

Drayton

Digistat⁺ 2

**Programmable Room
Thermostat**

24 Hour

Models:

22084 / 22088

Power Supply:
Battery / Mains



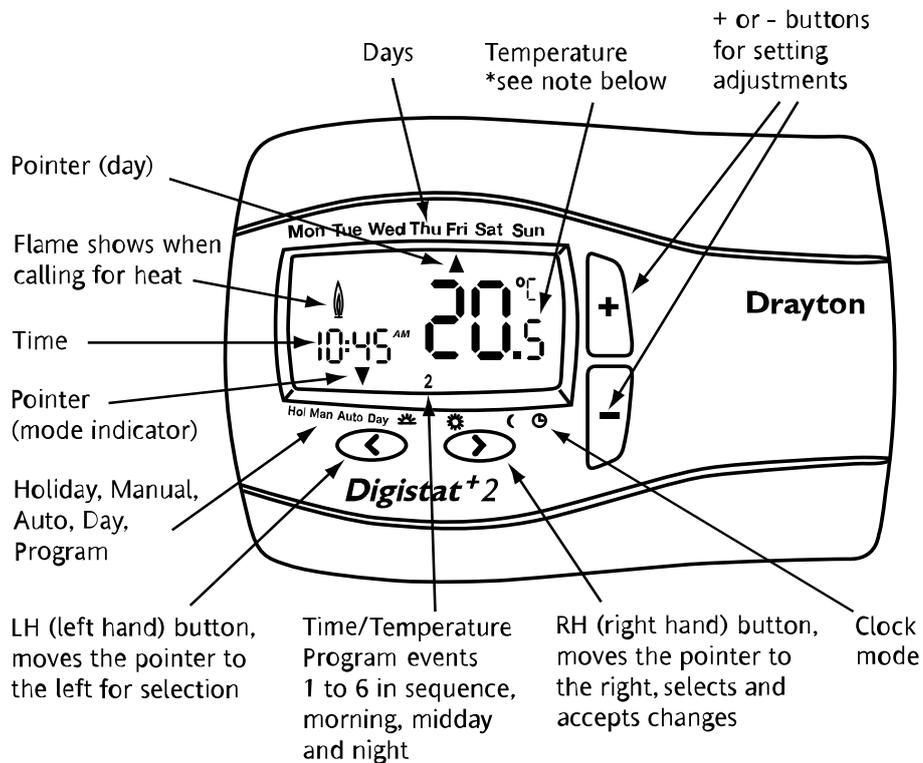
Invensys Controls Europe

Technical Helpline: +44 (0) 845 130 7722

www.draytoncontrols.co.uk

Installation / User Guide 06490045001 (0406)

User Guide



* Temperature displayed is actual room temperature unless adjusting the + or - button when it displays the set temperature. Once adjustment is complete and after 5 seconds this will return to actual room temperature.

Your *Digistat+2* programmable room thermostat. 24 Hour

Digistat+2 programmable room thermostat allows you to set time and temperature periods (up to 6 per day) to suit your own lifestyle. Once fully installed and powered the *Digistat+2* will automatically set the correct time and in auto mode will control your heating system according to pre-set program 1 (9 till 5). The temperature is controlled by sensing 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.

How to change the temperature for a short time (Override).

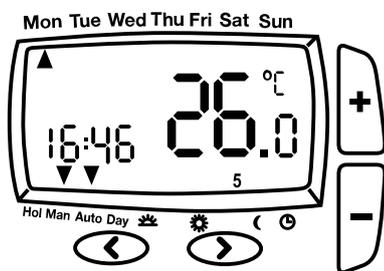
When in Auto mode you can override the existing temperature setting by pressing + or -. During adjustment the temperature will flash then stop. The *Digistat+2* will now control at this temperature until the next programmed time/temperature event is reached, when the *Digistat+2* will revert back to Auto mode. Whilst in temperature override the pointer indicates both Man and Auto. To exit override press > to return to Auto. (Fig 1) shows *Digistat+2* in override.

How to set a constant room temperature (Manual mode).

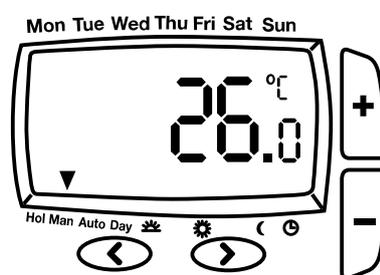
Manual mode will allow you to set a temperature, over-riding all programs, until you exit manual mode. In this mode all pre-set time temperature events will be disabled.

To enter manual mode press < until the pointer indicates MAN (Fig 2). The screen will only show the temperature, which can be adjusted by pressing + or -.

Once you have set the temperature it will flash for 5 seconds and then stop. The *Digistat+2* will now control at this temperature until you adjust using + or - or exit by pressing > to enter Auto mode.



(Fig 1)



(Fig 2)

How to set my room temperature for my holiday period. (Holiday Mode)

When going on holiday you can lower the temperature of your home for the duration of your holiday, but set *Digistat+2* to return to your normal programming ready for your return. Holiday mode works by counting down the days or hour until your return.

Time periods of between 1 to 24hr then 1 day to 199 days can be set.

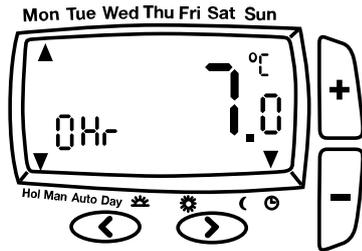
Example

I am ready to leave for my 2 week (14 day) holiday and would like the house temperature held at a constant 10.0 °C during this time and on my return the house temperature will be already running at my normal pre-set temperature.

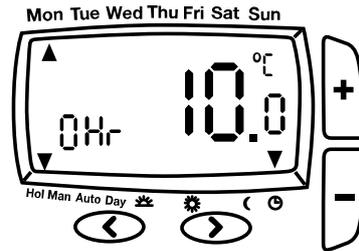
To enter Holiday mode press the < button until the pointer is indicating HOL (fig 3). The temperature will flash and by pressing the + or - buttons you can change to the temperature required (in this example to 10.0 °C) (Fig 3a).

Then press < again to set the time period.(in this example 14 days) using the + or - buttons. (it would be advisable in this example to set the time period 1 day less (13 days) to ensure the house temperature is back to normal on your return). (Fig 3b) Once you have set your time period the time will flash for 10 seconds and then start the holiday period. To exit the Holiday mode press either < or > to return to auto mode.

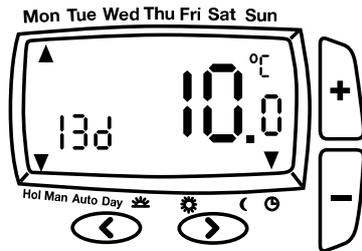
When changing time the display will scroll through Hr (Hours) 1-24 then d (Days) 1-99.
 The display will show holiday time period and set temperature.



(Fig 3)



(Fig 3a)

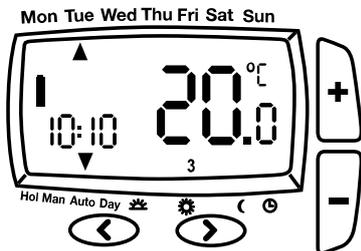


(Fig 3b)

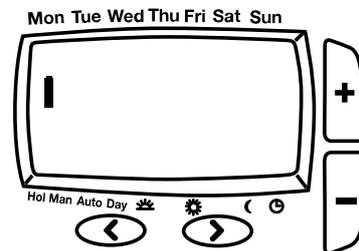
Battery Model only.

How do I know when to change the batteries.

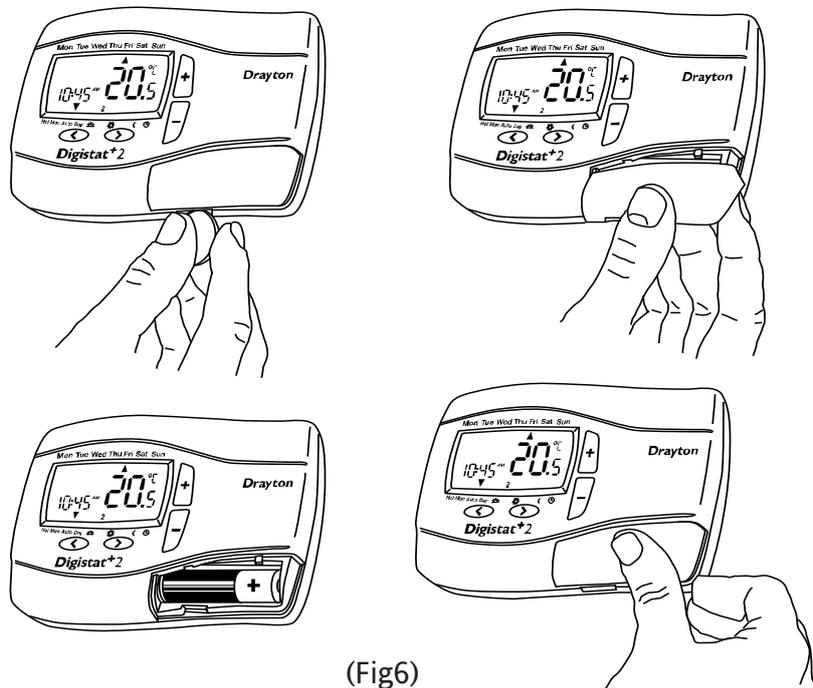
When the batteries start to run low a battery icon will blink for 15 seconds every 15 seconds to indicate “low battery” during this time the *Digistat+2* will function normally (see fig 4). Please replace batteries with (2 x AA 1.5V Alkaline batteries). After 6 months the *Digistat+2* will cease to function and will permanently display the battery icon and nothing else, shown in (fig 5).



(Fig 4)



(Fig 5)



(Fig6)

How to change the time, day, month & year.

Digistat+2 comes with a pre-set clock, which also automatically adjusts for summer/winter time changes. It is activated automatically on 1st installation. There should be no need to change these settings, however, should you wish to, it can be done in clock mode.

To enter the clock mode press > to move through Day and all 6 time/temperature events until the arrow points to the clock symbol. The time will now flash and can be adjusted (Fig 7) by pressing + or - then press > to accept and move to Day.

Change day. (Fig 8).

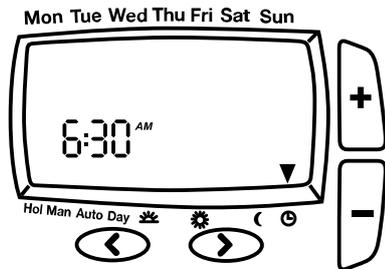
If you wish to change the day press + or - then press > to accept. *Digistat+2* will move to the next field - month.

Change month. (Fig 9).

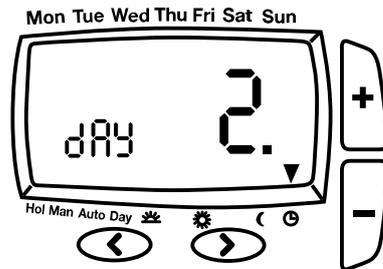
If you wish to change the month press + or - then press > to accept. *Digistat+2* will move to the next field - Year.

Change year. (Fig 10).

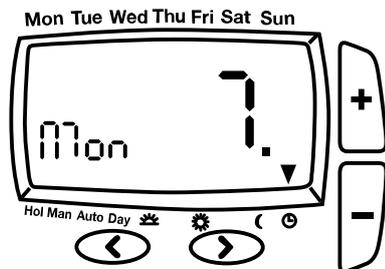
If you wish to change the year press + or -, then press > to accept. *Digistat+2* will now return to Auto mode.



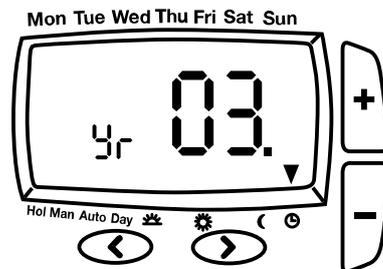
(Fig 7)



(Fig 8)



(Fig 9)



(Fig 10)

Display Error code E1 or E2.

When the display shows E1 or E2 this indicates a sensor fault and your heating system will remain Off. Please contact your installer.

How to select another pre-set time/temperature program.

There are 3 pre-set time/temperature programs already held in memory as shown, if pre-set program 1 is the best program to suit your lifestyle do nothing and the *Digistat+2* will control to program 1.

If you would like to select one of the other pre-set programs, refer to 'How to change User Options', Option 3 and select your preferred program.

Pre-set programs for *Digistat+2* 24 Hour.

Program 1 (9 till 5) as shown below

	Monday to Sunday					
Events	1	2	3	4	5	6
Time	6:30	8:30	12:00	14:00	16:30	22:30
Temperature C	20.0	16.0	16.0	16.0	21.0	7.0

Program 2 (Home for lunch)

	Monday to Sunday					
Events	1	2	3	4	5	6
Time	6:30	8:30	12:00	14:00	16:30	22:30
Temperature C	21.0	16.0	21.0	16.0	21.0	10.0

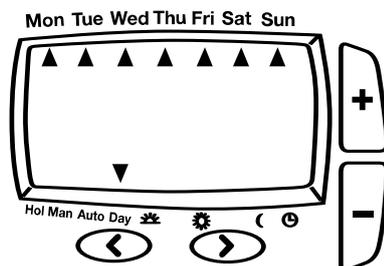
Program 3 (Home worker)

	Monday to Sunday					
Events	1	2	3	4	5	6
Time	6:00	8:30	12:00	14:00	17:30	22:30
Temperature C	21.0	19.0	21.0	19.0	21.0	16.0

How to change the pre-set time/temperature program to my own selection.

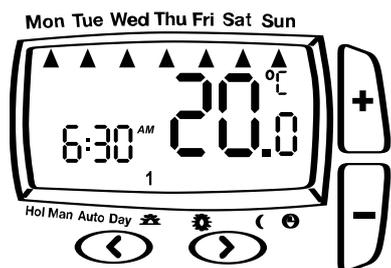
Press > to select the day function. (refer to fig 11).

This indicates that any changes made are valid for all days of the week.

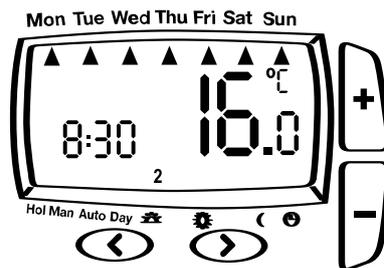


(Fig 11)

Press > to view the existing time/temperature event (1). (Fig 12) time will flash. Press > again to view the temperature setting, temperature will flash. Press > again to view the 2nd time/temperature event (Fig 12a).



(Fig 12)



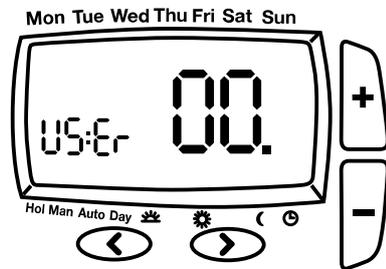
(Fig 12a)

When you get to the event you wish to change press + or - to change the required time, then Press > to accept. Use + or - to select the required temperature, then > to accept. *Digistat+2* will now show the next time/temperature event. To exit press < until you return to Auto mode.

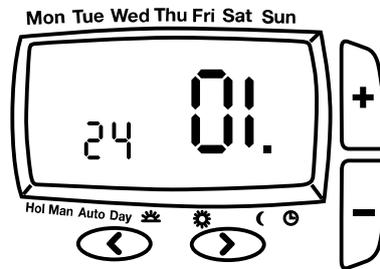
How to change User Options.

If you wish to change any user options 1 to 8 shown in table 1 they can be accessed from Auto or Man by pressing < and > simultaneously for 3 seconds. Once you have accessed the user setting Menu (Fig 13) press > to scroll through selectable options 1 to 8. The settings for each option can be changed by pressing + or - as required. Press > to accept the change and move to the next option. To exit press < and > simultaneously for 3 seconds. Alternatively, not pressing any buttons for 2 mins will cause the *Digistat+2* to return to Auto. (Fig 13a) shows option 1 24 (24 hour clock).

Only selected options which have been accepted by pressing > will be changed.



(Fig 13)



(Fig 13a)

User options	What is it	Min	Max	Default
1	Change 12h or 24h clock	12	24	24
2	Change the manual set point temperature °C	7 °C	32 °C	20 °C
3	Change to another pre-set programme	1	3	1
4	Change the number of programme events per day	2, 4 or 6		6
5	Switch on/off automatic summer/winter time change	On	Off	On
6	Change temperature offset °C	-5	5	0
7	Restore pre-set programme	On	Off	Off
8	To enable Off function	On	Off	Off

(Table 1)

How to change from 24hr to 12hr clock (Option 1).

Enter user options, select option 1 and use + and – keys to select desired option, 12 = 12hr and 24 = 24hr. Press > to accept change.

How to change the default manual set-point temperature (Option 2).

Enter user options, select option 2 and use + and – keys to set desired temperature. Press > to accept desired change.

How to change to another predefined program 1, 2 or 3 (Option 3).

Enter user options, select option 3 and use + and – keys to select desired program 1, 2 or 3. 1 = program 1, 2 = program 2 and 3 = program 3. Press > to accept desired change.

How to change the number of program events per day (Option 4).

Enter user options, select option 4 and use + and – keys to select desired option. 2 = 2 time / temp events per day, 4 = 4 time / temp events per day and 6 = 6 time / temp events per day. Press > to accept desired change.

How to switch on/off the automatic summer / winter time change (Option 5).

Twice a year the actual time is automatically changed to keep it in line with the summer / winter time change. Default setting is On. If you wish to disable / enable this feature enter user options, select option 5 and press – or + key to display Off or On as desired. Press > to accept desired change.

How to change temperature offset (Option 6).

The temperature displayed on the thermostat may not match that of other temperature measuring devices in the controlled space, because of its location. The displayed and set temperature may be offset to bring it in line with other devices. To adjust the temperature, enter the user options, select option 6. The temperature may be offset by +/- 5 degrees by pressing the + and – keys. Press > to accept the desired change.

How to restore the built in time temperature programs (Option 7).

Enter user options, select option 7 and use + and – keys to select desired option. Off = current programs retained. On = restore factory program settings. Press > to select the desired change.

Please note enabling this function will lose any user changes to the preset programs.

How to switch the *Digistat+2* and heating system off (Option 8).

To switch the *Digistat+2* and the heating system off you need to enable the Off function. Enter user options, select option 8 and use + or – keys to select On to enable the Off function. The thermostat and heating system will now be Off unless the temperature in the controlled space falls below 7°C the frost protection set-point. The LCD will display Off and room temperature only and the keys will not function. To switch On the *Digistat+2* enter user options select option 8 and use + or – keys to select Off to disable the Off function. The thermostat will now regulate the heating system in line with the currently selected program. Please note this does not effect the operation of domestic hot water where provided.

What is a programmable room thermostat?

...an explanation for householders

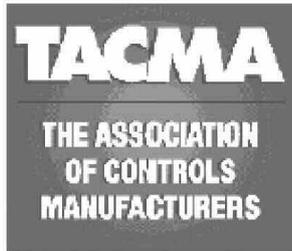
A programmable room thermostat is both a programmer and a room thermostat. A programmer allows you to set 'On' and 'Off' time periods to suit your own lifestyle. A room thermostat works by sensing the air temperature, switching on the heating when the air temperature falls below the thermostat setting, and switching it off once this set temperature has been reached.

So, a programmable room thermostat lets you choose what times you want the heating to be on, and what temperature it should reach while it is on. It will allow you to select different temperatures in your home at different times of the day (and days of the week) to meet your particular needs.

Turning a programmable 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 programmable room thermostat to a lower setting will result in the room being controlled at a lower temperature, and saves energy.

The way to set and use your programmable room thermostat is to find the lowest temperature settings that you are comfortable with at the different times you have chosen, and then leave it alone to do its job. The best way to do this is to set low temperatures first, say 18C, and then



turn them up by one degree each day until you are comfortable with the temperatures. You won't have to adjust the thermostat further. Any adjustments above these settings will waste energy and cost you more money.

If your heating system is a boiler with radiators, there will usually be only one programmable 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.

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.

Programmable 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.