

HOUSEHEAT

The radio-controlled radiator thermostat system comprises two components: -

- The 'FHT' heating control (the thermostat) and
- The 'FHT8V' valve operating mechanism

The system is used for temperature control in single rooms where the heat from the radiators is controlled by reducing the flow of hot water in the heating system.

The "FHT80B" heating control measures the room temperature by means of an integrated sensor and transmits the corresponding control data to the "FHT8V" valve operating mechanisms.

Important steps on programming system

1. Set the date and time etc. on room thermostat

- Insert batteries in room thermostat
- Use selection wheel to change year.
- Press the 'PROG' key
- Use selection wheel to change month.
- Press the 'PROG' key
- Do the above for date and time etc.
- After setting the minutes, "Sync" and "120" are displayed. The room thermostat now counts down 120 seconds.
- The room thermostat synchronises its operation with the valve operating mechanism(s).

2. Mount valve operating mechanism on radiator

- Remove old thermostat (if you cannot do it by hand, use a multigrip spanner to unscrew the nickel plated ring).
- Insert batteries into valve operating mechanism
- "C1" followed by a 2 digit number is displayed (the first numbers of the code)
- "C2" followed by a 2 digit number is displayed (the second numbers of the code)
- An acoustic signal is made and "A1" is displayed
- The valve operating mechanism fully retracts the control pin to facilitate mounting (a noise can be heard as it does this).
- "A2" is displayed
- Mount the valve operating mechanism on the radiator
- Press grey button on valve operating mechanism.
- "A3" is displayed
- The valve is closed (a noise can be heard as it does this).
- On the valve operating mechanism display the antenna symbol flashes and "0%" is displayed. (0% means that the valve is fully closed. 99% means that it is fully open.)

3. Set number of valve operating mechanisms for each room on to room thermostat

- To set the number of valve operating mechanisms for each room press and hold "PROG" on room thermostat until "Sond" is displayed
- Use wheel on heating control to select "An A"
- To confirm selection press "PROG"; displayed is "An A 001"
- Use wheel to select number of radiators
- To confirm selection press "PROG"

4. Set or change the individual room code.

- On room thermostat press and hold “PROG” until “Sond” is displayed
- Use wheel to select “CodE”
- To confirm selection press ”PROG”
- CodE 1 plus unique number is displayed
- Either accept or change to your own number using selection wheel (between 000 and 009)
- To confirm selection press “PROG”
- CodE 2 plus unique number is displayed
- Either accept or change to your own number using selection wheel
- To confirm selection press “PROG”
- Now displayed is CodE over SYnC 001
- Now go to valve operating mechanism on radiator
- Press and hold grey central key on valve operating mechanism for 3 seconds
- Acoustic signal is heard “3 beeps”
- “AC” is displayed on valve operating mechanism
- Press “PROG” on room thermostat
- Valve operating mechanism makes an acoustic signal
- Replace cover on battery compartment
- **Repeat above for second and other valve operating mechanisms but it always has to be the same code in the room (but the room thermostat will know this)**

5. Set the temperature

- Press the (/ * (bottom) button on the room thermostat for more than 3 seconds
- The comfort (high) temperature is displayed. (Also a ‘sun’ symbol)
- Use selection wheel to set the desired comfort temperature
- Confirm by pressing, briefly, the (/ * button
- The low temperature is displayed. (Also a ‘moon’ symbol)
- Use selection wheel to set the desired low temperature
- Confirm by pressing, briefly, the (/ * button
- The room thermostat returns to the normal operating mode
- NOTE. You can override manually the temperature at any time by using the selection wheel to alter the desired comfort temperature. It will return to the pre-set mode at the next programmed time (or you can re-set it manually, of course).

6. Set temperatures through the week

- Briefly press “PROG” key on room thermostat
- Day is displayed with arrow
- Press “PROG” key
- Time is displayed with a “sun” picture
- Use wheel to adjust for first comfort time on room thermostat
- Press “PROG” key; the first low time is displayed by moon symbol
- Use wheel to adjust for low temperature on room thermostat
- Press “PROG” to adjust for second comfort time on room thermostat
- Time is displayed with a “sun” picture
- Use wheel to adjust for second comfort time on room thermostat
- Press “PROG” key; the second low time is displayed by moon symbol
- Use wheel to adjust for low temperature on room thermostat
- Press “PROG” key to set

Do this for all days of week. Or you can select groups of days or select the whole week to use the same settings.

7. Location of room thermostat

Do not mount: -

- On badly insulated outer wall
- In direct sunlight
- Near heat sources; e.g. radiators, TVs, lamps, refrigerators etc.
- Next to a window
- Near metal objects

OPERATING MODES

Press the 'FUNKTION' key several times to scroll through the different operating modes

8. Automatic operation

- In the 'Auto' mode the room temperature is controlled according to the set program for the weekday
- A temporary temperature change can be set with the selection wheel
- The next time a regular temperature change is scheduled the thermostat will automatically return to the time-controlled program

9. Manual operation

- In the 'Manu' mode the heating control maintains the set temperature.
- An automatic time-controlled change will not be performed

10. Holiday/party function (Suitcase symbol)

The temperature is kept at a fixed level for a defined period of time. After this the heating control automatically switches to the automatic mode

- Select the suitcase symbol with the 'FUNKTION' key
- Set period of time this function will be active
- During the following 24 hours the temperature will reduce every 30 minutes (party function)
- After 24 hours the temperature will reduce every day (holiday function)
- Set the day you will return from your holidays.
- On this day at 0.00 hours the heating will be at the normal time program
- Confirm your setting of the desired period by briefly pressing the 'PROG' key
- Use the selection wheel to set the desired temperature

11. Key lock

To protect the device from unintentional operation (e.g. by children)

- To activate, simultaneously press 'FUNKTION' and 'PROG'
- 'LOC' is displayed briefly. All functions are blocked
- To deactivate, simultaneously press 'FUNKTION' and 'PROG' until 'LOC' disappears (after about 2 seconds)
- All functions are available again

12. Switching between comfort and low temperatures

- You may change the temperature at any time by using the selection wheel
- You may also switch directly from comfort to low temperature by pressing the (/ * key

13. Heating pause

Switch off the heating during the summer to save battery energy. During the heating pause the valves are opened completely and remain open. The weekly decalcification program will still be performed.

- Press 'FUNKTION' to switch to 'Manu'
- Turn wheel clockwise until 'On' is displayed

14. Closing the valve

Select this mode if the room is not to be heated at all. The valve is closed and remains closed unless the temperature drops below 5°C. The weekly decalcification cycle will still be performed.

- Press 'FUNKTION' to switch to 'Manu'
- Turn wheel anti-clockwise until 'OFF' is displayed

15. Emergency operation of valve operating mechanism

E.g. if new batteries are required.

- Remove batteries
- Remove control pin (located in right-hand battery compartment in valve operating mechanism)
- Put control pin on to peg in left-hand battery compartment
- Turn control pin clockwise to increase heat
- Turn control pin anti-clockwise to reduce heat

SPECIAL FUNCTIONS

The Special Functions menu can only be opened if the heating control is in the normal operating mode (time and date on left side of display; temperature on right).

16. Set time for decalcification (CALC)

The pre-set time is every Saturday at 1100 hours. To change the day or time: -

- Press 'PROG' key until 'Sond' is displayed
- Release 'PROG' key
- Turn selection wheel to 'CALC'
- Briefly press 'PROG' key
- Turn selection wheel to select the weekday
- Briefly press 'PROG' key
- Time when decalcification takes place is displayed
- Turn selection wheel to change time
- Briefly press 'PROG' key
- Control returns to normal mode

17. Set date and time (dAt)

- Press 'PROG' key until 'Sond' is displayed
- Release 'PROG' key
- Turn selection wheel to 'dAt'
- Briefly press 'PROG' key

18. Set safety code (CodE)

See 4 above

19. Set number of valve operating mechanisms (An A)

See 3 above

20. Synchronise the valve operating mechanisms (SYnC)

The thermostat transmits signals to all valve operating mechanisms for about 2 minutes instructing them to newly synchronise themselves. After synchronisation the valve operating mechanisms give an acoustic signal when they receive the first correct signal.

- Press 'PROG' key until 'Sond' is displayed
- Release 'PROG' key
- Turn selection wheel to 'SYnC'
- Briefly press 'PROG' key
- The safety code is displayed and the thermostat counts down from 120 seconds and then returns to normal

21. Test mode (tEst)

To check if all the valve operating mechanisms receive the radio signal correctly.

- Press 'PROG' key until 'Sond' is displayed
- Release 'PROG' key
- Turn selection wheel to 'tEst'
- Briefly press 'PROG' key
- Use wheel to select the valve operating mechanism(s) to be tested
- If display shows '0' all the valve operating mechanisms are tested
- Otherwise, if a number, the valve operating mechanism assigned to that number is tested
- The timer in the left corner of the display counts down to the time the next test cycle is to be started
- The valve operating mechanism(s) give an acoustic signal if correct
- Press 'PROG' to exit the test function

22. Display valve position (StEL)

Approximate percentage of the valve opening is displayed on the thermostat (valve operating mechanism 1 only)

- Press 'PROG' key until 'Sond' is displayed
- Release 'PROG' key
- Turn selection wheel to 'StEL'
- Briefly press 'PROG' key
- Display shows valve opening percentage (%)
- Press 'PROG' to exit the function

23. Display desired temperature or actual temperature (t-An)

The normal display is the desired temperature. To display the actual temperature: -

- Press 'PROG' key until 'Sond' is displayed
- Release 'PROG' key
- Turn selection wheel to 't-An'
- Briefly press 'PROG' key
- Turn selection wheel to 'ON' (activate display of actual temperature)
- Press 'PROG' key to confirm and exit

To display desired temperature: -

- As above but turn selection wheel to 'OFF' (deactivate display of actual temperature)

24. Radiator offset (OFFS)

If more than one valve operating mechanism is controlled by the thermostat, radiators may not heat up uniformly (because of bad radiator dimensions etc.). This setting can increase or decrease the heat given off by each radiator.

(NOTE. Setting the offset does not change the displayed percentage of the valve opening position. E.g. at a control value of 10% given by the thermostat a valve with a positive offset is opened wider than a valve with a negative offset, although the displayed value is 10% for both valves.)

- Press 'PROG' key until 'Sond' is displayed
- Release 'PROG' key
- Turn selection wheel to 'OFFS
- Briefly press 'PROG' key
- Turn selection wheel to select the number of the desired valve operating mechanism
- Briefly press 'PROG' key
- Turn selection wheel to select desired offset
- Briefly press 'PROG' key
- This process may have to be repeated several times to achieve the desired settings