

A27-HW



2 Zone Programmer Installation and Operation Guide



Table of contents

Installation Instructions

Factory Default Settings	5
Frost Protection	5
Specifications	6
Quick introduction to your A27-HW Programmer	7
Wiring diagram	8
Mounting & Installation	9

Operating Instructions

LCD Symbol Description	13
Button Description	14
Resetting the Timesitch	15
Keypad lock and unlock	15
Setting the date and time	16
Factory Program Setting	17
Mode selection	18
Adjust the program setting	19

Copy Function	20
Reviewing the program settings	21
Boost function	21
Advance function	22
Holiday mode	23
Backlight mode selection	24
PIN Function	25
Service Interval	27



2 Zone Programmer **Installation Instructions**

Factory Default Settings



Contacts:	230VAC
Program:	5/2D
Backlight:	On
Keypad:	Unlocked
Clock type:	24 Hr Clock
Daylight saving:	On
Frost protection:	5°C - Not adjustable

Frost Protection



5°C

Frost protection is built into this programmer.

It is pre fixed at 5°C and is not adjustable.

It will only be activated when the programmer is in the OFF mode and the room temperature falls below 5°C.

Specifications

Power Supply:	200 - 240 Vac, 50-60 Hz, 8 VA
Ambient Temperature:	0 ... 45°C
Relative Humidity Range:	5-95% RH
Contact Rating:	250VAC 3(1)A
Program Memory backup:	3 months
Battery:	LIR2032
Backlight:	Blue
IP Rating:	IP20
Backplate:	British System Standard
Pollution Degree:	Pollution Degree 2
Rated Impulse Voltage:	2,500V as per EN 60730
Automatic Action:	Type 1.C
Software:	Class A
Ball Pressure Test Temperature:	70°C
Dimensions:	140 x 99 x 35mm

Quick introduction to your A27-HW Programmer

The A27-HW programmer is used to control two separate zones in your central heating system, hot water and heating.

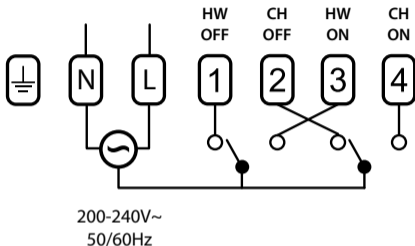
Each zone can be independently operated and programmed to suit your needs. Each zone has up to three daily heating programs called P1, P2 and P3. See Page 19 for instructions on how to adjust the program settings.

On the LCD screen of your programmer you can see what mode the zone is currently in, information about the hot water zone is displayed on the left. Information about your heating zone is displayed on the right.


For 'Mode Selection' please see page 18 for further explanation.

When the zone is ON, you will see the red LED for that zone light up. This indicates that power is being sent from the programmer on this zone.

Wiring diagram



Terminal Connections

	Earth	
N	Neutral	
L	Live	
1	Hot Water OFF	- N/C Normally closed connection
2	Central Heating OFF	- N/C Normally closed connection
3	Hot Water ON	- N/O Normally open connection
4	Central Heating ON	- N/O Normally open connection

Mounting & Installation

Caution!

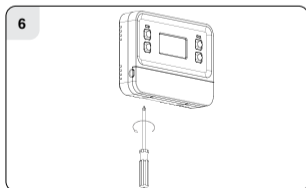
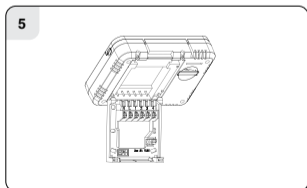
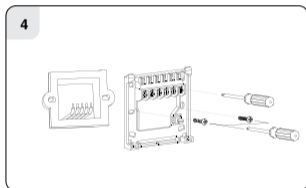
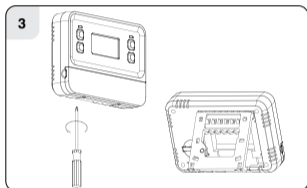
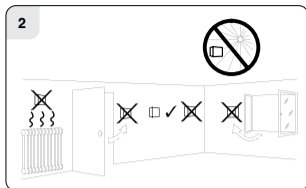
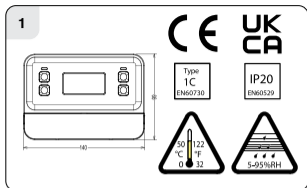
- Installation and connection should only be carried out by a qualified person.
- Only qualified electricians or authorised service staff are permitted to open the programmer.
- If the programmer is used in a way not specified by the manufacturer, its safety may be impaired.
- Prior to setting the programmer, it is necessary to complete all required settings described in this section.
- Before commencing installation, the programmer must be first disconnected from the mains.

This programmer can be mounted in the following ways:

- 1) Surface mounted**
- 2) Mounted to a recessed conduit box**

Mounting & Installation (Continued)

- 1) Remove the programmer from its packaging.
- 2) Choose a mounting location for the programmer:
 - Mount the programmer 1.5 metres above the floor level.
 - Prevent direct exposure to sunlight or other heating / cooling sources.
- 3) Use a philips screwdriver to loosen the screws of the backplate on the bottom of the programmer. The programmer is lifted upwards from the bottom and removed from the backplate.
(See Diagram 3 on Page 11)
- 4) Screw the backplate onto a recessed conduit box or directly to the surface.
- 5) Wire the backplate as per the wiring diagram on page 8.
- 6) Sit the programmer onto the backplate making sure the programmer pins and the backplate contacts are making a sound connection, push the programmer flush to the surface and tighten the screws of the backplate from the bottom. (See Diagram 6 on Page 11)

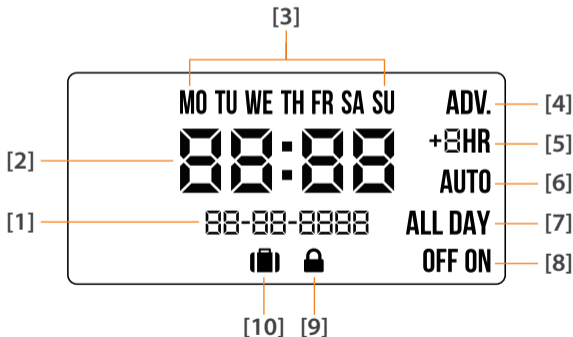




2 Zone Programmer Operating Instructions





LCD Symbol Description





- [1] Displays day / month / year
- [2] Displays current time.
- [3] Displays day of the week.
- [4] Displays advance function.
- [5] +1hr function.
- [6] Displays auto mode is activated.
- [7] Displays all day mode.
- [8] Displays off & on mode.
- [9] Displays when keypad is locked.
- [10] Displays holiday mode.







Button Description



-  +1 HR button
-  Advance Hot Water
-  + Button
-  Select Hot Water

-  OK Button
-  Set point decrease
-  Holiday mode
-  Select Heating button

-  +1HR button
-  Advance heating
-  Reset button
-  Clock set / Run / Program Set

Resetting the programmer


To reset the programmer to factory settings.

Press the  button.

This button is located behind the flap on the front of the unit.

'rst no' will appear on the screen.



Press the  button to change from 'rst no' to 'rst yES'.


Press  to confirm.



The programmer will restart and revert to factory defined settings.

The time and date will not reset.

Keypad lock and unlock Unlocked

To lock the keypad, press and hold the  and  buttons for 5 seconds.


 will appear on the screen. The keypad is now locked.




To unlock the keypad, press and hold the  and  buttons for 5 seconds.




 will disappear from the screen. The keypad is now unlocked.




Setting the date and time




Lower the flap on the front of the unit.




Move the selector switch to the **CLOCK SET**  **PROG SET** position.




Press the  or  buttons to adjust the day. Press the  button.

Press the  or  buttons to adjust the month. Press the  button.



Press the  or  buttons to adjust the year. Press the  button.

Press the  or  buttons to adjust the hour. Press the  button.

Press the  or  buttons to adjust the minute. Press the  button.

Press the  or  buttons to adjust 5/2D, 7D or 24H Press the  button.

The date, time and mode are now set. Move the selector switch to the

RUN  **PROG SET** position to run the program, or to the **PROG SET**  **CLOCK SET** position to change the program setting.

Factory Program Setting



5/2d, 7D. 24H

5/2 Day						
	P1 ON	P1 OFF	P2 ON	P2 OFF	P3 ON	P3 OFF
Mon-Fri	06:30	08:30	12:00	12:00	16:30	22:30
Sat-Sun	07:30	10:00	12:00	12:00	17:00	23:00

7 Day						
	P1 ON	P1 OFF	P2 ON	P2 OFF	P3 ON	P3 OFF
All 7 days	06:30	08:30	12:00	12:00	16:30	22:30

24 Hour						
	P1 ON	P1 OFF	P2 ON	P2 OFF	P3 ON	P3 OFF
Everyday	06:30	08:30	12:00	12:00	16:30	22:30

Mode selection

There are 4 modes available for selection.

- AUTO** The zone operates three 'ON/OFF' periods per day. (P1, P2, P3)
- ALL DAY** The programmer operates one 'ON/OFF' period per day. This operates from the first ON time to the third OFF time.
- ON** The programmer is permanently 'ON'.
- OFF** The programmer is permanently 'OFF'.

By pressing the '**SELECT HOT WATER**' button, you can change between **AUTO / ALL DAY / ON / OFF**.



Repeat this process for heating by pressing the '**SELECT HEATING**' button. Press '**SELECT HOT WATER**' to change the hot water zone between **AUTO / ALL DAY / ON / OFF**. The current mode will be shown on the left of the screen. Press '**SELECT HEATING**' to change the current mode. The current mode will be shown on the right.

Adjusting the program settings



Lower the flap on the front of the unit.

Move the selector switch to the **PROG SET**  position.

Programming for hotwater is now selected.

Press the  or  buttons to adjust the **P1 ON** time.


Press the  button.

Press the  or  buttons to adjust the **P1 OFF** time.

Press the  button.

Repeat this process to adjust the **ON & OFF** times for **P2 & P3**.

Press the '**SELECT HEATING**' button and repeat the above process to adjust for **HEATING**.


When completed, move the selector switch to the **RUN**  position.

Copy Function

Copy function may only be used if the programmer is in the 7d mode.

(See page 16 to select 7d mode)


Lower the flap on the front of the programmer.

Move the selector switch to the **PROG SET**  position.


Set the **ON & OFF** times for the day of the week you wish to copy from.


Press the  button for 2 seconds.


The next day of the week will begin to flash.

Press the  button to copy the **ON & OFF** times to this day.

Press the  button to skip a day.

ON & OFF times can be copied to multiple days by using the  button.


Press the  button when copying has been completed.


When completed, move the selector switch to the **RUN**  position.

Reviewing the Program Settings

Lower the front flap on the front of the programmer.





Move the selector switch to **PROG SET**  position.

Press  to scroll through the periods for the individual day (block of days).

Press  to jump to the next day (block of days).

Move the selector switch to  to return to normal operation.


Boost function


The programmer can be boosted for 1, 2 or 3 hours while it is in the AUTO, ALL DAY & OFF mode. Press **+1HR**  1, 2 or 3 times, to apply the desired boost period. When a **+1HR**  is pressed there is a 5 second delay before activation where **+1HR**  will flash on the screen, this gives the user the time to select the desired boost period. To cancel a boost, press **+1HR**  again. When a boost period has ended or has been cancelled, the programmer will return to the mode that was previously active prior to the boost.

Note: A Boost cannot be applied while in the ON or Holiday Mode.


Advance function

This function allows the user to bring forward the next switching time.

If the zone is currently timed to be **OFF** and the **ADV**  is pressed, the zone will be switched **ON** until the end of the next switching time.


If the zone is currently timed to be **ON** and the **ADV**  is pressed, the zone will be switched **OFF** until the end of the next switching time.

Press the **ADV HOT WATER**  or **ADV HEATING** .

To cancel the **ADVANCE** function, simply press the **ADV**  button again.

Holiday mode



Lower the flap on the front of the unit.

Move the selector switch to the **RUN**  position.

Press the  button.


The current date and time will flash on the screen.


It is now possible to enter the date when you plan to return.

Press the  or  buttons to adjust the holiday period required.

Press the  button.

The programmer is now switched **OFF** until the holiday period ends.

By pressing the  button again, this will cancel the holiday mode, thereby returning the programmer to the normal setting.

To cancel the holiday press . The programmer will return to normal operation when a holiday is finished or cancelled.

Backlight mode selection




On

There are two settings for selection. The factory default setting is **ON**.

ON The backlight is permanently ON.



AUTO On pressing any button the backlight stays on for 10 seconds.

To adjust the backlight setting, lower the flap on the front of the unit.

Ensure the selector switch is in the **RUN**  position.

Press and hold the  button for 5 seconds.

 will appear on screen.

Press either the  or  buttons to select between the **ON** or **AUTO** mode.

Press the  button.

PIN Function

This function allows the user to put a PIN lock on the programmer.


The PIN lock will reduce the functionality of the programmer.













The user will have two options to choose from:

01: All buttons will be disabled.




02: Functionality will be reduced to a 1 hour boost. The only modes available are the AUTO & OFF.



Set up the PIN

Ensure the selector is in the **RUN**  position.






Press and hold  and  buttons for 5 seconds, 'OFF' will appear on the screen. Press  to change from **OFF** to **ON**. Press . **0000** will flash on the screen. Press  and  to set the value from 0 to 9 for the first digit. Press  to move to the next PIN digit. When the last digit of the PIN is set, press . **'VERiFy'** is displayed with **0000**. Press  and  to set the value from 0 to 9 for the first digit. Press  to move to the next PIN digit. When the last digit of the PIN is set, Press .

PIN Function (Continued)

The PIN is now verified 'OP:01' will appear on the screen. Press  and  to select between OP:01 and OP:02. Press  confirm PIN option and the PIN lock is activated.

If the verification PIN is entered incorrectly the user is brought back to the menu. When the PIN lock is active the Lock symbol  will flash every second on the screen. When the programmer is PIN locked, pressing the  will take the user to the PIN unlock screen.


To Unlock the PIN

Press , 'UNLOCK' will appear on the screen. **0000** will flash on the screen. Press  and  to set the value from 0 to 9 for the first digit. Press  to move to the next PIN digit. When the last digit of the PIN is set. Press . The PIN is now unlocked.

If a PIN has been unlocked on the timeswitch, it will automatically reactivate if there is no button pressed for 2 minutes.

To Deactivate the PIN

When the PIN is unlocked (see above instructions)

Ensure the selector is in the **RUN** CLOCK SET  RUN PROG SET position.

Press and hold  &  for 5 seconds, 'ON' will appear on the screen.

Press  or  to select 'OFF'. Press . **.0000** will flash on the screen.

Enter the PIN. Press . The PIN is now disabled.

Service Interval OFF

The service interval gives the installer the ability to put an annual countdown timer on the timeswitch. When the Service Interval is activated 'SErv' will appear on the screen which will alert the user that their annual boiler service is due.

For details on how to enable or disable the Service Interval, please contact customer service.

EPH Controls IE

technical@ephcontrols.com
www.ephcontrols.com/contact-us
T +353 21 471 8440



EPH Controls UK

technical@ephcontrols.co.uk
www.ephcontrols.co.uk/contact-us
T +44 1933 322 072

