

## BRONZclay & COPPRCLAY programming for kilns 703-117, 703-118

Below are the basic definitions to be aware of when using the "User Defined" options. It is helpful to understand the three parts of any of the programs that are set in your kiln. These three parts are RAMP, TEMPERATURE, and HOLD TIME.

**RAMP:** Ramp is the same as heating. Think of it like your gas pedal in your car. When you ramp at FULL that means that the kiln will get to temperature as fast as possible. When you use a program with a slow schedule, that means that the ramping (or heating) isn't as fast as the kiln can go. For example, the slow BRONZclay schedule has a 250°F ramp. What this means is that it takes the kiln one hour to reach 250° degrees. So, remember that RAMP = How quickly the kiln heats up.

**TEMPERATURE:** This is the temperature that you want the kiln to maintain during the firing process.

**HOLD TIME.** This is the amount of time that you want the kiln to maintain the designated temperature that was determined in the previous step. The kiln is programmed to count down the timing and the heating elements will automatically shut off once the time has expired (the LCD display will remain on to let you know that it is complete).

### Programming the USER DEFINED option for original BRONZclay firing

BRONZclay firing schedule:

Ramp (RA1)	250°f per hour
Temperature (F1)	1550°f
Hold time (hld1)	3 hours (03.00)

Below are the steps that were used to enter this program:

From IDLE press the START/STOP key. The screen should display the last program that was used. Using the up arrow, scroll until you see PRO followed by a number (6 – 9). Press START/STOP when you reach the desired program number.

The screen should now say RA1. This is the ramp (how fast the kiln will heat up). Scroll up or down to until the screen reads 250°f. Press START/STOP once the correct temperature is selected.

Note: I prefer using the slow ramp of 250°f per hour. If you are doing small or thin pieces you can use a faster ramp of 500°f.

The screen should now say F°. This is the temperature. Use the up or down keys to scroll to 1550°f. Press START/STOP.

The next display should now say HLD1. This is how long you want the kiln to hold at the temperature you just programmed in. Scroll up or down until you reach 3 hours (03.00). Once the correct time is displayed press START/STOP.

The display will now read RA2. This is a second schedule that is available, but is not necessary to fire BRONZclay. (Some use this when fusing glass or doing other type of kiln work.) The display should read 00.00. Press START/STOP.

The final screen reads STRT. Press the START/STOP key one more time. The display will now read -ON-. Once you run this, it will remain in your user defined setting until you choose to change the program.

## **Programming the USER DEFINED option for original COPPRclay firing**

COPPRclay firing schedule:

Ramp (RA1)	FULL (fastest possible)
Temperature (F1)	1725°f (range is 1700 – 1750°f)
Hold time (hld1)	3 hours (03.00)

Below are the steps that were used to enter this program:

From IDLE press the START/STOP key. The screen should display the last program that was used. Using the up arrow, scroll until you see PRO followed by a number (6 – 9). Press START/STOP when you reach the desired program number.

The screen should now say RA1. This is the ramp (how fast the kiln will heat up). Scroll up or down to until the screen reads FULL. Press START/STOP once the correct temperature is selected.

The screen should now say F°. This is the temperature. Use the up or down keys to scroll to 1725°f. Press START/STOP. Note: COPPRclay has a firing range of 1700 – 1750°f. I've programmed this kiln for 1725°f. I recommend doing a test firing before firings any final pieces at this program. If the clay blisters, take the temperature down to 1700°f. If the pieces don't sinter fully, increase the temperature to 1750°f.

The next display should now say HLD1. This is how long you want the kiln to hold at the temperature you just programmed in. Scroll up or down until you reach 3 hours (03.00). Once the correct time is displayed press START/STOP.

The display will now read RA2. This is a second schedule that is available, but is not necessary to fire COPPRclay.

The final screen reads STRT. Press the START/STOP key one more time. The display will now read -ON-. Once you run this, it will remain in your user defined setting until you choose to change the program

## **Programming the USER DEFINED option for FASTfire BRONZclay firing**

FASTfire BRONZclay firing schedule:

Ramp (RA1)	1525°f per hour
Temperature (F1)	1525°f
Hold time (hld1)	1 hour (01.00)

Below are the steps that were used to enter this program:

From IDLE press the START/STOP key. The screen should display the last program that was used. Using the up arrow, scroll until you see the program you want to use. Press START/STOP when you reach the desired program number.

The screen should now say RA1. This is the ramp (how fast the kiln will heat up). Scroll up or down to until the screen reads 1525°f. Press START/STOP once the correct temperature is selected.

The screen should now say F°. This is the temperature. Use the up or down keys to scroll to 1525°f. Press START/STOP.

The next display should now say HLD1. This is how long you want the kiln to hold at the temperature you just programmed in. Scroll up or down until you reach 1 hour (01.00). Once the correct time is displayed press START/STOP.

The display will now read RA2. This is a second schedule that is available, but is not necessary to fire BRONZclay. (Some use this when fusing glass or doing other type of kiln work.) The display should read 00.00. Press START/STOP.

The final screen reads STRT. Press the START/STOP key one more time. The display will now read -ON-. Once you run this, it will remain in your user defined setting until you choose to change the program.