



# KilnMaster Addendum

## THE KILNMASTER CONTROLLER HAS A SLIGHTLY NEW LOOK AND MORE FEATURES

The New 600 Series controller is currently being installed on all new KilnMaster Kilns. The board looks almost identical to previous models however if you look in the top right hand corner of the board you will see that the "F/C" button has been replaced by a "MENU" button.

The MENU button gives the Artist easy access to a host of new features. Toggling from Fahrenheit to Celsius is now controlled through the "MENU" key. Here are a some of the new features to look for:

- *Preheat*
- *16 Segment Programming*
- *Controlled Cooling in Cone Fire Mode*
- *Improved Diagnostic Capabilities*

### Pre-heat

The Pre-heat feature allows the artist to "Pre-heat" the kiln when running a Cone Fire Mode program. It heats the kiln at a slow rate, 80 •F/hr, to 180 •F and holds it at that temperature for as long as 99.99 hours (1 to 2 hours is sufficient for most projects). After the pre-heat is complete the controller automatically begins the Cone Fire Mode program.

Pre-heating your ware helps to ensure that any remaining moisture in the clay is slowly released. Heating a moist clay body too fast, especially above 200 •F, can cause the water to escape violently in the form of vapor and crack the piece or, in extreme cases, cause the piece to explode.

Prior to the introduction of the "Pre-heat" feature it was necessary for the artist to program and run a Ramp and Hold program first and then come back to start a Cone Fire Mode program. Now whenever you enter a ConeFire Mode program the first question it asks you is "How long do you want Pre-heat?"

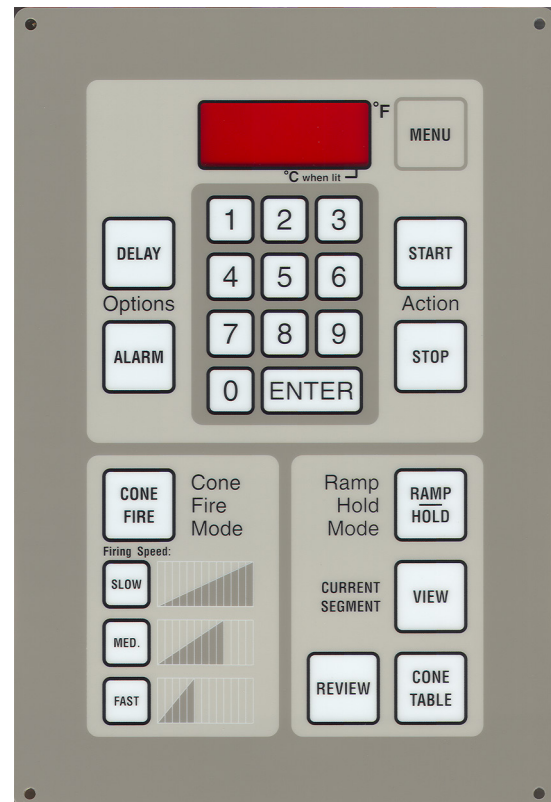
Pre-heat has actually been available for sometime on the KilnMaster Controller. The key difference on the 600 Series Board is that, due to it's popularity, we have now made it part of the standard programming sequence when entering any Cone Fire Mode program. Instructions for toggling this feature off are on page 22 of your operating manual.

Here is how to use the Pre-heat Feature:

1. Press "CONE FIRE"
2. Enter the amount of time for your pre-heat hold in Hours and Minutes
3. Continue programming the Cone Fire Mode Program as normal.
4. Press REVIEW to check the program.
5. Press START

*The controller will retain this pre-heat information until the CONE FIRE key is pressed again.*

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### 16 Segment Programming

This feature allows you to attach two stored programs together to make, up to, a 16 segment program. The first stored program would contain the first 1 to 8 segments of the program and the second stored program would contain the second 1 to 8 segments.

When the 16 segment feature is toggled "ON", the controller links programs #5 and #6. Now when you run program # 5, it will automatically run program # 6 to continue the firing after program #5 has completed. Due to requirements of the software the first segment of the Program 6 must be increasing in temperature by a minimum of 5 •F.

Here is how to use this feature:

1. Enter a 1 to 8 Segment Ramp and Hold Program in USER #5
2. Press "STOP"
3. Enter a 1 to 8 Segment Ramp and Hold Program in USER #6
4. Press "STOP"
5. Press "RAMP-HOLD"
6. Press "5"
7. Press "ENTER"
8. Press "STOP"
9. Press "MENU", "7", "8" (Screen will display "16-S" alternately with "OFF")
10. Press "1" (Screen will display "16-S" alternately with "ON")
11. Press "ENTER"
12. Press "Review"
13. Press "START"

**Important:** Program #5 must be cued prior to toggling the feature "ON". Once both programs have run, the controller automatically toggles OFF the 16 segment feature.

### Controlled Cooling in Cone Fire Mode

Crystal Glaze and Slow Cooling programs have become quite popular. In order to run these firing programs it was once necessary to write the entire program in Ramp and Hold Mode and therefore lose the benefit of Cone Correlation in the Cone Fire Mode. Cone Correlation is a unique feature of the Cone Fire Mode that adjusts the peak temperature of the firing program based on the kilns actual performance to ensure the proper heat work.

This new feature allows you to write a cooling program in the #6 stored program slot and attach it to any Cone Fire Mode Program. When the 16 Segment feature is toggled on the controller will run the Cone Fire Mode Program and then the Ramp and Hold cooling program stored in program slot #6.

Again, due to requirements of the software the first segment of the Program 6 must be increasing in temperature by a minimum of 5 •F. Since the final temperature can vary with Cone Fire Mode, the computer overrides this first segment to fulfill that requirement. Therefore, the first segment you input will not be used. You still must enter data in segment 1 but the program will begin with segment 2.

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Here is how to use this feature:

1. Enter your Ramp and Hold cooling program in stored program slot #6
2. Enter your Cone Fire Mode program
3. Press "MENU", "7", "8" (Screen will display "16-S" alternately with "OFF")
4. Press "1" (Screen will display "16-S" alternately with "ON")
5. Press "ENTER"
6. Press "Review"
7. Press "START"

*Important: Your Cone Fire Mode program must be cued prior to toggling the feature "ON". Once both programs have run, the controller automatically toggles OFF the 16 segment feature.*

### Improved Diagnostic Capabilities

We have developed some new diagnostic tools that will help get you back to firing as soon as possible should anything go wrong with your kiln.

LED Test  
Output Test