



APPENDIX 4

Error Messages

The following errors may appear in the window of your controller. Along with the error number, the display indicates elapsed time in hours and minutes and also the temperature the kiln reached when the error occurred. Please call your distributor or Skutt Ceramic Products at (503) 774-6000

In addition to the error messages in the chart at right, all of which indicate a problem which needs to be corrected, their is an informational error message: **ErrP**. When it flashes, a brief, non-critical power outage has occurred. The controller was able to resume firing and the load of ware is not in danger. It continues to alternately display with the internal temperature until you press Enter.

Error and description	Possible cause	Correction
1 Ramping up and rate is less than 12 ^o per hour. Rise is checked every 7.5 minutes. Rate must persist for 22.5 minutes before display.	Kiln-sitter has tripped. Limit timer has expired. Elements are weak. Load is heavy. Relay failed. Low voltage.	Place one cone hotter in Kiln-Sitter. Add time to limit timer. Check elements. Reduce size of load. Check relays. Check voltage.
2 Program in hold, temperature 50 ^o or more above hold temperature. Error must persist for more than 18 seconds before error is triggered.	Excessive heating rate going into the hold. One or more relays are stuck in the closed position.	Reprogram lower heating rate. Turn Off and unplug. Check resistance at plug with ohmmeter.
3 Program in hold, temperature 50 ^o or more below hold temperature. Error must persist for more than 18 seconds before error is triggered.	Kiln cannot maintain temperature to reach hold. Lid opened during firing. Elements may be weak.	Do not open lid during firing. Check elements with ohmmeter.
4 Program ramping down and temperature more than 50 ^o above last hold temperature. Error must persist for more than 18 seconds before error is triggered.	Relays may be stuck closed (failed closed).	Turn Off and unplug. Check circuit at plug with ohmmeter.
5 Program ramping down and temperature more than 50 ^o below local set point. Must persist for 18 seconds to trigger.	Normally kiln will have plenty of power to maintain a cooling rate. Was lid opened? Elements failing?	Do not open lid until the kiln has reached at least 500 ^o F. Check elements.
6 Negative reading detected at thermocouple, indicating it is wired improperly.	Thermocouple wires have been switched. Somewhere lead wires have been crossed.	Check and fix any backward connections.
7 Ramping up and temperature 50 ^o above local set point.	Possible relay failure in the closed position.	Turn Off and unplug. Check relay.
8 Controller in positive ramp, kiln temperature is ramping down. Negative rate must persist for 22.5 minutes to trigger error.	On Wall-Mount KM-1, The Kiln-Sitter may have tripped or timer depleted and turned Kiln-Sitter off.	Use hotter cone in Kiln-Sitter. Add more time to limit timer.
FAIL System cannot sense thermocouple.	Thermocouple broken or disconnected.	Secure or replace thermocouple.