

CHOOSING A PROGRAMMING MODE

The first step in programming your kiln is to decide which "Programming Mode" to use. Before making this decision it helps to have a good understanding of Firing Programs. A Firing Program consists of a series of program segments. Each segment consists of a Rate, a Temperature and a Hold Time. These segments determine the rate at which the kiln will heat up or cool down and how much Heatwork the pieces in the kiln will receive. For more information on Heatwork see Appendix 3.

CONE FIRE MODE

With Cone Fire Mode the programs are written for you. You simply give the controller some key information regarding the pieces you are firing and it accesses a program which best suits your project. This is the most commonly used mode of programming. The programs were created by Ceramic Engineers and are designed to minimize problems that can occur during critical stages in the firing process.

Cone Fire Mode is incredibly easy to use however, the software itself is extremely advanced. Cone Fire Mode uses complex algorithms to simulate the heatwork of a Pyrometric Cone. What is impressive is that it automatically makes adjustments to the firing profile based on your kiln's performance. Cone values are based on heatwork and heatwork is a function of time and temperature. Therefore, if your kiln is firing slow due to a heavy load or aging elements, Cone Fire Mode automatically adjusts the peak temperature down so you get the perfect amount of heatwork. There are very few reasons not to use this mode of programming.

RAMP/HOLD MODE

RAMP/HOLD Mode allows you to write your own programs when the results you want cannot be achieved through Cone Fire Mode. It is a perfect tool for:

- Fusing and slumping glass
- Annealing metal and glass
- Firing Precious Metals
- Clay
- Specialized glaze formulations and techniques

Ramp/Hold is generally considered an advanced form of programming. It requires in-depth knowledge of heatwork and a good feel for how your kiln performs under a range of conditions. Below is an example of a simple glass fusing Ramp/Hold program.

