable.

Notes:

- It is not recommended to have exposed wiring in a bathroom.
- Do not apply sealant to the controller cable.



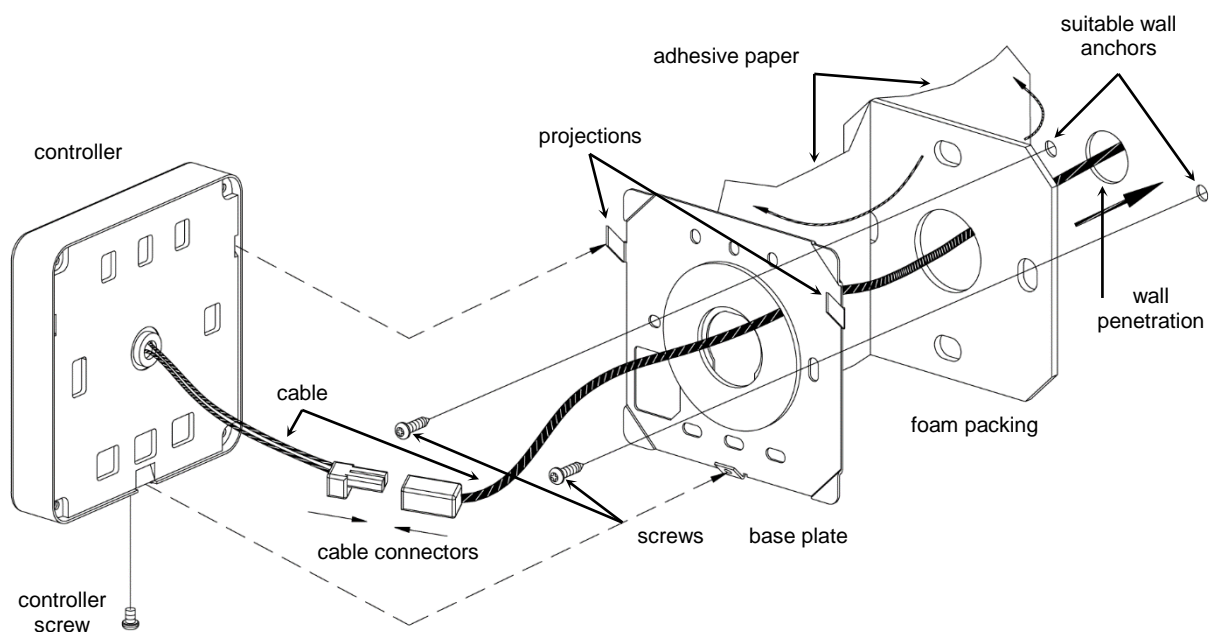
Bathroom 1 and Bathroom 2 Controller Components



Bathroom 1 Deluxe and Bathroom 2 Deluxe Controller Components

Wiring installation:

1. Penetrate the wall with a 30-35 mm hole at the controller location.
2. Install the supplied cable between the location of the controller and the water heater.
3. Remove the base plate from the controller.
4. Peel off one side of the adhesive paper from the foam packing and adhere to the back face of the base plate. This is the side without the projections.
5. Peel off the remaining adhesive paper from the foam packing.
6. Draw the cable through the central hole in the base plate.
7. Fix the base plate to the wall using suitable screws and wall anchors.
Ensure the projections in the base plate are pointing upwards.
8. Plug the controller wire into the Bathroom controller cable.
9. Place the controller over the base plate.
Ensure the projections in the base plate fit into the housings in the controller.
10. Fix the controller to the base plate at the bottom of the controller, using the screw provided.
11. Proceed to [“Connecting the Controller\(s\) to the Water Heater”](#) on page 75.



Bathroom Controller (Standard and Deluxe) Installation

CONNECTING THE CONTROLLER(S) TO THE WATER HEATER

To connect the controller(s) to the water heater:

1. Ensure the electrical supply to the water heater is switched off.
2. Unscrew and gently remove the electrical cover from the underside of the water heater.
3. Draw the cable(s) through the electrical cover.
4. Connect a cable lug from each cable to each of the remote controller terminals. Each cable has two cable lugs.

Ensure the terminal screws are seated firmly and there are no excess wire loops inside of the electrical cover.

- The cable connections are non-polarised.
- Three cable lugs, one from each controller, can be connected to each remote controller terminal.

5. Place the cable(s) in the cable holder notches.

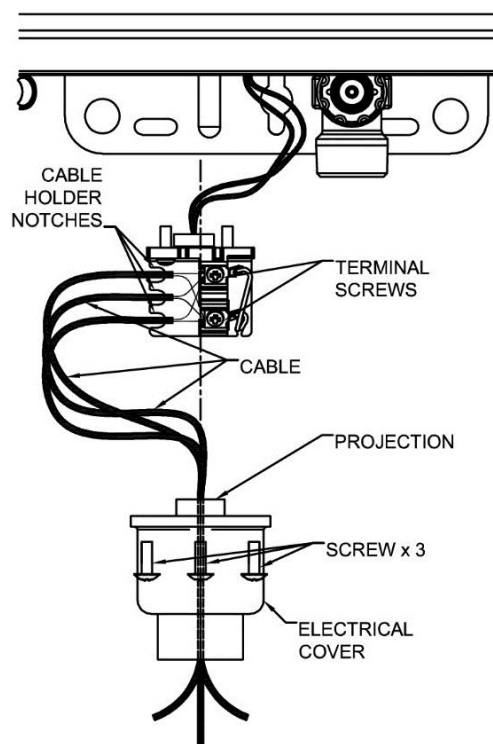
It is important to seat the cables into the cable notches. Failure to do this may cause an unstable contact or even disconnection of the cables from the terminals if the cables were to be pulled.

6. Refit the electrical cover to the water heater and replace the screws.
7. Switch on the electrical supply to the water heater.

Upon completion of the installation of the controllers, it is necessary to test their operation through the complete range of functions (refer to [“Temperature Control”](#) on pages 15 to 44).

Upon completion and testing of the installation, explain to the householder the functions and operation of the controllers and the water heater.

If it is necessary to turn off the water heater on completion of the installation, such as on a building site or where the premises is vacant, follow the procedure [“To Turn Off the Water Heater”](#) on page 85.



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