

## PENDANT ERROR LIGHTS

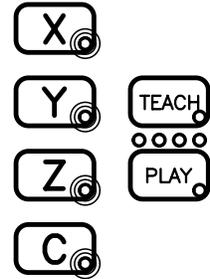
The **program selection lights** on the pendant are used as error lights. The error codes are used to diagnose motor, communications, and axis limit problems. Check this when an axis status light BLINKS at any time other than during the power on sequence (when a blinking status light means the axis is interfaced to a linear scale).

**Step 1:** When an axis status light is BLINKING, press and hold the axis key. Notice which one of the PROGRAM SELECTION LIGHTS turns ON.

**Step 2:** To clear the error light:  
Press and release the [STOP] key.

*IF:* If the error clears, continue with what you were doing.

*IF:* If the error does not clear, follow the instructions below.



### First Error Light

The first light indicates that the motor on the axis whose status light is BLINKING was not able to rotate (move) as expected. The axis status on the PC shows OVERLOAD or STUCK.



Press and release the [STOP] key. Try to move the axis again.

- IF:* If the error occurs again, check for mechanical problems:
- The axis has hit something.
  - The gibs are too tight.
  - The moving components need oil: check lead screws and ways.

- IF:* If there are no mechanical problems, check system components.
- Make sure the cable connectors are tight.
  - Call ServoSource for a procedure to check for the following:
    - Motor drive cable defective.
    - Motor defective.
    - Motor driver board defective.

### Second & Third Error Lights

The second light indicates a communications time out error.



The third light indicates an erroneous communication was received.



- For the communications errors, turn the motor controller power OFF for about 15 seconds. Then turn it ON again and see if normal operation has been restored.
- Error light #2 is also used to indicate a linear scale failure. If the DRO is turned off or disconnected, or if the DRO cables are crossed, the motor will turn two revolutions and then stop with error light #2 on.

- Error light #3 is also used to indicate when two motor boards are accidentally addressed the same; for example, if there are two X axis boards in the same system after the Y axis board was replaced. The procedure for opening the motor controller and checking the jumper plugs is in *Appendix A: Installation & Removal of Boards* in version 3 of the **Servo II Users Guide**, or *Appendix C* in older manuals.

*IF:* If there is a PC or SOC attached to the motor controller:

- Make sure all cables are properly attached. Disconnect the PC COM port RS-232 cable at the motor controller. Cycle power and operate the system from the pendant. There may be a problem with the COM port cable, especially if it is longer than 10 feet.
- The PC may also show a message relating to communication which may identify the problem more closely, such as "Pendant not detected." Check the Error Message listing.
- If you have turned on the PC while it is connected to the machine control when the control is already turned on, the pendant may have received some spurious data indicated by a communications error. An axis status light will blink. Press and release the [STOP] key to reset.

## Fourth Error Light

- NOTE** *The fourth error light was added on the pendant ROM P3.0. If your pendant has an older pendant ROM, it may not have this feature.*

The fourth light is used in Playback mode only. It indicates that the axis whose status light is BLINKING is programmed to travel outside the current axis travel limit. The light blinks at the beginning of the move, not when the limit is reached. The axis motion stops. If you are viewing the Manual Control & Display screen, the Status column is blinking the word LIMIT.



Press the [STOP] key to clear the BLINKING axis light and set new axis travel limits. Or set the program START POINT (SP) so that the program runs inside the current limits. This problem often occurs when a program is transferred from the PC to the pendant and the start point is not re-set [SETm] + [TEACH].