

Drayton Lifestyle

SINGLE CHANNEL Timeswitch

DUAL CHANNEL Programmer

for heating **OR** hot water

for heating **AND** hot water



LP111, LP711



LP112, LP241, LP522, LP722

SINGLE CHANNEL

DUAL CHANNEL

Installation Instructions

06490033001 ISSG

Invensys Controls

Sales: 0845 1305522 / Technical Helpline: 0845 1307722
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INSTALLATION INSTRUCTIONS

PLEASE NOTE: INSTALLATION MUST ONLY BE CARRIED OUT BY A QUALIFIED ELECTRICIAN OR HEATING ENGINEER. MAKE SURE MAINS INPUT HAS A 3 AMP FUSE.

TECHNICAL DATA

LP112, LP241, LP522 & LP722 PROGRAMMERS LP111 & LP711 TIMESWITCHES	
Voltage	230V a.c. +10% - 10% 50Hz
Programmer Rating	2 (1) A 230V a.c. each switch
Timeswitch Rating	2 (1) A 230V a.c.
Ambient temp	Operating: 0° to 45°C Storage: -20°C to 50°C
Without mains power	Display: blank Time: always kept Program times: always preserved
Programming resolution	1 minute
Wiring	Fixed wiring only, to comply with current IEE regulations
Maintenance	Must be maintained by a qualified electrician or heating engineer

Lifestyle Programmers and Timeswitches conform to the essential requirements of these Directives:

2004/108/EC – Electromagnetic compatibility
2006/95/EC – Low voltage



BEFORE INSTALLATION

First, make sure the mains supply is switched off!

PROGRAMMER ONLY

The programmer must be set to the type of system it is to control. The link on the back of the unit has two settings – P and G. P = a fully pumped and controlled system – allowing heating and hot water to be set separately. G = a gravity-fed hot water system – which does not allow independent setting of heating without hot water, though hot water can be controlled alone.

USING AN EXISTING WALL-PLATE

Loosen the securing screws on the old programmer and unplug it. Check that there's 70mm clearance to the right of the wall-plate, and 25mm above it. Check the chart on the next page to compare terminals and if necessary, change the wiring of the wall-plate to suit. Now plug the Lifestyle unit into the wall-plate and tighten the securing screws.

Check the 3A fuse, and switch on the mains.

FITTING A NEW WALL-PLATE

The ideal location is 1.4m above floor level, with reasonable lighting, good access, no condensation, no extremes of temperature, and a supporting surface that fully covers the back of the unit.

Position with 70mm clearance to the right, 25mm above, and sufficient room to access the securing screws underneath.

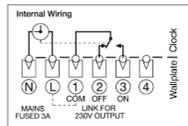
Fix, with terminals at the top, either direct to a flat wall using wall plugs and No. 6 x 1" (25mm) wood screws, or on a flush mounting single conduit box type UA1 (BS4662) using M3.5 x 14 bolts. DO NOT USE A SURFACE MOUNTING BOX.

TIMESWITCH TERMINAL COMPARISONS									
MAKE	MODEL	Earth Neutral	Line	Common	On	Off	Stop		
Current Models									
Drayton	Tempus 1, 2 (new models)	N	L	1	3	2	4		
Lifestyle	LP111, LP711	N	L	1	3	2	4		
Switchmaster	300	N	L	4	1				
Discontinued/Competitors' Models									
ACL	TC (Towerchron)	2	1	4	7				
Drayton	Tempus 1, 2 (old models)	N	L	1	2	3	4		
Switchmaster	980	N	L	4	1				
Danfoss Randall	TS15, 75 (Mk18)	E	N	L	1	4	2	5/6	
Danfoss Randall	TS15	E	N	L	1	4	2	3	
Danfoss Randall	TS975	E	N	L	5	4	6	2,3	
Danfoss Randall	SET1, SET1E	E	N	L	5	4	6		
Danfoss Randall	SET4	E	N	L	5	4	6		
Danfoss Randall	103, 103E, 103E5, 103E7	4	5	6	3	1	2		
Danfoss Randall	911, 971	E	N	L	5	6	4	2	
Grasslin Towerchron	QE1	E	N	L	2	4	3		
Grasslin Towerchron	T2001, T2001Q	E	N	L	7				
Honeywell	ST 6100A, ST 6100C	N	L	1	4	2			
Honeywell	ST 7000B	N	L	4	3	2			
Horstmann	Centaur SC1, SC7	N	L	4	3	2			
Horstmann	Centaur Plus, C11, C17	N	L	2	4	3			
Horstmann	Emerald 423, Pearl Auto	E	N	L	3	4			
Horstmann	517, Coronet, H11, H17	E	N	L	5	4	6		
Landis & Staefa	RWB3	N	L		4	3			
Landis & Staefa	RWB30, RWB50, 100, 152, 170	N	L	2	4	3	1		
Landis & Staefa	RWB7	N	L	2	4	3	1		
Potterton Myson	EP4000, 4001, 4002, 5002	N	L	5	4	2			
Sangamo	M6	E	4	6	3	1	2		
Smiths	Controller Mk1, Mk2	N	L	3	2				
Smiths	Controller 30	1	2		4/5				
Smiths	Controller 300, 980	N	L	4	1				
Somvic	Select 107	N	L	1	3	2	4		
Somvic	SP20, SP35	N	L	3	5	4	S		
Vesser	Venerable	N	L	LINE	LOAD				

PROGRAMMER TERMINAL COMPARISONS									
MAKE	MODEL	Earth Neutral	Line	Common	On	Off	HW	ON	CH
Current Models									
Drayton	Tempus 6, 7 (new models)	N	L	1	2	3	4		
Lifestyle	LP112, LP241, LP522, LP722	N	L	1	2	3	4		
Switchmaster	400, 600 (In connection to terminal 4 on 600)	N	L	4	3	1			
Switchmaster	805	N	L	4	2	3	1		
Discontinued/Competitors' Models									
ACL	MP (Towerchron)	2	1		6	10			
ACL	FP (Towerchron)	2	1	8	11	6	10		
Drayton	Tempus 3, 4, 6, 7 (old models)	N	L	1	2	3	4		
Switchmaster	905, 9001	N	L	4	2	3	1		
Danfoss Randall	CP15, CP17, FP15, FP17 (Mk18)	E	N	L	1	2	3	4	
Danfoss Randall	3020P, 3060	E	N	L	7	6	4	2	
Danfoss Randall	4033 (link 1-6)	E	N	L	7	6	5	3	4
Danfoss Randall	1022, 102E, 102E5, 102E7 (link 6-3)	E	N	L	5	6	1	2	
Danfoss Randall	701 (link L-5 and 5-6)	E	N	L	4	3	1		
Danfoss Randall	702 (link L-5 and 5-6)	E	N	L	4	2	3	1	
Danfoss Randall	922, 972 (link L-2 and 2-5)	E	N	L	1	4	3	6	
Danfoss Randall	SET5 (link L-2 and 2-5)	E	N	L	3	6	1	4	
Grasslin Towerchron	DP 72, QE2	N	L	1	2	3	4		
Honeywell	ST 699/799 (link L-5 and 5-8)	N	L	7	4	6	3		
Honeywell	ST 6200, ST 6300, ST 6400, ST 6450	N	L	1	2	3	4		
Honeywell	ST 7100 (link L-3 and 3-6)	N	L	7	4	8	5		
Horstmann	525, 527, 425 Diadem, H21, H27, H121, Tiara (link L-2 and 2-5)	E	N	L	3	6	1	4	
Horstmann	Centaur Plus, C21, C27	N	L	1	2	3	4		
Landis & Staefa*	RWB2, RWB2E, 20, 40, 102, 200, 252 & 270, RWB9	N	L	1	2	3	4		
Myson	Microtmer (link L-5 and 5-8)	N	L	7	4	6	3		
Potterton Myson	All EP2000's, EP3000's, EP6000's (link L-5 and N-N)	N	L	1	2	3	4		
Potterton Myson*	Mini Minder	N	L	1	2	3	4		
Somvic	Select 207	N	L	1	2	3	4		
Somvic	SP50, SP100 (link L-3)	N	L	1	4	2	5		

* Can simply be removed from the backplate and replaced without any disturbance to the existing wiring.

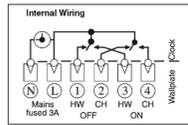
WIRING THE TIMESWITCH



Make the wiring connections as above. Note that the output contacts are voltage-free, so power needs to be put on to Terminal 1 either by linking from Terminal L or from a separate supply with a 3A fuse.

WIRING THE PROGRAMMER

USING A DRAYTON SIMP-L-FIT, ALTHOUGH NOT NECESSARY, WILL MAKE THIS INSTALLATION EASIER.



Arrowed numbers relate to the junction box. Consult boiler handbook for details of pump overrun wiring.

*Thermostat Key

C Common
H Call for Heat
S Satisfied
N Neutral
E Earth
L Live

Wiring Colour Codes

GR Grey
Y Yellow
BK Black
BL Blue
BR Brown
RD Red
W White
OR Orange
YG Yellow/Green

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What is a programmer?

...an explanation for householders

Programmers allow you to set 'On' and 'Off' time periods. Some models switch the central heating and domestic hot water on and off at the same time, while others allow the domestic hot water and heating to come on and go off at different times.

Set the 'On' and 'Off' time periods to suit your own lifestyle. On some programmers you must also set whether you want the heating and hot water to run continuously, run under the chosen 'On' and 'Off' heating periods, or be permanently off.

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

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

The heating will not work if the room thermostat has switched the heating off. And, if you have a hot-water cylinder, the water heating will not work if the cylinder thermostat detects that the hot water has reached the correct temperature.



User's Instructions TIMESWITCHES

INTRODUCTION

Lifestyle Timeswitches will automatically control your system by switching it on and off at times that suit you. The red light on the front of the timeswitch shows when it's on.

■ LP111 – a 24hr program, up to 3 heating periods each day, and every day the same.

■ LP711 – a 7-day program, allowing for different timings on each day of the week, up to 3 heating periods each day.

If the engineer hasn't set your timings for you, your timeswitch will work with a standard program that has been set at the factory. If this doesn't suit you, it's very easy to change it – when you've read this introductory section, simply turn to the page for your timeswitch model.



Remember:

■ Make your changes using the SET?, YES/-, and + buttons.

■ You can't set ON1 as the last timing before midnight, but you can set OFF3 after midnight – providing it's not more than 23 hours and 59 minutes after ON1.

■ You need to set the timings in sequence – i.e. ON1, OFF1, ON2, OFF2, ON3, OFF3. If you get out of sequence, the display will flash a warning.

INTRODUCTION Cont...

SWITCHING

ON 1 – start of first timed period

OFF 1 – end of first timed period

ON 2 – start of second timed period

OFF 2 – end of second timed period

ON 3 – start of third timed period

OFF 3 – final switch-off of the day

If the engineer has set your program and timings – you won't need to do anything else. Just keep this guide in a safe place for future reference.

DAY-TO-DAY VARIATIONS

Sometimes you might need to change the way you use your system temporarily – perhaps due to an exceptionally cold day. Here's how to do it – without affecting the timings in your program.

Switching on and off

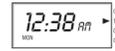
On the front of the timeswitch there is an **Advance/Boost** button. It allows you to switch your system either on or off, irrespective of the program. So if the heating is off, and you want warmth now, you can either –

1. Press **Advance** to switch it on (ADV will be displayed), and it will stay on until the end of the next period. Or if the heating is on and you don't need it, press **Advance** and it will go off until the beginning of the next ON period.

Advance will only operate in TIMED or ONCE modes.

2. Press & Hold **Boost** to switch on for an extra hour (b† and BST will be displayed), then Press again for two (b‡) or three (b‡) hours. To cancel Boost, Press Boost again (b‡). Or if the heating is already on, using Boost will extend the ON time by one, two or three hours.

Over-riding the program



At the side of the display there are four operating modes:

OFF = continuously off.

TIMED = on for up to 3 periods a day.

ONCE = on for 1 period a day, from the start of ON1 to the end of OFF3.

ON = continuously on.

Use the SELECT button under the flap to change the mode. This won't alter the timings in your program, which you can return to by selecting TIMED.

THE LP111 24hr ELECTRONIC TIMESWITCH

LP111 – a 24hr program, up to 3 heating periods each day, and every day the same.

Want to leave a timing as it is? Just press SET? and move on to the next one.

If you need to reset your timings to the standard program and start again, press 'SET' and '+' together to go back to the pre-set program.

The standard program

Your system will come on for up to 3 heating periods every 24hrs. ON1 starts the first one, OFF1 finishes it, and so on. Notice that ON2 and OFF2 are set to the same time.* This means your system won't respond, but if you want to activate that middle period or change any other timings – read on.

SWITCHING	STANDARD PROGRAM
ON 1 – start of first timed period	6.30am
OFF 1 – end of first timed period	8.30am
ON 2 – start of second timed period*	12.00pm
OFF 2</	

THE LP241 24hr ELECTRONIC PROGRAMMER Cont...

Set the central heating

- Press the YES button, and the display will ask 'SET CH PROG?'.



- Press YES and you'll see ON1, the start of your first central heating period. Adjust it in 1-minute steps using the - and + buttons. If the - and + buttons are held down, the time changes in 10-minute steps.



- Press SET?, and you'll see OFF1, the end of your first central heating period. Adjust this in the same way, press SET?, then repeat the procedure for ON2, OFF2, ON3 and OFF3.



Set the hot water

- When you press SET? after setting OFF3 for the central heating, the display will ask 'SET HW PROG?'.



- Press YES, then set your times in the same way. Remember, in this mode you can have different times to your central heating if you wish.

- When you press SET? after setting OFF3 for the hot water, the programmer will return to normal operation.

THE LP522 5/2-DAY ELECTRONIC PROGRAMMER

LP522 – a 5/2-day program allowing for different timings at the weekends, with central heating and hot water working independently for up to 3 heating periods each day.

If the timings haven't been set for you, then your programmer will still be on the factory-set standard program. This means that central heating and hot water will operate together, with the same timings for weekdays and different ones for the weekend. But it's easy to make changes, and have heating and water working independently – just follow the instructions.

Want to leave a timing as it is? Press SET? and move on to the next one.

If you need to reset your timings to the standard program and start again, press 'SET' and '+' together to go back to the pre-set program.

If you don't press anything for two minutes, the programmer automatically goes back to normal operation.

The standard program

Your system will come on for up to 3 heating periods every 24hrs. ON1 starts the first period, OFF1 finishes it, and so on. Notice that ON2 and OFF2 are set to the same time.* This means your system won't respond, but if you want to activate that middle period, or change any other timings – read on.

SWITCHING	WEEKDAYS		WEEKENDS	
	HW	CH	HW	CH
ON 1 – start of first timed period	6.30am	6.30am	7.00am	7.00am
OFF 1 – end of first timed period	8.30am	8.30am	9.00am	9.00am
ON 2 – start of second timed period*	12.00pm	12.00pm	12.00pm	12.00pm
OFF 2 – end of second timed period*	12.00pm	12.00pm	12.00pm	12.00pm
ON 3 – start of third timed period	4.30pm	4.30pm	4.00pm	4.00pm
OFF 3 – final switch-off of the day	10.30pm	10.30pm	11.00pm	11.00pm

Changing the timings

- Press the SET? button and you'll see 'SET PROG?'.



Set the weekday central heating

- Press the YES button, and the display will ask 'SET CH MON to FRI PROG?'.



- Press YES and you'll see ON1, the start of your first central heating period. Adjust it in 1-minute steps using the - and + buttons. If the - and + buttons are held down, the time changes in 10-minute steps.



- Press SET?, and you'll see OFF1, the end of your first central heating period. Adjust this in the same way, press SET?, then repeat the procedure for ON2, OFF2, ON3 and OFF3.



THE LP522 5/2-DAY ELECTRONIC PROGRAMMER Cont...

Set weekday hot water

- When you press SET? after setting OFF3 for the central heating, the display will ask 'SET HW MON to FRI PROG?'.



- Press YES, then set your times in the same way. Remember, in this mode you can have different times to your central heating if you wish.

Set weekend central heating

- When you press SET? after OFF3 for the weekday hot water, the display will ask 'SET CH SAT SUN PROG?'. Press YES to confirm, and alter the times in the same way.



Set weekend hot water

- When you press SET? after OFF3 for the weekend central heating, the display will ask 'SET HW SAT SUN PROG?'. Press YES, and follow the procedure.

- When you press SET? after OFF3 for HW SAT SUN, the programmer will go back to normal operation.

THE LP722 7-DAY ELECTRONIC PROGRAMMER

LP722 – a 7-day program allowing for different timings on each day of the week, with central heating and hot water working independently for up to 3 heating periods each day.

If the timings haven't been set for you, then your programmer will still be on the factory-set standard program. This has central heating and hot water operating together – with the option of having different timings for each day of the week. But it's easy to make changes, and have heating and water working independently – just follow the instructions.

Want to leave a timing as it is? Press SET? and move on to the next one.

If you need to reset your timings to the standard program and start again, press 'SET' and '+' together to go back to the pre-set program.

If you don't press anything for two minutes, the programmer automatically goes back to normal operation.

The standard program

Your system will come on for up to 3 heating periods every 24hrs. ON1 starts the first period, OFF1 finishes it, and so on. Notice that ON2 and OFF2 are set to the same time.* This means your system won't respond, but if you want to activate that middle period, change any other timings – read on.

SWITCHING	WEEKDAYS		WEEKENDS	
	HW	CH	HW	CH
ON 1 – start of first timed period	6.30am	6.30am	7.00am	7.00am
OFF 1 – end of first timed period	8.30am	8.30am	9.00am	9.00am
ON 2 – start of second timed period*	12.00pm	12.00pm	12.00pm	12.00pm
OFF 2 – end of second timed period*	12.00pm	12.00pm	12.00pm	12.00pm
ON 3 – start of third timed period	4.30pm	4.30pm	4.00pm	4.00pm
OFF 3 – final switch-off of the day	10.30pm	10.30pm	11.00pm	11.00pm

Changing the timings

- Press the SET? button and you'll see 'SET PROG?'.



Set all weekdays

First you set the times that are going to be the same for each weekday, then you can select each day individually and make any further adjustments. If you want each day to be quite different, go straight to 'Set each day.'

- Press the YES button, and the display will ask 'SET MON to FRI PROG?'.



- Press YES and the display will ask 'SET CH MON to FRI PROG?'.



- Press YES, and you'll see ON1, the start of your first central heating period. Adjust it in 1-minute steps using the - and + buttons. If the - and + buttons are held down, the time changes in 10-minute steps.



- Press SET?, and you'll see OFF1, the end of your first central heating period. Adjust this in the same way, press SET?, then repeat the procedure for ON2, OFF2, ON3 and OFF3.



THE LP722 7-DAY ELECTRONIC PROGRAMMER Cont...

- When you press SET? after setting OFF3 for the weekday central heating, the display will ask 'SET HW MON to FRI PROG?'.



- Press YES, then set your hot water times in the same way. Remember, in this mode you can have different times to your central heating if you wish.

Set each day

If, after you've set OFF3 for your hot water, you want to fine-tune one or more weekdays, press SET? until you find the first day you want to adjust – then go through the procedure, altering any time you wish. Press SET? to move on to the next day. When you've finished, press SET? until you see 'SET SAT SUN PROG?'.



If you don't want to alter any individual days, keep pressing SET? until you see 'SET SAT SUN PROG?'.



Set weekend

- Press YES, and alter the central heating and hot water times in the same way.

When you press SET? after OFF3 for HW SAT SUN, the programmer will ask the question TEST? If you want to test your program, see below, otherwise press SET? again. If you don't want to test your program, press SET? again – and you'll be asked the question SET H'DAY? If you want to set a holiday switch off, see page 23, otherwise press SET? again. If you're not going to program in a holiday switch-off, then press SET? again and your programmer will go back to normal operation.

Test your program

- This test facility allows you to run through your program to check that the timings are exactly what you want.

Answer YES to TEST? and the display will show Monday and a time just past midnight. Press YES again and hold it down – and the display will start to run through the days of the week, pausing for a few seconds when it reaches an ON or an OFF time. At each pause, the appropriate lights and circuits will come on.

- Release the YES button, and the display will stop running and give you longer to identify a timing.

- Press YES once more, and the display will start running again – and will continue all through the week until you press SET?

- Press SET? and your programmer will go back to normal operation.

Remember - The display shows the strict time sequence, so ON1 for HW could be followed by ON1 for CH, then OFF1 for HW etc Using this feature you can program your system to

SET A HOLIDAY SWITCH-OFF

Applicable to all models.

Using this feature you can program your system to switch off while you're on holiday, then switch back on again in time to have the house warm for your return.

- Press SET? three times and you'll see 'SET H'DAY?'

- Press YES to SET H'DAY? and the display will show '00'.

- Using + and -, set the number of days you want the system to be off.

Press SET, the display will show 'H'DAY' and the programmer will switch off the system. It will then return to normal operation after the set number of days.

Remember - The programmer counts each pass through midnight as a day. So if on a Saturday morning you don't want the heating on again until Tuesday morning, set for 3 days.

SETTING THE CLOCK AND DATE

Applicable to all models.

SETTING THE CLOCK

The clock in your programmer has been set at the factory, and automatically accounts for British Summer Time. However, should you need to set the clock, read on.

- Press the SET? button until you see SET CLOCK?.



Set the hour

- Press YES once, and then the hour will start to flash. Use the - and + buttons to set the hour, checking for AM and PM.



SETTING THE CLOCK Cont...

Set the minute

- Press SET?, and the minutes will start to flash. Use the - and + buttons to set the exact time.



- Press SET?, and 'SET DATE?' appears in the display.

If you don't want to change the date press SET? to go back to normal operation. If you do, go on to the next section.

SETTING THE DATE

The weekday is automatically calculated from the date, so if the weekday is incorrect you'll need to reset the date.

- Press the SET? button until you see SET DATE?.



Set the year

- Press YES and the year will start to flash. Use the - and + buttons to adjust.



Set the month

- Press SET? and the month will start to flash. Use the - and + buttons to adjust.



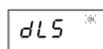
Set the day

- Press SET? and the day will start to flash. Use the - and + buttons to adjust.



Set the Day Light Saving

- Press SET? and the current DLS status will start to flash for day light saving (British Summer Time). Use the - and + buttons to turn on or off.



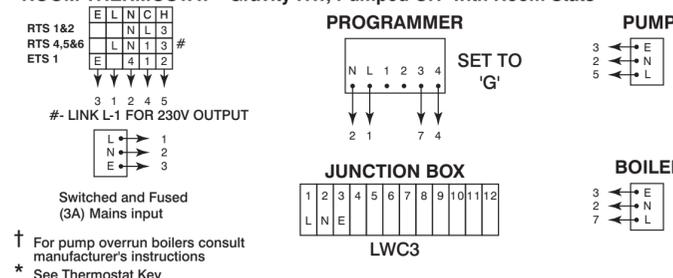
- Press SET? to go back to normal operation.

USERS NOTES

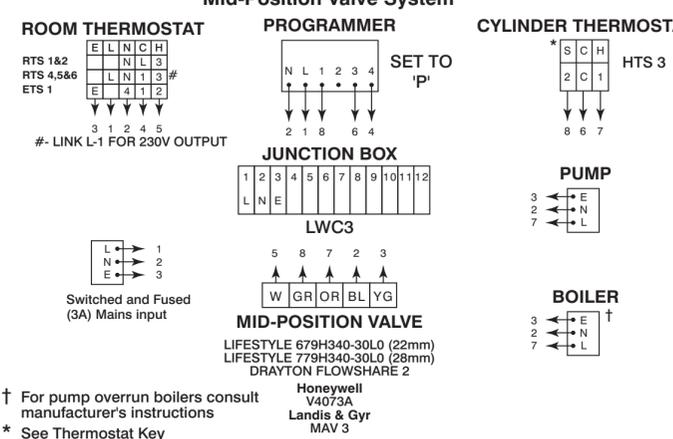
WIRING THE PROGRAMMER Cont...

Connection Charts

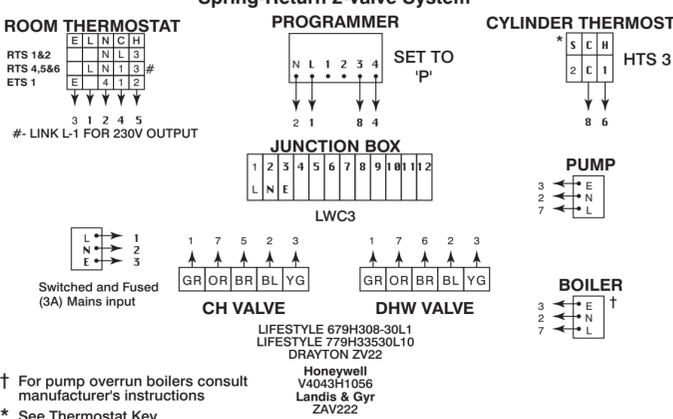
ROOM THERMOSTAT Gravity HW, Pumped CH with Room Stats



Mid-Position Valve System



Spring-Return 2-Valve System



Make the wiring connections, as above, for the appropriate system.

For surface wiring, snap out the cable entry strip on the bottom edge of the wall-plate. Lifestyle units are double-insulated and need no earth connection, but an earthing continuity (loop) terminal is provided for convenience.

After wiring, plug in the unit and tighten the securing screws. Check the mains input has a 3A fuse, and switch on the mains. Then set the timings as shown in the User's Guide.

ALWAYS SWITCH OFF THE MAINS BEFORE REMOVING THE LIFESTYLE TIMESWITCH/PROGRAMMER – AND NEVER FIT IT TO A LIVE WALL-PLATE!

INSTALLERS/ENGINEERS NOTES

Blank area for installers/engineers notes.

Invensys Controls

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