

Lucent Technologies
Bell Labs Innovations



DEFINITY[®]
Enterprise Communications Server
Release 6
Console Operations

555-230-700
Comcode 108049750
Issue 3
August 1997

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- Telecommunications Terminal Equipment (TTE) i-CTR3 BRI and i-CTR4 PRI

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Acknowledgment

This document was prepared by Product Documentation Development, Lucent Technologies, Denver, CO.

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Introduction

1

If you are a console operator, this book is for you! It is designed to show you the physical layout of your computer, how to perform standard and specialty functions, and how to maintain and clean your console. It also provides information specific to operating your console in a Centralized Attendant Service (CAS) environment.

NOTE:

This guide does not cover operations associated with Hospitality Services and Automatic Call Distribution (ACD). Information on these groups of features can be found in the following documents:

- *DEFINITY Communications System Generic 1 and Generic 3 Hospitality Operations, Issue 3, 555-230-723*
- *DEFINITY Enterprise Communications Server Release 5 — Automatic Call Distribution (ACD) Agent Instructions, Issue 5, 555-230-722*
- *DEFINITY Enterprise Communications Server Release 5 — Automatic Call Distribution (ACD) Supervisor Instructions, Issue 4, 555-230-724*

The rest of this book includes:

- [Chapter 2, "Understanding the Console Layout"](#), describes and illustrates the basic and enhanced versions of the two console models. It also describes information that appears on the console's alphanumeric display and tones heard at the console.
- [Chapter 3, "Operating the Console"](#), contains step-by-step instructions for placing calls, transferring calls, placing callers on hold, placing conference calls and handling emergency calls.

- [Chapter 4, "Using the Features"](#), describes of features associated with the console and provides step-by-step instructions where applicable.
- [Chapter 5, "Centralized Attendant Service"](#), describes CAS operations for handling CAS calls, CAS night service, and CAS backup procedures.
- [Chapter 6, "Routine Maintenance"](#), describes routine procedure for checking the console, cleaning the console; also contains information for handling the console after a commercial power failure.
- [Chapter A, "References"](#), lists other telecommunications documents associated with the console.
- [Glossary and Abbreviations](#) provides an alphabetical listing and brief definitions of words and terms used with the attendant console and communications systems.
- [Index](#) provides an alphabetical listing of the information within this guide. For ease of use, all key words within a title or term are listed.

Conventions Used in This Document

- Console buttons are shown as: CANCEL
- Console lamps are shown as: **Atnd**
- Alphanumeric displays appear as:

a=	TOM BROWN	3062
----	-----------	------

Security Measures

For detailed information on securing your systems from unauthorized use please see *BCS Products Security Handbook*. This document addresses security issues related to consoles including:

- Procedures for console operators when they receive hangup or silence calls
- Physical security
- Class of service
- Facility restriction levels and alternate facility restriction levels
- Console operator-controlled phones
- Rerouting calls to console operators
- Changing barrier codes
- Sending calls to console operators
- Console operator-controlled remote access
- Sending reports to console operators

Understanding the Console Layout

2

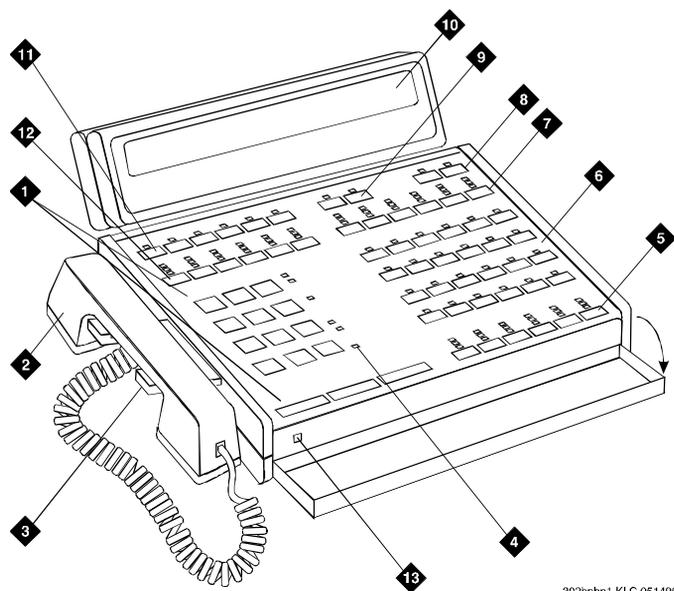
Your console is a powerful communications tool. With it, you function as a communications hub by managing calls and performing a variety of special functions. The goal of this chapter is to familiarize you with the console layout.

At the end of this chapter, you will be able to describe the layout of your console

Physical Layout of Your Console

At first glance, your console may look like an oversized phone with a few too many buttons and lamps (lights). While your console can function like a phone, it also manages several additional functions. In fact your console, with its many buttons and lamps, has functional groups designed to manage outside lines, incoming calls, and special features.

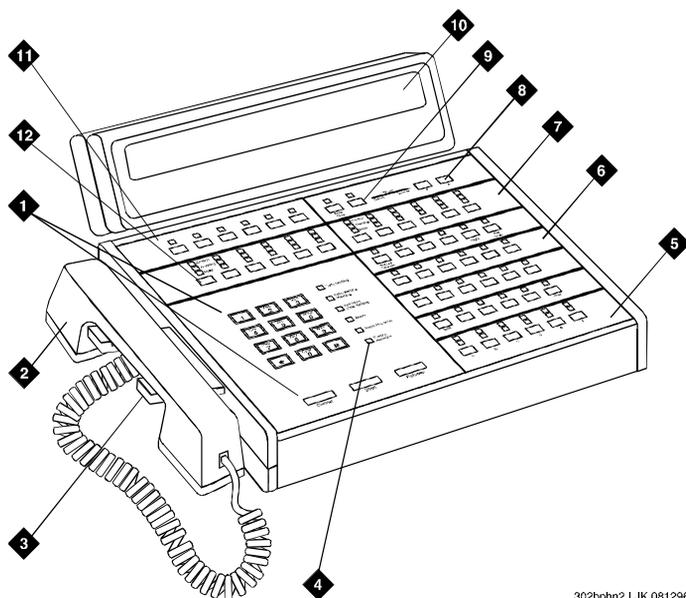
Two types of consoles are described in this chapter, the 302A/B and the 302C console. You may have a basic or enhanced version of these consoles. The following section contains drawings of basic and enhanced 302A/B and 302C consoles followed by information on their layout. Since information in this section is organized by basic and enhanced consoles, check these drawings to determine which type of console you have before proceeding.



302bphn1 KLC 051496

Figure 2-1. 302A/B Console

- | | |
|---|----------------------------------|
| 1. Keypad dialing | 8. Volume-control buttons |
| 2. Handset | 9. Select-button |
| 3. Handset cradle | 10. Alphanumeric-display buttons |
| 4. Warning lamps and call waiting lamps | 11. Display-mode buttons |
| 5. Call-appearance buttons | 12. Outside-line buttons |
| 6. Special-features buttons | 13. Lamp-test switch |
| 7. Outside-line buttons | |



302bphn2 LJK 081296

Figure 2-2. 302C Console

- | | |
|---|----------------------------------|
| 1. Keypad dialing | 7. Outside-line buttons |
| 2. Handset | 8. Volume-control buttons |
| 3. Handset cradle | 9. Select button |
| 4. Warning lamps and call waiting lamps | 10. Alphanumeric-display buttons |
| 5. Call-appearance buttons | 11. Display-mode buttons |
| 6. Special-features buttons | 12. Outside-line buttons |

Outside-Lines Buttons Area

The outside-lines buttons area allows you to choose an outside line or can be dedicated for paging system users. The outside-lines buttons area includes:

- Labeled buttons representing outside lines
- A **busy** lamp that lights when all outside lines are busy
- A **warning** lamp that lights when a predetermined number of outside lines are busy
- A **control** lamp indicating that an outside line is in use

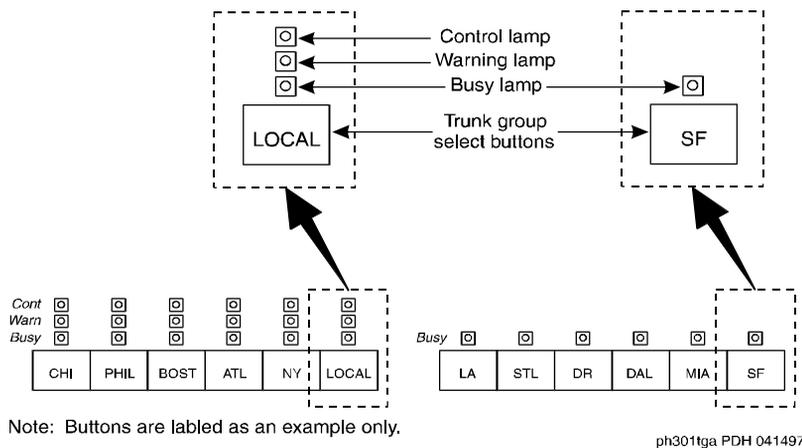


Figure 2-3. Sample Outside-Lines Buttons Area (basic console)

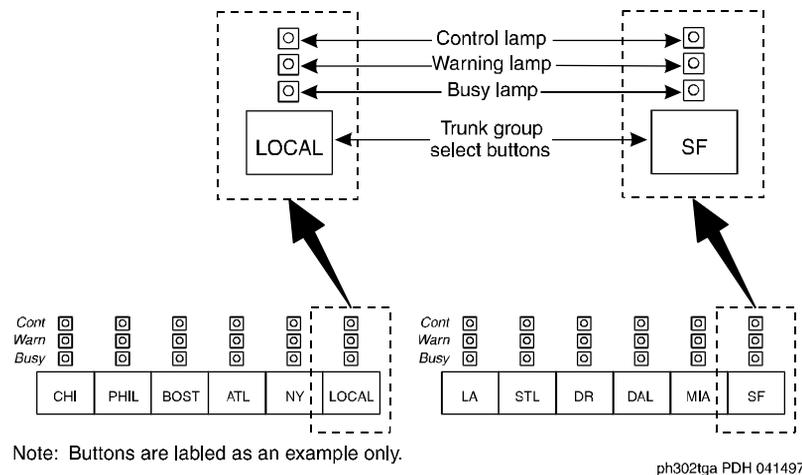


Figure 2-4. Sample Outside-Lines Buttons Area (enhanced console)

Call Appearance Buttons

The call handling buttons area allows you to answer calls, place calls, or place calls on hold. It includes:

- A call appearance button for answering or placing calls
- An **Atnd** lamp that lights when you answer or place a call. This lamp flashes when an incoming call comes to the console, or when a transferred call returns to the console.
- A **Hold** lamp that lights when you place a call on hold. This lamp flashes when a call remains on hold longer than the acceptable time limit that is programmed on your console.

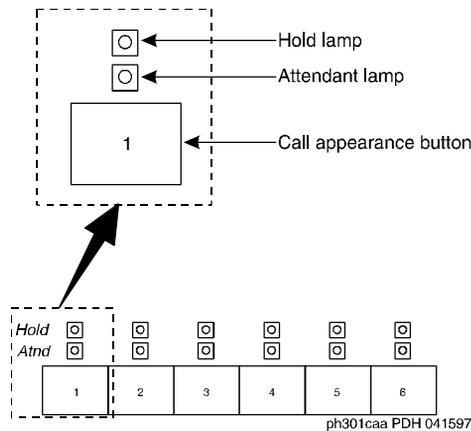


Figure 2-5. Call Appearance Buttons and Lamps

Dialing Keypad Area

The dialing keypad area has several buttons and lamps used for processing calls or notifying you of calls that are waiting to be answered, system-detected alarms, and lines that are available for placing calls.

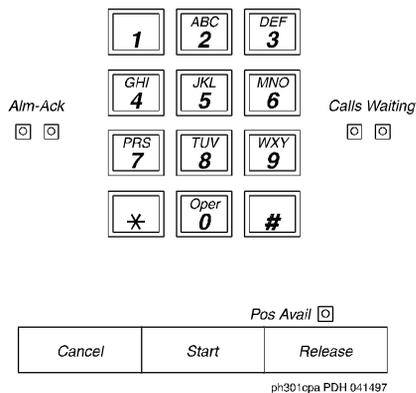


Figure 2-6. Call Processing Area (basic console)

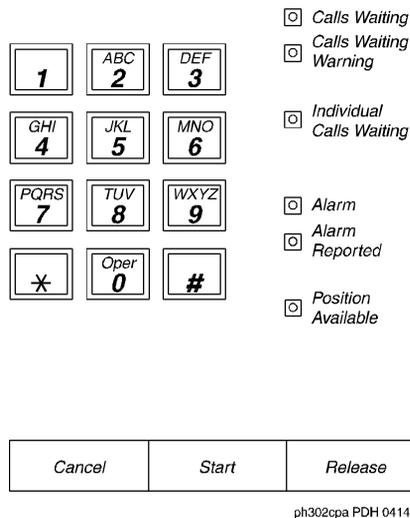


Figure 2-7. Call Processing Area (enhanced console)

The call-appearance buttons allow you to:

- Cancel a Call

The CANCEL button allows you to abort a call procedure without disconnecting parties who are on the line.

- Start a Call

The START button allows you to initiate a call or to transfer a call.



NOTE:

If you have Autostart, you can begin a call without pressing any button.

- Terminate a Call

The RELEASE button disconnects you from a call and prepares the console for the next call.

The Call Processing lamps notify you that the following conditions exist:

Table 2-1. Call Processing Indicators (enhanced console)

Lamp Name	Condition	Meaning	Action
Alarm	Lighted	Maintenance required	System automatically contacts your maintenance provider
Alarm/ Alarm Reported	Lighted	Successful communication to your maintenance provider	n/a
	Flashing	Unsuccessful communication to your maintenance provider	Contact your system manager
	Dark	Maintenance problem resolved	n/a
Calls Waiting	Lighted	Call is waiting to be answered	Answer call at your earliest convenience

Continued on next page

Table 2-1. Call Processing Indicators (enhanced console) — Continued

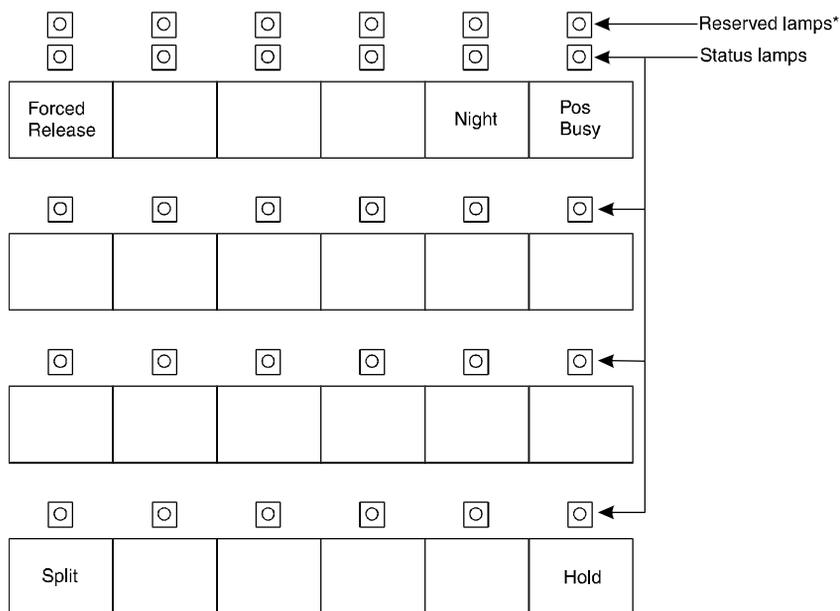
Lamp Name	Condition	Meaning	Action
Calls Waiting Warning	Lighted	Maximum number of calls are in the waiting queue	Answer calls as soon as possible or get assistance
Individual Calls Waiting	Lighted	Call to your personal extension needs to be answered	Answer call as soon as possible
Pos Avail	Lighted	Console available for incoming calls	n/a
	Dark	One of the following conditions exists: <ul style="list-style-type: none"> ■ You are on a call. ■ A call has arrived at the console. ■ The handset or headset is unplugged. ■ You pressed the Pos Busy button. ■ You placed the system in night-service mode. 	n/a

Table 2-2. Call Processing Indicators — Basic Console

Lamp Name	Condition	Meaning	Action
Alm-Ack	Lighted	Maintenance required	Contact your system manager
Calls Waiting	Lighted	Call needs to be answered	Answer call at your earliest convenience
Pos Avail	Lighted	Console available for incoming calls	n/a
	Dark	One of the following conditions exists: <ul style="list-style-type: none"> ■ You are on a call. ■ A call has arrived at the console. ■ The handset or headset is unplugged. ■ You pressed the Pos Busy button. ■ You placed the system in night service mode. 	n/a

Special Features

The special features area of your console allows you to perform standard and specialty operations. Your console is configured with features purchased by your company. Your system manager can provide a list of features available to you. For specific feature information, refer to [Chapter 4, "Using the Features"](#).



*Reserved lamps are on basic console only.

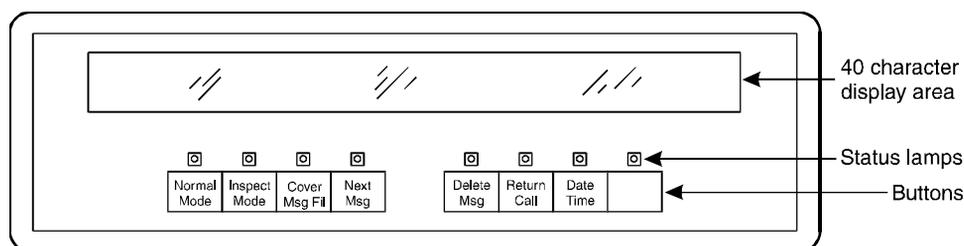
Note: Unlabeled buttons are available for assignment.

ph310ffb PDH 041597

Figure 2-8. Feature Button Area

The Alphanumeric Display

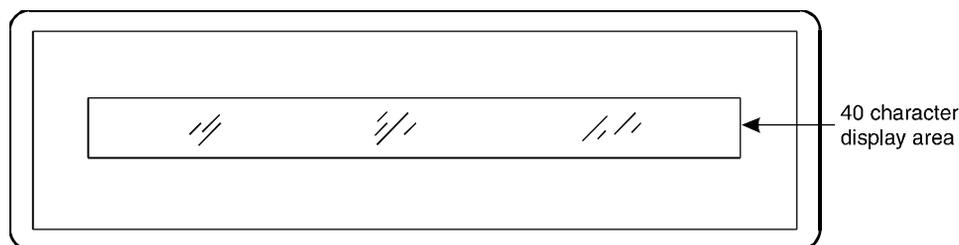
The alphanumeric display provides information about callers, called parties, call status, and call features. Your console has 9 buttons in the alphanumeric display area that function as different modes for viewing information. On the basic console, they are located on the display module. On the enhanced console, they are located on the main console.



Note: Buttons are labeled as an example only.

ph301and PDH 041597

Figure 2-9. Alphanumeric Display (basic console)



ph302and PDH 041597

Figure 2-10. Alphanumeric Display (enhanced console)

These display mode buttons are as follows:

 **NOTE:**

Your system manager may change The function of each button.

- **NORMAL MODE** (comes with every console)
This button displays call-related information for active, incoming calls and console-originated calls. For more information on information that displays in normal mode, see [Displaying in Normal Mode](#) later in this chapter.
- **INSPECT MODE**
This button displays call-related information for held calls when you are on another call.
- **DATE TIME**
This button displays the current time of day and date for five seconds.
- **TIMER (Elapsed Time)**
This button displays elapsed time in hours, minutes, and seconds. Timing begins when you press the **TIMER** button and stops when you press the button again. The elapsed time information disappears when you press the button a third time.
- **COVER MSG RT (Coverage Message Retrieval)**
This button retrieves Leave Word Calling (LWC) messages for system users. Leave Word Calling allows callers to leave messages for called parties on a message system that you can access from your console.
- **NEXT**
This button displays the next stored LWC message. If you are in Cover Msg Rt mode, the alphanumeric display shows **END OF MESSAGES** or **NEXT TO REPEAT**. If you are in Integrated Directory mode, it displays the next caller's name.
- **DELETE MSG (Message)**
This button deletes the displayed message.
- **INTGRTD DIRECTORY (Integrated Directory)**
This button displays users' names and extensions from the system directory.
- **MAKE CALL**
This button automatically returns calls from messages left in LWC. It also automatically calls currently-displayed Integrated Directory listings.

- STORED NUMBER

This button displays the code required for accessing an outside line (usually a 9), or the extension number of the facility that the BUSY button monitors. To access this information:

1. Press the STORED NUMBER button
2. Press the BUSY button.

Displaying in Normal Mode

Call-related information includes:

- Incoming-call button associated with the call

One of six buttons, labeled **a** through **f**, lights when a call comes to your console. In the following sample, the lamp that lights is a.

```
a= TOM BROWN 3062
```

- Caller identification

For internal calls, the display shows the caller's name or the identification assigned to the phone in use, and the caller's extension. In the following sample, the caller is Tom Brown who is at extension 3062.

```
a= TOM BROWN 3062
```

For outside calls, the display shows the kind of outside line used and the outside line's assigned access code. In the following sample, the access code for the local outside line is 8.

```
b= OUTSIDE CALL 8
```

- Called-party identification

For incoming calls, the display shows the called party's name and extension. In the following sample, the called party is Liz Via who is at extension 4328.

```
e= OUTSIDE CALL to LIZ VIA at EXT 4328
```

For outside calls, the display shows the kind of outside line used and the outside line's access code. In the following sample, the access code the line used is a WATS line, with access code, 101.

```
b= WATS 101
```

- System user's calling privileges

Your system manager assigns calling privileges for all system users. A 2-digit number assigned by your system manager, followed by a hyphen and 4-alpha characters that identify the user's calling privileges. The 4-alpha characters are listed in [Table 2-3](#).

Table 2-3. Calling Privilege Identifiers

4-alpha character	Meaning
ORIG	You cannot place any calls from this phone.
OTWD	You cannot place calls on outside lines from this phone.
TOLL	You cannot place long distance calls from this phone.
CODE	You do not have authorization code privileges.
NONE	You have no calling restrictions.

— Call purpose

Call-purpose information identifies features that are in use. The following table defines call-purpose identifiers.

Table 2-4. Call Purpose Identifiers

Identifier	Description
B	Displays when called parties: <ul style="list-style-type: none"> ■ Do not answer ■ Send their calls to coverage ■ Are active on a call that uses temporary bridged appearance
co	An internal user who doesn't have calling privileges for outside lines attempts to make an outgoing call.
cs	An internal user who doesn't have internal calling privileges attempts to make a call to another internal phone.
ct	A caller attempts to call a user who cannot receive calls.
d	Displays when the following occurs: <ul style="list-style-type: none"> ■ Called parties do not answer. ■ Called parties send their calls to coverage. ■ Called parties are unavailable and have a temporary bridged appearance.
f	System users forward their calls to you.

Continued on next page

Table 2-4. Call Purpose Identifiers — Continued

Identifier	Description
lc	The system redirects calls to you due to a problem with the system or because your system manager has programmed calls made to specified extensions to come to you.
ld	Incoming calls, that are listed in the phone book, that are placed directly to a system user's extension.
n	Night service is on and the call goes to the night service station.
na	Consoles are in night service mode.
rc	A held call returns to the console.
rt	An unanswered, transferred call returns to the console.
sc	A caller places repeated calls on the same line without disconnecting.
s	Displays when a called system user temporarily sends all their calls to coverage.
tc	A caller attempts to make an outgoing call on an outside line that you control. The call redirects to you.

— Call Status

Call-status displays the phone call's current status. [Table 2-5](#) identifies call status indicators and describes when they occur.

Table 2-5. Call Status Identifiers

Identifier	Description
Ringing	The dialed call rings.
Wait	The Attendant Call Waiting feature is available.
Wait, [I] Intrusion Allowed	The Attendant Call Waiting and Intrusion features are available.
Busy	An extension is busy or out of service and neither the Attendant Call Waiting nor the Intrusion features are allowed.
Busy, [I] Intrusion Allowed	An extension is busy or out of service and the Attendant Call Waiting feature is not allowed.

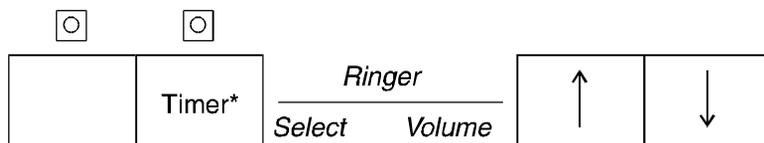
**NOTE:**

If your system has Integrated Services Digital Network (ISDN) — Primary Rate Interface (PRI), refer to [Chapter 4, "Using the Features"](#), for display information associated with ISDN-PRI.

**Ringer-Volume Control Area
(Enhanced Console)**

The ringer-volume control area provides volume control for:

- Incoming calls
- Timed reminder tones (Notification that a call needs additional attention)
- Call waiting tones (Notification that a call is waiting to be answered)



* "Timer" is the default value for this button. However, this value may be changed via system administration, resulting in a different button name.

ph302rvc PDH 041697

Figure 2-11. Ringer Volume Control Area (enhanced console)

The ringer volume control area has an UP button (▲) a DOWN button (▼), and a SELECT button. To adjust the volume on your console:

1. Press and release the UP button (▲) or DOWN button (▼) to activate the display.
 The alphanumeric display exhibits a bar graph and identifies the tone to be adjusted.
2. Press the SELECT button to choose the type of tone that you wish to adjust.
3. Press and release the UP button (▲), to increase the volume or the DOWN button (▼), to decrease the volume.
4. Press any other button on the console to complete or cancel this task.

Ringer Volume Control (basic console)

onsole)

The ringer volume control area provides volume control for:

- Incoming calls
- Timed reminder tones (notification that a call needs additional attention)
- Call waiting tones (notification that a call is waiting to be answered)

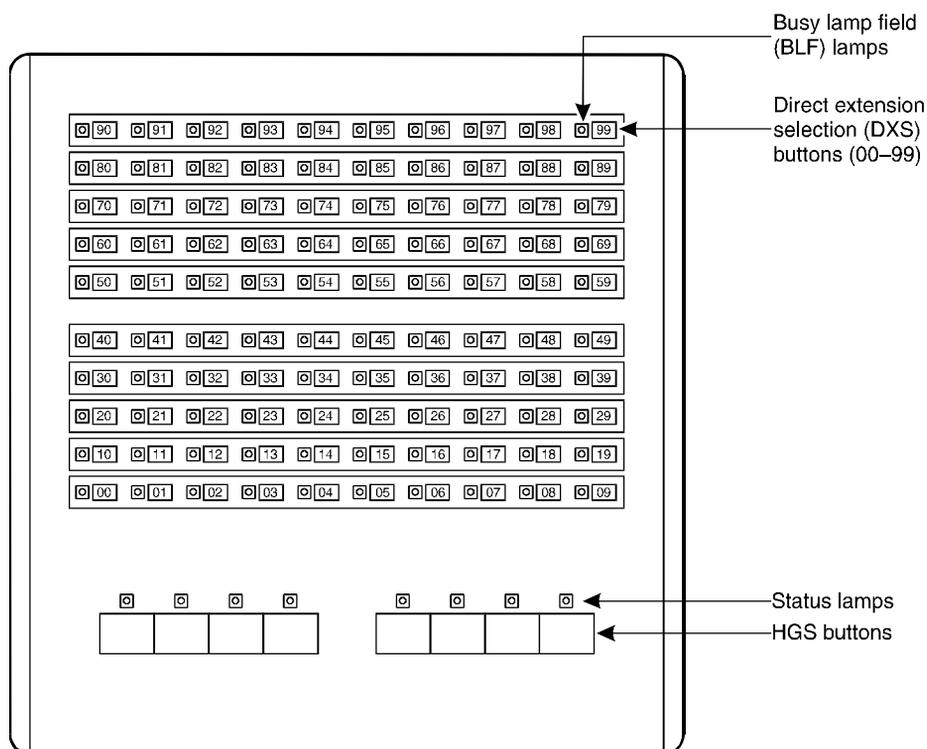
The basic console has three slide switches on the front panel of the basic console. To adjust the volume, slide the switch to the right to increase the volume, or to the left to decrease the volume.

Selector Console Area

The Selector Console Area allows you to transfer calls. It has two groups of buttons and lamps: the Hundreds Group Select (HGS) and the Direct Extension Selection (DXS) with Busy Lamp Field (BLF).

The basic console has 8 HGS buttons; the enhanced console has 20. You use them in conjunction with the DXS buttons to dial an extension. For example, if you wish to transfer a call to extension 3452, press the HGS button labeled 34, then press the DXS button labeled 52.

The 100 DXS buttons are labeled from 00 to 99. When combined with the HGS buttons, they provide up to 800 possible extensions for the basic console and up to 2000 possible extensions for the enhanced console. For more information on how to transfer calls, see [Transferring Calls to Internal Extensions](#) in chapter 3.



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Figure 2-12. Selector Console Area

Determining Extension Number Status

You can determine the status of an extension by pressing the two buttons necessary to complete the extension and look at the lamp to the left of the appropriate DXS button.

- If the lamp is dark, the extension is idle.
- If the lamp is lighted, the extension is in use. You can still transfer a call if system users have more than one line available. Ask your system manager about the phones in your company.
- If the extension is busy, you hear a busy tone.

Tones Heard Through Handset or Headset

When you operate the console, you hear tones through the handset or headset that can indicate progress or status of a call, or identify types of incoming calls. [Table 2-6](#) describes the tones available on your console.

Table 2-6. Ringing and Tones Descriptions

Tone Name	Pitch	Frequency	Meaning
Ringback	Low	15 times a minute	A transferred call comes back to the console.
Special Ringback	Low	Single	Calls are waiting to be answered.
Busy	Low	60 times a minute	The called extension is busy.
Fast Busy	Low	120 times a minute	A caller dialed an incorrect number or called a phone that cannot be called.
Confirmation	n/a	Three short bursts	The operation requested (activated or deactivated) is accepted.
Coverage	n/a	One short burst	A call to one extension rings at a different extension.
Dial		Continuous steady tone	A phone is ready to use.
Intercept	On-Off, high and low	Siren-type "Dee-Do"	A caller dialed a number incorrectly or called a phone that cannot be called.

Continued on next page

Table 2-6. Ringing and Tones Descriptions — Continued

Tone Name	Pitch	Frequency	Meaning
Reorder	Low	120 times a minute	All trunks within a particular trunk group are busy or that a requested feature is not available.
Call Waiting Ringback	Low	15 times a minute with decreasing volume during the last 0.2 second	A call is waiting at the console and the called party has been notified that the call is waiting.
Incoming Call Ringing	On-off, low	0.5 second	An incoming call is waiting to be answered.
Calls Waiting (Queued Calls)	On-off, low	0.25 second	One or more incoming calls are waiting to be answered.
Timed Reminder (Attendant Recall)	high	On for 0.5 second; off for 1 second	A single-party call is on hold for longer than the time allowed by your company. This tone also occurs when someone on a conference call calls you or an unanswered transferred call returns to you.
Emergency Access Ringing	On-Off, high and low	Siren-like	A tone that indicates an emergency. This ringing tone is heard on the latest models of the basic console and all models of the enhanced console.

Operating the Console

3

As a console operator, you spend the majority of your day placing calls, transferring calls, and putting callers on hold. You might also place a conference call or handle communications for an unexpected emergency. This section describes and provides step-by-step procedures for these operations. Before you read the rest of this section, check with your system manager to see if you work in a Centralized Attendant Service (CAS) environment. If you work in a CAS environment, be sure to read [Chapter 5, "Centralized Attendant Service"](#).

This chapter refers to "principal" consoles. A principal console is the main console used at your company. If your company has only one console, it is considered to be the principal console. If your work environment utilizes more than one console, your system manager assigns one console as "principal." Principal consoles can control features, such as night service, for all consoles in the system.

At the end of this chapter, you will be able to:

- Identify standard features available on your console
- Perform standard functions available on your console

Activating the Console

Activating the console refers to preparing the console for human control.

To activate the console:

1. Plug in the handset or the headset.
2. Select one of the following two options:
 - If you are at the principal console, press the NIGHT button.
 - If you are not at the principal console, press POS BUSY.

Deactivating the Console

Deactivating the console refers to preparing the console to operate automatically after hours.

To deactivate the console:

1. Unplug the handset or the headset.
2. Select one of the following two options:
 - If you are at the principal console, press the NIGHT button.
 - If you are not at the principal console, press Pos BUSY.

Transferring Calls to Internal Extensions

You may receive outside calls that you need to transfer to internal extensions or internal callers may need for you to transfer them to an extension. The process for both types of calls is the same.

To transfer calls to internal extensions:

1. Press the lighted call appearance button.
2. Greet the caller.
3. Press START.

NOTE:

If the Auto Start feature is administered at your console, you do not need to press the START button.

4. Press the desired buttons on the selector console to dial the desired extension.

5. Select one of the following

- Press RELEASE as soon as the call starts to ring.

or

- Announce the call to the called party.
 - If the called party accepts the call, press RELEASE.
 - If the called party declines to talk to the caller, press SPLIT to reconnect to the caller.

Follow your company's procedures for taking messages.

Press RELEASE.

or

- If the called party is busy or does not answer, press CANCEL to reconnect with the caller.
- Follow your company's procedures for taking messages.
- Press RELEASE.

Transferring Calls to Outside Numbers

You may receive calls that you need to transfer to outside calls from internal callers or you may need to transfer one outside call to another outside number. The process for both types of calls is the same.

To transfer a call to an outside number:

1. Press the lighted call appearance button.
2. Greet the caller.
3. Access an outgoing line by pressing an outside line button or by dialing an outside line access code (many companies use 9 to access an outside line).

4. Select one of the following options:

- Press RELEASE if the caller plans to complete the call.

or

- Dial the desired party using the dialing keypad.
- Press RELEASE as soon the call starts to ring.

or

- Announce the call to the called party.
 - If the called party accepts the call, press RELEASE.
 - If the called party declines to talk to the caller, press SPLIT to reconnect to the caller.

Follow your company's procedures for taking messages.

Press RELEASE.

or

- If the called party is busy or does not answer, press CANCEL to reconnect with the caller.
- Follow your company's procedures for taking messages.
- Press RELEASE.

Exceptions:

Two conditions impact your ability to transfer callers to outside parties. You cannot transfer calls to outside parties if:

- All outside lines are busy.
- The caller does not have calling privileges for the outside line requested.

Placing Callers on Hold

You can place up to 6 calls on hold. You should place callers on hold if you cannot service them immediately, or if you need to get back to the caller with information.

To place a call on hold:

1. Press the lighted call appearance button.
2. Greet the caller.
3. Press HOLD.

To reenter a call that is on hold:

1. Press the call appearance button that is on hold.
2. Talk to the party.

A single-party call that is on hold returns to the console automatically when it has been on hold for too long.

Connecting Two or More Callers

You can connect two or more parties with the attendant console. Connecting two or more callers is usually used for conference calls or to connect callers who cannot call each other.

To use connect two or more parties:

1. Call internal or external party number 1.
2. Press START.
3. Call the internal or external party number 2.
4. Press SPLIT. Both parties are connected.
5. Repeat steps 2 through 4 for additional parties.
6. Press HOLD.

Answering Emergency Calls

You may need to manage communication for an emergency. You can process emergency calls in the same way as regular calls. However, the console alerts you of an emergency call with the following information:

- The Emergency lamp flashes.
- The siren-like emergency tone sounds.
- The alphanumeric display identifies the calling party and shows **EMERG.**

Be sure to ask your system manager for the emergency procedures used in your company.

Using the Features

4

You might find yourself working at an organization that requires you to know more than the standard operating procedures outlined in the previous chapter. For example, you may be the guardian of your company's long distance calls.

This chapter covers features available at your console. You may not have every feature described in this chapter. To obtain a list of your company's features and their associated access codes, check with your system manager.

Information for each feature discussed in this chapter includes a brief feature description, an example that illustrates the feature, the feature's official name, and step-by-step procedures for using the feature.

The examples in this chapter are based on a fictitious company, Widgets, Inc., that produces self-cleaning bathtubs. The console operator for Widgets, Inc., Pat, manages calls for this 500-employee company.

Speeding Up the Console

Your system manager can program features described in this section to save time in a fast-paced environment. Features in this section reduce the number of buttons you must press to complete an operation.

Using Auto Start

You can initiate a calling procedure by pressing any button on your dial keypad without pressing START.

Example

Phone calls to Widgets, Inc. exceed 300 per day. Pat scrambles constantly to meet the demands of incoming calls. The system manager, Kelly Ratliffe, programs Auto Start to save Pat precious seconds.

Feature Name

Auto Start

Procedures

Your system manager programs this feature into your console to occur automatically.

Speed Dialing

With speed dialing, you can dial a frequently-used number by entering a code or pressing a button. You can use it to:

- Place local, long-distance, or international calls
- Activate features
- Access computer equipment at another location

Example

Pat orders office supplies for the executive offices. She purchases all Widget, Inc. supplies from the same vendor. So, Pat asks the system manager Kelly Ratliffe, to add the vendor's number to the abbreviated dialing list. Kelly programs the new number and gives Pat the code assigned to the vendor's number. Now, Pat dials *12 every time she wants to call the office supply vendor.

Feature Name

Abbreviated Dialing

Procedures

To use speed dialing:

1. Obtain an abbreviated dialing list from your system manager.
2. Press the code or button assigned by your system manager to reach a desired number.

Holding Calls Automatically

Your console automatically places a call on hold when you answer another call.

Example

Widgets, Inc. is conducting an infomercial on their self-cleaning bathtubs. Pat's console is unusually busy. So, the system manager, Kelly Ratliffe, programs Pat's console to automatically place calls on hold when Pat answers another call. Pat answers the first incoming call and asks the party to hold. Then she presses the CALL APPEARANCE button for the next incoming call, placing the first caller on hold.

Feature Name

Hold-Automatic

Procedures

Your system manager programs hold-automatic to work on all consoles in your system.

Handling Multiple-Party Calls

This section covers features associated with connecting 2 to 5 callers on one call. It includes connecting callers, parking callers, locking the console operator out of multi-party calls, accessing operators from a conference call, and paging system users to add them to an existing conference call.

Connecting Multiple Callers

You can connect up to five callers on a single call.

Example

Two bathtub distributors want identical contract upgrades with Widgets, Inc. Company president, Randy Foxworthy, commissions Pat to set up a conference call with him, two sales representatives, and the two distributors. Pat uses the procedures listed below to connect all five callers.

Feature Name

Attendant Conference

Procedures

To place a conference call:

1. Call internal or external party number 1.
2. Press START.
3. Call the internal or external party number 2.

4. Press SPLIT. Both parties are connected.
5. Repeat steps 2 through 4 for additional parties.
6. Press HOLD.

Locking Out the Console Operator

Your system manager programs the console to prevent you from reentering a multi-party call that you initiated. Parties on these calls, however, can contact you.

Example

Widgets Inc. is undergoing a merger. Company president, Randy Foxworthy, requests numerous conference calls to discuss highly confidential information. To protect the confidentiality of the conversations, the system manager, Kelly Ratliffe, programs the console with Attendant Lockout. Because no one can enter the conference call, Randy can conduct his calls with guaranteed privacy.

Feature Name

Attendant Lockout

Procedures

Your system manager programs this feature into your console to work automatically. If you try to reenter the call, the **Hold** lamp for this call:

1. Flutters for two seconds
2. Returns to a solid, lighted state

Recalling the Console Operator

System users who are on multi-party calls that are held at the console can recall you for assistance.

Example

Robert Planter, vice president of public relations, is on a conference call with musician, Larry Browning, and stand-up comedian, Cindy Wittner, to plan for a community fund-raising event. Robert wants Larry and Cindy to present their ideas to coworker, Jay Winstead, so Robert calls Pat to add Jay to the call.

Feature Name

Attendant Recall

Procedures

To recall the operator from multi-party calls from a phone with one line:

- Press RECALL.

or

- Flash the switch hook.

To recall the operator from multi-party calls from a phone with more than one line:

- Press CONFERENCE.

or

- Press TRANSFER.

Paging with Deluxe Voice Paging

This feature combines Call Park and Loudspeaker Paging features. With deluxe loudspeaker paging, you can page a system user to call the extension where their call is parked or have them call you. If the system user calls you, you can add them to an existing conference call.

You can page called parties in up to nine locations or use a single, designated access code or button to page the called party in all 9 locations at once. Your system manager designates codes for each paging zone by assigning:

- Outside line buttons (see [Table 7 on page 2-2](#) for more information) to function as paging buttons

or

- A sequence of numbers on your dial keypad that serves as the paging access code

Example

Robert Planter, vice president of public relations, is on a conference call with musician, Larry Browning, and stand-up comedian, Cindy Wittner, to plan for an upcoming community fund-raising event. Robert wants Larry and Cindy to present their ideas to executive vice president, Cathi Henrique. Pat pages Cathi. When Cathi answers her page, Pat adds her to the existing conference call.

Feature Name

Loudspeaker Paging Access — Deluxe

Procedures

To page individuals:

1. Tell the caller that you are going to page the called party.
2. Press one of the following:
 - PAGE 1 through PAGE 9
 - PAGE ALL, if provided
 - Keypad buttons to dial an access code
3. Page the called party, telling them which extension to call to get their call.

If you plan to connect the paged party to an existing conference call:

1. Tell them to call your extension.
2. Press the line where the conference call resides.
3. Press SPLIT.
4. Press HOLD.

Unanswered pages return to you for further assistance. If the allotted time for paging announcements expires during the page, the call disconnects and you hear an intercept tone (alternating high-low, siren-like tone or fast busy tone).

Answering Calls for Another Party

This section covers ways to answer calls from your phone when they ring to a different phone. It includes features that your system manager sets up to operate automatically and features that you must set up each time you use them.

Backing Up the Console Operator

Your system manager can program your overflow calls to ring to a designated phone.

Example

The marketing department just launched an infomercial about Widget, Inc.'s self-cleaning bathtubs. Consequently, the phones are "ringing off the hook". Chris answers Pat's overflow calls at his own phone.

Feature Name

Attendant Backup

Procedures

Your system manager programs this information into your console to occur automatically.

Routing Calls Through the Console Operator

Your system manager can designate up to 50 listed directory numbers to come directly to you.

Example

Widgets, Inc. president, Randy Foxworthy, wants Pat to screen all calls for him. Kelly Ratliffe, system manager, programs all of Randy's calls to come directly to Pat. When a salesman calls, Pat takes a message. When Randy's wife calls, Pat sends the call through to Randy.

Feature Name

Multiple Listed Directory Numbers

Procedures

Your system manager programs this information into your console to occur automatically.

Covering Calls from the Console

Your system manager designates unanswered calls to specified phones to ring through to you.

Example

Widgets, Inc. takes great pride in providing human contact for all persons calling customer service representatives. The system manager, Kelly Ratliffe, has programmed all customer service representative phones to go to coverage. When Suzanne Jones, customer service representative, is busy on a call, an incoming call routes to Pat.

Feature Name

Call Coverage

Procedures

[Table 4-1](#) describes the information that displays on your alphanumeric display when call coverage calls come to your console:

Table 4-1. Call Coverage Alphanumeric Display Information

Display	Meaning
b	The called party is already on a call. Your console displays the caller's number and the unanswered phone's number.
d	Nobody answered this phone or the calling party sent the call to coverage. Your console displays the caller's number and the unanswered phone's number.
s	All calls that come to this number are temporarily sent to coverage.

Forwarding All Calls

You can forward all calls or remove forwarding for all calls for any extension in the system except the console.

Exception:

Ask your system manager if you work in a 1Distributed Communications System (DCS) environment. If you do, the forwarded-to telephone number must not:

- Be longer than 10 digits. The 10 digits can include a 3-digit access code followed by a typical 7-digit telephone number.
- Include authorization codes. Authorization codes cannot be in the forwarded-to telephone number.

Example

Bob Sisterkey, quality assurance specialist at Widgets, Inc., had to leave the office in a hurry for a personal emergency. He is expecting an important phone call, so he calls Pat and asks her to forward his calls to another member of his team. Pat uses the call forwarding all calls procedures to forward his calls to his team member.

Feature Name

Call Forwarding All Calls

Procedures

To forward all calls for an extension:

1. Press START.
2. Dial the forwarding all calls access code.
3. Dial the extension of the phone to be forwarded.
4. Dial the forwarded-to number.
5. Select one of the two options below:
 - If you hear a confirmation tone (three short bursts of tone) indicating that the procedure is successful, press RELEASE.
 - If you hear an intercept tone (alternating high-low, siren-like tone or fast busy tone) indicating that the procedure is unsuccessful, press CANCEL to try again.

To deactivate call forwarding all calls for a particular extension:

1. Press START.
2. Dial the forwarding all calls access code.
3. Dial the extension you want to deactivate.
4. Press RELEASE.

Parking Calls

You can put an incoming call on hold at one extension, then retrieve it from any other phone in the system. Your console has up to 10 dedicated extensions for parking calls.

Example

Rick Foylund, company arbitrator, is away from his desk when a call comes in for him. Pat pages Rick to tell him that he can call extension 5432 to answer his call. Rick dials his company's call park feature access code then 5432 to answer his call.

Feature Name

Call Park

Procedures

To park a call:

1. Press START.
2. Select one of the following two options:
 - Dial the Call Park access code.or
 - Press the button your system administrator assigned to call park.
3. Use the dial keypad or the selector console to dial the extension where you want to park the call.
4. Select one of the two options below:
 - If you hear a confirmation tone (three short bursts of tone), the call is parked. Press RELEASE.
 - If you hear a busy tone, a call is already parked at the dialed extension. Press CANCEL to try again.

Paging for Called Parties

This section covers three methods for paging system users and includes Call Park information necessary for two of these methods.

Parking Calls

You can put an incoming call on hold at one extension then retrieve it from any other phone in the system. Your console has up to 10 extensions dedicated for parking calls.

Example

Rick Foylund, company arbitrator, is away from his desk when a call comes in for him. Pat places the call on hold at one of her 10 call park extensions. Pat pages Rick to tell him the number to dial to answer his call.

Feature Name

Call Park

Procedures

To park a call:

1. Press START.
2. Select one of the following two options:
 - Dial the Call Park access code.or
 - Press the button your system administrator assigned to call park.
3. Use the dial keypad or the selector console to dial the extension where you want to park the call.
4. Select one of the two options below:
 - If you hear a confirmation tone (three short bursts of tone), the call is parked. Press RELEASE.
 - If you hear a busy tone, a call is already parked at the dialed extension. Press CANCEL to try again.

Paging with Chimes

When called parties are not at their phones, you can page them with coded chime signals. The chimes coincide with the paged party's extension. For example, paging someone from extension 113 generates chimes that:

1. Chime once followed by a pause
2. Chime once again followed by a pause
3. Chime three successive times followed by a pause

The chime sequence repeats up to three times. If the paged party does not answer, the call returns to you for further assistance.

You can page called parties in up to nine locations or use a single, designated access code or button to page the called party in all 9 locations at once. Your system manager designates codes for each paging zone by assigning:

- The outside line buttons to function as paging buttons

or

- A sequence of numbers on your dial keypad that serves as the paging access code

Example

Rick Foylund, company arbitrator, is away from his desk when a call comes in for him. Pat pages Rick with code calling access. Rick hears his extension, 113, chimed and calls Pat to answer the page.

Feature Name

Code Calling Access

Procedures

To page using chimes:

1. Tell the caller that you are going to page the called party.
2. Press START.
3. Dial the code calling access code.
4. Dial the paged party's extension.

5. Select one of the following two options:
 - If you hear a confirmation tone (three short bursts of tone), the call parks on paged party's extension, and the system pages the called party.
 - To drop out of the call before the paged and calling parties are connected, press RELEASE.
 - To establish a 3-way call, wait for the called party to answer; then press Split.
 - To hold the call on the console, press HOLD.
- or
- If you hear a busy tone, press CANCEL.
 - Report that the line is busy to the caller.
 - Take a message.
 - Press RELEASE.

Paging with Voice Paging

When called parties are away from their phones, you can page them with loudspeaker paging by parking their call then voice paging them to the extension where you parked their call. If called parties do not answer their pages, their calls automatically return to you for further assistance.

You can page called parties in up to nine locations or use a single, designated access code or button to page the called party in all 9 locations. Your system manager designates codes for each paging zone by assigning:

- Outside line buttons to function as paging buttons

or

- A sequence of numbers on your dial keypad that serves as the paging access code

Example

Rick Foylund, company arbitrator, is away from his desk when a call comes in for him. Pat parks the call for Rick and pages him to let him know which extension he needs to call to answer the page.

Feature Name

Loudspeaker Paging Access

Procedures

To page individuals:

1. Tell the caller that you are going to page the called party.
2. Press one of the following:
 - PAGE buttons
 - PAGE ALL, if provided
 - Keypad buttons to dial an access code
3. Page the called party, to tell them which extension to call to answer their call.

Unanswered pages return to you for further assistance. If the allotted time for paging announcements expires during the page, the call disconnects and you hear an intercept tone (alternating high-low, siren-like tone or fast busy tone).

Paging with Deluxe Voice Paging

This feature combines call park and loudspeaker paging. You can page a caller to call an extension or call you. You can also add a paged party to an existing conference call.

You can page called parties in up to nine locations or use a single, designated access code or button to page the called party in all 9 locations. Your system manager designates codes for each paging zone by assigning:

- Outside line buttons to function as paging buttons

or

- A sequence of numbers on your dial keypad

Example

Robert Planter, vice president of public relations, is on a conference call with musician, Larry Browning, and stand-up comedian, Cindy Wittner, to plan for an upcoming community fund-raising event. Robert wants Larry and Cindy to present their ideas to executive vice president, Cathi Henrique. Pat pages Cathi. When Cathi answers her page, Pat adds her to the existing conference call.

Feature Name

Loudspeaker Paging Access — Deluxe

Procedures

To page individuals:

1. Tell the caller that you are going to page the called party.
2. Press one of the following:
 - PAGE
 - PAGE ALL, if provided
 - Keypad buttons to dial an access code
3. Page the called party and tell them which extension to call to answer their call.

If you plan to connect the paged party to an existing conference call:

1. Tell them to call your extension.
2. Press the line where the conference call resides.
3. Press SPLIT.
4. Press HOLD.

Unanswered pages return to you for further assistance. If the allotted time for paging announcements expires during the page, the call disconnects and you hear an intercept tone (alternating high-low, siren-like tone or fast busy tone).

Assisting Callers with Special Tools

This section covers features that allow you to provide special assistance to callers. It includes ways to hold callers on the line, interrupt an existing call, override existing features designed to block incoming calls, assist callers who need to reach a series of system users, or manage emergency calls.

Using Call Waiting

When you transfer a call to a busy line, the call returns to the console until the busy line becomes available. When the busy line becomes available, the call automatically rings through. If the line does not become available, the call rings back to you for further attention.

Example

A customer, John Steele, places a call to customer service representative, Leah Hoffguard. Leah is serving another client, but hears a beep in her ear indicating that she just received an incoming call. Pat notifies the caller that Leah's line is busy. Leah brings her current call to closure and John's call automatically rings through to her extension.

Feature Name

Attendant Call Waiting

Procedures

To notify callers that the party they called is busy:

1. Press **SPLIT**. The called party hears a call-waiting ringback tone.
2. Inform the caller that the called extension is busy, and that their call is waiting to be answered.
3. Press **RELEASE**.
4. One of the following two options occurs:
 - The call automatically rings through when the busy line becomes available.
 - If the line does not become available within the time preset by your system manager, the call rings back to you. To try to transfer again, repeat steps 1 through 3.

Interrupting a Call

You can interrupt someone who is on a call.

Example

Telemarketer, Sara Adams, has a son, Rob, who just broke his leg. Rob's high school coach calls Sara to let her know that they are taking Rob to the hospital. Pat assists Rob's coach by interrupting Sara's existing call. Now Rob's coach can talk to Sara.

Feature Name

Attendant Intrusion

Procedures

To interrupt a call:

1. Dial the desired busy party.
2. Press INTRUSION.
3. Give message to called party.
4. Press RELEASE.

Exception:

If you interrupt a call with a caller on your line:

- Dial the desired busy party.
- Press INTRUSION.
- Press SPLIT.
- Press RELEASE.

Overriding Diversion Features

Sometimes system users divert their incoming calls to another phone. For example, a user might forward calls to another extension for a lunch break. With this feature, you can bypass a diversion feature to access a desired party. Diversion features include Send All Calls, Call Coverage, Call Forward, and Busy Don't Answer.

Example

Vice president of design and development, Renee Gebner, is working on a tight deadline. She needs uninterrupted time to complete her project, so she forwards all incoming calls to her voice mail. Pat receives an urgent call for Renee and overrides the call forwarding that Renee implemented to reach her at her extension.

Feature Name

Attendant Override of Diversion Features

Procedures

To override diversion features:

1. Press OVERRIDE.
2. Dial the desired number.
3. Proceed with your current operation.

Ordering Calls

Your console recognizes the time that calls arrive and sequences them to come to you in the order in which they arrived.

Example

Widgets Inc., just offered a discount to the first one hundred callers who purchased a self-cleaning bathtub in the last year. Pat is swamped with calls. While Pat is handling one call, five more calls arrive. The system automatically places them in the order in which they arrived. Pat can assist the callers in an equitable manner.

Feature Name

Attendant Priority Queue

Procedures

Your system manager programs this feature into your console to occur automatically.

Providing Emergency Access to the Operator

Your system manager dedicates one or more extensions to serve as emergency numbers. When system users dial one of these extensions, your console recognizes them as emergency calls. You can then assign priority to the emergency calls.

Example

Linda Mahoney, Widgets, Inc. spokesperson, has just suffered from a heart attack. Tom Roberts, who works nearby, calls the company's emergency extension. When Pat answers the call, the following information appears on her alphanumeric display:

```
a= TOM ROBERTS EXT 3041 00 in EMRG Q
```

She also hears a siren-like tone.

Feature Name

Crisis Alert

Procedures

If you work for a company that has more than one console and you receive an emergency call, the following occurs at all consoles that are not on the emergency call:

1. The **Emerg** lamp, flashes.
2. The the emergency siren-like tone sounds. (On older consoles, normal ringing is heard.)
3. Any console operator can end their current call (or put it on hold) and answer the call.
4. As soon as a console operator answers, the emergency tone silences.
5. The alphanumeric display identifies the call with the abbreviation, EMRG, and shows the following information:
 - The line on which the call came in
 - The name assigned to the phone
 - The calling party's number
 - The number of emergency calls remaining in the queue

Placing a Serial Call

You can manage serial calls for parties who call you from outside lines, needing to speak to a series of system users without hanging up. With this feature, the caller returns to you when the first called party hangs up. You can then transfer the caller to the next party and continue the process until all calls are complete.

Examples

Widgets, Inc. researcher, Susan Bealan, is in a remote part of Africa locating natural resources for manufacturing environmentally-safe bathtub cleanser. She needs to talk to several people at Widgets, Inc. and wants to ensure that she does not lose contact with the company's phone system. Pat uses serial calling to connect Susan on multiple calls.

Feature Name

Attendant Serial Calling

Procedures

To manage a serial call:

1. Answer the call.
2. Press SERIAL.
3. Press START.
4. Dial the desired extension.
5. Press RELEASE.

When the call is complete, it returns to the console.

6. Repeat steps 1 through 5 until all calls are made.
7. Press SERIAL to terminate a serial call.

Managing Outside Lines

This section provides feature information for managing outside lines. It describes two types of networks and includes ways to control outside line access, ways to view outside line calling information, and ways to record outside-call information.

Accessing Private Networks

You can connect calls to other locations within your company's private network. To find out if your company might have a private network, ask your system manager. If your company uses more than one telephone switch, you might have a private network.

Example

Since Widgets, Inc. combined telecommunications with Widgets International, system manager, Kelly Ratliffe, established a private network, so that system users can access parties in either company with ease. When administrative assistant, John Lindsey, wants to contact someone at Widgets international, he dials an 8 followed by the party's extension.

Feature Name

Network Access — Private

Procedures

To connect calls in a private network:

1. Enter your private network access code, (usually 8).
2. Dial the desired number.

If you hear an intercept tone (alternating high-low, siren-like tone or fast busy tone), the call is unauthorized. If you hear a reorder tone (fast busy tone) or if the line is busy, try the call later.

Accessing Public Networks

You can use outside lines to call locations outside of your company.

Example

System manager, Kelly Ratliffe, programmed every employee's phone at Widgets, Inc. with the capability of placing local calls outside of Widgets, Inc. System users simply press 9 to dial a local call outside of Widgets, Inc.

Feature Name

Network Access — Public

Procedures

To connect calls in a public network:

1. Enter your public network access code, (usually 9, or 91 + area code).
2. Dial the desired number.

If you hear an intercept tone (alternating high-low, siren-like tone or fast busy tone), the call is unauthorized. If you hear a reorder tone (fast busy tone) or if the line is busy, try the call later.

Controlling Access to Outside Lines

You can control system users' access to 6 (basic console) or 12 (enhanced console) outside lines. If a user attempts to use one of these outside lines, they automatically redirect to you.

Example

In an effort to increase their profit margins, Widgets, Inc. institutes a controlled long-distance calling plan. Only three customer service representatives may use long distance service and they may only call Widget, Inc. distributors. Pat screens all outgoing customer service calls and when appropriate dials the long-distance numbers for the representatives.

Feature Name

Attendant Control of Trunk Group Access

Procedures

Your system manager programs this information into your console to occur automatically. When a controlled trunk group access call occurs, the alphanumeric display provides you with the following information:

```
a= LINDA WAGNER LOCAL tc
```

- The name of the calling line (a=)
- The calling party's name (Linda Wagner)
- The type of outside line that the calling party tried to access (Local)
- The type of call purpose in use (tc = you have control of outside lines for this call)

Displaying Outside Line Information

This feature provides call information about outside calls. This information appears on your alphanumeric display. When parties on the other end of the call do not have this feature, or faulty transmission causes information to be lost, information may not appear as you expect.

With this feature the following information appears on your alphanumeric display:

- Calling party's number
The full number, including the area code, of the calling party
- Calling party's name
The name associated with the calling party's phone
- Called party's number
The full number, including the area code, of the called party
- Called party's name
The name associated with the called party's number
- Special call status information (designated by MISCID in this chapter)
Information about the changing status of a call

NOTE:

Sometimes a billing number displays for a calling or called number. For example, the billing number for a pay phone might display rather than the pay phone number.

Example

Since Widgets, Inc. combined operations with Widgets International, system manager, Kelly Ratliffe, programmed ISDN-PRI on Pat's console. Now Pat can view information regarding outside calls on her alphanumeric display.

When she places an outbound call, she sees the following:

```
a= CALLED NAME CALLED NUMBER MISCID
```

If only name information is available, she sees:

```
a= CALLED NAME MISCID
```

If only number information is available, she sees:

```
a= ANSWERED BY CALLED NUMBER MISCID
```

If neither the name nor the number is available, she sees:

```
a= DIALED NUMBER MISCID
```

or

```
a= OUTSIDE LINE NAME MISCID
```

If the call gets redirected, she sees:

```
a= CONNECTED NAME CONNECTED NUMBER MISCID
```

When she receives a call from an outside line, she sees the following:

```
a= CALLING NAME CALLING NUMBER MISCID
```

If only name information is available, she sees:

```
a= CALLING NAME MISCID
```

If only number information is available, she sees:

```
a= CALL FROM CALLING NUMBER MISCID
```

If neither the name nor the number is available, she sees:

```
a= DIALED NUMBER MISCID
```

or

```
a= OUTSIDE LINE NAME MISCID
```

If the call gets redirected, she sees:

```
a= CALLING ID to CALLED ID CP
```

Feature Name

ISDN-PRI

Procedures

Your system manager programs this feature into your console to occur automatically.

Choosing Outside Lines

You can select a specific group of outside lines for an outgoing call.

Example

Widgets, Inc. frequently communicates with its parent company, Widgets International, located in Chicago. The system manager, Kelly Ratliffe, assigns one of the buttons in the outside lines select area to Widgets International. To call someone in Widgets International, Pat presses the outside line button labeled Chicago and dials the 7-digit phone number, without having to dial 1 and the area code.

Feature Name

Attendant Direct Trunk Group Selection

Procedures

To select an outside line:

1. Press the desired outside line button.
2. Dial the desired number.

Choosing the Best Route for Calls

You can select the most-preferred route for a call by using:

- Automatic Alternate Routing (AAR) to select the next best path available when the preferred route is unavailable.
- Automatic Route Selection (ARS) to select the least expensive path available for long distance calls.

Example

One of Pat's new goals for the upcoming year is to save Widgets, Inc. money by selecting the least expensive path for long distance calls. Pat accomplishes this by placing as many long distance calls as possible before 10:00 a.m. Pacific time. The system manager, Kelly Ratliffe, has programmed all calls made before 10:00 a.m. to route through their Los Angeles line. Widgets, Inc. receives night rates for these calls.

Feature Name

Automatic Alternate Routing and Automatic Route Selection

Procedures

To take advantage of AAR/ARS:

1. Dial the AAR/ARS access code
2. Dial the desired number.

If you hear an intercept tone (alternating high-low, siren-like tone or fast busy tone), the call is unauthorized. If you hear a reorder tone (fast busy tone) or if the line is busy, try the call later.

Recording Outside Call Information

You can record the following information for directly-dialed, or transferred outside calls:

- Calling numbers
- Called numbers
- Call duration
- Outside line used

Example

John LaKeefe, vice president of operations, is setting up a system to determine ways to increase the telemarketing department's success. Some of the information he needs includes:

- Which telemarketers are the most successful?
- Who did they call?
- How long should a successful call take?

Call detail recording automatically tracks this information for him.

Feature Name

CDR (SMDR) Account Code Dialing

Procedures

Your system manager programs this information into your console to occur automatically.

Using Features for Internal Use

This section covers features that you might use internally for a variety of reasons. These reasons may range from restricting calls, to providing system user telephone lists, to testing your equipment. It also includes information specific to accessing console operators and working with non-phone equipment.

Restricting Calls

You can activate or deactivate calling restrictions for individual phones or groups of phones. The restrictions you can control are:

Table 4-2. Calling Restrictions

Call Type	Users Cannot Do the Following:
Outbound calls	Place outside calls from these phones.
All Calls	Place or receive calls from these phones.
Station-to-Station	Receive or place calls from these phones without your assistance.
Termination	Receive calls on these phones.

These restrictions override user privileges established by your system manager.

Example

Lynn Johston, telemarketing manager, is starting a special marketing push for out-of-state business. He schedules 3 of his finest telemarketers to place long-distance calls for 4 days. Rather than change the system setup for phone calls, he asks Pat to deactivate outbound call restrictions for these three telemarketers.

Feature Name

Controlled Restrictions

Procedures

To manually activate a restriction:

1. Press START.
2. Dial the feature access code for controlled restrictions.
3. Dial one of the following restriction code numbers:
 - 1 = Outbound calls
 - 2 = All calls
 - 3 = Termination
 - 4 = Phone-to-phone
4. Dial the extension you wish to restrict.
5. Select one of the following two options:
 - If you hear a confirmation tone (three short bursts of tone), press RELEASE.
 - If you hear an intercept tone (alternating high-low, siren-like tone or fast busy tone), the extension is already restricted, or you dialed an incorrect code. Press CANCEL to retry.

To deactivate a restriction:

1. Press Start
2. Dial the restriction deactivation code.
3. Dial one of the following restriction code numbers:
 - 1 = Outbound calls
 - 2 = All calls
 - 3 = Termination
 - 4 = Phone-to-phone
4. Dial the extension that is no longer to be restricted.
5. Select one of the following two options:
 - If you hear a confirmation tone (three short bursts of tone), press RELEASE.
 - If you hear an intercept tone (alternating high-low, siren-like tone or fast busy tone), the extension is already restricted, or you dialed an incorrect code. Press CANCEL to retry.

Activating Don't Split

You can disable auto start by pressing DONT SPLIT. Don't split allows the system to send dialed touch-tone digits. Some telecommunications equipment requires touch-tone digits to function properly.

Example

Pat needs to call home to retrieve messages from her answering machine. To retrieve these messages, she must press DONT SPLIT, disabling auto start. Now, she can access messages from her answering machine.

Feature Name

Don't Split

Procedures

To use don't split:

1. Press DONT SPLIT.
2. Dial the desired number.

To deactivate don't split:

1. Press CANCEL.

Testing Phone System Components

You can place calls to test four components of your phone system:

- Outside lines
- Touch-tone phones
- Time slots
- System tones

Example

System manager, Kelly Ratliffe, is organizing a department move for accounting. To ensure that all phones are working properly, Kelly asks Pat to test the phones involved in the move. Pat uses facility test call procedures to verify that the phones are functioning properly.

Feature Name

Facility Test Call

Procedures

If you are authorized to perform these four tests, your system manager can provide detailed procedures located in the maintenance manuals for your switch.

Accessing Individual Console Operators

Your system manager assigns a personal extension to each console in your system, so that users can dial console operators directly. If you have this feature you can also:

- Be a member of a hunt group (when one line is busy, the system searches for the next available line)
- Activate and deactivate functions associated with hunt groups (Ask your system manager for more information.)
- Have two calls waiting in your individual call waiting queue

Example

Widgets, Inc. is consolidating telecommunications with parent company, Widgets International. Since the companies are located in different cities, system manager, Kelly Ratliffe, assigns personal extensions to each console operator. Jonathan Livingston, telemarketer, has a question specific to Widgets, Inc., so he calls Pat directly.

Feature Name

Individual Attendant Access

Procedures

Your system manager programs console operator extensions to work the same as all other extensions in the system.

Using the Internal Directory

You can retrieve up to 800 names and their associated extensions from your console.

Example

New Widgets, Inc. employee, Linda Cassanov, needs to find the extension for president, Randy Foxworthy, but she has not yet received a company telephone directory. She uses the procedures outlined for Integrated Directory to find Randy's number.

Feature Name

Integrated Directory

Procedures

To search for an extension corresponding to a known name:

1. Press INTGRTD DIRECT.

appears

2. Press the letters of the desired name on your keypad.

Names with their corresponding extensions appear.

3. Press NEXT to advance to the next name.

4. Select one of the following two options:

- Press MAKE CALL to call the displayed number.
- If entered name is not in directory,

appears.

5. Press another display mode button, to exit Integrated Directory mode.

Assigning Main Console Operators

Your system manager designates a console operator from a multi-branch system to answer calls from more than one branch location. Console operators, located at each branch, can answer calls for their branch, but not another branch.

Example

Since Widgets, Inc. combined operations with Widgets International, system manager, Kelly Ratliffe, programs the console at Widgets International with the capability to answer calls at Widgets, Inc. too. Pat can still answer calls from Widgets, Inc., but cannot answer calls that go to Widgets International. On the other hand, Lee Miller, Widgets International operator can answer calls for both sites.

Feature Name

Inter-PBX Attendant Calls

Procedures

Follow normal calling procedures.

Leaving Messages

Internal users can leave short, preprogrammed messages for other internal users. When the system stores a message, the Message Waiting lamp on the called party's phone lights.

Example

At Widgets, Inc. Pat receives numerous calls for president, Randy Foxworthy, that require personal attention. When Randy is unavailable to take these calls, Pat uses leave word calling to notify Randy that he has a call that she must discuss with him.

Feature Name

Leave Word Calling

Procedures

To store a message when a phone is busy or a call goes unanswered:

1. Press START.
2. Dial the desired extension.
Called party's phone is busy or goes unanswered.
3. Press LWC.
4. Leave message.
5. Hang up.

To cancel a message you left for a system user:

1. Press START.
2. Press LWC CANCEL.
3. Dial extension number where message was left.
4. Select one of the following two options:
 - If you hear a confirmation tone (three short bursts of tone), press RELEASE.or
 - If you hear a reorder tone (fast busy tone), press CANCEL to try again.

Retrieving Messages

You can retrieve messages for other system users. Other system users may or may not be able to retrieve their own messages.

Example

Rich Winston, manager of Widgets, Inc. self-cleaning bathtub manufacturing, needs to retrieve leave word calling messages left for him on his assembly line phone. He calls Pat and Pat gives sees the following information on her alphanumeric display:

```
CARTER ANN 2/7 10:45a 2 CALL 3124
```

Pat tells Rich that Ann Carter called him two times; the last time she called was at 10:45 on February 7; and Ann wants Rich to call her back at extension 3124.

Feature Name

Message Retrieval

Procedures

To retrieve messages:

1. Press COVER MSG RT.
Messages display on the alphanumeric display.
2. Read messages, if any, to the system user.
3. Press one of the following buttons for more options:
 - NEXT — DISPLAYS THE NEXT STORED MESSAGE OR DISPLAYS **END OF MESSAGES**
 - DELETE MSG (Delete Message) — Deletes the displayed message
 - MAKE CALL — AUTOMATICALLY RETURNS THE CALL REQUESTED BY THE CURRENTLY DISPLAYED MESSAGE

Using Night Service

Your console can automatically answer incoming calls without your assistance.

Example

Widgets, Inc. has a prerecorded message for people who call after hours. When Pat leaves work each night, she places the console in night service and callers hear the after hours message.

Feature Name

Night Service

Procedures

To activate Night Service:

1. Press NIGHT.

To deactivate Night Service:

1. Press NIGHT.

Routing Calls Economically

Your system can route outgoing calls in the most economical way based on the time of day and the day of the week. Your system manager designates one of up to eight routing plans as the standard routing plan for each day of the week. Your system manager may, however, alter the routing plan with manual or clocked manual override.

Manual Override

When your system manager activates Manual Override, the currently-active routing plan changes immediately to a new plan. The new plan remains in effect until your system manager manually deactivates the override or until the next scheduled routing plan takes effect.

Clocked Manual Override

This option lets your system manager specify the day and time to override the scheduled time-of-day routing plan. Your system manager can also specify a deactivate day and time, or can manually deactivate clocked manual override.

Example

System manager, Kelly Ratliffe, saves considerable money for Widgets, Inc. by designing automated paths for calls to follow at certain times of the day on certain days of the week. She programs calls placed before 10:00 a.m. from Maine to route through the Los Angeles outside line, and calls placed after 3:00 p.m. from Los Angeles to route through the Portland, Maine line. Widgets, Inc. receives night rates for Portland, Maine calls made before 10:00 a.m. and evening rates for Los Angeles calls made after 3:00 p.m.

Feature Name

Time-of-Day Routing

Procedures

Your system manager programs this information into your console to occur automatically. However, your system manager may ask you to change

Timing Calls

Your console can time call information. This feature tracks the time that:

- Calls are on hold
- Transferred calls go unanswered
- Calls go unanswered by you

Example

Widgets, Inc. company president, Randy Foxworthy, wants to ensure that no incoming call goes unattended for more than 20 seconds. System manager, Kelly Ratliffe, programs the console to send a reminder tone to Pat when a call has been on hold or goes unanswered for more than 15 seconds.

Feature Name

Timing

Procedures

Your system manager programs these call times on your console. Your console alerts you when calls go unattended past these times with:

- A flashing **Hold** lamp
- A fast busy tone

Using VIAS

Your console provides 8 buttons for voiced feedback for visually-impaired console-operators. These 8 buttons and their function are:

Table 4-3. Using VIAS Buttons

Button Name	Voiced Function
ACTIVATION/DEACTIVATION	Tells how to activate or deactivate this feature.
CONSOLE STATUS	Console's current status
DISPLAY STATUS	Alphanumeric display information
LAST OPERATION	Last completed operation
LAST VOICED MESSAGE	Last message or digit sent to the console
DIRECT TRUNK GROUP SELECTION STATUS	Available outside lines
CLASS OF RESTRICTION	Current caller's calling privileges
INSPECT	Tells what features are assigned to other buttons

NOTE:

This feature requires at least one speech processor circuit pack to be installed into a system port carrier, since you can perform VIAS capabilities with speech synthesis messages that system users voice to you.

The HELP number for visually impaired users is 1-800-233-1222.

Example

Pat is taking a leave of absence from Widgets, Inc. Her replacement, Lindsey Buller, is visually impaired. Kelly Ratliffe, system manager, programs her console with VIAS, and acquaints her with the location of each VIAS button. Lindsey must ensure that she activates the VIAS feature each day. A call comes in for president, Randy Foxworthy, and unfortunately, Lindsey forgets who just called. Lindsey simply presses LAST VOICED MESSAGE to find out who just called.

Feature Name

VIAS

Procedures

To use visually impaired services:

1. Press ACTIVATION/DEACTIVATION to activate the service for the console.
2. Press one of the buttons listed above.
3. Press ACTIVATION/DEACTIVATION to deactivate the service.



NOTE:

System initialization, does not automatically activate VIAS. After a warm RESTART button operation, VIAS remains activated.

RECOVERY and cold RESTART button operations do not automatically activate VIAS even if it was activated before the RECOVERY or RESTART button attempt.

When the attendant console busyouts and VIAS is active, VIAS automatically deactivates.

Centralized Attendant Service

5

Centralized Attendant Service (CAS) allows multi-switch systems at more than one location to consolidate console operators at one location. This location is "CAS main." The other locations, typically without console operators, are CAS branches.

Identifying Differences in a CAS Environment

Managing calls in the CAS environment is primarily the same as in standard environments. However, some differences occur, because CAS environments use a dedicated outside line to manage branch calls. This section identifies the differences between standard operations and CAS operations and describes how to use features in a CAS environment.

The following features do not function in a CAS environment:

- Attendant Auto-Manual Splitting
- Attendant Conference

The following features function differently in a CAS environment.

- Tones
- Alphanumeric display
- Transferring calls
- Night service

Using CAS-Associated Tones

In addition to the standard console tones, a CAS console has the following call identification tones:

Table 5-1. Ringing and Tones Descriptions

Tone	Pitch	Frequency	Meaning
Listed Directory Number	on-off, low	three short bursts	Identifies a call from an outside line
"0"	on-off, low	single	Identifies a branch location call to the console operator
Recall on Call Waiting	low	single	Routes unattended calls on call waiting to you
Recall on Remote Hold	on-off, low	4-6 cycles	Routes unattended remote hold calls to you
Recall on Don't Answer	medium	.25 second	Routes unanswered calls to you
Incoming Call Identification	determined by system manager	determined by system manager	Identifies the calling branch location

Using a CAS Alphanumeric Display

In addition to standard alphanumeric display information, you can view the following incoming calls information from branch locations:

Table 5-2. Incoming Branch Location Displays

Type of Call	Display Shows
Listed Directory Number	Incoming outside line name
Dial 0	Caller's name and extension
Remote hold recall	Caller's name and extension
Others (Including Coverage Calls)	Name and number of the outside line dedicated for handling branch calls.

Using CAS Operating Procedures

Operating procedures for CAS environments work similarly to standard environments. However, transferring calls, placing calls on hold, console backup services and night service function differently in CAS environments. The following section describes these procedures in detail.

Transferring CAS Calls

To transfer CAS calls:

1. Press the CALL APPEARANCE button.
2. Listen for a call identification tone (if provided by the branch).
3. Press START.
4. Listen for a dial tone.

NOTE:

Do not go proceed until you hear a dial tone. The call does not go through if you proceed before the dial tone sounds.

5. Dial the requested internal or external number.
6. Select one of the following options:
 - If you are not going to announce the call, press RELEASE as soon as the call starts to ring.

or

- If you are going to announce the call, wait for the called party to answer. When the called party accepts the call, press RELEASE.

If the called party declines to talk to the caller, press CANCEL to reconnect with the caller.

Explain to the caller that the called party is not available; take a message or ask the caller to try again later; then press RELEASE.

or

- If the called party, is busy or doesn't answer, press the Cancel button to reconnect with the caller.

Explain to the caller that the called party cannot be reached. If the caller wants to wait, transfer the call again; then press RELEASE.

If the caller does not want to wait, take a message and press RELEASE.

Placing Calls on Remote Hold

When calls for a branch location need to be placed on hold, you should use remote hold (not hold). Using remote hold frees the outside line that your system manager dedicated for branch calls.

To place calls on remote hold:

1. Press START.
2. Dial the remote hold feature access code.
3. Listen for confirmation tone (three short bursts of tone).
4. Press RELEASE.

Using CAS Backup Service

In addition to standard backup service, phones at remote branch locations can serve as backup phones for a CAS console.

Using CAS Night Service Operations

In addition to standard night service operations, phones with multiple or single lines at remote branch locations can answer night service calls. Below are descriptions for handling night calls from phones with multiple or single lines.

Multi-Line Phone — Night Service Operations

Handling night service calls from multi-line phones is similar to transferring calls from a console. You can transfer calls from a multi-line phone with:

- A FLASH button.
- A CONFERENCE button.
- A TRANSFER button.

Transferring CAS Calls

To transfer a CAS call from a multi-line phone:

1. Press the call appearance button where the green lamp is flashing.
2. Listen for call identification tone (if provided by the branch).
3. Answer the call.

4. Select one of the following three options:
 - Press FLASH. Flash lamp lights for 2 seconds.
 - Press CONFERENCE.
 - Press TRANSFER.
5. Dial the requested number.
6. End the call by hanging up or by pressing another call appearance button, the DISCONNECT button, or the DROP button.

If your phone has a display, it may also be have an OUTSIDE LINE button. By pressing the OUTSIDE LINE button while on an active call you can view the branch name, or the name of an outside line.

Placing CAS Calls on Remote Hold

To place a CAS call on remote hold from a multi-line phone:

1. Select one of the following three options:
 - Press FLASH.
 - Press CONFERENCE.
 - Press TRANSFER.
 2. Dial the remote hold feature access code.
 3. Select one of the following two options:
 - Hang up.
- or
- Press one of the following:
 - CALL APPEARANCE button
 - DISCONNECT button
 - DROP button

Cancelling CAS Calls

To cancel a CAS call from a multi-line phone:

1. Select one of the following options:
 - Press FLASH.
 - Press CONFERENCE.
 - Press TRANSFER.

The transferred call drops, or remote hold deactivates.

Single-Line Phone — Night Service Operations

If a single-line phone performs night service, the user flashes the switchhook to transfer CAS calls. You can place CAS calls on remote hold any time a caller wishes to wait; however, CAS calls cannot be placed on hold at a single-line voice terminal.

Transferring CAS calls

To transfer a CAS call from a single-line phone:

1. Answer the call.
2. Flash the switchhook.
3. Dial the requested extension number.
4. Hang up.

Placing CAS calls on Remote Hold

To place a CAS call on remote hold from a single-line phone:

1. Answer the call.
2. Flash the switchhook.
3. Dial the remote hold feature access code.
4. Listen for the remote hold confirmation tone (three short bursts of tone).
5. Hang up.

Routine Maintenance

6

Routine testing and cleaning for your console is quite simple. This chapter provides step-by-step procedures for testing your console, describes cleaning procedures, and discusses what you need to do in the case of a power outage.

Testing the Console

It is important for you to test your console's alphanumeric display and console lamps weekly. If a problem occurs with the alphanumeric display or one of the lamps, notify your system manager.

To test the alphanumeric display and the lamps:

1. Open the panel on the front of the console (see [Figure 2-1 on page 2-2](#) or [Figure 2-2 on page 2-3](#)).
2. Press and hold the lamp test switch (located at the left front of the console). The following should occur:
 - All lamps in the alphanumeric display should light.
 - Each row of lamps on the console and the selector console should light and go dark in sequence from top to bottom.
 - The timed-reminder tone (high-pitched, .5 second tone) sounds.
3. Release the Lamp Test switch.
 - Lamps return to their former state.
 - The timed-reminder tone silences.
4. Close the panel.

Cleaning Your Console

To clean the console, use a slightly-dampened paper towel or soft cloth. Oily substances on the console may require considerable rubbing or the use of a mild cleaner, such as window cleaner or desk and office cleaner. If you use a cleaner, do not apply it directly to the console; instead, apply it to the cloth, then rub it onto the console.

Do not spill any type of liquid on the console. Liquids spilled on the console damage the electronic components.

Commercial Power Failure

If commercial power fails, the system's battery backup keeps your console operating for a short time. When this short time expires, the power failure transfer automatically activates, and the console does not function. When power returns, consoles return to normal operation.

When power fails, all active calls and all calls on hold are lost. Also, a power failure affects the following features that require corrective action:

- Attendant Control of Trunk Group Access — Reestablish control of desired outside lines.
- Call Forwarding All Calls — Reactive Call Forwarding All Calls for desired extension numbers.
- Controlled Restrictions — Reestablish control of desired voice terminals or groups of voice terminals.
- Night Service — Reactivate Night Service as desired.

References



This section contains a list of user documents for the DEFINITY Enterprise Communications Server (ECS) Release 5.4.

To order these or other DEFINITY documents, contact the Lucent Technologies Publications Center at the address and phone number on the back of the title page of this document. A complete list of Business Communications Systems (BCS) documents, including previous issues of the documents listed here, is provided in *BCS Publications Catalog*, 555-000-010.

Basic DEFINITY ECS Documents

These are the basic documents issued for DEFINITY ECS Release 5.4.

DEFINITY Enterprise Communications Server Release 5 — Overview, Issue 3, 555-230-024

Provides a detailed overview of the ECS including descriptions of many of the major features, applications, hardware, system capabilities, and the support provided with the system. This document is available in the following languages: English, German (DE), Dutch (NL), Brazilian Portuguese (PTB), European French (FR), Colombian Spanish (SPL), and Japanese (JA). To order, append the language suffix to the document number; for example, 555-230-894DE for German. No suffix is needed for the English version.

DEFINITY Enterprise Communications Server Release 5.4.0 — Change Description, Issue 1, 555-230-472

Gives a high-level overview of the DEFINITY ECS Release 5.4. Describes the hardware and software enhancements and lists the problem corrections for this release.

DEFINITY Enterprise Communications Server Release 5 — System Description Pocket Reference, Issue 1, 555-230-207

Provides hardware descriptions, system parameters, listing of hardware required to use features, system configurations, and environmental requirements. This compact reference combines and replaces Release 5 *System Description and Specifications* and Release 5 *Pocket Reference*.

DEFINITY Enterprise Communications Server Release 5 — Administration and Feature Description, Issue 1, 555-230-522

Provides descriptions of system features. Also provides step-by-step procedures for preparing the screens that are required to implement the features, functions, and services of the system. Includes the applications and benefits, feature interactions, administration requirements, hardware requirements, and procedures for voice terminal, data module, and trunk group administration.

This document combines and replaces Release 5 *Feature Description* and Release 5 *Implementation*.

DEFINITY Enterprise Communications Server Release 5 — Implementation Blank Forms, Issue 1, 555-230-303

Provides blank hardcopy forms corresponding to the screens that are required to implement the features, functions, and services of the system.

DEFINITY Enterprise Communications Server Release 5 — System Monitoring and Reporting, Issue 4, 555-230-511

Provides detailed descriptions of the measurement, status, security, and recent change history reports available in the system and is intended for administrators who validate traffic reports and evaluate system performance. Includes corrective actions for potential problems. Issue 2 of this document was titled *Traffic Reports*.

DEFINITY Enterprise Communications Server Release 5 — Installation and Test for Single-Carrier Cabinets, Issue 3, 555-230-894

Provides procedures and information for hardware installation and initial testing of single-carrier cabinets.

This document is available in the following languages: English, German (DE), Dutch (NL), Brazilian Portuguese (PTB), European French (FR), Castilian Spanish (SP), and Japanese (JA). To order, append the language suffix to the document number; for example, 555-230-894DE for German. No suffix is needed for the English version.

DEFINITY Enterprise Communications Server Release 5 — Installation and Test for Multi-Carrier Cabinets, Issue 2, 555-230-112

Provides procedures and information for hardware installation and initial testing of multi-carrier cabinets.

DEFINITY Enterprise Communications Server Release 5 — Installation for Adjuncts and Peripherals, Issue 1, 555-230-125

Provides procedures and information for hardware installation and initial testing of ECS adjunct and peripheral systems and equipment.

DEFINITY Communications System Generic 3vs and Generic 3si — Upgrades and Additions, Issue 1, 555-230-108

Provides procedures for an installation technician to convert an existing DEFINITY Communications System earlier than Generic 3 Version 4 to Generic 3vs/si Version 4.

DEFINITY Communications System Generic 3r — Upgrades and Additions, Issue 1, 555-230-109

Provides procedures for an installation technician to convert an existing DEFINITY Communications System earlier than Generic 3 Version 4 to Generic 3r Version 4.

DEFINITY Enterprise Communications Server Release 5 — Upgrades and Additions for R5r, Issue 2, 555-230-121

Provides procedures for an installation technician to convert an existing Generic 3 Version 4 DEFINITY Communications System to DEFINITY ECS and from DEFINITY ECS Release 5 to DEFINITY ECS Release 5.4.

Included are upgrade considerations, lists of required hardware, and step-by-step upgrade procedures. Also included are procedures to add control carriers, switch node carriers, port carriers, circuit packs, auxiliary cabinets, and other equipment.

DEFINITY Enterprise Communications Server Release 5 — Upgrades and Additions for R5vs/si, Issue 2, 555-230-120

Provides procedures for an installation technician to convert an existing DEFINITY Communications System Generic 3 Version 4 to DEFINITY ECS and from DEFINITY ECS Release 5 to DEFINITY ECS Release 5.4.

Included are upgrade considerations, lists of required hardware, and step-by-step upgrade procedures. Also included are procedures to add control carriers, switch node carriers, port carriers, circuit packs, auxiliary cabinets, and other equipment.

DEFINITY Enterprise Communications Server Release 5 — Maintenance for R5r, Issue 1, 555-230-122

Provides detailed descriptions of the procedures for monitoring, testing, troubleshooting, and maintaining the ECS. Included are maintenance commands, step-by-step trouble-clearing procedures, the procedures for using all tests, and explanations of the system's error codes.

DEFINITY Enterprise Communications Server Release 5 — Maintenance for R5vs/sj, Issue 1, 555-204-123

Provides detailed descriptions of the procedures for monitoring, testing, troubleshooting, and maintaining the ECS. Included are maintenance commands, step-by-step trouble-clearing procedures, the procedures for using all tests, and explanations of the system's error codes.

DEFINITY Communications System Generic 3 Planning and Configuration, Issue 2, 555-230-601

Provides step-by-step procedures for the account team in determining the customer's equipment and hardware requirements to configure a system according to the customer specifications. Includes detailed requirements and block diagrams. This document reflects Generic 3 Version 2 software, but still contains relevant information for the ECS.

BCS Products Security Handbook, Issue 5, 555-025-600

Provides information about the risks of telecommunications fraud and measures for addressing those risks and preventing unauthorized use of BCS products. This document is intended for telecommunications managers, console operators, and security organizations within companies.

DEFINITY Enterprise Communications Server Release 5 — Terminals and Adjuncts Reference, Issue 8, 555-015-201

Provides descriptions of the peripheral equipment that can be used with System 75, System 85, DEFINITY Communications System, and DEFINITY ECS. This document is intended for customers and Lucent Technologies account teams for selecting the correct peripherals to accompany an ECS.

DEFINITY Enterprise Communications Server — Generic 1, Generic 3, System 75, and Voice Terminal Guide Builder, Issue 3, 555-230-755

Provides capability to produce laser-printed documentation for specific voice terminals. The software is supported by a comprehensive user's guide and on-line help. This product requires a 386 PC, minimum of 6MB disk space, minimum of 4MB RAM, a printer supported by Microsoft GDI printer drive, and Microsoft Windows 3.1 or higher. A mouse is recommended.

Call Center

These documents are issued for Call-Center applications of the DEFINITY ECS.

DEFINITY

DEFINITY Enterprise Communications Server Release 5 — Call Vectoring/EAS Guide, Issue 1, 585-230-521

Provides information on how to write, use, and troubleshoot vectors, which are command sequences that process telephone calls in an Automatic Call Distribution (ACD) environment. It is provided in two parts: tutorial and reference.

The tutorial provides step-by-step procedures for writing and implementing basic vectors.

The reference includes detailed descriptions of the call vectoring features, vector management, vector administration, adjunct routing, troubleshooting, and interactions with management information systems (including the Call Management System).

DEFINITY Enterprise Communications Server Release 5 — Basic Call Management System (BCMS) Operations, Issue 1, 555-230-706

Provides detailed instructions on how to generate reports and manage the system and is intended for telecommunications managers who wish to use Basic Call Management System (BCMS) reports and system managers responsible for maintaining the system.

CentreVu CMS

CentreVu Call Management System Release 3 Version 5 — Administration, Issue 1, 585-215-820

CentreVu Call Management System Release 3 Version 5 — Reports, Issue 1, 585-215-821

CentreVu Call Management System Release 3 Version 5 — Custom Reports, Issue 1, 585-215-822

CentreVu Call Management System Release 3 Version 5 — Upgrades and Migrations, Issue 1, 585-215-826

CentreVu Call Management System Release 3 Version 5 — External Call History Reference, Issue 1, 585-215-824

CentreVu Call Management System Release 3 Version 5 — Forecast, Issue 1, 585-215-825

Application-Specific Documents

These documents are application-specific.

DEFINITY Enterprise Communications Server Generic 2 to Release 5.4 — Transition Reference, Issue 1, 555-230-523

Provides information on the differences in features and administration between the old and new systems when upgrading from a Generic 2 system to DEFINITY ECS Release 5.4.

ASAI

DEFINITY Enterprise Communications Server Release 5 — CallVisor ASAI Planning Guide, Issue 5, 555-230-222

Provides procedures and directions for the account team and customer personnel for effectively planning and implementing the CallVisor Adjunct/Switch Application Interface (ASAI) PBX-Host environment. The CallVisor ASAI is a communications interface that allows adjunct processors to access switch features and to control switch calls. It is implemented using an Integrated Services Digital Network (ISDN) Basic Rate Interface (BRI). Hardware and software requirements are included.

DEFINITY Enterprise Communications Server Release 5 — CallVisor ASAI Protocol Reference, Issue 6, 555-230-221

Provides detailed layer 3 protocol information regarding the CallVisor Adjunct/Switch Application Interface (ASAI) for the systems and is intended for the library or driver programmer of an adjunct processor to create the library of commands used by the applications programmers. Describes the ISDN message, facility information elements, and information elements.

DEFINITY Enterprise Communications Server Release 5 — CallVisor ASAI Technical Reference, Issue 6, 555-230-220

Provides detailed information regarding the CallVisor Adjunct/Switch Application Interface (ASAI) for the systems and is intended for the application designer responsible for building and/or programming custom applications and features.

DEFINITY Enterprise Communications Server Release 5 — Installation, Administration, and Maintenance of CallVisor ASAI Over the DEFINITY LAN Gateway, Issue 2, 555-230-223

Provides procedures for installation, administration, and maintenance of the CallVisor Adjunct/Switch Application Interface (ASAI) Ethernet application over the DEFINITY LAN Gateway and is intended for system administrators, telecommunications managers, Management Information System (MIS) managers, LAN managers, and Lucent personnel. The ASAI-Ethernet application provides ASAI functionality using 10Base-T Ethernet rather than BRI as a transport media.

DEFINITY Enterprise Communications Server Release 5 — Call Visor ASAI Overview, Issue 2, 555-230-225

Provides a general description of Call Visor ASAI.

This document is available in the following languages: English, German (DE), Dutch (NL), Brazilian Portuguese (PTB), European French (FR), Colombian Spanish (SPL), and Japanese (JA). To order, append the language suffix to the document number; for example, 555-230-894DE for German. No suffix is needed for the English version.

DEFINITY Enterprise Communications Server Release 5 — CallVisor PC ASAI Installation and Reference, Issue 4, 555-246-205

Provides procedural and reference information for installers, Tier 3 support personnel, and application designers.

ACD

DEFINITY Enterprise Communications Server Release 5 — Automatic Call Distribution (ACD) Agent Instructions, Issue 5, 555-230-722

Provides information for use by agents after they have completed ACD training. Includes descriptions of ACD features and the procedures for using them.

DEFINITY Enterprise Communications Server Release 5 — Automatic Call Distribution (ACD) Supervisor Instructions, Issue 4, 555-230-724

Provides information for use by supervisors after they have completed ACD training. Includes descriptions of ACD features and the procedures for using them.

Call Detail Recording

Call Detail Acquisition & Processing Reference, 555-006-202

Contains call detail recording information.

Console Operations

DEFINITY Communications System Generic 1 and Generic 3 Console Operations, Issue 2, 555-230-700

Provides operating instructions for the attendant console. Included are descriptions of the console control keys and functions, call-handling procedures, basic system troubleshooting information, and routine maintenance procedures.

DEFINITY Enterprise Communications Server Release 5 — Console Operations Quick Reference, Issue 2, 555-230-890

Provides operating instructions for the attendant console. Included are descriptions of the console control keys and functions, call handling, basic system-troubleshooting information, and routine maintenance procedures.

This document is available in the following languages: English, German (DE), Dutch (NL), Brazilian Portuguese (PTB), European French (FR), Colombian Spanish (SPL), and Japanese (JA). To order, append the language suffix to the document number; for example, 555-230-894DE for German. No suffix is needed for the English version.

Hospitality

An Introduction to DEFINITY Communications System Generic 3 Hospitality Services, Issue 1, 555-230-021

Provides an overview of the features available for use by the lodging and health industries to improve their property management and to provide assistance to their employees and clients. Included are brief definitions of many of the system features, descriptions of the hardware, planning considerations, and list of the system capabilities.

DEFINITY Communications System Generic 1 and Generic 3 Hospitality Operations, Issue 3, 555-230-723

Provides step-by-step procedures for using the features available for the lodging and health industries to improve their property management and to provide assistance to their employees and clients. Includes detailed descriptions of reports.

Glossary and Abbreviations

Numerics

3B2 Message Server

A software application that combines voice and data messaging services for voice-terminal users whose extensions are connected to a system.

800 service

A service in the United States that allows incoming calls from certain areas to an assigned number for a flat-rate charge based on usage.

A

AA

Archangel. See [angel](#).

AAC

ATM access concentrator

AAR

See [Automatic Alternate Routing \(AAR\)](#).

abandoned call

An incoming call in which the caller hangs up before the call is answered.

Abbreviated Dialing (AD)

A feature that allows callers to place calls by dialing just one or two digits.

AC

1. Alternating current.
2. See [Administered Connection \(AC\)](#).

AAR

Automatic Alternate Routing

ACA

See [Automatic Circuit Assurance \(ACA\)](#).

ACB

See [Automatic Callback \(ACB\)](#).

ACD

See [Automatic Call Distribution \(ACD\)](#).

ACD agent

See [agent](#).

ACU

See [Automatic calling unit \(ACU\)](#)

ACW

See [after-call work \(ACW\) mode](#).

access code

A 1-, 2-, or 3-digit dial code used to activate or cancel a feature, or access an outgoing trunk.

access endpoint

Either a nonsignaling channel on a DS1 interface or a nonsignaling port on an analog tie-trunk circuit pack that is assigned a unique extension.

access tie trunk

A trunk that connects a main communications system with a tandem communications system in an electronic tandem network (ETN). An access tie trunk can also be used to connect a system or tandem to a serving office or service node. Also called access trunk.

access trunk

See [access tie trunk](#).

ACCUNET

A trademarked name for a family of digital services offered by AT&T in the United States.

ACD

See [Automatic Call Distribution \(ACD\)](#). ACD also refers to a work state in which an agent is on an ACD call.

ACD work mode

See [work mode](#).

active-notification association

A link that is initiated by an adjunct, allowing it to receive event reports for a specific switch entity, such as an outgoing call.

active-notification call

A call for which event reports are sent over an active-notification association (communication channel) to the adjunct. Sometimes referred to as a monitored call.

active notification domain

VDN or ACD split extension for which event notification has been requested.

ACU

See [Automatic calling unit \(ACU\)](#).

AD

See [Abbreviated Dialing \(AD\)](#).

ADAP

AUDIX Data Acquisition Package

ADC

See [analog-to-digital converter \(ADC\)](#).

adjunct

A processor that does one or more tasks for another processor and that is optional in the configuration of the other processor. See also [application](#).

adjunct-control association

A relationship initiated by an application via *Third Party Make Call*, the *Third Party Take Control*, or *Domain (Station) Control* capabilities to set up calls and control calls already in progress.

adjunct-controlled call

Call that can be controlled using an adjunct-control association. Call must have been originated via *Third Party Make Call* or *Domain (Station) Control* capabilities or must have been taken control of via *Third Party Take Control* or *Domain (Station) Control* capabilities.

adjunct-controlled split

An ACD split that is administered to be under adjunct control. Agents logged into such splits must do all telephony work, ACD login/ logout, and changes of work mode through the adjunct (except for auto-available adjunct-controlled splits, whose agents may not log in/out or change work mode).

adjunct-monitored call

An adjunct-controlled call, active-notification call, or call that provides event reporting over a domain-control association.

Adjunct-Switch Application Interface (ASAI)

A recommendation for interfacing adjuncts and communications systems, based on the CCITT Q.932 specification for layer 3.

ADM

Asynchronous data module

administer

To access and change parameters associated with the services or features of a system.

Administered Connection (AC)

A feature that allows the switch to automatically establish and maintain end-to-end connections between access endpoints (trunks) and/or data endpoints (data modules).

administration group

See [capability group](#).

administration terminal

A terminal that is used to administer and maintain a system. See also [terminal](#).

Administration Without Hardware (AWOH)

A feature that allows administration of ports without associated terminals or other hardware.

ADU

See [asynchronous data unit \(ADU\)](#).

AE

See [access endpoint](#).

after-call work (ACW) mode

A mode in which agents are unavailable to receive ACD calls. Agents enter the ACW mode to perform ACD-related activities such as filling out a form after an ACD call.

AG

ASAI Gateway

agent

A person who receives calls directed to a split. A member of an ACD hunt group or ACD split. Also called an ACD agent.

agent report

A report that provides historical traffic information for internally measured agents.

AIM

Asynchronous interface module

AIOD

Automatic Identification of Outward Dialing

ALBO

Automatic Line Build Out

All trunks busy (ATB)

The state in which no trunks are available for call handling.

ALM-ACK

Alarm acknowledge

American Standard Code for Information Interchange

See [ASCII \(American Standard Code for Information Interchange\)](#).

AMW

Automatic Message Waiting

AN

Analog

analog

The representation of information by continuously variable physical quantities such as amplitude, frequency, and phase. See also [digital](#).

analog data

Data that is transmitted over a digital facility in analog (PCM) form. The data must pass through a modem either at both ends or at a modem pool at the distant end.

analog telephone

A telephone that receives acoustic voice signals and sends analog electrical signals along the telephone line. Analog telephones are usually served by a single wire pair (tip and ring). The model-2500 telephone set is a typical example of an analog telephone.

analog-to-digital converter (ADC)

A device that converts an analog signal to digital form. See also [digital-to-analog converter \(DAC\)](#).

angel

A microprocessor located on each port card in a processor port network (PPN). The angel uses the control-channel message set (CCMS) to manage communications between the port card and the archangel on the controlling switch-processing element (SPE). The angel also monitors the status of other microprocessors on a port card and maintains error counters and thresholds.

ANI

See [Automatic Number Identification \(ANI\)](#).

ANSI

American National Standards Institute. A United States professional/technical association supporting a variety of standards.

answerback code

A number used to respond to a page from a code-calling or loudspeaker-paging system, or to retrieve a parked call.

AOL

Attendant-offered load

AP

Applications processor

APLT

Advanced Private-Line Termination

appearance

A software process that is associated with an extension and whose purpose is to supervise a call. An extension can have multiple appearances. Also called call appearance, line appearance, and occurrence. See also [call appearance](#).

application

An adjunct that requests and receives ASAI services or capabilities. One or more applications can reside on a single adjunct. However, the switch cannot distinguish among several applications residing on the same adjunct and treats the adjunct, and all resident applications, as a single application. The terms application and adjunct are used interchangeably throughout this document.

applications processor

A micro-computer based, program controlled computer providing application services for the DEFINITY switch. The processor is used with several user-controlled applications such as traffic analysis and electronic documentation.

application service element

See [capability group](#).

architecture

The organizational structure of a system, including hardware and software.

ARS

See [Automatic Route Selection \(ARS\)](#).

ASAI

See [Adjunct-Switch Application Interface \(ASAI\)](#)

ASCII (American Standard Code for Information Interchange)

The standard code for representing characters in digital form. Each character is represented by an 8-bit code (including parity bit).

association

A communication channel between adjunct and switch for messaging purposes. An active association is one that applies to an existing call on the switch or to an extension on the call.

asynchronous data transmission

A method of transmitting data in which each character is preceded by a start bit and followed by a stop bit, thus permitting data characters to be transmitted at irregular intervals. This type transmission is advantageous when transmission is not regular (characters typed at a keyboard). Also called asynchronous transmission. See also [synchronous data transmission](#).

asynchronous data unit (ADU)

A device that allows direct connection between RS-232C equipment and a digital switch.

asynchronous Transfer Mode (ATM)

A packet-like switching technology in which data is transmitted in fixed-size (53-byte) cells. ATM provides high-speed access for data communication in LAN, campus, and WAN environments.

ATB

See [All trunks busy \(ATB\)](#).

ATD

See [Attention dial \(ATD\)](#).

attendant

A person at a console who provides personalized service for incoming callers and voice-services users by performing switching and signaling operations. See also [attendant console](#).

ATM

See [asynchronous Transfer Mode \(ATM\)](#).

attendant console

The workstation used by an attendant. The attendant console allows the attendant to originate a call, answer an incoming call, transfer a call to another extension or trunk, put a call on hold, and remove a call from hold. Attendants using the console can also manage and monitor some system operations. Also called console. See also [attendant](#).

Attention dial (ATD)

A command in the Hayes modem command set for asynchronous modems.

Audio Information Exchange (AUDIX)

A fully integrated voice-mail system. Can be used with a variety of communications systems to provide call-history data, such as subscriber identification and reason for redirection.

AUDIX

See [Audio Information Exchange \(AUDIX\)](#).

auto-in trunk group

Trunk group for which the CO processes all of the digits for an incoming call. When a CO seizes a trunk from an auto-in trunk group, the switch automatically connects the trunk to the destination — typically an ACD split where, if no agents are available, the call goes into a queue in which callers are answered in the order in which they arrive.

Auto-In Work mode

One of four agent work modes: the mode in which an agent is ready to process another call as soon as the current call is completed.

Automatic Alternate Routing (AAR)

A feature that routes calls to other than the first-choice route when facilities are unavailable.***

Automatic Callback (ACB)

A feature that enables internal callers, upon reaching a busy extension, to have the system automatically connect and ring both parties when the called party becomes available.

Automatic Call Distribution (ACD)

A feature that answers calls, and then, depending on administered instructions, delivers messages appropriate for the caller and routes the call to an agent when one becomes available.

Automatic Call Distribution (ACD) split

A method of routing calls of a similar type among agents in a call center. Also, a group of extensions that are staffed by agents trained to handle a certain type of incoming call.

Automatic calling unit (ACU)

A device that places a telephone call.

Automatic Circuit Assurance (ACA)

A feature that tracks calls of unusual duration to facilitate troubleshooting. A high number of very short calls or a low number of very long calls may signify a faulty trunk.

Automatic Number Identification (ANI)

Representation of the calling number, for display or for further use to access information about the caller. Available with Signaling System 7.

automatic restoration

A service that restores disrupted connections between access endpoints (nonsignaling trunks) and data endpoints (devices that connect the switch to data terminal and/or communications

equipment). Restoration is done within seconds of a service disruption so that critical data applications can remain operational.

Automatic Route Selection (ARS)

A feature that allows the system to automatically choose the least-cost way to send a toll call.

automatic trunk

A trunk that does not require addressing information because the destination is predetermined. A request for service on the trunk, called a seizure, is sufficient to route the call. The normal destination of an automatic trunk is the communications-system attendant group. Also called automatic incoming trunk and automatic tie trunk.

AUX

Auxiliary

auxiliary equipment

Equipment used for optional system features, such as Loudspeaker Paging and Music-on-Hold.

auxiliary trunk

A trunk used to connect auxiliary equipment, such as radio-paging equipment, to a communications system.

Aux-Work mode

A work mode in which agents are unavailable to receive ACD calls. Agents enter Aux-Work mode when involved in non-ACD activities such as taking a break, going to lunch, or placing an outgoing call.

AVD

Alternate voice/data

AWOH

See [Administration Without Hardware \(AWOH\)](#).

AWG

American Wire Gauge

AWT

Average work time

B

B8ZS

Bipolar Eight Zero Substitution.

bandwidth

The difference, expressed in hertz, between the defined highest and lowest frequencies in a range.

barrier code

A security code used with the Remote Access feature to prevent unauthorized access to the system.

baud

A unit of transmission rate equal to the number of signal events per second. See also [bit rate](#) and [bits per second \(bps\)](#).

BCC

See [Bearer capability class \(BCC\)](#).

BCMS

Basic Call Management System

BCT

See [business communications terminal \(BCT\)](#).

Bearer capability class (BCC)

Code that identifies the type of a call (for example, voice and different types of data).

Determination of BCC is based on the caller's characteristics for non-ISDN endpoints and on the Bearer Capability and Low-Layer Compatibility Information Elements of an ISDN endpoint. Current BCCs are 0 (voice-grade data and voice), 1 (DMI mode 1, 56 kbps data transmission), 2 (DMI mode 2, synchronous/asynchronous data transmission up to 19.2 kbps) 3 (DMI mode 3, 64 kbps circuit/packet data transmission), 4 (DMI mode 0, 64 kbps synchronous data), 5 (temporary signaling connection, and 6 (wideband call, 128–1984 kbps synchronous data).

BER

Bit error rate

BHCC

Busy-hour call completions

bit (binary digit)

One unit of information in binary notation, having two possible values: 0 or 1.

bits per second (bps)

The number of binary units of information that are transmitted or received per second. See also [baud](#) and [bit rate](#).

bit rate

The speed at which bits are transmitted, usually expressed in bits per second. Also called data rate. See also [baud](#) and [bits per second \(bps\)](#).

BLF

Busy Lamp Field

BN

Billing number

BOS

Bit-oriented signaling

BPN

Billed-party number

bps

See [bits per second \(bps\)](#).

bridge (bridging)

The appearance of a voice terminal's extension at one or more other voice terminals.

BRI

The ISDN Basic Rate Interface specification.

bridged appearance

A call appearance on a voice terminal that matches a call appearance on another voice terminal for the duration of a call.

BTU

British Thermal Unit

buffer

1. In hardware, a circuit or component that isolates one electrical circuit from another. Typically, a buffer holds data from one circuit or process until another circuit or process is ready to accept the data.
2. In software, an area of memory that is used for temporary storage.

bus

A multiconductor electrical path used to transfer information over a common connection from any of several sources to any of several destinations.

business communications terminal (BCT)

A digital data terminal used for business applications. A BCT can function via a data module as a special-purpose terminal for services provided by a processor or as a terminal for data entry and retrieval.

BX.25

A version of the CCITT X.25 protocol for data communications. BX.25 adds a fourth level to the standard X.25 interface. This uppermost level combines levels 4, 5, and 6 of the ISO reference model.

bypass tie trunks

A 1-way, outgoing tie trunk from a tandem switch to a main switch in an ETN. Bypass tie trunks, provided in limited quantities, are used as a last-choice route when all trunks to another tandem switch are busy. Bypass tie trunks are used only if all applicable intertandem trunks are busy.

byte

A sequence of (usually eight) bits processed together.

C

CACR

Cancellation of Authorization Code Request

cabinet

Housing for racks, shelves, or carriers that hold electronic equipment.

cable

Physical connection between two pieces of equipment (for example, data terminal and modem) or between a piece of equipment and a termination field.

cable connector

A jack (female) or plug (male) on the end of a cable. A cable connector connects wires on a cable to specific leads on telephone or data equipment.

CAG

Coverage answer group

call appearance

1. For the attendant console, six buttons, labeled a–f, used to originate, receive, and hold calls. Two lights next to the button show the status of the call appearance.
2. For the voice terminal, a button labeled with an extension and used to place outgoing calls, receive incoming calls, or hold calls. Two lights next to the button show the status of the call appearance.

call-control capabilities

Capabilities (*Third Party Selective Hold, Third Party Reconnect, Third Party Merge*) that can be used in either of the Third Party Call Control ASE (cluster) subsets (Call Control and Domain Control).

Call Detail Recording (CDR)

A feature that uses software and hardware to record call data (same as CDRU).

Call Detail Recording utility (CDRU)

Software that collects, stores, optionally filters, and outputs call-detail records.

Call Management System (CMS)

An application, running on an adjunct processor, that collects information from an ACD unit. CMS enables customers to monitor and manage telemarketing centers by generating reports on the status of agents, splits, trunks, trunk groups, vectors, and VDNs, and enables customers to partially administer the ACD feature for a communications system.

call-reference value (CRV)

An identifier present in ISDN messages that associates a related sequence of messages. In ASAI, CRVs distinguish between associations.

call vector

A set of up to 15 vector commands to be performed for an incoming or internal call.

callback call

A call that automatically returns to a voice-terminal user who activated the Automatic Callback or Ringback Queuing feature.

call-waiting ringback tone

A low-pitched tone identical to ringback tone except that the tone decreases in the last 0.2 seconds (in the United States). Call-waiting ringback tone notifies the attendant that the Attendant Call Waiting feature is activate and that the called party is aware of the waiting call. Tones in international countries may sound different.

call work code

A number, up to 16 digits, entered by ACD agents to record the occurrence of customer-defined events (such as account codes, social security numbers, or phone numbers) on ACD calls.

CAMA

Centralized Automatic Message Accounting

carrier

An enclosed shelf containing vertical slots that hold circuit packs.

carried load

The amount of traffic served by traffic-sensitive facilities during a given interval.

CARR-POW

Carrier Port and Power Unit for AC Powered Systems

CAS

Centralized Attendant Service or Call Accounting System

CCS or hundred call seconds

A unit of call traffic. Call traffic for a facility is scanned every 100 seconds. If the facility is busy, it is assumed to have been busy for the entire scan interval. There are 3600 seconds per hour. The Roman numeral for 100 is the capital letter C. The abbreviation for call seconds is CS. Therefore, 100 call seconds is abbreviated CCS. If a facility is busy for an entire hour, then it is said to have been busy for 36 CCS. See also [Erlang](#).

capability

A request or indication of an operation. For example, *Third Party Make Call* is a request for setting up a call; *event report* is an indication that an event has occurred.

capability group

Set of capabilities, determined by switch administration, that can be requested by an application. Capability groups denote association types. For example, *Call Control* is a type of association that allows certain functions (the ones in the capability group) to be performed over this type of association. Also referred to as administration groups or application service elements (ASEs).

CA-TSC

Call-Associated Temporary Signaling Connection

cause value

A value is returned in response to requests or in event reports when a denial or unexpected condition occurs. ASAI cause values fall into two coding standards: Coding Standard 0 includes any cause values that are part of AT&T and CCITT ISDN specifications; Coding standard 3 includes any other ASAI cause values. This document uses a notation for cause value where the coding standard for the cause is given first, then a slash, then the cause value. Example: CS0/100 is coding standard 0, cause value 100.

CBC

Call-by-call or coupled bonding conductor

CC

Country code

CCIS

Common-Channel Interoffice Signaling

CCITT

CCITT (Comite Consultatif International Telephonique et Telegraphique), now called *International Telecommunications Union* (ITU). See [International Telecommunications Union \(ITU\)](#).

CCMS

Control-Channel Message Set

CCS

See [CCS or hundred call seconds](#).

CCSA

Common-Control Switching Arrangement

CDM

Channel-division multiplexing

CDOS

Customer-dialed and operator serviced

CDR

See [Call Detail Recording \(CDR\)](#).

CDRP

Call Detail Record Poller

CDRR

Call Detail Recording and Reporting

CDRU

See [Call Detail Recording utility \(CDRU\)](#).

CEM

Channel-expansion multiplexing

center-stage switch (CSS)

The central interface between the processor port network and expansion port networks in a CSS-connected system.

central office (CO)

The location housing telephone switching equipment that provides local telephone service and access to toll facilities for long-distance calling.

central office (CO) codes

The first three digits of a 7-digit public-network telephone number in the United States.

central office (CO) trunk

A telecommunications channel that provides access from the system to the public network through the local CO.

CEPT

European Conference of Postal and Telecommunications Rate 1

channel

1. A circuit-switched call.
2. A communications path for transmitting voice and data.
3. In wideband, all of the time slots (contiguous or noncontiguous) necessary to support a call. Example: an H0-channel uses six 64-kbps time slots.
4. A DS0 on a T1 or E1 facility not specifically associated with a logical circuit-switched call; analogous to a single trunk.

channel negotiation

The process by which the channel offered in the Channel Identification Information Element (CIIE) in the SETUP message is negotiated to be another channel acceptable to the switch that receives the SETUP message and ultimately to the switch that sent the SETUP. Negotiation is attempted only if the CIIE is encoded as *Preferred*. Channel negotiation is not attempted for wideband calls.

CI

Clock input

circuit

1. An arrangement of electrical elements through which electric current flows.
2. A channel or transmission path between two or more points.

circuit pack

A card on which electrical circuits are printed, and IC chips and electrical components are installed. A circuit pack is installed in a switch carrier.

CISPR

International Special Committee on Radio Interference

Class of Restriction (COR)

A feature that allows up to 64 classes of call-origination and call-termination restrictions for voice terminals, voice-terminal groups, data modules, and trunk groups. See also [Class of Service \(COS\)](#).

Class of Service (COS)

A feature that uses a number to specify if voice-terminal users can activate the Automatic Callback, Call Forwarding All Calls, Data Privacy, or Priority Calling features. See also [Class of Restriction \(COR\)](#).

cm

Centimeter

CM

Connection Manager

CMDR

Centralized Message Detail Recording

CMS

Call Management System

CO

See [central office \(CO\)](#).

common-control switching arrangement (CCSA)

A private telecommunications network using dedicated trunks and a shared switching center for interconnecting company locations.

communications system

The software-controlled processor complex that interprets dialing pulses, tones, and keyboard characters and makes the proper connections both within the system and external to the system. The communications system itself consists of a digital computer, software, storage device, and carriers with special hardware to perform the connections. A communications system provides voice and data communications services, including access to public and private networks, for telephones and data terminals on a customer's premises. See also [switch](#).

confirmation tone

A tone confirming that feature activation, deactivation, or cancellation has been accepted.

connectivity

The connection of disparate devices within a single system.

console

See [attendant console](#).

contiguous

Adjacent DS0s within one T1 or E1 facility or adjacent TDM or fiber time slots. The first and last TDM bus, DS0, or fiber time slots are not considered contiguous (no wraparound). For an E1 facility with a D-channel, DS0s 15 and 17 are considered contiguous.

control cabinet

See [control carrier](#).

control carrier

A carrier in a multicarrier cabinet that contains the SPE circuit packs and, unlike an R5r control carrier, port circuit packs. Also called control cabinet in a single-carrier cabinet. See also [switch-processing element \(SPE\)](#).

controlled station

A station that is monitored and controlled via a domain-control association.

COR

See [Class of Restriction \(COR\)](#).

COS

See [Class of Service \(COS\)](#).

coverage answer group

A group of up to eight voice terminals that ring simultaneously when a call is redirected to it by Call Coverage. Any one of the group can answer the call.

coverage call

A call that is automatically redirected from the called party's extension to an alternate answering position when certain coverage criteria are met.

coverage path

The order in which calls are redirected to alternate answering positions.

coverage point

An extension or attendant group, VDN, or ACD split designated as an alternate answering position in a coverage path.

covering user

A person at a coverage point who answers a redirected call.

CP

Circuit pack

CPE

Customer-premises equipment

CPN

Called-party number

CPN/BN

Calling-party number/billing number

CPTR

Call-progress-tone receiver

CRC

Cyclical Redundancy Checking

critical-reliability system

A system that has the following duplicated items: control carriers, tone clocks, EI circuit packs, and cabling between port networks and center-stage switch in a CSS-connected system. See also [duplicated common control](#), and [duplication](#).

CSA

Canadian Safety Association

CSCC

Compact single-carrier cabinet

CSCN

Center-stage control network

CSD

Customer-service document

CSM

Centralized System Management

CSS

See [center-stage switch \(CSS\)](#).

CSSO

Customer Services Support Organization

CSU

Channel service unit

CTS

Clear to Send

CWC

See [call work code](#).

D

DAC

1. Dial access code or Direct Agent Calling
2. See [digital-to-analog converter \(DAC\)](#).

data channel

A communications path between two points used to transmit digital signals.

data-communications equipment (DCE)

The equipment (usually a modem, data module, or packet assembler/disassembler) on the network side of a communications link that makes the binary serial data from the source or transmitter compatible with the communications channel.

data link

The configuration of physical facilities enabling end terminals to communicate directly with each other.

data module

An interconnection device between a BRI or DCP interface of the switch and data terminal equipment or data communications equipment.

data path

The end-to-end connection used for a data communications link. A data path is the combination of all elements of an interprocessor communication in a DCS.

data port

A point of access to a computer that uses trunks or lines for transmitting or receiving data.

data rate

See [bit rate](#).

data service unit (DSU)

A device that transmits digital data on transmission facilities.

data terminal

An input/output (I/O) device that has either switched or direct access to a host computer or to a processor interface.

data terminal equipment (DTE)

Equipment consisting of the endpoints in a connection over a data circuit. In a connection between a data terminal and host, the terminal, the host, and their associated modems or data modules make up the DTE.

dB

Decibel

dBa

Decibels in reference to amperes.

dBmC

Decibels above reference noise with C filter.

DC

Direct current

DCE

Data-communications equipment

D-channel backup

Type of backup used with Non-Facility Associated Signaling (NFAS). A primary D-channel provides signaling for an NFAS D-channel group (two or more PRI facilities). A second D-channel, on a separate PRI facility of the NFAS D-channel group, is designated as backup for the D-channel. Failure of the primary D-channel causes automatic transfer of call-control signaling to the backup D-channel. The backup becomes the primary D-channel. When the failed channel returns to service, it becomes the backup D-channel.

DCO

Digital central office

DCP

Digital Communications Protocol

DCS

Distributed Communications System

DDC

Direct Department Calling

DDD

Direct Distance Dialing

delay-dial trunk

A trunk that allows dialing directly into a communications system (digits are received as they are dialed).

denying a request

Sending a negative acknowledgement (NAK), done by sending an FIE with a *return error* component (and a cause value). It should not be confused with the denial event report that applies to calls.

designated voice terminal

The specific voice terminal to which calls, originally directed to a certain extension, are redirected. Commonly used to mean the forwarded-to terminal when Call Forwarding All Calls is active.

dial-repeating trunks

A PBX tie trunk that is capable of handling PBX station-signaling information without attendant assistance.

dial-repeating tie trunk

A tie trunk that transmits called-party addressing information between two communications systems.

DID

Direct Inward Dialing

digit conversion

A process used to convert specific dialed numbers into other dialed numbers.

digital

The representation of information by discrete steps. See also [analog](#).

digital communications protocol (DCP)

A proprietary protocol used to transmit both digitized voice and digitized data over the same communications link. A DCP link is made up of two 64-kbps information (I-) channels and one 8-kbps signaling (S-) channel.

digital data endpoints

In DEFINITY ECS, devices such as the 510D terminal or the 515-type business communications terminal (BCT).

digital multiplexed interface (DMI)

An interface that provides connectivity between a communications system and a host computer or between two communications systems using DS1 24th-channel signaling. DMI provides 23 64-kbps data channels and 1 common-signaling channel over a twisted-pair connection. DMI is offered through two capabilities: bit-oriented signaling (DMI-BOS) and message-oriented signaling (DMI-MOS).

digital signal level 0 (DS0)

A single 64-kbps voice channel. A DS0 is a single 64-kbps channel in a T1 or E1 facility and consists of eight bits in a T1 or E1 frame every 125 microseconds.

digital signal level 1 (DS1)

A single 1.544-Mbps (United States) or 2.048-Mbps (outside the United States) digital signal carried on a T1 transmission facility. A DS1 converter complex consists of a pair, one at each end, of DS1 converter circuit packs and the associated T1/E1 facilities.

digital terminal data module (DTDM)

An integrated or adjunct data module that shares with a digital telephone the same physical port for connection to a communications system. The function of a DTDM is similar to that of a PDM and MPDM in that it converts RS-232C signals to DCP signals.

digital-to-analog converter (DAC)

A device that converts data in digital form to the corresponding analog signals. See also [analog-to-digital converter \(ADC\)](#).

digital transmission

A mode of transmission in which information to be transmitted is first converted to digital form and then transmitted as a serial stream of pulses.

digital trunk

A circuit that carries digital voice and/or digital data in a telecommunications channel.

DIOD

Direct Inward and Outward Dialing

direct agent

A feature, accessed only via ASAI, that allows a call to be placed in a split queue but routed only to a specific agent in that split. The call receives normal ACD call treatment (for example, announcements) and is measured as an ACD call while ensuring that a particular agent answers.

Direct Extension Selection (DXS)

A feature on an attendant console that allows an attendant direct access to voice terminals by pressing a group-select button and a DXS button.

Direct Inward Dialing (DID)

A feature that allows an incoming call from the public network (not FX or WATS) to reach a specific telephone without attendant assistance.

Direct Inward Dialing (DID) trunk

An incoming trunk used for dialing directly from the public network into a communications system without help from the attendant.

disk drive

An electromechanical device that stores data on and retrieves data from one or more disks.

distributed communications system (DCS)

A network configuration linking two or more communications systems in such a way that selected features appear to operate as if the network were one system.

DIVA

Data In/Voice Answer

DLC

Data line circuit

DLDM

Data-line data module

DMI

Digital-multiplexed interface

DND

Do not disturb

DNIS

Dialed-Number Identification Service

DOD

Direct Outward Dialing

domain

VDNs, ACD splits, and stations. The VDN domain is used for active-notification associations. The ACD-split domain is for active-notification associations and domain-control associations. The station domain is used for the domain-control associations.

domain-control association

A *Third Party Domain Control Request* capability initiates a unique CRV/link number combination, which is referred to as a domain-control association.

domain-controlled split

A split for which *Third Party Domain Control* request has been accepted. A domain-controlled split provides an event report for logout.

domain-controlled station

A station for which a *Third Party Domain Control* request has been accepted. A domain-controlled station provides event reports for calls that are alerting, connected, or held at the station.

domain-controlled station on a call

A station that is active on a call, and which provides event reports over one or two domain-control associations.

DOSS

Delivery Operations Support System

DOT

Duplication Option Terminal

DPM

Dial Plan Manager

DPR

Dual-port RAM

DS1

Digital Signal Level 1

DS1C

Digital Signal Level-1 protocol C

DS1 CONV

Digital Signal Level-1 converter

DSI

Digital signal interface

DSU

Data service unit

DTDM

Digital-terminal data module

DTE

Data-terminal equipment

DTGS

Direct Trunk Group Select

DTMF

Dual-tone multifrequency

DTS

Disk-tape system

deduplicated common control

Two processors ensuring continuous operation of a communications system. While one processor is online, the other functions as a backup. The backup processor goes online periodically or when a problem occurs.

duplication

The use of redundant components to improve availability. When a duplicated subsystem fails, its backup redundant system automatically takes over.

duplication option

A system option that duplicates the following: control carrier containing the SPE, EI circuit packs in carriers, fiber-optic cabling between port networks, and center-stage switch in a CSS-connected system.

DWBS

DEFINITY Wireless Business System

DXS

Direct extension selection

E

E1

A digital transmission standard that carries traffic at 2.048 Mbps. The E1 facility is divided into 32 channels (DS0s) of 64 kbps information. Channel 0 is reserved for framing and synchronization information. A D-channel occupies channel 16.

E & M

Ear and mouth (receive and transmit)

EA

Expansion archangel

EAL

Expansion archangel link

ear and mouth (E & M) signaling

Trunk supervisory signaling, used between two communications systems, whereby signaling information is transferred through 2-state voltage conditions (on the E and M leads) for analog applications and through a single bit for digital applications.

EBCDIC

Extended Binary-Coded Decimal Interexchange Code

ECC

Error Correct Code

ECMA

European Computer Manufacturers Association

EPF

Electronic power feed

EI

Expansion interface

EIA

Electronic Industries Association

EIA-232

A physical interface specified by the EIA. EIA-232 transmits and receives asynchronous data at speeds of up to 19.2 kbps over cable distances of up to 50 feet. EIA-232 replaces RS-232 protocol in some DEFINITY applications.

electronic tandem network (ETN)

A tandem tie-trunk network that has automatic call-routing capabilities based on the number dialed and the most preferred route available. Each switch in the network is assigned a unique private network office code (RNX), and each voice terminal is assigned a unique extension.

Electronics Industries Association (EIA)

A trade association of the electronics industry that establishes electrical and functional standards.

emergency transfer

If a major system failure occurs, automatic transfer is initiated to a group of telephones capable of making outgoing calls. The system operates in this mode until the failure is repaired and the system automatically returns to normal operation. Also called power-failure transfer.

EMI

Electromagnetic interference

end-to-end signaling

The transmission of touch-tone signals generated by dialing from a voice terminal to remote computer equipment. These digits are sent over the trunk as DTMF digits whether the trunk signaling type is marked as tone or rotary and whether the originating station is tone or rotary. Example: a call to a voice-mail machine or automated-attendant service. A connection is first established over an outgoing trunk. Then additional digits are dialed to transmit information to be processed by the computer equipment.

enhanced private-switched communications service (EPSCS)

An analog private telecommunications network based on the No. 5 crossbar and 1A ESS that provides advanced voice and data telecommunications services to companies with many locations.

EPN

Expansion-port network

EPROM

Erasable programmable read-only memory

EPSCS

Enhanced Private Switched Communications Services

ERL

Echo return loss

Erlang

A unit of traffic intensity, or load, used to express the amount of traffic needed to keep one facility busy for one hour. One Erlang is equal to 36 CCS. See also [CCS or hundred call seconds](#).

ESF

Extended superframe format

ESPA

European Standard Paging Access

ETA

Extended Trunk Access; also Enhanced Terminal Administration

ETN

Electronic tandem network

ETSI

European Telecommunications Standards Institute

expansion archangel (EAA)

A network-control microprocessor located on an expansion interface (EI) port circuit pack in an expansion port network. The EA provides an interface between the EPN and its controlling switch-processing element.

expansion-archangel link (EAL)

A link-access function on the D-channel (LAPD) logical link that exists between a switch-processing element and an expansion archangel (EA). The EAL carries control messages from the SPE to the EA and to port circuit packs in an expansion port network.

expansion control cabinet

See [expansion control carrier](#).

expansion control carrier

A carrier in a multicarrier cabinet that contains extra port circuit packs and a maintenance interface. Also called expansion control cabinet in a single-carrier cabinet.

expansion interface (EI)

A port circuit pack in a port network that provides the interface between a PN's TDM bus/ packet bus and a fiber-optic link. The EI carries circuit-switched data, packet-switched data, network control, timing control, and DS1 control. In addition, an EI in an expansion port network communicates with the master maintenance circuit pack to provide the EPN's environmental and alarm status to the switch-processing element.

expansion port network (EPN)

A port network (PN) that is connected to the TDM bus and packet bus of a processor port network (PPN). Control is achieved by indirect connection of the EPN to the PPN via a port-network link (PNL). See also [port network \(PN\)](#).

extension-in

Extension-In (ExtIn) is the work state agents go into when they answer (receive) a non-ACD call. If the agent is in Manual-In or Auto-In and receives an extension-in call, it is recorded by CMS as an AUX-In call.

extension-out

The work state that agents go into when they place (originate) a non-ACD call.

external measurements

Those ACD measurements that are made by the External CMS adjunct.

extension

A 1- to 5-digit number by which calls are routed through a communications system or, with a Uniform Dial Plan (UDP) or main-satellite dialing plan, through a private network.

external call

A connection between a communications system user and a party on the public network or on another communications system in a private network.

F

FAC

Feature Access Code

facility

A telecommunications transmission pathway and associated equipment.

facility-associated signaling (FAS)

Signaling for which a D-channel carries signaling only for those channels on the same physical interface.

FAS

Facility-associated signaling

FAT

Facility access trunk

FAX

Facsimile

FCC

Federal Communications Commission

FEAC

Forced Entry of Account Codes

feature

A specifically defined function or service provided by the system.

feature button

A labeled button on a telephone or attendant console used to access a specific feature.

FEP

Front-end processor

FIC

Facility interface codes

fiber optics

A technology using materials that transmit ultrawideband electromagnetic light-frequency ranges for high-capacity carrier systems.

fixed

A trunk allocation term. In the fixed allocation scheme, the time slots necessary to support a wideband call are contiguous, and the first time slot is constrained to certain starting points.

flexible

A trunk allocation term. In the flexible allocation scheme, the time slots of a wideband call can occupy noncontiguous positions within a single T1 or E1 facility.

floating

A trunk allocation term. In the floating allocation scheme, the time slots of a wideband call are contiguous, but the position of the first time slot is not fixed.

FNPA

Foreign Numbering-Plan Area

foreign-exchange (FX)

A CO other than the one providing local access to the public telephone network.

foreign-exchange trunk

A telecommunications channel that directly connects the system to a CO other than its local CO.

foreign numbering-plan area code (FNPAC)

An area code other than the local area code, that must be dialed to call outside the local geographical area.

FRL

Facilities Restriction Level

FX

Foreign exchange

G

G3-MA

Generic 3 Management Applications

G3-MT

Generic 3 Management Terminal

G3r

Generic 3, RISC (Reduced Instruction Set Computer)

generalized route selection (GRS)

An enhancement to Automatic Alternate Routing/Automatic Route Selection (AAR/ARS) that performs routing based on call attributes, such as Bearer Capability Classes (BCCs), in addition to the address and facilities restriction level (FRL), thus facilitating a Uniform Dial Plan (UDP) that is independent of the type of call being placed.

glare

The simultaneous seizure of a 2-way trunk by two communications systems, resulting in a standoff.

GM

Group manager

GPTR

General-purpose tone receiver

grade of service

The number of call attempts that fail to receive service immediately. Grade of service is also expressed as the quantity of all calls that are blocked or delayed.

ground-start trunk

A trunk on which, for outgoing calls, the system transmits a request for services to a distant switching system by grounding the trunk ring lead. To receive the digits of the called number, that system grounds the trunk tip lead. When the system detects this ground, the digits are sent.

GRS

Generalized Route Selection

H

H0

An ISDN information transfer rate for 384-kbps data defined by CCITT and ANSI standards.

H11

An ISDN information transfer rate for 1536-kbps data defined by CCITT and ANSI standards.

H12

An ISDN information transfer rate for 1920-kbps data defined by CCITT and ANSI standards.

handshaking logic

A format used to initiate a data connection between two data module devices.

hertz (Hz)

A unit of frequency equal to one cycle per second.

high-reliability system

A system having the following: two control carriers, duplicate expansion interface (EI) circuit packs in the PPN (in R5r with CSS), and duplicate switch node clock circuit packs in the switch node (SN) carriers. See also [duplicated common control](#), [duplication](#), [duplication option](#), and [critical-reliability system](#).

HNPA

See [home numbering-plan area code \(HNPA\)](#).

holding time

The total length of time in minutes and seconds that a facility is used during a call.

home numbering-plan area code (HNPA)

The local area code. The area code does not have to be dialed to call numbers within the local geographical area.

hop

Nondirect communication between two switch communications interfaces (SCI) where the SCI message passes automatically without intermediate processing through one or more intermediate SCIs.

host computer

A computer, connected to a network, that processes data from data-entry devices.

hunt group

A group of extensions that are assigned the Station Hunting feature so that a call to a busy extension reroutes to an idle extension in the group. See also [ACD work mode](#).

Hz

See [hertz \(Hz\)](#).

I

I1

The first information channel of DCP.

I2

The second information channel of DCP.

I2 Interface

A proprietary interface used for the DEFINITY Wireless Business System for the radio-controller circuit packs. Each interface provides communication between the radio-controller circuit pack and up to two wireless fixed bases.

I3 Interface

A proprietary interface used for the DEFINITY Wireless Business System for the cell antenna units. Each wireless fixed base can communicate to up to four cell antenna units.

IAS

Inter-PBX Attendant Service

ICC

Intercabinet cable or intercarrier cable

ICD

Inbound Call Director

ICDOS

International Customer-Dialed Operator Service

ICHT

Incoming call-handling table

ICI

Incoming call identifier

ICM

Inbound Call Management

IDDD

International Direct Distance Dialing

IDF

Intermediate distribution frame

IE

Information element

immediate-start tie trunk

A trunk on which, after making a connection with a distant switching system for an outgoing call, the system waits a nominal 65 ms before sending the digits of the called number. This allows time for the distant system to prepare to receive digits. On an incoming call, the system has less than 65 ms to prepare to receive the digits.

IMT

Intermachine trunk

in

Inch

INADS

Initialization and Administration System

incoming gateway

A PBX that routes an incoming call on a trunk *not* administered for Supplementary Services Protocol B to a trunk *not* administered for Supplementary Services Protocol B.

information exchange

The exchange of data between users of two different systems, such as the switch and a host computer, over a LAN.

Information Systems Network (ISN)

A WAN and LAN with an open architecture combining host computers, minicomputers, word processors, storage devices, PCs, high-speed printers, and nonintelligent terminals into a single packet-switching system.

INS

ISDN Network Service

inside call

A call placed from one telephone to another within the local communications system.

Integrated Services Digital Network (ISDN)

A public or private network that provides end-to-end digital communications for all services to which users have access by a limited set of standard multipurpose user-network interfaces defined by the CCITT. Through internationally accepted standard interfaces, ISDN provides digital circuit-switched or packet-switched communications within the network and links to other ISDNs to provide national and international digital communications. See also [Integrated Services Digital Network Basic Rate Interface \(ISDN-BRI\)](#) and [Integrated Services Digital Network Primary Rate Interface \(ISDN-PR\)](#).

Integrated Services Digital Network Basic Rate Interface (ISDN-BRI)

The interface between a communications system and terminal that includes two 64-kbps B-channels for transmitting voice or data and one 16-kbps D-channel for transmitting associated B-channel call control and out-of-band signaling information. ISDN-BRI also includes 48 kbps for transmitting framing and D-channel contention information, for a total interface speed of 192 kbps. ISDN-BRI serves ISDN terminals and digital terminals fitted with ISDN terminal adapters. See also [Integrated Services Digital Network \(ISDN\)](#) and [Integrated Services Digital Network Primary Rate Interface \(ISDN-PRI\)](#).

Integrated Services Digital Network Primary Rate Interface (ISDN-PRI)

The interface between multiple communications systems that in North America includes 24 64-kbps channels, corresponding to the North American digital signal level-1 (DS1) standard rate of 1.544 Mbps. The most common arrangement of channels in ISDN-PRI is 23 64-kbps B-channels for transmitting voice and data and 1 64-kbps D-channel for transmitting associated B-channel call control and out-of-band signaling information. With nonfacility-associated signaling (NFAS), ISDN-PRI can include 24 B-channels and no D-channel. See also [Integrated Services Digital Network \(ISDN\)](#) and [Integrated Services Digital Network Basic Rate Interface \(ISDN-BRI\)](#).

intercept tone

A tone that indicates a dialing error or denial of the service requested.

interface

A common boundary between two systems or pieces of equipment.

internal call

A connection between two users within a system.

International Telecommunications Union (ITU)

Formerly known as International Telegraph and Telephone Consultative Committee (CCITT), ITU is an international organization that sets universal standards for data communications, including ISDN. ITU members are from telecommunications companies and organizations around the world. See also [BX.25](#).

International Telegraph and Telephone Consultative Committee

See [International Telecommunications Union \(ITU\)](#).

interflow

The ability for calls to forward to other splits on the same PBX or a different PBX using the Call Forward All Calls feature.

intraflow

The ability for calls to redirect to other splits on the same PBX on a conditional or unconditional basis using call coverage busy, don't answer, or all criteria.

internal measurements

BCMS measurements that are made by the system. ACD measurements that are made external to the system (via External CMS) are referred to as external measurements.

in-use lamp

A red light on a multiappearance voice terminal that lights to show which call appearance will be selected when the handset is lifted or which call appearance is active when a user is off-hook.

INWATS

Inward Wide Area Telephone Service

IO

Information outlet

ISDN

See [Integrated Services Digital Network \(ISDN\)](#).

ISDN Gateway (IG)

A feature allowing integration of the switch and a host-based telemarketing application via a link to a gateway adjunct. The gateway adjunct is a 3B-based product that notifies the host-based telemarketing application of call events.

ISDN trunk

A trunk administered for use with ISDN-PRI. Also called ISDN facility.

ISDN-PRI terminal adapter

An interface between endpoint applications and an ISDN PRI facility. ISDN-PRI terminal adapters are currently available from other vendors and are primarily designed for video conferencing applications. Accordingly, currently available terminal adapters adapt the two pairs of video codec data (V.35) and dialing (RS-366) ports to an ISDN PRI facility.

IS/DTT

Integrated Services/digital tie trunk

ISN

Information Systems Network

ISO

International Standards Organization

ISV

Independent software vendor

ITP

Installation test procedure

ITU

International Telecommunications Union

IXC

Interexchange carrier code

K

kHz

Kilohertz

kbps

Kilobits per second

kbyte

Kilobyte

kg

Kilogram

L

LAN

Local area network

LAP-D

Link Access Procedure on the D-channel

LAPD

Link Access Procedure data

LATA

Local access and transport area

lb

Pound

LBO

Line buildout

LDN

Listed directory number

LDS

Long-distance service

LEC

Local exchange carrier

LED

See [light-emitting diode \(LED\)](#).

light-emitting diode (LED)

A semiconductor device that produces light when voltage is applied. LEDs provide a visual indication of the operational status of hardware components, the results of maintenance tests, the alarm status of circuit packs, and the activation of telephone features.

lightwave transceiver

Hardware that provides an interface to fiber-optic cable from port circuit packs and DS1 converter circuit packs. Lightwave transceivers convert electrical signals to light signals and vice versa.

line

A transmission path between a communications system or CO switching system and a voice terminal or other terminal.

line appearance

See [appearance](#).

line buildout

A selectable output attenuation is generally required of DTE equipment because T1 circuits require the last span to lose 15–22.5 dB.

line port

Hardware that provides the access point to a communications system for each circuit associated with a telephone or data terminal.

link

A transmitter-receiver channel that connects two systems.

link-access procedure on the D-channel (LAPD)

A link-layer protocol on the ISDN-BRI and ISDN-PRI data-link layer (level 2). LAPD provides data transfer between two devices, and error and flow control on multiple logical links. LAPD is used for signaling and low-speed packet data (X.25 and mode 3) on the signaling (D-) channel and for mode-3 data communications on a bearer (B-) channel.

LINL

Local indirect neighbor link

local area network (LAN)

A networking arrangement designed for a limited geographical area. Generally, a LAN is limited in range to a maximum of 6.2 miles and provides high-speed carrier service with low error rates. Common configurations include daisy chain, star (including circuit-switched), ring, and bus.

logical link

The communications path between a processor and a BRI terminal.

loop-start trunk

A trunk on which, after establishing a connection with a distant switching system for an outgoing call, the system waits for a signal on the loop formed by the trunk leads before sending the digits of the called number.

LSU

Local storage unit

LWC

Leave Word Calling

M

MAC

Medium access

MADU

Modular asynchronous data unit

main distribution frame (MDF)

A device that mounts to the wall inside the system equipment room. The MDF provides a connection point from outside telephone lines to the PBX switch and to the inside telephone stations.

main-satellite-tributary

A private network configuration that can either stand alone or access an ETN. A main switch provides interconnection, via tie trunks, with one or more subtending switches, called satellites; all attendant positions for the main/satellite configuration; and access to and from the public network. To a user outside the complex, a main/satellite configuration appears as one switch, with one listed directory number (LDN). A tributary switch is connected to the main switch via tie trunks, but has its own attendant positions and LDN.

maintenance

Activities involved in keeping a telecommunications system in proper working condition: the detection and isolation of software and hardware faults, and automatic and manual recovery from these faults.

management terminal

The terminal that is used by the system administrator to administer the switch. The terminal may also be used to access the BCMS feature.

major alarm

An indication of a failure that has caused critical degradation of service and requires immediate attention. Major alarms are automatically displayed on LEDs on the attendant console and maintenance or alarming circuit pack, logged to the alarm log, and reported to a remote maintenance facility, if applicable.

Manual-In work mode

One of four agent work modes: the mode in which an agent is ready to process another call manually. See [Auto-In Work mode](#) for a contrast.

MAP

Maintenance action process

MAPD

Multiapplication platform for DEFINITY

MA-UUI

Message-Associated User-to-User Signaling

Mbps

Megabits per second

M-Bus

Memory bus

Mbyte

Megabyte

MCC

Multicarrier cabinet

MCS

Message Center Service

MCT

Malicious Call Trace

MCU

Multipoint control unit

MDF

Main distribution frame

MDM

Modular data module

MDR

Message detail record

MEM

Memory

memory

A device into which information can be copied and held, and from which information can later be obtained.

memory shadowing link

An operating-system condition that provides a method for memory-resident programs to be more quickly accessed, allowing a system to reboot faster.

message center

An answering service that supplies agents to and stores messages for later retrieval.

message center agent

A member of a message-center hunt group who takes and retrieves messages for voice-terminal users.

MET

Multibutton electronic telephone

MF

Multifrequency

MFB

Multifunction board

MFC signaling

Multifrequency-compelled signaling

MHz

Megahertz

MIM

Management information message

minor alarm

An indication of a failure that could affect customer service. Minor alarms are automatically displayed on LEDs on the attendant console and maintenance or alarming circuit pack, sent to the alarm log, and reported to a remote maintenance facility, if applicable.

MIPS

Million instructions per second

MIS

Management information system

MISCID

Miscellaneous identification

MMCS

Multimedia Call Server

MMCH

Multimedia call handling

MMI

Multimedia interface

MMS

Material Management Services

MO

Maintenance object

modem

A device that converts digital data signals to analog signals for transmission over telephone circuits. The analog signals are converted back to the original digital data signals by another modem at the other end of the circuit.

modem pooling

A capability that provides shared conversion resources (modems and data modules) for cost-effective access to analog facilities by data terminals. When needed, modem pooling inserts a conversion resource into the path of a data call. Modem pooling serves both outgoing and incoming calls.

modular processor data module (MPDM)

A processor data module (PDM) that can be configured to provide several kinds of interfaces (RS-232C, RS-449, and V.35) to customer-provided data terminal equipment (DTE). See also [processor data module \(PDM\)](#).

modular trunk data module (MTDM)

A trunk data module that can be configured to provide several kinds of interfaces (RS-232, RS-449, and V.35) to customer-provided data terminal equipment.

modulator-demodulator

See [modem](#).

monitored call

See [active-notification call](#).

MOS

Message-oriented signaling

MPDM

Modular processor data module

MS

Message server

ms

Millisecond

MS/T

Main satellite/tributary

MSA

Message servicing adjunct

MSG

Message service

MSL

Material stocking location

MSM

Modular System Management

MSS

Mass storage system

MSSNET

Mass storage/network control

MT

Management terminal

MTDM

Modular trunk data module

MTP

Maintenance tape processor

MTT

Multitasking terminal

multiappearance voice terminal

A terminal equipped with several call-appearance buttons for the same extension, allowing the user to handle more than one call on that same extension at the same time.

Multicarrier cabinet

A structure that holds one to five carriers. See also [single-carrier cabinet](#).

Multifrequency Compelled (MFC) Release 2 (R2) signaling

A signal consisting of two frequency components, such that when a signal is transmitted from a switch, another signal acknowledging the transmitted signal is received by the switch. R2 designates signaling used in the United States and in countries outside the United States.

multiplexer

A device used to combine a number of individual channels into a single common bit stream for transmission.

multiplexing

A process whereby a transmission facility is divided into two or more channels, either by splitting the frequency band into a number of narrower bands or by dividing the transmission channel into successive time slots. See also [time-division multiplexing \(TDM\)](#).

multirate

The new N x DS0 service (see N x DS0).

MWL

Message-waiting lamp

N

N+1

Method of determining redundant backup requirements. Example: if four rectifier modules are required for a DC-powered single-carrier cabinet, a fifth rectifier module is installed for backup.

N x DS0

N x DS0, equivalently referred to as N x 64 kbps, is an emerging standard for wideband calls separate from H0, H11, and H12 ISDN channels. The emerging N x DS0 ISDN multirate circuit mode bearer service will provide circuit-switched calls with data-rate multiples of 64 kbps up to 1536 kbps on a T1 facility or up to 1920 kbps on an E1 facility. In the switch, N x DS0 channels will range up to 1984 kbps using NFAS E1 interfaces.

NANP

North American Numbering Plan

narrowband

A circuit-switched call at a data rate up to and including 64 kbps. All nonwideband switch calls are considered narrowband.

native terminal support

A predefined terminal type exists in switch software, eliminating the need to alias the terminal (that is, manually map call appearances and feature buttons onto some other natively supported terminal type).

NAU

Network access unit

NCA/TSC

Noncall-associated/temporary-signaling connection

NCOSS

Network Control Operations Support Center

NCSO

National Customer Support Organization

NEC

National Engineering Center

NEMA

National Electrical Manufacturer's Association

NETCON

Network-control circuit pack

network

A series of points, nodes, or stations connected by communications channels.

network-specific facility (NSF)

An information element in an ISDN-PRI message that specifies which public-network service is used. NSF applies only when Call-by-Call Service Selection is used to access a public-network service.

network interface

A common boundary between two systems in an interconnected group of systems.

NFAS

See [Nonfacility-associated signaling \(NFAS\)](#).

NI

Network interface

NID

Network Inward Dialing

NM

Network management

NN

National number

node

A switching or control point for a network. Nodes are either tandem (they receive signals and pass them on) or terminal (they originate or terminate a transmission path).

Nonfacility-associated signaling (NFAS)

A method that allows multiple T1 and/or E1 facilities to share a single D-channel to form an ISDN-PRI. If D-channel backup is not used, one facility is configured with a D-channel, and the other facilities that share the D-channel are configured without D-channels. If D-channel backup is used, two facilities are configured to have D-channels (one D-channel on each facility), and the other facilities that share the D-channels are configured without D-channels.

NPA

Numbering-plan area

NPE

Network processing element

NQC

Number of queued calls

NSE

Night-service extension

NSU

Network sharing unit

null modem cable

Special wiring of an RS-232-C cable such that a computer can talk to another computer (or to a printer) without a modem.

NXX

Public-network office code

O

OA

Operator assisted

occurrence

See [appearance](#).

OCM

Outbound Call Management

offered load

The traffic that would be generated by all the requests for service occurring within a monitored interval, usually one hour.

ONS

On-premises station

OPS

Off-premises station

OPX

Off-premises extension

OQT

Oldest queued time

OSHA

Occupational Safety and Health Act

OSI

Open Systems Interconnect

OSS

Operations Support System

OSSI

Operational Support System Interface

OTDR

Optical time-domain reflectometer

othersplit

The work state that indicates that an agent is currently active on another split's call, or in ACW for another split.

OTQ

Outgoing trunk queuing

outgoing gateway

A PBX that routes an incoming call on a trunk administered for Supplementary Services Protocol B to a trunk *not* administered for Supplementary Services Protocol B.

P

PACCON

Packet control

packet

A group of bits (including a message element, which is the data, and a control information element (IE), which is the header) used in packet switching and transmitted as a discrete unit. In each packet, the message element and control IE are arranged in a specified format. See also [packet bus](#) and [packet switching](#).

packet bus

A wide-bandwidth bus that transmits packets.

packet switching

A data-transmission technique whereby user information is segmented and routed in discrete data envelopes called packets, each with its own appended control information, for routing, sequencing, and error checking. Packet switching allows a channel to be occupied only during the transmission of a packet. On completion of the transmission, the channel is made available for the transfer of other packets. See also [BX.25](#) and [packet](#).

PAD

Packet assembly/disassembly

paging trunk

A telecommunications channel used to access an amplifier for loudspeaker paging.

party/extension active on call

A party is on the call if he or she is actually connected to the call (in active talk or in held state). An originator of a call is always a party on the call. Alerting parties, busy parties, and tones are not parties on the call.

PBX

Private branch exchange

PC

See [personal computer \(PC\)](#).

PCM

See [pulse-code modulation \(PCM\)](#).

PCOL

Personal central-office line

PCOLG

Personal central-office line group

PCS

Permanent switched calls

PDM

See [processor data module \(PDM\)](#).

PDS

Premises Distribution System

PE

Processing element

PEC

Price element code

PEI

Processor element interchange

personal computer (PC)

A personally controllable microcomputer.

PGATE

Packet gateway

PGN

Partitioned group number

PI

Processor interface

PIB

Processor interface board

pickup group

A group of individuals authorized to answer any call directed to an extension within the group.

PIDB

Product image database

PKTINT

Packet interface

PL

Private line

PLS

Premises Lightwave System

PMS

Property Management System

PN

Port network

PNA

Private network access

POE

Processor occupancy evaluation

POP

Point of presence

port

A data- or voice-transmission access point on a device that is used for communicating with other devices.

port carrier

A carrier in a multicarrier cabinet or a single-carrier cabinet containing port circuit packs, power units, and service circuits. Also called a port cabinet in a single-carrier cabinet.

port network (PN)

A cabinet containing a TDM bus and packet bus to which the following components are connected: port circuit packs, one or two tone-clock circuit packs, a maintenance circuit pack, service circuit packs, and (optionally) up to four expansion interface (EI) circuit packs in DEFINITY ECS. Each PN is controlled either locally or remotely by a switch processing element (SPE). See also [expansion port network \(EPN\)](#) and [processor port network \(PPN\)](#).

port-network connectivity

The interconnection of port networks (PNs), regardless of whether the configuration uses direct or switched connectivity.

PPM

1. Parts per million
2. Periodic pulse metering

PPN

See [processor port network \(PPN\)](#).

PRI

See [Primary Rate Interface \(PRI\)](#).

primary extension

The main extension associated with the physical voice or data terminal.

Primary Rate Interface (PRI)

A standard ISDN frame format that specifies the protocol used between two or more communications systems. PRI runs at 1.544 Mbps and, as used in North America, provides 23 64-kbps B-channels (voice or data) and one 64-kbps D-channel (signaling). The D-channel is the 24th channel of the interface and contains multiplexed signaling information for the other 23 channels.

PRI endpoint (PE)

The wideband switching capability introduces PRI endpoints on switch line-side interfaces. A PRI endpoint consists of one or more contiguous B-channels on a line-side T1 or E1 ISDN PRI facility and has an extension. Endpoint applications have call-control capabilities over PRI endpoints.

principal

A terminal that has its primary extension bridged on one or more other terminals.

principal (user)

A person to whom a telephone is assigned and who has message-center coverage.

private network

A network used exclusively for the telecommunications needs of a particular customer.

private network office code (RNK)

The first three digits of a 7-digit private network number.

PROCR

Processor

processor carrier

See [control carrier](#).

processor data module (PDM)

A device that provides an RS-232C DCE interface for connecting to data terminals, applications processors (APs), and host computers, and provides a DCP interface for connection to a communications system. See also [modular processor data module \(MPDM\)](#).

processor port network (PPN)

A port network controlled by a switch-processing element that is directly connected to that PN's TDM bus and LAN bus. See also [port network \(PN\)](#).

processor port network (PPN) control carrier

A carrier containing the maintenance circuit pack, tone/clock circuit pack, and SPE circuit packs for a processor port network (PPN) and, optionally, port circuit packs.

Property Management System (PMS)

A stand-alone computer used by lodging and health-services organizations for services such as reservations, housekeeping, and billing.

protocol

A set of conventions or rules governing the format and timing of message exchanges to control data movement and correction of errors.

PSC

Premises service consultant

PSDN

Packet-switch public data network

PT

Personal terminal

PTC

Positive temperature coefficient

PTT

Postal Telephone and Telegraph

public network

The network that can be openly accessed by all customers for local and long-distance calling.

pulse-code modulation (PCM)

An extension of pulse-amplitude modulation (PAM) in which carrier-signal pulses modulated by an analog signal, such as speech, are quantized and encoded to a digital, usually binary, format.

Q

QPPCN

Quality Protection Plan Change Notice

quadrant

A group of six contiguous DS0s in fixed locations on an ISDN-PRI facility. Note that this term comes from T1 terminology (one-fourth of a T1), but there are five quadrants on an E1 ISDN-PRI facility (30B + D).

queue

An ordered sequence of calls waiting to be processed.

queuing

The process of holding calls in order of their arrival to await connection to an attendant, to an answering group, or to an idle trunk. Calls are automatically connected in first-in, first-out sequence.

R

RAM

See [random-access memory \(RAM\)](#).

random-access memory (RAM)

A storage arrangement whereby information can be retrieved at a speed independent of the location of the stored information.

RBS

Robbed-bit signaling

RC

Radio controller

RCL

Restricted call list

read-only memory (ROM)

A storage arrangement primarily for information-retrieval applications.

recall dial tone

Tones signalling that the system has completed a function (such as holding a call) and is ready to accept dialing.

redirection criteria

Information administered for each voice terminal's coverage path that determines when an incoming call is redirected to coverage.

Redirection on No Answer

An optional feature that redirects an unanswered ringing ACD call after an administered number of rings. The call is then redirected back to the agent.

remote home numbering-plan area code (RHNPA)

A foreign numbering-plan area code that is treated as a home area code by the Automatic Route Selection (ARS) feature. Calls can be allowed or denied based on the area code and the dialed CO code rather than just the area code. If the call is allowed, the ARS pattern used for the call is determined by these six digits.

Remote Operations Service Element (ROSE)

A CCITT and ISO standard that defines a notation and services that support interactions between the various entities that make up a distributed application.

REN

Ringer equivalency number

reorder tone

A tone to signal that at least one of the facilities, such as a trunk or a digit transmitter, needed for the call was not available.

report scheduler

Software that is used in conjunction with the system printer to schedule the days of the week and time of day that the desired reports are to be printed.

RFP

Request for proposal

RHNPA

See [remote home numbering-plan area code \(RHNPA\)](#).

RINL

Remote indirect neighbor link

RISC

Reduced-instruction-set computer

RLT

Release-link trunk

RMATS

Remote Maintenance, Administration, and Traffic System

RNX

Route-number index (private network office code)

ROM

See [read-only memory \(ROM\)](#).

RPN

Routing-plan number

RS-232C

A physical interface specified by the Electronic Industries Association (EIA). RS-232C transmits and receives asynchronous data at speeds of up to 19.2 kbps over cable distances of up to 50 feet.

RS-449

Recommended Standard 449

RSC

Regional Support Center

ROSE

See [Remote Operations Service Element \(ROSE\)](#).

S

S1

The first logical signalling channel of DCP. The channel is used to provide signaling information for DCP's I1 channel.

S2

The second logical signaling channel of DCP. The channel is used to provide signaling information for DCP's I2 channel.

SABM

Set Asynchronous Balance Mode

SAC

Send All Calls

SAKI

See [sanity and control interface \(SAKI\)](#).

sanity and control interface (SAKI)

A custom VLSI microchip located on each port circuit pack. The SAKI provides address recognition, buffering, and synchronization between the angel and the five control time slots that make up the control channel. The SAKI also scans and collects status information for the angel on its port circuit pack and, when polled, transmits this information to the archangel.

SAT

System access terminal

SCC

1. See [single-carrier cabinet](#).
2. Serial communications controller

SCD

Switch-control driver

SCI

Switch communications interface

SCO

System control office

SCOTCH

Switch Conferencing for TDM Bus in Concentration Highway

SCSI

See [small computer system interface \(SCSI\)](#).

SDDN

Software-Defined Data Network

SDI

Switched Digital International

SDLC

Synchronous data-link control

SDN

Software-defined network

SFRL

Single-frequency return loss

SID

Station-identification number

simplex system

A system that has no redundant hardware.

simulated bridged appearance

The same as a temporary bridged appearance; allows the terminal user (usually the principal) to bridge onto a call that had been answered by another party on his or her behalf.

single-carrier cabinet

A combined cabinet and carrier unit that contains one carrier. See also [Multicarrier cabinet](#).

single-line voice terminal

A voice terminal served by a single-line tip and ring circuit (models 500, 2500, 7101A, 7103A).

SIT

Special-information tones

small computer system interface (SCSI)

An ANSI bus standard that provides a high-level command interface between host computers and peripheral devices.

SMDR

Station Message Detail Recording, known as Call Detail Recording in DEFINITY ECS.

SN

Switch Node

SNA

Systems Network Architecture

SNC

Switch Node Clock

SNI

Switch Node Interface

SNMP

Simple Network Management Protocol

software

A set of computer programs that perform one or more tasks.

SPE

Switch Processing Element

SPID

Service Profile Identifier

split

See [ACD work mode](#).

split condition

A condition whereby a caller is temporarily separated from a connection with an attendant. A split condition automatically occurs when the attendant, active on a call, presses the start button.

split number

The split's identity to the switch and BCMS.

split report

A report that provides historical traffic information for internally measured splits.

split (agent) status report

A report that provides real-time status and measurement data for internally measured agents and the split to which they are assigned.

SSI

Standard serial interface

SSM

Single-site management

SSV

Station service

ST3

Stratum 3 clock board

staffed

Indicates that an agent position is logged in. A staffed agent functions in one of four work modes: Auto-In, Manual-In, ACW, or AUX-Work.

STARLAN

Star-Based Local Area Network

Station Message Detail Recording (SMDR)

An obsolete term now called CDR — a switch feature that uses software and hardware to record call data. See [Call Detail Recording \(CDR\)](#).

standard serial interface (SSI)

A communications protocol developed for use with 500-type business communications terminals (BCTs) and 400-series printers.

status lamp

A green light that shows the status of a call appearance or a feature button by the state of the light (lit, flashing, fluttering, broken flutter, or unlit).

stroke counts

A method used by ACD agents to record up to nine customer-defined events per call when CMS is active.

SVN

Security-violation notification

switch

Any kind of telephone switching system. See also [communications system](#).

switchhook

The buttons located under the receiver on a voice terminal.

switch-node (SN) carrier

A carrier containing a single switch node, power units, and, optionally, one or two DS1 converter circuit packs. An SN carrier is located in a center-stage switch.

switch-node (SN) clock

The circuit pack in an SN carrier that provides clock and maintenance alarm functions and environmental monitors.

switch-node interface (SNI)

The basic building block of a switch node. An SNI circuit pack controls the routing of circuit, packet, and control messages.

switch-node link (SNL)

The hardware that provides a bridge between two or more switch nodes. The SNL consists of the two SNI circuit packs residing on the switch nodes and the hardware connecting the SNIs. This hardware can include lightwave transceivers that convert the SNI's electrical signals to light signals, the copper wire that connects the SNIs to the lightwave transceivers, a full-duplex fiber-optic cable, DS1 converter circuit cards and DS1 facilities if a company does not have rights to lay cable, and appropriate connectors.

switch-processing element (SPE)

A complex of circuit packs (processor, memory, disk controller, and bus-interface cards) mounted in a PPN control carrier. The SPE serves as the control element for that PPN and, optionally, for one or more EPNs.

SXS

Step-by-step

synchronous data transmission

A method of sending data in which discrete signal elements are sent at a fixed and continuous rate and specified times. See also [association](#).

SYSAM

System Access and Administration

system administrator

The person who maintains overall customer responsibility for system administration. Generally, all administration functions are performed from the Management Terminal. The switch requires a special login, referred to as the system administrator login, to gain access to system-administration capabilities.

system printer

An optional printer that may be used to print scheduled reports via the report scheduler.

system report

A report that provides historical traffic information for internally measured splits.

system-status report

A report that provides real-time status information for internally measured splits.

system manager

A person responsible for specifying and administering features and services for a system.

system reload

A process that allows stored data to be written from a tape into the system memory (normally after a power outage).

T

T1

A digital transmission standard that in North America carries traffic at the DS1 rate of 1.544 Mbps. A T1 facility is divided into 24 channels (DS0s) of 64 kbps. These 24 channels, with an overall digital rate of 1.536 Mbps, and an 8-kbps framing and synchronization channel make up the 1.544-Mbps transmission. When a D-channel is present, it occupies channel 24. T1 facilities are also used in Japan and some Middle-Eastern countries.

TAAS

Trunk Answer from Any Station

TABS

Telemetry asynchronous block serial

TAC

Trunk-access code

tandem switch

A switch within an electronic tandem network (ETN) that provides the logic to determine the best route for a network call, possibly modifies the digits outpulsed, and allows or denies certain calls to certain users.

tandem through

The switched connection of an incoming trunk to an outgoing trunk without human intervention.

tandem tie-trunk network (TTTN)

A private network that interconnects several customer switching systems.

TC

Technical consultant

TCM

Traveling class mark

TDM

See [time-division multiplexing \(TDM\)](#).

TDR

Time-of-day routing

TEG

Terminating extension group

terminal

A device that sends and receives data within a system. See also [administration terminal](#).

tie trunk

A telecommunications channel that directly connects two private switching systems.

time-division multiplex (TDM) bus

A bus that is time-shared regularly by preallocating short time slots to each transmitter. In a PBX, all port circuits are connected to the TDM bus, permitting any port to send a signal to any other port.

time-division multiplexing (TDM)

Multiplexing that divides a transmission channel into successive time slots. See also [multiplexing](#).

time interval

The period of time, either one hour or one-half hour, that BCMS measurements are collected for a reports.

time slice

See [time interval](#).

time slot

64 kbps of digital information structured as eight bits every 125 microseconds. In the switch, a time slot refers to either a DS0 on a T1 or E1 facility or a 64-kbps unit on the TDM bus or fiber connection between port networks.

time slot sequence integrity

The situation whereby the N octets of a wideband call that are transmitted in one T1 or E1 frame arrive at the output in the same order that they were introduced.

to control

An application can invoke *Third Party Call Control* capabilities using either an adjunct-control or domain-control association.

to monitor

An application can receive *event reports* on an active-notification, adjunct-control, or domain-control association.

TOD

Time of day

tone ringer

A device with a speaker, used in electronic voice terminals to alert the user.

TOP

Task-oriented protocol

trunk

A dedicated telecommunications channel between two communications systems or COs.

trunk allocation

The manner in which trunks are selected to form wideband channels.

trunk-data module

A device that connects off-premises private-line trunk facilities and DEFINITY ECS. The trunk-data module converts between the RS-232C and the DCP, and can connect to DDD modems as the DCP member of a modem pool.

trunk group

Telecommunications channels assigned as a group for certain functions that can be used interchangeably between two communications systems or COs.

TSC

Technical Service Center

TTI

Terminal translation initialization

TTR

Touch-tone receiver

TTT

Terminating trunk transmission

TTTN

See [tandem tie-trunk network \(TTTN\)](#).

TTY

Teletypewriter

U

UAP

Usage-allocation plan

UART

Universal asynchronous transmitter

UCD

Uniform call distribution

UCL

Unrestricted call list

UDP

See [Uniform Dial Plan \(UDP\)](#).

UL

Underwriter Laboratories

UM

User manager

Uniform Dial Plan (UDP)

A feature that allows a unique 4- or 5-digit number assignment for each terminal in a multiswitch configuration such as a DCS or main-satellite-tributary system.

UNMA

Unified Network Management Architecture

UNP

Uniform numbering plan

UPS

Uninterruptible power supply

USOP

User service-order profile

UUCP

UNIX-to-UNIX Communications Protocol

UUI

User-to-user information

V

VAR

Value-added reseller

VDN

See [vector directory number \(VDN\)](#).

vector directory number (VDN)

An extension that provides access to the Vectoring feature on the switch. Vectoring allows a customer to specify the treatment of incoming calls based on the dialed number.

vector-controlled split

A hunt group or ACD split administered with the vector field enabled. Access to such a split is possible only by dialing a VDN extension.

VIS

Voice Information System

VLSI

Very-large-scale integration

VM

Voltmeter

VNI

Virtual nodepoint identifier

voice terminal

A single-line or multiappearance telephone.

W

WATS

See [Wide Area Telecommunications Service \(WATS\)](#).

WCC

World-Class Core

WCR

World-Class Routing

WCTD

World-Class Tone Detection

WFB

Wireless fixed base

Wide Area Telecommunications Service (WATS)

A service in the United States that allows calls to certain areas for a flat-rate charge based on expected usage.

wideband

A circuit-switched call at a data rate greater than 64 kbps. A circuit-switched call on a single T1 or E1 facility with a bandwidth between 128 and 1536 (T1) or 1984 (E1) kbps in multiples of 64 kbps. H0, H11, H12, and N x DS0 calls are wideband.

wideband access endpoint

Access endpoints, extended with wideband switching to include wideband access endpoints. A wideband access endpoint consists of one or more contiguous DS0s on a line-side T1 or E1 facility and has an extension. The Administered Connections feature provides call control for calls originating from wideband access endpoints.

wink-start tie trunk

A trunk with which, after making a connection with a distant switching system for an outgoing call, the system waits for a momentary signal (wink) before sending the digits of the called number. Similarly, on an incoming call, the system sends the wink signal when ready to receive digits.

work mode

One of four states (Auto-In, Manual-In, ACW, AUX-Work) that an ACD agent can be in. Upon logging in, an agent enters AUX-Work mode. To become available to receive ACD calls, the agent enters Auto-In or Manual-In mode. To do work associated with a completed ACD call, an agent enters ACW mode.

work state

An ACD agent may be a member of up to three different splits. Each ACD agent continuously exhibits a work state for every split of which it is a member. Valid work states are Avail, Unstaffed, AUX-Work, ACW, ACD (answering an ACD call), ExtIn, ExtOut, and OtherSpl. An agent's work state for a particular split may change for a variety of reasons (example: when a call is answered or abandoned, or the agent changes work modes). The BCMS feature monitors work states and uses this information to provide BCMS reports.

write operation

The process of putting information onto a storage medium, such as a hard disk.

WSA

Waiting session accept

WSS

Wireless Subscriber System

Z

ZCS

Zero Code Suppression

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