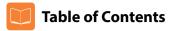
# heatmiser



### Model: Slimline V3





Product Image	1
Table of Contents	2
What is a Programmable Room Thermostat?	3-4
Installation Procedure	5-6
Mode Select/Factory Reset	7
Mode 1 - Thermostat	8
LCD Display	9-10
Setting the Clock	11
Temperature Display	12
Comfort Levels	13-14
Locking the Thermostat	15
Temperature Control	16
Temperature Hold	17
Holiday	18
Frost Protection	19
Heating On/Off	20
<b>Option Features Explained</b>	21-22

Adjusting the Optional Features	23
<b>Optional Features - Table</b>	24
Re-calibrating the Thermostat	25
Error Codes	26
Mode 2 - Time Clock	27
LCD Display	28-29
Setting the Clock	30
Locking the Time Clock	31
Setting the Switching Times	32
Countdown Mode	33
Timer Override	34
Holiday	35
Optional Features Explained	36
<b>Optional Features - Table</b>	36
Adjusting the Optional Features	37
Wiring Diagrams	39-41

# ? What is a Programmable Room Thermostat?

A programmable room thermostat is both a programmer and a room thermostat.

The programmer allows you to set "On" and "Off" periods to suit your own lifestyle. The room thermostat works by sensing the air temperature, switching on the heating when the air temperature falls below the thermostat setting, and switching it off once this set temperature has been reached.

So a programmable room thermostat lets you choose what times you want the heating to be on, and what temperature it should reach while it is on. It will allow you to select different temperatures in your home at different times of the day (and days of the week) to meet your particular needs and preferences.

Setting a programmable room thermostat to a higher temperature will not make the room heat up any faster. How quickly the room heats up depends on the design & size of the heating system.

Similarly reducing the temperature setting does not affect how quickly the room cools down. Setting a programmable room thermostat to a lower temperature will result in the room being controlled at a lower temperature, and saves energy.

The way to set and use your programmable room thermostat is to find the lowest temperature settings that you are comfortable with at the different times you have chosen, and then leave it alone to do its job.

The best way to do this is to set the room thermostat to a low temperature – say  $18^{\circ}$ C, and then turn it up by  $1^{\circ}$ C each day until you are comfortable with the temperature. You won't have to adjust the thermostat further. Any adjustment above this setting will waste energy and cost you more money.

If your heating system is a boiler with radiators, there will usually be only one programmable room thermostat to control the whole house. But you can have different temperatures in individual rooms by installing thermostatic radiator valves (TRVs) on individual radiators.

If you don't have TRVs, you should choose a temperature that is reasonable for the whole house. If you do have TRVs, you can choose a slightly higher setting to make sure that even the coldest room is comfortable, then prevent any overheating in other rooms by adjusting the TRVs.

You are able to temporarily adjust the heating program by overriding or using the temperature hold feature. These features are explained further on pages 16 and 17 of this manual.

Programmable room thermostats need a free flow of air to sense the temperature, so they must not be covered by curtains or blocked by furniture. Nearby electric fires, televisions, wall or table lamps may also prevent the thermostat from working properly.



**Do** Mount the thermostat at eye level. Read the instructions fully so you get the best from our product.



Don't

Do not install near to a direct heat source as this will affect functionality. Do not push hard on the LCD screen as this may cause irreparable damage.

This Slimline Series thermostat is designed to be flush mounted and requires a back box of 35mm (minimum depth) to be sunk into the wall prior to installation.

### Step 1

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.

### Step 2

Place the thermostat front somewhere safe.

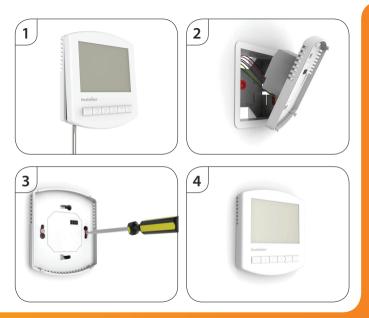
Terminate the thermostat as shown in the diagrams on pages 39-41 of this booklet.

### Step 3

Screw the thermostat back plate securely into the back box.

### Step 4

Clip the front of the thermostat back onto the thermostat back plate.

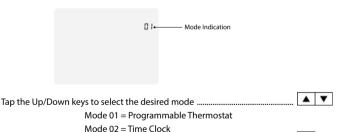




Slimline can either be used as a thermostat or a time clock. Thermostat mode is the default setting.

To change between thermostat & time clock modes, follow these steps.

- Hold down the 'Power' button to turn off the display.....
- Press and hold the Power and Up keys together until the LCD powers up.
  All of the icons will be displayed on screen momentarily ......
  The device will factory reset then provide 2 selectable mode options.



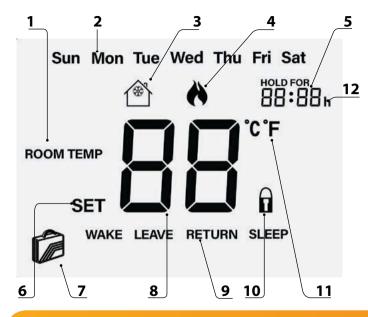
Φ

Φ

Tap the 'Power' button to turn the display on.....





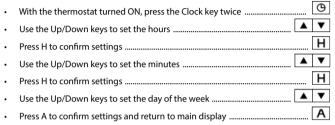




- 1. Room Temp Indicates the current temperature sensor mode.
- 2. Day Indicator Displays the current day.
- 3. Frost Icon Displayed when the thermostat is in frost protection mode.
- 4. Flame Icon Displayed when the thermostat is calling for heat, the flame icon will flash when the optimum start function is in operation.
- Temperature Hold When a Temp Hold is active, HOLD FOR and the remaining time period is displayed.
- Set Indicates when changes are being made to programs or temperature set points.
- 7. Holiday Indicator Displayed when the thermostat is in holiday mode.
- 8. Current Temp Indicates the current sensor temperature.
- Program Cycle Indicator Displayed during programming only to show which period is being altered.
- 10. Keypad Lock Indicator Displayed when the keypad is locked.
- 11. Units of Temperature Degrees Celsius or Fahrenheit.
- 12. Clock Digital clock display in 24h format.

# Setting the Clock (Programmable Mode)

To set the clock, follow these steps.





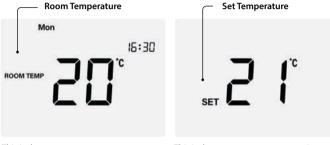
Note: When 'Feature 11' is set to 'Manual Mode' the clock button does not respond.

### **Slimline** Series

SET



The temperature display information is driven by two different inputs; the sensor measurement and the target temperature you have set.



This is the current room temperature.

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



The thermostat offers the following program mode options;

5/2 Day Programming – 4 levels for the weekdays and 4 different levels for the weekend.

7 Day Programming – 4 levels for each day.

24 hour Programming - 4 levels for all days.

Consult the 'Optional Features' section to select the required mode.

To program comfort levels, press Clock once ......





For Weekday/Weekend programming, Mon Tue Wed Thu Fri are displayed on screen. For 7 Day programming, only Mon is displayed in the day indicator field.

For 24 hour programming, all days are displayed.

•	Use the Up/Down keys to enter the required WAKE time		▼
•	Press H to confirm settings		Н
•	Use the Up/Down keys to enter the required WAKE temperature	۸	▼
•	Press H to confirm settings		Н
•	You will now see "LEAVE" displayed on screen.		
•	Repeat the programming steps for each period until complete.		
•	For unused periods enter and the thermostat will ignore the setti	ing.	
•	Press A to confirm settings and return to main display		A
	<b>Note:</b> In 7 Day programming mode you can repeat for each day indeper In Weekday/Weekend programming mode you will see Sat Sun displayed screen and can repeat for the weekend. To change the programming mo	don	tly.

please refer to pages 23-24.

# **C** Locking the Thermostat

The thermostat has a keypad lock facility. To activate the lock follow these steps.

- You will see the lock symbol appear on screen ......
- To unlock, repeat the steps above until the lock symbol disappears.

Note: The keypad lock indicator is only displayed when the lock is active.





The Up/Down keys allow you to adjust the set temperature .....

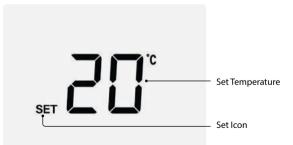
**A V** 

When you press either key, you will see the word SET and the desired temperature will be displayed on screen.

Use the Up/Down keys to adjust the SET value	 ▼	ч
Press A to confirm settings and return to main display	 Α	]

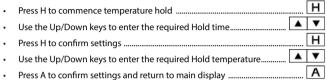
Note: In programmable mode, this new temperature is maintained only until the next programmed comfort level.

In non-programmable mode, this temperature will be constantly maintained.



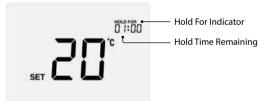


The temperature hold function allows you to manually override the current operating program and set a different temperature for a desired period.



You will see the 'Hold For' indication is displayed on screen.

The time will countdown the set duration and then revert to the normal program.



To cancel temperature hold, follow the same steps but reduce the Hold time to 00:00 hours.



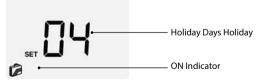
The holiday function reduces the set temperature in your home to the frost protection temperature setting (see page 19).

The thermostat will maintain this temperature for the duration of the holiday and will then automatically return to the program mode on your return.

- Press H three times (until you see the suitcase on screen) .....
- Use the Up/Down keys to enter the number of days holiday ......
- Press A to confirm settings and return to main display .....

The display will show a suitcase indicating the thermostat is in holiday mode.

Note: A holiday period does not start until 00:00 the next day. For example, if you set a holiday period on Friday for 2 days, Saturday will be counted as the first day and the thermostat will revert back to the programmed schedule at 00:00 on Monday.



To cancel, follow the same steps but reduce the Holiday duration to 00 days.

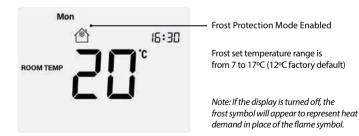
### Model: Slimline V3

н

А



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. Should the heating be turned on whilst in frost mode, the flame icon will be displayed. To cancel the frost protect mode, press the Power button once again.





The heating is indicated ON when the flame icon is displayed.

When the flame icon is absent, there is no requirement for heating to achieve the set temperature but the thermostat remains active.

To turn the thermostat back ON, press the Power button once again .....



Thermostat completely OFF



Thermostat powered ON

\*See Feature 3 on page 21

Model: Slimline V3

ወ



# THE FOLLOWING SETTINGS ARE OPTIONAL AND IN MOST CASES NEED NOT BE ADJUSTED

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

**Feature 02 – Switching Differential:** This function allows you to increase the switching differential of the thermostat. The default is  $1^{\circ}$ C which means that with a set temperature of  $20^{\circ}$ C, the thermostat will switch the heating on at  $19^{\circ}$ C and off at  $20^{\circ}$ C. With a  $2^{\circ}$ C differential, the heating will switch on at  $18^{\circ}$ C and off at  $20^{\circ}$ C.

Feature 03 – Frost Protect: You can set whether the thermostat will maintain the frost temperature when the thermostat display is turned off. As a default, this is enabled.

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 – Temperature Up/Down Limit: This function allows you to limit the use of the up and down keys. This limit is also applicable when the thermostat is locked and so allows you to give others limited control over the heating system.

Feature 06 – Sensor Selection: On this thermostat you can select which sensor should be used. Built in sensor or remote air sensor.

Feature 07 – Floor Temp Limit: This function is not available on this model.

**Feature 08 – Optimum Start:** Optimum start will delay the start up of the heating system to the latest possible moment to avoid unnecessary heating and ensure the building is warm at the programmed time. The thermostat uses the rate of change information to calculate how long the heating needs to raise the building temperature 1°C (with a rate of change of 20, the thermostat has calculated the heating needs 20 minutes to raise the building temperature 1°C) and starts the heating accordingly.

**Feature 09 – Rate Of Change:** This is the number of minutes the thermostat has calculated it takes to raise your building temperature 1°C. The thermostat will continue to monitor and learn the heat up time of your home to optimise heating efficiency.

**Feature 10 – Programming Mode:** The following program modes are available; 5/2 Day Programming – 4 levels for the weekdays and 4 different levels for the weekend.

7 Day Programming – 4 levels for each day.

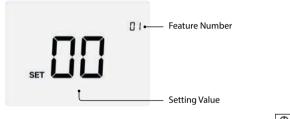
24 Hours – 4 levels over a 24-hour period.

Feature 11 – Thermostat Mode: Here you can set in which mode you would like the thermostat to operate. The options are, manual (non-programmable) or programmable (Comfort Levels).

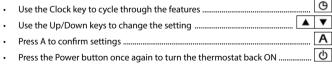


To adjust the optional settings, follow these steps.

- Press and hold the Power button to turn the thermostat OFF ......
- Press and hold the Clock key until the display appears as shown below ......



Θ



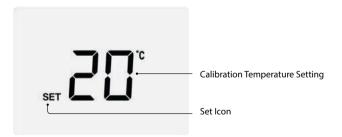


### **Optional Features - Table** Thermostat

FEATURE	DESCRIPTION	SETTING					
01	Temperature Format	$00 = ^{\circ}C$ , $01 = oF$ ( $^{\circ}C = Default$ )					
02	Switching Differential	01° - 03°C (01°C = Default)					
03	Frost Mode	00 = Enabled, 01 = Disabled (00 = Default)					
04	Output Delay	00 - 15 Minutes (00 = Default)					
05	Up/Down Temperature Limit	00° 10°C (00 = Default)					
06	Sensor Selection	00 = Built in Air Sensor 01= Remote Air Sensor					
07	Floor Temperature Limit	Not used on this model					
08	Optimum Start	00 - 03 Hours (00 = Default)					
09	Rate of Change	Minutes to raise by 1°C					
10	Program Mode	00 = 5/2 Day Programming (Default) 01 = 7 Day Programming 02 = 24h Programming					
11	Thermostat Mode	00 = Manual, 01 = Programmable (01 = Default)					

### Re-calibrating the Thermostat

f you	I need to re-calibrate the thermostat, follow these steps.	_	_
•	Press and hold the Power button to turn the thermostat OFF	(	り
·	Press and hold BOTH the Power and Down keys together until the temperature appears on the screen	ወ	▼
	Use the Up/Down keys to configure the new temperature		▼
	Press A to confirm settings		٩
	Press the Power button once to turn the thermostat back ON	(	り





**E0** = The internal sensor has developed a fault. You should contact your thermostat retailer for assistance.

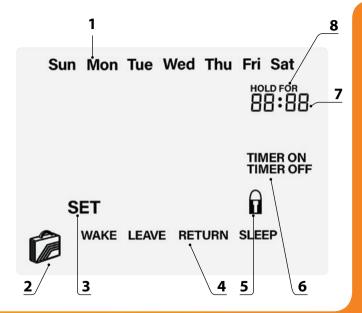
**E2** = The remote air probe has not been connected, has been wired incorrectly or the probe is faulty.







The time clock can be used to control various devices in and around your home e.g. 'Hot Water', 'Towel Rails' or even 'Lighting'. Refer to the manufacturers instructions for wiring to these devices.



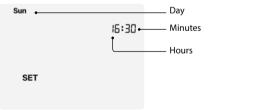


- 1. Day Indicator Displays the current day.
- 2. Holiday Indicator Displayed when the time clock is in holiday mode.
- 3. Set Indicates when changes are being made to programs or clock settings.
- Program Cycle Indicators Displayed during programming only to show which period is being altered.
- 5. Keypad Lock Indicator Displayed when the keypad is locked.
- 6. Timer Status Displays the current status of the timed output.
- 7. Clock Digital clock display in 24h format.
- 8. Hold For Displayed when a timer override is active, the remaining time will be shown.



To set the clock, follow these steps.

In Countdown mode, press the Clock button once	[	Θ
• In either 5/2, 7-day, or 24h mode, press the Clock button twice		
Use the Up/Down buttons to set the hours		
Press H to confirm settings		
Use the Up/Down buttons to set the minutes		▼
Press H to confirm settings	[	Н
Use the Up/Down buttons to set the day of the week		
Press A to confirm settings and return to the main display		



## Locking the Time Clock

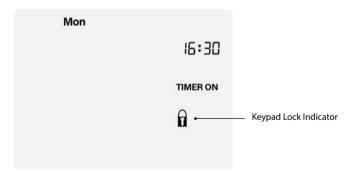
This time clock has a keypad lock facility. To activate the lock follow these steps.

- Press and hold the A and Down keys together for 10 seconds .....
- You will see the lock symbol appear on screen ......

А

• To unlock, repeat the steps above until the lock symbol disappears.

Note: The keypad lock indicator is only displayed when the lock is active.



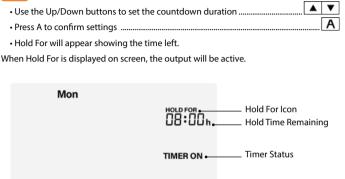
# Ø Setting the Switching Times

To program the switching times, follow these steps.

- Press the Clock button once.....
- You will see Mon (7 day mode), Mon Fri (5/2 day mode) or Mon -Sun (24H mode) displayed on screen. Use the Up/Down buttons to select the TIMER ON for the WAKE switching period
- Press H to confirm settings.....
- Press H to confirm settings.....
- Repeat these steps for LEAVE, RETURN and SLEEP levels.
- For unused periods set the time to --: -- and the time clock will ignore the setting.
- If set to 5/2-day mode you'll now see Sat Sun displayed on screen. Repeat steps above for the weekend settings.
- Press A to confirm settings and return to main display......

н

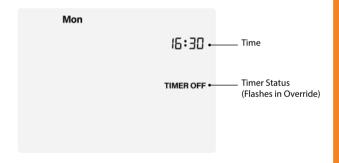




To cancel a countdown period, reduce time to 00:00.



The time clock is able to override its current timer status. If current status =Timer ON, – pressing A will switch it to Timer OFF ...... (TIMER OFF will flash to inform you the programmed output has been overridden) The time clock will return to the program at the next programmed time.





The holiday function allows you to quickly enter a holiday setting. During a holiday, the time clock will maintain TIMER OFF. At the end of your holiday, the time clock will revert back to the programmed setting.

	Press H once (you will see the suitcase displayed on screen)		
•	Use the Up/Down buttons to enter the number of days holiday	▼	
•	Press A to confirm settings	Α	

The display will show a suitcase indicating the time clock is in holiday mode.



To cancel, follow the same steps but reduce the holiday duration to 00 days.



### THE FOLLOWING SETTINGS ARE OPTIONAL AND IN MOST CASES NEED NOT BE ADJUSTED

Feature 01 – Programming Mode: The following program modes are available; 5/2 Day Programming – 4 levels for the weekdays and 4 different levels for the weekend.

7 Day Programming – 4 levels for each day. 24 Hours – 4 levels over a 24-hour period.

Feature 02 - Time Clock Mode: Here you can set in which mode you would like the time clock to operate. The options are, Countdown Timer or Programmable (Switching Times).



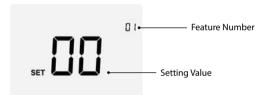
FEATURE	DESCRIPTION	SETTING
01	Programming Mode	00 = 5/2day (default), 01 = 7day, 02 = 24 hours
02	Time Clock Mode	00 = Countdown, 01 = Programmable (Default)



To adjust the optional settings, follow these steps.

- Press and hold the Power button to turn the time clock OFF.....
- Press and hold the Clock key until the display appears as shown below.....



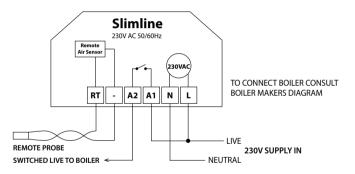


Use the Clock key to cycle through the features	Φ
Use the Up/Down keys to change the setting	▼
Press A to confirm settings	Α
Press the Power button once again to turn the time clock back ON	ዑ



### Wiring Diagram - Slimline to Boiler 230v

#### THIS UNIT MUST BE PROTECTED BY A FUSE OR RCD

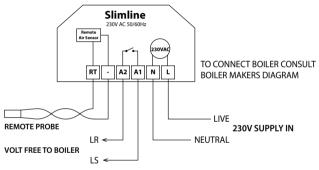


This product must only be installed by a qualified electrician and comply with local installation regulations.



### Wiring Diagram - Slimline to Boiler Voltfree

### THIS UNIT MUST BE PROTECTED BY A FUSE OR RCD



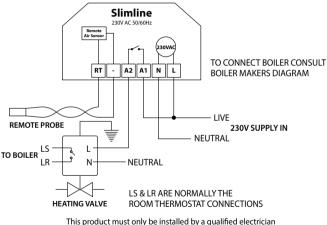
LS & LR ARE NORMALLY THE ROOM THERMOSTAT CONNECTIONS

This product must only be installed by a qualified electrician and comply with local installation regulations.



### Wiring Diagram - Slimline to Spring Return Valve

### THIS UNIT MUST BE PROTECTED BY A FUSE OR RCD



and comply with local installation regulations.



The time clock can be used to control various devices in and around your home e.g. lighting or towel rails.

Refer to the manufacturers instructions for wiring to these devices.

| ••••• | <br> |
|-------|------|------|------|------|------|------|------|------|
|       | <br> |
|       | <br> |
|       | <br> |
|       | <br> |
|       | <br> |
|       | <br> |
|       | <br> |
|       | <br> |
|       | <br> |



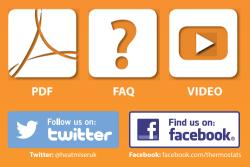





### Want More Information?

Call our support team on: +44 (0)1254 669090

Or view technical specifications directly on our website: www.heatmiser.com



Heatmiser UK Ltd, Units 1-5 Hurstwood Court, Mercer Way Shadsworth Business Park, Blackburn, Lancashire, BB1 2QU, United Kingdom. Rev. 1.3