



The Model 7152 matrix card can also be used by a single Source Measure Unit for remote sensing. For remote sensing, the Source Measure Unit could be connected to the matrix card as shown in Figure 2-22. OUTPUT HI/GUARD, SENSE HI/GUARD, SENSE LO and OUTPUT LO are connected to separate rows for maximum switching flexibility and optimum low current performance. Making the SENSE LO connection also connects OUTPUT LO to the matrix card through the triax connector. However, since it is connected to the inner shield, it is of no consequence as long as it is not used at the test fixture. In this test configuration, OUTPUT LO is accessed at the Source Measure Unit banana jack so that it can be independently switched.

The test configuration in Figure 2-22 "uses" four matrix rows. Remote sensing can be accomplished using three matrix rows by using OUTPUT LO at the triax connector. In this configuration, SENSE LO and OUTPUT LO use the same row. The disadvantage to this is the loss of some switching flexibility. Another option is to make OUTPUT LO a system common that is not routed (not switched) through the card. All commons are simply connected directly to the OUTPUT LO banana jack.

For high current applications where leakage current is not a consideration, the guard paths of the matrix card can be used for 4-wire sensing as shown in Figure 2-23. With this configuration only two matrix crosspoints are required to accomplish 4-wire connections to the DUT.

