

CM7012-6

CM7077-11

USER GUIDE

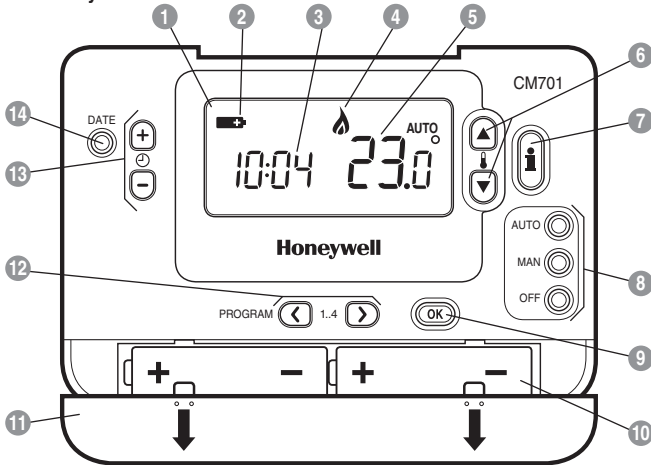
Description

The Honeywell CM701 is a programmable room thermostat designed to control your heating system efficiently, providing comfortable temperatures when you are at home and energy savings when you are away. The following instructions explain how to program and use the thermostat to provide the most home comfort at the least cost.

Features

- Ergonomic user interface featuring an 'OK-button'.
- Large LCD (Liquid Crystal Display) Screen with backlight.
- 4 independent temperature levels (from 5°C to 35°C).
- Automatic Summer/Winter Time Change.
- Optimum Start to achieve the right temperature at the right time.
- Built-in Memory holds the user program indefinitely.

Controls Layout



- | | | |
|-------------------------|------------------------------|------------------------|
| 1 LCD Screen | 6 Temperature Change Buttons | 11 Battery Cover |
| 2 Battery Low Indicator | 7 Temperature Enquiry Button | 12 Program Buttons |
| 3 Time Display | 8 Operating Mode Buttons | 13 Time Change Buttons |
| 4 Burner On Indicator | 9 Green OK Button | 14 Set Date Button |
| 5 Temperature Display | 10 Battery Compartment | |

This section shows you how to setup and run the thermostat in 3 simple steps:

STEP 1: Installing the Batteries

Note: Please follow the instructions in this section only if the thermostat screen is blank (no symbols or digits are displayed). If the room temperature is already displayed move on to Step 2: Setting the Date and Time.

To install the Batteries:

- Lift up the front cover of the thermostat to reveal the battery cover and product controls.
- Remove the battery cover by pressing down and sliding out.
- Insert the 2 x AA LR6 Alkaline Batteries supplied with the thermostat, ensuring the correct orientation (see '**Controls Layout**' on page 2).
- After a short pause the thermostat will display information on the screen and is now ready for use.
- Replace the battery cover by sliding it firmly back into the front of the thermostat.

STEP 2: Setting the Date and Time

To set the Date and Time:

- Press the **DATE** button to begin setting the date. When you set the date for the first time after the batteries are inserted, the display will show:

Press the \ominus \oplus or \ominus buttons to set the current day of the month (e.g. *d 01* = 1st day of the month) then press the green **OK** button to confirm.



- Press the \ominus \oplus or \ominus buttons to set the current month of the year (e.g. *m 01* = January) then press the green **OK** button to confirm.



- Press the \ominus \oplus or \ominus buttons to set the current year (e.g. *yr 06* = 2006) then press the green **OK** button to confirm.

The date is now stored.



- Use the \ominus \oplus or \ominus buttons to set the correct time then press the green **OK** button to confirm. Each press of the buttons will change the time by one minute and holding them down will change the time slowly at first and get progressively quicker.

Note: If this mode is entered accidentally then press the **AUTO**, **MAN** or **OFF** buttons to exit.



STEP 3: Running the Built-in Heating Program

The thermostat is now ready for operation. Press the **AUTO** button and the built-in heating program will start running. **Note:** The built-in heating program has been designed to provide normal comfort requirements, but if you want to customise the settings please see the next section '**Programming the CM701**'.

The Built-in Heating Program

The built-in heating program has 4 temperature level changes that can be set between 3.00am and 2.50am the following day - allowing you to maintain the evening temperature after midnight. Each temperature level can be set between 5°C and 35°C, and adjusted in 0.5°C increments. The factory default program for heating is as follows.


Period	1	2	3	4
Time	6:30	8:00	18:00	22:30
Temperature	21°C	18°C	21°C	16°C

Reviewing the Heating Program

To review or edit the heating program use the **PROGRAM** (◀) or (▶) buttons to navigate between the 4 individual programming periods.

Modifying the Heating Program

To change the heating program:

- Press either of the **PROGRAM** (◀) or (▶) buttons to enter the programming mode. The time / temperature settings for period (1) will be flashing as shown. The active period is highlighted by a flashing square around the numbers at the bottom of the screen.
 
- To adjust the period start time use the (⏪) or (⏩) buttons, the display will stop flashing and the 'OK?' indicator will be displayed. Holding the button down will change the time quickly.

Note: If you are pressing the (⏪) or (⏩) buttons and the display flashes the next period, it means the next period will be pushed forward.
- Once the required time is reached press the green (OK) button to confirm.

Note: If the original time setting did not require adjustment press the green (OK) button to move to step 'd'.
- The temperature setting for period (1) will now be flashing. To adjust this press the (▲) or (▼) buttons and confirm the setting again by pressing the green (OK) button.
- The next time and temperature period will now be active. Adjust this by repeating steps b - d above until all 4 periods are set or press the **AUTO** button to run the program as set, at any time.

Disabling / Enabling Time Periods



The thermostat has 4 periods that can be programmed, but you may not need all of these switch points for your heating requirements. Therefore, any period from 2 to 4 can be removed from (or returned to) the heating program profile.

To disable or enable time periods:

- To disable unwanted periods go to the desired period (2 to 4) using the **PROGRAM** (◀) or (▶) buttons to navigate, ensure the correct period is highlighted with the flashing square symbol. Press and hold the (⏸) button for at least 2 seconds and the display will indicate the period has been removed from the program.
- To enable periods again follow the same procedure as above, navigating to the already disabled period. To enable this period again press and hold the (⏸) button for at least 2 seconds.


Choosing the Operating Mode

The thermostat can operate in three different modes: Automatic, Manual or Off. To set the operating mode press either of the **AUTO**, **MAN** or **OFF** buttons. The screen indicates which mode is currently active by displaying **AUTO**, **MAN** or **OFF**.






- **AUTO (automatic)** mode sets the thermostat to follow the built-in temperature program (default or personalised). Operating the thermostat in this mode is the best way to maintain a high level of temperature comfort whilst maximising your energy savings.
- **MAN (manual)** mode sets the thermostat to act as a simple thermostat with a fixed setpoint throughout the day. The setpoint can be adjusted from 5°C to 35°C by using the  or  buttons. The thermostat will continue to maintain this temperature until another operating mode or temperature is selected.
- **OFF** mode sets the thermostat to control to a minimum temperature setting of 5°C (default) that acts as a frost protection measure for your home.

During Normal Operation

• Temperature Enquiry




In **AUTO**, **MAN** and **OFF** operating modes the thermostat will display the current room temperature. To review the programmed '**target**' temperature (the temperature which the thermostat is trying to maintain) press the  button. This 'target' temperature value will be displayed flashing for 5 seconds before returning to the current room temperature value.

• Temperature Override

During normal operation (**AUTO** mode) the programmed temperature can be adjusted manually by pressing the  or  buttons or the  button. The 'target' temperature will be displayed and flash for 5 seconds - during this time the  or  buttons can be used to modify the set value.

Note: This temperature override is cancelled at the next programmed temperature change.

Adjusting the Time

To adjust only the time during normal operation use the  or  buttons to adjust the time and press the green  button again to confirm any changes.

Using the Special Features

- **Display Backlight**

The CM701 has a backlit display that will illuminate when a button is pressed for easier viewing of the display in low light conditions.

- **SERVICE indicator**

Note: This option only works if activated by your installer.

The 'SERVICE' indicator is displayed at set intervals as a reminder that your heating system requires a routine check. Please call your installer to arrange a maintenance visit.

The 'SERVICE' indicator will remain on the display of the CM701 until it is either reset or disabled by your installer. The CM701 and heating system will continue to operate as normal.






- **Automatic Summer/Winter Time Change**

The CM701 has a built-in Automatic Summer/Winter Time Change feature that will automatically adjust the clock forward or backward by one hour for 'Daylight Saving Time'. This is carried out on the last Sunday of March and October each year.

- **Optimum Start**


Optimum Start is a program which ensures that the optimum temperature conditions are achieved at the required times. This is an Energy Efficiency feature that adjusts the start time of your heating system depending upon how cold it is. For example, on cold days your heating system will be started earlier to ensure that your home is warm when you get up (at the target temperature) and on warmer days the heating system will be started later to save energy. So, if the Optimum Start Feature is used, then the time / temperature settings which are entered into the thermostat should be set to when you want to be warm by and not when you want the heating system to start.

TROUBLESHOOTING THE CM701



Symptom	Remedy
Blank Display (Power Loss).	Check batteries are installed by removing the battery cover. Check batteries have been installed in the correct orientation. Replace the batteries.
Display shows flashing  symbol.	The batteries in the thermostat are low on power - Replace the batteries.
Display shows  symbol.	A fault has occurred in your heating system. Remove and re-insert the batteries. If the  symbol does not clear after a few minutes contact your installer.
Display shows the word ' SERVICE '	Your installer has set a scheduled maintenance alert period on your CM701 as a recommendation that your heating system should receive a routine inspection. Call your installer to arrange a maintenance visit. Note: <i>The CM701 and heating system will continue to operate as normal.</i>

FAQ's

How do I change the batteries on the thermostat when they run out?

The thermostat constantly monitors the battery power level, which typically lasts for about 2 years before needing replaced. When the power is running low a flashing  symbol will be displayed on the screen. To change the batteries follow the steps in the above section ('**STEP 1: Installing the Batteries**' on page 3), replacing the used batteries with new ones in Step c. Note: While changing the batteries your program settings will be stored but you may need to adjust the time settings to be correct.

How do I set one temperature for the whole day?

To operate as a simple thermostat with one temperature throughout the day, select the manual operating mode by pressing the **MAN** button. Adjust the temperature by pressing the  or  buttons - this can be set anywhere from 5°C to 35°C in 0.5°C steps. The thermostat will continue to maintain this temperature until another operating mode is selected or the temperature is adjusted.

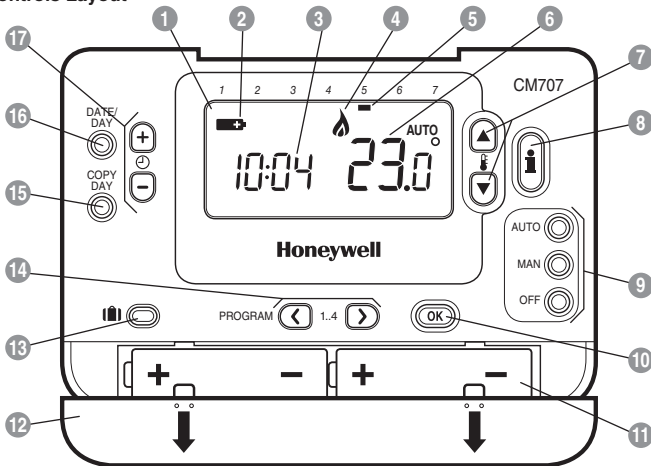
Description

The Honeywell CM707 is a programmable room thermostat designed to control your heating system efficiently, providing comfortable temperatures when you are at home and energy savings when you are away. The following instructions explain how to program and use the thermostat to provide the most home comfort at the least cost.

Features

- Ergonomic user interface featuring an 'OK-button'.
- Large LCD (Liquid Crystal Display) Screen with backlight.
- 7-day heating program to match your lifestyle, whilst maximising energy savings.
- 4 independent temperature levels per day (from 5°C to 35°C).
- Holiday button saves energy by letting you reduce the temperature for 1 to 99 days.
- Automatic Summer/Winter Time Change.
- Optimum Start to achieve the right temperature at the right time.
- Built-in Memory holds the user program indefinitely.

Controls Layout



- | | | |
|-------------------------|------------------------------|----------------------------|
| 1 LCD Screen | 7 Temperature Change Buttons | 13 Holiday Function Button |
| 2 Battery Low Indicator | 8 Temperature Enquiry Button | 14 Program Buttons |
| 3 Time Display | 9 Operating Mode Buttons | 15 Copy Day Button |
| 4 Burner On Indicator | 10 Green OK Button | 16 Set Date/Day Button |
| 5 Day Indicator | 11 Battery Compartment | 17 Time Change Buttons |
| 6 Temperature Display | 12 Battery Cover | |

This section shows you how to setup and run the thermostat in 3 simple steps:

STEP 1: Installing the Batteries

Note: Please follow the instructions in this section only if the thermostat screen is blank (no symbols or digits are displayed). If the room temperature is already displayed move on to **Step 2: Setting the Date and Time**.

To install the Batteries:

- Lift up the front cover of the thermostat to reveal the battery cover and product controls.
- Remove the battery cover by pressing down and sliding out.
- Insert the 2 x AA LR6 Alkaline Batteries supplied with the thermostat, ensuring the correct orientation (see **'Controls Layout'** on page 8).
- After a short pause the thermostat will display information on the screen and is now ready for use.
- Replace the battery cover by sliding it firmly back into the front of the thermostat.

STEP 2: Setting the Date and Time

To set the Date and Time:

- Press the **DATE/DAY** button to begin setting the date. When you set the date for the first time after the batteries are inserted, the display will show:

Press the \ominus \oplus or \ominus buttons to set the current day of the month (e.g. *d 01* = 1st day of the month) then press the green **OK** button to confirm.



- Press the \ominus \oplus or \ominus buttons to set the current month of the year (e.g. *m 01* = January) then press the green **OK** button to confirm.



- Press the \ominus \oplus or \ominus buttons to set the current year (e.g. *yr 06* = 2006) then press the green **OK** button to confirm.

The date is now stored and the Day Indicator will be displayed under the current day of the week (e.g. 1 = Monday, 2 = Tuesday, etc.)



- Use the \ominus \oplus or \ominus buttons to set the correct time then press the green **OK** button to confirm. Each press of the buttons will change the time by one minute and holding them down will change the time slowly at first and get progressively quicker.

Note: If this mode is entered accidentally then press the **AUTO**, **MAN** or **OFF** buttons to exit.



STEP 3: Running the Built-in Heating Program

The thermostat is now ready for operation. Press the **AUTO** button and the built-in heating program will start running. **Note:** The built-in heating program has been designed to provide normal comfort requirements, but if you want to customise the settings please see the next section **'Programming the CM707'**.

The Built-in Heating Program

The built-in heating program has 4 temperature level changes per day that can be set between 3.00am and 2.50am the following day - allowing you to maintain the evening temperature after midnight. Each temperature level can be set between 5°C and 35°C, and adjusted in 0.5°C increments. The factory default program for heating is as follows.

Monday to Friday (Day 1 to 5)

Period	1	2	3	4
Time	6:30	8:00	18:00	22:30
Temperature	21°C	18°C	21°C	16°C

Saturday & Sunday (Day 6 & 7)

Period	1	2	3	4
Time	8:00	10:00	18:00	23:00
Temperature	21°C	21°C	21°C	16°C

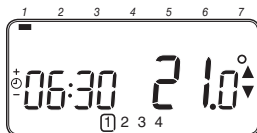
Reviewing the Heating Program

To review or edit the heating program use the **PROGRAM** (◀) or (▶) buttons to navigate between the 4 individual programming periods for that day. Use the **DATE/DAY** button to step through each day of the week, so the complete 7 day heating program can be reviewed or edited.

Modifying the Heating Program

To change the heating program:

- a. Press either of the **PROGRAM** (◀) or (▶) buttons to enter the programming mode. The time / temperature settings for period **1** on Monday (Day 1) will be flashing as shown. The active period is highlighted by a flashing square around the numbers at the bottom of the screen and the selected day is shown with the day indicator.



- b. To adjust the period start time use the (⏪) (+) or (⏩) (-) buttons, the 'OK?' indicator will be displayed to confirm the change. Holding the button down will change the time quickly.

Note: If you are pressing the (⏪) (+) or (⏩) (-) buttons and the display flashes the next period, it means the next period will be pushed forward.

- c. Once the required time is reached press the green **OK** button to confirm.

Note: If the original time setting did not require adjustment press the green **OK** button to move to step 'd'.

- d. The temperature setting for period **1** on Monday (Day 1) will now be flashing. To adjust this press the (▲) (▲) or (▼) (▼) buttons and confirm the setting again by pressing the green **OK** button.
- e. The next time and temperature period will now be active. Adjust this by repeating steps b - d above until all 4 periods are set for Monday or press the **AUTO** button to run the program as set, at any time.

You now have a choice of how to set the program for the next day:

- f. i) Press the **COPY DAY** button to copy Monday's program into Tuesday. The display will go blank apart from the 'non flashing' day indicator, which indicates the day copied and the 'flashing' target day to copy the program to. To accept this day press the green **OK** button. To select a different target day press the **DATE/DAY** button until the 'flashing' day indicator is under the required day, then accept it by pressing the green **OK** button. **Note:** *Once the target day is confirmed it becomes the day that is copied if the **COPY DAY** button is pressed again.*

OR

- ii) Press the **DATE/DAY** button to move the day indicator to Tuesday (Day 2). The program for that day can then be adjusted by following steps **b to e**. Programs for the remaining days can be set in the same way, using the **DATE/DAY** button to move to the next day.

To exit the programming mode select the desired operating mode by pressing the **AUTO**, **MAN** or **OFF** buttons. **Note:** *To run the adjusted program select the **AUTO** mode.*

Disabling / Enabling Time Periods

The thermostat has 4 periods each day that can be programmed, but you may not need all of these switch points for your heating requirements. Therefore, any period from 2 to 4 can be removed from (or returned to) the heating program profile.

To disable or enable time periods:

- To disable unwanted periods go to the desired period (2) to (4) using the **PROGRAM** (←) or (→) buttons to navigate, ensure the correct period is highlighted with the flashing square symbol. Press and hold the (⏏) button for at least 2 seconds and the display will indicate the period has been removed from the program.
- To enable periods again follow the same procedure as above, navigating to the already disabled period. To enable this period again press and hold the (⏏) button for at least 2 seconds.


Choosing the Operating Mode

The thermostat can operate in three different modes: Automatic, Manual or Off. To set the operating mode press either of the **AUTO**, **MAN** or **OFF** buttons. The screen indicates which mode is currently active by displaying **AUTO**, **MAN** or **OFF**.






- AUTO (automatic)** mode sets the thermostat to follow the built-in temperature program (default or personalised). Operating the thermostat in this mode is the best way to maintain a high level of temperature comfort whilst maximising your energy savings.
- MAN (manual)** mode sets the thermostat to act as a simple thermostat with a fixed setpoint throughout the day. The setpoint can be adjusted from 5°C to 35°C by using the (⬆) (▲) or (▼) buttons. The thermostat will continue to maintain this temperature until another operating mode or temperature is selected.
- OFF** mode sets the thermostat to control to a minimum temperature setting of 5°C (default) that acts as a frost protection measure for your home.

During Normal Operation

• Temperature Enquiry





In **AUTO**, **MAN** and **OFF** operating modes the thermostat will display the current room temperature. To review the programmed '**target**' temperature (the temperature which the thermostat is trying to maintain) press the  button. This 'target' temperature value will be displayed flashing for 5 seconds before returning to the current room temperature value.

• Temperature Override

During normal operation (**AUTO** mode) the programmed temperature can be adjusted manually by pressing the  or  buttons or the  button. The 'target' temperature will be displayed and flash for 5 seconds - during this time the  or  buttons can be used to modify the set value.

Note: This temperature override is cancelled at the next programmed temperature change.

Adjusting the Time










To adjust only the time during normal operation use the   or  buttons to adjust the time and press the green  button again to confirm any changes.


Using the Special Functions

• HOLIDAY Function

The holiday function allows you to set a constant temperature (default = 10°C) for a specified number of days (from 1 - 99 days). This lets you save energy and related costs when you are away from home, but resumes normal operation on the day of your return.

To set the Holiday function:

- Ensure the thermostat is running in **AUTO** or **MAN** operating modes.
- Press the holiday  button to display the holiday days counter and temperature setting, along with the holiday indicator .
- Press the   or  time buttons to set the holiday time (1 - 99 days) and press the green  button to confirm.
- Press the  or  buttons to set the holiday temperature (5°C - 35°C) and press the green  button to confirm.

The thermostat will now control to the new temperature for the set number of days that your home is vacant. At midnight the holiday counter will be reduced by one until the selected number of days have passed. The thermostat will then return to normal operation as set by the **MAN** or **AUTO** mode. To cancel the HOLIDAY function or to exit the function at any time press the  button a second time.

Using the Special Features

- **Display Backlight**

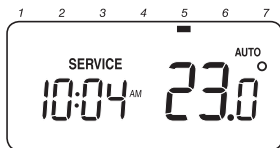
The CM707 has a backlight display that will illuminate when a button is pressed for easier viewing of the display in low light conditions.

- **SERVICE indicator (optional)**

Note: This option only works if activated by your installer.

The 'SERVICE' indicator is displayed at set intervals as a reminder that your heating system requires a routine check. Please call your installer to arrange a maintenance visit.

The 'SERVICE' indicator will remain on the display of the CM707 until it is either reset or disabled by your installer. The CM707 and heating system will continue to operate as normal.






- **Automatic Summer/Winter Time Change**


The CM707 has a built-in Automatic Summer/Winter Time Change feature that will automatically adjust the clock forward or backward by one hour for 'Daylight Saving Time'. This is carried out on the last Sunday of March and October each year.

- **Optimum Start**



Optimum Start is a program which ensures that the optimum temperature conditions are achieved at the required times. This is an Energy Efficiency feature that adjusts the start time of your heating system depending upon how cold it is. For example, on cold days your heating system will be started earlier to ensure that your home is warm when you get up (at the target temperature) and on warmer days the heating system will be started later to save energy. So, if the Optimum Start Feature is used, then the time / temperature settings which are entered into the thermostat should be set to when you want to be warm by and not when you want the heating system to start.

Symptom	Remedy
Blank Display (Power Loss).	<p>Check batteries are installed by removing the battery cover.</p> <p>Check batteries have been installed in the correct orientation.</p> <p>Replace the batteries.</p>
Display shows flashing  symbol.	The batteries in the thermostat are low on power - Replace the batteries.
Display shows  symbol.	<p>A fault has occurred in your heating system. Remove and re-insert the batteries.</p> <p>If the  symbol does not clear after a few minutes contact your installer.</p>
Display shows the word 'SERVICE'	<p>Your installer has set a scheduled maintenance alert period on your CM707 as a recommendation that your heating system should receive a routine inspection.</p> <p>Call your installer to arrange a maintenance visit.</p> <p>Note: <i>The CM707 and heating system will continue to operate as normal.</i></p>

How do I change the batteries on the thermostat when they run out?

The thermostat constantly monitors the battery power level, which typically lasts for about 2 years before needing replaced. When the power is running low a flashing  symbol will be displayed on the screen. To change the batteries follow the steps in the above section ('**STEP 1: Installing the Batteries**' on page 3), replacing the used batteries with new ones in Step c. Note: While changing the batteries your program settings will be stored but you may need to adjust the time settings to be correct.

How do I set one temperature for the whole day?

To operate as a simple thermostat with one temperature throughout the day, select the manual operating mode by pressing the **MAN** button. Adjust the temperature by pressing the  or  buttons - this can be set anywhere from 5°C to 35°C in 0.5°C steps. The thermostat will continue to maintain this temperature until another operating mode is selected or the temperature is adjusted.

WHAT IS A PROGRAMMABLE ROOM THERMOSTAT?

...an explanation for householders

A programmable room thermostat is both a programmer and a room thermostat. A programmer allows you to set 'On' and 'Off' time periods to suit your own lifestyle. A 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.

Turning a programmable room thermostat to a higher setting will not make the room heat up any faster. How quickly the room heats up depends on the design of the heating system, for example, the size of boiler and radiators.

Neither does the setting affect how quickly the room cools down. Turning a programmable room thermostat to a lower setting 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 low temperatures first, say 18°C, and then turn them up by one degree each day until you are comfortable with the temperatures. You won't have to adjust the thermostat further. Any adjustments above these settings 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.

The time on the programmer must be correct. Some types have to be adjusted in spring and autumn at the changes between Greenwich Mean Time and British Summer Time.

You may be able to temporarily adjust the heating programme, for example, 'Override', 'Advance' or 'Boost'. These are explained in the manufacturer's instructions.

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 prevent the thermostat from working properly.



Honeywell Control Systems Ltd.

Arlington Business Park,

Bracknell

Berkshire

RG12 1EB

Technical Help Desk: 08457 678999

www.honeywelluk.com

Honeywell

42010941-007 R1

© 2006 Honeywell International Inc.