A27-HW

2 Zone Programmer

Installation and Operation Guide

EPH CONTROLS

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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:	230Vac 3(1)A
Switch Output:	230Vac
Program Memory backup:	3 months
Battery:	LIR2032
Backlight:	Blue
IP Rating:	IP20
Backplate:	British System Standard
Pollution Degree:	Pollution Degree 2
Rated Impluse 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.

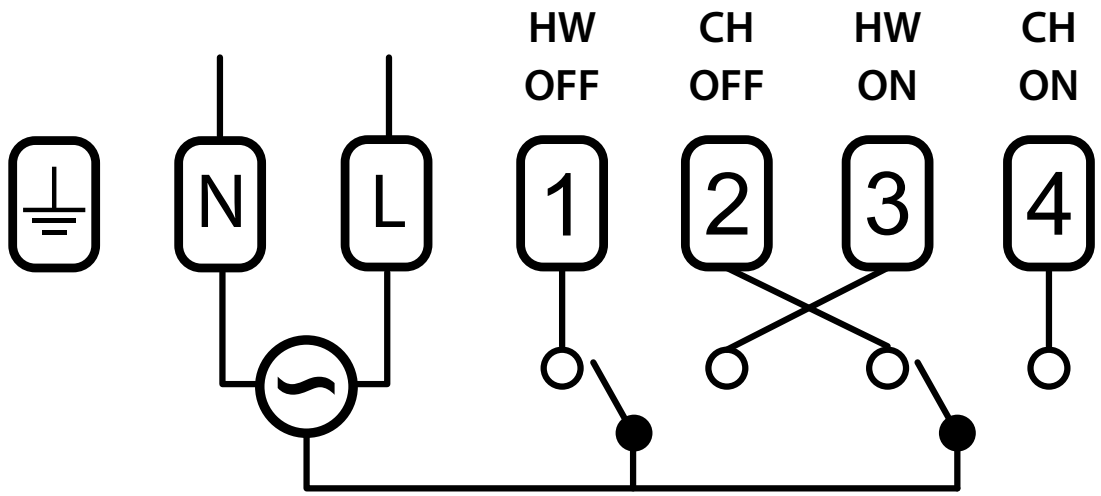
Each zone can be independently operated and programmed to suit your needs. Each zone has up to three daily heating programs called P1, P2 and P3. See Page 19 for instructions on how to adjust the program settings.

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



200-240V~
50/60Hz

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.

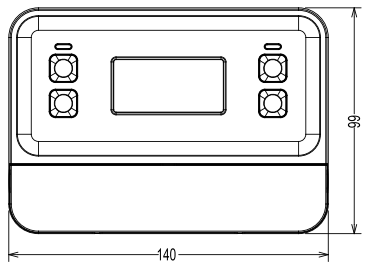
3) Use a philips screwdriver to loosen the screws of the backplate on the bottom of the programmer. The programmer is lifted upwards from the bottom and removed from the backplate.
   (See Diagram 3 on Page 11)

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.

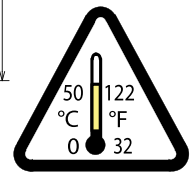
6) Sit the programmer onto the backplate making sure the programmer pins and the backplate contacts are making a sound connection, push the programmer flush to the surface and tighten the screws of the backplate from the bottom. (See Diagram 6 on Page 11)

1



Type
1C
EN60730

IP20
EN60529



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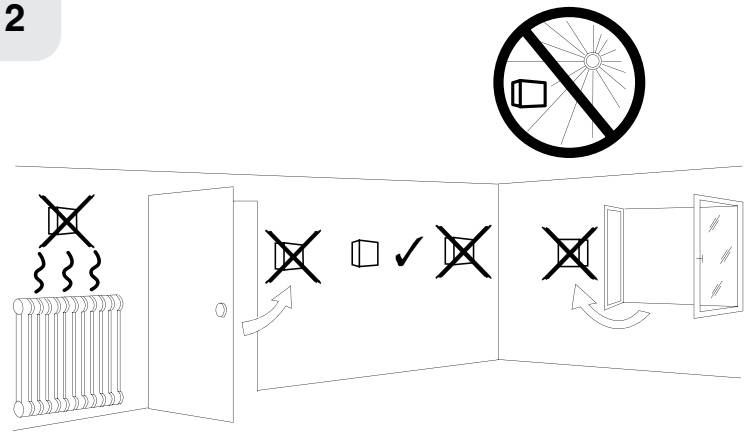
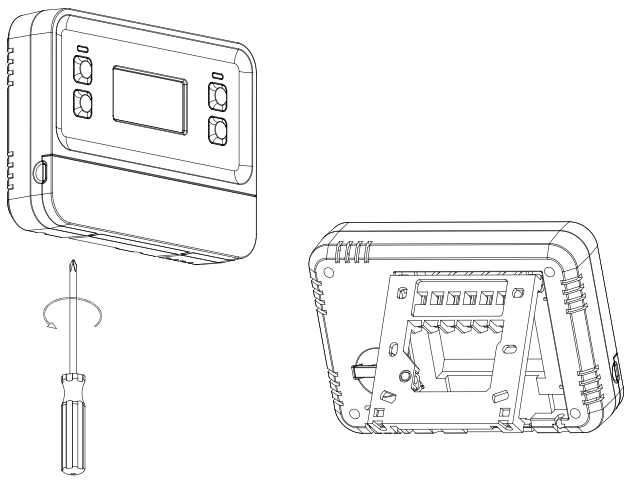


3



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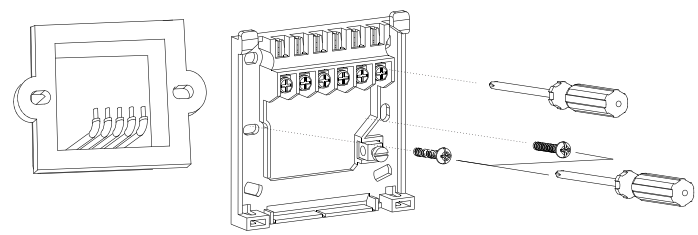
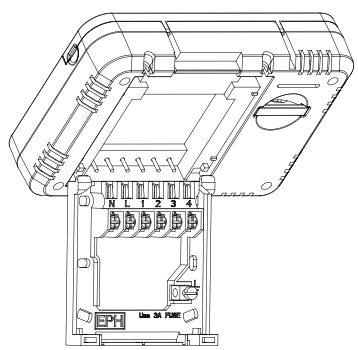
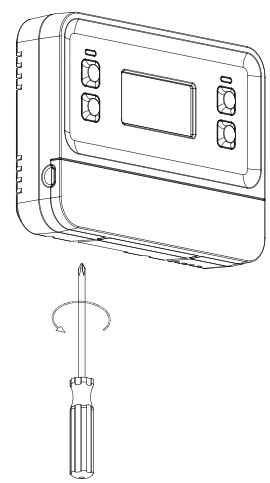


5



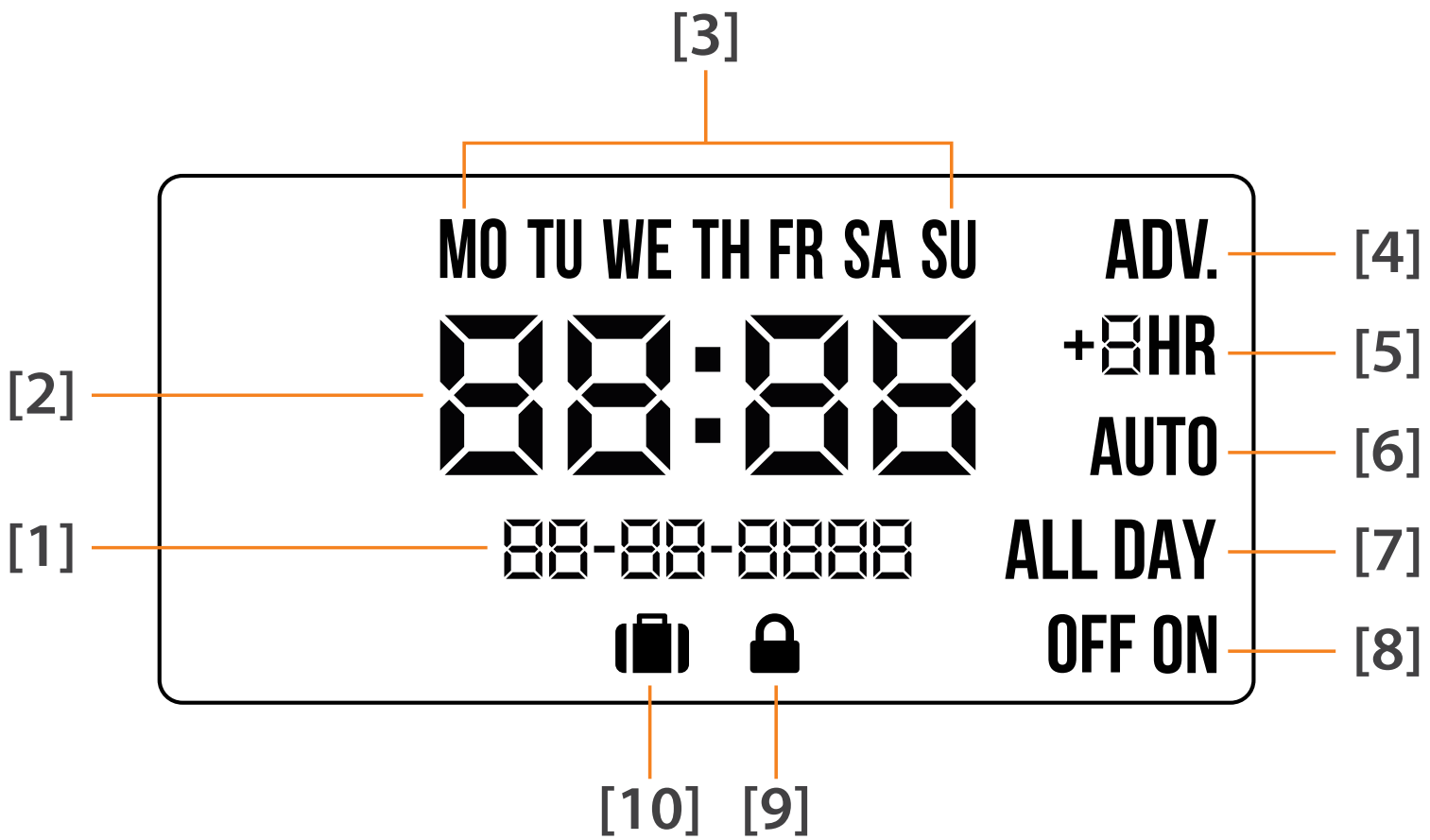
6



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 RESET 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 OK 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 OK and HOLIDAY buttons for 5 seconds.

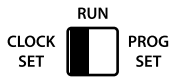
🔒 will appear on the screen. The keypad is now locked.

To unlock the keypad, press and hold the OK and HOLIDAY 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** 

position.

Press the + or − buttons to adjust the day. Press the OK button.

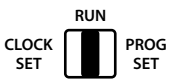
Press the + or − buttons to adjust the month. Press the OK button.

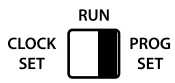
Press the + or − buttons to adjust the year. Press the OK button.

Press the + or − buttons to adjust the hour. Press the OK button.

Press the + or − buttons to adjust the minute. Press the OK button.

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

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

position to run the program, or to the **PROG 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.

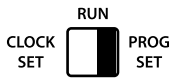
AUTO	The zone operates three 'ON/OFF' periods per day. (P1, P2, P3)
ALL DAY	The programmer operates one 'ON/OFF' period per day. This operates from the first ON time to the third OFF time.
ON	The programmer is permanently 'ON'.
OFF	The programmer is permanently 'OFF'.

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 hot water is now selected.

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

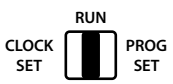
Press the OK button.

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

Press the OK 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** 

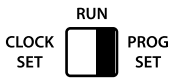
position.

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 HOLIDAY button for 2 seconds.

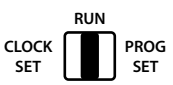
The next day of the week will begin to flash.

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.

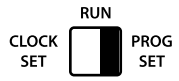
Press the OK button when copying has been completed.

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

Press SELECT 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.

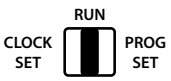
If the zone is currently timed to be **ON** and the **ADV** is pressed, the zone will be switched **OFF** until the end of the next switching time.

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 HOLIDAY 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 OK button.

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

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

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

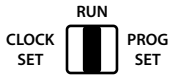
Backlight mode selection On

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 OK button for 5 seconds.

On bKLt will appear on screen.

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

Press the OK button.

PIN Function

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

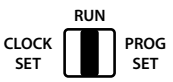
The PIN lock will reduce the functionality of the programmer.

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

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 OK 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 OK will take the user to the PIN unlock screen.

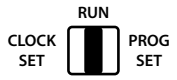
To Unlock the PIN

Press OK , '**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 OK to move to the next PIN digit. When the last digit of the PIN is set. Press OK . The PIN is now unlocked.

If a PIN has been unlocked on the programmer, 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** 

position.

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

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

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

Service Interval OFF

The service interval gives the installer the ability to put an annual countdown timer on the programmer. 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

+353 21 471 8440

Cork, T12 F753

EPH Controls UK

technical@ephcontrols.co.uk

www.ephcontrols.co.uk/contact-us

+44 1933 322 072

Harrow, HA1 1BD

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