

EURO-JP Manual



TIME SETTING UP AND TIMER

BASIC MOTIONS

Present Time Set: By touching HOUR or MIN button on the front panel for one time, the screen indicating the present time on the upper part flickers.

At this time, change the hour or minute by using key “hour key” or “min key” .

(In setting up, if there is no change for 3 sec., the present day of the week and time is set and flicker is cancelled.)

Set of present day of the week : By touching the DAY button for one time, the present DAY lamp flickers.

For changing DAY, use ∨ or ∧ button on the left.

(In setting up, if there is no change for 3 sec., the present day of the week and time is set and flicker is cancelled.)

TIMER SETTING UP

By touching Pgm button, after the signal of “- - -” on the time display screen flickers for 2 times, the signal of “00:00” is displayed and ON time lamp flickers. At this time, set ‘ON’ time and touch PGM button once again. Then ‘OFF-t’ lamp flickers and “00:00” is displayed. At this time, after setting “OFF” time, touch PGM button once again. In the same way it is possible to set TIMER for 5 times (max.) a day (ON/OFF Time)

In case of changing the DAY after inputting TIME, touch PGM button when “00:00” flickers in the state of not setting TIME, then the present DAY lamp is changed to the next DAY and flickers. In the same way, it is possible to change the timer for a week.

TIMER CONFIRMATION

By touching PGM button, the existing DAY and TIME are displayed. From the flicker of On time and Off time lamp, it is possible to distinguish and change ON/OFF time. By touching PGM button, it is possible to refer since the next TIME and DAY are displayed.

DELETION OF TIMER

Whenever Clear button is touched, Timer Mode and No Timer Mode are changed by turns. In case of OFF-ON Power, the existing TIMER Mode starts to run. For canceling permanently, touch “ Clear ” button for 3 sec., the timer data is deleted with the sound of buzz.

TIMER motion is set based on the unit of a week. In case of setting only ON time, the motion of ON time is continued till the DAY set ON time and on the contrary in case of setting only OFF time, the motion of OFF time is continued the DAY set OFF time.

MODE SETTING UP AND CHANGE

MODE SET

euro-jp motion method is divided into the method of Temp Sensing Sensor and motion method according to Timer Set Value. As the method of mode set, by touching √ or ^ button for Temp Set for 3 sec, the signal of “tn” is displayed on the present Temp Screen. At this time, by touching √ button for one time, the signal “ En” is displayed. By touching √ or ^ button for one time, detailed change value is displayed. After finished all steps for Temp Value Set in good order, the present Temp is displayed and works again.

SENSOR MODE (En)

As basic motion method, the motion of ON/OFF is depended on the comparison between SET TEMP and floor /indoor Temp sensed by sensor. By sensing the indoor temp, heat power is ON/OFF. If another sensor is installed on the floor, in case the floor sensing temp is over the set temp, the heat power is shut off at once.

TIMER MODE(In)

In connection with the motion of TIMER MODE, the heating power is controlled automatically according to ON/OFF time saved inside of controller. Basic time is fixed and it is possible to change detailed cycle and step.

METHOD OF TEMP MODE SET IN DETAILS

By pushing the temp set ▼ , ▲ button simultaneously for 3 sec, “Stn” the signal of FUNCTION start is displayed. By touching ▲ button in the state that Stn is displayed, the display is conducted in the order of En – In. In case that En is displayed on the screen, touch ▼ , ▲ button simultaneously for one time once again. All processes are over in the same way, the present TEMP is displayed and the changed set value is running.

METHOD OF TEMP MODE SET IN DETAILS

Role	Display	Range of SET	Basic SET	Motion Description
Motion Mode Selection	SEn – tIn	Sensor Mode – Timer Mode	SEN	Motion according to the sensor sensing temp / Repeated On/Off motion according to the fixed time
Min Temp Set	t - L	-20℃ ~ under max temp	0℃	Set the lowest temp within the range of temp set by consumer
Max Temp Set	t - H	Over min temp ~80℃	80℃	Set the highest temp within the range of temp set by consumer
Set Temp Deviation Set	dIF	00℃ ~ 05℃	03℃	Set the deviation between set temp enabling the heating power to supply and present temp.
Delay Time Set	DLy	01sec ~ 60sec	20 초	Set the time from the temp sense to supply of heating power
Overheating Temp Set	oHt	Over max temp (30℃~ 80℃)	80℃	By sensing the floor temp during the indoor temp is running, in case of reaching the set temp, the output is OFF
Standard Resistance Set	rES	-9℃ ~ 50℃	00℃	Set for displaying or running by placing deviation so that the controller display temp may match to the situation.

ERROR MESSAGE AND TIMER MODE SET METHOD

ERROR MESSAGE

SNAPPING OF TEMP SENSING SENSOR

Basic motions are conducted by indoor sensing temp sensor. If the floor sensor is installed as an additional option – indoor sensor is snapped, the floor sensor is running through auto conversion. If there is no floor sensor or two sensors are all snapped, “**Eo**” message flickers and alarm goes off. -- output break—

Check whether or not sensor is attached, check if terminal stand is connected. --- in case of extending the wire, check the part of wiring .

SHORT OF TEMP SENSING SENSOR

At the time of using indoor sensing temp sensor – in case of short of indoor sensor, “**ES**” message flickers and alarm goes off. -- output break—
In case additional floor sensor is installed, - in case of short of floor sensor, “**FS**” message flickers and alarm goes off. -- output break—

Check whether or not sensor is attached, check if terminal stand is connected. --- in case of extending the wire, check the part of wiring .

INITIALIZATION FUNCTION

This returns all values automatically to the basic values set in the factory. By pushing the power button for 10 sec, all set values are return to the state set in the factory. In case that the set value is changed due to wrong operation or outer noisy, this stores the before values automatically.

TIMER MODE FUNCTION

※ For using Timer Function, be sure to remove the temp sensing sensor.

※ By pushing ▼ , ▲ key simultaneously for 3 sec, the signal of “Stn” is displayed initially. In this state, by pushing ▲ key for one time, the signal “SEN” is displayed..

SEN as running by sensor is same to the present method. By touching ▲ key once again, the signal “tin” is displayed. At this time by pushing ▼ , ▲ key simultaneously, the cycle value is displayed and set the cycle with ▼ , ▲ key. Then by pushing ▼ , ▲ key simultaneously once again, SAU flickers, the cycle value is stored and the present set degree is displayed.

How to set by an engineer = pushing ▼ , ▲ key simultaneously → Display “Stn” on the screen→ Select tin→ pushing ▼ , ▲ key simultaneously → Cycle value display(Cycle) → Select Cycle (basic 3 min) → Set Cycle Value→ pushing ▼ , ▲ key simultaneously - SAU flickers – Completion of Store.
(The consumer should not set the cycle)

How to set by a consumer= select the degree by touching ▼ , ▲ key.(Basic 1 step)

TIMER MODE MOTION TIME

- ※ Basic cycle is set to 3 min. (possible to select cycle from 1 min to 60 min)
- ※ After selecting Cycle, by touching ▼, ▲ key simultaneously, SAU flickers and the set is completed.(Engineer)
- ※ The degree is selected out of temp that a consumer wishes to.
- ※ Basic step is set to 1 step. (possible to control the degree from 1step to 10 step)

DETAILED TIMER MODE SET

Step	Output (ON)	Output (OFF)	Remarks
1	15sec * S	45sec * S	※ S – selected cycle value If 1min S=1 If 3min S=3 If 5min S=5 * * ※ (If 20min s = 20 , value multiplying by 20) ※ (If 60min s = 60 , value multiplying by 60) It is the length of ON and OFF.
2	20sec * S	40sec * S	
3	25sec * S	35sec * S	
4	30sec * S	30sec * S	
5	35sec * S	25sec * S	
6	40sec * S	20sec * S	
7	45sec * S	15sec * S	
8	50sec * S	10sec * S	
9	55sec * S	5sec * S	
10	60sec * S	0sec * S	

Classi.	Item		SPECIFICATIONS
Power unit	Rated input voltage		85V AC ~ 265V AC (Universal voltage)
	Output voltage		85V AC ~ 265V AC (Universal voltage)
	Driving method		Electronic Type
	Max output		3.5kw
	Load	No. of circuit	1 circuit
Max capacity		15A (Resistance load)	
Precision	Temp precision		$\pm 1^{\circ}\text{C}$; change condition of 1°C per 30 sec (Delay Option 20초)
Motion	Power input display		FND Temp , Time display
	Output display		HEAT LED lighting (Red)
	Range of Temp		Possible to select within the range between -2°C ~ 80°C
	Timer Function		Timer for one week – 5 times (Max) a day (ON/OFF)
Sensor	Kind		NTC : Negative Temperature Coefficient Epoxy molding
	Precision %		1 %
	25 $^{\circ}\text{C}$ rated resistance		5000 ohm , Beta Constant = 4000°K
	Quantity		SENSOR 1 : for sensing indoor temp (installed inside of controller) , SENSOR2 : for sensing floor temp(Optional)
Function (Capacity)	Safe device	Snapping/ Short of Sensor Line	In case of snapping temp sensing sensor : “EO” (Error Open) , In case of short, “ES” (Error Short) , “FS” (Floor Short) display. output break
		Overheating Prevention Sensor(OPTION)	In case that the temp sensed by the floor sensor is higher than the set temp, output break
		Resistance for fuse	10 ohm (for protecting the circuit inside of controller)
Others	Outer case		Anti-flammable
	Weight		150g
	Dimension (mm)		90(W) * 90(H) * 48(D)
	Use Temp	Air Temp	0°C ~ 40°C
		Air Moisture	Under 80 %