## RESETTING THE CHANNELPLUS XL SERIES 2

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 also default to 1st January 2005 - See Adjusting Time and Date on page 3 of the user guide.

Lower the front flap of the unit. On right hand 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.

#### **BATTFRY**

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 - H27XXL SERIES2

**Contact type:** Micro dis-connection(Voltage free) Contact rating: 3(1)Amps 230-240V AC

Power supply: 230V AC 50Hz

Operating Temperature range: 0°C to 40°C

Double insulated.

**Dirt protection:** Normal situations.

Enclosure protection: IP30 Purpose of control: Electronic time switch

Independently mounted control for surface mounting. Operating time limitation: Continuous

Battery Type: Lithium

Case material: Thermoplastic, flame retardant

Dimensions: 163mm x 101mm x 37mm Display: Fully graphical LCD, back-lit Clock: 24hour /12 hour AM/PM Display time adjustment: 1 Minute steps

Switched time adjustment: 10 Minute steps Programme selection: Auto, On all day, On constant, Off, Holiday

Operating periods per day: Three per channel -

(Separate daily programmes for H27ZXL and H27ZXL)

Override: Boost, 1 or 2 Hours

Extension to ON period, 1Hr or 2Hr

Instant Advance

Backplate: 9 Pin terminal connection

Email: sales@horstmann.co.uk Website: www.horstmann.co.uk

Horstmann Controls Limited Bristol BS4 1UP t:0117 9788 773 - f:0117 9788 701



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W.W. H. J. J. J. W. H. J. W. SERVES INSTALLATION INSTALLATIONS Horstmann 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 Horstmann ChannelPlus H21XL, H27XL and H27ZXL programmers, utilising existing wiring and backplate connections.

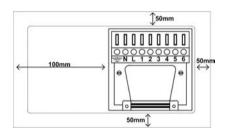
INSTALLATION AND CONNECTION SHOULD ONLY BE CARRIED OUT BY A SUITABLY QUALIFIED PERSON AND IN ACCORDANCE WITH THE CURRENT EDITION OF THE IEE WIRING REGULATIONS.

WARNING: ISOLATE MAINS SUPPLY BEFORE COMMENCING INSTALLATION

#### FITTING THE BACKPLATE

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

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



#### DIRECT WALL MOUNTING

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

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 series 2 programmers 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 programmer 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 1.0mm<sup>2</sup> or 1.5mm<sup>2</sup>.

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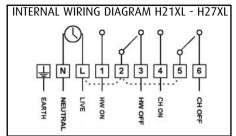
#### **ELECTRICAL CONNECTIONS**

ChannelPlus programmers 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.

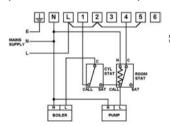
When used to control MAINS VOLTAGE SYSTEMS INTERNAL WIRING DIAGRAM H21XL - H27XL Terminals L.2 and 5 should be electrically linked by means of a suitable piece of sleeved conductor. When used to control EXTRA LOW VOLTAGE SYSTEMS these links MUST NOT be fitted.

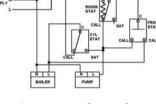
Example circuit diagrams are shown below. These diagrams are schematic and should be used as a guide only. Please ensure that all installations comply with the current IEE regulations.

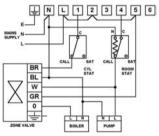


For reasons of space and clarity the diagrams have been simplified, for instance some Earth connections have been omitted. Other control components shown in the diagrams i.e. Valves, RoomStats etc. are general representations only. However the wiring detail can be applied to the corresponding models of most manufacturers e.g. Horstmann, Honeywell, Danfoss Randall etc.

Cylinder and Room Thermostat Key: C = Common CALL = Call for heat or break on rise SAT = Satisfied on rise N = Neutral



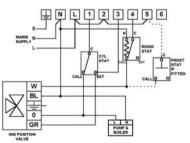




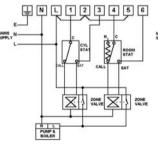
Gravity Hot water with Pumped Heating via RoomStat CylinderStat

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

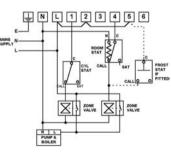
Gravity Hot water with Pumped Heating via RoomStat, CylinderStat and Two Port Zone Valve (with Changeover Auxiliary Switch) on Hot Water circuit







Fully Pumped System using RoomStat and CylinderStat and Two (2 Port) Motorised Valve with Auxiliary Switches



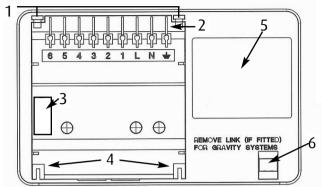
Fully Pumped System using RoomStat and Two (2 Port) Spring Return Zone Valve with Auxiliary Switches

NOTE: When fitted in conjunction with suitably rated contactors the H27ZXL can also be used to control two Zones of Electric heating

#### COMMISSIONING THE PROGRAMMER

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

## REAR VIEW OF CHANNELPLUS XL PROGRAMMER



- 1 RFTAINING SCREWS
- 2 CONNECTOR BLADES
- 3 PRODUCTION DATE LABEL
- 4 POSITIONING LUGS
- 5 RATINGS LABFI
- FULLY PUMPED / GRAVITY LINK (REMOVABLE, SÉE NOTE BELOW)

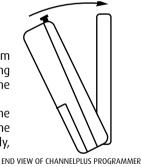
# FULLY PUMPED / GRAVITY LINK

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 PROGRAMMER

If surface wiring has been used, remove the knockout/insert from the bottom of the programmer to accommodate it. Loosen the two 'captive' retaining screws on the top of the unit. Now fit the programmer to the Backplate, line the lugs on the programmer with the flanges on the Backplate.

Swing the top of the programmer 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.



## **INITIAL SET-UP**

Once the mains power has been switched on the ChannelPlus XL Series 2's display will illuminate. The programmer has a number of pre-programmed functions to assist the installation, which are detailed below:

**TIME AND DATE -** The programmer 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 programmer has been pre-set with default heating and hot water times, these can be altered to meet the user requirements, please refer to the 'Setting the Programme Times' section of the user quide.