

Congratulations on your new kiln purchase! The kiln will arrive with an instruction manual, but I've found it can be overwhelming for the first time kiln user. I'm sending you these simplified instructions to get you started. I have included two sets of instructions. One for programming the kiln to fire metal clay, and one for programming the kiln to fire enamels.

Metal Clay Firing

Before beginning to program your kiln you will need to determine the firing requirements for the type of metal clay you have selected. This information should have been included in the packaging with your clay. There are three things you need to know.

Firing Temperature: How hot will you fire the clay?

Hold Time: How long will you hold it at the peak firing temperature?

Ramp Speed: How fast will the kiln heat? For pieces that are just clay, the answer will be "full speed", however if you are using cork, ceramics, glass or other inclusions, you may need to slow it down. A ramp speed of 4 is commonly used for many of these items.

The controller has three buttons: A Start/Stop button, and up arrow that is labeled "Higher" and a down arrow that is labeled "Lower". The Start/Stop button is used to progress from segment to segment in the programming.

1. Press the "Start/Stop" button until the display reads "Pr0" or "SPd" followed by a number.
2. Press the "HIGHER" button until you reach "SPd5". This display will alternate with "FULL". If you scroll past SPd5 do **not** use the "LOWER" button. That will launch the program at this stage. Just continue using the "HIGHER" button until it comes around again. This step sets how quickly your kiln will reach the desired temperature (ramp speed). These instructions are for clay only, with no inclusions. Different ramp speeds may be used if other items are being fired with the clay.
3. Press the "Start/Stop" button again to move to the next programming segment.
4. "°F 1" will display, alternating with the programmed temperature. Press the "HIGHER" or "LOWER" buttons until the display reaches the desired firing temperature.
5. Press the "Start/Stop" button.
6. "HLd1" will display, alternating with the set hold time. Press the "HIGHER" or "LOWER" buttons until the display reaches the desired hold time. Time is displayed in hours and minutes. For 10 minutes the display should read 00.10.
7. Press the "Start/Stop" button two more times. The first time "Strt" will display. The second time "-ON-" will display. At this point the kiln is on and firing will commence per your programmed instructions.

The unit will remember these settings until you change them. The next time you can just use the "LOWER" button after reaching "SPd5" to review the program and launch the kiln for metal clay firing. Press the "Start/Stop" button until the display reads "Pr0" or "SPd" followed by a number. Scroll "Higher" until you reach "SPd5" and then click the "Lower" button. At this point the display will review the program you set, ending with "Strt". One more click of the Start/Stop button will switch it to "-ON-" and firing will commence.

To fire the clay, simply place it on a kiln shelf in the kiln and launch the program as described above. Once the program cycle is finished, the kiln will beep and shut off automatically. As long as it's just metal clay, without other inclusions, go ahead and open the kiln door to speed up the cooling time. You can use a pair of tweezers to remove the piece from the kiln to cool it faster. Be sure to wear heat resistant gloves when you do this, and place the piece on a tile, extra kiln shelf, or some surface that won't burn.

Enamel Firing

Enamel firing differs from metal clay firing in that you pre-heat the kiln to a set temperature and then use it for a series of short, 1 to 3 minute firings. The kiln is left on and hot while additional layers of enamel are applied, dried and fired. Often you will be working on several enameling projects simultaneously. Unlike metal clay firing, the kiln does not need to be set to hold for a pre-determined period of time, but rather is just shut off manually when the user is done.

1. Press the "Start/Stop" button until the display reads "Pr0" or "SPd" followed by a number.
2. Press the "HIGHER" button until you reach "Pr01". If you scroll past your target do not use the "LOWER" button. Just continue using the "HIGHER" button until it comes around again. This is the ONLY step where you can not use the lower button. You can go up or down on all other steps.
3. Press the "Start/Stop" button again to move to the next programming segment.
4. The display will now read "rA 1" alternating with the desired ramp speed. Press the "HIGHER" or "LOWER" button until the display reads FULL. "Full" falls between 1798 and 0000, so if you are closer to the high end use the "higher" button. If you're closer to "0000" use the lower button.
5. Press the "Start/Stop" button.
6. The display will read "°F 1", alternating with the programmed temperature. Press the "HIGHER" or "LOWER" buttons until the display reaches the desired firing temperature. For enameling I usually set my kiln somewhere between 1450°F and 1500°F.
7. Press the "Start/Stop" button.
8. The display will read "HLd1", alternating with the set hold time. Press the "HIGHER" or "LOWER" buttons until the display reaches 99.59.
9. Press the "Start/Stop" button.
10. The display will read "rA 2". Press the "HIGHER" or "LOWER" buttons until the display reaches 0000. If you've never done this before it will probably default to 0000 and you won't have to change anything.
11. Press the "Start/Stop" button two more times. The first time "Strt" will display. The second time "-ON-" will display.

The kiln will commence heating to the set temperature at this point and will hold until you are done and manually shut off the kiln (or for 99 hours and 59 minutes, whichever comes first). One more click of the start/stop button will shut the kiln off.

"Pr01" is now set for enameling. The next time you can just use the "LOWER" button after reaching "Pr01" to review the program and launch the kiln for enameling. Press the "Start/Stop" button until the display reads "Pr0" or "SPd" followed by a number. Scroll "Higher" until you reach "Pr01" and then click the "Lower" button. At this point the display will review the program you set, ending with "Strt". One more click of the Start/Stop button will switch it to "-ON-" and firing will commence.

If you have never fired your kiln you should pre-fire it. It should have come with a kiln shelf. If it was brand new, the shelf will be wrapped in cardboard. Remove the cardboard and put the shelf in the kiln. Close it up and fire the kiln to about 1650 for five minutes or so. This will burn off any dust or debris in the kiln. I'd do this even if the kiln has been used before (but not by you) just to make sure it's clean inside.

And lastly, for enameling I recommend modifying the door catch to make it easier to open and shut. As delivered, the door catch can be so tight the unit is jarred when you open and close it. This can dislodge enamels before they are fired on. Use a small screwdriver to remove the bottom bearing of the latch assembly. The top bearing is enough to hold it closed, but not so tightly that you jar your enamels when you close the door. If it's still tight you can loosen the top bearing a tiny bit, but don't remove it. You need one of them in place.