



Wired Digital Thermostat

Model: HTRP230



INSTALLER MANUAL

# Contents of the box

## Icons used in this manual:



Safety



Important info



Your benefit

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HTRP230 Thermostat



Fixing Screws



1 x Installer Manual

## Product Compliance and Safety Info



### **Product Compliance**

SALUS Controls hereby declares that the product complies with the essential requirements of the following EC Directives: 2014/30/EU, 2014/35/EU and 2011/65/EU. The full text of the EU Declaration of Conformity is available at the following internet address: [www.saluslegal.com](http://www.saluslegal.com).



### **Safety Information**

Use in compliance with safety regulations. The unit is to be used for the control of room temperature inside the house.



### **Installation**

This accessory must be fitted by a competent person, and installation must comply with the guidance, standards and regulations applicable to the city, country or state where the product is installed. Failure to comply with the relevant standards could lead to prosecution.

## Product Description

Thank you for purchasing the Salus HTRP230 Thermostat. This thermostat is a device that lets you customize the heating and cooling of your home as needed.

The HTRP230 device from Salus Controls is a stylish and accurate digital room thermostat that is fitted with a large easy to read LCD screen and one touch buttons. You can now simply adjust your home temperature as desired in order to create a comfortable home environment.

We hope you enjoy our product.

## Installing the unit

Install the HTRP230 digital room thermostat roughly about 1.5m above floor level. It should be mounted in a location where the thermostat is easily accessible and away from direct sunlight. You can mount the thermostat directly on the wall or you can install it on top of a wall-box.

# 1. Mounting the Thermostat



Gently remove front housing.



Without floor sensor

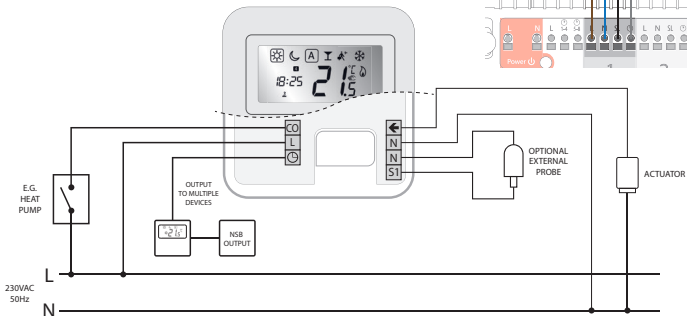
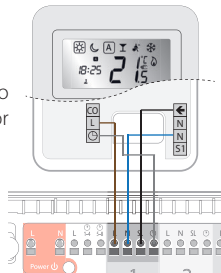


With floor sensor











## 2. Terminal Connection









**Note:** You can wire the thermostat directly to the KL08NSB wiring centre or to an actuator (purchased separately).



### 3. Thermostat Icons





	BOX means to select mode. e.g.  means Hi temp is selected  means the Hi temp is not selected.
	Sunny: Hi comfortable temperature
	Moon: Low comfortable temperature
	Indicates AUTO ON or AUTO OFF
	Indicates that the Party Mode is active
	Indicates that the Holiday Mode is ON.
	Frost Protection Indicator: Frost protection is active, not available in cooling mode.
	Heat Mode indicator: Indicates heating is running

## 4. Thermostat Icons Continued

	Cool Mode indicator: The icon is flashing when cooling mode is active
	Temperature indicator • Display the room temperature • Display the set temp
	Temporary override indicator: The hand will appear until the next programs starting time.
	Programs number indicator.
	Indicates the time.
	Indicates the the day of the week



## 5. Button Functions

	Mode selection. Long press to return home without saving.
	OK key. Short press to confirm selection. Long press to save and return home. Long press to enter Temperature offset Heat/Cool.
 OR 	Decrease or increase Setpoint Temperature.

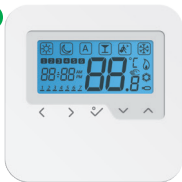


Note: LCD backlight is activated by pressing any key.

## 6. Setting Date and Time

When you first power up your device you will have to set up the date and time.

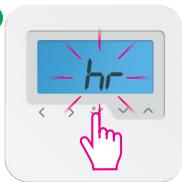
1



2






3



Press  to confirm.

4



Press  or  to choose 12/24 hr then press  to confirm.

## 6. Setting Date and Time

5






Set the hour  
by using






6



Set the minutes  
by using  or .  
Press  to  
confirm.




7




Set the date  
using the   
or . Press  
 to confirm.

8



**Note:** You can access the date and hour by long pressing . After that press   
and  to confirm.

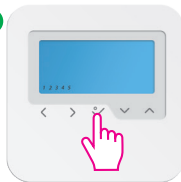
## 7. Setting Your Programs

You can customise your programs by long pressing  when on the program screen.

1






2

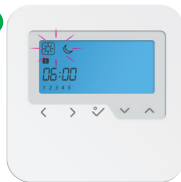







3



Set the hour using  or . Press  to confirm. Repeat the procedure for setting the minutes.

4



Select the desired program  or  by pressing  or . Press  to confirm.



**Note:** If you want to select another Program Profile (from the available 5), please enter in Installer Mode, choose option d17 and after that select the desired program.

## 7. Setting Your Programs

You can select and customise any of the following programs:

### Program Profile 1

5 days (Monday to Friday)			
Program	Program Time	Heat set point	Cool set point
1	6:00	Sunny	Sunny
2	9:00	Moon	Moon
3	16:00	Sunny	Sunny
4	23:00	Moon	Moon
5	--:--	--:--	--:--
6	--:--	--:--	--:--

2 days (Saturday to Sunday)			
Program	Program Time	Heat set point	Cool set point
1	7:00	Sunny	Sunny
2	23:00	Moon	Moon
3	--:--	--:--	--:--
4	--:--	--:--	--:--
5	--:--	--:--	--:--
6	--:--	--:--	--:--

## 7. Setting Your Programs

### Program Profile 2

5 days (Monday to Friday)			
Program	Program Time	Heat set point	Cool set point
1	6:00	Sunny	Sunny
2	22:30	Moon	Moon
3	--:--	--:--	--:--
4	--:--	--:--	--:--
5	--:--	--:--	--:--
6	--:--	--:--	--:--

2 days (Saturday to Sunday)			
Program	Program Time	Heat set point	Cool set point
1	7:00	Sunny	Sunny
2	23:00	Moon	Moon
3	--:--	--:--	--:--
4	--:--	--:--	--:--
5	--:--	--:--	--:--
6	--:--	--:--	--:--

## 7. Setting Your Programs

### Program Profile 3

5 days (Monday to Friday)			
Program	Program Time	Heat set point	Cool set point
1	5:00	Sunny	Sunny
2	8:00	Moon	Moon
3	14:00	Sunny	Sunny
4	22:00	Moon	Moon
5	--:--	--:--	--:--
6	--:--	--:--	--:--

2 days (Saturday to Sunday)			
Program	Program Time	Heat set point	Cool set point
1	7:30	Sunny	Sunny
2	22:30	Moon	Moon
3	--:--	--:--	--:--
4	--:--	--:--	--:--
5	--:--	--:--	--:--
6	--:--	--:--	--:--

## 7. Setting Your Programs

### Program Profile 4

5 days (Monday to Friday)			
Program	Program Time	Heat set point	Cool set point
1	6:00	Sunny	Sunny
2	9:00	Moon	Moon
3	15:00	Sunny	Sunny
4	22:30	Moon	Moon
5	--:--	--:--	--:--
6	--:--	--:--	--:--

2 days (Saturday to Sunday)			
Program	Program Time	Heat set point	Cool set point
1	7:30	Sunny	Sunny
2	23:00	Moon	Moon
3	--:--	--:--	--:--
4	--:--	--:--	--:--
5	--:--	--:--	--:--
6	--:--	--:--	--:--



## 7. Setting Your Programs

### Program Profile 5

5 days (Monday to Friday)			
Program	Program Time	Heat set point	Cool set point
1	6:00	Sunny	Sunny
2	10:00	Moon	Moon
3	16:00	Sunny	Sunny
4	23:00	Moon	Moon
5	--:--	--:--	--:--
6	--:--	--:--	--:--

2 days (Saturday to Sunday)			
Program	Program Time	Heat set point	Cool set point
1	7:30	Sunny	Sunny
2	23:30	Moon	Moon
3	--:--	--:--	--:--
4	--:--	--:--	--:--
5	--:--	--:--	--:--
6	--:--	--:--	--:--

## 8. How to reset the thermostat



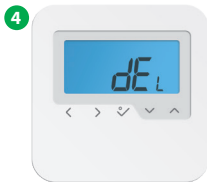
Press the indicated keys together for 3 seconds.



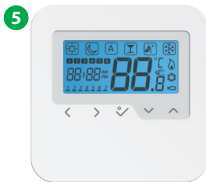
Select P47 if you want to reset to factory settings.



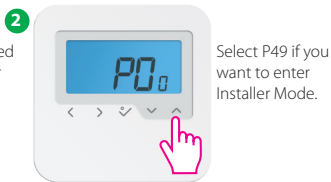
Press  to confirm.



Press  to confirm.



## 9. Installer Mode



**Note:** This function allows you to customise your thermostat as you desire. In order to do this please consult the tables on the next pages.

## 10. Functions explained

dx	D setting function	Parameter/ Values	Definition	Default value
d01	Heating Control	0	PWM (Pulse-width modulation)	0
		1	ON-OFF: 0.5C ( $\pm 0.25^{\circ}\text{C}$ )	
		2	ON-OFF: 1.0C ( $\pm 0.5^{\circ}\text{C}$ )	
d02	Room temp. offset	-3.0°C to +3.0°C	Offset room temp measuring error (in 0.5°C)	0.0°C
d03	OUT sensor probe (S1/S2)	0	Out sensor probe not connected	0
		1	Out sensor probe connected	
d04	Air sensor or Floor sensor	0	A: if d03 = 0, IN sensor controls Tr A: if d03 = 1, IN disabled and OUT controls Tr	0
		1	F: if d03 = 0, IN sensor controls Tr F: if d03 = 1, IN disabled and OUT controls Tr Floor Protection	
d05	Cooling Control	1	ON-OFF: 0.5°C ( $\pm 0.25^{\circ}\text{C}$ )	2
		2	ON-OFF: 1.0°C ( $\pm 0.5^{\circ}\text{C}$ )	
d07	Valve Protection	0/1	0 = VP disabled 1 = Enable	1
d08	Frost Setpoint	5°C-17°C		5.0°C

## 10. Functions explained

d09	12/24 Hour Format	0	12hr	1
		1	24hr	
d11	Daylight Saving Time (DST)	0	Off	1
		1	On	
d12	Maximum limitation of heating setpoint	5°C - 35°C		35°C
d13	Maximum limitation of cooling setpoint	5°C - 40°C		5°C
d14	Floor sensor protection limit (heating high limit-HL)	11°C - 45°C	Turn off relay output when floor sensing temp > protecting limit, step is 0.5°C	27°C
d15	Floor sensor protection limit (heating low limit-LL)	6°C - 40°C	Turn on relay output when floor sensing temp < protecting limit, step is 0.5°C	10°C
d16	Floor sensor protection limit (cooling)	6°C - 45°C	Turn off relay output when floor sensing temp < protecting limit, step is 0.5°C	6°C

## 10. Functions explained

d17	Preset program selection	1-5	Select one of these 5 default programs. Once selected, default program will overwrite present program. Selected default program can be edited by the user in the User Setting Mode.	1
d18	Heat/Cool Mode Selection	0 or 1	0: No connection 1: Connection	0
d19	Cooling Blocked	0 or 1	0: Cooling allowed 1: Cooling disabled	0
d20	Actuators loading selection for different temperature compensation.	1 to 5	1: x 1 actuator loading    2: x 2 actuators loading 3: x 3 actuators loading    4: x 4 actuators loading 5: x 5 actuators loading	1

## 11. Cooling Blocked

When the thermostat is set on Cooling Disabled (d19-->1) it will block the cooling function for single rooms until the device will receive the heating command. During the periods of cooling blocked no special indicator will be displayed on the LCD screen. Ice flake will also be turned off.



**Note:** d19 will be available only if d18 is set on 1 (Heat/Cool Mode selection Connected).

## 12. Party Mode

1



Press or to select Party Mode.

2



Press or to select the time for Party Mode.

3

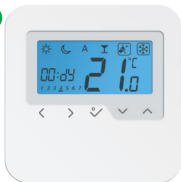




The maximum time allowed on the Party Mode is 9 h 50 min and can be set from 0-10 min.

If you want to exit Party Mode, press or to move the (box) to a different program. Once Party Mode ends the countdown automatically resets to 0.

## 13. Vacation Mode



1



Press  or  to select Vacation Mode.

2



Press  or  to select the number of vacation days.






**Note:** Vacation Modes ends when it reaches day 0. After that the device goes back to Auto Mode.

## 14. Frost Mode




1



Press  or  to select Frost Mode. Press  to confirm.

2




Press  or  if you want to change the Frost Mode temp. Press  to confirm.



## 15. Temperature Offset

1



Long press  in order to enter Settings Mode.

2



Press  to enter Setting Mode.

3




Press  or  in order to set the Temperature Offset.

4



5



The Temperature Offset can be set at any value between  $-3^{\circ}\text{C}$  and  $+3^{\circ}\text{C}$ . Press  to confirm.

## Technical Specification

Model:	HTRP230
Voltage	230 V AC, +10%, 50/60 Hz
Operating performance	230 V: 1,8 W
Temperature setback	Adjustable
Temperature range	5°C – 35°C
Span	+/- 0,5°C
Storage temperature	-20°C to +60°C
Ambient temperature	0 °C up to 45 °C
Degree of protection	IP 30
CE conformity according to	Class II ( EN60730 )
Housing material	PC, V2
Color	RAL 9010 pure white
Connection	Screw terminal
Weight	125 g net / 170 g gross
Puls-wide-modulation (PWM)	Yes
Clock, Timer	Yes, programmable
Profile Modes	3 ( Sun, Moon, Automatic)
Heating and Cooling	Yes, automatically Change Over on the Wiring Centre
Parameter adjustment	Yes, in Installer Mode
Dimensions	85mm*85mm*25mm

## Warranty

SALUS Controls warrants that this product (HTRP230) will be free from any defect in materials or workmanship, and shall perform in accordance with its specification, for a period of five years from the date of installation. SALUS Controls sole liability for breach of this warranty will be (at its option) to repair or replace the defective product.

Customer Name: .....

Customer Address: .....

.....

..... Post Code: .....

Tel No: ..... Email: .....

Engineers Company: .....

Tel No: ..... Email: .....

Installation Date: .....

Engineers Name: .....

Engineers Signature: .....

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