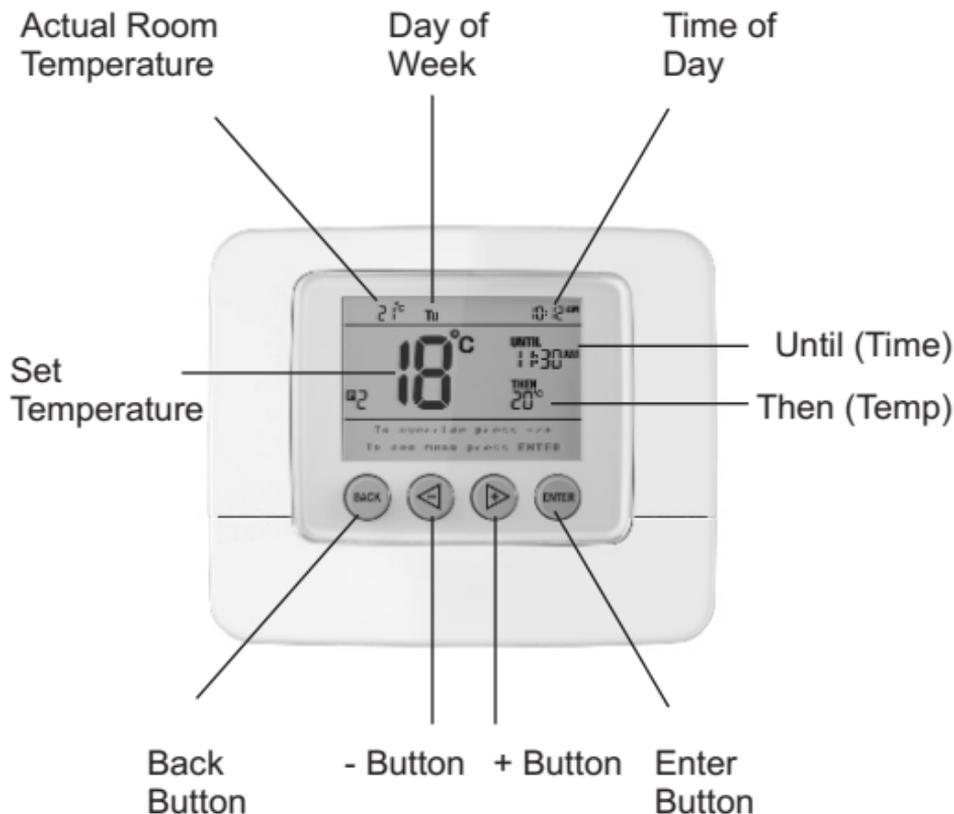# SECURE

SCS317

User Instructions

SCS317 7 Day Wireless Programmable Room Thermostat

Programmable room thermostats are widely recognised as one of the best ways in which to control central heating. The SCS317 programmable room thermostat has a large display and intuitive user interface, making it easy to set up and use. SCS317 uses a sophisticated time proportional integral (TPI) algorithm for accurate temperature control and energy efficiency.

SCS317

DISPLAY

Actual Room Temperature

Day of Week

Time of Day

Set Temperature

Until (Time)

Then (Temp)

Back Button

- Button

+ Button

Enter Button

DISPLAY

Actual Room Temperature	This is the actual room temperature measured by the SCS317
Set Temperature	This is the temperature that the SCS317 will allow the room to reach. The temperature range can be set between 5°C and 30°C
	When the temperature shown in the display is achieved the SCS317 will switch the heating OFF.
	If the temperature in the room falls below the setting the SCS317 will switch the heating ON.
Until (time)	This is the time that the next temperature setting is due to operate
Then (temp)	This is the temperature setting that is due to operate next
Day of the week	It is important that the correct day of the week shows in the display
Time of day	This is the current time of day
Setting Buttons	Press any button to illuminate the display.
	The message 'To override press -/+ To see menu press ENTER' will appear
¡ No Radio waves	Wireless connection not set up
📡 Solid Radio Antenna	Z-Wave communication present – Flashing Radio Antenna – Temporary loss of Z-Wave communication

ACTIVATING THE BACK-LIT DISPLAY

Press any button to illuminate the display. This will remain illuminated for 10 seconds

GENERAL INFORMATION

During programming please note that the display will return to its normal operating screen if the last button press exceeds 10 seconds.

TEMPORARY OVERRIDE

A temporary temperature change can be made at any time. It is also possible to extend how long this temperature override is in operation.

Press '-' or '+' to adjust temperature	➡	New temperature setting will be shown on the display

The temperature will revert to its normal programmed setting at the next timed temperature change

TEMPORARY OVERRIDE WITH TIME EXTENSION
(Maximum of 4 hours)
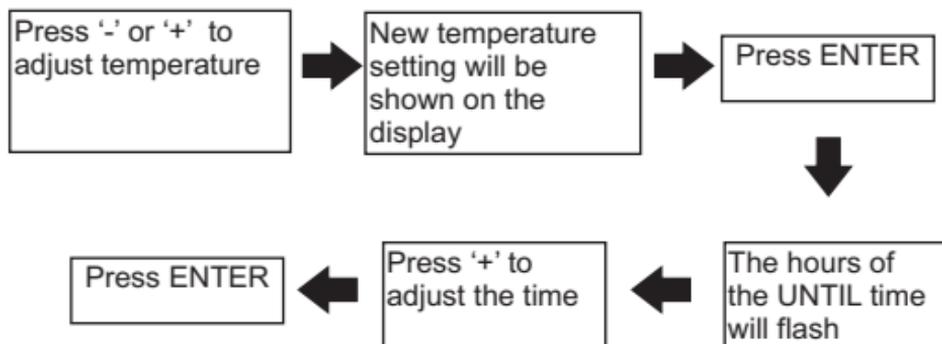
Press '-' or '+' to adjust temperature	➡	New temperature setting will be shown on the display	➡	Press ENTER

Press ENTER	⬅	Press '+' to adjust the time	⬅	The hours of the UNTIL time will flash

The temperature will revert to its normal programmed setting at the next timed temperature change.

PERMANENT OVERRIDE

```
┌─────────────────┐    ┌─────────────────┐    ┌─────────────────┐
│ Press '-' or '+'│    │ New temperature │    │  Press ENTER    │
│ to adjust       │ ▶  │ setting will be │ ▶  │                 │
│ temperature     │    │ shown on the    │    │                 │
│                 │    │ display         │    │                 │
└─────────────────┘    └─────────────────┘    └─────────────────┘
                                                        │
                                                        ▼
┌─────────────────┐    ┌─────────────────┐    ┌─────────────────┐
│  Press ENTER    │    │ Press the '+'   │    │ The hours of    │
│                 │ ◀  │ repeatedly until│ ◀  │ the UNTIL time  │
│                 │    │ HOLD appears in │    │ will flash      │
│                 │    │ the display     │    │                 │
└─────────────────┘    └─────────────────┘    └─────────────────┘
         │
         ▼
┌─────────────────┐
│ Message will    │
│ appear briefly  │
│ confirming      │
│ 'Temperature set│
│ until manual    │
│ release'        │
└─────────────────┘
```
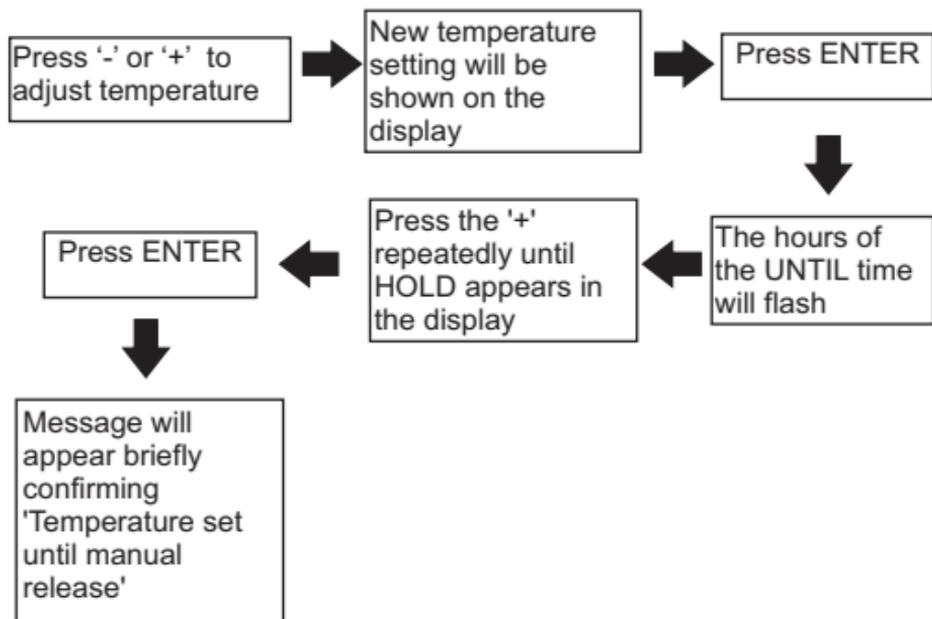
In the 'HOLD' position the temperature can be overridden by pressing either the '-' or '+' buttons. This will then become the new 'HOLD' temperature

PERMANENT OVERRIDE – CANCELLATION

```
┌─────────────┐    ┌─────────────┐
│ Press BACK  │ ▶  │ Press ENTER │
└─────────────┘    └─────────────┘
```

SETTING UP THE SCS317

Upon initial installation the SCS317 has the following factory default settings

Settings – Monday to Friday

	Time	Target Temperature
Period 1	06:00 am	20 °C
Period 2	08:30 am	18 °C
Period 3	11:30 am	20 °C
Period 4	01:30 pm	18 °C
Period 5	05:00 pm	21 °C
Period 6	10:00 pm	15 °C

Settings – Saturday and Sunday

	Time	Target Temperature
Period 1	07:00 am	20 °C
Period 2	10:00 am	19 °C
Period 3	11:30 am	21 °C
Period 4	01:30 pm	18 °C
Period 5	05:00 pm	21 °C
Period 6	11:00 pm	15 °C

These can be changed by the installer or the end user at any time by accessing the MAIN MENU

MAIN MENU

To access the MAIN MENU take the following steps:

Press ENTER twice	➡	Press '-' or '+' to toggle between the menu options

MENU OPTIONS

Programme	This allows the user to adjust the different time and temperature settings from the factory default settings shown in the table on page 6. Up to six different temperature levels can be set in any 24 hour period
Standby	This puts the SCS317 into Frost protection or Standby condition and allows the heating to be permanently switched off but will activate and switch the heating on if the temperature in the house falls below the standby temperature set. All programme settings are overridden and the unit will not return to normal operation until the standby period has ended by pressing the ENTER button.
Holiday	This puts the SCS317 into a temporary standby mode with a start and end date which can be set to coincide with a holiday period. At the end of the set period the SCS317 will resume normal operation
Time / Date	The SCS317 has a built in clock and calendar. This will require setting on initial installation. If this has not been set on installation please go to Setting the TIME and DATE section on page 12 before continuing
Set Up	Enables the programming of various options outlined in the SET UP MENU on page 13 of these instructions – These should be set on installation.

Setting the PROGRAMME

Six time and temperature settings are available in each 24 hour period. Pressing BACK at any time in this process will return you to normal operating mode.

Press ENTER three times → The day of the week will flash → Press '-' or '+' to select day to programme

↓

Press '-' or '+' to select time / temperature period you wish to set (P1 to P6) ← Time / Temperature setting P1 will flash ← Press ENTER

↓

Press ENTER → Temperature will flash, use the '-' or '+' to select the required temperature → Press ENTER

↓

Press '-' or '+' to adjust the minutes then press ENTER. ← Press '-' or '+' to adjust the hours then press ENTER. The minutes will then flash. ← The hours START time will flash

↓

If you require to set further periods for the same day, the next period will now automatically flash. Follow this process again to programme as required	On completion of period 6 (P6) go to the copy process on Page 9 of this booklet

If only two different temperature settings are required in 24 hours then set the first time and temperature using programme one (P1) and the second time and temperature setting using programme setting two (P2). The remaining programmes (P3 to P6) should all be set to the same time and temperature as P2.

This same method can be used if three, four or five temperature levels are required, always using the first settings to provide the temperature change commands with the remaining settings that are not required set to the same time and temperature as the last required setting.

To copy the same programmes to other days of the week, please follow the process below

```
┌─────────────────────┐      ┌─────────────┐      ┌─────────────────────┐
│ When you have set   │      │ Press ENTER │      │ The next            │
│ P6 the message 'To  │ ───► │             │ ───► │ sequential day      │
│ Copy press ENTER'   │      │             │      │ will now flash.     │
│ will appear.        │      │             │      │                     │
└─────────────────────┘      └─────────────┘      └─────────────────────┘
                                                             │
                                                             ▼
┌─────────────────────┐                          ┌─────────────────────┐
│ When complete press │                          │ Press '-' or '+' to │
│ BACK to return to   │ ◄────────────────────────│ select the days you │
│ normal operating    │                          │ wish to copy the    │
│ mode                │                          │ set programmes.     │
└─────────────────────┘                          │ Pressing ENTER      │
          │                                       │ after each day to   │
          ▼                                       │ confirm             │
┌─────────────────────┐                          └─────────────────────┘
│ To programme        │
│ remaining days      │
│ please go to the    │
│ start of the        │
│ process 'Setting    │
│ the PROGRAMME'      │
└─────────────────────┘
```

Setting the STANDBY

```
┌─────────────────┐      ┌─────────────────────┐      ┌─────────────┐
│ Press ENTER     │ ───► │ Press '-' or '+'    │ ───► │ Press ENTER │
│ Twice           │      │ until STANDBY       │      │             │
│                 │      │ appears on the      │      │             │
│                 │      │ display             │      │             │
└─────────────────┘      └─────────────────────┘      └─────────────┘
                                                              │
                                                              ▼
┌─────────────────────┐                          ┌─────────────────────┐
│ After a short       │                          │ The words STANDBY   │
│ period Standby      │ ◄────────────────────────│ and Standby Enabled │
│ Enabled will        │                          │ will appear on the  │
│ disappear from      │                          │ display             │
│ the display         │                          │                     │
└─────────────────────┘                          └─────────────────────┘
```

To exit STANDBY mode, press ENTER TWICE

Setting the HOLIDAY programme

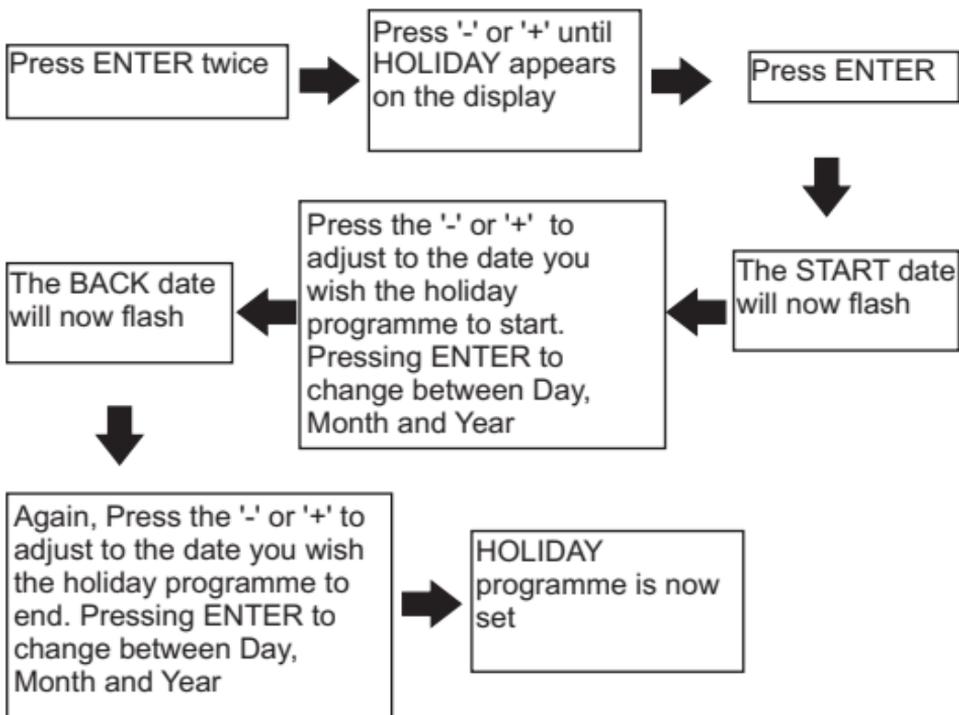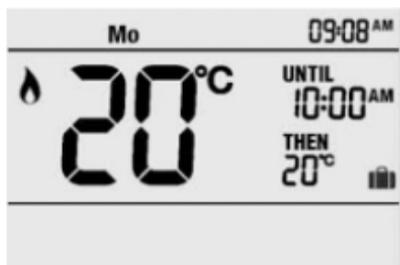Pressing BACK at any time in this process will return you to normal operating mode

```
┌─────────────────┐     ┌─────────────────┐     ┌─────────────────┐
│ Press ENTER     │ ──▶ │ Press '-' or '+'│ ──▶ │ Press ENTER     │
│ twice           │     │ until HOLIDAY   │     │                 │
│                 │     │ appears on the  │     │                 │
│                 │     │ display         │     │                 │
└─────────────────┘     └─────────────────┘     └─────────────────┘
```

```
┌─────────────┐  ◀─ ┌──────────────────────┐ ◀─ ┌─────────────────┐
│ The BACK    │     │ Press the '-' or '+'  │    │ The START date  │
│ date will   │     │ to adjust to the date │    │ will now flash  │
│ now flash   │     │ you wish the holiday  │    │                 │
│             │     │ programme to start.   │    │                 │
│             │     │ Pressing ENTER to     │    │                 │
│             │     │ change between Day,   │    │                 │
│             │     │ Month and Year        │    │                 │
└─────────────┘     └──────────────────────┘    └─────────────────┘
```

```
┌──────────────────────┐ ──▶ ┌─────────────────┐
│ Again, Press the '-'  │     │ HOLIDAY         │
│ or '+' to adjust to   │     │ programme is now│
│ the date you wish     │     │ set             │
│ the holiday programme │     │                 │
│ to end. Pressing      │     │                 │
│ ENTER to change       │     │                 │
│ between Day, Month    │     │                 │
│ and Year              │     │                 │
└──────────────────────┘     └─────────────────┘
```

If the holiday period START date matches today's date, the STANDBY temperature will be shown on the display together with the suitcase icon.

If the holiday period START date does not match today's date the display will remain in normal operating mode but with the suitcase icon appearing on the right of the display. Indicating a holiday period is pending
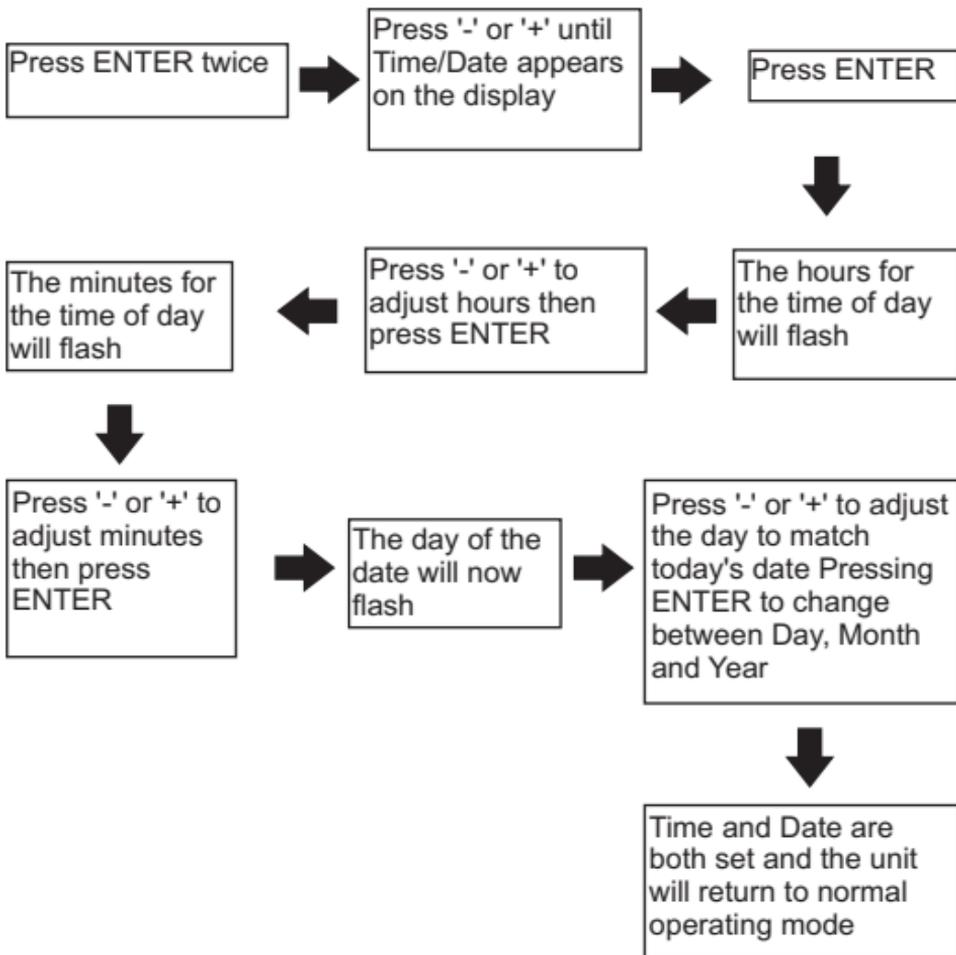

To cancel a set holiday programme in ADVANCE of its activation, re-programme using the above procedure and set the START date and BACK date to today's date.

To cancel a set holiday programme during activation press ENTER button twice, the unit will return to normal operating mode and the suitcase icon will disappear.

THE DATES SPECIFIED BECOME EFFECTIVE FROM MIDNIGHT OF THE DAY ENTERED
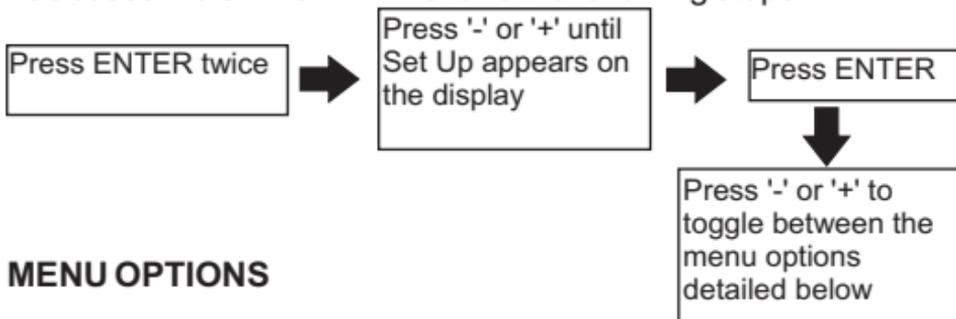
Setting the TIME and DATE

Pressing BACK at any time in this process will return you to normal operating mode

```
Press ENTER twice  ➡  Press '-' or '+' until        ➡  Press ENTER
                        Time/Date appears
                        on the display
                                                            ⬇

The minutes for    ⬅  Press '-' or '+' to         ⬅  The hours for
the time of day        adjust hours then              the time of day
will flash             press ENTER                     will flash
      ⬇

Press '-' or '+' to    The day of the      ➡  Press '-' or '+' to adjust
adjust minutes     ➡  date will now          the day to match
then press             flash                  today's date Pressing
ENTER                                          ENTER to change
                                               between Day, Month
                                               and Year
                                                            ⬇

                                               Time and Date are
                                               both set and the unit
                                               will return to normal
                                               operating mode
```

If an incorrect date is entered the wrong day will appear in the normal operating screen.

SETUP MENU

To access the SET UP MENU take the following steps:

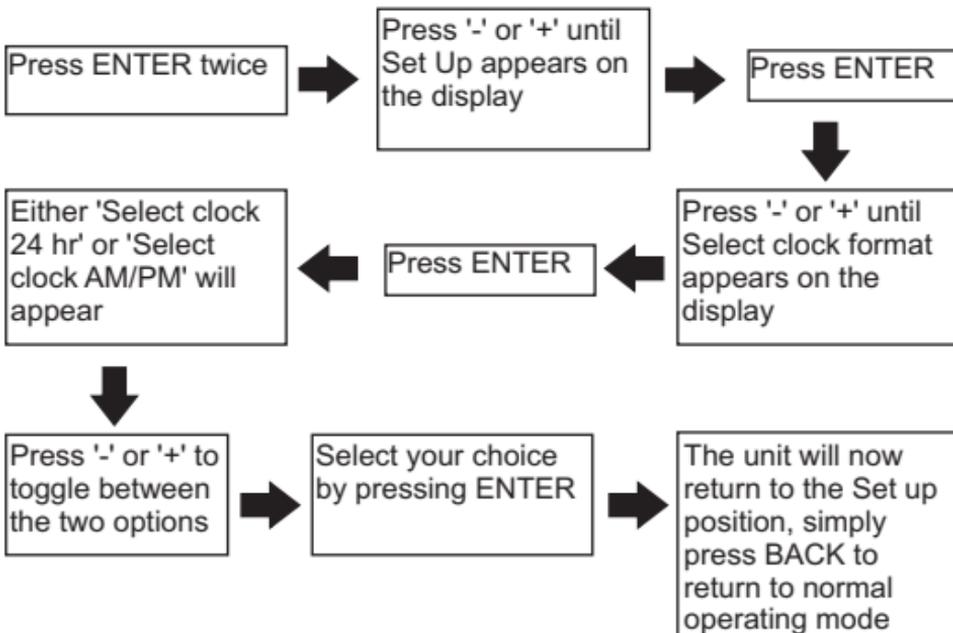Press ENTER twice ➡ Press '-' or '+' until Set Up appears on the display ➡ Press ENTER

⬇

Press '-' or '+' to toggle between the menu options detailed below

MENU OPTIONS

Select clock format	This allows the display to show the time in 24 hour or AM/PM format
Daylight saving	This is the adjustment made in the UK when the clocks go back or forward in the Autumn and Spring. Default setting ON
Standby temperature	This is the temperature setting used when in Standby or Holiday mode (Min 5°C / Max 30°C) In cold weather the heating will activate if the temperature being measured falls below this temperature setting.
Lower temperature limit	This sets the lowest temperature setting the SCS317 will allow to be programmed. The default setting is 5°C
Upper temperature limit	This sets the highest temperature setting the SCS317 will allow to be programmed The default setting is 30°C

MENU OPTIONS (Contd...)

TPI cycles per hour	This setting helps the TPI energy saving software to operate correctly depending on the type of heating system you have
Optimum start	This calculates the amount of time the SCS317 may need to switch on in advance of the next target temperature setting in order to meet the requirement.
Tamper setting	This setting allows a 4 digit release code to be set up to stop unauthorised adjustments being made in multi occupancy buildings.
Set up Z-Wave	Wireless connection to receiver

Setting the SELECT CLOCK FORMAT

Pressing BACK at any time in the process will return you to normal operating mode

Press ENTER twice → Press '-' or '+' until Set Up appears on the display → Press ENTER

↓

Either 'Select clock 24 hr' or 'Select clock AM/PM' will appear ← Press ENTER ← Press '-' or '+' until Select clock format appears on the display

↓

Press '-' or '+' to toggle between the two options → Select your choice by pressing ENTER → The unit will now return to the Set up position, simply press BACK to return to normal operating mode
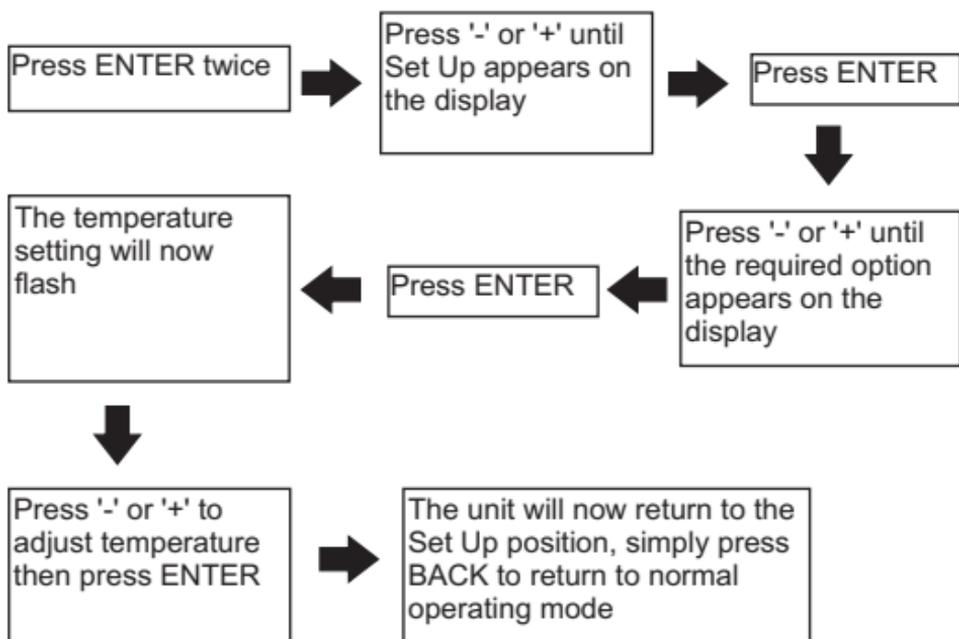
Setting the DAYLIGHT SAVING

Pressing BACK at any time in this process will return you to normal operating mode

The default factory setting is for the Daylight saving to be ON.

```
┌─────────────────┐      ┌─────────────────┐
│ Press ENTER     │ ──►  │ Press '-' or '+'│ ──►  ┌─────────────┐
│ twice           │      │ until Set Up    │      │ Press ENTER │
└─────────────────┘      │ appears on the  │      └─────────────┘
                         │ display         │            │
                         └─────────────────┘            ▼
┌─────────────────┐      ┌─────────────────┐      ┌─────────────────┐
│ Either 'Daylight│      │                 │      │ Press '-' or '+'│
│ Saving Off' or  │ ◄──  │ Press ENTER     │ ◄──  │ until Daylight  │
│ 'Daylight Saving│      │                 │      │ saving appears  │
│ On' will appear │      └─────────────────┘      │ on the display  │
│ on the display  │                               └─────────────────┘
└─────────────────┘
        │
        ▼
┌─────────────────┐      ┌─────────────────┐      ┌─────────────────┐
│ Press '-' or '+'│      │ Select your     │      │ The unit will   │
│ to toggle       │ ──►  │ choice by       │ ──►  │ now return to   │
│ between the two │      │ pressing ENTER  │      │ the Set up      │
│ options         │      └─────────────────┘      │ position, simply│
└─────────────────┘                               │ press BACK to   │
                                                  │ return to normal│
                                                  │ operating mode  │
                                                  └─────────────────┘
```
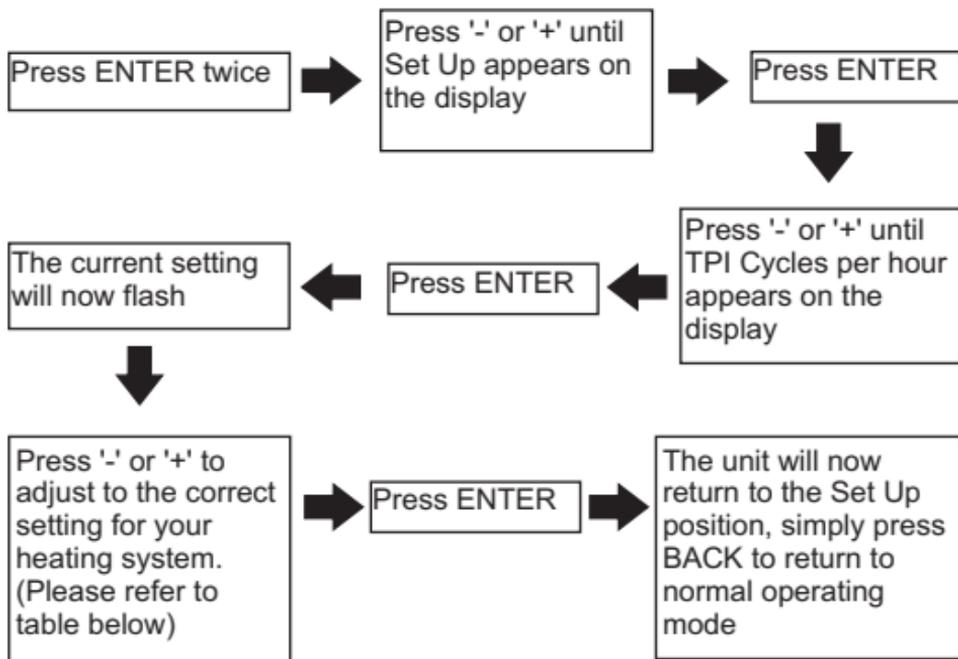
Setting the STANDBY TEMPERATURE, LOWER TEMPERATURE LIMIT or UPPER TEMPERATURE LIMIT

Pressing BACK at any time in this process will return you to normal operating mode

```
Press ENTER twice  →  Press '-' or '+' until Set Up appears on the display  →  Press ENTER
                                                                                   ↓
The temperature setting will now flash  ←  Press ENTER  ←  Press '-' or '+' until the required option appears on the display
        ↓
Press '-' or '+' to adjust temperature then press ENTER  →  The unit will now return to the Set Up position, simply press BACK to return to normal operating mode
```

Setting the TPI cycles

Pressing BACK at any time in this process will return you to normal operating mode

```
Press ENTER twice  →  Press '-' or '+' until     →  Press ENTER
                      Set Up appears on
                      the display
                                                        ↓
The current setting  ←  Press ENTER  ←  Press '-' or '+' until
will now flash                          TPI Cycles per hour
                                        appears on the
                                        display
      ↓
Press '-' or '+' to     →  Press ENTER  →  The unit will now
adjust to the correct                      return to the Set Up
setting for your                           position, simply press
heating system.                            BACK to return to
(Please refer to                           normal operating
table below)                               mode
```

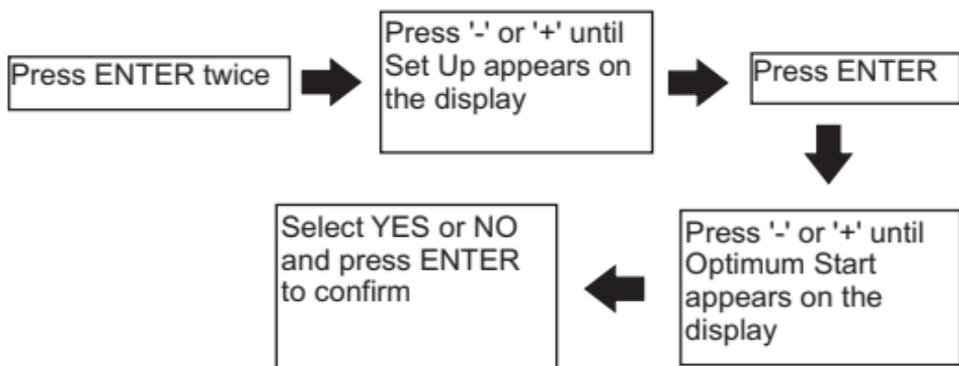| Oil Boilers | 3 cycles per hour |
Gas Boilers	6 cycles per hour
Not used	9 cycles per hour
Electric Heating	12 cycles per hour

This feature would normally be set by your installer

Setting the OPTIMUM START

This setting will allow the SCS317 to anticipate the next set temperature and switch on up to two hours in advance to ensure room temperature has been reached by the time the new set temperature applies.

As a consequence the switch on time could take place anywhere between 2 hours and zero before the set time and temperature.

With the optimum start set to OFF the user will need to anticipate the warm up time needed in the programme settings. (Typically the set temperature will be set approx. 1 hour in advance of when it is required)

Pressing BACK at any time in this process will return you to normal operating mode
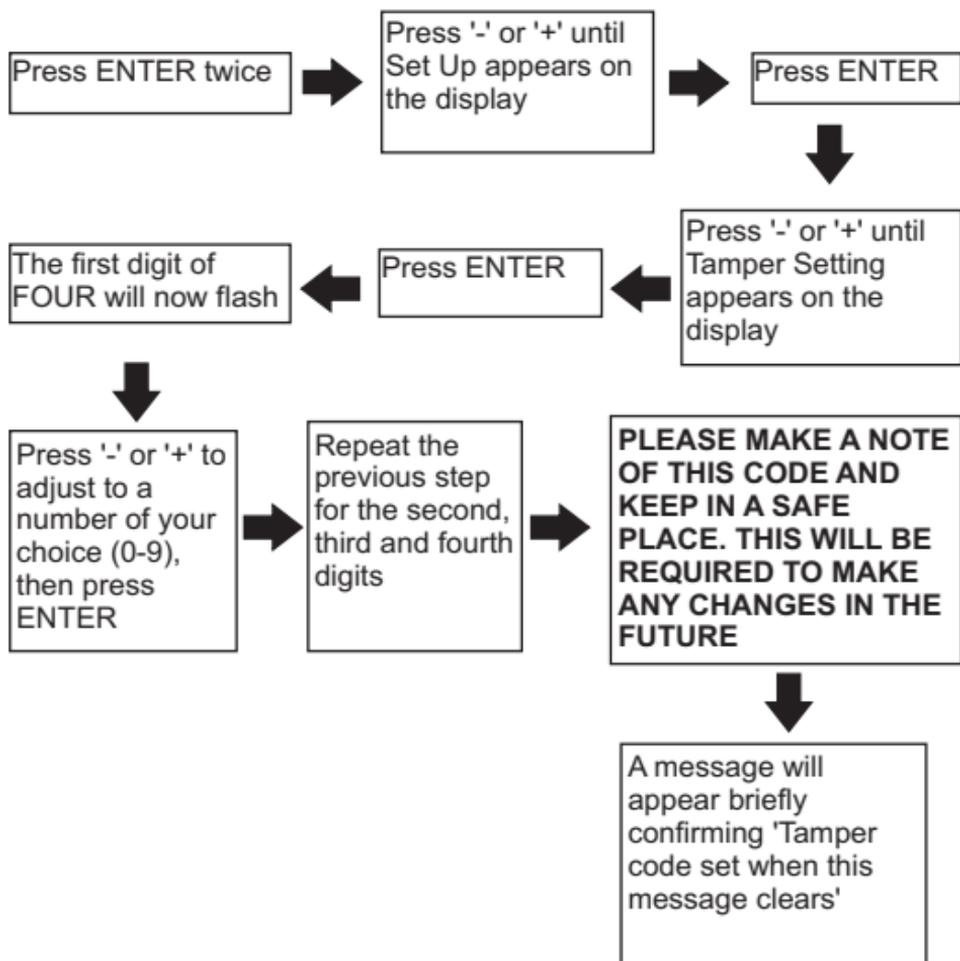
```
┌─────────────────┐     ┌─────────────────┐     ┌─────────────────┐
│ Press ENTER     │ ──▶ │ Press '-' or '+'│ ──▶ │ Press ENTER     │
│ twice           │     │ until Set Up    │     │                 │
│                 │     │ appears on the  │     └─────────────────┘
└─────────────────┘     │ display         │              │
                        └─────────────────┘              ▼
┌─────────────────┐     ┌─────────────────┐
│ Select YES or NO│ ◀── │ Press '-' or '+'│
│ and press ENTER │     │ until Optimum   │
│ to confirm      │     │ Start appears on│
│                 │     │ the display     │
└─────────────────┘     └─────────────────┘
```

This feature would normally be set by your installer.

Setting the TAMPER SETTING

This setting allows the unit to be locked to the programmes set and can only be reactivated by entering the pin code.
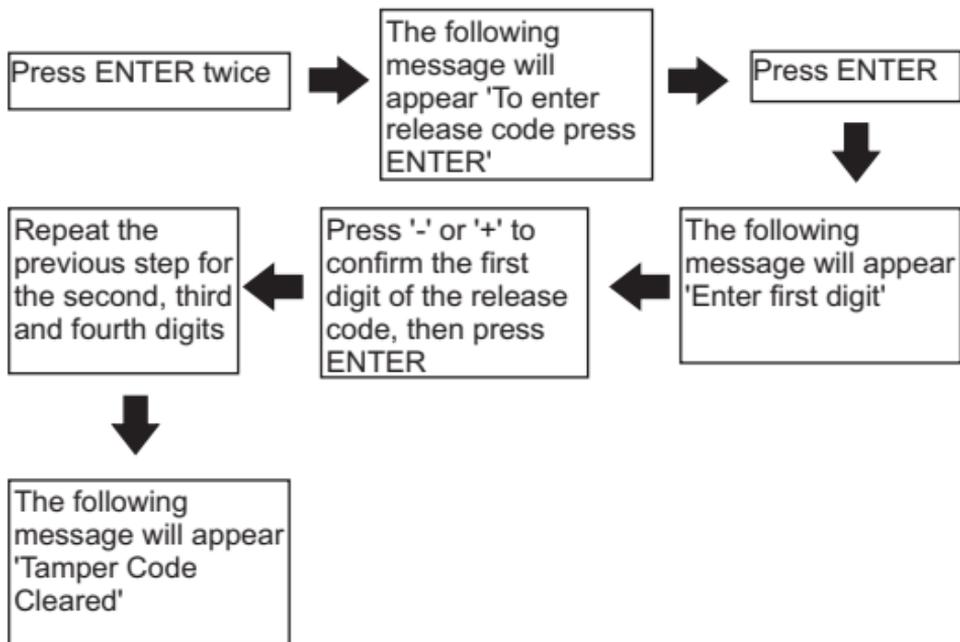
None of the buttons will operate until the security code is entered

Pressing BACK at any time in this process will return you to normal operating mode

```
┌──────────────┐     ┌──────────────────┐     ┌──────────────┐
│ Press ENTER  │ ──> │ Press '-' or '+' │ ──> │ Press ENTER  │
│ twice        │     │ until Set Up     │     │              │
│              │     │ appears on the   │     │              │
│              │     │ display          │     │              │
└──────────────┘     └──────────────────┘     └──────┬───────┘
                                                      │
                                                      v
┌──────────────┐     ┌──────────────┐     ┌──────────────────┐
│ The first    │ <── │ Press ENTER  │ <── │ Press '-' or '+' │
│ digit of     │     │              │     │ until Tamper     │
│ FOUR will    │     │              │     │ Setting appears  │
│ now flash    │     │              │     │ on the display   │
└──────┬───────┘     └──────────────┘     └──────────────────┘
       │
       v
┌──────────────┐     ┌──────────────┐     ┌──────────────────┐
│ Press '-' or │ ──> │ Repeat the   │ ──> │ PLEASE MAKE A    │
│ '+' to       │     │ previous     │     │ NOTE OF THIS     │
│ adjust to a  │     │ step for the │     │ CODE AND KEEP IN │
│ number of    │     │ second,      │     │ A SAFE PLACE.    │
│ your choice  │     │ third and    │     │ THIS WILL BE     │
│ (0-9), then  │     │ fourth       │     │ REQUIRED TO MAKE │
│ press ENTER  │     │ digits       │     │ ANY CHANGES IN   │
│              │     │              │     │ THE FUTURE       │
└──────────────┘     └──────────────┘     └────────┬─────────┘
                                                    │
                                                    v
                                          ┌──────────────────┐
                                          │ A message will   │
                                          │ appear briefly   │
                                          │ confirming       │
                                          │ 'Tamper code set │
                                          │ when this        │
                                          │ message clears'  │
                                          └──────────────────┘
```

Cancelling the TAMPER SETTING

Pressing BACK at any time in this process will return you to normal operating mode

| Press ENTER twice | → | The following message will appear 'To enter release code press ENTER' | → | Press ENTER |

| Repeat the previous step for the second, third and fourth digits | ← | Press '-' or '+' to confirm the first digit of the release code, then press ENTER | ← | The following message will appear 'Enter first digit' |

| The following message will appear 'Tamper Code Cleared' |

RESETTING THE SCS317 THERMOSTAT

Electronic equipment can in some circumstances be affected by electrical interference.

If the display becomes frozen or scrambled simply press both the BACK and ENTER button simultaneously.

Using this procedure will restore the SCS317 to the original factory settings, the Time and Date will remain correct.
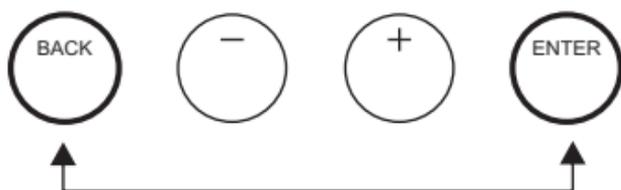
BATTERY

The SCS317 thermostat runs on 2 standard AA (Alkaline) non rechargeable batteries and is designed to give a battery life of approximately two years.

There are three stages of warning as the batteries become low in power.

Stage 1 – The battery low symbol will appear in the display

Stage 2 – The words 'Low Battery' will appear in the display for 1 second each time a button is operated

Stage 3 – The unit will switch itself OFF and the message 'Replace Batteries' will appear permanently in the display.

The batteries should be changed at Stage 2 at the latest.

To replace the batteries of the SCS317, please carefully pull down the hinged battery cover on the front of the unit. Ensure they are fitted correctly as indicated by the terminal markings in the battery compartment.

Please dispose the old batteries responsibly 🗑

SERVICE AND REPAIR

This programmer is NOT user serviceable. Please do not dismantle the unit. In the unlikely event of a fault developing please refer to the RESETTING THE SCS317 THERMOSTAT on page 21. If this fails to resolve the problem please contact a local heating engineer or a qualified electrician.