

Honeywell



The CM Range. Clearly different

Control of your central heating is important



The chart on the left shows energy consumption in an average UK home.

- Other 2%
- Wet appliances 2%
- Lighting 3%**
- Cooking 3%
- Consumer electronics 3%
- Cold appliances 3%

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The Facts

- 84% of UK domestic energy is used for heating and hot water
- 60% of UK domestic energy is used for heating
- Only 3% of UK domestic energy is used for lighting
- One third of the UK's energy consumption is from domestic use*
- Turning your thermostat down 1°C will save 10% on your bill**
- Never using a light bulb again would only save 3% of the energy used in your home
- 40% of homes in the UK are missing a thermostat*

*Source: BERR

**Source: Energy Savings Trust



Effortless efficiency

Our CM900 range of programmable thermostats offers maximum energy efficiency with minimum fuss.

They all feature our unique Line of Text (LoT™) display, which makes setting up and programming easier than ever. All you have to do is follow the plain English prompts on the screen.

Each model can be adjusted to suit the system it's controlling, while the self-adapting features (TPI*) will fine tune for maximum efficiency. So you can sit back and relax in perfect comfort, knowing that you're keeping fuel waste and environmental impact to a minimum.

* TPI (Time Proportional and Integral) control is an industry standard term for an On/Off control using an advanced energy saving control method that can be used by most heating systems in the UK.



No mess, no fuss, no wires

Our conventional wired models (CM901 and CM907) offer 1 day or 7 day control using voltage free contacts for valves and any boilers using low voltage or mains power.

If you want good control but don't want the mess caused by running cables, wireless versions (CM921 and CM927) make it easier to upgrade your system with minimum disruption. Not only that, but the same wireless receiver is used for many products – so you can combine them in any number of ways.

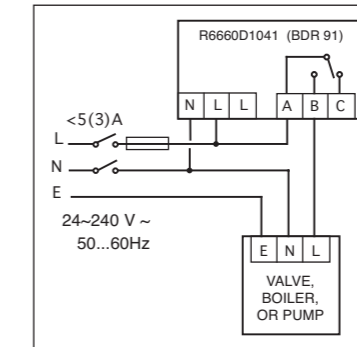
For peak efficiency modulating controls (wired CM937 and wireless CM957) use OpenTherm to send data directly to the boiler.

- Synchronised zone control – by synchronising the firing periods within the programme time, the boiler off-time can be maximised, reducing heating costs and saving energy.
- Radiator zone control – to create an extra zone within the home, CM920s can control wireless radiator controllers, enabling any radiator to demand heat, as well as creating a boiler interlock.
- Underfloor heating zone control – CM920 can send wireless signals to an underfloor heating manifold controller to control one or more heating zones.

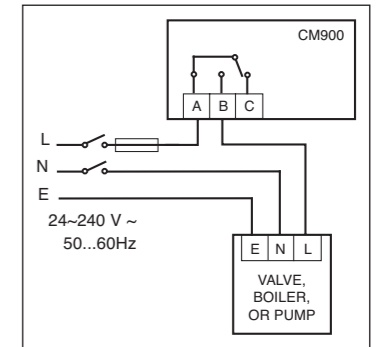
CM Range specifications

| Feature | CM907 | CM901 | CM927 | CM921 | CM937 | CM957 | CM707 | CM701 | CM727 | CM721 |
|---------------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|----------------------------------------------------------------------------------------------------------------------------------|
| Suitable for Systems with | | | | | | | | | | |
| Combi boilers | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Regular boilers | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| System boilers | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Multiple zones | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Underfloor heating | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Solar heating | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| User Interface | | | | | | | | | | |
| LoT™ (Line of Text) technology | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| OK button | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Large display | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Extra large display | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Backlight | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Programme | | | | | | | | | | |
| Number of days | 7 | 1 | 7 | 1 | 7 | 7 | 7 | 1 | 7 | 1 |
| Number of temperature changes/day | 6 | 6 | 6 | 6 | 6 | 6 | 4 | 4 | 4 | 4 |
| Time setting resolution min | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Temperature setting resolution °C | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 |
| Special Functions | | | | | | | | | | |
| Automatic Summer/Winter time change | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Holiday Mode | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Party Function (Timed override) | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Day Off Function | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Optimum Start | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| TPI control | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Fuzzy Logic control | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Service reminder | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Load Compensation | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Control Output | | | | | | | | | | |
| Relay output | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Relay type | SPDT | SPDT | SPDT | SPDT | SPDT | SPDT | SPDT | SPDT | SPDT | SPDT |
| Relay load | 8(3)A | 8(3)A | 5(3)A | 5(3)A | 5(2)A | 5(2)A | 5(3)A | 5(3)A | 5(3)A | 5(3)A |
| Wired on/off | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Wireless on/off | | | ✓ | ✓ | | | | | ✓ | ✓ |
| Wired/OpenTherm Modulating control | | | | | ✓ | | | | | |
| Wireless/OpenTherm Modulating control | | | | | | ✓ | | | | |
| Extra Wireless Functions | | | | | | | | | | |
| Multi Zone | | ✓ | ✓ | | | | | | | |
| Synchronised Multi Zone | | ✓ | ✓ | | | | | | | |
| One Zone Radiator Control | | ✓ | ✓ | | | | | | | |
| Underfloor Heating Zone | | ✓ | ✓ | | | | | | | |
| | | | | | | | | | | Zone Receiver 1x BDR91 Receiver 1x HR80UK Radiator Controller (one per radiator) 1x HCC80 Underfloor Heating Controller |

Wiring Diagrams



Wireless receivers for
CM921, CM927
CM721, CM727



Wired models
CM901, CM907 <math>< 8(3)A</math>
CM701, CM707 <math>< 5(2)A</math>

Remote Sensors



CM900 wired models can be used with remote sensors.

- The Remote Sensor allows the user to control a room with the programmable room thermostat fitted outside that room. or
- The Outside Sensor allows the user to see the outside temperature displayed.

Part Numbers

| | | | |
|------------------|---------------|----------|---------------------------------|
| CM901 | CMT901A1044 | Wired | 1 day programmable thermostat |
| CM907 | CMT907A1041 | Wired | 7 day programmable thermostat |
| Outside Sensor | F42010971-001 | Wired | Outside sensor for wired models |
| Remote Sensor | F42010972-001 | Wired | Remote sensor for wired models |
| CM921 | | | |
| With receiver | CMT921A1042 | Wireless | 1 day programmable thermostat |
| Without receiver | CMS921B1042 | Wireless | 1 day programmable thermostat |
| CM927 | | | |
| With receiver | CMT927A1049 | Wireless | 7 day programmable thermostat |
| Without receiver | CMS927B1049 | Wireless | 7 day programmable thermostat |
| CM937 | CMT937A1027 | Wired | OpenTherm |
| CM957 | CMT957A1009 | Wireless | OpenTherm |

Any System

A 'secret' combination of buttons places the CM900 into 'installer mode', where non-user settings can be changed. These include the frost protection temperature and selection of the 'Optimum Start' feature, which adjusts the start-up time each morning according to the prevailing temperature and building heat-up characteristics.

Other parameters can be changed to adapt the programmable thermostat to almost any system, whether with boilers that are new condensing or older standard, with stored hot water or combi, gas or oil fired.

All these Honeywell programmable room thermostats provide energy savings and satisfy best practice as defined in Energy Savings Trust document CHeSS (ref.CE51).



HR80UK Wireless radiator controller
Allows groups of radiators to be controlled as a zone with no change to pipework or cable runs.



CM920 Wireless zone
Simply add CM920 wireless programmable thermostat to a group of HR80UKs to form a CM900 zone.



Multi zones
Simply by adding an extra receiver, the demands can be synchronised to increase energy efficiency.



Under floor heating zone control
HCC80 allows wireless control of underfloor heating zones using CM920, CM Zone or HCW80.

CM900

Our innovative Line of Text (LoT™) display makes the thermostat extremely easy to use. The unique design means that your CM900 is:

- Easy to read
- Easy to set
- Easy to understand

There's no need for instructions. Just press the OK button when you have read and understood the display.

The whole CM900 range offers the latest energy saving features, you just need to choose wired or wireless, then decide if your boiler is OpenTherm or not (see CM937 & CM957 pages).

Fold out this sheet to see the full range.





Fold out to see ►
CM Range specifications

The innovation is easy to see

Not only does the CM900 boast the biggest display on the market, but it also has backlighting which comes on whenever you press a button. Whether using the wired or wireless models, clarity and simplicity are the name of the game.

Inside, the innovation is not quite so easy to see, but rest assured the latest TPI technology is working hard to minimise your boiler firing times whilst keeping you warm. The self-adapting system learns how your home responds to heat demand and adjusts itself accordingly.

This helps save up to 10%* off your fuel bills and also reduces carbon emissions, especially if you have a condensing boiler.

But in addition, because the control is so much more accurate, the set point can be reduced, without loss of comfort, introducing extra savings up to 15%.

To save energy the CM Range has Optimum Start, which works out when to switch the boiler on to suit when you want to be warm. Every day the boiler will start at the latest possible moment depending on the weather.

* Single cycle steady state test

CM937 & CM957



The standard way to control a heating system is to switch the boiler on and off at intervals with On/Off controls. The majority of the CM Range uses TPI control, a more precise energy efficient process.

This can be improved even further with Modulating control using OpenTherm to control the size of the boiler flame directly. It allows the amount of heat provided by the boiler to be controlled to match the varying demand signal. These must be used with an OpenTherm boiler.



...extra energy savings with OpenTherm

- Improve the energy efficiency of heating systems by 15%*
- Lower fuel bills by up to 15%*
- As easy to fit and use as the rest of the CM900 range
- Available wired (CM937) and wireless (CM957)
- Modulating control
- Varies the heat to match the load

www.opentherm.eu

*Single cycle steady state test.



CM700



The CM700 is especially suitable for social housing and retirement properties. It features a service timer function which can be set by the landlord to flash a 'service is due' reminder message in its display after a variable interval time. It is ideal for controlling Combi boilers.

Programming and operation couldn't be simpler. The layout is straight forward and intuitive and the front flap closes to leave just the day-to-day buttons exposed. So all you have to do is set your temperature to be just right.

Available as wired and wireless models for 1 and 7 day control. The wired versions use voltage free contacts for valves and any boilers using low voltage or mains power.

Inside the CM700 range, the same intelligent TPI* technology as the CM900 works hard to reduce energy consumption by minimising the boiler firing time.

The CM700 also has 'Optimum Start' which works out when to switch the boiler on to suit when you want to be warm. Every day the boiler will start at the latest possible moment depending on the weather.



...comfortably in control

*Time Proportional and Integral control



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