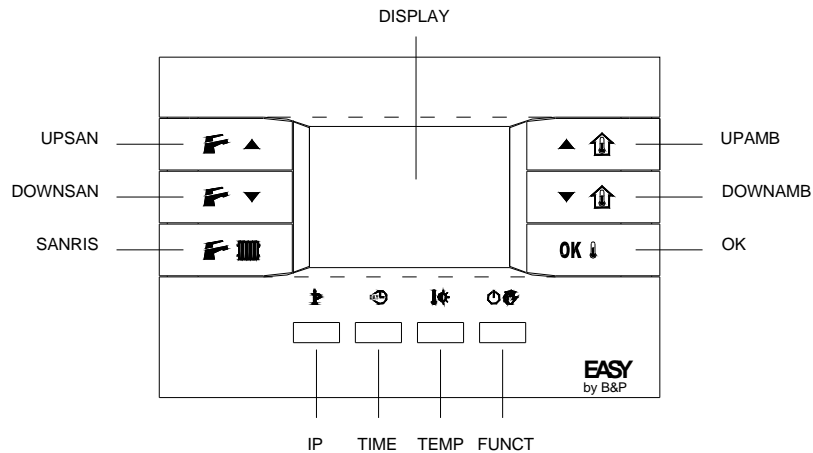
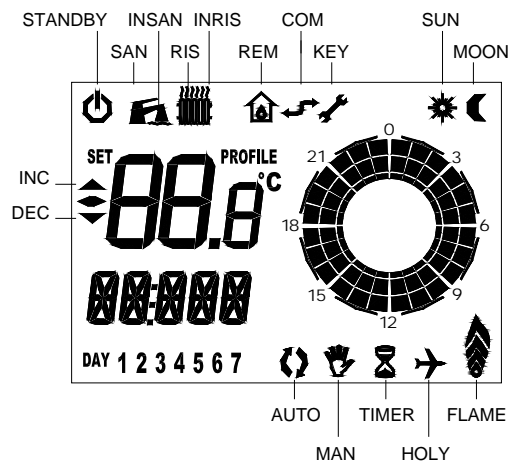


# 1. MAIN SPECIFICATIONS

## USER INTERFACE



## DISPLAY INFORMATION



<b>SAN</b>	DOMESTIC HOT WATER FUNCTION ENABLED (SHOWER MODE IN PROGRESS IF FLASHING)
<b>INSAN</b>	WATER SANITARY IN PROGRESS (DOMESTIC HOT WATER MODE REQUEST)
<b>RIS</b>	CENTRAL HEATING FUNCTION ENABLED (ANTI-FROST MODE ACTIVE IF FLASHING)
<b>INRIS</b>	CENTRAL HEATING ENABLED, TEMPERATURE IN RISING (HEATING MODE REQUEST)
<b>REM</b>	CENTRAL HEATING REMOTE PARAMETER / SWITCHING ON REQUEST BY REMOTE ZONE
<b>COM</b>	COMMUNICATION ACTIVE CENTRAL HEATING
<b>KEY</b>	ERROR OR SERVICE REQUEST
<b>SUN</b>	COMFORT TEMPERATURE REQUEST
<b>MOON</b>	ECONOMY TEMPERATURE REQUEST
<b>FLAME</b>	FLAME STATUS / MODULATION POWER
<b>HOLY</b>	HOLIDAY MODE ACTIVE OR TIMED OFF FUNCTION
<b>TIMER</b>	MANUAL TIMED MODE ACTIVE
<b>MAN</b>	MANUAL MODE ACTIVE / FORCED MODE
<b>AUTO</b>	AUTOMATIC MODE ACTIVE / FORCED MODE
<b>INC</b>	ROOM TEMPERATURE INCREASING
<b>DEC</b>	ROOM TEMPERATURE DECREASING
<b>STANDBY</b>	STAND-BY MODE

## OPERATION MODE

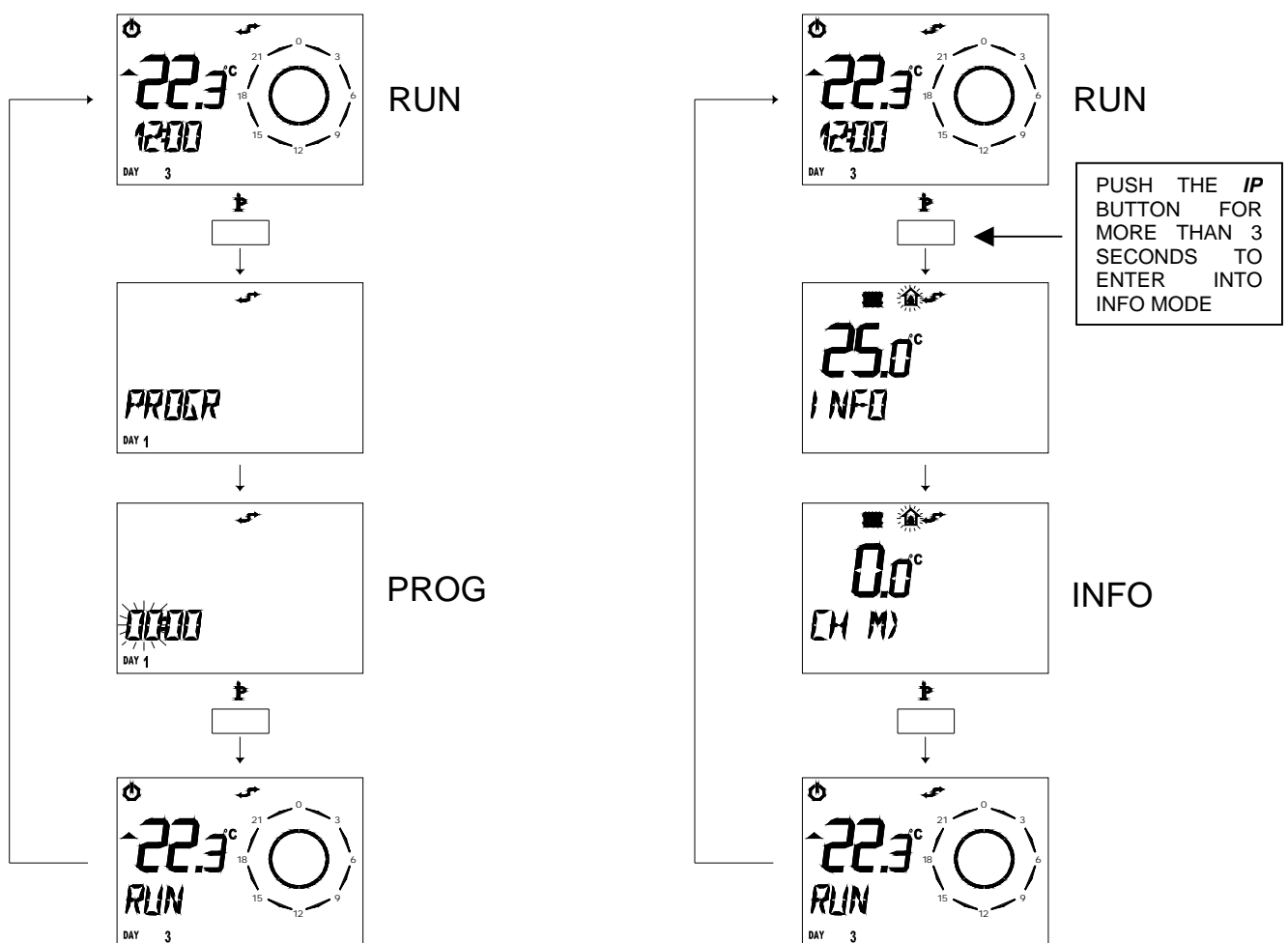
Easy by B&P has three main Operation Modes:

- Normal Operation (**RUN**)
- User Programming Mode (**PROGR**)
- Advanced Information Mode (**INFO**)

The first mode serves an ordinary use. When Easy by B&P is working, it executes pre-set functions and user requests. By using the second mode, you can set time and day of the week, then temperature settings and time programs. The third mode is useful for monitoring parameters controlled by the communication protocol and obtaining advanced information about the heating system operation.

The transition between Operating Modes is performed as follows:

- To shift from RUN to PROG, briefly push IP button (<PROGR> text will scroll for few seconds)
- To shift from RUN to INFO, briefly push IP button for at least 3 seconds (<INFO> text will scroll for few seconds)
- To return from PROG or INFO to RUN, briefly push IP button again (<RUN> text will scroll for few seconds)



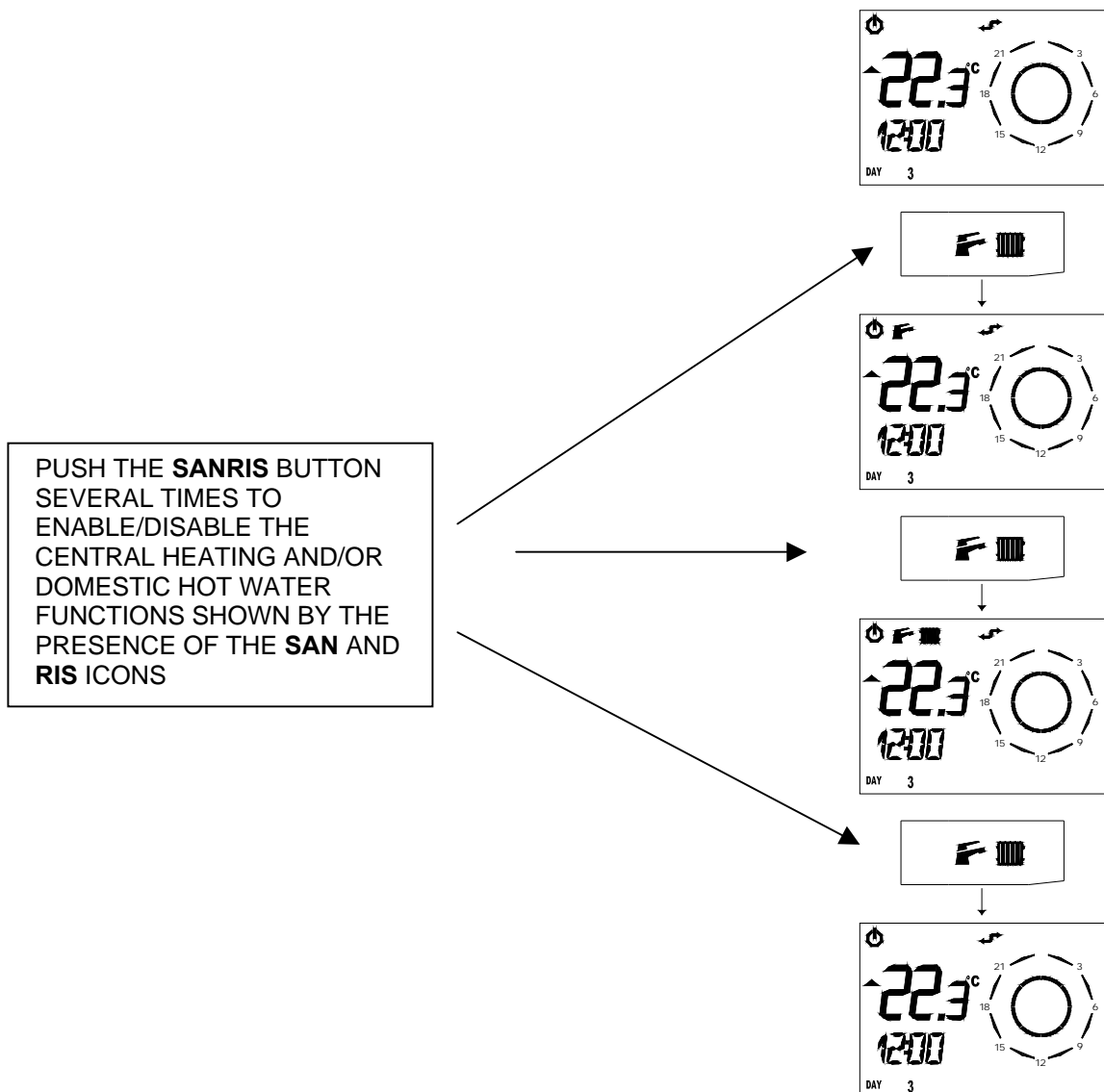
## NORMAL OPERATION (RUN)

### CENTRAL HEATING AND/OR DOMESTIC HOT WATER ENABLE

By pushing the **SANRIS** button several times, it is possible to enable/disable central heating and/or domestic hot water functions. If enabled functions are indicated by the presence of relating icons **SAN** and/or **RIS**. The Enable takes priority over all the other relating functions, so as it is not current, central heating functioning within domestic hot water is not allowed, even though other enabled functions would require that. Only the anti-frost mode allows activating central heating, even though other heating functions are disabled. When central heating does not accept any process of domestic hot water function, Easy by B&P can show the **SAN** icon while asking for a domestic hot water function. At the end of request, the icon will switch off. At the same time while the anti-frost mode is working, the **RIS** icon will be switched on and flashing.

Special programs or enabled functions are indicated by the presence of the following icons:

- **RIS+SAN off:** No active function (only Anti-Frost if enabled), corresponding to OFF or STAND BY mode.
- **SAN on:** Only Domestic Hot Water enabled, corresponding to SUMMER mode.
- **RIS+SAN on:** Domestic Hot Water and Central Heating enabled, corresponding to WINTER mode.
- **SAN flashing:** Shower Mode active
- **RIS flashing:** Anti-frost Mode active



## AUTOMATIC, MANUAL, OFF FUNCTIONS

There are three main functions with relating timed sub-functions: *Automatic*, *Manual*, *Off*:

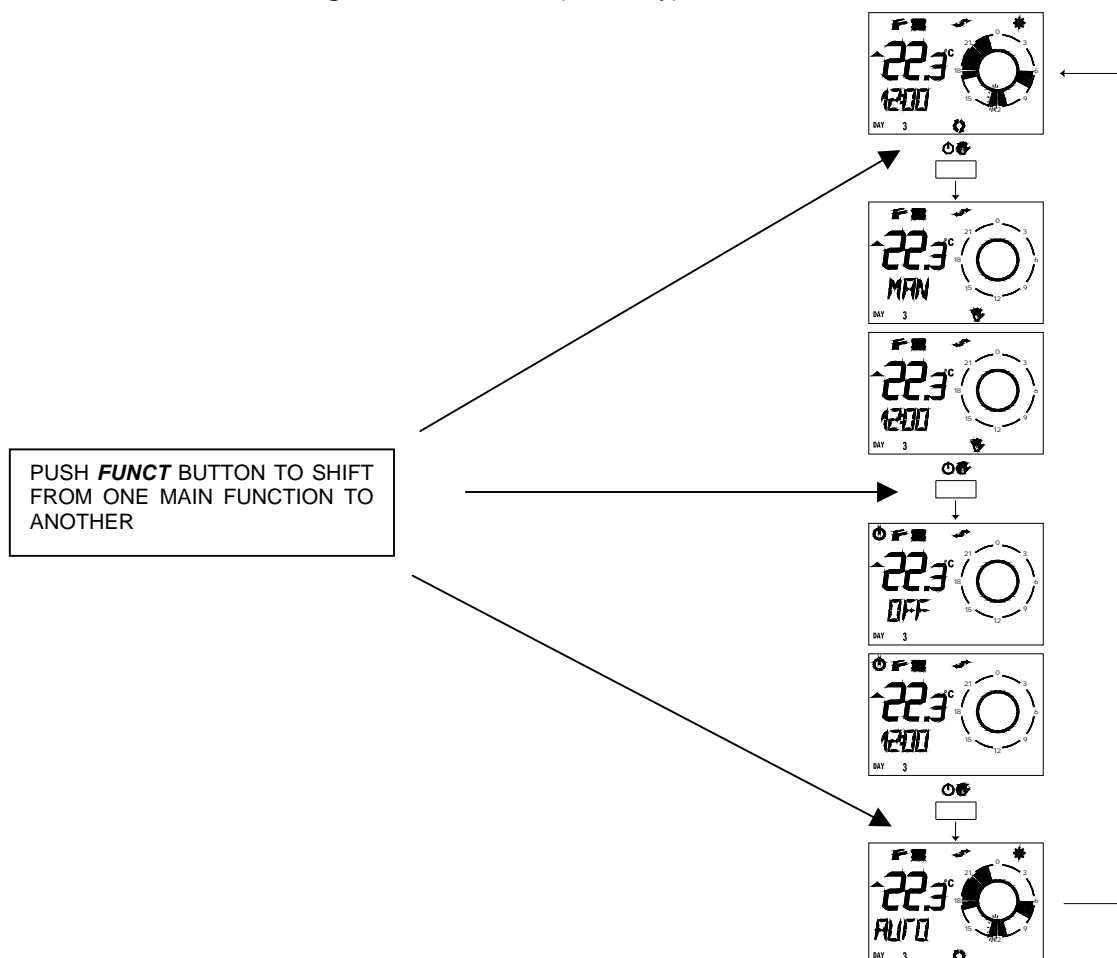
- *Automatic*, room temperature follows user programmed timer progress (regulation thermal profile).
- *Manual*, room temperature is regulated at a fixed user programmed set-point.
- *Off*, the system is in stand-by mode (in case it is active, if the temperature goes below the OFF setting within the heating mode or the Anti-Frost Mode and if enabled).

The timed sub-functions (Timed Functions) are the following:

- *Automatic Forced*, a timed temperature is fixed until the next set point and it is separate from the regulation profile in use.
- *Timed Manual*, the system proceeds in manual function mode (user-programmed set-point) for a certain period of time and then Easy by B&P proceeds to Automatic Function mode.
- *Timed Off or Holiday Mode*, the system proceeds in Stand-by Function mode for a user-programmed time then proceeds to Automatic Function mode.

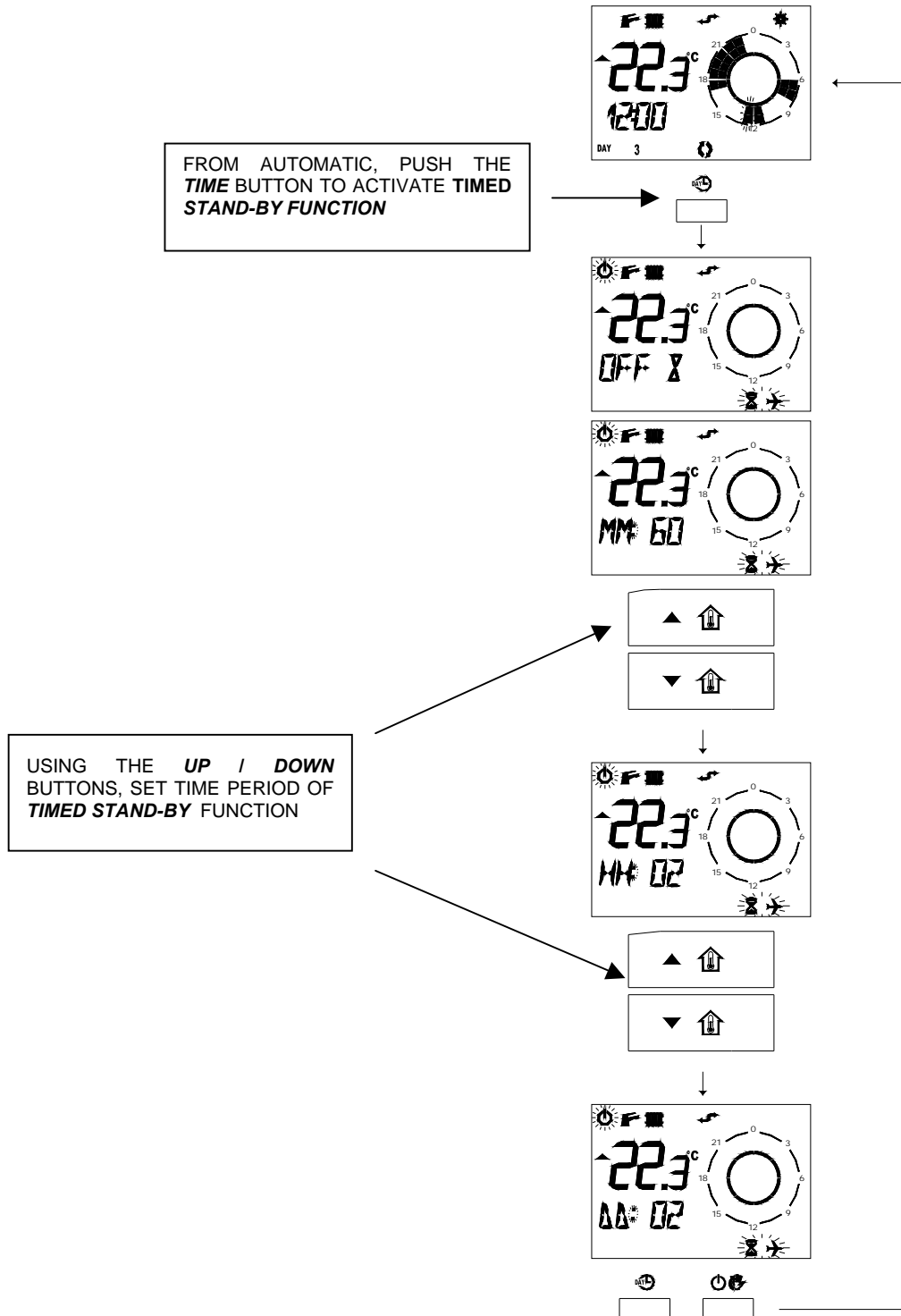
To shift from one function to another, push the **FUNCT** button several times if necessary. If enabled, functions are indicated by the presence of relating icons as follows and when activated a text scrolls on display.

- |                                      |                      |
|--------------------------------------|----------------------|
| • <b>AUTO</b>                        | Automatic            |
| • <b>AUTO + MAN flashing</b>         | Automatic Forced     |
| • <b>MAN</b>                         | Manual               |
| • <b>MAN + TIMER flashing</b>        | Timed Manual         |
| • <b>OFF</b>                         | Off                  |
| • <b>OFF + TIMER + HOLY flashing</b> | Timed Off (Stand-by) |



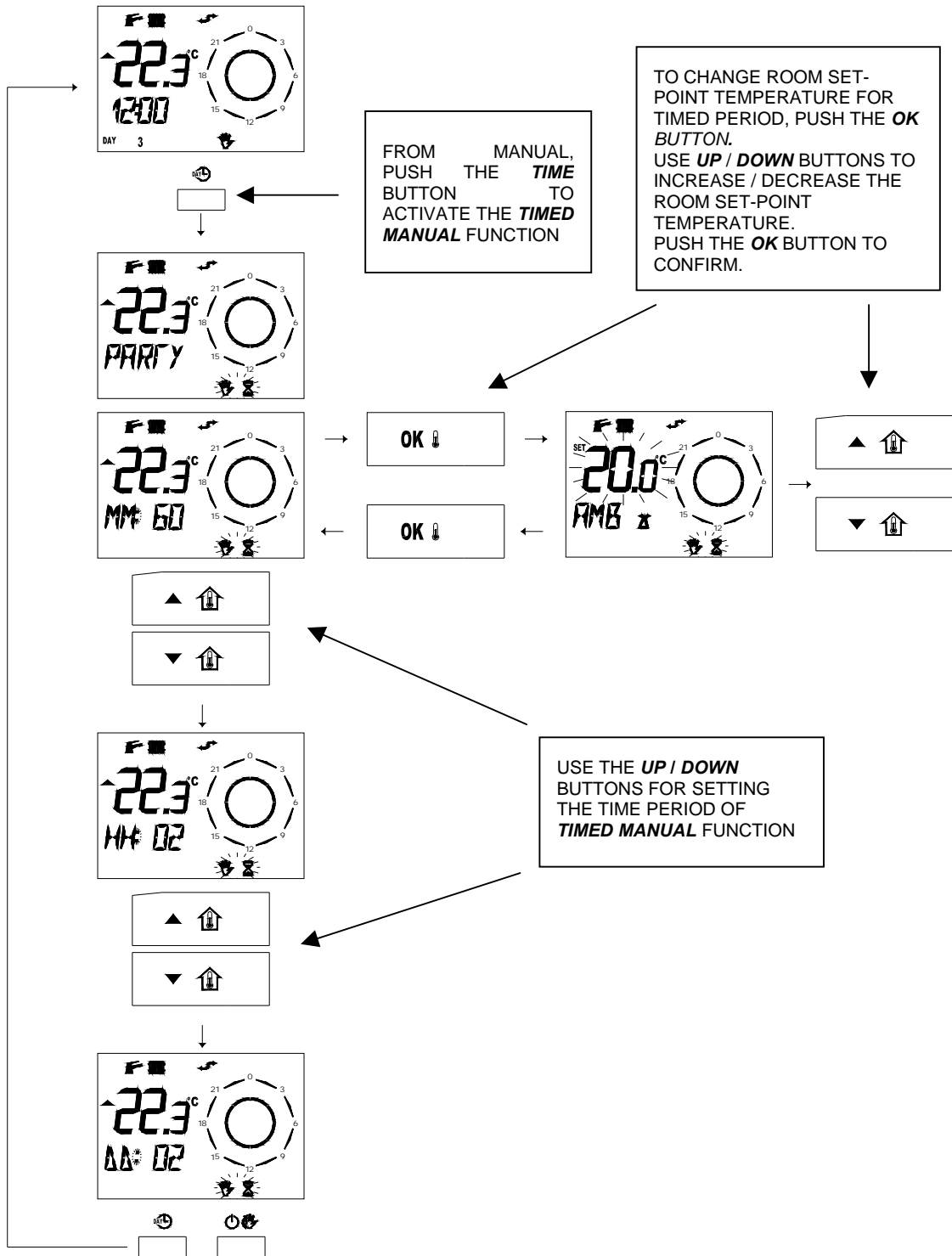
## TIMED FUNCTIONS: FROM AUTOMATIC TO TIMED STAND-BY

By pushing the **TIME** button it is possible to activate *Timed Stand-by* or *Holiday Program* from the *Automatic* function. In this case, the starting of that function will be shown below through the scrolling line "**OFF** ⌚" and time in minutes for the function Off will appear down below, which can be pre-set through the UP and DOWN buttons. After this sequence EASY by B&P will proceed to activate the Automatic program. During the whole process, the remaining time will be shown on the LCD as the timed function ends. This period can vary between 10 – 90 minutes (**MM: nn**), it can be increased or decreased in 10 minute increments, in hours from 2 to 47 (**HH: nn**), in 1 hour increments or in days from 2 to 45 (**GG: nn**) in one day increments. Actually this last one is the Holiday Program.



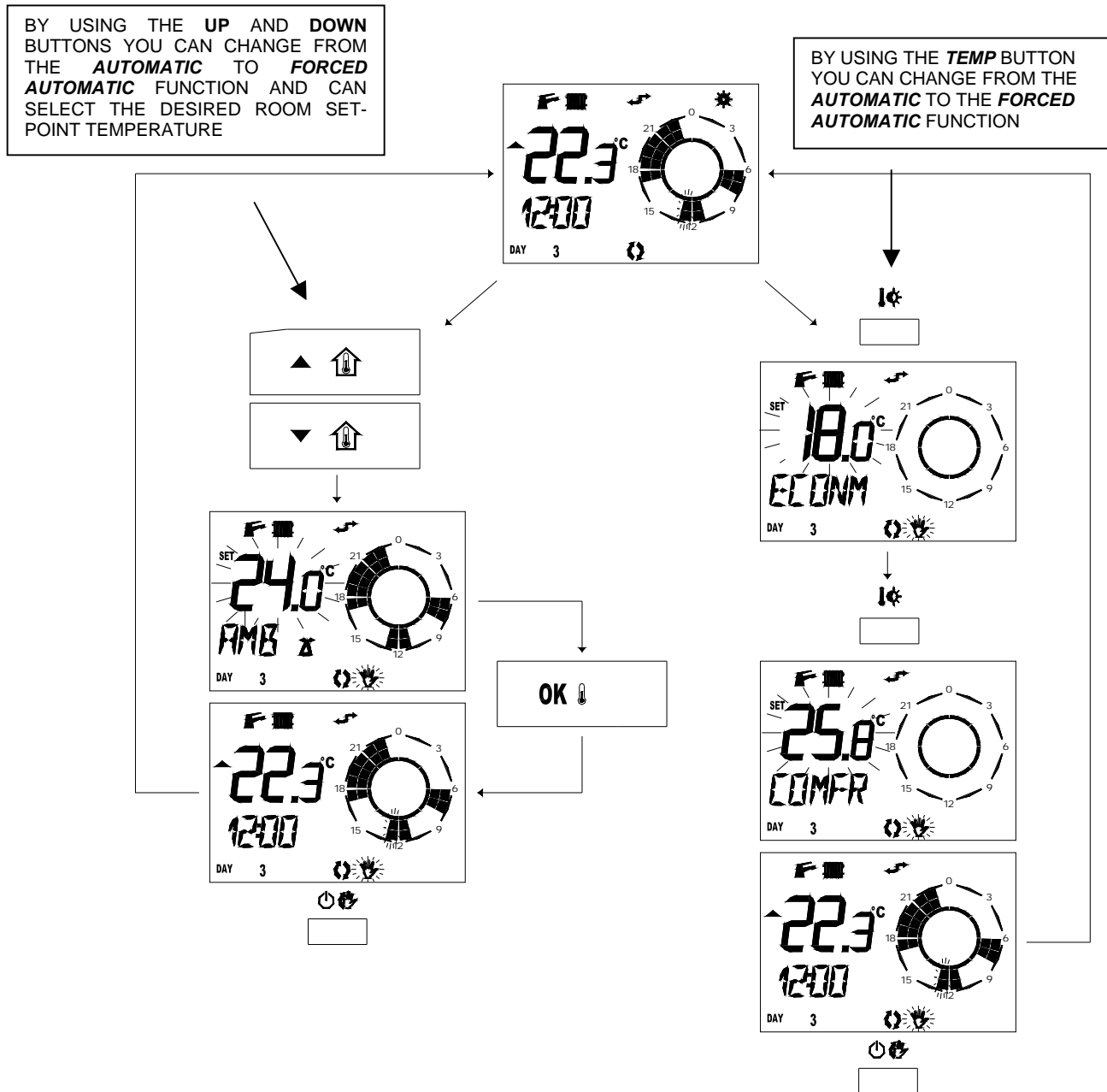
## TIMED FUNCTIONS: FROM MANUAL TO TIMED MANUAL

From the *Manual* function you can access the *Timed Manual* function by pushing the **TIME** button. It is also possible to stop the timed functions linked to the setting of the room temperature by selecting the **FUNCT** button to choose the desired function. During timed functions it is possible to change the temporary setting through the **UP**, **DOWN** and **TEMP** buttons.



## TIMED FUNCTIONS: FROM AUTOMATIC TO FORCED AUTOMATIC

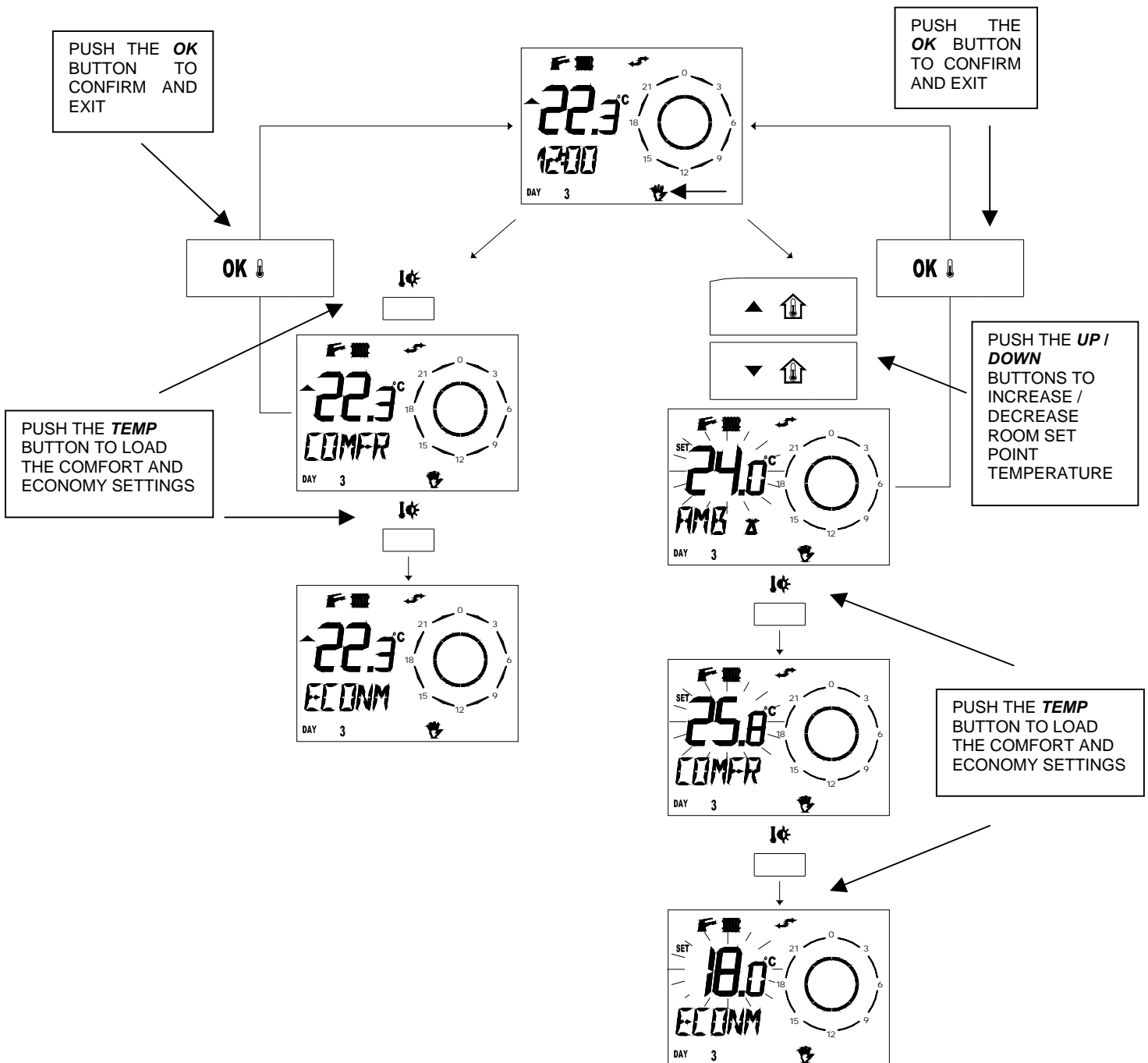
From the *Automatic* function you can access the *Forced Automatic* function by pushing the **TEMP** button to set the COMFORT and ECONOMY temperature or by pushing the **UP** and **DOWN** buttons. In each instance it is possible to stop the timed functions linked to the setting of the room set-point temperature by selecting the **FUNCT** button to choose the desired function. These functions and settings are set until the next programmed set-point in the *Automatic* function. When it reaches that set-point, the function will turn to *Automatic* with the temperature setting as programmed.





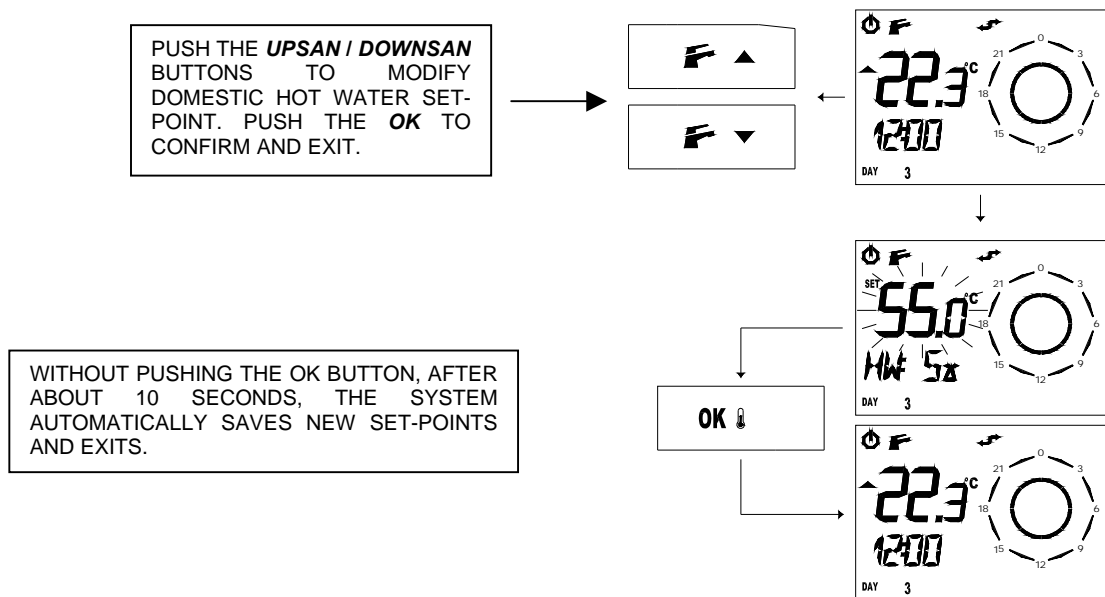
## ROOM SET-POINT TEMPERATURE

From the manual mode it is possible to change the room setting in each instance, simply by selecting the **UP** and **DOWN** buttons. The increase or the decrease will be 1/10 degree and it will be displayed for few seconds by flashing text below "**AMB** Δ". By keeping one of the two buttons pushed, a faster variation can be obtained in continuous acceleration. By pushing the **TEMP** button it is possible to load either COMFORT or ECONOMY as a setting, by pushing on the same button several times you can switch between one or the other. By pushing those buttons from the *Automatic* function you can access the *Forced Automatic* function (see the corresponding section).



## DOMESTIC HOT WATER SET-POINT

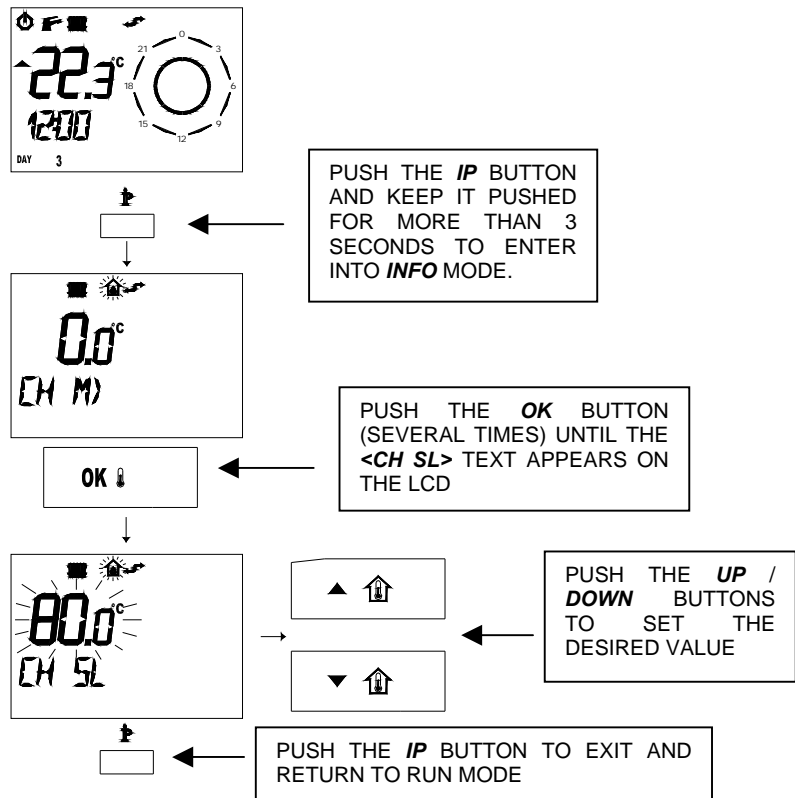
The domestic hot water setting can be modified in each instance (if you enable the domestic hot water function, the icon **SAN** is showing), by pushing the **UPSAN** and **DOWNSAN** buttons, in that case the “**HW SΔ**” (Hot Water Set) message will flash for a few seconds on the LCD. The value of the setting can be adjusted within a preset range depending on the higher and lower limits allowed by the central heating system.



## HEATING SYSTEM SET LIMIT

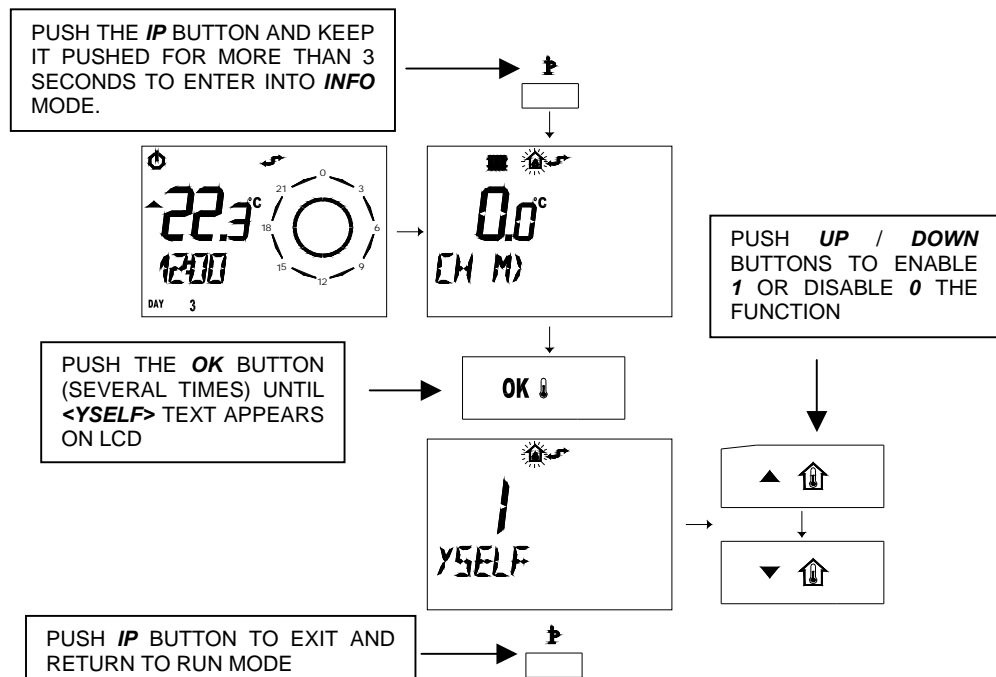
**(Max. Set-Point, if function is allowed within the central heating system)**

It is possible to modify the maximum set point limit of the heating circuit by entering into **INFO** mode (by keeping the IP button pressed for at least 3 seconds) and by accessing the **<CH SL>** menu (by pushing the **OK** button in quick succession). Once the flashing value of this limit appears on the LCD, it is possible to modify it between the limits allowed by the system by using the **UP** and **DOWN** buttons.



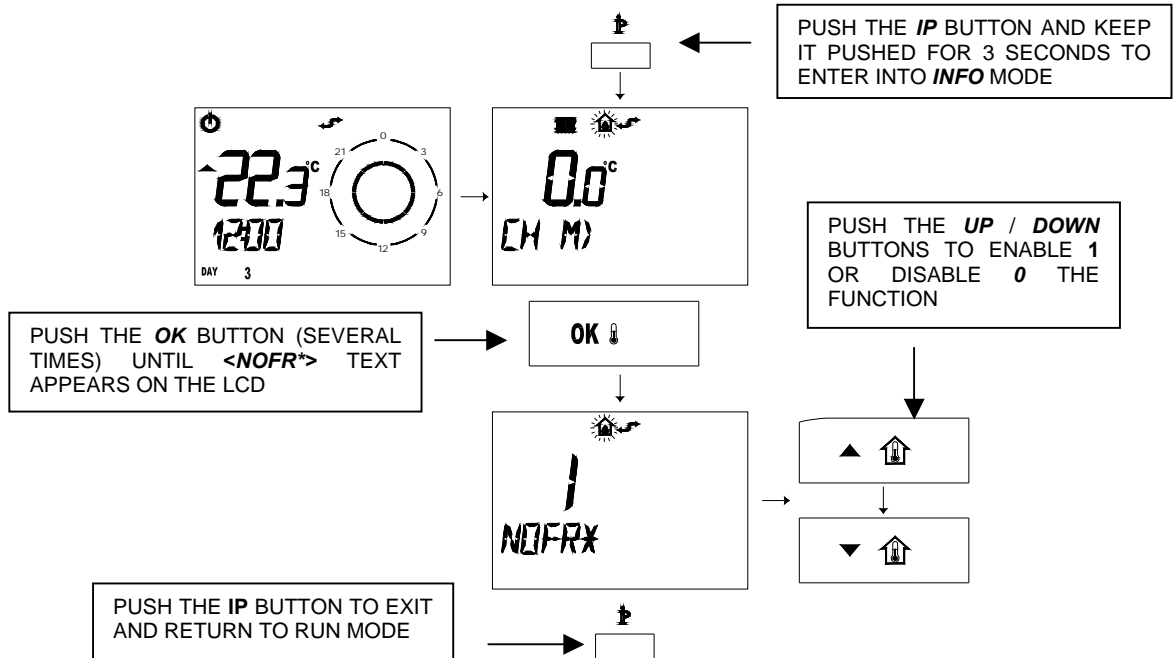
### ENABLE/DISABLE SELF-LEARNING

It is possible to enable/disable the self-learning function by entering into **INFO** mode (by keeping the **IP** button pressed for at least 3 seconds) and by accessing to the **<YSELF>** menu (pushing the **OK** button in quick succession). A value equal to 1 indicates the function is enabled, whereas a value equal to 0 indicates the function is disabled. By using the **UP** and **DOWN** buttons it is possible to modify that value.



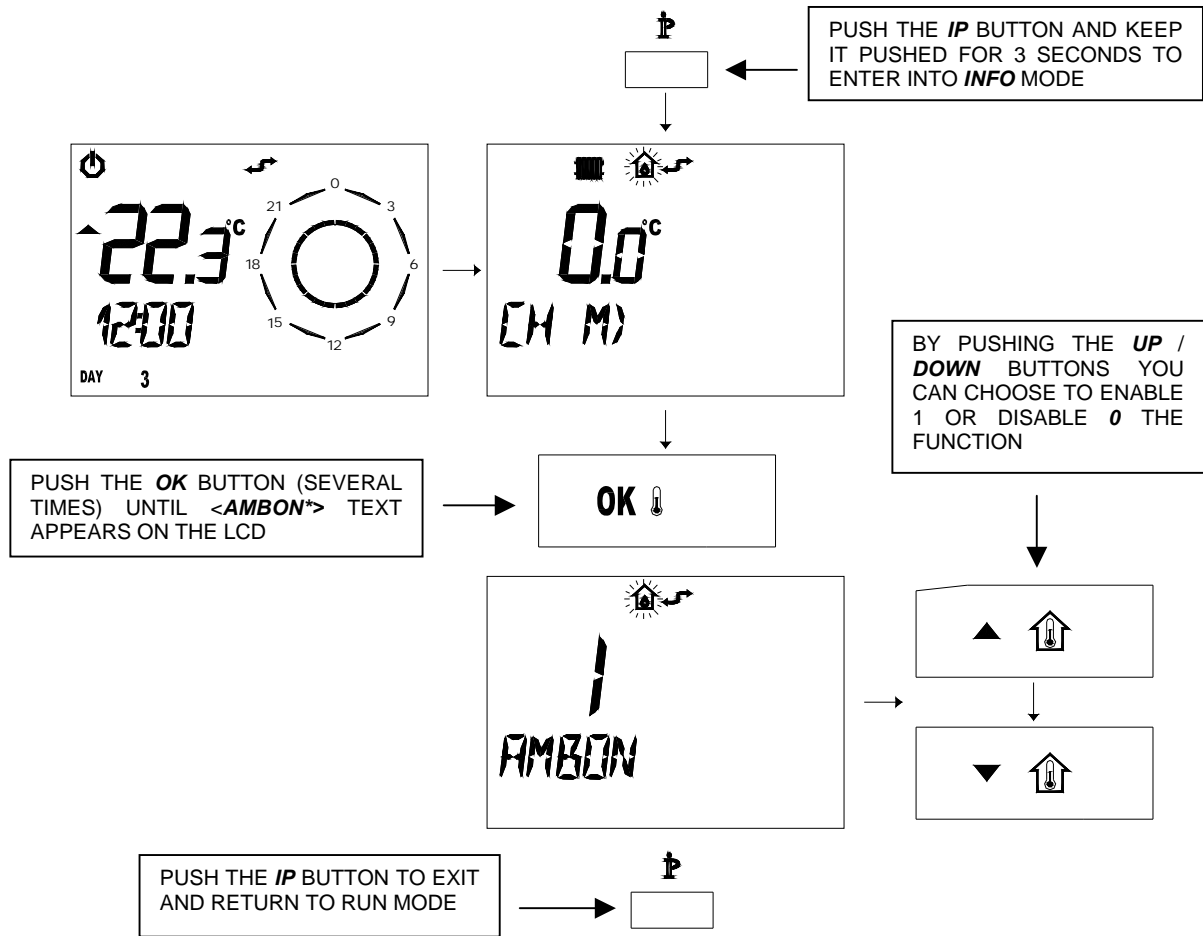
## ENABLE/DISABLE ANTI-FROST

It is possible to enable/disable the anti-frost protection function by entering the **INFO** mode (by keeping the **IP** button pressed for at least 3 seconds) and by accessing the **<NOFR\*>** menu (by pushing the **OK** button in quick succession). A value equal to 1 indicates the function is enabled, whereas a value equal to 0 indicates the function is disabled. By using the **UP** and **DOWN** buttons it is possible to modify that value.



## ENABLE/DISABLE ROOM TEMPERATURE SENSOR

It is possible to enable/disable the room temperature sensor function by entering into **INFO** mode (by keeping pushed the **IP** button for at least 3 seconds) and by accessing the **<AMBN>** menu (by pushing the **OK** button in quick succession). A value equal to 1 indicates the enabled function, whereas a value equal to 0 indicates a disabled function. By using the **UP** and **DOWN** buttons it is possible to modify that value. By disabling the room temperature sensor the system will work at a constant level (non-fluctuating) according to the set programmed parameters.

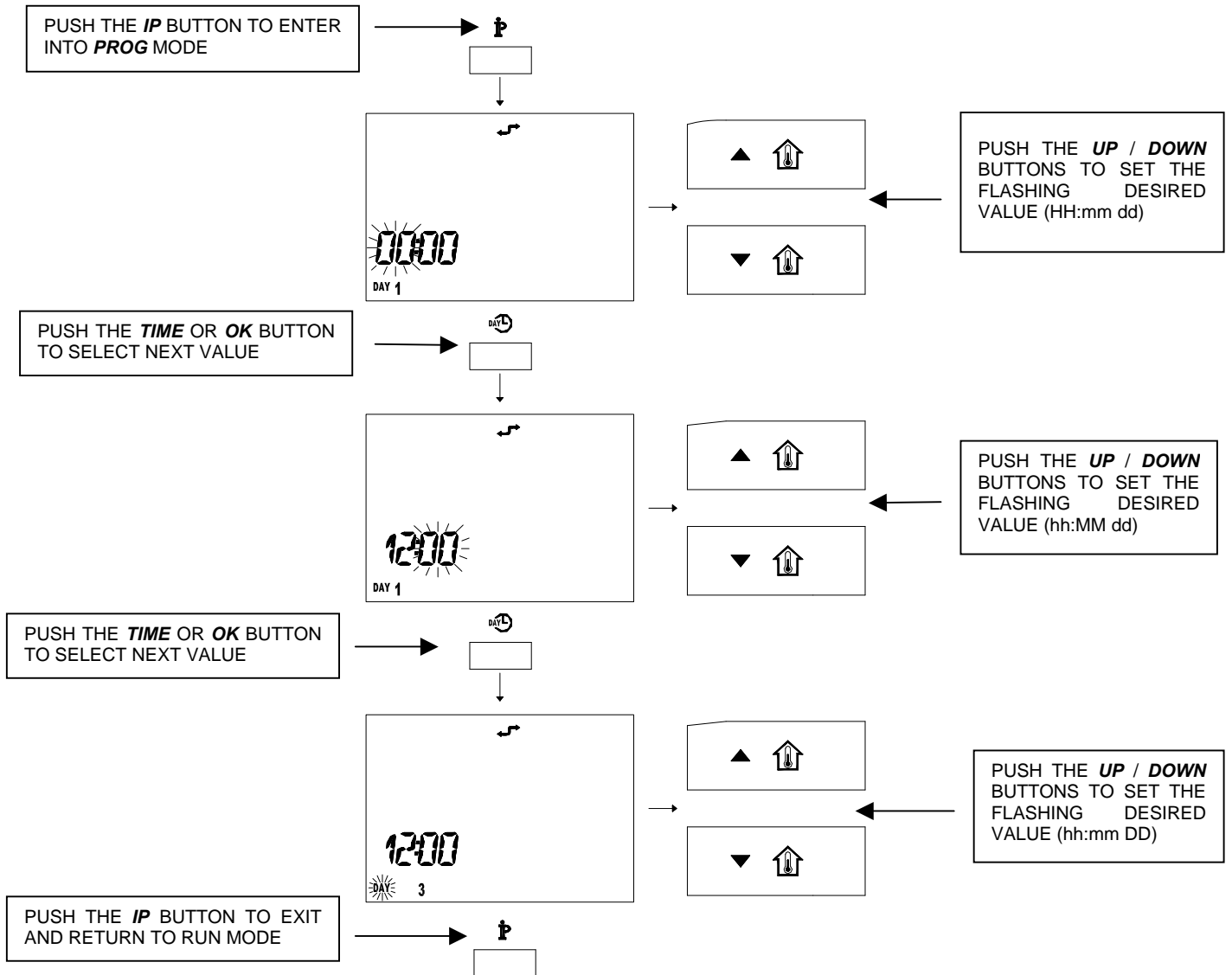


## PROGRAMMING AND SETUP

### TIME AND DAY OF THE WEEK

Once entered into programming mode, it is possible to display the time and day settings by pushing the **TIME** button, except when the free programming menu of the daily set points is showing for the whole week, the **TIME** button does not allow access to the programming menu of the present time and day of the week, as it is linked to it in a different function.

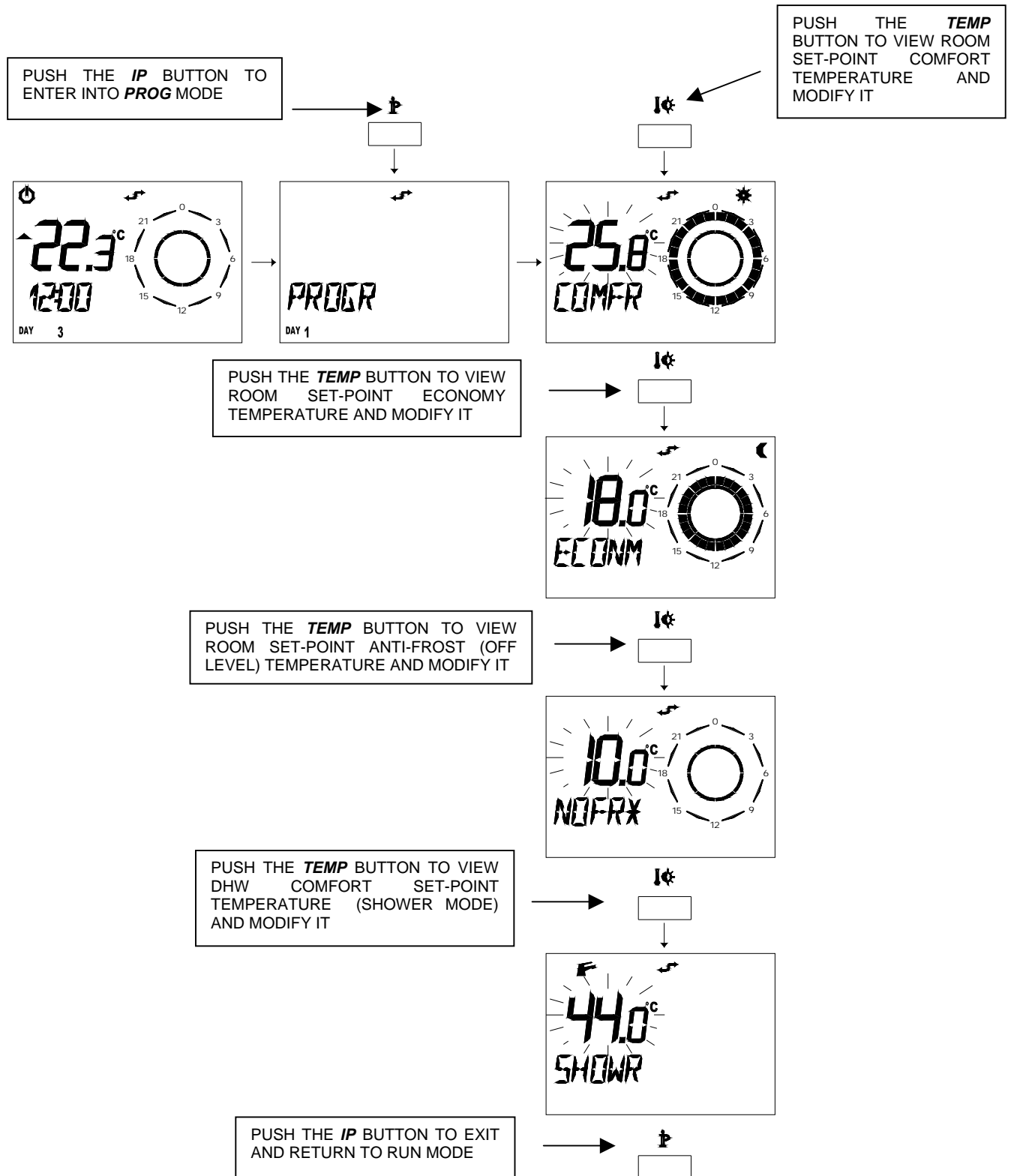
The time and day of the week programming menu can be shown by the presence of the time displayed below and the week day by the **DAY** icon flashing. By using the **UP** and **DOWN** buttons it is possible to modify the selected flashing value (hour, minutes, week day). To change from one value to another press the **TIME** button or the **OK** button repeatedly.



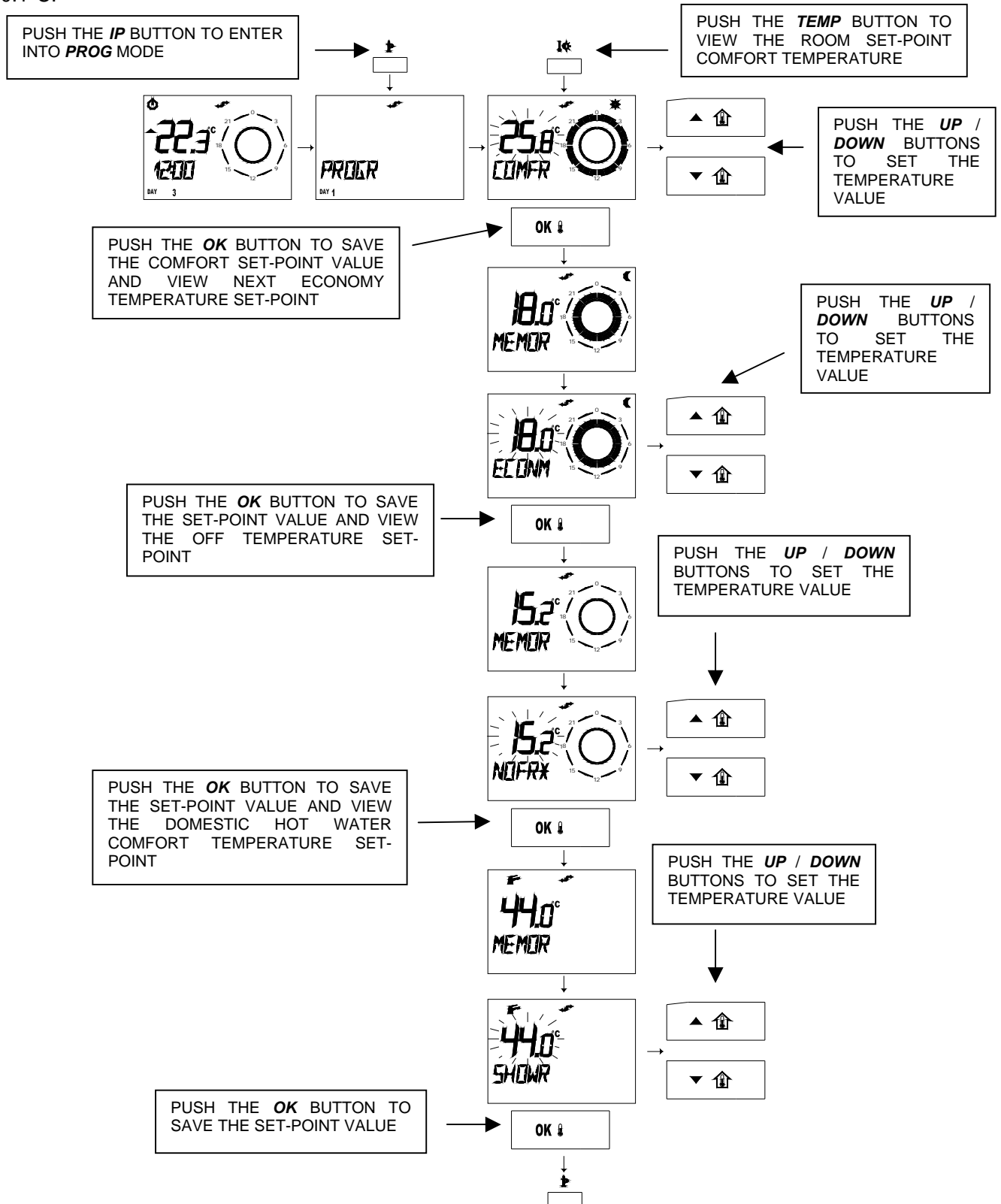
**N.B.: IN THIS CASE, THE UPAMB AND DOWNAMB BUTTONS ARE INTERCHANGEABLE WITH THE UPSAN AND DOWNSAN BUTTONS. THE TIME BUTTON IS INTERCHANGEABLE WITH THE OK BUTTON.**

## USER ROOM AND DOMESTIC HOT WATER SET-POINT TEMPERATURES

Once entered into the programming menu it is possible to see the Comfort, Reduction and Anti-frost (Nofr\*) programming menu, also the Domestic Hot Water Comfort (Shower function) by repeatedly pushing the **TEMP** button.



The temperature levels programming menu can be indicated by the presence of the “COMFR” button below (Comfort settings), “ECONM” (Economy settings), “NOFR” (Off position) and “SHOWR” (Domestic Hot Water Comfort). By using the **UP** and **DOWN** buttons it is possible to modify the selected flashing value. To change from one value to another press the **TIME** button repeatedly, to apply the changed value and to assign the set value to memory press the **OK** button. The system will then proceed to the next setting. The Comfort temperature can vary between 10°C and 35°C in increments of 0.1°C, the same applies to Increasing / decreasing temperature. The Off temperature can vary between 7.0°C and 20°C in increments of 0.1°C.





## TIME SETTING: DAY/DAYS GROUP SELECTION

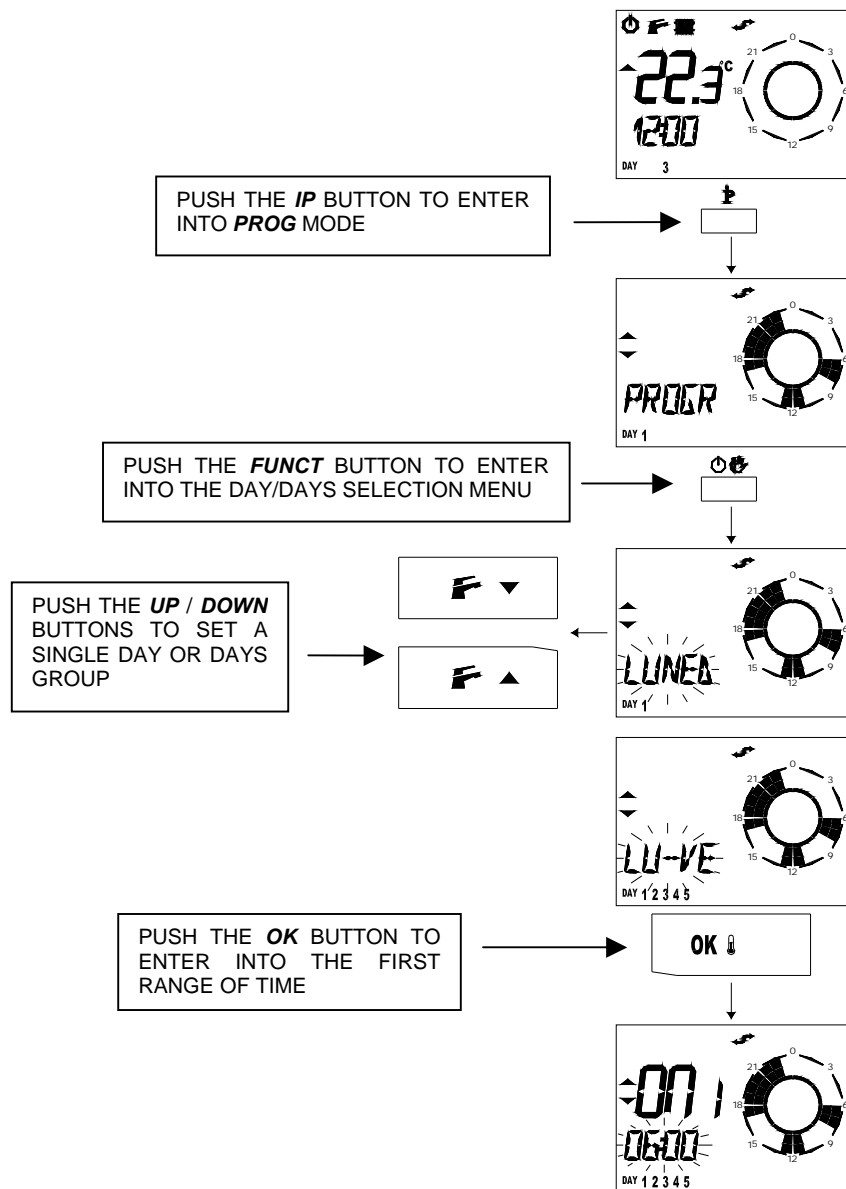
Once entered into programming mode by first pressing the **FUNCT** button, it is possible to view the day/days selection menu. From here can be viewed the associated time programming menu which is related to the Automatic functioning.

By pressing the **UP** and **DOWN** buttons, it is possible to select a single day (from Monday 'till Sunday) or a group of days, to which the associated profile or time program can be assigned as defined below:

- a) Single day: MON TUE WED THU FRI SAT SUN
- b) Group: MON – FRI (from Monday to Friday)
- c) Group: SAT – SUN (Saturday and Sunday)
- d) Group: MON – SAT (From Monday to Saturday)
- e) Group: MON – SUN (every day)

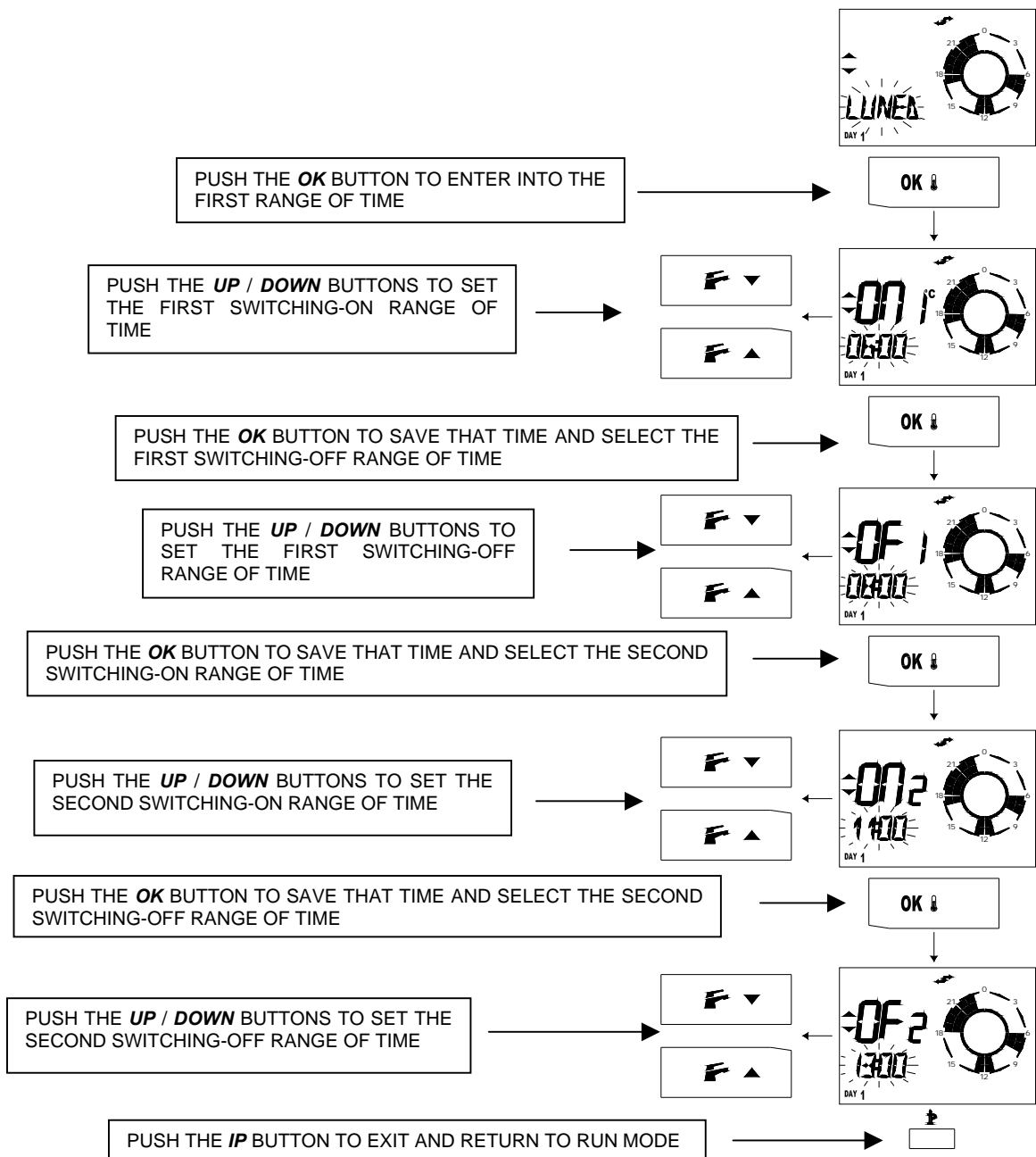
By pressing the **OK** button a single day or group can be selected and you will enter the menu relating to the time range, which is explained in the next section.

**Attention: these operations can cause the modification or loss of previously defined time settings.**



## TIME SETTING: SET ON / OFF TIME DEFINITION

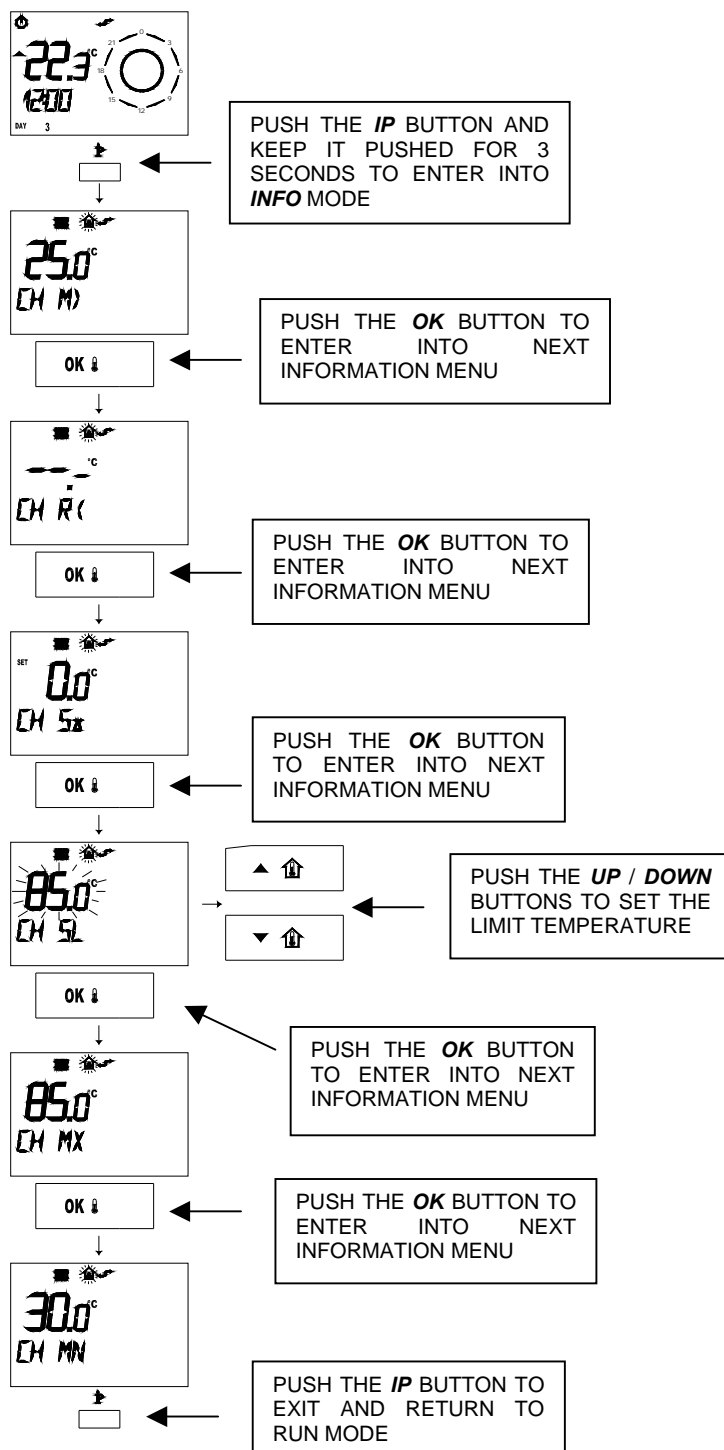
Within a 24 hour period, it is possible to define a maximum of 4 Comfort ranges (see Profiles and Time programming Appendix) each setting is defined by an ON/OFF period (ON/OFF). If you use for example only 3 ranges in a single day, you can set the ON/OFF times for the fourth range for 24:00. In each instance you can exit from the programming menu by pressing the **IP** button. Once entered into the time range programming menu, you can proceed by using the **UP** and **DOWN** buttons to define the time of the first switching on (ON 1). By pressing the **OK** button you can memorize that time range and proceed to the first switching off time setting (OFF 1). By using the **UP** and **DOWN** buttons you can modify that time and by pressing **OK** you can assign that time to memory, then proceed to the time of the second switching on. You can repeat these steps until the time of the fourth switching off (OFF 4).



## INFORMATION AND ADVANCED SETUP MENU

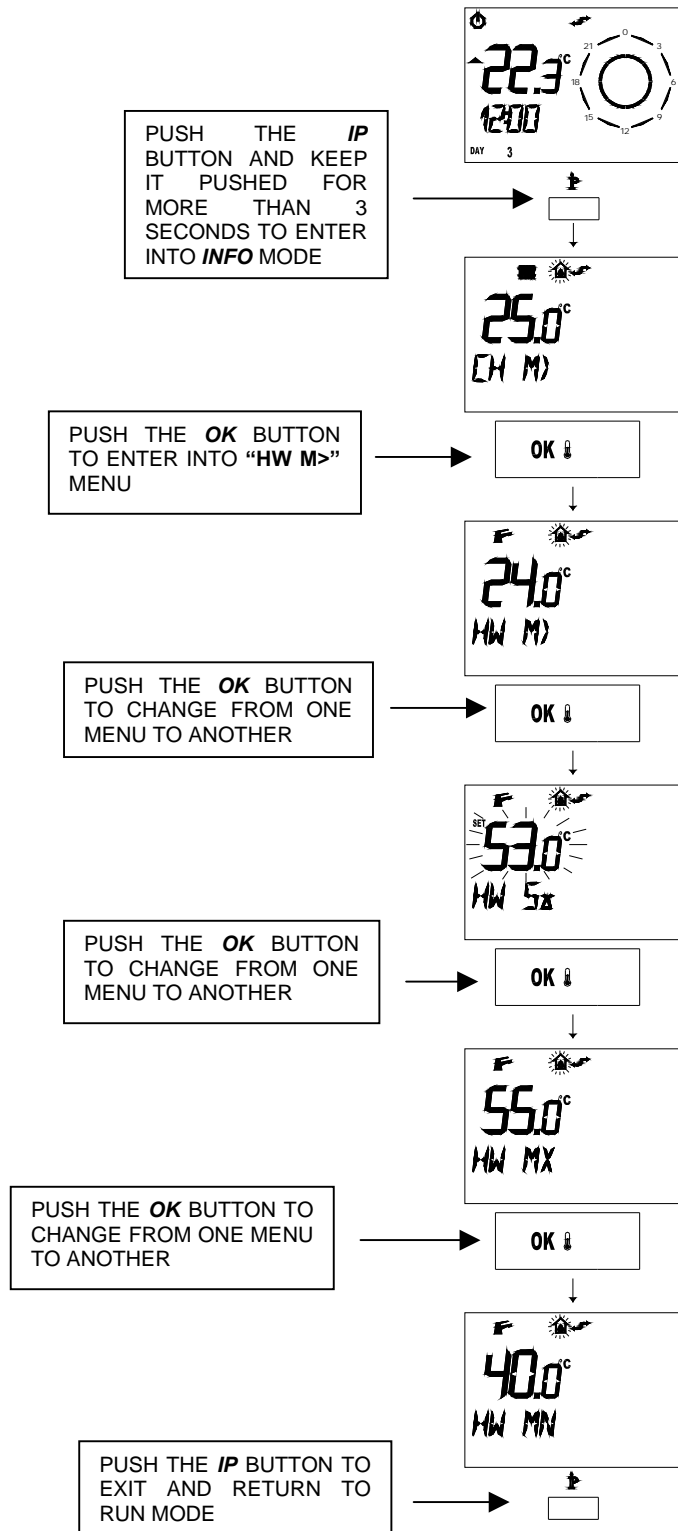
To enter into *Information* and *Advanced setup* mode press the **IP** button for at least 3 seconds, the “**INFO**” message will be shown on the LCD and you are then in INFO mode. To exit the INFO mode, briefly press the very same button. To change from one menu to another, just press the **OK** button. As the large flashing figures appear on the LCD, by pressing the **UP** and **DOWN** buttons it is possible to modify the value linked to the displayed parameter (layout). If the parameter is not administered by the card in the central heating connected to Easy by B&P, some dashes will appear in place of the value (“- -”).

### INFORMATION CENTRAL HEATING CIRCUIT MENU



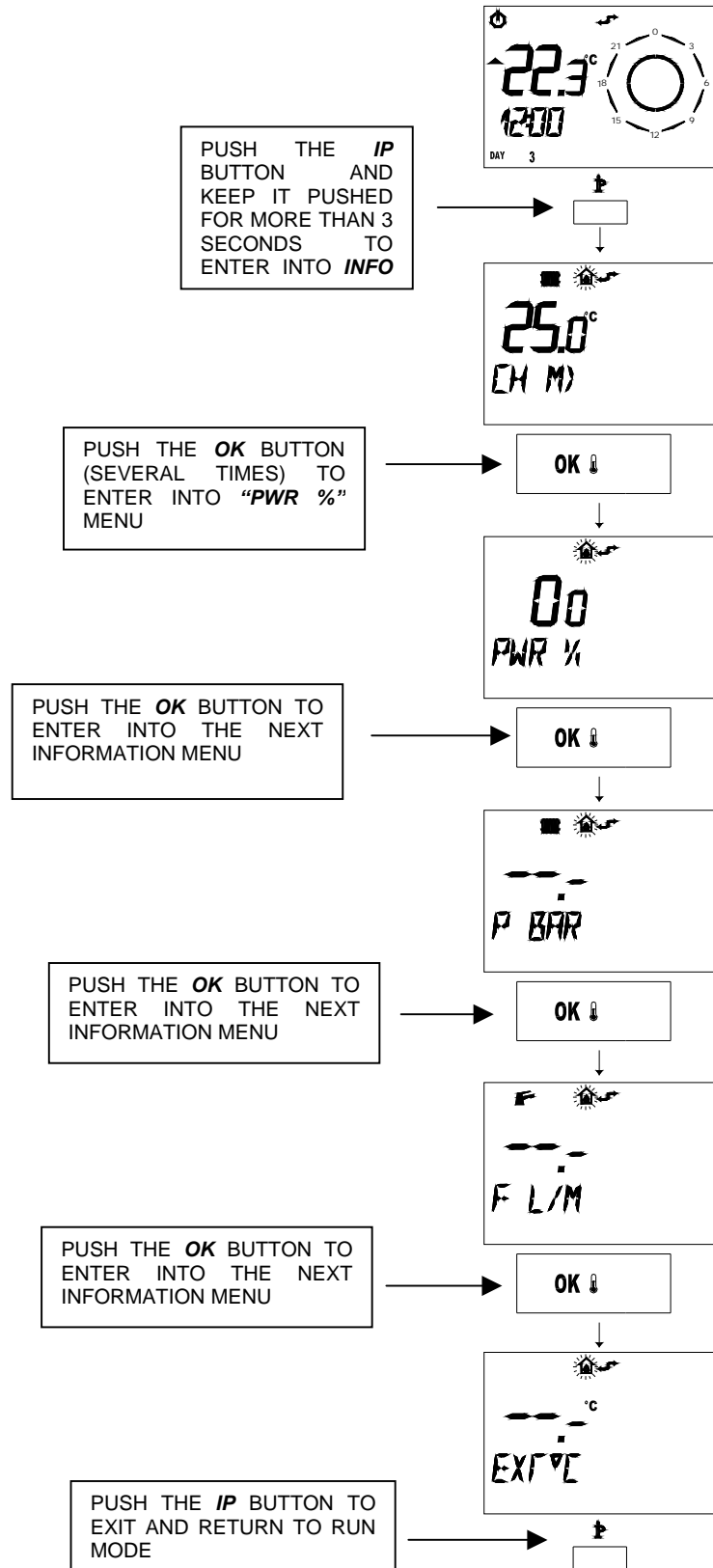
## INFORMATION DOMESTIC HOT WATER CIRCUIT MENU

- Domestic hot water temperature circuit or boiler group (0..99°C), “**HW M>**” message.
- Domestic hot water circuit water set-point (0..99°C), “**HW SΔ**” message. It is possible to set values by pushing the **UP** and **DOWN** buttons.
- Domestic hot water circuit maximum set-point (0..99°C), “**HW MX**” message.
- Domestic hot water circuit minimum set-point (0..99°C), “**HW MN**” message.



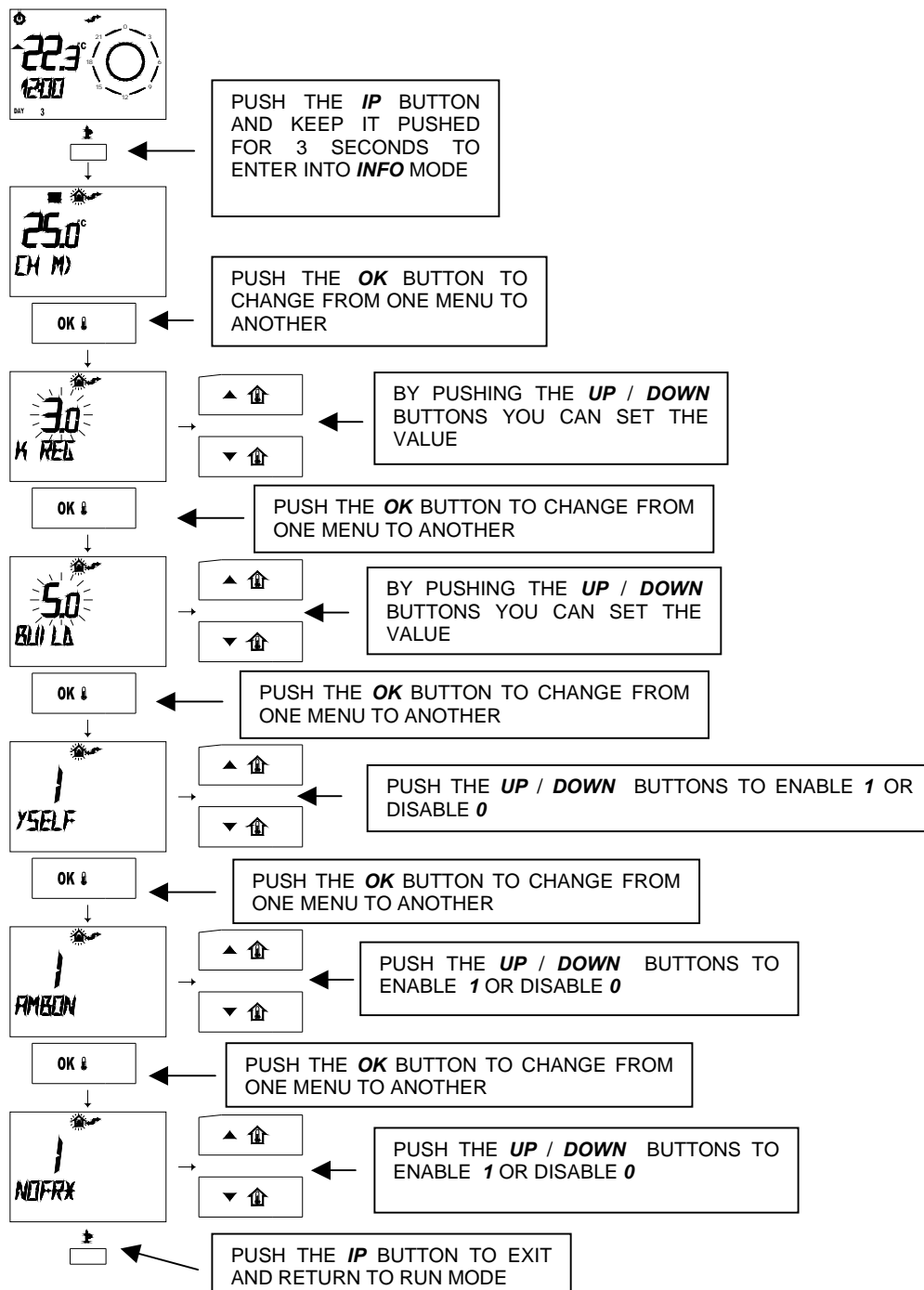
## CENTRAL HEATING ADVANCED MENU INFORMATION

- Power level/flame modulation (0..100%), “PWR %” message
- Water pressure heating circuit (0,0..5,0 bar), “P BAR” message
- Domestic hot water flow in exit circuit (0,0..16,0 litre/min), “F L/M” message
- Central Heating external sensor temperature (-40..99°C), “EXT°C” message



## LAYOUT MENU ALGORITHM PARAMETER REGULATION

- Regulation constant (self-learning algorithm) (0,5..6,5), “**K REG**” message. By pushing the **UP** and **DOWN** buttons you can set a value and vary that according to the data processed by the algorithm. A high value makes the temperature rise within the heating circuit (depending on the external temperature).
- Parameter building size for regulation (1..10), “**BUILD**” message. The **UP** and **DOWN** buttons allow the value setting. A high value is associated with a building/heating system with a high temperature inertia (i.e.: large rooms with slow systems), otherwise a low value is associated to small rooms or systems with low temperature inertia (convector heaters).
- Functioning (self-learning function), “**YSELF**” message. By pushing the **UP** and **DOWN** buttons you can set a value. “0” indicates non-functioning, whereas “1” indicates functioning.
- Functioning (anti-frost function), “**NOFR\***” message. By pushing the **UP** and **DOWN** buttons you can set a value. “0” indicates non-functioning, whereas “1” indicates functioning.



## APPENDIX: TIME SCHEDULING

Time *Scheduling* represents the course of the desired room temperature within a 24hr period. In this case, the display will show time intervals in succession while temperature is kept on a constant level. Time scheduling allows a maximum of 4 Comfort intervals within a 24hr period, each one of them is shown by a switching on (ON) and off (OFF) time, higher than the previous one.

### Example of time Scheduling in 3 Comfort intervals (Standard Program Mon-Fri):

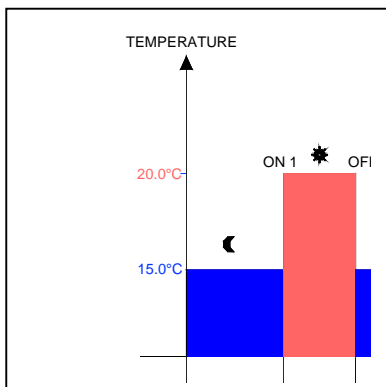
Comfort Temperature: 20.0°C from 06:00 to 08:00,  
from 11:00 to 13:00,  
from 17:00 to 23:00.

Economy Temperature: 15.0°C from 00:00 to 06:00,  
from 08:00 to 11:00,  
from 13:00 to 17:00,  
from 23:00 to 24:00.

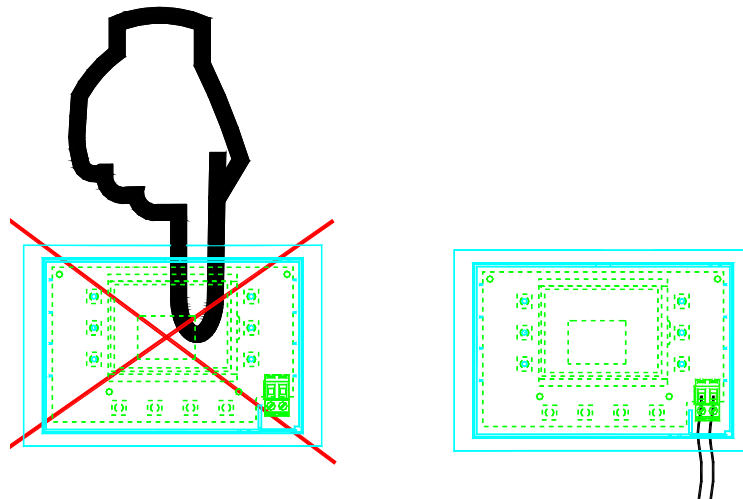
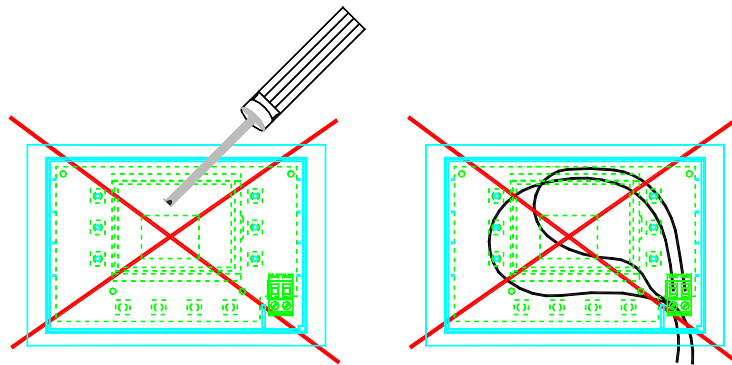
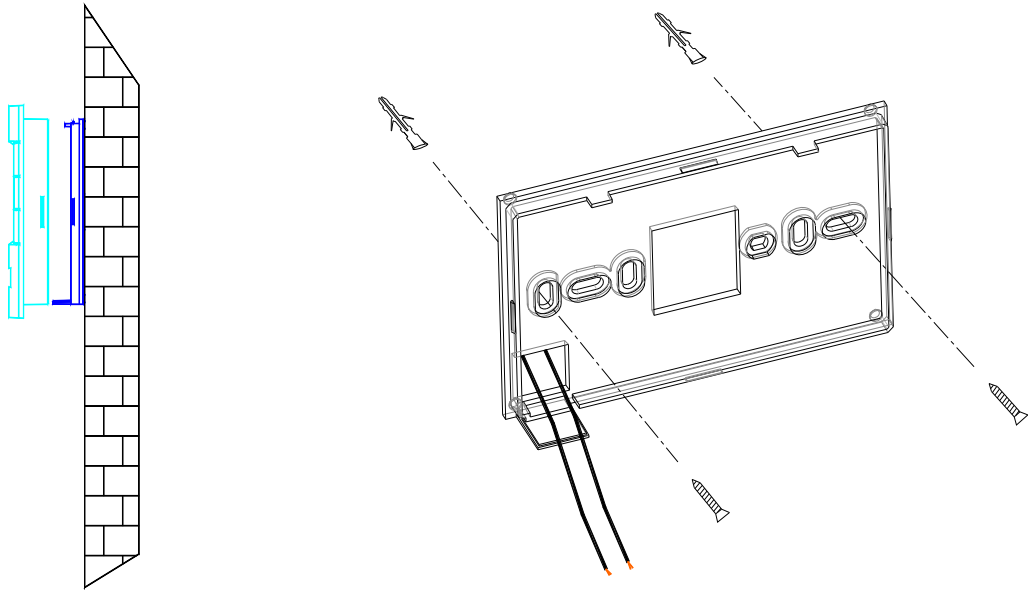
### Example of time Scheduling in 1 Comfort interval (Standard Program Sat-Sun):

Comfort Temperature: 20.0°C from 06:00 to 23:00.

Economy Temperature: 15.0°C from 00:00 to 06:00,  
from 23:00 to 24:00.



## INSTALLATION



**TECHNICAL DATA**



SUPPLY VOLTAGE:

NOMINAL FREQUENCY:

ABSORBED POWER:

BUS INTERFACE:

ROOM TEMPERATURE:

WAREHOUSE TEMPERATURE:

SEFETY TYPE:

SEFETY CATEGORY ACCORDING TO THE LAW EN 60730:

SEFETY CATEGORY ACCORDING TO THE LAW EN 60529:

SOFTWARE CATEGORY:

RADIO WAVES PROTECTION:

TROUBLE STRENGTH:

EU ACCORDANCE:

CONTAINER DIMENSIONS (WIDTHxHEIGHTxDEPTH):

CONTAINER MATERIAL:

TECHNIQUE OF CONNECTION:

NOMINAL CURRENT:

FUSE APPLIANCE:

CENTRAL HEATING TEMPERATURE CONTROL:

SEFETY TEMPERATURE LIMITER: