

## Error Messages

Two types of errors may be displayed:

### **PROGRAMMING**

Programming error messages indicate that a programming attempt was invalid. Except for error message “E0 EErr”, the control will continue to operate the outputs normally during programming errors. Programming error messages will be flagged in the following list with this symbol: “P”

### **SYSTEM**

System errors occur when conditions are detected that can cause unreliable operation. All outputs will be disabled when system error messages occur. The cause of a system error must be determined and corrected before reliable controller operation can be guaranteed. Contact the Electro Cam factory for assistance whenever system error messages repeat. System errors will be flagged in the following list with this symbol: “S”

### ***CrASH***

Watchdog Timer Fault: “S”

The Watchdog Timer has timed out, indicating that the controller is not properly executing its program. All outputs will be disabled during this error condition. This problem can be caused by severe electrical noise or hardware failure within the control.

**Solution:** Remove and restore AC input power to the controller. If the control immediately repeats the CrASH error condition each time it is powered up, hardware within the control is damaged. Call Electro Cam for return authorization and further advice.

If CrASH errors occur at intermittent intervals, they are apparently being caused by excessive electrical noise. Check wiring for proper shielding and grounding.

### ***E0EErr***

EEPROM Programming Error: “P”

The Checksum associated with the Function programming (controller’s global configuration) was found to be incorrect.

**Solution:** Press the CLR/CLE key to clear the flashing error message. All configuration programming and setpoint information will remain unchanged. It will be necessary to re-program all functions that were altered from the factory defaults. (See page A-16, Alt Fcn 7000 for a listing of factory defaults.)

### ***E0FAtL***

Memory Fault: “S”

A problem with random access memory has been detected and the unit cannot function properly. Memory circuitry in the controller is not functioning properly.

**Solution:** Control must be returned to factory for repair. Call Electro Cam first for return authorization and further information.

### ***E1 CHEC***

#### **Checksum Error (Checked on Power-up): “S”**

The stored checksum value did not match the memory contents when checked on power-up. This problem can be caused by severe electrical noise during power-up or hardware failure within the control.

**Solution:** Remove and restore AC input power to the controller. If the control immediately repeats the E1 CHEC error condition each time it is powered up, hardware within the control is damaged. Call Electro Cam for further information.

### ***E1 OLAP***

#### **Pulse Overlap: “P”**

The output pulse that was just created or adjusted overlaps or touches another pulse that already exists in the same output channel. It was therefore not entered. Also, if one edge of a pulse is moved until it is equal to the other edge, an “E1 OLAP” error will occur.

**Solution:** Press the CLR/CLE key to clear the flashing error message. Use VIEW keys to review the setpoints that are already programmed on this channel to determine the cause of the overlap condition.

### ***E2run***

#### **Item Can Not be Programmed While Running: “P”**

While the encoder/resolver was turning, an attempt was made to change a programmed item that cannot be changed unless the transducer is stationary. Items which cannot be changed while in motion are: Direction of Rotation (FCN 0 - CL/CCL), Scale Factor (FCN 0 - SF), Output Grouping (FCN 8), and Enable Inputs and Modes (FCN 9).

**Solution:** Press the CLR/CLE key to clear the flashing error message. Stop the machine (transducer) while making the program change.

### ***E4-Pro***

#### **Programming Not Enabled: “P”**

A programming change was attempted when the corresponding level of programming access was not enabled. There are three levels of programming access. See page 4-1 for details.

**Solution:** Press the CLR/CLE key to clear the flashing error message. Enable the appropriate level of programming access and make the necessary changes.

### ***E58888***

#### **Number Out of Range: “P”**

A number was entered that exceeds allowable limits for the item being programmed. Some examples are: a setpoint value that exceeds the scale factor; a channel number that exceeds the number of output channels; an active program number that exceeds 8; etc.

**Solution:** Press the CLR/CLE key to clear the flashing error message. Enter a valid value for the item being programmed.

### ***E6-379***

#### **Illegal Setpoint Value (encoder controls only): “P”**

A setpoint value with a 3, 7, or 9 in the units digit was entered into a PS-50XX (encoder based) controller. Degree positions with 3, 7, or 9 in the units digit are skipped except for the following positions: 89, 179, 269 and 359.

**Solution:** Press the CLR/CLE key to clear the flashing error message. Enter a value that does not have 3, 7, or 9 in the units digit.

**E7-dEF**

Too Many Enable Inputs (5xx4 models only): “P”

An attempt was made to program more Enable Inputs (FCN 9) than there are Output Groups (FCN 8).

**Solution:** Press the CLR/CLE key to clear the flashing error message. Review Functions 8 and 9 to determine the cause of the problem.

**E9tdE**

Too Many Timed Outputs: “P”

An attempt was made to program more timed outputs than are allowed. The number of timed outputs depends on the number of outputs and the timing base selected (page 4-5.)

8, 9, and 16 output systems: 8 - 1 mSec timed outputs  
4 - .5 mSec timed outputs

24 and 48 output systems: 4 - 1 mSec timed outputs  
(No .5 mSec time base)

**Solution:** Press the CLR/CLE key to clear the flashing error message.

**E10-rES**

Resolver Fault: “S”

No resolver is connected to the controller, or one of the connections to the resolver has experienced an intermittent or maintained open circuit condition.

**Solution:** Press the CLR/CLE key to clear the flashing error message, restore output operation and verify that the control is responding correctly to resolver position changes. It is important to determine the cause of the problem to avoid its occurrence in the future. Check that the resolver cable connector on the back of the control is plugged in all the way and that the seven wires connected to the screw terminals are properly secured. Also check that the resolver connector is properly secured to the resolver.

The following resistance values can be checked at the control end of the resolver cable when it is unplugged from the controller and plugged into the resolver. Measure the resistance between wire pairs. Measurements will fall into one of two categories depending on age of resolver.

<b>Wire Pair</b>	<b>Resistance</b>	<b>or</b>	<b>Resistance</b>
White/Black	15 to 25 Ohms		60 to 85 Ohms
Red/Black	20 to 40 Ohms		135 to 185 Ohms
Green/Black	20 to 40 Ohms		135 to 185 Ohms

**E11-ScE**

Too Many Speed Compensated Channels (48 output systems only): “P”

An attempt was made to program more than 16 speed compensated outputs into a 48 output controller.

**Solution:** Press the CLR/CLE key to clear the flashing error message.

**FAtL int**

Internal Run Error: “S”

There is a hardware problem with internal circuitry. All outputs will be disabled.

**Solution:** Call Electro Cam for return authorization and further information.

**LinEFAiL**

Input Power Voltage Low: “S”

The input power to the controller dropped below normal operating voltage, causing the controller to stop functioning. Check that input supply voltage to controller is within specified operating range (pg.A-18).

**Solution:** Control will come out of “LinEFAiL” condition when input voltage rises to normal range.

### ***Pb Stuc***

#### Push Button Stuck: “S”

If one of the keyboard keys is on when the unit powers up, this message will be displayed. It can indicate that a key is shorted and always on.

**Solution:** If “Pb Stuc” error message remains or occurs frequently on power up, call Electro Cam for further information.

### ***StoP***

#### Controller in Stop Mode: “S”

When Serial Communication Command 6 (COM\_STOP) is sent to the control, it goes into an idle mode and displays the message “StoP”. The Stop mode allows serial information to be written directly into the control's EEPROM memory, thus allowing rapid loading of program information. The PLSNET DLOAD (down load) program first puts the control in the Stop mode before sending information. When the loading process is complete it returns the control to the run mode. If the loading process is interrupted, the control might accidentally be left in the Stop mode.

**Solution:** Power cycle the control to restore normal operation

### ***rSEt***

#### Controller in Reset Mode: “S”

This error indicates an internal fault due to the controller not receiving proper power. Electrical “noise” can also be a cause for this error.

**Solution:** Check that there is a good supply voltage to the unit. Eliminate any interruptions from other devices that could cause a power drop. Check for proper grounding. Isolate unit to its own power supply.