

Modulating Indirect Gas Quick Start Guide

This quick start document is intended to help with getting the initial unit startup completed, but does not replace the IOM. Please read the IOM for all safety information and precautions before performing any work on the equipment. Complete pre-start checks and blower start-up prior to this procedure.

Pre-Start Information: To energize the unit control circuits
(*field-wiring shown on diagram with dashed lines*):

1. Enable the unit to start the supply fan
 - a. Connect terminals R to G
 - b. On initial power up, navigate to UNIT ENABLE and set the unit to ENABLED.
2. Verify blower rotation is correct.
 - a. To reverse the rotation on three phase units, disconnect and lock out the power, then interchange any two power leads going to the motor.
 - b. Check motor amp draw and compare to motor nameplate FLA – reduce airflow if amp draw is greater than FLA.
3. Verify the unit inlet gas pressure:
 - a. Inlet gas pressure needs to be equal to or greater than the minimum gas pressure but not to exceed the maximum gas pressure listed on the unit gas pressure label.

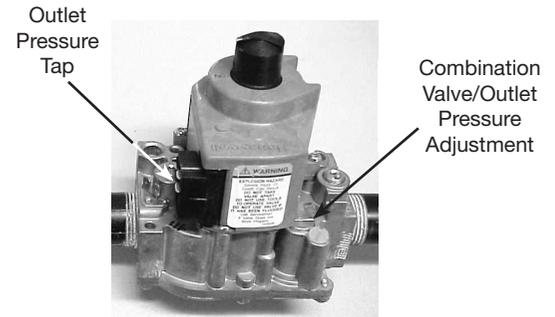
Microprocessor Controller Start Up (Password=1000)

Modulating Furnace Commissioning

1. Navigate to the CTRL VARIABLES > ADVANCED > LOGIN and enter the password = 1000. After pressing enter, this will return you to the Advanced menu.
2. Scroll down to the MANUAL OVERRIDES > IG Furnace Setup and press enter.
3. Adjust outlet pressure on the combination valve. (**Fig. 1**)
 - a. Connect manometer to outlet pressure tap on combination valve.
 - b. Adjust outlet pressure using outlet pressure adjustment screw.
4. Adjust the High Fire setting on the modulating valve (**Fig. 2**)
 - a. Connect manometer to test port on burner manifold
 - b. Press and hold button #1 until the LED lights solid red on the mod valve. Release button and observe pressure on manometer.
 - c. Adjust mod valve by pushing button #1 to increase the pressure and button #2 to decrease the pressure.
 - d. Save the High Fire setting by simultaneously pressing button #1 and #2 until the LED turns off.
5. Adjust Low Fire setting on mod valve (**Fig. 3**)
 - a. Press and hold button #2 until LED blinks RED. Release button and observe pressure on manometer.
 - b. Adjust low fire setting by pushing button #1 to increase or button #2 to decrease the pressure.
 - c. Save the Low Fire setting by simultaneously pressing button #1 and #2 until the LED turns off.
6. Repeat steps 2 & 3 for high turndown furnaces.
7. Continue through Commissioning Menu to verify proper furnace operation.

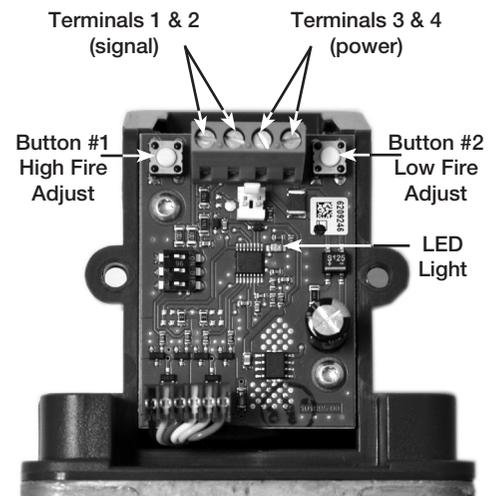
Staged Furnace Commissioning

1. If 2 stage furnace is present, scroll down to MANUAL OVERRIDES > FURNACE REQUEST and enable each stage of Furnace 2 (FS2) followed by setting gas pressures to **Fig. 2** and **Fig. 4**
2. If single stage furnace is present, scroll down to MANUAL OVERRIDES > FURNACE REQUEST and enable Furnace (FS3) followed by setting gas pressures to **Fig. 2**.



Combined Regulator Valve

Fig. 1 Outlet Pressure Settings	
Natural Gas	5 in. wg
LP Gas	11.5 in. wg



EXA Modulating Gas Valve
(with cover removed)

Fig. 2 All High Fire Settings	
Natural Gas	3.5 in. wg
LP Gas	10.0 in. wg

Fig. 3 Mod Low Fire Settings	
Natural Gas	0.3 in. wg
LP Gas	1.0 in. wg

Fig. 4 2 Stage Low Fire Settings	
Natural Gas	0.88 in. wg
LP Gas	2.5 in. wg