NEC

- Complete system documentation, including a detailed *Software Manual*, is provided on the *System Document CD* packed with your system.

- For additional resources, visit our Technical Support site on the web at **208.141.100.36/ds2000**.

If upgrading from a software version prior to 02.02.14:
- Use **9803 - Initialize Distinctive Ringing** to initialize Distinctive Ringing. *Following initialization, you must reset the system or unplug and then replug each telephone.* Refer to the *Software Manual* on the *System Document CD* for more.
- Use **9804 - Initialize Caller ID Log Utility** to initialize (clear) your Caller ID logs. Refer to the *Software Manual* on the *System Document CD* for more.

- Be sure your system's hardware configuration does not exceed the System Load Factor. See *System Load Factor Calculations* in your *Hardware Manual* for more.

When installing telephones and other station devices:
- Digital station ports (300-315 in DS1000, on installed and programmed PCBs in DS2000) *automatically* detect the type of connected device when the keyset, 2-OPX Module (both ports) or Digital Door Box is plugged in. It is no longer necessary to individually set circuit types **1801 - Extension Circuit Type**.

DS2000 Installation Notes

This software uses the following hardware default assignments:
- Slot CN1 = 16DSTU PCB (Extensions 300-315).
- Slot CN2-CN8 = Undefined.

When installing PCBs:
- After plugging in your PCBs and powering up the system, use **9902 -Slot Control** to enable the installed PCBs. See *Using Program 9902 in DS2000 to Add or Delete PCBs* on page 1-5 for more.

1. Start-up Programming

2. Customizing Features

3. Additional Resources

DS1000/2000

Quick Setup Guide

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:

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

Table of Contents

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.

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

In DS2000, there are no trunks enabled because there are no trunk PCBs programmed.

● After plugging in trunk PCBs, go to *Using Program 9902 in DS2000 to Add or Delete PCBs* on page 1-5. Also turn to *Programming Ringing at Keysets* on page 1-7 to make the trunks ring extensions.

All trunks (outside lines) 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 1-6.

Keysets

The circuit types for keyset extensions 300-315 are automatically set when the extension is plugged in.

● If your system is prior to software version 02.02.14, you have to set the extension's circuit type. See *Setting an Extension's Circuit Type* on page 1-6.

● To add more DS2000 keysets, go to *Using Program 9902 in DS2000 to Add or Delete PCBs* on page 1-5.

Keyset 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 2-20.

● 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?	*Programming the System* on page 1-3.
How do I add or Delete PCBs in DS2000?	*Using Program 9902 in DS2000 to Add or Delete PCBs* on page 1-5.
I want to default the system. What are the steps?	*Reloading the System Default Settings* on page 1-15.
Can I change the system password?	*Changing the System Password* on page 1-15.
Trunks and Ringing	
How do I turn trunk ringing on or off for certain extensions?	*Programming Ringing at Keysets* on page 1-7.
How can I make single line telephones ring for incoming calls?	*Programming Ringing at Single Line Telephones* on page 1-8.
I have DP (Dial Pulse) trunks, but the system default is DTMF. How do I make my trunks DP?	*Setting a Trunk's Circuit Type* on page 1-6.
How do I place outgoing calls from single line telephones?	*Placing Outgoing Calls from Single Line Telephones* on page 1-9.
Extension Setup	
When I plug in 34-Button Telephones, the last 2 rows of keys don't work. How do I fix this?	*Setting an Extension's Circuit Type* on page 1-6.
What do I program to restrict access *from* certain extensions *to* certain trunks?	*Setting Up Trunk Access Restrictions* on page 1-10.
We have a group of phones that should ring for each other's calls. How do I set this up?	*Call Coverage* on page 1-16.
How do the User Programmable Features work?	*User Programmable Features* on page 1-17.
Voice Mail Setup	
How do I set up Voice Mail?	*Basic Voice Mail Programming* on page 1-11.
Can I make the Voice Mail answer only at night?	*Set Voice Mail to Answer at Night* on page 1-13.
If a call rings an extension and does not get picked up, can I have Voice Mail answer it?	*Having Voice Mail Pick Up Unanswered Calls* on page 1-13.

1

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 **# * # ***

> **DS1000   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:
1. 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**.

Using Program 9902 in DS2000 to Add or Delete PCBs

Use *9902 - Slot Assignment* to enable any PCBs you have plugged into slots CN2-CN8. ***If you don't enable the PCBs plugged into slots CN2-CN8 in this program, they will not function.*** (Note that by default, slot CN1 is assigned as a 16DSTU PCB for extensions 300-315.)

Enabling PCBs

- *You can only enable a PCB if its slot is empty (unassigned) in programming.*
- To delete a PCB in slots CN2-CN8 (so you can enable it with a new assignment), see **Deleting PCBs in 9902 - Slot Assignment** below.

1

To add or delete a PCB:
1. Enter the programming mode.
2. Enter **9902** + **HOLD** and follow the charts below.

Enabling PCBs in 9902 - Slot Assignment

OR

Deleting PCBs in 9902 - Slot Assignment
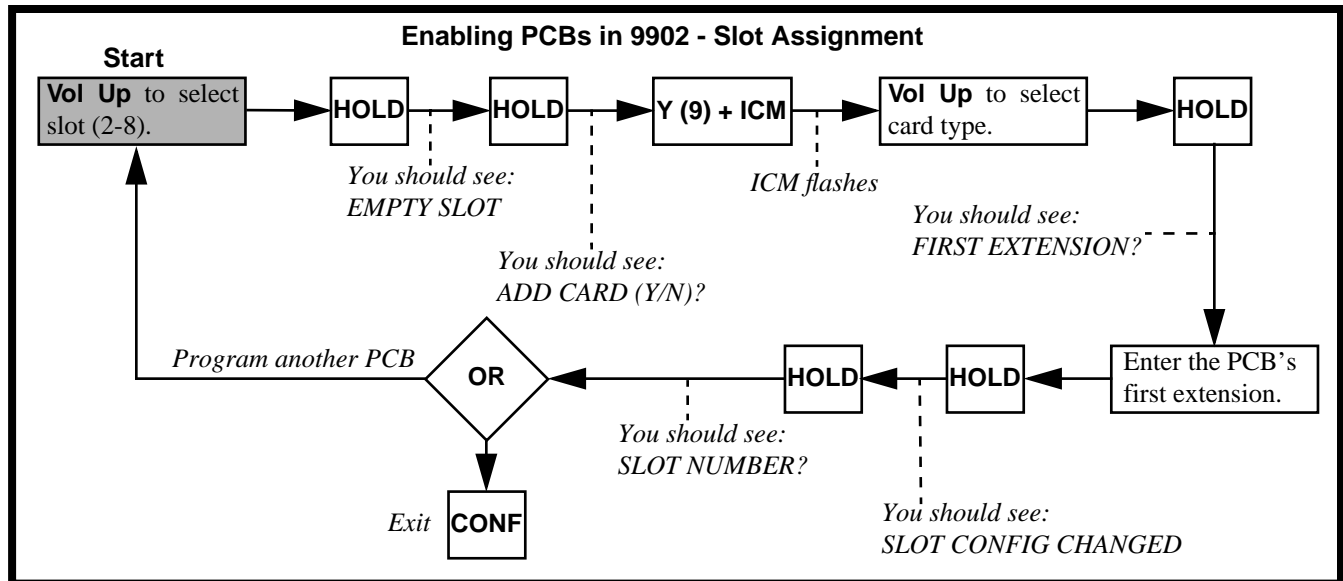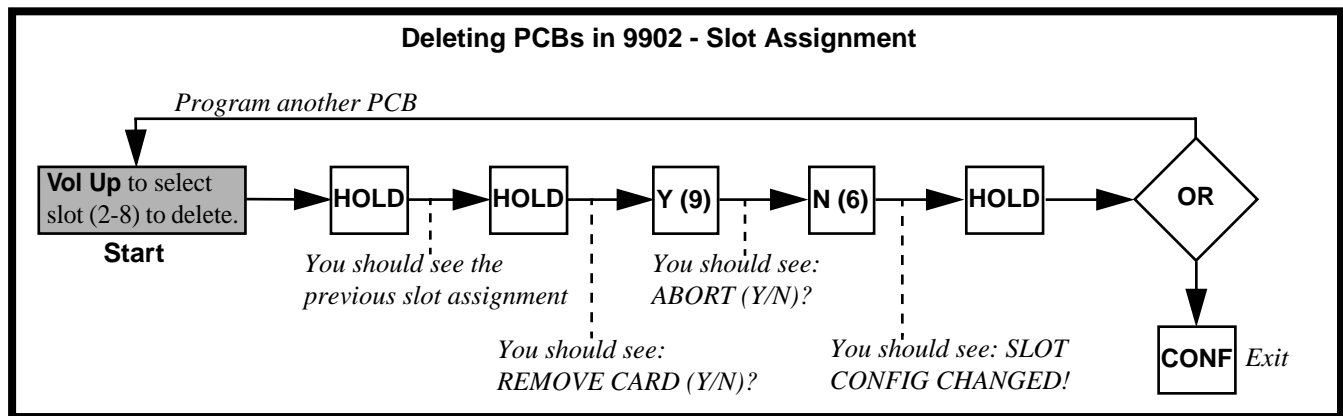
Setting a Trunk's Circuit Type

To set a trunk's circuit type:

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 number of the trunk you want to program (1-6 in DS1000, 1-48 in DS2000) + **HOLD**. You see:

    > **1001:TRUNK PORT:n**
    > **TYPE?nnnn nnnnnn nn**

4. 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)**

5. 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.

Setting an Extension's Circuit Type

In software versions prior to 02.02.14, the programmed circuit type for each extension has to match the telephone type. If you plug in a 34-Button Display telephone and don't change the circuit type, for example, the last 2 rows of programmable keys will not work. There are 4 types of keyset extensions:

Telephone Type	Circuit Type
22-Button Standard	01
22-Button Display	02
34-Button Display	06
34-Button Super Display	09

Analog extensions (e.g., single line telephones) plug into the system's analog ports. In DS1000, these are extensions 316-323. The circuit types for these extensions in DS1000 are preset and do not have to be programmed.

To set an extension's circuit type:
1. Enter the programming mode. You see:

    USER: nnn
    ENTER PROGRAM?

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

    1801:EXTENSION PROG
    STATION #?nnn

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

    1801:STA:nnn
    PT TYP?n:nnnn

4. Enter the extension circuit type that matches the telephone plugged in the extension port (**01**=22 Button Standard, **02**=22 Button Display, **06**=34-Button Super Display, **09**=34-Button Super Display, **15**=Analog station) + **HOLD**. You see:

    1801:STA:nnn
    PT TYP?n:nnnn

5. Enter a different circuit type for the extension (if you made a mistake).
                    OR
   Press **CONF** to select another extension.
                    OR
   Press **CONF** twice to exit program 1801.

Programming Ringing at Keysets

In DS1000 by default, trunks 1-6 appear 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.

In DS2000 by default, trunks 1-12 appear on line keys 1-12 on every keyset. These trunks ring at extensions 300-315 and flash (without ringing) at all other extensions.

There are two ways to change the ringing assignments on a keyset's line keys: using the system programming or the User Programmable Features.

Changing Ringing Assignments Using the System Programming

To change line key ringing:
1. Enter the programming mode. You see:

    USER: nnn
    ENTER PROGRAM?

2. Enter **1805** + **HOLD**. You see:

    1805:RING ASSIGNMENT
    STATION #?nnn

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

    1805:STA:nnn
    LINE NUMBER?n

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

    1805:STA: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:STA: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 1-17 for more.

Programming Ringing at Single Line Telephones

With software version 02.02.00 and higher, single line telephones follow the 1805 - Ring Assignments programming (see the previous page). If you have earlier software (or want an alternate way to make single line sets ring), consider setting up Ring Groups. There are three basic steps to do this:

● Part I: Set up a Ring Group Master Number.
● Part II: Terminate trunks to the Ring Group Master Number.
● Part III: Assign single line sets to the Ring Group.

Part I: Set up a Ring Group Master Number

The system will direct certain outside calls (set up in Part II below) to this master number.

1. Enter the programming mode. You see:

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

2. Enter **0511** + **HOLD**. You see:

```
0511:RING GROUP ID
GROUP NUM?n
```

3. Enter the number of the Ring Group you want to program (1-8) + **HOLD**. You see:

```
0511:RING ID-GROUP:n
EXT NUM?nnn
```

4. Enter an "unused" number for the Ring Group master number (e.g., 600) + **HOLD**.
5. Press **CONF** twice to exit program 0511.

Part II: Terminate Trunks to the Ring Group Master Number

Trunks terminated to the Ring Group Master number will ring the single line sets assigned to the Ring Group in Part III below. (Once terminated to the master number, a trunk will flash but no longer ring a keyset's line key.)

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?:1**
> **PICK-UP Group?n**

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

> **1003:TRUNK PORT?:1**
> **DAY TERM?KEY RING**

5. Enter the Ring Group master number (e.g., 600) + **HOLD**.
6. Press **CONF** to go back to step 3 and enter another trunk number.
    > OR
    Press **CONF** twice to exit program 1003.

Part III: Assign Single Line Sets to the Ring Group

1. Enter the programming mode. You see:

> **USER: nnn**
> **ENTER PROGRAM?**

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

> **1802:EXT OPT PART 1**
> **STATION #?nnn**

3. Enter the number of the single line extension you want to program (e.g., 319) + **HOLD**. You see:

> **1802:STA:nnn**
> **ALLOW DND?YES**

4. Press **Vol Up**, you see:

> **1802:STA:nnn**
> **RING GROUP NUM?n**

5. Enter the Ring Group number (e.g., 1) you assigned in Step I above + **HOLD**.
6. Press **CONF** to go back to step 3 and enter another trunk number.
    > OR
    Press **CONF** twice to exit program 1003.

Placing Outgoing Calls from Single Line Telephones

With DS1000 software version 02.02.00 and higher, single line telephone users can dial 9 for an outside line by default.

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 0 (which is the default dial 9 group).
●   Part II: Allow analog ports to have full or outgoing access to the trunks in group 0.

Part I: Assign Trunks to Trunk Group 0.

1. Enter the programming mode. You see:

> **USER: nnn**
> **ENTER PROGRAM?**

2. Enter **1002** + **HOLD**. You see:

> **1002:TRUNK GROUPS**
> **TRUNK GROUP?0**

3. Press **HOLD** to select Trunk Group 0. You see:

> **1002:TRUNK GROUP:0**
> **ORDR 1:TRK NUM?UND**

4. Dial **1** and press **Vol Up**. (This assigns trunk 1 as your first outgoing trunk in group 0.) You see:

> **1002:TRUNK GROUP:0**
> **ORDR 2:TRK NUM?UND**

5. Go back to step 4 and add another trunk to group 0.

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 0 Trunks.

1. Enter the programming mode. You see:

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

2. Enter **1803** + **HOLD**. You see:

   ```
   1803:LINE ACCESS
   STATION #?nnn
   ```

3. Enter the extension number for the single line telephone you want to program (e.g., 319) + **HOLD**. You see:

   ```
   1803:STA:nnn
   LINE NUMBER?n
   ```

4. Enter the number of the trunk you want to program + **HOLD**. You see (for the trunk selected):

   ```
   1803:STA: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:STA: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.

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
   STATION #?nnn
   ```

3. Enter the number of the extension for which you want to set up access restrictions + **HOLD**. You see:

   ```
   1803:STA: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:STA: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

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

Basic Voice Mail Programming

The basic Voice Mail programming is divided into four parts:
- Part I: Set up the Voice Mail Hunt Group.
- Part II: Enable Voice Mail programming.
- Part III: Set up the Voice Mail ports.
- Part IV: Program the Voice Mail system.

Part I: Set Up the Voice Mail Hunt Group

1. Enter the programming mode. You see:

   > **USER: nnn**
   > **ENTER PROGRAM?**

2. Enter **0510** + **HOLD**. You see:

   > **0510:ACD/UCD GRP ID**
   > **GROUP NUM?1**

3. Enter the number of the UCD Hunting Group you want to use for Voice Mail (1-8) + **HOLD**. You see:

   > **0510:ACD ID-GROUP:n**
   > **EXT NUM?nnn**

4. Enter the master number (e.g., 700) for the Voice Mail hunt group + **VOL Up**. You see:

   > **0510:ACD ID-GROUP:n**
   > **OVERFLOW DEST?NONE**

5. Press **CONF** twice to exit program 0510.

Part II: Enable Voice Mail Programming

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**
   > **V-MAIL INSTALLED?nn**

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

> **0201:TENANT OPTIONS**
> **V-MAIL MST EXT?nnn**

5. Enter the master number you programmed in Part I above (e.g., 700) + **HOLD**.
6. Press **CONF** to exit program **0201**.

Part III: Set Up the Voice Mail Ports

<u>Assign VX Ports</u>

First, you must assign the ports connected to your Voice Mail as Voice Mail (VX) ports.

● *Digital VANGARD* systems use digital station ports programmed as 2-OPX ports (**1801-Circuit Type** = 21). Be sure to set up the Voice Mail programming for both 2-OPX ports (e.g., 314 and 515).
● *All other* NVM-Series Voice Mail systems use analog ports (**1801-Circuit Type** = 15). (Note that in DS1000 the circuit type for the system's analog ports is automatically set up by default.)

1. Enter the programming mode. You see:

> **USER: nnn**
> **ENTER PROGRAM?**

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

> **1802:EXT OPT PART I**
> **STATION#?nnn**

3. Enter the extension number of the system's first Voice Mail port (e.g., 317) + **HOLD**. You see:

> **1802:STA:nnn**
> **ALLOW DND?nnn**

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

> **1802:STA:nnn**
> **VOICE MAIL PORT?nn**

5. Dial **9** (for yes) + **HOLD** + **CONF**. You see:

> **1802:EXT OPT PART I**
> **STATION#?nnn**

6. Go back to step 3 and enter the extension number of the next Voice Mail port (e.g., 318), then repeat steps 4 and 5 for that port (and any additional ports required).

                    OR

Press **CONF** to exit program 1802.

<u>Assign VX Ports to the Voice Mail Hunt Group</u>

Next, you must assign each Voice Mail port to the Voice Mail UCD Hunting Group (set up in Part I above).

1. Enter the programming mode. You see:

> **USER: nnn**
> **ENTER PROGRAM?**

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

> **1807:EXT OPT PART II**
> **STATION#?nnn**

3. Enter the extension number of the system's first Voice Mail port (e.g., 317) + **HOLD**. You see:

> **1807:STA:nnn**
> **STA VOICE CALL?nnn**

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

> **1807:STA:nnn**
> **HUNT TYPE?nnnn**

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

> **1807:STA:nnn**
> **MASTER NUM?nnnn**

6. Enter the Voice Mail master number you programmed in Part I + **CONF**.
7. Go back to step 3 and enter the extension number of the next Voice Mail port (e.g., 318), then repeat steps 4 and 5 for that port (and any additional ports required).

OR

Press **CONF** to exit program 1807.

Part IV: Program the Voice Mail System

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 keysets' line keys 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 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.

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
    STATION#?nnn
    ```

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

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

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

    ```
    1807:STA:nnn
    HUNT TYPE?nnnn
    ```

5.   Dial **3** (Busy/Ring No Answer Hunting for All Calls) and press **VOL Up**. You see:

> **1807:STA: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**.

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
   STATION #?300
   ```

3. Enter the number of the extension that you want to have Call Coverage Keys + **HOLD**. You see:

   ```
   1701:STA: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:STA: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:STA: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:

- Headset Mode
- Hotline Key Assignment[2]
- Off Hook Signaling Setup
- Paging (Incoming)
- Prime Line Assignment
- Programmable Function Key Assignment
- Programmable Function Key Ringing for Call Coverage, Hotline, Group Call Pickup, and Line Keys[2]
- Ringing Line Preference
- Speed Dial Bin Setup
- Time and Date
- Voice Announce (for incoming Intercom calls)
- Voice Over[1]

[1] This option is not available by default. See the *Software Manual* on the *System Document CD* for more.
[2] 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 2-23 for more on setting up these keys.

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

**User Programmable Features**
To program a feature, press **#** and the feature's code. For example, to enable incoming Paging, press **#** and dial **V P Y**, then **SPK** to hang up. By default, System Speed Dial and Time and Date are only available to the attendant.

Feature	Mnemonic	Operation
Headset	**#HS**	**#HS** + **Y** to enable or **N** to disable + **SPK** to exit
Hotline	**#HL**	**#HL** + Press flashing Hotline key + Enter extension for new Hotline partner + Program another Hotline key or **SPK** to exit.
Off Hook Signaling	**#OHS**	**#OHS** + Select mode (**C**=Outside line, **D**=Hotline, **I**=ICM) + Select option (see below) + **SPK** to exit. _Outside line options:_ **C**=Camp On tone, **O**=Off Hook Ringing, **0** = None _Intercom options:_ **C**=Camp On, **V**=Voice Over, **0**=None _Hotline Options:_ **C**=Camp On, **0**=None
Paging (Incoming)	**#VP**	**#VP** + **Y** to enable or **N** to disable + **SPK** to exit.
Prime Line Assignment	**#PLA**	**#PLA** + Press one of your flashing programmable keys or **ICM** + **SPK** to exit.
Programmable Function Key Assignments	**#KP**	**#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) + Press **VOL Up** or **VOL Down** to select another key to program, or **SPK** to exit.
Programmable Function Key Ringing	**#RAC**	_Call Coverage Keys:_ **#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.
	#RAL	_Outside Line Keys:_ **#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	_Group Call Pickup Keys:_ **#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**	**#RLP** + **Y** to enable or **N** to disable + **SPK** to exit.
Speed Dial, Personal	**#SP**	**#SP** + Press bin key (for bins 701-710) or **DIAL** then bin key (for bins 711-720) + **HOLD** + Enter outside line (e.g., 1), line group (e.g., 90), or **ICM** for Intercom feature + **HOLD** + Number to store + **HOLD** + Name + **HOLD** + Press another bin key or **SPK** to exit.
Speed Dial, System	**#SP**	**#SP** + Dial System Speed Dial bin number (e.g., 200) + **HOLD** + Enter outside line (e.g., 1), line group (e.g., 90), or **ICM** for Intercom feature + **HOLD** + Number to store + **HOLD** + Name + **HOLD** + Press another bin key or **SPK** to exit.
Time and Date	**#TD**	**#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.
Intercom Voice Announce (for incoming Intercom calls)	**#VA**	**#VA** + **V** for voice announce or **R** for ring + **SPK** to exit.

Figure 1-1: User Programmable Features

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 2-9 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**
    > **STATION#?**

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

    > **1801:STA:nnn**
    > **PT TYP?n:nnnnnn nnn**

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

    > **1801:STA: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:STA: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.

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**

3. 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**.

4. Press **CONF** to exit program 0201.

Part II: Enable/Disable Camp-On to a Busy Extension 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** until you see:

> **0101:COS:n**
> **CAMP-ON BUSY EXT?nnn**

5. To enable Camp-On, dial **9** (for yes).
> OR

To disable Camp-On, dial **6** (for no).

6. 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

1. Enter the programming mode. You see:

> **USER: nnn**
> **ENTER PROGRAM?**

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

> **1801:EXTENSION PROG**
> **STATION#?**

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

> **1801:STA:nnn**
> **PT TYP?n:nnnnnn nnn**

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

> **1801:STA: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:STA: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.

Feature Quick Steps

To Camp-On to a busy extension:

1. Call busy extension + Dial 2 (do not hang up).
> *If you hang up, the system converts your Camp-On to a Callback.*

2. 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, extensions 300-315 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 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.

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.)

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.

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.

Notes:
- DS1000 has built in Caller ID.
- DS2000 ATRU PCBs P/N 80010**B** and P/N 80011**B**, when used with software version 02.02.14 or higher, also have built in Caller ID. Check with your Sales Representative for availability.
- DS2000 versions prior to 02.0.14, as well as all DS2000 systems without ATRU PCBs P/N 80010**B** or 80011**B**, require the installation of Caller ID Daughter Boards on the ATRU PCBs.
- Caller ID is not available at 2-OPX ports.

Programming

There are 3 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).
- 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 DESCRIPTIOM
   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 Caller ID for the trunk in DS2000 software version 02.02.14 or higher with P/N 80011**B** ATRU PCBs or DS1000, dial 1 (for DSP) + **Vol Up**.

   OR

   To enable Caller ID for the trunk in DS2000 software versions prior to 02.02.14 and all versions without P/N 80011**B** ATRU PCBs, dial 2 (for daughter board) + **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) + **HOLD**.

　　　　　　　　OR

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

9.　　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
STATION#?
```

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

```
1801:STA:nnn
PT  TYP?n:nnnnnn nnn
```

4.　　Press **Vol Up** until you see:

```
1801:STA: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:STA: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 1-48 in DS2000) or Trunk Group (90-98 for Trunk Groups 0-8) + **HOLD**.

4.　　Press **CONF** to exit program 1302.

Specify the System's Home Area Code

The 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
```

   You HNPA entry displays.

6. Press **HOLD** again, then **CONF** twice 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.
   You can press a line key, loop key, Call Coverage key, or Hotline key:
   - Press a <u>line key</u> while the call is ringing or connected to the third party.
   - Press a <u>loop key</u> or <u>Call Coverage Key</u> while the call is ringing the third party.
   - Press a <u>Hotline key</u> 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 Keset

1. Press **CL**nn.
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 Keset

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.

DS1000/2000

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 Consoles 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 2-10.

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*.

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

DS1000

Hotlines to Extensions

Hotlines to Trunks

Note: Blank keys are undefined.
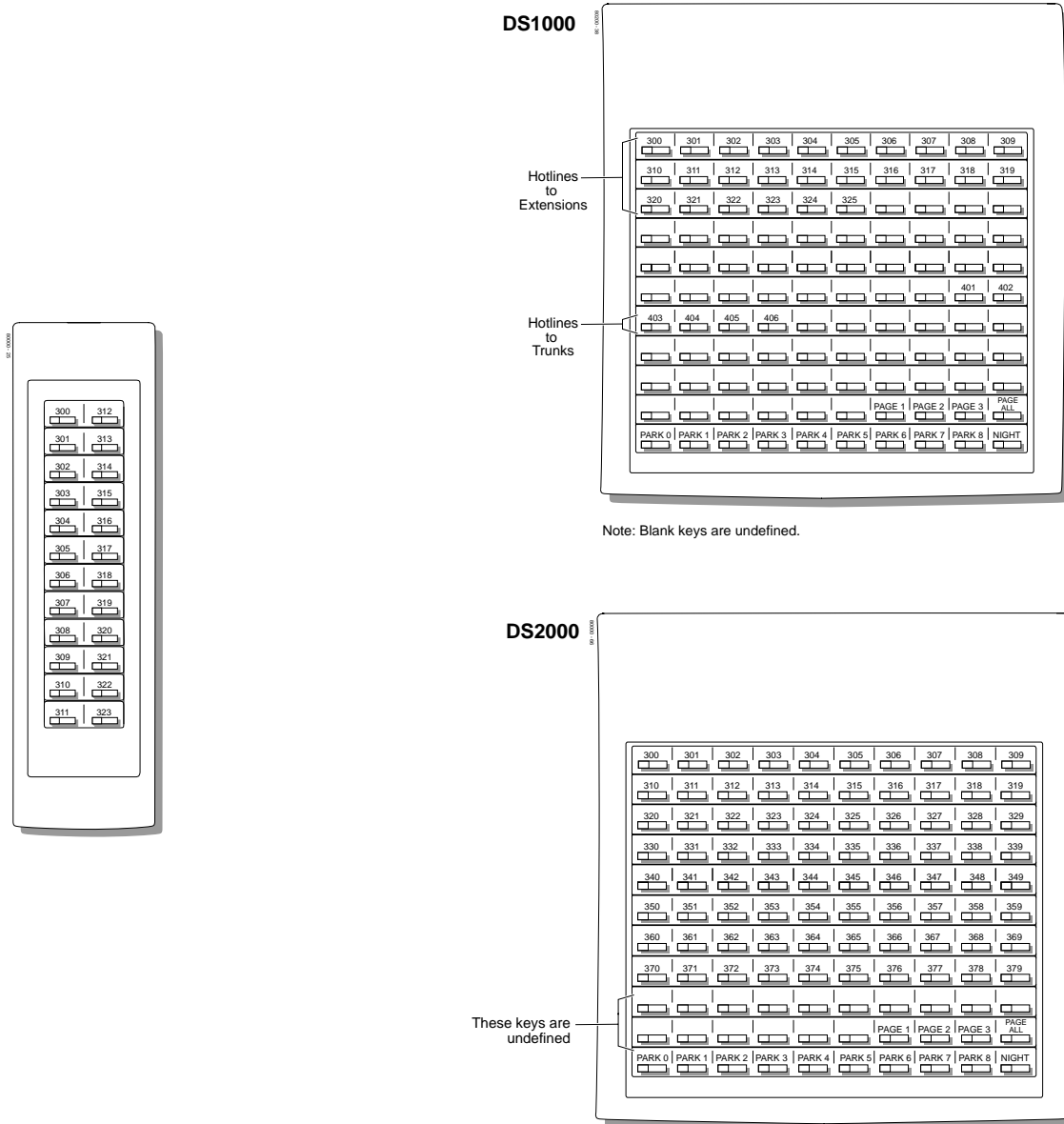
DS2000

These keys are undefined

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
    STATION?nnn

3. Enter the 34-button keyset extension you want to program (e.g., 300) + **HOLD**. You see:

    1801:STA:nnn
    PT TYPE?nn nnnnnnnnn

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

    1801:STA: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:STA: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**

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 DSS Console trunk (line) key:

1.   Press the DSS Console trunk key.

To use your DSS Console Park key:

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

To use your DSS Console Hotline key:

1.   Press key to call Hotline partner.

To use your DSS Console 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 (lamp only).

To use your DSS Console 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 (lamp only).

To use your DSS Console Page Zone key:

1.   Press key to Page into assigned zone.

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 Personal Speed dial key:

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

To use your DSS Console 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 DSS Console Night key:

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

To use your DSS Console Split key:

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

To use your DSS Console ICM Directory key:

1. Press key to access Intercom Directory Dialing.

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 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 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.

2

Door Box

Use a Door Box to remotely monitor an entrance door.

The Door Box 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.

There are two types of Door Boxes: Analog Door Box P/N 92245 (DS10000 only) and Digital Door Box P/N 80560. Both Door Boxes operate identically. There are, however, some differences:

● The Digital Door Box connects to a digital station port (e.g., 305). The number of Digital Door Boxes you can install may be limited by the System Load Factor. Refer to *System Load Factor Calculations* in your system's *Hardware Manual* for more.

● The Analog Door Box (DS1000 only) connects to a dedicated Door Box port (DOOR1 or DOOR2).

● The Analog Door Box (DS1000 only) can be mounted outside. Refer to the *Section 4, Optional Equipment* in the *Hardware Manual* on your *System Document CD* for more.

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. In DS2000, there is a single relay on the CPRU PCB. DS1000 has 2 relays, located in the DOOR1 and DOOR2 Analog Door Box jacks. In either system, you can assign these relays for Door Box strike control or Page Relay Control, but not both. (In DS1000, Digital Door Boxes cannot control system relays.)

Important Be sure the devices connected to the system's relay contacts are compatible with the following specifications	
DS1000	
Contact Configuration	Normally Open
Maximum Load	0.5A @ 120 VAC 1A @ 24 VDC
Maximum Initial Contact Resistance	100 mOhms
DS2000	
Contact Configuration	Normally Open
Maximum Load	60 mA @ 30 VDC 10 mA @ 90 VDC
Maximum Initial Contact Resistance	50 mOhms

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 in DS1000, DOOR1 (extension 324) and DOOR2 (extension 325) are reserved for Analog Door Boxes. There are no Digital Door Boxes assigned in either system.

Installing the Door Box

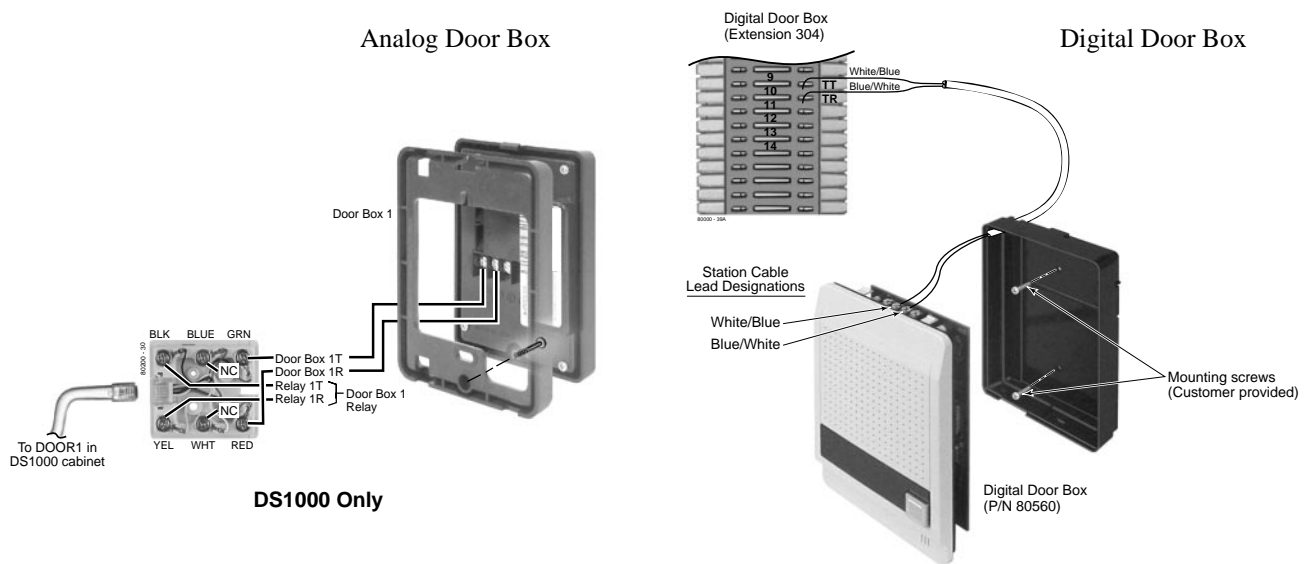1. Connect the Door Box according to the drawings below.

Figure 2-3: Connecting Door Boxes

2

Programming

There are 3 steps to setting up a Door Box:

● Part I: Assign the Door Box circuit type and 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 Circuit Type and Chime Tone

The Circuit Type option applies to Digital Door Boxes only. 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
    STATION #?nnn
    ```

3. Enter the Door Box extension number (in DS1000 use 300-315 for Digital Door Boxes, 324 or 325 for Analog Door Boxes) + **HOLD**. You see:

    ```
    1801:STA:nnn
    PT TYP?nn:nnn
    ```

4. Enter **10** + **Vol Up**. You see:

    ```
    1801:STA:nnn
    DCI TYPE?0
    ```

5. Press **Vol Up** until you see:

    ```
    1801:STA:nnn
    DOOR CHIME?nnnn
    ```

6. Enter the chime type (0-3) that the Door Box should use to alert the extensions in its Ring Group + **CONF**.
    0 = Normal Ring Group (Intercom) ringing
    1 = Low pitch chime pattern
    2 = Mid range pitch chime pattern
    3 = High pitch chime pattern

7. 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
    STATION #?nnn
    ```

3. Enter the number of the Door Box (in DS1000 300-315, 324 or 325) you want to assign to a Ring Group + **HOLD**. You see:

    ```
    1802:STA:nnn
    ALLOW DND?nnn
    ```

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

> **1802:STA:nnn**
> **RING GROUP NUM?n**

5. Enter the number of the Ring Group (1-8) to which the Door Box should belong + **CONF**.
6. Press **CONF** to return to step 3 and add an extension to the Door Box Ring Group.

<div align="center">OR</div>

Press **CONF** twice to exit program 1802.

To set up the Door Box Ring Group master number:
1. Enter the programming mode. You see:

> **USER: nnn**
> **ENTER PROGRAM?**

2. Enter **0511** + **HOLD**. You see:

> **0511:RING GROUP ID**
> **GROUP NUM?n**

3. Enter the number of the Ring Group you assigned to the Door Box in the previous procedure + **HOLD**. You see:

> **0511:RING ID-GROUP:n**
> **EXT NUM?nnn**

4. Enter an unused extension number (e.g., 600) for the Ring Group master number + **HOLD**.
5. Press **CONF** to go back to step 3 and enter another Ring Group number.

<div align="center">OR</div>

Press **CONF** twice to exit program 0511.

Part III: Program 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:
   DS1000

> **0201:TENANT OPTIONS**
> **DOOR1 RELAY?nnnn**

   DS2000

> **0201:TENANT OPTIONS**
> **CPU RELAY?nnnn**

4. DS1000
   To have the Analog Door Box plugged into DOOR1 activate its associated relay, dial **1** + **Vol Up**. You see:

> **0201:TENANT OPTIONS**
> **DOOR2 RELAY?nnnn**

   DS2000
   To have the CPRU relay activate for a Digital Door Box, dial **1** + **Vol Up**.
5. DS1000
   To have the Analog Door Box plugged into DOOR2 activate its associated relay, dial **1** + **Vol Up**.
   DS2000
   Skip to step 6.
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
   STATION #?nnn

3. Enter the extension number of the Door Box you want to program + **HOLD**. You see:

   1801:STA:nnn
   PT TYP?10:DOOR BOX

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

   1801:STA:nnn
   RELAY OWNER?nnnn

5. DS1000
   If the Analog Door Box you are programming is connected to DOOR1, dial **1** + **CONF**.
   OR
   If the Analog Door Box you are programming is connected to DOOR2, dial **2** + **CONF**.
   DS2000
   To assign the CPRU PCB relay to the Door Box, dial **1** + **CONF**.

6. Press **CONF** to go back to step 2 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
    STATION #?nnn
    ```

2. Enter the number of the extension you want to add to a Pickup Group (e.g., 300) + **HOLD**. You see:

    ```
    1802:STA:302
    ALLOW DND?nnn
    ```

3. Press **Vol Up** until you see:

    ```
    1802:STA: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.

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
    STATION #?nnn
    ```

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

    ```
    1701:STA: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:STA: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
    Pres **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

2

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. The Hotline key shows the status of the partner's extension:

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

Part II: 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**
> **STATION #?nnn**

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

> **1701:STA: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:STA: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

Pres **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 1-13 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 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

1. Enter the programming mode. You see:

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

2. Enter **1701** + **HOLD**. You see:

```
1701:KEY PROGRAMMING
STATION #?nnn
```

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

```
1701:STA:nnn
KEY NUMBER?n
```

4. 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:STA:nnn KEY:nn
nnnnnnnn
```

5. For the key selected, assign it as a Night Key (**18**) + **CLEAR** + **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.

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

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
   ACTIVATE NITES?nnn

5. 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**.

6. 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

1. Enter the programming mode. You see:

   USER: nnn
   ENTER PROGRAM?

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

   1801:EXTENSION PROG
   STATION#?

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

   1801:STA:nnn
   PT TYP?n:nnnnnn nnn

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

   1801:STA: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:STA: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.

Feature Operation

To activate or deactivate Night Service:

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

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

1. 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 call, Off-Hook Signaling for trunk calls 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.)

          OR

● While on a handset or Handsfree call, a flashing green line/loop key and Camp-On tones. This is the default setting.

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.

Programming

To program Off-Hook Signaling for trunk calls:

1. Enter the programming mode. You see:

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

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

   ```
   1802:EXT OPT PART I
   STATION#?nnn
   ```

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

   ```
   1802:STA:nnn
   ALLOW DND?nnn
   ```

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

   ```
   1802:STA:nnn
   OHS CO?
   ```

5. To enable Off-Hook Signaling Camp-On tones for the extension, dial **1** + **HOLD**.

             OR

   To enable off-hook ringing for the extension, dial **2** + **HOLD**.

6. 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.

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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*.

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

Programming

To assign an extension's Programmable Function Keys:

1. Enter the programming mode. You see:

   USER: nnn
   ENTER PROGRAM?

2. Enter **1701** + **HOLD**. You see:

   1701:KEY PROGRAMMING
   STATION #?nnn

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

   1701:STA:nnn
   KEY NUMBER?n

4. Enter the number of the key you want to program (1-24) + HOLD. You see:

   1701:STA:nnn KEY:n
   nnnnnnnnn

   The previously programmed assignment displays.
   To be able to program all 24 keys on a 34-button keyset in software versions prior to 02.02.14, you must set the correct circuit type. See Setting an Extension's Circuit Type on page 1-6 for more.

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 key options.*

Feature[1]	Key Code
Undefined (blank) Key	**00**
Switched Loop Key	**01**
Fixed Loop Key	**02** + Trunk group (0-8)
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)
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

Feature[1]	Key Code
Split	**20**
Intercom Directory Dialing	**21**
Reverse Voice Over	**23**+ Covered Extension (e.g., 304)
Message Center	**24** + Message Center Extension
Save	**25**

[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.

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 0.

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 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 for Trunk Groups 0-8) 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 Entering Speed Dial Names (Figure 2-4) *on the next page for more.*

7. Go back to step 3 and select another bin to program.

   > OR

   Press **CONF** to exit program 1101.

2

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)[1]	**/** (backslash)[1]	**'** (apostrophe)[1]	**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.

[1]In software versions prior to 02.00.00, the codes for 1 + 2, 1 + 3, and 1 + 4 were not available.

Figure 2-4: Entering Speed Dial Names

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 for Trunk Group 0)
   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 for Trunk Group 0).
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.

2

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 system is fully compatible with the NVM-Series Voice Mail with Automated Attendant Systems. These systems provide telephone users with comprehensive Voice Mail and Automated Attendant features.

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 following features:

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 2-23.

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 1-13.

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 2-23 for more.

Interactive Soft Key Shows New Messages

The Display and Super Display Telephone 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 **ICM** + 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** + Press **SPK** to hang up.

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**.
1.   Dial Answering Machine Emulation option (2 or hang up to forward all calls, 8 to forward just trunk calls) + Press **SPK** to hang up.
      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.

2

Section 3:

Additional Resources

On the Web

- For support questions and to download new software, go to **208.141.100.36/ds2000**.
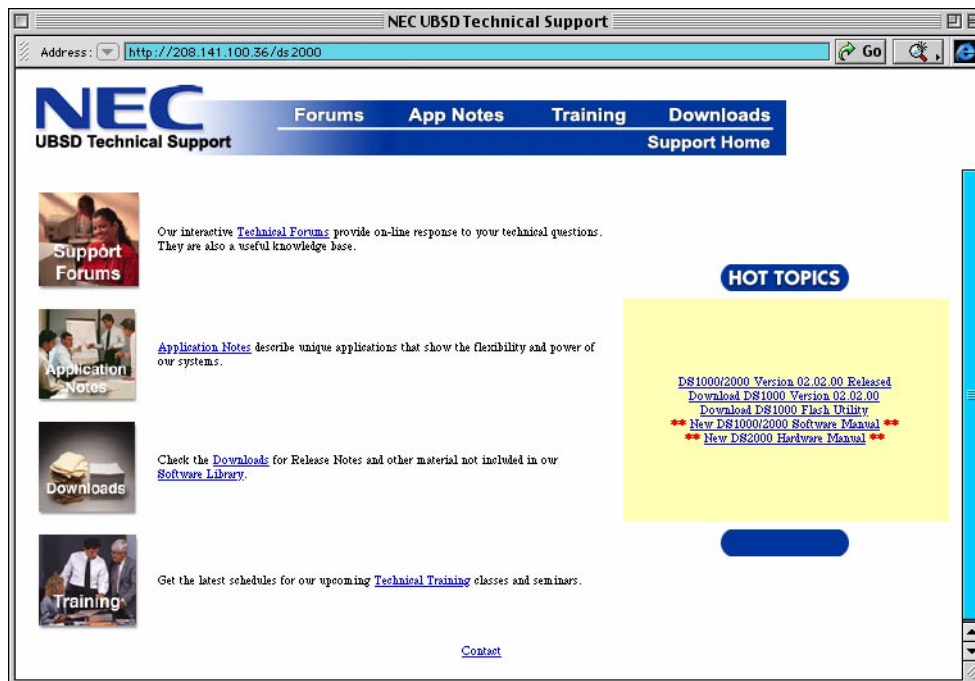
Printed System Documentation

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.
- **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. They are shipped automatically with each DS1000 and DS2000 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 multimedia hardware guides, the latest version of the DS 1000 Flash Utility, and DS1000 System software. The System Document CD has a point-and click interface and is organized in the following folders:

- **Software Manuals**
- **Hardware Manuals**
- **Multimedia Hardware Guides**
- **User Guides**
- **Release Notes**
- **DS1000 Flash Utility (including DS1000 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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NEC

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

Other Important Telephone Numbers

Sales: 203-926-5450
Customer Service: 203-926-5444
Customer Service FAX: 203-926-5454
Technical Service: 203-925-8801
Discontinued Product Service: 900-990-2541
Technical Training: 203-926-5430
Emergency Technical Service (After Hours) 203-929-7920
     (Excludes discontinued products)