

## 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*):



- a. Exhaust fan (*optional*) - Connect terminals R to H
- b. Supply fan - Connect terminals R to G
- c. Heating - Connect terminals R to W1
- d. Cooling (*optional*) - Connect terminals R to Y1

**Note:** If unit is controlled by microprocessor, only connect terminals R to G.

1. Energize the supply fan by connecting terminals R to G.
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.

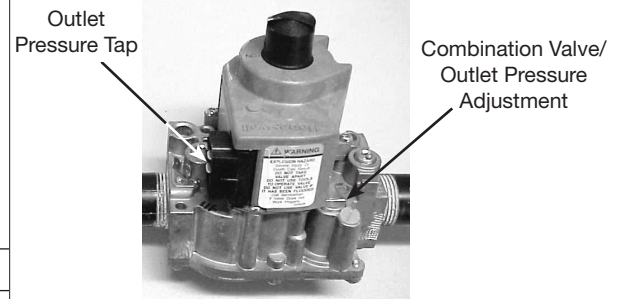
4. Enable call for heat by powering terminal W1.

### Microprocessor/Furnace Controller Start Up (Password=1000)

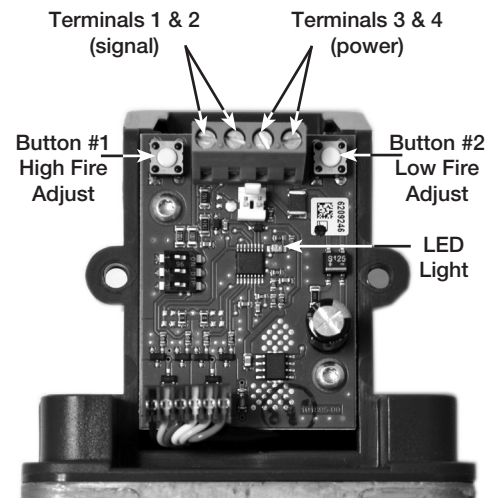
1. Press the program key 
2. Scroll down to SERVICE screen , press enter
3. Scroll down to COMMISSIONING, press enter
4. Scroll down to IG Furnace, press enter
5. You are now in the furnace commissioning sequence; follow the step by step procedures to set up each furnace.

### Commissioning Sequence

1. 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.
2. 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.
3. 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.
4. Repeat steps 2 & 3 for high turndown furnaces.
5. Continue through Commissioning Menu to verify proper furnace operation.



**Combined Regulator Valve**



**EXA Modulating Gas Valve**  
(with cover removed)

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

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

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