R17 V2

1 Zone Timeswitch

Installation and Operating Guide

EPH CONTROLS

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1 Zone Timeswitch

Installation Instructions

Factory Default Settings

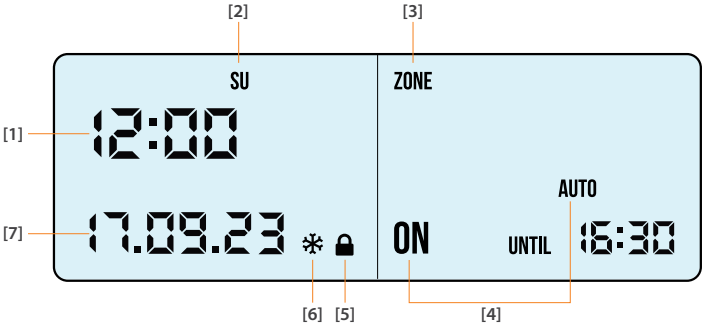
Contacts:	Volt Free Contacts
Program:	5/2D
Backlight:	On
Keypad Lock:	Off
Frost Protection:	Off
Operating Mode:	Auto
Pin Lock:	Off
Service Interval:	Off
Zone Title:	ZONE

Specifications

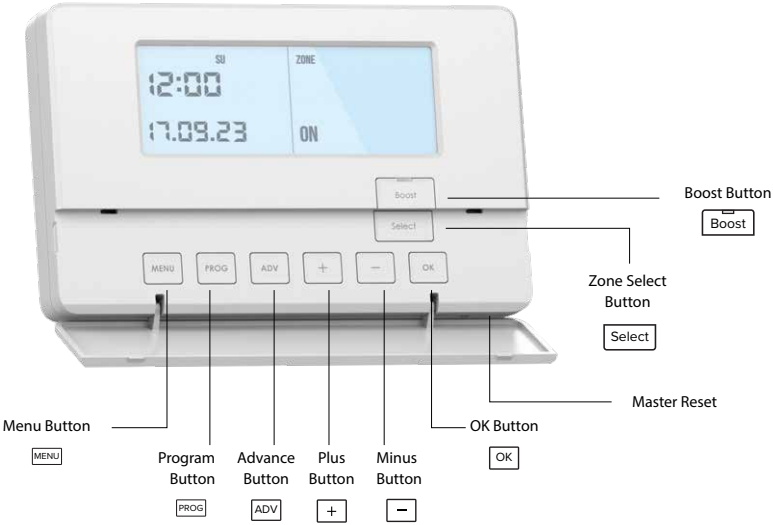
Power Supply:	230VAC
Ambient Temperature:	0 … 50˚C
Dimensions:	161 x 100 x 31 mm
Contact Rating:	3(1)A
Program Memory	5 Years
Temperature Sensor:	NTC 100K
Backlight:	White
IP Rating:	IP20
Battery:	3VDC Lithium LIR2032 & CR2032
Backplate:	British System Standard
Pollution degree:	2 (Resistance to voltage surge 2000V; as per EN60730)
Software Class:	Class A

LCD Display

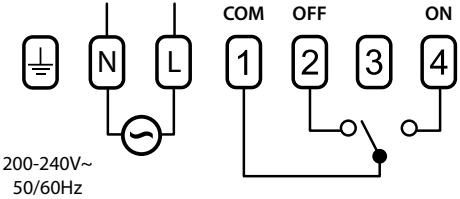
[1] Displays current time.
[2] Displays current day of the week.
[3] Displays zone title.
[4] Displays current mode.
[5] Displays when keypad is locked.
[6] Displays when frost protection is activated.
[7] Displays current date.



Button Description



Wiring Diagram



Terminal Connections

⏚	Earth	
N	Neutral	
L	Live	
1	COM	- Common Connection
2	OFF	- N/C Normally Closed Connection
4	ON	- N/O Normally Open Connection

Switching Options

Mains Switching

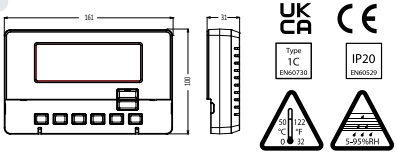
- Link L to 1.

Low Voltage Switching

- Remove the external controls link from the boiler PCB.
- Connect 1 and 4 to these terminals.

Mounting & Installation

1



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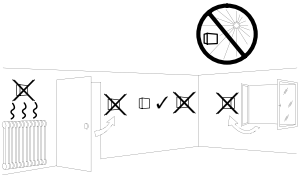

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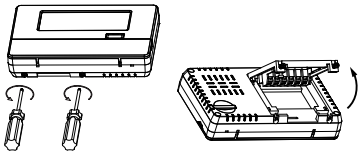

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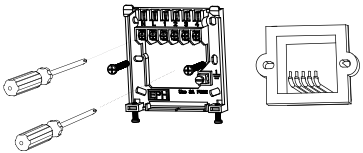

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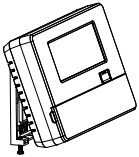

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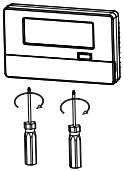

Caution!

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

This timeswitch can be surface mounted or mounted to a recessed conduit box.

1) Remove the timeswitch from its packaging.
2) Choose a mounting location for the timeswitch:
   - Mount the timeswitch 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 timeswitch. The timeswitch is lifted upwards from the bottom and removed from the backplate. (See Diagram 3 on Page 7)
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 6.
6) Sit the timeswitch onto the backplate making sure the timeswitch pins and the backplate contacts are making a sound connection, push the timeswitch flush to the surface and tighten the screws of the backplate from the bottom. (See Diagram 6 on Page 7)

1 Zone Timeswitch

Operating Instructions

Quick introduction to your R17^{V2} Timeswitch:

The R17 ^{V2} timeswitch has up to three daily heating programs called P1, P2 and P3. See Page 13 for instructions on how to adjust the program settings.

Within these sections you can see what mode the timeswitch is currently in.

When in the AUTO mode, it will show when the timeswitch is next programmed to be switched ON or OFF.

For 'Mode Selection' please see page 11 for further explanation.

When the timeswitch is ON, you will see the red LED light up. This indicates that power is being sent from the timeswitch.

Mode Selection AUTO

There are four modes available for selection.

AUTO The timeswitch operates up to three 'ON/OFF' periods per day (P1,P2,P3).

ALL DAY The timeswitch operates one 'ON/OFF' period per day. This operates from the first 'ON' time to the third 'OFF' time.

ON The timeswitch is permanently ON.

OFF The timeswitch is permanently OFF.

Press Select to change between AUTO, ALL DAY, ON & OFF.

The current mode will be shown on the screen.

The Select is found under the front cover.

Programming Modes

This timeswitch has the following programming modes.

5/2 Day mode Programming Monday to Friday as one block and Saturday and Sunday as a 2nd block.

7 Day mode Programming all 7 days individually.

24 Hour mode Programming all 7 days as one block.

Factory Program Setting

5/2d

	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

Adjust the Program Setting in 5/2 Day Mode

Press PROG .

Programming for Monday to Friday is now selected.

Press + and − to adjust the P1 ON time. Press OK .

Press + and − to adjust the P1 OFF time. Press OK .

Repeat this process to adjust P2 and P3 times.

Programming for Saturday to Sunday is now selected.

Press + and − to adjust the P1 ON time. Press OK .

Press + and − to adjust the P1 OFF time. Press OK .

Repeat this process to adjust P2 and P3 times.

Press MENU to return to normal operation.

While in programming mode, pressing Select will jump to the next day (block of days) without changing the program.

Note:

1. To change from 5/2d to 7D or 24H programming, refer to page 16, Menu P01.
2. If you don't wish to use one or more of the daily programs then simply set the start time and end time to be identical. For example, if P2 is set to start at 12:00 and end at 12:00 the timeswitch will simply ignore this program and proceed to the next switching time.

Reviewing the Program Settings

Press PROG .

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).

Press MENU to return to normal operation.

Boost Function

The timeswitch can be boosted for 30 minutes, 1, 2 or 3 hours while it is in the AUTO, ALL DAY & OFF mode.

Press Boost 1, 2, 3 or 4 times, to apply the desired BOOST period.

When a Boost is pressed there is a 5 second delay before activation where '**BOOST**' will flash on the screen, this gives the user the time to select the desired BOOST period.

To cancel a BOOST, press Boost again.

When a BOOST period has ended or has been cancelled, the timeswitch 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

When the timeswitch is in the AUTO or ALLDAY mode, the Advance function allows the user to bring it forward to the next switching time.

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

Press ADV.

The timeswitch will display '**ADVANCE ON**' or '**ADVANCE OFF**' until the end of the next switching time.

To cancel an ADVANCE, press ADV again.

When an ADVANCE period has ended or has been cancelled, the timeswitch will return to the mode that was previously active prior to the ADVANCE.

Menu Function

This menu allows the user to adjust additional functions.

To access the menu, press [MENU].

P01 Setting the Date, Time and the Programming Mode DST ON

Press [MENU], '**P01 tInE**' will appear on the screen.

Press [OK], the year will begin to flash.

Press [+] and [−] to adjust the year. Press [OK].

Press [+] and [−] to adjust the month. Press [OK].

Press [+] and [−] to adjust the day. Press [OK].

Press [+] and [−] to adjust the hour. Press [OK].

Press [+] and [−] to adjust the minute. Press [OK].

Press [+] and [−] to adjust from 5/2d to 7d or 24h mode. Press [OK].

Press [+] and [−] to turn DST (Day Light Saving time) On or Off.

Press [MENU] and the timeswitch will return to normal operation.

Note:

Please see page 12 for descriptions of Programming Modes.

P02 Holiday Mode

This menu allows the user to switch off their heating system by defining a start and end date.

Press [MENU], '**P01**' will appear on the screen.

Press [+] until '**P02 HOL**' will appears on the screen.

Press [OK], '**HOLIDAY FROM**', the date and time will appear on the screen. The year will begin to flash.

Press [+] and [−] to adjust the year. Press [OK].

Press [+] and [−] to adjust the month. Press [OK].

Press [+] and [−] to adjust the day. Press [OK].

Press [+] and [−] to adjust the hour. Press [OK].

'**HOLIDAY TO**' and the date and time will appear on the screen. The year will begin to flash.

Press [+] and [−] to adjust the year. Press [OK].

Press [+] and [−] to adjust the month. Press [OK].

Press [+] and [−] to adjust the day. Press [OK].

Press [+] and [−] to adjust the hour. Press [OK].

The timeswitch will now be switched off during this selected period.

To cancel the HOLIDAY, press [OK].

The timeswitch will return to the normal operation when a holiday has finished or been cancelled.

P03 Frost Protection OFF

This menu allows the user to activate the frost protection between a range of 5°C and 20°C.

Frost protection is default set to OFF.

Press MENU, '**P01**' will appear on the screen.

Press + until '**P03 FrOST**' appears on the screen.

Press OK, '**OFF**' will appear on the screen.

Press + to select '**ON**'. Press OK.

'**5˚C**' will flash on the screen.

Press + and − to select your desired frost protection temperature. Press OK.

Press MENU and the timeswitch will return to normal operation.

The Frost symbol ❄ will display on the screen if the user activates it in the menu.

If the ambient room temperature drops below the desired frost protection temperature, the timeswitch will activate and the frost symbol will flash until the frost protection temperature has been achieved.

P04 Zone Title

This menu allows the user to select different titles for the timeswitch.
The options are:

DEFAULT OPTION	RENAME OPTION 1	RENAME OPTION 2
ZONE	HEATING	HOT WATER

Press MENU , '**P01**' will appear on the screen.

Press + until '**P04**' appears on the screen.

Press OK , '**ZONE**' will flash on the screen.

Press + to change from '**ZONE**' to '**HEATING**' or '**HOT WATER**'.

Press MENU and the timeswitch will return to normal operation.

P05 PIN

This menu allows the user to put a PIN lock on the timeswitch.

The PIN lock will reduce the functionality of the timeswitch.

Set up the PIN

Press [MENU], '**P01**' will appear on the screen.

Press [+] until '**P05 PIn**' appears on the screen.

Press [OK], '**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]. The PIN is now verified, 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 timeswitch is PIN locked, pressing the menu will take the user to the PIN unlock screen.

Note:

When the PIN lock is enabled, BOOST periods are reduced to 30 minute and 1 hour periods.

When the PIN lock is enabled, Mode Selections are reduced to Auto and OFF.

To Unlock the PIN

Press [MENU], '**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 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)

Press [MENU], '**P01**' will appear on the screen.

Press [+] until '**P05 PIn**' appears on the screen.

Press [OK], '**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.

Press [MENU] to return to normal operation or it will automatically exit after 20 seconds.

Copy Function

Copy function can only be used when the 7d mode is selected. (See page 16 to select 7d mode)

Press PROG to program the ON and OFF periods for the day for the week you want to copy.

Do not press OK on the P3 OFF time, leave this period flashing.

Press ADV , '**COPY**' will appear on the screen, with the next day of the week flashing.

To add the desired schedule to this day press + .

To skip this day press − .

Press OK when the schedule has been applied to the desired days.

Ensure the timeswitch is in the 'Auto' mode for this schedule to operate accordingly.

Backlight Mode Selection ON

There are 3 backlight settings available for selection:

AUTO Backlight stays on for 10 seconds when any button is pressed.

ON Backlight is permanently On.

OFF Backlight is permanently Off.

To adjust the backlight press and hold [OK] for 10 seconds.

'**Auto**' appears on the screen.

Press [+] or [−] to change the mode between Auto, On and Off.

Press [OK] to confirm selection and to return to normal operation.

Locking the Keypad

To lock the timeswitch, press and hold [+] and [−] together for 10 seconds.

🔒 will appear on the screen. The buttons are now disabled.

To unlock the timeswitch, press and hold [+] and [−] for 10 seconds.

🔒 will disappear from the screen. The buttons are now enabled.

Resetting the Timeswitch

To reset the timeswitch to factory settings:

Press [MENU].

'**P01**' will appear on the screen.

Press [+] until '**P06 rESEt**' appears on the screen.

Press [OK] to select.

'**nO**' will begin to flash.

Press [+], to change from '**nO**' to '**YES**'.

Press [OK] to confirm.

The timeswitch will restart and revert to its factory defined settings.
The time and date will not be reset.

Master Reset

To master reset the timeswitch to factory settings, locate the master reset button on the right-hand side underneath the timeswitch. *(see page 5)*

Press the Master Reset button and release it.

The screen will go blank and reboot.

The timeswitch will restart and revert to its factory defined settings.

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.

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