4G+ CELLULAR HEATER CONTROLLER

Installation Instruction

Operating Instructions

Cellular Heater Kit

P/N TBD

Instructions

CELLULAR CONTROLLER INSTRUCTIONS

The Cellular Heater Controller has been designed to provide a simple means of using any SMS enabled cellular phone to control the operation of the heater system and provide operational/diagnostic feedback. The controller connects to the diagnostic circuit (4-wire cable that connects to standard controllers) of the heater. Any valid SMS issued command will result in a corresponding response sent to the originating cell phone.

A cellular plan is required to use this device and can be purchased from ROM Communications at http://webstore.romcomm.com

The controller allows for an effective means to remotely turn on and turn off the heater from a standard SMS cellular phone (must be within cell service). Run times can be set from 5 minutes to 12 hours with the default time being 20 minutes.

PLACEMENT

Being a cellular wireless device, this controller requires connectivity to a Rogers/AT&T or compatible 3G/4G/LTE Service. It is typically ok to mount under the dash of a vehicle. The wireless signal may also transmit through glass, wood, or fiberglass, but NOT anything metal. Before mounting, test the device by looking at the red LED located near the antenna connector. If it is blinking slowly, it is working correctly. If required, use the included long range antenna to avoid having to move the device to achieve better cellular reception.

1. Mount Cellular Controller under dash or other desired location and secure with tie straps.
2. Attach remote antenna by attaching to mounting location and route cable lead to controller – OR – attach whip antenna to controller
3. Cut harness to length and terminate wires, attach using connector. Insert terminals into housing
4. Connect harness to heater.
5. Check the status of the Red LED light.

*Note: The phone number of your device is located on the product label (T/N: **4035551212 = 403-555-1212**)
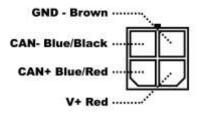
INSTALLATION NOTES

The controller is designed to be independent of other controllers. If another timer or controller is installed, it should be removed to avoid conflicts.

The controller expects a single heater installation with the heater enumerated as 'heater 1' (default).

WIRING

The heater wiring uses a standard 4-pin header that is often provided in the wiring harness. The diagram below shows the orientation, facing inward to the controller.
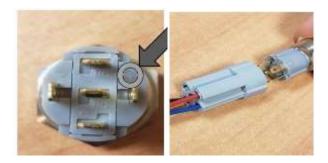

GND - Brown
CAN- Blue/Black
CAN+ Blue/Red
V+ Red

SWITCH WIRING

The controller has flying lead wires: Green, Black, and White. The provided switch should be wired as follows:

Controller Wire	Switch Wire
Green	Red
Black	Black + Blue
White	White

It is important to note the orientation of the switch placed into the harness. The "+" mark <u>MUST</u> connect to the red wire. A reversed insertion will have an operational indicator, but the button will not control the heater.

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OPERATING INSTRUCTIONS

LED STATUS INDICATION

LED Status	Controller Status
Slow Blink	Connected to Network, Normal operation
Steady On	Searching for Network, no cellular coverage.
Off	No Power

BUTTON INDICATOR

LED Status	Controller Status
On	Call for heat in progress
Off	No call for heat
Flashing Rapidly	No heater detected (while button pressed)

TEXT MESSAGE COMMAND FORMAT

SMS Text message commands are in the following format:

{passcode} {command} {optional parameter(s)}

Passcode = 4 digits (0000-9999) Factory Setting = 1234

STARTING THE HEATER

To start the heater, press and hold the button for 5 seconds, OR send a SMS text message to the unit's phone number with the following commands:

1234 Heat On turns on the heater for the default time.

1234 Heat On 120 turns on the heater for 120 minutes (2 hours).

STOPPING THE HEATER

Press and hold the switch for 5 seconds OR send a SMS text message to the unit's phone number.

1234 Heat Off turns off the heater. A text message is returned to confirm heat off.

CHANGE THE PASSWORD

Send an SMS text message to the unit's phone number.

1234 pass 5678 changes the previous password to the new one. A text message is returned to confirm password change.

RETRIEVING THE STORED FAULT CODES

Send an SMS text message to the unit's phone number.

1234 DIAG will retrieve the last 5 fault codes. A text message is returned with the last 5 fault codes.

If a start cycle fails, a fault code message will be sent to the last cell number to message the device.

GET THE CURRENT CALENDAR SCHEDULE

Send an SMS text message to the unit's phone number.

1234 CAL retrieves the current schedule from the controller. A text message is returned with weekly schedule.

SET THE CALENDAR SCHEDULE

Send an SMS text message to the unit's phone number.

1234 CAL {parameters} where the parameters are;

1. 2 letter day (**SU,MO,TU,WE,TH,FR,SA**)
2. Heat time start: time of day **(0000-2359).** Time of xxxx clears calendar date
3. Heater Run Time: **HExx (xx=05 – 720)**

To schedule 10 AM Sunday, and 1 PM Tuesday, running the heater for 15 minutes the command would be:

1234 CAL SU1000 TU1300 HE15

To add Thursday at 9:15 and remove Sunday, the command would be:

1234 CAL TH915 SUxxxx

OPTIONAL GPS

Devices with an optional GPS have the ability to locate the control by SMS command. The command 1234 POLL will return a coordinate and map link. Ensure the GPS antenna has an unobstructed view of the sky. Typical lock will occur in less than a minute. Allow up to 5-10 minutes if obstructions are present.

NOTES ABOUT SENDING TEXT COMMANDS

- Leave spaces between each command word
- Letters can be upper or lower case.
- Allow up to 2 minutes for response to a sent command.
- Both you and the heater controller must be within cellular coverage.

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Command	Notes
1234 Heat On	Turns on heater for default time.
1234 Heat On xxx	Turn on heater for xx minutes. (xxx = 5 to 720 min)
1234 Heat Off	Turns off heater.
1234 Pass 5678	Change password from 1234 to 5678
1234 DIAG	Return last fault code(s) from the heater.
1234 CAL	Returns the current schedule
1234 CAL <param>	Set the schedule for the heater. <params> = WE0400 HE120
1234 poll	Gets the GPS coordinate and map link for devices with optional GPS connection.
1234 prime	Causes the fuel pump to draw fuel for 5 seconds. Only usable when the heater is 'off'. This should only be used during initial installation or if the fuel line has been completely emptied.
1234 RESETFAULT	Clears active or stored fault codes. This should only be used once the cause of faults is determined and bypassing a 'lockout' is required. Removal of fault history is permanent.

HEATER CONTROLLER CONNECTION

CONTAINS MODULE

FCC ID: UDV-201606   PTCRB Certified   CE

WARRANTY & SERVICE INFORMATION

The warranty covers manufacturing defects only for a period of two (2) years from the date of purchase. The liability of ROM Communications Inc (ROM) is limited to the cost of repair and/or replacement of the product under warranty. ROM Communications does not warranty the cost of any installation services required for the troubleshooting, removal, or replacement of equipment.

The warranty is invalidated if the defect is caused (whatsoever) by misuse, neglect, and/or tampering. It is invalidated if unauthorized persons carry out any alterations and/or repairs. Also, the warranty is invalidated in the following cases:

For repair due to incorrect installation in your vehicle,

Where any ancillary equipment not furnished or recommended by ROM Communications causes problems or damage that is attached to or used in connection with the product.

To obtain technical assistance or to request service/repair to your product under warranty, please contact ROM at **1.877.860.3762** or email **esparservice@romcomm.com**.