

## Description

### Remotely program a system using the DSX built-in modem, the System Administrator, and the modem in your PC.

- The Built-In Modem is available in software versions 2.01 and higher.

The DSX built-in modem lets you use the System Administrator and the modem in your PC to remotely program a system. With the built-in modem, you can securely and economically maintain and customize your installed systems without leaving your office. The DSX built-in modem is software-based and no additional equipment at the remote site is required. The modem meets the V.32bis modem standard and employs V.42 error correction for effective speeds approaching 14.4K bps.

To remotely program a DSX system:

1. Start the System Administrator and select the com port and initialization string for your PC modem.
2. Dial the modem in the remote system. There are three basic ways to do this.
  - Place a call to a Direct Inward Line terminated to the remote modem extension number.
  - Using Direct Inward Dialing, dial the remote modem extension number.
  - Dial into the remote system's Automated Attendant and do an Unscreened Transfer to the remote modem extension.
3. After your PC modem and the remote modem negotiate and set up, enter the system's password and use the System Administrator normally to program the system.

#### Conditions

- None

#### Default Setting

- The Built-In modem is enabled and assigned to extension 428.

## Programming

### Basic Setup

#### 1. Enable the built-in modem.

1. **1102-01: MODEM ENABLED** (PAGE 693)  
[SYSTEM: CONFIG: COMMUNICATION: MODEM: INSTALLED]  
Enter 1.
2. **1316-01: INTERNAL MODEM EXTENSION NUMBER** (PAGE 724)  
[SYSTEM: NUMBERING: MODEM: EXTENSION]  
Enter the modem's extension number (normally 428).

## Setting up a Direct Inward Line (DIL) to the Built-In Modem

### 1. Do you want a specific line (DIL) to be automatically answered by the built-in modem during the day?

1. If yes:

**3112-01: DIRECT TERMINATION IN THE DAY** (PAGE 935)

[LINES: CONFIG: OPTIONS: TERMINATION: DAY TERMINATION: DIRECT TERMINATION]

Enter the built-in modem extension number (normally 428).

2. If no, skip this step.

### 2. Do you want a specific line (DIL) to be automatically answered by the built-in modem at night?

1. If yes:

**3112-04: DIRECT TERMINATION AT NIGHT** (PAGE 936)

[LINES: CONFIG: OPTIONS: TERMINATION: NIGHT TERMINATION: DIRECT TERMINATION]

Enter the built-in modem extension number (normally 428).

2. If no, skip this step.

## Using Direct Inward Dialing (DID) to Route to the Built-In Modem

### 1. Set the circuit type for each DID line.

1. Be sure your T1/PRI PCB is installed and connected and that your telco is providing DID service.

2. **3101-01: LINE TYPE** (PAGE 923)

[LINES: CONFIG: SETUP: TYPE (3101): TYPE]

Enter the correct circuit type for each DID line:

- **03** for DID Wink Start
- **04** for DID Immediate Start

3. **3101-03: DTMF DIALING** (PAGE 926)

[LINES: CONFIG: SETUP: TYPE (3101): DTMF DIALING]

Indicate whether the line is DTMF (**1**) or Dial Pulse (**0**).

4. If your telco provides DID service using T1 E&M Wink Start DTMF signaling, choose circuit type 03 (DID Wink Start) and enable **3101-03: DTMF DIALING**.

### 2. Specify the number of incoming DID digits you expect to receive from the telco.

1. **3301-01: NUMBER OF DID DIGITS** (PAGE 950)

[LINES: DID: SETUP: CONFIGURATION (3301): NUMBER OF DID DIGITS]

Specify the number of incoming DID digits expected from the connected DID service.

- By default, the system expects to receive three DID digits from the connected service.

### 3. Set up the DID Translation Table to route to the built-in modem.

1. **3302-01: INCOMING DID DIGITS** (PAGE 952)  
*[LINES: DID: SETUP: TRANSLATIONS (3302): INCOMING DIGITS]*  
 Enter the digits the caller will dial to reach the built-in modem.
2. **3302-01: DAY TRANSLATION DESTINATION** (PAGE 952)  
*[LINES: DID: SETUP: TRANSLATIONS (3302): DAY TRANSLATION]*  
 Enter the built-in modem's extension number (normally 428).
3. **3302-01: NIGHT TRANSLATION DESTINATION** (PAGE 952)  
*[LINES: DID: SETUP: TRANSLATIONS (3302): NIGHT TRANSLATION]*  
 Enter the built-in modem's extension number (normally 428).

### Using the Automated Attendant to Access the Built-In Modem

#### 1. Should the Automated Attendant allow an Unscreened Transfer to the built-in modem?

1. If yes:  
**4222-01: DIAL ACTION TABLE** (PAGE 1008)  
*[VOICE MAIL: ROUTING MAILBOXES: ROUTING MAILBOX: ROUTING OPTIONS (4222): DIAL ACTION TABLE]*  
 Make sure the first digit of the modem's extension number is set as a UTRF (**2**) in the active Dial Action Table.
  - This is the default setting for Dial Action Table 1.
2. If no:  
**4222-01: DIAL ACTION TABLE** (PAGE 1008)  
*[VOICE MAIL: ROUTING MAILBOXES: ROUTING MAILBOX: ROUTING OPTIONS (4222): DIAL ACTION TABLE]*  
 Make sure the first digit in the built-in modem's extension number **does not** have a UTRF (**2**) assigned.

## Other Related Features

### Features

#### **DIRECT INWARD DIALING** (PAGE 113)

Use DID to directly dial the built-in modem extension number.

#### **DIRECT INWARD LINE** (PAGE 123)

Set up a Direct Inward Line to directly ring into the modem extension.

#### **SYSTEM ADMINISTRATOR (PC PROGRAM)** (PAGE 380)

The built-in modem gives the System Administrator remote programming via modem capability.

### IntraMail Features

#### **AUTOMATED ATTENDANT** (PAGE 486)

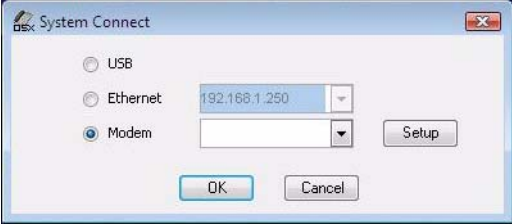


#### **AUTOMATED ATTENDANT, BUILT-IN** (PAGE 489)

#### **UNSCREENED TRANSFER** (PAGE 673)

The Automated Attendant can route calls to the built-in modem via an Unscreened Transfer.

# Modem, Built-In

## Operation

| Using the Built-In Modem for Remote Programming          |  | In these instructions:<br>[Super Display Soft Key]<br>[Keyset Soft Key] |
|--|--|---|
| <b>To use the built-in modem for remote programming:</b> |  |   |
| 1.   | Start the System Administrator. <ul style="list-style-type: none"> <li>From your Windows desktop, click <b>Start + All Programs + NEC + DSX + DSX System Administrator</b>.</li> </ul>   |   |
| 2.   | Click the <i>Connect</i> button or click <b>System + Connect</b> . <ul style="list-style-type: none"> <li>You see the <i>System Connect</i> screen.</li> </ul>    |   |
| 3.   | Select the <i>Modem</i> radio button and then click <b>Setup</b> to go to the <i>Modem Setup</i> screen.   |   |
| 4.   | <ul style="list-style-type: none"> <li>Open the <i>Choose modem/port</i> drop-down box and select the com port on which your PC modem is installed.</li> <li>Check the <i>Enter Modem Initialization sting</i> entry for compatibility with your modem and change if required. The default initialization string is <b>ATQ0V1E0</b>.               <ul style="list-style-type: none"> <li><b>AT</b> = Attention (i.e., string begins here).</li> <li><b>Q0</b> = Enable result codes to DTE (accepts connect status messages from your PC modem).</li> <li><b>V1</b> = Result codes in word format (your PC displays status messages in words, rather than codes).</li> <li><b>E0</b> = Echo disabled (your modem doesn't mirror the commands back to your PC).</li> </ul> </li> <li>Click <b>OK</b> to return to the <i>System Connect</i> screen.</li> </ul> |   |
| 5.   | In the <i>System Connect</i> screen <i>Modem</i> window, enter the remote site telephone number. <ul style="list-style-type: none"> <li>For <i>DID or DIL into the remote system</i>, just enter the DIL or DID telephone number.</li> <li>If calling into the remote site Automated Attendant,               <ul style="list-style-type: none"> <li>Enter the remote site telephone number (e.g., <b>555 1212</b>).</li> <li>Add a few pauses to allow the remote Automated Attendant to answer (e.g., <b>555 1212 ,,,</b>).</li> <li>Add the remote site's modem extension number (e.g., <b>555 1212 ,,, 428</b>).</li> </ul> </li> </ul>  |   |
| 6.   | Click <b>OK</b> to dial the remote site. Once you connect, you'll see <i>Login</i> screen.    |   |
| 7.   | Enter the system password (normally <b>necdsx</b> ) and program normally.  |   |