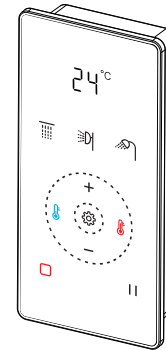


Renovation Mart

USER'S MANUAL

Digital Controller

Digital Control Valve - B



Contents

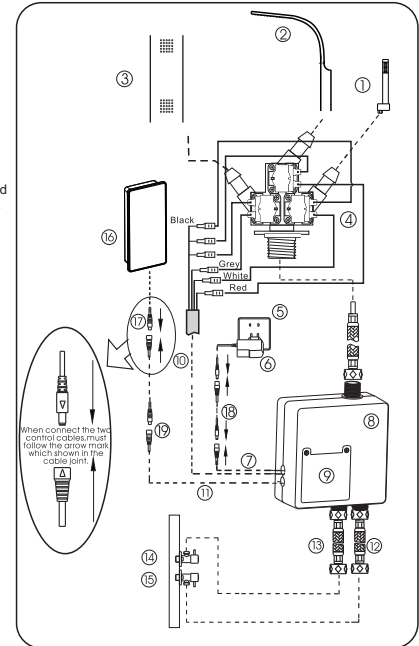
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Digital controller installation

Thank you for choosing our digital thermostat shower controller !

This is an digital thermostat shower controller. You can set the outlet water TEMP & water flow on touch panel as you like. Outlet water keep thermostatic TEMP. Complete set including the touch panel, host box and adapter.

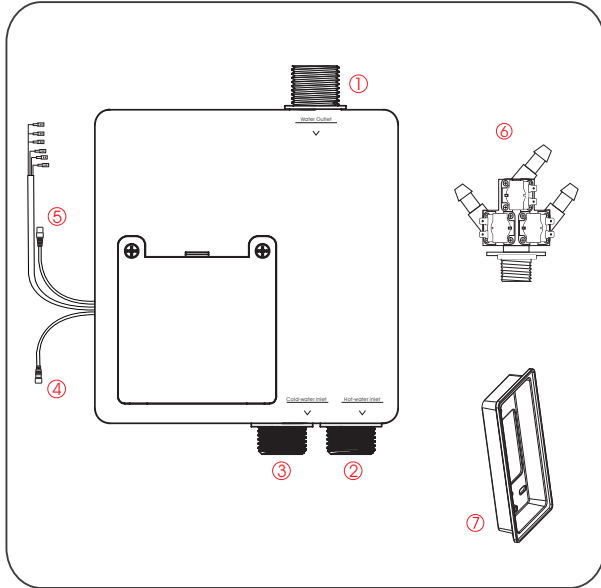
- ① Hand shower
- ② Overhead shower
- ③ Bath/Body jet
- ④ 3ways water outlet valve
- ⑤ AC100-240V plug seat
- ⑥ Power adapter
NOTICE: The power adapter should be installed to where there is no water.
- ⑦ Power supply cable of the host box
- ⑧ Host box
- ⑨ Battery cover
- ⑩ Spray control cable
- ⑪ Control cable of the host box
- ⑫ Hot water inlet
- ⑬ Cold water inlet
- ⑭ Cold water switch
- ⑮ Hot water switch from water heater
- ⑯ Control panel
- ⑰ Control panel's control cable
- ⑱ Power trunk
- ⑲ Control cable of the host box



A. Structural drawing

The host box has hot water inlet, cold water inlet, mix water outlet & 3ways, water outlet valve, the control cable, power supply cable, battery cover and bracket.

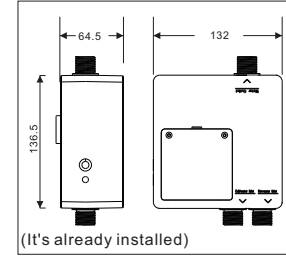
see picture as below:



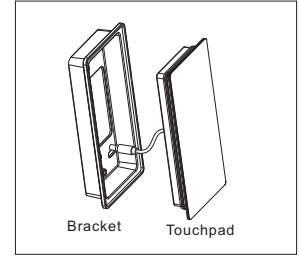
- ① mix water outlet
- ② hot water inlet
- ③ cold water inlet
- ④ The control cable
- ⑤ power supply cable
- ⑥ 3way water outlet valve
- ⑦ The control panel installation bracket

B. Digital controller component list

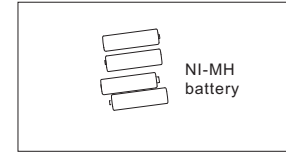
Host box (1 pcs)



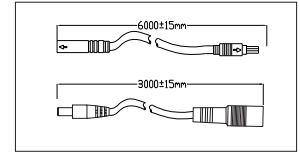
Control panel (1 pcs)



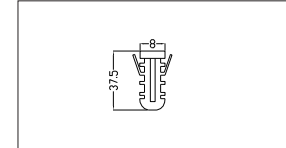
The host box battery (4 pcs)



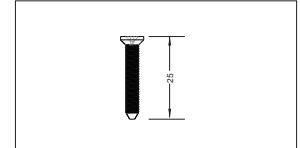
Computer midline (2 pcs)



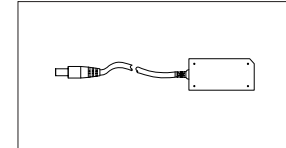
Rubber plug (4 pcs)



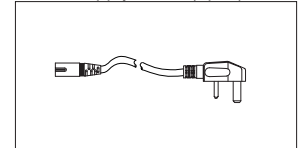
ST4x25 screws (4 pcs)



Power adapter (1 pcs)



Power supply cable (1 pcs)

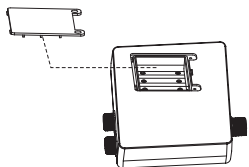


C.Host box battery installation

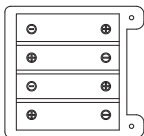
Note:

1. 4 pcs of rechargeable batteries are already pre-installed in the host box, so no need to install them on initial installation of the shower panel;
2. When used over time and the batteries get aged, the change of batteries should follow the below instructions.

1. Loosen the screws on the battery cover and take it off.

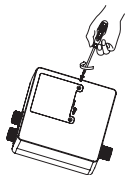


2. Putting 4 pcs rechargeable batteries into the battery slot of host box.



Attention:
When putting the battery into the host box, you need to identify the anode and the cathode.

3. Insert the battery cover into the host box, and lock it with the screws.



Caution:

- A) Using rechargeable NI-MH battery [the 5#(AA) and the capacity is more than 1000Mah].
- B) After electrify, forbid using the normal 5#(AA) battery. Otherwise, would cause the battery explosion.
- C) When the power cut, you can use the high quality normal 5#(AA) dry battery as the emergency measure. But you must unplug the adapter.
- D) When you install the host box, please put the battery into it. If the product haven't connected with the power in a long time. Please take out the battery from the host box. This way can avoid affect the battery working life.
- E) If you want to the battery with a longer working life, you can charge the battery every some months.

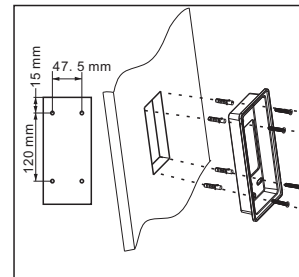
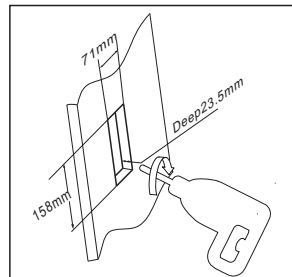
D.Recess mounted the control panel into wall

Step 1 Open a slot in the wall for the control panel

Note: This place might be pre-selected when installing the back cover of the shower panel and embedding the Control cable of the host box, making sure the cable could then be connected with the control panel inside the slot.

Refer to Installation of back cover in this manual.

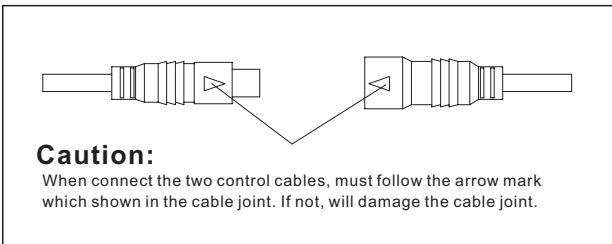
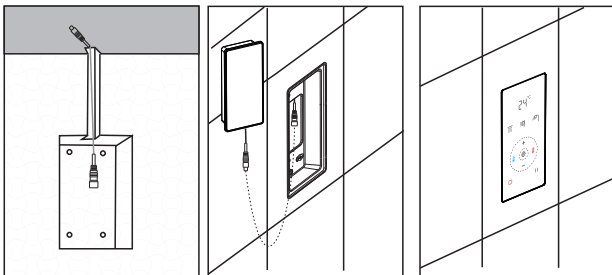
Step 2 Drill 4 holes by diameter 6mm inside the slot for installation of the control panel wall bracket (as the picture) and then put the wall plugs into the holes.



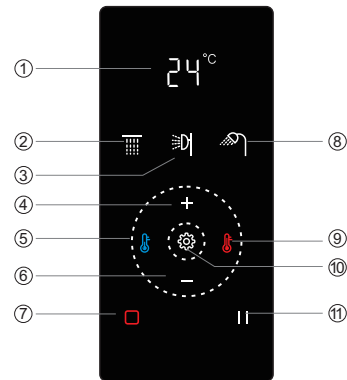
Step 3 Put the control panel wall bracket inside the slot and then fasten with screws, making sure the rack is level with the wall surface (ceramic tile) or 0.5-1mm lower than the wall surface.

Step 4 Connect the control cable of the host box that previously embedded to the control panel properly. See below drawing.

Step 5 Put control panel onto the bracket in the slot to faster it and complete .



Operation Instruction



- | | |
|--------------------|----------------|
| ① Display | ⑧ Hand shower |
| ② Overhead shower | ⑨ TEMP add key |
| ③ Bath/Body jet | ⑩ Set key |
| ④ Add key | |
| ⑤ TEMP minus key | |
| ⑥ Minus Key | |
| ⑦ ON/OFF key | |
| ⑧ Hand shower | |
| ⑨ TEMP add key | |
| ⑩ Set key | |
| ⑪ Shower pause key | |

Notice

1. The control panel is sensitive, when install it, please avoid to let it face directly to the water from hand shower and the head shower, because water will get it mis-operation or lock the control panel.
2. The touch button is the best sensitive area.
3. The touch panel has water splash protection technology. When system detect mis-operation, no response and need about 1 second to recover.

Function


1. Water TEMP display and setting
2. Water flow display and setting
3. Timing display and setting
4. Spray mode selection


Operation

1. Standby


After electrify, when all the functions are off, system will enter into standby mode automatically, and display would be off.

2. Power on

When under standby mode, shortly press  to enter into system, display will show the current water TEMP, The first boot effluent setting temperature defaults to 38°C, while default water flow the maximum flow is L8.

The power on default mode is hand shower, and the backlit is  bright while the backlit of other sprays are dark. To choose another shower mode after power on, in power off 20 minutes to boot. Otherwise it will still use current shower mode to open the water. When it power off over 20 minutes or the system is cut off the electricity, the system will recover to hand shower mode.



3. Power off



After booting, the system starts the countdown according to the set boot time; system will be off automatically when timing countdown to "0" or shortly press  key.

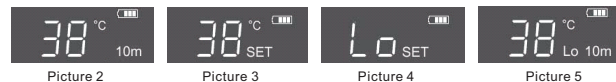
4. Lock


After power on, without any operation in 20 seconds, it will enter lock state. Display show , in addition  and  key, other key without any response. Press shortly  to unlock.

5. Water TEMP display and setting


When system is on, the default water TEMP is 38°C, display will show the current water TEMP, shows as picture 2. If Shortly press  or , it will enter into water TEMP setting mode with "SET" on, shows as Picture 3. At this

moment, if shortly press water TEMP minus key  for one time, water TEMP will decrease by 1°C. if shortly press water TEMP add key  for one time, water TEMP will increase by 1°C. When no operation on water TEMP adjustment within 3 seconds, it will exit water TEMP setting mode. Water TEMP setting range is 25°C ~48°C. Set temperature will be save in the system, the next boot the system automatically calls the save set temperature (save the setting temperature is not affected by power system).







After water TEMP adjust as 25°C, if shortly press water TEMP minus key  for one time, it will enter into cold water mode, shows as picture 4. When exit TEMP setting, if it is cold water mode now, display will show cold water mode with "Lo", shows as picture 5.

6. Cold water mode

Close hot water for the cold water mode, fitted only open the cold water inlet. After turn on cold water mode, shortly press  will exit cold water mode and return to the former thermostat water TEMP. TEMP will be 25 °C.




Power off when it is cold water mode, the system will automatically quit out. Power on again the system will recover the default thermostat TEMP 38 °C.

7. Water flow display and setting

When system is on, shortly press  and  key to set the flow. As picture 6 show, Water flow rate is set by water flow level. if shortly press  for one time, it will decrease by 1 level; if shortly press  for one time, it will increase by 1 level. When no operation on water flow adjustment within 3 seconds, it will exit water flow setting mode and show as the current water TEMP. Water flow setting range is 1~8 level. When you have finished setting up the effluent, the effluent grade will be save automatically. Next boot time will transfer the save effluent grade. Not use the default anymore.



8.Power on time setting

In the state of power on, shortly press  the system will change to power on time setting mode. Display show as figure 7. Shortly press  to increase 1 minute, shortly press  to decrease 1 minutes. Without any operation within 3 seconds , it will quit the setting. It will be saved the time after power on. Power on time setting range:1—60minutes. The default power time is 30 minutes.



Picture 7




9.Overheat protection





When system is on, if outlet water TEMP is over 49°C and last for 3 seconds, system will shut down automatically. LCD screen display overheating protection tips and according to the current temperature cycle 1 second intervals, as pictured 8.



Picture 8

10.Spray mode selection

When system is on, shortly press  to enter into overhead shower mode, while the backlit of overhead shower is bright, shortly press  to enter into bath/body jet mode, while the backlit of body jet is bright; shortly press  to enter into hand shower mode, while the backlit of hand shower is bright. The backlit of spray mode which is not selected is dark.


When start spray, shortly press , the current spray will be suspended, and the backlit of the current spray will be flashing; at this moment, if shortly press  or shortly press the current flashing spray key (for example, if suspended , press  again) will restore the current spray water outlet; if it is in suspended state, shortly press other spray button, it will switch to other spray mode and let the water out.

11.Battery

On systems with batteries, when mains power supply when the battery charging status, only when the battery power, in the display area the upper right corner of the battery, when the mains power supply, battery power or the system without battery, the battery icon is not shown. When the battery power appears low battery, The electric



Picture 9

icon is flash. As shown below picture 9. When the electric is low than grade 1. The icon shows  the lowest state When you detect the lowest electricity after 5 seconds. The system will off automatically.

12.Fault indicator

On the screen shows "EE", it means connection failure. Please check the connection panel with the host communication lines.

13.Technical Parameters

Rated Working condition and characteristic					
Rated voltage	AC100-240V	Frequency	50/60Hz	Rated power	10W
Insulation resistance	>20MΩ	Waterproof rating	IPX5		

Load parameters				
Loads	Rated voltage	Frequency	Rated power	Other
Switching solenoid valve	DC12V	-	5W*3	-
Flow valve	DC5V	-	1W	-
Thermostat valve	DC12V	-	2W	-

Notice:

1. Working water pressure is 0.1MPa-0.6MPa.

Please install a water pressure release valve if water pressure more than 0.6MPa.

2. Our shower controller don't have heater function, it should be using with water heater. Max. water TEMP accepted is 85°C. If not necessary, we suggest you to adjust the water outlet TEMP from the heater to be 65°C lower.

Caution :

a. If working with the electric instant water heater or the gas water heater, hot water TEMP from heater can not set higher than 5°C than the preset water TEMP on the panel.

b. After electrify, the system can charge the rechargeable NI-MH 5#(AA) battery automatically. The rechargeable NI-MH 5#(AA) battery would use out after long time delivery, please put the battery as instruction and charge it after electrify the system.

3. To be safe, please touch water TEMP by your hand to make sure ok before bath.

4. Forbid to use the normal 5#(AA) dry battery. Otherwise, it will cause the battery explosion.

Trouble Shooting

Problem	Possible Reasons	Solution
Water flow low	Setted water flow too low	Set higher water flow
	Low water pressure	Check the water supply
	The faucet outlet use the water flow limit design	Needn't to solve
Outlet water TEMP is lower than the display TEMP	Water outlet pipe is too long, lead the TEMP cold down	Shorter the pipe between the mixer and the shower faucet
	The TEMP haven't been adjusted steady	Please wait the TEMP adjust steady
	Set the water flow too low	Needn't to solve
	Water TEMP from heater is cold	Increase water TEMP from heater
	Malfunction on host box	please contact the factory
Outlet water TEMP is higher than the display TEMP	The TEMP haven't been adjusted steady	please wait the TEMP adjust steady
	The running water TEMP is higher than the setting TEMP	Needn't to solve
	Malfunction on host box	Please contact the factory
Response time of TEMP adjust is slow	Low water flow	Needn't to solve
	Long time not use the hot water, cold down in the pipe and the hot water pipe is too long	Shorter the pipe distance between the heater and the faucet and so you can drain the cold water in pipe quickly
	Malfunction on host box	Please contact the factory
Overheat alarm	No cold water supply	Check the cold water supply pipe, fix problem before turn on shower faucet
	Malfunction on host box	Please contact the factory
The touch button not sensitive	Too much water on touch panel	Clean the water
Outlet water TEMP is not stable when product work with instant water heater gas heater or the centralized heating system because heater not work always	The electric instant water heater and the gas water heater's can not work if water flow low than it's default value	1. For gas heater or instant heater, it won't work for low water pressure. Set almost same water TEMP of gas heater and instant heater as that setted. 2. Increase the water flow.