Heatmiser PRT/HW-WTS

Wireless Programmable Thermostat with Hot water output

Ref: PRT/HW-WTS

Rev: 1.0



Contents Page

Installation Procedure	2
Pairing the Thermostat with the Receiver	3-4
Temperature Display	4
Setting the Clock	4
Comfort Levels Explained	5
Hot Water Timings Explained	7
Changing the Hot Water Times	8
Locking the Thermostat	9
Temperature Hold & Override	10
Holiday	11
Heat On/Off	13
Clean Screen	13
Factory Reset	13
Calibration	14
Recharging the Battery	14
Optional Feature Setup	15-19

Installation Procedure

Do's

1. Do mount the thermostat at eye level, or if using the desk stand, ensure the thermostat is away from any heat sources.

Don'ts

 Do not push hard on the LCD otherwise you will damage the liquid crystal display and this is not repairable.

Wall mounting

The wall plate is supplied loose. If you are using the wall plate, fix to the wall and then push the thermostat onto the wall plate.

Desk Stand

Remove the wall plate from the back of the thermostat before releasing the desk stand.

Pairing the Thermostat

To pair the thermostat with the receiver, follow these steps;

On the receiver;

- Press the Pair button.
- The Communication LED will come on

On the thermostat;

- Press Prog and then Setup
- At the top of the LCD, you will see 01.
 Use the up arrow to select 05 to enter the pairing function
- In the centre of the LCD, you will see 01. This is the channel address. The default setting of 01 can be used in most cases, but should be changed when a conflict is detected between other RF devices
- Use the Up/Down keys to enter the address
- Press Setup to Pair the thermostat.

Note: You need to finish pairing the thermostat before the receiver pair LED goes out.

Pair Successful

The Comms LED on the receiver should flash and then go out to indicate the pair is successful. The thermostat will then display the communication icon.

Pair Fail

If the Comms LED does not flash there is a problem with the RF signal, and you should reduce the distance between the thermostat and receiver and where possible check that no metal objects are blocking the signal. The LED will automatically go out after 1 minute.

Temperature Display

Room Temp = This is the current room temperature.

SET = This is the temperature you are trying to achieve in your home.

Setting the Clock

To set the clock in your thermostat, follow the steps below;

- With the thermostat turned on, press PROG
- Press Clock
- Use the Up and Down keys to set the correct time
- Press Day to set the correct day
- Press Done to accept and Store

Comfort Levels Explained

Comfort levels allow you to set different temperatures throughout the day. For example, you may want the home warm in the morning when you are getting ready for work, cooler during the day when the house is unoccupied and then warmer in the evening when you are at home relaxing. The thermostat offers 5/2 Day Programming (4 Levels for the Weekday, 4 for the Weekend) and 7 Day Programming (4 Levels for each day).

Tip- If you don't want to use all of the comfort levels, just set the time to --.—and the thermostat will ignore this setting.

Factory Programmed Comfort Levels

The following comfort levels are programmed already, however you can change them easily.

Weekday Level	Time	Temp
Wake	07.00	21°C
Leave	09.00	16°C
Return	16.00	21°C
Sleep	22.00	16°C
Weekend Level		
Wake	09.00	21°C
Leave	22.00	16°C
Return		
Sleep		

Changing the Comfort Levels

- Press PROG and select Wake
- Use the Up/Down keys to set the time for the 1st Comfort Level
- Use the Up/Down keys to set the temperature for the 1st
 Comfort Level
- You should now repeat for the Leave, Return and Sleep levels.
- Press Day to select the next day. In 5/2 day mode the thermostat will highlight Sat Sun prompting you to program the temperature levels for the weekend. In 7 day mode, the thermostat will highlight Tuesday.
- When complete, press Done to store and exit.

Hot Water Timings Explained

The PRT/HW-WTS offers an additional timed output for the hot water cylinder. The thermostat offers 5/2 Day Programming (4 Levels for the Weekday, 4 for the Weekend) and 7 day Programming (4 Levels for each day)

Factory Programmed Hot Water Times

The following hot water switching times are programmed already; however you can change them easily.

Weekday	On Time	Off Time
1	07:00	09:00
2	16:00	20:00
3		
4		
Weekend	On Time	Off Time
Weekend 1	On Time 07:00	Off Time 09:00
1	07:00	09:00

Changing the Hot Water Times

- Press Prog and select Timer
- You will see Time 1 and On Flash
- Use the Up/Down keys to set the time for the 1st switching time
- Press Off and then use the Up/Down keys to set the off switching time.
- You should now repeat for the Time 2-4
- Press Day to select the next day. In 5/2 day mode, the thermostat will highlight Sat, Sun prompting you to program the switching times for the weekend. In 7 day mode, the thermostat will highlight Tuesday.
- When complete, press Done to store and exit.

Locking the Keypad

The thermostat has a keylock facility. To enable this press the bottom right corner of the display and hold for 10 seconds. When activated you will see the lock symbol. To cancel, repeat the steps above

Temperature Set

Using the Up and Down keys allows you to adjust the set temperature. When you press either of these keys, you will see the word SET and the desired temperature. Press Done to accept.

Temperature Hold

The temperature hold function is ideal for parties or when you will be going out for a number of hours. It allows you to hold a temperature for a desired period.

- Press Hold
- Set the desired Hold time and temperature
- Press Done
- To cancel a Hold time, reduce the time to 00.00

Hot Water Override

The thermostat has an override function for the hot water output, allowing you to override the hot water into the opposite state.

- Press Hold
- Press Timer
- If the Hot water is already on, press OFF
- If the Hot water is already off, press ON

The hot water will remain in the override state until the next programmed time. To cancel, repeat the steps above.

Holiday

The Holiday function reduces the set temperature in your home to the frost temperature setting. The thermostat will maintain this temperature for the duration of the holiday and will then automatically return to the program mode on your return.

Assume you program a holiday on Monday for 1 day, the holiday will start immediately will count the next day (Tuesday) as the holiday. The thermostat will then revert back to its program at midnight at midnight Tuesday.

- Press Holiday
- Enter the duration of your holiday
- Press Done
- To cancel a holiday, reduce the Holiday time to 00 days

Frost Protect Mode: Pressing the Power button once will place the thermostat in frost protect mode. In this mode, the thermostat will display the frost icon and will only turn the heating on should the room temperature drop below the set frost temperature (see pages 13-14) Should the heating be turned on whilst in frost mode, the flame symbol will be displayed. To cancel the frost protect mode, press the Power button.

Thermostat Off: To turn the thermostat off completely, press and hold the Power Button. The display and heating will be turned off. To turn the thermostat back on, press the Power button.

Clean Screen

Pressing "Screen" will disable all buttons, allowing you 15 seconds to wipe the screen clean

Factory Reset

Turn off the thermostat by pressing the Power button. Press and hold the Power button for 10 seconds. You will see all the icons appear for 2 seconds and then disappear. The thermostat has been reset to the factory defaults.

Calibration

- Should you need to calibrate the thermostat, follow these steps;
- Turn off the thermostat
- Press and hold the OFF Key for 10 seconds
- Use the Up and Down keys to enter the correct temperature.
- Press Done to store

Battery and Recharging

The thermostat battery should last at least 6 months in normal operating conditions. The thermostat is equipped with a rechargeable battery and is supplied with a mini USB to USB lead so that you can charge the thermostat from your PC's USB port. An optional mains adaptor (PS-USB) is also available.

Feature Setup

Feature 01 – Temperature Format: This function allows you to select between °C or °F

Feature 02 – Switching Differential: This function allows you to adjust the switching differential of the thermostat. This is the number of degrees the thermostat will switch on below the set temperature. This can be adjusted in order to obtain optimum switching of the heating in your home. As an example, the default is 1°C which means the thermostat will switch the heating on 1.0°C below the set temperature.

Feature 03 – Frost Temperature: This is the temperature maintained when the thermostat is in frost mode. The range is 07-17°C. The default is 12°C and is suitable for almost all applications.

Feature 04 – Output Delay: To prevent rapid switching, an output delay can be entered. This can be set from 00-15 minutes. The default is 00 which means there is no delay.

Feature 05 – Pairing Function: Allows the thermostat to be paired with the receiver.

Feature 06 - Fail Safe

If enabled, the thermostat will send a signal to the receiver every 20 minutes. Should the receiver fail to receive the signal from the thermostat, the receiver will activate the heat output for 20% of the time. This is to protect the system against a loss of wireless signal or should the thermostat battery fail whilst you are away.

Feature 07 – Optimum Start: Optimum start will bring the heating on early if needed, so the house is warm when you wake up. This means you don't need to allow any extra heat up time when programming the comfort levels. The thermostat will automatically learn the required heat up time and will adjust itself, if required, throughout the year.

Feature 08 – Rate of Change: This is the number of minutes the thermostat has calculated it takes to raise your building 1°C The thermostat will continue to learn the heat up time of your home and will adjust this setting to suit.

Feature 09 – 5/2 Day or 7 Day: This function allows you to switch between 5/2 day or 7 day programming. 5/2 Day means you can program 4 comfort levels for the weekday and 4 different levels for the weekend. 7 day programming allows you to program 4 temperature levels for each day of the week.

Adjusting the Feature Settings

To adjust the settings, follow these steps;

- With the thermostat turned on.
- Press Prog
- Press Setup
- Use the Up/Down keys at the top of the screen to select the feature number (Shown on page 16)
- Use the Up/Down keys in the centre of the display to adjust the setting
- Press Done to store

Feature Table Doccrintion

Feature	Description	Setting
01	C/F	Temperature Format
02	Switching	0.5 – 03
	Differential	1°C Default
03	Frost Protect	07-17°C
	Temperature	12°C Default
04	Output Delay	00-15 Minutes
		00 Default
05	Pairing	Used to Pair with
		Receiver
06	Fail Safe	00 Disabled
		01 Enabled (00 default)
07	Preheat	00-03 Hours
		00 Default
08	Rate of Change	20 Minutes Default
		(Information Only)
09	5/2 Day	00=5/2 Day 01= 7 Day
	7 Day	00 = Default





