1 SETTING CLOCK AND DAY

This thermostat is fitted with a real time clock. It is essential that the clock time and day are set accurately if you require your programmed events to start on time. To set follow the steps below:

1. Touch the time display and the time will start flashing. Use the (+) and (–) buttons to set the time. By holding the button down the time will change faster.
2. Press (>) to move to the Day setting and use the (+) and (–) buttons lo get to the correct day.
3. Press DONE to store and exit.

2 CUSTOMISE CONTROLLER SETTINGS

To enter into the setting menu follow the steps below:

1. Turn the thermostat off by pressing POWER.
2. Press MENU and you will then see menu 01.
3. Use the (+) and (–) buttons to adjust menu setting (refer to table below).
4. Press (>) to move to the next Menu and repeat step 3 through all menu option sets (refer to table below).
5. Press DONE to accept and store.

ZONE SELECTION

To alternate between ZONE 1 (Floor Heating) and ZONE 2 (Towel Rail), press the zone number Z1 or Z2 shown on the top line of the display screen.

MENU FEATURE – Basic Menu

1.Sensor selector (F mode by default)
A mode = control of ambient temperature.
F mode = control of floor temperature (floor probe must be installed).
AF mode = control of ambient and floor temperature (floor probe must be installed).

2.Maximum Floor Temp (AF mode only)
This is to protect the floor surface.

3.5 + 2 / 7 Day Mode
This allows you to program either 5 days at once, then the 2 days of the weekend separately, or a full 7 days at the same time, or 7 days separately.
01 = 5+2 day programmable
02 = 7 day programmable

MENU FEATURE – Advanced Menu

In menu 03, press and hold top right corner of the screen for about 5 seconds, you will see menu 04. Press (>) to move to the next Menu.

4. Clock Format
You can select the clock to show in either 12 or 24 hour time.

10. Modes
00 = Manual Mode 01 = Auto Mode

12.Direction of Installation
P = Portrait L = Landscape

Options 5-9 not applicable.

3 OPERATION

Auto Mode
This thermostat has the a bility to programme each individual day of the week separately or programme 7 days of the week at once. You can also programme weekdays (5 days) to one schedule and then weekends (2 days) to a different schedule.

Default schedule

PROGRAM	START TIME	SET POINT
01	WAKE 07.00	22°C
Set to the time you would like to wake to and the temperature you want during the morning, until you leave for the day.		
02	LEAVE 09.30	16°C
Set to the time you leave home and the temperature you wish your home to maintain while you are away at work perhaps.		
03	RETURN 16.30	22°C
Set to the time you return home at the end of the day and the temperature you want during evening until bed time.		
04	SLEEP 22.30	16°C
Set to the time you return home at the end of the day and the temperature you want during evening until bed time.		

To modify the schedule:

1. Press SCHEDULE and the day display will start flashing. Using the arrow to select the day you wish to programme. Then press (>) . (If your thermostat is set to 5+2 day programmable mode, the programming will skip to step 3.)
2. To select every day to follow the some program simply press All Days. Press (>).
3. The LCD screen will show scheduled programme 1 (Pl). This is the first programme function of the day.
4. The default start time for the scheduled program is now flashing. Adjust the time programme 1 event it should commence. Then press (>).
5. The temp is now flashing. Set the temp that you want the floor to heat to during schedule programme 1 event.

Mode A Control Tip: The recommended air temperature setting is 19-21°C.
Mode F Control Tip: The recommended floor temperature setting for tile floors is 24 -28 °C, carpet 25° C, slab, vinyl and timber 27°C.
3. Repeat steps 3, 4 & 5 to set the schedule program event 2,3 & 4. Press DONE to store and exit.

Auto/Manual Mode
Use MENU 10 to select Auto/Manual mode.
In Manual mode the thermostat maintains a constant set temperature manually set by the user. To adjust the set temperature in Manual mode press the temperature and increase it to the required level. In Auto mode, the thermostat executes the preprogrammed schedules.

OVERRIDE Temporary Temperature Override Touch the temperature display, and ii will start to flash. Use the (+) or (–) buttons to adjust. Press DONE to accept, and you will see " O/RIDE " on the lop of the screen . The thermostat will maintain the new set temperature until the next programmed event. To cancel the override setting, press RUN SCHEDULE.

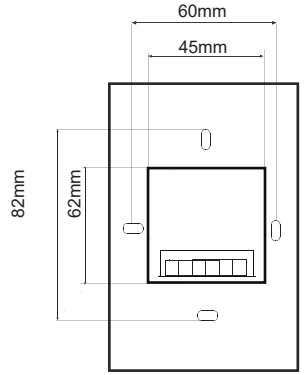
4 LOCK THE KEYPAD

To lock the keypad, press and hold the top left corner of the display for 5 seconds. You will see LOCKED on the screen. To unlock, repeat the steps above and the symbol will disappear.

5 RESET TO FACTORY SETTINGS

With thermostat turned off, press and hold (OFF) for 5 seconds until you see -:- on the LCD screen.

Product name: Thermostat
Model: TS8100W-DUAL-US
Input: 230-240VAC 50Hz
Output:230-240VAC 8/8Amps



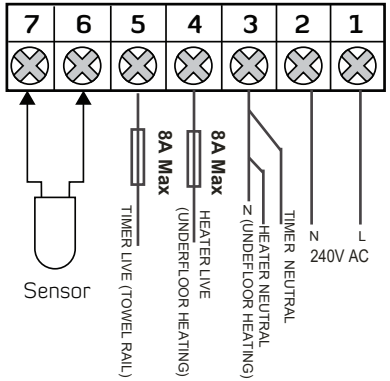
radiant AUSTRALIA

TS8100W-DUAL-US



- ✔ Large colour touch screen
- ✔ 5+2 / 7 day schedules
- ✔ Vertical / horizontal models

WIRING DIAGRAM



WARNING–Important safety instructions

Disconnect the power supply before carrying out any installation or maintenance work on this control unit and associated components. This control unit and associated components should only be installed by a competent person (i.e. a qualified electrician). Electrical installation must be in accordance with appropriate statutory regulations.

The button cell battery inside the product is fixed in place. Should replacement be necessary, it must be performed by a qualified technician.

Mounting of thermostat

Carefully separate the front half of the thermostat from the back plate by placing a small flat head terminal driver into the slots on the bottom face of the thermostat.

Carefully unplug the ribbon connector which is plugged into the front half of the thermostat.

Place the thermostat front half somewhere safe. Terminate the thermostat as per the above wiring diagram.

Screw the thermostat back plate on to the wall plate. Re-connect the thermostat ribbon cable and clip the two halves together.

To ensure the numerical display is correctly orientated during installation, the locating clip tabs must be positioned appropriately relative to the mounting orientation. For vertical mounting, ensure the locating clip / tabs are positioned at the base of the unit. For horizontal mounting, ensure the locating clip / tabs are positioned on the right-hand side when facing the front of the unit. Re-connect the timer cable and clip the two halves together.

Technical data

Product Name: Thermostat
Model: TS8100-DUAL-US

Supply voltage	230-240V AC 50Hz
Output	230-240VAC resistive load (two 8 amp zones)
Clock function	4-event program
Air sensor temp. range	+5°C to +45°C
Air sensor calibration range	-5°C to +5°C
Floor sensor temp. range	+5°C to +45°C
Installation orientation	Portrait / Landscape
Floor sensor type	NTC (10K Ohms)
On/Off differential range	1°C to 10°C
Battery backup	1 x CR1220 3V
Screen backlight life	5,000 hours
Protective housing	IP20
Housing material	PC+ABS

Installation of the external floor sensor

It is recommended that the sensor cable be placed in a non-conductive conduit embedded in the floor. The end of the pipe must be sealed and the pipe placed as high as possible to the surface of the floor finish.

Alternatively, the sensor can be embedded directly in the floor. Note this will make replacing the sensor impossible should it fail.

The sensor cable must be led through a separate conduit from power cables. The tip of the floor sensor must be centred between the heating cables.

The sensor cable may be extended up to 100m by means of a separate two-core cable. The two-core cable must be placed in a separate pipe or segregated from power cables.