**CAUTION!** SUBJECT TO ELECTROSTATIC DAMAGE OR DECREASE IN RELIABILITY. HANDLING PRECAUTIONS REQUIRED.

For more information, refer to the Installation and Maintenance Practice (P/N 61181310L2-5) available online at www.adtran.com.

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**Total Access 3000/T1-OR/NIU**

### TEST POINTS

Provides a method to measure span current and voltage. The following can be measured:

1. **±0.6 Volts Test Jacks**
   - +Tx / –Tx measures the transmit span current
   - +Rx / –Rx measures the receive span current
   - +Tx / –Rx measures the span voltage
   - –Tx / +Rx measures the span voltage

### Bantam Test Block Diagrams

- **CAUTION:** Do not use EQ bantam jacks if there is DSX activity on the Total Access 3000 backplane.

### Operational Modes

- **DSX EQ OR Mode**
  - Tx to customer
  - Rx from customer
  - **OR**
  - Tx to network
  - Rx from network

- **DSX MON OR Mode**
  - Tx to customer
  - Rx from customer

**NOTE:** Direction of EQ jacks can be changed in the Loopback and Test menu.

**NOTE:** EQ jacks work towards the customer when optioned for DSX network service.
COMPLIANCE

The T1-OR/NIU complies with the requirements covered under UL 1950 and is intended to be installed in Restricted Access Areas only and in equipment with a Type “B” or “E” enclosure. The T1-OR/NIU is NRTL listed to the applicable UL standards.

<table>
<thead>
<tr>
<th>Code</th>
<th>Input</th>
<th>Output</th>
</tr>
</thead>
<tbody>
<tr>
<td>Power Code</td>
<td>F</td>
<td>C</td>
</tr>
<tr>
<td>Telecommunication Code (TC)</td>
<td>–</td>
<td>X</td>
</tr>
<tr>
<td>Installation Code (IC)</td>
<td>A</td>
<td>–</td>
</tr>
</tbody>
</table>

INSTALLATION AND TURNUP

After unpacking the unit, inspect it for damage. If damage is noted, file a claim with the carrier, and then contact ADTRAN. For further information, refer to the warranty.

The T1-OR/NIU plugs directly into any number of the access slots, labeled 1–28, of the Total Access 3000 chassis. No installation wiring is required. This unit can be either DSX or MUX fed. If the unit is MUX fed, a BNC Adaptor Module (P/N 1181004L1) will be necessary for the MUX module to interface with the network. In a protection configuration, the main unit must occupy an odd-numbered slot and the auxiliary unit must occupy the adjacent, right-hand, even-numbered slot.

Insert the T1-OR/NIU module into the designated slot. Simultaneous thumb pressure at the top (above the POWER LED) and bottom (below the MON bantam jack) of the unit to ensure a good seat of the T1-OR/NIU pins into the backplane connector. Push the ejector tab up and closed against the T1-OR/NIU front panel.

Upon installation, the unit will reflect the provisioning as being set at factory defaults. See the Provisioning table to the right for default settings and provisioning information.

See the table below for Network Source provisioning information.

<table>
<thead>
<tr>
<th>Network Source</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>DSX</td>
<td>Unit interfaces through the MUX in Slot A</td>
</tr>
<tr>
<td>MUX A</td>
<td>Unit Interfaces through the MUX in Slot A</td>
</tr>
<tr>
<td>MUX B</td>
<td>Unit interfaces through the MUX in Slot B</td>
</tr>
<tr>
<td>Auto MUX</td>
<td>Unit interfaces through either MUX A or MUX B, depending on which one is currently online. Will automatically switch to online MUX</td>
</tr>
</tbody>
</table>

ACCESSING THE T1-OR/NIU

The T1-OR/NIU can be provisioned and tested only through the SCU craft interface. To access the Provisioning menu, connect a terminal emulator via the RS-232 (DB-9) connector on the faceplate of the SCU. The terminal must be VT100 or compatible and set for 9.6 kbps, 8 data bits, no parity, 1 stop bit. At the Logon screen, enter the system password. The default is “PASSWORD” and can be changed upon successful login. Select Access Modules from the Total Access 3000 Main menu and then Module Menus from the Access Modules menu. Access the desired T1-OR/NIU by selecting the corresponding slot number.

PROVISIONING THE T1-OR/NIU MODULE

1. From the T1-OR/NIU Main Menu select Provisioning, and press ENTER.

Span Power Option

2. Two board-mounted jumper straps (P4) select this span power option.
3. With the straps positioned in the 1-3 and 2-4 configuration (factory setting), span power is software controlled.
4. With the straps positioned in the 3-5 and 4-6 configuration, span power is always disabled and software selection is ignored regardless of screen indication.

WARNING: Jumper P4 should be changed to 4-6 and 3-5 if the card is provisioned as a T1-NIU. Failing to do so will prevent the span power from looping back properly through the unit and the line powered devices will not receive power. P4 should be set to 1-3 and 2-4 if it is deployed as a T1-OR (the default setting).

WIRING INSTRUCTIONS

The T1-OR utilizes amphenol connectors Pair 7 and Pair 8 to connect to the DSX-1 panel. Pair 7 carries T and R (IN) from the DSX-1 panel while Pair 8 carries T and R (OUT) to the DSX-1 panel. Pair 1 and Pair 2 are used for the DS1 interface.