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   **P** 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   **MON TUE WED THU FRI SAT SUN**   Icon: Day of a week icon.

12   `88:88`   Clock display: Displays real time.

13   `88.8℃`   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   **P** 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   **P** 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   **P** 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   **P** programming key or do not press any keys fort 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 **P** 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 fort 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 (↻ **P** icons are flashing),

Press once **P** programming key (**P** 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 **P** 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 ⏰ iming key (run time is flashing).

Press △ up key or ▽ down key to adjust run time.

Press once 〽 Heating key to save setting (↻ Displays). **P** 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, **P** icon and CLd are flashing)

Press once **P** 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 (**P** icon, sensor symbol, and setting).

Press △ up key or ▽ down key to switch the parameters,

Press **P** 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.