P7500 TriMode™ Probe Deskew Procedures

Overview

Deskew aligns signals to compensate for differing signal delays from cables of different lengths. The oscilloscope deskew feature applies deskew correction after it completes each acquisition. The deskew values do not affect logic triggering. Deskew has no affect on XY and XYZ display formats. In order to perform deskew with the P7500 Series probes, the Tektronix Deskew Fixture (Part Number 067-1586-00) shown in Figure 1 is required.

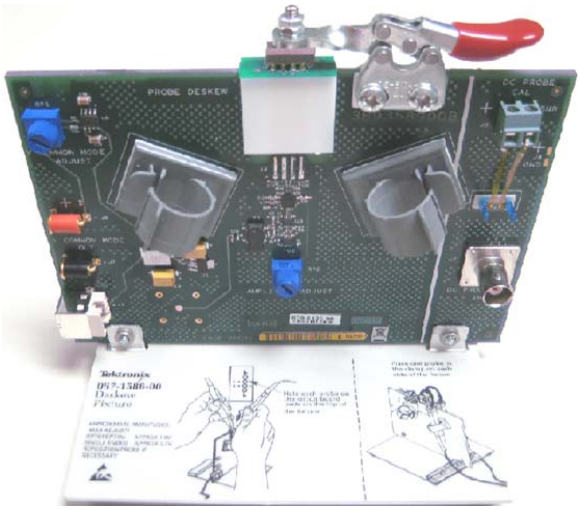

Figure 1: Tektronix P7500 Deskew Fixture

Step-by-Step Procedures

1. Connect the deskew fixture to a USB power source as shown in Figure 2 with the other end of the USB cable plugged into the oscilloscope.
2. Connect the probes to the oscilloscope.

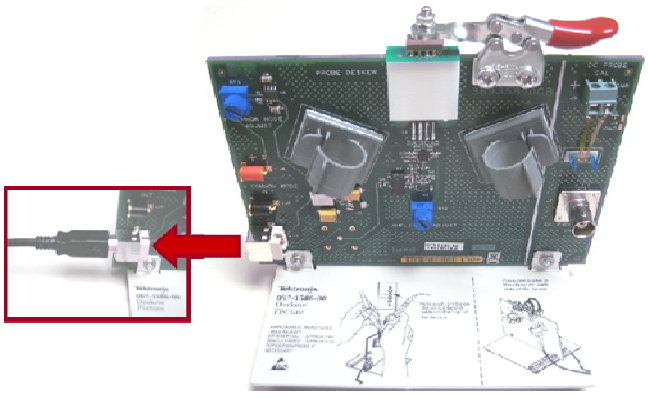

Figure 2: Powering the Deskew Fixture

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3. Locate the solder box on the Deskew Fixture. Ensure that the solder pins are in the middle of the solder box as shown in the box in Figure 3

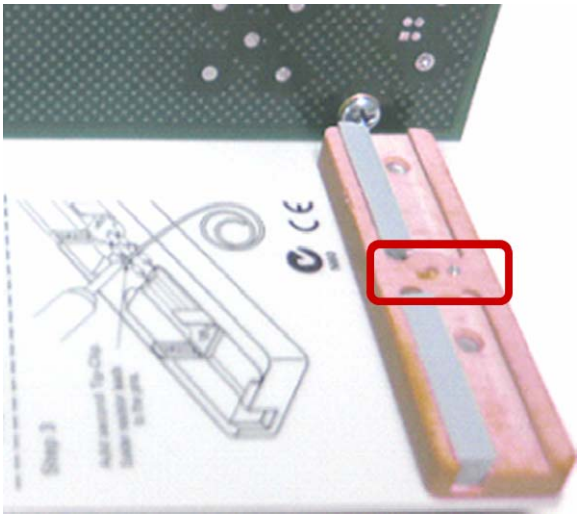

Figure 3: Location of the Solder Pins

4. Solder the first of two P75TLRST solder tips to the solder pins.

Figure 4: P75TLRST Soldered to the Solder Pins

5. Push the pins through the solder box and rotate the P75TLRST so that it is on the opposite side of the solder box as shown in Figure 5. Secure the cable of the P75TLRST in the slot in the clamp.

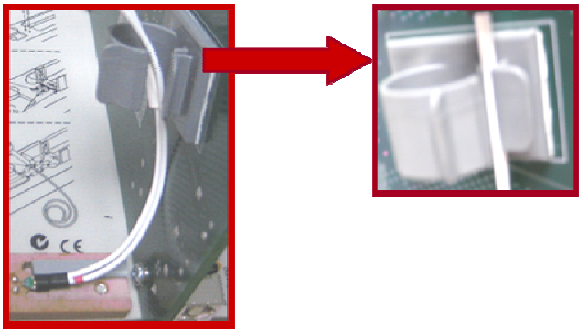

Figure 5: P75TLRST Secured in the Clamp

6. Solder the second P75TLRST solder tip to the solder pins. Make sure the second solder tip is inverted because the polarities will need to match for proper deskew. The red band on the solder tips should be located on the same side as shown in Figure 6.

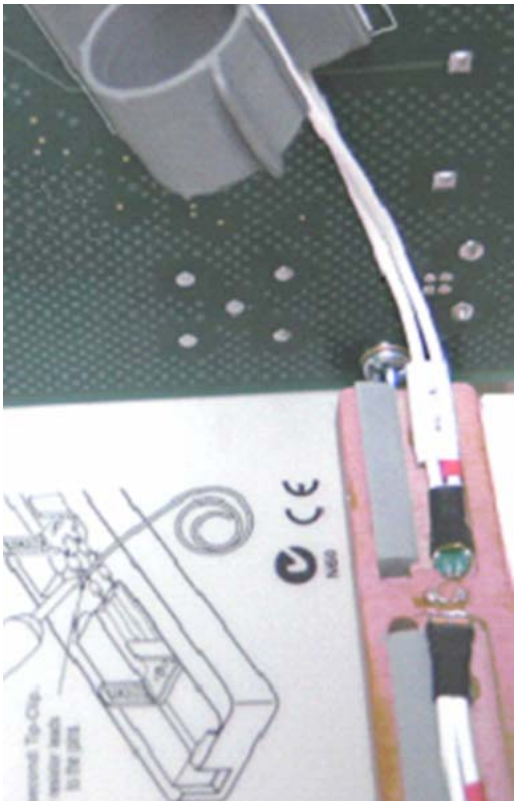

Figure 6: Two P75TLRSTs Soldered to the Solder Pins

7. With the P75TLRST wire leads soldered on to the solder pins, remove the solder pins from the solder box and install them in the holes at the top of the Deskew Fixture shown in Figure 7. The solder pin with the red band is inserted into the hole with the "+" and the other solder pin is inserted into the hole with the "-".

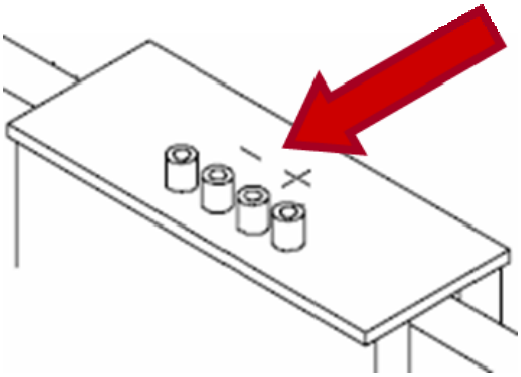

Figure 7: Holes for the Solder Pins

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8. Close the clamp by pushing down on the lever to secure the Tip-Clip assembly as shown in Figure 8. NOTE: To avoid unnecessary wear on the clamp elastomer, leave the clamp in the open position when not using the fixture.

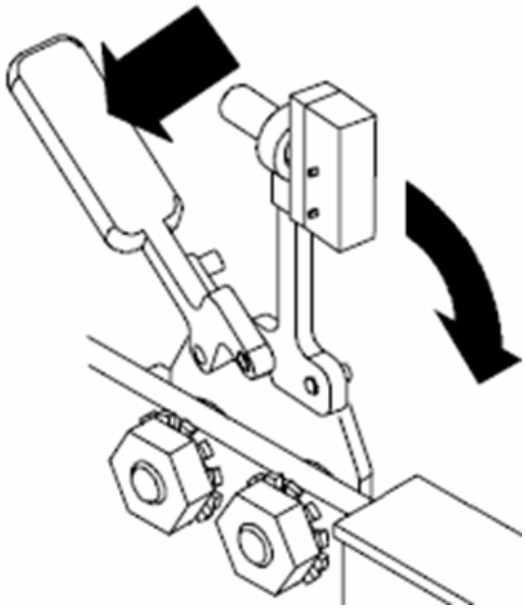

Figure 8: Securing the Clamp on the Deskew Fixture

9. The P75TLRST solder tips are positioned in the Deskew Fixture as shown in Figure 9. Ensure the polarities of the wire leads are attached to the correct connector. The red bands on the wires should be located on the same side.
10. Reference your oscilloscope manual for detailed deskew adjustment procedures.

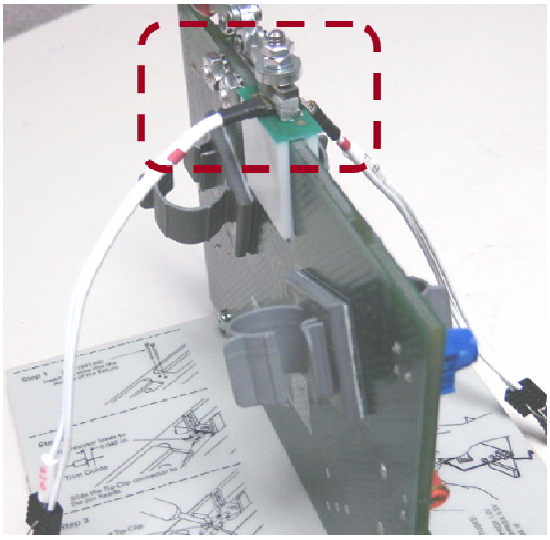

Figure 9: Two P75TLRSTs secured in the Deskew Fixture

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