**PRESS THE ➡ BUTTON TO VIEW DIFFERENT SETTING MODES**

| SETTING MODE OPTIONS | Pre-Purge* | Trial for Ignition | Post-Purge | Flame Stabilize | CAD Ohms Max | Ignition Type | TT Jumpered Internally** | Vent Input | Allowed Recycles | Alarm Contacts | Clear Fault History | Restore Factory Defaults |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PRESS THE ⬇⬆ BUTTONS TO CHANGE SETTINGS | No Valve | 10 Sec†† | 0 Sec | 5 Sec | 3300 | Interrupted | Yes | Not Used | None | N/O | Yes | Yes |
| | 0 Sec† | 15 Sec | 10 Sec | 10 Sec | 5300 | Smart Ign | No | Intake | 3 | N/C | No | No |
| | 3 Sec† | 30 Sec | 15 Sec | 15 Sec | 7200 | Intermittent | | Exhaust | | | | |
| | 10 Sec | 45 Sec | 30 Sec | 30 Sec | | | | | | | | |
| | 15 Sec | | 2 min | 45 Sec | | | | | | | | |
| | 30 Sec | | 5 min | | | | | | | | | |
| | 60 Sec | | 15 min | | | | | | | | | |
| | 2 min | | | | | | | | | | | |

Shaded box = default setting; CAD Ohms Max default is application dependent.
 *When selecting "No" valve during initial startup, "Pre-Purge" will be set to "No Valve" and "Post-Purge" will be set to "0 Sec".
 **Changing this setting to 'Yes', with limits powered will exit Settings mode and result in immediate 'Call For Heat'.
 †If flame is sensed during Pre-Purge, control will lockout immediately (except when Pre-Purge is set to 0 or 3 seconds).
 ††A 10 second TFI is recommended for commercial burners 7GPH and larger.

## Setup Menu Definitions

• **Pre-Purge:** Time period motor is on prior to Trial for Ignition. This setting is often referred to as "valve delay on". **Note:** If flame is sensed during Pre-Purge, control will lockout immediately (except when Pre-Purge is set to 0 or 3 seconds).

• **Trial for Ignition:** Flame-establishing period during ignition.
  45 sec TFI up to 3 GPH
  15 sec TFI up to 19.9 GPH

• **Post-Purge:** Time period the motor is on after the Call for Heat is satisfied to allow for evacuation of combustion gases. This setting is often referred to as "motor delay off". A call for heat during Post-Purge will result in a recycle. **Note:** If Pre-Purge is set to "0 Seconds" or "No Valve", Post-Purge can only be set to "0 Seconds".

• **Flame Stabilize:** The time period after Trial for Ignition that the ignitor remains on to stabilize flame.

• **CAD Ohms Max:** The maximum Ohms range that the control will allow the burner to operate.

• **Ignition Type**
  **Interrupted:** Spark is turned off after Flame Stabilization period.
  **Smart Ignition:** If flame is lost at any time after the Flame Stabilization period, the control will recycle (60 - 65 seconds). Following this recycle, the control will operate in Intermittent Duty mode (ignition on throughout the call for heat) for 5 heat cycles. Following these five cycles, the control will revert back to Interrupted Duty and will remain in Interrupted Duty until another recycle event occurs. If control recycles and operates in Intermittent Duty three consecutive times, on a fourth consecutive recycle the control will lockout, due to hitting smart ignition limit, displaying "15 max smart ign"
  **Intermittent:** Spark remains on during call for heat.

• **TT Jumpered:** Allows TT to be "jumpered" by software program.

• **Vent Input:** Applicable only to applications equipped with a combustion air proving switch (Intake) or a blocked vent switch (Exhaust):
  **Intake:** When the burner is equipped with a combustion air proving switch, the "Intake" setting should be selected. At each burner startup, the control will check the air intake during pre-purge (Valve On Delay)*. If the air is blocked, the control will abort pre-purge and shutdown the burner. If the air intake is not blocked during this startup test, but becomes blocked during normal burner operation, the burner will shut down if the air remains blocked for 20 seconds. Following any shutdown, the burner will be permitted to recycle 3 times following a 1 minute delay. Lockout occurs if the blockage persists throughout 3 recycles during any single call for heat.

*If "no valve" is selected in setup, the air intake cannot be checked prior to TFI. In this case, the burner will only shut down following the 20 second blockage described above. For all burners with valves, Valve Delay settings of less than 15 Seconds will be automatically changed to 15 Seconds to allow for the prepurge test.*

**Exhaust:** When the appliance is equipped with a blocked vent switch, the "Exhaust" setting should be selected. If a blocked vent is detected during burner startup, the Pro X 70200 control will NOT respond to the blocked intake vent until 30 seconds after the ignition sequence is complete (following Flame Stabilization), if the vent remains blocked at that time, the burner will shutdown and lockout. If the vent is not blocked during this startup test, but becomes blocked during normal burner operation, the burner will shut down and recycle, depending on the Allowed Recycles selected. Lockout occurs if the blockage persists and the Allowed Recycles setting is reached during any call for heat.

**NOTE:** If the Pro-X 70200 is being connected to both a combustion air proving switch and blocked vent switch, call Carlin Technical Support for assistance.

• **Allowed Recycles:** Number of Recycles allowed during a single Call for Heat prior to lockout.

• **Alarm Contacts:** Option to choose N/O (Normally Open) or N/C (Normally Closed)

• **Clear Fault History:** Allows all prior burner fault conditions stored in control to be cleared.

• **Restore Factory Defaults:** Allows all factory defaults to be restored in control (refer to settings shaded in gray in the table above). Will reset and reboot control and require answer to "solenoid valve" question at startup.

**NOTICE** Per UL requirements, the control will not turn on if the cad cell senses flame (light) during the self-test. If the cad cell sees flame, the control will remain in self-test mode until the cad cell no longer senses flame.