Wired, wireless & connected heating controls

Control, Comfort and Energy Efficiency

Control, Comfort and Energy Efficiency

This brochure looks at the range of heating and hot water controls that can be wired into the heating system or installed wirelessy thereby providing you with:

• Independent timing control of the heating and hot water
• Temperature control of the heating
• Combined time and temperature control of the heating including underfloor heating
• Temperature control of the hot water

This control is provided by either using a modern control screen that is easy to use or by means of a smart phone or tablet app.

Energy saving features in our controls:

• Time Proportional and Integral (TPI) control calculates the demand from a room thermostat, controlling the boiler so that it fires for shorter periods as the temperature approaches the set point. This can offer additional energy consumption savings of up to 13% (BEAMA 2015)
• Optimisation allows for energy savings by varying the start up time of the boiler. It then learns how the house reacts, so that the calculation can be more accurate the next day.
• Optimum Start, Delayed Start and Optimum Stop are all methods of optimisation.

ErP Energy Efficiency Ratings

The ErP energy efficiency ratings shown in this brochure will provide installers and end users with the information required to both complete the ErP energy label and assess the benefits of the heating controls to the overall heating system in the property. These ratings apply to room thermostats (including programmable thermostats).

The need for choice

To control today's modern domestic heating systems and satisfy your customers needs for additional levels of control, you need Honeywell's comprehensive range of controls that allow you to offer your customers what they need secure in the knowledge that the controls you install will also work with the heating system.

The Honeywell range consists of time and temperature controls that are either wired or wireless and can be controlled via easy controls on the timer or thermostat and you also have the option of providing control via a smartphone or tablet.

Why wireless?

More and more wireless thermostats and time controls are being installed and the reasons why are easy to see:

• They are easy to install and easy to use
• They overcome any difficult installation problems you may face
• There is no additional wiring over and above wiring of one control into the existing system.
• There is no disruption to the fabric of the building when retrofitting controls.

Why Wired?

Our wired range of time control, programmable and room thermostats are ideal when you need to replace existing wired products. All the modern features that are within our wireless range – easy to use timing programs; thermostats with inbuilt smart features such as TPI and optimisation are also in our wired range.

Why Connected?

With broadband in nearly every home; your customers are now favouring products which offer control via smartphone or tablet. The Honeywell smart connected range provides you with: all the choice you need to give your customers what they are asking for .

Our heating control systems

We have combined our tried and trusted heating controls into a series of wireless heating control packs that you can use when you have a specific installation need. Sundial RF2 packs are boxed sets of controls that feature a combination of a wireless enabled timer, wireless thermostat and wireless cylinder thermostat, to suit a range of installation types. The timer has a wireless receiver built-in. This means that simply by replacing an old timer a thermostat is enabled in a system without having to run any new wiring.

Remove the old timer

With Sundial RF2 you get:

• A two-way wireless receiver built into the timer avoiding the need to wire extra receivers into the heating system.
• Products that are set up so that as soon as they are installed they will start to communicate with the RF² timer.
• A wired timer that can easily be fitted in place of existing controls.
• Thermostats that can be free-standing or wall mounted.
• Products that fit on to industry standard back plates for fast and easy replacement.
• A wireless cylinder thermostat that can be swiftly integrated into the system.
• Timers that have Optimisation features (Optimum Start, Delayed Start and Optimum Stop energy saving technology) as standard
• Digital thermostats that have TPI (Time proportional and Integral) control and energy saving features to reduce energy demand. (Saves 13% over a normal room thermostat –BEAMA 2015).

Install the RF² timer

It will wirelessly communicate straight out of the box

The ST9420 programmer in Sundial RF² Packs 2 & 3 directly replaces any of the following programmers:

Supplier	Programmer	Supplier	Programmer	Supplier	Programmer	Supplier	Programmer
ACL - Drayton	SM2	Danfoss	CP15	Iflow	Iflow PR	Microgyr	200
ACL - Drayton	LP112	Danfoss	CP75	Landis & Gyr	RWB40	Microgyr	200cw
ACL - Drayton	LP241	Danfoss	CP715	Landis & Gyr	RWB102	Microgyr	252
ACL - Drayton	LP522	Danfoss	CP715Si	Landis & Gyr	RWB200	Microgyr	252cw
ACL - Drayton	LP722	Danfoss	FP15	Landis & Gyr	RWB200cw	Microgyr	270
ACL - Drayton	LP241Si	Danfoss	FP75	Landis & Gyr	RWB252	Microgyr	9
ACL - Drayton	LP522Si	Danfoss	FP715	Landis & Gyr	RWB252cw	Microgyr	XP
ACL - Drayton	LP722Si	Danfoss	FP715Si	Landis & Gyr	RWB270	Potterton	Miniminder
ACL - Drayton	Tempus 3	Danfoss	MP15	Landis & Gyr	RWB2	Potterton	Miniminder E
ACL - Drayton	Tempus 4	Danfoss	MP75	Landis & Gyr	RWB Mk1	Sankey	Sunline
ACL - Drayton	Tempus 6	Glowworm	Mastermind	Landis & Gyr	RWB2	Siemens	RWB29
ACL - Drayton	Tempus 7	Homexpert	THR860S	Landis & Gyr	RWB2 Mk2	Siemens	RWB270
ACL - Drayton	LS241	Honeywell	ST6400A	Landis & Gyr	RWB2.9	Sunvic	Select 207
ACL - Drayton	LS522	Honeywell	ST6400C	Landis & Gyr	RWB9	Thorn	Miniminder
ACL - Drayton	LS722	Honeywell	ST9400A	Landis & Gyr	RWB-XP	Wickes	RWB2/6832
ACL - Drayton	EPR1	Honeywell	ST9400C	Landis & Staefa	RWB9	Wickes	RWB200.cw
ACL - Drayton	RPF7	Horstmann	Centaurplus C21	Landis & Staefa	RWB2E	Wickes	RWB252.cw
ACL - Drayton	RP24	Horstmann	Centaurplus C27	Microgyr	1	Wickes	RWB2E.cw
ACL - Drayton	EMP1	Horstmann	Centaurplus C121	Microgyr	102	Wickes	RWB9.cw
ACL - Drayton	EMP2	Horstmann	Centaurplus C127	Microgyr	2		
ACL - Drayton	UP1			Microgyr	40		

This information is based on the back plate supplied with the original programmer. At the time of writing, all information is correct.

ErP Class VIII +5%

Total control of temperature via smartphone or tablet app

Pack Number	Application	You get
Sundial RF² Pack One Y9120H2009	Ideal for adding a room thermostat to combi boilers and single heating zones.	ST9120C Single channel time switch; DT92E Digital thermostat with wireless receiver.
Sundial RF² Pack Two Y9420H1008	Ideal for adding a room thermostat to an existing system that has stored hot water and a domestic hot water thermostat.	ST9420C twin channel timer; DT92E Digital thermostat with wireless receiver.
Sundial RF² Pack Three Y9420S2005	Ideal for adding a room thermostat and cylinder thermostat to new and existing systems.	ST9420C Twin channel timer; DT92E Digital thermostat with wireless receiver and CS92 wireless cylinder thermostat.
Sundial RF² Pack Four Y9120W1000	Ideal for adding a hot water timer and cylinder thermostat to new and existing Sundial systems, or upgrading a gravity hot water system.	ST9120C Single channel time switch and wireless cylinder thermostat.
Sundial RF² Pack Five Y9520Z1007	Ideal for providing 2 heating zones.	ST9520C Twin channel timer; 2 x DT92E Digital thermostat with wireless receiver.

Sundial RF² System Components

ST9120C wireless enabled timeswitch

ST9420C wireless enabled programmer

ST9520C wireless enabled 2 zone programmer

ST9120/ST940/ST9520 Timer range
- Large backlit display - easy to read with text feedback that gives set up assistance and programming hints
- Optimisation - Optimum Start, Delayed Start and Optimum Stop energy saving technology
- Choice of 3 different built in programmes for energy saving plus 'Extra hour' facility for up to 3 hours programme extension at the touch of a button.
- Set every day differently with 7 day programming – flexible to suit the users lifestyle.
- Holiday button ensuring energy cost savings.
- Temporary or permanent override facilities offer maximum flexibility.
- Fits on industry standard back plate – no need to re-wire.
- 2 level battery backup - maintains settings in event of power failure and settings retained in memory indefinitely.
- Factory set time and date, with automatic Summer/ Winter 1 hour time change.

- Service mode - set a service reminder with the option of a phone number displayed on screen and/or a service countdown.
- Enquiry mode - access temperature information from other system components.
- Suitable for mains, low voltage or potential free switching.
- The ST9520C can control two separate digital thermostats from the one control and has OpenTherm capability.
- ST9120C is the direct replacement for Honeywell ST9100 and ST6100 models.
- ST9420C is the direct replacement for Honeywell ST9400 and ST6400 models.
- ST9520C is the direct replacement for Honeywell ST9500 models.
- All Sundial RF2 products meet Building Regulations Part L standards and when replacing an existing wired timer, Part P Building Regulations do not apply.

DT92E wireless thermostat

DT92E Wireless Thermostats

- Easy to set up with two way wireless communication (30 metres range) and a signal strength indicator.
- 'TPI control' offering energy saving technology to reduce heating costs.
- Simple user operation plus an ECO button giving a timed temperature boost or reduction at the touch of a button.
- 5º to 35ºC set point range offers a wide range of comfort levels.
- Heating 'ON' indicator, no need to visit the timer control for a system check.
- 'Installer mode' allows the installer to set the fundamentals of the system for the customer.

CS92A Wireless Cylinder

CS92A Wireless Cylinder

- Hot water temperature set at programmer.
- Pre-bound to programmer and ready to use.
- Fits on new or existing systems.
- Battery powered.

BDR91T Receiver

BDR91T Receiver

Enables wireless enabled timer to be connected to remote boiler installations: Pack 1, 3 or 5.
This is an additional RF² product and is not included in any of the packs.

Product information	Pack 1 Y9120H2009	Pack 2 Y9120H2009	Pack 3 Y9420S2005	Pack 4 Y9120W1000	Pack 5 Y9520Z1007
Pack Contents					
ST9120C Timeswitch	✔			✔	
ST9420C Programmer		✔	✔		
ST9520C Programmer					✔
DT92E Thermostat	✔	✔	✔		2
CS92A Cylinder Thermostat			✔	✔	
Features					
OpenTherm					✔
TPI Control	✔	✔	✔	✔	✔
Optimum Start	✔	✔	✔	✔	✔
Delayed Start	✔	✔	✔	✔	✔
Optimum Stop	✔	✔	✔	✔	✔
Holiday Mode	✔	✔	✔	✔	✔
DT92E Thermostat	✔	✔	✔	✔	✔
Override	✔	✔	✔	✔	✔

Product information	Pack 1 Y9120H2009	Pack 2 Y9120H2009	Pack 3 Y9420S2005	Pack 4 Y9120W1000	Pack 5 Y9520Z1007
Channels	1	2	2	1	2
Channels	7,5/2 or 1	7,5/2 or 1	7,5/2 or 1	7,5/2 or 1	7,5/2 or 1
Number of On/Off per day	3	3	3	3	3
Line of text display	✔	✔	✔	✔	✔
Fits industry Standard backplate	✔	✔	✔	✔	✔
System rewire required	No	No	No	No	No
Boiler service reminder	✔	✔	✔	✔	✔
PIN code	✔	✔	✔	✔	✔
Phone number on display	✔	✔	✔	✔	✔
Installer setup	✔	✔	✔	✔	✔
Signal strength indicator	✔	✔	✔	✔	✔

Programmable Room Thermostats

The CM900 range of programmable room thermostats are suitable for heating and cooling systems in domestic and light commercial buildings. The range offers a thermostat with a 7 day schedule in both a wired and wireless version.

The CM700 range of programmable room thermostats are designed for social housing needs and provide wired or wireless time and temperature control for domestic premises with additional functionality for landlords.

The Honeywell T4 Programmable thermostat is a wired or wireless 7-day Programmable Room Thermostat with a modern design and an upgraded user interface. It provides automatic time and temperature control of domestic heating in domestic or light commercial premises.

The Lyric T6 series of programmable thermostats has been developed as part of a future world of connected controls, the Lyric T6 Series is thoughtfully designed and equipped with touch-screen technology, remote access via tablet or smartphone, recognisable icons, wireless connectivity and a suite of features in tune with today's home controls. It is suitable for any boiler and any system.

T4R wireless programmable thermostat

T4 wired programmable thermostat

New and improved wireless relay box

Wireless relay box backplate

Honeywell T4 programmable thermostat

T4 is a modern a wired or wireless 7-day Programmable Room Thermostat. It is designed to provide automatic time and temperature control of domestic heating in domestic or light commercial premises.

- Compatible with 24-230V on/off appliances such as gas boilers, combi-boilers and zone valves.
- The T4 can be used in a Sundial S or Y Plan system
- Well suited to control combination boiler installations or additional zones in an S Plan Plus system.
- On screen text display and function buttons to ensure simplified programming and operation for all users
- Energy saving TPI control;
- Optimum Stop, Start & Delayed Stop features that learn how the room is heated
- Two wire, volt free connections are ideal for use with combination boilers
- Easy to fit
- New improved wall plate with extra wiring space
- Clip on cover to the fixed wall plate
- Optional Wired external sensor available (wired versions only)
- On screen heat demand icon makes start up testing easy
- Simple push button access to configuration menus
- Adjustable Frost protection
- Away mode with specific temperature set (number of days changeable)
- Temporary schedule override until next set point or for 1 or 2 hours
- Schedule can be turned off – will operate as a variable setting thermostat only
- Continuous time, displayed in extra-large LCD
- Automatic Summer/Winter time change
- 7-day programming with 7 day; 5/2 or single day schedules
- Four or six independent time & temperature settings (default is 4)
- Pre-configured 5/2 heating schedule
- Battery powered (with low-power indicator)
- Easy change battery compartment
- Optional backlight with extended light on time period
- Burner 'ON' symbol

Wireless programmable thermostat additional features and benefits (T4R)
- Wireless communication between thermostat and receiver box with 30m range.
- Pre-bound to the wireless relay box, no need to establish a binding

Relay box (wireless version only)
Designed for the installer in mind, this relay box comes pre-bound to the Honeywell T4R and provides the link between the boiler and the wireless thermostat.

Lift up wiring bar for easy wiring
OpenTherm terminals as standard
Clear wiring labels
Strain relief
4 screw fixing

Product Code	Description
T4H110A1021	T4 wired thermostat
Y4H910RF4003	T4 wireless thermostat

CM900 programmable thermostats

The CM900 wired and wireless Programmable Room Thermostats are designed to provide time and temperature control to heating or cooling systems in domestic and light commercial buildings.
- All models can provide a different heating programme for each day of the week to maximise energy efficiency.
- Two wire, volt free connections are ideal for use with combination boilers.

CM900 range features and benefits
- Slim, ultra modern design.
- Energy saving TPI control.
- Optional optimum start.
- Extra large LCD display with user friendly Line of Text display (LoT™) and optional back light.
- 6 temperature level changes per day.
- Automatic Summer/Winter time change.
- Auto, manual, holiday and off (frost) modes.
- Synchronised boiler control in multi-zone systems for optimum efficiency.
- Boiler 'ON' display for easier system diagnostics.
- Memory holds user programme even when batteries are changed.
- Battery powered (with low-power indicator).
- Volt free connections.

Wireless programmable thermostat additional features and benefits (CM927)
- Wireless communication between thermostat and receiver box with 30m range.
- OpenTherm Compatible

CM907 wired programmable thermostat

CM927 wireless programmable thermostat

CM700 programmable thermostats

The CM700 range of programmable room thermostats is designed for social housing needs and provides automatic time and temperature control to heat domestic premises with additional functionality for landlords.

The CM700 range has a scheduled maintenance alert, fault diagnostic mode and automatic Summer/Winter time change to assist in maintenance. Two wire, volt free connections are ideal for use with combination boilers.

- Slim, ultra modern design.
- Service interval warning.
- Energy saving TPI control
- Optional optimum start
- The CM720 has 4 temperature level changes per day.
- Automatic Summer/Winter time change.
- Auto, manual, holiday and off (frost) modes.
- The CM727 has synchronised boiler control in multi-zone systems for optimum efficiency.
- Boiler 'ON' display for easier system diagnostics.
- Memory holds user programme even when batteries are changed.
- Battery powered (with low-power indicator).
- Volt free connections.

Wireless programmable thermostat additional features and benefits (CM727)
Wireless communication between thermostat and receiver box with 30m range.

CM707 wired programmable thermostat

CM727 wireless programmable thermostat

Product Information	CM901 & CM927
Suitable for systems with	
Combi boilers	✔
Regular boilers	✔
System boilers	✔
Multiple zones	✔
Features	
User interface	
Line of text display	✔
OK button ü	✔
Large display	
Extra large display	✔
Back light	✔
Programme	
Number of days	7
Number of temperature changes/day	6
Time setting resolution min	1
Temperature setting resolution °C	0.5

Product Information	CM907 & CM927
Features	
Special functions	
Automatic summer/winter time change	✔
Holiday mode	✔
Party function (timed override)	✔
Day off function	✔
Optimum start	✔
TPI control	✔
Control output	
Relay output	✔
Relay type	SPDT
Relay load	5(3)A
Wireless On/Off (CM927)	✔
OpenTherm compatible (CM927)	✔

Product Information	CM707 & CM727
Suitable for systems with	
Combi boilers	✔
Regular boilers	✔
System boilers	✔
Multiple zones	✔
Features	
User interface	
OK button ü	✔
Large display	✔
Programme	
Number of displays	7
Number of temperature changes/day	6
Time setting resolution min	1
Temperature setting resolution °C	0.5

Product Information	CM707 & CM727
Features	
Special functions	
Automatic summer/winter time change	✔
Holiday mode	✔
Party function (timed override)	✔
Optimum start	✔
TPI control	✔
Service reminder	✔
Control output	
Relay output	✔
Relay type	SPDT
Relay load	5(3)A
Wireless on/off	✔

Product Code	Description
CMT907A1041	Wired 7-day programmable thermostat complete with batteries, fixing screws and instructions
CMT927A1049	Wireless 7day Programmable Thermostat complete with pre-bound Receiver Box, batteries, fixing screws and
CMT707A1029	Wired 7-day programmable thermostat complete with batteries, fixing screws and instructions
CMT727D1026	7 day wireless programmable thermostat complete with batteries, fixing screws and instructions

Room & Frost Thermostats

Control the temperature of the property with room and frost thermostats. These wall mounted and wireless models provide sophisticated temperature measurement and accurate control.

DT90 & DT92E room thermostats

- Slim modern design with a display featuring extra-large easy to read text
- Energy saving TPI control allowing boilers to operate with greater efficiency
- ECO button for energy saving mode, giving timed setback or temperature boosts with countdown timer
- Simple user operation with one button up/down temperature adjustment over a 5 to 35°C set point range. The interface includes a room temperature inquiry and a heating on indicator
- Adjustable off set point so that frost protection can be achieved when in timed period
- Four year battery life with battery low warning
- Mains or low voltage switching
- Two wire, volt-free connections are ideal for use with combination boilers or heating zones
- Installer Mode that allows control to be matched to the system and user requirements, adapting minimum on or off times, set point controls etc
- Can be surface or wall box mounted

Wireless version only
- Easy to set up with pre-bound two way wireless communication (30 metres range) and a signal strength indicator.
- Table stand
- Lockable clear plastic thermostat cover, includes back plate and spare available for both models (Code TG510A1001 – one cover for both models)

DT92 wireless thermostat

DT90 wired thermostat

T6360 Mechanical wired room thermostat

The T6360 is a mains voltage room thermostat designed to give automatic temperature control of domestic wet central heating systems. It can be used to directly switch a circulating pump or boiler, or to operate spring return and motor open/motor close zone valves. The T6360 can switch electrical heating loads up to 16 amp and can also be used for cooling applications.

- Double insulated, no earth wire required for operation
- Dual diaphragm temperature sensing element for accurate measurement
- Heat anticipator for close temperature control
- Simple dial for temperature setting
- 10 to 30°C setpoint range
- Change over contact switching
- Easy to wire terminals with built-in conductor clamps to ensure wiring is retained securely for use in cooling and heating/cooling applications
- Suitable for surface or switch box mounting (fixing screws are supplied for either surface or flush mounting box)

Y6630D room thermostat

The Y6630D is a battery powered wireless room thermostat and mains powered HC60NG Receiver Box, to give intelligent room temperature control of a single zone.
- Energy saving TPI control.
- Simple dial for temperature setting, no programming required.
- LED indication of battery status and RF signal.
- Solid state temperature sensing.
- 'ON' LED indication.
- Restrict temperature setting range.
- Wireless thermostat and receiver with Radio Frequency (RF) communication check for easier diagnostics.
- Battery powered (with low power indicator).
- Volt free connections.
- Replacement Wireless Room Thermostat available (code HCW80)
- Replacement Receiver Box avail (code R6660D1041)

Product Code	Description
DT92E1000	Wireless digital room thermostat with ECO energy saving feature; complete with batteries
DT90E1012	Wired digital room thermostat with ECO energy saving feature; complete with batteries and full instructions

Product Code	Functions
T6360B1028	Standard model complete with heat anticipator and RFI suppressor to protect from external electrical interference.10 amp
T4360B1015	High current rated version with SPST switching and rated at 16A (resistive). This model is without a heat anticipator
T6360B1069	As standard model but with tamper-resistant cover and setting dial
T6360B1036	As standard model but with indicator lamp on front cover which is lit on a call for heat
T6360B1085	As standard model but with setting dial marked 1 to 5
T4360E1018	Model with temperature setback heater (fixed at 6°C) and SPST switching Complete with anticipator heater and RFI suppressor

Product Code	Description
Y6630D1007	Pre-bound Wireless Room Thermostat and Receiver Box complete withbatteries, fixing screws and instructions

T4360
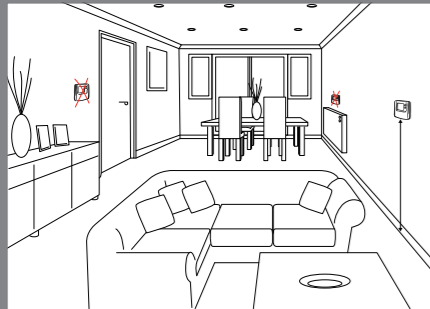## Frost wired room thermostat

The T4360 is a mains voltage frost thermostat designed to give automatic frost protection to boilers, pipework and the fabric of the building. The thermostat should be fitted in the coldest areas e.g. loft space, floor voids, garages etc.

- Dual diaphragm temperature sensing element for accurate temperature calculation
- 3 to 20°C setpoint range
- Tamper proof cover
- Suitable for surface or switch box mounting
- Double insulated, no earth wire required for operation
- Change over contacts for use in cooling and heating/cooling applications
- Use in conjunction with low limit Pipe Thermostat (Frost Kit)

Product Code	Functions
T4360A1009	Frost Thermostat
K42008628-001	Frost Kit including T4360 Frost Thermostat and L641B Low-Limit Pipe Thermostat

Positioning a room thermostat correctly

The performance of all room thermostats is affected by measured air flow across them. This air flow is dependent on the location of the room thermostat. If a room thermostat is poorly located, the air flow will not be representative of the rest of the room, and the temperature control will be adversely affected. Because every heating system must have a room thermostat, the decision of where to position it is very important. There are places where a room thermostat should never be found and require careful consideration before installing. The places that are left will be appropriate for locating the room thermostat.

So where should you put it? The diagram above gives good guidance on where a thermostat should be fitted. Generally, it is very difficult to suggest the perfect position, as every heating system is different.

Locate the room thermostat in the heated area (zone) requiring control on wall at a height of about 1.2m, where it has a free flow of air around it. But, do make sure that the thermostat is not suffering from any of the adverse factors in the following list.

Where you should never site a thermostat:
- In a room with another major heat source, e.g. an open fire, gas fire or cooker
- In an unheated room
- In a room fitted with radiator thermostats
- In direct sunlight
- Behind furniture or curtains
- In a warm draught
- In a cold draught
- Directly opposite a radiator, or other heat source
- Directly above a radiator, or other heat source (Don't forget that electrical appliances emit considerable amounts of heat. e.g. Television, DVD Player, Hi-fi etc)
- In a corner of two walls
- In a corner at the junction of the wall and ceiling

Some positions for a room thermostat may be perfectly acceptable, but exceptional problems may need to be considered.

On an external wall. The room thermostat may be on a cold wall, therefore overheating the living space. To overcome this, you may need to set the temperature at a lower point to compensate.

On a garage wall. Sometimes an electrician may surface mount the cable in the garage and then drill through the wall to access the back of the thermostat. This can allow a very cold draught directly into the back of the thermostat, reducing the sensed temperature and causing serious overheating of the living space. If the hole between garage and the property is competently filled, this should alleviate any temperature changing drafts.

It is, however, very easy to eliminate all of the inappropriate places to site the room thermostat.

Cylinder, Surface Mount & Immersion Thermostats

Our mechanical thermostats for Sundial systems and Mechanical Aquastat thermostats suit a wide variety of water heating control applications. Aquastats are liquid filled, sensitive, fast response thermostats, available as either surface mount or immersion versions and with standard control or manual reset to suit a wide range of requirements.

L641A cylinder thermostat

Hot Water Thermostats
L641A cylinder thermostat

The L641A cylinder thermostat is designed for surface mounting on domestic hot water cylinders. It can be used to switch directly a wet central heating circulating pump or boiler, or to operate spring return and motor open/close zone valves.
- Ideal for general applications
- Suitable for use on non insulated and foam lagged cylinders
- Can be installed either vertically or horizontally
- Surface mounted – easy to fit – no need to drain the system
- Dial or screwdriver slot temperature adjustment

L641B cylinder thermostat

L641B cylinder thermostat

The L641B is a control thermostat designed to provide high or low limit or frost protection in heating and hot water systems.
- Ideal for pumped systems
- Tamperproof adjustment option
- High & low limit models
- Bi-metal strip sensor
- Surface mounted

L6190B cylinder thermostat
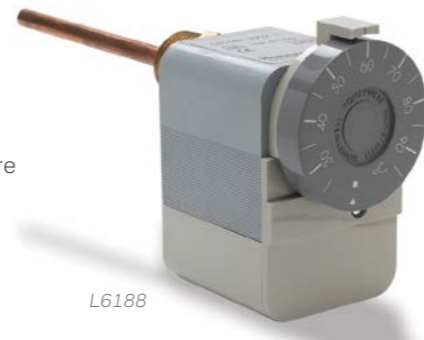
L6190B cylinder thermostat

The L6190B is a high limit control thermostat, which has a tamperproof concealed adjustment. The liquid-filled probe means highly responsive tempera-ture control.
- Commercial construction with a wide temperature range
- Surface mounted – can be installed either vertically or horizontally
- Large adjustment dial for easy temperature setting

Product Code	Application
L641A1039	Cylinder Thermostat, setting 40 to 80˚C, Diff. 10ºC with strap
L6190B1014	Cylinder Thermostat, setting 25 to 95˚C, Diff. 12ºC with strap
L641B1004	Controller, setting 10 to 40˚C, min. setting 2ºC. With pipe fixing springs. Used with T4360A thermostat for Frost Protection Kit
L641B1012	Controller, setting 50 to 95˚C. With pipe fixing springs

Single Aquastat Immersion Thermostats

The L6188 Aquastat range is primarily designed for use on water-filled heating and hot water systems in domestic and commercial premises. The liquid filled temperature probe is designed to be inserted into a well in a heat exchanger or pipework. This ensures highly responsive temperature control.

L6188

Single Aquastat Immersion Thermostats					
Part Number	Temperature Range	Switching Differential (ºC)	Setting Method	Manual reset	Note
L6188A2002U	25-95 ºC	4-10 adjustable	External Dial	No	With Well Assembly
L6188A2010U	40-110 ºC	4 -10 adjustable	External Dial	No	With Well Assembly
L6188A2028U	25-95 ºC	4 -10 adjustable	External Dial	No	1.5m Capillary
L6188A2036U	70-140 ºC	4 -10 adjustable	External Dial	No	With Well Assembly
L6188B2018U	70-140 ºC	4 -10 adjustable	Internal Setting	No	1.5m Capillary
L6188B2034U	25-95 ºC	4 -10 adjustable	Internal Setting	No	With Well Assembly
L6188C2008U	70-140 ºC	–	Internal Setting	Yes	1.5m Capillary
L6188C2016U	25-95 ºC	–	Internal Setting	Yes	With Well Assembly

Model	Features
L6188A	Aquastat with external control dial
L6188B	Aquastat with tamper-proof internal setting
L6188C	Aquastat with tamper-proof internal setting and manual reset

Aquastat Immersion Well Assembly	
45.900.409-003	Well Assembly for Single Immersion Aquastats. 1/BSPT thread. Length 105mm
45.900.409-007B	Well Assembly for Dual Immersion Aquastats. 1/2" BSPT thread. Length 105mm

Surface Mount Aquastat Thermostats

Two Aquastat thermostats are available:
The L6190B is a control thermostat, which has a tamperproof concealed adjustment. The liquid-filled probe means highly responsive temperature control, ideal for solid fuel applications. The L6190C is a high limit thermostat which requires manual resetting each time the contacts break when temperature rises. Typically used on unvented cylinder applications.

- Ideal for solid fuel applications
- Fast thermal response
- Large temperature range
- Double insulated
- Manual reset model
- Adjustable switching differential
- Surface mounted

L6190B   *L6190C*

Single Aquastat Immersion Thermostats					
Part Number	Temperature Range	Switching Differential (ºC)	Setting Method	Manual reset	Note
L6190B2014U	25-95 ºC	12	External Dial	No	2m mounting strap
L6190B2030U	25-95 ºC	4 -10 adjustable	Internal Setting	No	250mm mounting strap
L6190C2004U	25-95 ºC		Internal Setting	Yes	2m mounting strap

Dual Aquastat Immersion Thermostats

The L6191 Dual Aquastat combines both the controller and limit thermostats into one common unit, requiring only one direct immersion well. The controller and limit heads are provided with a jumper to minimise wiring.
The controller has an external adjustment, while the limit has concealed adjustment with manual reset feature.

- Fast thermal response
- Combined controller and limit
- Double insulated easy-to-wire terminals
- Optional gold-plated limit contacts for use in thermocouple/ECO appli-cations

L6188

Single Aquastat Immersion Thermostats						
Part Number	Thermostat	Temperature Range	Switching Differential (ºC)	Setting Method	Manual reset	Note
L6191A2007U	Control	40-110 ºC	4-10 adjustable	External Dial	No	With Well Assembly
	Limit	40-110 ºC	4	Internal Setting	No	
L6191A2015U	Control	25-95 ºC	4	External Dial	No	Gold Limit contacts for Thermocouple application
	Limit	101 ºC (fixed)	4	Internal Setting	No	
L6191A2023U	Control	50-95 ºC	4	External Dial	No	Gold Limit contacts for Thermocouple application
	Limit	101 ºC (fixed)	4	Internal Setting	No	
L6191B2005U	Control	25-95 ºC	4	External Dial	No	With Well Assembly
	Limit	40-110 ºC		Internal Setting	Yes	
L6191B2013U	Control	40-110 ºC	4-10 adjustable	External Dial	No	With Well Assembly
	Limit	40-110 ºC		Internal Setting	Yes	
L6191B2021U	Control	70-140 ºC	4-10 adjustable	External Dial	No	With Well Assembly
	Limit	70-140 ºC		Internal Setting	Yes	

Lyric T6 series programmable thermostat
Engineered for comfort

The Lyric T6 has been developed to meet the demand for smarter, connected controls.

Seamless control for you and your customers
The Lyric T6 offers customers a host of features to fit their lifestyle, whilst simplifying the installation and set-up process for installers.

One thermostat, multiple solutions
The Lyric T6 is available in both wired and wireless models, providing installers with a choice of installation or upgrade solutions.

Engineered for the future
The Lyric app gives customers complete control over their home heating system wherever they are.

The Lyric T6 Series supports all boilers and applications, offering integration into almost every heating system. Controls on/off (230V) boilers, OpenTherm boilers and heating systems, using TPI or modulating control, delivering superior energy efficiency without user interaction. Can be installed in a standard S Plan or Y Plan system.

- Compatible with 24–230V on/off and OpenTherm appliances such as gas boilers, combi boilers and heat pumps
- Easy integration into existing heating systems
- On-screen set-up and fail-safe functions accessible via the thermostat or the installers own smart phone simplifies the installation process
- 'In control' confirmation with a flame symbol
- Temperature measurement can be offset to suit the position of the thermostat if required
- Wi-Fi-enabled connectivity offers direct connection to the customer's home network without additional equipment
- Touch-screen interface simplifies scheduling, changing and overriding temperature
- Control via smartphone/tablet gives customers complete control of their heating system wherever they are
- Location-based temperature control (geo-fencing) adds an additional automated layer of control, adjusting the customer's home heating based on their location
- Pre-configured scheduling gives customers a choice of settings to suit their needs, including away modes and 7 day, 5/2 day and single day combined time and temperature control with up to 6 time periods per day
- Optimisation features, including optimum stop, start and delayed start boiler control, allow the thermostat and boiler to work more efficiently together
- Smarter TPI control protocols ensure the boiler fires for the minimum amount of time required to maintain the desired set point

Total control of temperature via smartphone or tablet app

Wireless Receiver Box

- The wireless receiver box has been redesigned to simplify the installation process.
- Simple flip-up wiring bar for easy access and an easy-to-install boiler or zone valve interface*
- Direct wall mounting or wall-box mounting
- Utilise existing wiring from a wired thermostat
- Specific OpenTherm terminals make connection to OpenTherm-capable boilers simple
- LED power and warning light system shows communication status with boiler or zone valve
- Override the thermostat and fire the boiler for a systems check with a one-button push
- Quickly reset and delete the current binding using the reset pinhole

Receiver box back plate

Both T6 and T6R models require a receiver box

Lyric T6 Wired Programmable Thermostat

- Wall-mounted programmable thermostat designed to replace existing wired models.
- Simple wall mounting solution
- Utilise wiring from the old thermostat, using an optional decor plate to cover a larger footprint where necessary

Lyric T6

Lyric T6R Wireless Programmable Thermostat

- Wireless programmable thermostat supporting easy installation.
- Small table-top stand (powered by standard power lead) can be easily positioned for optimal temperature measurement
- Easy switch-over for existing wireless receiver boxes with a simple, one-wire path to the boiler
- Device pre-bound at installation with the option to create a new binding using the thermostat or app
- Signal strength test facility ensures a robust wireless signal
- Boiler operation fail-safe feature for lost communications

Lyric T6R

Model	Product code
T6 wired	Y6H910WF1011
T6R Wireless	Y6H910RW4022

Single Zone Connected Thermostat

The perfect replacement room thermostat. It is the first choice for hundreds of replacement room control situations.

- Wireless digital room thermostat that is perfect for upgrades;
- For any system, any boiler
- Easy to fit & simple to use
- Remote control via a smartphone or tablet (RFG100 Mobile Access Kit required)
- Create a 2 zone S Plan Plus system controllable via the App (both zones on the one App)
- Easily rebind to any existing Honeywell wireless relay (use T87RF spare thermostat without the wireless relay)
- Battery powered with low battery indicator. pre-bound to the wireless relay box
- Use this for room temperature control with a combi boiler or connect the unit to the internet and provide full time and temperature scheduling via the app
- On screen battery status and RF signal check
- Use as a Programmable Thermostat: Once connected, you can also use the Total Connect Comfort App to provide a combined time and temperature profile of 6 time periods a day variable by day for each of 7 days
- Perfect for UK homes: The set point range is 5– 35 degrees C in .5 degree increments
- Energy saving TPI control
- Security features: programmed range stop function
- Can also be used: as a temperature sensing device in the evohome multi zoning system
- Will connect with the evohome security system—heating and security control in one app

Y87RF2024

Total control of temperature via smartphone or tablet app

RFG100 Mobile Access Kit

Simple to install wireless modem to let the Single Zone Thermostat communicate with the Honeywell Total Connect Comfort App - Connects via an Ethernet cable (supplied) to the home broadband router

- One button binding
- 240V power supply (supplied)
- Honeywell Total Connect Comfort App available free of charge from ITunes or Google Play Store; Free Honeywell TCC account

RFG100

evohome WiFi multi-zone system

evohome is a sophisticated heating system that ensures you can create and individually control up to 12 heating zones in domestic properties. evohome will also control domestic hot water.

evohome is suitable for any home with a hydronic (wet) central heating system. Zoning solutions can be designed for even the simplest of property layouts. evohome is ideal when looking to control temperatures in larger properties, such as luxury apartments; large family homes; homes with business use; multiple occupancy apartments and light commercial spaces, such as doctor's surgeries and small offices.

evohome allows the installation of multiple temperature sensing devices around the property without altering existing pipework, disrupting décor or damaging fixtures and fittings.

With touchscreen control, the user can quickly gain control of exactly where and when the property should be heated.

Remote access is provided via a tablet or smartphone.

Wireless Radiator Controllers provide an easy way of installing heating zones without draining down or disturbing pipes or décor.

OpenTherm control capability is possible by installing the evohome OpenTherm Bridge.

evohome can also be installed as a connected programmable thermostat to control any system and any boiler providing further connected thermostat product choice.

Total control of temperature via smartphone or tablet app

evohome controls

Radiator Controllers

- The radiator controllers use two-way communication with the evohome controller to ensure that commands are received and valves are opened while maintaining boiler interlock.

Attractively designed

- These slim, ergonomically-designed radiator controllers will fit on most standard TRV bodies. They are battery powered with a two-year battery life and a battery-low reminder visible on both the radiator controller screen and the evohome controller screen.
- The flip-up screen is backlit and can be positioned so that it can be easily viewed or folded away flat.

Full of features

- The backlit LCD screen displays the zone name and local set point temperature. The local set point temperature can easily be overridden by turning the dial at the top of the radiator controller. Override temperatures can be set in half degree increments and are effective until the next scheduled temperature change. There is an open window feature that recognises a sudden temperature drop and shuts off the local radiator.
- The zone temperature changes made either at the evohome controller's screen or via the remote app will change in real time on the screen on the radiator controller.

Simple to install

- Radiator controllers provide the optimum solution for installers when considering installing heating zones as there are no additional zone valves required which makes installation a lot quicker and cleaner. With existing TRV bodies already in place there is no need to drain down the system and they will fit on most compact radiators.
- They are easily bound into the system using the guided configuration feature in the evohome controller; binding confirmation is displayed on the screen. Controllers are available either individually or as a pack of 4.

evohome WiFi multi-zone system

The evohome Connected Thermostat Pack consists of an evohome controller, power lead and stand plus a wireless relay box. A zoning pack is available so that you can create additional heating zones.

evohome Radiator Multi-Zone Kit

The evohome Radiator Multi-Zone kit provides 4 wireless radiator controller heads allowing you to create up to 5 zones - one per head plus the evohome controller as a temperature sensing device in a zone. Individual radiator controllers are also available.

evohome Hot Water Kit

The Hot Water kit consists of a wireless cylinder thermostat, transceiver, optional unvented cylinder insertion sensor and an additional wireless relay for control of the hot water zone valve.

Digital room thermostat
Where there is a requirement to use a wireless room thermostat as a temperature sensor, Honeywell's DT92 or Y87 digital room thermostat can be included in the evohome system.

Wireless cylinder thermostat
Control domestic hot water via the evohome controller screen by installing an externally-mounted wireless cylinder thermostat onto the hot water cylinder; sensors are provided for vented and unvented cylinders.

Wireless relay
The remote relay is wired into either a motorised zone valve or an installed boiler and provides the wireless interface between these devices and the evohome system. The relay box requires a permanent 230V~ supply.

Under floor heating controller
By controlling hydronic under floor heating via the Honeywell under floor heating controller, the time and temperature of the under floor heating can be achieved via the evohome controller screen.

OpenTherm relay box
Allows the boiler to be modulated via this bridge between OpenTherm capabilities built into the evohome controller and the OpenTherm capable boiler. Only required when controlling an OpenTherm capable boiler.

Product Specification	
Order Code	
ATP921R3100	**evohome WiFi Connected Thermostat Pack:** 1 x evohome controller with white fascia, power lead and table stand, Wireless Relay box
ATF500DHW	**evohome Hot Water Kit:** Wireless cylinder thermostat, transceiver, vented and unvented cylinder insertion sensor and a Wireless Relay box for control of the hot water zone valve
HR924UK	**The evohome Radiator Multi-Zone Kit:** 4 wireless thermostatic radiator controllers
HR92UK	1 x Radiator Controller
BDR91T1004	Wireless Relay
DTS92E1020	Digital Room Thermostat
Y87RF2024	Single Zone Room Thermostat
ATC928G3000	1 x evohome controller (table stand not included)
R8810A1018	OpenTherm Bridge
Accessories	
ATF800	evohome WiFi desk stand
ATF600	evohome WiFi wall mounting pack
ATF700	evohome WiFi grey; graphite & black optional front covers
HCC80R	Underfloor heating controller
VHL120	Valve body kit for radiator
EVA1	Adaptor to fit Danfoss valve body (supplied as standard with HR92UK)
AOV30	Adaptor to fit Oventrop valve body
ACH28	Adaptor to fit Herz valve body
HCF82	Adaptor to fit Herz valve body
HCW82	Remote room temperature sensor
AVS90	HR92 vandal protection
APS90	HR92 power supply PCB
AFA90	Pack of 3 chromed caps for HR92
MT4-230-NC	Standard Actuator

Heating control timeswitches & programmers

Control the timing of your heating or hot water system, with either a seven day or single day timer.

Single channel timeswitch controls

1-day single channel timeswitch ST9100A

7-day single channel timeswitch ST9100C

1-day single channel timeswitch ST9100S with service interval reminder

The ST9100 single channel timeswitches are designed for control of a single heating zone or combi boiler applications.

The 3 timeswitches in the range are:
- ST9100A – 1-day timeswitch
- ST9100C – 7-day timeswitch to suit 7-day, and 5/2 day, timing profiles
- ST9100S – 1-day timeswitch with a service interval reminder. There is no difference in the appearance of the ST9100S, the ST9100A and the ST9100C.

All of the models feature:
- Large clear high contrast display for easy set up
- On screen instructions, provide text feedback that gives help and programming hints. The unit has programme indicator lights so that in operation checks can easily be made
- Large backlit display which can be set to off, intermittent or on continuously, with no extra energy consumption
- Up to 3 On/Off periods per day can be set and a choice of 3 different built-in programmes make timing choices easy
- Factory-set clock and date with automatic daylight saving, 1-hour time change facility.
- Programmed settings are retained indefinitely in non-volatile memory if mains power is lost

Additional control is provided through:
- Holiday button allowing programme override for a variable number of days making it easier to set the system for extended absences
- Extra hour facility, for up to 3 hours boost or programme extension
- Temporary or permanent override facilities for total individual control Installation is easy, as the unit fits onto industry standard back plates and is suitable for mains, low voltage or potential free switching.

Service Interval Reminder

The service timer facility is available on the ST9100S model. This is a reminder on the display when a heating system service is due each year. The service interval can be set to flag up a message, restrict the heating to manual control only, or disable the heating completely. The interval period is adjustable to between 1 and 400 days. All settings are protected by a PIN code that can be set by the installer.

Two channel programmers

ST9400A Two channel programmer

ST9400C Two channel programmer

ST9400S Two channel programmer with service interval reminder

Two zone programmers

ST9500C Two zone, two channel programmer

The ST9400 range of programmers are two channel programmers with independent timing for control of heating and hot water zones. The 3 programmers in the range are:
- ST9400A – 1-day programmer with two channels
- ST9400C – 7-day programmer, two channels to suit 7-day or 5-day and 2-day timing profiles
- ST9400S – 1-day programmer, two channel model with a service interval reminder

All of the models feature:
- Large clear high contrast display for easy set up
- On screen instructions, providing text feedback that gives help and programming hints. The unit has
- Programme indicator lights so that in operation checks can easily be made
- Large backlit display which can be set to off, intermittent or on continuously, with no extra energy consumption
- Up to 3 On/Off periods per day can be set and a choice of 3 different built-in programmes make timing choices easy
- Factory set clock and date with automatic daylight savings, 1-hour time change facility. Programmed settings are retained indefinitely in non-volatile memory if mains power is lost
- Additional control is provided through:
- Holiday button allowing programme override for a variable number of days, making it easier to set the system for extended absences
- Extra hour facility, for up to 3 hours boost or programme extension
- Temporary or permanent override facilities for total individual control

Installation is easy as the unit fits onto industry standard back plates and is suitable for mains, low voltage or potential free switching.

ST9500C features and benefits:
- ST9500 is a 2 channel 7-day full programmer designed to control 2 heating zones. Zoning a house not only helps make the heating system more energy efficient, but can also improve comfort conditions, as each zone will only be heated when required

Additional features are identical to the ST9400 models.

Product Code	Application
ST9100A1008	1-day timeswitch, having two on/off periods per day
ST9100C1006	7-day timeswitch, having three on/off periods per day
ST9100S1007	1-day timeswitch, with service interval reminder, having two on/off periods per day

Product Code	Application
ST9400A1002	1-day programmer, having two on/off periods per day
ST9400C1000	7-day programmer, having three on/off periods per day
ST9400S1001	1-da1-day programmer, with service interval reminder, having two on/off periods per day
ST9500C1015	2 zone, two channel programmer having three on/off periods per day

Classic Controls

These classic compact models have straightforward slider and button controls and are ideal for controlling small domestic heating systems, where minimum control is required.

1-day classic programmer ST699

7-day classic programmer ST799

These classic time controls (ST699/799) are not Building Regulations (Part L) compliant and we recommend that they are used only as like for like replacements. Consideration should be given to upgrading the control system to a more modern system.

These controls come in either a 1-day programmer version (ST699) or a 7-day programmer version (ST799). Both models feature:

- Classic controls that include a simple set of button or slider interfaces to control the time programme
- Compact size, can be wall mounted in places where space is at a premium
- Double insulated and suitable for surface or switchbox mounting
- Single channel operation for either heating or hot water
- Simple control choices – up to two on/off sequences can be programmed in a 24-hour period, with the same setting time for heating and hot water, repeated every 24-hours. Unit can be operated in a manual setting
- 12-hour display with AM/PM indication and has indicator lights that denote the timed period is active or unit is manually switched to on
- Reset button – return the settings to the original built-in programme
- Battery back-up included – in the event of a mains electricity failure, the programmed information will be retained for up to 7-days
- 1-day or 7-day model (The ST799 can be installed as a 5-day/2-day unit, to allow for weekday/weekend timed programmes)

Product Code	Application
ST699B1002	1-day programmer with separate outputs for heating and hot water
ST799A1003	7-day programmer with separate outputs for heating and hot water

Wiring Accessories

Designed to make wiring Honeywell products straightforward, these products help facilitate easier installation.

10 Way Junction Box

Wiring Centre

The 10 way Junction Box, designed to be used in conjunction with the numbered wiring diagrams provided in the Honeywell Wiring Guide. This is a universal box and can be used with any 5 amp rated wiring application.

- Compliant with current wiring regulations
- Strain relief on all entries
- Optimized sizing on terminals

The Sundial Plan Wiring Centre can be used with C, S and Y Plan systems and has single terminal connections which are clearly labelled.

- Provision is made for basic and pump overrun boilers.
- Dedicated terminal block for each system component
- One wire per terminal connection
- No wiring diagram or additional instructions required
- On the board fuse - plus spare
- Strong, fire retardant ABS box
- Cable clamps

Product Code	Application
42002116-002	10-way Junction Box
42005748-001	Sundial Plan Wiring Centre complete with fuse, spare fuse and cable clamps

Motorised Zone Valves

The range of leading motorised zone valves provide a full set of solutions to suit all domestic heating installations.

- The two port motorised valve has a wide range of flow control applications in domestic and light commercial central heating systems.
- The motorised mid position valves have been designed to control the flow of water in domestic central heating systems, where both radiator and hot water cylinder circuits are pumped. They are typically suited for small to medium sized installations.
- The motorised diverter valves are replacement products and have been designed to control the flow of water between heating and hot water in domestic fully pumped central systems.

All Models offer:
- Spring return action
- Power head, replaceable without draining down
- Manual lever for filling/draining down
- Quiet operation, minimal power consumption

For more information about these zone valves visit **www.honeywelluk.com**

Motorised 2 Port Zone Valve V4043

Motorised Mid-Position Valve V4073A

Motorised Diverter Valve V4044C

Motorised Zone Valves Spares

- A comprehensive range of Zone valve spares is available:
- Honeywell Original Equipment
- Replacement Zone Valve Head
- All the features and benefits of Honeywell zone valves - makes like for like replacement simple (not V4043B model)
- Replacement Zone Valve Motors
- Original Honeywell Equipment, replacement Zone Valve Motors
- Drive the valve with the same motor
- Replacement Zone Valve Components
- Honeywell Original Equipment, replacement components designed for the job

For a full list of Zone valve models and spares visit **www.honeywelluk.com**

Check out the full range of Honeywell Water Controls

Download this brochure from **www.honeywellukwater.com**

Honeywell Installer Training Courses

Expand your knowledge of heating and hot water controls with expert training on our one day installer courses, held across UK and Ireland. Learn more about how to install our Connected Product Range with one day courses across the UK. Visit: **honeywelluk.com**, email installer. training@honeywell.com or call 01344 656352 for more information.

YouLearn Training

Visit the Professional area of **www.honeywelluk.com** and find out more about the online training we provide.

Honeywell Apps

Check out the Apple App Store or Google Ply store and search for:

The Honeywell Wiring Guide
Our most highly requested print document is now available as an app.

The Installer Assistant
Use this to help you set up our range of timers & programmable thermostats.

For more information
www.honeywelluk.com

Honeywell Heating Controls
Honeywell House, Bracknell
Berkshire, RG12 1EB
Tel: 01344 656000
Fax: 01344 656240
E-mail: insidesales@honeywell.com
www.honeywelluk.com

Honeywell