

NEC

This Quick Setup Guide is for system software versions 03..** or higher.**

In DS1000, software version 03..** requires expanded memory cabinet P/N 80200A. Do not install in prior versions.**

In DS2000, software version 03..** requires expanded memory CPU P/N 80025B. Do not install in prior versions.**

Expanded Database

System numbering is expanded in version 03.**.**. See *Expanded Database* on page 1-3 for more.

- In DS1000, extension numbers are 300-333 and trunk numbers are 1-6 (using extension numbers 101-106).
- In DS2000, extension numbers are 300-427 and trunk numbers are 1-64 (using extension numbers 101-164).
- In both systems, UCD Hunting Groups are preset at 700-707, and the Voice Mail Hunt Group is preset at 700.
- In both systems, Ring Groups are preset at 600-607.

Automatic Slot Configuration (DS2000)

Automatic Slot Configuration automatically sets up station and trunk PCBs when you initially power up the system. This simplifies installation because you no longer have to use system programming to activate station and trunk PCBs after you plug them in.

- See *Automatic Slot Configuration (DS2000)* on page 1-5 for more.

Simplified Voice Mail Programming

The system provides a predefined set of Voice Mail station numbers (201-208), which have a predefined set of corresponding Voice Mail extension numbers (500-507). In addition, the Voice Mail extension numbers are already designated as Voice Mail ports and assigned to a predefined UCD Hunting Group (with 700 as the master number). Because of these assignments, programming external Voice Mail is a simple, 2-step process:

- In *Program 8001 - Voice Mail Setup*, enter E to enable external Voice Mail. (IntraMail and UltraMail set up this option automatically.)
- In *Program 9902 - Set Up Stations (DS1000)* and *Program 9902 - Set Up Stations (DS2000)*, assign the Voice Mail ports to the predefined Voice Mail station numbers (201-208).
- See *Voice Mail Setup* on page 1-11 for more.

**1. Start-up
Programming**

**2. Customizing
Features**

**3. Additional
Resources**

DS1000/2000

Quick Setup Guide

(03.**.**)

This manual has been developed by NEC America, Inc. It is intended for the use of its customers and service personnel, and should be read in its entirety before attempting to install or program the system. Any comments or suggestions for improving this manual would be appreciated. Forward your remarks to:

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Section 1: Start-up Programming

1

Default Feature Setup

This is how your system operates on initial power-up:

Trunks

In DS1000, trunks 1-6 (if installed) ring line keys 1-6 and single line telephones.

- Trunks 4-6 will only work if you have an Expansion Board installed.

In DS2000, trunks 1-12 ring on line keys 1-12 for extensions 300-315.

- All other extensions are lamp-only for trunks 1-12 on line keys 1-12.
- Trunks 13-64 do not appear on line keys.
- Single line sets do not ring for incoming trunk calls. See *Programming Ringing* on page 1-7.

All trunks (outside lines) on ATRU PCBs are loop start DTMF.

- If you have Dial Pulse lines, you'll have to reprogram the trunk circuit type. See *Setting a Trunk's Circuit Type* on page 1-7. For T1 trunks, see the *Software Manual* on your *System Document CD*.

Keysets

The circuit types for extensions are automatically set when the extension is plugged in.

Keypad users can place outside calls by pressing a line key and dialing the outside number.

- In DS1000, all extension users can also place outside calls by dialing 9 plus the outside number.

At the attendant's extension (300), key 11 is the Night Key and the last key on the phone (12 or 24 - depending on telephone model) is the Operator Call Key.

- Pressing the Night Key puts the system in the night mode. See *Night Service / Night Ring* on page 2-21.
- Use the Operator Call Key to answer incoming Intercom calls queued at the attendant's extension. See *Attendant Call Queuing* on page 2-1.

If you need to modify your system's default feature setup:

- First, turn to *Frequently Asked Programming Questions* on the next page.
- Next, if you can't find the feature you want to change in the list of questions, refer to the additional features in *Section 2: Customizing Features* on page 2-1. You may also find the Table of Contents at the beginning of this guide a handy reference.
- Finally, if you need more detailed information, go to the *Software Manual* on your *System Document CD*.

Frequently Asked Programming Questions

If you have this question:	Go here:
General	
How do I enter the Programming Mode and change the system's options?	<i>Programming the System</i> on page 1-5.
I want to default the system. What are the steps?	<i>Reloading the System Default Settings</i> on page 1-17.
Can I change the system password?	<i>Changing the System Password</i> on page 1-16.
Trunks and Ringing	
How do I turn trunk ringing on or off for certain extensions?	<i>Programming Ringing</i> on page 1-7.
In DS2000, how can I make single line telephones ring for incoming calls?	<i>Programming Ringing</i> on page 1-7.
I have DP (Dial Pulse) trunks, but the system default is DTMF. How do I make my trunks DP?	<i>Setting a Trunk's Circuit Type</i> on page 1-7.
How do I place outgoing calls from single line telephones?	<i>Placing Outgoing Calls from Single Line Telephones</i> on page 1-8.
Extension Setup	
What do I program to restrict access <u>from</u> certain extensions <u>to</u> certain trunks?	<i>Setting Up Trunk Access Restrictions</i> on page 1-9.
We have a group of phones that should ring for each other's calls. How do I set this up?	<i>Call Coverage</i> on page 1-17.
How do the User Programmable Features work?	<i>User Programmable Features</i> on page 1-18.
Voice Mail Setup	
How do I set up Voice Mail?	<i>Basic External Voice Mail Programming</i> on page 1-11.
Can I make the Voice Mail answer only at night?	<i>Set Voice Mail to Answer at Night</i> on page 1-14.
If a call rings an extension and does not get picked up, can I have Voice Mail answer it?	<i>Having Voice Mail Pick Up Unanswered Calls</i> on page 1-15.

Expanded Database

**When setting up your system, do not exceed the system's Load Factor capacity.
Review your system's *Hardware Manual* for more on the Load Factor.**

The Expanded Database is a new database method that provides database records (memory) for all possible extensions, trunks, Hunt Groups, Ring Groups, and Voice Mail ports. This new capability allows for:

- Automatic Slot Configuration in DS2000.
- Simplified installation of Voice Mail, Hunt Groups, and Ring Groups.
- Support for built-in UltraMail (DS2000 only) and IntraMail Voice Mail
- Introduction of the DS Series PC Program.

To understand the Expanded Database, you'll need to keep track of three things: port, station (or trunk) number, and extension number.

- **Port**

The port is where the device you are programming connects to the system. For example, in DS2000 each 16DSTU PCB has 16 ports which can connect up to 16 digital telephones.

 - In DS2000, ports are numbered consecutively for each slot, and only exist when you plug in the PCB to which the device should connect.
 - In DS1000, there is a separate set of ports for digital stations, analog stations, analog Door Boxes, and trunks.
- **Station Number and Trunk Number**

The station or trunk number is the element in software that keeps track of the connected devices's programming. Station and trunk numbers (and associated database records) exist for all possible devices you can connect to the system, even if you don't have any ports installed to connect them. You can't call station and trunk numbers directly – you need the associated extension numbers to do that (see below).
- **Extension Numbers**

Extension numbers allow you to access the stations and trunks. By default, each station and trunk number has an extension number assigned to it. You can change these assignments if you want to.

 - Digital station ports have primary and secondary station numbers. The primary station's extension number is used to call the device connected to the port. The secondary station's extension number calls the second channel on 2-channel devices such as 2-OPX Modules and Digital VANGARD Voice Mail ports.

Default Numbering in DS1000

Default Numbering in DS1000			
Stations (Telephones)	Ports	Station Numbers	Extension Numbers
Digital Station	1-16	1-16	300-315
Analog Station	1-8	17-24	316-323
Door Box	1, 2	25-26	324, 325
Unassigned ¹	-	27-34	326-333
Total Station Ports	34	-	-
<ul style="list-style-type: none"> To find out the default extension number for any station number, add 299 to the station number. - For example, station number 1 uses extension number 300 (1 + 299). 			
Trunks	Ports	Trunk Numbers	Extension Numbers
Trunk Ports	1-6	1-6	101-106
Total Trunk Ports	6	-	-
<ul style="list-style-type: none"> To find out the default extension number for a trunk number, add 100 to the trunk number (e.g., 1+100=101). 			
Voice Mail Ports	Ports	Station Numbers	Extension Numbers
	-	201-208	500-507
UCD Groups	Total Groups	UCD Group Master Extension Numbers	
	8	700-707	
Ring Groups	Total Groups	Ring Group Master Extension Numbers	
Ring Group Masters	8	600-607	
¹ Available for the second channels on 2-OPX Modules and Digital VANGARD Voice Mail.			

Default Numbering in DS2000

Default Numbering in DS2000			
Stations (Telephones)	Ports	Station Numbers	Extension Numbers
Station	Set by installed PCB	1-96	300-395
Unassigned ¹	32	97-128	396-427
Total Station Ports	128	-	-
<ul style="list-style-type: none"> To find out the default extension number for any station number, add 299 to the station number. - For example, station number 1 uses extension number 300 (1 + 299). 			
Trunks	Ports	Trunk Numbers	Extension Numbers
Trunk Ports	Set by installed PCB	1-64	101-164
Total Trunk Ports	64	-	-
<ul style="list-style-type: none"> To find out the default extension number for a trunk number, add 100 to the trunk number (e.g., 1 + 100=101). 			
Voice Mail Stations	Station Numbers		Extension Numbers
	201-208		500-507
UCD Groups	Total Groups	UCD Group Master Extension Numbers	
	8	700-707	
Ring Groups	Total Groups	Ring Group Master Extension Numbers	
Ring Group Masters	8	600-607	
¹ Available for the second channels on 2-OPX Modules and Digital VANGARD Voice Mail.			

Automatic Slot Configuration (DS2000)

DS2000 Automatic Slot Configuration automatically sets up station and trunk PCBs when you initially power up the system. This simplifies installation because you no longer have to use system programming to activate station and trunk PCBs after you plug them in. Here's how Automatic Slot Configuration works:

- **With power off, install your station and trunk PCBs.**
With the system powered down, install the station and trunk PCBs from left to right in the order you want your extension and trunk numbers set up.
 - *Be sure to install a 16DSTU PCB in the first slot (CN1).*
 - You don't have to group your station and trunk PCBs together, although it may be more convenient to do so. For example, when setting up a 16x32 system, you can install the 2nd DSTU PCB and your two ATRU PCBs in any slot, in any order. Automatic Slot Configuration will properly handle the numbering.
- **Power up the system.**
On power up, the system scans the PCBs from left to right and sets up the extension and trunk numbering as follows.
 - Extension numbers will begin with 300 in the first slot and increment from left to right.
 - Trunk numbers will begin with 101 (starting from the first installed ATRU PCB) and will also increment from left to right.

Notes:

- System reset does not cause reconfiguration. Automatic Slot Configuration is temporarily disabled during a system reset.
- For more, see **Automatic Slot Configuration (DS2000)** and **9902 - Set Up Stations (DS2000)** in the *Software Manual* on your System Document CD.

Programming the System

How to Enter the Programming Mode

To enter the programming mode:

1. Go to any working display telephone.
2. Do not lift the handset.
3. Press **ICM**.
4. Dial **# * # ***

DSnnnn VER nn.nn.nn
PASSWORD:

5. Dial the system password + **HOLD**.
Refer to the following table for the default system passwords.

Password Level	Password	Level
System Administrator 1	0000	1
System Administrator 2	9999	2
Installer	372000	3

See the Software Manual on your System Document CD for more on password levels.

USER: nnn
ENTER PROGRAM?

6. Enter the number of the program you want to change (e.g., 1801) + **HOLD**.

How to Exit the Programming Mode

To exit the programming mode:

- When you see:

**USER: nnn
ENTER PROGRAM?**

OR

**DS1000 VER nn.nn.nn
PASSWORD:**

Press and release the hookswitch, or press **SPK**.

If you don't see one of the above prompts, press CONF until you do. When you exit programming, the system automatically stores your entries in Random Access Memory (RAM).

Using Keys to Move Around in the Programs

Once you enter the programming mode, use the keys in the following chart to enter data, edit data and move around in the menus.

Use this key:	When you want to:
0-9, # and *	Enter data into the program.
HOLD	Complete the programming step you just made (like pressing Enter on a PC keyboard). When a program entry displays, press HOLD to accept the entry (i.e., bypass the entry without changing it).
CONF	Complete the programming step you just made (like pressing Enter on a PC keyboard) and back up one step in the program.
LND	Delete the entry to the left (like pressing Backspace on a PC keyboard). To delete an entire name entry (without backspacing over each letter), just reenter the name without pressing LND first.
CLEAR	Erase the entire command line you just entered and undefine the entry.
CHECK	Erase the entry you just made and replace it with the prior stored entry.
VOL Up	Scroll forward through a list of entries in a program. If you enter data and then press this key, the system accepts the data before scrolling forward to the next entry.
VOL Down	Scroll backward through a list of entries in a program. If you enter data and then press this key, the system accepts the data before scrolling backward to the previous entry.
ICM	Enable the scroll mode. When you press this key and it lights, you can then press VOL Up and VOL Down to scroll through the options. To choose the displayed value, press HOLD .

Setting a Trunk's Circuit Type

To set a trunk's circuit type:

- Enter the programming mode. You see:
USER: nnn
ENTER PROGRAM?
- Enter **1001** + **HOLD**. You see:
1001:TRK DESCRIPTION
TRUNK PORT?n
- Enter the number of the trunk you want to program (1-6 in DS1000, 1-64 in DS2000) + **HOLD**. You see:
1001:TRUNK PORT:n
TYPE?nnnn nnnnnn nn
- Enter the trunk circuit type (**0**=uninstalled, **51**=loop start DTMF, **52**=loop start DP) + **HOLD**. You see:
1001:TRUNK PORT:n
TYPE?(your selection)
For additional T1 circuit types, see T1 Trunking in the Software Manual on the System Document CD that came with your system.
- Enter a different circuit type for the trunk (if you made a mistake).
OR
Press **CONF** to select another trunk.
OR
Press **CONF** twice to exit program 1001.

1

Programming Ringing

In DS1000 by default:

- Trunks 1-6 appear and ring on line keys 1-6 on every keyset. In addition, line keys ring for each incoming call on that key. This means that every keyset rings for each incoming call.
- Single line telephones also ring for each incoming trunk call.

In DS2000 by default:

- Trunks 1-12 appear and ring on line keys 1-12 for extensions 300-315. All other extensions are lamp-only for trunks 1-12 on line keys 1-12.
- Trunks 13-64 do not appear on line keys.
- Single line telephones do not ring for incoming trunk calls.

There are two ways to change the ringing assignments: using the system programming or the User Programmable Features.

Changing Ringing Assignments Using the System Programming

To change ringing:

- Enter the programming mode. You see:
USER: nnn
ENTER PROGRAM?
- Enter **1805** + **HOLD**. You see:
1805:RING ASSIGNMENT
EXTENSION #?nnn
- Enter the number of the extension you want to program + **HOLD**. You see:
1805:EXT:nnn
LINE NUMBER?n

4. Enter the number of the trunk you want to program (e.g., 1) + **HOLD**. You see:
**1805:EXT:nnn LINE:n
nnnnnnn**
The currently programmed ringing option for the trunk selected displays.
5. For the extension and trunk selected, enter the ring option + **CONF**:
1 = Lamp only (no ringing)
2 = Ringing day and night
3 = Ringing at night, lamp only during the day
4 = Delayed ringing day and night
**1805:EXT:nnn
LINE NUMBER?n**
6. Go back to step 4 and enter the number of another trunk to program for the selected extension.
OR
Press **CONF** and go back to step 3 to select another extension.
OR
Press **CONF** twice to exit program 1805.

Changing Ringing Assignments With User Programmable Features

A keyset user can change line key ringing right from their phone.

To change line key ringing with the User Programmable Features:

1. Dial **#RAL**.
*Your line keys flash. The flash rate shows the type of ringing enabled:
On red = lamp only day and night
On green = immediate ring day and night
Fast flash green = delay ring day and night
Slow flash green = immediate ring at night, lamp only during the day*
2. Press the line key to change its ringing mode.
3. Press **SPK** when you are done.

See *User Programmable Features* on page 1-18 for more.

Placing Outgoing Calls from Single Line Telephones

In DS1000 by default, single line telephone users can dial 9 for an outside line.

If your single line telephone users can't dial 9 to place outgoing calls, you need to check the following:

- Part I: Assign some trunks to Trunk Group 90 (which is the default dial 9 group).
- Part II: Allow analog ports to have full or outgoing access to the trunks in group 90.

Part I: Assign Trunks to Trunk Group 90.

1. Enter the programming mode. You see:
**USER: nnn
ENTER PROGRAM?**
2. Enter **1002 + HOLD**. You see:
**1002:TRUNK GROUPS
TRUNK GROUP?90**
3. Press **HOLD** to select Trunk Group 90. You see:
**1002:TRUNK GROUP:90
ORDR 1:TRK NUM?UND**
4. Dial **1** and press **VOL Up**. (This assigns trunk 1 as your first outgoing trunk in group 90.) You see:
**1002:TRUNK GROUP:90
ORDR 2:TRK NUM?UND**

5. Go back to step 4 and add another trunk to group 90.
OR
Press **HOLD** to save your entries.
OR
Press **HOLD** + **CONF** to exit program 1002.

Part II: Allow Analog Ports to have Full or Outgoing Access to group 90 Trunks.

1. Enter the programming mode. You see:

```
USER: nnn
ENTER PROGRAM?
```
2. Enter **1803** + **HOLD**. You see:

```
1803:LINE ACCESS
EXTENSION #?nnn
```
3. Enter the extension number for the single line telephone you want to program (e.g., 319) + **HOLD**. You see:

```
1803:EXT:nnn
LINE NUMBER?n
```
4. Enter the number of the trunk you want to program + **HOLD**. You see (for the trunk selected):

```
1803:EXT:nnn LINE:n
nnnnnnnnnn
```

The previously programmed access setting for the selected trunk displays.
5. Enter access option 2 (outgoing only) or 3 (full/both ways access) for the selected trunk + **VOL Up**. You see (for the next trunk):

```
1803:EXT:nnn LINE:n
nnnnnnnnnn
```
6. Press **CONF** to return to step 4 and select another trunk to program.
OR
Press **CONF** twice to return to step 3 and select another extension to program.
OR
Press **CONF** three times to exit program 1803.

1

Setting Up Trunk Access Restrictions

The system allows you to set up an “access matrix” for each trunk at each extension. With access restriction, for example, you could restrict a lobby phone from being able to place outside calls on certain trunks.

To set up trunk access restrictions:

1. Enter the programming mode. You see:

```
USER: nnn
ENTER PROGRAM?
```
2. Enter **1803** + **HOLD**. You see:

```
1803:LINE ACCESS
EXTENSION #?nnn
```
3. Enter the number of the extension for which you want to set up access restrictions + **HOLD**. You see:

```
1803:EXT:nnn
LINE NUMBER?n
```
4. For the extension selected, enter the number of the trunk for which you want to set up access restrictions + **HOLD**. You see:

```
1803:EXT:nnn LINE:n
nnnnnnnnnn
```

The previously programmed access setting displays.

5. Enter the access option for the selected trunk + **VOL Up**.
0 = No access
1 = Incoming only
2 = Outgoing only
3 = Full access (both incoming and outgoing)
6. Enter the access option for the next consecutive trunk.
OR
Press **CONF** to go back to step 4 and select another trunk.
OR
Press **CONF** twice to go back to step 3 and select another extension.
OR
Press **CONF** three times to exit program 1803.

Voice Mail Setup

Basic IntraMail and UltraMail Programming

IntraMail and UltraMail built-in Voice Mail systems automatically set up without any required programming.

Basic External Voice Mail Programming

Prior to programming, follow the instructions that came with your external Voice Mail and connect the Voice Mail to your system. *If you are using the DS1000 PFT/MDM port for a Power Failure Telephone or Modem Cut-through, do not use extension 316 for external Voice Mail.*

The system provides a predefined set of Voice Mail station numbers (201-208), which have a predefined set of corresponding Voice Mail extension numbers (500-507). In addition, the Voice Mail extension numbers are already designated as Voice Mail ports and assigned to a predefined UCD Hunting Group (with 700 as the master number).

The basic external Voice Mail programming is divided into three parts:

- Part I: Enable External Voice Mail
- Part II: Assign the external Voice Mail ports to the Voice Mail station numbers.
- Part III: Program the external Voice Mail system.

Part 1: Enable External Voice Mail

1. Enter the programming mode. You see:

```
USER: nnn
ENTER PROGRAM?
```

2. Enter **8001** + **HOLD**. You see:

```
8001:V-MAIL SETUP
V-MAIL TYPE?NONE
```

3. Enter **E (3)** + **HOLD**. You see:

```
8001:V-MAIL SETUP
V-MAIL TYPE?EXTERNAL
```

4. Press **CONF** to exit program 8001.

Part II: Assign the External Voice Mail Ports to the Voice Mail Station Numbers (DS2000)

For Analog Voice Mail (such as analog VANGARD and NVM-2e)

1. Enter the programming mode. You see:

```
USER: nnn
ENTER PROGRAM?
```

2. Enter **9902** + **HOLD**. You see:

```
9902:STATION CARDS
SLOT?
```

3. Enter the slot number (2-8) that contains the ASTU PCB to which your analog Voice Mail is connected + **HOLD**. You see:

```
9902:SLOT:n:nASTU
V-RMV/P-PORTS/X-SWAP
```

4. Enter **P (7)**. You see:

```
9902:SLOT:n:nASTU
PORT:nn STATION:nnn
```

5. Press **VOL Up** until you select the first (lowest numbered) port to which your Voice Mail is connected.

6. Enter **201 + HOLD** twice. You see:
9902:SLOT:n:nASTU
PORT:nn STATION:nnn
7. Press **VOL Up**, then repeat step 6 to assign additional Voice Mail stations (202-208) to the remaining installed Voice Mail ports.
8. Press **CONF** to go back to step 4.
OR
Press **CONF** twice to go back to step 3 and select another slot to program.
OR
Press **CONF** three times to exit program 9902.

For Digital VANGARD

Each Digital VANGARD connection is a two-channel device that represents two Voice Mail ports (stations). In programming, you assign a separate Voice Mail station (201-208) to each channel. The first channel is called the primary station; the second channel is called the secondary station.

1. Enter the programming mode. You see:
USER: nnn
ENTER PROGRAM?
2. Enter **9902 + HOLD**. You see:
9902:STATION CARDS
SLOT?
3. Enter the slot number (1-8) which contains the DSTU PCB to which your digital Voice Mail is connected + **HOLD**. You see:
9902:SLOT:n:16DSTU
V-RMV/P-PORTS/X-SWAP
4. Enter **P** (7). You see:
9902:SLOT:n:16DSTU
PORT:nn PRI STA?:nnn
5. Press **VOL Up** until you select the primary station for the first (lowest numbered) port to which your Digital VANGARD is connected.
6. Enter **201 + HOLD** twice. You see:
9902:SLOT:n:16DSTU
PORT:nn PRI STA?:201
7. Press **VOL Up**. You see:
9902:SLOT:n:16DSTU
PORT:nn SEC STA?:UND
8. Enter **202 + HOLD** twice. You see:
9902:SLOT:n:16DSTU
PORT:nn PRI STA?:201
9. Repeat steps 6-8 to assign Voice Mail stations to the remaining installed Digital VANGARD Voice Mail ports.
10. Press **CONF** to go back to step 4.
OR
Press **CONF** twice to go back to step 3 and select another slot to program.
OR
Press **CONF** three times to exit program 9902.

(DS1000)

For Analog Voice Mail (such as analog VANGARD and NVM-2e)

1. Enter the programming mode. You see:
USER: nnn
ENTER PROGRAM?
2. Enter **9902 + HOLD**. You see:
9902:STATION CARDS
D-DGTL/A-ANLG/X-DBOX
3. Enter **A (2)**. You see:
9902:ANALOG PORTS
PORT:17 STATION:17
4. Press **VOL Up** until you select the first (lowest numbered) analog port to which your analog Voice Mail is connected.
5. Enter **201 + HOLD** twice. You see:
9902:SLOT:n:nASTU
PORT:17 STATION:201
6. Press **VOL Up**, then repeat step 5 to assign additional Voice Mail stations (202-208) to the remaining installed Voice Mail ports.
7. Press **CONF** to go back to step 3.
OR
Press **CONF** twice to exit program 9902.

For Digital VANGARD

Each Digital VANGARD connection is a two-channel device that represents two Voice Mail ports (stations). In programming, you assign a separate Voice Mail station (201-208) to each channel. The first channel is called the primary station; the second channel is called the secondary station.

1. Enter the programming mode. You see:
USER: nnn
ENTER PROGRAM?
2. Enter **9902 + HOLD**. You see:
9902:STATION CARDS
D-DGTL/A-ANLG/X-DBOX
3. Press **D (3)**. You see:
9902:STATION CARDS
PORT:01 PRI STA?1
4. Press **VOL Up** until you select the first (lowest numbered) digital port to which your Digital VANGARD is connected.
5. Enter **201 + HOLD**. You see:
9902:STATION CARDS
STATION ASSIGNED
6. Press **HOLD** again + **VOL Up**. You see:
9902:STATION CARDS
PORT:nn SEC STA?UND
7. Enter **202 + HOLD** twice. You see:
9902:SLOT:n:16DSTU
PORT:nn SEC STA?202
8. Repeat steps 4-8 to assign Voice Mail stations to the remaining installed Digital VANGARD Voice Mail ports.
9. Press **CONF** to go back to step 3.
OR
Press **CONF** twice to exit program 9902.

Part III: Program the External Voice Mail System

Important

When setting up external Voice Mail, the Trunk Mailbox numbers must be 101-106 for DS1000 and 101-164 for DS2000.

VANGARD Mail

To set up VANGARD Mail for DS1000/2000:

1. Following the instructions in your VANGARD Mail manual, connect the Voice Mail system.
2. From the VANGARD Mail Main Menu, enter **IN** + **Enter**.
3. Enter the VANGARD Mail password (**CTL**) + **Enter**.
4. When you see the Install System Menu, enter **7** + **Enter** (to select DS2000) and follow the prompts.

NVM-2e

To set up NVM-2e for DS1000/2000:

1. Following the instructions in your NVM-2e manual, connect the Voice Mail system.
The steps that follow assume your NVM-2e still has its default programming.
2. From any extension:
 - Press **ICM**.
 - Dial the Voice Mail master number (e.g., **700**)
 - (NVM-2e version 2.0 or higher) Dial **301**, wait for the main menu.
 - (NVM-2e version prior to 2.0) Dial **10**, wait for the main menu.
3. At the Main Menu, dial **DM** (36) for the Database Management Menu.
4. Dial **SI** (74) for System Initialization.
5. Dial **3** to initialize the Voice Mail database.
6. Dial **4** to install the database for DS1000/2000.
7. Press **#**, then follow the voice prompts to exit.

Set Voice Mail to Answer at Night

To have the Voice Mail Automated Attendant answer a trunk at night, you program the trunk as a night mode DIL to the Voice Mail master number. When the attendant presses the NIGHT key, the system switches to the night mode and the Voice Mail Automated Attendant answers the trunk. During the day, the trunk rings normally.

To set up a Night Mode DIL to Voice Mail:

1. Enter the programming mode. You see:
USER: nnn
ENTER PROGRAM?
2. Enter **1003** + **HOLD**. You see:
1003:TRUNK OPTION
TRUNK PORT?n
3. Enter the number of the trunk you want to program (e.g., 1) + **HOLD**. You see:
1003: TRUNK PORT?:n
PICK-UP GROUP?n
4. Press **VOL Up** until you see:
1003: TRUNK PORT?:n
NIGHT TERM?nnn nnnn
5. Enter the Voice Mail master number (e.g., 700) + **HOLD**.
6. Press **CONF** to go back to step 3 and enter another trunk.
OR
Press **CONF** twice to exit program 1003.

Having Voice Mail Pick Up Unanswered Calls

There are two ways to set this up:

- Method I: Use the system's trunk overflow capabilities.
- Method II: Set up Terminal Hunting to Voice Mail.

Method I: Trunk Overflow to Voice Mail

With Method I, an outside call will ring a keyset for 15 seconds and then divert to Voice Mail. You set up Method I on a trunk-by-trunk basis. *Method I is a trunk-based overflow method.* You can use Method I in combination with Method II.

To set up trunk overflow to Voice Mail:

1. Enter the programming mode. You see:

```
USER: nnn
ENTER PROGRAM?
```

2. Enter **1003** + **HOLD**. You see:

```
1003:TRUNK OPTION
TRUNK PORT?n
```

3. Enter the number of the trunk you want to program (e.g., 1) + **HOLD**. You see:

```
1003:TRUNK PORT?:n
PICK-UP GROUP?n
```

4. Press **VOL Up** until you see:

```
1003:TRUNK PORT?:n
DAY OVERFLOW?nn
```

5. Dial **9** (for yes) and press **VOL Up**. You see:

```
1003:TRUNK PORT?:n
DAY OVRFLW DEST?nnn
```

6. Enter the Voice Mail master number (e.g., 700) + **HOLD**.

If you don't want to use Voice Mail, the overflow destination can be another extension or the system attendant (e.g., 300).

7. Press **CONF** to go back to step 3 and enter another trunk.

OR

Press **CONF** twice to exit program 1003.

The length of time a call rings before diverting to Voice Mail is set by the Trunk Revert interval in program 0401. Refer to the Software Manual on your System Document CD for more on this timer.

Method II: Terminal Hunting to Voice Mail

If an outside call rings an extension and the extension is not answered, is busy, or is in Do Not Disturb, Voice Mail can pick up the call. To do this, you set up Terminal Extension Hunting to Voice Mail at each extension. In the default system, this method is primarily used for transferred calls. If an outside call is transferred to an extension that is unanswered, busy, or in DND, the call will automatically go to the called user's mailbox.

The extension user can just press DND to have their calls go to their mailbox.

You set up Method II on an extension-by-extension basis. Method II is an extension-based overflow method. You can use this method in combination with Method I.

To set up Terminal Hunting to Voice Mail:

1. Enter the programming mode. You see:

```
USER: nnn
ENTER PROGRAM?
```

2. Enter **1807** + **HOLD**. You see:

```
1807:EXT OPT PART II
EXTENSION#?nnn
```

3. Enter the number of the extension you want to set up for Terminal Hunting to Voice Mail + **HOLD**. You see:

```
1807:EXT:nnn
STA VOICE CALL?nnn
```

4. Press **VOL Up** until you see:
1807:EXT:nnn
HUNT TYPE?nnnn
5. Dial **3** (Busy/Ring No Answer Hunting for All Calls) and press **VOL Up**. You see:
1807:EXT:nnn
HUNT DEST?nnn
6. Enter the Voice Mail master number + **HOLD**.
If you don't want to use Voice Mail, the overflow destination can be another extension or the system attendant (e.g., 300).
7. Press **CONF** and go back to step 3 to program another extension.
OR
Press **CONF** twice to exit program 1807.

Changing the System Password

The default system passwords are:

Password Level	Password	Level
System Administrator 1	0000	1
System Administrator 2	9999	2
Installer	372000	3

To change the system password:

1. Enter the programming mode. You see:
USER: nnn
ENTER PROGRAM?
2. Enter **9905** + **HOLD**. You see:
9905:PASSWORD PROG
PASSWORD LVL?
3. Enter the level (1-3) for the password you want to change + **HOLD**. You see:
9905:PASSWORD PROG
NEW PASS?
4. Enter the new password for the level selected (up to 8 digits) + **HOLD**. You see:
9905:PASSWORD PROG
CONFIRM?
5. Reenter the password you entered in step 4 above + **HOLD**. You see:
9905:PASSWORD PROG
PASSWORD ACCEPTED
6. Press **CONF** to return to step 3 and select another password to change.
OR
Press **CONF** twice to exit program 9905.

Reloading the System Default Settings

To reload the factory-installed default settings (and permanently erase all the site-specific programming):

1. Enter the programming mode. You see:
USER: nnn
ENTER PROGRAM?
2. Enter **9999 + HOLD**. You see:
9999:INITIALIZATION
INITIALIZE SYS?NO
3. To initialize the system, type **Y + HOLD**.
 OR
 To cancel initialization and leave the site specific programming intact, type **N + HOLD**.

1

Call Coverage

A Call Coverage Key allows an extension user to “cover” a co-worker’s calls from their own telephone. The Call Coverage Key indicates whenever the co-worker’s phone rings. The user can then press the key to pick up the co-worker’s call. When the covered co-worker’s phone is idle, the user can press the Call Coverage Key to place an Intercom call to the co-worker.

To set up Call Coverage Keys:

1. Enter the programming mode. You see:
USER: nnn
ENTER PROGRAM?
2. Enter **1701 + HOLD**. You see:
1701:KEY PROGRAMMING
EXTENSION #?300
3. Enter the number of the extension that you want to have Call Coverage Keys + **HOLD**. You see:
1701:EXT:nnn
KEY NUMBER?n
4. For the extension selected in step 3, enter the number of the Programmable Function Key you want to program as a Call Coverage Key (1-24) + **HOLD**. You see:
1701:EXT:nnn KEY:nnn
nnnnnn
The previously programmed assignment displays.
5. Enter the Call Coverage Key code for the selected key:
 06 = Immediate ring Call Coverage Key
 07 = Lamp only Call Coverage Key (no ring)
 08 = Delay ring Call Coverage Key
ENTER KEY DATA
CALL CVR nnnnnn
6. Enter the number of the extension that should be covered (i.e., the co-worker’s extension) + **HOLD + CONF**. You see:
1701:EXT:nnn
KEY NUMBER?n
7. Go back to step 4 and select another key to program.
 OR
 Press **CONF** to go back to step 3 and select another extension.
 OR
 Press **CONF** twice to exit program 1701.

User Programmable Features

The User Programmable Features allow an extension user to dial mnemonics to customize the way certain features work on their telephone, such as:

- Call Forwarding Clear All
- Headset Mode
- Hotline Key Assignment¹
- Off Hook Signaling Setup (including Camp On, Off Hook Ringing for trunk calls, and Voice Over for Intercom calls)
- Paging (Incoming)
- Prime Line Assignment
- Programmable Function Key Assignment
- Programmable Function Key Ringing for Call Coverage, Hotline, Group Call Pickup, and Line Keys
- Ringing Line Preference
- Speed Dial Bin Setup
- Time and Date
- Voice Announce (for incoming Intercom calls)

¹ An extension user can change the ringing for Hotline, Call Coverage, and Group Call Pickup Keys only if they have the keys already programmed on their keyset. Turn to *Programmable Function Keys* on page 2-24 for more on setting up these keys.

See the User Programmable Features chart on the next page for operation.

Note: To change an extension's Access Level, see **1801 - Access Level** in the *Software Manual* on the *System Document CD* that came with your system.

User Programmable Features				
To program a feature, press # and the feature's code. For example, to enable incoming Paging, press # and dial VPY , then SPK to hang up. By default, Call Forwarding Clear All, System Speed Dial, and Time and Date are only available to the attendant.				
Feature	Mnemonic	Numeric	Operation	Access Level
Call Forwarding Clear All	#CC	#22	#CC + Y to clear (cancel) forwarding or N to exit without clearing + SPK to hang up.	4 and 5
Headset Mode	#HS	#47	#HS + Y to enable or N to disable + SPK to exit.	3-5
Hotline	#HL	#45	#HL + Press flashing Hotline key + Enter extension for new Hotline partner + HOLD + Program another Hotline key or SPK to exit.	3-5
Off Hook Signaling	#OHS	#647	#OHS + Select mode (C =Outside line, I =ICM, D =Hotline) + Select option (see below) + SPK to exit. <i>Outside line options:</i> C =Camp On tone, O =Off Hook Ringing, 0 =None <i>Intercom options:</i> C =Camp On, V =Voice Over, 0 =None <i>Hotline Options:</i> C =Camp On, 0 =None	3-5
Paging (Incoming)	#VP	#87	#VP + Y to enable or N to disable + SPK to exit.	3-5
Prime Line Assignment	#PLA	#752	#PLA + Press one of your flashing programmable keys or ICM + SPK to exit.	3-5
Programmable Function Key Assignments	#KP	#57	#KP + Press key you want to program + HOLD + ICM + Press VOL Up or VOL Down to select key option + HOLD + (Enter any additional data if required ¹ + HOLD) + Press VOL Up or VOL Down to select another key to program, or CONF + SPK to exit.	3-5
			¹ To set up a Night (System Mode System) key, press CLEAR instead of entering additional data.	
Programmable Function Key Ringing	#RAC	#722	<i>Call Coverage Keys:</i> #RAC + Call Coverage Key repeatedly to select ringing mode + SPK to exit. Call Coverage Keys flash as follows: Lamp only=On red, Immediate ring=On green, Delay ring=Fast flash green.	2-5
	#RAL	#725	<i>Outside Line Keys:</i> #RAL + Line Key repeatedly to select ringing mode + SPK to exit. Line keys flash as follows: Lamp only=On red, Immediate ring=On green, Delay ring=Fast flash green, Night ring=Slow flash green.	
	#RAP	#727	<i>Group Call Pickup Keys:</i> #RAP + Group Call Pickup Key repeatedly to select ringing mode + SPK to exit. Group Call Pickup Keys flash as follows: Lamp only=On red, Immediate ring=On green, Delay ring=Fast flash green.	
Ringing Line Preference	#RLP	#757	#RLP + Y to enable or N to disable + SPK to exit.	2-5

Section 1: Start-up Programming

DS1000/2000

User Programmable Features				
To program a feature, press # and the feature's code. For example, to enable incoming Paging, press # and dial V PY , then SPK to hang up. By default, Call Forwarding Clear All, System Speed Dial, and Time and Date are only available to the attendant.				
Feature	Mnemonic	Numeric	Operation	Access Level
Speed Dial, Personal	#SP	#77	#SP + Press bin key (for bins 701-710) or DIAL then the bin key (for bins 711-720) + HOLD + Dial outside line (e.g., 1), Line group (e.g., 90-98), or ICM for Intercom feature + HOLD + Number to store + HOLD + Name + HOLD + Press another bin key or SPK to exit.	1-5
Speed Dial, System	#SP	#77	#SP + Dial System Speed Dial bin number (e.g., 200) + HOLD + Dial outside line (e.g., 1), Line group (e.g., 90-98), or ICM for Intercom feature + HOLD + Number to store + HOLD + Name + HOLD + Press another bin key or SPK to exit.	4 and 5
System Program Access	###		### + Enter programming password	3-5
Time and Date	#TD	#83	#TD + Enter time in 24-hour clock using hours (2 digits), minutes (2 digits) and seconds (2 digits) + HOLD + Enter date using month (2 digits), day (2 digits) and year (4 digits) + HOLD + SPK to exit.	4 and 5
Intercom Voice Announce (for incoming Intercom calls)	#VA	#82	#VA + V for voice announce or R for ring + SPK to exit.	3-5

Section 2: Customizing Features

2

Attendant Call Queuing

Attendant Call Queuing helps minimize call congestion in systems that use the attendant as the overflow destination for unanswered calls.

An unlimited number of Intercom callers can queue for the attendant. The callers hear ringback while they wait for the attendant to answer — not busy tone.

Operator Call Key

The last programmable key on an attendant telephone is permanently assigned as an Operator Call Key. When the operator has Intercom calls waiting to be answered, the calls queue under this key. The key winks (on) when calls are queued.

The Operator Call Key is a permanent assignment for all extensions assigned as operators. You cannot change this assignment. Attendant Call Queuing is a permanent, non-programmable feature.

Programming

None required.

Feature Quick Steps

To answer a call flashing the Operator Call Key:

1. Press the flashing Operator Call Key.

Attendant Position

The attendant is the system's call processing focal point.

The attendant is the focal point for call processing within the system. By default, the system has a single attendant at extension 300. You can, however, program the system to have up to four attendants (see the *Software Manual* on the *System Document CD* for more). In addition to the features of a standard keyset, the attendant also has the following unique capabilities:

- **Attendant Call Queuing**
Incoming Intercom calls from co-workers queue for the attendant. The callers never hear busy tone.
- **Barge In (Intrusion)**
The attendant can break into another extension user's established call.
- **Direct Trunk Access**
Direct Trunk Access lets the attendant user dial a code to access an individual trunk.

- **Forced Trunk Disconnect**
In an emergency, the attendant can release (disconnect) another user's active trunk call.
- **Night Service / Night Ring**
An attendant with a Night key can put the system in the night mode.
- **Removing Trunks and Extensions From Service**
The attendant can remove problem trunks from service —then return them to service once the problem is corrected.
- **Trunk (Line) Queuing / Trunk Callback**
The attendant can Camp On (queue) for a busy trunk.

The attendant should use a 34-Button Display or 34-Button Super Display Telephone. In addition, most attendants should find a 24-Button or 110-Button Direct Station Selection (DSS) Console helpful when processing calls. See *Direct Station Selection (DSS) Console* on page 2-10 for more.

Programming

None required.

Feature Quick Steps

To call the attendant:

1. Press **ICM** + Dial 0 (or 01-04 if the system has multiple attendants).

Barge In (Intrusion)

In an emergency, use Barge In to get through to a co-worker right away.

Barge In permits an extension user to break into another extension user's established call. This sets up a three-way conversation between the intruding extension and the two parties on the initial call. The user can Barge In on an Intercom call or a trunk call. By default, Barge In is enabled for attendants and disabled for all other extensions.

!! CAUTION !!

Unauthorized intrusion on calls using this feature may be interpreted as an invasion of privacy.

Programming

There are 2 steps to setting up Barge In:

- Part I: Enable/disable an extension's ability to Barge In in Class of Service.
- Part II: Assign the Class of Service with Barge In enabled to the extension.

Part I: Enable/Disable Barge In in Class of Service

1. Enter the programming mode. You see:

```
USER: nnn
ENTER PROGRAM?
```

2. Enter **0101** + **HOLD**. You see:

```
0101:CLASS OF SERVICE
COS NUM?n
```

3. Enter the Class of Service (1-15) you want to program + **HOLD**. You see:

```
0101:COS:n
OFF PREM FWRD?nn
```

By default, the attendant (extension 300) has Class of Service 1. All other extensions have Class of Service 2.

4. Press **VOL Up**. You see:

```
0101:COS:n
BREAK IN?nnn
```

5. To enable Barge In, dial **9** (for yes).
OR
To disable Barge In, dial **6** (for no).
6. Press **CONF** twice to exit program 0101.

Part II: Assign the Class of Service with Barge In Enabled to the Extension

1. Enter the programming mode. You see:
USER: nnn
ENTER PROGRAM?
2. Enter **1801** + **HOLD**. You see:
1801:EXTENSION PROG
EXTENSION#?
3. Enter the number of the extension you want to program (e.g., 300) + **HOLD**. You see:
1801:EXT:nnn
PT TYP?n:nnnnnn nnn
4. Press **VOL Up** until you see:
1801:EXT:nnn
CLASS OF SERVICE?n
5. Enter the Class of Service (1-15) you want to assign to the extension selected + **HOLD**. You see:
1801:EXT:nnn
CLASS OF SERVICE?n
6. Press **CONF** and go back to step 3 to select another extension.
OR
Press **CONF** twice to exit program 1801.

2

Feature Quick Steps

To Barge In on a call:

1. Call busy extension or access busy trunk + Dial 4.
2. Join the conversation in progress.

Call Waiting / Camp-On

Call Waiting helps busy extension users know when they have additional waiting calls. It also lets callers wait in line for a busy extension without being forgotten.

With Call Waiting, an extension user may call a busy extension and wait in line (Camp-On) without hanging up. When the user Camps-On (by dialing 2), the system signals the busy extension with two beeps indicating the first waiting call. (The busy extension can be on a handset or Handsfree call.) The call goes through when the extension becomes free. If an extension has more than one caller waiting, they queue on a first-in/first-out basis (FIFO). The extension will not hear Camp-On beeps for additional waiting calls. Call Waiting / Camp-On is enabled by default.

Programming

There are 3 steps to setting up Call Waiting / Camp-On:

- Part I: Enable/disable Camp-On system-wide.
- Part II: Enable/disable an extension's ability to Camp-On to a busy extension in Class of Service.
- Part III: Assign the Class of Service with Camp-On enabled to the extension.

Part I: Enable/Disable Camp-On System-Wide

1. Enter the programming mode. You see:

USER: nnn
ENTER PROGRAM?

2. Enter **0201** + **HOLD**. You see:

0201:TENANT OPTIONS
CALL WAIT?nnn

- To enable Call Waiting / Camp-On system wide, dial **9** (for yes) + **HOLD**.
OR
To disable Call Waiting / Camp-On system wide, dial **6** (for no) + **HOLD**.
- Press **CONF** to exit program 0201.

Part II: Enable/Disable Camp-On to a Busy Extension in Class of Service

- Enter the programming mode. You see:
USER: nnn
ENTER PROGRAM?
- Enter **0101** + **HOLD**. You see:
0101:CLASS OF SERVICE
COS NUM?n
- Enter the Class of Service (1-15) you want to program + **HOLD**. You see:
0101:COS:n
OFF PREM FWRD?nn
By default, the attendant (extension 300) has Class of Service 1. All other extensions have Class of Service 2.
- Press **VOL Up** until you see:
0101:COS:n
CAMP-ON BUSY EXT?nnn
- To enable Camp-On, dial **9** (for yes).
OR
To disable Camp-On, dial **6** (for no).
- Press **CONF** to go back to step 3 and select another Class of Service.
OR
Press **CONF** twice to exit program 0101.

Part III: Assign the Class of Service with Camp-On Enabled to the Extension

- Enter the programming mode. You see:
USER: nnn
ENTER PROGRAM?
- Enter **1801** + **HOLD**. You see:
1801:EXTENSION PROG
EXTENSION#?
- Enter the number of the extension you want to program (e.g., 300) + **HOLD**. You see:
1801:EXT:nnn
PT TYP?n:nnnnnn nnn
- Press **VOL Up** until you see:
1801:EXT:nnn
CLASS OF SERVICE?n
- Enter the Class of Service (1-15) you want to assign to the extension selected + **HOLD**. You see:
1801:EXT:nnn
CLASS OF SERVICE?n
- Press **CONF** and go back to step 3 to select another extension.
OR
Press **CONF** twice to exit program 1801.

Feature Quick Steps

To Camp-On to a busy extension:

- Call busy extension + Dial 2 (do not hang up).
If you hang up, the system converts your Camp-On to a Callback.
- Speak to your co-worker when they answer their Camp-On ring.

Caller ID

Caller ID automatically displays the phone number and optional name for incoming trunk calls.

Caller ID allows a display keyset to show an incoming caller's telephone number (called Directory Number or DN) and optional name. Caller ID supports the telco's Called Number Identification (CNI) and Called Number Delivery (CND) service, when available. These services provide the Caller ID information (i.e. messages) between the first and second ring burst of an incoming call. By default, Caller ID is disabled.

Caller ID provides the following features:

Single and Multiple Message Format Compatibility

There are two types of Caller ID message formats currently available: Single Data Message Format (SDMF) and Multiple Data Message Format (MDMF). With Single Message Data Format, the telco sends only the caller's phone number (DN). The DN can be up to 10 digits long. In Multiple Data Message Format, the telco sends the DN and the caller's name. The DN for this format can be up to 15 digits long and the name provided can consist of up to 15 ASCII characters. If no DN is received, no number or error message displays.

Caller ID Logging

Caller ID Logging stores a record of the caller's number and name (if provided by the telco) for each outside call that rings an extension. This allows an extension user to easily review and redial their calls. The system can log records directly to an extension or to one of 8 Caller ID Logging Groups. All extensions in the same Logging Group share the same Caller ID records. Each extension or Logging Group can store up to 99 Caller ID records. DS2000 stores up to 1000 Caller ID records (allocated among all extensions and Logging Groups). DS1000 stores up to 500 records. By default in DS1000, all keyset extensions (300-315) are in Caller ID Logging Group 1. By default in DS2000, extensions 300-315 are set up for personal logging and can log up to 10 calls each. Logging is disabled at all other extensions.

Caller ID Integration with Voice Mail

Caller ID fully integrates with IntraMail, UltraMail, and NVM-Series Voice Mail systems. This enables Voice Mail features such as Make Call with Caller ID. Make Call allows the Voice Mail subscriber to return a call to someone who left them a message without knowing the calling party's phone number. By default, Caller ID Integration with Voice Mail is enabled.

Second Call Caller ID (Extension Level Call Waiting Caller ID)

While a display keyset user is busy on a call, the system can show the Caller ID information for a waiting call. If the busy extension is programmed to receive Camp On tones or Off-Hook Ringing from the waiting call, the system will send the Caller ID data to the busy telephone's display. If the busy extension does not receive Camp On tones or Off-Hook Ringing, it will also not receive the waiting call's Caller ID. (Note that Caller ID data from a Camp On is displayed only once, corresponding to the single Camp On beep.) By default, this option is enabled. *This is an internal system feature and does not use the telco's Call Waiting Caller ID.*

Third Party Caller ID Check

Third Party Caller ID Check allows a keyset user to display the Caller ID data for another trunk. The trunk that the user checks can be ringing or busy. By default, this option is disabled.

Caller ID Display Separator

An extension's display can optionally show a calling party number separator. The separator is a dash after the area code and after the local exchange on a 7 or 10 digit number. By default, this option is enabled.

Notes:

- Caller ID is built in. In DS2000, be sure to use ATRU PCBs P/N 80010B and P/N 80011B or higher.
- Caller ID is not available at 2-OPX ports.
- Caller ID is available at single line extensions (if enabled in programming).

Programming

There are 4 steps to setting up Caller ID:

- Part I: Enable/disable Caller ID trunk options:
 - Caller ID for each trunk (disabled by default).
 - Caller ID Integration with Voice Mail (enabled by default).

- Part II: Enable/disable Caller ID Class of Service options:
 - Caller ID display (enabled by default).
 - Second Call Caller ID (enabled by default).
 - Third Party Caller ID Check (disabled by default).
 - Caller ID display separator (disabled by default).
 - Caller ID alert lamp for Caller ID Logging (enabled by default).
- Part III: Assign the Class of Service with the Caller ID options set to the extension.
- Part IV: To enable Caller ID Logging, assign the Caller ID Outbound Line/Group and the system's Home Area Code (HNPA). (To set up additional Caller ID Logging options, refer to the *Caller ID Logging* feature in the *Software Manual* on the *System Document CD* that came with your system.)

Part I: Enable/Disable Caller ID Trunk Options:

1. Enter the programming mode. You see:
USER: nnn
ENTER PROGRAM?
2. Enter **1001** + **HOLD**. You see:
1001:TRK DESCRIPTION
TRUNK PORT?n
3. Enter the trunk you want to program (e.g., 1) + **HOLD**. You see:
1001:TRUNK PORT:n
TYPE?nnnn nnnn nnn
4. Press **VOL Up** until you see:
1001:TRUNK PORT:n
CALLER ID?nnn
5. To enable built-in Caller ID for the trunk, dial 1 (for DSP) + **VOL Up**.
OR
To disable Caller ID for the trunk, dial 0 + **VOL Up**. You see:
1001:TRUNK PORT:n
VOICE MAIL CLID?nnn
6. To enable Caller ID integration with Voice Mail, dial 9 (for yes) + **HOLD**.
OR
To disable Caller ID integration with Voice Mail, dial 6 (for no) + **HOLD**.
7. Press **CONF** to go back to step 3 and select another trunk.
OR
Press **CONF** twice to exit program 1001.

Part II: Enable/Disable Caller ID Class of Service Options:

1. Enter the programming mode. You see:
USER: nnn
ENTER PROGRAM?
2. Enter **0101** + **HOLD**. You see:
0101:CLASS OF SERVICE
COS NUM?n
3. Enter the Class of Service (1-15) you want to program + **HOLD**. You see:
0101:COS:n
OFF PREM FWRD?nn

By default, the attendant (extension 300) has Class of Service 1. All other extensions have Class of Service 2.
4. Press **VOL Up** until you see:
0101:COS:n
CLID DISPLAY?nnn
5. To enable Caller ID for the Class of Service, dial 9 (for yes) + **VOL Up**.
OR

To disable Caller ID for the Class of Service, dial **6** (for no) + **VOL Up**. You see:

```
0101: COS:n
2nd Call CLID?nnn
```

6. To enable Second Call Caller ID for the Class of Service, dial **9** (for yes) + **VOL Up**.

OR

To disable Second Call Caller ID for the Class of Service, dial **6** (for no) + **VOL Up**. You see:

```
0101: COS:n
3rd PARTY CLID?nnn
```

7. To enable Third Party Caller ID Check for the Class of Service, dial **9** (for yes) + **VOL Up**.

OR

To disable Third Party Caller ID Check for the Class of Service, dial **6** (for no) + **VOL Up**. You see:

```
0101: COS:n
'-' IN CID DISP?nnn
```

8. To enable the Caller ID Display Separator for the Class of Service, dial **9** (for yes) + **VOL Up**.

OR

To disable the Caller ID Display Separator for the Class of Service, dial **6** (for no) + **VOL Up**. You see:

```
0101: COS:n
FORCE AC CODES?nnn
```

9. Press **VOL Up** until you see:

```
0101: COS:n
CLID ALERT LAMP?nnn
```

10. To enable the Caller ID Alert Lamp for the Class of Service, dial **9** (for yes) + **HOLD**.

OR

To disable the Caller ID Alert Lamp for the Class of Service, dial **6** (for no) + **HOLD**.

11. Press **CONF** to go back to step 3 and select another Class of Service.

OR

Press **CONF** twice to exit program 0101.

Part III: Assign the Class of Service with the Caller ID Options set to the Extension.

1. Enter the programming mode. You see:

```
USER: nnn
ENTER PROGRAM?
```

2. Enter **1801** + **HOLD**. You see:

```
1801: EXTENSION PROG
EXTENSION#?
```

3. Enter the number of the keyset extension you want to program (e.g., 300) + **HOLD**. You see:

```
1801: EXT:nnn
PT TYP?n:nnnnnnn nnn
```

4. Press **VOL Up** until you see:

```
1801: EXT:nnn
CLASS OF SERVICE?n
```

5. Enter the Class of Service (1-15) you want to assign to the extension selected + **HOLD**. You see:

```
1801: EXT:nnn
CLASS OF SERVICE?n
```

6. Press **CONF** and go back to step 3 to select another extension.

OR

Press **CONF** twice to exit program 1801.

Part IV: To enable Caller ID Logging, assign the Caller ID Outbound Line/Group and the system's Home Area Code (HNPA).

To set up additional Caller ID Logging options, refer to the Caller ID Logging feature in the Software Manual on the System Document CD that came with your system.

Setting up the Caller ID Outbound Line/Group

1. Enter the programming mode. You see:
USER: nnn
ENTER PROGRAM?
2. Enter **1302** + **HOLD**. You see:
1302:CID DIALING
LINE/GROUP:
3. Enter the trunk number (1-6 in DS1000 or 1-64 in DS2000) or Trunk Group (90-98) + **HOLD**.
4. Press **CONF** to exit program 1302.

Specify the System's Home Area Code

This is the area code in which the system is installed.

1. Enter the programming mode. You see:
USER: nnn
ENTER PROGRAM?
2. Enter **1303** + **HOLD**. You see:
1303:HNPA CODES
EDIT-E/INIT-I
3. Dial **4** (I) + **9** (Y) to initialize the HNPA table. You see:
1303:HNPA CODES
EDIT-E/INIT-I
4. Dial **3** (E) + **2** (A) to enter the HNPA table edit mode. You see:
1303:ADD CODES
DATA?
5. Enter your home area code (e.g., 203) + **HOLD**. You see:
1303:HNPA TBL(?=CHK)
nnn
Your HNPA entry displays.
6. Press **HOLD** again, then **CONF** to exit program 1303.

Feature Quick Steps

To cancel the Caller ID display and return your phone to its normal display:

1. Press **CLEAR**.

To turn the Caller ID display back on (after you press CLEAR to cancel it):

1. Press **CHECK**.

To display the Caller ID data for the third party's call (i.e., use Third Party Caller ID Check):

1. Press **ICM + CHECK**.
2. Press the key for the call you want to check.
 - Press a line key while the call is ringing or connected to the third party.
 - Press a loop key or Call Coverage key while the call is ringing the third party.
 - Press a Hotline key while the call is connected to the third party.
3. Hang up when you are done.

To review your Caller ID log:

Your Ring/Message Lamp (the large green LED on the upper right corner of your phone) winks on (green) when you have Caller ID records you have not reviewed.

At Your 22-button and 34-Button Display Keyset

1. Press **CLnn**.
2. Press **ALL** to review all your records.
 - OR
 - Press **UNAN** to review records for calls that rang your phone but were unanswered in the system.
3. Press **VOL Up** or **VOL Down** to scroll through your Caller ID records.
 - Press **CHECK** to toggle your display between its two Caller ID display modes.
4. Press **DIAL** to call the person back.

At Your Super Display Keyset

1. Press **CALLS nn**.
2. Press **VIEW ALL** to review all your records.
 - OR
 - Press **VIEW UNANS** to review records for calls that rang your phone but were unanswered in the system.
 - OR
 - Press **VIEW ANS** to review the records just for calls that rang you phone that were answered in the system.
3. Press **VOL Up** or **VOL Down** to scroll through your Caller ID records.
4. Press **CALLBACK** to call the person back.

Direct Station Selection (DSS) Console

DSS Consoles provide one-touch access to extensions, trunks and system features.

The DSS Console gives a 34-Button Display or 34-Button Super Display user a Busy Lamp Field (BLF) and one-button access to extensions, trunks, and selected system features. This saves time for users that do a lot of call processing (such as operators or dispatchers). There are two DSS Console types: the 24-Button (P/N 80556) and the 110-Button (P/N 80555). By default, there are no DSS Consoles programmed. Once programmed, DSS Consoles use the default key assignments shown in Figure 2-2 *DSS Console Default Assignments* on page 2-11.



Figure 2-1: 24-Button and 110-Button DSS Consoles

The system allows you to install 4 DSS Consoles maximum. In addition, System Load Factor may further reduce the number that you can install. Refer to *System Load Factor Calculations* in your system’s *Hardware Manual* for more. You cannot connect multiple DSS Consoles to the same keyset. DSS Consoles do not use a station port and do not require their own power supply.

The system provides four unique DSS configurations (called blocks). If you want your DSS Consoles to have unique key configurations, assign them to different blocks. If you want your consoles to share the same configuration, assign them to the same block. Note that DSS Console Personal Speed Dial bins are the same as the extension to which the console is attached. This means that DSS Consoles that share the same block number still have unique Personal Speed Dial.

You can assign DSS Console keys to the following functions. If you have additional questions about the features listed, refer to the *Software Manual* on your *System Document CD*.

• Account Code	• ICM Directory	• Save
• Call Coverage (immediate, delayed or no ring)	• Message Center	• Speed Dial, Personal
• Call Forwarding	• Night Key	• Speed Dial, System
• Group Pickup (immediate, delayed or no ring)	• Page Zones	• Split
• Headset Key	• Park Orbit	• Trunks (line keys)
• Hotline	• Reverse Voice Over	• Voice Mail Record

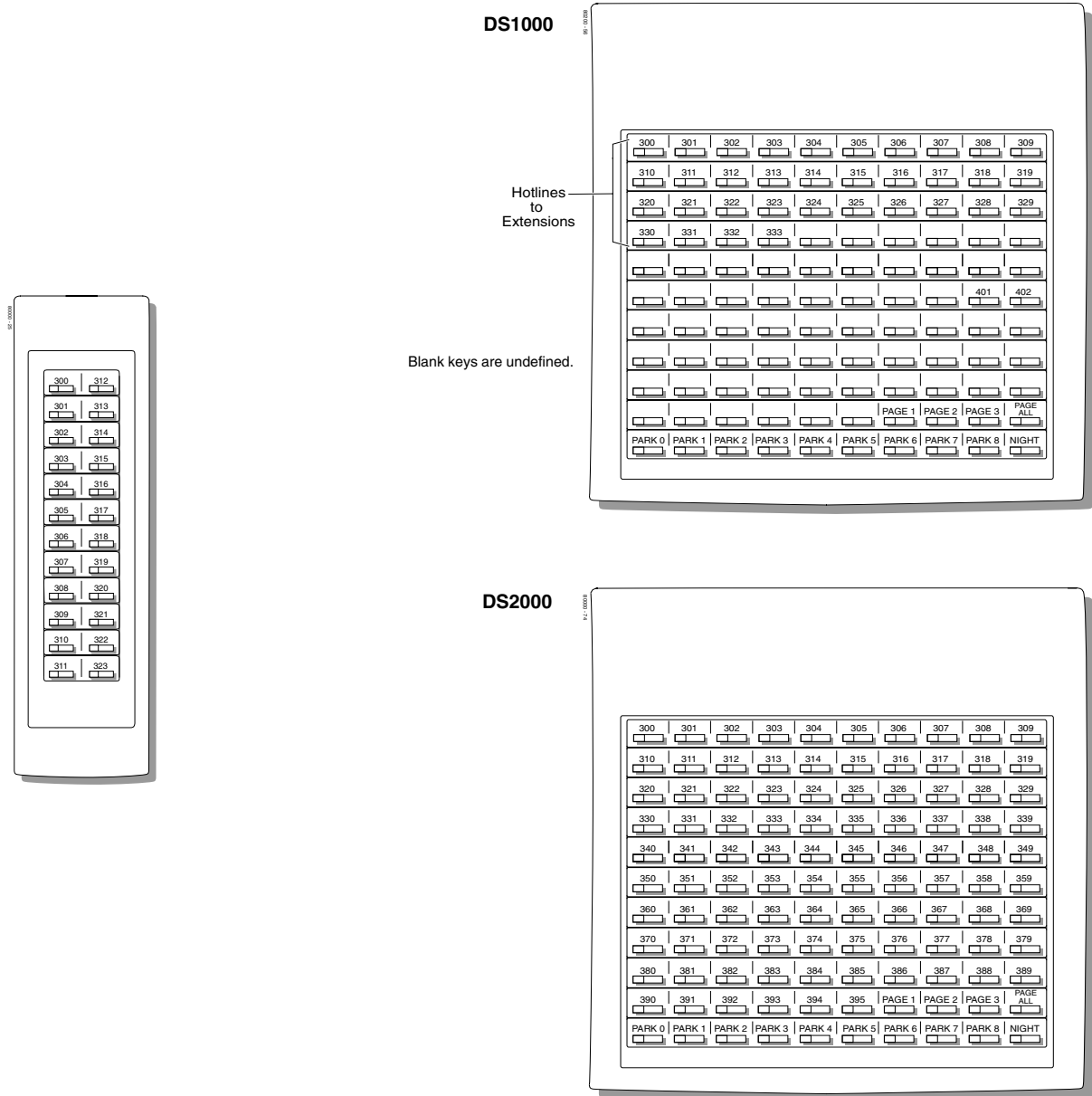


Figure 2-2: DSS Console Default Assignments

Programming

There are 2 steps to setting up a DSS Console:

- Part I: Assign DSS Console and DSS Block to the host extension.
- Part II: Program the DSS Console keys.

Part I: Assign DSS Console and DSS Block to The Host Extension.

1. Enter the programming mode. You see:

```

USER: nnn
ENTER PROGRAM?
    
```

2. Enter **1801 + HOLD**. You see:
**1801:EXTENSION PROG
EXTENSION?nnn**
3. Enter the 34-button keyset extension you want to program (e.g., 300) + **HOLD**. You see:
**1801:EXT:nnn
PT TYPE?nn nnnnnnnnn**
4. Press **VOL Up** until you see:
**1801:EXT:nnn
DSS TYPE?nnnn**
5. Enter the type of DSS Console attached to the extension you selected in step 3 above (1=24-button, 2=110-button) + **VOL Up**. You see:
**1801:EXT:nnn
DSS BLOCK NUM?n**
6. Enter the number of the DSS Block (1-4) you want to assign to the DSS Console attached to the extension you are programming + **HOLD**.
Normally, the first console you install has block 1, the second has block 2, etc.
7. Press **CONF** to go back to step 3 and select another extension to program.
OR
Press **CONF** twice to exit program 1801.

Part II: Program the DSS Console Keys.

1. Enter the programming mode. You see:
**USER: nnn
ENTER PROGRAM?**
2. Enter **1704 + HOLD**. You see:
**1704:DSS KEY PROG
DSS BLOCK NUM?**
3. Enter the number of the DSS Console block you want to program (see Part I) + **HOLD**. You see:
**1704:DSS KEY PROG
DSS KEY:n**
4. Enter the number of the DSS Console key you want to program (1-110) + **HOLD**. You see:
**DSS BLOCK:n KEY:n
nnnnnnnnnnnn**
The previously programmed assignment for the selected key displays.
5. For the key selected, enter the code for the feature you want to assign plus any additional data (see the chart below) + **VOL Up**.
*You can optionally press **ICM + VOL Up** to scroll through the available DSS Console key options. For more on the features listed, refer to the Software Manual on the System Document CD.*

Feature	Key Code
Undefined (blank) Key	00
Line Key	03 + Line number (e.g., 1)
Park Orbit Key	04 + Park Orbit (60-69)
Hotline Key	05 + Hotline Partner's Extension (e.g., 304)
Call Coverage Immediate Ring	06 + Covered Extension (e.g., 304)
Call Coverage No Ring (lamp only)	07 + Covered Extension (e.g., 304)
Call Coverage Delay Ring	08 + Covered Extension (e.g., 304)
Group Pickup Immediate Ring	09 + Pickup Group (1-16)

Feature	Key Code
Group Pickup No Ring (lamp only)	10 + Pickup Group (1-16)
Group Pickup Delay Ring	11 + Pickup Group (1-16)
Page Zone	13 + Page Zone (0 for All Call, or zone 1-7)
System Speed Dial	14 + System Bin (200-299)
Personal Speed Dial	15 + Personal Bin (701-720)
Voice Mail Record	17
Night Mode	18 + CLEAR
Split	20
Intercom Directory Dialing	21
Reverse Voice Over	23 + Covered Extension (e.g., 304)
Message Center	24 + Message Center Extension
Save	25
Account Code	26
Call Forwarding	27
Headset	28

2

6. Program the next consecutive key on the console.
 OR
 Press **CONF** to go back to step 4 and select another key to program.
 OR
 Press **CONF** twice to go back to step 3 and select another block to program.
 OR
 Press **CONF** three times to exit program 1704.

Feature Quick Steps

For more on these features, refer to the Software Manual on the System Document CD.

To use your Account Code key:

- Place or answer trunk call + Press Account Code key + Enter Account Code + Press Account Code key to return to call.

To use your DSS Console Call Coverage key:

- Press key to call covered extension or pick up ringing call.
You can set up the Call Coverage key for immediate ring, delayed ring, or no ring.

To use your DSS Console Call Forwarding key:

- Press the Call Forwarding key instead of pressing **ICM** and dialing *3.

To use your DSS Console Group Call Pickup key:

- Press key to answer call ringing Pickup Group.
You can set up the Group Call Pickup key for immediate ring, delayed ring, or no ring.

To use your DSS Console Headset key:

- Press the Headset key to enable or disable the Headset mode.

To use your DSS Console Hotline key:

- Press key to call Hotline partner.

To use your DSS Console ICM Directory key:

1. Press key to access Intercom Directory Dialing.

To use your DSS Console Message Center key:

1. Press key to see how many messages are waiting in the Message Center.

OR

Press **SPK** (or lift the handset) + key to call Message Center mailbox.

To use your DSS Console Night key:

1. Press key to put the system in the night mode.

To use your DSS Console Page Zone key:

1. Press key to Page into assigned zone.

To use your DSS Console Park key:

1. Press DSS Console Park key to Park or retrieve call.

To use your DSS Console Reverse Voice Over key:

1. While on a handset call, press key to place Private Intercom call to covered extension.

To use your DSS Console Save key:

1. While on a call, press key to Save the number you just dialed.

OR

While idle, press key to redial a previously saved number.

Save keys provide no BLF.

To use your DSS Console Personal Speed dial key:

1. Press key to dial stored number.

Personal Speed Dial keys provide no BLF.

To use your DSS Console System Speed dial key:

1. Press key to dial stored number.

System Speed Dial keys provide no BLF.

To use your DSS Console Split key:

Turn to the Split feature in the Software Manual on your System Document CD.

To use your DSS Console trunk (line) key:

1. Press the DSS Console trunk key.

To use your DSS Console Voice Mail Record key:

1. Press key to record conversation in mailbox.

You must have Voice Mail installed to use this key. A voice prompt and a periodic beep will remind you that your calls are being recorded.

Door Box (DS1000)

Use an analog Door Box in DS1000 to remotely monitor an entrance door.

The analog Door Box (P/N 92245) is a self-contained Intercom unit typically used to monitor an entrance door. A visitor at the door can press the Door Box call button (like a door bell). The Door Box then sends chime tones to all extensions programmed to receive chimes. To answer the chime, the called extension user just lifts the handset. This lets the extension user talk to the visitor at the Door Box. The Door Box is convenient to have at a delivery entrance, for example. It is not necessary to have company personnel monitor the delivery entrance; they just answer the Door Box chimes instead.

The analog Door Box in DS1000 connects to a dedicated Door Box port (DOOR1 or DOOR2) and can be mounted outside. Refer to the *Section 4, Optional Equipment* in the *Hardware Manual* on your *System Document CD* for more. ***The analog Door Box is not currently available in DS2000.***

Any keyset extension that receives Door Box chimes can control a system relay, which in turn typically enables an electric strike on an entrance door next to a Door Box. After answering the Door Box chimes, the extension user can press FLASH or a soft key to enable the associated relay. The visitor at the door can then

enter without having an employee open the entrance for them. DS1000 has 2 relays, located in the DOOR1 and DOOR2 analog Door Box jacks. You can assign these relays for Door Box strike control or Page Relay Control, but not both.

Important Be sure the devices connected to the system's relay contacts are compatible with the following specifications	
DS1000 Analog Door Box	
Contact Configuration	Normally Open
Maximum Load	0.5A @ 120 VAC 1A @ 24 VDC
Maximum Initial Contact Resistance	100 mOhms

2

The system uses Ring Groups to control Door Box chimes. When a visitor at the door presses the Door Box call button, the Door Box will alert (chime) all the extensions in the Ring Group to which the Door Box belongs. For example, if the Door Box and extensions 301 and 302 are in Ring Group 1, pressing the call button alerts 301 and 302.

By default, DOOR1 (extension 324) and DOOR2 (extension 325) are reserved for analog Door Boxes.

Installing the Door Box

1. Connect the Door Box according to the drawing below.

Analog Door Box

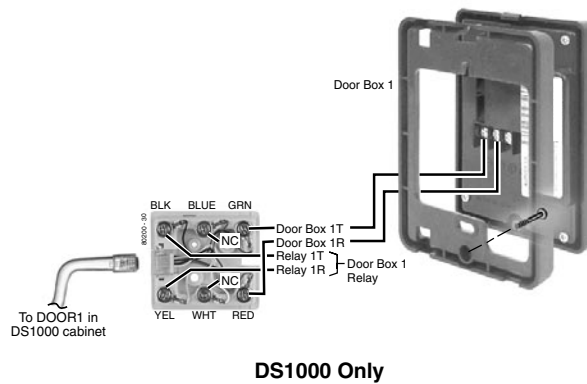


Figure 2-3: Connecting an Analog Door Box in DS1000

Programming

There are 3 steps to setting up a Door Box in DS1000:

- Part I: Assign the Door Box chime tone.
The Door Box alerts the extensions in the Door Box Ring Group (assigned in Part II) using the chime type you select.
- Part II: Set up the Door Box Ring Group.
To have Door Box chimes alert extensions, the extensions have to be in the same Ring Group as the Door Box.
- Part III: Program analog Door Box relay control.
After answering a Door Box chime, the extension user has the option of pressing a key to activate the system's relays.

Part I: Assign the Door Box Chime Tone

The circuit type is automatically set for DS1000 Analog Door Boxes plugged into DOOR1 or DOOR2 (extensions 324 and 325).

1. Enter the programming mode. You see:
USER: nnn
ENTER PROGRAM?
2. Enter **1801** + **HOLD**. You see:
1801:EXTENSION PROG
EXTENSION #?nnn
3. Enter the Door Box extension number (324 or 325) + **HOLD**. You see:
1801:EXT:nnn
PT TYP?DOOR BOX
4. Press **VOL Up** until you see:
1801:EXT:nnn
DOOR CHIME?nnnn
5. Enter the chime type (0-3) that the Door Box should use to alert the extensions in its Ring Group + **HOLD**.
0 = Normal Ring Group (Intercom) ringing
1 = Low pitch chime pattern
2 = Mid range pitch chime pattern
3 = High pitch chime pattern
6. Press **CONF** to go back to step 3 and select another Door Box to program.
OR
Press **CONF** twice to exit program 1801.

Part II: Set Up the Door Box Ring Group

To add the Door Box and other extensions into the Door Box Ring Group:

1. Enter the programming mode. You see:
USER: nnn
ENTER PROGRAM?
2. Enter **1802** + **HOLD**. You see:
1802:EXT OPT PART I
EXTENSION #?nnn
3. Enter the number of the Door Box (324 or 325) you want to assign to a Ring Group + **HOLD**. You see:
1802:EXT:nnn
ALLOW DND?nnn
4. Press **VOL Up** until you see:
1802:EXT:nnn
RING GROUP NUM?n
5. Enter the number of the Ring Group (1-8) to which the Door Box should belong + **HOLD**.
Ring Groups 1-8 are preset to use master numbers 600-607.

6. Press **CONF** to return to step 3 and add an extension to the Door Box Ring Group.
OR
Press **CONF** twice to exit program 1802.

Part III: Program Analog Door Box Relay Control

To set up the relays for Door Box strike control:

1. Enter the programming mode. You see:
USER: nnn
ENTER PROGRAM?
2. Enter **0201 + HOLD**. You see:
0201:TENANT OPTIONS
CALL WAIT?nnn
3. Press **VOL Up** until you see:
0201:TENANT OPTIONS
DOOR1 RELAY?nxxx
4. To have the analog Door Box plugged into DOOR1 activate its associated relay, dial **1 + HOLD + VOL Up**. You see:
0201:TENANT OPTIONS
DOOR2 RELAY?nxxx
5. To have the analog Door Box plugged into DOOR2 activate its associated relay, dial **1 + HOLD + VOL Up**. You see:
0201:TENANT OPTIONS
PAGE ZONE?nxxx
6. Press **CONF** to exit program 0201.

To activate the relay for each Door Box:

1. Enter the programming mode. You see:
USER: nnn
ENTER PROGRAM?
2. Enter **1801 + HOLD**. You see:
1801:EXTENSION PROG
EXTENSION #?nnn
3. Enter the extension number of the Door Box you want to program + **HOLD**. You see:
1801:EXT:nnn
PT TYP?10:DOOR BOX
4. Press **VOL Up** until you see:
1801:EXT:nnn
RELAY OWNER?nxxx
5. If the analog Door Box you are programming is connected to DOOR1, dial **1 + HOLD**.
OR
If the analog Door Box you are programming is connected to DOOR2, dial **2 + HOLD**.
6. Press **CONF** to go back to step 3 and select another Door Box.
OR
Press **CONF** twice to exit program 1801.

Feature Quick Steps

To place a call to the Door Box:

- Lift handset and press **ICM** + Dial the Door Box extension number.

To answer the Door Box chimes from a keyset:

- Lift handset or press **SPK**.

To control the system relay which in turn controls the door strike.

- To open the relay, press **FLASH** key or **OPEN** soft key.
To close the relay, press **FLASH** key or **CLOSE** soft key.

Flash

Extension users can access certain CO and PBX features (such as the telephone company's Call Waiting) by interrupting trunk loop current.

Flash allows an extension user to access certain telephone company and PBX features by interrupting trunk loop current. Flash lets an extension user take full advantage of whatever features the connected telco or PBX offers. You must set the Flash parameters for compatibility with the connected telephone company or PBX. By default, the Flash interval is 800 mS (.8 seconds).

Programming

To change the Flash interval:

1. Enter the programming mode. You see:
USER: nnn
ENTER PROGRAM?
2. Enter **0402 + HOLD**. You see:
0402:TRUNK TIMERS
CAMP-ON?nn
3. Press **VOL Up** until you see:
0402:TRUNK TIMERS
FLASH PBX
4. Enter the new Flash value (in milliseconds) + **Hold**.
5. Press **CONF** to exit program 0402.

Feature Quick Steps

1. Press **FLASH** (if applicable) + Dial the code for the desired CO/PBX feature.

Group Call Pickup

Easily answer a call ringing your Pickup Group, even if you don't know which extension is ringing.

Group Call Pickup allows an extension user to answer a call ringing an extension in their assigned Pickup Group. This permits co-workers in the same Pickup Group to easily "cover" each other's ringing calls. The user can intercept the ringing call by dialing a code or pressing a programmed Group Call Pickup key. The system has a maximum of 8 Pickup Groups, with an unlimited number of extensions in each group. However, an extension can be a member of only one pickup group. By default, the system has no Pickup Groups programmed.

Group Call Pickup can answer the following types of calls:

- Ringing Intercom calls
- Transferred calls
- Direct Inward Lines
- Calls on trunks assigned to the Pickup Group

To simplify picking up calls, an extension can have Programmable Function Keys assigned as Group Call Pickup keys. There are three types of Group Call Pickup keys: immediate ring, no ring (lamp only) or delayed ring.

Programming

There are 2 steps to setting up a Group Call Pickup:

- Part I: Assign extensions to Pickup Groups.
- Part II: Assign Group Call Pickup Keys to extensions.

Part I: Assign Extensions to Pickup Groups:

1. Enter **1802 + HOLD**. You see:

1802:EXT OPT PART I
EXTENSION #?nnn

2. Enter the number of the extension you want to add to a Pickup Group (e.g., 300) + **HOLD**. You see:
1802:EXT:302
ALLOW DND?nnn
3. Press **VOL Up** until you see:
1802:EXT:302
PK-UP GROUP NUM?n
4. Enter the number of the Pickup Group to which the extension should belong (1-8, 0=no group) + **CONF**.
5. Press **CONF** to go back to step 2 and select another extension to program.
OR
Press **CONF** twice to exit program 1802.

Part II: Assign Group Call Pickup Keys to Extensions:

1. Enter the programming mode. You see:
USER: nnn
ENTER PROGRAM?
2. Enter **1701** + **HOLD**. You see:
1701:KEY PROGRAMMING
EXTENSION #?nnn
3. Enter the number of the keyset extension (e.g., 300) you want to program (see Part I) + **HOLD**. You see:
1701:EXT:nnn
KEY NUMBER?n
4. Enter the number of the Programmable Function Key you want to assign as a Group Call Pickup Key (1-24, depending on keyset type) + **HOLD**. You see:
1701:EXT:nnn KEY:nn
nnnnnnnn
5. For the key selected, assign it as a Group Call Pickup Key (**09**=immediate ring, **10**=lamp only, **11**=delay ring), then enter the Pickup Group number (1-8) + **HOLD**.
6. Press **CONF** to go back to step 4 and select another key to program.
OR
Press **CONF** twice to go back to step 3 and select another extension to program.
OR
Press **CONF** three times to exit program 1701.

Feature Quick Steps

To answer a call ringing a phone in your Pickup Group:

1. Lift handset + Press flashing Group Call Pickup Key or dial *#.

Hotline

Hotline provides partner extensions with one-button calling and Transfer.

Hotline gives a keyset user with a programmed Hotline key one-button calling and Transfer to another extension (the Hotline partner). Hotline helps co-workers that work closely together. The Hotline partners can call or Transfer calls to each other just by pressing their Hotline key. By default, an extension has no Hotline keys assigned. Your Hotlines function as DSS/BLF keys and also show you the status of your partners' extensions:

Hotline Busy Lamp Indications	
When the key is:	The covered extension is:
Off	Idle or not installed
On	Busy or ringing
Flashing fast	In Do Not Disturb

Programming

Assign Hotline Keys to Extensions:

1. Enter the programming mode. You see:
USER: nnn
ENTER PROGRAM?
2. Enter **1701 + HOLD**. You see:
1701:KEY PROGRAMMING
EXTENSION #?nnn
3. Enter the number of the keyset extension (e.g., 300) you want to program + **HOLD**. You see:
1701:EXT:nnn
KEY NUMBER?n
4. Enter the number of the Programmable Function Key you want to assign as a Hotline Key (1-24, depending on keyset type) + **HOLD**. You see:
1701:EXT:nnn KEY:nn
nnnnnnnn
5. For the key selected, assign it as a Hotline Key (**05**), then enter the Hotline partner's extension number + **HOLD**.
6. Press **CONF** to go back to step 4 and select another key to program.
OR
Press **CONF** twice to go back to step 3 and select another extension to program.
OR
Press **CONF** three times to exit program 1701.

Feature Quick Steps

To place a call to your Hotline partner:

1. Press Hotline key.

To Transfer your trunk call to your Hotline partner:

1. Press Hotline key + Announce call or hang up.

To answer a call from your Hotline partner:

1. Speak toward phone.

Night Service / Night Ring

Use Night Service to reroute calls after hours.

Night Service redirects trunk calls to their night mode destination. For example, you can set up your system so calls that ring all phones during the day are answered by Voice Mail at night (see *Set Voice Mail to Answer at Night* on page 1-14 for more on how to set this up). Typically, the attendant or supervisor activates Night Service after normal working hours, when most employees are unavailable to answer calls.

By default, key 11 on an attendant keyset is a Night Key. This allows the attendant to activate the Night Mode system-wide.

Programming

There are three steps to setting up an extension so that it can enable Night Service:

Part I: Assign a Night Key to the telephone.

Part II: In Class of Service, enable the extension's ability to put the system in the Night Mode.

Part III: Assign Class of Service to extensions.

Part I: Assign a Night Key to the Telephone

- Enter the programming mode. You see:
USER: nnn
ENTER PROGRAM?
- Enter **1701** + **HOLD**. You see:
1701:KEY PROGRAMMING
EXTENSION #?nnn
- Enter the number of the keyset extension (e.g., 300) you want to program + **HOLD**. You see:
1701:EXT:nnn
KEY NUMBER?n
- Enter the number of the Programmable Function Key you want to assign as a Night Key (1-24, depending on keyset type) + **HOLD**. You see:
1701:EXT:nnn KEY:nn
nnnnnnnn
- For the key selected, assign it as a Night Key (**18**) + **CLEAR** + **HOLD**.
- Press **CONF** to go back to step 4 and select another key to program.
OR
Press **CONF** twice to go back to step 3 and select another extension to program.
OR
Press **CONF** three times to exit program 1701.

Part II: In Class of Service, Enable the Extension's Ability to Put the System in the Night Mode

- Enter the programming mode. You see:
USER: nnn
ENTER PROGRAM?
- Enter **0101** + **HOLD**. You see:
0101:CLASS OF SERVICE
COS NUM?n
- Enter the Class of Service (1-15) you want to program + **HOLD**. You see:
0101:COS:n
OFF PREM FWRD?nn

By default, the attendant (extension 300) has Class of Service 1. All other extensions have Class of Service 2.
- Press **VOL Up** until you see:
0101:COS:n
ACTIVATE NITES?nnn

- To allow the Class of Service to put the system in the night mode, dial **9** (for yes) + **VOL Up**.
OR
To prevent the Class of Service from putting the system in the night mode, dial **6** (for no) + **VOL Up**.
- Press **CONF** to return to step 3 and enter another Class of Service to program.
OR
Press **CONF** twice to exit program 0101.

Part III: Assign Class of Service to Extensions

- Enter the programming mode. You see:
USER: nnn
ENTER PROGRAM?
- Enter **1801** + **HOLD**. You see:
1801:EXTENSION PROG
EXTENSION#?
- Enter the number of the keyset extension you want to program (e.g., 300) + **HOLD**. You see:
1801:EXT:nnn
PT TYP?n:nnnnnn nnn
- Press **VOL Up** until you see:
1801:EXT:nnn
CLASS OF SERVICE?n
- Enter the Class of Service (1-15) you want to assign to the extension selected + **HOLD**. You see:
1801:EXT:nnn
CLASS OF SERVICE?n
- Press **CONF** and go back to step 3 to select another extension.
OR
Press **CONF** twice to exit program 1801.

Feature Quick Steps

To activate or deactivate Night Service:

- Do not lift the handset + Press the Night key.

To answer a call that rings a line or loop key at night:

- Lift handset + Press flashing line or loop key.

Off-Hook Signaling

Off-Hook Signaling helps important callers get through.

When a user is busy on a call, Off-Hook Signaling indicates that another caller is trying to get through. Off-Hook Signaling helps important callers get through, without waiting in line for the called extension to become free. After the user hears the off-hook signal, they can use other system features (such as Hold or Park) to process their active call and then answer the waiting call.

Off-Hook Signaling for Trunk Calls

While a user is on a trunk call, Off-Hook Signaling can be:

- While on a handset call, a flashing green Ring/Message lamp, line/loop key, and muted off-hook ringing. (While Off-Hook Signaling ringing is occurring, use **VOL Up** and **VOL Down** to adjust the volume of ringing.) This is the default setting.
- OR
- While on a handset or Handsfree call, a flashing green line/loop key and Camp-On tones.

Off-Hook Ringing for trunks occurs for DILs, transferred trunk calls, Voice Mail Automated Attendant transfers, Call Coverage Key calls, Group Call Pickup key calls, and Key Ring calls. Note that single line telephone users cannot receive off-hook ringing.

Off-Hook Signaling for Intercom Calls

While an extension user is on a handset call, they can receive Camp-On tones in the telephone handset from a co-worker that called them and dialed 2 to Camp-On. Turn to *Call Waiting / Camp-On* on page 2-3 for more on how to set this up. Off-hook ringing for Intercom calls is not available. Camp-On tones in the telephone handset is the default setting.

Off-Hook Signaling for Hotline Calls

While an extension user is on a handset call, they can receive Camp-On tones in the telephone handset when their Hotline Partner calls them by pressing their Hotline key. This is the default setting.

Programming

To program Off-Hook Signaling:

1. Enter the programming mode. You see:


```
USER: nnn
ENTER PROGRAM?
```
2. Enter **1802 + HOLD**. You see:


```
1802:EXT OPT PART I
EXTENSION#?nnn
```
3. Enter the number of the keyset extension you want to program (e.g., 300) + **HOLD**. You see:


```
1802:EXT:nnn
ALLOW DND?nnn
```
4. Press **VOL Up** until you see:


```
1802:EXT:nnn
OHS ICM?nnnnnnnn
```
5. Enter one of the following:
 - 0 - Disables Off Hook Signaling for Intercom calls.
 - 1 - Enables Off Hook Signaling Camp On tone for Intercom calls.
 - 3 - Enables Voice Over for Intercom calls. See *Voice Over* in the *Software Manual* on the *System Document CD* that came with your system.
6. Press **VOL Up**. You see:


```
1802:EXT:nnn
OHS HL?nnnnnnnn
```
7. Enter one of the following:
 - 0 - Disables Off Hook Signaling for your Hotline partner.
 - 1 - Enables Off Hook Signaling Camp On tone for your Hotline partner.

8. Press **VOL Up**. You see:
1802:EXT:nnn
OHS CO?nnnnnnnn
9. Enter one of the following:
0 = Disables Off Hook Signaling for trunk calls.
1 - Enables Off Hook Signaling Camp On tone for trunk calls.
2 - Enables Off Hook Ringing for trunk calls.
10. Press **VOL Up**. You see:
1802:EXT:nnn
HF REPLY ON ICM?nnn
11. Press **CONF** to go back to step 3 and select another extension to program.
OR
Press **CONF** twice to exit program 1802.

Programmable Function Keys

Programmable Function Keys simplify feature operation.

Each keyset has Programmable Function Keys. These Programmable Function Keys simplify placing calls, answering calls and using certain features. You can customize the function of any keyset's Programmable Function Keys from the User Programmable Features or from system programming.



The **22-Button Standard and Display Telephones** feature 12 Programmable Function Keys.



The **34-Button Display Telephone** features 24 Programmable Function Keys.



The **34-Button Super Display Telephone** also features 24 Programmable Function Keys.

The following chart lists the available Programmable Function Key assignments. For more on features associated with these keys, refer to the *Software Manual* on your *System Document CD*.

• Account Code	• Intercom Directory Dialing	• Park Orbit
• Call Coverage	• Line Key	• Reverse Voice Over
• Call Forwarding	• Loop Key, Fixed	• Save
• Call Timer	• Loop Key, Switched	• Speed Dial, Personal
• Group Pickup	• Message Center	• Speed Dial, System
• Headset Key	• Night Key	• Split Key
• Hotline	• Page Zones	• Voice Mail Record Key

Programming

To assign an extension's Programmable Function Keys:

- Enter the programming mode. You see:
USER: nnn
ENTER PROGRAM?
- Enter **1701 + HOLD**. You see:
1701:KEY PROGRAMMING
EXTENSION #?nnn
- Enter the number of the keyset extension you want to program (e.g., 300) + **HOLD**. You see:
1701:EXT:nnn
KEY NUMBER?n
- Enter the number of the key you want to program (1-24) + **HOLD**. You see:
1701:EXT:nnn KEY:n
nnnnnnnnn
The previously programmed assignment displays.
- For the key selected, enter the code for the feature you want to assign plus any additional data (see the chart below) + **VOL Up**.

You can optionally press ICM + VOL Up to scroll through the available key options.

Feature ¹	Key Code
Undefined (blank) Key	00
Switched Loop Key	01
Fixed Loop Key	02 + Trunk group (90-98)
Line Key	03 + Line number (e.g., 1)
Park Orbit Key	04 + Park Orbit (60-69)
Hotline Key	05 + Hotline Partner's Extension (e.g., 304)
Call Coverage Immediate Ring	06 + Covered Extension (e.g., 304)
Call Coverage No Ring (lamp only)	07 + Covered Extension (e.g., 304)
Call Coverage Delay Ring	08 + Covered Extension (e.g., 304)
Group Pickup Immediate Ring	09 + Pickup Group (1-16)



Feature ¹	Key Code
Group Pickup No Ring (lamp only)	10 + Pickup Group (1-16)
Group Pickup Delay Ring	11 + Pickup Group (1-16)
Page Zone	13 + Page Zone (0 for All Call, or zone 1-7)
System Speed Dial	14 + System Bin (200-299)
Personal Speed Dial	15 + Personal Bin (701-720)
Call Timer Key	16 + 1 for Manual Timer or 2 for Auto Timer
Voice Mail Record	17
Night Mode	18 + CLEAR
Split	20
Intercom Directory Dialing	21
Reverse Voice Over	23+ Covered Extension (e.g., 304)
Message Center	24 + Message Center Extension
Save	25
Account Code Key	26
Call Forwarding	27
Headset Key	28

¹ For more on these features, refer to the *Software Manual* on the *System Document CD*.

6. Program the next consecutive key on the console.
 OR
 Press **CONF** to go back to step 4 and select another key to program.
 OR
 Press **CONF** twice to go back to step 3 and select another extension to program.
 OR
 Press **CONF** three times to exit program 1701.

Feature Quick Steps

For more on these features, refer to the Software Manual on the System Document CD.

To use your line or loop key:

1. Press the trunk key.

To use your Park key:

1. Press Park key to Park or retrieve call.

To use your Hotline key:

1. Press key to call Hotline partner.

To use your Call Coverage key:

1. Press key to call covered extension or pick up ringing call.

You can set up the Call Coverage key for immediate ring, delayed ring, or no ring.

To use your Group Call Pickup key:

1. Press key to answer call ringing Pickup Group.

You can set up the Group Call Pickup key for immediate ring, delayed ring, or no ring.

To use your Page Zone key:

1. Press key to Page into assigned zone.

To use your System Speed dial key:

1. Press key to dial stored number.
System Speed Dial keys provide no BLF.

To use your Personal Speed dial key:

1. Press key to dial stored number.
Personal Speed Dial keys provide no BLF.

To use your Call Timer key:

1. Press key to start or stop the Call Timer.
If you have an Automatic Call Timer Key, the timer will start automatically after you place or answer an outside call.

To use your Conversation Record key:

1. Press key to record conversation in mailbox (must have Voice Mail installed).
A voice prompt and a periodic beep will remind you that your calls are being recorded.

To use your Night key:

1. Press key to put the system in the night mode.

To use your Split key:

Refer to the Split feature in the Software Manual on your System Document CD.

To use your ICM Directory key:

1. Press key to access Intercom Directory Dialing.

To use your Reverse Voice Over key:

1. While on a handset call, press key to place Private Intercom call to covered extension.

To use your Message Center key:

1. Press key to see how many messages are waiting in the Message Center.
OR
Press **SPK** + key to call Message Center mailbox.

To use your Save key:

1. While on a call, press key to Save the number you just dialed.
OR
While idle, press key to redial a previously saved number.
Save keys provide no BLF.

To use your Account Code key:

1. Place or answer outside call.
2. Press Account Code key.
The key flashes fast (green).
3. Enter your Account Code.
4. Press the Account Code key again.
The key is on (green).

To use your Call Forwarding key:

1. Press your Call Forwarding key.
The key flashes fast (red).
2. Select the Call Forwarding mode (e.g., 2, 4 or 6).
3. Enter the Call Forwarding destination (e.g., extension or **MW** for Voice Mail).
4. Select the Call Forwarding type (2 for all calls, 8 for trunk calls).
The key winks off (red) while your phone is forwarded.

To use your Headset key:

1. Press to turn the Headset mode on and off.
The key is on (red) while the Headset mode is enabled.

Speed Dial

Instead of dialing a long telephone number to reach a client or customer, use Speed Dial instead. Also, store Intercom digits for quick access to commonly used features.

Speed Dial gives an extension user quick access to frequently called numbers. There are two types of Speed Dial: System and Personal. Speed Dial numbers can be up to 32 digits long, using 0-9, # and *. Every Speed Dial number can have a programmed name up to 16 characters long. The name shows in the telephone display as the Speed Dial number dials out.

Speed Dial can store outside numbers and Intercom digits. The capability to store Intercom digits provides the user with “one-touch” access to features they use most often. For example, a user can have a Speed Dial bin that simplifies forwarding calls to Voice Mail or a co-worker.

System Speed Dial

System Speed Dial gives every extension access to the same set of stored numbers. The system provides up to 1000 System Speed Dial numbers. Depending on the system option selected, the system provides either 10, 100 or 1000 System Speed Dial numbers.

Personal Speed Dial

Personal Speed Dial provides extensions with 20 numbers stored privately for their own use. The Personal Speed Dial keys on a DSS Console access the same bins as the extension to which the console is attached.

Unique Speed Dial Entries

In addition to the digits 0-9, # and *, you can enter the following for additional dialing options:

For this option	Use this key:
Pause	MIC
Flash	FLASH

Storing Trunk Routing in a Speed Dial Bin

When you program a Speed Dial bin, you can select either a trunk or a Trunk Group over which the call should route. For example, you can enter 1 for trunk 1 or 90 for Trunk Group 90.

Centrex Compatibility

Speed Dial offers unique compatibility with connected Centrex services. A Speed Dial number can accommodate **both** placing a new call **and** outdialing the stored Speed Dial number on an active Centrex trunk. This enables features such as Centrex Transfer and Conference.

By default:

- All extensions can use Personal and System Speed Dial.
- There are no Personal or System Speed Dial numbers programmed (i.e., all bins are empty).
- Only the attendant (extension 300) can store System Speed Dial numbers.
- The system has 100 System Speed Dial numbers (200-299).
- Since the DS2000 system has no Trunk Groups defined by default, users should store trunk numbers (e.g., 1) instead of Trunk Groups when programming outside Speed Dial numbers.

Programming

To program System Speed Dial numbers:

This procedure is an alternative to using the #SP User Programmable Feature.

1. Enter the programming mode. You see:

```
USER: nnn
ENTER PROGRAM?
```

2. Enter **1101** + **HOLD**. You see:

```
1101:SYSTEM SPD DIAL
BIN?nnn
```

3. Enter the number of the system bin you want to program (200-299) + **HOLD**. You see:

1101:SPDL BIN:nnn
LINE/GRP/ICM:n
4. Enter the trunk number (e.g., 1) you want the system to use when dialing the stored number + **HOLD**.
 OR
 Enter the Trunk Group number (90-98) you want the system to use when dialing the stored number + **HOLD**.
 OR
 Press **ICM + HOLD** if you want to enter Intercom codes. You see:

1101:SPDL BIN:nnn
NUM?nnnnnnn
5. Enter the System Speed Dial number for the selected bin + **HOLD**. You see:

1101:SPDL BIN:nnn
NA?nnnnnnn

The Speed Dial number can be up to 32 digits long. If the number is longer than 16 digits, it automatically uses the next adjacent bin in addition to the bin you are programming.
6. Enter the name for the selected bin + **HOLD**.
See Keys for Entering Names below for more.
7. Go back to step 3 and select another bin to program.
 OR
 Press **CONF** to exit program 1101.



Keys for Entering Names					
Press this key:	Then one of these keys to enter the character in the white cell:				
	1	2	3	4	#
1	&	- (dash)	/ (backslash)	' (apostrophe)	1
2	A	B	C		2
3	D	E	F		3
4	G	H	I		4
5	J	K	L		5
6	M	N	O		6
7	P	Q	R	S	7
8	T	U	V		8
9	W	X	Y	Z	9
0	SPACE	:			0
*					*
#					

To enter characters in lower case (e.g., **e** instead of **E**), press **MW** before pressing the key in the first shaded column. Use **LND** to backspace over (erase) any characters you want to correct.

Feature Quick Steps

Personal Speed Dial

To Program a Personal Speed Dial Number:

1. Dial **#SP**.
2. Dial the Personal Speed Dial bin number (701-720). or
Press Personal Speed Dial Key (for bins 1-10), or
Press **DIAL** and the Personal Speed Dial Key for bins 11-20.
3. Press **HOLD**.
4. Enter the trunk number (e.g., 1) you want the system to use when dialing your stored number,
OR
Enter the Trunk Group number you want the system to use when dialing your stored number (e.g., 90)
OR
Skip this step if you want to enter Intercom codes.
5. Press **HOLD** + Enter the number you want to store + Press **HOLD**.
The Speed Dial number can be up to 32 digits long. If the number is longer than 16 digits, it automatically uses the next adjacent bin in addition to the bin you are programming.
6. Enter a name for the Speed Dial number + Press **HOLD**.
7. Repeat from step 2 to program another bin number, or press **SPK** to exit.

To dial a Personal Speed Dial Number:

1. Press **ICM** and dial #.
2. Dial the Personal Speed Dial bin number (701-720).

For one-button access to your Personal Speed Dial numbers:

1. Press Personal Speed Dial Key for bins 1-10, or
Press **DIAL** then Personal Speed Dial key for bins 11-20, or
Press Programmable Function key for Personal Speed Dial bin.

System Speed Dial

To Program a System Speed Dial Number:

1. Dial **#SP**.
2. Dial the System Speed Dial bin number (normally 200-299) + Press **HOLD**.
3. Enter the trunk number (e.g., 1) you want the system to use when dialing your stored number,
OR
Enter the Trunk Group number you want the system to use when dialing your stored number (e.g., 90).
4. Press **HOLD** + Enter the number you want to store + Press **HOLD**.
The Speed Dial number can be up to 32 digits long. If the number is longer than 16 digits, it automatically uses the next adjacent bin in addition to the bin you are programming.
5. Enter a name for the Speed Dial number + Press **HOLD**.
6. Repeat from step 2 to program another bin number, or Press **CONF** to exit.

To dial a System Speed Dial Number:

1. Press **ICM** and dial #.
2. Dial the System Speed Dial bin number (normally 200-299), or
Press Programmable Function Key for System Speed Dial bin.

Voice Mail

Voice Mail ends the frustration and cost of missed calls, inaccurately written messages and telephone tag, freeing up the company's receptionists and secretaries for more productive work.

The DS1000/2000 is fully compatible with the built in IntraMail and UltraMail Voice Mail with Automated Attendant systems, as well as the external NVM-Series Voice Mail with Automated Attendant systems.

- *Automated Attendant* automatically answers the system's incoming calls. After listening to a customized message, an outside caller can dial a system extension or use Voice Mail.
- Integrated *Voice Mail* enhances the telephone system with the features listed below.

Call Forwarding to Voice Mail

An extension user can forward their calls to Voice Mail. Once forwarded, calls to the extension connect to that extension's mailbox. The caller can leave a message in the mailbox instead of calling back later. Forwarding can occur for all calls immediately, for unanswered calls or when the extension is busy, or just for unanswered calls.

Leaving a Message

Voice Mail lets a keyset extension user easily leave a message at an extension that is unanswered, busy, or in Do Not Disturb. The caller just presses their Voice Mail key to leave a message in the called extension's mailbox. There is no need to call back later.

Transferring to Voice Mail

By using Transfer to Voice Mail, an extension user can Transfer a call to the user's own or a co-worker's mailbox. After the Transfer goes through, the caller can leave a message in the mailbox.

Conversation Record

While on a call, an extension user can have Voice Mail record the conversation. The keyset user just presses their Voice Mail Record Key or Interactive Soft Key. Once recorded, the Voice Mail stores the conversation as a new message in the user's mailbox. After calling their mailbox, a user can save, edit or delete the recorded conversation. For more on setting up a Conversation Record key turn to *Programmable Function Keys* on page 2-24.

Caution

The use of monitoring, recording, or listening devices to eavesdrop, monitor, retrieve, or record telephone conversations or other sound activities, whether or not contemporaneous with transmission, may be illegal in certain circumstances under federal or state laws. Legal advice should be sought prior to implementing any practice that monitors or records any telephone conversation. Some federal and state laws require some form of notification to all parties to a telephone conversation, such as using a beep tone or other notification methods or requiring the consent of all parties to the telephone conversation, prior to monitoring or recording the telephone conversation. Some of these laws incorporate strict penalties.

Personal Answering Machine Emulation

A keyset user can have their idle extension emulate a personal answering machine. This lets Voice Mail screen their calls, just like their answering machine at home. If activated, the extension's incoming calls route to the user's subscriber mailbox. Once the mailbox answers, the user hears two alert tones followed by the caller's incoming message. The keyset user can then:

- Let the call go through to their mailbox.
- Intercept the call before it goes to their mailbox.

Voice Mail Overflow

If Voice Mail automatically answers trunks, Voice Mail Overflow can reroute those trunks to an extension, Ring Group or UCD Hunting group when all Voice Mail ports are busy. During periods of high traffic, this prevents the outside calls from ringing Voice Mail for an inordinate amount of time. Without overflow, the outside calls ring Voice Mail until a port becomes available or the outside caller hangs up. For some basics on how to set up overflow, turn to *Having Voice Mail Pick Up Unanswered Calls* on page 1-15.

Message Center Mailbox

A Message Center Mailbox is a mailbox shared by more than one extension. Any keyset that has a Message Center Key for the shared mailbox can:

- Listen to the messages stored in the mailbox.
- Transfer calls to the shared mailbox.
- Use many other Voice Mail features previously available only at an extension's individual mailbox.

A Message Center Mailbox helps co-workers that work together closely — such as members of the same Pickup Group. For example, the group supervisor can send important messages to the shared Message Center Mailbox, to which any group member can respond when time allows. Each group member's Message Center Key flashes when messages are waiting.

Message Center requires a uniquely programmed Message Center key. Turn to *Programmable Function Keys* on page 2-24 for more.

Interactive Soft Key Shows New Messages

The Display and Super Display Telephone's interactive soft keys show the number of new messages in the user's mailbox. For example, if a Display Telephone user has 2 new messages in their mailbox, their soft key shows: **VM02**. If a Super Display Telephone user has 2 new messages in their mailbox, their Voice Mail soft key shows **V-MAIL 02**.

Programming

For basic Voice Mail programming, turn to *Voice Mail Setup* on page 1-11.

Feature Quick Steps

To call your mailbox:

1. Press **MW** or dial Voice Mail master number followed by your mailbox number.
2. If requested by Voice Mail, enter your security code.

To leave a message in a mailbox of an unanswered extension:

1. Press **MW**.

To activate or cancel Call Forwarding to your mailbox:

1. Press **ICM** + Dial ***3**.
2. Dial Call Forwarding type: (0 = Cancel forwarding, 2 = Busy/No Answer, 4 = Immediate, 6 = No answer).
3. Press **MW** + Dial **2** to forward all calls or **8** to forward just trunk calls.

To Transfer your active call to a mailbox:

1. Press **ICM** + Dial the number of the mailbox to receive the Transfer + Press **MW**.
2. Press **SPK** to hang up.

To record your active call in your mailbox:

1. Press Voice Mail Record key or Interactive Soft Key.
2. Press Voice Mail Record key, press line key, or hang up when you are done.

To activate Answering Machine Emulation:

1. Press **ICM** + Dial ***3** + Dial **7**.
2. Dial Answering Machine Emulation option (2 or hang up to forward all calls, 8 to forward just trunk calls).
When Answering Machine Emulation broadcasts your caller's message, you can:
 - Do nothing to have the caller's message automatically recorded in your mailbox,
 - Lift the handset to intercept the call and speak to your caller.

To cancel Answering Machine Emulation:

1. Press **ICM** + Dial ***30** + Press **SPK** to hang up.

To check your messages:

1. Press **MW**.

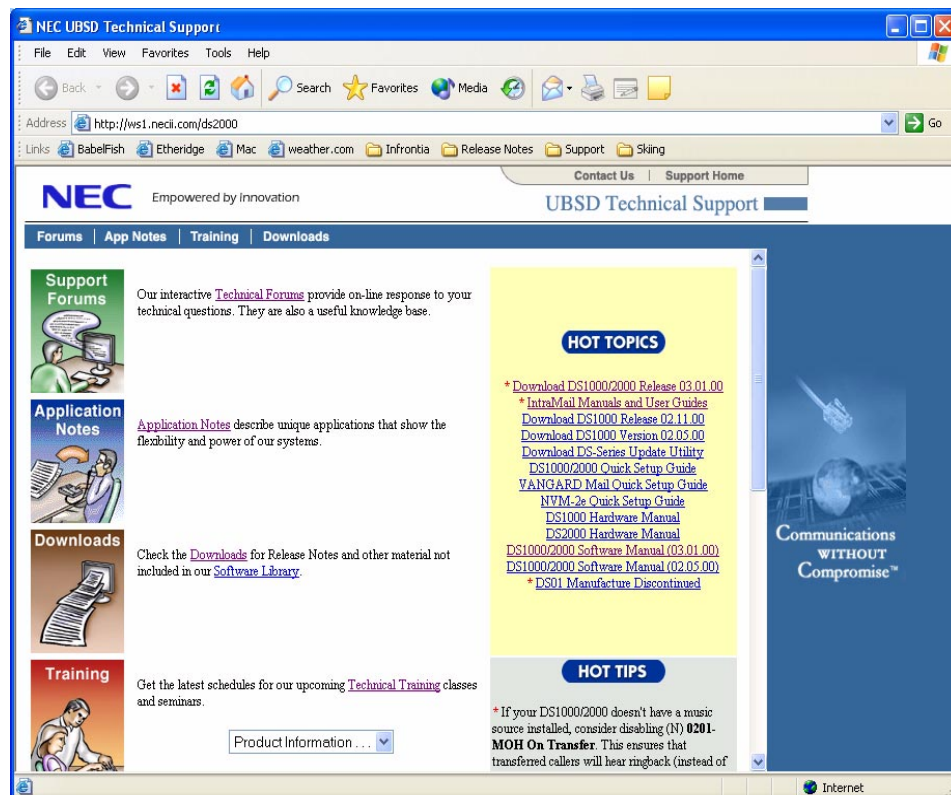
To use the Message Center

1. Press **SPK** or lift handset + Press the Message Center key.
2. If requested by Voice Mail, enter the security code for the Message Center mailbox.

Section 3: Additional Resources

On the Web

- For support questions and to download new software, go to <http://ws1.necii.com/ds2000>.



Printed System Documentation

The DS1000/2000 printed system documentation includes:

- **DS1000 Hardware Manual** (P/N 80200INS**) and **DS2000 Hardware Manual** (P/N 80000INS**) These Hardware Manuals provides comprehensive, step-by-step installation instructions for all the DS1000 and DS2000 components and options. Each manual also includes a Parts List and complete Specifications.
- **DS1000/2000 Software Manual** P/N 80000SWG** This detailed manual helps you understand, program, and use every system feature and programmable option. This book is a must for experienced technicians.
- **IntraMail System Guide** P/N 80044INS** Describes in detail the installation, features, and programming for the IntraMail built-in Voice Mail with Automated Attendant. This manual is essential for advanced IntraMail programming.
- **DS1000/2000 Feature Handbook** P/N 80000MFH** To quickly learn how to use the system features, read this Feature Handbook.
- **DS1000/2000 Multibutton Telephone Quick Reference Guide** P/N 80000MBG** These are the fold-out quick reference guides packed with each keyset telephone. The quick reference starts off with a tour around the telephone, and then guides the reader through the basics of telephone operation.
- **DS1000/2000 Single Line Telephone Quick Reference Guide** P/N 80000SLT** Similar to the Multibutton Quick Reference, this is the fold-out guide for single line telephone users.
- **DS1000/2000 Soft Key Glossary** P/N 80000GLO** If you want to learn more about the display telephone Interactive Soft Keys, this is the guide you'll need. It defines each soft key, and is indexed in several different formats. Just pick the format that's easiest for you to use.
- **DS1000/2000 Product Description** (P/N 80000PDG**) The Product Description Manual is an overview of your system's features and components. It is helpful as a Sales/Training tool, and is also a convenient feature glossary if your Software Manual isn't handy.
- **DS1000 Release Notes** (P/N 80200RNT**) and **DS2000 Release Notes** (P/N 80001RNT**) Release Notes highlight the latest enhancements to your system. You should always review these notes before installing.
- **DS1000/2000 Brochure** (P/N 80000BRO**) Read this color brochure for a quick overview of the DS1000/2000 telephone systems.

Contact your Sales Representative for help with purchasing this documentation.

On Your System Document CD

The System Document CD (P/N 80200DCD**) provides the DS1000 and DS2000 manuals and user guides in Adobe Acrobat PDF format. It also includes the latest version of the DS Series Update Utility and system software. The System Document CD has a point-and click interface and is organized in the following folders:

- **Software Manuals**
- **Hardware Manuals**
- **User Guides**
- **Release Notes**
- **DS Series Update Utility (including System Software)**
- **Brochure**
- **Product Description**
- **Labelmaker**
- **Training Materials**
- **Program Record Forms**
- **Acrobat Reader**

Reading PDF Documents

To read a PDF document, double-click on its folder and then double-click on the PDF file. If your PC has Adobe Acrobat (3.0 or higher) installed, the document will automatically open.

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