

Phone: 715.359.6171 www.greenheck.com

## Frequently Asked Questions

## How do I manually override components?

1. Press the "bullseye" button to access the Main Menu.



2. Scroll down to "Ctrl Variables", and press Enter.



3. Scroll down to "Advanced", and press Enter.



4. Scroll down to "Login", and press Enter.



- 5. Input the password, 9998.
  - a. Press Enter to move the cursor to the first editable digit.



- b. Use the Up/Down arrow keys to edit the first digit.
- c. Press Enter to move to the next digit.
- d. Complete Steps 6a-6c until the password reads 9998. When you press Enter after setting the last digit to 8, the controller will automatically take you back to the Advanced menu.



6. Once logged in, there will be an option for "Manual Overrides" in the Advanced menu. Press Enter on it to access the Manual Overrides menu.



7. The Manual Overrides menu is where you will find the furnace commissioning tool which will walk you through commissioning/setting up your furnace if it is a model PVG. For additional details on how to use the commissioning tool, see the FAQ document titled, "How Do I Complete Furnace Commissioning On A Furnace Model PVG?".

IG Furnace Setup

Press ENTER to access IG Furnace Commission

Unit must be running

- 8. Before proceeding further, the manual override mode must be enabled. To enable manual override mode, put an X in the "Enable" box. (No components can be overridden until this is enabled).
  - a. Press the Enter button to move the cursor down to the checkbox.
  - b. The cursor will blink on the checkbox. Use the Up/Down arrow keys to put an "X" in the checkbox.
  - c. Press Enter twice more to move the cursor back off the screen. If the manual override mode was properly enabled, the "Status:" will say "Enabled", and the "Time Remaining:" will be counting down.



- 9. Once the manual override mode is enabled, the unit must be manually overridden "On". If the Unit On Off page is not set to a "Value:" of "On", the unit will not allow any components to come on.
  - a. Press the Enter button to move the cursor down to the "Override:" line.
  - b. Use the Up/Down arrow keys to change the "Override:" to "Manual".
  - c. Press the Enter button to move the cursor down to the "Value:" line.
  - d. Use the Up/Down arrow keys to change the "Value:" to "On".
  - e. Press the Enter button once more to stop editing the page.

<b>A</b> <b>O</b>	Unit	On Off	↑
	Override:	Manual	
	Value:	On	÷
5			≁

- 10. Once manual override mode is enabled and the unit is manually overridden on, you can manually override individual components as desired. Each component that can be manually overridden will have one or more dedicated page/s for doing so. To manually override a component, change it's "Override:" to "Manual", and give it a "Command:", "Position:", "Value:", "Speed:", etc.
  - a. An example of manually overriding the outside air damper to 100% and the supply fan to 55% is shown below.



<u>Note:</u> The unit will not allow fans to run until the necessary dampers have been opened to allow a path for airflow. Similarly, the unit will not allow heating or cooling devices to run until the necessary fans have been enabled and have proven run status.

- 11. Once the unit receives proof from the VFDs that the necessary fans are running, the heating/cooling devices can be overridden on.
  - a. Compressors have a page for commanding them "On"/"Off", as well as a separate page for giving the modulating compressor a modulation percentage.\_\_\_\_



b. There is also a "Cooling Ramp" page. On this page you can command your entire cooling section at once.

- i. A cooling ramp "Demand:" of 100% equates to all compressors on at maximum modulation percentage.
- ii. For cooling ramp demands <100%, the Carel controller will stage/modulate compressors to achieve that percentage of cooling.



c. Like the compressor/cooling pages shown above, similar pages will be available for heating. Shown below are the pages for IG furnaces. For furnace commissioning on a furnace model PVG, the furnace commissioning tool (see Step 7 above) is recommended in lieu of the pages below.



d. There is also a Heating Ramp page that functions similarly to the Cooling Ramp page. Heating ramp would be used for commanding Water Valves and Electric Heaters, as well as being able to be used to command IG furnaces.

A	Heating Ramp		个
0	Override:	Auto	_
	Demand:	100%	¢
5			4

- 12. There are also additional manual override pages that will appear based on how the unit was ordered and how devices are controlled. Some such pages include Energy Recovery Ramp, and Pressure Control.
  - a. Energy Recovery Ramp can be used to command the energy recovery wheel or face/bypass dampers.
  - b. The Pressure Control page can be used to command the condenser fans.