





















7 DAYS TIMER OPERATION AND PROGRAMMING INSTRUCTIONS

The 7 day timer with 2 times per day settings enables you to preset the start of the heater operation up to 7 days in advance. It is possible to program 2 different starting times per day or more. When the heater is ON, the timer displays current time and day of a week. When the heater is OFF, the display and buttons are illuminated and displays current time, day of a week and temperature. In the event of power supply interruption the heater will return to preset settings after the power is turned back on.


2. Keys and icons

- 1  Run key: On/Off controller or cancel timing setting.
- 2  Programming key: Choosing controller operation mode or selecting
- 3  Timing key: Setting / Viewing the time; setting /recalling day of the week
- 4  Down / back key: setting temperature or menu item data.
- 5  Up / forward key: setting temperature or menu item data.
- 6  : Fault icon.
- 7  : Heating mode icon.
- 8  : Ventilation mode icon.
- 9  : single timing starting or shutdown icon.
- 10  : week timing starting up icon.
- 11  Icon: Day of a week icon.
- 12  Clock display: Displays real time.
- 13  Temperature display: Displays current and set temperature, data, etc.


3. To set current time and day of the week:

Press 3 times  timing key (all start flashing),
 Press once  programming key (day start flashing).
 Select proper day by pressing  up or  key.
 Press once  timing key to set hour (hours start flashing),



Press  up or  key to adjust hours.

Press once  timing key to set minuets (minuets start flashing),.



Press  up or  key to adjust minuets.

Press once  programming key to set settings or do not touch any keys for 10 seconds.



4. Manual start

To turn heater ON press the run  key, the controller is turned ON, the heat icon  is lit, the display will flash set temperature for 5 seconds, and then it will display cabin air or engine water temperature.

5. Manual shutdown



To turn heater OFF press  heat Key the icon  will go out. Screen will display clock only

6. Temperature adjustment

To adjust temperature press  up key or  down key, the display will flash set temperature for 5 seconds and then it will display cabin air or engine water temperature.

7. Single start time setting;


Note; Heater must be in OFF mode

Press once  timing key (all start flashing), Press once  programming key (hour start flashing).

Press  up key or  down key to adjust hour,

Press once  timing key to set minuets,

Press  up key or  down key to adjust minuets.



To save settings press once  programming key or do not press any keys for 10 seconds and timer will set new settings automatically.

Note; Heater will start on set time and run for 120 minutes.

Single run is set when  single timing starting icon ON.

8. To cancel single timing starting;

Press once  timing key,

Press once  run key, a single timing starting is canceled, ( single timing starting icon is OUT).

9. Single delayed shutdown time setting;

Note; Heater must be in ON mode.


Press once  timing key (display screen will start flashing),

Press once  programming key, (hour start flashing).

Press  up key or  down key to adjust hour,

Press one time  timing key to set minuets,

Press  up key or  down key to adjust minuets.



Press once  programming key or do not press any keys for 10 seconds , timer will set new settings automatically.

Heater will shutdown at set time.

Note; delayed shutdown is set when  single timing starting icon ON.




10. To cancel delayed shutdown;

Press once  timing key,.



Press once  run key, single delayed shutdown is canceled, ( single timing starting icon is OUT).

11. Programming your 7 day timer


Note; The timer default setting is set for 14 startup times; the number of settings can be change by changing default stings.

Press 2 times  timing key (  icons are flashing),

Press once  programming key ( is flashing, display shows MON, hours, min. and d00)

Press  up key or  down key to select a day of a week (first day #1starting)

Press once  programming key again (Selected day is flashing)

Press once  timing key (Hours are flashing).




Press  up key or  down key to adjust hour.

Press once  timing key (minuets are flashing).

Press  up key or  down key to adjust minuets.

Press once  timing key (run time is flashing).

Press  up key or  down key to adjust run time.



Press once  Heating key to save setting ( Displays).  is flashing

Press  up key or  down key to move to next day d001.

Note; Repeat the entire process for all 14 settings.


To save all settings do not do not touch any keys for 10 seconds.

12. To cancel all week starting time;

Press 4 times  timing key, (display will shows time,  icon and CLd are flashing)



Press once  program key, (CLd stop flashing)

Press once  running key, (display will flash alternately “ALL” “OFF”).


Press once  timing key to exit setting or do not touch any keys for 10 seconds.

13. Checking the sensor parameters

Note; Heater must be ON.

Press and hold  up key more than 5 seconds, the digital tube will display ( icon, sensor symbol, and setting).

Press  up key or  down key to switch the parameters,

Press  program key to save settings and exit or it will exit automatically after 10 seconds without pressing any keys.

The table of sensor number and value

Item	Sensor symbol	Sensor / item
1	In	Air / water inlet temperature
2	Out	Air / water outlet temperature
3	Burn	Combustion chamber temperature
4	PL	Fuel pump speed
5	FJ	Fan / water pump speed
6	Uo	Controller input voltage


14.Fault codes.

At the starting up as soon as heater is turned ON, when the heater controller detect a failure, the timer will display fault codes, when several failures accurse, the timer will display fault codes.


The fault codes as follow:

Item	Fault	Malfunction
1	CODE	
2	E01	The power supply voltage too high
3	E02	The power supply voltage too low
4	E03	Burner temperature sensor malfunction
5	E04	Inlet air/water temperature sensor malfunction
6	E05	Outlet air/water temperature sensor malfunction
7	E06	Glow pin malfunction
8	E07	Fuel pump malfunction
9	E08	Blower malfunction
10	E09	Water pump malfunction
11	E10	Flame extinguish protection
12	E11	Burner overheating protection
13	E12	Outlet air/water temperature overheating protection
14	E13	Forbid the system operation

15.Default settings.

Press the  down key and **P** programming key at the same time more than 10 seconds, display shows the parameter number, and default setting.

Press once  up key or  down key to modify the parameter value.

Press once  timing key to change the parameter number.



Press **P** programming key to save the data and exit.

The table of system parameter number and parameter value;

Item	Parameter number	Description	Initial value	Range
1	F01	Setting the temperature initial value	20℃	F02~F03
2	F02	Setting the temperature lower limit value	10℃	0℃~F03-1
3	F03	Setting the temperature upper limit value	40℃	F02~60℃
4	F04	Number of time start up settings per week	14	7~30
5	F05	Whether to use wire control temperature as the environment temperature	0~1	0 - Disabled, 1 - Enabled
6	F06	Initialize the timer parameters	0~1	0 - don't Initialize; 1 - Initialize
7	F07	Show Fahrenheit or Celsius	0~1	0 - Celsius; 1 - Fahrenheit
8	F08			

16. Self-check state.

Power on

Press and hold  timing key and  up key at the same time for 2 seconds. The timer will then enter the self-check mode; every icon on the display will light up gradually and circle for 3 times, after circulating 3 times the display will return normal state.