

ES3247B

# 3 Channel Multi-Purpose Programmer

## **Installation Instructions**



## Thank you for choosing ESi Controls.

All our products are tested in the UK so we are confident this product will reach you in perfect condition and give you many years of service. However, for additional peace of mind, we recommend you register your product online at www.esicontrols.co.uk/warranty for your extended warranty.

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**Installation Instructions** 

# Technical data

Power Supply	230V AC, 50Hz		
Operating Temperature	0°C to 35°C		
Swith Rating	230V AC, 6(2) A SPDT		
Battery Type	Lithium Cell CR2032		
Enclosure Protection	IP30		
Plastics	Thermolatic, flame retardant		
Insulation Class	Double		
Wiring	For fixed wiring only		
Back Plate	Industry standard		
Dimensions	140mm(L) x 90mm(H) x 30mm(D)		
Clock	12 hour am/pm, 1 minute resolution		
BST/GMT Time Change	Automatic		
Clock Accuracy	+/- 1 sec/day		
Programme Cycle	24hr, 5/2 Day or 7 Day selectable		
Programme Selection	Auto, ON, All Day, OFF		
Programme Override	+1, +2, +3Hr and/or Advance		
Heating System	Pumped, Gravity selectable		
Complies	EN60730-1, EN60730-2.7, EMC Directive 2014/30EU, LVD Directive 2014/35/EU		

# **Installation Safety Instructions**

The unit must be installed by a suitably qualified person in accordance with the latest IEE Wiring Regulations.

Isolate mains supply before commencing installation. Please read all instructions before proceeding.

Ensure that the fixed wiring connections to the mains supply is via a fuse rated at not more than 6 amps and class 'A' switch having a contact separation of a minimum of 3mm in all poles. The recommended cable sizes are 1.0mm sqr or 1.5mm sqr.

No earth connection is required as the product is double insulated but ensure continuity of earth throughout the system. To facilitate this, an earth park terminal is supplied on the back plate.

If the unit is fitted to a metal surface, **IT IS ESSENTIAL** that the metal be earthed. **DO NOT** use a surface mounting box.

#### Maintenance

Always isolate the mains supply before commencing any work, servicing or maintenance on the system. And please read all instructions before proceeding.

Arrange for an annual maintenance and inspection schedule to be carried out by a qualified person on every part of the heating and hot water system.

## Safety Notice

#### WARNING!

Always isolate the AC mains supply before installing. this product must be fitted by a qualified person, and installation must comply with the guidance provided in the current editions of BS767 (IEE wiring regulations) and part "P" of the building regulations.

## Technical Settings

- Move the slider to RUN. Hold down the Home button, the Day button and the button (under the facia) together for 3 seconds to enter the Technical Setting Mode.
- 2. Press +/- to choose between 2 or 3 ON/OFFs per day.
- Press the Next → button and press +/- to choose between Pu (Pumped, allows independent control of CH and HW) or Gr (Gravity does not allow CH without HW but can provide HW without CH).
- 3. Press the **Next →** button and press +/- to choose between Protection ON/OFF. (If Protection is ON and the system does not call for heat for one week, the system will be turned ON for one minute each week that the system does not call for heat.)
- Press the Next → button and press +/- to choose between 12 hour clock or 24 hour clock.
- Press the Next → button and press +/- to choose between Std (standard time with the changeover at 2.50am) or ECON (economy time with the changeover at 00.00am, midnight).

## Setting the Landlord Service Interval

- Switch the slider to RUN.
- Press Home, Copy and the + buttons together to enter the landlord settings. A numeric password will be required to enter these settings.
- The LCD display will show COdE. Press the +/- buttons to enter the first digit of the code. Press the Day button to move to the next digit. Repeat this until all 4 digits have been entered and then press the Next → button.
- **N.B.** Only when the code entered matches either the pre-set or master code can the landlord settings be entered. The factory default code is 0000.
  - The LCD display will show ProG. Press the Next →
    button and the LCD will show En. Press the +/- buttons
    to turn the landlord functions on/off.
  - 5. If landlord functions are turned on, press the Next >> button and the LCD display will show SHO. Select on and the LCD will display ArEA and this will allow a contact number to be entered. Press the +/- buttons to set the area code for the maintenance telephone number. Press the Day button to move to the next digit. Repeat this until all digits have been entered and then press the Next >> button.
  - The LCD display will show tELE. Press the +/- buttons to set the maintenance telephone number. Press the Day button to move to the next digit. Repeat this until all digits have been entered and then press the Next >> button.
  - 7. The LCD display will show **duE**. Press the **+/-** buttons to set the due date (from 1 450 days).

- Press the Next → button and the LCD display will show ALAr. Press the +/- buttons to set the reminder (from 1 31 days). This will then remind the user when the annual service is due by alternating between displaying SER and the maintenance telephone number in the LCD screen according to these settings.
- Press the Next → button and the LCD display will show tYPE. Press the +/- buttons to choose between: -
  - 0: Reminds the user when the annual service is due by alternating between displaying SER and the maintenance telephone number in the screen according to installer set settings.
  - Reminds the user when the annual service is due by alternating between displaying SER and the maintenance telephone number in the screen according to installer set settings and only allows the system to run in manual operation for 60 minutes.
  - 2: Reminds the user when the annual service is due by alternating between displaying SER and the maintenance telephone number in the screen according to installer set settings and does not allow the system to run (permanently OFF).
- 10. Press the Next >> button and the LCD display will show nE. Here a new installer code can be entered. Press +/- to set the first digit, then press the Day button. Repeat this for all four digits. Press the Next >> button to confirm the changes and the LCD display will show SET to confirm.
- 11. Press the **\( \Phi\) Home** button or wait for 15 seconds to automatically confirm and return to Run Mode.

## Fitting the Back Plate

- Position the wall-plate (terminals along top edge) with 60mm (min) clearance to its right, 25mm (min) above, 90mm (min) below. Ensure that the supporting surface will fully cover the back of the programmer.
- Offer the back plate to the wall in the position where the programmer is to be mounted, remembering that the back plate fits to the left side of the programmer. Mark the fixing positions through the slots in the back plate, drill and plug wall, then secure back plate in position.
- All necessary electrical connections should now be made. Ensure that the wiring to the wall-plate terminals leads directly away from the terminals and is completely enclosed within the wall-plate aperture. Wire ends must be stripped and screwed to the terminals so that minimal bare wire is showing.

#### To enter a New Installer Code

- Move the slider to RUN.
- Press Home, Copy and the + buttons together to enter the landlord settings. A numeric password will be required to enter these settings.
- The LCD display will show COdE. Press the +/- buttons to enter the first digit of the code. Press the Day button to move to the next digit. Repeat this until all 4 digits have been entered and then press the Next → button.
- **N.B.** Only when the code entered matches either the pre-set or master code can the landlord settings be entered. The factory default code is 0000.
  - The LCD display will show ProG. Continue to press the Next ➤ button until the LCD will show NE 0000. Press

the **Day** button and the first digit will flash, then use the **+/-** buttons to choose a new code using the **Day** button to move between digits.

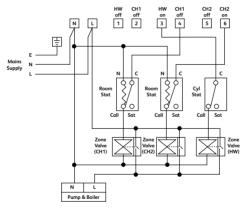
- When the desired code is entered correctly, press Next → button to confirm changes.
- 6. Press A Home button to exit the menu.

#### **Existing Installations**

- Remove the old programmer from its back plate mounting, loosening any securing screws as dictated by its design.
- 2. Check compatibility of existing back plate & wiring arrangement with that of the new programmer. See online Programmer Replacement Guide for direction.
- Make all necessary changes to back plate & wiring arrangement to suit new programmer.

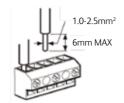
#### **New Installations**

Example circuit diagram for a typical installation is shown below. This diagram is 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 diagram has been simplified. For instance some Earth connections have been omitted. Other control components shown in the diagram i.e. Valves, Room Stats etc are general representations only. However, the wiring detail can be applied to the corresponding model of most manufacturers. e.g. Horstmann, Honeywell, Danfoss Randall, Drayton, ESi Controls etc.



The Programmer controls 3 x two port spring return valves via Room Stats and Cylinder Stat giving independent control of Hot Water and two zones of Heating. If the programmer is being installed on an existing system, additional equipment such as an extra zone valve may be fitted in order to achieve full three channel control.

#### Wiring Diagram





## Commissioning

Switch on mains supply. Referring to User Instructions.

- 1. Use the buttons to ensure correct product functionality.
- 2. Set timing and programme details in accordance with customer requirements (page 11-13).
- Normally the unit will be left with channel in 'Auto' mode.
- 4. Set backlight either permanently ON or OFF in accordance with customer requirements (page 17).
- 5. Leave these installation instructions with customer for reference.

We are continuously developing our products to bring you the very latest in energy saving technology and simplicity. However, should you have any questions setting up your controls please email us at sales@esicontrols.co.uk.

WARNING: Interference with sealed parts renders the guarantee void.

In the interests of continuous product improvement we reserve the right to alter designs, specifications and materials without prior notice and cannot accept liability for errors.





