

MV OLED V2 Control with Timer

ALPINE AUTO
OPERATION MANUAL
ED 1.00

MV Heating UK Ltd Unit 6 Second Avenue Business Park Millbrook Southampton SO15 0LP



MV Heating UK LTD +44 (0)2380 522345

+44 (0)23 8052 2345



Contents

OLED Display	3
Screen Display Icons	4
Operation	5
Initial Start Up & Standby Mode	5
Changing Operation Mode	6
Operating Modes	7
Variable Output Mode	7
Thermostatic Mode	8
Fan Only Mode	g
Timer Control	10
Settings	12
Changing the Date and Time	12
Bluetooth	13
Voice (Sound)	14
Information Display	15
Changing Language	16
Temperature Scale	17
Fuel Priming Function	18
APP and SIM Control Display	19
APP Control	19
GSM Module	19

+44 (0)23 8052 2345

LED Indictor	20
Faults	21
No Connection	21
Disconnect	21
Fault	22
Updates	22
Installation	23
Location	23
Installation Steps	24
Fault Codes	
Notes	26



OLED Display

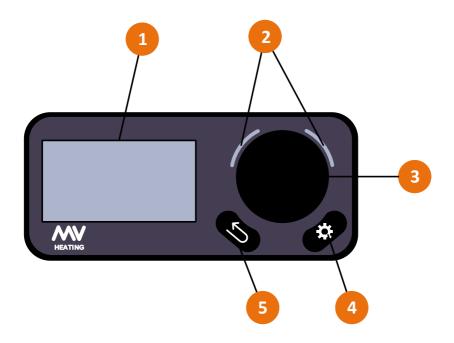


Figure 1

- 1. OLED Display
- 2. LED Indicators
- 3. Rotary Dial and Confirm Button
- 4. Settings Button
- 5. Return/Back Button



Screen Display Icons



12:00:00 \rightarrow Current time

★ Current heating mode (Variable Output Shown)

P7 → Output level

ON → Heater status (On/Off)

1:35 → Remaining heating time (1hour and 35 minutes)

★ → Bluetooth is connected

 $(\underline{\gamma}) \rightarrow$ In the process of remote GSM phone control

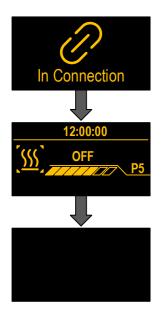
The timer is switched on

□ - 2 → Timer 2 is running



Operation

Initial Start Up & Standby Mode



Once the unit has been powered on, the panel will attempt to connect to the heater.
(If connection is unsuccessful, see page 21)

Once connected, the panel will enter the normal control interface.

After 30 seconds of inactivity the display will turn blank. This is the standby mode. Press any button to wake the display up.

Note: When the heater is switched on (see operating modes) it will take approximately 5 minutes for heat to come out of the outlet. The heater will first go through its 'purge cycle' to check working conditions before firing up.



Changing Operation Mode



The heater can run in three different modes. Variable output, thermostatic, and fan only.



During the normal control interface, press the rotary knob to enter the operation select mode.

Turn the knob to the left or the right and to change to the desired mode.



Short press on the desired mode to select it

Short press the back button to return to the normal control interface

The timer mode is also selectable in this way, see page 10 for more details.



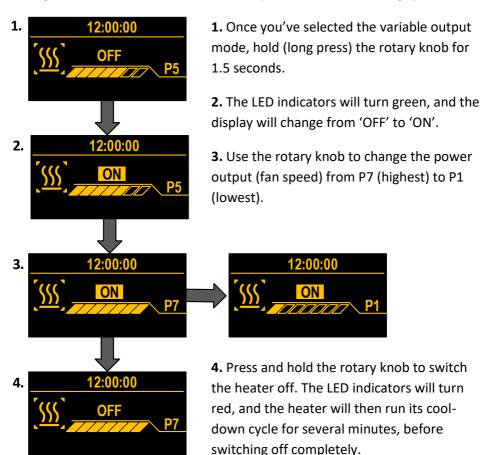
Note: When the heater is running, both the variable output, and thermostatic modes can be switched between, but not the fan only mode, or timer mode.



Operating Modes

Variable Output Mode

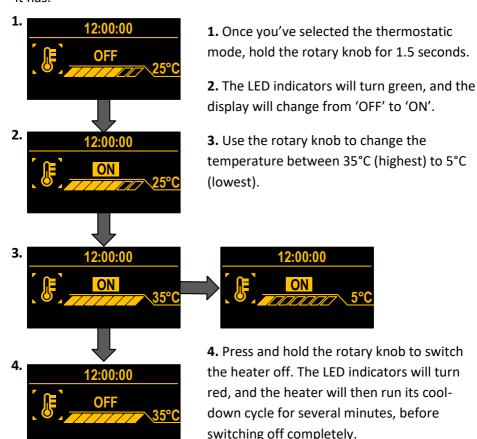
In variable output mode, whilst running the heater will continue to heat until it is manually turned off again. Whilst turned on, the rotary knob is used to select the power output (fan speed) of the heater. The higher the fan speed, the greater the volume of hot air will be pushed into the heating space.





Thermostatic Mode

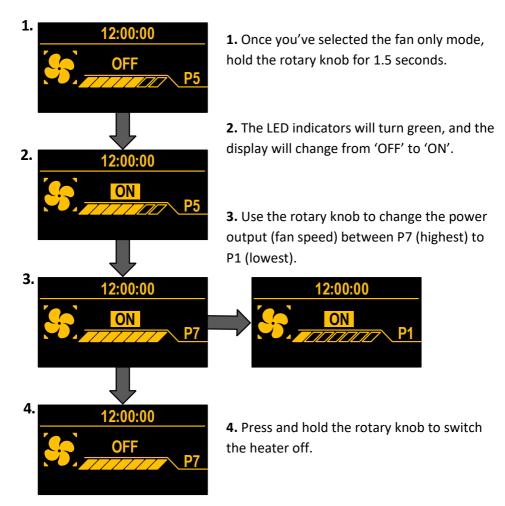
In thermostatic mode, the heater will run until it has reached the set temperature and (version dependent) either switch off completely or continue to run the fan until the temperature has dropped significantly so that the heater will then relight and start again. The unit will continue to cycle until the controller is switched off manually. Temperature will vary depending on where the temperature probe is installed, and how much ambient air flow it has.





Fan Only Mode

In fan only mode, once turned on the heater will only run the fresh air fan until it is manually turned off again. Whilst turned on, the rotary knob is used to select the fan speed. The higher the fan speed, the greater the volume of air will be pushed into the heating space.





Timer Control

The OLED V2 control has an inbuilt timer mode, with 3 separate daily timers to choose from. Press the return key to exit the timer interface at any time.



Select the Timer - To select the timer, press the rotary dial during the normal control interface, and use the dial to scroll to the timer icon. Press the dial again to confirm.

Turn the Timer On/Off – Press the dial to turn the first timer on or off.

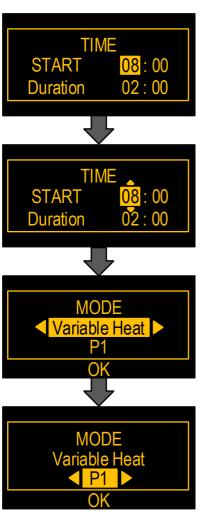
Solid box = On **Empty box** = Off

Continue to Timer Parameters – Use the dial to select the confirmation arrow, and pressing the rotary dial to confirm, and continue to the remaining parameter settings.

Selecting the Day of the Week – Use the rotary dial to select between days of the week you want the heater to run and press it to turn the day on or off.

Solid box = On **Empty box** = Off





Time Settings -

START – At what time do you want the heater to start.

Duration – How long do you want the heart to run for. (10 minutes minimum, 24 hours maximum.

Adjust and Confirm Time Settings – Use the rotary dial to adjust the settings, and short press the dial to confirm and move to the next selection.

Heating Mode Selection – Use the rotary dial to select which mode you want the heater to run in, and press the dial to confirm.

Output Mode Selection – Use the rotary dial to choose the desired power/room temperature the heater will run at. Press the dial to confirm.



Settings

Press the settings button during the normal control interface to enter the settings selection menu.

Changing the Date and Time



Use the rotary dial to select the 'Time' icon from the settings menu, and short press it to confirm.

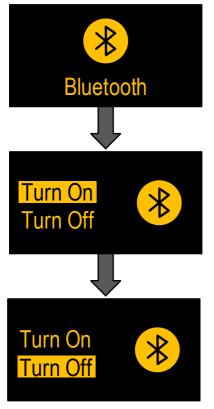
Use the rotary dial to adjust the date (day, month, year) pressing the dial each time to confirm.

Use the rotary dial to adjust the current time, and the day of the week, pressing the dial each time to confirm.



Bluetooth

The Bluetooth function is compatible with the 'MyBluee' app on smart devices. Once connected, please refer to the separate app manual for further information.



Use the rotary dial to select the 'Bluetooth' icon from the settings menu, and short press it to confirm.

Use the rotary dial to turn the Bluetooth mode on or off, pressing the dial to confirm your selection.

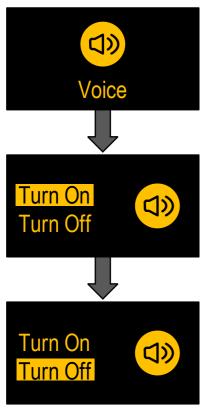
Press the return button to go back at any time.

When turned on, the Bluetooth symbol will appear on the top left on the display.

NOTE: The Bluetooth setting has a memory function and will not change when power has been cut off.



Voice (Sound)



Use the rotary dial to select the 'Voice' icon from the settings menu, and short press it to confirm.

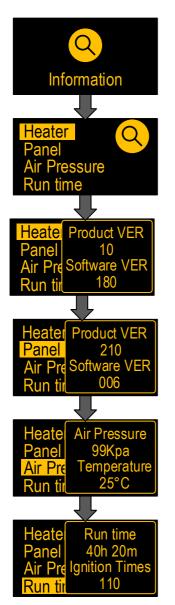
Use the rotary dial to turn the voice mode on or off, pressing the dial to confirm your selection.

Press the return button to go back at any time.

NOTE: The voice setting has a memory function and will not change when power has been cut off.



Information Display



Use the rotary dial to select the 'Information' icon from the settings menu, and short press it to confirm.

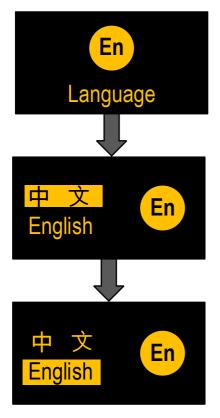
Use the rotary knob to switch between various information on the control panel. Press the rotary dial to view the information for each setting.

These include heater information, OLED (control) panel information, atmospheric pressure, and the heater's run time, on your current OLED display.

Press the return button to go back at any time.



Changing Language



Use the rotary dial to select the 'Language' icon from the settings menu, and short press it to confirm.

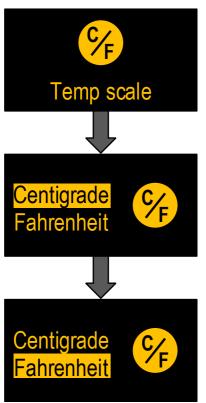
Use the rotary dial to change the language between English and Chinese, pressing the dial to confirm your selection.

Press the return button to go back at any time.

NOTE: The language setting has a memory function and will not change when power has been cut off.



Temperature Scale



Use the rotary dial to select the 'Temp scale' icon from the settings menu, and short press it to confirm.

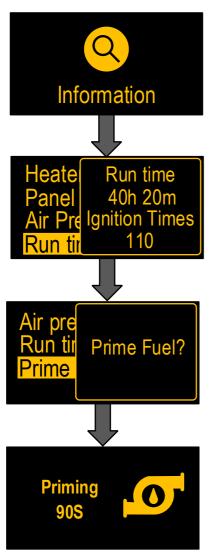
Use the rotary dial to change between Centigrade and Fahrenheit, pressing the dial to confirm your selection.

Press the return button to go back at any time.

NOTE: The temperature scale setting has a memory function and will not change when power has been cut off.



Fuel Priming Function



To enter the fuel priming mode, press the settings icon, and scroll to 'Information'. Press the rotary dial to confirm.

Scroll along to the 'Run Time' submenu and press the dial to confirm. Press and hold the settings button and the return button together to enter the priming mode sub screen.

When the display reads 'Prime Fuel?' press the rotary knob to confirm. The fuel pump will begin to pulse quickly. The display will automatically exit this mode if left unattended for 3 seconds.

Use the rotary knob to adjust the pumping time and press the return button to go back or let the countdown timer run down (default runtime is 90 seconds).

NOTE: Disconnect the fuel from the heater first to prevent flooding



APP and SIM Control Display

APP Control

If the smart phone APP is in use, the Bluetooth symbol will appear in the top left of the display.



During Bluetooth control the heater is controlled via your smart phone. You can change operating modes, and check fault status while using the app.

GSM Module

If the external SIM card GSM module is installed and in use, the remotecontrol symbol will appear in the top right of the display.



When using the GSM module, the default heating mode is thermostatic, and the temperature is set to 25°C.



LED Indictor

The LED indicator will flash and/or change colour depending on what state the heater is in.



No Lights: When the control panel is in use or in standby mode and the heater is not running.



Blue Lights: When the control panel is initializing.



Blue Lights Flashing: When the control panel is disconnected.



Green Lights: When the heater is running.



Green Lights Flashing: Fault condition - The heater has detected a fault.



Red Lights: When the heater is shutting down.



Faults

When a fault appears, or the controller has lost connection, a prompt will appear.

No Connection



When the control panel starts, if the OLED display is unable to connect, the panel will enter a disconnected state.

Press the return key to attempt initializing again. If no connection continues, check the communication cable is installed correctly, and securely.

Disconnect



If the communication between the heater and control panel becomes disconnected during an operation (heater is running, fuel priming etc.) the display will read 'Disconnect'.



If disconnect continues, check the communication cable is installed correctly, and has not become damaged or loose.



Fault

If the heater detects a fault, the display will go into a fault state.



The display will read the fault code (number) and the fault cause.

To exit the fault display, hold the rotary knob.

NOTE: After exiting the fault display, please wait until the heater is completely turned off before restarting the heater. Otherwise, the heater may not exit the lockout state.

Updates



If connected via Bluetooth to the MyBluee app, any updates to the OLED display or the heater will turn the display into an update state.

The display will automatically exit the update state when the update is complete.



Installation

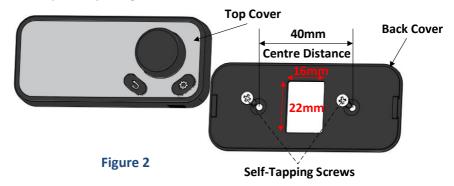
NOTES: The control switch must be installed in the vehicle in accordance with any corresponding technical specifications for vehicle control.

Safety Information:

- Find a suitable mounting surface within the vehicle to fix the control switch.
- Do not use high-voltage devices unless the electronic circuit (PCB board) has been disconnected.
- If welding is required on the vehicle, do not connect the DC power supply to the control switch. Welding will cause serious damage to the switch.
- Do not shorten the original control lead wire.
- When installing this control switch, the vehicle power supply must be turned off.
- This control switch should be installed in a waterproof and moisture-proof location.

Location

The control switch should be installed where it is easy to read and locate. The control panel opening size is 16mm X 22mm, as shown below.





Installation Steps

- 1. Clean the installation opening and surface to ensure that it is smooth and clean with no dust or water.
- 2. Insert the tapping screw into the mounting surface as shown in Figure 2 and fix the back cover on the mounting surface.
- 3. Insert one end of the control switch lead wire into the PCB board's terminal seat as shown in Figure 3, and the other end through the back cover and installation opening as shown in Figure 2.
- 4. Finally, press the top cover firmly onto the back cover as shown in Figure 4.

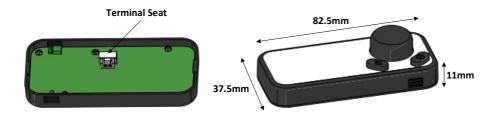


Figure 3 Figure 4

NOTES: Do not make any tensile stress on the control switch (communication) wires.

If any of the cables are pulled out during operation, it will cause the heater to interrupt and fail, and may even damage the heater and/or controller.



Fault Codes

Code on Digital/OLED Control	Error Description	Error Light (Flashing Light) on Rotary Control
00	No Fault	No Flashes
10	Second start failure	1 Flash
20	Heater does not light in time	2 Flashes
21	Combustion termination	
30	Voltage too high	3 Flashes
31	Voltage too low	
A9	Voltage too low	
41	Overheated	10 Flashes
50	Flame sensor open circuit	5 Flashes
51	Flame sensor short circuit	
52	Hot air sensor open circuit	
53	Hot air sensor short circuit	
54	Hot air sensor overheated	
65	Inside temperature sensor broken circuit	6 Flashes
66	Inside temperature sensor short circuit	
68	Outside temperature circuit broken circuit	
69	Outside temperature circuit short circuit	
70	Fuel pump short circuit	7 Flashes
71	Fuel pump broken circuit	
80	Fan broken circuit	8 Flashes
81	Fan short circuit	
82	fan speed too low	
83	Fan speed too high	
84	Fan speed measurement fault	
85	Fan motor failure to start	
90	Glow pin open circuit	9 Flashes
91	Glow pin short circuit	
92	Glow pin high resistance	
93	Glow plug drive open circuit	
a2	Overheating	10 Flashes
b4	Overheating or sensor fault	11 Flashes
b5	Overheat sensor fault	
c0	Hydro only - blower relay open circuit	12 Flashes
c1	Hydro only - blower relay short circuit	
c4	Preheating temperature broken circuit	
c5	Preheating temperature short circuit	
d0	Crystal oscillator in ECU broken	13 Flashes
d1	Fault information storage failure	
d3	Maintenance reminder	
-	Earth Fault	Constant Flash
_	Connection/Communication Error	Traffic Light



Notes		