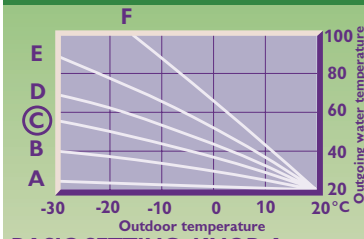
EH-80 OPERATING INSTRUCTIONS



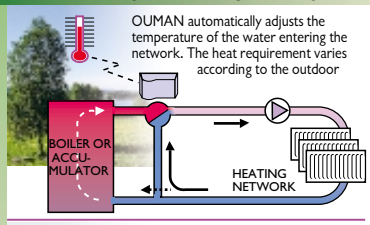
BASIC SETTING, KNOB A

If the room temperature goes down when the weather gets colder, select a steeper curve and vice versa.

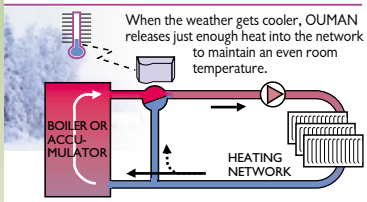
FINE ADJUSTMENT, KNOB B

If the room temperature is always too cool or warm, turn knob B in the desired direction; + raises, - lowers the temperature.

OUMAN EH-80 OPERATING PRINCIPLE



OUMAN automatically adjusts the temperature of the water entering the network. The heat requirement varies according to the outdoor

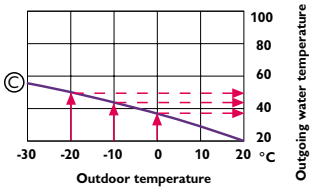


When the weather gets cooler, OUMAN releases just enough heat into the network to maintain an even room temperature.

OUMAN EH-80 CONTROL CURVES

The OUMAN controller contains a wide range of control curves that are designed to respond to very different kinds of heating conditions. It also has low curves suitable for houses with floor heating.

For example, read control curve C as follows:



When it is -20°C, the outgoing water is 50°C
When it is 10°C, the outgoing water is 44°C
When it is 0°C, the outgoing water is 37°C

OUMAN EH-80 INDICATOR LAMPS

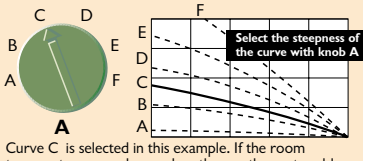
LED	Blinking	On continuously
+	The controller is increasing the heat. (Valve is opening)	The valve is competely open. Not enough heat in the boiler.
–	The controller is decreasing the heat (Valve is closing)	The valve is closed. In the summer when no heat is needed this lamp may always be on.
ON		The unit is operating.

If the green ON indicator lamp is not on, check that the transformer is plugged in and the transformer lead is connected. Check the line voltage.

OUMAN EH-80 BASIC SETTING

Select a house-specific control curve with knob A.
Set the basic setting according to the table below.

Heating characteristics of the building	Position of knob A
Well-insulated house (radiator heating)	C...D
House with poor heating characteristics	E... F
House with a floor heating system	A... B



Curve C is selected in this example. If the room temperature goes down when the weather gets cold, select a steeper curve. If the room temperature goes up, select a lower curve. A suitable curve for your house may be between the plotted curves.

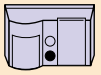
OUMAN EH-80 MIN - MAX - LIMITS

The settings located behind the instruction booklet under the clear cover are usually set only when the controller is taken into use the first time.

The maximum limit knob sets the highest allowable outgoing water temperature. This is especially beneficial in floor heating systems, where overly hot water may cause damages.

The minimum limit knob sets the lowest allowable outgoing water temperature (if sufficient heat is available).

OUMAN EH-80 FINE ADJUSTMENT

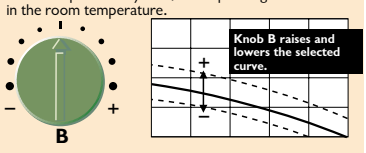


If the room temperature is even, but it is too cool or warm, make a fine adjustment with knob B.

* If the room temperature is always too cool, turn knob B in the + direction.

* If the room temperature is always too warm, turn knob B in the - direction.

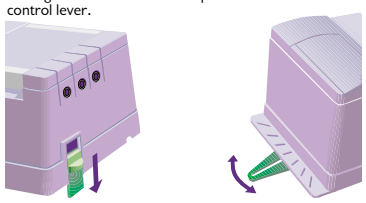
One step of the scale of knob B changes the outgoing water temperature by 4°C, corresponding to about 1°C in the room temperature.



NOTE ! Changes in the settings are felt quite slowly. Wait a few hours before making additional adjustments.

OUMAN EH-80 MANUAL OPERATION

The OUMAN 80 can also be used manually. Unplug the transformer to disconnect the operating voltage. Press the button on the bottom right all the way down while turning the valve to the desired position with the manual control lever.



NOTE ! If you wish to disconnect the controller for a longer period (e.g., in summer), disconnect the operating voltage (13 VAC) connector from the controller. The clock battery will also be disconnected to avoid unnecessary battery drainage (battery life = about 180 days). The battery is a backup power supply for the clock and programming during power shortages.

OUMAN EH-80 OPTIONAL EQUIPMENT

ROOM COMPENSATION TMR/P

The OUMAN EH 80 can be equipped with an optional room compensation unit, TMR/P. It improves temperature control in special conditions such as:

* *windy weather (the house tends to get cooler)*
* *the house is warmed by a fireplace, brick oven, etc.*
* *the house has large windows on the south side, and the house gets warm on sunny spring days regardless of cold weather.*

Install the TMR/P in a central place in the house.

Select the desired room temperature with the TMR/P knob. 21°C is in the middle. Each step of the scale equals 1°C. If the room temperature deviates from the set temperature, the TMR/P automatically adjusts the outgoing water temperature.

The degree of room compensation, the compensation ratio, can be adjusted with the COMP knob.

If the room temperature deviates from the TMR/P set value, the TMR/P adjusts the outgoing water temperature by a ratio of the deviation set with the Comp knob. These examples assume the outdoor sensor is connected.

Example 1. The COMP knob is in position 4. If the room temperature drops 1,5°C, the TMR/P will raise the outgoing water temperature by 4 x 1,5 = 6°C.

Example 2. The COMP knob is in position 2. If the room temperature rises 4°C, the TMR/P will lower the outgoing water temperature by 2 x 4 = 8°C.

ONLY ROOM COMPENSATION

OUMAN can be connected as a room-controlled outgoing water controller. (Disconnect the outdoor sensor.) Set the room temperature with the TMR/P knob. If the delay before the radiator temperature reacts to a change in room temperature is too long, increase the COMP ratio.

OUMAN KS/80 TIMER

OUMAN can be equipped with a timer that drops the room temperature for desired periods (e.g., at night or on weekends). The timer is easy to install later.

Set the drop in the temperature of the outgoing water with this knob. The numbers indicate the number of degrees the temperature will be dropped. General guide: a 4°C drop in the water temperature corresponds to a 1°C drop in the room temperature.

NOTE! If the room compensation unit TMR/P is in use, double the temperature drop setting. This will take into account the compensation effect of the TMR/P.

TO SET THE TIME

When the timer is switched on, all the symbols in the display will blink. Follow the procedure shown below.

Meaning of symbols: Press once / Press repeatedly until the desired state is displayed

Press	Display	Press	Note!
1	00:00		
2	1234567	3	Select a day. 1=Mon, 2=Tue, 3=Wed, etc.
2	00:00	3	Set the hour.
2	00:00	3	Set the minutes. Acknowledge 4. Time OK.

SUMMER/WINTER TIME DIFFERENCE:
Press and hold 3. The clock will automatically move ahead or back one hour.

Summer time is being displayed

PROG TO SET THE DROP TIMES

Press	Display	Press	Note!
1	00 PROG		The number indicates the amount of free program positions.
4	- -:- - 1234567		
2	1234567	3	Select the desired combination of days when the temperature drop should start.
2	00:00	3	Set the start time for the temperature drop: hour ...
2	00:00	3	... and minutes. Acknowledge 4.
2	00:00		Set the end time for the temperature drop: hour ...
2	00:00	3	... and minutes. Acknowledge 4.

Now you can program a new temperature drop period.
Return to the normal state by pressing 1 twice.

The display now shows the correct time and the colon between the numbers is blinking. The programmed temperature drop period is darkened.

1 = The temperature is dropped

0 = normal temperature (the temperature is not dropped)

TO BROWSE A PROGRAM:
When the display shows PROG, you can browse through a program in the timer by repeatedly pressing 4.

TO ADD A PROGRAM:
The timer must be in the PROG state. Press 4 until - -:- - 1234567 is displayed, then begin programming a new temperature drop period.

VACATION FUNCTION

The vacation function lets you program a temperature drop period that begins immediately or later (0 ...14 days). The temperature drop period can last 1... 99 days.

Press	Display	Press	Note!
1	00:00	3	Set the number of days after which the vacation function should start (0... 14 days).
2	00:00	3	Set the length of the vacation period (1... 99 days).
2	1 0	3	Set the temperature state during the vacation. 1 = temperature drop 0 = normal temperature Acknowledge 4.

When the timer arrives at the vacation function time, the symbol will be displayed.
If you do not press acknowledgement 4, the timer will return to the basic state. You can start programming again.

FORCED CONTROL

You can temporarily by-pass the timer program as follows:

Press and hold 2 until the desired state is displayed. Repeating this procedure will change the state. The next programmed time will switch the forced control state off. If you wish to permanently use forced control, press 2 again until the display shows 1 0.

TO CLEAR THE PROGRAMS:

To clear the programs in the timer:
Press and hold 1 and 4 simultaneously.

Manufacturer:
OUMAN OY
KEMPELE, FINLAND