

*An ADTRAN Quick Start Guide*

**ADTRAN Total Access 604/608  
Configuration Guide for  
Interfacing with Castelle  
FaxPress Server**

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*An easy, step-by-step procedure for  
configuring a Total Access 604/608 to connect  
dedicated T1-CAS channels to an attached  
Castelle FaxPress Server and PBX.*

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## **I. INTRODUCTION**

This guide provides a typical solution to convert digital T1-CAS signaling from TelCo/Service Provider to DTMF signaling that can be interfaced with FaxPress models 2500, 5000, 7000 and Analog Premier using the Adtran Total Access (TA) 604/608. Also included is information on the provisioning of the TA 604 to connect to the FaxPress and the PBX.

The Adtran TA 604 is used for the digital-to-analog signaling conversion for fax calls to the FaxPress and for providing DSX-1 connection to the attached PBX for voice/data calls. With the proper configuration, incoming faxes/calls will be routed to the appropriate destination based on Called Party Number/DNIS digits received.

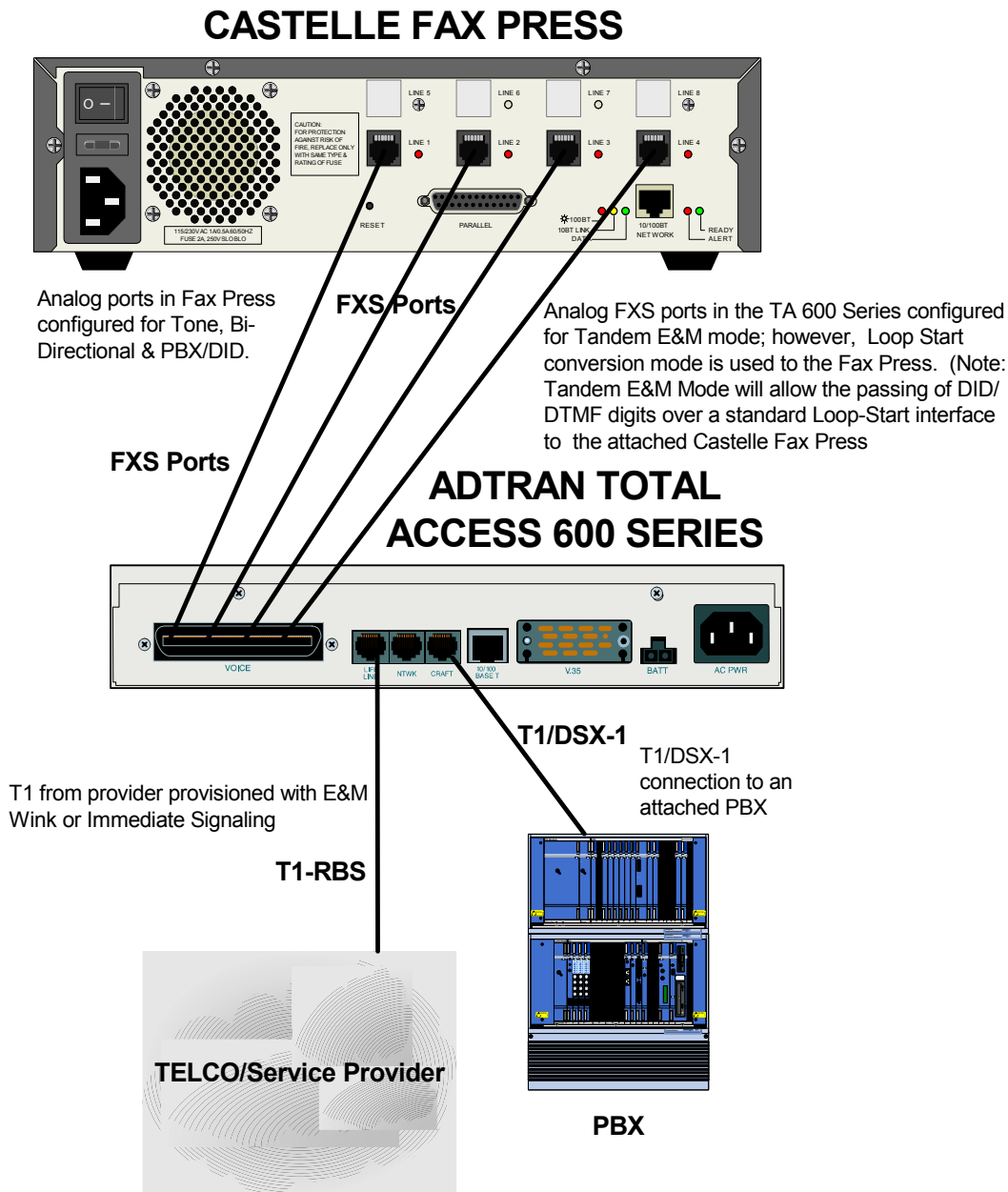
## **II. HARDWARE CONFIGURATION**

Based on the number of FXS connection required, one of the following Adtran TA 600 series models should be selected.

- One TA 606 for connecting to a 2 or 4-Port FaxPress.
- One TA 608 for connecting to an 8-Port FaxPress.
- One TA 616 for connecting to 16-port Analog Premier

Please refer to Figure 1 on the next page for the interconnection of all the components.

## Typical Total Access 604/608 Configuration



**Figure 1.**

This figure depicts a single T1 circuit with E&M signaling from the Network Service provider, passing DID/DNIS digits over FXS ports to the attached FaxPress, while providing a DSX-1 connection to an attached PBX.

Please note that the Amphenol cable is required to connect the FXS ports to the FaxPress Server and this cable is not included with your order of TA 604/608.

For PRI interface from the Network, refer to “ADTRAN ATLAS 550 Quick Start Configuration Guide”. For others TA Models integration with FaxPress, please call Adtran Customer Support at 888-4ADTRAN or visit <http://www.adtran.com/>

### **III. TYPICAL SCENARIO**

Customer subscribes to a T1 with E&M Signaling from the Network Service provider. The Adtran Total Access 604 or 608 will provide 4 or 8 analog FXS ports passing DTMF/DID digits to the Castelle Fax Press Server. In addition, the customer has provisioned a second trunk group on the remaining channels of the T1, which will be mapped to a DSX-1 interface connecting to their PBX.

Note that DSX-1 interface is referred to telephone equipment that can be connected to the network, the most common of this are phone switches (PBXs). Channel banks and multiplexers may also fall into this category.

This solution will require that the T1 service/circuit be provisioned with two Trunk Groups. The first trunk group consists of the channels being used by the FaxPress. The second trunk group consists of the remaining channels that will be mapped to the PBX.

If customer is looking for a dynamic solution that “does not” require multiple trunk group provisioning from the Telco/provider, refer to the “ADTRAN ATLAS 550 Configuration Guide for interfacing with FaxPress Server” available also in our web site ([www.castelle.com](http://www.castelle.com)).

### **IV. METHODS OF OPERATION**

There are two ways to access the TA 604/608 Main menu:

1. Hyper terminal session from the PC that is attached to the Total Access 604/608 via the RJ45/DB9 cable.
2. Telnet session established through the unit’s Ethernet port.  
The factory default is no password.

The Main Menu of the TA 604/608 is shown in Figure 2.

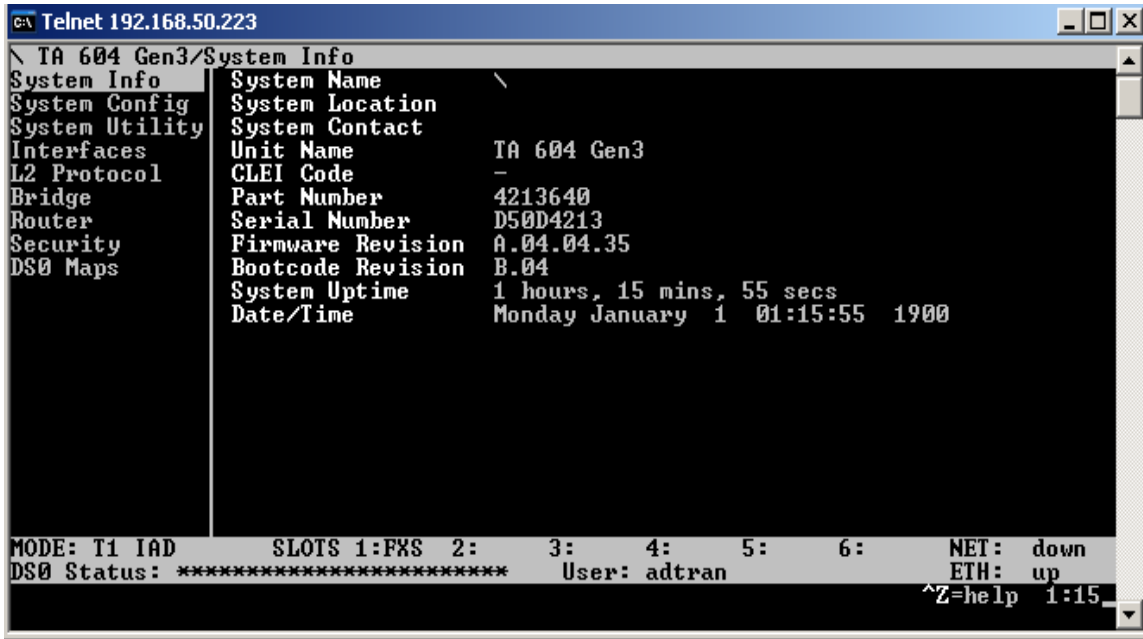


Figure 2 – Main Menu

## V. NETWORK CONNECTION CONFIGURATION

The Adtran TA 604/608 needs to be assigned an IP address in order to connect to it through a Telnet session. To configure the IP address for the TA 604/608, set up the hyper terminal session from the attached PC and follow the steps below:

1. From main menu, select “Router” on the left pane as shown in Figure 3.

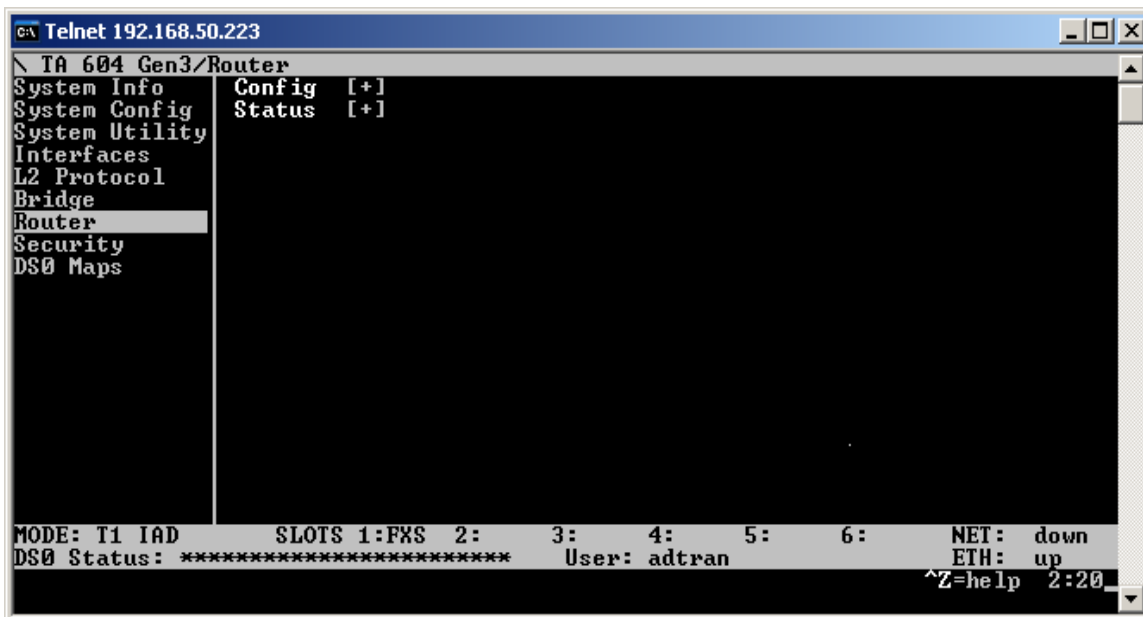


Figure 3 – Router menu

2. Select Config/Interfaces/Setup/Primary IP

- From the Primary IP menu, configure IP address and subnet mask for the TA 604/608 as shown in Figure 4.

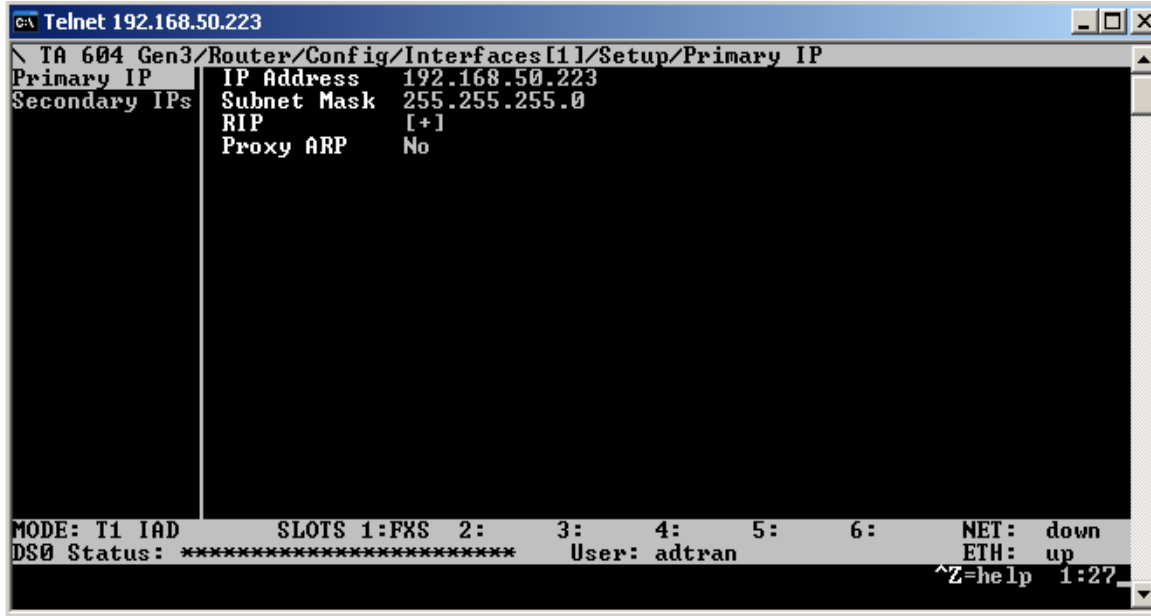


Figure 4 – Primary IP menu

## VI. CHANNELS CONFIGURATION

To configure the T1 channels, follow the steps below:

- Type H to return to the Main Menu and select the DSO Maps option from the left pane submenu. The DSO Maps menu is shown in Figure 5 below.

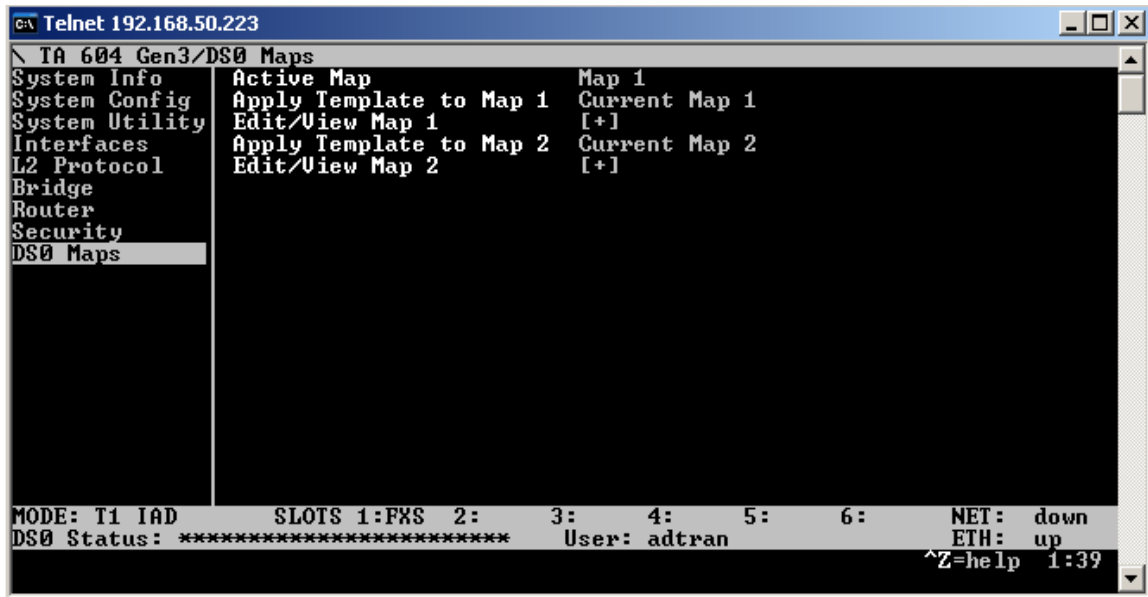


Figure 5 – DSO Map Menu

2. Select Edit/View Map1 to map the T1 channels assigned to the FXS to the ports connected to the Castelle FaxPress. (Note: In this example we are using an ADTRAN Total Access 604, providing 4-analog FXS ports connection to the 4-Port Castelle FaxPress. If Castelle FaxPress is equipped with an 8-Port fax board, the ADTRAN Total Access 608 will be required.) See Figure 6

3. Map some or all of the remaining channels on the Network T1 to the T1/DSX-1 port connecting the PBX. See Figure 6.

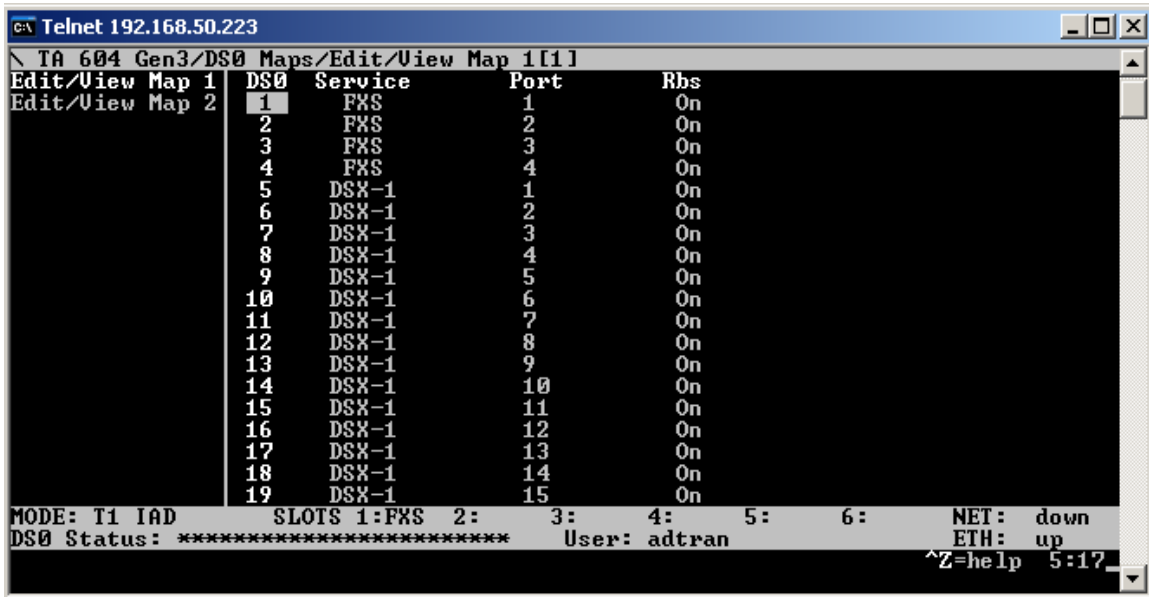


Figure 6

4. Type H to return to the Main Menu and select the Interface option from the left pane menu, next select FXS configuration, then configure the FXS ports for “Tandem E&M” mode as shown in Figure 7. In this mode, the FXS ports will provide/respond to E&M signaling from the Telco, and pass DID/DNIS digits to the attached FaxPress using standard Loop Start signaling. (Note: The Total Access will pass DID/DNIS digits after an off-hook condition is detected from the FaxPress.)

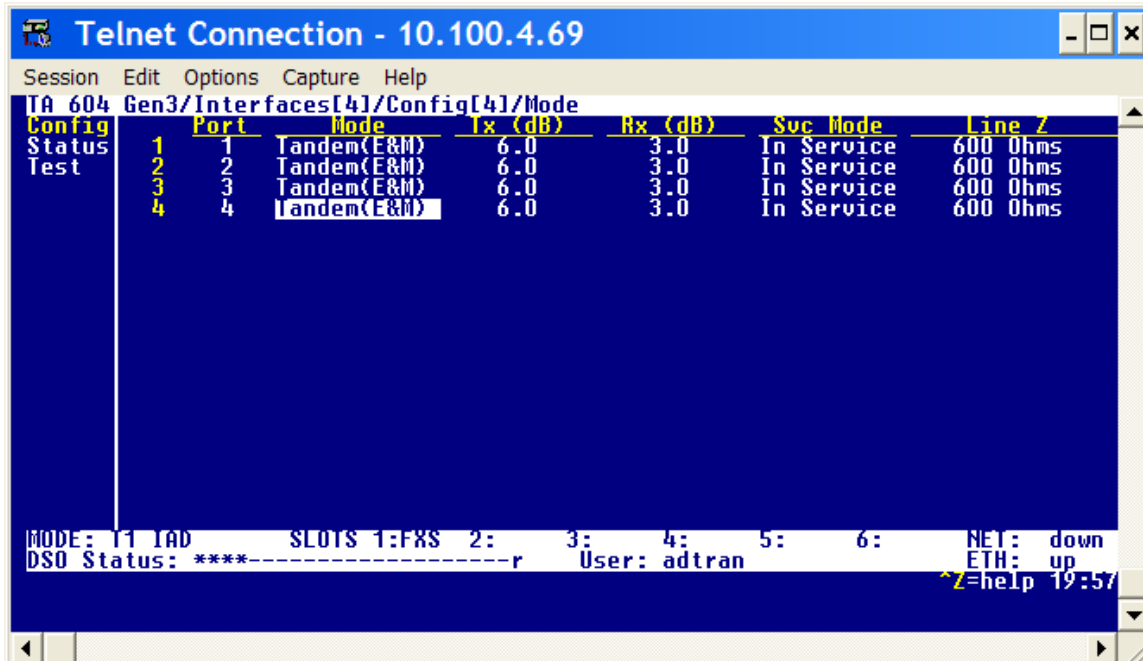


Figure 7

5. Under the Tandem options, set the conversion mode to Loop Start and the Supervision to either “WINK” or “IMMEDIATE”, depending on the supervision used by the carrier. (Note: “WINK” is typically the preferred method when using E&M signaling).

6. Set DNIS Options to “Enable”, then set DNIS delay to “5.0 sec”. (Note: if delay is too long, change DNIS delay to 3.0 seconds). See Figure 8.

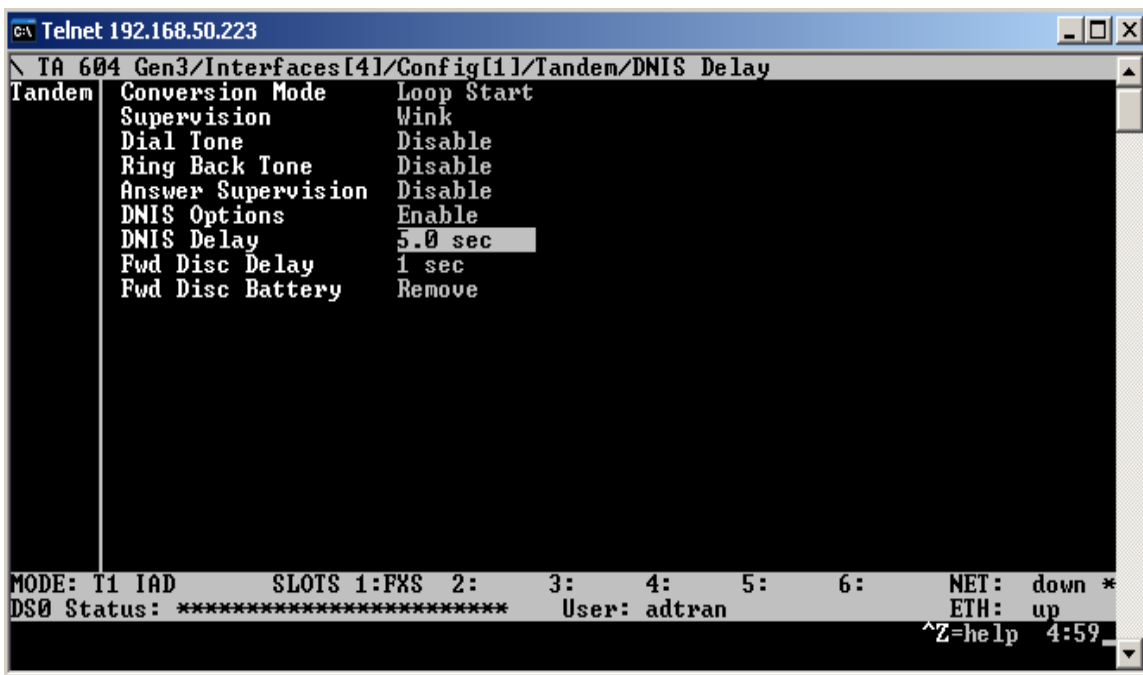


Figure 8

## VII. CASTELL FAXPRESS CONFIGURATION

Log in to the FaxPress with Supervisor account and then from the Line Settings tab of the FaxPress property window, confirm that all the Fax Press ports are configured as follows:

Dialing Type = TONE,  
Routing Type = PBX/DID.

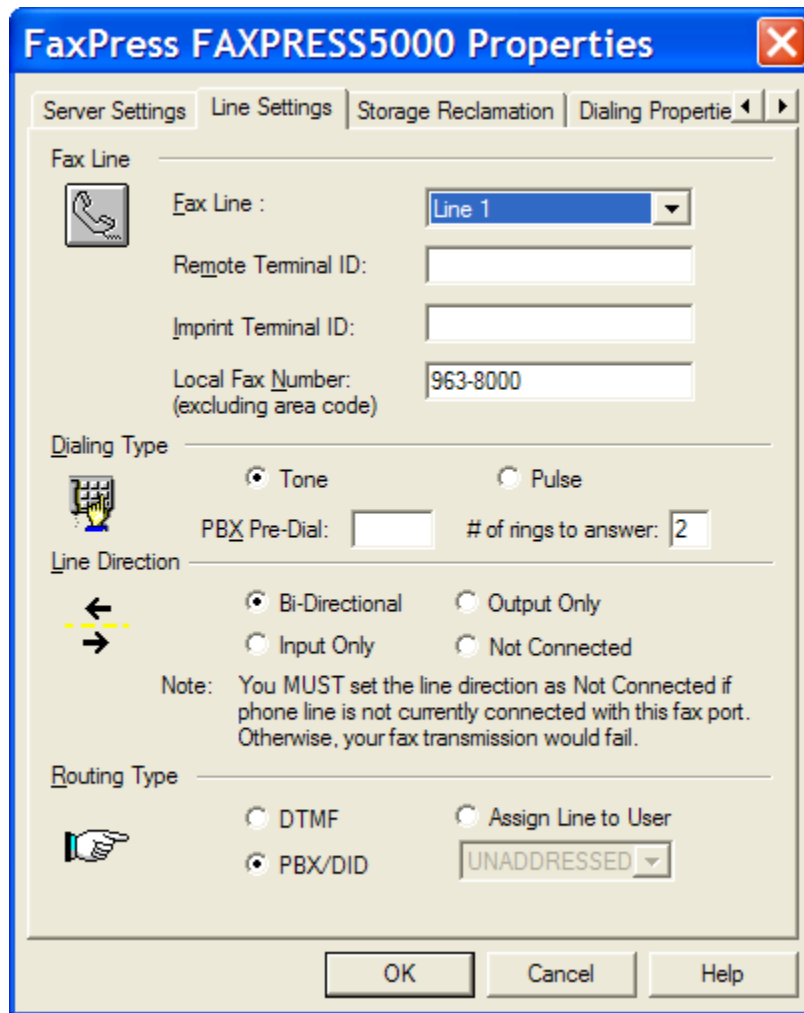


Figure 8

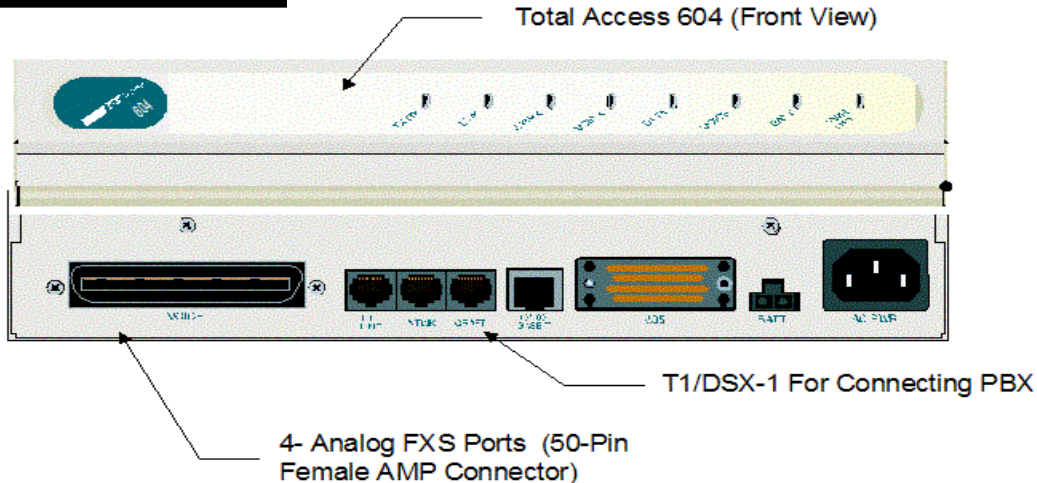
Note: Subscription to a two-way DID trunk (DID/DOD) from the Service Provider is required in order for the Bi-Directional to work on both incoming and outgoing faxes, otherwise just set to "Input Only".

## VIII. ORDERING INFORMATION

The following section provides part numbers for ordering TA 604 and TA 608. Please check with your local dealer for pricing.

### Total Access 604 – Configuration Options for connecting a 2 or 4-Port Castelle 2500 or 5000 Fax Press

#### 2 or 4 –Port Option



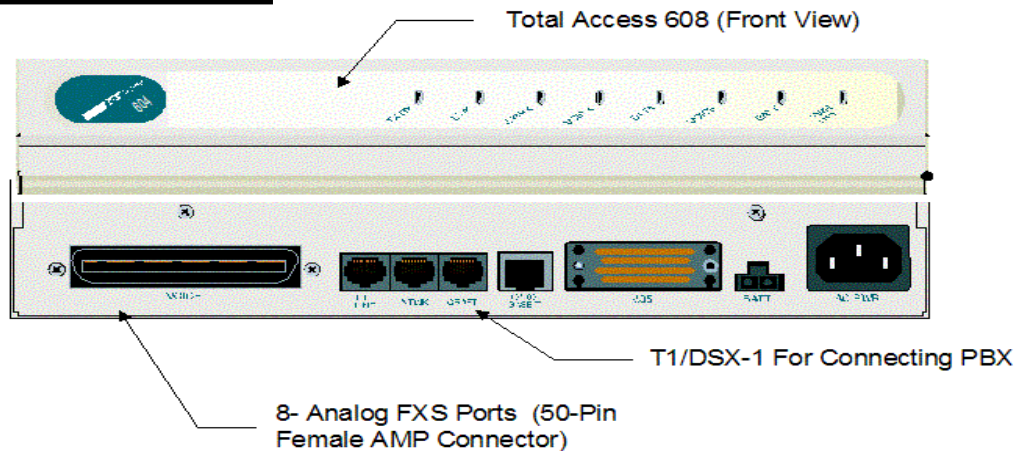
#### ADTRAN Part Number & Description

Total Access 604, T1 TDM with DSX-1  
Description: T1 network interface, Four FXS ports, DSX-1, V.35, 10/100 BaseT w/internal IP Router.

Part # 4213640L1#TDM

### Total Access 608 – Configuration Options for connecting an 8-Port Castelle 5000 or 7000 Fax Press

#### 8-Port Option



**ADTRAN Part Number & Description**

Total Access 608, T1 TDM with DSX-1

Description: T1 network interface, Eight FXS ports, DSX-1, V.35, 10/100 BaseT w/internal IP Router.

Part # 4213680L1#TDM