



C1 Heater Control Panel User Manual

1. Introduction

Please read these operating instructions carefully before starting to set up and operate. This operating manual contains all the important information you need during setup and operation. Please keep this operation manual for future reference.

1.1 Safety instructions

When entering the gas station, be sure to turn off the heater. Pay attention to all information and tips, especially the safety instructions in this document and heater instructions!

1.2 Scope of use

The timer is used to start and switch off the heater equipment installed in the vehicle, as well as for selecting the operating mode, setting the operating time and pre-selecting the start time.

1.3 General tips

The timer has a simple operating structure. All functions must be set and changed when required by means of 4 buttons.

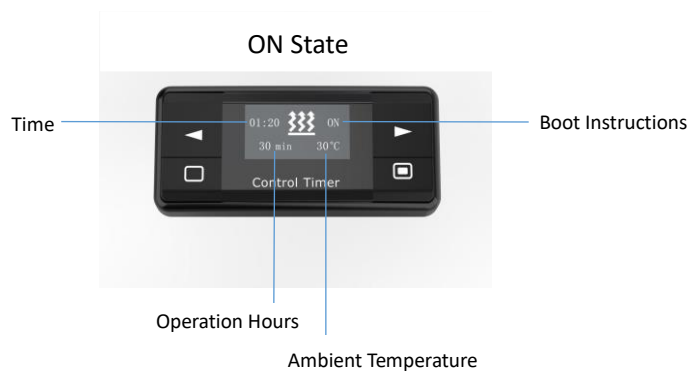
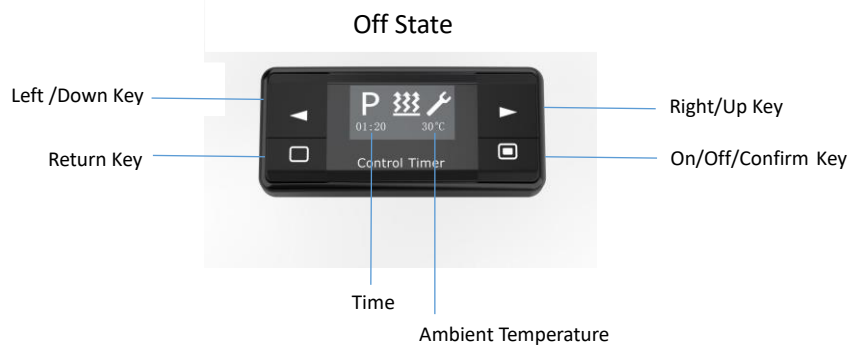
If the car has been disconnected (the battery has been disconnected) and then the power is restored, the time and day of the week have to be set again.

2. Overview

2.1 Technical Parameters

Rated Voltage	12V
Operating Voltage Range	9V - 18V
Operating Temperature	-40°C - +65°C/-40°F - +149°F
Installation Location	Vehicle Interior
Timing Start	3 start times can be preset within 7 days

2.2 Key Description



3. Operation & Setting

3.1 ON/OFF

Power on: Press any key to wake up the screen, short press the power on key to enter the running time adjustment interface. Adjust the running time according to different needs, press the left key to reduce the running time, press the right key to increase the running time.

The running time can be set in the range of 10-120min. When adjusting to 120min, press the right key again, it can be set to run for unlimited time. (Please use this function carefully, it will consume a lot of battery power and the vehicle will be difficult to start.)

Turn on the machine, after 60 seconds, the screen enters hibernation mode. There is a breathing light flashing in the middle of the screen, indicating that the heater is on.

Long press the on button for 5 seconds, the heater will follow the last running time and go directly to the already on interface.

Shutdown: Press any key to wake up the screen. Long press the off button for 3 seconds, the heater will turn off and the screen will return to the main menu interface. 60 seconds later, the screen will enter hibernation mode.

3.2 Remote Control Pairing

In the off state, press and hold the left button and return button at the same time for 3 seconds to enter the remote-control matching interface. Press the ON or OFF key of the remote control once at this time, and the interface will show the word OK when the match is successful. If the match is unsuccessful, the word NOK will be displayed. You need to match the remote control again; one timer can match two remote controls at the same time.

Remote Control Pairing



3.3 Remote Control Power ON/OFF

The remote control is one-way remote control, without back transmission function, the remote-control distance is about 30 meters (open area).

Remote control power on: short press the remote control ON key, the timer screen will wake up, the screen will show the power on interface, after 60 seconds, it will enter the hibernation state, and the breathing light will flash in the middle of the screen.

Remote control shutdown: short press the remote control OFF key, the timer screen wakes up, at this time the screen returns to the main menu interface, and will enter the hibernation state after 60 seconds.

3.4 Time Setting

Press any key to wake up the screen, left and right key to select setting, press confirm key to

enter the time setting (24 hours). After pressing confirm key the clock flashes, press left and right key to adjust the clock. After pressing confirm key, the minute flashes, press left and right key to adjust the minute. Press confirm button again to return to clock screen. Press left and right button to select week setting, press confirm button to enter week setting screen, press left and right button to select week (MON.TUE.WEN.THR.FRI.SAT.SUN.).



3.5 Timer setting

Press any key to wake up the screen, left and right keys to select P timer function. Press confirm key to enter the timer interface, 3 pre-selected times can be in the same day of the week or divided in different days.

Press the confirmation key to enter P1 timing selection, then press the confirmation key, select the week, press the confirmation key, the clock flashes, adjust the clock, then press the confirmation key, set the running time, then press the confirmation key again, select ON or OFF by the left and right keys, and finally press the confirmation key, the screen returns to the main menu interface. At this time, a dot will appear in the upper left corner of the screen to indicate that the timing function has been turned on. If you set P2 and P3, please press the above operation.

When the pre-selected time is finished running, the tick behind P1 will be cancelled, indicating that P1 is finished running. If P2 and P3 do not turn on the timing function, the dot prompt in the upper left corner of the screen turns off at this time.



3.6 Function Inquiry

In the power on state, press any key to wake up the screen, press and hold the left key and right key at the same time for 3 seconds to enter the function query interface, arrange the data from top to bottom: fan speed, voltage, oil pump frequency, water temperature, press the return key to return to the main menu interface.

4 Faults & Solutions

4.1 Error Code

Error Code	Error of Issue	Troubleshooting
E-01	The heater failed to ignite	Two ignition failures, check the oil circuit and intake and exhaust.
E-02	Flame goes out	The flame goes out during operation, check the oil circuit.
E-03	The voltage is too high	The voltage is continuously higher than 16V for 5 seconds
E-04	The voltage is too low	The voltage is continuously lower than 10V for 20 seconds
E-05	Water temperature sensor	Open circuit or short circuit
E-06	Overheating sensor	Open circuit or short circuit
E-07	The fuel pump is malfunctioning	Fuel pump open
E-08	Fan failure	Open circuit or short circuit
E-09	The glow plug is malfunctioning	Open circuit or short circuit
E-10	The glow plug power is too small	The glow plug heat does not reach the set value
E-11	The heater is overheated	The water circuit is blocked or the antifreeze is lacking
E-12	Overheating lock machine	Three consecutive overheating failures
E-13	Ignition fails and locks the machine	The heater fails E-01 twice in a row, and the machine locks
E-14	Water pump failure	Short circuit of water pump
E-15	Lin communication failure	Lin communication line failure

4.2 Fault solution

If the heater fails in the power-on state, the screen will show E-XX. Press and hold the power-off button for 3 seconds to turn off the heater. 3 seconds later, turn on the heater again and the fault code will be cleared. If the fault is not removed, the fault code will still appear until the fault is removed. See the fault code table for details.

If the fault E-12 and E-13 appear, the heater is already in a locked state at this time. Shutdown state, you need to pull off the heater fuse (20A) for 3 seconds, and then reinstall the fuse, the machine lock-up fault is removed.