

Kiln Corner

More Controller Questions

by Arnold Howard

Photography Courtesy of Paragon Industries, L.P.

Though Arnold Howard works for Paragon Industries, L.P., the information here applies to all brands of glass kilns. Feel free to send him questions for this column no matter what brand of kiln you own.

When a firing schedule is complete and I want to turn off my kiln, is it necessary to press “Enter” until the readout indicates “Stop,” or can I just turn the power switch off when the readout indicates that the schedule is complete?

When the firing has completed, you can just turn the toggle switch to the “Off” position. In fact, you can do that at any time during a firing without harming the kiln. The current firing program will remain in active memory.

My controller temperature goes down 20 to 30 degrees Fahrenheit during a hold before the kiln turns back on. What is causing this?

The relay in your kiln is waiting too long to send power to the elements. Please make sure the wires that are attached to the relays are tight. The temperature drop may be due to a loose controller-to-relay wire.

How close does the Sentry Xpress maintain temperature during a hold?

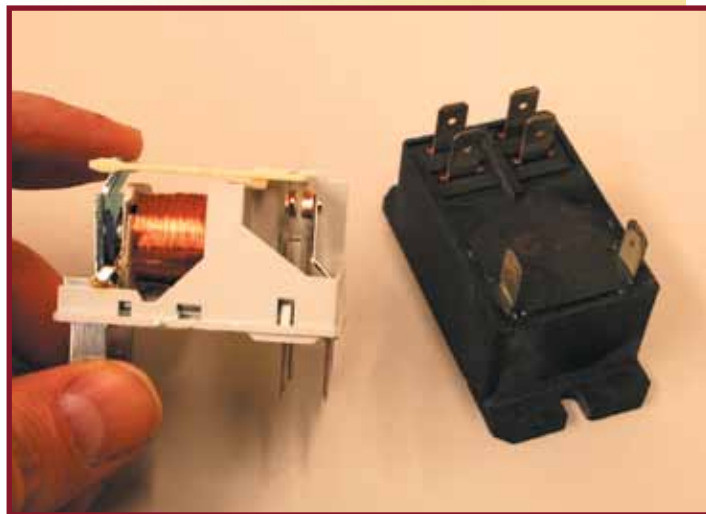
The normal temperature fluctuation during a hold is plus or minus 2 degrees Centigrade. Ordinarily, the only time the temperature goes beyond the two-degree fluctuation is after a fast rate, which causes a temperature overshoot. The overshoot usually stabilizes within 15 minutes.

What is the relay that is used in kilns and how does it work?

Relays turn on the heating elements of digital kilns. The relays make that clicking noise that you hear while the kiln fires. A relay contains a small electromagnet. When the controller needs to turn on the kiln’s heating elements, it sends a 12-volt signal to the electromagnet, which then pulls a bar toward the magnet. The bar, in turn, allows electric contacts to come together. The elements are wired to the relay so that when the relay contacts close, electricity flows to the elements.

How does one delete a program for a Sentry Xpress digital controller that has already been entered?

To delete a program, overwrite it with a new one. Press “Start,” then select the program you want to erase. Enter new rates and temperatures. The new program will automatically replace the old one.



When the relay receives a signal from the controller, the electrical contacts close. This sends power to the heating elements.



The thermocouple measures the temperature inside the kiln.

Arnold Howard writes instruction manuals and advertisements for Paragon Industries, L.P. His hobbies are glass fusing and karate. He also enjoys studying history and watching classic movies. You can reach Arnold at ahoward@paragonweb.com with questions for future columns. Sign up for his kiln newsletter at www.paragonweb.com.

© Copyright 2013 by The Flow.
All rights reserved.