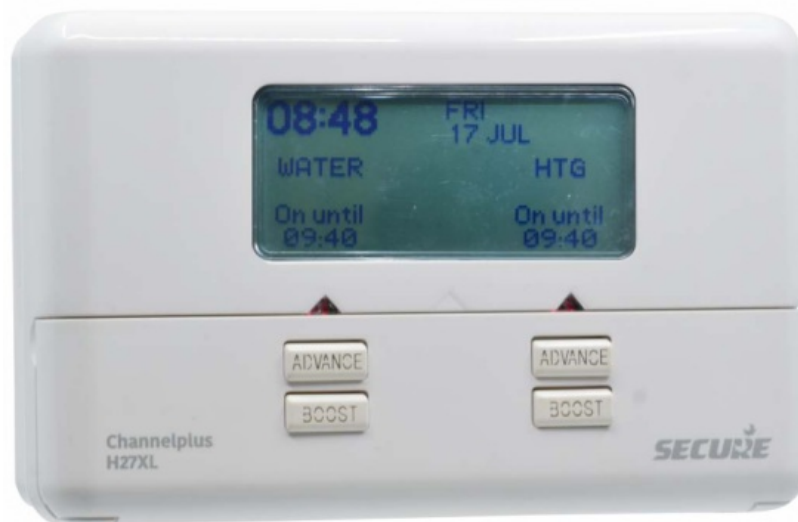




SECURE H21XL ChannelPlus Hot Water Programmer Installation Guide

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SECURE H21XL ChannelPlus Hot Water Programmer



The ChannelPlus XL Series 2 – Two Channel Programmer. Each channel offers up to three programmed operating periods per day, with independent Boost and Advance control on Fully Pumped Systems. This model has a fully graphical, back-lit display combined with simple menu driven programming.

It is also a suitable direct replacement for existing ChannelPlus H21XL, H27XL and H27ZXL programmers, utilising existing wiring and backplate connections.

Installation and connection should only be carried out by a suitably qualified person in accordance with the current edition of the IET wiring regulations.

Warning: Isolate mains supply before commencing installation.

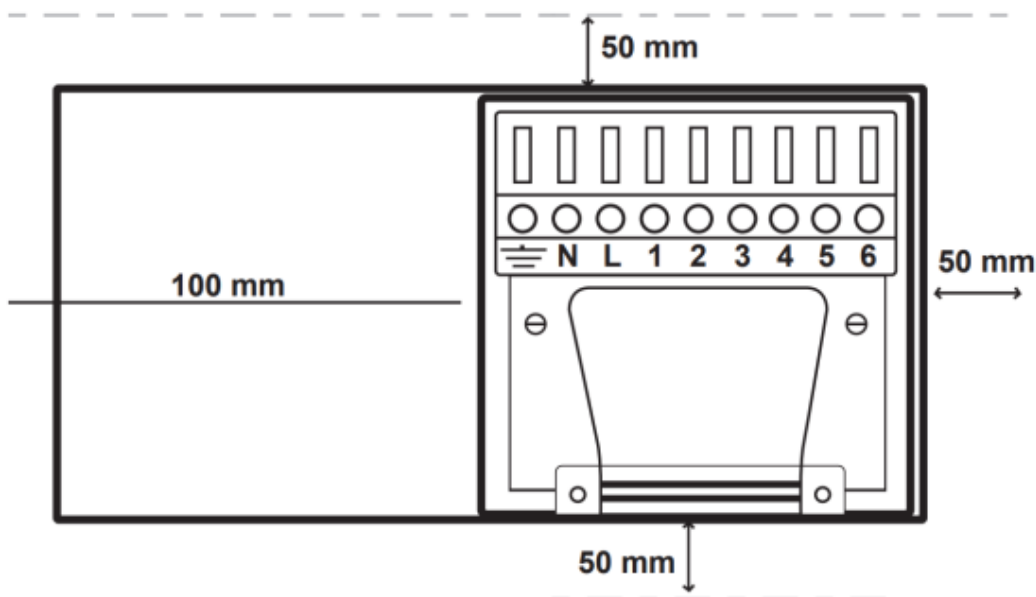
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Fitting the Backplate

Once the Backplate has been removed from the packaging please ensure the timeswitch is re-sealed to prevent damage from dust, debris etc.

The Backplate should be fitted with the wiring terminals located at the top and in a position which allows the relevant clearances around the timeswitch. (See diagram)



Direct Wall Mounting

Offer the plate to the wall in the position where the timeswitch is to be mounted, remembering that the Backplate fits to the right hand end of the timeswitch.

Mark the fixing positions through the slots in the Backplate (Fixing centres 60.3mm), drill and plug the wall, then secure the plate in position. The slots in the Backplate will compensate for any misalignment of the fixings.

Wiring Box Mounting

The Backplate may be fitted directly on to a single gang steel flush wiring box complying with BS4662, using two M3.5 screws.

ChannelPlus timeswitches are suitable for mounting on a flat surface only, they must not be positioned on a surface mounted wall box or on unearthed metal surfaces.

Electrical Connections

All necessary electrical connections should now be made. Flush wiring can enter from the rear through the aperture in the Backplate. Surface wiring can only enter from beneath the timeswitch and must be securely clamped.

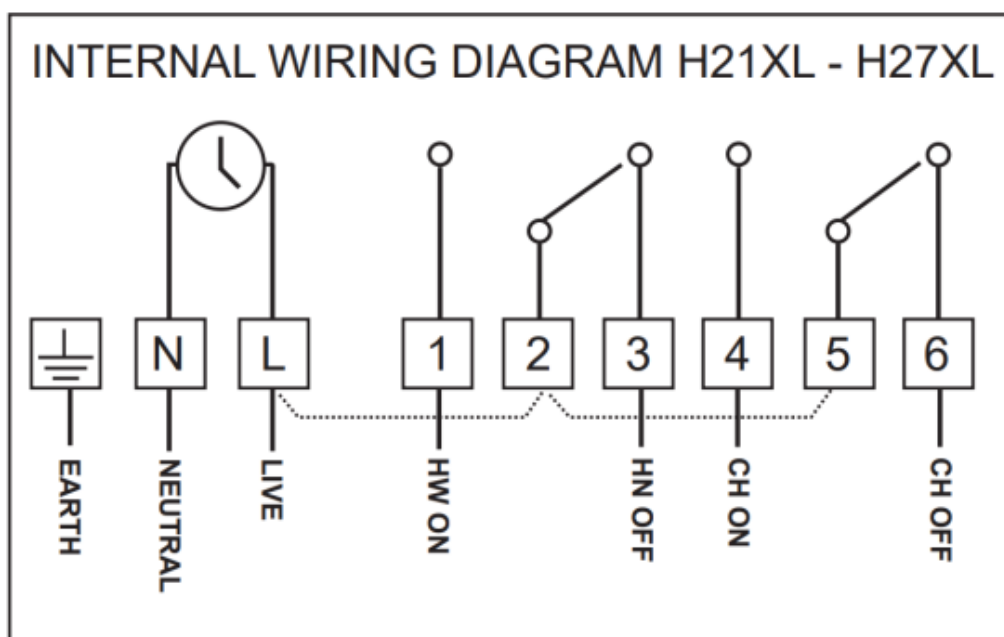
The mains supply terminals are intended to be connected to the supply by means of fixed wiring. The recommended cable sizes are 1.0mm² or 1.5mm².

ChannelPlus timeswitches are double insulated and do not require an Earth connection but an Earth terminal is provided on the Backplate for terminating any Earth connections. Earth continuity must be maintained and all bare Earth conductors must be sleeved. Ensure that no conductors are left protruding outside the central space enclosed by the Backplate.

When used to control MAINS VOLTAGE SYSTEMS Terminals L and 5 should be electrically linked by means of a suitable piece of sleeved conductor. When used to control EXTRA LOW VOLTAGE SYSTEMS these links MUST NOT be fitted.

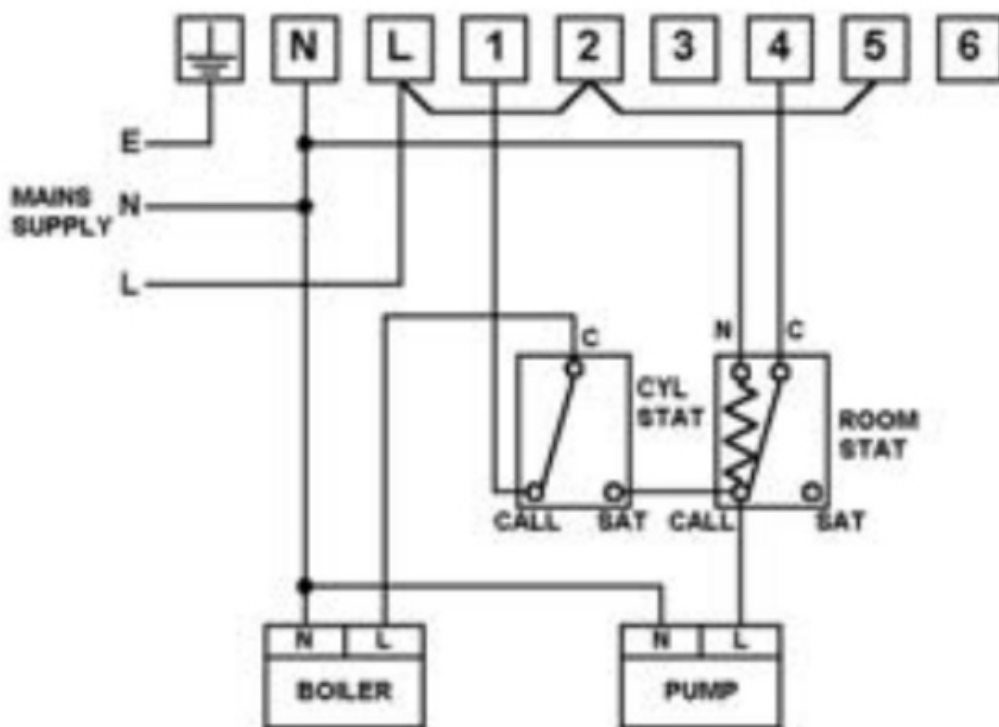
Electrical Connections

Example circuit diagrams are shown on page 5, 6 & 7. These diagrams are schematic and should be used as a guide only. Please ensure that all installations comply with the current IET regulations.

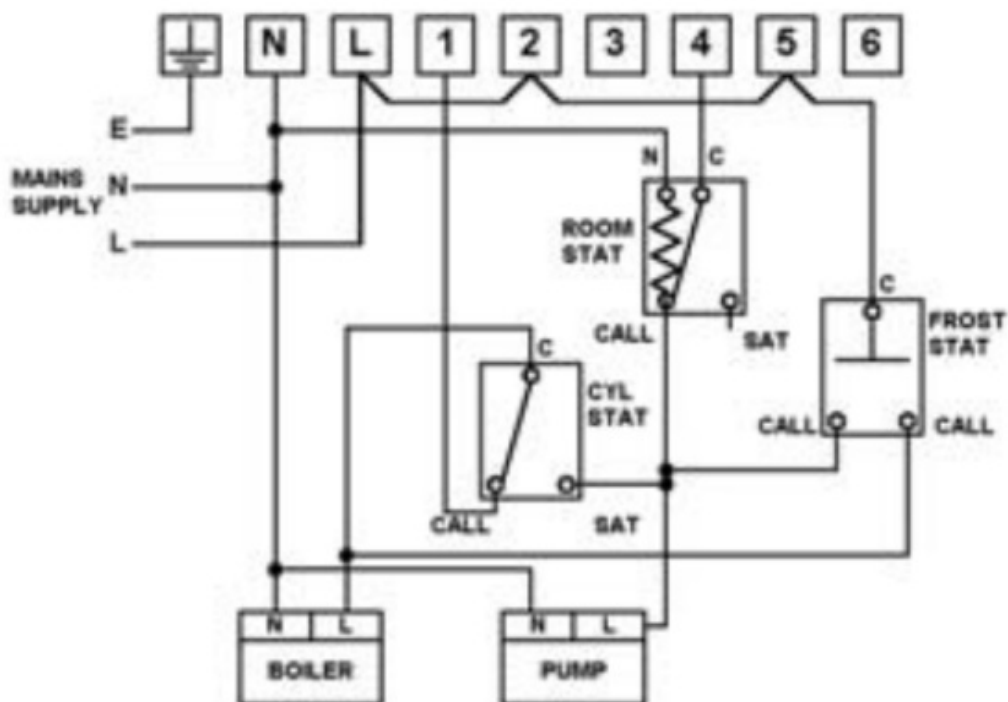


For reasons of space and clarity the diagrams have been simplified, for instance some Earth connections have

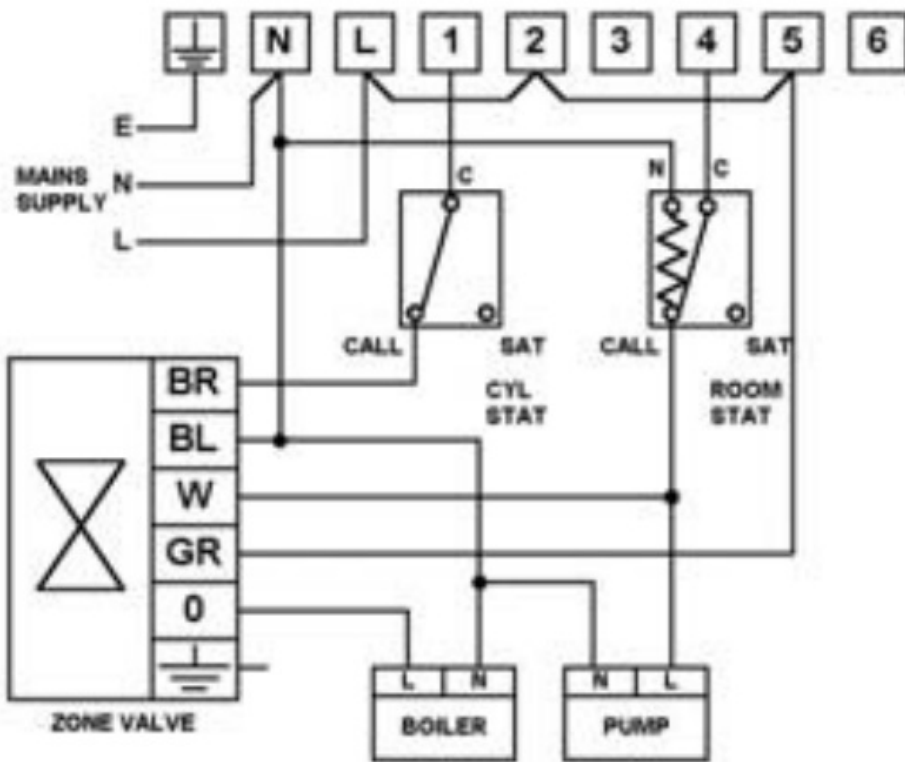
been omitted. Other control components shown in the diagrams i.e. Valves, RoomStats etc. are general representations only. Cylinder and Room Thermostat Key: C = Common CALL = Call for heat or break on rise SAT = Satisfied on rise N = Neutral



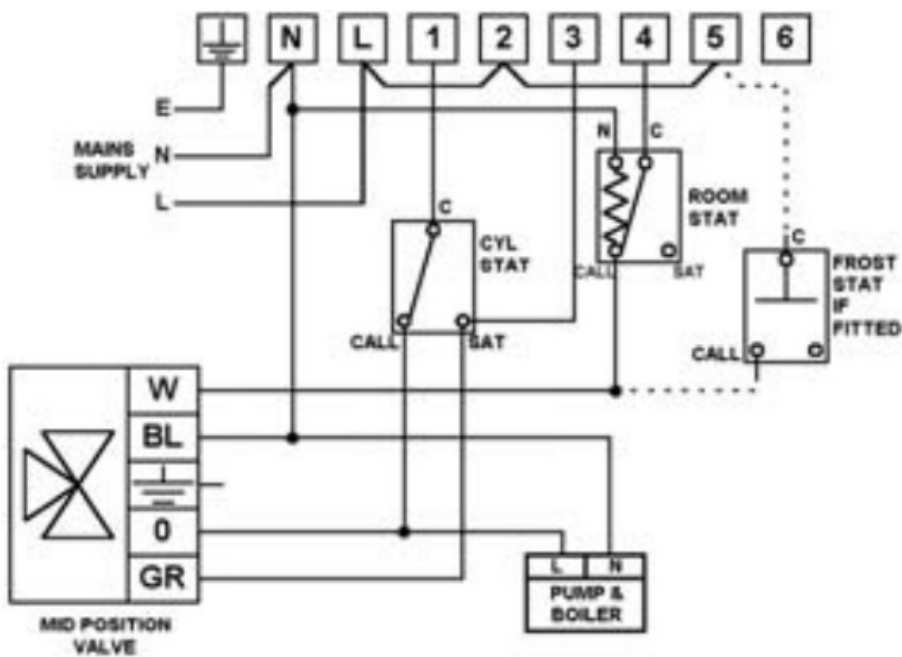
Gravity Hot water with Pumped Heating via RoomStat and CylinderStat



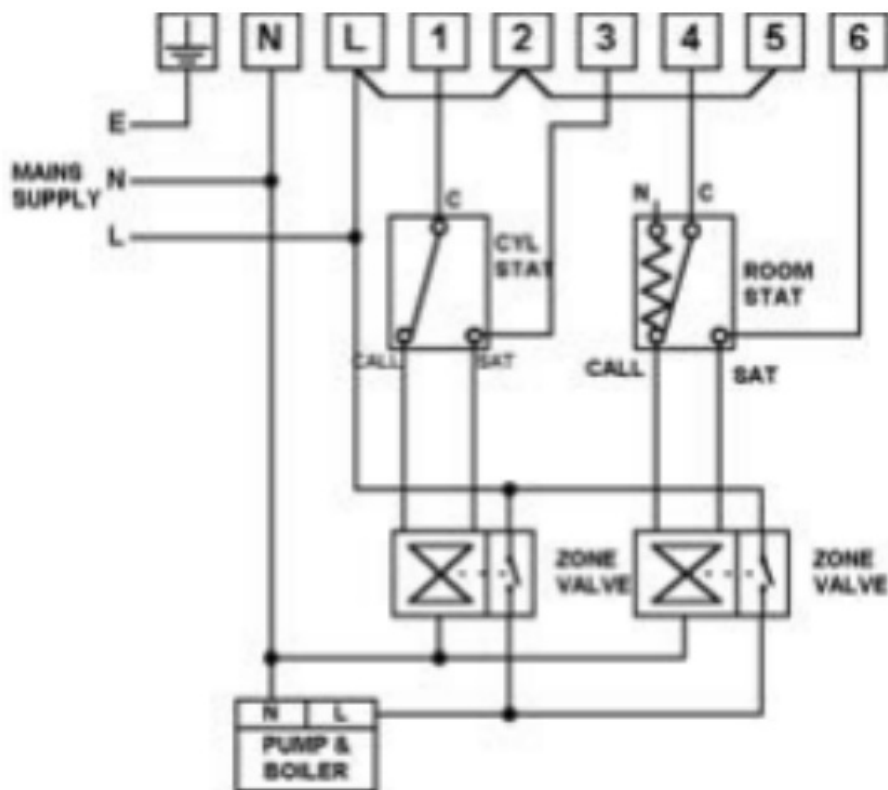
Gravity Hot water with Pumped Heating via RoomStat and CylinderStat including Frost protection via double pole FrostStat 5



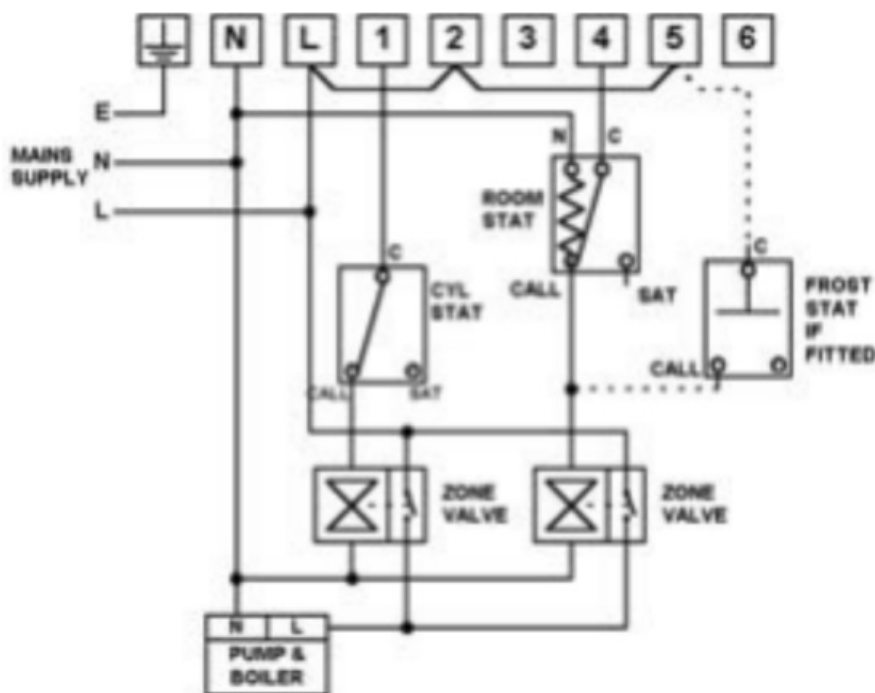
Gravity Hot water with Pumped Heating via RoomStat, CylinderStat and Two Port Zone Valve (with Changeover Auxiliary Switch) on Hot Water circuit



Fully Pumped Heating System using RoomStat, CylinderStat and Three Port Mid-Position Valve



Gravity Hot water with Pumped Heating via RoomStat, CylinderStat and Two Port Zone Valve (with Changeover Auxiliary Switch) on Hot Water circuit

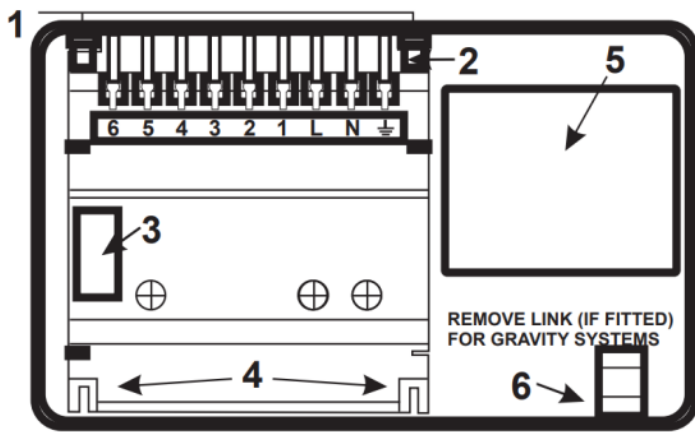


Fully Pumped Heating System using RoomStat, CylinderStat and Three Port Mid-Position Valve

Commissioning the Timeswitch

Ensure all dust and debris has been cleared away from the work area before removing the timeswitch from its packaging. All ChannelPlus controls are fitted with battery reserve which maintains programmed times in the event of a mains power failure.

Rear View of ChannelPlus Timeswitch



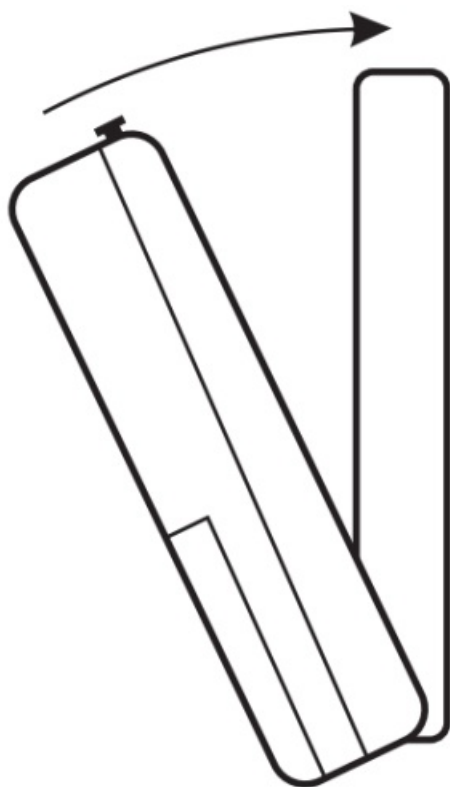
1. RETAINING SCREWS
2. CONNECTOR BLADES
3. PRODUCTION DATE LABEL
4. POSITIONING LUGS
5. RATINGS LABEL
6. FULLY PUMPED/GRAVITY LINK
(REMOVABLE, SEE NOTE BELOW)

Fully Pumped / Gravity Link

All ChannelPlus programmers are suitable for either gravity or fully pumped systems. On fully pumped systems it is possible to programme independent time settings for each channel, gravity systems allow only one common time setting. As supplied the ChannelPlus is suitable for fully pumped systems and the link should remain in situ. If the programmer is to control a gravity system this link should be removed by simply pulling it out of the back of the programmer.

Fitting the Timeswitch

If surface wiring has been used, remove the knockout/insert from the bottom of the timeswitch to accommodate it. Loosen the two 'captive' retaining screws on the top of the unit. Now fit the timeswitch to the Backplate, line the lugs on the timeswitch with the flanges on the Backplate. Swing the top of the timeswitch into position ensuring that the connection blades on the back of the unit locate into the terminal slots in the backplate. Tighten the two 'captive' retaining screws to fix the unit securely, then switch on the mains supply.



END VIEW OF CHANNELPLUS
TIMESWITCH

Initial Setup

Once the mains power has been switched on the ChannelPlus, the display will illuminate. The timeswitch has a number of preprogrammed functions to assist the installation which are detailed below;

TIME AND DATE – The timeswitch has been pre-set with the current time and date during manufacture. No alteration should be required to the time and date, however if any modification is required, please refer to the 'Adjusting Time and date' section of the user guide.

PROGRAMME TIMES – The timeswitch has been pre-set with default ON and OFF times, these can be altered to meet the requirements, please refer to the 'Setting the Programme Times' section of the user guide.

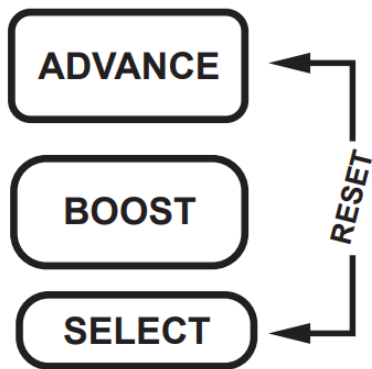
PLEASE ENSURE THAT THE USER GUIDE IS HANDED OVER TO THE END USER.

RESETTING THE CHANNELPLUS

Electronic equipment can in some circumstances be affected by electrical interference. If the display becomes frozen or scrambled; or if you wish to revert back to the default settings please use the following procedure.

RESET PROCEDURE

PLEASE NOTE; Using this procedure will restore the ChannelPlus to the original factory programme settings, the time setting will remain correct.



Lower the front flap of the unit. On the far right (forth) Channel press the ADVANCE (Enter) and SELECT (Blue) buttons together then release the buttons and the programmer will return to the preset factory settings.

General Information

Before handing over the installation to the user, always ensure that the system responds correctly on all control programmes and that other electrically operated equipment and controls are correctly adjusted.

EXPLAIN HOW TO OPERATE THE CONTROLS AND HAND OVER THE USERS OPERATING INSTRUCTIONS TO THE USER.

Battery

The programmer is fitted with a non-rechargeable, non-serviceable long life battery, which will maintain the programmed time settings with the mains supply disconnected.

THIS RESERVE SHOULD BE SUFFICIENT TO COVER POWER INTERRUPTIONS DURING THE LIFE OF THE UNIT. During power interruptions the display will be blank.

Specification H21XL – H27XL

Electrical

Purpose of Control: Electronic Central Heating Programmer (2 Channel)

Contact Rating: 3(1) Amp 230V AC

Contact Type: Micro-disconnection

Supply: 230V AC 50Hz only

Protection: Class II

Control Action: Type 1B,R

Operating Time Limitation: Intermittent

Software Class: Class A

Battery Type: Lithium

Battery Life: 10 months continuous operation (minimum)

Display: Full Graphical LCD, Backlit

Clock: 24 Hour / 12 hour AM/PM

Display Time Adjustment: 1 Minute Intervals

Switch Time Adjustment: 10 Minute Steps

Programme Selection: Auto, On, All Day, On Constant, Off, Holiday

Operating Periods per Day: 3 for each Channel Independently

Override: Boost 1 or 2 Hours (If pressed during ON Period, will extend ON Period). Instant Advance.

Mechanical

Dimensions: 163mm x 101mm x 37mm

Case Material: Thermoplastic, flame retardant

Ball Pressure Test Temperature: 75°C

Mounting: Industry standard 9 pin British Gas Wallplate, independently mounted

Environmental

Impulse Voltage Rating: Cat II 2500V

Enclosure Protection: IP30

Pollution Degree: Degree 2

Operating Temperature Range: 0°C to +40°C

Compliance

Design Standard:

EN 60730-2-7

BS EN 60730-2-7

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Documents / Resources

 <p>The ChannelPlus H Series 2, Two ChannelPlus meters (each shown above) up to three programmed operating periods per day with independent Start and Stop times and on/off days. Programmable. The meter has a fully graphical LCD display with backlit display menu and keypad.</p> <p>It is not a suitable direct replacement for existing ChannelPlus H Series 1, H21XL and H27XL programmes. When making any changes to the programme.</p> <p>Installation and connection should only be carried out by a suitably qualified person in accordance with the current edition of the IET wiring regulations.</p> <p>Warning: isolate mains supply before commencing installation.</p>	<p>SECURE H21XL ChannelPlus Hot Water Programmer [pdf] Installation Guide H21XL, H27XL, H21XL ChannelPlus Hot Water Programmer, H21XL, ChannelPlus Hot Water Programmer</p>
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