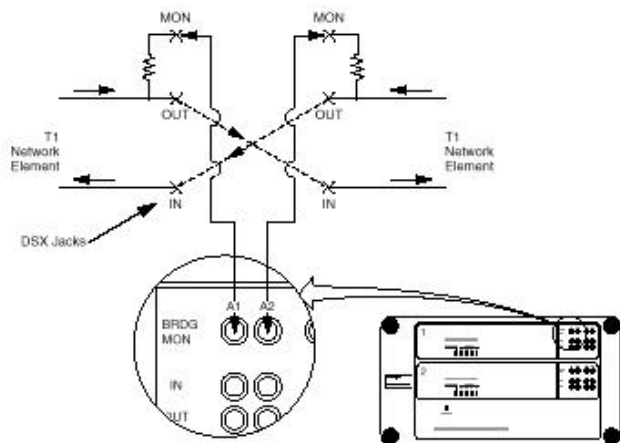


## E2D at DSX

### E2D set for the "monitor" mode



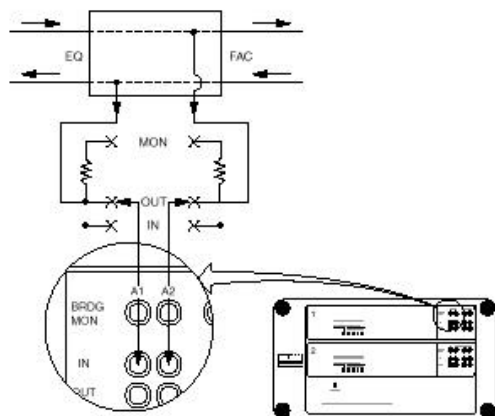
EXAMPLE: -20dBdsx monitor access for one T1 circuit. Use A1 Jacks for Timing.

## Connecting a T1 to the E2D

The connectors on the front panel of the E2D allow various types of connections to T1 lines, depending on where you want to perform access or monitoring. The illustrations in this section show typical connections to a single T1 using the A1 and A2 jacks. You would connect the second T1 to the B1 and B2 jacks. When a T1 line is connected to the E2D and if frame synchronization is OK, the red ALARM lights on the front panel will be off. If there is a problem with frame synchronization, the lights will be on.

## E2D at DCS (Digital Cross-Connect System)

### E2D set for "terminate" mode

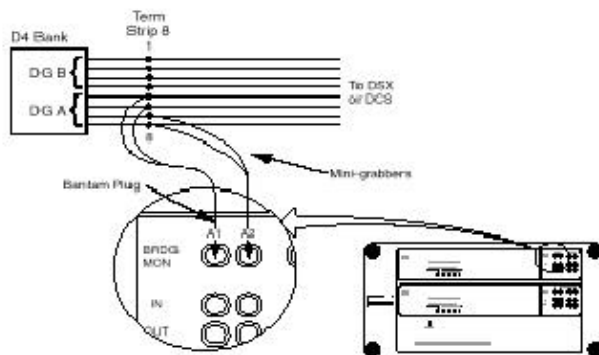


EXAMPLE: DCS or DACS test access. Monitoring the T1 both ways. The DCS test port is an isolated, full 0 dBdsx level, appearing in a DSX "OUT" jack. 100Ω term required.  
(TL1 command: CONN-TACC-T1::TESTPORT, FROM, TO::MONEF;)

**Important for DCS Test Access Ports (TAPS):** Normally, the OUT Jacks of the TAPS should be connect to the IN Jacks of the E2D/ET5000. If the E2D or ET5000 is connected to the TAP Monitor Jacks, the OUT jacks must be terminated (100 ohms).

## E2D at D4 Channel Bank

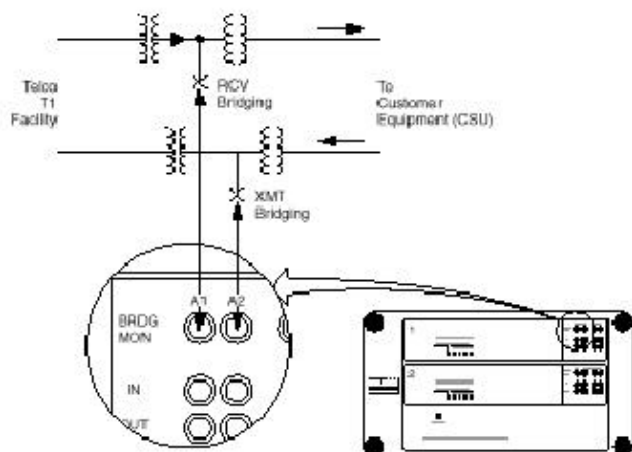
### E2D set for the "bridged" mode



EXAMPLE: "Bridging" across T1 line on terminal strip #8 on a D4 channel bank or other network element.

## E2D at NIU (Network Interface Unit)

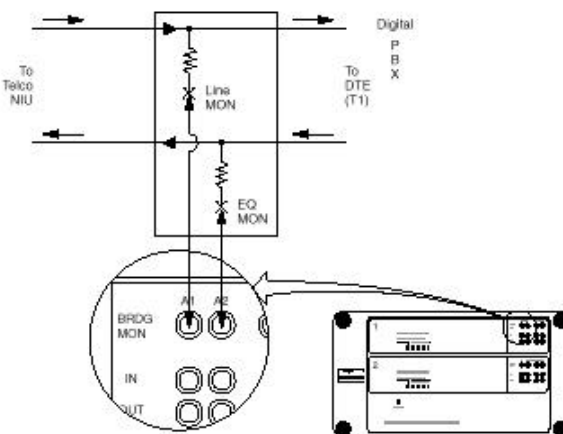
### E2D set for the "bridged" mode



EXAMPLE: "Bridging" across a T1 line on a T1 network interface unit.

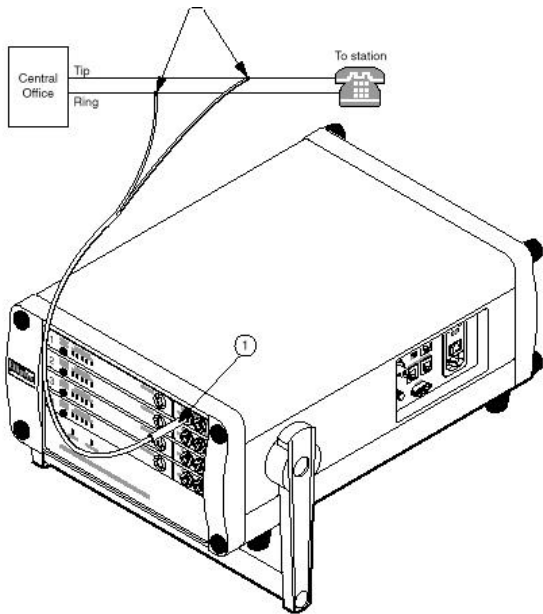
## E2D at T1 CSU (Channel Service Unit)

### E2D set for the "monitor" mode



EXAMPLE: Monitoring the T1 at a T1 CSU in the monitor jacks (-20 dBdsx).

NOTE: READ the CSU documentation to make sure you DO NOT interrupt service by going into an intrusive jack. - Like "OUT" or "IN".



## Connecting E4A in monitor mode

Connecting in monitor mode will not cause any interruption of service on the line. However, in monitor mode the E4A cannot collect information about DC current changes on the line. This may make it more difficult to analyze obscure call problems.

In monitor mode you are setting up a "half-tap" or bridge on the circuit. (For information on preparing a banana jack-to-310 adapter to make this type of connection, please see Appendix C.)

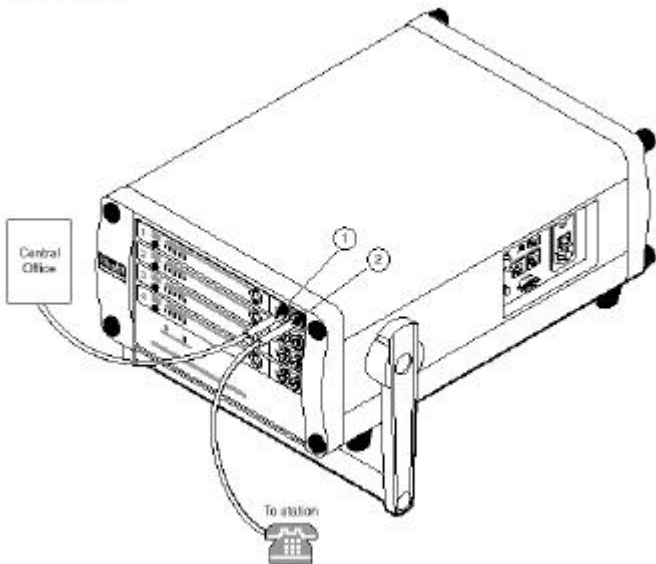
**NOTE:** If you are connecting an E4A close to an 5ESS central office, you might want to connect in intrusive mode rather than monitor mode. The characteristics of the 5ESS float voltages make this necessary.

**DANGER:** Hazardous ringing voltage may be present when you connect to the circuit under test. Make sure you are not grounded in any way. Connect one lead at a time to avoid electrical shock. Keep in mind that these are usually "live" circuits and that it is important to avoid shorting out these connections.

**CAUTION:** The E4A power cord **MUST** be connected to a three-prong, grounded outlet. If you must use a non-grounded outlet, make sure you connect the ground lug on the side panel of the E2D to an earth ground.

**Without a sufficient earth ground, the E4A measurements may be inaccurate.**

E4A Intrusive Mode



## Connecting E4A in intrusive mode

As you connect a circuit to the E4A in intrusive mode, you will temporarily put the circuit out of service. (This may not be feasible for some customers. In those cases, connect the circuit in monitor mode instead.)

Before you make this connection, notify the customer of the service interruption. Once the connection is made, the E4A does not interfere with subscriber usage.

**DANGER:** Hazardous ringing voltage may be present when you connect to the circuit under test. Make sure you are not grounded in any way. First connect the 310 plug into the E4A, and then insert the RJ11 plug into the RJ11 jack.

**CAUTION:** The E2D power cord **MUST** be connected to a three-prong, grounded outlet. If you must use a non-grounded outlet, make sure you connect the ground lug on the side panel of the E2D to an earth ground.

**Without a sufficient earth ground, the E2D measurements may be inaccurate.**

**Ellipsys**

**Expert Call Analyzer**

**Quick Reference Guide**

**Connecting E4A, E2D  
and ET5000 to Circuits**



E2D



E4A