AT&T

ISDN 8510T Voice Terminal
Instructions for Changing the Jumper Settings
for the Terminating Resistors
and for AUX and PHAN Power Options

The ISDN 8510T Voice Terminal Circuitry

The circuitry of the ISDN 8510T voice terminal contains a set of 2 terminating resistor jumpers which can be set for **ON** and **OFF**. The **ON** setting enables the terminating resistor, and **OFF** bypasses the terminating resistor.

It also contains 2 power option jumpers which can be set for **AUX** (for auxiliary power), and **PHAN** (for phantom power). Auxiliary draws power from an adjunct/bulk power unit, and phantom draws power from the PBX.

The terminating resistor **ON** and **OFF** settings and the power option **AUX** and **PHAN** settings are activated by placing the appropriate (2) jumpers over the correct set of pins.
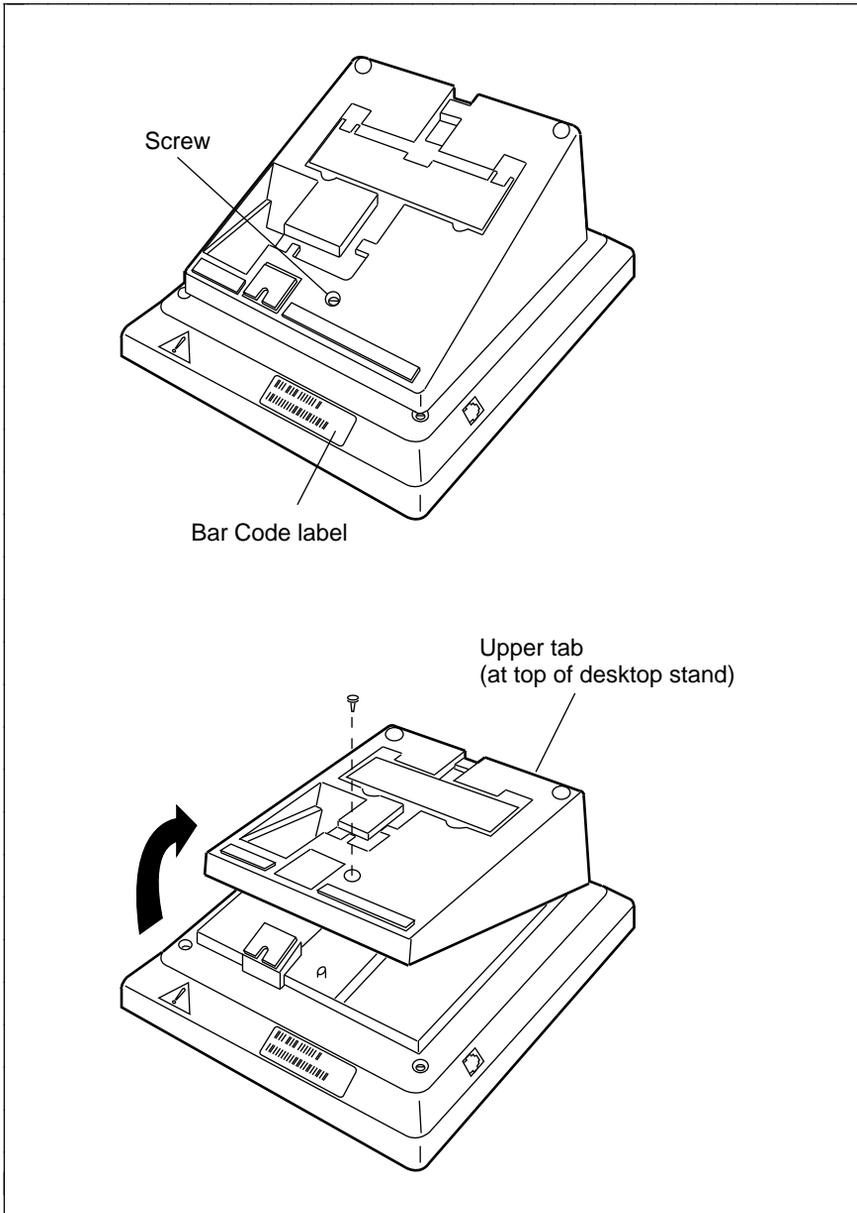
The Information in These Instructions

The information in these instructions explains how to change the jumper settings on the terminating resistor option and the (Auxiliary/Phantom) power option.

IMPORTANT: The following procedures for removing and replacing the voice terminal stand and for verifying and changing the jumpers must be done ONLY by a qualified technician.

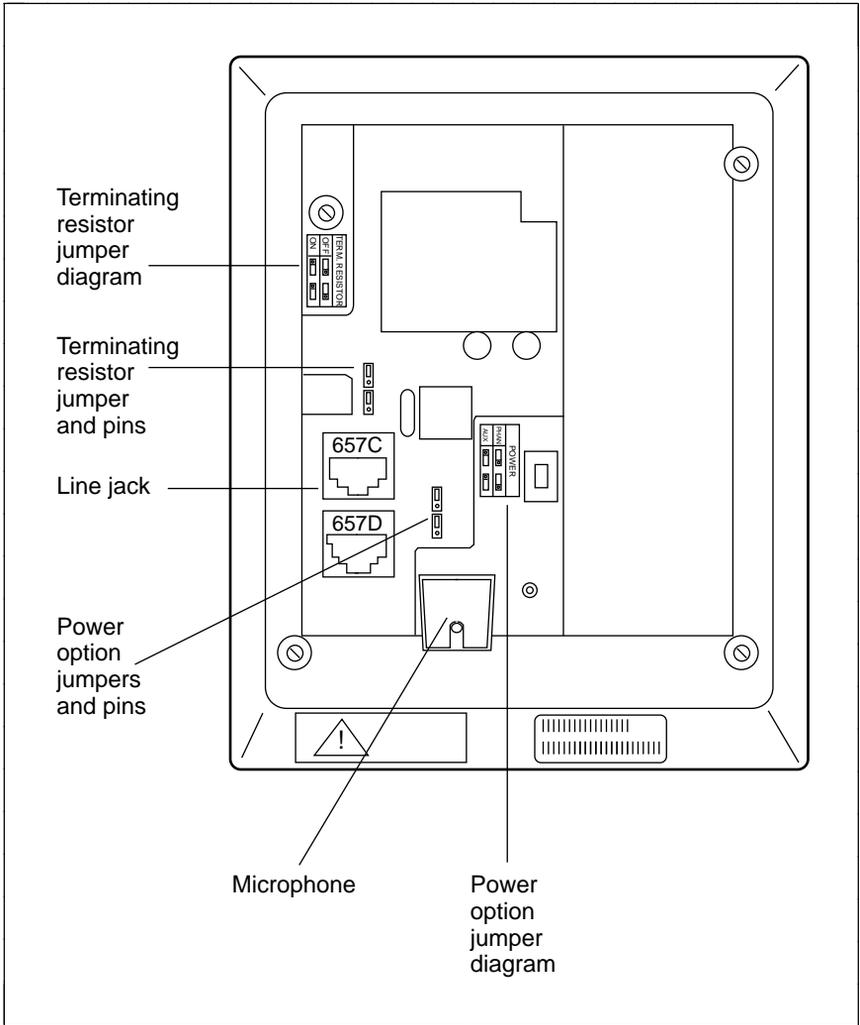**Removing the Voice Terminal Stand**

Before you can set the terminating resistor jumpers or the power option jumpers, you must remove the voice terminal desktop stand from the bottom of the voice terminal. To remove the stand, follow these directions.

1   Pick up the handset and place it to the side.

2   If the voice terminal has already been connected, you *must* first disconnect all wires, including the line and handset cords (and the adjunct equipment cord, if necessary).

3   Place the voice terminal face down on a flat surface. The Bar Code label on the bottom of the set should be toward you.

4   Remove the screw on the lower center of the stand. See **Figure 1** for the location of the screw.

5   Remove the desktop stand attached to the base of the voice terminal by tabs on the top and bottom of the stand. (See **Figure 1**).

- Slowly lift the bottom of the desktop stand toward the top of the voice terminal.

- Then carefully lift the upper tab on the top of the stand out of the upper tab slot.

Screw

Bar Code label

Upper tab
(at top of desktop stand)

FIGURE 1 Removing the Voice Terminal Desktop Stand

Figure 2 shows the bottom of the voice terminal without the desktop stand and, specifically, the location of the 2 sets of terminating resistor jumpers and 2 sets of power option jumpers. The 2 sets of 3 terminating resistor pins are located at the top left of the voice terminal, just above the Line (657C) jack. The 2 sets of 3 power resistor pins are located in the bottom center of the voice terminal, just above the microphone.

FIGURE 2 8510T Voice Terminal, Bottom View without Desktop Stand

Setting the Terminating Resistor and AUX and PHAN Jumpers

The following directions explain the setting for the terminating resistors on 8510T voice terminals connected to a DEFINITY Communications System Generic 1, Generic 2, and Generic 3, or to a 5E5, 6, 7 switch.

NOTE: For the terminating resistor jumper setting: voice terminals connected to a DEFINITY or a 5E5, 6, 7 switch can be set to **ON** or **OFF**. See the verification procedures under "Setting the Terminating Resistor Jumpers."
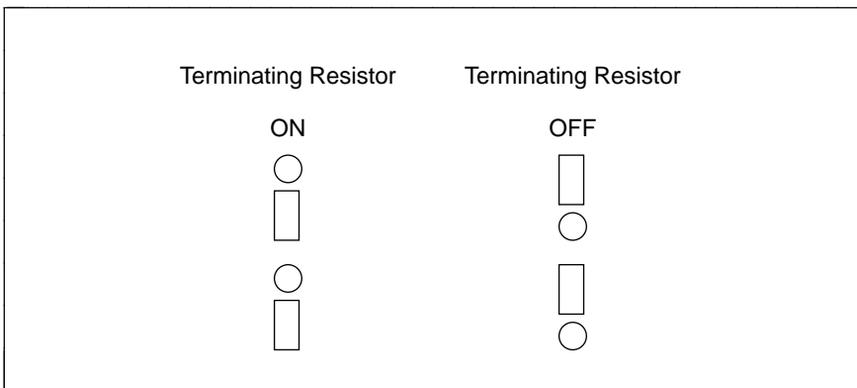
For the power option jumper setting: a voice terminal connected to a DEFINITY switch can be set for either **AUX** or **PHAN**. See the verification procedures under "Setting the Power Option Jumper." However, a voice terminal connected to a 5E5, 6, 7 switch *must be* set for **AUX**.

Setting the Terminating Resistor Jumpers

1 After you have removed the voice terminal desktop stand, locate the terminating resistor jumpers on the upper left side. Above the pins, on the plastic housing, you will see the label **TERM. RESISTOR** and a diagram of the correct settings.

The following is a description of the settings: (See also **Figure 3**.)

► The terminating resistors are set to **ON** if each of the 2 jumpers covers the 2 lower pins in each set. (The first pin in each set is left uncovered.)

► The terminating resistors are set to **OFF** if each of the 2 jumpers covers the 2 top pins in each set. (The third pin in each set is left uncovered.)

FIGURE 3 Terminating Resistor Jumper Settings

2 Verify that the present position of the jumpers is correct.

- Verify that the terminating resistor jumpers are set to **OFF** when the voice terminal is in a point-to-point configuration and the terminating resistor is placed in the closet or a 440A4 is connected on the line.

- Verify that the terminating resistor jumpers are set to **ON** when the voice terminal is in a point-to-point configuration and the terminating resistor is *not* in the closet or a 440A4 is *not* connected on the line.

- Verify that the terminating resistor jumpers are set to **OFF** when the voice terminal is in a multipoint configuration and the terminating resistor is either in the closet, a 440A4 is connected on the line, or the jumpers are set to **ON** in any of the other voice terminals on the line.
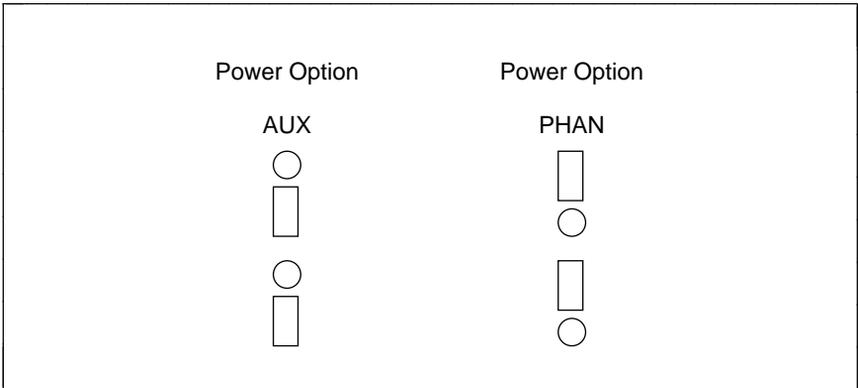
  NOTE: Only one terminating resistor is used for multipoint configuration.

- Verify that the terminating resistor jumpers are set to **ON** when the voice terminal is in a multipoint configuration and the terminating resistor is *not* in the closet, or a 440A4 is *not* connected on the line, or the jumpers are *not* set to **ON** in any of the other voice terminals on the line.

Setting the Power Option Jumpers

1 Locate the power option jumpers at the bottom center. On the right side of the pins, on the plastic housing, you will see the label **POWER** and a diagram of the correct settings.

The following is a description of the settings: (The **PHAN** setting can be used only for voice terminals connected to a DEFINITY switch.) (See also **Figure 4**.)

- ► The power option resistors are set to **AUX** if each of the 2 jumpers covers the 2 lower pins in each set. (The first pin in each set is left uncovered.)

- ► The power option resistors are set to **PHAN** if each of the 2 jumpers covers the 2 top pins in each set. (The third pin in each set is left uncovered.)

FIGURE 4 Power Option Jumper Settings (The PHAN *setting is used only for DEFINITY)*

2   Then, verify that the present position of the jumpers is correct.

For an 8510T voice terminal connected to the DEFINITY communications system, the power option jumpers should be set as follows:

- Verify that the power option jumpers are set to **PHAN** (phantom) when power is provided by the PBX.

- Verify that the power option jumpers are set to **AUX** (auxiliary) when power is provided in the closet or locally.

For an 8510T voice terminal connected to a 5E5, 6, 7 switch, the power option jumpers should be set as follows:

- Verify that the power option jumpers are set to **AUX** (auxiliary).

Reinstalling the Desktop Stand

1   Replace the desktop stand by placing the upper desktop stand tab in the voice terminal slot at the top of the voice terminal.

2   Slowly lower the desktop stand until the tab at the bottom of the desktop stand fits into the slot on the bottom part of the voice terminal.

3   Replace the screw in the hole from which you removed it.

Connecting the 8510T to the System

For directions on installing the 8510T voice terminal (that is, connecting the line cord and handset cord and, if appropriate, the adjunct equipment to the voice terminal, refer to the section, "Installation" in the *AT&T ISDN 8510T Voice Terminal User's Manual* shipped in the box with the voice terminal and these instructions.

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