

Work Off-Line

Set up a new database or modify a previously saved database (without being connected to the telephone system). This helps minimize on-site programming time.

Work On-Line (connected directly or via modem)

- Program your system via the PC, in lieu of using the telephone programming.
- Download a database from the telephone system which you can modify. Then, save the database to a file on your PC or upload the changes back into the phone system. Be sure to download the entire database before saving it.
- Upload a new database to the telephone system.



Off-line:

This is the same as using *File: New* from the menu bar (see page 3-3).

Opens a new (default) database. The first time you use this option, you must specify a region (U.S. or Latin America). Always select U.S.

1. Connecting

2. Installation

and Start-up

3. Programming

the PC

Not available. On-line:



Off-line:

On-line:

This is the same as using *File: Open* from the menu bar (see page 3-4).

- Opens an existing (previously saved) database. You cannot connect to the system after opening a database off-line.
- Opens an existing database and immediately uploads into the telephone system, overwriting the current phone system data.



Off-line: On-line: This is the same as using *File: Save* from the menu bar (see page 3-7).

- Saves the currently open database to a file on your PC hard disk. For a new database, you will be prompted to enter a name.
- Saves the currently connected system's database to a file on your PC hard disk. You will be prompted to download the connected system's entire database before saving, if required.



Off-line:

This is the same as using Connection: Online from the menu bar (see page 3-80). See page 1-2 to learn how to make a direct connection.

- While on-site, directly connect to the telephone system. This option is not available while an off-line database is open.
- On-line: Not available.



Off-line:

On-line:

This is the same as using Connection: Remote from the menu bar (see page 3-81). See page 1-5 to learn how to make a modem connection.

- While off-site, remotely connect to the telephone system via modem. This option is not available while an off-line database is open.
- Not available.



Off-line:

On-line:

page 3-83). Close your open file and return to the opening screen. You will be prompted to save any unsaved data.

This is the same as using Connection: Break from the menu bar (see

Break your connection and return to the opening screen. You will be prompted to save any unsaved data.

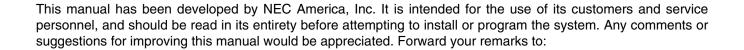


On-line:

- Off-line:
 - While on-line, download the entire database from the telephone system.

Download

S PC Program User's Guide (01.01.05)



NEC America, Inc., Corporate Networks Group 4 Forest Parkway Shelton, CT 06484 cng.nec.com

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Chapter 1: Connecting the PC

Directly Connecting the PC to the Telephone System

Overview

Directly connect your PC to the telephone system when the PC and the phone system are in the same location. You can also use your direct connection for running the Update Utility, outputting Station Message Detail Recording (SMDR), or recording Call History.

- The *Update Utility* allows you to upgrade your system software.
- SMDR provides a record of the system's outside calls. Once set up in programming, SMDR automatically outputs from the system's RS-232 (serial) port.
- The Call History provides data on system activity. Technical Support personnel can use this data to evaluate system performance.

The default communications parameters of the DS1000/DS2000 serial port are 19200 8 N 1 (19200 baud, eight data bits, no parity, and 1 stop bit).



Directly Connecting to DS1000

To connect a PC to your DS1000 telephone system (Figure 1-1):

- Plug one end of a mod-8 (standard 8 conductor) patch cord into the system's RS-232 port.
- 2. Plug the other end of the mod-8 patch cord into the DB9 to Mod-8 Adaptor (P/N 85980). It is recommended that you use adaptor P/N 85980. If you choose to make your own adaptor and/or cable, however, refer to Making Data Cables on page 1-7.
- Plug the adaptor into the DB9M COM connector on the back of your PC. 3.
- Use the Direct Connection button (page 2-9) or the Connection: Online menu option (page 3-80) to connect the PC Program to the telephone system.

Directly Connecting to DS2000

To connect a PC or laptop to your DS2000 telephone system (Figure 1-2):

- Plug the DIN end of the 8-PIN DIN to Mod-8 Cable (P/N 80893) into the CPU serial port.
- Plug one end of the DB9 to Mod-8 Adaptor (P/N 85980) into the cable. It is recommended that you use cable P/N 80893 and adaptor P/N 85980. If you choose to make your own adaptor and/or cable, however, refer to Making Data Cables on page 1-7.
- 3. Plug the other end of the adaptor into the DB9M COM connector on the back of your PC.
- Use the Direct Connection button (page 2-9) or the Connection: Online menu option (page 3-80) to connect the PC Program to the telephone system.

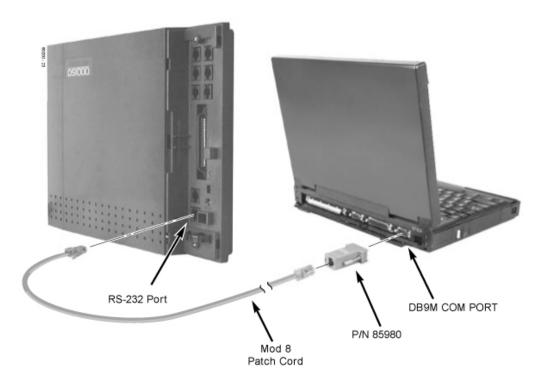


Figure 1-1: DS1000 Direct Connection

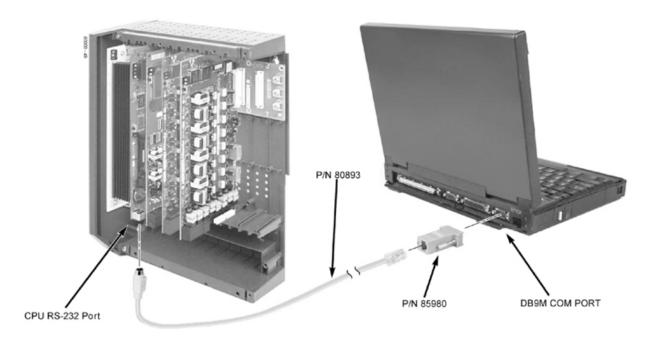


Figure 1-2: DS2000 Direct Connection

Testing the Connection

To test the connection:

- Open HyperTerminal on your Windows PC or laptop:
 - Click Start + Programs + Accessories + Communications + Hypertrm.
 - Double-click **Hyperterm.exe**.
 - Name your connection, pick an icon, and click **OK**.
- When you see the Connect To screen, open the Connect using drop down and select Direct to Com n (where n is the number of the PC COM port connected to the system).
- Click **OK** after making your selection above.
- When you see the COMn Properties, set the parameters to the following:
 - Bits per second = 19200
 - Data bits = 8
 - Parity = none
 - Stop bits = 1
 - **Flow control** = none
- Click **OK** after making your selections above.
- Press Enter.

You may see some diagnostic data. If you press Enter again, you will see a "greater than" prompt(>).

If you don't see anything (or garbage) on your screen, check your connections and HyperTerminal settings, then restart HyperTerminal and try again.

From the PC or laptop keyboard, press **Shift 1** to enable history. 7.

> To verify the connection, lift the handset or use features at any telephone. History data will display on the PC or laptop screen.

Once you have verified that everything is working OK, press **Shift 1** again to disable history.

Checking the System's Serial Port Settings

To check the system's serial port settings:

- 1. Enter the programming mode from a display telephone.
- 2. Enter **0301** + **HOLD**.
- 3. Press Vol ▲ until you see: BAUD RATE?nnnn
- Enter the new baud rate, if required + **HOLD**. (0=1200, 1=2400, 2=4800, 3=9600, 4=19200, and 5=38400)
- Press **CONF** to exit program 0301.



Connecting a Modem to the Telephone System

Overview

Use a modem connection when the phone system is in a different (remote) location than your PC. You typically use the remote connection for remote programming and troubleshooting, You would not normally use the remote connection for the *Update Utility*, *SMDR*, and *Call History*.

Connecting a Modem to DS1000

To connect a modem to DS1000 (Figure 1-3):

- Plug one end of a mod-8 (standard 8 conductor) patch cord into the system's RS-232 port.
- Plug the other end of the mod-8 patch cord into the DB25 to Mod-8 Adaptor (P/N 85981). It is recommended that you use adaptor P/N 85981. If you choose to make your own adaptor and/or cable, however, refer to Making Data Cables on page 1-7.
- 3. Plug the other end of the adaptor into the DB25F connector on the back of your modem.
- Following the modem manufacturer's instructions, plug in the modem power supply and connect to the trunk on which you will call to access the system remotely.

Turn to Tools: Options: Modem on page 3-79 for more on setting up the modem initialization strings. Be sure the string includes the command to turn flow control off.

Use the Remote Connection button (page 2-10) or the Connection: Remote menu option (page 3-81) to connect the PC Program to the telephone system.

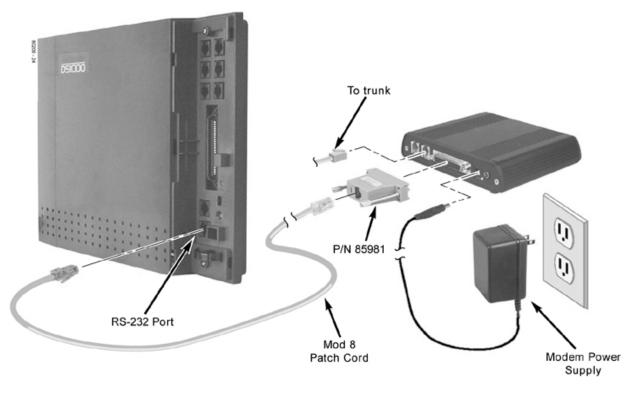


Figure 1-3: DS1000 Remote (Modem) Connection

Connecting a Modem to DS2000

To connect a modem to DS2000 (Figure 1-3):

- 1. Plug the DIN end of the 8-Pin DIN to Mod-8 Cable (P/N 80893) into the CPU serial port.
- 2. Plug one end of the DB25-Mod-8 Adaptor (P/N 85981) into the cable

 It is recommended that you use adaptor P/N 85981. If you choose to make your own adaptor and/or cable, however, refer to Making Data Cables on page 1-7.
- 3. Plug the other end of the adaptor into the DB25F connector on the back of your modem.
- 4. Following the modern manufacturer's instructions, plug in the modern power supply and connect to the trunk on which you will call to access the system remotely.

Turn to Tools: Options: Modem on page 3-79 for more on setting up the modem initialization strings. Be sure the string includes the command to turn flow control off.

5. Use the *Remote Connection* button (*page 2-10*) or the *Connection: Remote* menu option (page 3-81) to connect the PC Program to the telephone system.

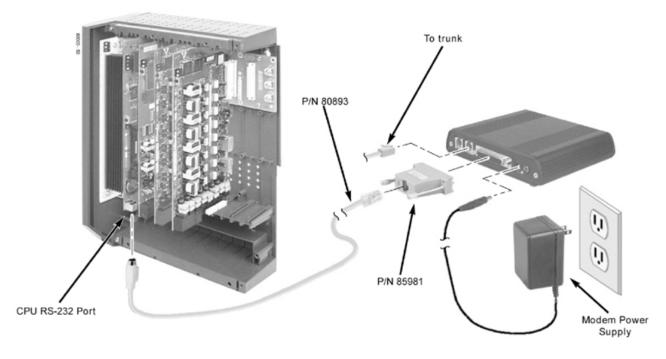


Figure 1-4: DS2000 Remote (Modem) Connection



DS1000/2000

Making Your Own Data Cables

To make your own DS1000 data cables (Figure 1-5):

See the illustration below.

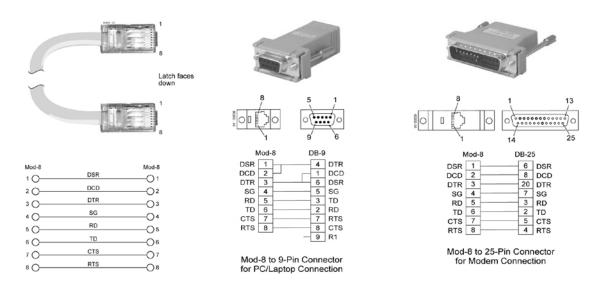


Figure 1-5: Making DS1000 Data Cables

To make your own DS1000 data cables (Figure 1-6):

See the illustration below.

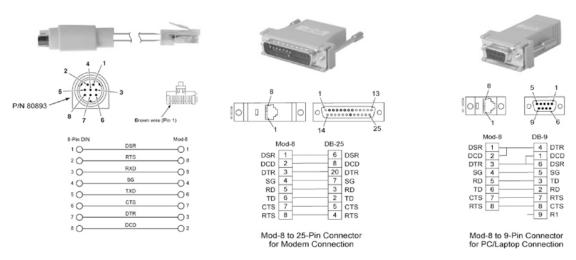


Figure 1-6: Making DS2000 Data Cables

Chapter 2:

Installing the PC Program

Minimum Requirements

Be sure the PC on which you want to install the PC Program meets the following minimum requirements:

Installation and Start-up

- Windows NT, Windows 2000, Windows XP, and above.
- P133 with 32 MB RAM.
- 256 Color 800 x 600 display (1240 x 1024 is optimal).
- Do not use large fonts.
- 40 MBytes of available hard disk space.



Installation

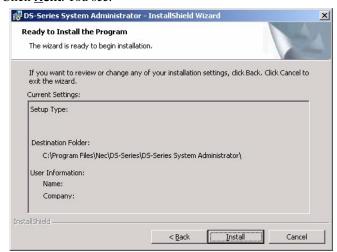
To install the DS1000/2000 PC Program:

Before installing, use Add/Remove Programs to remove any prior installed versions of the DS1000/2000 PC Program.

- Insert your DS1000/2000 System Administrator CD (P/N 80053-V*.**.**). 1.
- Click **Start** + **Run** + **Browse**, then select the 80053-V*.**.** icon.
- 3. Select the file **DS-Series System Administrator Install.exe** and click **Open**.
- Click **OK**. After a few minutes, you see:



Click Next. You see:





Click **Install**. After a few minutes, you see:



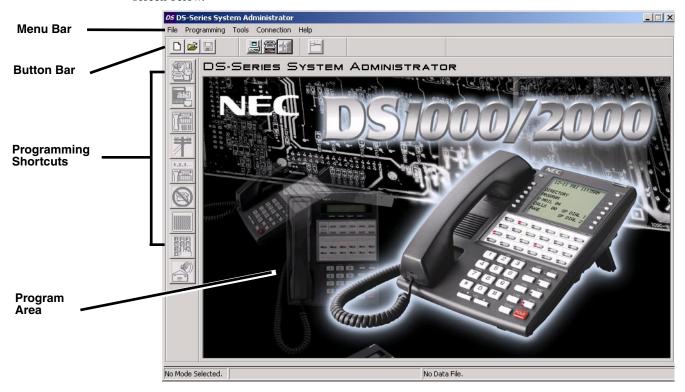
Click **Finish** to complete the installation.

Starting the PC Program

Initial Start-up

To start the DS1000/2000 PC Program:

Click Start + Programs + DS Series + DS-Series System Administrator. You see the opening screen below.





The PC Program Components

Menu Bar

File

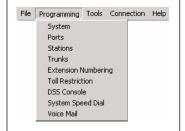


Use the *File* Menu Bar option to open a database, save a database, or import portions of a stored database into your current session.

- File: New opens a new (default) database.
 - This option has the same function as the *New* button on the Button Bar.
 - This option is not available while on-line.
- File: Open opens a an existing (previously saved) database.
 - It has the same function as the *Open* button on the Button Bar.
 - This option is available while on-line or off-line.
 - While on-line, this option loads the saved database into the telephone system. Be careful! You will of overwrite the customer database in the connected system.
- *File: Close* ends your current programming session and returns you to the opening screen.
 - This option is available while on-line or off-line.
 - While on-line, this option breaks (tears down) your direct or modem connection before returning you to the opening screen.
 - This option is similar to the *Break* button on the button bar.
- File: Save saves the currently open database to the PC hard disk.
 - This option is available while on-line or off-line.
 - For a new database while off-line, you will be prompted to enter a name prior to saving.
 - While on-line, this option always asks if you want to download the entire system database prior to saving. Be careful! To avoid saving a file with incomplete data, you should download the entire database prior to saving.
 - File: Save is the same as the Save button on the Button Bar.
- File: Save As allows you to save the currently open database to a new file on the PC hard disk.
 - This option is available while on-line or off-line.
 - While on-line, this option always asks if you want to download the entire system database prior to saving. Be careful! To avoid saving a file with incomplete data, you should download the entire database prior to saving.
- *File: Import* lets you import a portion of a previously saved database into your current session.
 - This option is available while on-line or off-line (with a new or saved database open).
 - For example, you can import just the Toll Restriction settings from another database into your current session.
- *File: Properties* allows you to enter contact information and other data about a site. This data is saved with each file.
- *File: Exit* exits the *File* options.
- For more on the *File* options, see *page 3-3*.



Programming



The *Programming* Menu Bar option lets you display the various programmable options in the program area. Each programmable option has a corresponding programming shortcut to the left of the program area. Either method accesses the same option - use the method that you find most convenient. For more on each programmable option, refer to:

- Programming: System on page 3-13.
- Programming: Ports on page 3-31 and page 3-34.
- Programming: Stations on page 3-37.
- *Programming: Trunks* on page 3-46.
- *Programming: Extension Numbering* on page 3-50.
- Programming: Toll Restriction on page 3-54.
- Programming: DSS Console on page 3-58.
- Programming: System Speed Dial on page 3-60.
- Programming: Voice Mail on page 3-62.

Tools



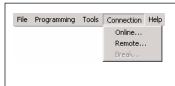
The *Tools* Menu Bar option allows you to:

- Initialize Toll Restriction.
- Use the *Online Utilities* to perform various system resets, in addition to saving and loading PC Card data (DS2000 only).
- Set up additional options, such as:
 - Specifying the region preference (US or Latin America).
 - Configuring the serial port for direct connections.
 - Configuring the modem port for remote connections.

For more on the *Tools* options, refer to:

- *Tools: Initialize Toll Restriction* on page 3-67.
- Tools: Online Utilities: PC Card Load/Save on page 3-68.
- Tools: Online Utilities: PC Card Load/Save on page 3-68.
- Tools: Online Utilities: Reset Station Port on page 3-73.
- Tools: Online Utilities: Initialize Caller ID Log on page 3-74.
- Tools: Online Utilities: Reset System on page 3-75.
- Tools: Online Utilities: Initialize System on page 3-76.
- *Tools: Options: General* on page 3-77.
- Tools: Options: Communications on page 3-78.
- Tools: Options: Modem on page 3-79.

Connection

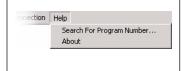


Use the *Connection* Menu Bar option to connect to the telephone system. You can connect directly (*Online*), connect remotely (*Remote*), or *Break* (tear down) an existing connection.

- Connection: Online has the same function as the *Direct* button on the Button Bar. For more on *Connection: Online*, see page 3-80.
- *Connection: Remote* has the same function as the *Remote* button on the Button Bar. For more on *Connection: Remote*, see page 3-81.
- *Connection: Break* has the same function as the *Break* button on the Button Bar. For more on *Connection: Break*, see page 3-83.



Help



The *Help* Menu Bar option allows you to access the *Search For Program Number* utility. With this utility, just type in a telephone programming program number (such as 1801) and the utility will automatically tell you where the option is located in the PC Program. The *Help* Menu Bar option also provides a splash screen which displays the PC Program version number.

• For more on the *Help* options, see *page 3-84*.



Button Bar

New



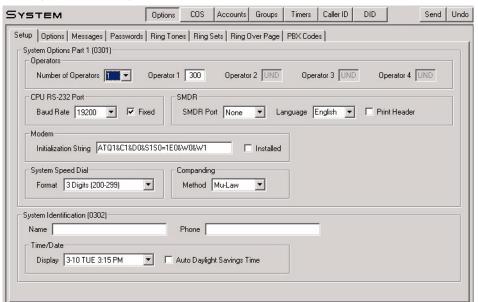
This button is the same as using *File: New* from the menu bar (see page 3-3).

The *New* button opens a new (default) database. To use this option:

Click the button. You see:



- The first time you use this option, you must specify a region (U.S. or Latin America). Always select U.S.
- Select the type of telephone system you want to program. You see the opening screen for a new (default database).



Note that the DID option is not available on DS1000.

On-line

This option is not available while on-line.



Open



This button is the same as using *File: Open* from the Menu Bar. Turn to page 3-4 for more.

Off-line

Use the *Open* button if you want to open an *existing* (previously saved) database. You may want to do this when:

- Making changes to an existing database.
- Opening an existing database which you will then modify and *Save* or *Save As* for use with another system.
- You cannot connect to the system after opening a database off-line.

On-line

• Opens an existing database and immediately uploads it into the system, *overwriting the current phone system data*.

Save



This button is the same as using *File: Save* from the menu bar. Turn to page 3-8 for more.

Off-line

Saves the currently open database to a file on your PC hard disk. For a new database, you will be prompted to enter a name.

On-line

Saves the currently connected system's database to a file on your PC hard disk. You will be prompted to download the connected system's entire database before saving, if required. Be careful! You have the option of saving a partial database – which you can upload later over the customer database in the connected system.

Direct



This button is the same as the *Connection: Online* Menu Bar option (see page 3-80).

Off-line

Click the *Direct* button to directly connect to the telephone system while on site. Prior to clicking this button, be sure your PC is properly connected to the telephone system. See page 1-2 to learn how to make a direct connection.

The PC communicates with the telephone system using the settings you enter in *Tools: Options: Communications* on page 3-78. When the PC programming session ends (i.e., you break the connection), the telephone system returns to the settings specified in **0303 - CPU Baud Rate**.

Note: If reconnecting after an unexpected disconnect, you may see a "communication synchronization" error message. Just click this button to try again.

On-line

Not available.



Remote



The Remote Connection button is the same as the Connection: Remote Menu Bar option. See page 3-81 for more.

Off-line

Click the *Remote Connection* button to make an off-site (remote) connection to the telephone system via modem. Prior to clicking this button, be sure your PC and the remote system are properly connected to their respective modems. See Connecting a Modem to DS1000 on page 1-5 and Connecting a Modem to DS2000 on page 1-6 to learn how to make these modem connections.

On-line

Not available

Break



This button is the same as using *Connection: Break* from the menu bar (see page 3-83).

Off-line

Use Break to close your open file and return to the opening screen. You will be prompted to save any unsaved data.

On-line

Click *Break* to break (tear down) your direct or modem connection and return to the opening screen. You will be prompted to save any unsaved data.

Download



Off-line

Not available.

On-line

While you are connected to the telephone system (directly or remotely), this button lets you download the entire database from the connected telephone system. You might want to do this when:

- You need to obtain a database from a system that was configured using telephone programming (and you don't want to lose the site data).
- You have applied many individual changes during your programming session, and you now want to save a single copy of the entire database. See *Programming* on page 3-13 for more on how to apply individual changes.

After clicking this button, you can select all or just individual programs to download.

Programming Shortcuts

Each of the Programming Shortcuts below has a corresponding *Programming* Menu Bar option. To learn more about the programs available with each shortcut, turn to the referenced *Programming* option.

System



Click to program various system options such as Passwords, Class of Service, Account Codes and Timers.

See *Programming: System* on page 3-13 for more.

Ports



Click to set up the slots in DS2000 and the ports in DS1000.

See Programming: Ports (DS2000) on page 3-31 and Programming: Ports (DS1000) on page 3-34 for more.



Stations



Click to set up the options at each station.

See *Programming: Stations* on page 3-37 for more.

Trunks



Click to set up the options for each trunk.

See *Programming: Trunks* on page 3-46 for more.

Extension Numbering



Click to set up the system numbering, as well as the extension numbers for stations and trunks.

See Programming: Extension Numbering on page 3-50 for more.

Toll Restriction



Click to set up Toll Restriction.

See *Programming: Toll Restriction* on page 3-54 for more.

DSS Console



Click to program the DSS Console key assignments.

See Programming: DSS Console on page 3-58 for more.

System Speed Dial



Click to program the System Speed Dial numbers and names.

See Programming: System Speed Dial on page 3-60 for more.

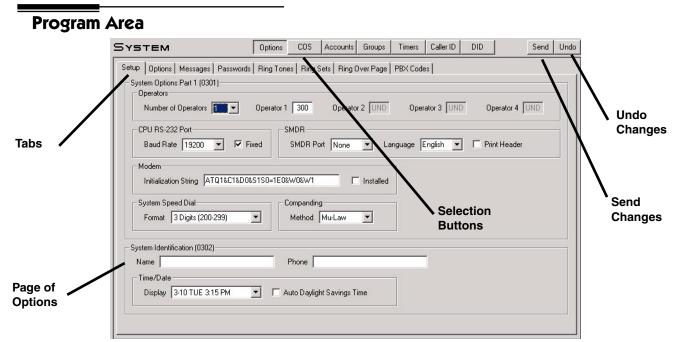
Voice Mail



Click to program the IntraMail built-in Voice Mail system and set other basic voice mail port options.

See *Programming: Voice Mail* on page 3-62 for more.





The Program Area is where the programming options appear. In this area, you can:

- Click the tabs and selection buttons to choose the page of options you want to program.
- Enter data directly into a field, or select from among the choices in a drop down menu.
- Send your changes to the connected telephone system.
- Prior to sending your changes, undo entries you have made on a particular page and return them to their previous entries. (Undo applies only to the displayed page.)



Programming the Telephone System

Programming Strategies

Sending Individual Changes

To connect to a telephone system and make limited programming changes:



- Click the Direct button to directly connect to the telephone system and enter your password (normally 372000).
 - You can optionally connect remotely using the *Remote* button.
 - If the system is already in the telephone programming mode, you will see a dialog box that allows you to override the local programming.
- Using the Programming Shortcuts or the Programming options from the Menu Bar, make the desired programing changes.
- Click the *Send* button on the active page. 3.
 - The PC Program sends your changes to the connected telephone system.

Creating and Sending an Entire Database

To create a new database and send the entire database to a telephone system:



- Click the *New* button to create a new default database.
 - You can only click this button while off-line.
- 2. Specify the type of database you want to create (DS1000 or DS2000).
 - You will see the opening page of System: Options.
- 3. Enter all your custom programming.



4. Click the *Save* button to save your changes to a database on your PC hard disk.



5. Click the *Break* button to close the file and go back to the opening screen.



- Click the *Direct* button to directly connect to the telephone system and enter your password (normally 372000).
 - You can optionally connect remotely using the *Remote* button.



- 7. Click the *Open* button.
- Select the database you want to upload into the system. 8.
 - In DS2000, you will see a warning box if your installed hardware does not match the configuration stored in the database. You have the option of sending the database anyway (*Program*), using the installed configuration (*System*), or canceling.
 - Be careful! You have the option of overwriting the customer database in the connected system.



Retrieving a Database

To retrieve a database from a telephone system and save it to your PC hard disk:



- Click the *Direct* button to directly connect to the telephone system and enter your password (normally 372000).
 - You can optionally connect remotely using the *Remote* button.
 - If the system is already in the telephone programming mode, you will see a dialog box that allows you to override the local programming.



- 2. Click the *Download* button to download the entire contents of the connected telephone system's database.
 - When you see the *Programs (Upload/Download)* screen, be sure to click *All* to download the entire database.
 - The download may take 15-20 minutes.



- 3. Click the Save button to save your changes to a database on your PC hard disk.
 - If you skip step 2 above, the program will prompt you to download the entire database in this step.

Importing Data from a Saved Database

To import data from saved database and upload it into the system:



- Click the *Direct* button to directly connect to the telephone system and enter your password (normally 372000).
 - You can optionally connect remotely using the *Remote* button.
 - If the system is already in the telephone programming mode, you will see a dialog box that allows you to override the local programming.
- 2. Click File: Import.
- 3. When you see the *Programs (Upload/Download)* screen, select the programs you want to import into the system and click OK.
- 4. Select the database from which you want to import the data and click *OPEN*.
- 5. Click the *Send* button the send the imported change to the telephone system.



6. Optionally click the Save button to save your changes to a database on your PC hard disk.



7. Click the *Break* button to close the file and go back to the opening screen.

Chapter 3 **Programming**

Overview

How to use this Chapter

This chapter provides an overview of the items on the PC Program Menu Bar:

Use the File Menu Bar option to open a database, save a database, or import portions of a stored database into your current session.

Programming

The Programming Menu Bar option provides access to all the PC Program programmable options. It also explains how to use the toolbars (where available) and cross-references each screen to its corresponding telephone programming option. For detailed information about each of the *Programming* options, refer to the DS1000/2000 Software Manual (P/B 80000SWG16 or higher).

Tools

The Tools Menu Bar option allows you to set up direct and remote (modem) connections, save and load data to the DS2000 PC Card, and perform various system resets.

Connection

Use the Connection Menu Bar option to connect to the telephone system. You can connect directly (Online), connect remotely (Remote), or Break (tear down) an existing connection.

The Help Menu Bar option allows you to access the Search For Program Number utility for finding telephone programming program numbers in the PC Program. This option also provides a splash screen which displays the PC Program version number.



Programming Tips

Shortcuts

- Ctrl C copies data from a programming field.
- **Ctrl X** cuts data from a programming field.
- **Ctrl V** pastes copied data into a programming field.
- **Ctrl Z** restores the previous programming field entry.

When Connecting to a Telephone System

As soon as you connect to a telephone system (directly or remotely), the PC Program automatically downloads the following:

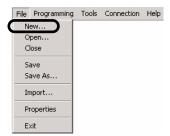
- All data for station 1 (extension 300).
- All data for trunk 101.
- All Toll Restriction data for Toll Restriction Level 1.
- All other system data.

Additional station, trunk and Toll Restriction data is downloaded:

- As required when you go to a new station, trunk, or Toll Restriction Level screen.
 - OR
- When you click the *Download* button.

Once connected to a telephone system (directly or remotely), you must take some action every 30 minutes or the PC Program will break the connection.

Description



Use the File: New option to open a new (default) database. This option has the same function as the Open New Database button on the Button Bar. This option is only available while off line.

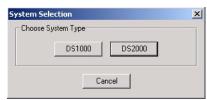
Programming Shortcut



Program Entry

To use File: New (off line only):

Click File: New. You see:



- Select the system database type you want to open (DS1000 or DS2000).
 - The database loads into the program area.

First Time New Option

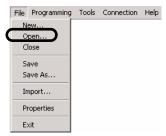
The first time you select a new database, you see:



This screen allows you select the region in which your system is installed (U.S. or Latin America). For North American applications, always select U.S.

Open

Description



Use the *File: Open* option to load (open) a database previously saved to your PC hard disk. This option is available while on-line or off-line. While off-line, *File: Open* opens the database into the PC program. While on-line (direct or remote), *File: Open* opens the file and uploads it into the connected system (overriding that system's existing database).

• While on-line, this option loads the saved database into the telephone system. Be careful! You have the option of overwriting the customer database in the connected system.

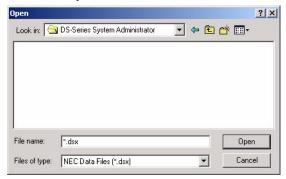
Programming Shortcut



Program Entry

To use File: Open while off line:

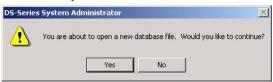
1. Click File: Open. You see:



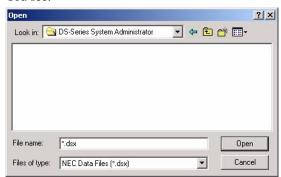
- 2. Select the stored database you want to open and click Open.
 - The database loads into the program area.

To use File: Open while on-line:

Click File: Open. You see:



Since this process will automatically upload the stored database into the connected system, click Yes. You see:

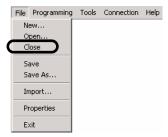


Select the stored database you want to upload and click Open. You see:



4. To continue with the upload, click Yes.

Description



Use the *File: Close* option to end your current programming session and return you to the opening screen. This option is available while on-line or off-line. While on-line, this option breaks (tears down) your direct or modem connection before returning you to the opening screen.

Programming Shortcut



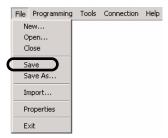
Program Entry

To use File: Close:

1. Click File: Close. You see:



Description



Use the File: Save option to save the currently open database to the same file on the PC hard disk. This option is available while on-line or off-line. While on-line, this option always asks if you want to download the entire system database prior to saving. Be careful! You have the option of saving a partial database which you can upload later over the customer database in the connected system.

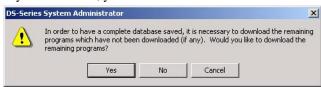
Programming Shortcut



Program Entry

To use File: Save:

- Click File: Save. If you are off-line, skip to step 3.
- If you are on-line, you see:



Normally, click Yes to be sure you have downloaded all the programming from the connected telephone system before saving.

- The database saves to the existing file on the PC hard disk.
 - For a new database, you will be prompted to enter a name.

Save As

Description



Use the File: Save As option to save a database to a file on your PC hard disk. You can save a database you created using the New button or a database you downloaded using the Download button. The File: Save As option is available while off-line and on-line. While on-line, this option always asks if you want to download the entire system database prior to saving. Be careful! You have the option of saving a partial database which you can upload later over the customer database in the connected system.

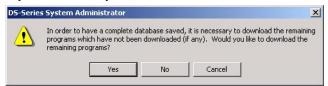
Programming Shortcut

N/A

Program Entry

To use File: Save As:

- Click File: Save As. If you are off-line, skip to step 3.
- If you are on-line, you see:



Normally, click Yes to be sure you have downloaded all the programming from the connected telephone system before saving.

When you see:



Enter a name for your saved database and click Save.

Double-click on an existing file and click Yes to overwrite a previously saved database.



Use the *File: Import* option to import a portion of a previously saved database into your current session. For example, you can import just the Toll Restriction settings from another database into you current session. This option is available while on-line or off-line. After importing the data, you can:

- Click *Send* to upload the imported data to the connected telephone system.
- Use *File: Save* the save the data to the same file on the PC hard disk (and optionally upload the changed data to the phone system if on-line).
- Use *File: Save As* to save the data to a new file on the PC hard disk (and optionally upload the changed data to the phone system if on-line).

Be careful! You have the option of saving a partial database – which you can upload later <u>over</u> the customer database in the connected system.

Programming Shortcut

N/A

Program Entry

To use File: Import:

1. Click File: Import. You see:

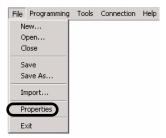


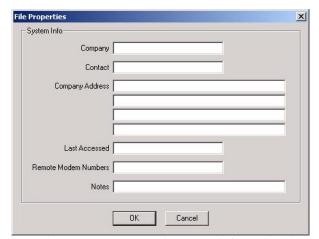
Import

Select the programs you want to import and click OK. You see: 2.



- Select the file from which you want to import the programs you selected in step 2. 3.
- Click *OK*. The selected data is imported into your existing session.



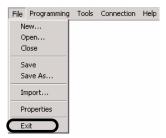


Use File: Properties to enter important information about the remote site. You can enter contact information, the remote telephone numbers, as well as important notes and when the site was last accessed. The properties data is saved as part of the database.

Program Entry

To use File: Properties:

Click File: Properties.



Use the File: Exit to exit the PC Program. (The system will prompt you if you try to exit while you have unsaved changes.)

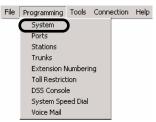
Programming Shortcut

N/A

Program Entry

To use File: Exit:

Click File: Exit.



The Programming: System option provides access to system-wide programming.

Programming Shortcut



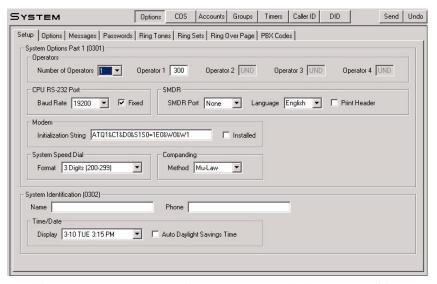
System Toolbar Controls

Options C	OS Accounts Groups Timers Caller ID DID Send Undo		
Options	Click to access Operator and other system option programming. See <i>System: Options</i> on page 3-14 for more.		
cos	Click to access Class of Service programming. See <i>System: Class of Service (COS)</i> on page 3-19 for more.		
Accounts	Click to access the Verified Account Codes table. See <i>System: Account Codes</i> (<i>Accounts</i>) on page 3-24 for more.		
Groups	Click to access Trunk Group programming. See <i>System: Trunk Groups</i> on page 3-24 for more.		
Timers	Click to access the programming for system, trunk, station, and T1/E1 timers. See <i>System: Timers</i> on page 3-25 for more.		
Caller ID	Click to access the Caller ID programming. See <i>System: Caller ID</i> on page 3-28 for more.		
DID	(DS2000 Only) Click to access the DID configuration and the DID translation table programming. See <i>System: Direct Inward Dialing (DID)</i> on page 3-30 for more.		
Send	 While on-line, sends the programmed changes to the connected telephone system. Send is not available while off-line. 		
Undo	Cancels any changes you made to the current page.		



Options

Setup



Use this page to set up system options, operators, and other system-wide programming. Refer to the following in the DS1000/2000 Software Manual for more:

- 0301 System Options (Part 1)
- 0302 System Identification

Note: For proper PC Program operation, be sure Fixed Baud Rate is enabled (checked).

More on the Modem: Installed Option

You should enable (check) *Modem: Installed* when an external modem is connected to the system. If enabled, the system outputs diagnostics, SMDR and call history only while the modem is on-line.

Modem: Installed also enables the modem initialization string. The system outputs this string from the serial port when:

- This system is powered up or reset (while the modem is connected).
- The string is changed in the PC Program (while the modem is connected). The system sends the init string after the PC Program session ends.
- The modem is plugged into the serial port and powered up.
- Any time the *Baud Rate* or *Modem: Installed* options are changed.
- Whenever you click the *Break* button.

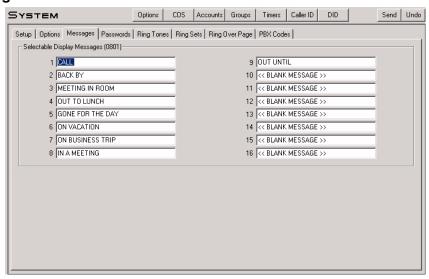
Options



Use this page to set up additional system-wide feature options. Refer to the following in the DS1000/2000 Software Manual for more:

0201 - Tenant Option Programming

Messages

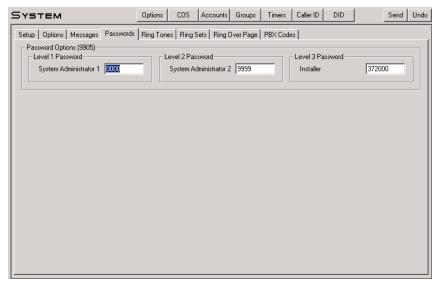


Use this page to enter the Selectable Display Messages. Refer to the following in the DS1000/2000 Software Manual for more:

0801 - Selectable Display Messages



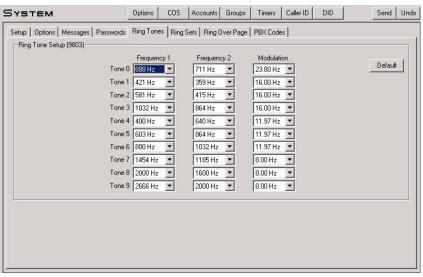
Password



Use this page to enter the system passwords. Refer to the following in the DS1000/2000 Software Manual for more:

9905 - Password

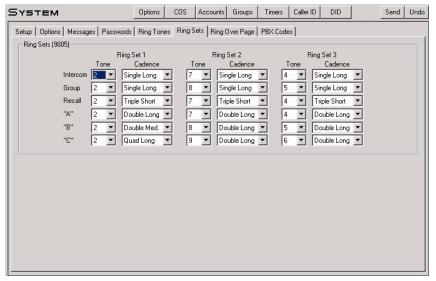
Ring Tones



Use this page to specify the two frequencies (Frequency Index 1 and Frequency Index 2) and the modulation rate (Modulation Index) for each of the 10 Ring Tones (0-9). Refer to the following in the DS1000/2000 Software Manual for more:

- **Distinctive Ringing**
- 9803 Ring Tone Setup

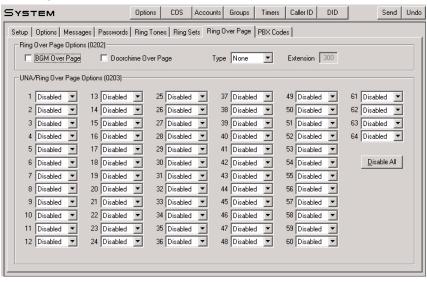
Ring Sets



Use this page to specify the Ring Tone and Cadence for each Ring Type. This program does not exist in telephone programming. Refer to the following in the DS1000/2000 Software Manual for more:

Distinctive Ringing

Ring Over Page



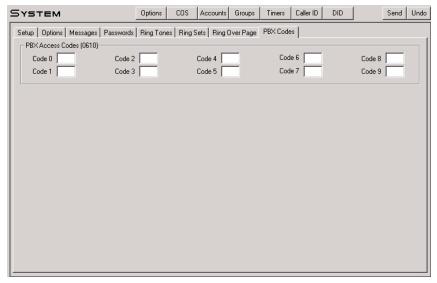
Use the top section of this page to set up Ringing Over Page. You can separately enable Background Music, Door Box Chimes, and station or trunk ringing over page. If you enable trunk ringing over page, use the bottom portion of this page to determine which trunks will initiate trunk which type of trunk ringing. (To simultaneously make all entries *Disabled*, click *Disable All*.)

Refer to the following in the DS1000/2000 Software Manual for more:

- 0202 Page Ring Source
- 0203 UNA Ringing Over Page



PBX Codes

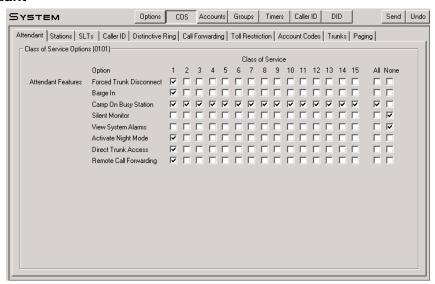


Use this page to enter the 10 PBX Access Codes. Each code is either 1 or 2 digits long, using the digits 0-9 and * as a wild card. Refer to the following in the DS1000/2000 Software Manual for more:

0610 - PBX Access Codes Table

Class of Service (COS)

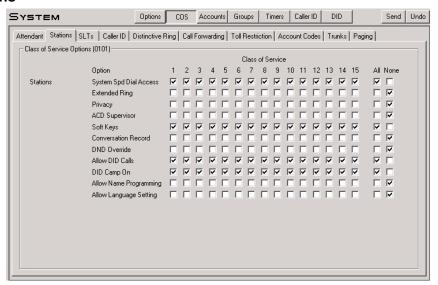
Attendant



Use this page to select Class of Service options for the attendant. Although the options on this page are available to any keyset user, they are typically used by system attendants. To enable an option in all Classes of Service, click All. To disable an option in all Classes of Service, click None. Refer to the following in the DS1000/2000 Software Manual for more:

0101 - Class of Service Options

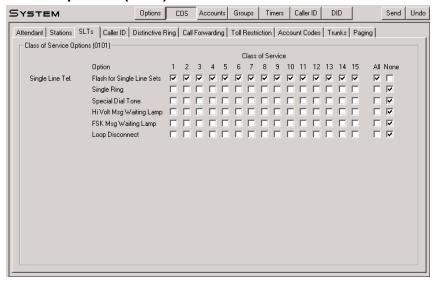
Stations



Use this page to select Class of Service options for the keysets. Refer to the following in the DS1000/2000 Software Manual for more:



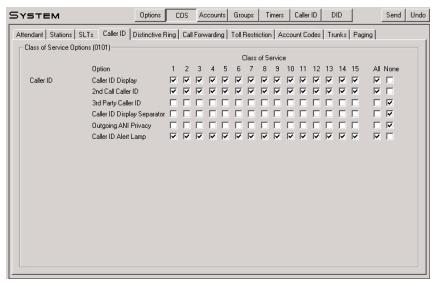
Single Line Telephones (SLTs)



Use this page to select Class of Service options for single line telephones. These options have no affect on keyset operation. Refer to the following in the DS1000/2000 Software Manual for more:

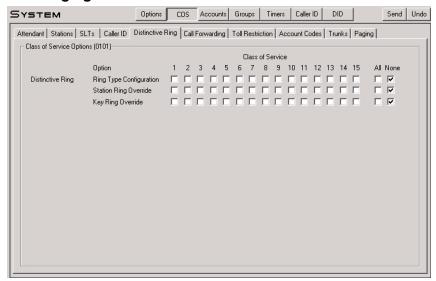
0101 - Class of Service Options

Caller ID



Use this page to select the Class of Service options that pertain to Caller ID. Refer to the following in the DS1000/2000 Software Manual for more:

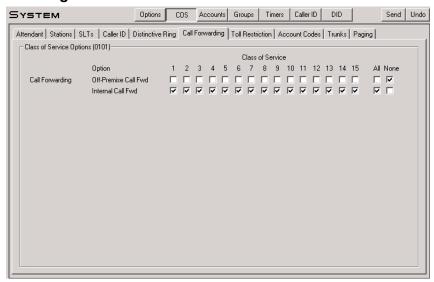
Distinctive Ringing



Use this page to select the Class of Service options that pertain to Distinctive Ringing setup. Refer to the following in the DS1000/2000 Software Manual for more:

0101 - Class of Service Options

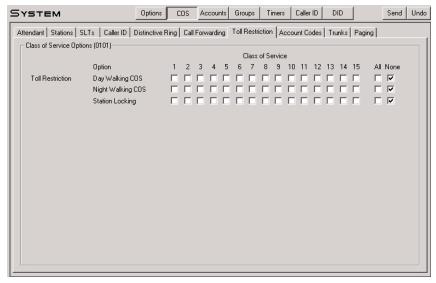
Call Forwarding



Use this page to select the Class of Service options that pertain to Call Forwarding. Refer to the following in the DS1000/2000 Software Manual for more:



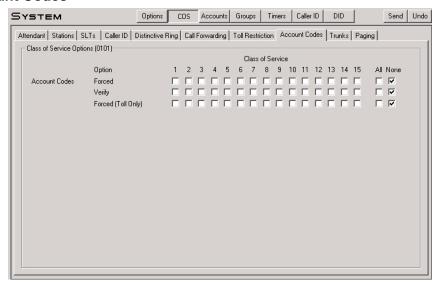
Toll Restriction



Use this page to select the Class of Service options that pertain to Toll Restriction, Walking Class of Service, and Extension Locking. Refer to the following in the DS1000/2000 Software Manual for more:

0101 - Class of Service Options

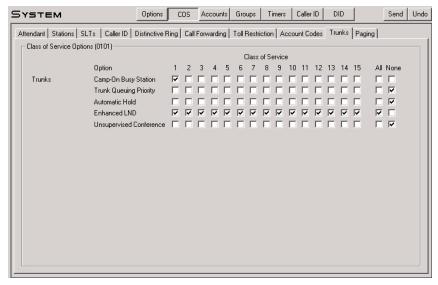
Account Codes



Use this page to select the Class of Service options that pertain to the type of Account Codes in force at a station. Refer to the following in the DS1000/2000 Software Manual for more:

Trunks

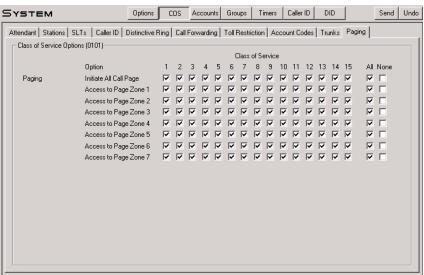
DS1000/2000



Use this page to select the Class of Service options that pertain to a station's outside (trunk) calls. Note that these are station Class of Service options, not trunk Class of Service options. Refer to the following in the DS1000/2000 Software Manual for more:

0101 - Class of Service Options

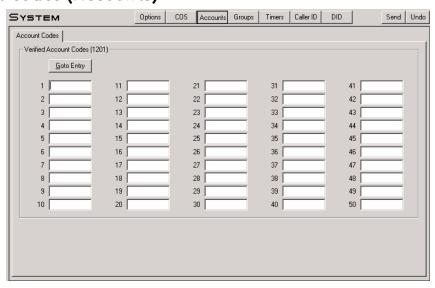
Paging



Use this page to set the Class of Service access to Zone and All Call Paging. Refer to the following in the DS1000/2000 Software Manual for more:

System

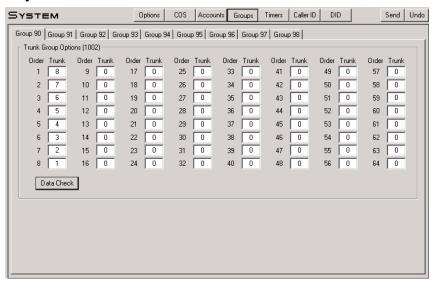
Account Codes (Accounts)



Use this page to enter the system's Verified Account Codes. Verified Account Codes are 2 to 10 digits long, using * as a wild card. DS2000 has 1000 Verified Account Codes. DS1000 has 500 Verified Account Codes. This page initially shows the first 50 Verified Account Codes. To display additional codes, click Goto Entry and enter the first code in the range of codes you want to access. Refer to the following in the DS1000/2000 Software Manual for more:

1201 - Verified Account Codes Table

Trunk Groups

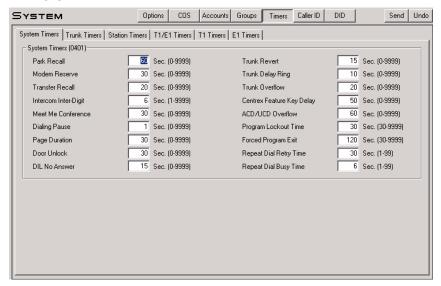


Use this page to assign trunks to one of the 9 Trunk Groups (90-98). A trunk can only be in one Trunk Group. DS2000 has 64 trunks maximum (1-64); DS1000 has 6 (1-6). Click Data Check to see if you have inadvertently assigned the same trunk to more than one group. Refer to the following in the DS1000/2000 Software Manual for more:

1002 - Trunk Groups

Timers

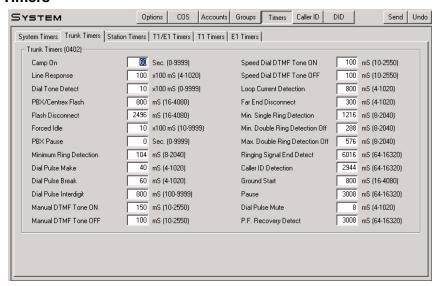
System Timers



Use this page to enter values for the system timers. Refer to the following in the DS1000/2000 Software Manual for more:

0401 - System Timers

Trunk Timers

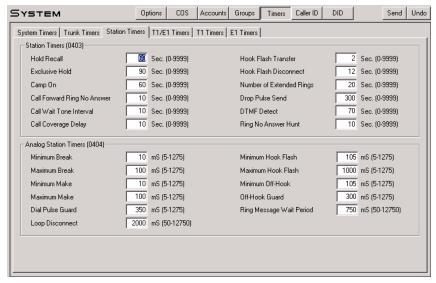


Use this page to enter values for the analog trunk timers. Refer to the following in the DS1000/2000 Software Manual for more:

0402 - Trunk Timers



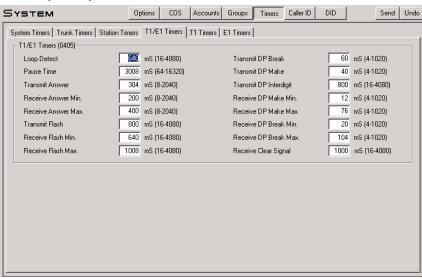
Station Timers



Use this page to enter values for the digital (keyset) station timers and the analog (SLT) station timers. Refer to the following in the DS1000/2000 Software Manual for more:

- 0403 Station Timers
- 0404 Analog Station Timers

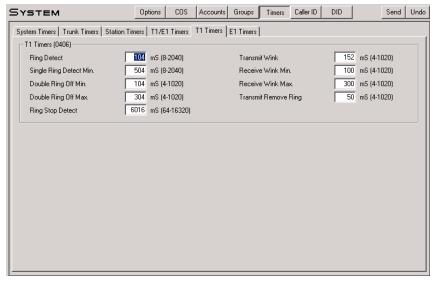
T1/E1 Timers (1 of 3)



(DS2000 Only) Use this page to enter values for the trunk timers used exclusively by the T1/E1 PCB that apply to both T1 and E1 trunk circuits. Refer to the following in the DS1000/2000 Software Manual for more:

0405 - T1/E1 Timers

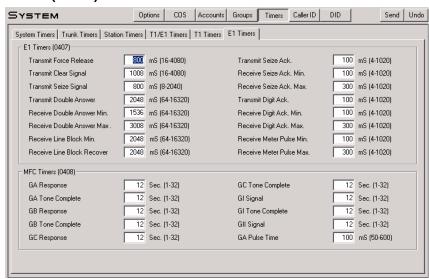
T1/E1 Timers (2 of 3)



(DS2000 Only) Use this page to enter values for the trunk timers used exclusively by the T1/E1 PCB. This page provides timers used only by T1 circuits. Refer to the following in the DS1000/2000 Software Manual for more:

0406 - T1 Timers

T1/E1 Timers (3 of 3)



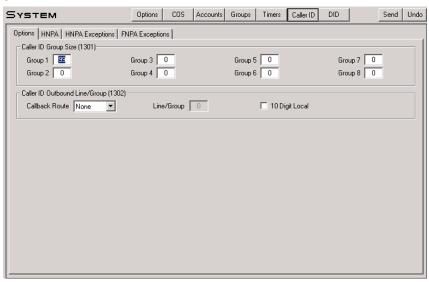
(DS2000 Only) Use this page to enter values for the trunk timers used exclusively by the T1/E1 PCB. This page provides timers used only by E1 circuits. Refer to the following in the DS1000/2000 Software Manual for more:

0407 - E1 Timers



Caller ID

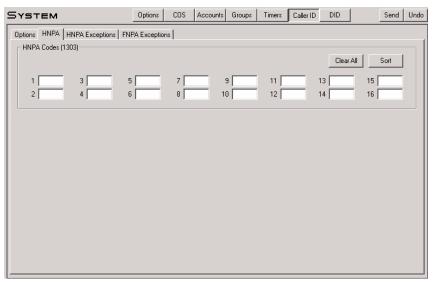
Options



Use the top portion of this page to program the maximum number of records (0-99) in each Caller ID Group. Use the bottom portion of this page to set up Caller ID outbound dialing. Refer to the following in the DS1000/2000 Software Manual for more:

- 1301 Caller ID Group Configuration
- 1302 Caller ID Outbound Line/Group
- 1302 10 Digit Local Calls

HNPA Codes

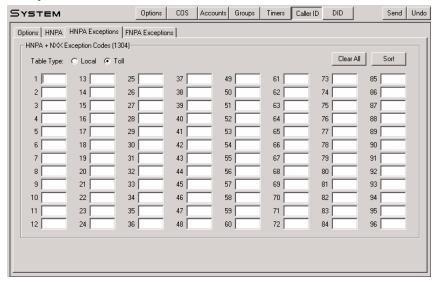


Use this page to enter Home Area (HNPA) Codes for Caller ID Logging. The Home Area Code is the local area code in which the system is installed. To erase all the entries in the table, click Clear All. To sort your HNPA entries numerically, click Sort Data. Refer to the following in the DS1000/2000 Software Manual for more:

1303 - Home Area (HNPA) Codes

HNPA Exceptions

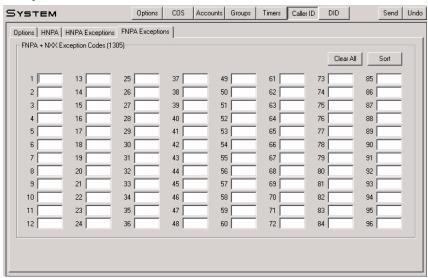
DS1000/2000



Use this page to create the Home Area (HNPA) Exception List. This identifies which (if any) calls in your home area code are toll calls. To erase all the entries in the table, click Clear All. To sort your HNPA entries numerically, click Sort. To make the table a Local Table, click Local. To make the table a Toll Table, click *Toll.* Refer to the following in the *DS1000/2000 Software Manual* for more:

1304 - Home Area (HNPA) Exception List

FNPA Exceptions

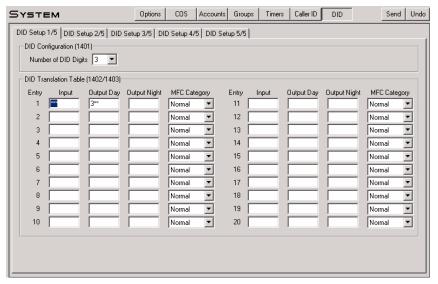


Use this page to create the Foreign Area (FNPA) Exception List. This identifies which (if any) calls in an adjacent area code are local calls. To erase all the entries in the table, click Clear All. To sort your FNPA entries numerically, click *Sort*. Refer to the following in the *DS1000/2000 Software Manual* for more:

1305 - Foreign Area (FNPA) Exception List



Direct Inward Dialing (DID)



(DS2000 Only) Use the top portion of this page to specify the number of incoming DID digits that should be translated. Use the bottom of portion of this page, as well as the remaining DID tabs, to enter data in the DID Translation Table. There are 100 table entries. Each entry specifies the DID digits received, the day routing for the call, and the night routing for the call. Refer to the following in the DS1000/2000 Software Manual for more:

- 1401 Number of DID Digits
- 1402 DID Translation Table
- 1403 DID MFC Dialing Category



Use Programming: Ports (DS2000) to set up the PCB slots in the DS2000.

Programming Shortcut

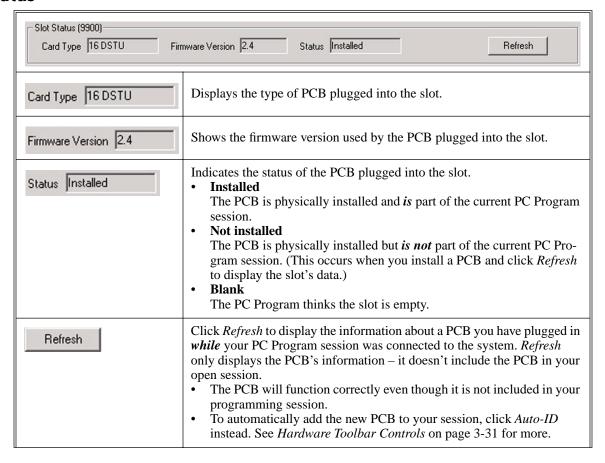


Hardware Toolbar Controls

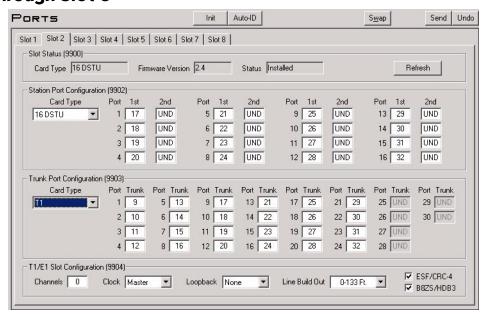
Init Auto	o-ID S <u>w</u> ap Send Undo	
Init	 Initializes (reorders) the PCB slots. Click <i>Init</i> to have the system reorder all the installed PCBs from left to right (similar to initial power up). <i>Important!</i> If PCBs of the same type are not installed sequentially from left to right, clicking Init will move extensions to different PCBs. This could disrupt service in a functioning system. 	
Auto-ID	 If you plug in a PCB while your PC Program session is connected, click <i>Auto-ID</i> to include the new PCB in your programming. • <i>Auto-ID</i> automatically adds the new PCB, using the next consecutive group of available port numbers. • If you don't click <i>Auto-ID</i> after adding a new PCB, it will function correctly but <i>not</i> be included in the PC program until you exit and reconnect. • To display the formation about a new PCB without including it in the PC Program session, click <i>Refresh</i> instead. See <i>Slot Status</i> on page 3-32 for more. 	
S <u>w</u> ap	Swaps the programming between two slots.	
Send	While on-line, sends the programmed changes to the connected telephone system. • Send sends all changes made since the last Send command. • This button is not available while off-line.	
Undo	Cancels any changes you made to the current page.	



Slot Status



Slot 1 through Slot 8



Use the upper portion of this page to set up your DSTU and ASTU PCBs. Use the lower portion of this page to set up your ATRU and other trunk PCBs. These options allow you to:

- Set up a system "off-line" without any PCBs plugged in.
- Uninstall (remove) an installed PCB. (You may want to do this if you need to change the order of your PCBs.)
- Change the Hardware Port to station assignments on an installed PCB. This lets you swap programming for two devices in software without cross-connection.
- Swap the station assignments (and all related programming) of two installed PCBs, without cross-con-

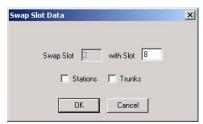
Note that all slots except slot 1 can have both a station and trunk PCB programmed. The system "activates" the programming for whichever PCB is plugged in. Refer to the following in the DS1000/2000 Software Manual for more:

- 9902 Set Up Stations (DS2000)
- 9903 Set Up Trunks (DS2000)
- 9904 T1/E1 Slot Configuration

Swapping Slots

To swap the programming between two slots:

- 1. Select the tab for one of the slots you want to swap (e.g., Slot 2).
- 2. Click Swap. You see:



- 3. In the with Slot field, enter the number of the slot with which you want to swap all programming (e.g., 8).
- 4. Select the type of data you want to swap (Stations, Trunks, or **both**) and click OK.



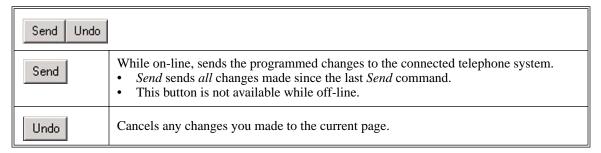


Use Programming: Ports (DS1000) to set up the system's digital ports, analog ports, Door Boxes and trunk ports.

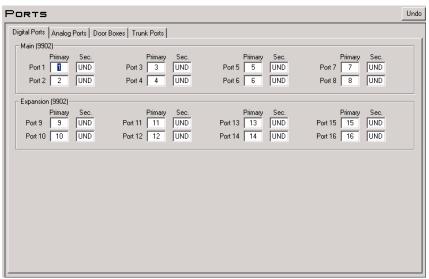
Programming Shortcut



Hardware Toolbar Controls



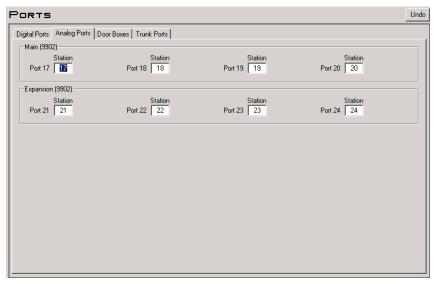
Digital Ports



Use this page to set up the system's digital ports. This page applies to keysets, UltraMail, and 2-OPX Modules. By swapping the primary port assignments between two digital ports (e.g., ports 5 and 6), you can swap all the related programming (and extension numbers) between the two devices. Refer to the following in the DS1000/ 2000 Software Manual for more:

9902 - Set Up Stations (DS1000)

Analog Ports



Use this page to set up the system's analog ports. This page applies to analog telephones and analog voice mail (such as VANGARD Mail and NVM-2e). By swapping the port assignments between two analog ports (e.g., ports 17 and 18), you can swap all the related programming (and extension numbers) between the two devices. Refer to the following in the DS1000/2000 Software Manual for more:

9902 - Set Up Stations (DS1000)

Door Boxes

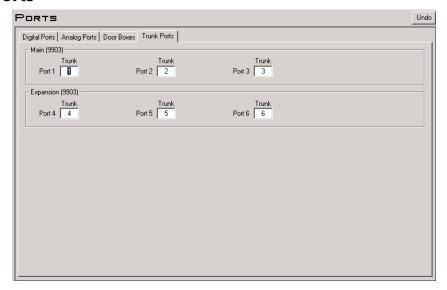


Use this page to set up the system's analog Door Box ports. By swapping the port assignments between the two door boxes (e.g., ports 25 and 26), you can swap all the related programming (and extension numbers) between the two devices. Refer to the following in the DS1000/2000 Software Manual for more:

9902 - Set Up Stations (DS1000)

Ports (DS1000)

Trunk Ports



Use this page to set up the system's trunk ports. By swapping the port assignments between two trunk ports (e.g., ports 1 and 2), you can swap all the related programming (and extension numbers) between the two devices. Refer to the following in the DS1000/2000 Software Manual for more:

9903 - Set Up Trunks (DS1000)

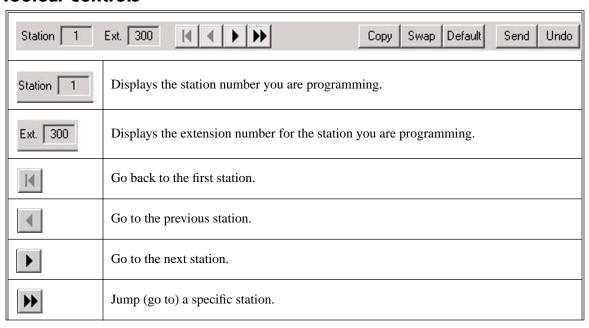


The *Programming: Stations* option provides the station specific programming.

Programming Shortcut



Station Toolbar Controls

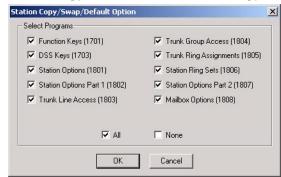


Stations

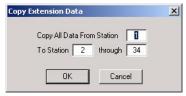
Сору

Copies data from a station to another station or range of stations.

Click the *Copy* button. You see the *Station Copy/Swap/ Default Option* screen:



- Select the programs you want to copy, or click *All* to copy all listed programs. 2.
- 3.
- 4. When you see the Copy Extension Data screen.



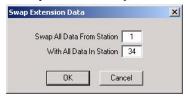
Select the <u>source</u> and <u>destination</u> station(s).

- The <u>source</u> is the station from which you want to copy.
- The <u>destination</u> is the station or range of stations that should receive the copied data.
- 5. Click OK.

Swap

Swaps the programming between two stations. Note that this option *does not* swap extension numbers (see *Programming: Extension Numbering* on page 3-50 instead).

- 1. Click the *Swap* button. You see the *Station Copy/Swap/ Default Option* screen.
- Select the programs you want to swap in the Station Copy/Swap/ Default Option 2. screen, or click All to swap all listed programs.
- Click OK. 3.
- When you see the Swap Extension Data screen:



Select the source and destination ports and click OK.

Default

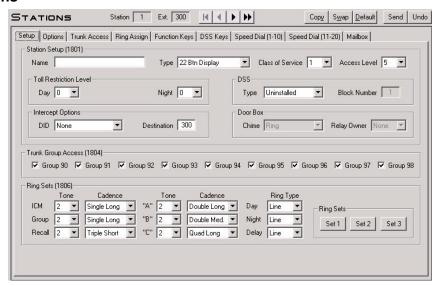
Resets the current page to its default settings.

- Click the *Default* button.
 - If the current page has a single program, the PC Program immediately resets the options to default.
 - If the current page has multiple programs, you see the Station Copy/Swap/ Default Option screen. Go to step 2.
- 2. Select the programs you want to default in the Station Copy/Swap/ Default Option screen, or click All to default all listed programs.
- Click OK.

Send	While on-line, sends the programmed changes to the connected telephone system. • Send sends all changes made since the last Send command. • This button is not available while off-line.
Undo	Cancels any changes you made to the current page.

Setup

Stations



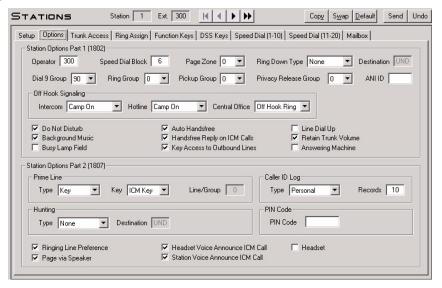
Use this page to set up station feature options, outgoing trunk group access, and define the Distinctive Ringing for each station. This option also lets you define the tone and cadence for each ring type in each of the station's default Ring Sets. (Normally, this capability is only available from a display telephone.) Refer to the following in the DS1000/2000 Software Manual for more:

- 1801 Extension Port Description
- 1804 Extension Trunk Group Access
- 1806 Ring Type Configuration

Note: After changing the Distinctive Ringing setup and applying the change to the system, you must use Tools: Online Utilities: Reset Station Port on page 3-73 to reset the station port.



Options

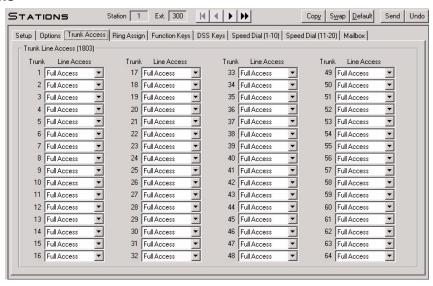


Use this page to set up additional station feature options. Refer to the following in the DS1000/2000 Software Manual for more:

- 1802 Extension Options (Part 1)
- 1807 Extension Options (Part 2)

Trunk Access

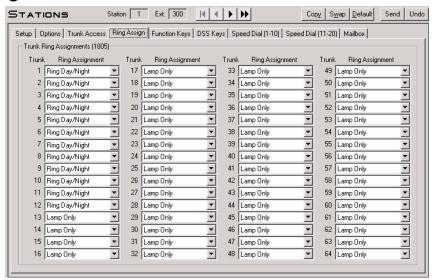
Stations



Use this page to set up the trunk access assignments for each station. Refer to the following in the DS1000/ 2000 Software Manual for more:

1803 - Extension Line Access Assignments

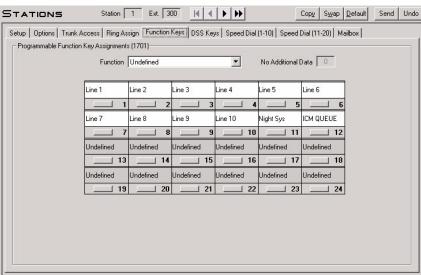
Ring Assignments



Use this page to set up incoming ringing for each trunk at each station. Refer to the following in the DS1000/ 2000 Software Manual for more:

1805 - Ring Assignments

Programmable Function Keys



Use this page to set up a station's Programmable Function Key assignments. If you have a 22-button telephone, only the first two rows of keys are available. To assign a Programmable Function Key:

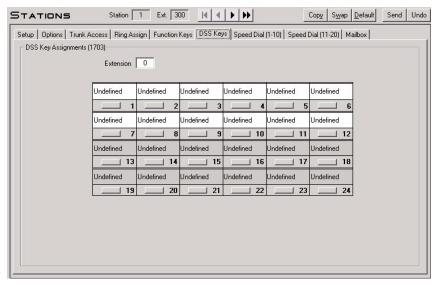
- Pick a key type from the Key Function drop-down box.
- 2. Enter any additional data (such as Park Orbit or Hotline partner) in the Additional Data field.
- Click the key to which you want to assign the data.
 - You can click additional keys to enter a sequence of assignments (such as consecutive Hotlines).

Refer to the following in the DS1000/2000 Software Manual for more:

1701 - Programmable Function Key Assignments



DSS Keys



Use this page to assign a station's DSS Keys. If you have a 22-button telephone, only the first two rows of keys are available. To assign a DSS Key:

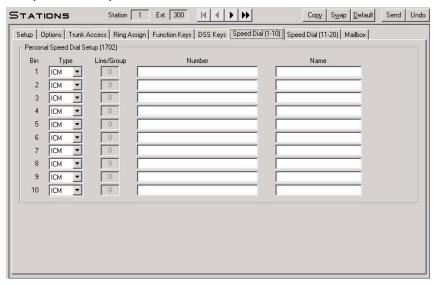
- 1. Enable (check) Busy Lamp Field in the Options page.
- 2. On the DSS Keys page, enter the number of the extension you want assigned to the DSS Key.
- 3. Click the key to which you want to assign the data.
 - You can click additional keys to enter a sequence of DSS assignments.

Refer to the following in the DS1000/2000 Software Manual for more:

1703 - DSS Key Assignments

DS1000/2000

Speed Dial (Personal) Bins 1-10



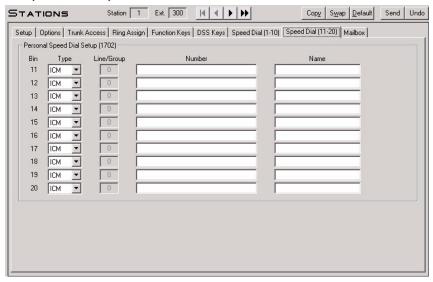
Use this page to assign a station's first 10 Personal Speed Dial bins (701-710). Be sure to follow all the normal Personal Speed Dial restrictions and guidelines. To enter a Flash, type F. To enter a pause, type P. Names can be up to 15 characters long, using digits 0-9, upper and lower case letters, spaces, and the following special characters:

&	4
-	:
/	

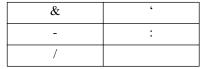
Refer to the following in the DS1000/2000 Software Manual for more:

1702 - Personal Speed Dial

Speed Dial (Personal) Bins 11-20



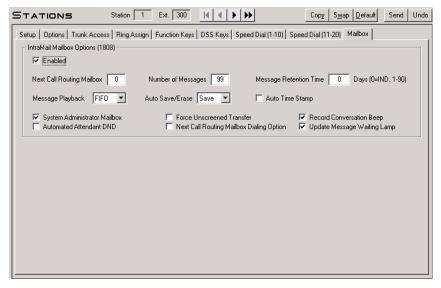
Use this page to assign a station's second 10 Personal Speed Dial bins (711-720). Be sure to follow all the normal Personal Speed Dial restrictions and guidelines. To enter a Flash, type F. To enter a pause, type P. Names can be up to 15 characters long, using digits 0-9, upper and lower case letters, spaces, and the following special characters:



Refer to the following in the DS1000/2000 Software Manual for more:

1702 - Personal Speed Dial

Mailbox



Use this page to assign the station's IntraMail mailbox options (if installed). (To set up system-wide options for the IntraMail Voice Mail, see Programming: Voice Mail on page 3-62.) Refer to the following in the IntraMail System Guide for more:

1808 - IntraMail Mailbox Options

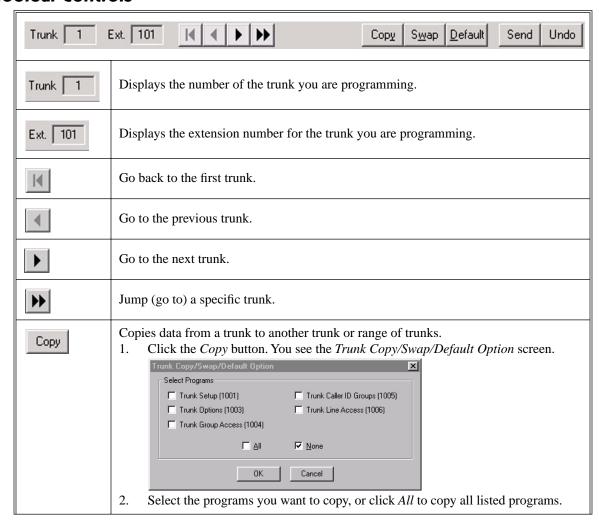


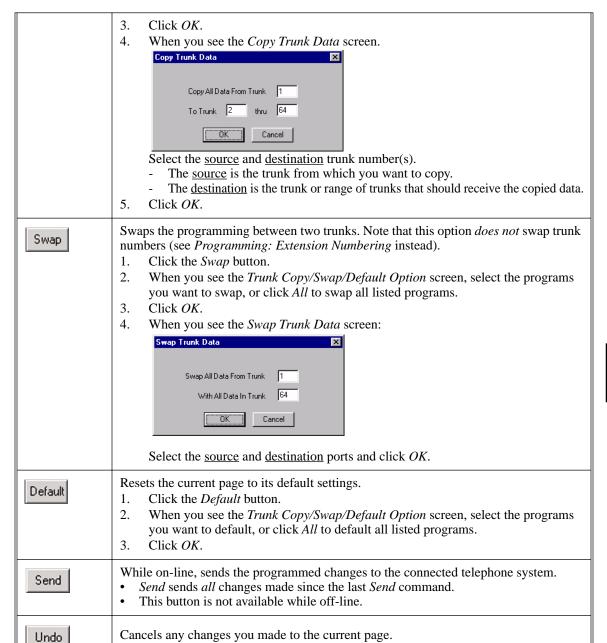
The *Programming: Trunks* option provides the trunk specific programming.

Programming Shortcut



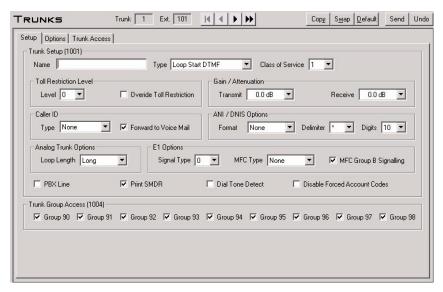
Trunk Toolbar Controls







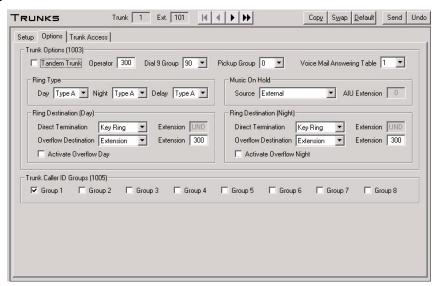
Setup



Use this page to set up basic trunk features and Outgoing Trunk Group Access. Refer to the following in the DS1000/2000 Software Manual for more:

- 1001 Trunk Port Description
- 1004 Outgoing Trunk Group Access for Trunks

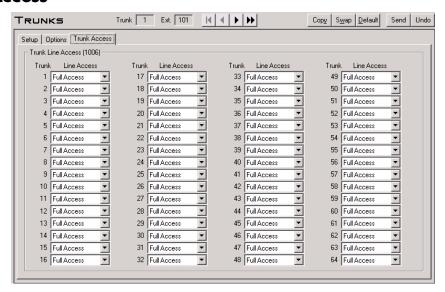
Options



Use this page to set up additional trunk features (such as Direct Inward Lines and overflow), as well as assign trunks to Caller ID Groups.Refer to the following in the DS1000/2000 Software Manual for more:

- 1003 Trunk Options
- 1005 Trunk Caller ID Logging Group

Trunk Access

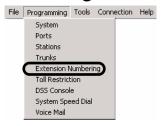


Use this page to set up individual trunk access. Refer to the following in the DS1000/2000 Software Manual for more:

1006 - Outgoing Individual Trunk Access



System Numbering

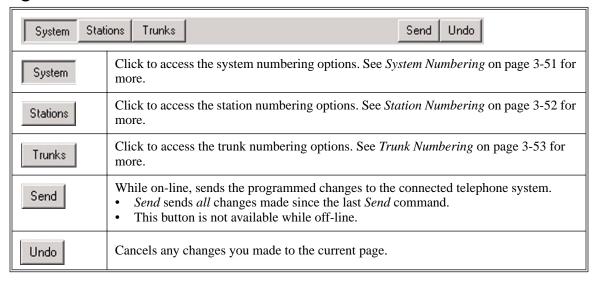


Use Programming: Extension Numbering to set up the system's number plan, including station and trunk extension numbers, UCD Hunting Groups, Ring Groups, and feature access digits.

Programming Shortcut

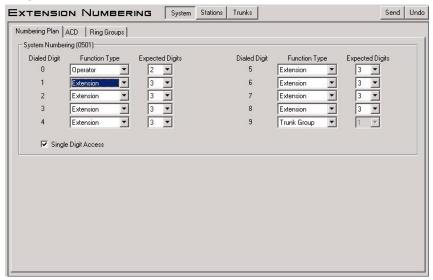


Numbering Toolbar Controls



System Numbering

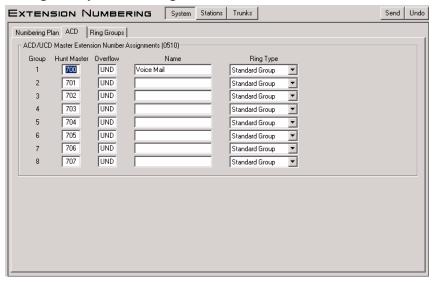
Numbering Plan



Use this page set up the system's number plan. For each dialed digit (0-9, excluding # and *), assign a Function Type and the number of Expected Digits. Refer to the following in the DS1000/2000 Software Manual for more:

0501 - Numbering Plan

UCD Hunting Group Numbering

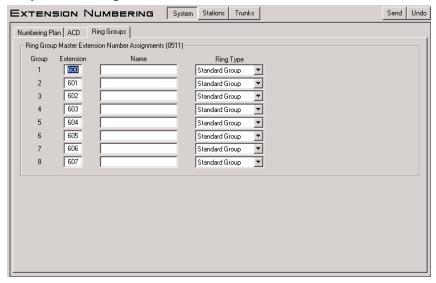


Use this page to set up the system's UCD Hunting Groups. For each of the 8 groups, you can assign a Master Number, Overflow Destination, Name, and Distinctive Ringing Ring Type. Refer to the following in the DS1000/2000 Software Manual for more:

0510 - ACD/UCD Master Extension Numbers and Names

Programming Extension Numbering

Ring Group Numbering

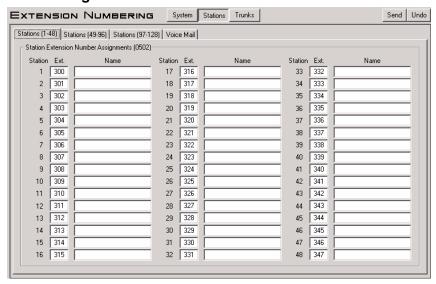


Use this page to set up the system's Ring Groups. For each of the 8 groups, you can assign a Master Number, Name, and Distinctive Ringing Ring Type. Refer to the following in the DS1000/2000 Software Manual for more:

0511 - Ring Group Master Extension Numbers and Names

Station Numbering

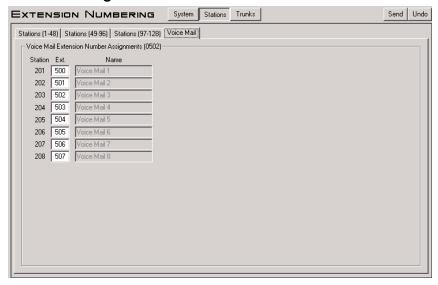
Station Numbering



Use this page to assign extension numbers and names to each station. By editing the Ext field, you can also use this option to change (or swap) the extension numbers of two stations. For example, to make station 3 extension 303 and station 4 extension 302, just swap their Ext field entries. Note that this program does not swap programming, just extension numbers. (To swap programming, refer to Programming: Ports (DS2000) on page 3-31 and Programming: Ports (DS1000) on page 3-34.) In DS2000, the 128 stations are programmable via three separate tabs. In DS1000, all 34 stations are programmable from a single tab. Refer to the following in the DS1000/2000 Software Manual for more:

0502 - View Extension Numbers

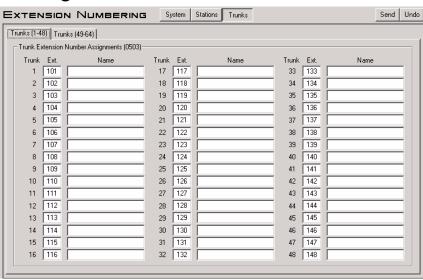
Voice Mail Numbering



Use this page to assign extension numbers and names to the system's 8 Voice Mail station ports (201-208). Wherever possible, simplify Voice Mail installation by leaving these assignments at their default values. Refer to the following in the *DS1000/2000 Software Manual* for more:

• 0502 - View Extension Numbers

Trunk Numbering



Use this page to assign extension numbers and names to each trunk. You can also use this option to change (or swap) the extension numbers of two trunks. For example, to make trunk 3 extension 104 and trunk 4 extension 103, just swap their *Ext* field entries. Note that this program *does not swap programming, just extension numbers*. (To swap programming, refer to *Programming: Ports* (*DS2000*) on page 3-31 and *Programming: Ports* (*DS1000*) on page 3-34.) In DS2000, the 64 trunks are programmable via two separate tabs. In DS1000, all 6 trunks are programmable from a single tab. Refer to the following in the *DS1000/2000 Software Manual* for more:

• 0503 - View Trunk Numbers

Toll Restriction

Description

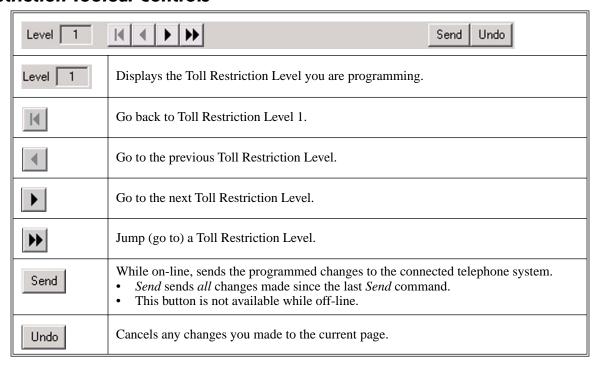


The Programming: Toll Restriction option provides access to the Toll Restriction programming.

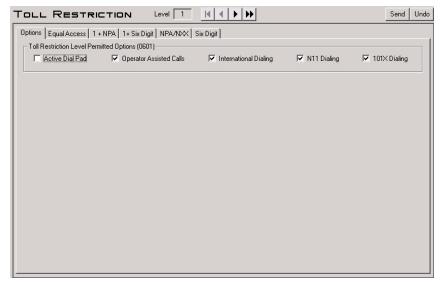
Programming Shortcut



Toll Restriction Toolbar Controls



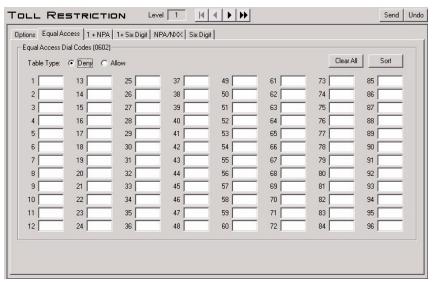
Options



Use this page to enable or disable various options for the selected Toll Restriction Level (1-7). Refer to the following in the DS1000/2000 Software Manual for more:

0601 - Configure Toll Level Options

Equal Access

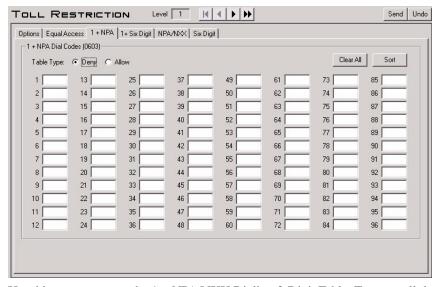


Use this page to set up the 1010 + XXX Equal Access Dialing Table. To erase all the entries in the table, click Clear All. To sort your table entries numerically, click Sort Data. To set up the table as an Allow Table, click Allow. To set up the table as a Deny Table, click Deny. Refer to the following in the DS1000/ 2000 Software Manual for more:

0602 - 1010 + XXX Equal Access Dialing



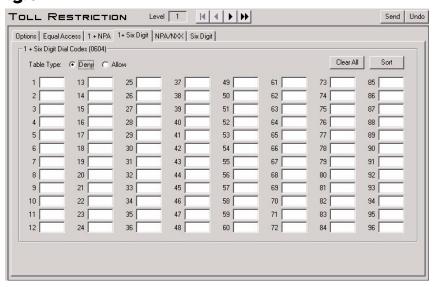
1 + NPA



Use this page to set up the 1 + NPA/NXX Dialing 3-Digit Table. To erase all the entries in the table, click Clear All. To sort your table entries numerically, click Sort Data. To set up the table as an Allow Table, click Allow. To set up the table as a Deny Table, click Deny. Refer to the following in the DS1000/2000 Software Manual for more:

0603 - 1 + NPA/NXX Dialing 3-Digit Table

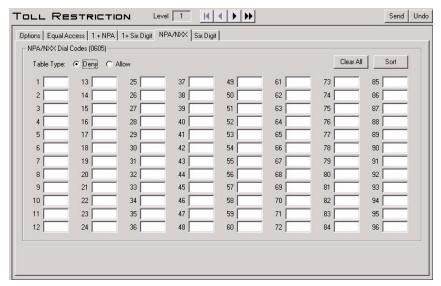
1 + Six Digit



Use this page to set up the 1 + NPA + NXX Dialing 6-Digit Table. To erase all the entries in the table, click Clear All. To sort your table entries numerically, click Sort Data. To set up the table as an Allow Table, click Allow. To set up the table as a Deny Table, click Deny. Refer to the following in the DS1000/2000 Software Manual for more:

0604 - 1 + NPA + NXX Dialing 6-Digit Table

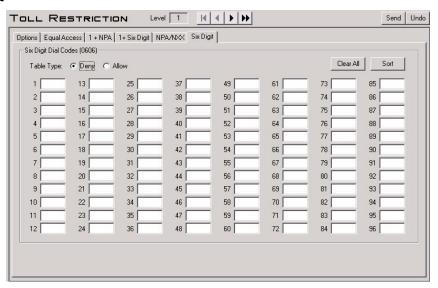
NPA/NXX



Use this page to set up the NPA/NXX Dialing 3-Digit Table. To erase all the entries in the table, click *Clear All*. To sort your table entries numerically, click *Sort Data*. To set up the table as an Allow Table, click *Allow*. To set up the table as a Deny Table, click *Deny*. Refer to the following in the *DS1000/2000 Software Manual* for more:

• 0605 - NPA/NXX Dialing 3-Digit Table

Six Digit



Use this page to set up the NPA + NXX Dialing 6-Digit Table. To erase all the entries in the table, click *Clear All*. To sort your table entries numerically, click *Sort Data*. To set up the table as an Allow Table, click *Allow*. To set up the table as a Deny Table, click *Deny*. Refer to the following in the *DS1000/2000 Software Manual* for more:

• 0606 - NPA + NXX Dialing 6-Digit Table



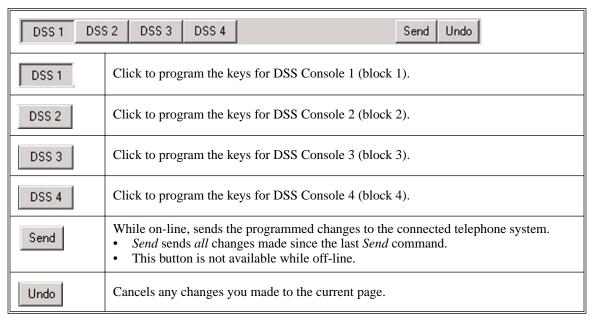


The Programming: DSS Console option allows you to program the key assignments on the system's DSS Consoles. You can install up to 4 DSS Consoles (called blocks DSS1-DSS4).

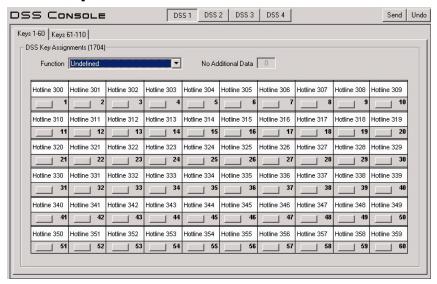
Programming Shortcut



DSS Console Toolbar Controls



Keys 1-60 and Keys 61-110



Use this page to set up the selected DSS Console's Programmable Function Key assignments. Click the Keys 1-60 tab to program keys 1-60. Click the Keys 61-110 tab to program keys 61-110. To assign a DSS Console Programmable Function Key:

- 1. Pick a key type from the Key Function drop-down box.
- 2. Enter any additional data (such as Park Orbit or Hotline partner) in the Additional Data field.
- Click the key to which you want to assign the data.
 - You can click additional keys to enter a sequence of assignments (such as consecutive Hotlines).

The 24-Button DSS Console uses the first 24 keys on this page. If you prefer, you can program all 110 keys in case you decide to upgrade to a 110-Button DSS Console later on.

Refer to the following in the DS1000/2000 Software Manual for more:

1704 - DSS Console Key Assignment



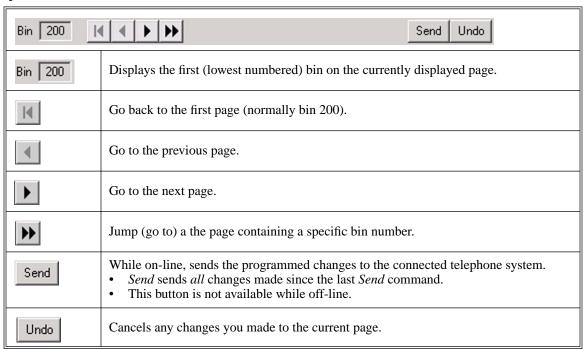


Use Programming: System Speed Dial to enter the system's Speed Dial numbers and names.

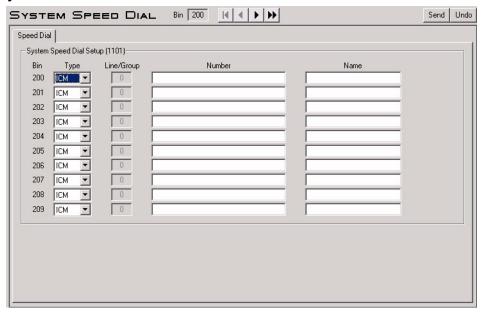
Programming Shortcut



System Speed Dial Toolbar Controls



System Speed Dial Numbers



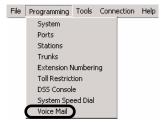
Use this page to assign a station's first 10 System Speed Dial bins (normally 200-209).

- To assign additional System Speed Dial bins, click the Jump (go to) toolbar button and enter the bin you want to program. The page that contains that bin will display.
- Be sure to follow all the normal Personal Speed Dial restrictions and guidelines. To enter a Flash, type F. To enter a pause, type P.
- System Speed Numbers can be either 2, 3 or 4 digits long, depending on the setting of *Programming*: System: Options: System Speed Dial Code Digits Setup on page 3-14.
- To assign Personal Speed Dial numbers to stations, go to Speed Dial (Personal) Bins 1-10 on page 3-

Refer to the following in the DS1000/2000 Software Manual for more:

1101 - System Speed Dial Numbers



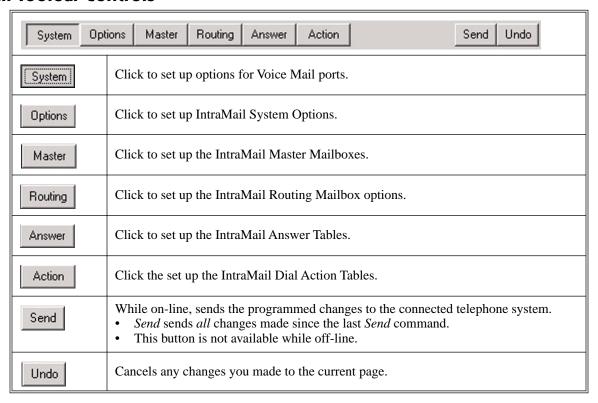


Use Programming: Voice Mail to set up the Voice Mail and IntraMail system-wide options. (To set up options for each IntraMail voice mailbox, see Programming: Stations: Mailbox on page 3-45.)

Programming Shortcut

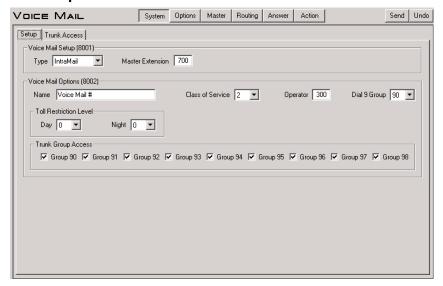


IntraMail Toolbar Controls



Voice Mail Setup

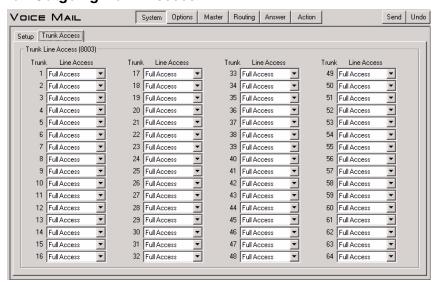
Voice Mail Setup



Use this page to set up various options for Voice Mail ports. Refer to the following in the *IntraMail System Guide* for more:

- 8001 Voice Mail Setup
- 8002 Voice Mail Port Options (Part 1)

Voice Mail Outgoing Trunk Access

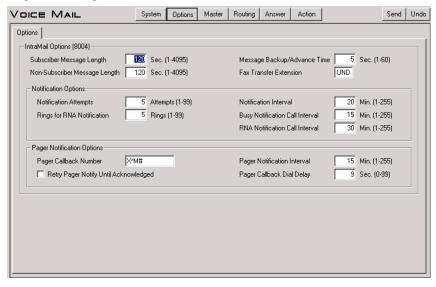


Use this page to set up outgoing trunk group access for Voice Mail ports. Refer to the following in the *Intra-Mail System Guide* for more:

• 8003 - Voice Mail Port Options (Part 2)



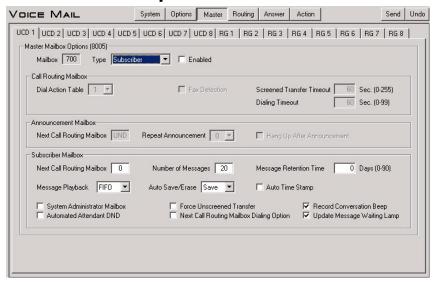
IntraMail System Options



Use this page to set various IntraMail System Options. Refer to the following in the IntraMail System Guide

8004 - IntraMail System Options

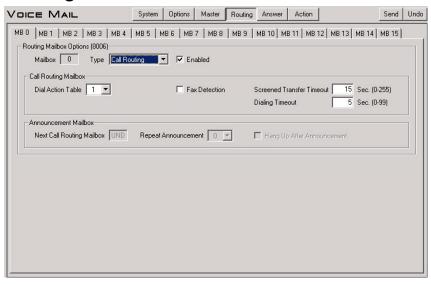
IntraMail Master Mailbox Options



Use this page to set up the 16 IntraMail Master Mailboxes. Refer to the following in the IntraMail System Guide for more:

8005 - IntraMail Master Mailboxes

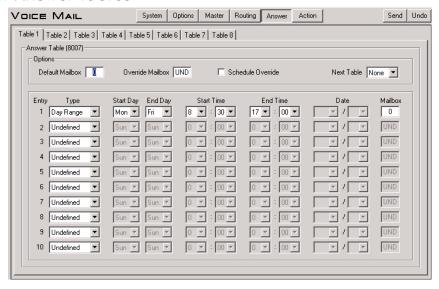
IntraMail Routing Mailboxes



Use this page to set up the 16 IntraMail Routing Mailboxes. Refer to the following in the IntraMail System Guide for more:

8006 - IntraMail Routing Mailboxes

IntraMail Answer Tables

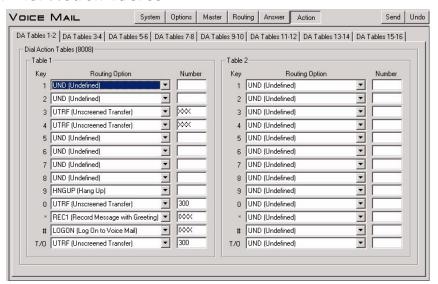


Use this page to set up the 8 IntraMail Answer Tables. There are 10 possible entries in each Answer Table. (For additional capacity, you can link Answer Tables using the Next Table drop down box.) Refer to the following in the *IntraMail System Guide* for more:

8007 - IntraMail Answer Tables



IntraMail Dial Action Tables



Use this page to set up the 16 IntraMail Dial Action Tables. Refer to the following in the IntraMail System Guide for more:

8008 - IntraMail Dial Action Tables



Use this option to initialize Toll Restriction. You must initialize Toll Restriction prior to programming it for the first time.

To initialize Toll Restriction:

Click Tools: Initialize Toll Restriction. You see:



For installations in North America, select *United States* from the drop-down box and click *OK*. You see:



Click OK to initialize Toll Restriction and go to the Programming: Toll Restriction: Options screen. See page 55 for more.

Description

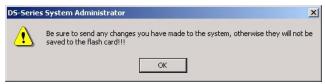


In DS2000, PC Card Load/Save allows you to back the site data to a Data Base PC Card (P/N 85880), restore site data from the PC Card, and completely erase the data stored on the PC Card. PC Card Load/Save combines the functions of the following DS2000 telephone system programs:

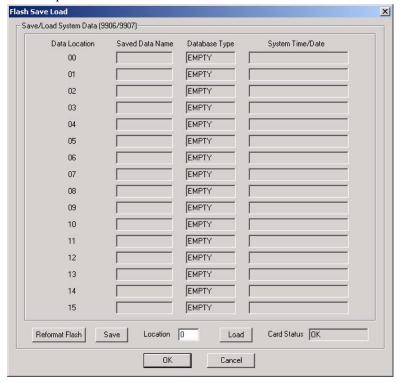
- 9906 Database Save
- 9907 Database Load
- 9908 PC Card Erase Utility

To save a DS2000 database to a PC Card (P/N 85880):

- Following the instructions in your system's Hardware Manual, insert Data Base PC Card P/N 85880 into the CPU.
- 2. Click Tools: Online Utilities: PC Card Load/Save. You see:



Since PC Card Load/Save backs up whatever data is in the DS2000 CPU, be sure you have uploaded all the required data and click OK. You see Save/Load Main Screen:



In the Location field, enter the address of the database (00-15) to which you want to save the data.

5. Click Save. You see:



Enter a name for the database you wish to save (up to 15 characters) and click OK. You see: 6.



Enter the system password (normally 372000) and click OK. You see:



Click OK to begin the database save. After a few minutes, the save completes and you see:

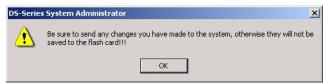


9. Click *OK* to return to the *Save/Load Main Screen*.

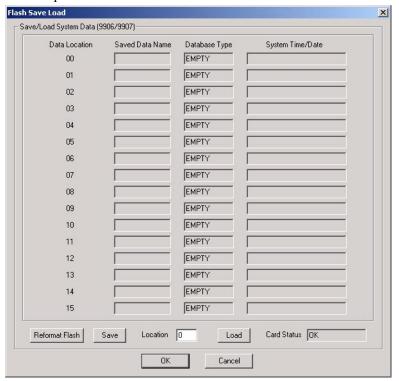


To load a DS2000 database from a PC Card (P/N 85880):

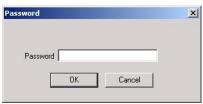
- 1. Following the instructions in your system's *Hardware Manual*, insert Data Base PC Card P/N 85880 into the CPU.
- 2. Click Tools: Online Utilities: PC Card Load/Save. You see:



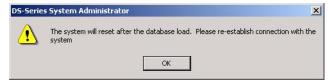
3. Since *PC Card Load/Save* backs up whatever data is in the DS2000 CPU, be sure you have uploaded all the required data and click *OK*. You see *Save/Load Main Screen*:



- 4. In the Location field, enter the address of the database (00-15) from which you want to load the data.
- 5. Click *Load*. You see:



6. Enter the system password (normally 372000) and click OK. You see:



7. Click *OK* to begin the database load. After a few minutes, the load completes.

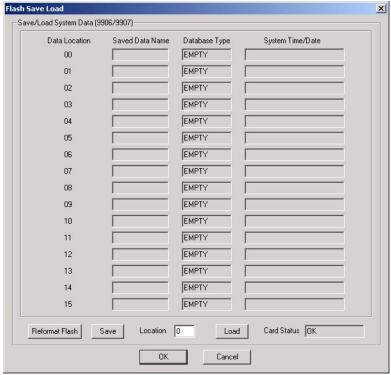
To format (erase) a DS2000 database PC Card (P/N 85880):

Formatting the PC Card will erase all data stored on the card.

- 1. Following the instructions in your system's *Hardware Manual*, insert Data Base PC Card P/N 85880 into the CPU.
- 2. Click Tools: Online Utilities: PC Card Load/Save. You see:



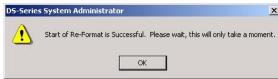
3. Click OK. You see Save/Load Main Screen:



4. Click Reformat Flash. You see:



5. Enter the system password (normally 372000) and click *OK*. You see:





Click OK to reformat the PC Card. When the reformat completes, you see:



- Click *OK* to return to the *Save/Load Main Screen*. 7.
 - You must reconnect to the system to continue programming.



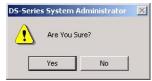
Reset Station Port allows you to reset an extension. This is the same as using telephone system program 9901 - Reset Station Port.

To reset an extension:

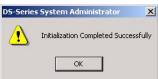
Click Tools: Online Utilities: Reset Station Port. You see:



Enter the number of the extension you want to reset (e.g., 300) and click OK. You see:



Click *Yes*. The extension resets and you see:



4. Click OK.

Online Utilities: Initialize Caller ID Log

Description



Initialize CID LOG to initialize (clear) all the Caller ID logs system-wide. This clears all the personal logs as well as all the group logs. It has no effect on other Caller ID programming. This is the same as using telephone system program 9804 - Initialize Caller ID Log Utility.

To reset the Caller ID logs:

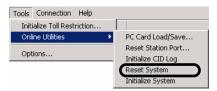
Click Tools: Online Utilities: Initialize CID Log. You see:



Click Yes to initialize the Caller ID logs. You see:



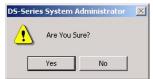
Click OK.



Use Reset System to do a reboot (warm reset) of the system without initializing. This is the same as pressing your system's red reset button.

To reset system:

Click Tools: Online Utilities: Reset System. You see:



Click Yes to reset the system. You see:



- 3. Click OK.
 - You must reconnect with the system to continue programming.

Online Utilities: Initialize System

Description



Use Initialize System to initialize the system database. Initializing the system database erases all your programmed entries and replaces them with the factory-installed default values. do a reboot (warm reset) of the system without initializing. This is the same as using system program 9804 - Initialize Caller ID Log Utility.

To initialize the system:

Click Tools: Online Utilities: Initialize System. You see:



Click Yes to initialize the system. You see:



- 3. Click OK.
 - You must reconnect with the system to continue programming.



Use Options: General to set the Region Preference for new databases you create using the PC Program. In North America, always choose *United States* as the Region Preference. Selecting *Latin America* will:

- Enable the Latin American Toll Restriction options in *Programming: Toll Restriction*.
- Enable A-Law Companding in Programming: System: Setup: Companding.
- Enable Spanish as the SMDR language in *Programming: System: Setup: SMDR*.
- Enable Spanish as the telephone display language in Programming: Stations: Options: Display.
- Change the Time and Date format in *Programming: System: Setup: Time/Date* to (for example) **10 MAR TUE 15:15** (from the US standard of **3-10 TUE 3:15 PM**).

To set the Region Preference:

Click Tools: Options and click the General tab. You see:



Make sure *United States* is selected and click *OK*. 2.

Options: Communications

Description



Use Options: Communications to set the RS-232-C serial port parameters of the PC running the DS 1000/2000 PC Program. When connected directly to the telephone system, the PC will use these settings. Do not change these settings once connected. Initially, the settings are:

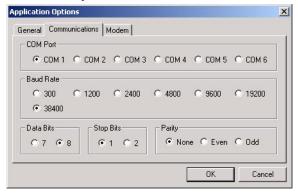
- Com 1 Selected
- 38,400 Baud
- No parity
- 8 data bits
- 1 stop bit

The PC communicates with the telephone system using the settings you enter in this option. When the programming session ends (i.e., you break the connection), the telephone system returns to the settings specified in 0303 - CPU Baud Rate.

Note: The default baud rate for the telephone system is 19200 baud, with the Fixed Baud Rate option enabled. See Programming: System: Options on page 3-14 for more.

To set PC serial port parameters:

Click Tools: Options and click the Communications tab. You see:



Make your selections as required and click OK.



Use Options: Modem to set the PC modem's initialization string and whether the modem uses tone (DTMF) or pulse (DP) dialing. Options: Modem also sets how long the PC Program will wait for Timeout (i.e., for the remote modem to answer and connect).

- The initialization string for your PC modem should be: ATT E0 Q0 M1 V1.
- The initialization string for the modem connected to the remote system should be:

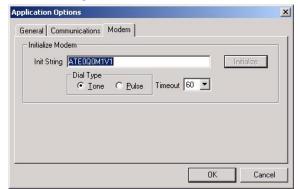
AT Q1 &C1 &D0 &S1 S0=1 E0 &W0 &W1

Be sure this string includes the command to turn flow control off.

For more on the modem settings, see Connection: Remote on page 3-81.

To set the modem options:

Click Tools: Options and click the Modem tab. You see:



Make your selections as required and click *OK*.





Use this option to connect directly from your PC's serial port to the telephone system.

To make a direct connection to the telephone system:

- Turn to *Chapter 1: Connecting the PC* to review the cabling requirements.
- Click Connections: Online.
 - You can also click the *Direct Connection* button on the button bar.
- 3. When you see:



Enter the system password (normally 372000) and click OK.

The PC communicates with the telephone system using the settings you enter in *Utilities: Initialize* Toll Restriction on page 3-67. When the PC programming session ends (i.e., you break the connection), the telephone system returns to the settings specified in 0303 - CPU Baud Rate.

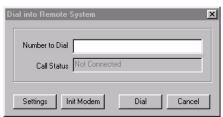
Note: If reconnecting after an unexpected disconnect, you may see a "communication synchronization" error message. Just select this option to try again.



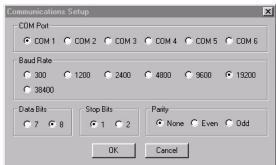
Use this option to connect to the telephone system remotely via modem.

To connect to the telephone system remotely via modem:

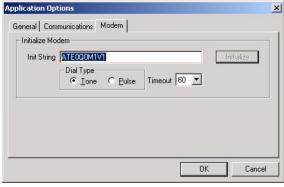
- 1. Turn to *Chapter 1: Connecting the PC* to review the modem and cabling requirements.
- 2. Click Connection: Remote.
 - You can also click the *Remote Connection* button on the button bar.
- 3. You see:



4. To verify that your modem port settings are compatible with you modem, click *Settings*. You see:



- Select the Com port, baud rate, parity, data bits, and stop bits as required.
- Click *OK* when you are done.
- Do not change these settings once connected.
- 5. To verify your PC modem's initialization string, click *Init Modem*. You see:



- The initialization string for your PC modem should be: AT E0 Q0 M1 V1
- The initialization string for the modem connected to the remote system should be:

AT Q1 &C1 &D0 &S1 S0=1 E0 &W0 &W1

- Click *OK* when you are done.
- Set *Timeout* interval. The remote modem must respond within this interval.

Connection

Remote



- In the Number to Dial field, enter the phone number of the remote system.

 - The number should contain any required access digits.
 To enter a pause (for example, after a trunk access code), enter a comma (,).
- Click Dial. 7.



This option ends your current programming session and returns you to the opening screen. It is available while on-line or off-line. While on-line, this option breaks (tears down) your direct or modem connection before returning you to the opening screen. This option is the same as File: Close and the Break Connection button on the button bar.

To break the connection with the telephone system and return to the opening screen:

- Click Connection: Break.
 - You can also click the *Break Connection* button on the button bar.
- 2. You see:





Search For Program Number

Description



If you know a telephone programming program number, use this option to help you locate it in the PC Program.

To find a program number in the PC Program:

Click Help: Search For Program Number. You see:



- Enter the number of the program you want to locate and click *OK*.
 - A dialog box will explain where the program is located.
 - For example, if you entered 1801 and clicked *OK*, you would see:





Use this option to display the PC Program version number.

To display the PC Program Version Number:

Click Help: About. You see:



NEC

NEC America, Inc., Corporate Networks Group 4 Forest Parkway, Shelton, CT 06484 Tel: 800-365-1928 Fax: 203-926-5458

cng.nec.com

Other Important Telephone Numbers

0
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4
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1
0
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(



NEC America, Inc., Corporate Networks Group 4 Forest Parkway, Shelton, CT 06484 TEL: 203-926-5400 FAX: 203-929-0535 cng.nec.com

