R45 (2.2K) Resistor Removal

Application Note

PXL-250

1.0 Removal of the R45 (2.2K) Resistor from a PXL-250

Because of improvements made in the RS-485 circuitry, for network optimization R45 (2.2K) resistors MUST be removed from existing PXL-250s when adding a PXL-500/510.

1.1 R45 (2.2K) Resistor Test

A PXL-250 controller may be tested to see if it has the R45 (2.2K) Resistor by performing the following steps.

1. Disconnect all power (TB-2) from the PXL-250 controller.
2. Unplug the RS-485 connector (TB-1).
3. Measure resistance between pins 1 and 2 of TB-1 with a digital volt meter.
4. If the meter reads less than 3K (3000 ohms), the PXL-250 controller has the resistor installed. If a PXL-500/ PXL-510 is being installed on the network, the resistor must be removed for network optimization.

1.2 Surface Mount PXL-250

1. Disconnect all power from the PXL-250 controller.
2. Unplug all connectors from TB-1 through TB-12 as applicable.
3. Remove the SB-293 or SB-593 from the PXL-250 (if there is one connected).
4. Remove the four mounting screws that hold the PXL-250 to the plastic back plate or the metal KRE-2 Enclosure.
5. Turn the PXL-250 board over so that you are working on the back side.
6. Locate the R45 resistor. The R45 resistor is located on the back side of the PCB behind TB-1 (see Figure 1).
7. Cut or break the R45 resistor. Take care not to damage the circuit board. (This can be cut with a small pair of front or diagonal cutters.)
8. Remount the board to the back plate with the four mounting screws.
9. Reconnect any Satellite Boards and connectors on TB-1 through TB-12 (as applicable).
10. Power up and RAM rest the controller.
11. Perform a Total Update from *Doors*.
12. Repeat for each PXL-250 controller on the network.
13. If a PXL-500/PXL-510 is located on the network (as the master controller), perform a RS-485 Wiring Test on the network. Refer to the PXL-500/PXL-510 Quick Start Guide (P/N 01918-001) for instructions on how to perform this test.

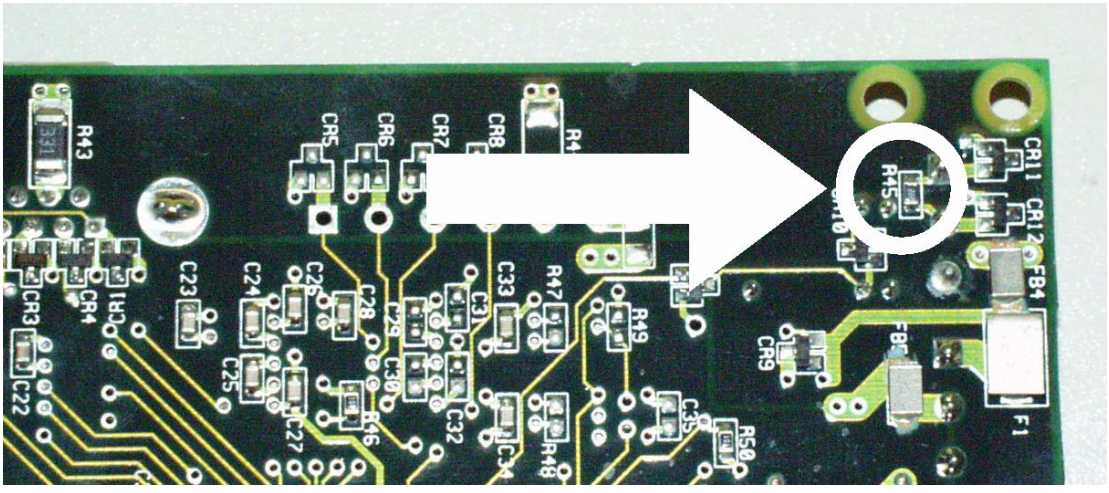

Figure 1: Location of the R45 on back side of Surface Mount PXL-250

KERISYSTEMS INCORPORATED

1530 Old Oakland Road, Suite 100
San Jose, CA 95112 USA
(800) 260-5265 (408) 451-2520 FAX (408) 441-0309
Web: http://www.kerisys.com E-mail: sales@kerisys.com

R45 (2.2K) Resistor Removal

1.3 Through Hole PXL-250

1. Disconnect all power from the PXL-250 controller.
2. Unplug all connectors from TB-1 through TB-12 as applicable.
3. Remove the SB-293 or SB-593 from the PXL-250 (if there is one connected).
4. Locate the 2.2K resistor in the top, right corner of the front side of the PCB (see Figure 2).
5. Cut both legs of the resistor. Take care not to damage the circuit board. (This can be cut with a small pair of front or diagonal cutters).
6. Reconnect any Satellite Boards and connectors on TB-1 through TB-12 (as applicable).
7. Perform a Total Update from *Doors*.
8. Repeat for each PXL-250 controller on the network.
9. If a PXL-500/PXL-510 is located on the network (as the master controller), perform a RS-485 Wiring Test on the network. Refer to the PXL-500/PXL-510 Quick Start Guide (P/N 01918-001) for instructions on how to perform this test.

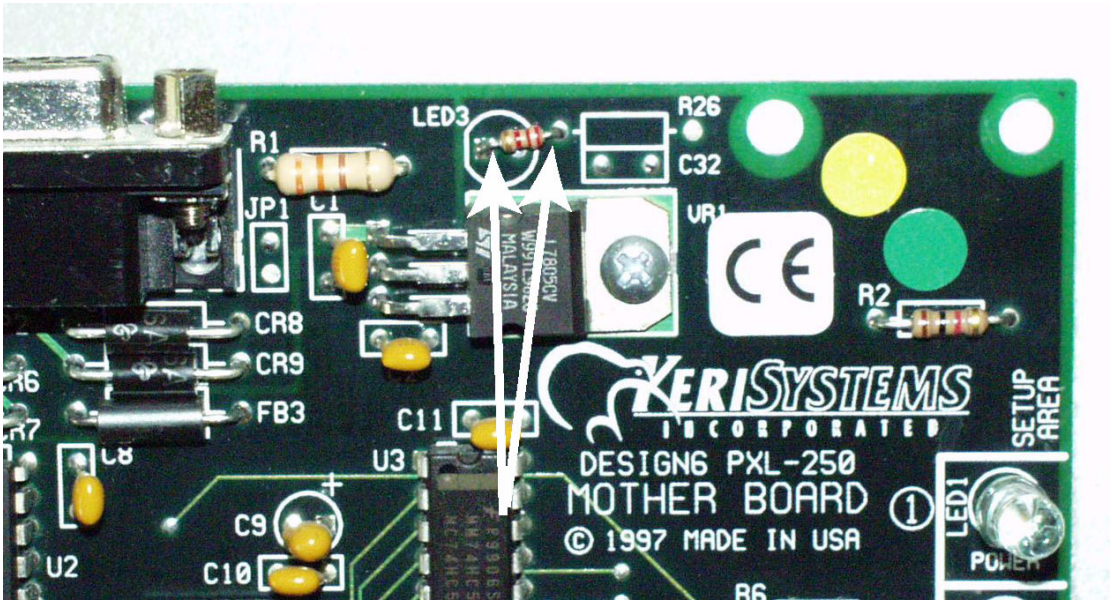

Figure 2: Location of the 2.2K Resistor on a Through Hole PXL-250