

# Large LCD screen smart thermostat

- √ Customized exclusive temperature plan up to 6 events allowed to set per day
- √ Sail shape design-delicate and elegant
- √ Large LCD screen-better user experience
- √ 485 modbus and room card linkage customized equipment (optional)

#### Parameter

Supply voltage	AC100~240V;50~60Hz
Power consumption	1W Max (Wi-Fi 3W Max)
Temp. setting range	5~95°C (41~99°F)
Floor limited range	20~90°C (68~99°F)
On/off deviation	0.5~10°C(1~10°F), Factory setting ±1°C
Ambient temperature	-5~50°C (23~122°F)
Protection level	IP20
Shell material	Anti-Flammable PC

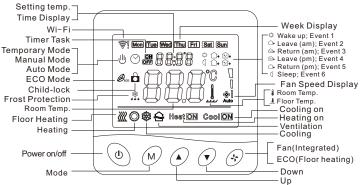
Version:R3 1.3(04/2021)

#### **Product Overview**

This series of thermostat has Floor Heating, Fan Coil, and Integrated version, meeting the requirements under different scenarios.

Version	System mode	Model	Application	
Floor heating		716	Built-in & floor sensor, floor limit sensor + Weekly programming	
	Heating	703	A NC/NO dual-output + Weekly programming	
		723	A NC/NO dual-output + Weekly programming Potential-free output	
Fan Coil	Heating /Cooling /	743	Timer task + 2-pipe system	
	Ventilation	843	Timer task + 2-pipe system + 485Modbus (optional)	
		853	Timer task + 4-pipe system + 485Modbus (optional)	
Integrated	Heating / Cooling / Ventilation/Floor heating / Floor heating + Heating	963	Floor heating & fan coil, weekly programming + Potential-free output + Timer task + 485Modbus (optional) + Door card (optional)	

## **Display Symbols**



### Temperature Control Mode(Floor Heating/Integrated)

# Auto Mode

Weekly-circled programme, up to 6 heating events can be set per day. Heating events, workdays and temperature can be separately customized based on personal routines.

## 

Thermostat works based on manually-set temperature, disconnecting from auto mode.  $\label{eq:constraint}$ 

### 

Thermostat works based on manually-set temperature temporarily and then shifts back to auto mode till next event.

#### **User Operation**

Power on/off: Press "()" shortly to turn on/off the thermostat.

Auto-mode: Press "M" for 3 seconds to edit auto-mode settings. (Floor Heating/Integrated)

Time task: Press "-f-" for 3 seconds to edit timer task. (Integrated)
Time setting: Press "-f-" for 3 seconds to set time. (Floor Heating)

Press "4" twice for 3 seconds to set time. (Automatic time synch for Wi-Fi version)

**Temp setting:** Press "▲" or "▼" shortly to change setting temperature by 0.5°C.

Child-lock: Press "▲" + "▼" for 3 seconds to activate child-lock.

 $\begin{tabular}{ll} \textbf{System mode:} & Press "M" shortly to switch cooling/heating/ventilation (Fan Coil/Integrated) \\ & Press "M" shortly to switch cooling/heating/ventilation/floor heating/floor \\ \end{tabular}$ 

heating + heating. (Integrated)

Temp control mode: Press "M" shortly to switch manual/auto mode. (Floor heating)
Press "♣," shortly to switch manual/auto mode. (Integrated, floor heating)

Fan speed setting: Press "Ja" shortly to adjust fan speed.(Integrated)

**ECO mode:** Press "-" shortly to set to ECO mode 18°C(65°F). (Floor heating)

## Auto-mode Setting (Floor Heating/Integrated)

Press "M" for 3 seconds to edit auto-mode setting.

			Time		Temperature		
Events		Symbols	Default value	Modify	Default value	Modify	
Workdays	1	✡	06:00	Droop	20°C (68°F)	Droop	
	2		08:00	Press	15°C (59°F)	Press	
	3	<b>₩</b> +	11:30	" ▲ "	15°C (59°F)	"▲"	
	4	<b>№</b>	12:30	or	15°C (59°F)	or	
	5	Û∙	17:00	0,	22°C (72°F)	51	
	6		22:00	"▼"	15°C (59°F)	" ▼ "	
Weekends	1	✡	06:00	, i	20°C (68°F)	ı i	
	2		20:00		20°C (68°F)		

#### Advanced Setting (Usually for Professional Technicians)

Under power-off, press "M" for 3 seconds to enter advanced setting mode, then re-press "M" to switch to pext mode. Press "(1)" to save and exit advanced setting mode.

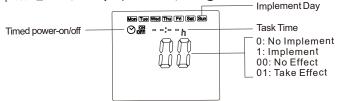
Code	Meaning	" A " " — "	Default Value	Integrated	Fan Coil		Floor Heating	
		" ▲ " or " ▼ "		963	843 853	743	730/716/723	
00	Postal address	Adjustment range 0x00~0xFA	00	<b>√</b>	√	×	1	
01	Temp. calibration	-9. 9~9. 9°C (-9~9°F)	−3°C	1	7	7	1	
02	Dead zone	0.5~10°C (1~10°F)	±1°C	1	1	7	1	
03	Temp. upper limit	5~95°C (41~99°F)	50°C	1	7	7	√	
04	Temp. lower limit	5~47°C (41~99°F)	5°C	√	4	<b>√</b>	√	
05	Frost protection	ON: frost protection on OFF: frost protection off	OFF	4	7	<b>√</b>	1	
06	Temperature unit	°C/°F	°C	<b>√</b>	7	7	1	
07	Sensor selection	IN: Controlled by built-in sensor OUT: Limited by floor sensor ALL: Controlled by built-in sensor and limited by floor sensor	IN	4	×	×	4	
80	Floor limited temp.	20~90°C (68~99°F)	35°C	4	×	×	1	
09	Weekly programming setting	12345: 5/2 week mode 123456: 6/1 week mode 1234567: 7/0 week mode	12345	4	×	×	4	
10	Status of potential -free and main power outputs	00: both outputs are normally open 01: main power output is normally closed; potential-free output is normally open 02: both outputs are normally closed 03: both outputs are normally closed, under power-off, frost protection is off either	00	<b>~</b>	×	×	4	
11	Delay time of outputs	0~5min	0	√	×	X	<b>√</b>	
	Child-lock	O: Child-lock inactivate when screen off, lock all when child-lock activate O1: Child-lock activate when screen off, lock all when child-lock activate O2: Child-lock activate when screen off, lock all except Fan Speed, Up and Down when child-lock activate O3: Child-lock activate when screen off, lock all except Power on/off when child-lock activate	00	<b>√</b>	<b>√</b>	4	1	
13	Power-on-reset	00: stay power-off after Power-on-reset 01: stay power-on after Power-on-reset 02: recovery after Power-on-reset	02	4	7	7	✓	
14	Door card status	00: turn off door card function 01: set to ECO temp. after pulling door card out 02: stay power-off after pulling door card out	00	<b>~</b>	7	×	×	
15	Door card heating ECO temp.	10~21°C (50-69°F)	18°C	4	7	×	×	
16	Door card cooling ECO temp.	22~32°C (72-89°F)	26°C	4	4	×	×	
17	Fan coil mode setting	00: Cooling and heating 01: Cooling only	00	4	7	7	×	
18	Weekly programming for Integrated	00: turn on 01: turn off	01	4	×	×	×	
19	Reset	Press "▲"for 3 seconds to reset		-√	-√	7	1	

#### Sensor failure

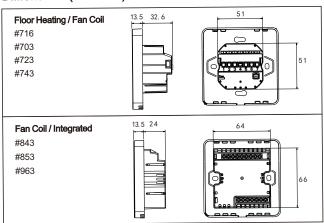
Please select work mode of sensors correctly. When it shows E0/E1 error, thermostat will stay power-off till the error is eliminated.E0: built-in sensor is short-circuited or disconnected. E1: floor sensor is short-circuited or disconnected.

## Timer Task Setting (Fan Coil/Integrated)

Press "-" for 3 seconds to enter timer task setting; press "M" to change settings; press " ▲ " or " ▼ " to adjust parameters; press "(1)" to save and exit.

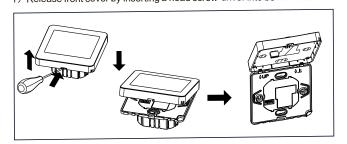


### Dimensions (Unit: mm)

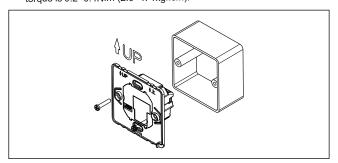


### **Mounting Steps**

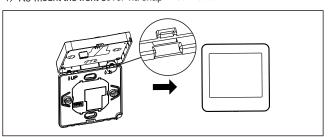
The thermostat adopt pre-guide and limited snap-fit design. It is easy to mount. 1) Release front cover by inserting a head screw-driver into bottom crack.



- 2) Insert the wires and then fix these wires with screws. Suggested wire-stripping length is 7-9mm.
- 3) Mount backing plate into wall-cassette, put screws and then fix thermostat. Make sure that the thermostat is fixed without deformation. Suggested torque is 0.2~0.4N.m (2.0~4. 1kgf.cm).

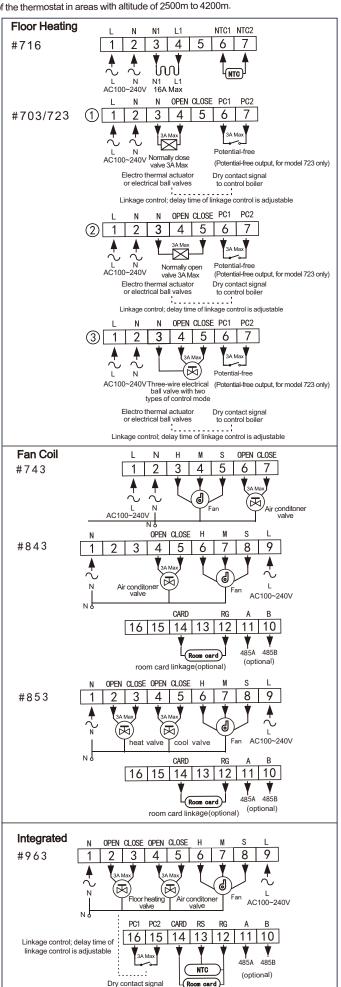


4) Re-mount the front cover via snap-fit connection.



#### **Connecting Diagram**

The thermostat operates in full capacity in areas with the altitude of less than 2500 above sea level. Power rating of external load should be less than or equal to 80% rated power of the thermostat in areas with altitude of 2500m to 4200m.



(Room card)

room card linkage(optional)

to control heat pump