LEDs and switches can be wired by the customer to the 44-pin card edge connectors provided on each driver board. The driver boards have (40) I/O points on each of two edge connectors, for a total of (80) I/O points. Each connector has two rows of (22) tabs, so the connectors are often referred to as "22/44" connectors. The data signal wiring to the driver board determines whether the board is used to drive LEDs or to scan switches. Switches and LEDs cannot be mixed on a single connector. Refer to the wiring tabulations for point assignments.

The row of connector tabs with alpha designations is oriented on the top of the driver board, and the letters "A" and "Z" are marked on each board to indicate this orientation. Notice that the letters G, I, O, and Q are not used.

The LEDs should be wired with a positive common, as shown on the “typical LED” schematic below. A current-limiting resistor must be wired in series with the LED. Most LEDs require an operating current of about 15 to 20 milliamps. A typical resistor for a dot LED, driven by five volts DC, would be 220 ohms. When using five volt power, a 1/4 watt resistor rating is sufficient. Higher values of resistors must be used when the LEDs are driven by voltages greater than five volts.

For switches, notice that the scan bus is an isolated line that is read by the Z-Card. Do NOT connect this line to positive or negative power supplies.