## **OUMAN EH-800 INSTALLATION INSTRUCTIONS**



Use the manual control knob to turn the valve all the way to the left, so the valve is either completely open or closed. If the valve is completely open, the valve direction in the controller's menu must be changed to open in the counterclockwise direction. (see section 14). Remove the manual control knob and detach the two cover screws from the valves. Note! Esbe VRG and Belimo R4...D(K) valves have their own mounting kits as optional equipment.



**Fasten the installation bracket** to the valve using the cover screws as shown in the diagram. The installation bracket has several holes. Use the ones that match the valve type.



**Fasten the adapter** to the axle of the valve using the tightening band so that the star-shaped piece is straight and the adapter's teeth are not in the same place as the tapered side of the axle. Place the manual control lever on the axle of the adapter with the concave side toward the controller and pointing to the left (9 o'clock position).



**Fasten the controller** so that the spring on the end of the adapter goes into the star-shaped hole on the bottom of the controller and then line the axle of the adapter up to the pin of the installation bracket. Press the controller into place. If you cannot install the controller "right side up" because of a lack of space, you can install it upside down and turn the controller's display from the controller's device settings.

User the manual control lever to check that the valve turns freely over the full range of movement (90°). You must press the manual control knob while you are turning the manual control lever.





FOLIONIA

#### H1 Supply water sensor H2 Supply water sensor

5

6

AC/DC

is already attached to the controller. connect the external unit to the controller using the RJ45-2

**Fasten the surface sensor** to the surface of the pipe entering the network about 0.5...1.5 m from the valve either on the top or side of the pipe. The surface of the pipe should be clean, rust free and smooth; the pipe can be painted.



Cut the corner of the bag open and squeeze the grease on the bottom surface of the sensor (cooper plate).



Wrap the fastening strap around the pipe. Make sure that that the surface sensor is not loose.



Wrap the strap around the pipe again if it is long enough. Cut the strap to the proper length along the groove between the holes.

**Detach the protective cover** of the controller's connection space (slides off at a right angle to the controller) and connect the outdoor sensor to the controller.



Position the outdoor sensor (TMO) in a shady place on the northern side of the building at a height of about 2.5 meters. Do not install the sensor directly above a window, door, vent or sensor cable protection tube coming from indoors, or next to an exhaust duct or any other source of heat. If necessary, the cable can be either shortened or lengthened using a screw connector. (No special requirements for cable type).



Plug one end of the cord into the wall and the other end into the controller. We recommend putting the cord in a protective sleeve. Put the connection space's protective cover back into place.

# **CONTROLLER SETTINGS**



Image: Setup       Summary         Image: Add Language       Summary         Image: Add Language       Press the control knob (changuage)         Image: Add Language       Press the control knob (changuage)         Image: Add Language       Summary         Image: Add Language       Press the control knob (changuage)         Image: Add Language       Summary         Image: Add Language       Press the control knob (changuage)         Image: Add Language       Image: Add Language         Image: Add Language       Image: Add Langu							
Note of the set of the s	9	EH-800 setup		Changing the I	anguage:	Kieli/Språk/Language	
Measure channels settings       Addator heating, normal >         Image data and the control knob to go to time and date settings and press OK.       Image data and the control knob to go to time and date settings and press OK.         Image data and the control knob to go to time and date settings       Image data and the control knob to go to time and date settings         Image data and the control knob to go to time and date settings       Image data and the control knob to go to time and date settings         Image data and the control knob to go to time and date settings       Image data and the the press of know the control knob to go to time and date settings         Image data and the settings       Image data and the settings       Image data and the press of know the control knob to go to the and press of know the control knob to go to a setting the control knob to go to the and press of know the and the the the settings         Image data and the settings       Image data and the settings       Image data and the the settings the control and the the settings the control and the the settings the control and the the settings         Image data and the settings       Image data and the settings the control and to set the and press of know the and press of know the and the setting the control knob to get the the and the setting the control and the the the set the data and the the the set the data and the set the set the data and the the the and the set the data and the the the set the data and the the the and the data and the the the and the data and the press of know the the control and the set the data and the set the		Kieli/Språk/Language Suor	mi>	Press the control	knob (=OK),	le Suomi lo Svenska	
Image: Pleating mode       Pleating normal >         Image: Pleating mode       First set the control knob to go to time and date settings and press OK.         Image: Pleasure channels settings       Press OK. Select teither a time or date settings         Press OK. Select teither a time or date settings       Image: Pleasure channels settings         Press OK. Select teither a time or date settings       Set the hours;         ESC to exit from time and date settings       Image: Pleasure channels settings         Image: Pleasure channels settings       Set the hours;         Image: Pleasure channels       Pleasure channels		Measur: channels settings	>	the language and p	ress OK.	© English	
<ul> <li>Turn the control knob to go to time and date settings and press OK.</li> <li>Et+800 setup</li> <li>Language/Kel/Soråk</li> <li>The additor heating</li> <li>Press OK. Select either a time or date settings</li> <li>Set the hours and press OK to confirm. Set the innum. Press CK constitutes 3 and 4 appear on the display. Press ESC to default is that the controller sounds an alarm when the switch opens. (see user manual p. 24).</li> <li>Measurement 3 THI Floor measurement to closes. The default is that the controller sounds an alarm when the switch opens. (see user manual p. 24).</li> <li>Measurement 4 Not in use y</li> <li>Measurement 5 and 4 appear on the display. Press ESC to default is that the controller sounds an alarm when the switch opens. (see user manual p. 24).</li> <li>Measurement 4 Not in use you can select whether the controller controller and alarm set the grant or display. Press ESC to default is that the controller controller and concret floor drying</li></ul>		Heating mode Radiator heating, norm	al >				
EH-800 setup       Characterization         Heasing mode       Radiator heating         Press OK. Select either a time or date settings       Set the hours:         Linguager/left/Språk       Set the hours and press OK         Set to exit from time and date settings       First set the day. then the weekday is automatically updated.         Image: Solution of the settings       Set the hours and press OK. the name of the weekday is automatically updated.         Image: Solution of the settings       Set the hours and press OK. the name of the weekday is automatically updated.         Image: Solution of the settings       Set the hours and press OK. the name of the weekday is automatically updated.         Image: Solution of the settings       Set the hours and press OK.         Image: Solution of the settings       Set the hours and press OK.         Image: Solution of the settings       Set the hours and press OK.         Image: Solution of the setting       Set the hours and press OK.         Image: Solution of the settings       Set the setting         Image: Solution of the setting       Set the setting         Image: Solution of the setting       Setting addition the setting         Image: Solution of the setting       Setting addition the setting         Image: Solution of the setting       Setting addition the setting         Image: Solution of the setting       Setting addition th	10	Turn the control knob to go to time and	o to time and date settings and press OK.				
Give the day:       Give the day:         Time and date setting       htmm         Press OK. Select either a time or date and press OK to confirm. Set the hours and press OK to confirm. Set the minutes and press OK to confirm. Set the minutes and press OK to confirm. Set the minutes and press OK to confirm. Set the weekday is automatically updated.         In Taking additional connections (measurements 3 and 4) into use using the cord and connecting box.       First set the day, then the year. Press OK to confirm. Set the minutes and press OK to confirm. Set the minutes and date setting.         In additional connections (measurements 3 and 4) into use using the cord and connecting box.       Measurements into use (see section 7), go to section 12.         EH-800 setup       Image: Additional connections into use (see section 7), go to section 12.         EH-800 setup       Image: Additional connections into use (see section 7). go to section 12.         Measurements       Measurements         Measurements       Notinuse into use (see alternatives, section 7).         Measurements       Measurement 14         Measurements       Notinuse into use (see alternatives, section 7).         Measurements       Measurement 3 (4) or alarm can be freely labeled. The uses for measurement into alarm use, you can select whether the controller of seconds to confirm. Press OK to confirm. Press OK for a number of seconds to confirm the name. Press ESC to delete the letter. Press ESC for a number of seconds to confirm the name. Press ESC to delete the letter. Press ESC for a number of seconds to confirm the name. Press E		EH-800 setup	Time		🕒 Date		
Measure channels settings Heating mode       First set the day, then the first set the day, then the set the hours and press OK to confirm. Set the minutes and press OK to confirm. Set the minutes and press OK to confirm. Set the day, then the year. Press Set to exit from time and date settings         Image: Set to exit from time and date settings       Set the hours and press OK to confirm. Set the minutes and press OK to confirm. Set the day, then the year. Press Set to exit from time and date settings         Image: Set to exit from time and date settings       Set the hours and press OK to confirm. Set the day, then the year. Press Set to exit from time and date settings         Image: Set to exit from time and date settings       Image: Set to exit from time and date settings         Image: Set to exit from time and date settings       Image: Set to exit from time and date settings         Image: Set to exit from time and date settings       Image: Set to exit.         Image: Set to exit from time and date settings       Image: Set to exit.         Image: Set to exit from time and set to exit.       Image: Set to exit.         Image: Set to exit.       Measurement 3 (4) or alarm can be freely labelled. The uses for measurement in to alarm use, you can select whether the controller seconds to confirm. The name. Press ESC to delete the letter. Press OK to ra number of seconds to confirm the name. Press ESC to delete the letter. Press Circ and the press of the analy in you take a measurement into alarm use, you can select whether the controller seconds to confirm the name. Press ESC to delete the letter. Press Circ and the setting. Set the name. If you take a measurement into alarm use, you can		Language/Kieli/Språk (	Sive th				
IHeating mode       Heataror heatin         Press OK. Select either a time or da- te and press OK.       Set the hours and press OK to confirm. Set the minutes and press OK to confirm.       First set the day, then the month and then the year, Press OK. (the name of the weekday is automatically updated).         Image: Additional connections (measurements 3 and 4) into use using the cord and connecting box       First set the day, then the year, Press OK. (the name of the weekday is automatically updated).         Image: Additional connections (measurements 3 and 4) into use using the cord and connecting box       Measurements         If you do not take additional connections into use (see section 7), go to section 12.       Image: Additional connections into use (see section 7), go to section 12.         Image: Additional connections (measurements 3 and 4) into use 3       Not in use 3         Image: Addition Heating, normal 3       Measurement 3       Not in use 3         Image: Addition Heating, normal 3       Measurement 3 (4) or alarm can be freely labelled. The uses for measurements 3 and 4 appeer on the display. Press ESC to confirm. Press OK for a number of seconds to confirm the name. Press ESC to delet the letter. Press ESC for a number of seconds to confirm the name. Press ESC to delet the letter. Press ESC for a number of seconds to confirm the name. Press ESC to confirm. Press OK for a number of seconds to confirm. The press ESC to confirm. Press OK for a number of seconds to confirm. The addition heating, normal 3 Direction on valve       Measurement 4 Not in use, you can select whether the controller concrete floor reating, damp rooms Fior heating, normal 4 Radiator heating, inormal 4 Radia		Measur. channels settings				9-10-2005	
Press OK. Select effiner a time of data to a press OK.       Set the notives and press OK.       First set the day, then the work here's OK to confirm. Set the nanue of the weekday is automatically updated).         Image: Taking additional connections (measurements 3 and 4) into use using the cord and connecting box.       Image: Taking additional connections into use (see section 7), go to section 12.         Image: Taking additional connections into use (see section 7), go to section 12.       Image: Taking additional connections into use (see section 7), go to section 12.         Image: Taking additional connections into use (see section 7), go to section 12.       Image: Taking additional connections into use (see section 7), go to section 12.         Image: Taking additional connections into use (see section 7), go to section 12.       Image: Taking additional connections into use (see section 7), go to section 12.         Image: Taking additional connections into use (see section 7), go to section 12.       Image: Taking additional connections into use (see section 7), go to section 12.         Image: Taking additional connections into use (see section 7).       Image: Taking additional connections into use (see section 7).         Image: Taking additional connections into use (see section 7).       Image: Taking additional connections into use (see section 7).         Image: Taking additional connections into use (see section 7).       Image: Taking additional connections into use (see section 7).         Image: Taking additional connections into use (see section 7).       Image: Taking additing additing addition addition addition addition additi		Heating mode Hadiator heating	4 4 la a la				
and press OK to confirm.       OK, the name of the weekday is automatically updated).         Image: State in the state of the state o		te and press OK. Select eitner a time or da-	confirr	m. Set the minutes	month and	the day, then the the lithen the year. Press	
11       Taking additional connections (measurements 3 and 4) into use using the cord and connecting box.         If you do not take additional connections into use (see section 7), go to section 12.         EH-800 setup         Language/Neil/Språk         Time and date setting:         Heasurement 4         Notin use >         Measurement 5         Heasurement 4         Notin use >         Measurement 5         Measurement 6         Measurement 7         Measurement 8         Measurement 9         Measurement 1         Measurement 1         Measurement 2         Measurement 3         Measurement 4         Notin use >         Measurement 5         Measurement 6         Measurement 7         Measurement 8         Measurement 9         Measurement 1         Measurement 1         Measurement 3         Measurement 4         Measurement 5         Measurement 4         Notin use >         Measurement 5         Measurement 6         Measurement 7         Measurement 8         Measurement 9         Notin use 7<		en e	d pres	s OK to confirm.	OK. (the n	ame of the weekday	
11       Taking additional connections (measurements 3 and 4) into use using the cord and connecting box.         If you do not take additional connections into use (see section 7), go to section 12.         EH-800 setup         Language/Right/Språk         Time and date setting         Heasure channels settings         Heasure ment 3         Notin use >         Measurement 4         Notin use >         Labelling: Use the control knob to select a letter. Press CK to confirm. Press CK or a number of seconds to confirm the name. Press ESC to delete the letter. Press ESC for a number of seconds to confirm the switch opens or when it closes. The default is that the controller sounds an alarm when the switch opens or when it closes. The default is that the controller sounds an alarm when the switch opens clockwise >         Start-up with new settings       >         Heating mode       Floor heating, normal : normal reditor heating, steep curve. Select this when your house has poor insulation or the red		ESC to exit from time and date settings					
If you do not take additional connections into use (see section 7), go to section 12.         EH-800 setup         Language/Kiel/Språk         The add date setting         Measurement3         Not in use >         Measurement4         Measurement5         Measurement4         Measurement4         Measurement4         Measurement4         Measurement4         Measurement4         Measurement4         Measurement5         Measurement3         Measurement4         Measurement3         Measurement3         Measurement4         Not in use >         Measurement3         Measurement4         Not in use >         Measurement5         Measurement4         Not in use >         Measurement5         Measurement6         Measurement6         Measurement6	11	aking additional connections (measurements 3 and 4) into use using the cord and onnecting box					
EH-800 setup       Measurements         Language/kiel/Språk       English >         Time and date settings       Not in use >         Measurement 3       Not in use >         Measurement 4       Not in use >         Measurement 5       Measurement 4         Measurement 4       Not in use >         Measurement 4       Not in use >         Measurement 4       Not in use >         Measurement 5       Measurement 3 (4) or alarm can be freely labelled. The uses for measurements 3 and 4 appear on the display. Press ESC to exit.         Labelling: Use the control knob to select a letter. Press OK to confirm. Press OK for a number of seconds to confirm the name. Press ESC to delete the letter. Press ESC for a number of seconds to confirm the name. Press ESC to delete the letter. Press ESC for a number of seconds to confirm the name. Press ESC to delete the letter. Press ESC for a number of seconds to delete the name. If you take a measurement into alarm use, you can select whether the controller sounds an alarm when the switch opens or when it closes. The default is that the controller gives an alarm when the switch opens. (see user manual p.24).         Image Flexibility       Measurement 4         Direction on valve       Open clockwise >         Start-up with new settings       The controller has factory settings for normal floor         heating Floor heating, damp rooms: select this when the controller. Radiator heating, steep curve: select this when your house has poor insulation or the radiators do not give off		If you do not take additional connections into use (see section 7), go to section 12.					
Language/Kiell/Språk       English         Measurement:3       Not in use >         Measurement:4       Not in use >         Measurement:5       Measurement:4         Measurement:3       THE Roommeasurement >         Measurement:4       Not in use >         Measurement:5       Measurement:4         Measurement:6       THE Roommeasurement >         Measurement:6       THE Roommeasurement >         Measurement:6       Not in use >         Measurement:7       Measurement:6         Measurement:8       and 4 appear on the display. Press ESC to cellet the letter. Press ESC for a number of seconds to confirm the name. Press ESC to delete the letter. Press ESC for a number of seconds to confirm the switch opens or when it closes. The default is that the controller sounds an alarm when the switch opens. (see user manual p.24).         Measure channels settings       >         Measurement 4       Not in use >		EH-800 setup		🏋 Measurements			
Measurement 4       Not in use >         Press OK. Select the measurement use (see alternatives, section 7).         Press OK. Select the measurement use (see alternatives, section 7).         Press OK. Select the measurement use (see alternatives, section 7).         Measurement 3       THE Roommeasurement >>         Measurement 4       Not in use >         Press OK. Select the measurement use (see alternatives, section 7).         Measurement 4       Not in use >         Measurement 4       Not in use >         Press OK confirm. Press OK for a number of seconds to confirm the name. Press ESC to delete the letter. Press ESC for a number of seconds to confirm the name. Press ESC to delete the letter. Press ESC for a number of seconds an alarm when the switch opens or when it closes. The default is that the controller sounds an alarm when the switch opens or when it closes. The default is that the controller gives an alarm when the switch opens. (see user manual p.24).         Presting mode       Flacitor heating, normal >         Breating mode       Flacitor heating, normal >         Presting node       Flacitor neating, normal and alarm use, you can select whether the controller controller has factory settings for normal radiator heating, normal         Breating mode       Flacitor neating, normal in and alarm prooms select this when the controller controller controller door drying or insulation or the radiator heating, steep curve: select this when the controller controller door drying are special applications of theat on heating, steep curve: select this when the con		Language/Kieli/Språk Englist	l >	Measurement 3		Not in use >	
Heating mode       Radiator heating, normal       Press OK. Select the measurement use (see alternatives, section 7).         Measurements       Measurement 3       THR Foom measurement > Measurement 4       Measurement 3 (4) or alarm can be freely labelled. The uses for measurements 3 and 4 appear on the display. Press ESC to exit.         Labelling: Use the control knob to select a letter. Press OK to confirm. Press OK for a number of seconds to confirm the name. Press ESC to delete the letter. Press ESC for a number of seconds to delete the name. If you take a measurement into alarm use, you can select whether the controller sounds an alarm when the switch opens or when it closes. The default is that the controller gives an alarm when the switch opens. (see user manual p.24).         Measure. channels settings       Image: Second Se		Measur, channels settings	>	Measurement 4         Not in use >           Press OK. Select the measurement use (see alternatives, section 7).			
Measurements       Measurements (4) or alarm can be freely labelled. The uses for measurements 3 and 4 appear on the display. Press ESC to exit.         Labelling: Use the control knob to select a letter. Press OK to confirm. Press OK for a number of seconds to confirm the name. Press ESC to delete the letter. Press ESC for a number of seconds to confirm the name. Press ESC to delete the letter. Press ESC to exit.         Image: Use the control knob to select a letter. Press OK to confirm. Press OK for a number of seconds to delete the name. If you take a measurement into alarm use, you can select whether the controller gives an alarm when the switch opens or when it closes. The default is that the controller gives an alarm when the switch opens. (see user manual p. 24).         Image: Measurement into alarm use, you can select whether the controller gives an alarm when the switch opens or when it closes. The default is that the controller gives an alarm when the switch opens (see user manual p. 24).         Image: Measurement into alarm use, you can select whether the controller gives an alarm when the switch opens (see user manual p. 24).         Image: Measurement into alarm use, you can select whether the controller gives an alarm when the switch opens (see user manual p. 24).         Image: Measurement into alarm use, you can select whether the controller gives an alarm when the switch opens (see user manual p. 24).         Image: Measurement into alarm use, you can select whether the controller is installed for selection on valve the general for normal in a didator heating, normal information about heating modes in the user manual on p. 27). After initialization, the heating mode selection can be found from the controller at "Device settings -> H1 Process settings'. <t< td=""><td></td><td>Heating mode Radiator heating, norm</td><td>al &gt;</td></t<>		Heating mode Radiator heating, norm	al >				
Measurement 3 Measurement 4       TMR Room measurement > Not in use >       The uses for measurements 3 and 4 appear on the display. Press ESC to exit.         Labelling: Use the control knob to select a letter. Press OK to confirm. Press OK for a number of seconds to confirm the name. Press ESC to delete the letter. Press ESC for a number of seconds to delete the name. If you take a measurement into alarm use, you can select whether the controller sounds an alarm when the switch opens or when it closes. The default is that the controller gives an alarm when the switch opens. (see user manual p.24).         Measurement into alarm use, you can select whether the controller sounds an alarm when the switch opens. (see user manual p.24).         Measurement is controller Measur. channels settings       >>>>>>>>>>>>>>>>>>>>>>>>>>>>>>		🛠 Measurements		Measurement 3 (4) or alarm can be freely labelled. The uses for measurements 3 and 4 appear on the display. Press ESC to exit			
Instant the number of seconds to confirm. Press OK for a number of seconds to confirm the name. Press ESC to delete the letter. Press SC for a number of seconds to delete the name. If you take a measurement into alarm use, you can select whether the controller sounds an alarm when the switch opens or when it closes. The default is that the controller gives an alarm when the switch opens. (see user manual p.24).         12       Heating mode selection         Using EH-800 as a heating controller       Image: Alarm when the switch opens or when it closes. The default is that the controller gives an alarm when the switch opens. (see user manual p.24).         13       Heating mode         Prection on valve       Open clockwise > Start-up with new settings         Start-up with new setting. Floor heating, normal normal floor       Heating floor heating, damp rooms. Select this when the controller only heats tiled floors (when you want a comfortably warm floor and/or a dry floor in the summer). Radiator heating, steep curve: select this when your house has poor insulation or the radiators do not give off enough heat. The constant temperature controller and concrete floor drying are special applications of the controller. (additional information about heating modes in the user manual on p. 27). After initialization, the heating mode selection can be found from the controller at "Device settings -> H1 Process settings /> Heating mode         Measur. channels settings       Alaitar heating, normal >         Measur. channels settings       Alaitar heating normal second setting modes in the user manual on p. 27). After initialization, the heating mode selection can be found from the controller at "Device settings -> H1 Process settings /> Open clock		Measurement 3 TMR Room measureme	nt >				
Labelling: Use the control knob to select a letter. Press OK to confirm. Press OK for a number of seconds to delete the name. If you take a measurement into alarm use, you can select whether the controller sounds an alarm when the switch opens or when it closes. The default is that the controller gives an alarm when the switch opens. (see user manual p.24). <b>Heating mode selection</b> Using EH-800 as a heating controller          Measur. channels settings          Heating mode         Bitator heating, normal         Direction on valve         Open clockwise >         The controller has factory settings for normal radiator heating, normal (normal floor)         heating Floor heating, damp rooms: select this when the controller on the set prove: select this when the controller on the set prove: select this when the controller on the set prove: select this when the controller on taking, steep curve: select this when your house has poor insulation or the radiators do not give off enough heat. The constant temperature controller and concrete floor drying are special applications of the controller. (additional information about heating modes in the user manual on p. 27). After initialization, the heating mode selection for the controller at "Device settings -> H1 Process settings".            Setting the valve direction for the controller settings.            Weasur: channels settings             Setting the valve direction for the controller dive settings.            Measur: channels settings            Measur: channels settings <th></th> <th colspan="5"></th>							
delete the name. If you take a measurement into alarm use, you can select whether the controller sounds an alarm when the switch opens or when it closes. The default is that the controller gives an alarm when the switch opens. (see user manual p.24). <b>Heating mode selection</b> Using EH-800 as a heating controller       Image: the the time of time of the time of time of time of the time of time of time of the time of the time of time of time of time of the time of time of the time of time of the time of time of time of the time of ti		<b>Labelling:</b> Use the control knob to select a seconds to confirm the name. Press ESC to	letter	te the letter. Press ESC for a number of seconds to			
sounds an alarm when the switch opens or when it closes. The default is that the controller gives an alarm when the switch opens. (see user manual p.24). <b>Heating mode selection</b> Using EH-800 as a heating controller       Image: Character of the controller at "Device settings → Heating mode floor heating, damp rooms: select this when the controller only heats tiled floors (when you want a comfortably warm floor and/or a dry floor in the summer). Radiator heating, steep curve: select this when your house has poor insulation or the radiators do not give off enough heat. The constant temperature controller at "Device settings -> H1 Process settings". <b>Setting the valve direction for the controller</b> Using EH-800 as a heating controller Weasur: channels settings → Hadiator heating, normal > Direction on valve Open clockwise > Start-up with new settings → Hadiator heating, normal > Direction on valve As a default the valve opens when it is turned clockwise. If the controller is installed for a valve that opens		delete the name. If you take a measuremen	nt into	alarm use, you can	select whet	ther the controller	
12       Heating mode selection         Using EH-800 as a heating controller         Measur: channels settings         Heating mode       Fadiator heating, normal         Direction on valve       Open clockwise >         Start-up with new settings       >         The controller has factory settings for normal radiator heating, normal       Radiator heating, normal         Gator heating, Floor heating, damp rooms: select this when the controller only heats tiled floors (when you want a comfortably warm floor and/or a dry floor in the summer). Radiator heating, steep curve: select this when your house has poor insulation or the radiators do not give off enough heat. The constant temperature controller and concrete floor drying are special applications of the controller. (additional information about heating modes in the user manual on p. 27). After initialization, the heating mode selection can be found from the controller at "Device settings -> H1 Process settings".         13       Setting the valve direction for the controller         Using EH-800 as a heating controller       * Direction of valve         Measur: channels settings       > Heating mode         Heating mode       Radiator heating, normal >         Direction on valve       Open clockwise >         Start-up with new settings       >         Heating mode       Radiator heating, normal >         Direction on valve       Open clockwise >         Start-up with new settings       >		sounds an alarm when the switch opens or	wher manu	n it closes. The defa ual n 24)	ult is that th	e controller gives	
12       Heating mode selection         Using EH-800 as a heating controller       Heating mode         Measur. channels settings       >         Direction on valve       Open clockwise >         Start-up with new settings       >         The controller has factory settings for normal floor       Radiator heating, normal         Neating Floor heating, damp rooms: select this when the controller only heats tiled floors (when you want a comfortably warm floor and/or a dry floor in the summer). Radiator heating, steep curve: select this when your house has poor insulation or the radiators do not give off enough heat. The constant temperature controller and concrete floor drying are special applications of the controller. (additional information about heating modes in the user manual on p. 27). After initialization, the heating mode selection can be found from the controller at "Device settings -> H1 Process settings".         Measur: channels settings       >	_						
Weasur, channels settings       >         Heating mode       Radiator heating, normal         Direction on valve       Open clockwise >         Start-up with new settings       >         The controller has factory settings for normal radiator heating, floor heating, normal: normal floor       Radiator heating, steep curve         Contant temperature controller       Concrete floor drying         Weasur, channels settings       >         The controller has factory settings for normal radiator heating, floor heating, damp rooms: select this when the controller only heats tiled floors (when you want a comfortably warm floor and/or a dry floor in the summer). Radiator heating, steep curve: select this when your house has poor insulation or the radiators do not give off enough heat. The constant temperature controller and concrete floor drying are special applications of the controller. (additional information about heating modes in the user manual on p. 27). After initialization, the heating mode selection can be found from the controller at "Device settings -> H1 Process settings".         Setting the valve direction for the controller         Measur: channels settings       > heating mode         Measur: channels settings       > heating normal > Direction of valve         Start-up with new settings       > heating controller         Measur: channels settings       > heating normal > Direction on valve         Direction on valve       Open clockwise > Start-up with new settings         Start-up with new settings	12	Heating mode selection	I	Heating mode			
Heating mode       Radiator heating, normal >         Direction on valve       Open clockwise >         Start-up with new settings       >         The controller has factory settings for normal radiator heating, floor heating, normal       Radiator heating, steep curve Contant temperature controller concrete floor drying         heating Floor heating, damp rooms: select this when the controller only heats tiled floors (when you want a comfortably warm floor and/or a dry floor in the summer). Radiator heating, steep curve: select this when your house has poor insulation or the radiators do not give off enough heat. The constant temperature controller and concrete floor drying are special applications of the controller. (additional information about heating modes in the user manual on p. 27). After initialization, the heating mode selection can be found from the controller at "Device settings -> H1 Process settings".         Setting the valve direction for the controller         Using EH-800 as a heating controller         Measur: channels settings         Heating mode         Radiator heating, normal >         Direction on valve       Open clockwise >         Start-up with new settings       >         As a default the valve opens when it is turned clockwise. If the controller is installed for a valve that opens		Measur, channels settings	L	Floor heating. da	amp rooms	٥	
Direction on valve       Open clockwise >         Start-up with new settings       >         The controller has factory settings for normal radiator heating. Steep curve:       Radiator heating, normal         Gontant temperature controller       Concrete floor drying         Concrete floor drying       Concrete floor drying         Want a comfortably warm floor and/or a dry floor in the summer). Radiator heating, steep curve: select this when your house has poor insulation or the radiators do not give off enough heat. The constant temperature controller and concrete floor drying are special applications of the controller. (additional information about heating modes in the user manual on p. 27). After initialization, the heating mode selection can be found from the controller at "Device settings -> H1 Process settings".         Setting the valve direction for the controller         Wing EH-800 as a heating controller         Measur: channels settings         Heating mode         Radiator heating, normal >         Direction on valve         Open clockwise >         Start-up with new settings         As a default the valve opens when it is turned clockwise. If the controller is installed for a valve that opens		Heating mode Radiator heating, norma	Þ	Floor heating, no	, normal		
The controller has factory settings for normal radiator heating. Floor heating, normal: normal floor       Contant temperature controller Concrete floor drying         The controller has factory settings for normal information heating. Floor heating, damp rooms: select this when the controller only heats tiled floors (when you want a comfortably warm floor and/or a dry floor in the summer). Radiator heating, steep curve: select this when your house has poor insulation or the radiators do not give off enough heat. The constant temperature controller and concrete floor drying are special applications of the controller. (additional information about heating modes in the user manual on p. 27). After initialization, the heating mode selection can be found from the controller at "Device settings -> H1 Process settings".         Image: Setting the valve direction for the controller         Using EH-800 as a heating controller         Measur: channels settings         Heating mode         Radiator heating, normal >         Direction on valve         Open clockwise         Start-up with new settings         As a default the valve opens when it is turned clockwise. If the controller is installed for a valve that opens		Start-up with new settings	se>	Radiator heating	g, normai g, steep curvi	e	
diator heating. Floor heating, normal: normal floor       Iterating floor heating, damp rooms: select this when the controller only heats tiled floors (when you want a comfortably warm floor and/or a dry floor in the summer). Radiator heating, steep curve: select this when your house has poor insulation or the radiators do not give off enough heat. The constant temperature controller and concrete floor drying are special applications of the controller. (additional information about heating modes in the user manual on p. 27). After initialization, the heating mode selection can be found from the controller at "Device settings -> H1 Process settings".         13       Setting the valve direction for the controller at "Device settings -> H1 Process settings".         Using EH-800 as a heating controller       Image: Controller and concrete floor drying are special application of valve         Measur: channels settings       > heating mode         Heating mode       Radiator heating, normal > Direction on valve         Open clockwise       > Open clockwise         Start-up with new settings       > As a default the valve opens when it is turned clockwise. If the controller is installed for a valve that opens		The controller has factory settings for normal	ra-	Contant temper	ature contro Inving	ller	
heating Floor heating, damp rooms: select this when the controller only heats tiled floors (when you want a comfortably warm floor and/or a dry floor in the summer). Radiator heating, steep curve: select this when your house has poor insulation or the radiators do not give off enough heat. The constant temperature controller and concrete floor drying are special applications of the controller. (additional information about heating modes in the user manual on p. 27). After initialization, the heating mode selection can be found from the controller at "Device settings -> H1 Process settings". <b>Setting the valve direction for the controller</b> Using EH-800 as a heating controller Measur: channels settings Heating mode Radiator heating, normal > Direction on valve Open clockwise Start-up with new settings As a default the valve opens when it is turned clockwise. If the controller is installed for a valve that opens		diator heating. Floor heating, normal: normal floor					
Image: Second Strategy Warming of and/or a dry noor in the sammer). Inductor notating, steep earty. Second strategy explores the second strategy explores the second strategy explores the second strategy explores the second strategy earty. Second strategy earty and second		heating Floor heating, damp rooms: select this when the controller only heats tiled floors (when you want a comfortably warm floor and/or a dry floor in the summer). Bediator heating, steep curve: select					
temperature controller and concrete floor drying are special applications of the controller. (additional information about heating modes in the user manual on p. 27). After initialization, the heating mode selection can be found from the controller at "Device settings -> H1 Process settings". <b>Setting the valve direction for the controller</b> Using EH-800 as a heating controller   Measur. channels settings   Heating mode   Badiator heating, normal >   Direction on valve   Open clockwise >   Start-up with new settings   As a default the valve opens when it is turned clockwise. If the controller is installed for a valve that opens		this when your house has poor insulation or the radiators do not give off enough heat. The constant					
Importation about heating modes in the user mandar on p. 27). After initialization, the heating mode selection can be found from the controller at "Device settings -> H1 Process settings".         Importation about heating modes in the user mandar on p. 27). After initialization, the heating mode selection can be found from the controller at "Device settings -> H1 Process settings".         Importation about heating modes in the user mandar on p. 27). After initialization, the heating mode selection for the controller         Using EH-800 as a heating controller         Measur. channels settings         Heating mode       Badiator heating, normal >         Direction on valve       Open clockwise >         Start-up with new settings       >         As a default the valve opens when it is turned clockwise. If the controller is installed for a valve that opens		temperature controller and concrete floor drying are special applications of the controller. (additional					
13       Setting the valve direction for the controller         Using EH-800 as a heating controller       Image: Setting s		selection can be found from the controller at	"Dev	ice settings -> H1 P	rocess setti	ings".	
Using EH-800 as a heating controller	12	Setting the valve direction for the controller					
Measur. channels settings       >         Heating mode       Radiator heating, normal >         Direction on valve       Open clockwise >         Start-up with new settings       >         As a default the valve opens when it is turned clockwise. If the controller is installed for a valve that opens		Using EH-800 as a heating controller		🛛 🛠 Direction of val	ve		
Heating mode       Hadiator heating, normal >         Direction on valve       Open clockwise >         Start-up with new settings       >         As a default the valve opens when it is turned clockwise. If the controller is installed for a valve that opens		Measur, channels settings	>	Open clockwise			
Start-up with new settings       >         As a default the value opens when it is turned clockwise. If the controller is installed for a value that opens		Heating mode Radiator heating, norm Direction on valve Open clockwis	al> :e>	♥ Open counterclo	ockwise		
As a default the valve opens when it is turned clockwise. If the controller is installed for a valve that opens		Start-up with new settings	>				
		As a default the valve opens when it is turned	clocky	wise. If the controller	is installed f	or a valve that opens	

the counterclockwise direction. (see section 1).

Additional information on page 27 of the user manual. Changing the direction of the valve, see "Device settings".

**Valve direction**: The range of movement of boiler valves is mechanically limited to 90°. Therefore, it is easy to find the limits by turning the valve to the extreme limits using the manual control knob or axle. Sometimes it may be difficult to determine the opening direction of a 3-way valve installed in the network, e.g., if the manual control knob is missing or the scale plate of the valve is installed incorrectly. To make it easier to determine the direction, a few hints are given below for the most common mixing valves on the market.

ESBE (3MG): The slide of the valve can be turned 360°. Turn the valve all the way to the left (9 o'clock). The tapered side of the valve axle always faces toward the slide. (the branch on the tapered side is closed). Open clockwise



or accumulator

O

Boiler

TERMOMIX: The slide of the valve is always on the opposite side of the taper at the end of the axle.

If you can't get the valve turned so that the slide moves between the hot water branch and circulating water branch, the position of the valve cover must be changed. We recommend having a plumber change the direction because of the risk of water damage and burns.

The branch is completely open when it is in the same direction as the tapered side.



Using EH-800 as a heating controller Radiator heating, normal > Direction on valve Open clockwise > Start-up with new settings

Press OK. The controller will take into use the new settings which are determined by the heating mode. The new settings can be found in the controller under "Device settings".

#### The controller has now been taken into use as a one circuit heating controller.

Taking the second control circuit into use 15 Device settings > H2 Process settings H2 Process settings In use > Heating mode Radiator heating, normal > 0-10V >Actuator selection 150 s > Actuator driving time Heating curve type 3-point heating curve > The EXU-800 external unit must be in use to take the second control circuit into use. Connect the supply water sensor (strip connector 11 and ground) and the actuator (strip connector 8 (24VDC OUT), 9 (Y) and ground) of the second control circuit to the external unit. Connect EXU-800 to the controller using the RJ45-2 connection. Take the H2 control circuit into use through point H2 process settings in the controller's device settings (see user manual p. 32).

### In floor heating solutions

Name of regul. circuit

In floor heating solutions it is important to make sure that exessively hot water which could damage structures or surfaces doesn't ever get into the network. A mechanical thermostat should be installed on a supply water pipe which stops the circulation pump in case of overheating. Ouman Oy has in it's product range a surface mounted thermostat C01A.

Radiator circuit >



#### HINTS FOR FIRST-TIME USE

If room temperature measurement is not in use: At first the radiator thermostats should be turned fully open. Set the fine adjustment so that the first time there is below freezing temperatures outdoors, the room temperature stays about 1 °C higher than what you want it to be. After that turn down the radiator thermostats just enough to obtain the desired room temperature. This prevents the room temperature from dropping on windy days, because the radiator thermostats will be able to increase the heating level.

Room temperature measurement in use: Room control can, if necessary, raise or lower the temperature level of the whole house and so the small temperature increase in the network mentioned before is not needed. Also you get more even temperature control in houses with floor heating when room temperature measurement is taken into use.

Warranty: Ouman Oy has given EH-800 a three year warranty for the device. The warranty covers repair of the device at Ouman Oy:s factory and includes necessary spare parts. The warranty is not in effect if the device has been installed incorrectly or mechanically damaged. The warranty does not cover indirect or consequential loss or damages. It does not cover the cost connected with finding a fault, detaching the device, or sending or installing the device.

OUMAN OY www.ouman.fi ouman@ouman.fi Factory and Oulu sales office: Tel. 0424 8401 Voimatie 6 90440 Kempele Fax. 08 815 5060

SyxthSense Ltd 3 Topsham Units Topsham Exeter EX3 0QH United Kingdom

Tel: +44 (0)844 8403100 Email: sales@syxthsense.com www.svxthsense.com

