

3 KEY LIMIT CONTROLLER Software: LMT4KA

Summary-

The model 3K 100 – limit, has 3 main modes of operation – STOP, PROGRAMMING, and FIRING. From STOP, pressing “enter” will take you to the PROGRAMMING mode. While in the PROGRAMMING mode, use the arrow keys to adjust the limit set point then press “enter” to save the setting and go to the FIRING mode. While in the FIRING mode press “enter” to go to the STOP mode.

MODES OF OPERATION

- 1 FIRING MODE – The controller will display the current temperature (no flashing) and its output will be on if the temperature is less than the programmed “°F 1” limit temperature. If the temperature goes higher than the programmed °F 1, the controller will switch to “limit exceeded” mode.

While in the FIRING mode, press “enter” to go to the STOP mode

- 2 LIMIT EXCEEDED

LMT mode – The controller will turn the output off and the display will flash LMT and then the current temperature. Pressing “enter” will go to the stop mode.

- 3 ERROR CODE (the output is off at all error conditions)

a. tc fail – The thermocouple has failed.

b. tc— The controller has detected a negative reading. Probably due to the thermocouple connected backwards.

c. errd – The controller detected that the temperature was 100 °F above the limit set point.

- 4 PROGRAMMING

Program limit temperature (°F 1) – The display will flash between the current set point and °F 1. Use the arrow keys to adjust the limit temperature and press “enter” to store the displayed value as the new limit. After pressing “enter”, the controller goes to the FIRING mode.

- 5 REVIEW FIRING TIMES –During the firing mode, pressing the down arrow will display t 1 and the amount of time that the temperature has been below the limit point. The firing times are reset after programming.

- 6 STOP – In the STOP mode, the display will flash the current temperature and “stop”. From the STOP mode, press “enter” to go to the PROGRAMMING mode.

EDIT OPTIONS

Pressing and holding the “enter” key while the controller powers up will put the controller in the EDIT mode. Release the key when the display shows “EDIT”. The first option to set is the power-up mode. It can be set to “on” (which causes the controller to power-up in the same operating mode that it was in when it lost power) or “off” (which causes the controller to always power-up in the STOP mode). Use the arrow keys to toggle between on/off and press “enter” to accept the displayed option.

The second option to set is temperature scale (°F or °C). Use the arrow keys to toggle between °F/°C and press “enter” to accept the displayed option.

The last option to set is the maximum programmable set point. There are 3 options (1700°F/927°C, 2000°F/1093°C or 2350°F/1288°C). Use the arrow keys to toggle between the options and press “enter” to accept the displayed option. The controller will go back to normal operation.