



Wiring Guide

Issue 17

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These wiring diagrams are for guidance only and at the time of publication represent the latest information available to us from other manufacturers. Honeywell reserve the right at any time and without notice to change any product, specification or any other information contained in this publication and cannot accept any responsibility for loss or damage arising out of any errors that may inadvertently be contained herein.

Whilst Honeywell takes all reasonably practical steps to design and manufacture its products to comply with the requirements of the Health and Safety at Work Act 1974, all products must be properly used and purchasers are reminded that their obligations under the Act are to ensure that the installation and operation of such products at a place of work should be safe and without risk to them.



Honeywell has been manufacturing heating controls for over 100 years and is the UK leader for quality, efficiency and reliability.

This book contains wiring advice to assist with installing Honeywell heating controls in a variety of systems. Our range includes many wired and wireless models and this guide will help you complete the required wiring of our range of timers; programmers and thermostats.

All wiring should be carried out by a competent installer or electrician.



**ALL OF OUR PROGRAMMABLE
THERMOSTATS ARE BOILER
PLUS COMPLIANT**

Honeywelluk.com/boilerplus

Contact Us

Visit our Web site at www.honeywelluk.com

Installer Training Tel: 01344 656352

Email: installer.training@honeywell.com

Email: insidesales@honeywell.com

Web: www.honeywelluk.com

Literature

Our literature can be downloaded from www.honeywelluk.com

Technical Support

Phone: Contact our dedicated Technical support line on 0300 130 1299 and select Option 2

Email: technical.support@honeywell.com

Web: www.honeywelluk.com
(see Support section)

Any boiler. Any system

Our Heating controls are compatible with any boiler and any system including 24–230V on/off and OpenTherm® appliances such as gas & oil boilers, combi boilers and heat pumps.

The wireless versions also control zone valve applications that provide time control of stored domestic hot water and two heating zone applications (S Plan Plus).



System wiring notes

The Sundial Plan diagrams in this guide are designed for ease of wiring to a 10 way junction box (Honeywell part number 42002116-001). Where three plans are illustrated there is one for wired, wireless and wireless enabled controls.



*10 way junction box
42002116-001*

Connect the controls, pump, boiler and 230 Volt fused supply to the junction box terminals indicated by the arrows in the diagrams next to each control, other electrical device or circuit. These diagrams should be read in conjunction with product installation instructions.

A list of boilers can be found on page 16. Boilers with built in programmers must be wired in accordance with the manufacturers instructions.

ALL WIRING MUST BE IN ACCORDANCE WITH IEE & BUILDING REGULATIONS AND IN SOME CASES, NOTIFIABLE TO BUILDING CONTROL.

A list of programmers can be found on page 19. The room thermostat and programmer are for use with fixed wiring only; the cylinder thermostat may be used with fixed wiring or flexible cable; the motorised valves are supplied fitted with a one metre length of heat resistant cable.

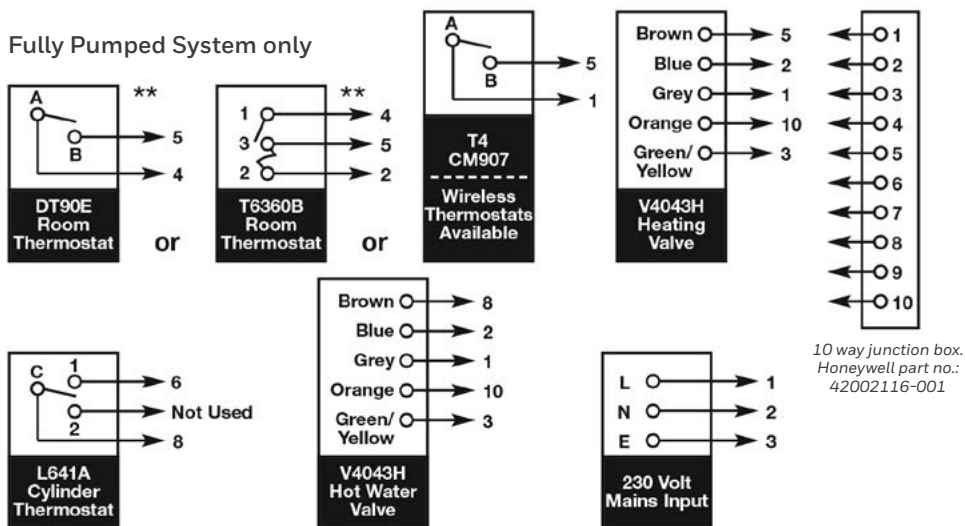
A switch (having contact separation of at least 3mm in all poles) must be incorporated in the fixed wiring as a means of disconnecting the mains supply.

The heating system must be appropriately fused for attached appliances. The diagrams refer only to 3 amp fuses for gas appliances throughout. Use a 5 amp fuse for oil where appropriate. The T6360B room thermostat, L641A cylinder thermostat and Honeywell range of programmers are Class II (double insulated) devices. Earth terminals, where provided, are for earth parking purposes only. All earth conductors inside the programmer and room thermostat must be appropriately sleeved. The zone valves are Class I devices and must be connected to a suitable earth.

Sundial S Plan

If using a 6 wire or 1" BSP V4043H on either circuit, the white wire is not needed and must be made electrically safe.

Fully Pumped System only



For list of central heating boilers to attach to this circuit - see page 18.

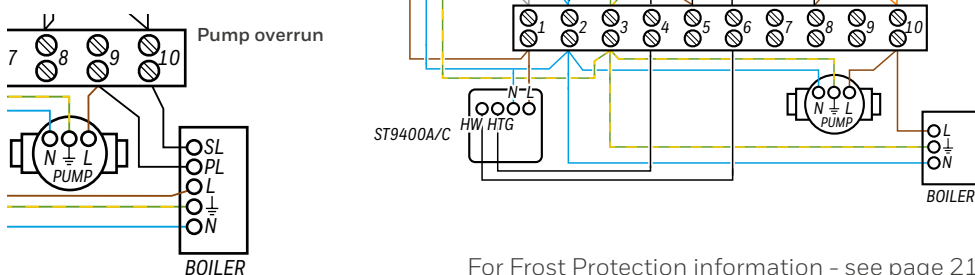
For list of programmers to attach to this circuit - see page 19.

When circuit is wired as above: Completed wiring will be as line drawing below.

Wired

Note:

1. It is recommended that either the 10 way junction box or Sundial Wiring Centre should be used to ensure first time, fault free wiring.
2. If using the V4043H1080 (1" BSP) or V4043H1106 (28mm), the white wire must be electrically isolated.
3. For wiring other room thermostats see above**.



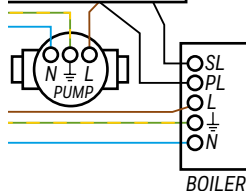
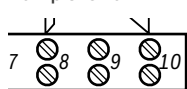
For Frost Protection information - see page 21

Sundial S Plan Wireless room thermostat

Note:

1. It is recommended that either the 10 way junction box or Sundial Wiring Centre should be used to ensure first time, fault free wiring.
2. If using the V4043H1080 (1" BSP) or V4043H1106 (28mm), the white wire must be electrically isolated.
3. The same terminal numbers are used on the receiver for both the DT92E and Y6630D wireless room thermostats.

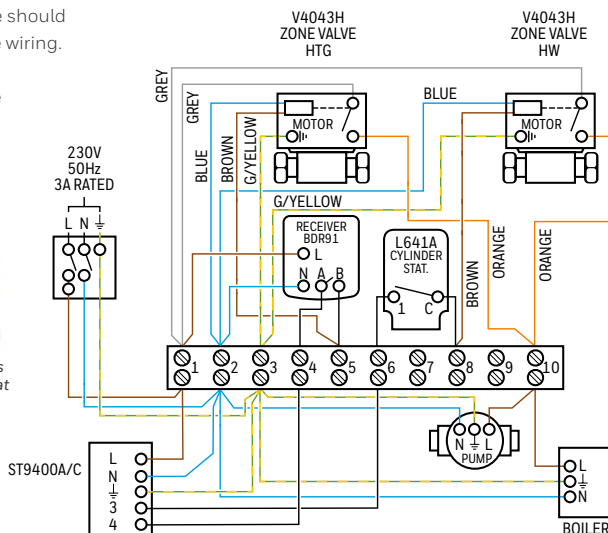
Pump overrun



DT92E wireless room thermostat



Y87RF room thermostat

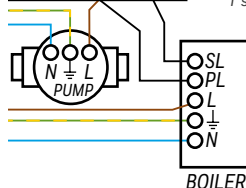
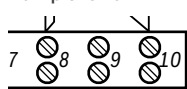


Sundial S Plan Wireless programmable room thermostat

Note:

1. It is recommended that either the 10 way junction box or Sundial Wiring Centre should be used to ensure first time, fault free wiring.
2. If using the V4043H1080 (1" BSP) or V4043H1106 (28mm), the white wire must be electrically isolated.
3. The same terminal numbers are used on the receiver for both the DT92E and Y6630D wireless room thermostats.

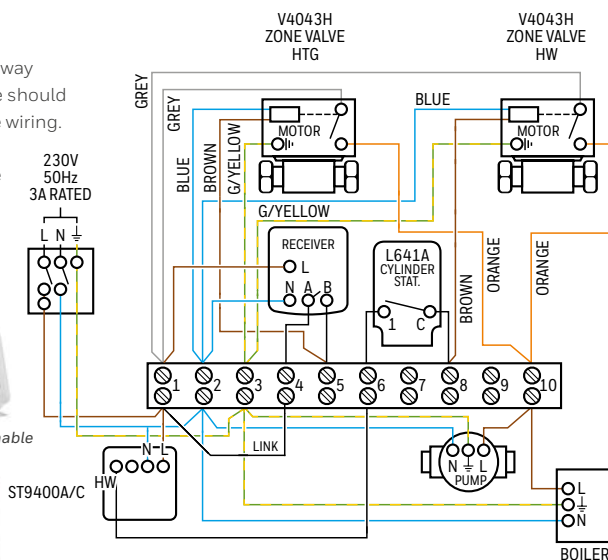
Pump overrun



T series programmable thermostat



T series programmable thermostat



For Frost Protection information - see page 21

Sundial S Plan Wireless enabled room thermostat (Sundial RF² Pack 2)

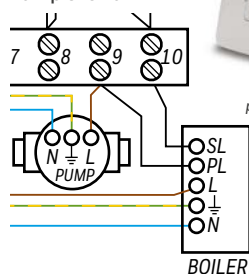
Note:

1. It is recommended that either the 10 way junction box or Sundial Wiring Centre should be used to ensure first time, fault free wiring.
2. If using the V4043H1080 (1" BSP) or V4043H1106 (28mm), the white wire must be be electrically isolated.
3. If replacing an old wired thermostat remove cabling and add a link between terminals 4 and 5 as shown.

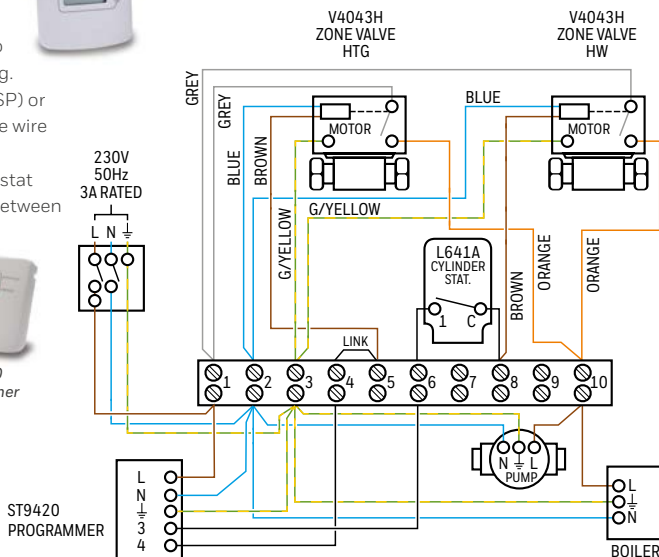


DT92E wireless room thermostat

Pump overrun



ST9420 programmer



Sundial S Plan T6R-HW smart thermostat with timed hot water control

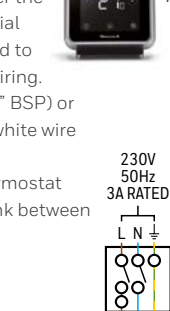
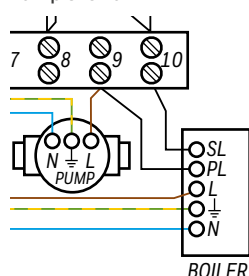
Note:

1. It is recommended that either the 10 way junction box or Sundial Wiring Centre should be used to ensure first time, fault free wiring.
2. If using the V4043H1080 (1" BSP) or V4043H1106 (28mm), the white wire must be electrically isolated.
3. If replacing an old wired thermostat remove cabling and add a link between terminals 4 and 5 as shown.

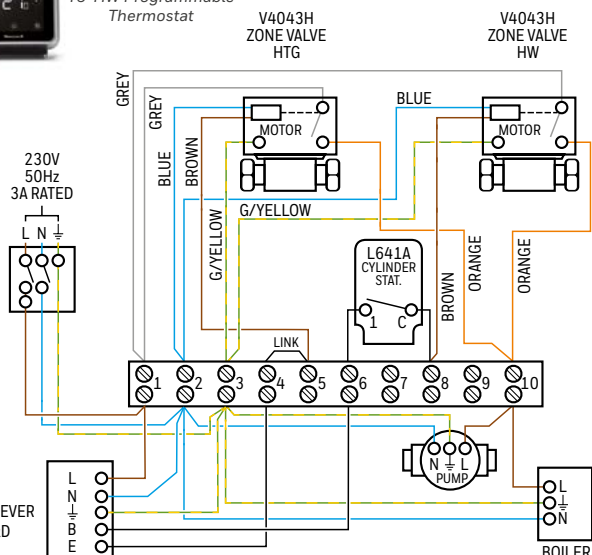


T6-HW Programmable Thermostat

Pump overrun



T6R-HW RECIEVER
(LINK L TO A&D
INTERNALLY)

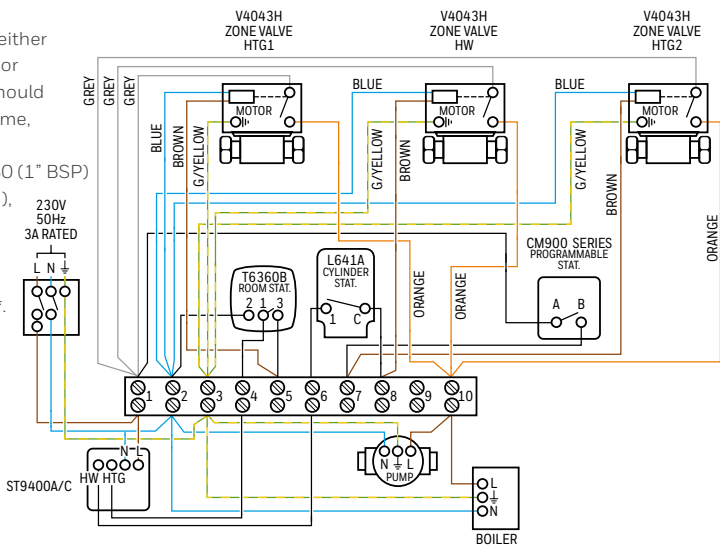
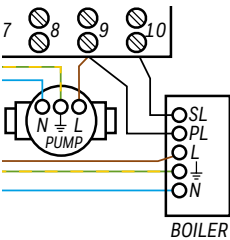


Sundial S Plan Plus

Note:

- 1. It is recommended that either the 10 way junction box or Sundial Wiring Centre should be used to ensure first time, fault free wiring.
- 2. If using the V4043H1080 (1" BSP) or V4043H1106 (28mm), the white wire must be electrically isolated.
- 3. For wiring other room thermostats see above**.

Pump overrun

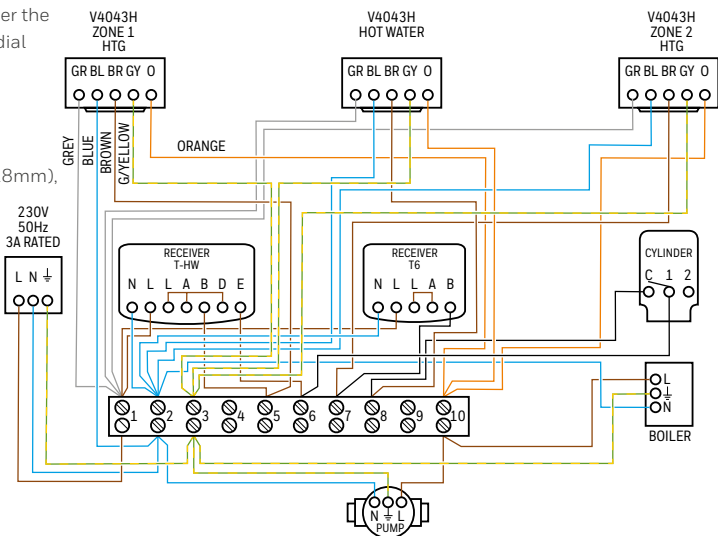
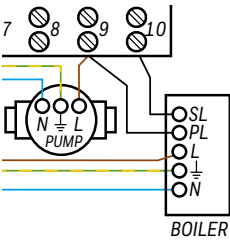


Sundial S Plan Plus T series wireless relay

Note:

- 1. It is recommended that either the 10 way junction box or Sundial Wiring Centre should be used to ensure first time, fault free wiring.
- 2. If using the V4043H1080 (1" BSP) or V4043H1106 (28mm), the white wire must be electrically isolated.
- 3. For wiring other room thermostats see above**.

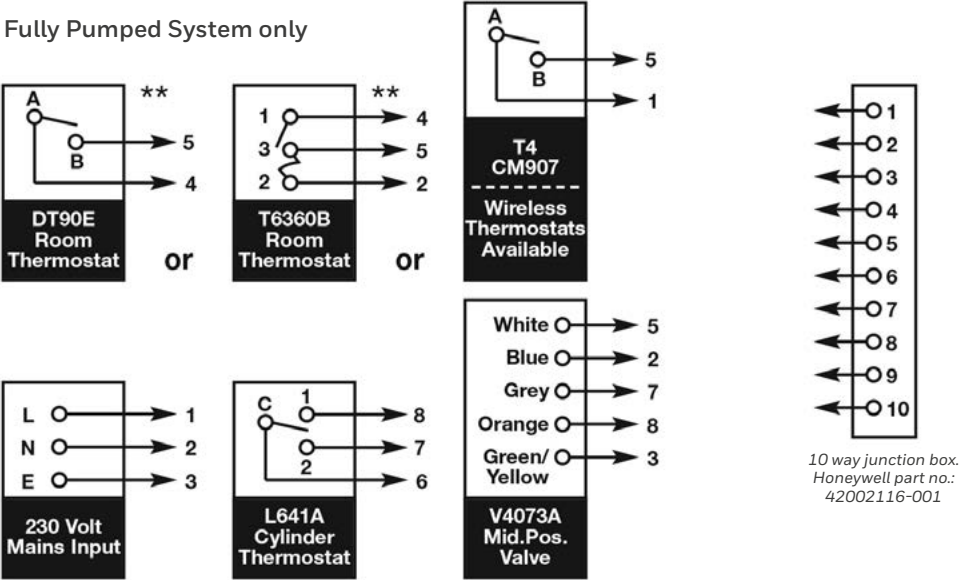
Pump overrun



For Frost Protection information - see page 21

Sundial Y Plan

Fully Pumped System only



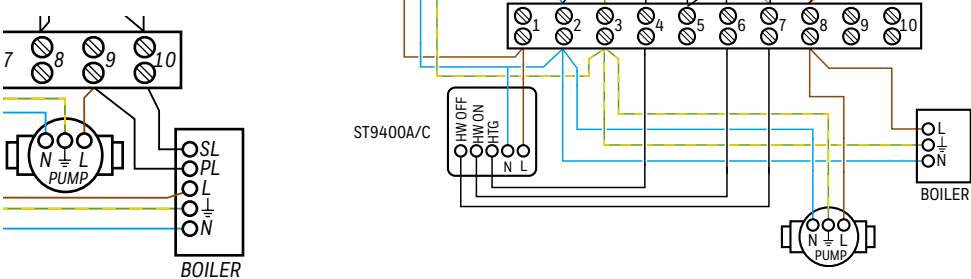
For list of central heating boilers to attach to this circuit - see page 18.
For list of programmers to attach to this circuit - see page 19.
When circuit is wired as above: Completed wiring will be as line drawing below.

Wired

Note:

1. It is recommended that either the 10 way junction box or Sundial Wiring Centre should be used to ensure first time, fault free wiring.
2. For wiring other room thermostats see above**.

Pump overrun



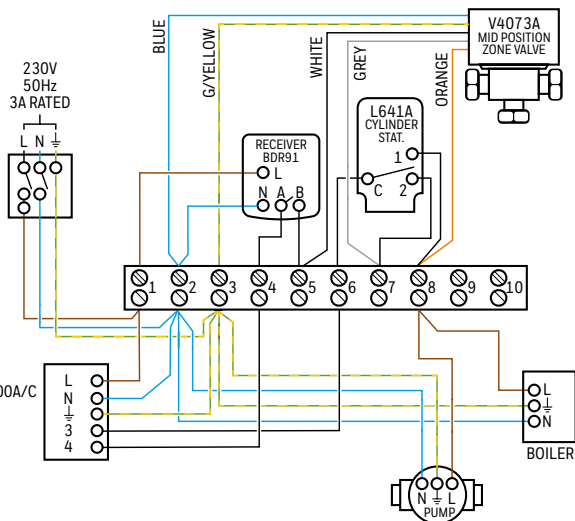
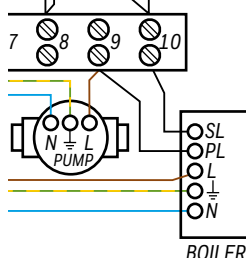
For Frost Protection information - see page 21

Sundial Y Plan Wireless room thermostat

Note:

1. It is recommended that either the 10 way junction box or Sundial Wiring Centre should be used to ensure first time, fault free wiring.
2. If using the V4043H1080 (1" BSP) or V4043H1106 (28mm), the white wire must be electrically isolated.

Pump overrun

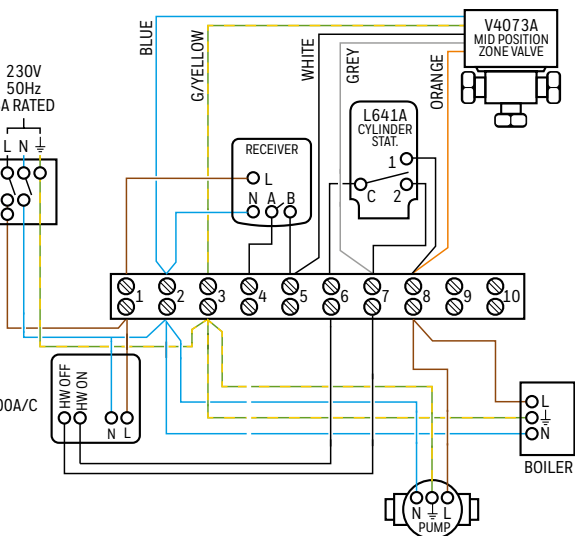
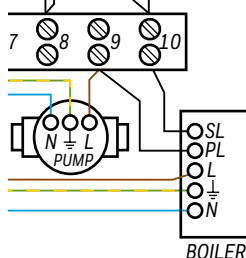


Sundial Y Plan Wireless programmable room

Note:

1. It is recommended that either the 10 way junction box or Sundial Wiring Centre should be used to ensure first time, fault free wiring.
2. If using the V4043H1080 (1" BSP) or V4043H1106 (28mm), the white wire must be electrically isolated.

Pump overrun



For Frost Protection information - see page 21

Sundial Y Plan Wireless enabled room thermostat (Sundial RF² Pack 2)

Note:

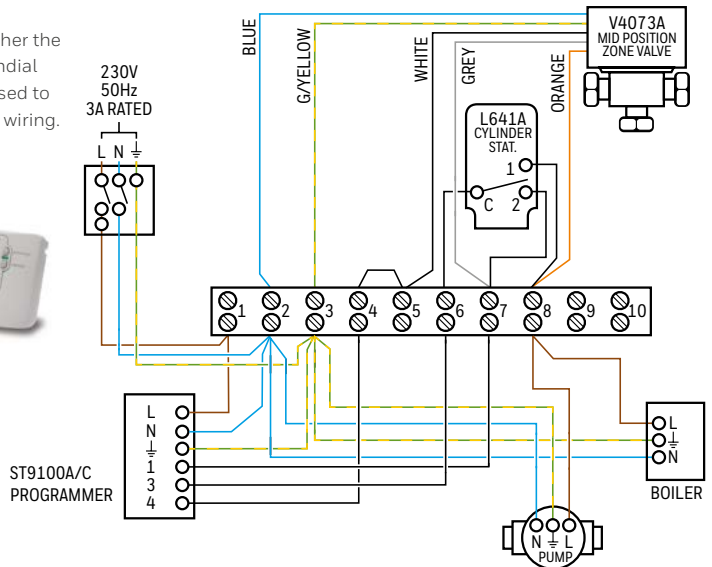
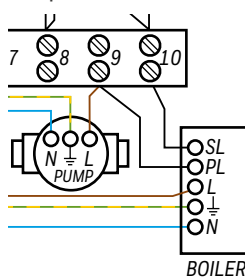
1. It is recommended that either the 10 way junction box or Sundial Wiring Centre should be used to ensure first time, fault free wiring.



DT92E wireless
room thermostat



ST9420
programmer



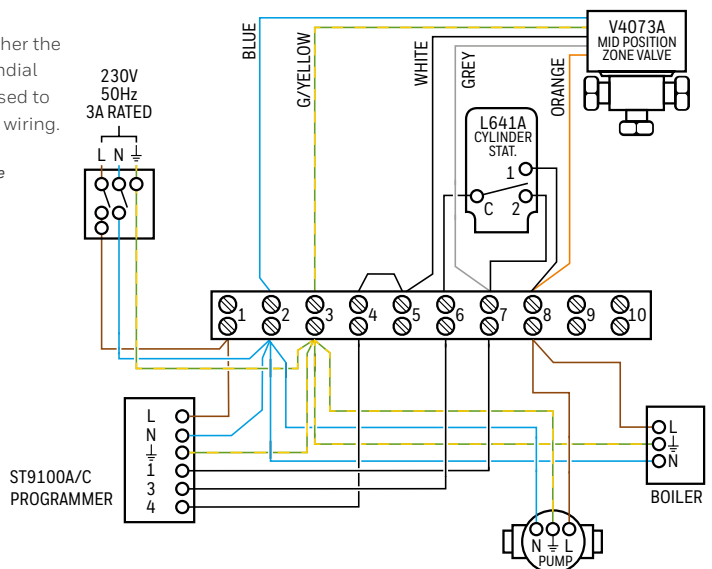
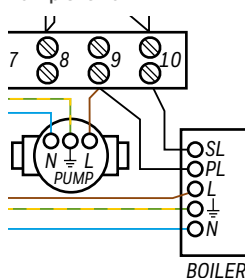
Sundial Y Plan T6R-HW thermostat with timed hot water control

Note:

1. It is recommended that either the 10 way junction box or Sundial Wiring Centre should be used to ensure first time, fault free wiring.

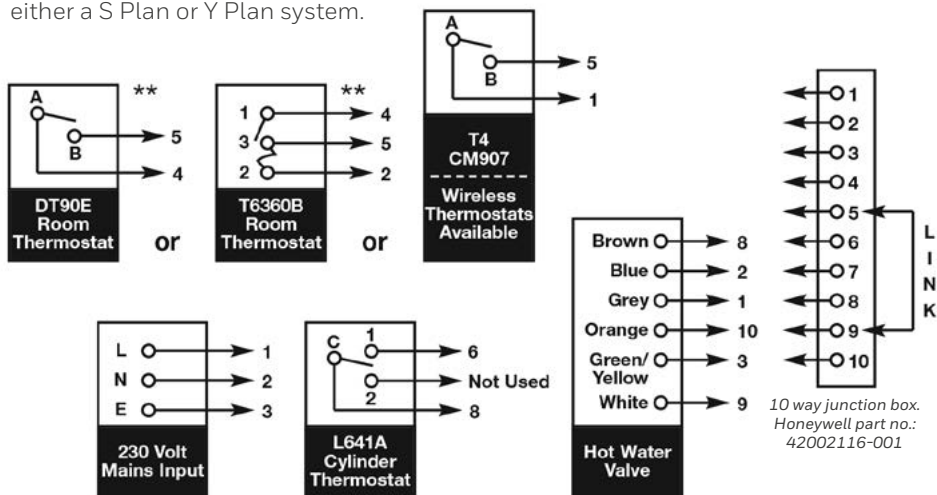


T6-HW Programmable Thermostat



Sundial C Plan Gravity hot water, pumped central heating

Link terminals 5-9 in the 10 way junction box. This plan does not comply with current to modern building regulations – we recommend upgrading the control system for either a S Plan or Y Plan system.



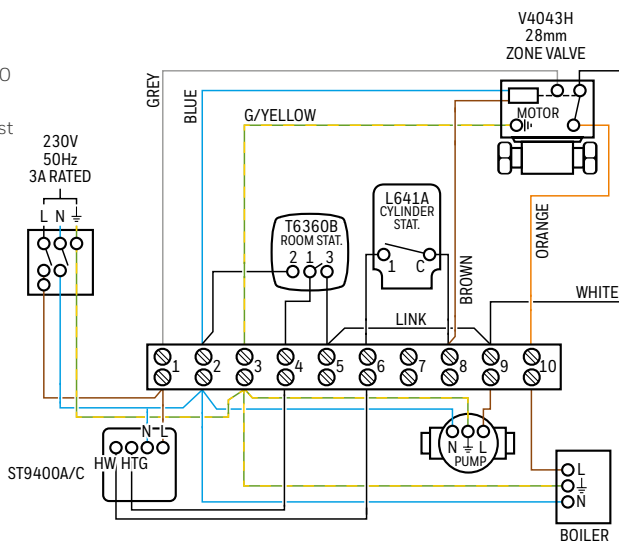
For list of central heating boilers to attach to this circuit - see page 18.

For list of programmers to attach to this circuit - see page 19.

When circuit is wired as above: Completed wiring will be as line drawing below.

Note:

1. It is recommended that either the 10 way junction box or Sundial Wiring Centre should be used to ensure first time, fault free wiring.
2. For wiring other room thermostats see above**



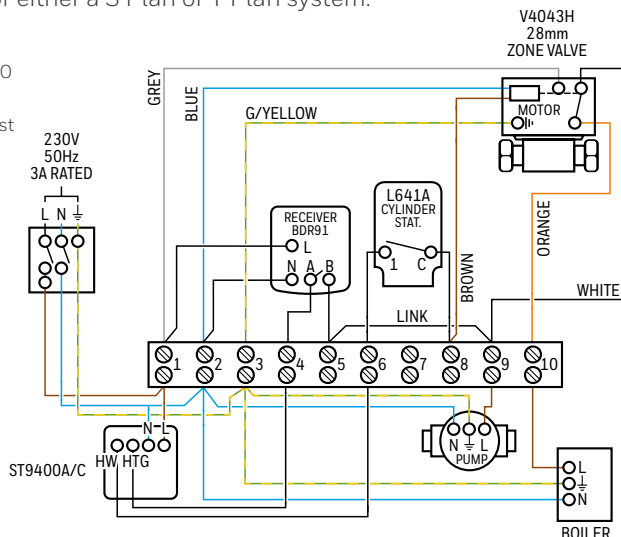
For Frost Protection information - see page 21

Sundial C Plan Wireless room thermostat

This plan does not comply with current modern building regulations – we recommend replacing the control system for either a S Plan or Y Plan system.

Note:

1. It is recommended that either the 10 way junction box or Sundial Wiring Centre should be used to ensure first time, fault free wiring.
2. The same terminal numbers are used on the receiver for both the DT92E and Y6630D wireless room thermostats.



Sundial C Plan Wireless enabled room thermostat

Note:

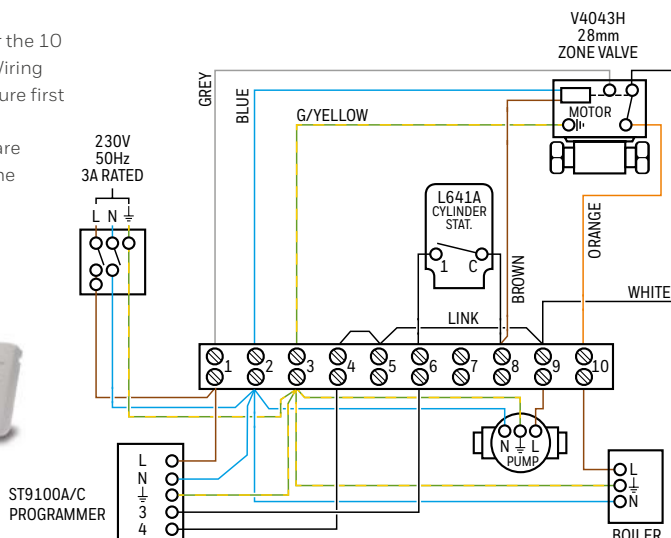
1. It is recommended that either the 10 way junction box or Sundial Wiring Centre should be used to ensure first time, fault free wiring.
2. The same terminal numbers are used on the receiver for both the DT92E and Y6630D wireless room thermostats.



DT92E wireless room thermostat

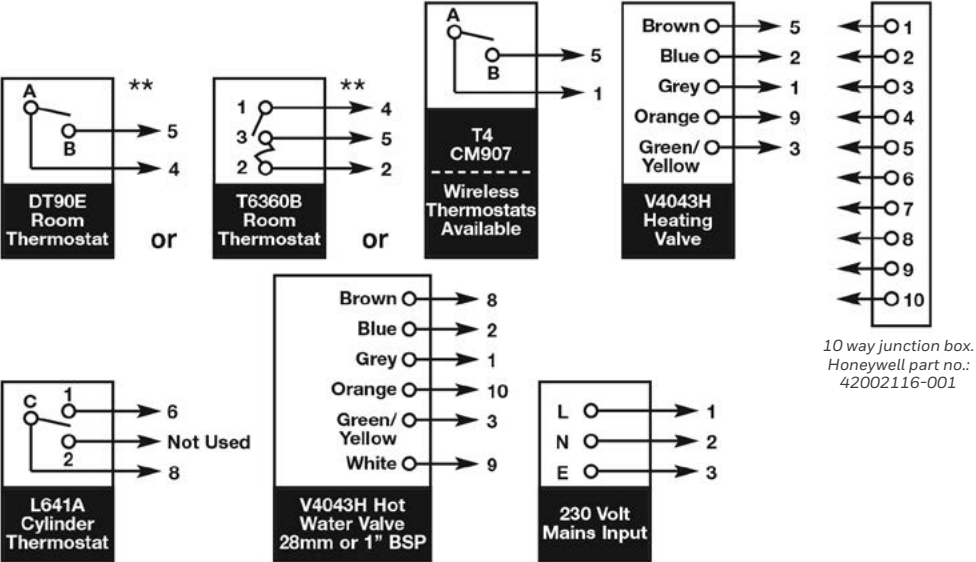


ST9100A/C programmer



For Frost Protection information - see page 21

Sundial C Plan Plus Gravity hot water, pumped central heating



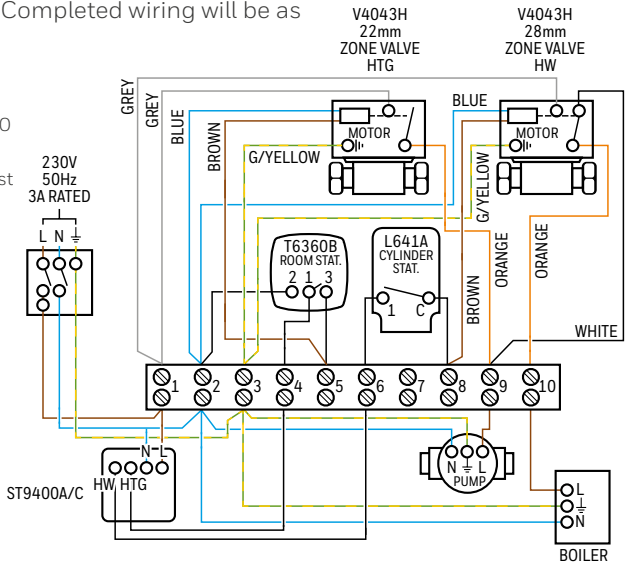
For list of central heating boilers to attach to this circuit - see page 16.

For list of programmers to attach to this circuit - see page 17.

When circuit is wired as above: Completed wiring will be as line drawing below.

Note:

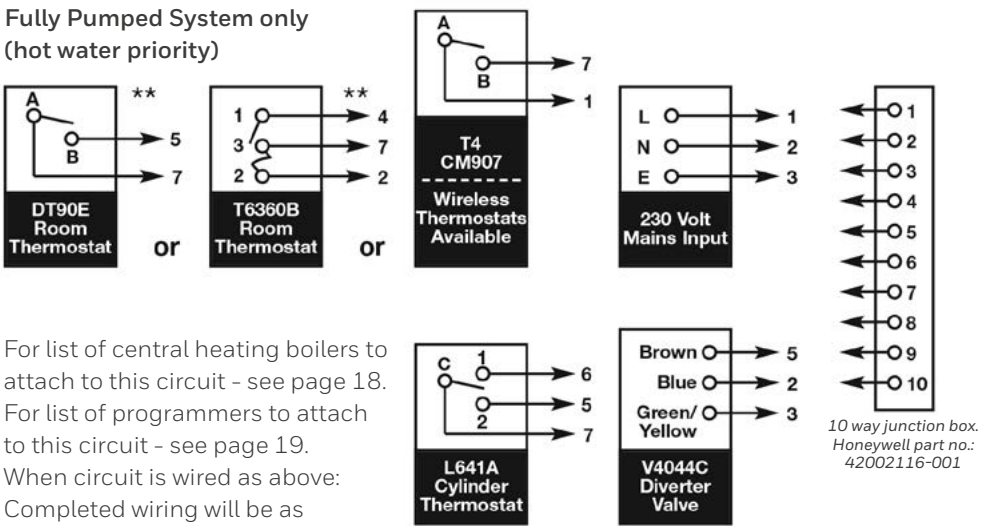
1. It is recommended that either the 10 way junction box or Sundial Wiring Centre should be used to ensure first time, fault free wiring.
2. For wiring other room thermostats see above**.



For Frost Protection information - see page 21

Sundial W Plan

Fully Pumped System only
(hot water priority)

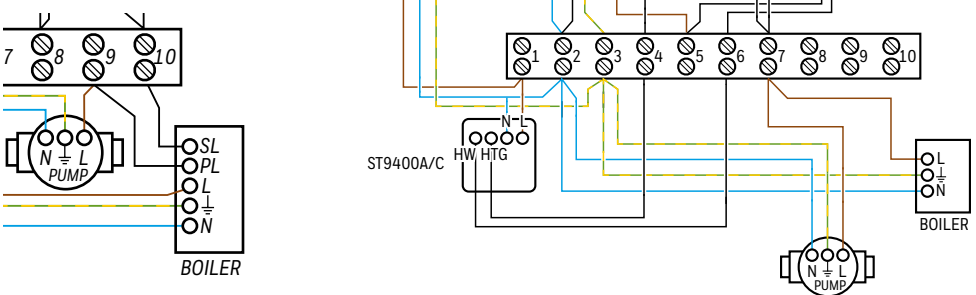


For list of central heating boilers to attach to this circuit - see page 18.
For list of programmers to attach to this circuit - see page 19.
When circuit is wired as above:
Completed wiring will be as line drawing below.

Note:

- 1. It is recommended that either the 10 way junction box or Sundial Wiring Centre should be used to ensure first time, fault free wiring.
- 2. For wiring other room thermostats see above**.

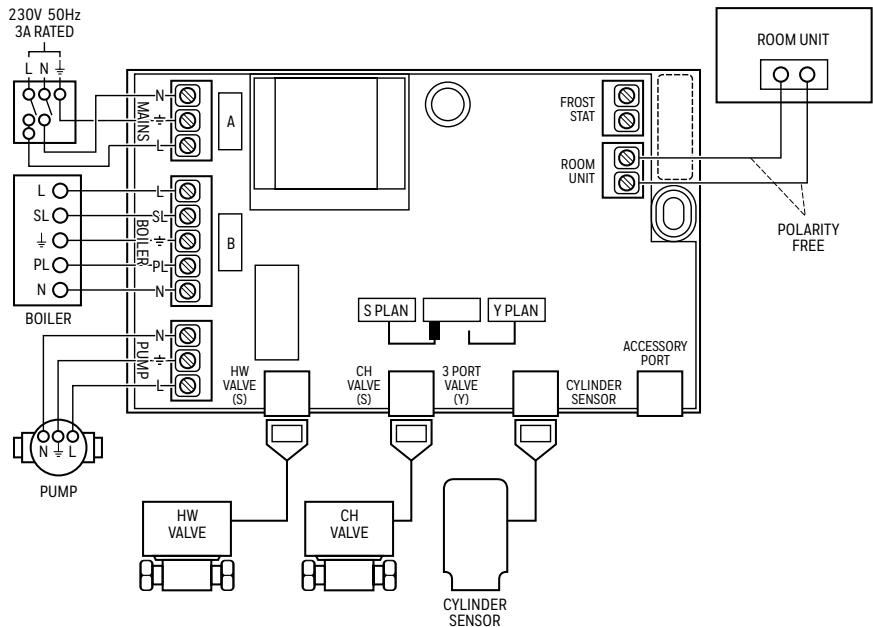
Pump overrun



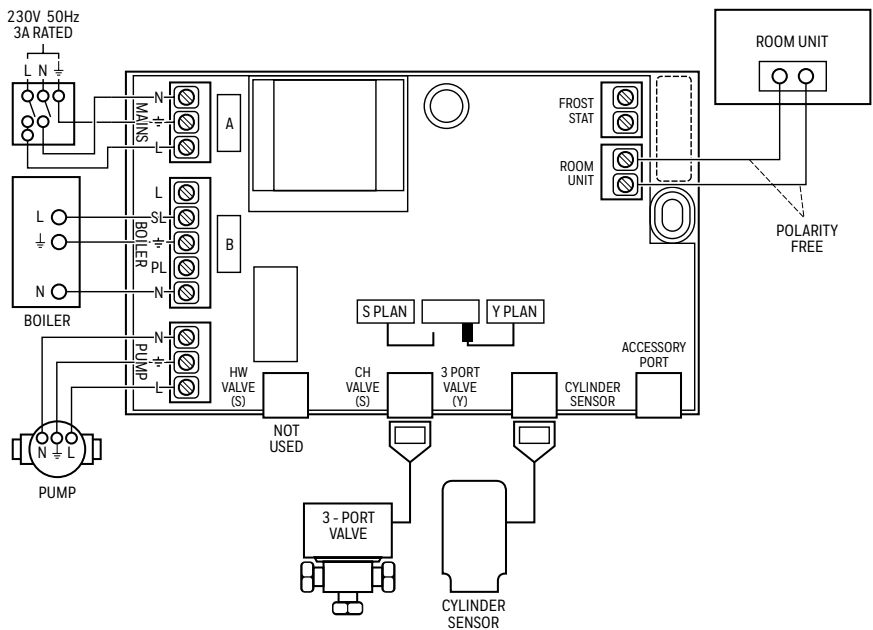
For Frost Protection information - see page 21

Smartfit

Smartfit S Plan System connected for pump overrun boiler



Smartfit Y Plan System connected for basic boiler



Smartfit

Smartfit has now been discontinued. Replacement components are no longer available. The need to replace faulty components will mean the heating system will need upgrading to either a S Plan or Y Plan system. In the event of a problem, a fault code will be displayed on the Room Unit display. Before removing Base Unit cover, isolate mains.

Fault Codes

Fault Code	Description	Action
Blank display	No display	a) Switch system off then on again b) Check that power is supplied to the base unit c) Check room unit connections at base unit and room unit
F1	Room Sensor Fault	a) Replace room unit
F2	S Plan - Central heating valve open circuit Y Plan - 3 Port valve open circuit	a) Check valve connections at base unit and valve b) Check valve cable for open circuit c) Change actuator
F3	S Plan - Central heating valve short circuit Y Plan - 3 Port valve short circuit	a) Ensure valve is plugged into correct socket b) Check valve connections at base unit and valve c) Check valve cable for short circuit d) Change actuator
F4	S Plan - Central heating valve jammed Y Plan - 3 port valve jammed	a) Check actuator is fitted to the valve b) Check actuator drives valve full travel. If not, remove actuator and check actuator will drive for at least 10 seconds c) Use manual lever on actuator to free valve d) Check valve for blockage and clear
F5	S Plan - Hot water valve open circuit	a) See F2 corrective action
F5	Y Plan - Incorrect system selection switch position	a) Ensure system selection switch in base unit is set to Y Plan position*
F6	S Plan - Hot water valve short circuit	a) See F3 corrective action
F6	Y Plan - Incorrect system selection switch position	a) Ensure system selection switch in base unit is set to Y Plan position*
F7	S Plan - Hot water valve jammed	a) See F4 corrective action
F7	Y Plan - Incorrect system selection switch position	a) Ensure system selection switch in base unit is set to Y Plan position*
F8	Cylinder sensor short circuit	a) Ensure cylinder sensor is plugged into correct socket b) Change cylinder sensor
F9	Cylinder sensor open circuit	a) Ensure cylinder sensor is plugged into correct socket b) Change cylinder sensor
F10	Valve in cylinder sensor socket	a) Reconnect valve to correct socket
F11	Valve or cylinder sensor in accessory port	a) Reconnect valve or cylinder sensor to correct socket
F12	Communication fault between room unit and base unit	a) Check room unit wiring b) Switch system off then on again c) Replace room unit d) Replace base unit
F13	Configuration fault	a) Replace room unit
F14	System selection switch fault	a) Check system selection switch in base unit is set to Y or S Plan position depending on the plan you have* b) Move switch across to plan you don't want then back to correct plan* c) Replace base unit
F15	Plug in hot water socket	a) Remove plug in hot water socket and connect to correct socket
F16	Remote room unit fault	a) Check remote room unit wiring b) Replace remote room unit
F17	Outside sensor short circuit	a) Check outside sensor wiring
F18	Outside sensor open circuit	a) Check outside sensor wiring
F19 to F22	Not used in S or Y Plan systems	Not used in S or Y Plan systems
F23	No automatic time set (ATS) signal for 5 days	a) Check ATS module is attached correctly b) De-select and then re-select ATS in Installer Mode c) Refer to ATS installer guide for detailed fault finding
F24	Internal fault	a) Replace room unit

*When changing the system selection switch the power must be off.

Boiler Wiring

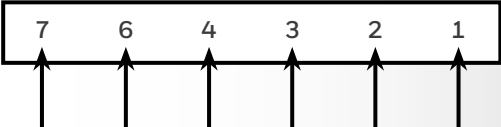
Terminal Block		Boiler					Pump			
		L	N	E	Pump	Demand	N	E		
S Plan		9	10	3	2	1	9	10	2	3
S Plan Plus		9	10	3	2	1	9	10	2	3
Y Plan		9	8	3	2	1	9	8	2	3
C Plan		9	10	3	2	1	9	10	2	3
C Plan Plus		9	10	3	2	1	9	10	2	3
W Plan		9	7	3	2	1	9	7	2	3
Regular Boiler	Boiler Name	Boiler					Pump			
Alpha	CD18R	L	N	E	PL		N	E		
	InTec2 20/30SE	L	N	E						
	CD 13/18/24R	L	N	E	PL		N	E		
Baxi	200		N	E			N	E		
	400		N	E			N	E	L	
	EcoBlue Advance 13/16/19/21/25/30		N	E			N	E	L	
Glow-worm	EcoBlue 12/15/18/21/24		N	E			N	E	L	
	EcoBlue 12/15/18/21/24/28/32	L	N	E						
	Energy	X1-L	X1-N	X1-E			N	E	L	
Ideal	Energy	X1-L	X1-N	X1-E						
	Easicom 3	X1-L	X1-N	X1-E			N	E	L	
	Easicom 3	X1-L	X1-N	X1-E						
Ideal	Ultimate 2	X1-L	X1-N	X1-E			N	E	L	
	Ultimate 2	X1-L	X1-N	X1-E						
	Mexico HE	L1	N	E			N	E	L	
Intergas	Logic Heat	L	N	E			N	E	L	
	Logic+ Heat	L	N	E			N	E	L	
	Logic System	L	N	E						
Potterton	Logic+ System	L	N	E						
	Vogue System	L	N	E						
	HRE SB	X2-2	X2-4	E						
Vaillant	HRE OV	X2-2	X2-4	E						
	Assure		N	E			N	E	L	
	Assure	L	N	E						
Worcester	Promax		N	E			N	E	L	
	Promax	L	N	E						
	EcoFIT Pure	X1-L	X1-N	X1-E						
Worcester	EcoTec	L	N	E						
	EcoFIT Pure	X1-L	X1-N	X1-E						
	EcoTec	L	N	E						
Worcester	100-W	X1-L	X1-N	X1-E			N	E	L	
	Greenstar CDI Classic	L	N	E						
	Greenstar i	L	N	E						
Worcester	Greenstar CDI Classic	L	N	E	LZ / LN			E		
	Greenstar Ri	L	N	E	LP / LN			E		
	Greenstar Ri Compact	L	N	E	Htg L / N/E					

Combi Boilers	Name	Boiler			Mains		Volt Free		
Alpha	InTec2 20/30SE	E	N	L	1	2			
	InTec2 25/28XE	E	N	L	1	2			
	InTec 30/34C	E	N	L	1	2			
	InTec 30/40GS	E	N	L	1	2			
	Eco2 Plus	E	N	L	1	2			
Baxi	100	E	N	L	M1-1	M1-2			
	200	E	N	L	X4-1	X4-2			
	400	E	N	L	X4-1	X4-2			
	600	E	N	L	M1-1	M1-2			
	Duotec 24/28/33/40	E	N	L	1	2			
Glow-worm	EcoBlue Advance 24/28/33/40	E	N	L	M1-1	M1-2			
	Eco Blue Plus 24/28/33	E	N	L	M1-1	M1-2			
	Platinum 24/28/33/40	E	N	L	1	2			
	Easicom 3	E	N	L	X1-L	X1-RT			
	Betacom 3	E	N	L	X1-L	X1-RT			
Ideal	Ultimate 2	E	N	L	X1-L	X1-RT			
	Energy	E	N	L	X1-L	X1-RT			
	Logic+ System	E	N	L	1	2			
	Logic Combi	E	N	L	RS/T-1	RS/T-2			
	Logic+ Combi	E	N	L	RS/T-1	RS/T-2			
Intergas	Vogue Combi	E	N	L	RS/T-1	RS/T-2			
	Rapid	E	X2-4	X2-2	X2-1	X2-3	X4-6	X2-7	
	Eco RF	E	X2-4	X2-2	X2-1	X2-3	X4-6	X2-7	
	HRE	E	X2-4	X2-2	X2-1	X2-3	X4-6	X2-7	
	Potterton	E	N	L	G1	G2	M1	M2	
Vaillant	Promax	E	N	L	G1	G2	M1	M2	
	Promax Ultra	E	N	L	G1	G2	M1	M2	
	EcoFIT Pure	E	N	L	X1-L	X1-RT			
	EcoTec	E	N	L	RT230	RT230	RT24	RT24	
	Viessmann	E	N	L	Kit 7582789 required	X9.1	X9.2		
Worcester	Vitodens 050	E	N	L	X1-L	X1-1			
	Vitodens 100	E	N	L	LS	LR			
	Greenstar CDI Classic	E	N	L	LS	LR			
	Greenstar Highflow CDI	E	N	L	230V Out-L	LR (HTG)			
	Greenstar CDI Compact	E	N	L	230V Out-L	LR (HTG)			
Worcester	Greenstar Si Classic	E	N	L	230V Out-L	LR (HTG)			
	Greenstar i	E	N	L	230V Out-L	LR (HTG)			
	Boulter		L	E	N			L	N E
	Esse		10	E	3			L	N E
	Grant		1	4	2		L		N E
Worcester	Multi Pass 50/70								
	Potterton		L	E	N			L	N E
	Rayburn		BLK	E	N	L		L	N E
	Heatranger	PL	SWL	E	N	L			N E

Notes: 1. This information is only provided as a guide. The boiler manufacturer's installation instructions should always be consulted to confirm the correct connections.
2. Some boilers may require the removal of links and/or parameter changes. Please consult the boiler manufacturer's instructions for details.
3. For boilers not listed please consult the boiler manufacturer's instructions or their technical support dept.

Programmer Wiring

Connect onto terminal
block numbers



Programmer Interchange	HW OFF	HW ON	CH ON	E	N	L
Honeywell ST9400, ST9440, ST9500	1	3	4	E	N	L
Honeywell ST6450, ST6400, ST6300	1	3	4	E	N	L
Honeywell ST6200		3	4	E	N	L
Honeywell ST699B, ST799A, (Link L5-8)	7	6	3		N	L
Honeywell ST7100	7	6	5	E	N	L
Programmer in RF ² Pack 2	1	3	4	E	N	L
Programmer in RF ² Pack 3	1	3	4	E	N	L
Programmer in RF ² Pack 5	Help				N	L

CM900 & CM700 Replacement guide					
The CM range of Programmable thermostats is being superseded by newer, more technically advanced products—here's a handy replacement guide					
CM model	Programming and Wiring	Replace with	Reason	Replace with	Reason
CM701	One day wired version	T4 1, 5/2 & 7 day wired model	Automatic energy efficiency	T6 1, 5/2 & 7 day wired model	Automatic energy efficiency PLUS smart connected control
CM707	Seven day wired version	T4 1, 5/2 & 7 day wired model		T6 1, 5/2 & 7 day wired model	
CM721	One day wireless version	T4R 5/2 & 7 day wireless model		T6R 1, 5/2 & 7 day wireless model	
CM727	Seven day wireless version	T4R 5/2 & 7 day wireless model		T6R 5/2 & 7 day wireless model	
CM901	One day wired version	T4 1, 5/2 & 7 day wired model		T6 1, 5/2 & 7 day wired model	
CM907	Seven day wireless version	T4 1, 5/2 & 7 day wired model		T6 1, 5/2 & 7 day wired model	
CM921	One day wireless version	T4R 5/2 & 7 day wireless model		T6R 1, 5/2 & 7 day wireless model	
CM927	Seven day wireless version	T4R 5/2 & 7 day wireless model		T6R 1, 5/2 & 7 day wireless model	
Models best for	OpenTherm Boiler control	T4M 5/2 & 7 day wired model		T6R 1, 5/2 & 7 day wireless model or T6 wired model	
CM921	Hot Water Control			T6R-HW 1, 5/2 & 7 day wireless model	

Valve Wiring

Replacement Wiring Guide for the old V4073A1005 to all new V4073A models

The old valve had 6 wires and a relay plugged into one end. When replacing this old model with the newer model, wire the new valve colour for colour apart from the **Brown** wire which is missing from the new valve.

ON SINGLE CHANNEL TIME SWITCHES

Omit **Brown** wire and reverse C & 1 on the cylinder thermostat.

ON DOUBLE CHANNEL PROGRAMMERS i.e. separate switching outputs for Heating and Hot Water circuits.

Omit **Brown** wire and reverse C & 1 on the cylinder thermostat.

- For programmers capable of selecting heating only: Run extra cable from the Grey wire on the valve to the **HOT WATER OFF terminal on the programmer.**
- For programmers NOT capable of selecting heating only: This extra cable is NOT required and MUST NOT be included.

EXCEPT:

1. ON RANDALL 4033 PROGRAMMER

Remove wire that connects to cylinder thermostat 1 at JUNCTION BOX end and re-connect to **Orange** wire connection of mid-position valve. Disconnect wire at Terminal 1 on programmer, isolate and make safe. Add link in programmer back plate between Terminals 1 and 6.

NB. If the Randall 4033 has been used as a junction box, any wires going into terminal 1 should be removed and re-connected into a spare terminal connector (not supplied by Honeywell).

2. ON SANGAMO 410 FORM 1 PROGRAMMER

Follow instructions for Randall 4033, except on programmer base plate, disconnect wire on Terminal 3 and add link between 3 and 6 on baseplate of Programmer.

MOTORISED VALVE INTERCHANGEABILITY GUIDE

Programmer Interchange	E	N	S/L	HW ON	CH ON	HW OFF
Honeywell V4073A	GY	BL	OR		WH	GR
ACL 679H340	GY	BL	OR		WH	GR
ACL 679B340	GY	BL	OR		WH	GR
Danfoss/Randall DVM-3M	GY	BL	OR		WH	GR
Danfoss/Randall HSA3	GY	BL	OR		WH	GR
Drayton Flowshare 2	GY	BL	OR		WH	GR
Grasslin/Tower MP 22C	GY	BL	OR		WH	GR
Landis & Gyr MAV322	GY	BL	OR		WH	GR
Pegler/Sunvic SD2701	GY	BL	OR		WH	GR
Pegler/Sunvic SDV2211	GY	BL	OR		WH	GR
Pegler/Sunvic SD1701	GY	BL	OR		BR	GR
Potterton/Myson PMV3	GY	BL	OR		BR	GR
Potterton/Myson MSV322	GY	BL	OR		WH	GR
Sopac ZV20-EB	GY	BL	RE		WH	GR
Switchmaster MIDI	GY	BL	RE	OR	YE	WH
Danfoss Heatshare	GY	BL	RE	OR	YE	WH

Add Link

Model	E	N	S/L	Motor	PL
Honeywell V4043H	GY	BL	OR	BR	GR
ACL 679H308-30L1	GY	BL	OR	BR	GR
ACL 679B308-30L1	GY	BL	BK	BR	WH
Danfoss/Randall DVM-2C	GY	BL	OR	BR	GR
Danfoss/Randall HP2A		BL	OR	BR	GR
Drayton	GY	BL	OR	BR	GR
Landis & Gyr ZAV222	GY	BL	OR	BR	GR
Pegler/Sunvic SZV 1212		BL	OR	BR	GR
Potterton/Myson PMV43	GY	BL	OR	BR	GR
Randall HPA2	GY	BL	OR	BR	GR
Sopac ZV20-2-EB	GY	BL	RE	WH	GR
Switchmaster Auto Z	GY	BL	OR	BR	GR
Tower/Grasslin MV2-22C	GY	BL	OR	BR	GR

Sunvic V*203

(White wire - make electrically safe)

Connect Grey wire on V4043H to permanent live.

GY = Green/Yellow
YE = Yellow

BK = Black
BL = Blue

BR = Brown
RE = Red

OR = Orange
WH = White

GR = Grey

Frost Thermostats



T4360 Frost Thermostat and L641B Pipe Thermostat

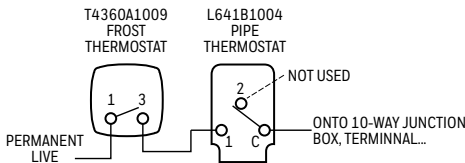
To reduce the risk of frozen pipework during severe cold weather, Frost Protection can be installed to protect either the whole central heating system or the boiler and localised pipework. These controls are designed to override the Programmer and Room Thermostat controls whether wired, wireless or wireless enabled.

If a Frost Thermostat only is to be installed to protect the whole central heating system, it must be sited where a rise and fall in heated air temperature can be detected, i.e. in a room with a radiator, and set to 12-16°C. This function is built in to programmable thermostats and Sundial RF².

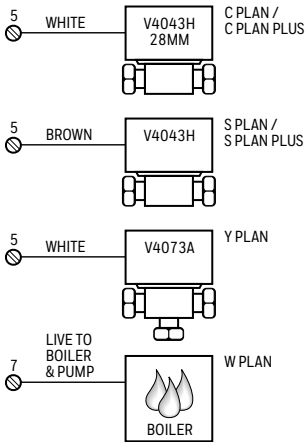
If the Frost Thermostat is installed outside the heated area, i.e. in a boiler room, garage or attic space, it is strongly recommended that a Pipe Thermostat be used as well to ensure that overheating of the property does not occur. The Frost Thermostat should be set to 5°C. The Pipe Thermostat will sense a rise in water temperature in the pipework and then switch the system off. It should be sited on the boiler return, set at 25°C and wired as below.

Mains Voltage Frost Kit: K42008628-001

T4360 Frost Thermostat and L641B Low-Limit Pipe Thermostat
(Recommend 1mm² 240Vac rated cable)



(Mains Voltage Frost Kit cannot be used on Smartfit)

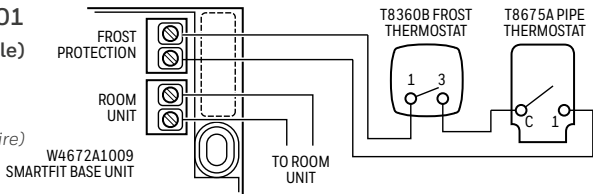


Smartfit Frost Kit: K42009706-001

(this is obsolete and no longer available)

T8630B Frost Thermostat and T8675A
Low-Limit Pipe Thermostat

(Recommend 2-core doorbell 10Vdc rated wire)



When a Frost Thermostat is installed on a central heating system, the fused spur should only be switched off for servicing and maintenance. If the heating system is to be switched off for any other reason, eg. holiday, then switching must only be carried out at the Programmer or Timeswitch, otherwise the Frost Protection is disabled.

Sundial Y Plan

The table opposite gives guidance on a quick electrical check for installed wired **Sundial Y Plans** to help in commissioning and to pin-point the source of any electrical problems. Remember the **Golden Rule** when you have a problem. First of all **check your wiring**. Only start suspecting faulty components after you are satisfied all wiring is correct.

The following notes will help to identify faulty components.

Cylinder Stat

First of all, make sure you have wired to the correct terminals.

Terminal C (common) is the **Left Hand** terminal. Terminal 1 is the **Middle** terminal. Terminal 2 is the **Right Hand** terminal.

Suspect the cylinder thermostat is faulty only if Terminal 1 does not become live when calling for Hot Water, or Terminal 2 does not become live when satisfied. (Make sure that Terminal C is live in both cases). While checking, disconnect Terminals 1 and 2 to prevent false readings due to backfeed.

Room Stat

- 1) Remove wire from Terminal 3.
- 2) Live to Terminal 1.
- 3) Turn stat to call, if no live on 3 then faulty.

Suspect the room stat is faulty only if Terminal 3 is not live when calling for heat. (Make sure Terminal 1 is live). While checking, disconnect wiring from Terminal 3 to prevent false readings due to backfeed.

Mid-Position Valve

Suspect the V4073A valve is faulty only if the valve does not operate as specified in the following checks (these should be done in order 1, 2, 3, 4, 5 and 6).

Valve open for Heating only

1. **Switch off mains supply.** Disconnect **Grey** and **White** wires from appropriate junction box terminals. Reconnect both Grey and White wires to permanent live terminal in junction box.
2. Switch on mains supply. Valve motor should now move to fully open heating Port A. The motor should stop automatically when Port A is open, and stay in this position as long as power is applied to **White** and **Grey** wires. When Port A is fully open, the **Orange** wire becomes live, to start pump and boiler.

Double check by feeling that Port A outlet is getting progressively warmer.

Valve open for DHW only

3. Switch off mains supply. The valve should now automatically return to open DHW Port B and close Heating Port A.
4. Isolate **Grey** and **White** wires and make safe. Remove cylinder stat wire from Terminal 6 in junction box and connect to permanent live. Switch on fused spur, cylinder thermostat must be set to call for heat, pump and boiler should start.

Valve open for both DHW and Heating

5. Switch off mains supply. Replace cylinder stat wire to Terminal 6. Isolate and make safe **Grey** wire and connect **White** wire to permanent live. Switch on mains supply, motor should now move to mid-position and stop automatically. Cylinder thermostat must be set to call for heat. Both ports A & B are now open for Hot Water and Heating. Boiler and pump should start.

Double check by feeling that pipe outlets from ports A & B become progressively warmer.

6. Switch off mains supply, reconnect **White** and **Grey** wires to junction box terminals. If this check completes satisfactorily, the problem is not the valve, but elsewhere in the circuit.

Programmer

Suspect the programmer only:

- (a) After you have made sure that any links required are in place,
- (b) After you have made sure that the Programmer has power – to the correct terminal,
- (c) After you have made sure that the Programmer timing is set up correctly (see individual Programmer User Guide as appropriate),
- (d) If live does not appear at Heating ON Terminal when Heating only is selected on continuous or timed,
- (e) If live does not appear at Hot Water ON Terminal when Hot Water only is selected on continuous or timed,
- (f) If live does not appear on Hot Water OFF terminal with Hot Water OFF on programmer.

Sundial Y Plan

Programmer Switch Position	Heating only selected	Hot Water only selected	Hot Water and Heating selected
Programmer	Live on both 'CH ON' & 'HW OFF' Terminals.	Live on 'HW ON' Terminal.	Live on both 'CH ON' & 'HW ON' Terminals.
T6360B Room Thermostat	Set to call for Heat. Live on Terminals 1 & 3.	No live on any terminal. (See note 2 for Terminal 3).	Set to call for Heat. Live on Terminals 1 & 3.
L641A Cylinder Thermostat	Nominal 90 volts. Live on Terminals 1 & 2 (Note Terminal 1 only becomes 240 volt live after V4073A valve opens and Boiler fires). (See notes below).	Set to call for Hot Water. Live on Terminals C & 1. (See note 2 for Terminal 2).	Set to call for Hot Water. Live on Terminals C & 1. (See note 2 for Terminal 2).
V4073A 3 Port Mid-Position Valve	Live on Grey , White and Orange wires. Valve opens to Port A for Central Heating (CH).	Live on Orange wire only (See note 2 for Grey and White wires) Valve not energised. Port B open for Domestic Hot Water (DHW).	Live on White wire and Orange wire. (See note 2 for Grey wire). Valve in mid position for CH and DHW.
Boiler and Pump	Boiler and pump fired via live feed from Orange wire.	Boiler and pump fired via live feed from Terminal 1 on cylinder stat.	Boiler and pump fired via live feed from Terminal 1 on cylinder stat and Orange wire.

Notes:

- Any checks to be undertaken on electrical wiring **must** only be made by a suitably qualified electrician or other competent person.
- Low A.C. voltage may appear on specified wire or terminals due to back feed from V4073A valve. If in doubt, disconnect **Grey** or **White** wire as appropriate, or check with meter for full 240V.
- Blue** wire on valve **must** be connected to neutral.
- Terminal 2 on the T6360B room thermostat **must always** be connected to neutral.
- Ensure that any links required in programmer are in place.
- Earth connection (**Green/Yellow**) **must** be made on valve.
- Earth connection not needed on room stat or cylinder stat.

SEE NOTES OPPOSITE IF YOU HAVE A PROBLEM

Sundial S Plan and S Plan Plus

The table opposite gives guidance on a quick electrical check for installed wired **Sundial S Plan** and wired **S Plan Plus** to help in commissioning and to pin-point the source of any electrical problems. Remember the Golden Rule when you have a problem. First of all **check your wiring**. Only start suspecting faulty components after you are satisfied all wiring is correct.

The following notes will help to identify faulty components.

Cylinder Stat

First of all, make sure you have wired to the correct terminals.

Terminal C (common) is the **Left Hand** terminal.
Terminal 1 is the **Middle** terminal. Terminal 2 is the **Right Hand** terminal.

Suspect the cylinder thermostat is faulty only if Terminal C **not** live when calling for Hot Water.

Room Stat

- 1) Remove wire from Terminal 3.
- 2) Live to Terminal 1.
- 3) Turn stat to call, if no live on 3 then faulty.

Suspect the room stat is faulty only if Terminal 3 is not live when calling for heat. (Make sure Terminal 1 is live). While checking, disconnect wiring from Terminal 3 to prevent false readings due to backfeed.

Zone Valves

Suspect a motorised valve is faulty only:

1. If the motor fails to rotate with live applied to the **Brown** wire and neutral to the **Blue** wire. (Motor can be viewed with valve cover removed).

Note that the motor stops automatically when the valve is fully open and stays in this condition as long as live is applied to the **Brown** wire.

The valve automatically closes under spring return when live is removed from the **Brown** wire.

The **Orange** wire only becomes live after the valve has fully opened (Make sure the **Grey** wire is live).

3. If the boiler and pump continues to run when the cylinder stat and room stat is satisfied and the clock is in OFF position.

Programmer

Suspect the programmer only:

- (a) After you have made sure that any links required are in place.
- (b) After you have made sure that the Programmer has power – to the correct Terminal.
- (c) After you have made sure that the Programmer timing is set up correctly (see individual Programmer User Guide as appropriate).
- (d) If live does not appear at Heating ON Terminal when Heating is selected on continuous or timed.
- (e) If live does not appear at Hot Water ON Terminal when Hot Water only is selected on continuous or timed.

Sundial S Plan and S Plan Plus

Programmer Switch Position	Heating only selected	Hot Water only selected	Hot Water and Heating selected
Programmer	Live on both 'CH ON' Terminal.	Live on 'HW ON' Terminal.	Live on both 'HW ON' & 'CH ON' Terminals.
T6360B Room Thermostat	Set to call for Heat. Live on Terminals 1 & 3.	No live on any terminal.	Set to call for Heat. Live on Terminals 1 & 3.
L641A Cylinder Thermostat	No live on any terminal	Set to call for Hot Water. Live on Terminals C & 1.	Set to call for Hot Water. Live on Terminals C & 1.
V4043H Heating Zone Valve	Live on Brown, Grey and Orange wires.	Live on Grey and Orange wires.	Live on Brown, Grey and Orange wires.
V4043H Hot Water Zone Valve	Live on Grey and Orange wires	Live on Brown, Grey and Orange wires.	Live on Brown, Grey and Orange wires.
Boiler and Pump	Boiler and pump fired via live feed from Orange wire.	Boiler and pump fired via live feed from Orange wire.	Boiler and pump fired via live feed from Orange wire.

Notes:

- Any checks to be undertaken on electrical wiring **must** only be made by a suitably qualified electrician or other competent person.
- Grey** wire on both Heating and Hot Water zone valves **must** be connected to permanent live.
- Blue wire on both Heating and Hot Water zone valves must be connected to neutral.
- Terminal 2 on the T6360B room thermostat **must always** be connected to neutral.
- Ensure that any links required in programmer are in place.
- Earth connection (**Green/Yellow**) **must** be made on valve.
- With 28mm or 1 inch V4043H valves the **White** wire is not used and **must** be made electrically safe.

SEE NOTES OPPOSITE IF YOU HAVE A PROBLEM

Sundial C Plan

The table opposite gives guidance on a quick electrical check for installed wired **Sundial C Plans** to help in commissioning and to pin-point the source of any electrical problems. Remember the **Golden Rule** when you have a problem. First of all **check your wiring**. Only start suspecting faulty components after you are satisfied all wiring is correct.

The following notes will help to identify faulty components.

Cylinder Stat

First of all, make sure you have wired to the correct terminals.

Terminal C (common) is the **Left Hand** terminal. Terminal 1 is the **Middle** terminal. Terminal 2 is the **Right Hand** terminal.

Suspect the cylinder thermostat is faulty only if Terminal C is not live when calling for Hot Water.

Room Stat

- 1) Remove wire from Terminal 3.
- 2) Live to Terminal 1.
- 3) Turn stat to call, if no live on 3 then faulty.

Suspect the room stat is faulty only if Terminal 3 is not live when calling for Heat. (Make sure Terminal 1 is live). While checking, disconnect wiring from Terminal 3 to prevent false readings due to backfeed.

Zone Valve

Suspect the valve is faulty only:

1. If the motor fails to rotate with live applied to the **Brown** wire and neutral to the **Blue** wire. (Motor can be viewed with valve cover removed).

Note that the motor stops automatically when the valve is fully open and stays in this condition as long as live is applied to the **Brown** wire.

2. If the boiler continues to run when the cylinder stat and/or room stat is satisfied and/or the clock is in OFF position.
3. (a) SWITCH OFF mains supply.
(b) Disconnect **Brown** wire to valve, and terminate safely.
(c) Disconnect **White** wire and re-connect to permanent live terminal at junction box.
(d) Disconnect pump live connection at junction box and re-connect to permanent live terminal.

- (e) SWITCH ON mains supply.
- (f) Valve should remain closed, **Orange** wire should become live to fire boiler.

4. (a) SWITCH OFF mains supply.
(b) Restore **White** wire and pump live connections to original positions at junction box.
(c) Connect **Brown** wire to permanent live terminal at junction box.
(d) Ensure **Grey** wire is connected to permanent live.
(e) SWITCH ON mains supply.

Valve should now motor open. When fully open, **Orange** wire should become live to fire Boiler.

SWITCH OFF mains supply. Restore **Brown** wire to original Terminal on junction box.

If these checks complete satisfactorily, the problem is not on valve but elsewhere in circuit.

Note that a V4043H1106 (28mm) or V4043H1080 (1 inch BSP) valve is required for the C Plan.

Programmer

Suspect the programmer only:

- (a) After you have made sure that any links required are in place.
- (b) After you have made sure that the Programmer has power – to the correct terminal.
- (c) After you have made sure that the Programmer timing is set up correctly (see individual Programmer User Guide as appropriate).
- (d) If live does not appear at Heating ON Terminal when Heating only is selected on continuous or timed.
- (e) If live does not appear at Hot Water ON Terminal when Hot Water only is selected on continuous or timed.

Sundial C Plan

Programmer Switch Position	Heating only selected	Hot Water only selected	Hot Water and Heating selected
Programmer	Live on 'CH ON' Terminal.	Live on 'HW ON' Terminal.	Live on both 'HW ON' & 'CH ON' Terminals.
T6360B Room Thermostat	Set to call for Heat. Live on Terminals 1 & 3.	No live on any terminal.	Set to call for Heat. Live on Terminals 1 & 3.
L641A Cylinder Thermostat	No live on any Terminal.	Set to call for Hot Water. Live on Terminals C & 1.	Set to call for Hot Water. Live on Terminals C & 1.
V4043H Hot Water Zone Valve	Live on Grey, White and Orange wires.	Live on Brown, Grey and Orange wires.	Live on Brown, White, Grey and Orange wires.
Boiler and Pump	Boiler fired via Orange wire, room stat Terminal 3 runs pump.	Boiler fired via Orange wire.	Boiler fired via Orange wire, room stat Terminal 3 runs pump.

Notes:

- Any checks to be undertaken on electrical wiring **must** only be made by a suitably qualified electrician or other competent person.
- Grey** wire on both Heating and Hot Water zone valves **must** be connected to permanent live.
- Blue** wire on both Heating and Hot Water zone valves **must** be connected to neutral.
- Terminal 2 on the T6360B room thermostat **must always** be connected to neutral.
- Ensure that any links required in programmer are in place.
- Earth connection (**Green/Yellow**) **must** be made on valve.
- With 28mm or 1 inch V4043H valves the **White** wire is not used and **must** be made electrically safe.

SEE NOTES OPPOSITE IF YOU HAVE A PROBLEM

Sundial W Plan

The table opposite gives guidance on a quick electrical check for installed wired **Sundial W Plans** to help in commissioning and to pin-point the source of any electrical problems. Remember the **Golden Rule** when you have a problem. First of all **check your wiring**. Only start suspecting faulty components after you are satisfied all wiring is correct.

The following notes will help to identify faulty components.

Cylinder Stat

First of all, make sure you have wired to the correct terminals.

Terminal C (common) is the **Left Hand** terminal. Terminal 1 is the **Middle** terminal. Terminal 2 is the **Right Hand** terminal.

Suspect the cylinder thermostat is faulty only if Terminal 1 is **not** live when calling for Hot Water, or Terminal 2 is **not** live when satisfied. (Make sure that Terminal C is live in both cases). While checking, disconnect Terminals 1 and 2 to prevent false readings due to backfeed.

Room Stat

- 1) Remove wire from Terminal 3.
- 2) Live to Terminal 1.
- 3) Turn stat to call, if no live on 3 then faulty.

Suspect the room stat is faulty only if Terminal 3 is not live when calling for heat. (Make sure Terminal 1 is live). While checking, disconnect wiring from Terminal 3 to prevent false readings due to backfeed.

Diverter Valve V4044C

Suspect the V4044C valve is faulty only if the valve does not operate as specified in the following checks (these should be done in order 1, 2, 3 and 4).

Valve open for Heating only

1. Switch off mains supply. Disconnect Brown wire from appropriate terminal and connect to permanent live Terminal in junction box.
2. Switch on mains supply. Valve motor should now rotate to fully open heating Port A.

Valve opens for DHW only

3. Switch off mains supply. The valve should automatically spring return to open DHW Port B and close Port A.
4. Reconnect Brown wire to Terminal 5.

Programmer

Suspect the programmer only:

- (a) After you have made sure that any links required are in place.
- (b) After you have made sure that the Programmer has power – to the correct terminal.
- (c) After you have made sure that the Programmer timing is set up correctly (see individual Programmer User Guide as appropriate).
- (d) If live does not appear at Heating ON Terminal when Heating is selected on continuous or timed.
- (e) If live does not appear at Hot Water ON Terminal when Hot Water only is selected on continuous or timed.

Sundial W Plan

Programmer Switch Position	Hot Water only selected	Hot Water and Heating selected
Programmer	Live on 'HW ON' Terminal.	Live on both 'CH ON' & 'HW ON' Terminals.
T6360B Room Thermostat	No live on any terminal.	Set to call for Heat. Live on Terminals 1 & 3.
L641A Cylinder Thermostat	Set to call for Hot Water. Live on Terminals C & 1.	Set to call for Hot Water. Live on Terminals C & 1.
V4044C Diverter Valve	Valve not energised Port B open for Domestic Hot Water.	Live on Brown wire only. When D.H.W. satisfied.
Boiler and Pump	Boiler and pump fired via live feed from Terminal C on cylinder stat.	Boiler and pump fired via live feed from Terminal C on cylinder stat and 3 on room stat.

Notes:

1. Any checks to be undertaken on electrical wiring **must** only be made by a suitably qualified electrician or other competent person.
2. **Blue** wire on diverter valve **must** be connected to neutral.
3. Terminal 2 on the T6360B room thermostat **must always** be connected to neutral.
4. Ensure that any links required in programmer are in place.
5. Earth connection (**Green/Yellow**) **must** be made on valve.

SEE NOTES OPPOSITE IF YOU HAVE A PROBLEM

Boiler Plus

All gas boilers in England must have 'controls that programme the system to come on and off at set times, and set the temperature'. This is commonly known as boiler interlock.



Additionally, if you are fitting a gas combi boiler, you must fit at least one additional energy efficiency measure:

- A heat flue recovery system OR
- Weather compensation OR
- Load compensation OR
- Fit a Smart Control that provides with automation AND optimisation features

All Honeywell programmable thermostats are Boiler Plus Ready. For further information visit www.honeywelluk.com/boilerplus.

Wireless Room Thermostat Fault Finding

If your heating is not responding to your wireless thermostat the first thing to check is to see if the thermostat is communicating with the wireless relay that is connected to the boiler. There are a few common symptoms and these can easily be checked. First check that the thermostat has fresh batteries and that they are correctly installed.

Locate the wireless relay box, this is probably mounted close to your boiler or in the airing cupboard. It looks like this.

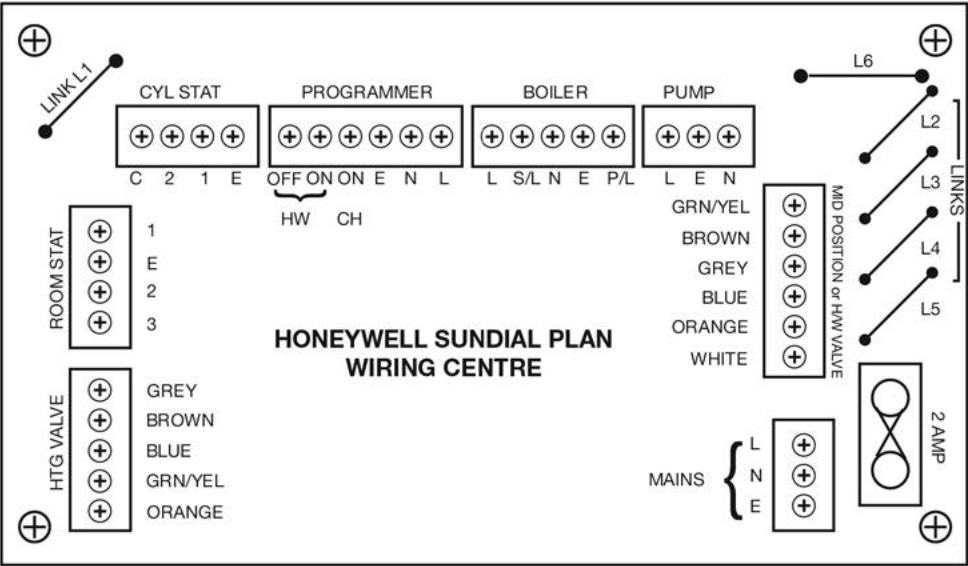


It has two small lights which display information about the operation of the heating system. The table below gives you information regarding what the lights mean.

Symptom	Cause	Resolution
Steady red light on wireless relay.	Comms lost with all bound room units.	Please check for positioning of the room unit and the relay, eg not near other wireless devices or large metal objects. If the unit worked fine for some time then developed this issue please check for new items introduced into the vicinity and check batteries in room unit. If symptom repeats, conduct a signal strength check.
Slow Flashing red light on relay unit, (3 seconds on, 3 seconds off).	It is possible to bind up to 4 units to the relay. This signal indicates that one of these units has lost comms.	If there are supposed to be more than one unit communicating with the relay then check for positioning as above. If there is only one room unit then rebind making sure to delete all previous binding information as following guide.
Medium flashing red light on wireless relay (0.5 seconds on, 0.5 seconds off).	Wireless relay has been put into binding mode and may have had the previous binding deleted.	Re bind room thermostat to wireless relay (see following guide).
Quick flashing red light on wireless relay (0.1 seconds on, 0.9 seconds off).	Wireless relay has had the previous binding deleted or is an unbound new unit.	Re bind room thermostat to wireless relay (see following guide).
Any of the above with a steady green light.	The above causes still apply but the green light indicates that one of the bound units is still operating correctly and the boiler is being fired.	Follow appropriate cure above.
Red led Constantly on and the green LED flashes once 0.1 sec on and 3 sec off.	The relay was left in binding mode and did not receive the binding message from the thermostat within 3 minutes.	Repeat binding process (see following guide).
Red led Constantly on and the green LED flashes twice 0.1 sec on and 3 sec off.	Miss bound or attempting to do something that is not possible.	Delete all binding and repeat following guide below. If symptom persists then please contact technical support for guidance on the application that is being attempted.
Red led Constantly on and the green LED flashes three times 0.1 sec on and 3 sec off.		
Red led Constantly on and the green LED flashes four times 0.1 sec on and 3 sec off.		
Red led Constantly on and the green LED flashes five times 0.1 sec on and 3 sec off.		

Wiring Centre

A simple alternative to using this guide and a conventional junction box, is the Honeywell Sundial Plans Wiring Centre (Part number 42005748-001). This provides a clearly marked terminal block for each component in the system with each wire having its own terminal.



COMPONENTS LAYOUT

If using Programmer (not basic Time Clock) Cut link 1

FOR FULLY PUMPED SYSTEMS

FOR S PLAN (two zone valves) Cut links L2 and L4.

If boiler requires pump overrun Cut link L3 also.

If using a 28mm or 1" BSP V4043H the WHITE wire must be isolated and made safe. Do not connect to a terminal.

FOR Y PLAN (mid position valve) Cut links L4 and L5.

If boiler requires pump overrun Cut link L6 also.

FOR GRAVITY PRIMARY SYSTEMS

FOR C PLAN (one 28mm zone valve) Cut links L2 and L3.

If Room Thermostat is not being used, link terminals 1 and 3 at the ROOM STAT connector block.

For frost protection connect the FROST THERMOSTAT T4360A as follows:

S Plan

Frost thermostat Terminal 1 to HW OFF on programmer block. Frost thermostat Terminal 3 to WHITE on MID POS/HW VALVE terminal block.

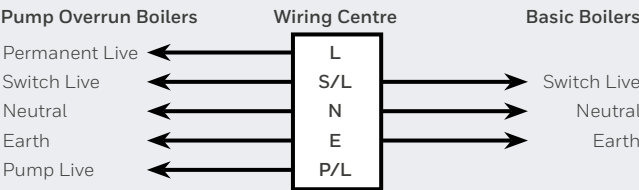
Y Plan

Frost thermostat Terminal 1 to GREY and frost thermostat Terminal 3 to BROWN on HTG VALVE terminal block.

C Plan

Frost thermostat Terminal 1 to GREY and Frost thermostat Terminal 3 to ORANGE on HTG VALVE terminal block.

BOILER CONNECTIONS



Re-binding of wireless products

Rebinding the T6 series wireless thermostat

The Lyric T6R Smart Thermostat wireless thermostat comes pre-bound from the factory. The binding operation described below is only required if:

The Lyric T6R thermostat or Receiver box is replaced.

The Lyric T6R thermostat or Receiver box has incorrect or no binding data stored. The Thermostat will indicate the Alert message: NO RECEIVER BOX BINDING and the Receiver box status LED remains green blinking signifying that there is no communication from thermostat or the Receiver box status LED does not light up signifying that it is not bound.

To re-establish the binding between the wireless T6 series programmable thermostat, please follow these steps.



1. Reset the receiver by using a paper clip to push the Rest button (a small hole on the side of the receiver box)
2. Put the Receiver box into binding mode by pressing the button for 3 seconds. The LED light in the button will flash amber
3. Enable binding in the thermostat:
 - a) Enter the Advanced menu by pressing the menu button for 5 seconds
 - b) Navigate to the Binding Screen
 - c) Select Clear Binding and confirm
 - d) Select Bind and the binding signal will be sent
3. When the binding is successful the Thermostat screen will show SUCCESS and the receiver box LED light in the button will show green
4. When the binding is not successful the Thermostat screen will show FAILED



Please note that the receiver box will exit binding mode after 3 minutes.

Re-Binding the BDR91 Wireless Receiver

If you need to re-establish the binding relationship between a Honeywell wireless thermostat that uses the BDR91 Wireless Receiver, please follow the following instructions.

Preparing the BDR91 Wireless Receiver to re-accept the binding signal (this applies when working with all Honeywell thermostats).

Step 1 It is important to delete any previous binding from the relay memory before starting. On the BDR91 Wireless relay unit, press and hold the button wait until the red light starts to flash – continue holding until it changes to a fast flash then release.















STAGE 1 Press and hold for 15 sec
The red light will flash on for 0.1 sec and be off for 0.9 sec

Step 2 Press and hold the button again for 5 seconds (until the red LED blinks slowly). Then release. Now follow the steps to re-bind the specific Honeywell thermostat in the table below:



STAGE 2 Press and hold for 5 sec
The red light will flash on for 0.5 sec and be off for 0.5 sec

CMT900 & CMT700 range of Wireless Programmable Room Thermostats	DT92E Wireless Digital Room Thermostat
 <p>Move the room thermostat slider to the OFF (CMT900) position or press the off button (CMT700) and press the   and  buttons together along with the  button. The unit will display “InSt” and ‘CONTROL BINDING’.</p>	 <p>Press and hold the power button for 2 seconds to put the unit into standby.</p>
<p>Press the green  button to send the binding signal out to the Relay Box. The red LED on the relay is switched off to confirm successful binding operation. If the red LED still flashes push the button again until binding is successful.</p>	<p>Press the up and down arrows together for 3 seconds – it should say INst.</p>
<p>Return the slider to AUTO (CMT900) or press the AUTO button (CMT700).</p>	<p>Press the down arrow – it should say COnt.</p>
	<p>Press the up arrow three times – it should say CLr.</p>
	<p>Follow appropriate cure above.</p>
	<p>Press the power button once to clear any previous binding data.</p>
	<p>Press the up arrow – it should say Cont.</p>
	<p>Press the power button to send the binding signal to the wireless relay.</p>
	<p>The screen will return to normal and the red light will disappear from the relay.</p>
	<p>Press the power button for 5s and the screen will return to normal.</p>

Y6630D Wireless Room Thermostat	Y87RF Wireless Room Thermostat
 <p>Note The Y6630D uses the HC60 relay unit, but clearing the memory and putting the unit into listening mode is the same as the BDR91.</p> <p>Take the front cover off of the thermostat.</p>	 <p>Touch and hold on the left touch zone for approximately 10 seconds.</p>
Press the “send” button (bottom right of the thermostat body).	The screen for binding the Boiler Relay is now displayed.
The red light on the receiver should disappear if it has been successful.	When the symbol ‘bo’ is flashing, briefly touch the left touch zone to send the binding signal, at which point the  symbol will flash several times.
The Y6630D thermostat is being phased out and it is recommended that a new digital room thermostat such as the DT90/92 or the Y87RF is fitted in its place.	If binding has been successful the number indicates the signal strength (1 = min to 5 = max).
	If binding fails,   appears on screen. Please try again.
	Press the power button once to clear any previous binding data.
	The red LED on the Boiler Relay will turn off when binding has been successful.

OpenTherm Information

Many Honeywell Programmable Thermostats provide OpenTherm control of applicable OpenTherm boilers. The following information should be considered when specifying these thermostats for OpenTherm Boilers.

Product	OpenTherm Setting information
T4M - Wired OpenTherm heating control.	optional WC curve setting and internal reference - no support for DHW setpoint.
T4R - Wireless OpenTherm heating control.	no support for DHW setpoint.
T6 - Wired OpenTherm heating control.	support for DHW setpoint and overnight preheat disable for combi boiler applications.
T6R - Wireless OpenTherm heating control.	Support for DHW setpoint and overnight preheat disable for combi boiler applications.
T6R-HW (2 channel receiver) Wireless OpenTherm heating and hot water timed control.	Support for DHW setpoint and overnight preheat disable, plus timed hot water control for storage combis and system boilers.

Training

Installer training courses



Introduction to Heating Controls (standard training)

Expand your knowledge of heating and water controls. Receive expert training on one of our one day installer courses.

You may also wish to consider some of the other training courses we offer. To find out more visit www.honeywelluk.com.

- Wireless controls
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- Part L Building Regulations
- Boiler Plus

Accessing more information

There is a wealth of information about our products available from the Honeywell website at www.honeywelluk.com

For more information

www.honeywelluk.com

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