

# iQE

## CP318

### USER OPERATING INSTRUCTIONS



#### Combined Timeswitch and Room Thermostat

The CP318 combined wireless room stat and time control allows a combi boiler system to have a room thermostat added without the need for any additional wiring.

Replacing the existing time controller with the CP318 will allow the room thermostat to be connected wirelessly producing immediate energy savings in houses where no previous room thermostat has been fitted.

The device is intended to upgrade existing combi boiler systems that do not have an existing room thermostat. It is not intended for new installations where it will be necessary to install two heating zones in order to comply with current Building Regulations.

## **General system - explanation for householder**

The CP318 is a timeswitch which is connected to its own room thermostat - using the latest Z-wave wireless technology.

Where it has been used to replace your existing time control it is likely that there was no room thermostat fitted previously.

The addition of this room thermostat will make considerable energy savings which independent tests have shown could be as much as 10% off your energy bills.

The thermostat uses the latest micro-processor controlled energy saving software – known as TPI - which is a very accurate temperature control method compared to older style mechanical room thermostats. It runs on two AAA batteries which should last more than 2 years and a battery low indicator will appear in the display of the thermostat when they need changing.

The timeswitch is mains powered with a reserve battery to retain its memory during power cuts. It will allow up to 3 On/Off settings per day for each day of the week and has a 1 hour boost button and an On/Off advance button.

There is also a programme override allowing the permanent selection of OFF/ON/AUTO/ALLDAY.

The room thermostat will only operate during 'On' periods set by the time control which is always indicated by the red neon indicator light on the front. If there is no light then the heating is 'Off' and the room thermostat is inoperative.

When the timeswitch is 'On' (shown by the red indicator light) the thermostat will be operational and will provide very accurate control of the room temperature.

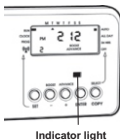
When the thermostat is 'calling' for heat the flame symbol will appear in the thermostat display and if the timeswitch is 'On' the heating will be operative and will run under the control of the timeswitch and the temperature set on the room thermostat.

The thermostat is silent in operation – it does not 'click' on and off like older style thermostats. The contacts on the timeswitch will do the actual switching rather than the thermostat which is linked to it by Z wave wireless signals.

The indicator against the radio mast symbol on the CP318 shows that the radio link is established.

A flashing indicator means that the wireless connection has been temporarily lost. This is usually restored by going to the thermostat and turning the dial up and down.

If no indicator is present next to the radio mast symbol then this would suggest that the timeswitch and the thermostat have not been paired correctly on installation. (See pairing instructions in the Installation Guide).



## What is a programmer?

... an explanation for householders.

Programmers allow you to set 'On' and 'Off' time periods. Some models switch the central heating and domestic hot water on and off at the same time; while others allow the domestic hot water and heating to come on and go off at different times. Set the 'On' and 'Off' time periods to suit your own lifestyle. On some programmers you must also set whether you want the heating and hot water to run continuously, run under the chosen 'On' and 'Off' heating periods, or be permanently off.

The time on the programmer must be correct. Some types have to be adjusted in Spring and Autumn at the changes between Greenwich Mean Time and British Summer Time. You may be able to temporarily adjust the heating programme, for example, 'Override', 'Advance' or 'Boost'. These are explained in the manufacturer's instructions.

The heating will not work if the room thermostat has switched the heating off. And, if you have a hot-water cylinder, the water heating will not work if the cylinder thermostat detects that the hot water has reached the correct temperature.

**The above explanation also applies to your timeswitch, which operates as a single circuit programmer.**

## **What is a room thermostat?**

### **...an explanation for householders**

A room thermostat simply switches the heating system on and off as necessary. It works by sensing the air temperature, switching on the heating when the air temperature falls below the thermostat setting and switching it off once this set temperature has been reached.

Turning a room thermostat to a higher setting will not make the room heat up any faster. How quickly the room heats up depends on the design of the heating system, for example, the size of boiler and radiators.

Neither does the setting affect how quickly the room cools down. Turning a room thermostat to a lower setting will result in the room being controlled at a lower temperature and saves energy.

The heating system will not work if a time switch or programmer has switched it off.

The way to set and use your room thermostat is to find the lowest temperature setting that you are comfortable with, and then leave it alone to do its job. The best way to do this is to set the room thermostat to a low temperature – say 18°C – and then turn it up by one degree each day until you are comfortable with the temperature. You won't have to adjust the thermostat further. Any adjustment above this setting will waste energy and cost you more money.

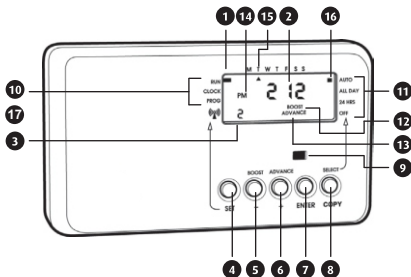
If your heating system is a boiler with radiators, there will usually be only one room thermostat to control the whole house. But you can have different temperatures in individual rooms by installing thermostatic radiator valves (TRVs) on individual radiators.

If you don't have TRVs, you should choose a temperature that is reasonable for the whole house. If you do have TRVs, you can choose a slightly higher setting to make sure that even the coldest room is comfortable, then prevent any overheating in other rooms by adjusting the TRVs.

Room thermostats need a free flow of air to sense the temperature, so they must not be covered by curtains or blocked by furniture. Nearby electric fires, televisions, wall or table lamps may prevent the thermostat from working properly.

## The CP318 timeswitch

The simple instructions contained in this user guide are designed to help with the programming and operation of the unit.

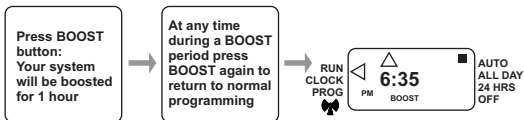


- 1 SET indicator - RUN is the normal position
- 2 Time of day
- 3 Switch period symbol
- 4 SET button
- 5 BOOST or adjust (-) button
- 6 ADVANCE or adjust (+) button
- 7 ENTER button
- 8 SELECT or COPY button
- 9 System ON indicator
- 10 SETTING positions
- 11 PROGRAMME settings
- 12 BOOST symbol
- 13 ADVANCE symbol
- 14 AM/PM symbol
- 15 Day of week indicator
- 16 PROGRAMME indicator
- 17 RF signal indicator

## Manual Overrides

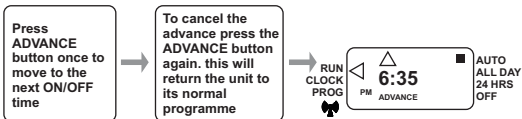
### Boost Function - 1 Hour Temporary Override

The boost facility will allow the user to boost the system which is currently 'OFF' for 1 hour. To indicate the boost being activated BOOST will be shown on the display for the duration of the boost period. The system ON indicator will also be illuminated.



### Advance Function – Brings forward the next on or off operation

The advance facility will allow the user to advance the system to 'ON' when currently 'OFF' or switch the system 'OFF' when currently 'ON'. To indicate the advance feature being activated ADVANCE will be shown on the display until the next programme switching time. The system ON indicator will also be illuminated.





## Programme Override Facilities

With the CP318 timeswitch operating in the normal running mode it is possible to alter the functionality of the programme by means of the SELECT button.

The options include;

**Auto** - Timeswitch follows all programmed 'ON' and 'OFF' times.

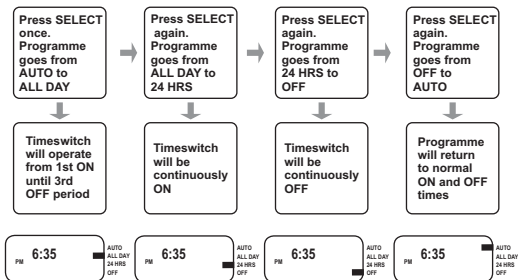
**All day** - Timeswitch operates from 1st 'ON' time until 3rd 'OFF', ignoring all switching times in between.

**24hrs** - Timeswitch will be constantly 'ON'.

**Off** - Timeswitch will be constantly 'OFF', there is the ability to turn off the heating during the summer without altering the programme times. Boost is still available.

All of the settings above will be permanent, i.e. unaffected by programme times, until alteration by the user.

The diagram below illustrates how to alter the setting, it assumes that the programme is in the AUTO mode to begin with.



## Resetting the timeswitch

Electronic equipment can in some circumstances be affected by electrical interference. If the programmer's display becomes frozen or scrambled; or if you wish to revert back to the default time settings please reset by pressing the SET and SELECT buttons together as shown below.

After initial installation it is advisable, before programming the CP318 for the first time, to reset the unit. Resetting can only be achieved with the power 'ON' by pressing the SET and SELECT buttons together. This will return the programmer to the factory set default times.

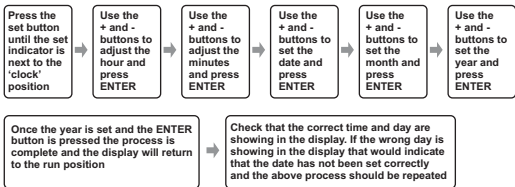
Press the SET and SELECT buttons together then release the buttons and the programmer will return to preset factory settings



# Setting Time of Day and Date

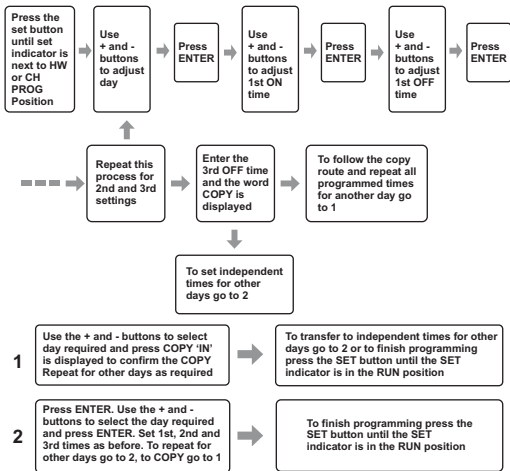
The CP318 timeswitch has a built in clock and calendar. This will mean that you will need to enter the date as well as the time on initial set up or if the factory re-set has been used.

Having done this, the clock will automatically adjust for BST/GMT time changes throughout the year.



# Setting the On and Off Times

To alter these settings please proceed as follows:-



## Default Time settings

1 <sup>st</sup> ON	1 <sup>st</sup> OFF	2 <sup>nd</sup> ON	2 <sup>nd</sup> OFF	3 <sup>rd</sup> ON	3 <sup>rd</sup> OFF
6.30AM	8.30AM	12.00PM	12.00PM	4.30PM	10.30PM

*The default time settings shown above are preset at the factory*

NB. The factory default settings for the 2nd ON/OFF times are both set at 12:00pm (midday) which cancels this 'ON' period giving 2 ON/OFF periods for the day. If a midday 'ON' period is required set the 2nd ON and OFF times accordingly. If not press ENTER twice.

# Room Thermostat User Instructions

The CP318 thermostat uses the latest control technology to provide extremely accurate temperature control which will help to keep your energy usage as low as possible without affecting your comfort levels. In fact comfort levels may well be improved as the control accuracy should ensure that the room does not 'overheat' before switching off.



The display will show the required temperature setting and can be adjusted in increments of 1°C. To adjust the required temperature setting turn the dial anti clockwise to decrease it and clockwise to increase it.



When the thermostat is in the 'call for heat' condition a flame symbol will appear in the display.



Pressing the temperature setting dial will allow the user to check the current actual measured room temperature which will be displayed for approx 7 seconds before returning to the set temperature.



The aerial symbol complete with radio wave symbols in the display of the thermostat indicates that it is communicating satisfactorily with the timeswitch.

A flashing radio wave indicates a loss of communication. This may be temporary and can often be restored by turning the thermostat dial and increasing or decreasing the temperature to make the thermostat switch. If this has no effect please see Z-Wave pairing instructions.



A radio mast symbol with no radio waves indicates that the thermostat has not been signed on to enable it to communicate with the timeswitch. In this case you may wish to contact the Installer as the indication is that the product has not been commissioned when the installation took place.

Alternatively see the Z-Wave pairing details contained in the Installation Instructions. Further information on how the thermostat operates is contained in the 'Explanation for householders' that precedes this section.

## Battery Replacement

The thermostat runs on 2 x type AAA (Alkaline) non rechargeable batteries and is designed to give a battery life of approximately two years.



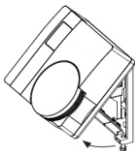
Battery should be changed immediately

Low battery symbol appears first when the batteries are nearing the end of their life.

When the batteries are nearing the end of their life a low battery symbol will appear in the display and the batteries should be changed within a few days. If the batteries are not changed at this point eventually a 'LO' battery message flashes intermittently in the display and if this happens the batteries should be changed immediately.

To change the batteries it is necessary to remove the thermostat from the wall. To do this first undo the two captive screws at the base of the thermostat and swing the thermostat up and away from the wall plate.

Remove the old batteries and replace them with two new AAA size alkaline batteries ensuring that they are fitted correctly as indicated by the terminal markings in the battery compartments.



Once the batteries are fitted, re-fit the thermostat to the wall plate by engaging with the lugs at the top of the wall plate and push the thermostat into position. Locate it over the captive screws at the base of the wall plate and tighten so that the thermostat is locked into position.

Check the temperature setting is correct and adjust if necessary.

**Please dispose of old batteries responsibly**



**iQE**

[www.iQE.co.uk](http://www.iQE.co.uk)

Trade House BA22 8RT



Leaflet number P85486 Issue 1