

PROGRAMMING THE RAMP/HOLD MODE

PROGRAMMING STEPS

STEP 1

- From Idle Mode, press **RAMP/HOLD**.
Display will show PROG alternating with a number between 1 and 6.

STEP 2

- Input the **PROG Number** of the Program you wish to create or run. *(This is a number between 1 and 6 that you assign to a program which will be stored in permanent memory until it is replaced.)* Press **ENTER**
Display will show SEGS

STEP 3

- Input the total number of segments for your program. Press **ENTER**.
Display will show RA 1

STEP 4

- INPUT THE FIRST HEATING RATE IN DEGREES PER HOUR. PRESS **ENTER**.
Display will show °F 1 (or °C 1 if using Celsius)

STEP 5

- INPUT THE FIRST TEMPERATURE TO REACH. PRESS **ENTER**.
Display will show HLD 1.

STEP 6

- INPUT THE AMOUNT OF **Hold Time** in hours and minutes. Press **ENTER**.
Display will show ALRM if this the last segment you are entering, otherwise it will show RA 2.

STEP 7

- **REPEAT** steps 4 through 6 until all segments have been completed. The display will then flash **ALRM** (Alarm) alternately with the current Alarm temperature. The default setting for no alarm is 9999. Enter the desired alarm setting. Press **ENTER**
Display will briefly flash CPL

STEP 8 – PREPARE VENTING - (SEE DESCRIPTION ON PAGE 15)

STEP 9

- The display will return to Idle mode. At this point the program is loaded and ready to start. Before pressing **START**, it is a good idea to press **REVIEW** to make sure the program was input correctly. Be sure to check that the lid latch is secure on kilns that are equipped with lid lifters. **Press START** and the program will begin firing.
Display will briefly show ON and then will show the internal temperature of the kiln chamber unless a DELAY START has been programmed in which case it will begin counting down minutes from the designated Delay time.

DESCRIPTION

STEP 1 – RAMP/HOLD

RAMP/HOLD MODE IS A MODE OF PROGRAMMING THAT ALLOWS YOU TO WRITE YOUR OWN FIRING PROGRAM. WHEN YOU ARE ENTERING YOUR PROGRAM YOU WILL NOTICE DATA ALREADY STORED. SIMPLY WRITE OVER THIS INFORMATION. IF YOU MIS-ENTER DATA YOU MAY EITHER PRESS ZEROS TO CLEAR THE DATA AND RE-ENTER IT OR PRESS STOP TO START FROM THE BEGINNING.

STEP 2 – PROGRAM NUMBER (PROG)

You have the option of storing up to six firing programs. You may recall these programs at any time for future use. We recommend that you write down which number you have assigned each program so that you do not overwrite existing programs you have stored.

STEP 3 - SEGMENTS (SEGS)

This step is prompting you to input the total number of segments you wish to use in your program. Each segment consists of a heating or cooling rate, a target temperature, and a hold time at that target temperature if one is desired. You may program up to eight segments. Two programs may be connected to achieve 16 segment programs. See instructions on page 20.

STEP 4 – RATE (RA#)

This step is prompting you to input a Temperature Rate. The display will show RA along with the current segment number you are programming alternately with the previous data entered. You may enter any rate between 1 °F/hr (1 °C/hr) to 9999 °F/hr (9999 °C/hr). This can be a cooling rate or a heating rate. The controller distinguishes between the two by checking to see if the temperature entered in the next segment is hotter or cooler than the previous segment.

Just because you enter a rate does not mean the kiln is capable of achieving that rate. Things such as element age, load density, and temperature range will all affect the kiln's ability to heat. Conversely, the kiln's insulation will influence its ability to cool. A rate must be entered for each segment.

STEP 5 – TEMPERATURE (°F#) OR (°C#)

This prompt is asking you to enter a temperature to go to. When it gets to that temperature it will either hold at that temperature or switch to a new rate and aim for a new temperature. If you are programming in Celsius it will read °C instead of °F. The controller will allow you to program temperatures between 32 °F (0 °C) and 2400 °F (1315 °C). A temperature should not be entered which exceeds the kiln's temperature rating.

STEP 6 – HOLD TIME (HOLD)

A HOLD time is generally entered to allow the kiln time to balance out and all of the pieces in the kiln to reach the input temperature before the kiln moves to the next segment. You may enter hold times of 00.00 to 99.99.

A Hold at peak temperature can be used for this reason or to gain additional heatwork to fine tune cone bends or to fire in-between cones. Remember that everything to the left of the decimal point on the display is Hours and everything to the right is Minutes. Excessive Hold times may cause over-fires.

STEP 7 – REPEAT

Continue to enter a rate, a temperature and a hold time for all the segments. When the last segment has been entered the display will prompt you to enter an Alarm temperature. The default is 9999 for no alarm. Input an Alarm temperature and Press **ENTER**. The display will briefly flash CPL for "complete" and then return to Idle Mode. The program is now loaded.

STEPS 8 AND 9 – PREPARE VENTING AND START

Before starting the program it is always a good idea to press **REVIEW** and make sure the data was entered correctly. If you find an error simply press **RAMP/HOLD** and continue to Press **ENTER** until you find the error and are able to correct it. If there is a Delay entered, when you press start the kiln will begin counting down from the input time. Remember to turn on your vent (or prop your lid) before pressing **START**