

Perfect Fire Control Instructions

There are two steps to doing a new firing:

Setting the profile

Starting the firing

Once the profile is set, additional similar firings are as easy as pressing the START button.

SETTING THE PROFILE

To set the profile, (4) numbers are entered into the control. Two numbers are optional and may be set to zero, while the other two are required.

The end temperature is in degrees Fahrenheit. This can be found from a cone number from table 1. The temperature can be set to a resolution of 1 degree.

The delay time is from when the START button is pressed until the kiln actually begins to heat. This can be set from 0, (no delay), to 3959 , (39 hours and 59 minutes).

The ramp rate is how fast the kiln temperature rises. It can be set as high as 900 degrees per hour. A setting of 300-500 degrees per hour is recommended.

The hold (soak) time is how long the temperature stays at a particular temperature. This gives you more control for large items with delicate features. To simulate a cone, it can be set to 0.

STARTING THE FIRING

Press the START button.

EXAMPLE:

We want to fire to 1816 degrees F. To do this we go through the following steps:

Press 'SELECT', and the top lamp marked Temp/Off will begin to flash. The display shows the temperature that is entered now. Use the UP and DOWN keys to change the temperature to 1816, and then press 'ENTER' to store 1816. The display will blink to confirm.

Press 'SELECT' again, and the second lamp will begin to flash indicating the Delay Time. We set this to 0. (If it is already at 0, then proceed to 3). (Useful to start up early; next day also).

Press 'SELECT' again and the third lamp will flash, indicating the rate desired. We will set that to 350 using the UP and DOWN keys.

Press 'SELECT' again to show the Hold Time. We will use 0 for that.

Press 'Select' once more , and the top lamp will go on steadily, indicating that the kiln is 'Off', and the display will show the temperature currently inside the kiln.

To check that the profile has been correctly entered, just press 'SELECT' 5 times, and the display will show the 4 numbers that were entered and return to the kiln temperature. Check it until you are sure that the numbers are correct. (1816,0,350,0).

Now we are ready to fire the kiln. To begin the firing, just press the 'START' button. The display will show the temperature in the kiln as it rises from current temperature to 1816.

After the kiln has turned OFF, the temperature is displayed so that you can tell when it is safe to open the kiln and remove the fired articles.

CAUTION:

Hold times should be relatively short. Long hold times at elevated temperatures reduce the element life. The longer the hold time and the longer the hold temperature, the shorter the element life.