PERCEPTION 4000

DATABASE PROGRAMMING MANUAL

Release 2.0

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Introduction

GENERAL DESCRIPTION

The PERCEPTION 4000 database can be programmed for a variety of custom features and sophisticated switching capabilities. Some of the features that you can assign via the database worksheets include: setting up automatic parameters for call placement; defining outgoing call restrictions; or creating a customized Least Cost Routing service.

This manual contains background information and instructions for filling out the command forms which are used for configuring the PERCEPTION 4000 system. It is meant to aid in planning the system structure before it is actually installed.

System Administrators, Customer Service Representatives (CSRs), Interconnects (Telecommunication systems dealers and vendors,) or whoever is responsible for designing or installing the system should become familiar with the information in this document. For the purposes of this manual, we assume that you, the reader, will be the person responsible for structuring the PERCEPTION 4000 system and filling out the forms. This manual also assumes that you have a good working knowledge of telecommunications terms and technology, as well as the needs of end users.

The forms in this manual correspond with the maintenance and administration software screens of the PERCEPTION 4000 system. We suggest that you keep a record of the original form definitions used for installation and any updates that are made.

PURPOSE

This manual is meant to enhance the information discussed in the PERCEPTION 4000 Database and other technical level classes, as well as provide specific information on the database forms used for defining system features and hardware. We recommend that you attend and successfully complete one of the courses on the PERCEPTION 4000 product line, at the technical level, prior to filling out these forms. Information on a number of complex issues which are not covered in this manual will be discussed in the classroom.

For an overview of the PERCEPTION 4000 system and its features, refer to the *PERCEPTION 4000 General Description.* For more information regarding your system hardware or interfacing with the PERCEPTION 4000 system, see the *PERCEPTION 4000 Maintenance and Administration Manual, Installation and Troubleshooting Manual, Installation Provisioning Manual,* and *Installation Site Guide.* For information on specific features, consult the *PERCEPTION 4000 Feature Description Manual.*

ORGANIZATION

The database commands are organized into chapters according to their function or equipment type. Within each chapter, they are ordered (as much as possible) so that any commands which are prerequisites appear before their dependent commands.

The following summarizes the information available in each chapter.

Introduction—This chapter provides general information about this manual. The definitions included in "Terms You Should Know" are helpful since most of them apply specifically to this manual.

Chapter 1, Numbering Plan Assignments—Includes the Numbering Plan Assignment which defines access codes for trunks, features and facility access codes. It also includes the Uniform Numbering Plan Assignment which establishes how a private network works in conjunction with the Least Cost Routing feature.

Chapter 2, Attendant and Attendant Group Assignments—Defines a variety of attendant features and capabilities for individual attendants and attendant groups.

Chapter 3, Trunk and Trunk Group Restriction Assignments—Covers dialing definitions, trunk hunting, and other attributes and controls which are applied to outgoing and bothway trunk and trunk groups.

Chapter 4, Inward Routing Assignments—Includes commands which define inward trunk routing, such as the Trunk and Trunk Group Routing Assignments, and Direct Inward Dialing (DID) Assignments.

Chapter 5, Station and Line-Oriented Assignments—Discusses general capabilities for all types of stations except attendant stations. Includes Private/Hotline Assignments, Call Pickup Groups, and Speed Calling Groups. This chapter also covers setting up Classes of Service, Forced Account Codes, Authorization Codes, and Time Zone and/or LCR change definitions.

Chapter 6, Area Code Assignments—Includes Country Code and Destination Restriction Level Assignments, as well as the following restriction tables: Country Code; Area/Office Code; Area Code and Exception Restriction.

Chapter 7, ACD, UCD, and Hunting Assignments—Hunt groups, UCD groups, ACD agent groups, and hunting methods are covered, along with queuing and call treatment patterns for ACD and UCD calls.

Chapter 8, Data and Modem Pool Assignments—Covers the controls for data stations, Data Interface Units (DIUs), and related parameters for Data and Modem Pool Assignments.

Chapter 9, Least Cost Routing—Includes Least Cost Routing Tables, Common Carrier Definition Table, and Facility Restriction Assignments.

Chapter 10, Miscellaneous—Covers the following system access-related features: Voice Paging/Code Call, Dictation machine and group assignments, M&A Security Levels, Direct Inward System Access (DISA) Security Codes and related Dual-tone Multi-frequency (DTMF) receivers. Also includes System Holiday, System Timer, System Option Flag, Night Bell Assignment, Station Message Detail Reports (SMDR), Canned Text/Advisory Message Creation, and input/output port configurations.

Chapter 11, ISDN Assignments—Contains all of the commands necessary to set up ISDN operation for the PERCEPTION 4000 system. This includes commands for assigning ISDN channel groups, channel group hunting, IPRC and IPRI cards, service min/max levels, and trunk group parameters.

HOW TO USE THIS MANUAL

Each command is treated as its own section, for instance, there will always be a discussion of each command and information on its relationship to other commands. A sample form is provided at the front of each description to help you identify the corresponding full-size form. Following this, are instructions for filling out each field of the form.

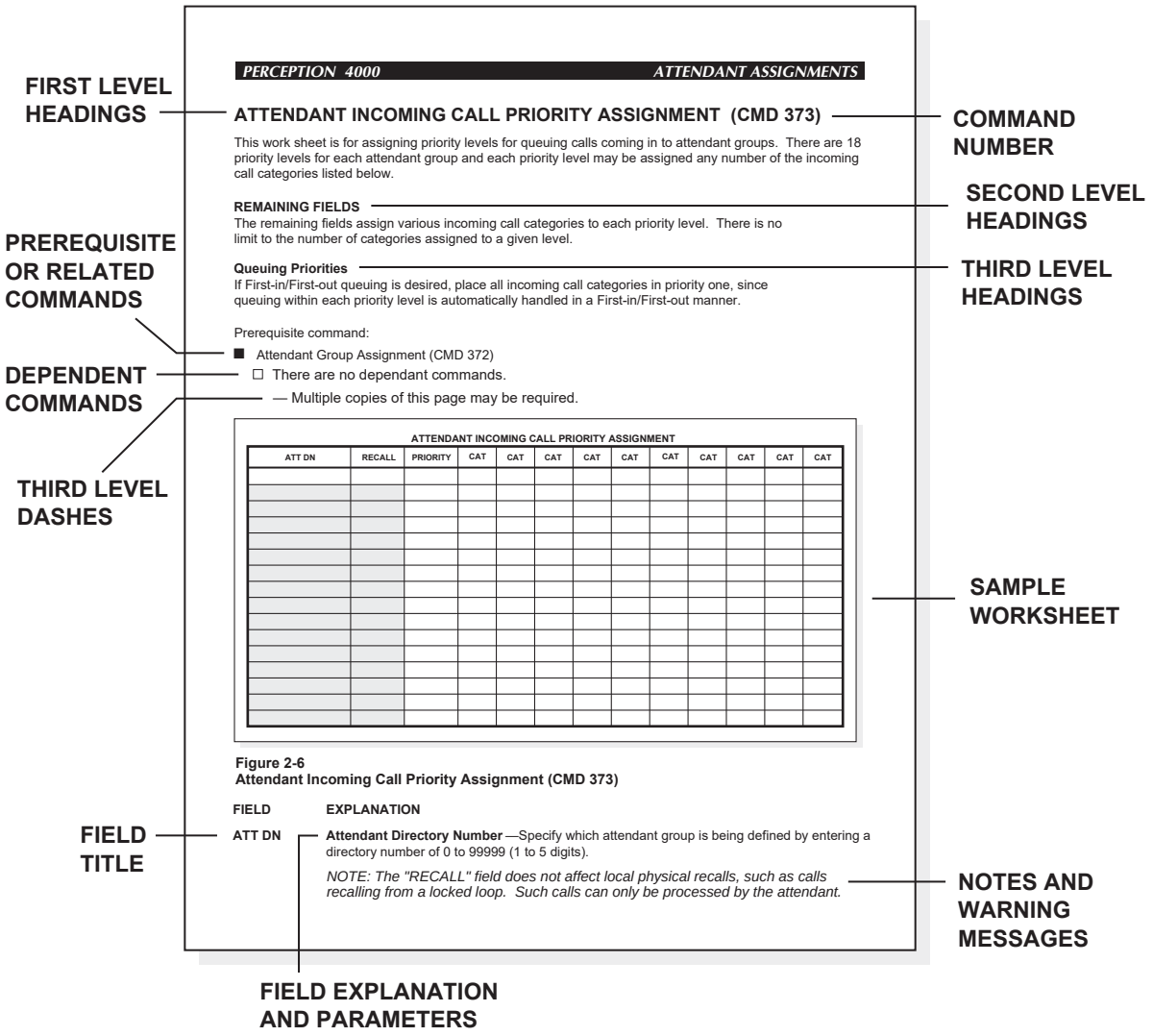


Figure I-1
Sample Page

CONVENTIONS USED IN THIS MANUAL

Command Numbers

Every command has an assigned command number which will be used for reference purposes in this manual. These command numbers are also used when performing Maintenance and Administration (M&A) functions, such as making modifications on the PERCEPTION 4000 system database. These M&A functions are mentioned merely to give you a better understanding of how command numbers apply to the PERCEPTION 4000 system. They are not included in this document. For more information, refer to the *PERCEPTION 4000 Maintenance and Administration Manual.*

Prerequisite and Dependent Commands

A number of commands are prerequisites to other commands. These commands have been placed before their dependent commands in this manual, whenever possible. For easy reference, prerequisite commands are near the beginning of each section and marked with a bullet. Dependent commands are marked with the "open" bullet.

Field Explanations

Field headings are listed in the left-hand column. Instructions for filling in that field will usually be in the first paragraph to the right of the heading.

ADDITIONAL FORMS

In addition to this manual, you should also receive a separate package of forms that we suggest you treat as original master sheets which you can photocopy whenever you need more. There is only one copy of each worksheet in the master set, so for those commands that require more than one copy of the same worksheet, you will need to make additional copies.

TERMS YOU SHOULD KNOW

The following terms and abbreviations are used frequently in this manual. See the "Abbreviations" section at the end of this document for more definitions.

CMD Command.

M&A Maintenance and Administration.

Worksheet This refers to any of the guides provided to help you determine a company's specific needs for some of the more intricate database command forms.

FIELD PARAMETER TERMS

Field The abbreviated and full name of the field is shown here. Field names are usually abbreviated on the forms.

Type This indicates which specific kind of equipment will be used or, if applied to a form, it indicates how all items on the form will be treated, according to the "type" specified.

Keyword A word or mnemonic which indicates specific information to the PERCEPTION 4000 database. Keywords must be entered exactly as they are spelled in this manual. If a keyword is a mnemonic or an abbreviation, enter the keyword, which appears in the left-hand column. The full name for the abbreviation appears in parentheses in the right-hand column.

Value The range of valid numerical entries or keywords.

Format The maximum or minimum number of characters or digits required for a particular field. This information is included in the instructions for each field and appears in parentheses. If less than three digits or characters are required, then no format is provided.

FORM TERMS

chars. Characters.

max. Maximum.

no. Number.

~ Through. For instance "Enter 0~9, (1 to 3 digits)" means that you may enter a number that is up to three digits long, consisting of numbers zero through nine. Valid entries could be: 515, 2, 800, 16, 000, 999, etc.

Chapter 1

NUMBERING PLAN ASSIGNMENTS

Chapter 1 covers the following command assignments:

- Numbering Plan Assignment (CMD 300)
- Uniform Numbering Plan (CMD 301)

NUMBERING PLAN ASSIGNMENT (CMD 300)

The system Numbering Plan Assignment is the first worksheet that should be filled out. It defines the system feature access codes and the facility access codes used by the system. Facility access codes include those used to access specific trunks, Least Cost Routing (LCR), or networking. The Numbering Plan Assignment also defines post dialing digit lengths for some features.

Structure the numbering system so that there is no ambiguity within the plan. Ambiguity is defined as when one number is equal to the leading digits of another. For instance, the following numbers cannot co-exist in the numbering plan:

72 and 7230
678 and 67820

ACCESS CODES

Each trunk group that carries outgoing calls must be assigned a unique access code for use by the following features:

- Direct Trunk Group Access
- Attendant Trunk Group Status Display
- Attendant Trunk Group Control

DIALING DIGITS

The following list shows the types of dialing codes or digits which are not literally interpreted by the Numbering Plan:

- Authorization Codes
- Account Codes
- ACD Agent ID Codes
- External Call Destination Digits (Direct Distance Dialing, Public Data Network, etc.)
- Device Control Codes (Dictation, Code Call, etc.)
- Hardware Test Codes (for telset or attendant testing)
- Speed Dialing Codes
- Intercom Numbers

Other numbering plans, such as station numbers, ACD/UCD group pilot numbers, etc., will be added and modified via other Maintenance and Administration (M&A) commands.

DEPENDENT AND RELATED COMMANDS

Numerous commands are related to the Numbering Plan Assignment command, and rather than list all of them here, the relationship is stated under the individual command.

Access codes listed in the Numbering Plan must not conflict with codes in the Station Numbering Plan (CMD 330) or the steering digits of the Coordinated Numbering Plan (CMD 303).

NUMBERING PLAN ASSIGNMENT (1 of 4)

CHECK LIST	NAME	FNO	ACC	LEN PD1	LEN PD2
	Code Calling Access	258			
	Voice Paging Access-Zone	259			
	Voice Paging Access-System	260			
	Voice Paging Access-Emergency	261			
	Call Pickup-Group	262			
	Dictation Machine-Group	263			
	Dictation Machine-Individual	264			
	Voice Paging Retrieval-Zone	265			
	Voice Paging Retrieval-System	266			
	Code Calling Retrieval	267			
	Night Answer Access	269			
	Modem Pooling Access	282			
	Last Number Redial	283			
	Call Pickup-Directed	284			
	Call Pickup-Directed Group	285			
	Camp-on Callback Cancellation	286			
	Swap	287			
	Do Not Disturb Registration	288			
	Do Not Disturb Cancellation	289			
	Speed Calling-System	290			

Figure 1-1
Numbering Plan Assignment (CMD 300)

WORKSHEET NOTES

Note that there are four different pages of forms for this command.

FIELD	EXPLANATION
CHECK LST	**Check List**—In the left-hand column of the Numbering Plan Assignment worksheets, check off the features that apply to your particular PERCEPTION 4000 system.
NAME	**Feature Name**—In the blank lines at the bottom of this list, add any additional features which are not listed on the worksheet. (Feature names can be up to 30 characters long.)
FNO	**Feature Numbers**—Pre-assigned feature numbers (which range from 258 through 999) are shown in this column. This number is an index used by the system to identify the feature or facility being defined. Values 001 to 256 specify trunk groups 1 to 256 respectively, however, trunk groups 96 to 256 are reserved for systems configured above the standard default of 95. Values 257 to 999 are reserved for other features. These values are predefined by Toshiba and may not be modified. Appendix A contains a listing of FNO numbers for system features (FNOs 001~343). *NOTE: The feature number 257 is reserved for Trunk-to-Trunk connections. Refer to "Appendix A" for more information on feature number assignments.*

ACC

Access Code—Enter a unique access code, using the dialpad numbers 0 through 9. Only feature access codes may begin with a **#** or *****, and can use the dialpad numbers 0 through 9. (1 to 3 digits/characters max).

Access codes can be any combination of digits, and must be unique to directory numbers. If the **#** or ***** are used in an access code, they should be the first character(s) of the dialed digit string.

Valid entries: *** 9**, *** * 9**, *** # 3**

Invalid entries: **9 ***, **9 # ***, **9 # 9**

Access codes listed in the Numbering Plan Assignment must not conflict with station numbers, pilot numbers, attendant directory numbers, etc.

LEN PD1

Length of First Post Dialing Digits—If Post Dialing Digits are required in addition to a feature access code for identification purposes, enter the length of the first set of digits. Use the values 0 to 99 (1 or 2 digits).

External peripheral equipment that is supported by the PERCEPTION 4000 system software may require post dialing digits for identification purposes. Dictation machines and Code Calling feature access codes require post dialing digits.

LEN PD2

Length of Second Post Dialing Digits—If a second set of post dialing digits are needed to identify a location or time zone, indicate the length in the "LEN PD2" field. Enter a value from 0 to 99 (1 to 2 digits).

Example: Code Calling requires two sets of post dialing digits. In addition to the access code, it requires a zone number and an ID code, so the length of the zone number would be entered in the "LEN PD1" field, and the length of the ID code would be entered in the "LEN PD2" field.

UNIFORM NUMBERING PLAN ASSIGNMENT (CMD 301)

On the PERCEPTION 4000 system, you can establish private networking by using either the Coordinated Numbering Plan (CNP) or the Uniform Numbering Plan (UNP). The Coordinated Numbering Plan (CMD 303) requires that numbering plans among network nodes are coordinated in order to route offnet calls properly. With the Uniform Numbering Plan, consistent network dialing and the use of RNX codes are required to automatically route calls through the Least Cost Routing system.

This worksheet provides information that instructs the PERCEPTION 4000 on the length of on-net calls, defines the location code for the PBX itself in the network, and defines all the other RNX (location) codes used in the network.

The way that a call is placed under the Uniform Numbering Plan is by dialing the network access code followed by a network number. A typical example would require dialing the location code first, followed by the station number in that node:

RNX-XXXX	RNX= network location code XXXX = the station in that node

Structure the UNP so that there is no ambiguity between the home RNX and other RNX codes, nor among RNX codes defined for other nodes in the network. Ambiguity is where one number is equal to the prefix of another.

UNIFORM NUMBERING PLAN ASSIGNMENT

UNP LENGTH	HOME RNX	RNX	RNX	RNX	RNX	RNX	RNX	RNX	RNX	RNX	RNX

Figure 1-2
Uniform Numbering Plan Assignment (CMD 301)

FIELD	EXPLANATION
UNP LENGTH	**Uniform Numbering Plan (UNP) Length**—Define the UNP length by entering the values 4 to 8 (1 digit).
HOME RNX	**Home Location Code (RNX)**— Enter a directory number from 0 to 999 (1 to 3 digits).
RNX	**Network Location (RNX) Code**—Enter a directory number to represent the network location, using the numbers 0 to 999 (1 to 3 digits).

ATTENDANT AND ATTENDANT GROUP ASSIGNMENTS

The PERCEPTION 4000 system has the capability to support up to 30 attendant groups, and a number of sophisticated features to help attendants handle every situation with precision and speed. For instance, you can program four different urgency levels for emergency calls. Overflow call destinations can be assigned for each of four time zones, and alternate answering positions may include voice stations, hunt groups, UCD and ACD pilot groups, as well as night bells and announcement machines.

This chapter covers the following command assignments:

- Attendant Password Assignment (CMD 375)
- Attendant Group Assignment (CMD 372)
- Attendant Position Assignment (CMD 370)
- Attendant Feature Key Assignment (CMD 371)
- Attendant Incoming Call Priority Assignment (CMD 373)
- Internal Call Alternate Routing Assignment (CMD 374)
- Emergency Call Destination Assignment (CMD 345)

Attributes and controls must be set set for Attendant consoles, just as they are for stations. Individual attendants may be assigned to groups which have their own associated characteristics. Two levels of definition are required: one for the attendant position itself and another for the attendant group to which the attendant belongs. If attendants are placed in their own groups for autonomy of operation and definition, both areas must still be defined in the database structure.

Attendant group attributes and controls are assigned by the following attendant group commands:

- ☐ Attendant Group Assignment (CMD 372)
- ☐ Attendant Incoming Call Priority Assignment (CMD 373).

The attendant position (console) level is defined by the following commands:

- ☐ Attendant Position Assignment (CMD 370)
- ☐ Attendant Feature Key Assignment (CMD 371)

ATTENDANT PASSWORD ASSIGNMENT (CMD 375)

The PERCEPTION 4000 system will support up to 64 attendant passwords. Each password may be assigned to an identification code which will be printed on the SMDR call record to identify the attendant using the console.

- This command has no prerequisites.
  - Attendant Position Assignment (CMD 370) is dependent upon this command if "YES" is entered in the "PSWD" (Attendant Password) field on command form 370.

ATTENDANT PASSWORD ASSIGNMENT

INDEX	ATT PSWD	SMDR ID	INDEX	ATT PSWD	SMDR ID

Figure 2-1
Attendant Password Assignment (CMD 375)

FIELD	EXPLANATION
INDEX	**Index Number—**Enter an index number from 1 to 64 which can be used to identify the attendant password log table. If the password is deleted from an entry, the corresponding attendant password and ID code are removed from the table.
ATT PSWD	**Attendant Password**—Enter an attendant password from 0 to 99999999 (1 to 8 digits). ***IMPORTANT: A password cannot conflict with any other password (for instance, 12 conflicts with 123).***

SMDR ID

Station Message Detail Recording ID Code—Not used. This is a future feature.

Enter an SMDR code of 0 to 99 (1 to 2 digits).

You may assign an optional one- or two-digit SMDR code to each attendant password. This code is used to identify individual attendants on the SMDR call record. It's equivalent to an operator ID number. The same ID code may not be used for multiple passwords.

ATTENDANT GROUP ASSIGNMENT (CMD 372)

The PERCEPTION 4000 system supports up to 30 attendant groups. Any number of attendants may belong to an attendant group (up to the system maximum number of consoles, which is also 10), but an attendant position may be assigned to only one attendant console. The attendant group must be defined prior to assigning individual attendant consoles and their related information. Attendant positions are assigned using the Attendant Position Assignment form (CMD 370).

Attendants belonging to an attendant group share the call load presented via the attendant group directory number. Also, the incoming call priority for all attendants in the group is defined at the attendant group level.

Related commands:

- Numbering Plan Assignment (CMD 300)
- Attendant Feature Key Assignment (CMD 371)
- Station Hunting Assignment (CMD 342)
- Night Bell Assignment (CMD 405) is needed to assign a corresponding UNA Night Bell, if an entry is made in the "OVF DEST" (Overflow Destination) field of this form.

This command may be needed by :

- ☐ Station Assignment (CMD 330)
- ☐ Attendant Position Assignment (CMD 370)
- ☐ Attendant Incoming Call Priority Assignment (CMD 373)
- ☐ Internal Call Alternate Routing Assignment (CMD 374). This command may be needed for the overflow destination or alternate route assignments.

ATTENDANT GROUP ASSIGNMENT

GRP#	ATG DN	NAME	OVF TMR	OVF DEST	ICI NO	ICI CAT	CALLS

GRP#	ATG DN	NAME	OVF TMR	OVF DEST	ICI NO	ICI CAT	CALLS

Figure 2-2
Attendant Group Assignment (CMD 372)

FIELD	EXPLANATION
GRP#	**Attendant Group Number**—Assign a group number from 1 to 30 (1 or 2 digits).
ATG DN	**Attendant Group Directory Number**—Enter a directory number of 0 to 99999 (1 to 5 digits). This directory number is dialed by system users to dial any of the attendants in the group. Each attendant group must be assigned a unique directory number which must not conflict with other feature access codes and directory numbers defined in the system Numbering Plan (CMD 300).
NAME	**Attendant Group Name**—Enter a name of up to 9 ASCII characters in length. Embedded spaces are allowed. The attendant group name assigned in this field will appear on regular or attendant display stations when a system user dials the attendant number.
OVF TMR	**Attendant Overflow Timer**—Assign a wait time of 5 to 180 seconds (1 to 3 digits). This entry is used to determine how long a call will wait in queue before overflowing to the overflow target destination. The overflow time may be adjusted in 1 second intervals.
OVF DEST	**Overflow Destination**—Assign the night bell location to which overflowed calls will be directed by entering keywords BL01 to BL64 (4 ASCII characters) or NON (No Overflow Destination). The PERCEPTION 4000 system supports up to 64 night bells. Overflow calls may be directed to only one night bell. (See Night Bell Assignment (CMD 405) for information on night bell device designators).
ICI NO	**Incoming Call Identification (ICI) Key Definition Number**—Assign an ICI key definition number of 1 to 10 (1 to 2 digits). The ICI keys receive definition at the attendant group level. These keys may then be assigned to an attendant or attendants belonging to the group. Any ICI key definition may appear on multiple consoles within the same attendant group. These keys allow the attendant to answer the oldest call of a particular ICI category type by pressing the associated ICI key instead of answering the call via the ANSWER fixed key. Once the ICI key numbers are defined on this form, then they can be placed on various attendant consoles using the Attendant Feature Key Assignment form (CMD 371).

ICI CAT

ICI Category Assignment—If an attendant group has incoming call identification (ICI) capability, assign an ICI category using one of the following keywords. Assign only one ICI category per ICI key. Also, the same keyword cannot be assigned more than once for a different ICI key number.

ATT	(Attendant group)
DATT	(Directed Attendant calls)
EMR1	(Emergency 1)
EMR2	(Emergency 2)
EMR3	(Emergency 3)
EMR4	(Emergency 4)
ICPT	(Intercepts)
IPC	(Interposition calls)
LHR	(Long hold recall)
NAR	(No answer recall)
001 - 256	(Trunk groups 001 to 256, or to the maximum system configuration)

CALLS

Number of Calls Per Attendant—Assign a number of 1 to 32 (1 or 2 digits).

Define the number of calls per attendant allowed in the attendant group. The number of attendant-calls per group (including talking, parked, and ringing/in-queue calls) is dependent on the number of attendants assigned to the same group directory number and the number of calls allowed per attendant. Note that a call that is being transferred or processed (where two or more parties besides the attendant are involved) counts as one call. This number can be calculated as follows:

Number of attendant-calls per group = Number of attendants with the same ATG DN, times the number of calls per attendant (CALLS).

ATTENDANT POSITION ASSIGNMENT (CMD 370)

This form is for defining attributes for individual attendant consoles in the system.

Prerequisite commands:
- Attendant Group Assignment (CMD 372)
- Attendant Password Assignment (CMD 375) is required if "YES" is entered in the "PSWD" (Attendant Password) field on this form.

Related commands:
- Numbering Plan Assignment (CMD 300)
- Attendant Feature Key Assignment (CMD 371)
- Emergency Call Destination Assignment (CMD 345)
- Authorization Code Assignment (349)
- Station Hunting Assignment (CMD 342)

This command may also be needed by:
- ☐ Station Assignment (CMD 330)
- ☐ Internal Call Alternate Routing Assignment (CMD 374). This command may be needed for the overflow destination or alternate route assignments.

ATTENDANT POSITION ASSIGNMENT

EQUIP #	ATT DN	NAME	GRP DN	COS	DRL	FRLP	QPL	ROB	EMR RNG	PSWD	TYPE	AUD

Figure 2-3
Attendant Position Assignment (CMD 370)

FIELD	EXPLANATION
EQUIP #	**Equipment Number**—Assign a line card by using the following chart to determine the valid ranges for various types of equipment. All equipment numbers must be 5 to 6 digits long. (If the first digit is a zero, then it can be dropped.) ***IMPORTANT: An attendant console cannot be assigned to a card strapped for 2B type operation; it must be assigned to a digital line card (DSTI) strapped for 1B type operation.*** For DSTI, equipment cards, the following ranges apply:

Digits	Range	Hardware
First two digits	01~10	Shelf no.
Second two digits	01~11, 13	Card slot no.
Last two digits	01~16	Circuit no.

ATT DN	**Attendant Directory Number**—Assign a directory number from 0 to 99999 (1 to 5 digits). The attendant console must be assigned a directory number so that system users can dial the individual console. The ATT DN must not conflict with any other directory numbers or feature access codes in the system Numbering Plan Assignment (CMD 300).
NAME	**Attendant Name**—You can enter an optional attendant position name of up to 9 ASCII characters. Embedded spaces are allowed. This name will be displayed on attendant consoles and stations equipped with displays.
GRP DN	**Attendant Group Directory Number**—Enter a directory number from 0 to 99999 (1 to 5 digits). In this field, provide the logical association for the attendant position to an attendant group. The attendant group directory number must first be defined on the Attendant Group Assignment form (CMD 372) before filling in the "GRP DN" field.
COS	**Class of Service Number**—Enter a COS of 1 to 64 (1 to 2 digits). See "Class of Service (CMD 334)" for more information.
DRL	**Destination Restriction Level**—Assign a DRL of 1 to 16, or to maximum system configuration, (1 to 2 digits). See "Destination Restriction Level (CMD 337)" for more information.
FRLP	**Facility Restriction Level Profile**—Enter an FRLP of 1 to 32, or to maximum system configuration, (1 to 2 digits). See "Facility Restriction Level Profile (CMD 387)" for more information.
QPL	**Queue Priority Level**—Enter a QPL of 1 to 8 (1 digit). See "LCR Routing Table Assignment (CMD 383)" for more information.

ROB **Ring Over Busy Flag**—Enter one of the following keywords to enable or disable muted ringing at the console when a new call comes in while the attendant is already engaged in processing the call.

YES (Enable)
NO (Disable)

EMR RNG **Emergency Call Ringing Flag**—To enable or disable the audible emergency ringing signal at the console, enter one of the following keywords:

YES (Enable)
NO (Disable)

If emergency ringing is enabled, then when an emergency call comes in to the console, a rapid repeating cadence at full volume will occur. The ringer will go on full volume regardless of the console volume setting or whether or not the console is idle. If it's disabled, the emergency call will produce a muted ring provided that the ring-over-busy feature is enabled.

PSWD **Attendant Password Requirement**—Designate whether or not the attendant must enter a password prior to using the system by entering one of the following keywords:

YES (Password required))
NO (Password not required)

If a password is required, the console would remain in the position busy mode, and return to call processing only after a valid password has been entered. To enable this feature, attendant passwords must be defined on the Attendant Password Assignment form (CMD 375).

TYPE **Terminal Type**—Designate the type of display terminal being assigned as an attendant position. Either EGA (Enhanced Graphic Display) or EL (Electroluminescent Display Unit) can be assigned.

AUD **Key Depression Audible Response**—Enable or disable the key confirmation tones assigned to the attendant console by entering one of the following:

YES (Enable)
NO (Disable)

Currently, this is a locked field set to "YES".

ATTENDANT FEATURE KEY ASSIGNMENT (CMD 371)

The Attendant Feature Key Assignment form is for defining the 24 flexible feature keys on each attendant console in the PERCEPTION 4000 system. Although, all types of keys may be assigned to the attendant console, it is important to note that unless the attendants have access to certain trunk groups or features according to their class of service definition, use of the key may be denied by call processing once the key is assigned to the console.

The definitions for trunk access codes for trunk group keys or zone numbers for code call or voice paging are made in the "DEF 2" field of this command form. These definitions must be in line with the post-dialing digit length as defined in the Numbering Plan Assignment (refer to CMD 300).

Prerequisite command:
- Attendant Position Assignment (CMD 370)

Related command:
- Numbering Plan Assignment (CMD 300)
- Class of Service Assignment(CMD 334)

☐ There are no dependent commands.

ATTENDANT FEATURE KEY ASSIGNMENT

ATT DN	POS	DEF 1	DEF 2	POS	DEF 1	DEF 2
	1			13		
	2			14		
	3			15		
	4			16		
	5			17		
	6			18		
	7			19		
	8			20		
	9			21		
	10			22		
	11			23		
	12			24		

Figure 2-4
Attendant Feature Key Assignment (CMD 371)

FIELD	EXPLANATION
ATT DN	**Attendant Directory Number**—Enter a directory number of 0 to 99999 (1 to 5 digits). Each attendant's unique directory number should not conflict with any other numbering plan in the entire system.

POS **Key Position**—Assign a key position number from 1 to 24 (1 to 2 digits), which corresponds to an exact location on the attendant console.

Each feature must be assigned to a key position.

DEF 1 **Key Definition 1**—Define the feature key by entering keywords from the following keyword list.

Brief descriptions of the keywords follows the feature keyword list. For more detailed information on the attendant features, refer to the *PERCEPTION 4000 Attendant Console Feature Descriptions.*

Note the following relationships or limitations when defining feature keys:

- The number of keys assigned to multiple keys feature (Autodial, Trunk Group Access Code) is limited to 20.
- Up to 10 feature keys may be assigned as Incoming Call Identification (ICI) keys are allowed per console.
- The ICI keys are assigned numbers and categories on the Attendant Group Assignment form (CMD 372).
- Attendants must have a Class of Service level which allows Trunk-to-Trunk connections in order to have conferencing capability.
- If the ADL key is assigned, then the console should be equipped with a PRGM (programming) key.
- The following keys should also be assigned; otherwise, the attendant traffic handling will be degraded:

1) SPLT (Split Key)
2) CONF (Eight Party Conference Key)
3) VP_Z (Voice Paging Access–Zone)
4) SPVS (Supervise Key)

Feature keyword list:

ADL	(Autodial)
AEE	(Attendant End-to-End Signaling)
BLF	(Busy Lamp Field control)
CC	(Code Calling Access)
CCMM	(Code Calling Retrieval)
CONF	(Eight Party Conference Key)
HELP	(HELP key)
ICI	(Incoming Call Identification)
LND	(Last Number Redial)
OVF	(Attendant Overflow control)
PR_A	(Attendant Parked Paging Retrieval)
PR_S	(System Paging Retrieval)
PRGM	(Program Mode)
SYSD	(Speed Calling—System)
SPLT	(Split Key)
SPVS	(Supervise Key)
TGAC	(Trunk group access code)
UNA	(Night Answer Access)

UND	(Undefined)
VP_E	(Voice Paging Access—Emergency)
VP_S	(Voice Paging Access—System)
VP_Z	(Voice Paging Access—Zone)
VPMM	(Voice Paging Retrieval—Zone)

DEF 2

Definition 2—Data in this field is required only if any of these keywords, "CC", "CCMM", " "VP_Z", "TGAC", or "ICI", are entered in the "DEF 1" field. Use following chart to fill in "DEF 2" field if the corresponding entries have been made in "DEF 1" field.

Although the digit length can range from 1 to 3 digits long, the number of digits entered must correspond to the number entered in the "LEN PD1" (Length of Second Post Dialing Digits) field of the Numbering Plan Assignment form (CMD 300).

For instance, if "CC" (Code Calling) is entered in the "DEF 1" field, and you enter a **2** digit number, such as **99** in the "DEF 2" field, make sure that **2** is filled in the "LEN PD1" field of the Numbering Plan Assignment (CMD 300).

Table 2-1

DEF 1	DEF 2 Data Field
CC	Zone Number from 0 to 9 or 00 ~ 99 (1 or 2 digits)
CCMM	Zone Number from 0 to 9 or 00 ~ 99 (1 or 2 digits)
VP_Z	Zone Number from 0 to 9 or 00 ~ 99 (1 or 2 digits)
TGAC	Trunk Group Access Code from 0 ~ 9, #, * (1 to 3 digits)
ICI	Incoming Call ID No. from 1 ~ 10 (1 or 2 digits)

Key Definition 2

NOTE: The zone number is optional if assigning a general access key.

See the Numbering Plan Assignment (CMD 300) for trunk group access codes.

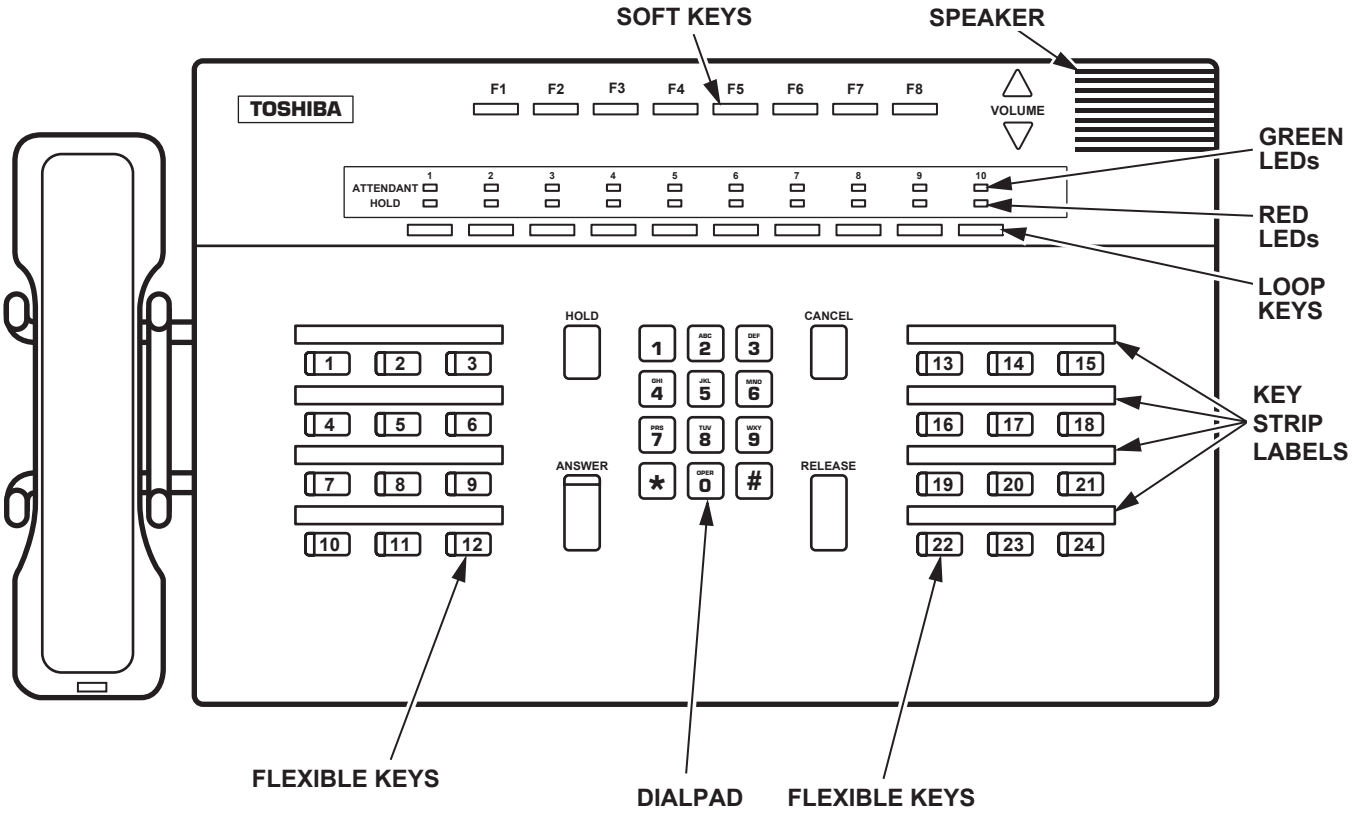


Figure 2-5
Attendant Console Base Unit

NOTE: The order in which the flexible keys should be programmed is indicated by the numbers marked on these keys, shown in Figure 2-5.

ATTENDANT INCOMING CALL PRIORITY ASSIGNMENT (CMD 373)

This form is for assigning priority levels for queuing calls coming in to attendant groups. There are 18 priority levels for each attendant group and each priority level may be assigned any number of the incoming call categories which are shown in the following "Field Explanation" section. All categories assigned to a given priority level will be queued up on a First-in/First-out (FIFO) basis, within that priority level.

Calls of any type that come in over trunks which are not assigned a priority level, will be treated as if they are in the lowest ("unassigned") priority level and are handled on a FIFO basis within that level.

Prerequisite command:
- Attendant Group Assignment (CMD 372)

Related command:
- Emergency Call Destination Assignment (CMD 345)

☐ There are no dependent commands.

ATTENDANT INCOMING CALL PRIORITY ASSIGNMENT

ATG DN	RECALL	PRIORITY	CAT	CAT	CAT	CAT	CAT	CAT	CAT	CAT	CAT	CAT

Figure 2-6
Attendant Incoming Call Priority Assignment (CMD 373)

FIELD	EXPLANATION
ATG DN	**Attendant Group Directory Number**—Specify which attendant group is being defined by entering a directory number of 0 to 99999 (1 to 5 digits).

RECALL **Recall Handling Option**—Define whether recalls are sent only to the extending attendant or whether they may recall to the attendant group by entering one of the following keywords.

IND	(Recall to extending attendant)
GRP	(Recall to attendant group)

This field does not affect local physical recalls, such as calls recalling from a locked loop. Such calls can only be processed by the attendant.

PRIORITY **Priority Level**—Assign a priority level of 1 to 18 (1 to 2 digits) for the specified attendant group. All priority levels need not be used.

IMPORTANT: The "EMR1" and "EMR2" (Emergency 1 & 2) categories do not require priority assignments, since they are pre-assigned to be the two highest priority levels by Toshiba. The pre-assigned "EMR1" and "EMR2" categories will be at a higher priority level than the categories assigned priority levels 1 and 2 in the previous field.

CAT **Incoming Call Category**—Use one of the following keywords to assign the incoming call category.

ATT	(Attendant group)
DATT	(Directed Attendant calls)
EMR3	(Emergency 3)
EMR4	(Emergency 4)
ICPT	(Intercepts)
IPC	(Interposition calls)
LHR	(Long hold recall)
NAR	(No answer recall)
001 - 256	(Trunk groups 001 to 256, or to the maximum system configuration)

Any trunk group number or categories listed above can be assigned to a given priority level. All priorities need not be used. Remember, those trunk groups which are not assigned a priority level and will be treated as the lowest priority. Calls within this lowest, or "unassigned" priority level will be treated on a FIFO basis.

The remaining category fields are for assigning various incoming call categories to each priority level.

The command form is designed to allow you to assign more than one category per priority level. For instance, if you fill in a priority level of "2", priority level "2" may receive "ATT" (attendant group),""NAR" (no answer recall), and "004" (trunk group 4") category assignments.

There is no limit to the number of categories assigned to a given level. However, a category cannot be used more than once. For instance, if the "NAR" category was assigned to priority level 2, then it cannot be used again on the form.

If First-in/First-out (FIFO) queuing is desired for all calls in the system, regardless of any priority type, then place all incoming call categories in priority one, since queuing within each priority level is automatically handled in a First-in/First-out manner.

INTERNAL CALL ALTERNATE ROUTING ASSIGNMENT (CMD 374)

This form allows you to specify an alternate answering destination for internal calls to attendants and/or attendant groups that are in the position busy mode. Alternate answering positions may be assigned for each of four time zones.

Trunk calls receive alternate routing when encountering an attendant or attendant group in the position busy mode, as defined in the Trunk and Trunk Group Routing Assignments (refer to commands 308 and 307, respectively).

An alternate route must be defined for each individual attendant as well as each group, in order for all calls directed to that attendant or attendant group to be re-routed. If an individual attendant has not been assigned alternate routing, then calls to that attendant will not be re-routed, even if alternate routing has been assigned for the attendant group that the attendant belongs to.

Prerequisite commands:
- Attendant Position Assignment (CMD 370)
- Attendant Group Assignment (CMD 372)

Related commands:
- Station Assignment (CMD 330)
- ACD Group Assignment (CMD 355)
- UCD Group Assignment (CMD 354)
- Station Hunting Assignment (CMD 342)
- Miscellaneous Device Assignment (CMD 400)
- Night Bell Assignment (CMD 405)
- Announcement Pattern Assignment (CMD 353)

INTERNAL CALL ALTERNATE ROUTING ASSIGNMENT

ATT DN/GRP DN	AR TZ 1	AR TZ 2	AR TZ 3	AR TZ 4	ATT DN/GRP DN	AR TZ 1	AR TZ 2	AR TZ 3	AR TZ 4

Figure 2-7
Internal Call Alternate Routing Assignment (CMD 374)

FIELD	EXPLANATION
ATT DN or **GRP DN**	**Attendant or Group DN**—Enter the attendant or attendant group directory number from 0 to 99999 (1 to 5 digits) to be assigned alternate routing. The attendant or attendant group directory number is entered in the first field as the primary key. The alternate answering position is then defined for each time zone. You should only use the time zones that you need. If no alternate routing is defined, the caller will receive ring-no-answer.
AR TZ *n*	**Alternate Route of Time Zone 1, 2, 3, or 4**—Enter either a directory number or keyword to assign an alternate route for time zones 1 through 4. The following is a list of valid entries:

0 to 99999	for	Station directory number Hunt group pilot number UCD group pilot number ACD group pilot number*
AP01-AP50		(Announcement pattern number)
BL01-BL64		(Night bell device number)
NON		(No alternate route)

n = Alternate Route of Time Zone 1, 2, 3 or 4

*Providing internal calling is allowed. Refer to the ACD Group Parameter Assignment (CMD 357) for more information on the ACD Groups and Timers.

EMERGENCY CALL DESTINATION ASSIGNMENT (CMD 345)

The PERCEPTION 4000 system provides four distinct emergency calling levels for varying degrees of urgency. Emergency calls can be routed to attendants or attendant groups.

Related commands:
- Numbering Plan Assignment (CMD 300)
- Attendant Position Assignment (CMD 370)
- Attendant Incoming Call Priority Assignment (CMD 373)

☐ There are no dependent commands

EMERGENCY CALL DESTINATION ASSIGNMENT

EMR LEVEL	EMR CODE	DESTINATION NUMBER	EMERGENCY DISPLAY MESSAGE
1			
2			
3			
4			

EMR LEVEL	EMR CODE	DESTINATION NUMBER	EMERGENCY DISPLAY MESSAGE
1			
2			
3			
4			

EMR LEVEL	EMR CODE	DESTINATION NUMBER	EMERGENCY DISPLAY MESSAGE
1			
2			
3			
4			

Figure 2-8
Emergency Call Destination Assignment (CMD 345)

FIELD	EXPLANATION
EMR LEVEL	**Emergency Level**—The index numbers from 1 to 4 have been provided to represent each emergency priority level, with 1 being the highest priority and 4 being the lowest priority. Priority 1 and 2 calls will get next-call-in-queue treatment. Special ringing will be offered the attendant(s) if the emergency ringing flag is enabled (see the Attendant Position Assignment (CMD 370) and the emergency message will be displayed. Priority levels 3 and 4 may be prioritized relative to other call categories for the attendant console or group as defined in the Attendant Incoming Call Priority Assignment (CMD 373).
EMR CODE	**Emergency Access Code**—Enter an access code from 0 to 99999 (1 to 5 digits). The emergency calling code must not conflict with other numbers and access codes defined in the Numbering Plan (CMD 300).

DESTINATION NUMBER

Enter a destination number from 0 to 99999 (1 to 24 digits).

The destination may be an attendant or attendant group.

EMERGENCY DISPLAY MESSAGE

Enter an emergency display message (30 characters maximum) which will be displayed on the attendant console when an emergency call is placed in the system. This message is displayed at the time of ringing unless an off-premises destination number is assigned.

Chapter 3

TRUNK AND TRUNK GROUP RESTRICTION ASSIGNMENTS

In the PERCEPTION 4000 system, there are certain attributes and controls which must be exercised over trunks at both the trunk group and trunk circuit level. The following command forms define bothway and outgoing attributes, and controls over the usage of these trunks. Additionally, interface with the central office or private network is defined, as well as other transmission-related parameters.

This chapter covers the following database commands:

- Dialing Definition (CMD 317)
- Interchangeable Office Code Table (CMD 318)
- Trunk Group Toll-Free Tables (CMD 311)
- Trunk Group Assignment (CMD 310)
- Trunk Assignment (CMD 313)
- Digital Carrier Channel Assignment (CMD 413)
- Trunk Hunting Assignment (CMD 309)
- Coordinated Numbering Plan Assignment (CMD 303)
- Trunk-to-Trunk Connection Assignment (CMD 305)
- Clock Provider Assignment (CMD 417)
- Trunk Group Parameter Assignment (CMD 420)
- Trunk PP Parameter Change (CMD 364)

DIALING DEFINITION (CMD 317)

This form defines the dialing groups which are used on the Trunk Group Assignment form (CMD 310) and on the LCR Special Routing Assignment form (CMD 384). Dialing Group 1 is undefined and is normally used for TIE lines and interfaces to peripheral equipment where standard dialing does not exist. Private networks will often use unconventional dialing methods which require the use of Dialing Group 1.

There are two benefits to using dialing groups:

- The PBX can detect End-of-Dialing as soon as it occurs when a defined group is used.
- The PBX will be able to recognize inconsistent dialing before a trunk is seized, thus fewer trunks will be tied up unnecessarily and more lines will be free for traffic.

Since Dialing Group 1 has no definition, end-of-dialing is recognized by timeout after the last digit is dialed.

The following can be defined as special dialing definition groups: operator and long distance operator prefix, international operator prefix, International Direct Distance Dialing (IDDD) access code, toll prefix, local directory assistance, telephone repair number, emergency access code, and international office code recognition.

- This command has no prerequisites.

Related commands:

- Interchangeable Office Code Table (CMD 318)
- Trunk Group Toll-free Tables (CMD 311)
- Trunk Group Assignment (CMD 310)
- LCR Special Routing Assignment (CMD 384)

DIALING DEFINITION

GRP#	OPP	LOP	IOP	IAC	TP	LDA	REPR	BUS	EMR	AUX1	AUX2	AUX3	IOC
2													
3													
4													

GRP#	OPP	LOP	IOP	IAC	TP	LDA	REPR	BUS	EMR	AUX1	AUX2	AUX3	IOC
2													
3													
4													

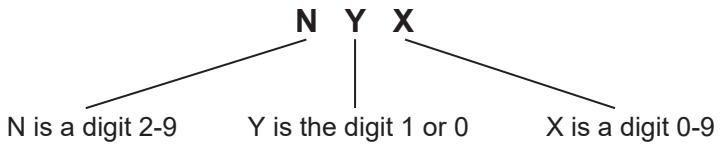
GRP#	OPP	LOP	IOP	IAC	TP	LDA	REPR	BUS	EMR	AUX1	AUX2	AUX3	IOC
2													
3													
4													

Figure 3-1
Dialing Definition (CMD 317)

FORM NOTES
Please note that "001" is considered different from "01" or "1" in the following fields.

FIELD	EXPLANATION
GRP#	**Dialing Group Number**—Use the appropriate fields to the right of Dialing Group numbers 2, 3, and 4 for defining these dialing groups.
OPP	**Operator Prefix**—Assign the operator prefix using dialed digits 0 to 999. Default is 0.
LOP	**Long Distance Operator Prefix**—Using the dialed digits 0 to 999, assign the operator prefix. The default is 00.
IOP	**International Operator Prefix**—Enter the IOP using 0 to 999. The default for international operator is 01.
IAC	**International Direct Distance Dialing (IDDD) Access Code**—Enter the IDDD dialing digits, using 0 to 999 (1 to 3 digits). IDDD access code default is 011.
TP	**Toll Prefix**—Assign a toll prefix of 0 to 999 (1 to 3 digits). The default is 1.
LDA	**Local Directory Assistance**—Enter the local directory assistance number using 0 to 999 (1 to 3 digits). The default is 411.
REPR	**Telephone Repair**—Use 0 to 999 (1 to 3 digits) to assign a telephone repair number. The default is 611.
BUS	**Telephone Business Office**—Enter a telephone business office number of 0 to 999 (1 to 3 digits). The default is 811.
EMR	**Emergency Access**—Enter an emergency access number using 0 to 999 (1 to 3 digits). The default is 911.
AUX1	**Auxiliary Definition 1**—The AUX1, 2, and 3 fields are reserved for future use. If you need to add any dialing definitions not included in the previous field, enter them in these three auxiliary fields. Use the digits from 0 to 999 (1 to 3 digits).
AUX2	**Auxiliary Definition 2**—For future use. See "AUX1" explanation. Valid digits range from 0 to 999 (1 to 3 digits).
AUX3	**Auxiliary Definition 3**—For future use. See "AUX1" explanation. Valid digits range from 0 to 999 (1 to 3 digits).
IOC	**Interchangeable Office Code**—Enter one of the following keywords to indicate whether interchangeable office codes exist for the trunk groups using this dialing group and if so, how they are identified — by toll prefixes used before the area code or by timeout after "10" or "1" digits are dialed. NON (No Interchangeable Office Codes conflict with any area codes) ITP (Identifiable by toll prefix before area codes) ITO (Identifiable by timeout)

Interchangeable office codes are defined as office codes which have a "0" or "1" as a middle digit which make them appear as an area code. They are defined in the following "NYX" format.



INTERCHANGEABLE OFFICE CODE TABLE (CMD 318)

Interchangeable office codes have the same format as area codes. The format for these codes is represented by "NYX", where "N" represents a digit from 2 to 9, "Y" is either a 0 or 1, and "X" represents a digit 0-9.

Any interchangeable office codes which do not match or have the same digits as an existing area code are defined on this form. For instance, "210" may be an office code, but is not an existing area code even though the format is that of an interchangeable office code.

A list of area codes can be obtained from the serving central offices for all central office and foreign exchange trunks. This information should be reviewed at least every six months to ensure codes entered into this table remain unique (no corresponding area code) and to ensure no new area codes have come into existence which conflict with an interchangeable office code previously defined on this form.

- This command has no prerequisites or dependents.

Related command:
- Dialing Definition (CMD 317)

INTERCHANGEABLE OFFICE CODE TABLE

IOC	IOC	IOC	IOC	IOC	IOC	IOC	IOC	IOC	IOC	IOC	IOC

Figure 3-2
Interchangeable Office Code Table (CMD 318)

FIELD	EXPLANATION
IOC	**Interchangeable Office Code**—Enter interchangeable office codes from 200 to 919 in the following format:

N Y X

N is a digit 2-9 Y is the digit 1 or 0 X is a digit 0-9

TRUNK GROUP TOLL-FREE TABLES (CMD 311)

The true toll-free zone for a serving central office is defined by the Trunk Group Toll-Free Table(s). Up to 16 tables may be defined as toll-free area/office code tables for the system trunk groups and up to three of these tables may be assigned to any given trunk group. These tables are used by the outgoing call restriction process for a given trunk restriction group and calling device destination restriction level.

These tables are optional for outgoing call management, but they provide a shortcut method for defining only toll-free calls to be allowed over certain facilities by certain calling entities. Information on what areas are truly toll-free for a given trunk group can generally be found in the front pages of the serving central office's white pages directory. These areas change from time to time so it's advisable to check with the local telephone company office on occasion and request the most recent listing.

- This command has no prerequisites or dependents.

Related command:

- Trunk Group Assignment (CMD 310)—The area code/office code tables defined here, on the CMD 311 form, are assigned to each trunk group in the "TF#" (Toll-free Table Number) field of CMD 310.

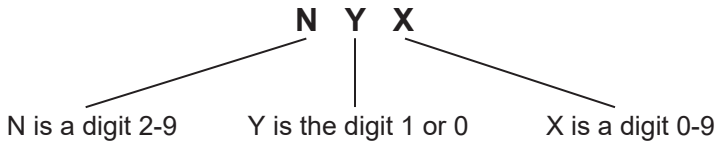
TRUNK GROUP TOLL-FREE TABLES

TBL#	AC	OC	OC	OC	OC	OC	OC	OC	OC	OC	OC	OC	OC

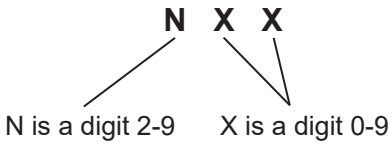
Figure 3-3
Trunk Group Toll-Free Tables (CMD 311)

FIELD	EXPLANATION
TBL#	**Table Code**—Assign a table identification code number of 1 to 32 (or maximum system configuration number).

AC **Area Code**—Enter the area codes from 200 to 919 (3 digits) in the following "NXX" format:



OC **Office Code**—Enter an office area code from 200 to 999 (3 digits) in the following "NXX" format:



This field represents the office code. All office codes listed in these AC/OC tables are toll free.

There is no fixed mapping between a table and an area code, in other words, you can create several area code tables with the same office code numbers.

TRUNK GROUP ASSIGNMENT (CMD 310)

This form is used for defining attributes for all of the trunk groups supported by the PERCEPTION 4000 (including the channel group for ISDN trunks) and for providing calling definitions for any Direct Inward System Access trunks and incoming TIE trunks which may exist in this trunk group. Up to three toll-free calling areas can be assigned to a trunk group.

Prerequisite command:
- Dialing Definition (CMD 317)
- Trunk Group Toll-Free Tables (CMD 311)

Related commands:
- Numbering Plan Assignment (CMD 300)
- Trunk Assignment (CMD 313)
- Trunk-to-Trunk Connection Assignment (CMD 305)
- Trunk Group Routing Assignment (CMD 307)
- Night Bell Assignment (CMD 405)
- DID/CCSA DISA LDN Assignment (CMD 315)
- DID/CCSA LDN Assignment (CMD 316)
- Voice Paging/Code-Calling Assignment (CMD 319)
- Private/Hotline Assignment (CMD 332)
- Destination Restriction Level Assignment (CMD 337)
- Dictation Group/Machine Assignment (CMD 401)
- Facility Level Restriction Assignment (CMD 387)
- LCR Special Routing Assignment (CMD 384)
- SMDR Configuration Assignment (CMD 409)
- Trunk Hunting Assignment (CMD 309)
- Trunk Group Parameter Assignment (CMD 420)
- ISDN Channel Group Assignment (CMD 423)
- ISDN Channel Group Hunting Assignment (CMD 424)
- ISDN IPRC and IPRI Card Assignment (CMD 422)
- ISDN Service Min/Max Assignment (CMD 425)
- ISDN Trunk Group Parameter Assignment (CMD 421)

TRUNK GROUP ASSIGNMENT

TGN	CGN	TYPE	USE	RG	DG	COS	DRL	FRLP	QPL	ANSPOS	S RG	SUP	RCL DN	HAC	GF

Figure 3-4
Trunk Group Assignment (CMD 310)

FIELD	EXPLANATION
TGN	**Trunk Group Number**—Enter a TGN from 1 to 256, or to the maximum system configuration (1 to 3 digits)
CGN	**ISDN PRI Channel Group Number—**When assigning ISDN trunks types to a trunk group, a channel group number (1~32) must also be entered. Individual trunks are assigned to channel groups via the ISDN Channel Group Assignment command (CMD 423).
TYPE	**Trunk Type**—Assign a trunk group type (ISDN or non-ISDN) for each trunk group number used by the system. Use the following keywords to identify the trunk usage. In this field, you can also designate any other auxiliary uses such as the interface to various peripheral apparatus like Voice Paging, Code Calling, dictation and announcement machines. A trunk restriction group is not required for Direct Inward Dialing, paging, dictation device, announcement device, and auxiliary trunk groups. Non-ISDN Usage:

AUX	(Auxiliary Use)
CC	(Code Calling)
CCSA	(Common Control Switching Arrangement)
CO	(Central Office)
DID	(Direct Inward Dialing)
DMI	(Digital Multiplexing Interface) (Reserved for future use)
DM01~DM16	(Dictation Machine group 1 to 16)

DNIS	(Dialed Number Identification Service)
FX	(Foreign Exchange)
PVT	(Private Line)
TIE	(TIE Line)
VPG	(Voice Paging)
WATS	(Wide Area Telecommunication Service)

ISDN Usage:

ACCU	(ACCUNET)
ATAT	(AT&T Long Distance Service)
IMC8	(International AT&T MEGACOM 800 Service)
INCW	(INWATS)
MAXW	(MAXWATS)
MC	(AT&T MEGACOM)
MC8	(AT&T MEGACOM 800 Service)
MQST	(Multiquest 900 Service)
OUTW	(OUTWATS)
POTS	(Plain Old Telephone Service)
PSDN	(Private Software Defined Network)
SDN	(Public/Global Software Defined Network)

USE **Trunk Use**—Enter one of the following keywords to define how the trunk group will be used.

INC	(Incoming)
OUT	(Outgoing)
BWY	(Bothway)

Each non-ISDN and ISDN trunk group is defined as an incoming, outgoing, or a bothway trunk group. DID, MC8, IMC8, MQST trunks are incoming only.

RG **Restriction Group Number**—Enter a number from 1 to 8. Restriction group 1 is reserved for use by tie trunks and interfaces to peripheral equipment where unconventional dialing patterns are used and where absolute unrestricted dialing for all parties is required.

Trunk Restriction Groups represent a set of trunk groups which will have similar dialing restrictions placed on them due to cost factors and sensible dialing practices. This field applies to both ISDN and non-ISDN bothway or outgoing trunk groups. DID, MC8, IMC8, and MQST trunks; dictation devices; announcement devices; and auxiliary trunk groups do not require trunk restriction.

Example: If a Foreign Exchange line was set up to terminate in Dallas from a company location in Irvine, CA., it would make sense to prohibit everyone in the system from placing local calls in Irvine via the FX.

In the above example, FX trunk groups to the Dallas area might all be bundled together in one restriction group while regular CO lines terminating to the serving central office in Irvine might be grouped together in another. Trunk restriction groups 2 through 8 may be used for this bundling purpose.

DG **Dialing Definition Group Number**—This field applies to both ISDN and non-ISDN trunk groups. Assign a dialing definition group number from 1 to 4. Dialing Definition Group 1 is undefined, and is recommended for TIE trunk groups and trunk groups where no digit analysis or restriction is necessary. Dialing groups 2 through 4 may be defined as bundling dialing groups.

There are dialing groups labeled 2 through 4 that define characteristics for similar central offices. These definitions include various operator and toll prefixes, as well as "N11" numbers. The dialing groups are defined on the Dialing Definition form (CMD 317).

In order to provide feature and facility access as well as dialing control, the following five fields, shown in Table 3-1, must be filled in for incoming TIE and DISA trunks only. Except for the Answer Position field, all of these listed fields, are further defined in the section pertaining to that command. Please refer to those sections for further information on these fields.

FIELD NAME	COMMAND	COMMAND NUMBER
COS	Class of Service	334
DRL	Destination Restriction Level	337
FRLP	Facility Restriction Level Profile	387
QPL	Queuing Priority Level	384
ANSPOS	Answer Position	___

Table 3-1
Feature, Facility Access and Dialing Control Fields

COS **Class Of Service**—Enter a number from 1 to 64 to define the COS for this trunk group.

This field is required if the trunk group type is non-ISDN/ISDN TIE, or if the trunk group has trunks flagged for DISA use. This class of service determines whether or not TIE or DISA trunks can access other trunks. See "Class of Service Assignment (CMD 334)" for more information.

DRL **Destination Restriction Level**—Assign a DRL of 1 to 16.

This field is required if the trunk group type is non-ISDN/ISDN TIE, or if the trunk group has trunks flagged for DISA use. When DRL is "1", all calls are allowed regardless of what Restriction Group number (RG) is being used. See "Destination Restriction Level Assignment (CMD 337)" for more information.

FRLP **Facility Restriction Level**—Enter an FRLP of 1 to 32.

This field is required if the trunk group type is non-ISDN/ISDN TIE, or if the trunk group has trunks flagged for DISA use. See "Facility Restriction Level Profile Assignment (CMD 387)" for more information.

QPL **Queuing Priority Level**—Assign a QPL from 1 to 8.

This field is required if the trunk group type is TIE, or if the trunk group has trunks flagged for DISA use. See the "LCR Special Routing Assignment (CMD 384)" for more information.

ANSPOS **Answer Position**—Enter a destination number from 0 to 99999.

This field is used by both ISDN and non-ISDN trunk groups. The answer position defines the destination for calls made using the universal attendant access code. These are internal calls normally made by dialing "0." Note: "0" can be redefined as any legal directory number in the Numbering Plan Assignment (CMD 300). The destination can be an Attendant DN, Attendant Group DN, Station DN, Hunt Group Pilot, UCD Pilot, or ACD Pilot. This field is needed for TIE and DISA.

S RG **Station Restriction Group**—Not used. This feature is for future release.

SUP **Answer Supervision**—This field is used by both ISDN and non-ISDN trunk groups. Use the following keywords to define whether or not answer supervision will be supplied to the PBX from the network after the call is answered.

YES	(indicates answer supervision will be supplied)
NO	(supervision will not be supplied)

For ISDN trunks, this field should be set to **YES**. If a **<TAB>** is entered when assigning an ISDN trunk group, “Answer Supervision” will default to **YES**.

This field information can clarify the billing process.

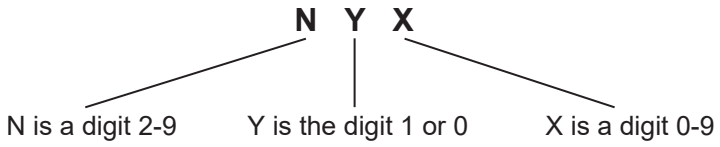
If Answer Supervision is set to "YES," then the SMDR threshold will not be used, regardless of its existence.

If Answer Supervision is not supplied, then billing will start at the SMDR level, regardless of when and if the call was answered.

RCL DN **Recall Destination Directory Number**—Enter a directory number from 0 to 99999 (1 to 5 digits).

The CO/FX/WATS/DID/CCSA trunks must have recall destination directory numbers assigned to them. The recall destination directory number can be either an Attendant directory number or an Attendant Group DN.

HAC **Trunk Group’s Home Area Code**—This field applies to both ISDN and non-ISDN trunk groups. Enter three dialed digits, from 200 to 919, in the following "NYX" format. You do not need to assign a home area code for TIE lines.



The PERCEPTION 4000 system bases its digit analysis on 10-digit numbers; therefore, if only 7 digits were dialed, the system will look at this table to find the home area code (3 digits) and add that to the front of the 7-digit number before performing digit analysis.

A home area code assigned to the trunk group is used by the outgoing call restriction process to determine whether or not a call is allowed based on the trunk restriction group definition and the calling party's destination restriction level. The outgoing call restriction process checks the home area code of 7-digit calls for a specific facility.

GF

Global Net Flag—In most cases, this field is not used. The Global Net Flag field is only enabled for Toshiba proprietary networks. This field applies only to non-ISDN trunks. If an entry in this field is required, enter one of the following keywords.

Y	(Yes)
N	(No)

TRUNK ASSIGNMENT (CMD 313)

This form identifies the characteristics of individual trunks, assigns these trunks to specific hardware circuits in the system, and provides the logical linkage to their trunk group.

Prerequisite command:
- Trunk Group Assignment (CMD 310)

Related command:
- Numbering Plan Assignment (CMD 300)
- Trunk Hunting Assignment (CMD 309)
- Trunk Routing Assignment (CMD 308)
- Trunk-to-Trunk Assignment (CMD 305)
- Private/Hotline Assignment (CMD 332)

TRUNK ASSIGNMENT

EQUIP #	TGN	ORG	TERM	SIG	CO SUP TYPE	ST	DT	DISA	TRK NAME

Figure 3-5
Trunk Assignment (CMD 313)

FIELD	EXPLANATION
EQUIP #	**Equipment Number**—Use the following charts to determine the valid ranges for various types of equipment. All equipment numbers must be 5 to 6 digits long. (If the first digit is a zero, then it can be dropped.)

For COGI, DIDI, and EM1I, equipment cards, the following ranges apply:

Digits	Range	Hardware
First two digits	01~10	Shelf no.
Second two digits	01~14	Card slot no.
Last two digits	01~08	Circuit no.

For an EM2I card, the circuit number cannot be greater than 6:

Digits	Range	Hardware
First two digits	01~10	Shelf no.
Second two digits	01~14	Card slot no.
Last two digits	01~06	Circuit no.

TGN **Trunk Group Number**—Enter number of the trunk group from 1 to 256 (or to the maximum system configuration) to which the trunk is assigned. A trunk can belong to one and only one trunk group.

ORG **Originating Dial Mode**—Enter one of the following keywords to define whether Dual-Tone Multi-Frequency (DTMF) or dialpulse sending will be used over the circuit.

DTMF (Dual-Tone Multi-Frequency)
DP10 (Dial Pulse /10 Pulses per Second)
DP20 (Dial Pulse /20 Pulses per Second)

TERM **Terminating Dial Mode**—Use the following keywords to define the type of sending the PERCEPTION 4000 can expect to receive from the distant end.

DTMF (Dual-Tone Multi-Frequency)
DP10 (Dial Pulse /10 Pulses per Second)
DP20 (Dial Pulse /20 Pulses per Second)
NA (Not Applicable - this field is only for outgoing trunk groups.)

The terminating dial mode is primarily for DID, CCSA, and incoming TIE trunk calls. This field is not applicable for outgoing-only trunk groups.

SIG **Signaling**—Assign the type of signaling to be used by the trunk circuit - loop start, ground start, or E & M signaling.

DID (Direct Inward Dialing)
EM1 (E&M1—signaling leads)
EM2 (E&M2—signaling leads)
GND (Ground start)
LP (Loop start)
LTIE (Loop TIE start)

The signaling field defines the type of signaling to be used by the trunk circuit - loop start, ground start, or E & M signaling. This signaling must be consistent with the type trunk interface card installed which in turn must be compatible with the signaling used by the serving central office or other PBX.

CO SUP TYPE **Central Office Supervision Type**—Use these keywords to define the type of release supervision provided by the central office for a given trunk circuit:

CLD (Called party disconnect)
CLG (Calling party disconnect)
EPD (Either party disconnect)
NON (No supervision)

If a trunk is terminated with a peripheral equipment, the CO supervision type should be "NON". "First party disconnect" is also referred to as "either party disconnect". It can only be EPD or CLG if "YES" is entered in DISA field.

This release supervision is considered by the PBX whenever a Trunk-to-Trunk connection is requested in order to prevent trunk lockups. (Please refer to the Trunk-to-Trunk Connection Assignment form (CMD 305) for an in-depth discussion of these principles).

ST

Start Mode—Define the type of start used for TIE trunks connecting different PBXs with these keywords:

DLY	(Delay dial)
DT	(Dial tone)
IMM	(Immediate start)*
TIM	(Timing start)
WNK	(Wink start)

*"Immediate start (IMM)" cannot have DTMF in ORIG/TERM dial mode field.

"Timing (TIM)" is required for loop start trunks.

Filling out this field requires a knowledge of the other PBX's signaling scheme, therefore coordination between system administrators is important. If this field is set to immediate start, then the originating and terminating dial mode types must not be DTMF.

DT

Dial Tone—Enter one of the following keywords to define whether the PERCEPTION 4000 will return dial tone or silence to the calling end prior to the distant end beginning to send digits.

DT	(Dial tone return)
STR	(Silence tone return)

The dial tone field is also used in private network applications.

DISA

DISA Flag—Enter either one of the following keywords to indicate whether or not the trunk should be flagged for Direct Inward System Access (DISA) use:

YES	(Flag is desired)
NO	(No flag is desired)

Outgoing trunks should not be designated as DISA trunks.

TRK NAME

Trunk Name—You can assign an optional name, up to 14 characters in length, for each trunk circuit. This name will be displayed on 2020 station sets and PERCEPTION 4000 attendant consoles when connected to this trunk.

DIGITAL CARRIER CHANNEL ASSIGNMENT (CMD 413)

Individual channel characteristics of the T-1 digital carrier channel are defined on this form. The T-1 card uses 24 time slots in the PERCEPTION 4000 system. Only a trunk card or Electronic Telephone line card can be used in the same highway with this card. The T-1 card is placed in the second slot of the desired highway.

Prerequisite command:
- Trunk Group Assignment (CMD 310)

Related commands:
- Trunk-to-Trunk Connection Assignment (CMD 305)
- Trunk Assignment (CMD 313)
- Trunk Hunting Assignment (CMD 309)

DIGITAL CARRIER CHANNEL ASSIGNMENT

EQUIP #	TGN	SIG	ST	STOUT	DBNK	DT	ORG	TERM	RSPV	DISA	SPD	NAME

Figure 3-6
Digital Carrier Channel Assignment (CMD 413)

FIELD	EXPLANATION
EQUIP #	**Digital Carrier Channel Equipment Number**—Use the following chart to determine the valid ranges for various types of equipment. All equipment numbers must be 5 to 6 digits long. (If the first digit is a zero, then it can be dropped.) For TTRI equipment cards, only the even-numbered card slots are used:

Digits	Range	Hardware
First two digits	01~10	Shelf no.
Second two digits	02, 04, 06, 08, 10, 12	Card slot no.
Last two digits	01~24	Channel no.

TGN **Trunk Group Number**—Enter the number of the trunk group (from 1 to 256 or up to the maximum system configuration) to which the trunk is assigned. A trunk can belong to one and only one trunk group.

SIG **Signaling**—Define the signaling type for each digital carrier channel of the T-1 interface by using one of the keywords from Table 3-2.

Trunk Type	Keywords	Compatible Signaling
CO, FX, or WATS	GND LP	(Ground start CO) (Loop start CO)
DID	DID	(Direct Inward Dialing)
TIE DMI	EM DMI	(TIE E&M) (TIE Digital Multiplexing Interface)

Table 3-2
Compatible Digital Channel Signaling

The Signaling field determines whether the digital channel will emulate a loop start, ground start, DID, E&M TIE, or Digital Multiplexing Interface (DMI) TIE trunk.

The signaling type must be compatible with trunk group type. If trunk group type is CO or FX or WATS, the SIG can only be GND or LP. DID in signaling is compatible with DID trunk type. E&M in signaling is compatible with TIE trunk group type. DMI signaling is for future use.

ST **Start Method**—Define which channel will be used as the start method by entering one of the following keywords:

Keyword	Definition	Compatible Signaling
IMM	(Immediate start)	DID or E&M signaling
WNK	(Wink start)	DID, E&M or DMI signaling
DLY	(Delay dial)	DID or E&M signaling
TIM	(Timeout)	E&M, LP or GND signaling
AUT	(Automatic)	DMI signaling

Table 3-3
Compatible Channel Start Method

Wink, delay, and immediate start methods are used for DID and E&M. Additionally, E&M may use timing. If the signaling is DMI, then wink or automatic start is legal (DMI is reserved for future use). Loop and ground start signaling can only use the timing start method. "TIM" is required for loop start trunks.

STOUT **Start Method for Outgoing Call**—This field is used for DMI signaling only; all other signaling types do not use this field (DMI is for future use). To assign the start method for outgoing calls with DMI signalling, enter one of the following keywords:

IMM	(Immediate start)
WNK	(Wink start)
DLY	(Delay dial)
TIM	(Timing)
AUT	(Automatic)

DBNK **D-bank Equivalent**—Use this field only if the channel is designated as a CO trunk (loop or ground start signaling). To define the D-Bank Equivalent for CO trunks only, specify the channel as foreign exchange subscriber or special access subscriber with one of the following keywords:

FXS	(Foreign exchange subscriber)
SAS	(Special access subscriber)

DT **Dial Tone**—Define whether dial tone or silence is returned. Only DMI (for future use) and E&M TIE trunks can be defined for the silence option (STR).

DT	(Dial tone return)
STR	(Silence tone return)

ORG **Originating Dialing Mode**—Defines the Originator's Dial Mode for a digital carrier channel as either dial pulse (10 pulses per second) or Dual-Tone Multi-Frequency (DTMF) signaling.

DP10	(Dial Pulse/10 pulses per second)
DTMF	(Dual-Tone Multi-Frequency)

TERM **Terminating Dial Mode**—Define the Terminator's Dial Mode for a digital carrier channel as either dial pulse (10 pps), DTMF, or not applicable.

DP10	(Dial Pulse/10 pulses per second)
DTMF	(Dual-Tone Multi-Frequency)
NON	(Not applicable)

RSPV **CO Supervision Type**—Assign the CO Supervision Type for digital carrier channel.

CLD	(Called party disconnect)
CLG	(Calling party disconnect)
EPD	(Either party disconnect)
NON	(No supervision)

The RSPV (Supervision) field defines release supervision provided by the central office or distant switch. The PERCEPTION 4000 uses this information to determine whether or not an unsupervised Trunk-to-Trunk connection can be formed using the channel.

If "LP" or "GND" are not entered in the "SIG" field, then the CO supervision type should be "NON". If a channel is terminated with a peripheral equipment, the CO supervision type should be "NON". "First party disconnect" is also referred to as "either party disconnect".

DISA

DISA Flag—Enter one of the following keywords to indicate whether or not the channel should be flagged as a Direct Inward System Access (DISA) trunk. Outgoing trunks should not be designated as DISA usage.

YES	(DISA flag on)
NO	(DISA flag off)

SPD

Transmission Speed—Define the transmission speed over the channel with the following keywords. If no data is entered, default value 64K bps (bits per second) is selected.

16K	(16,000 bits per second)
64K	(64,000 bits per second)

NAME

Channel Name—Assign a channel (trunk) name of up to 14 ASCII characters. Embedded spaces are allowed. The name will be displayed at attendant and display stations when the trunk is accessed by or terminated to the device.

TRUNK HUNTING ASSIGNMENT (CMD 309)

This form is for specifying the type and order of hunting that will be performed by the PERCEPTION 4000 PBX when a trunk group is selected to make an outbound call. This hunting information is required for all outgoing and bothway trunk groups.

The two types of hunting are described as follows:

TERMINAL HUNTING

This refers to when hunting occurs in the opposite order from rotary operation. This method is helpful for situations where glare (sometimes referred to as collision) is a problem. Glare is the condition when an inbound call simultaneously seizes the same trunk being used to perform an outbound call, thus, two parties are accidentally connected to each other. Glare usually occurs on loop start trunks.

If the terminal hunting method is used, the craftsperson should obtain information from the phone company regarding how the trunk circuits rotate (rotary operation). Then the circuits should be set up for terminal hunting using the Trunk Hunting Assignment (CMD 309) and listed in the opposite order from the rotary operation. This greatly reduces the occurrence of glare since inbound telephone traffic is offered to the trunks in one direction, such as from the top to the bottom, while the outbound traffic is offered from the bottom up.

DISTRIBUTED HUNTING

This method will attempt to seize a trunk from the group for an outbound call by remembering which circuit was last used for an outgoing call and then connecting the user to the next closest, idle trunk circuit.

The advantage of this method is that traffic is distributed more evenly to all circuits, which, over a long period of time, can help prolong the life of hardware equipment.

Prerequisite commands:

- Trunk Group Assignment (CMD 310)
- For trunk terminal, it requires Trunk Assignment (CMD 313)
- For a dictation machine, it requires the Dictation Group/Machine Assignment (CMD 401)

  - There are no dependent commands.

TRUNK HUNTING ASSIGNMENT

TGN	TYPE	SEQ #	EQUIP #	SEQ #	EQUIP #	SEQ #	EQUIP #

Figure 3-7
Trunk Hunting Assignment (CMD 309)

FIELD	EXPLANATION
TGN	**Trunk Group Number**—Enter a TGN from 1 to 256, or to the maximum system configuration (1 to 3 digits), to receive a hunting definition.
TYPE	**Hunting Method**—Define the hunting type as either distributed or terminal by using the following keywords: TERM (Terminal) DIST (Distributed)
SEQ#	**Hunting Sequence Number**—Assign a hunt sequence number from 1 to 64. The system will perform its hunt beginning with the lowest numbered index and going to the highest numbered index. Incoming-only trunk groups are not allowed PBX-side trunk hunting assignments.
EQUIP #	**Trunk Equipment Terminal Port Number**—The equipment number is assigned on the Trunk Assignment form (CMD 313). This field selects the appropriate trunk to be added, deleted, or displayed in the trunk hunting feature. Use the following charts to determine the valid ranges for various types of equipment. All equipment numbers must be 5 to 6 digits long. (If the first digit is a zero, then it can be dropped.)

For COGI, DIDI, and EM1I cards:

Digits	Range	Hardware
First two digits	01~10	Shelf no.
Second two digits	01~14	Card slot no.
Last two digits	01~08	Circuit no.

For an EM2I card, the circuit number cannot be greater than 6:

Digits	Range	Hardware
First two digits	01~10	Shelf no.
Second two digits	01~14	Card slot no.
Last two digits	01~06	Circuit no.

NOTE: Do not assign a DID card on this form since Direct Inward Dialing is not supported by this command.

COORDINATED NUMBERING PLAN ASSIGNMENT (CMD 303)

The Coordinated Numbering Plan Assignment is one of the two means provided by the PERCEPTION 4000 system for routing calls in a private network environment. The Uniform Numbering Plan (CMD 301) is the other network routing plan.

The Coordinated Numbering Plan automatically selects the proper trunk group based on steering digits dialed by a user. This process of selecting a TIE trunk group is virtually undetected by the user because the steering digits appear to be part of the phone number.

This form is for specifying the steering digits that each TIE trunk group will select when placing a call using those steering digits.

Related commands:
- Numbering Plan Assignment (CMD 300)
- Trunk Group Assignment (CMD 310)

☐ There are no dependent commands.

COORDINATED NUMBERING PLAN ASSIGNMENT

TGN	STDGT	STDGT	STDGT	STDGT	STDGT	STDGT	STDGT	STDGT	STDGT	STDGT	STDGT	STDGT	STDGT

TGN	STDGT	STDGT	STDGT	STDGT	STDGT	STDGT	STDGT	STDGT	STDGT	STDGT	STDGT	STDGT	STDGT

TGN	STDGT	STDGT	STDGT	STDGT	STDGT	STDGT	STDGT	STDGT	STDGT	STDGT	STDGT	STDGT	STDGT

Figure 3-8
Coordinated Numbering Plan Assignment (CMD 303)

FIELD	EXPLANATION
TGN	**Trunk Group Number**—Enter a TIE TGN from 1 to 256, or to the system's configurable maximum value, (1 to 3 digits). Begin with 1 or 001.

STDGT **Steering Digits**—Enter a steering digit from 0 to 99999 (1 to 5 digits).

When you fill out the Coordinated Numbering Plan, keep in mind that a steering digit may not be assigned to more than one trunk group; however, there is virtually no limit to the number of steering digits that can be defined for a given trunk group.

Ambiguity may not exist among steering digits or other members of the system Numbering Plan Assignment (CMD 300), such as feature access codes. The definition of ambiguity is when one number is equal to the prefix of another number.

TRUNK-TO-TRUNK CONNECTION ASSIGNMENT (CMD 305)

In the PERCEPTION 4000 system, Trunk-to-Trunk connections are made only if the following three prerequisites are met:

- The station's class of service must permit the Trunk-to-Trunk connection.
- It must be determined that a trunk lockup won't occur if one of the parties disconnects before the other. This is validated by checking both trunks' release supervision type and the direction of call.
- The Trunk-to-Trunk Connection Assignment (CMD 305) must allow the connection.

If the class of service definition denies a Trunk-to-Trunk connection, then the connection is not permitted. A connection will also be denied if the release supervision does not allow the connection. Trunk-to-Trunk connections are automatically placed on a locked loop when incorrect release supervision disallows an unsupervised call. This feature allows manual supervision of the call, and thus prevents potential trunk lockups.

Prerequisite command:
- Trunk Group Assignment (CMD 310)

Related commands:
- Numbering Plan Assignment (CMD 300)
- Trunk Assignment (CMD 313)
- Digital Carrier Channel Assignment (CMD 413)

TRUNK-TO-TRUNK CONNECTION ASSIGNMENT

APPL	TYPE	INDEX	TGN/ TYPE A	ORG DIRECT	TGN/ TYPE B	ORG DIRECT	APPL	TYPE	INDEX	TGN/ TYPE A	ORG DIRECT	TGN/ TYPE B	ORG DIRECT

Figure 3-9
Trunk-to-Trunk Connection Assignment (CMD 305)

FIELD	EXPLANATION
APPL	**Application**—This Trunk-to-Trunk Connection Assignment form contains two tables of system level definitions. One is for stations and the other is for attendants. In this field, specify if you're using this table for defining attendant capabilities or for station connectivity by entering one of the following keywords: ATT (Attendant's connectivity table) STA (Station's connectivity table)
TYPE	**Table Type**—Define the table type as one of the following: ALW (Trunk-to-trunk connection allowed) DNY (Connection denied) Trunk definition tables may be used as either allow or deny tables, depending on whichever would require the shorter definition. For instance, if you wish to deny only those calls which are incoming 800 calls connected to all other outbound or bothway trunk groups, it would be simpler to build a deny table than to build an allow table which would include all of the other possibilities. Once the "TYPE" field is selected as an allow or deny table, then all assignments of new Trunk-to-Trunk connections must be of the same type.
INDEX	**Connection Index Number**— Assign a value from 1 to 160 (or to the maximum configurable number in the system) for identification purposes.
TGN/TYPE A or TGN/TYPE B	**Trunk Type**—Entries in this field can be either keywords or decimal values, for trunk group numbers from 1 to 256 (or to the maximum system configuration). AUX (Auxiliary Use) CC (Code Call) CCSA (Common Control Switching Arrangement) CO (Central Office) DIC (Dictation Machine) DID (Direct Inward Dialing) FX (Foreign Exchange) PVT (Private Line) TIE (Inter-PBX Communication) VPG (Voice Paging) WATS (Wide Area Telecommunication Service) 1~256 (Trunk Group Numbers 1~256, or to maximum system configuration) Generally, you need two trunks to form a connection, so "Trunk Type A" can stand for one trunk, and "Trunk Type B" is the other. By using the "A" or "B" identifiers, you can easily define "Trunk A" as a CO (Central Office) trunk which connects to a VP (Voice Paging) trunk.

ORG DIRECT **Direction of Origin**—Define each facility as pertaining to incoming only, outgoing only, or bothway call types by entering one of the following keywords:

INC	(Incoming)
OUT	(Outgoing)
BWY	(Bothway—Incoming and Outgoing)

For stations, connections between pairs of trunk types/groups not inhibited by their deny table are still subject to the supervisability requirement. For instance, if neither party involved in a Trunk-to-Trunk connection has release supervision, the connection will not be made.

When the tables deny a permission to a particular trunk group, the trunks within these trunk groups may not be connected, regardless of whether they are supervisable.

CLOCK PROVIDER ASSIGNMENT (CMD 417)

This form assigns a priority level to the clock contained on the T1/DS1 Digital Trunk Interface (TTRI) card or the ISDN Primary Rate Controller (IPRC) card. The assigned priority level determines whether the TTRI/IPRC card's clock serves as the dominant clock in a networking arrangement, or if another clock will be dominant. The current assignment can also be displayed.

Prerequisite commands:

- IPRC/IPRI Card Assignment (CMD 422)
- Digital Carrier Channel Assignment (CMD 413)

CLOCK PROVIDER ASSIGNMENT

PRIORITY	CARD#	PRIORITY	CARD#	PRIORITY	CARD#

Figure 3-10
Clock Provider Assignment (CMD 417)

FIELD	EXPLANATION
PRIORITY	**PRIORITY**—Assign the priority level (1-60) of the clock provider on the TTRI or the IPRC circuit card (1 is the highest priority; 60 is the lowest). An entry of **NO** indicates that no priority is assigned.
CARD #	**CARD NUMBER**—Identify the equipment location of the TTRI or IPRC card containing the prioritized clock. Enter 102~1012 in the form SSPP, where SS = shelf number 1~10 and PP = card slot port number 01~12.

When the modify option is chosen, a third field, **TYPE**, will be displayed identifying whether the selected equipment location is occupied by a TTRI or an IPRC card.

TRUNK GROUP PARAMETER ASSIGNMENT (CMD 420)

This form allows the attributes of one or more trunk groups to be modified. Trunk group attributes include translation profile number, toll-free table number, incoming call ACD queue priority level, incoming call ACD queue priority timer, next incoming call ACD queue priority level, and ACD overflow destination.

Prerequisite commands:

- Trunk Group Assignment (CMD 310)

TRUNK GROUP PARAMETER ASSIGNMENT

TGN	PFL#	TF#	TF#	TF#	IQP1	IQP TMR	IQP2	OVF TMR

Figure 3-11
Trunk Group Parameter Assignment (CMD 420)

FIELD	EXPLANATION
TGN	**Trunk Group Number**—Specify the number of the trunk group (1-256) that will be modified.
PFL#	**Profile Number**—This field applies to both ISDN and non-ISDN trunk groups. Assign a translation profile number (1-32) to the specified trunk group. Enter **NON** (default) if no translation profile should be used.
TF#	**Toll-Free Table Number**—These three fields apply to both ISDN and non-ISDN trunk groups. Assign up to three toll-free area/office code tables to the trunk group. These tables must have already been programmed via CMD 311. Entering **<CTRL> D** deletes values previously entered in these fields. Assign a table number 1~16 (or up to the system-configured maximum).

IQP1 **Incoming ACD Call Queuing Priority**—This field applies to both ISDN and non-ISDN trunk groups. Assign a priority (1-16) to incoming ACD calls.

IQP TMR **Incoming ACD Call Queuing Priority Timer**—This field applies to both ISDN and non-ISDN trunk groups. Assign the number of seconds (1-9999) that an incoming ACD call will wait in queue before being repositioned by its assigned “IQP2” priority level. Entering **<CTRL> D** deletes both the “IQP1” and “IQP2” programmed values.

IQP2 **Second Incoming ACD Call Queuing Priority**—This field applies to both ISDN and non-ISDN trunk groups. Assign the priority level (1-16) at which ACD calls will be repositioned after having waited in queue for the duration of the IQP Timer. Entering **<CTRL> D** deletes both the “IQP1” and “IQP2” programmed values. “IQP2” must be set at a lower numeric value than “IQP1.”

OVF TMR **Overflow Timer**—This field applies to both ISDN and non-ISDN trunk groups. Assign the overall amount of time (1-9999 seconds) an ACD call will have to wait in queue before an overflow is attempted. An overflow destination must have been previously assigned via CMD 357.

TRUNK PP PARAMETER CHANGE (CMD 364)

This form modifies the settings that are assigned to each trunk, including start-check error time, interdigit timers, dial width, dial time, dial tone width, busy tone width, and disconnect timers.

Prerequisite commands:
- Trunk Group Assignment (CMD 310)
- Trunk Assignment (CMD 313)

TRUNK PP PARAMETER CHANGE

EQUIP	PARA	VALUE	PARA	VALUE	PARA	VALUE	PARA	VALUE

Figure 3-12
Trunk PP Parameter Change (CMD 364)

FIELD	EXPLANATION
EQUIP	**Equipment Number**—Specify the equipment number (010101 to 121416) of the trunk that is to be modified. The first two digits represent the number of the shelf containing the trunk circuit card; the next two digits represent the card slot number; and, the last two digits represent the circuit number on the card.
PARA	**Parameter to be Changed**—Specify the trunk parameter that will be modified.

CKERR	(Number of Start Check Errors)
CKTIM	(Start Check Error Time)
1TIME	(First Interdigit Timer)
2TIME	(Second Interdigit Timer)
DLWDT	(Dial Width)
DLTIM	(Dial Time)

GDTIM	(Guard Time)
DTONW	(Dial Tone On Width)
DTOFW	(Dial Tone Off Width)
SDTON	(Secondary Dial Tone On Width)
SDTOF	(Secondary Dial Tone Off Width)
BTONW	(Busy Tone On Width)
BTOFW	(Busy Tone Off Width)
DISHC	(Disconnect Time for E&M Line or HIC Open Time for Loop Line)

VALUE **Value of the Parameter**—Assign a value to each parameter being modified.

CKERR	(1~100)
CKTIM	(1000~10,000 milliseconds)
1TIME	(2~40 milliseconds)
2TIME	(2~40 milliseconds)
DLWDT	(80~600 milliseconds)
DLTIM	(80~600 milliseconds)
GDTIM	(440~10,200 milliseconds)
DTONW	(40~10,200 milliseconds)
DTOFW	(40~10,200 milliseconds)
SDTON	(40~10,200 milliseconds)
SDTOF	(40~10,200 milliseconds)
BTONW	(40~10,200 milliseconds)
BTOFW	(40~10,200 milliseconds)
DISHC	(160~10,200 milliseconds)

Chapter 4

INWARD ROUTING ASSIGNMENTS

Trunks, trunk groups and trunk circuits which are assigned to inward routing are defined in this chapter. Trunks and trunk groups which are considered bothway interfaces are discussed in Chapter 3, titled "Trunk and Trunk Group Restriction Assignments."

This chapter covers the following database commands:

- Trunk Routing Assignment (CMD 308)
- Trunk Group Routing Assignment (CMD 307)
- DID/CCSA/DNIS Trunk Group Assignment (CMD 314)
- DID/CCSA/DNIS DISA LDN Assignment (CMD 315)
- DID/CCSA/DNIS LDN Assignment (CMD 316)

TRUNK ROUTING ASSIGNMENT (CMD 308)

The PERCEPTION 4000 offers a powerful means of routing incoming trunk calls via the trunk and trunk group routing tables, combined with time zone definitions.

For example, when a call arrives on a trunk, the Trunk Routing Assignment (CMD 308) is first checked to see if unique routing is defined for this trunk. If not, the Trunk Group Routing Assignment (CMD 307) is examined for the routing instruction for that trunk group as defined for the time zone that is active. If no definition exists at either the trunk or trunk group level for the time zone used, the call will not receive routing, the PBX will not return answer supervision to the central office, and the caller will continue to hear ringback tone from the central office.

Prerequisite command:

- Trunk Group Assignment (CMD 310)

This command may be needed by:

- ☐ Attendant Position Assignment (CMD 370)
- ☐ Attendant Group Assignment (CMD 372)
- ☐ Station Assignment (CMD 330)
- ☐ Miscellaneous Device Assignment (CMD 400)
- ☐ Announcement Pattern Assignment (CMD 353)
- ☐ ACD Group Assignment (CMD 355)
- ☐ Station Hunting Assignment (CMD 342)
- ☐ Night Bell Assignment (CMD 405)
- ☐ System Speed calling Assignment (CMD 402)
- ☐ UCD Group Assignment (CMD 354)

TRUNK ROUTING ASSIGNMENT

EQUIP #	TIME ZONE #	ROUTE CHOICE 1	ROUTE CHOICE 2	ROUTE CHOICE 3

EQUIP #	TIME ZONE #	ROUTE CHOICE 1	ROUTE CHOICE 2	ROUTE CHOICE 3

EQUIP #	TIME ZONE #	ROUTE CHOICE 1	ROUTE CHOICE 2	ROUTE CHOICE 3

Figure 4-1
Trunk Routing Assignment (CMD 308)

FIELD	EXPLANATION

EQUIP #

Equipment Number—Use the following charts to determine the valid ranges for various types of equipment. All equipment numbers must be 5 to 6 digits long. (If the first digit is a zero, then it can be dropped.)

NOTE: Do not assign a DID card on this form since Direct Inward Dialing is not supported by this command.

For COGI and EMI1, equipment cards, the following ranges apply:

Digits	Range	Hardware
First two digits	01~10	Shelf no.
Second two digits	01~14	Card slot no.
Last two digits	01~08	Circuit no.

For an EM2I card, the circuit number cannot be greater than 6:

Digits	Range	Hardware
First two digits	01~10	Shelf no.
Second two digits	01~14	Card slot no.
Last two digits	01~06	Circuit no.

TIME ZONE #

Time Zone Number—Assign the time zone during which this particular routing destination will apply. Use the numbers from 1 to 4.

The routing destination can be varied from time zone to time zone. To specify the routing destination, the user must specify the time zone first.

ROUTE CHOICE 1

Routing Choice One—Enter one of the following as the routing destination:

—A directory number from 0 to 99999 (1 to 5 digits).
—Speed Access Code (3 digits) + Index number (1 to 2 digits).
—Or one of the following keywords:

AP01 to AP50	(Announcement pattern number)
BL01 to BL64	(Night bell)
NON	(No routing)

For Route Choice 1, it can be one of the following:

- An individual attendant console directory number (1 to 5 digits)
- Attendant group directory number (1 to 5 digits)
- Station directory number (1 to 5 digits)
- Announcement pattern number (AP01 to AP50)
- Hunt group pilot number (1 to 5 digits)
- UCD group pilot number (1 to 5 digits)
- ACD group pilot number (1 to 5 digits)
- Speed call code - System speed calling access code (3 digits) plus speed calling index number (1 to 2 digits) for a total of 4 to 6 digits.
- Night bell (BL01 to BL64)
- No routing (NON). "NON" is only valid for "Route Choice 1. "

ROUTE CHOICE 2 **Routing Choice Two**—An entry in this field is necessary only when the "Route Choice 1" field has been defined as an attendant or attendant group. The system will use "Route Choice 2" when the attendant(s) are in the unavailable (Position Busy Mode).

- Use the same options as "Route Choice 1," except for the "No routing (NON)" option, which is only valid for "Route Choice 1."

ROUTE CHOICE 3 **Routing Choice Three**—If the "Routing Choice 1 and 2" fields are defined as attendants or attendant groups, or a combination of the two, then a third routing choice can be defined.

The system will use "Route Choice 3" when both Routes 1 and 2 are unavailable because the attendant console(s) or attendant group is in the Position Busy Mode.

For "Route Choice 3," use the same options as "Route Choice 1," with the following exceptions:

- Attendants and attendant groups are not valid options for "Route Choice 3."
- "No routing (NON)" is not a valid option.

TRUNK GROUP ROUTING ASSIGNMENT (CMD 307)

This form provides routing instructions for trunk groups according to the active time zone. Routing definition must be provided at either the trunk or trunk group level for the various time zones used or calls will not receive routing.

Prerequisite command:

- Trunk Group Assignment (CMD 310)

If the route choice is defined, the following commands may be needed:

- Attendant Position Assignment (CMD 370)
- Attendant Group Assignment (CMD 372)
- Station Assignment (CMD 330)
- Miscellaneous Device Assignment (CMD 400)
- Call Treatment Pattern Assignment (CMD 353)
- ACD Group Assignment (CMD 355)
- Station Hunting Assignment (CMD 342)
- Night Bell Assignment (CMD 405)
- System Speed calling Assignment (CMD 402)
- UCD Group Assignment (CMD 354)

☐ There are no dependent commands.

TRUNK GROUP ROUTING ASSIGNMENT

TGN	TIME ZONE #	ROUTE CHOICE 1	ROUTE CHOICE 2	ROUTE CHOICE 3

TGN	TIME ZONE #	ROUTE CHOICE 1	ROUTE CHOICE 2	ROUTE CHOICE 3

TGN	TIME ZONE #	ROUTE CHOICE 1	ROUTE CHOICE 2	ROUTE CHOICE 3

Figure 4-2
Trunk Group Routing Assignment (CMD 307)

FIELD	EXPLANATION
TGN	**Trunk Group Number**—Enter a TGN from 1 to 256, or to the maximum system configuration (1 to 3 digits).
TIME ZONE #	**Time Zone Number**—Specify a time zone from 1 to 4 (1 digit). The routing destination will vary, depending on which time zone has been selected.
ROUTE CHOICE 1	**Routing Choice One**—Enter one of the following as the routing destination: —A directory number from 0 to 99999 (1 to 5 digits). —Speed Access Code (3 digits) + Index number (1 to 2 digits). —Or one of the following keywords: AP01 to AP50 (Announcement pattern number) BL01 to BL64 (Night bell) NON (No routing) For Route Choice 1, it can be one of the following: ■ An individual attendant console directory number (1 to 5 digits) ■ Attendant group directory number (1 to 5 digits) ■ Station directory number (1 to 5 digits) ■ Announcement call treatment pattern number (AN01 to AN64) ■ Hunt group pilot number (1 to 5 digits) ■ UCD group pilot number (1 to 5 digits) ■ ACD group pilot number (1 to 5 digits) ■ Speed call code - System speed calling access code (3 digits) plus speed calling index number (1 to 2 digits) for a total of 4 to 6 digits. ■ Night bell (BL01 to BL64) ■ No routing (NON). This is only valid for "Route Choice 1."
ROUTE CHOICE 2	**Routing Choice Two—**An entry in this field is necessary only when the "Route Choice 1" field has been defined as an attendant or attendant group. The system will use "Route Choice 2" when the attendant(s) are in the unavailable (Position Busy Mode). ■ Use the same options as "Route Choice 1," except for the "No routing (NON)" option, which is only valid for "Route Choice 1."
ROUTE CHOICE 3	**Routing Choice Three**—If the "Routing Choice 1 and 2" fields are defined as attendants or attendant groups, or a combination of the two, then a third routing choice can be defined. The system will use "Route Choice 3" when both Routes 1 and 2 are unavailable because the attendant console(s) or attendant group is in the Position Busy Mode. For "Route Choice 3," use the same options as "Route Choice 1," with the following exceptions: ■ Attendants and attendant groups are not valid options for "Route Choice 3." ■ "No routing (NON)" is not a valid option.

DID/CCSA/DNIS TRUNK GROUP ASSIGNMENT (CMD 314)

This form defines DID, CCSA, and DNIS non-ISDN trunk groups as well as DDI/DNIS ISDN trunk groups. It also specifies any digit deletion and/or addition required on in-bound dialed numbers for proper call routing.

Prerequisite commands:

- Announcement Pattern Assignment (CMD 353)
- Attendant Position Assignment (CMD 370)
- ISDN Trunk Group Parameter Assignment (CMD 421)
- Night Bell Assignment (CMD 405)
- Trunk Group Assignment (CMD 310)

DID/CCSA/DNIS TRUNK GROUP ASSIGNMENT

TGN	ORG DIGIT	NEW DIGIT	CO DIGIT	KEPT DIGIT	PREFIX	INTER TYPE	INTER ALT

Figure 4-3
DID/CCSA/DNIS Trunk Group Assignment (CMD 314)

FIELD	EXPLANATION
TGN	**Trunk Group Number**—Enter the number of the trunk group (1-256) that is being defined.
ORG DIGIT	**Originating Digits**—This field is used only for DID and CCSA non-ISDN trunks. Specify the original digits (0-9999999) received from the central office. When assigning DNIS or DDI trunk groups, enter the keyword **NON** or skip past this field by entering **<TAB>**.

NEW DIGIT

New Digits—This field is used only for DID and CCSA non-ISDN trunks. Specify new digits (0-9999999) to be assigned to calls when the digits specified in the "ORG DIGIT" field are received from the central office.

Up to 32 unique "ORG DIGIT" and "NEW DIGIT" pairs can be assigned to each trunk group.

If an original/new digits pair is not required, enter either **<TAB>** or the keyword **NON** to skip past these fields. However, if digits have been entered in the "ORG DIGIT" field, then new digits or **NON** must be entered in the "NEW DIGIT" field.

When assigning DNIS or DDI trunk groups, either enter **NON** or skip past this field by entering **<TAB>**.

CO DIGIT

Central Office Sending Digits—Specify the predetermined number of digits (2-7) to be sent by the central office. This field is not used for DNIS/DDI trunks.

KEPT DIGIT

Number of Digits to be Kept—Specify the number of digits to be kept after receiving a digit string from the central office.

Keywords: NON – No received CO digits will be kept
ALL – All received digits will be kept

For DID/CCSA/DNIS non-ISDN trunks enter 1-7. For DDI/DNIS ISDN trunks enter 1-15.

For non-ISDN trunks, the value entered should be less than or equal to the value entered for "CO DIGIT."

PREFIX

Digit String to be Added—Specify the digit string to be added at the front of the received CO digit string (10 ~ 99999). For DNIS trunk groups, either a **<TAB>** or the keyword **NON** should be entered. **NON** can also be entered for other trunk types, if no prefix string is to be added for them.

INTER TYPE

Intercept Treatment Type—Define the device or attendant that will perform vacant number intercept treatment for the specified DID/CCSA/DNIS/DDI trunk group. Attendants, attendant groups, and announcement patterns are valid definitions.

AP01-AP50 — Announcement pattern 1 – 50
0 – 99999 – Attendant or attendant group directory number

The announcement pattern specified must have already been assigned (CMD 353).

INTER ALT

Alternate Intercept Treatment—Specify an alternate intercept plan (night bell device) for the DID/CCSA/DNIS/DDI, if the first-choice attendant or attendant group is busy.

BL01 – BL64 – Night bell device number

The night bell device specified must have already been assigned (CMD 405)

No entry is required if an announcement pattern number was entered for "INTER TYPE." Entering **<CTRL> D** deletes the existing alternate intercept treatment.

DID/CCSA/DNIS DISA LDN ASSIGNMENT (CMD 315)

Each Direct Inward Dialing (DID), Common Control Switching Arrangement (CCSA), and Dialed Number Identification Service (DNIS) trunk group defined in the system may have some listed directory numbers assigned for Direct Inward System Access (DISA) usage. The numbers defined for DISA usage are listed for this trunk group. Individuals knowing these telephone numbers may call the system and access system features and facilities after entering a security code and/or authorization code (both of which are optional).

Listed directory numbers are the literal numbers sent from the central office. In other words, these numbers do not receive any translation by the PBX. All DID/CCSA/DNIS numbers are compared against this DID/CCSA/DNIS DISA Listed Directory Number (LDN) Assignment (CMD 315) and the DID/CCSA/DNIS LDN Assignment (CMD 316) prior to performing any digit translation.

For example, if the central office sends 5 digits and 33789 is sent, a valid entry in this table would be 33789. Whenever the PBX received these numbers over this trunk group, it would be treated as a DISA LDN and dial tone is returned to the calling party.

Prerequisite commands:

- Trunk Group Assignment (CMD 310)
- DID/CCSA/DNIS Trunk Group Assignment (CMD 314)

  - ☐ There are no dependent commands.

DID/CCSA/DNIS DISA LDN ASSIGNMENT

TGN	DISA LDN	DISA LDN	DISA LDN	DISA LDN	DISA LDN	DISA LDN	DISA LDN	DISA LDN

Figure 4-4
DID/CCSA/DNIS DISA LDN Assignment (CMD 315)

FIELD	EXPLANATION
TGN	**Trunk Group**—Enter a trunk group number from 1 to 256 (1 to 3 digits) that you wish to assign Listed Directory Numbers for Direct Inward System Access usage.
DISA LDN	**Direct Inward System Access Listed Directory Number**—Enter all of the Listed Directory Numbers (LDNs) which should not receive digit translation. Use a number 00 to 9999999 (2 to 7 digits) for DID, CCSA, or DNIS non-ISDN trunks. Use a number 00 to 999999999999999 (2 to 15 digits) for DDI or DNIS ISDN trunks. The LDNs listed in this field apply only to the trunk group specified in the first field. Each trunk group can be assigned up to eight LDNs which do not receive digit translation.

DID/CCSA/DNIS LDN ASSIGNMENT (CMD 316)

This form specifies the unique routing defined for a non-Direct Inward System Access (non-DISA) listed directory number. Up to 32 listed directory numbers (non-DISA) are allowed per DID/CCSA trunk group.

Each Listed Directory Number (LDN) may be assigned unique routing for up to four different time zones. The structure and relationships of the three route choices within each time zone for each Listed Directory Number (LDN) parallels that used in the Trunk Routing Assignment (CMD 308) and Trunk Group Routing Assignment (CMD 307) forms. Please refer to those forms for a discussion of these relationships and parameter issues.

Unlike the trunk group routing and trunk routing commands, there is no relationship of Trunk-to-Trunk group. If an LDN for the DID/CCSA trunk group receives no definition in a time zone the call will not be treated as a regular DID call but, rather, will go unanswered.

Overall screening of DID/CCSA numbers from the central office happens along these lines:

1. Check received digits against DID/CCSA DISA LDN Assignment form (CMD 315) for the appropriate trunk group. If found, treat as DISA call. If not found, see item "2" below.

2. Check received digits against DID/CCSA LDN Assignment form (CMD 316) for the appropriate trunk group. If found, route according to inward routing definition assigned for that LDN in the active time zone. If not found, then see item "3" below.

3. Collect all digits sent from CO and translate to resultant number according to digit translation instruction defined for this trunk group on the DID/CCSA Trunk Group Assignment (CMD 314). If there is a vacant number, perform the appropriate vacant number intercept defined for this trunk group (also defined on CMD 314).

Prerequisite commands
- Trunk Group Assignment (CMD 310)
- DID/CCSA/DNIS Trunk Group Assignment (CMD 314)

If the route choice is defined, the following commands may be needed:
- Attendant Position Assignment (CMD 370)
- Attendant Group Assignment (CMD 372)
- Station Assignment (CMD 330)
- Miscellaneous Device Assignment (CMD 400)
- ACD Group Assignment (CMD 355)
- Station Hunting Assignment (CMD 342)
- Night Bell Assignment (CMD 405)
- System Speed calling Assignment (CMD 402)
- UCD Group Assignment (CMD 354)

☐ There are no dependent commands.

DID/CCSA/DNIS LDN ASSIGNMENT

TGN	INDEX	LDN	TIME ZONE #	ROUTE CHOICE 1	ROUTE CHOICE 2	ROUTE CHOICE 3

TGN	INDEX	LDN	TIME ZONE #	ROUTE CHOICE 1	ROUTE CHOICE 2	ROUTE CHOICE 3

TGN	INDEX	LDN	TIME ZONE #	ROUTE CHOICE 1	ROUTE CHOICE 2	ROUTE CHOICE 3

Figure 4-5
DID/CCSA/DNIS LDN Assignment (CMD 316)

FIELD	EXPLANATION
TGN	**Trunk Group Number**—Enter the trunk group number (1-256) to which you wish to assign the LDN. The trunk group must have been defined as either DID, CCSA, or DNIS by CMD 310. Each DID/CCSA/DNIS non-ISDN and each DDI/DNIS-mode ISDN trunk group can have only one LDN table.
INDEX	**Index for LDN Entry**—Enter a sequential index number (1-256). This number is used only as a counter in ADD and DISPLAY operations and does not indicate an actual position in a trunk group or set any priority for data entered in this command.
LDN	**Listed Directory Number**—Enter the dialing digits of the LDN. 2-7 digits for DID, CCSA, or DNIS non-ISDN trunks 2-15 digits for DDI or DNIS ISDN trunks Each LDN must be unique within its own trunk group. However, an LDN can be assigned to more than one trunk group. All LDNs assigned to the same DID/CCSA/DNIS non-ISDN trunk group must have the same number of digits. The length of each LDN must be the same as the non-ISDN trunk group's digit length.

TIME ZONE # **Time Zone Number**—Enter the time zone number which will apply to each LDN entry in the trunk group and which will specify the routing destination. Assign the numbers 1 to 4 (1 digit) in this field.

ROUTE CHOICE 1 **Routing Choice One**—Enter one of the following as the routing destination:
—A directory number from 0 to 99999 (1 to 5 digits).
—Speed Access Code (3 digits) + Index number (1 to 2 digits).
—Keywords:

AP01 to AP50 (Announcement call treatment pattern number)
BL01 to BL64 (Night bell)

For Route Choice 1, it can be one of the following:

- An individual attendant console directory number (1 to 5 digits)
- Attendant group directory number (1 to 5 digits)
- Station directory number (1 to 5 digits)
- Announcement pattern number (AP01 to AP50)
- Hunt group pilot number (1 to 5 digits)
- UCD group pilot number (1 to 5 digits)
- ACD group pilot number (1 to 5 digits)
- Speed call code - System speed calling access code (3 digits) plus speed calling index number (1 to 3 digits) for a total of 4 to 6 digits.
- Night bell (BL01 to BL64) This entry is only valid for "Route Choice 1."

ROUTE CHOICE 2 **Routing Choice Two—**An entry in this field is necessary only when "Route Choice 1" has been defined as an attendant or attendant group. The system will use "Route Choice 2" when the attendant(s) are in the unavailable (Position Busy Mode).

- Use the same options as "Route Choice 1," except for "night bell (BL01 to BL64)," which is not a valid option for "Route Choice 2".

ROUTE CHOICE 3 **Routing Choice Three**—If the "Routing Choice 1 and 2" fields are defined as attendants or attendant groups or a combination of the two, then a third routing choice can be defined.

The system will use "Route Choice 3" when both Routes 1 and 2 are unavailable because the attendant console(s) or attendant group is in the Position Busy Mode.

For "Route Choice 3," use the same options as "Route Choice 1," with the following exceptions:

- Attendants and attendant groups are not valid options for this field.
- Night bell (BL01 to BL64) is not valid for this field.

STATION AND LINE-ORIENTED ASSIGNMENTS

This chapter covers the following data and line-oriented assignments:

- Class of Service Assignment (CMD 334)
- Station Feature Key Pattern Assignment (CMD 320)
- Station Assignment (CMD 330)
- Forced Account Code Toll-Free Tables (CMD 352)
- Station-Level Parameter Assignment (CMD 329)
- Station Feature Key Assignment (CMD 331)
- Private/Hotline Assignment (CMD 332)
- Call Pickup Group Assignment (CMD 346)
- Time Zone Assignment (CMD 336)
- LCR/Authorization Time Zone Change Assignment (CMD 343)
- Group Speed Calling Member Assignment (CMD 350)
- Group Speed Calling List Assignment (CMD 351)
- Timeout Routing Destination Assignment (CMD 323)
- Authorization Code Assignment (CMD 349)
- Miscellaneous Device Assignment (CMD 400)
- Account Code Assignment (CMD 348)

All voice stations must be defined in the system database through the Station Assignment form (CMD 330). This form covers the following assignments and controls:

- ☐ Primary Equipment Index Number
- ☐ Prime Directory Number
- ☐ Station Type
- ☐ Logical Extension Control
- ☐ Prime Ring/No Ring Control
- ☐ Data Security Control
- ☐ Class of Service (COS) number
- ☐ Destination Restriction Level (DRL) number
- ☐ Facility Restriction Level Profile (FRLP) number
- ☐ Queuing Priority Level (QPL) number
- ☐ Universal Answering Position Destination
- ☐ Station Name
- ☐ Department Number

Additional control information is assigned on the Station-Level Parameter Assignment form (CMD 329). The following assignments and controls are made here:

- ☐ Primary Directory Number
- ☐ Device Type
- ☐ Line Preference
- ☐ Voice Announcement Reception via Prime Line Control
- ☐ Voice Announcement Reception via Intercom Line Control
- ☐ Automatic Answerback to Voice Announce Control
- ☐ Ring-Over Busy Control
- ☐ Definitions for each key and associated attributes (for both line appearances and feature keys)

Modems which are supported by Basic Standard Telephone Interface (BSTI) circuits are not defined here. They are defined in the Modem Pool Assignment (CMD 347).

CLASS OF SERVICE ASSIGNMENT (CMD 334)

In the PERCEPTION 4000 system, up to 64 classes of service may be defined. A Class of Service (COS) definition is a profile that assigns the capabilities of individual facilities and features. Every station, data station, attendant, and trunk group housing Direct Inward System Access (DISA) or incoming TIE trunks must be assigned a Class of Service.

Most of the COS definitions apply to all of the above devices or facility types; however, some COS definitions only apply to a specific device/facility type. For instance, Do-Not-Disturb override is only allowed for attendants. For these cases, the PBX understands the limitation and will not allow the capability to be affected by a station user, even if it exists in its class of service definition.This allows greater flexibility in the configuration of definitions.

Since many features will probably require identical or similar capabilities, we suggest that you take a look at the organizational structure of the company and determine which users can be logically grouped together in terms of telephone needs and privilege levels. Once these groups are defined, a COS can be assigned to each group so that definitions will apply to all telephones and consoles within the group.

Prerequisite commands:

- Attendant Group Assignment (CMD 372)
- Attendant Position Assignment (CMD 370)

This command may be needed by:

- ☐ Station-Level Parameter Assignment (CMD 329)
- ☐ Station Feature Key Assignment (CMD 331)
- ☐ Private/Hotline Assignment (CMD 332)
- ☐ Station Hunting Assignment (CMD 342)
- ☐ Call Pickup Group Assignment (CMD 346)
- ☐ Group Speed calling Member Assignment (CMD 350)
- ☐ UCD Group Assignment (CMD 354)
- ☐ Data Station Assignment (CMD 360)
- ☐ Internal Call Alternate Routing Assignment (CMD 374)

CLASS OF SERVICE ASSIGNMENT (1 of 2)

		CLASS OF SERVICE LEVEL																													
FEATURE NAME	FNO	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32

Figure 5-1
Class of Service Assignment (CMD 334)

FIELD	EXPLANATION
FEATURE NAME	**Feature Name—**Enter the feature name to receive a class of service (COS) level assignment. Feature names are shown below.
FNO	**Feature Number—**Enter the feature numbers (FNOs) of those features and trunks that you wish to assign to various Class of Service levels. Values from 1 to 256, or to maximum system configuration, are actual trunk group numbers. (Refer to the Numbering Plan Assignment, CMD 300, for a list of trunk feature numbers.) Values from 257 to 345 represent features. Additional entries can be added as new features are defined. Following is a list of valid feature entries.

Feature Name	FNO
Attendant Break-in	332
Attendant End-to-End Signaling	345
Attendant Parked Page Retrieval	333
Call Forward - All Calls Key	271
Call Forward - Busy/No Answer Key	272
Call Forward - No Answer Key	273
Call Fwd - All Calls Register	295
Call Fwd - Busy/No-Answer Register	296
Call Fwd - No Answer Register	297
Call Pickup - Directed	284

	Feature Name	FNO	
	Code Calling Access	258	
	Code Calling Retrieval	267	
	Data Privacy	312	
	Dictation Access - Direct	264	
	Dictation Access - Group	263	
*	Direct Trunk Access - Trunk Group 1	1	
*	Direct Trunk Access - Trunk Group nnn	nnn	(nnn is greater than 1 and less than 256)
*	Direct Trunk Access - Trunk Group 256	256	
	Do Not Disturb Key	270	
	Do Not Disturb Registration	288	
	Eight Party Conference Access	313	
	ISDN CPN Presentation Allowed	342	
	ISDN CPN Presentation Restricted	343	
	Night Answer Access	269	
	Trunk-to-Trunk Connection	257	
	Trunk Verification from Station	334	
	Voice Paging Access - Emergency	261	
	Voice Paging Access - System	260	
	Voice Paging Access - Zone	259	
	Voice Paging Retrieval - System	266	
	Voice Paging Retrieval - Zone	265	

* If the type of trunk group is defined as a private line, the corresponding feature number is not under COS control.

The feature numbers previously listed also appear in the "COS" column of the "Trunk and Feature Assignments chart—Appendix A." Those features in the "COS" column which are marked with a "Y" can receive Class of Service level definitions on this form.

CLASS OF SERVICE LEVEL

Class of Service Level Numbers— Enter an "X" under the Class of Service (COS) level assigned to the feature.

STATION FEATURE KEY PATTERN ASSIGNMENT (CMD 320)

This form establishes templates of preprogrammed key patterns for PERCEPTION 4000 multiline telephones. The default pattern (Pattern 1) determines the positions of the Prime Directory Number, Data Directory Number, and Release keys. For electronic telephones, the Message Waiting key is also preprogrammed with Pattern 1. Patterns 2 through 4 can be programmed with additional features, such as Call Forwarding keys, ACD keys, and Auto Dial keys. In addition, the Prime Directory Number and Data Directory Number key positions may be changed in Patterns 2 through 4.

Related commands:

- Station Assignment (CMD 330)
- Station Feature Key Assignment (CMD 331)

STATION FEATURE KEY PATTERN ASSIGNMENT (1 of 8)

DEV	PAT	PRM POS	DDN POS	FEA POS	FEA ID	DEV	PAT	PRM POS*	DDN POS	FEA POS	FEA ID*
2010	1	6		1		2010				1	
				2						2	
				3						3	
				4						4	
				5						5	
				6	PRM					6	
				7						7	
				8						8	
				9						9	
				10	RLS					10	RLS

Figure 5-2
Station Feature Key Pattern Assignment (CMD 320)

FIELD	EXPLANATION
DEV	**Device Category**—Select the station device to be assigned the feature-key pattern.

2010 (10-key digital telephone)
2020 (20-key digital telephone)
ID10 (10-key digital telephone with Digital Interface Unit (DIU))
ID20 (20-key digital telephone with DIU)
EKT1 (Electronic telephone with 10 flexible keys and 4 fixed keys)
EKT2 (Electronic telephone with 20 flexible keys, 4 fixed keys, and with or without a display)
DKT1 (Digital telephone with 10 flexible keys, 4 fixed keys, and with or without a display)
DKT2 (Digital telephone with 20 flexible keys, 4 fixed keys, and with or without a display)

PAT **Station Feature Key Pattern Number**—Assign a pattern number from 2 to 4. Note that Pattern 1, the default pattern, is not programmable. Each Database Programming Form for this command includes the default pattern key positions on the left side of the form for each "Device Category." The right side of each form is used for data input.

For illustrations of key positions, refer to the Station Feature Key Assignment command (CMD 331).

PRM POS **Prime Directory Number Key Position**—Enter the key position number to be assigned as the Prime Directory Number key. Valid data input is listed below.

1 to 10 (10-key digital and electronic telephones, and 10-key digital telephones with DIUs)
1 to 20 (20-key digital and electronic telephones, and 20-key digital telephones with DIUs)

Default values are as follows:

"DEV" Field	"PRM POS" Field
2010	6
2020	16
ID10	6
ID20	16
EKT1	1
EKT2	1
DKT1	1
DKT2	1

NOTES

1. *The Release key and Message Waiting key positions may not be reprogrammed. Therefore, you may not assign the Prime Directory Number key to those positions. Table 5-a shows key positions for the Release and Message Waiting keys.*

DEV	FEA POS	FEA ID
2010	10	RLS
2020	20	RLS
ID10	10	RLS
ID20	20	RLS
EKT1	9	RLS
	10	MSW
EKT2	19	RLS
	20	MSW
DKT1	10	RLS
DKT2	20	RLS

Table 5-1
Release Key and Message Waiting Key Positions

2. *When entering the "PRM POS" number on the database form, be sure to include the number in the "FEA ID" field in addition to the "PRM POS" field.*

DDN POS **Data Directory Number Key Position**—Enter the key position number to be assigned as the Data Directory Number key. Valid data input is listed below.

1 to 10 (10-key digital telephones with DIUs)
1 to 20 (20-key digital telephones with DIUs)

NOTES

1. *The Release key and Message Waiting key positions may not be reprogrammed. Therefore, you may not assign the Data Directory Number key to those positions. Refer to Table 5-a for key positions for the Release and Message Waiting keys.*
2. *When entering the "DDN POS" number on the database form, be sure to include the number in the "FEA ID" field in addition to the "DDN POS" field.*

FEA POS **Feature Key Position**—Assign secondary keys on multi-line stations. The following feature key positions cannot be modified or deleted. This applies to all feaure key patterns.

Device	Feature Position	Feature ID
2010	10	RLS
2020	20	RLS
ID10	10	RLS
ID20	20	RLS
EKT1	9	RLS
	10	MSW
EKT2	19	RLS
	20	MSW
DKT1	10	RLS
DKT2	20	RLS

FEA ID **Feature ID Number or Abbreviation**—Select the feature to be assigned to the key defined in the previous field (FEA POS). Data entry for this field is in the form of a feature "Number" or "Abbreviation."

Feature Name	Number	Abbreviation
ACD Alarm Key	326	ALRM
ACD Assistance	324	ASST
ACD Inter-Group Call Pick-up	336	INTP
ACD Inter-Group Tap Key	337	INTM
ACD Intra-Group Call Pickup	323	ACDP
ACD Intra-Group Tap Key	325	TAP
ACD Log Key	317	LOG
ACD Status Key	320	STAT
ACD Work Mode Cancellation	321	CANC
ACD Work Unit	322	WRKU
Account Code	307	ACCT
Attendant Parked Page Retrieval	333	PR_A
Authorization Code	299	AUTH
Autodial Key	278	ADL
Automatic Answer Key	279	AUTO
Call Forward - All Calls Key	271	CFAC
Call Forward - Busy/No Answer Key	272	CFBN
Call Forward - No Answer Key	273	CFNA
Call Forward - Preregistered	275	PRCF
Call Park - Local Access/Retrieval	301	CP_L
Call Park - Remote Access/Retrieval	302	CP_R
Call Pickup - Directed	284	DPU
Call Pickup - Directed Group	285	DGPU
Call Pickup - Group	262	GPU
Camp-on Key	281	CAMP
Code Calling Access	258	CC
Code Calling Retrieval	267	CCMM
Data Privacy	312	DPVY
Dictation Machine Access - Direct	264	DC_I
Dictation Machine Access - Group	263	DC_G
Do Not Disturb Key	270	DND
Headset Control Key	339	HSC
Headset Mode Key	338	HSM
LCD Contrast Control Key	340	LCDC
LCD Remote Logout Agent	341	RLOG
Night Answer Access	269	UNA
Privacy Release	268	PRLS
Program Mode Key	274	PRGM
Save and Repeat Key	277	S&R
Speed Calling - Group	291	SC_G
Speed Calling - System	290	SYSD
Swap	287	SWAP
UCD Available/Unavailable Key	309	UCD
Voice Calling Key	276	VC

Feature Name	Number	Abbreviation
Voice Paging Access - Emergency	261	VP_E
Voice Paging Access - System	260	VP_S
Voice Paging Access - Zone	259	VP_Z
Voice Paging Retrieval - System	266	PR_S
Voice Paging Retrieval - Zone	265	VPMM

STATION ASSIGNMENT (CMD 330)

This is the primary form used for assigning stations to the system.

- It defines the station's prime directory number
- Establishes linkage to a hardware circuit
- Instructs the PBX on what type of station this is (digital, EKT, analog single-line)
- Defines terminal-level and prime-line associated attributes.

The Station Level Parameter Assignment form (CMD 329) is also required to complete all fundamental station information. The Station Feature Key Assignment form (CMD 331) is required if there are any multi-line devices.

Prerequisite commands:

- Attendant Group Assignment (CMD 372)
- Attendant Position Assignment (CMD 370)
- Station Feature Key Pattern Assignment (CMD 320) is required if a pattern number other than the default of "**1**" is entered in the "PAT" field.

Related command:

- Numbering Plan Assignment (CMD 300)

This command may be needed by:

- ☐ Station-Level Parameter Assignment (CMD 329)
- ☐ Station Feature Key Assignment (CMD 331)
- ☐ Private/Hotline Assignment (CMD 332)
- ☐ Station Hunting Assignment (CMD 342)
- ☐ Call Pickup Group Assignment (CMD 346)
- ☐ Group Speed calling Member Assignment (CMD 350)
- ☐ UCD Group Assignment (CMD 354)
- ☐ Data Station Assignment (CMD 360)
- ☐ Internal Call Alternate Routing Assignment (CMD 374)

STATION ASSIGNMENT

EQUIP #	PRM DN	TYPE	PAT	A1	A2	EXT	RNG	COS	DRL	FRL	QPL	ANSPOS	SRG	NAME	DEPT

Figure 5-3
Station Assignment (CMD 330)

FIELD	EXPLANATION

EQUIP #

Equipment Number—Use the following charts to determine the valid ranges for various types of equipment. All equipment numbers must be 5 to 6 digits long. (If the first digit is a zero, then it can be dropped.)

For BSTI and 1B-Channel DSTI equipment cards, the following ranges apply:

Digits	Range	Hardware
First two digits	01~10	Shelf no.
Second two digits	01~11, 13	Card slot no.
Last two digits	01~16	Circuit no.

For a 2B-Channel DSTI equipment card, the following ranges apply:

Digits	Range	Hardware
First two digits	01~10	Shelf no.
Second two digits	01,03,05,07,09,11	Card slot no.
Last two digits	01~16	Circuit no.

For an EKTI or XSTI card, the following are valid ranges:

Digits	Range	Hardware
First two digits	01~10	Shelf no.
Second two digits	01~14	Card slot no.
Last two digits	01~08	Circuit no.

PRM DN

Prime Directory Number—Enter "PRM DNs" 0 to 99999 (1 to 5 digits).

Assign prime directory numbers to the appropriate equipment number in this field. The prime line number must not conflict with any other directory number, steering digit, or feature/facility access codes defined in the system Numbering Plan Assignment (CMD 330).

TYPE

Station Type—Define the station type here by entering the appropriate keywords. Definitions of the keywords appear within parentheses. The device must be consistent with the interface card type installed to the corresponding equipment number.

IMPORTANT: For each DSTI card, determine if it has been configured for 1B or 2B operation. Table 5-1 shows which station types can be assigned to cards configured for either 1B or 2B operation.

DSTI Card Configuration	
1B Operation	**2B Operation**
2010 2020	ID10 ID20 2010 2020

NOTES:
1. *A digital telephone with an integrated DIU (ID10 or ID20) must have the data channel programmed through the Data Station Assignment command (CMD 360).*
2. *A digital telephone (2010 or 2020) assigned to a DSTI card configured for 2B operation uses a voice and a data channel, however, the data channel is ignored by the system.*

Table 5-2
1B and 2B Operation Devices

2B Operation: A DSTI card configured for 2B operation allows simultaneous voice and data communication.

1B Operation: A DSTI card configured for 1B operation permits termination to a telephone for voice connection or to a DIU for data connection.

2010	(PERCEPTION 4000 10-key digital telephone)
2020	(PERCEPTION 4000 20-key digital telephone)
ID10	(PERCEPTION 4000 10-key digital telephone/Data Interface Unit (DIU))
ID20	(PERCEPTION 4000 20-key digital telephone with DIU)
ANLG	(Analog telephone)
AVMS	(Analog port assigned to Voice Message System)
ANMW	(Analog with Message Waiting)
OPS	(Off-premises analog station)
EK01	(Electronic telephone with 1 line key and 3 fixed keys)
EK10	(Electronic telephone with 10 flexible keys and 4 fixed keys)
EK20	(Electronic telephone with 20 flexible keys and 4 fixed keys)
EK2D	(Electronic telephone with 20 flexible keys and 4 fixed keys, and display)
DK10	(DKT digital telephone with 10 flexible keys)
DK1D	(DKT digital telephone with 10 flexible keys and display)
DK20	(DKT digital telephone with 20 flexible keys)
DK2D	(DKT digital telephone with 20 flexible keys and display)

PAT **Pattern Number of Feature Key Template**— Select a preprogrammed pattern of feature key positions for digital and electronic telephones. The patterns are programmed with the Station Feature Key Pattern Assignment command (CMD 320). Values for this field are from 1 to 4.

A1 **First Add-on Module Type (digital telephones only)**— A digital station with or without an integrated Data Interface Unit (DIU-I) can use add-on modules to increase the number of flexible line/feature keys. Electronic and analog telephones will not support add-on modules.

The A1 field is used to denote the use of one 20-key add-on module (M1), a 60-key add-on module (actually three 20-key add-on modules [M2]), or no add-on modules (NO). If two 20-key add-on modules are used, then the A1 field should denote the use of one 20-key add-on module (M1) and the A2 field should also denote the use of a 20-key add-on module (M1). If either one 20-key or a 60-key add-on module is to be used, then the A2 field should denote that no additional modules will be used (NO).

M1	(one 20-key add-on module)
M2	(one 60-key add-on module [three 20-key modules])
NO	(No add-on module needed)

A2 **Second Add-on Module Type (digital telephones only)**—This field specifies whether the station has a second 20-key add-on module. See "A1" for additional information on add-on modules. Assign one of the following parameters to this field:

M1	(20-key add-on module; entered when using two modules)
M2	(Reserved for future use)
NO	(No additional add-on module needed; entered when using one 20-key module, a 60-key module, or no modules)

EXT **Extension**—Not used. This is a future feature.

RNG **Ringing Option**—This field applies to analog telephones only. This field defines whether or not an analog station will ring for incoming calls. If set to "no ringing," the set will still ring for camp-on callbacks and recalls. Assign ring options with the following keywords:

RNG	(Ring)
NRG	(No ring)

COS **Class of Service**—Assign a class of service from 1 to 64 (1 to 2 digits).

The fields for Class of Service, Destination Restriction Level, Facility Restriction Level Profile, and Queuing Priority Level must be defined for all station types in order to provide feature and facility service information.

We suggest that you assign the highest priority level to COS 1 and the lowest priority to 64.

DRL **Destination Restriction Level**—Assign a DRL of 1 to 16 (1 to 2 digits). See "Destination Restriction Level Assignment (CMD 337)" for more information.

FRL **Facility Restriction Level Profile**—Enter a Facility Restriction Level Profile of 1 to 32 (1 to 2 digits). See "Facility Restriction Level Profile Assignment (CMD 387)" for more information.

QPL **Queuing Priority Level**—Enter a QPL level from 1 to 8 (1 digit). See "LCR Special Routing Assignment (CMD 384)" for more information.

ANSPOS **Attendant Answer Position Directory Number**—Enter a directory number from 0 to 99999, or "NON" (1 to 5 digits). If no attendant directory number is assigned to answer, then enter the keyword "NON".

The Answer Position field defines where calls made via the universal attendant access code are directed. The directory number must be defined as either an Attendant Group number, Attendant number, or UCD, ACD, or hunt station number.

SRG **Station Restriction Group Number**—Not used. This feature is reserved for future use.

NAME **Name**—Enter a name which will appear in the called party's display window. Up to 9 alphanumeric characters are allowed.

DEPT **Department Name**—Enter a maximum of 4 alphanumeric characters.

FORCED ACCOUNT CODE TOLL-FREE TABLES (CMD 352)

When Forced Account Code is enforced for a station user for toll calls only (as defined in the Station Level Parameter Assignment - CMD 329), the system must screen the call against a toll-free definition. The parameters for this definition are assigned on this form. Multiple tables may be defined for the system. If no area/office codes are entered in this table, then the system will assume that all calls are toll calls.

First, enter the area code and then all office codes considered to be toll free on the form. Then, follow this same procedure for other area codes as required. More than one table per area code is not allowed.

- There are no prerequisite or dependent commands.

FORCED ACCOUNT CODE TOLL-FREE TABLES

AC	OC	OC	OC	OC	OC	OC	OC	OC	OC	OC

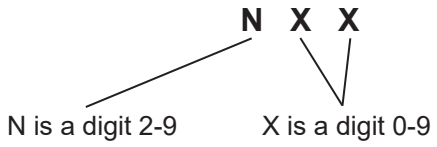
Figure 5-4
Forced Account Code Toll-Free Tables (CMD 352)

FIELD	EXPLANATION
AC	**Area Code**—Enter the area code considered to be toll-free. Use the digits 200 to 919 (3 digits). Use the following "NYX" format:

N Y X

N is a digit 2-9 Y is the digit 1 or 0 X is a digit 0-9

OC **Office Code**—Enter the toll-free office codes, using the numbers 200 to 999 (3 digits). Use the same "NXX" format as shown below.



STATION-LEVEL PARAMETER ASSIGNMENT (CMD 329)

This form further defines device and prime line-related attributes for system telephone sets.

Prerequisite command:
- Station Assignment (CMD 330)

Related command:
- Timeout Routing Destination Assignment (CMD 323)
- Forced Account Code Toll-Free Tables (CMD 352)

☐ There are no dependent commands.

STATION-LEVEL PARAMETER ASSIGNMENT

EQUIP #	PRM DN	VM DEST	TYPE	ORG/TER	PVT	ASD	TOR#	DID#	DISP	SEC	VMS#

Figure 5-5
Station-Level Parameter Assignment (CMD 329)

FIELD	EXPLANATION
EQUIP #	**Equipment Number**—Use the following charts to determine the valid ranges for various types of equipment. All equipment numbers must be 5 to 6 digits long. (If the first digit is a zero, then it can be dropped.)

For BSTI and 1B-Channel DSTI equipment cards, the following ranges apply:

Digits	Range	Hardware
First two digits	01~10	Shelf no.
Second two digits	01~11, 13	Card slot no.
Last two digits	01~16	Circuit no.

For a 2B-Channel DSTI equipment card, the following ranges apply:

Digits	Range	Hardware
First two digits	01~10	Shelf no.
Second two digits	01,03,05,07,09,11	Card slot no.
Last two digits	01~16	Circuit no.

For an EKTI or XSTI card, the following are valid ranges:

Digits	Range	Hardware
First two digits	01~10	Shelf no.
Second two digits	01~14	Card slot no.
Last two digits	01~08	Circuit no.

PRM DN **Prime Directory Number**—Enter the prime directory number (from 0 to 99999) assigned to the "EQUIP #" defined in the previous field (1 to 5 digits).

VM DEST **Voicemail Retrieval Destination**—Enter destination dialing digits from 0 to 99999 (1 to 5 digits).

The voice mail retrieval destination number defines a voice mail port or hunt group pilot number used for accessing the voice mail system. Calls will be routed to the defined destination when:

- the station's message waiting key is pressed.
- the message waiting return access code is dialed while there's an existing voice mail message.

TYPE **Forced Account Code Type**—Enter one of the following keywords to assign the Forced Account Code type:

ALL	(All calls)
TOLL	(Toll calls only)
NON	(None)

A forced account code can be required for all outgoing calls or only for toll calls. (The definition of non-toll dialing for the forced account code feature is defined for the system using the Forced Account Code Toll-Free Definition - CMD 352). Forced account codes will apply to any line appearing on the device, not just the prime line.

ORG/TER **Originate or Terminate Only Station**—This field defaults to allowing bi-directional usage. A station may be configured to only receive calls or to only make calls if it is allowed. These restrictions apply to the prime line only. Calls with "originate only" status may still receive

camp-on callbacks and recalls. "Terminate only" stations may not perform consultation hold. Enter one of the following keywords.

ORG	(Origination allowed and termination denied)
TER	(Origination denied and termination allowed)
BOTH	(Origination allowed and termination allowed)

PVT **Conversation Privacy**—Either enable/disable "attendant break-in." When the Conversation Privacy field is enabled, it prevents the attendant from breaking into an existing conversation.

YES	(Privacy enabled)
NO	(Privacy disabled)

ASD **Attendant Supervision Disable**—Either enable/disable attendant supervision. When the field is disabled (field parameter **YES**), the attendant is prevented from performing supervision (locked loop operation) of any call the station is handling.

YES	(Disable attendant supervision)
NO	(Enable attendant supervision)

TOR# **Timeout Routing Index**—Enter a Timeout Index of 1 to 32 (1 to 2 digits). See "Timeout Routing Destination (CMD 323)" for more information.

DID# **DID Index Number**—Specify the DID index number (1-16) that applies to the telephone. This index number refers to the prefix number assigned in the System Option Flag Assignment (CMD 408).

DISP **Outgoing Call Display Flag**—Specify the type of call identification information that will be displayed at the station when placing outgoing calls.

NAME	(Trunk Name)
DLDN	(Dialed Number—default)

SEC **Data Security**—Enter one of the following to define whether or not the station will have data security on the prime line.

YES	(Yes)
NO	(No)

If set to "YES," the station will never receive any indicative tones while engaged in a call, nor will break-ins or other types of monitoring be allowed. This secures the line from any interruption that could corrupt data transmission. This flag would normally be set for an analog station which connects to a modem for analog data transmission over the voice channel.

VMS# **Voice Messaging System Port Number**—This field is for future use and does not apply to the current command form, but will appear in the DISPLAY operation of the Maintenance and Administration command.

STATION FEATURE KEY ASSIGNMENT (CMD 331)

This form defines digital and analog electronic telephone attributes, as well as feature keys for these telephones and for PERCEPTION 4000 add-on units.

Prerequisite commands:
- Station Assignment (CMD 330)
- Station Level Parameter Assignment (CMD 329)

Related commands:
- Private/Hotline Assignment (CMD 332)
- Data Station Assignment (CMD 360)

STATION FEATURE KEY ASSIGNMENT

PRM DN	DEV	PREF	PRM VA	ICM VA	AUT VA	ROB	POS	TYPE	DEF 1	DEF 2	DEF 3

Figure 5-6
Station Feature Key Assignment (CMD 331)

FIELD	EXPLANATION
PRM DN	**Prime Directory Number (PRM DN)**—The prime directory number of the digital telephone, electronic telephone, or add-on module to be assigned attributes and feature keys is entered here. Enter a PRM DN of 0 to 99999 (1 to 5 digits).
DEV	**Device Category**—Identify the device as being a PERCEPTION 4000 station, an add-on module, or an electronic telephone by entering one of the following keywords.

4000	(PERCEPTION 4000 Digital Telephone)
AD1	(Add-on module 1 [20-key or 60-key])
AD2	(Add-on module 2 [20-key])
EKT	(Electronic Telephone)
DKT	(DKT Digital Telephone)

PREF

Line Preference—Define the automatic line selection capability of the telephone based on various states with the following keywords. The matrix in **Table 5-2** shows which line will be selected according to the Line Preference setting and the station's status at the time of automatic selection. It does not apply to the line appearances for the intercom feature, private line, and ACD line.

PRM	(Prime Line)
IDL	(Idle)
PRNG	(Prime and ringing)
PIDL	(Prime and idle)
RIDL	(Ringing and idle)
RNG	(Longest ringing)
ALL	(All)
NON	(No preference)

Automatic selection of a line takes place at various call states in many different features. If the user goes off-hook or presses the speaker key while the station is on-hook idle, automatic line selection will conform to Matrix 1. If the user attempts direct dialing via the keypad or feature keys (i.e., using the last number redial, auto dial, etc.) while the station is on-hook idle, then automatic line selection conforms to Matrix 2, **Table 5-3**.

PRM VA

Receive Voice Announce on Prime Line—Specify whether or not the instrument will allow voice announcements to be made over the prime line:

ALW	(Allowed)
DNY	(Denied)

ICM VA

Receive Voice Announce via Intercom Line—Define whether or not voice announcements will be allowed over the intercom (ICM) line.

ALW	(Allowed)
DNY	(Denied)

AUT VA

Automatic Answerback to Voice Announce—Use the following keywords to indicate whether or not the instrument instrument will automatically activate the station set's microphone for answerback to the voice announcements when they take place.

ALW	(Allowed)
DNY	(Denied)

This should not be confused with the Automatic Answer feature which automatically activates the speakerphone when an internal call arrives at the station.

ROB

Ring Over Busy—This feature applies only to the 20- and 40-key digital telephones.

Specify whether the station user will receive a ring-over-busy indication when a call arrives on another line on the device while the station user is presently engaged in a call.

YES	(Allowed)
NO	(Denied)

Ring-over-busy is a muted ring generated through the station's speaker. It will only work when the user is off-hook on one line while a call is coming in over another line on the same phone, provided that the line being rung allows audible ringing.

NOTE: All of the above parameters pertain to digital and electronic telephone configurations only. The next five fields pertain to multi-line instruments as well as add-on units.

POS **Key Assignment Position Number**—Use values listed below to assign secondary keys on multi-line stations. Data entered in this field determines the key assignments made in the "TYPE" field (also on this form), which determines whether data is entered in the "DEF 1," "DEF 2," and/or "DEF 3" fields.

1 to 10 (10-key digital or electronic telephone)
1 to 20 (20-key digital or electronic telephone; 20-key add-on module)
1 to 60 (60-key add-on module [three 20-key modules])

TYPE **Key Assignment Type**—Define the key type for the location selected in the "POS" field. Except for the Release key position on 2000-series telephones, each key may be assigned as a line key, intercom key, or feature key. The following are valid entries:

FEA (Feature Key)
LINE (Secondary Appearance Line Key)
PRM (Prime Line)
LLIN (Logical Line)
AGE (ACD Line - Agent)
SUP (ACD Line - Supervisor)
DDN (Integrated Data DN Key)
SDDN (Secondary Data DN Key (Reserved for future use))
MLIN (Multiple Line)
PVT (Primary Private Line)
SPVT (Secondary Private Line (Reserved for future use))
HOT (Hotline)
ICM (Intercom Group)
SLU (Switch Loop Unit (Reserved for future use))
UND (Undefined)

The "TYPE" field defines the key type for the location selected in the “POS” field. There are several key types, but there are only two different key classes: FEATURE key and LINE key. Based on the key type, the values in the “DEF 1,” “DEF 2,” and “DEF 3” fields are determined. If the key type is a private line or a hotline, additional information must be entered in the Private/Hotline Assignment command (CMD 332).

DEF 1 **Key Assignment Definition One**—Enter the appropriate definition for the key type specified in the previous "TYPE" field:

For LINE/HOT/PVT/SPVT/LLIN/PRM/DDN/MLIN, enter a directory number from 0 to 99999 (1 to 5 digits).

For other definitions, enter one of the following:

1 to 256	(For ICM Group number)
Empty	(For UND/AGE/SUP)

For FEA (feature keys), you can enter either the predefined **feature numbers** or **keywords**, shown in the following chart:

Number	Feature Name	Keyword
326	ACD Alarm	ALRM
324	ACD Assistance	ASST
323	ACD Intra-Group Call Pickup	ACDP
337	ACD Inter-Group Tap Key	INTM
336	ACD Inter-Group Call Pick-up	INTP
317	ACD Log Key	LOG
320	ACD Status Key	STAT
322	ACD Work Unit	WRKU
325	ACD Intra-Group Tap Key	TAP
321	ACD Work Mode Cancellation	CANC
307	Account Code	ACCT
333	Att Voice Paging Retrieval	PR_A
299	Authorization Code	AUTH
278	Autodial Key	ADL
279	Automatic Answer Key	AUTO
271	Call Forward - All Calls Key	CFAC
272	Call Forward - Busy/No Answer Key	CFBN
273	Call Forward - No Answer Key	CFNA
275	Call Forward - Preregistered	PRCF
301	Call Park - Local Access/Ret	CP_L
302	Call Park - Remote Access/Ret	CP_R
284	Call Pickup - Directed	DPU
285	Call Pickup - Directed Group	DGPU
262	Call Pickup - Group	GPU
281	Camp-on Key	CAMP
258	Code Calling Access	CC
267	Code Calling Retrieval	CCMM
312	Data Privacy	DPVY
264	Dictation Machine Access - Individual	DC_I
263	Dictation Machine Access - Group	DC_G
270	Do Not Disturb Key	DND
339	Headset Control Key	HSC
338	Headset Mode Key	HSM
340	LCD Contrast Key	LCDC

341	LCD Remote Logout Agent	RLOG
269	Night Answer Access	UNA
268	Privacy Release	PRLS
274	Programming Key	PRGM
277	Save & Repeat Key	S&R
291	Speed Calling - Group	SC_G
290	Speed Calling - System	SYSD
287	Swap	SWAP
309	UCD Available/Unavailable Key	UCD
276	Voice Call Key	VC
261	Voice Paging Access - Emergency	VP_E
260	Voice Paging Access - System	VP_S
259	Voice Paging Access - Zone	VP_Z
266	Voice Paging Retrieval - System	PR_S
265	Voice Paging Retrieval - Zone	VPMM

The "DEF 1" field is defined based upon the key type selected in the “TYPE” field. If the key type is a line key (LINE), the "DEF 1" field may be required to enter a directory number, such as for a regular line, hot line, private line, logical line, or logical paired data key. If **ICM** is entered in the "TYPE" field, "DEF1" represents the intercom group number.

If the key type is a feature key (FEA), the "DEF 1" field is required to enter the abbreviated feature name or the feature number. Certain features can only be assigned once for the same station, such as Do Not Disturb, Call Forward, Conference, etc.

DEF 2

Key Assignment Definition Two—An entry in this field is only required for various line types and intercom keys. Define the status of the intercom key by entering one of the following:

RNG (Ring)
NRG (No ring)

This setting will not affect camp-on callbacks and recalls.

DEF 3

Key Assignment Definition Three—If the ICM or MLIN key type is entered, assign a third key definition by entering one of the following:

Directory number of 0 to 9 (10 member ICM group)
Directory number of 01 to 20 (20 member ICM group)
Index number of 1 to 7 (Multiple Line Index)

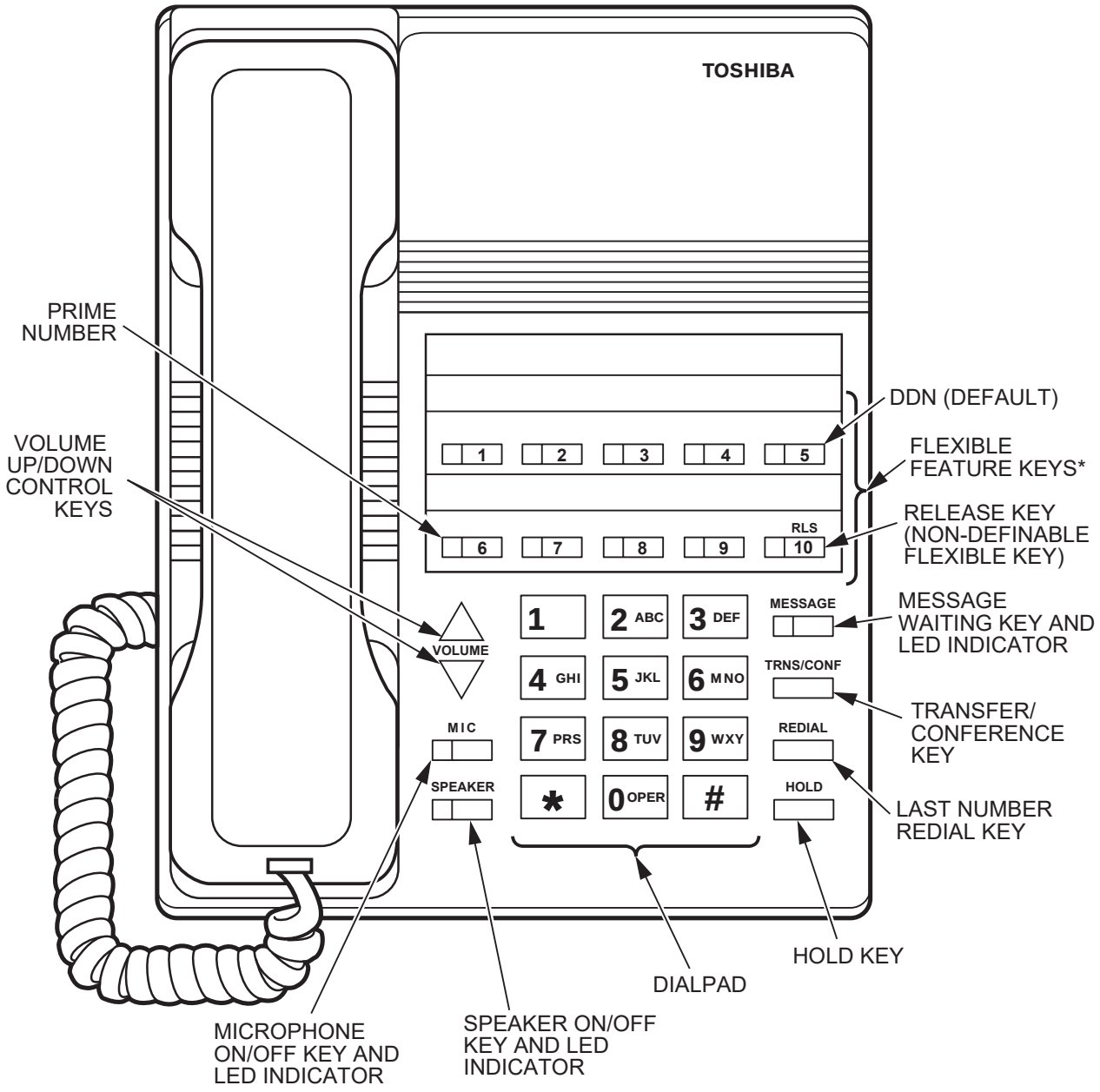
The "DEF 3" field is only used when the key type is an intercom or multiple line. In these cases, the member/index number is assigned to the key using the "DEF 3" field.

	STATUS					
	IDLE, ALL LINES	RINGING ON PRIME LINE	RINGING ON NON-PRIME LINES, PRIME LINE IDLE	RINGING ON NON-PRIME LINES, PRIME LINE BUSY	RINGING ON ALL LINES	NO RING, PRIME BUSY
PRIME LINE PREFERENCE	PRIME LINE	PRIME LINE	PRIME LINE	QUIET TONE	PRIME LINE	QUIET TONE
RINGING LINE PREFERENCE	QUIET TONE	PRIME LINE	LONGEST RINGING LINE	LONGEST RINGING LINE	LONGEST RINGING LINE	QUIET TONE
IDLE LINE PREFERENCE	PRIME LINE	ANY IDLE LINE	PRIME LINE	ANY IDLE LINE	QUIET TONE	ANY IDLE LINE
PRIME PLUS RINGING PREFERENCE	PRIME LINE	PRIME LINE	LONGEST RINGING LINE	LONGEST RINGING LINE	PRIME LINE	QUIET TONE
PRIME PLUS IDLE PREFERENCE	PRIME LINE	PRIME LINE	PRIME LINE	ANY IDLE LINE	PRIME LINE	ANY IDLE LINE
RINGING PLUS IDLE PREFERENCE	PRIME LINE	PRIME LINE	LONGEST RINGING LINE	LONGEST RINGING LINE	LONGEST RINGING LINE	ANY IDLE LINE
ALL TYPES OF PREFERENCE	PRIME LINE	PRIME LINE	LONGEST RINGING LINE	LONGEST RINGING LINE	PRIME LINE	ANY IDLE LINE
NO PREFERENCE	QUIET TONE	QUIET TONE	QUIET TONE	QUIET TONE	QUIET TONE	QUIET TONE

Table 5-3
Line Selection Matrix 1

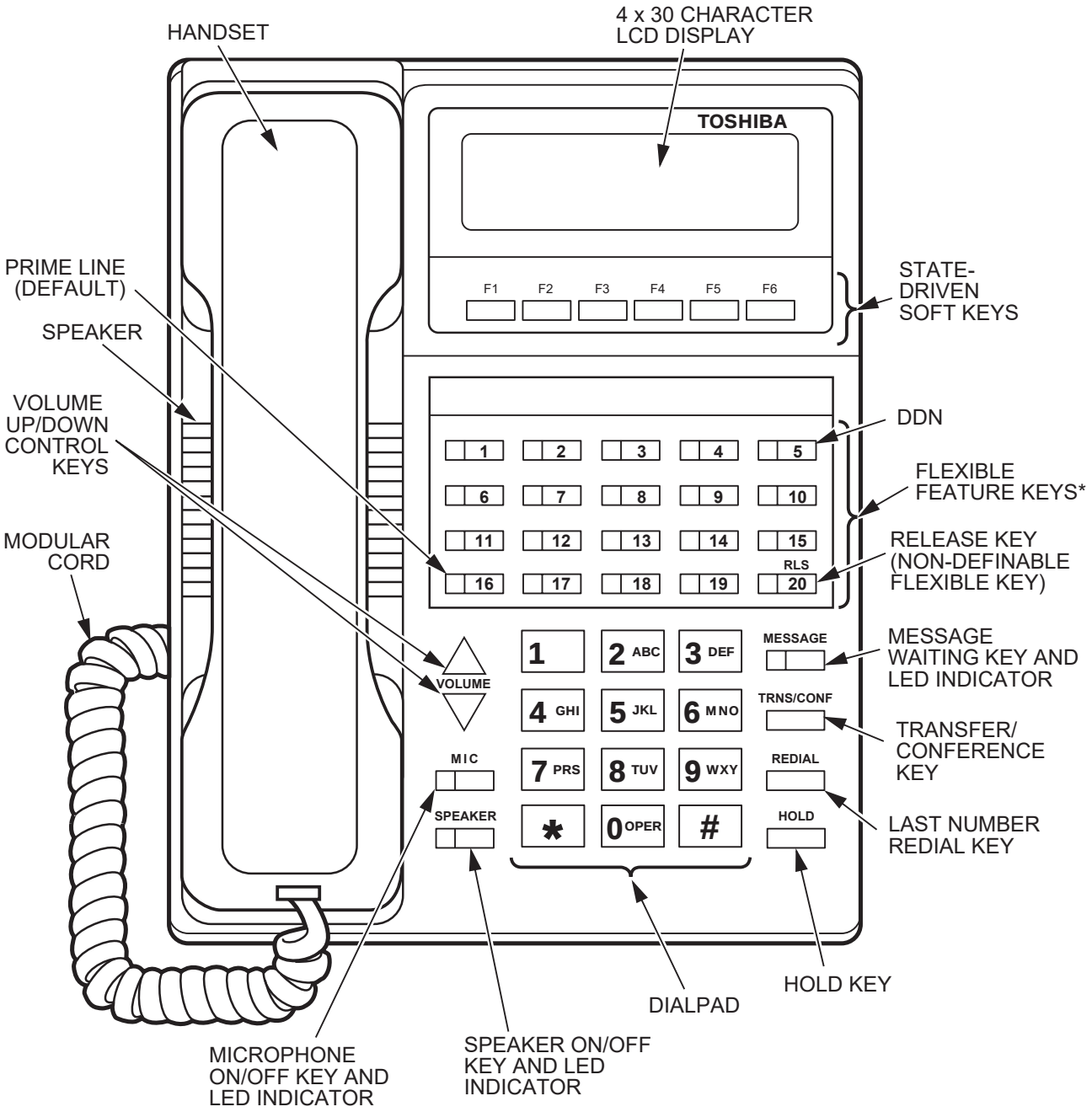
	STATUS					
	IDLE, ALL LINES	**RINGING ON PRIME LINE**	**RINGING ON NON-PRIME LINES, PRIME LINE IDLE**	**RINGING ON NON-PRIME LINES, PRIME LINE BUSY**	**RINGING ON ALL LINES**	**NO RING, PRIME BUSY**
PRIME LINE PREFERENCE	*PRIME LINE	IGNORE KEY	*PRIME LINE	IGNORE KEY	IGNORE KEY	IGNORE KEY
RINGING LINE PREFERENCE	IGNORE KEY	IGNORE KEY	IGNORE KEY	IGNORE KEY	IGNORE KEY	IGNORE KEY
IDLE LINE PREFERENCE	*PRIME LINE	*ANY IDLE LINE	*PRIME LINE	*ANY IDLE LINE	IGNORE KEY	*ANY IDLE LINE
PRIME PLUS RINGING PREFERENCE	*PRIME LINE	IGNORE KEY	*PRIME LINE	IGNORE KEY	IGNORE KEY	IGNORE KEY
PRIME PLUS IDLE PREFERENCE	*PRIME LINE	*ANY IDLE LINE	*PRIME LINE	*ANY IDLE LINE	IGNORE KEY	*ANY IDLE LINE
RINGING PLUS IDLE PREFERENCE	*PRIME LINE	*ANY IDLE LINE	*PRIME LINE	*ANY IDLE LINE	IGNORE KEY	*ANY IDLE LINE
ALL TYPES OF PREFERENCE	*PRIME LINE	*ANY IDLE LINE	*PRIME LINE	*ANY IDLE LINE	IGNORE KEY	*ANY IDLE LINE
NO PREFERENCE	IGNORE KEY	IGNORE KEY	IGNORE KEY	IGNORE KEY	IGNORE KEY	IGNORE KEY

Table 5-4
Line Selection Matrix 2



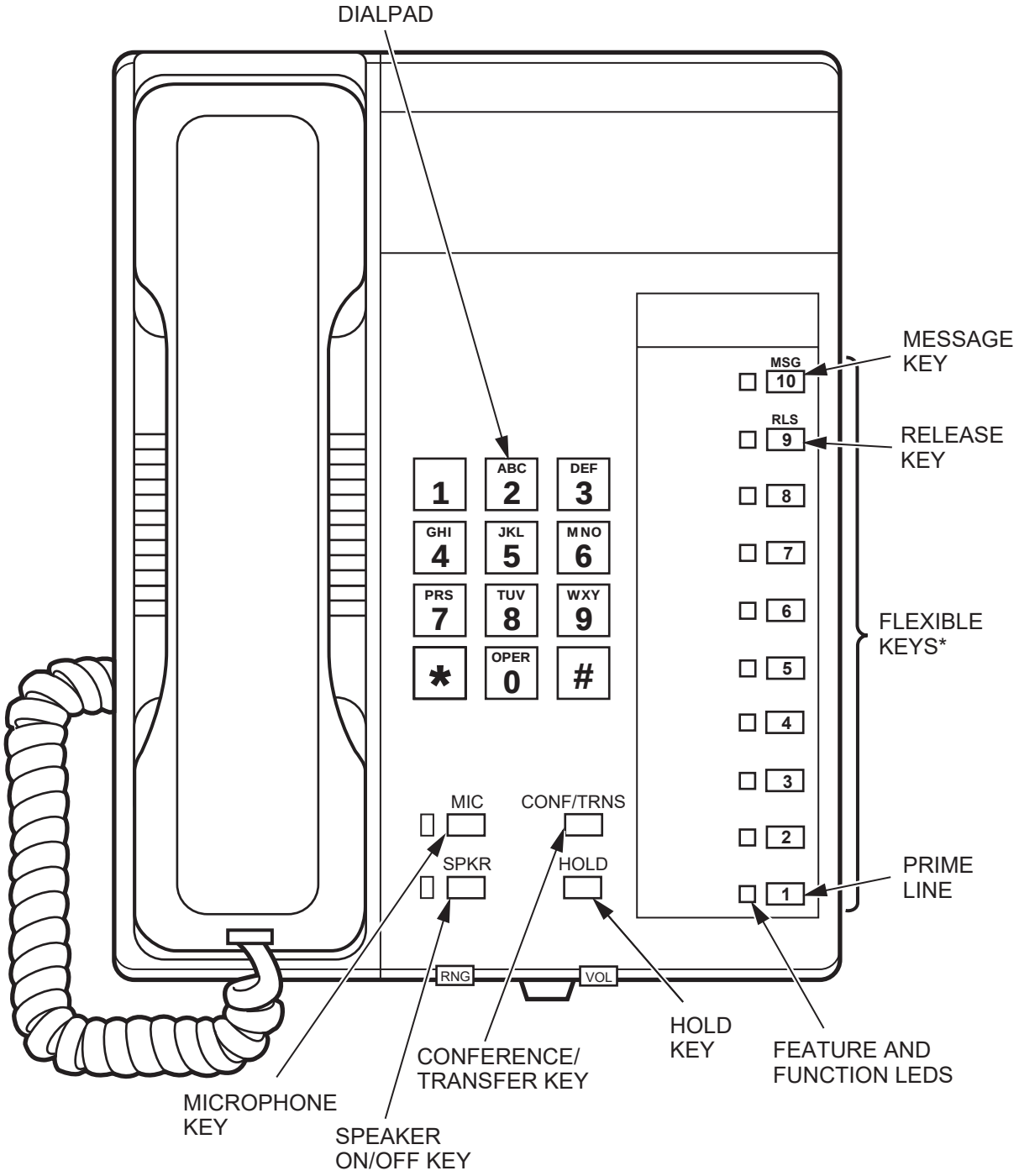
**The numbers on the flexible feature keys indicate the order in which they are programmed.*

Figure 5-7
PERCEPTION 10-Key Digital Telephone (HDT2010S)



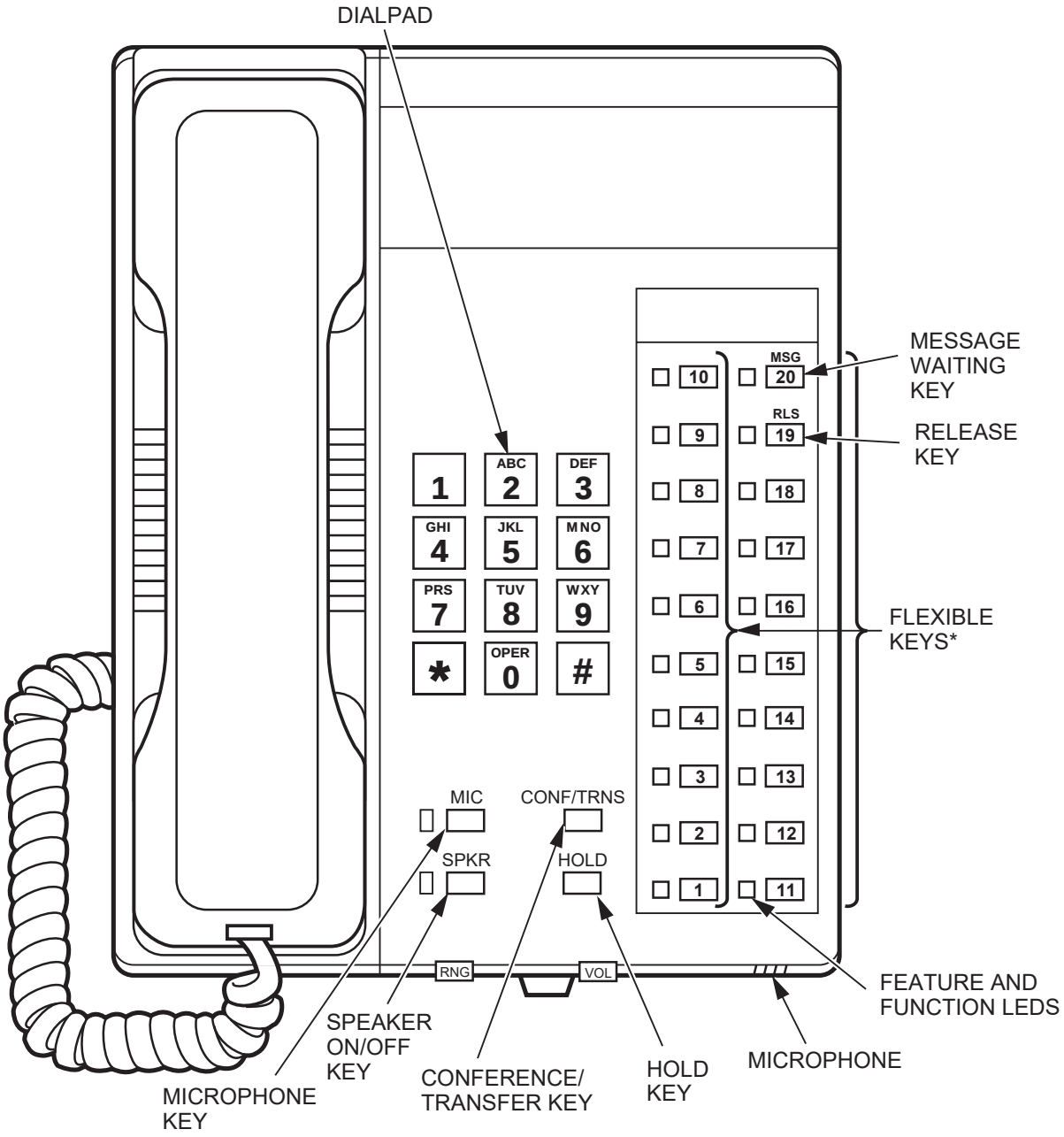
**The numbers on the flexible feature keys indicate the order in which they are programmed.*

Figure 5-8
PERCEPTION 20-key Digital Telephone (HDT2020SD)



**The numbers on the flexible feature keys indicate the order in which they are programmed.*

Figure 5-9
Electronic Telephone with 10 Flexible Keys



**The numbers on the flexible feature keys indicate the order in which they are programmed.*

Figure 5-10
Electronic Telephone with 20 Flexible Keys

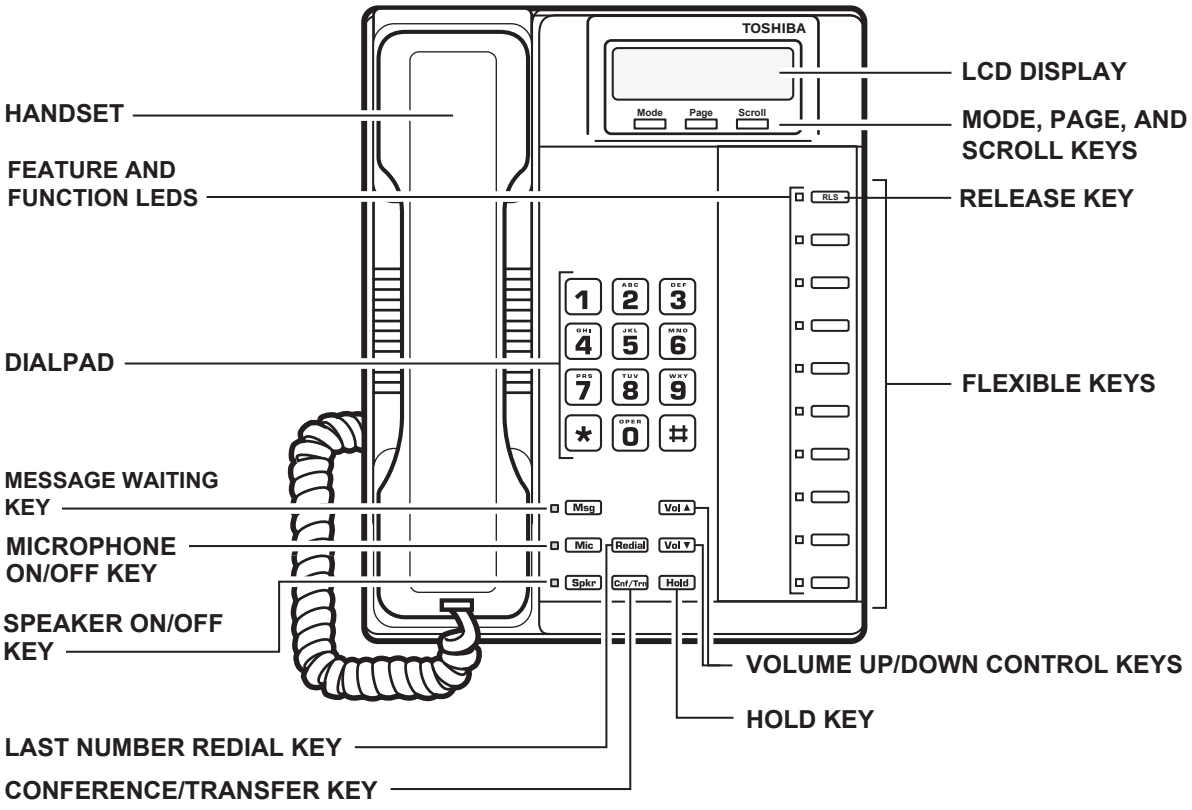


Figure 5-11
DKT Digital Telephone With 10 Flexible Keys

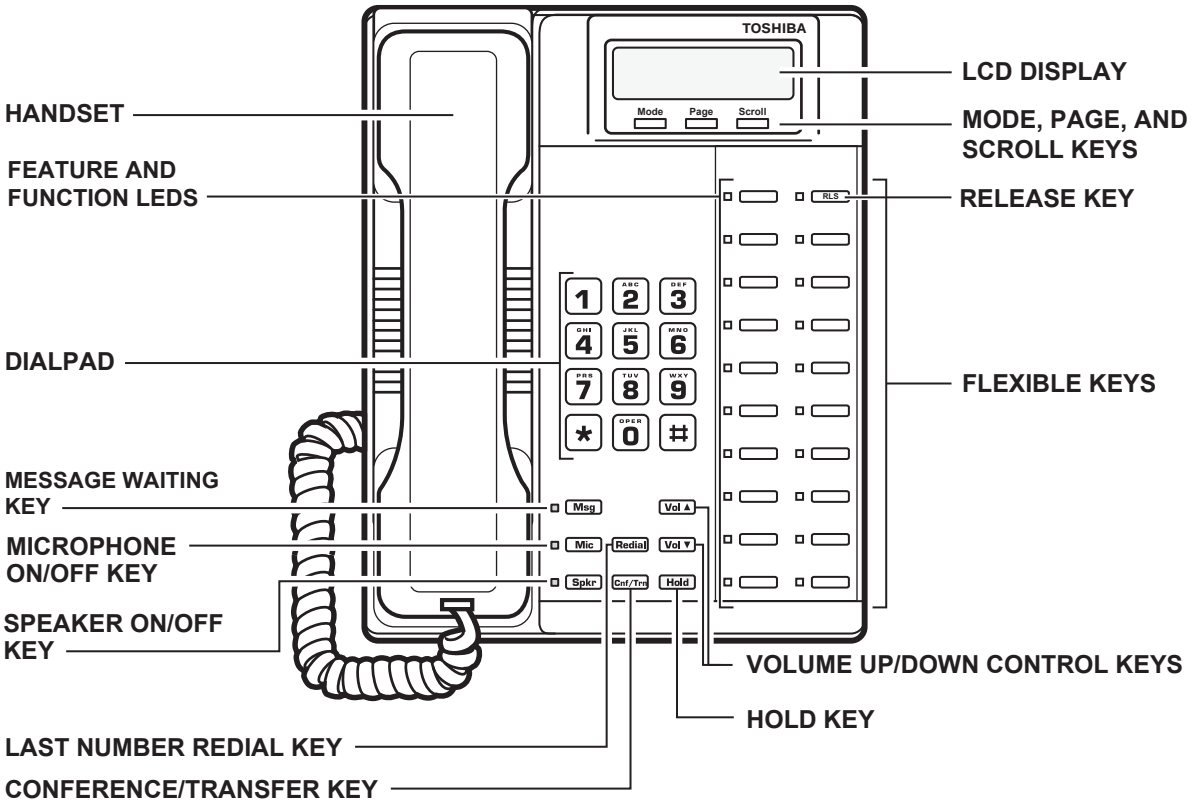
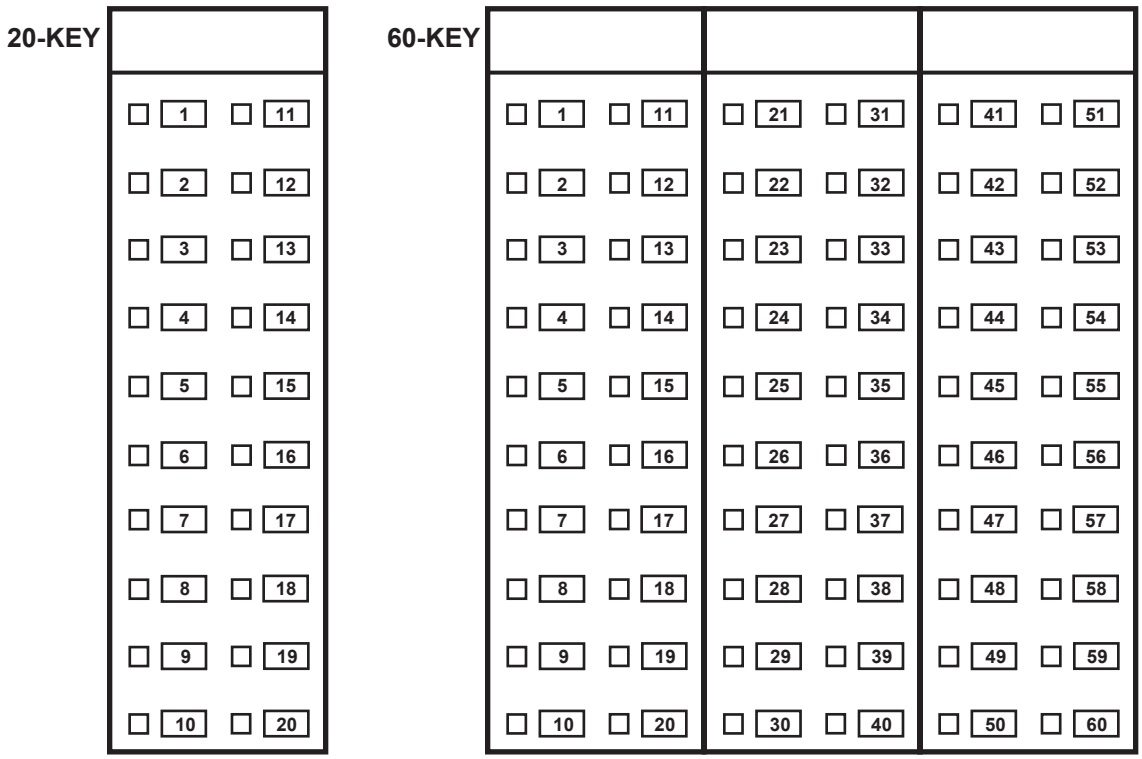


Figure 5-12
DKT Digital Telephone with 20 Flexible Keys



NOTES:

1. *The numbers on the flexible feature keys indicate the order in which they are programmed.*
2. *The two depicted modules can be programmed by entering AD1 in the DEV field of CMD 331. The 60-key add-on module is actually composed of three 20-key add-on modules. If two-20-key add-on modules are used (providing 40 additional line/feature keys), then AD1 is entered to program the first module and AD2 is entered to program the second module. It should be noted that the AD1 and AD2 indications correspond directly with the A1 and A2 assignments in CMD 330.*

Figure 5-13
20-key and 60-key Add-on Modules

PRIVATE/HOTLINE ASSIGNMENT (CMD 332)

This form is used to further define keys assigned via the Station Feature Key Assignment form (CMD 331). It also will assign hotline capability to the single-line stations, essentially commanding those stations to ringdown to a defined location. This is similar to a manual originating line service, which is useful for emergency phones and "white phones" in airports and hotels.

Prerequisite commands:
- Station Assignment (CMD 330)
- Station Feature Key Assignment (CMD 331)

For private lines, the following commands may be needed as prerequisites:
- Trunk Group Assignment (CMD 310)
- Trunk Assignment (CMD 313)

☐ There are no dependent commands.

PRIVATE/HOTLINE ASSIGNMENT

TYPE	INDEX	HOT/PVT DN	TGN	DESTINATION NUMBER	PRM DN	POS	REMARKS

Figure 5-14
Private/Hotline Assignment (CMD 332)

FIELD	EXPLANATION
TYPE	**Key Type**—Indicate the type of line being defined — either a hotline or private line. PVT (Private line) HOT (Hotline)

INDEX

Index Number—Enter an index number from 1 to 256, or to maximum system trunk line configuration (3 digits).

Use this field for keeping track of the total number of hot lines and privates lines, so that the cumulative number does not exceed the system maximum.

HOT/PVT DN

Hotline or Private Line Directory Number—Enter a directory number of 0 to 99999 (1 to 5 digits).

To define a private line here, the directory number has to be a private line directory number.

Enter either the same directory number which was assigned to the key on the Station Feature Key Assignment form (CMD 331) or the prime directory number if a single-line telephone is being configured for ringdown.

The number assigned to a private line will not be accessible to station direct dialing within the PBX. Only the attendant may direct calls to this number.

For a Hotline, the directory number can be any regular directory number.

TGN

Trunk Group Number—Enter a TGN from 1 to 256 (or maximum system configuration).

DESTINATION NUMBER

Destination Number—This field is required for hot lines and only used for private lines if an off-premises ringdown circuit is desired.

To define the destination of the private line, enter the trunk access code. Entering the destination number after the trunk access code is optional.

Assign a destination number using the digits 0 to 9 or * or # (24 digits maximum).

Internal destination numbers are legal entries for hotline, but not for the private line.

Off-premises numbers are legal for both types, however trunk or LCR access code is required for hotline off-premises numbers but should not be included in private line destinations. Normally, a destination is not defined for a private line.

PRM DN

Prime Directory Number—Enter the prime directory number of the device receiving the private line or hotline assignment. Enter a directory number of 0 to 99999 (1 to 5 digits).

This prime directory number uniquely identifies each station and is assigned to the station on the Station Assignment (CMD 330) form.

For HOT line, this field is the secondary key for this command (CMD 332) because each appearance of the Hotline directory number can be assigned a different destination number.

For PVT line, this field is ignored because each Private Line directory number can only be assigned to one Trunk Access Code.

POS **Key Assignment Position Number**—Assign a key position number from 1 to 60 (1 or 2 digits).

If an attribute is being designated to a key on a multi-line instrument, then the key position entered must coincide the feature key assignment on the Station Feature Key Assignment form (CMD 331).

NOTE: A private line may only be defined on a multi-line device; a single-line station may not be configured with a private line.

CALL PICKUP GROUP ASSIGNMENT (CMD 346)

This form defines the system call pickup group memberships. This information is necessary for both the group call pickup and the directed group call pickup features. Directed call pickup does not require the calling or called party to be assigned pickup group membership.

Each group is identified by a call pickup group number and may optionally be assigned a group name which may be from 1 to 9 ASCII characters in length. Embedded spaces are allowed.

Each group may have up to 32 members, which must consist of only voice stations. Stations may belong to only one call pickup group. A maximum of 512 members per system may be assigned to Call Pickup Groups.

Ordering is important because when a party requests group pickup or directed group pickup and more than one telephone within that group is ringing, the lowest index numbered ringing telephone will be picked up first. (This feature does not look for longest ringing call, but rather does a sequential search of this table.) The search is made from the lowest index number to the highest.

Prerequisite command:

- ■ Station Assignment (CMD 330)

  - ☐ There are no dependent commands.

CALL PICKUP GROUP ASSIGNMENT

GRP#	NAME	INDEX	MEM DN	INDEX	MEM DN	GRP#	NAME	INDEX	MEM DN	INDEX	MEM DN

Figure 5-15
Call Pickup Group Assignment (CMD 346)

FIELD	EXPLANATION
GRP#	**Call Pickup Group Number**—Enter a group number from 1 to 128 (1 to 3 digits).
NAME	**Group Name**—Assign a group name from 1 to 9 ASCII characters.
INDEX	**Member Index Number**—Enter a member ID number from 1 to 32 (1 to 2 digits).
MEM DN	**Pickup Group Member Directory Number**—Enter directory numbers of members assigned to the call pickup group, from 0 to 99999 (1 to 5 digits).

TIME ZONE ASSIGNMENT (CMD 336)

The Time Zone Assignment allows you to define for each table type the starting and stopping points for each time zone in each day of the week and for holidays.

Related commands:
- LCR/Authorization Time Zone Change Assignment (CMD 343)
- System Holiday Assignment (CMD 404)

TIME ZONE ASSIGNMENT

TYPE	INDEX	SUN		MON		TUE		WED		THU		FRI		SAT		HOL	
		ST TZ	TZ	ST TZ	TZ	ST TZ	TZ	ST TZ	TZ	ST TZ	TZ	ST TZ	TZ	ST TZ	TZ	ST TZ	TZ

TYPE	INDEX	SUN		MON		TUE		WED		THU		FRI		SAT		HOL	
		ST TZ	TZ	ST TZ	TZ	ST TZ	TZ	ST TZ	TZ	ST TZ	TZ	ST TZ	TZ	ST TZ	TZ	ST TZ	TZ

TYPE	INDEX	SUN		MON		TUE		WED		THU		FRI		SAT		HOL	
		ST TZ	TZ	ST TZ	TZ	ST TZ	TZ	ST TZ	TZ	ST TZ	TZ	ST TZ	TZ	ST TZ	TZ	ST TZ	TZ

Figure 5-16
Time Zone Assignment (CMD 336)

FIELD	EXPLANATION
TYPE	**Type of Table**—Define the table type by entering one of the following keywords:

LCR (LCR time/day change definition table)
INW (Inward routing time/day change definition table)
COS (COS/DRL/FRLP/QUE time/day change definition table)
IS01 (ISDN Time/Day Change Definition Table—Class 1)
IS02 (ISDN Time/Day Change Definition Table—Class 2)
IS03 (SDN Time/Day Change Definition Table—Class 3)
IS04 (ISDN Time/Day Change Definition Table—Class 4)

When the Class of Service (COS) clock is set, it changes the time/day definition for the Class of Service, Destination Restriction Level (DRL), Facility Restriction Level Profile (FRLP), and Queuing Priority Level (QUE).

INDEX **Index of Time Changes Per Day**—Enter the index number for the time of day to be assigned, from 1 to 4 (1 digit).

WEEKDAY **Day of Week or Holiday**—Choose one of the following keywords:

SUN	(Sunday)
MON	(Monday)
TUE	(Tuesday)
WED	(Wednesday)
THU	(Thursday)
FRI	(Friday)
SAT	(Saturday)
HOL	(Holiday)

ST TZ **Start Time for Each Time Zone**—Assign the start time for the time zone listed in the INDEX field. Enter times in the following format:

HR	00 to 23 (2 digits)
MN	00 to 59 (2 digits)

This field contains the starting time of the specified time zone and the ending time (one minute before the next Index number period). If no further time zone is entered for that day, that time zone is carried over to the next day. These times must be input in ascending order.

TZ **Time Zone Number**—Enter the time zone number from 1 to 4 (1 digit)

The default value is Zone 1, which will apply to all zones (ISO1-ISO4) for all 24 hours.

LCR/AUTHORIZATION TIME ZONE CHANGE ASSIGNMENT (CMD 343)

This command allows you to perform two completely different types of changes. 1) It can be used for changing control definitions, such as Class of Service, Destination Restriction Level, Facility Restriction Level Profile, or Queuing Priority Level definitions, or 2) it can be used to change time zone definitions.

Related commands:

- Class of Service Assignment (CMD 334)
- Destination Restriction Level Assignment (CMD 337)
- Facility Restriction Level Profile (CMD 387)
- LCR Routing Table Assignment (CMD 383)
- Time Zone Assignment (CMD 336)

☐ There are no dependent commands.

Because this command allows you to perform two different changes, two different forms are provided for this command. Use the appropriate form for the type of change desired.

TIME ZONE DEFINITION CHANGES

1. To redefine which LCR Route Pattern Tables (CMD 383) that the system will refer to during the current time zone, use the form shown in the following figure:

LCR/AUTHORIZATION TIME ZONE CHANGE ASSIGNMENT
(Route Pattern Table Number Change Form)

(1 of 2)

TYPE	RPN	TZ1 TBL	TZ2 TBL	TZ3 TBL	TZ4 TBL

Figure 5-17
Route Pattern Table Number Change Form (CMD 343)

CONTROL DEFINITION CHANGES

2. To change the Class of Service, Destination Restriction Level, Facility Restriction Level Profile, or Queuing Priority Level definitions, use the form shown below:

LCR/AUTHORIZATION TIME ZONE CHANGE ASSIGNMENT
(Original Definition Time Zone Change Form)

(2 of 2)

TYPE	ORIG DEF	TZ1 NEW DEF	TZ2 NEW DEF	TZ3 NEW DEF	TZ4 NEW DEF

Figure 5-18
Original Definition Time Zone Change Form (CMD 343)

FIELD	EXPLANATION
TYPE	**Type of Table**—Define the definition changes table type by the following keywords: COS (Class of Service) DRL (Destination Restriction Level) FRLP (Facility Restriction Level Profile) QPL (Queuing Priority Level - refers to route pattern queuing) LCR (Least Cost Routing)
ORIG DEF/RPN	**Original Definition for COS, DRL, FRLP, and QPL / Route Pattern Number (RPN) for LCR only**—Enter the appropriate definition number corresponding to the table type previously entered. COS 1~64 DRL 1~16 FRLP 1~32 QPL 1~8 RPN 1~100

NOTE: Use the same entry information shown in the previous field explanation, "ORG DEF/RPN", for the following four time zone definition or route table changes.

TZ1 NEW DEF/TBL **Time Zone One: New Definition for COS, DRL, FRLP, and QPL / Route Number for LCR only**—For this time zone, enter the corresponding definition number from 1 to 100 (1 to 3 digits).

TZ2 NEW DEF/TBL **Time Zone Two: New Definition for COS, DRL, FRLP and QPL / Route Number for LCR only**—For time zone two, enter the corresponding definition number from 1 to 100 (1 to 3 digits). Refer to same command assignments as the "ORG DEF/RPN" field.

TZ3 NEW DEF/TBL **Time Zone Three: New Definition for COS, DRL, FRLP, and QPL / Route Number for LCR only**—For time zone three, enter the corresponding definition number from 1 to 100 (1 to 3 digits). Refer to same command assignments as the "ORG DEF/RPN" field.

TZ4 NEW DEF/TBL **Time Zone Four: New Definition for COS, DRL, FRLP, and QPL / Route Number for LCR only**—For time zone four, enter the corresponding definition number from 1 to 100 (1 to 3 digits). Refer to same command assignments as the "ORG DEF/RPN" field.

GROUP SPEED CALLING MEMBER ASSIGNMENT (CMD 350)

The PERCEPTION 4000 system will support up to 255 speed calling groups, which may have as many as 32 members per group. Only voice stations and data stations are allowed in group speed calling groups. The directory number must be the prime or data directory number and can be a member of only one group. Ordering within this table has no effect on user capability.

Prerequisite command:

- Station Assignment (CMD 330)

Related command:

- Group Speed Calling List Assignment (CMD 351)

GROUP SPEED CALLING MEMBER ASSIGNMENT

GRP#	INDEX	MEM DN	INDEX	MEM DN	GRP#	INDEX	MEM DN	INDEX	MEM DN

Figure 5-19
Group Speed Calling Member Assignment (CMD 350)

FIELD	EXPLANATION
GRP#	**Speed Calling Group Number**—Number the speed calling group, from 1 to 255 (1 to 3 digits).
INDEX	**Speed Calling Group Member Index**—Enter the index numbers of members in the group, from 1 to 32 (1 to 2 digits).
MEM DN	**Member Primary Directory Number**—Enter the prime or data directory number of each member in the speed calling group, from 0 to 99999 (1 to 5 digits). Each prime directory number can only belong to one speed calling group.

GROUP SPEED CALLING LIST ASSIGNMENT (CMD 351)

The PERCEPTION 4000 system allows each Speed Calling group a list of up to 10 destination numbers which may be accessed by all members belonging to that group. Each destination may be up to 24 digits in length. Internal numbers are allowed, but not feature access codes.

Speed Calling numbers may not be used to define the destination. Dial tone detection and pauses represented by ** and *n respectively (n = 1 through 9 seconds) are also allowed.

Related command:

- Group Speed Calling Member Assignment (CMD 350)

GROUP SPEED CALLING LIST ASSIGNMENT

GRP#	GSCC	DESTINATION NUMBER	GRP#	GSCC	DESTINATION NUMBER

Figure 5-20
Group Speed Calling List Assignment (CMD 351)

FIELD	EXPLANATION
GRP#	**Group Speed Calling Number**—Enter the number of the Speed Calling group, from 1 to 255 (1 to 3 digits), which will be assigned a set of destination numbers.
GSCC	**Group Speed Calling Code**—Enter the group Speed Calling code, from 0 to 9 (1 digit).
DESTINATION NUMBER	**Destination Address**—Enter up to 10 destination numbers for each speed calling code. Use 1 to 24 digits (maximum of 24 digits, including the trunk or LCR access code). Although pauses include several characters, they represent one digit of the 24 allowed. The dialing digits here include: Digits 0 to 9, # Dial tone detection (**) Timed pause (*n, where n = 1 to 9 seconds)

TIMEOUT ROUTING DESTINATION ASSIGNMENT (CMD 323)

The PERCEPTION 4000 system allows a call to be routed to a preselected location if the user times out while dialing. Up to 32 destination locations can be selected in the system. Each station can be programmed to route to one of these 32 locations in a timeout condition.

This command allows the user to modify the destination location, which can be an internal station number, a logical line, a hunt group pilot number, an attendant or attendant group, or one of the four Emergency Access Codes.

Related command:

- Station Level Parameter Assignment (CMD 329)

  - There are no dependent commands.

TIMEOUT ROUTING DESTINATION ASSIGNMENT

INDEX	DESTINATION NUMBER	INDEX	DESTINATION NUMBER
1		17	
2		18	
3		19	
4		20	
5		21	
6		22	
7		23	
8		24	
9		25	
10		26	
11		27	
12		28	
13		29	
14		30	
15		31	
16		32	

Figure 5-21
Timeout Routing Destination Assignment (CMD 323)

FIELD	EXPLANATION
INDEX	**Timeout Routing Index Number**—Enter a Timeout Routing Index Number of 1 to 32 (1 to 2 digits).
DESTINATION NUMBER	**Destination Address**—Enter the number of the destination location. This can be the number of an internal station, a logical line, a hunt group pilot, or an attendant/attendant group. Enter from 1 to 5 digits (0 to 99999).

AUTHORIZATION CODE ASSIGNMENT (CMD 349)

The PERCEPTION 4000 system will support up to 1,024 authorization codes. Once authorization codes have been registered, users can enter the authorization codes via stations to use the dialing privileges associated with the authorization code.

Each authorization code has a corresponding Station Message Detail Recording (SMDR) identification code in order to identify which caller used the system without disclosing the actual authorization code.

Each authorization code will override the Class of Service definition, Destination Restriction Level, Facility Restriction Level Profile, Queuing Priority Level, and Answering Position from whatever is in effect for the station, data device, attendant, Direct Inward System Access (DISA) or incoming TIE trunk at the time of authorization code registration.

All authorization codes must be of the same length defined by Post Dialing Digit 1 (LEN PD1) in the Numbering Plan Assignment (CMD 300). The same authorization code can be used on any device which is assigned the above attributes. All applicable definitions will be enforced.

Prerequisite commands:

- Numbering Plan Assignment (CMD 300)
- ACD Group Assignment (CMD 355)
- Attendant Position Assignment (CMD 370)
- Attendant Group Assignment (CMD 372)
- Station Hunting Assignment (CMD 342)
- UCD Group Assignment (CMD 354)

☐ There are no dependent commands.

AUTHORIZATION CODE ASSIGNMENT

INDEX	AUTH CODE	SMDR ID	COS	DRL	FRLP	QPL	ANS POS	RG

Figure 5-22
Authorization Code Assignment (CMD 349)

FIELD	EXPLANATION
INDEX	**Index Number**—Enter an index number from 1 to 1024 (1 to 4 digits) for identification purposes.
AUTH CODE	**Authorization Code**—Enter an authorization code from 1 to 99999999 (1 to 8 digits). The code length must match the entry in the "LEN PD1" field of the Numbering Plan Assignment (CMD 300).
SMDR ID	**Station Message Detail Recording ID Code**—Enter an SMDR code from 1 to 5 ASCII characters. After each authorization code is entered (all must be the same length) SMDR identification codes are defined where desired. SMDR ID codes are optional and are not required. *NOTE: All other fields, except the Station Restriction group field, must receive definition or default values will apply.*
COS	**Class Of Service**—Enter a COS number from 1 to 64 (1 to 2 digits).
DRL	**Destination Restriction Level**—Enter a DRL number from 1 to 16 (1 to 2 digits).
FRLP	**Facility Restriction Level Profile**—Enter an FRLP number from 1 to 32 (1 to 2 digits).
QPL	**Queue Priority Level**—Enter a QPL number from 1 to 8 (1 digit).
ANSPOS	**Answer Position**—Enter a directory number from 0 to 99999 (1 to 5 digits). This field must be one of the following: Attendant Attendant Group Station Hunt Group Pilot ACD Pilot UCD Pilot
RG	**Voice/Data Restriction Group**—Not used. This is a future field. Enter a station restriction group number from 1 to 16 (1 to 2 digits).

MISCELLANEOUS DEVICE ASSIGNMENT (CMD 400)

This form sets up the Announcement Machine/Music-on-Hold table. The table defines the equipment number and usage for each announcement machine and Music-on-Hold device. Up to 64 announcement machines and four external music-on-hold sources are supported in the system.

Related commands:

- Announcement Pattern Assignment (CMD 353)
- Internal Call Alternate Routing Assignment (CMD 374)
- Miscellaneous Device Assignment (CMD 400)

MISCELLANEOUS DEVICE ASSIGNMENT

DEV	EQUIP #	USAGE

Figure 5-23
Miscellaneous Device Assignment (CMD 400)

FIELD	EXPLANATION
DEV	**Device Number**—Enter one of the following devices to receive definition: AM01~AM64 (Announcement machines, numbers 1 through 64) MS01~MS04 (Music-on-Hold Devices, numbers 1 through 4) This field contains the announcement machine and music-on-hold device number.

EQUIP #

Equipment Number—Assign announcement machine or Music-on-Hold device to a circuit by entering the appropriate equipment number. This equipment number must be unique in the system and must be associated with an BSTI, XSTI, EM1I, or EM2I card.

Use the following charts to determine the valid ranges for various types of equipment. All equipment numbers must be 5 to 6 digits long. (If the first digit is a zero, it can be dropped.)

For (MOH) BSTI equipment cards, the following ranges apply:

Digits	Range	Hardware
First two digits	01~10	Shelf no.
Second two digits	01~11, 13	Card slot no.
Last two digits	01~16	Circuit no.

For (MOH) XSTI and (ANN) EM1I cards, the following are valid ranges:

Digits	Range	Hardware
First two digits	01~10	Shelf no.
Second two digits	01~14	Card slot no.
Last two digits	01~08	Circuit no.

For an (ANN) EM2I card, the following ranges apply:

Digits	Range	Hardware
First two digits	01~10	Shelf no.
Second two digits	01~14	Card slot no.
Last two digits	01~06	Circuit no.

USAGE

Announcement or Music-on-Hold Usage—Specify which of the following features are used for the device by entering one of the following keywords:

ACD	(ACD announcement)
UCD	(UCD announcement)
DID	(Direct Inward Dialing announcement)
GEN	(General intercept)
AUX	(Other)

The default usage for an announcement machine or music-on-hold device is "GEN" for any new machines added to the system. The usage for the music-on-hold device must be "GEN".

ACCOUNT CODE ASSIGNMENT (CMD 348)

The Account Code Assignment worksheet defines account codes that system users can enter either in a forced or voluntary manner when making or receiving calls. Command 348 enables the programmer to display, add, or delete account codes.

Entering *ADD, DELETE*, or *DISPLAY* defines the operation to be performed. Account codes to be added or deleted are entered sequentially separated by a single space. If DELETE is the operation selected, entering *ALL* in the first field deletes all previously-programmed account codes. If DISPLAY is the operation selected, entering **<TAB>** in the first field displays all account codes in the data base.

Prerequisite commands:

- Numbering Plan Assignment (CMD 300).

ACCOUNT CODE ASSIGNMENT

ACCOUNT CODE	ACCOUNT CODE	ACCOUNT CODE	ACCOUNT CODE	ACCOUNT CODE	ACCOUNT CODE

Figure 5-24
Account Code Assignment (CMD 348)

FIELD	EXPLANATION
ACCOUNT CODE	**ACCOUNT CODE**—Enter the account code that is to be either added or deleted.

Chapter 6

AREA CODE ASSIGNMENTS

This chapter covers the following area code commands:

- Country Code Assignment (CMD 335)
- Destination Restriction Level Assignment (CMD 337)
- Country Code Restriction Tables (CMD 338)
- Area/Office Code Restriction Tables (CMD 339)
- Area Code Restriction Tables (CMD 341)
- Exception Restriction Tables (CMD 340)

COUNTRY CODE ASSIGNMENT (CMD 335)

This table is consulted when international calls are made via direct dialing for purposes of verifying the validity of the number dialed, or for Least Cost Routing or other restriction purposes. All of the country codes presently in existence are listed on this table and are already configured by Toshiba. Review the Country Code Definition table periodically to see that it conforms to current international dialing conventions. Your local telephone company or long distance carrier should have this information.

■ This command has no prerequisites.

This command may be needed by:

☐ Country Code Restriction Table (CMD 338)

COUNTRY CODE ASSIGNMENT

CC	CC	CC	CC	CC	CC	CC	CC	CC	CC	CC	CC	CC	CC	CC

Figure 6-1
Country Code Assignment (CMD 335)

FIELD	EXPLANATION
CC	**Country Code**—Enter all necessary country code directory numbers, from 1 to 999 (1 to 3 digits).

DESTINATION RESTRICTION LEVEL ASSIGNMENT (CMD 337)

Destination Restriction Levels (DRLs) control outgoing calls made via direct trunk group access. This type of dialing restriction can also be applied to Least Cost Routing, as long as it is designated in the System Option Flag Assignment (CMD 408).

Prerequisite commands:
- Trunk Group Assignment (CMD 310)
- Trunk Group Toll-Free Tables (CMD 311)

☐ There are no dependent commands

DESTINATION RESTRICTION LEVEL ASSIGNMENT

TRGN	DRL	NON TF	EXCEPT DNY	EXCEPT ALW	CC TBL	AC/OC TBL	AC TBL

Figure 6-2
Destination Restriction Level Assignment (CMD 337)

FIELD	EXPLANATION
TRGN	**Trunk Restriction Group Number**—Enter the TRGN to receive definition, from 2 to 8 (1 digit). Seven trunk restriction groups can be defined in the system.
DRL	**Destination Restriction Level**—Enter a DRL number, from 2 to 16 (1 to 2 digits). When DRL is 1, all the calls are allowed.
NON TF	**Non Toll-Free Calling Zone Allowance/Denial**—Define whether non-toll free calls are allowed or denied:

DNY (Deny non-toll-free calls)
ALW (Allow non-toll-free calls)

When the keyword "DNY" is entered, the calls to destinations outside of the toll free calling zone are denied. If "ALW" is entered, the restriction of these calls is controlled by other restriction tables.

The following fields do not apply to the form, but will appear in the DISPLAY operation of the Maintenance and Administration Commands:

- EXCEPT DNY (Exceptional Destination Restriction Denial table)
- EXCEPT ALW (Exceptional Destination Restriction Allowance table)
- CC TAB (Country Code Restriction table)
- AC/OC TAB (Area/Office Code Restriction table)
- AC TAB (Area Code Restriction table)

COUNTRY CODE RESTRICTION TABLES (CMD 338)

On the Country Code Restriction Tables form, you can specify whether to allow or deny calls to various countries. The country code restriction tables are defined for each Trunk Restriction Group/Destination Restriction Level (TRG/DRL) combination, except for those cases when either the TRG or DRL is equal to 1. Trunk restriction group 1 is defined as "unrestricted", and is recommended for TIE trunk groups. For more information on TRG and DRL call control, refer to the Destination Restriction Level Assignment form (CMD 337).

A quick way to build tables is to specify each table as an "allow" or "deny" table. Use whichever would require the fewest number of codes to be entered. For example, if all country codes but two needed to be allowed, it would be easier to build a "deny" table and enter only two codes vs building an "allow" table and entering all but two codes.

To use these tables, specify the TRG/DRL pair, define the table as either an "allow" or "deny" type, then enter the necessary country codes. Make sure all entered country codes are supported in the Country Code Assignment (CMD 335).

Prerequisite command:

- ■ Country Code Assignment (CMD 335)

  - ☐ There are no dependent commands.

COUNTRY CODE RESTRICTION TABLE

TRGN	DRL	TYPE	CC	CC	CC	CC	CC	CC	CC	CC	CC

Figure 6-3
Country Code Restriction Table (CMD 338)

FIELD	EXPLANATION

TRGN **Trunk Restriction Group Number**—Enter the number of the trunk restriction group, from 2 to 8 (1 digit) to be used in the TRG/DRL pair.

DRL **Destination Restriction Level**—Assign the DRL to be paired with the TRG in the first field. Enter a DRL number from 2 to 16 (1 to 2 digits).

TYPE **Table Type**—Define this table as an "allow" or "deny" table, by entering one of the following keywords.

ALW (Allow)
DNY (Deny)

If the keyword, "ALW" (or DNY), is entered, calls to any country codes in this Country Code Restriction table are allowed (or denied).

CC **Country Code**—Enter the country codes that will be allowed or denied access, depending on the table type entered in the previous field. Use the directory numbers from 1 to 999 (1 to 3 digits).

RELATIONSHIPS

- When DRL is 1, all calls are allowed regardless of what trunk restriction group number (TRG #) being used. Therefore, there is no Country Code Restriction table associated with it.
- Country codes are checked against the System Country Code table to verify their validity.

AREA/OFFICE CODE RESTRICTION TABLES (CMD 339)

The Area/Office Code Restriction Tables form defines the local and long distance dialing codes for each trunk restriction group/destination restriction level (TRG/DRL) combination according to the North American Dialing Plan conventions. The only TRGs or DRLs which are not defined in this table are those that have been assigned the number "1." For more information on TRG and DRL call control, refer to the information on the Destination Restriction Level Assignment (CMD 337).

A shortcut to building tables is to specify a table as either an "allow" or "deny" table. Choose whichever table type would require the fewest number of codes to be entered. For example, if all office codes but two should be "allowed," then it would be quicker to create a "deny" table and enter only the two codes which are not allowed.

To fill out this form, first specify the TRG/DRL pair, then select the most convenient table type and enter the area code. Continue to list all necessary office codes.

Note: Only one area/office code table per area code is allowed per TRG/DRL combination.

- This command has no prerequisites or dependencies.

AREA/OFFICE CODE RESTRICTION TABLE

TRGN	DRL	TYPE	AC	OC	OC	OC	OC	OC	OC	OC	OC	OC

Figure 6-4
Area/Office Code Restriction Table (CMD 339)

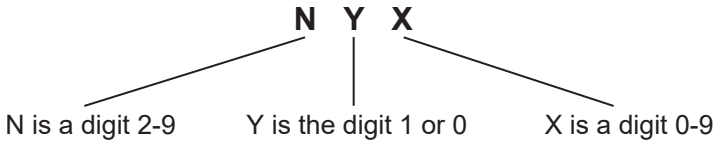
FIELD	EXPLANATION
TRGN	**Trunk Restriction Group Number**—Enter the TRGN from 2 to 8 (1 digit) to be paired with the DRL.
DRL	**Destination Restriction Level**—Assign a DRL number from 2 to 16 (1 to 2 digits) to be paired with the previous TRGN.

When DRL is 1, all calls are allowed regardless of what trunk restriction group number (TRG #) being used.

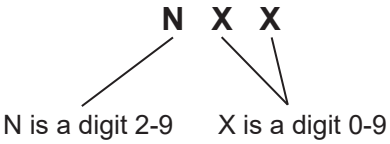
TYPE **Table Type**—Define whether this table will allow or deny all area/office codes entered on this table by entering one of the following keywords:

ALW	(Allow)
DNY	(Deny)

AC **Area Code**—Enter the area codes to be allowed or denied, depending on the table type. Use the area codes digits from 200 to 919. Remember, area codes must conform to the NYX formula, shown below.



OC **Office Code**—Enter the office codes, from 200 to 999, to be allowed or denied, depending on the previously assigned table type. Use the "NXX" format, shown as follows:



- When DRL is 1, all calls are allowed regardless of what trunk restriction group number (TRG #) being used. Therefore, there are no Area/Office Code Restriction tables associated with it.
- Trunk restriction group 1 is defined as "unrestricted", and is recommended for TIE trunk groups.

AREA CODE RESTRICTION TABLES (CMD 341)

The process of building Area Code Restriction tables is almost identical to that of the previous Country Code Restriction tables. Definitions for each Trunk Group /Destination Restriction Level (TRG/DRL) combination except when either TRG or DRL is assigned the number "1". See the Destination Restriction Level Assignment discussion (CMD 337) for more information on TRG and DRL call control.

To build these tables, first specify the TRG/DRL pair. Then, label the tables as either "allow" or "deny" tables, whichever requires the least amount of entries. For instance, if all area codes except three should to be allowed, then it would be easiest to build a "deny" table, and only enter the three exceptions. Finally, enter the necessary area codes.

This is the last restriction table checked by the system. The area code restriction table emphatically allows or denies calls to the listed area codes listed on this table. This table's "allow" or "deny" capability overrides the access capabilities listed in a caller's class of service definition.

- This command has no prerequisites or dependencies.

AREA CODE RESTRICTION TABLE

TRGN	DRL	TYPE	AC	AC	AC	AC	AC	AC	AC	AC	AC	AC

Figure 6-5
Area Code Restriction Table (CMD 341)

FIELD	EXPLANATION
TRGN	**Trunk Restriction Group Number**—Enter the TRGN from 2 to 8 (1 digit) to be paired with the DRL. Trunk restriction group 1 is defined as "unrestricted", and is recommended for TIE trunk groups.

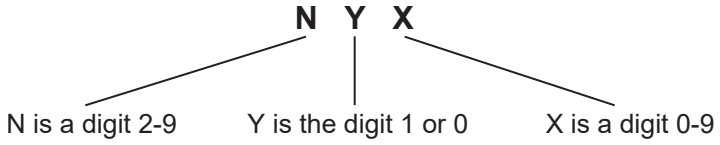
DRL **Destination Restriction Level**—Assign a DRL number from 2 to 16 (1 to 2 digits) to be paired with the previous TRGN.

When DRL is 1, all calls are allowed regardless of which trunk restriction group number (TRGN) is being used. Therefore, there is no Area/Office Code Restriction table associated with it.

TYPE **Area Code Restriction Type**—Define whether this table will allow or deny all area codes entered on this table by entering one of the following keywords:

ALW	(Allow)
DNY	(Deny)

AC **Area Code**—Enter the area codes to be allowed or denied, depending on the table type. Use the area codes digits from 200 to 919. Remember, area codes must conform to the "NYX" formula, shown below.



EXCEPTION RESTRICTION TABLES (CMD 340)

The Exception Restriction Tables form provides a means for assigning absolute denial and/or allowance to certain numbers or groups of numbers. This flexible design allows you to make small or vast changes, from changing the options on a single subscriber number to more widespread changes such as implementing control over an office code regardless of area code (such as 976 numbers), or control operator access, 10XXX codes, as well as standard telephone numbers.

You can list up to a total of 32 exception allowance or denial numbers for each TRG/DRL combination. For more information of TRG and DRL call control, refer to the discussion accompanying the Destination Restriction Level Assignment form (CMD 337).

To make Exception Destination Restriction assignments, first enter the type of allowance or denial, followed by the desired TRG/DRL combination. Then, list the exceptional numbers. Valid digits and characters are:

0-9	dialed digits
Y	represents a 1 or 0
X	represents 0-9
N	represents 2-9
T	represents one or more digits to follow. The last digit is identified by timeout.

These tables can be used to allow or deny large sets of calls, or very specifically restrict or allow a call by exact match.

411	Restricts local information
1XXX976XXXX	Restricts all non-local 976 numbers
10XXX1900XXXXXXX	Restricts all 900 area code numbers via equal access dialing
0T	Restricts 0+ dialing
011T	Restricts international direct distance dialing
0	Restricts straight "Dial 0" calls
976XXXX	Restricts local 976 numbers

- This command has no prerequisites or dependencies.

EXCEPTION RESTRICTION TABLES

TYPE	TRGN	DRL	INDEX	EXCEPTION NUMBER	INDEX	EXCEPTION NUMBER

Figure 6-6
Exception Restriction Table (CMD 340)

FIELD	EXPLANATION
TYPE	**Type of List**—Define whether or not this table absolutely allows or denies access to certain numbers: DNY (Exception denial list type) ALW (Exception allowance list type)
TRGN	**Trunk Restriction Group Number**—Enter the TRGN from 2 to 8 (1 digit) to be paired with the DRL.
DRL	**Destination Restriction Level**—Assign a DRL number from 2 to 16 (1 to 2 digits) to be paired with the previous TRGN.
INDEX	**List Index Number**—Assign an index number from 1 to 32 (1 to 2 digits). Up to 32 exceptions are allowed for each TRG/DRL combination. This is the maximum for the combined number of entries in the exception allowance and denial lists. For example, if 25 exception denials exist for a certain TRG/DRL combination, then the maximum exception allowances for that same combination is 7.
EXCEPTION NUMBER	**Exception Number**—Define the exception numbers to be denied or allowed by entering from 1 to 24 dialing digits, including the characters X, Y, N, and T.

The valid digits and characters include the following:

0-9 – dialed digits
Y – represents a 1 or 0
X – represents any digit 0-9
N – represents any digit 2-9
T – followed by one or more digits, last digit identified by timeout

For example: 10XXX1800 can be an exception number.

Chapter 7

ACD, UCD, AND HUNTING ASSIGNMENTS

This chapter covers the following assignments:

- Station Hunting Assignment (CMD 342)
- Announcement Pattern Assignment (CMD 353)
- UCD Group Assignment (CMD 354)
- ACD Group Assignment (CMD 355)
- ACD Agent Assignment (CMD 356)
- ACD Group Parameter Assignment (CMD 357)

STATION HUNTING ASSIGNMENT (CMD 342)

This worksheet is for defining voice hunt groups in the system. Data hunt groups are assigned via the Data Hunting Assignment form, (CMD 366). Up to 200 hunt groups may be assigned, and up to16 members may be defined in a hunt group. Note, however, that the system allows for a maximum of 800 hunt group members.

Prerequisite commands:
- Station Assignment (CMD 330)

The following commands may be needed as prerequisites for the "OVF DEST" (Overflow Destination) field:
- UCD Group Assignment (CMD 354)
- ACD Group Assignment (CMD 355)
- Attendant Position Assignment (CMD 370)
- Attendant Group Assignment (CMD 372)
- System Speed Calling Assignment (CMD 402)

Related commands:
- Numbering Plan Assignment (CMD 300)
- Authorization Code Assignment (CMD 349)
- Internal Call Alternate Routing Assignment (CMD 374)
- Trunk Group Routing Assignment (CMD 307)
- Trunk Routing Assignment (CMD 308)
- DID/CCSA LDN Assignment (CMD 316)

STATION HUNTING ASSIGNMENT

GRP #	METHOD	PILOT DN	NAME	OVF DEST	MEM #	MEM DN	ENT PT

Figure 7-1
Station Hunting Assignment (CMD 342)

FIELD	EXPLANATION
GRP #	**Hunt Group Number**—Enter a hunt group number from 1 to 200 (1 to 3 digits). Hunt groups are used by both the circular and serial voice hunting methods. The combined total of both groups may not exceed 200 groups.
METHOD	**Hunt Method**—Define the method with one of the following keywords: SER (Serial hunt method) CIR (Circular hunt method) **Serial Hunt Groups** For the serial hunt group, entry into the group is generally by the pilot number and the hunt will begin at the top of the list and cease at the bottom. Various members may also be flagged as an entry point. Dialing any member directory number marked as an entry point which is busy or in the Do-Not-Disturb mode (but not forwarded) will result in a search for an available member in the order prescribed on this form, starting at the busy member, and proceeding to the end of the list. Unlike circular hunting, "wrapping" does not occur. **Circular Hunt Groups** For circular hunt groups, dialing a member directory number which is either busy or in the Do-Not-Disturb mode (and not forwarded) will result in a search for an available member in the order prescribed on this form. If necessary, the call will continue to "wrap around" the hunt group until a member is reached. In a circular hunt, all members are entry points.
PILOT DN	**Pilot Directory Number**—If the hunt method is the serial type, enter a pilot directory number from 0 to 99999 (1 to 5 digits). For circular hunting, a pilot number is not needed. When the hunt group pilot number is dialed, hunting will take place in the order established by the member number ordering (member number and member directory number fields).
NAME	**Group Name**—Assign a group name from 1 to 9 ASCII characters. The Group Name field is provided for the benefit of the attendant and users with display telephones. When the pilot number is dialpad or a legal entry point is used into a serial hunt group, the group name information will be displayed. For example, "I SALES" may be displayed to indicate that this hunt group is for inside sales personnel.
OVF DEST	**Overflow Destination**—Enter an overflow destination, which may be any one of the station types in the following list. Station or pilot numbers can range from 0 to 99999 (1 to 5 digits), Speed Calling numbers range from 2 to 4 digits. —Individual attendant console directory number —Station number —Hunt group pilot number —UCD group pilot number —ACD group pilot number —Attendant group directory number —1-3 digits + 3 digits Speed Calling access and code

This number is used to establish a secondary hunt or call termination point. Only one level of hunt overflow is allowed. If the destination is another hunt group which also has an overflow defined, the second group's overflow will not be used.

— Any legal internal voice directory number or pilot number can be used in this field.
— Attendant and attendant groups are also allowed.
— Off-premises routing is available via system speed call number entry. In the case where a caller overflows into another group and everyone in that group is unavailable, then camp-on is allowed and the call will camp-on to the first hunt group.

MEM # **Membership Index Number**—Enter a member ID number from 1 to 16 (1 to 2 digits).

This index number shows the search order when the hunt group pilot directory number is dialed, from the lowest to the highest number. Member Directory Numbers are assigned in the desired sequence. Only voice stations are legal members of a voice hunt group.

MEM DN **Member Directory Number**—Enter a corresponding member directory number, from 0 to 99999 (1 to 5 digits).

ENT PT **Entry Point**—Define whether a member directory number can be used as an entry point into the serial hunt group list.

YES (Yes)
NO (No)

The search starts at that directory number’s position and continues down the list until the first idle directory number is found or until the remaining members have been exhausted. For circular hunt groups, only "YES" may be entered.

ANNOUNCEMENT PATTERN ASSIGNMENT (CMD 353)

This form allows you to choose and set the play intervals for Music-on-Hold or recorded announcements for callers who access either Automatic Call Distribution (ACD) or Uniform Call Distribution (UCD) features. The announcements can be specifically tailored for each ACD or UCD group, thereby allowing you to provide pertinent information to different callers.

Up to 50 call treatment patterns are supported by the PERCEPTION 4000 system. Each pattern number acts as an index that links to the appropriate ACD or UCD group. (Refer to the ACD Group Assignment (CMD 355) and the ACD Group Parameter Assignment (CMD 354) commands).

Prerequisite command:
- Miscellaneous Device Assignment (CMD 400)

Related commands:
- Trunk Group Routing Assignment (CMD 307)
- Trunk Routing Assignment (CMD 308)
- DID/CCSA Trunk Group Assignment (CMD 314)
- UCD Group Assignment (CMD 354)
- ACD Group Assignment (CMD 355)
- ACD Group Parameter Assignment (CMD 357)
- System Options Flag Assignment (CMD 408)

ANNOUNCEMENT PATTERN ASSIGNMENT

AP#	RING TIME	ANN1 NUM	INT1 TIME	#1 CYC	ANN2 NUM	INT2 TIME	#2 CYC	ANN3 NUM	INT3 TIME	#3 CYC	2&3 CYC

Figure 7-2
Announcement Pattern Assignment (CMD 353)

FIELD	EXPLANATION
AP#	**Announcement Pattern Number**—Assign a call treatment pattern number from 1 to 50 (2 digits).
RING TIME	**Length of the Ring**—Enter the length of the ring in seconds, from 1 to 60 (1 to 2 digits). This is the length of time the caller receives ringback tone before the announcement plays.
ANN1 NUM	**Announcement Number 1**—Define which announcement machine will be used to provide the first announcement. Use the entries: AM01 ~ AM64 (4 characters).
INT1 TIME	**Interval of Time between Announcements**—Enter the number of seconds, from 1 to 120 (1 to 3 digits), that the caller will hear either silence or Music-on-Hold. The entry in this field represents the interval before the system cycles back to announcement number one or proceeds to Announcement 2. (Quiet tone will be substituted if Music-on-Hold is not provided by the system.)
#1 CYC	**Number of Cycles for Announcement 1**—Define the number of times Announcement 1 should be cycled, from 0 to 9, or 00 to 09 (1 to 2 digits). The maximum definable number of cycles is nine. The announcement will be cycled infinitely all other fields will be ignored if "0" (zero) is entered. If nothing is entered, the announcement and interval time will only play once.
ANN2 NUM	**Announcement Number 2**—Define which announcement machines will provide Announcement 2. Use the following keywords: AM01 ~ AM64 (4 characters). If this field is entered, interval time and cycle for Announcement 2 cannot be entered.
INT2 TIME	**Interval of Time between Announcements**—Enter from 1 to 120 (seconds) (1 to 3 digits). Specify in seconds how long Music-on-Hold (or quiet tone, if Music-on-hold is not provided by the system) will play before cycling back to announcement number two or proceeding on to Announcement 3.
#2 CYC	**Number of Cycles for Announcement 2**—Enter the number of times Announcement 2 should be cycled, from 0 to 9, or 00 to 09 (1 to 2 digits). The announcement will be cycled infinitely if "0" is entered. All remaining fields are ignored if entered. If nothing is entered, the announcement and interval time will only play once. The maximum definable number of cycles is nine. If a definite number of cycles are defined, and there is no definition for Announcement 3, the system will continue to keep the caller connected to Music-on-hold or quiet tone.

ANN3 NUM **Announcement Number 3**—Define which announcement machine will be used to provide the Announcement 3. Enter the following:

AM01 ~AM64

Announcement 3 may only be defined if Announcement 2 was defined.

INT3 TIME **Interval of Time between Announcements**—Enter the number of seconds, from 1 to 120 (1 to 3 digits), that Music-on-Hold or quiet time plays before cycling to an announcement.

Again, if Music-on-Hold is not provided by the system, or quiet tone be substituted, this third interval can cycle back to Announcement 3 or to both Announcement 2 and 3 again.

#3 CYC **Number of Cycles for Announcement 3**—Define the number of times, from 0 to 9, or 00 to 09 (1 to 2 digits). Announcement 3 should be cycled.

The maximum definable number of cycles is nine – if set to "0", the system will cycle Announcement 3 and music number 3 indefinitely. If this field is left undefined, the default is to play the announcement only once.

2&3 CYC **Cycle Announcement 2 and 3**—Provided that "Cycle 3" is not set to "0" (infinite), then you can enter the number of times Announcements 2 and 3 will cycle (including their respective music times and cycling instructions) for up to 9 times or indefinitely. Enter from 0 to 9, or 00 to 09 (1 to 2 digits).

If set to defined cycling, music or quiet tone will be provided indefinitely upon cycle completion.

If only music is to be presented to the caller, only the first music field need be filled in, and cycle number one set to infinite cycling.

RELATIONSHIPS

- If "Announcement 1" cycle is set to "0", the remaining fields regarding Announcements 2 and 3 are ignored if entered.
- If the "Announcement 2" cycle is set to "0", the remaining fields regarding Announcement 3 are ignored if entered.
- If the "Cycle Announcement 2 and 3" field is filled out, both the Announcement 2 and 3 fields will be entered or in the database.

UCD GROUP ASSIGNMENT (CMD 354)

The PERCEPTION 4000 PBX system may be configured with up to eight Uniform Call Distribution (UCD) groups. This form is for assigning group operation features and listing the UCD group members.

Prerequisite commands:
- Station Assignment (CMD 330)
- Announcement Pattern Assignment (CMD 353)

Related commands:
- Numbering Plan Assignment (CMD 300)
- Trunk Group Routing Assignment (CMD 307)
- Trunk Routing Assignment (CMD 308)
- Station Hunting Assignment (CMD 342)
- Authorization Code Assignment (CMD 349)
- ACD Group Assignment (CMD 355)
- Internal Call Alternate Routing Assignment (CMD 374)
- DID/CCSA LDN Assignment (CMD 316)
- ACD Group Assignment (CMD 355)
- System Speed Calling Assignment (CMD 402)

UCD GROUP ASSIGNMENT

GRP#	PILOT DN	NAME	OVF DEST	AP#	OVF TMR	INDEX	MEM DN	INDEX	MEM DN

Figure 7-3
UCD Group Assignment (CMD 354)

FIELD	EXPLANATION
GRP#	**Uniform Call Distribution (UCD) Group Number**—Enter a UCD group number from 1 to 8 (1 digit).
PILOT DN	**Pilot Directory Number**—Enter a pilot directory number (PDN) from 0 to 99999 (1 to 5 digits). Each group is assigned a group PDN which may not conflict with any other directory number in the system Numbering Plan Assignment (CMD 300).
NAME	**Group Name**—You can enter an optional group name up to 9 ASCII characters. The name will be displayed on calling party terminals or the attendant console. Embedded spaces allowed.
OVF DEST	**Overflow Destination**—Enter an overflow destination directory number, from 0 to 99999 (1 to 5 digits). Only Uniform Call Distribution (UCD) and Automatic Call Distribution (ACD) pilot groups may be used as an overflow destination. Only one overflow is allowed per call, even if the overflow group has another overflow specified.
AP#	**Announcement Pattern Number**—Select one of the 50 announcement patterns defined in the Announcement Pattern Assignment (CMD 353). Enter from 1 to 50 (1 to 2 digits). This field describes how the call is treated while waiting in queue (announcements, music, etc.).
OVF TMR	**Overflow Timer**—Enter the time in seconds that the call must wait in queue before overflowing to the overflow destination, from 0 to 1000 (1 to 4 digits).
INDEX	**Index Number**—Assign an index number from 1 to 16 (1 to 2 digits) for reference purposes.
MEM DN	**Uniform Call Distribution (UCD) Member Directory Number**—Add the directory numbers, from 0 to 99999 (1 to 5 digits) of all of the members that you wish to add to the group. Members must be voice stations only and may appear in only one UCD group.

ACD GROUP ASSIGNMENT (CMD 355)

This command defines attributes for ACD groups and provides the system with information about each group so that an appropriate amount of memory may be allocated for the queue size. Up to 32 ACD groups are allowed, with a maximum of 64 members per group in the PERCEPTION 4000 system.

ACD groups can be configured to include an ACD supervisor who can have (customer option) an ACD Management Information System (MIS) terminal. Through the ACD/MIS system, the supervisor can access real-time displays or print reports on ACD group and agent statistics. The ACD/MIS terminal is supported by an outboard ACD/MIS processor that is integrated with the PBX.

The System Option Flag Assignment (CMD 408) also allows you to define several ACD features, such as the call distribution method or whether or not warning tones will sound when a supervisor is monitoring an ACD call.

Related command:
- Numbering Plan Assignment (CMD 300)
- System Option Flag Assignment (CMD 408)

This command may be needed by:
- ☐ Trunk Group Routing Assignment (CMD 307)
- ☐ Trunk Routing Assignment (CMD 308)
- ☐ Station Hunting Assignment (CMD 342)
- ☐ Authorization Code Assignment (CMD 349)
- ☐ ACD Agent Assignment (CMD 356)
- ☐ ACD Group Parameter Assignment (CMD 357)
- ☐ Internal Call Alternate Routing Assignment (CMD 374)

ACD GROUP ASSIGNMENT

GRP#	PILOT DN	NAME	SUP PWD	GRP MON	MAX TERMS	MAX CALLS

Figure 7-4
ACD Group Assignment (CMD 355)

FIELD	EXPLANATION
GRP#	**ACD Group Number**—Enter an ACD group number, from 1 to 32 (2 digits).
PILOT DN	**Pilot Directory Number**—Define the ACD group pilot number by entering a directory number of 0 to 99999 (1 to 5 digits). This is the entry point into the ACD group. This number must not conflict with other numbers and access codes in the system Numbering Plan Assignment (CMD 300).
NAME	**Group Name**—You can enter an optional group name, up to 9 ASCII characters. This ACD group name will be displayed if the internally-called party has a display window-type telephone. Embedded spaces are allowed.
SUP PWD	**Supervisor Password**—Enter a password which the supervisor will enter to login to the system, from 0 to 99999999 (1 to 8 digits).
GRP MON	**Supervisor Inter-Group Monitor Flag**—Define whether or not the supervisor can listen in on an ACD call by one of the agents in another group. Enter one of the following keywords:

YES	(Enables supervisor monitoring)
NO	(Disables supervisor monitoring)

The monitor feature creates a listen-only path for the supervisor and an optional, low warning tone can be provided for the agent. The warning tone will be controlled by the attendant monitoring flag and must be defined in the System Option Flag Assignment Command (CMD 408). The supervisor can also monitor agents in other groups if the capability is defined in the group monitor field.

MAX TERMS **Maximum Number of Agent Terminals**—Specify the maximum number of agents in this ACD group that will be logged in simultaneously by entering a maximum number of agent terminals, from 1 to 64 (2 digits).

NOTE: Entries in this "MAX TERMS" field and the following "MAX CALLS" field affect how much memory will be allocated for the ACD group.

MAX CALLS **Maximum Number of Calls Handled Simultaneously**—Define the maximum number of calls which can be handled simultaneously by this ACD group, from 1 to 100 (2 digits).

These "handled" calls include calls which are ringing, calls currently being handled by ACD agents in the Talk mode, and calls which are waiting in the queue.

The entry should not exceed two times the number in the "MAX TERMS" (maximum terminal's) value. Also, normally it should not exceed the total number of agents, unless the Call Holding and Work Time associated with each call is short.

ACD AGENT ASSIGNMENT (CMD 356)

This form is for assigning agent identification codes to ACD groups. It also defines whether or not agents can use the intra-ACD group call pickup feature and if their calls can be picked up by other agents within the group.

Prerequisite command:
- ACD Group Assignment (CMD 355)
- Facility Restriction Level Profile Assignment (CDM 387)
  - ☐ There are no dependent commands.

ACD AGENT ASSIGNMENT

GRP#	AGT	PU1 FLAG	PU2 FLAG	COS	DRL	FRLP	QPL	NAME

Figure 7-5
ACD Agent Assignment (CMD 356)

FIELD	EXPLANATION
GRP#	**Group Number**—Enter an ACD group or primary key number (1 or 2 digits) from 1 to 32 (or up to the system-configured maximum).
AGT	**Agent Identification Code**—Assign a three-digit identification code to each agent, from 000 to 999 (3 digits). Up to 64 agents can be assigned per group. These identification or index codes are used by the system to reference each agent. The same agent ID codes can be used in different groups since the ACD group number will differentiate them.
PU1 FLAG	**Call Pickup Flag**—Define whether an agent can perform an Intra-group Call Pickup. ALW (Pickup is allowed) DNY (Pickup is not allowed)

PU2 FLAG **Call Picked-up Flag**—Specify whether other agents in the same group may pick up a particular agent's calls.

ALW	(May be picked up)
DNY	(May not be picked up)

COS **Agent Class of Service**—Assign an ACD class of service (Classes 1~64) to the agent.

DRL **Agent Destination Restriction Level**—This field restricts the destinations to which the agent can place calls. Enter restriction level 1~16 (or up to the system-configured maximum).

FRLP **Agent Facility Restriction Level Profile—**Enter from 1~32 (or up to the system-configured maximum). Assign facility restrictions that will apply to this agent. Facility Restriction Level Profiles (FRLPs) and Facility Restriction Levels (FRLs) are assigned by CMD 387.

QPL **Agent Queue Priority Level**—This field defines the agent's priority level within the queue. Priorities 1-8 can be assigned.

NAME **Agent Name**—Enter a name to be used for identifying agents on the ACD/MIS displays and reports. Use up to 9 ASCII characters in length, including spaces and punctuation.

ACD GROUP PARAMETER ASSIGNMENT (CMD 357)

The information on this form provides additional ACD group information to the PERCEPTION 4000 PBX system for timers, call overflow features, call waiting threshold levels, call restrictions, and announcement patterns.

Prerequisite commands:
- ACD Group Assignment (CMD 355)
- Announcement Pattern Assignment (CMD 353)

☐ There are no dependent commands.

ACD GROUP PARAMETER ASSIGNMENT

GRP#	DAY DEST	NIT DEST	ALM TON	ALM ON	ALM OFF	INT FLG	AP#	WRK TMR

Figure 7-6
ACD Group Parameter Assignment (CMD 357)

FIELD	EXPLANATION
GRP#	**ACD Group Number**—Enter the number of the ACD group to receive assignments by the following fields, enter from 1 to 32 (1 to 2 digits).
DAY DEST	**Daytime Overflow Destination**—If an overflow destination is desired, define the ACD or UCD group to receive this group's overflow calls. Only ACD or UCD group pilot numbers should be entered in this field. Enter a pilot directory number from 0 to 99999 (1 to 5 digits).
NIT DEST	**Nighttime Overflow Destination**—Define where a call overflows to if the ACD group is in the NIGHT (after shift) mode. Enter a directory number from 0 to 99999 (1 to 5 digits).

Any legal voice directory number in the system can be assigned as a nighttime overflow destination. Continued processing and overflows are subject to system forwarding control rules.

ALM TON **Audible Indication of Queue-size Alarm**—Specifying whether or not audible alarms will be enabled at the supervisor's station set by entering "YES" or "NO".

This field is tied to the Alarm On and Off ("ALM ON" and "ALM OFF") fields. If the alarm is enabled in this field, then an alarm will sound when the number of calls waiting in the queue exceed a set limit. Also, the alarm LED will light up as an additional indicator. The supervisor can press the ALARM key to turn off the audible alarm, but the LED indicator will remain on until the queue size drops below a lower threshold setting.

The audible alarm will turn off automatically if the number of calls drops below the lower threshold limit. If the alarm tone is not enabled in this field, the system will still provide an LED indication.

ALM ON **Queue-size Threshold to Turn the Alarm On**—Enter the number of calls waiting in queue to create an alarm condition, from 1 to 100 (1 to 3 digits).

ALM OFF **Queue-size Threshold to Turn the Alarm Off**—Set the lower threshold which must be met in order to turn off the alarm once an alarm condition has occurred. Enter the number of calls to trigger this, from 1 to 100 (1 to 3 digits).

"ALM ON" value must be greater than "ALM OFF" value for a given ACD group.

The setting should be low enough so that alarm conditions are created and disabled quickly on a continuing basis. Call holding time, work time, and the number of agents should be configured when determining the alarm threshold levels.

INT FLG **Internal Call Restriction Flag**—Indicate whether internal calls and internal call transfers are permitted for various ACD groups.

ALW	(Allowed)
DNY	(Denied)

This flag determines if internal calls may be directed to ACD groups. If internal calls are not allowed in this field, then the only calls allowed to the ACD groups are those directly terminating trunk groups, or those transferred by the attendant.

AP# **Announcement Pattern Number**—Define which announcement pattern will be used by this ACD group for calls while being held in queue, from 1 to 50 (1 to 2 digits).

This pattern defines what announcements, music, etc., will be presented to a caller waiting in queue for the next available ACD agent. (Refer to the Announcement Pattern Assignment form, CMD 353).

WRK TMR **After Call Work Timer**—Define how long the PBX will wait after one ACD call before presenting another to the same ACD agent. Enter the time in seconds, from 0 to 255 (1 to 3 digits).

This Work Time is intended to allow ACD agents time to fill out paperwork related to the previous ACD call. During this period, the system regards the agent as unavailable to take ACD calls. Work time is specified in seconds. If work time is not desired, set the timer in this field to a very low setting, such as one second.

DID/CCSA/DNIS ACD PARAMETER ASSIGNMENT (CMD 359)

This form is used to define listed directory numbers (LDNs) used for inbound ACD calls and their associated routing destinations. Routing choices for non-ISDN trunk groups are DID, CCSA, or DNIS; ISDN trunk groups must be defined as DNIS/DDI. CMD 359 enables parameter definitions to be either modified or displayed.

Prerequisite commands:
- Trunk Group Assignment (CMD 310)
- Trunk Group Parameter Assignment (CMD 420)
- DID/CCSA/DNIS Trunk Group Assignment (CMD 314)
- DID/CCSA/DNIS LDN Assignment (CMD 316)

DID/CCSA/DNIS ACD PARAMETER ASSIGNMENT

TGN	LDN	IQP1	IQP TMR	IQP2	OVF TMR	LDN NAME

Figure 7-7
DID/CCSA/DNIS ACD Parameter Assignment (CMD 359)

FIELD	EXPLANATION
TGN	**Trunk Group Number**—Assign the Trunk Group Number (1-256) for the LDN. The specified trunk group must be a DID, CCSA, or DNIS; or an ISDN trunk with DNIS/DID inward mode. (Trunk group assignment is made with CMD 310.)
LDN	**Listed Directory Number**—Enter the listed directory number that will be routed to this trunk group (2 to 15 digits). Allowable values are 00-999999999999999. The entered LDN must have been previously defined with CMD 316.
IQP1	**First Incoming ACD Call Queuing Priority**—Define the ACD priority of calls entering the system over this LDN. Priorities from 1 through 16 can be assigned, with 1 being highest priority and 16 lowest.

IQP TMR **Incoming ACD Call Queuing Priority Timer**—Define the period of time an incoming LDN call will wait in queue before being reprioritized as defined by the “IQP2” entry.

“IQP TMR” must be assigned if “IQP2” is assigned. If **<Ctrl> D** is entered in the “IQP TMR” field, both the “IQP TMR” and “IQP2” entries will be deleted. The “IQP TMR” value should be less than the value assigned to “OVF TMR.”

IQP2 **Second Incoming ACD Call Queuing Priority**—Define the new priority that will be assigned to LDN calls that wait in queue longer than the value set for “IQP TMR.”

If a value is entered for “IQP TMR,” then the “IQP2” parameter must also be set. If **<Ctrl> D** is entered in the “IQP TMR” field, both the “IQP TMR” and “IQP2” entries will be deleted. The assigned “IQP2” value should be less than or equal to the “IQP1” value.

OVF TMR **ACD Overflow Timer**—Assign the period of time an incoming LDN call will wait at the “IQP2” priority level before being routed to the assigned overflow destination for the ACD group.

The “OVF TMR” value should always be greater than the “IQP TMR” value (unless the overflow timer is set to 0). If **<Ctrl> D** is entered, the “OVF TMR” value will be deleted.

LDN NAME **Listed Directory Number Name**—Define the name associated with the LDN (1-14 characters).

DATA AND MODEM POOL ASSIGNMENTS

Commands discussed in this section include:

- Modem Pool Assignment (CMD 347)
- Data Station Assignment (CMD 360)
- Data Interface Parameter Assignment (CMD 361)
- Data Station Parameter Assignment (CMD 362)
- Data Hunting Assignment (CMD 366)
- Name Dialing Assignment (CMD 367)
- High Usage Data Destination Assignment (CMD 368)

The following controls for all data stations are defined by the Data and Modem Pool Assignments. They are:

- ☐ Equipment Number
- ☐ Data Directory Number
- ☐ Data Station Type
- ☐ Associated Directory Number
- ☐ Default Modem Pool
- ☐ Class of Service (COS) number
- ☐ Destination Restriction Level (DRL) number
- ☐ Facility Restriction Level Profile (FRLP) number
- ☐ Queuing Priority Level (QPL) number
- ☐ Data Interface Unit (DIU) Answer Method Control
- ☐ Data Directory Name

Certain Data Interface Unit (DIU) to data device protocols must also be defined in the system database. These are defined by the Data Station Parameter Assignment form (CMD 362) and are listed below:

- ☐ Data Equipment Number or Modem Pool ID Number
- ☐ Local Echo Control
- ☐ Flow Control
- ☐ Break Handling Specification
- ☐ Automatic Disconnection Control
- ☐ Local Editing Specification
- ☐ Backspace Character Definition
- ☐ Cancel Character Definition
- ☐ Display Character Definition
- ☐ User Command Interface (UCI) Control

The supporting Data Interface Unit (DIU) must also be assigned with a set of attributes, which are defined by the Data Interface Parameter Assignment form (CMD 361). These attributes include:

- ☐ Data Equipment Number or Modem Pool ID Number
- ☐ Synchronous/Asynchronous Control
- ☐ Duplex Control
- ☐ Data Terminal Equipment/Data Circuit Terminating Equipment Emulation Control
- ☐ Clock Selection Control
- ☐ Baud Rate Selection
- ☐ Parity Control
- ☐ Data Bit Selection
- ☐ Stop Bit Selection
- ☐ Detect Terminal Ready (DTR) Treatment Selection
- ☐ Data Set Ready (DSR) Treatment Selection

- ☐ Ready To Send (RTS) Treatment Selection
- ☐ Clear To Send (CTS) Treatment Selection

DIUs which are used in modem pools are supported by digital line card (DSTI) circuits. They are defined by the Modem Pool Assignment form (CMD 347).

MODEM POOL ASSIGNMENT (CMD 347)

This form is used for configuring modem pools for incoming, outgoing, or bothway calling. It also provides for the logical linkage to DSTI and BSTI circuits. Up to 32 groups of 64 modems can be defined on for PERCEPTION 4000 system.

MODEM POOL CONFIGURATION

Modem pools are configured by attaching Stand-alone Data Interface units (DIU-S) configured as Data Terminal Equipment (DTE) to digital line card (DSTI) circuits and Hayes Smart modems (or compatible modems) attached to the analog line card (BSTI) circuit and then linked to the DIU-S to the modem via an RS232C connection.

Modems and Stand-alone Data Interface Units (DIU-S) defined for modem pool use do not receive directory numbers and are not individually addressable by data station users.

Since like configuration is important for all modems in a modem pool, the Data Interface Parameter Assignment (CMD 361) and the Data Station Parameter Assignment (CMD 362) allow for a modem pool number as a primary key. This modem pool primary key information automatically applies the same configurations to all modems in the pool upon downloading, thus the craftsperson doesn't need to remember to configure all modems identically.

Selection of a modem pool by a data user or by the system administrator when configuring certain forms should always take into consideration the configuration of the modem pool so that correct baud rate, flow control, etc., will match the intended needs.

HUNTING METHOD

Modem pools use distributed hunting, which allows a more even usage of system and peripheral resources. A given BSTI or DSTI circuit may be used in one and only one modem pool group. Hunting order is defined by index number, and always searches from lowest to highest, and then wraps back around to the lowest again.

- This command has no prerequisites.

Dependent commands:

- ☐ Data Station Assignment (CMD 360)
- ☐ Data Interface Parameter Assignment (CMD 361)
- ☐ Data Station Parameter Assignment (CMD 362)
- ☐ High Usage Data Destination Number (CMD 368)

MODEM POOL ASSIGNMENT

GRP#	NAME	TYPE	INDEX	MODEM EN	DIU EN	INDEX	MODEM EN	DIU EN

Figure 8-1
Modem Pool Assignment (CMD 347)

FIELD	EXPLANATION
GRP#	**Modem Group Number**—Enter the number of the modem group to be defined on this form, from 1 to 32 (1 to 2 digits). Up to 32 groups of 64 modems can be defined.
NAME	**Display Name**—Assign a name of up to 9 ASCII characters in length (embedded spaces are allowed).
TYPE	**Modem Group Type—**Define the usage of the modem group with the following keywords: INC (Incoming call usage) OUT (Outgoing call usage) BWY (Bothway call usage)
INDEX	**Index Number—**Define the order number of modem members in the modem pool by assigning index numbers from 1 to 64 (1 to 2 digits).
MODEM EN	**Modem Equipment Number**—Enter the modem equipment numbers for the Modem Pool Group's member. Use the following charts to determine the valid ranges for various types of equipment cards. All equipment numbers must be 5 to 6 digits long. (If the first digit is a zero, then it can be dropped.)

For BSTI equipment cards, the following ranges apply:

Digits	Range	Hardware
First two digits	01~10	Shelf no.
Second two digits	01~11, 13	Card slot no.
Last two digits	01~16	Circuit no.

For XSTI cards, the following are valid ranges:

Digits	Range	Hardware
First two digits	01~10	Shelf no.
Second two digits	01~14	Card slot no.
Last two digits	01~08	Circuit no.

NOTES:
1. *Only Modem equipment numbers which are analog ports can be assigned to the Modem Pool Group(s).*
2. *Both Modem and DIU equipment numbers must belong to the same LCPU.*
3. *Modem, or DIU equipment numbers cannot be defined in more than one Modem Pool Group.*

DIU EN

Data Interface Unit (DIU) Equipment Number—Enter a DIU equipment number for the Modem Pool Group's member, from (0)10101 to 101316* or enter the keyword **ALL**.

* Use the following chart to determine valid ranges for DIU (DSTI) equipment cards:

Digits	Range	Hardware
First two digits	01~10	Shelf no.
Second two digits	01~11, 13	Card slot no.
Last two digits	01~16	Circuit no.

NOTE: Slot 13 is unavailable if the card is a 2B type.

This field defines the data interface unit equipment number for the modem pool group member. The "DIU EN" and the "MODEM EN" must belong to the same LCPU. Only DIU equipment numbers which are digital ports can be assigned to the Modem Pool Group(s). The keyword **ALL** may be used for deletion of all of the DIUs assigned to the specified group number.

NOTES:
1. *DIUs may be installed on DSTI cards configured for 1B or 2B operation. When installed on a DSTI card configured for 2B operation, a '2B' device must already be assigned to the card.*
2. *If installed on a DSTI card configured for 2B operation, the circuit's voice channel is ignored by the system.*

DATA STATION ASSIGNMENT (CMD 360)

This form is for configuring the basic call definitions of data stations which are not part of a modem pool. Definitions made on this form include the data directory number and the type of data interface unit (DIU) as stand-alone or integrated.

The Data Station Assignment form allows you to assign a default modem pool which may be used for incoming trunk calls arriving via direct inward routing or by attendant transfer. The standard class of service, destination restriction level, facility restriction level profile, queuing priority level, and the DIU's answer method are also defined here.

Prerequisite commands:

- Numbering Plan Assignment (CMD 300)
- Modem Pool Assignment (CMD 347)
- Station Assignment (CMD 330) may be needed to predefine a voice station if the entry in the "TYPE" field is an Integrated (ITG) station type.

Dependent commands:

- ☐ Data Interface Parameter Assignment (CMD 361)
- ☐ Data Station Parameter Assignment (CMD 362)
- ☐ Permanent Connection Assignment (CMD 365)
- ☐ Data Hunting Assignment (CMD 366)
- ☐ Name Dialing Assignment (CMD 367)

DATA STATION ASSIGNMENT

EQUIP #	DIU DN	TYPE	AS DN	DEF MDM	COS	DRL	FRLP	QPL	DRG	ANS	NAME

Figure 8-2
Data Station Assignment (CMD 360)

FIELD	EXPLANATION

EQUIP #

Equipment Number—Enter the directory number of the equipment assigned to the DIU. Use the following chart to determine the valid ranges for various types of equipment. All equipment numbers must be 5 to 6 digits long. (If the first digit is a zero, then it can be dropped.)

NOTE: Do not use slot 13 if the card is a 2B type.

For DSTI equipment cards, the following ranges apply:

Digits	Range	Hardware
First two digits	01~10	Shelf no.
Second two digits	01~11, 13	Card slot no.
Last two digits	01~16	Circuit no.

Only data stations within the system and incoming data trunk calls can address this DIU equipment directory number.

DIU DN

Data Interface Unit (DIU) Directory Number—Enter a DIU directory number from 0 to 99999 (1 to 5 digits) to assign the DIU to a digital line card (DSTI) circuit.

The directory number must not conflict with any other numbers in the Numbering Plan Assignment (CMD 300). Ambiguity cannot exist between these directory numbers and those in the Numbering Plan Assignment command.

If the DIU being assigned is integrated, then it will use the same equipment number that the supporting telephone uses. Each data station must be assigned a unique directory number which must not conflict with any numbering plan in the entire system.

TYPE

Data Interface Unit Type—Define the DIU as an integrated, logically paired, or stand-alone by entering one of the following keywords:

SAL (Stand-alone)
ITG (Integrated)
LGP (Logically paired) For future use.

If the DIU is logically paired, then the prime directory number of the 4000 series terminal with the same equipment number must be entered in the next field, the Associated Directory Number field.

AS DN

Associate Directory Number—Not used. This is a locked field.

DEF MDM

Default Modem Pool—Assign the number of the modem pool which will be automatically selected for incoming trunk calls that are either directly routed via the inward routing tables or via transfer from an attendant. Enter a modem pool number from 1 to 32 (1 to 2 digits).

This modem pool should be compatible with the terminating data interface unit's configuration.

It also defines modem port for outgoing trunk calls if no modem is specified directly or implicitly by the caller.

The fields for Class of Service, Destination Restriction Level, Facility Restriction Level Profile, and Queuing Priority Level must be defined for each data station in order to assign feature and facility access, as well as dialing capabilities.

COS **Class Of Service**—Enter a COS of 1 to 64 (1 to 2 digits). See "Class of Service Assignment (CMD 334)" for more information.

DRL **Destination Restriction Level**—Enter a DRL of 1 to 16 (1 to 2 digits). See "Destination Restriction Level (CMD 337)" for more information.

FRLP **Facility Restriction Level Profile**—Enter an FRLP of 1 to 32 (1 to 2 digits). See "Facility Restriction Level Profile (CMD 387)" for more information. The facility restriction level profile determines the LCR facilities available to the caller.

QPL **Queuing Priority Level**—Enter a QPL of 1 to 8 (1 digit).

DRG **Data Restriction Group**—Not used. This is a locked field.

ANS **Answer Method**—Assign the type of answering method that the DIU uses by entering one of the following keywords:

AUTO	(Auto-answer)
DTE	(Data Terminal Equipment answer)
NON	(Neither)

NAME **Directory Name**—You can assign an optional directory name, up to 9 alphanumeric characters. Embedded spaces are allowed.

DATA INTERFACE PARAMETER ASSIGNMENT (CMD 361)

Data interface parameters are defined by this command and data station parameters are defined by the Data Station Parameter Assignment (CMD 362). This form defines parameters concerning data transmission and signaling for both integrated and stand-alone data interface units (DIUs). Data parameters are divided into two parts: data interface and data station parameters.

FORM CONSIDERATIONS

When one or more parameters for a modem pool is modified, data communication characteristics of all the data circuit terminating equipment (DTE) which are grouped in the modem pool are changed.

Prerequisite commands:

- Modem Pool Assignment (CMD 347)
- Data Station Assignment (CMD 360)

Related command:

- Data Station Parameter Assignment (CMD 362)

☐ There are no dependent commands.

DATA INTERFACE PARAMETER ASSIGNMENT

EQ/MP #	SYN/ASY	DPLX	EMU	CLK	SPEED	PRTY	DATA B	STOP	DTR	DSR	RTS	CTS

Figure 8-3
Data Interface Parameter Assignment (CMD 361)

FIELD	EXPLANATION
EQ/MP #	**Equipment/Modem Pool Number**—Enter a modem pool number or a DIU equipment number, using the following:

1 to 32 for modem pool numbers (1 to 2 digits)

Or an appropriate equipment number (5 to 6 digits)

Use the following chart to determine the valid ranges for various types of equipment. All equipment numbers must be 5 to 6 digits long. (If the first digit is a zero, then it can be dropped.)

Do not use slot 13 if the card is a 2B type.

For DSTI equipment cards, the following ranges apply:

Digits	Range	Hardware
First two digits	01~10	Shelf no.
Second two digits	01~11, 13	Card slot no.
Last two digits	01~16	Circuit no.

Using an equipment number configures the DIU as data communications equipment (DCE), which is used for interfacing directly to host computers, data terminals, printers, and other computer peripherals.

By assigning a modem pool number in the first field, the DIU can be configured as data circuit terminating equipment (DTE). DTEs are generally stand-alone DIUs used for modem pools. All of the DIUs in a modem pool will have the same configuration.

SYN/ASY **Synchronous/Asynchronous**—Assign the DIU device or modem pool for asynchronous or synchronous communication by entering the appropriate keyword. The defined mode will be used to interface to the data device.

SYN (Synchronous) For future use.
ASY (Asynchronous)

DPLX **Full/Half-duplex**—Configures the DIU for full- or half-duplex operation.

HDX (Half-duplex)
FDX (Full-duplex)

In the full-duplex operation, two-way data traffic can be exchanged between DIU and the data device at the same time. In the half-duplex operation, only alternate data exchange is allowed.

EMU **DTE/DCE Emulation**—For future use. It is used to define the DIU as either emulating Data Terminal Equipment (DTE) or Data Communications Equipment (DCE) in the emulation field.

DCE (DIU functions as Data Communications Equipment)
DTE (DIU functions as Data Terminal Equipment)

When the keyword "DCE" is chosen, the DIU will function as data communications equipment and interface with a data terminal device such as a CRT. When "DTE" is chosen, the DIU will perform the data terminal equipment logical functions over the DIU female connector.

CLK **Clock Selection**—For future use. It is used for selecting an internal or external clock, or no clock at all.

ICLK	(Internal clock - PBX master clock)
XCLK	(External clock)
NON	(No clock)

NOTE: Only asynchronous communications, "No clock" is available at this time.

When "ASY" is entered in the "SYN/ASY" field, the keyword, "NON" must be entered in this field.

SPEED

Speed Selection—Define the data transfer speed in bits per second (bps) across the communications interface by using one of the following keywords.

NOTE: Only asynchronous operation is supported at this time.

AUTO	(Autobaud - asynchronous only)
50	(")
75	(")
110	(")
300	(")
600	(Asynchronous and synchronous)
1200	(")
2400	(")
4800	(")
9600	(")
19200	(")

If "AUTO" (autobaud) is selected, the DIU assumes 8 bits per character with "NON" parity or 7 data bits plus odd/even parity detection, depending on whether it's a synchronous or asynchronous operation.

For DTE mode, only 300, 600, 1200, 2400, 4800, and 9600 are valid.

PRTY

Parity Selection—Define the parity used in the data character to be transmitted or received over the communications interface. "ODD", "EVEN", and "DET" can only be used when the data bits selection field is set to 7 data bits per character.

NO	(No parity)
ODD	(Odd parity)
EVEN	(Even parity)
DET	(Detect, check for odd or even parity)

DATA B

Data Bit Selection—Enter the number of data bits to correspond with the parity setting. If the keyword, "7" or "8", is chosen, "NON" parity can be specified in the "PRTY" field. If "7" is chosen, only "ODD", "EVEN" or "DET" can be specified in the "PRTY" field.

7BIT	(7 data bits)
8BIT	(8 data bits)

STOP **Stop Bit Selection**—Assign the number of stop bits in a single character transmitted over the communication interface.

1BIT	(1 stop bit)
2BIT	(2 stop bits)

DTR **Detect Terminal Ready (DTR) Treatment**—Define the treatment of the device ready condition normally provided by the DTR interface lead.

For the DIU functioning as a Data Terminal Equipment (DTE) , the keyword, "NON" must be chosen. For the DIU functioning as a Data Communications Equipment (DCE), either "DET" or "HI" must be chosen.

NON	(No DTR treatment)
DET	(Detect DTR)
HI	(Consider DTR high at all times)

DSR **Data Set Ready (DSR) Treatment**—Specify the treatment of the Data Set Ready (DSR) signal when the DIU functions as a DTE using the listed keywords.

For the DIU functioning as a Data Communications Equipment (DCE), the keyword "NON" must be chosen. For the DIU functioning as a Data Terminal Equipment (DTE), either "DET" or "HI" must be chosen.

NON	(No DSR treatment)
DET	(Detect DSR)
HI	(Consider DSR high at all times)

RTS **Ready To Send Treatment**—Specify the treatment of the Ready to Send (RTS) treatment.

NON	(No RTS treatment)
DET	(Detect RTS)
HI	(Consider RTS high at all times)

For the DIU functioning as a Data Terminal Equipment (DTE), the keyword, "NON" must be chosen. For the DIU functioning as a Data Communications Equipment (DCE), either "DET", or "HI" must be chosen. For full duplex operation, DIU functioning as a DCE may be required to select "HI" as an input to this field.

CTS **Clear To Send (CTS) Treatment**— Define the treatment of the Clear to Send (CTS) signal when the DIU functions as a data terminal equipment.

For the DIU functioning as a Data Communications Equipment (DCE), the keyword "NON" must be chosen. For the DIU functioning as a Data Terminal Equipment (DTE), either "DET", or "HI" must be chosen.

NON	(No CTS treatment)
DET	(Detect CTS)
HI	(Consider CTS high at all times)

DATA STATION PARAMETER ASSIGNMENT (CMD 362)

The Data Station Parameter Assignment form further defines the communication protocol between the data terminal or communication equipment and the data interface unit (DIU).

Similar to the definitions on the previous form (Data Interface Parameter Assignment, CMD 361), the following parameters apply to DIUs configured as data communications equipment (DCE), as well as data terminal equipment (DTE) for modem pools, which provides compatibility between various types of equipment.

When one or more parameters for a modem pool ID is modified, data communication characteristics of all the data terminals which are grouped in the modem pool are changed.

Prerequisite commands:

- Modem Pool Assignment (CMD 347)
- Data Station Assignment (CMD 360)

Related command:

- Data Interface Parameter Assignment (CMD 361)

  - ☐ There are no dependent commands.

DATA STATION PARAMETER ASSIGNMENT

EQ/MP #	ECHO	FLOW	BRK	AUTO DC	EDIT	B SP	CANCEL	DSPL	UCI	D UCI	REMARKS

Figure 8-4
Data Station Parameter Assignment (CMD 362)

FIELD **EXPLANATION**

EQ/MP # **Equipment/Modem Pool Number**—Enter the primary key which is represented by either the DIU equipment numbers or a modem pool number.

1 to 32 for modem pool numbers (1 to 2 digits)
Or an appropriate equipment number (5 to 6 digits).

Use the following chart to determine the valid ranges for various types of equipment, which must be 5 to 6 digits long. (If the first digit is a zero, it can be dropped.)

NOTE: Do not use slot 13 if the card is a 2B type.

For DSTI equipment cards, the following ranges apply:

Digits	Range	Hardware
First two digits	01~10	Shelf no.
Second two digits	01~11, 13	Card slot no.
Last two digits	01~16	Circuit no.

ECHO **Local Echo Selection**—Enter either DIU or no local echo capability by using the following keywords:

NON (No local echo)
ECHO (DIU local echo)

User Command Interface (UCI) must be turned "ON" in order for local echo selection to be effective. UCI is the last field on this form.

FLOW **Flow Control Selection**—This field regulates the data flow across the communication interface. Select one of the following:

NFC (No flow control)
CFC (Character flow control)
RCFC (Ready To Send/Clear To Send flow control)

If no flow control is chosen, the control between data devices is transparent to the DIU. When character flow control (CFC) or ready to send/clear to send flow control is selected, the DIU will recognize and obey the XON and XOFF controls. The default is character flow control.

BRK **Break Handling**—Defines the treatment as either "pass through" or "pass through then disconnect" upon detection of the BREAK condition.

PT (Pass through)
PTD (Pass through then disconnect)

The DIU usually detects the "breaking" of a communications line and relates it to the distant end. Also, if "pass through, then disconnect" is selected, the DIU will initiate the data call clearing sequence.

AUTO DC **Automatic Disconnec**t—The disconnection criteria of the communications link between the DIU and the attached device is defined in this field through the following keywords:

DIS	(Autodisconnect disable)
ENB	(Autodisconnect enable)

When "autodisconnect enable" is selected, the DIU will disconnect the link by turning off the Detect Terminal Ready/Data Set Ready (DTR/DSR) signal as a result of data call clearing. Also, when the DIU detects that the DTR/DSR signal has been dropped from the attached device, it will initiate the data call clearing procedure.

EDIT **Local Editing Selection**—Enable or disable local editing capability:

DIS	(Disable local editing)
ENB	(Enable local editing) Default.

If "enable" is entered, then data entered in the Backspace Character (B SP), Cancel Character (CANCEL), and Display Character (DSPL) fields (which follow) must be between 001 and 127.

Note: In the following three editing character fields (Backspace, Cancel, and Display), "0" is the only value that can be duplicated.

B SP **Backspace Character**—The Backspace Character selection field only applies when local editing is enabled. When the backspace is enabled, users can use backspace key to delete the previous character. Enter a value from 1 to 3 digits, using the following selections:

0	(Disable function)
1 to 127	(Character in decimal value)

No duplicated value except "0" can be entered in these editing characters fields (i.e., the "B SP", "CNCL", and "DSPL" fields).

CANCEL **Cancel Character**—The Cancel Character field is available only when local editing is enabled. If it's enabled, the user can clear the contents of the DIU receive buffer so that new data can be entered. Enter from 1 to 3 digits to define this field:

0	(Disable function)
1 to 127	(Character in decimal value)

DSPL **Display Character**—This field only applies when local editing is enabled. If this is enabled, the user can display the contents of the DIU receive buffer. Enter a value from 1 to 3 digits, using the following definitions:

0	(Disable function)
1 to 127	(Character in decimal value)

UCI **User Command Interface**—In the User Command Interface (UCI) Selection field, define the

use of local editing characters:

ON	(Enable function)
OFF	(Disable function)

This field must be enabled in order for local echo selection, local editing selection, backspace character, cancel character, and the display character to function. The UCI should be disabled for DIUs in modem pools.

D UCI **Dial Up User Command Interface**—Use the following keywords to define whether or not this feature will be used.

ON	(Enable function)
OFF	(Disable function)

DATA HUNTING ASSIGNMENT (CMD 366)

The PERCEPTION 4000 supports up to 32 data hunt groups, each of which may have up to 64 members. A data device may belong to only one data hunt group. Data hunt groups use the distributed hunting method. Since only physical devices may be assigned as members, data hunt groups may not be members of other data hunt groups.

Prerequisite command:

- Data Station Assignment (CMD 360)

Related commands:

- Numbering Plan Assignment (CMD 300)
- Name Dialing Assignment (CMD 367)

DATA HUNTING ASSIGNMENT

GRP#	NAME	PILOT DN	MEM #	MEM DN	MEM #	MEM DN	MEM #	MEM DN	MEM #	MEM DN

Figure 8-5
Data Hunting Assignment (CMD 366)

FIELD	EXPLANATION
GRP#	**Group Number**—Enter the data hunt group number from 1 to 32 (1 to 2 digits).
NAME	**Group Name**—An optional name for the data hunt group can be entered, using from 1 to 9 ASCII characters. (Embedded spaces are allowed.)
PILOT DN	**Pilot Directory Number**—This field assigns the entry point into the hunt group. Enter a directory number of 0 to 99999 (1 to 5 digits). Individual members may be addressed directly, but if they are busy, the system will not begin hunting for other available stations. This pilot number must not conflict with other directory numbers or access codes in the system

Numbering Plan (CMD 300). A pilot directory number cannot be assigned to a physical equipment number.

MEM # **Member Index Number**—Assign an index number which will order the directory number in the data hunt group by entering one of the following:

1 to 64 (1 to 2 digits)

For each Member Index Number, the data directory number of the data device is entered. Hunting will follow this ordering in the direction of lowest to highest index numbers and then wrap around to the lowest again. Distributed hunting rules will apply for idle device selection.

MEM DN **Member Directory Number**—In this field, enter the member directory number(s) from 0 to 99999 (1 to 5 digits).

A directory number can only be a member of one data hunt group.

NAME DIALING ASSIGNMENT (CMD 367)

You can define up to 128 name strings which can be used for keyboard dialing to address internal or external destinations on this form. An internal or external destination number up to 24 digits in length may be defined for each name string. Index numbers are provided for your convenience.

Prerequisite commands:

- Data Station Assignment (CMD 360)
- Data Hunting Assignment (CMD 366)

☐ There are no dependent commands.

NAME DIALING ASSIGNMENT

INDEX	NAME	DESTINATION NUMBER	INDEX	NAME	DESTINATION NUMBER

Figure 8-6
Name Dialing Assignment (CMD 367)

FIELD	EXPLANATION
INDEX	**Index Number**—Enter a number from 1 to 128 (1 to 2 digits). This field allows you to assign an identification number to each name string.
NAME	**Character String or Name**—Assign a name string of up to 9 ASCII characters. The first character of the name string must be an alpha character; all others may be either alpha or numeric numbers. Embedded spaces are not allowed in the construction of the name string. There are a maximum of 128 maximum names/strings allowed in this form.

DESTINATION NUMBER

Internal or External Destination Number—Enter from 1 to 24 dialing digits, using the following valid characters:

0 to 9, *, #

External numbers must begin with a direct trunk group access code or the least cost routing access code. Pauses and dial tone detection are not recognized in this destination number. Feature access codes are not allowed, but system speed calling numbers are allowed.

HIGH USAGE DATA DESTINATION ASSIGNMENT (CMD 368)

Up to 32 high usage data numbers are supported by the PERCEPTION 4000 system which may be used to automatically select a modem for an outbound call. Each number will contain information on the modem pool to be selected for use when a call to the destination number is placed by a data user.

Index numbers on this form are assigned strictly for your identification purposes. For each index number, a modem pool is assigned in the modem pool field and then the frequently dialed destination is assigned in the destination number field.

Prerequisite command:

- Modem Pool Assignment (CMD 347)

  - ☐ There are no dependent commands.

HIGH USAGE DATA DESTINATION ASSIGNMENT

INDEX	MODEM ID	DESTINATION NUMBER	INDEX	MODEM ID	DESTINATION NUMBER

Figure 8-7
High Usage Data Destination Assignment (CMD 368)

FIELD	EXPLANATION
INDEX	**Index Number**—Enter an index number from 1 to 64 (1 or 2 digits).
MODEM ID	**Modem ID Number**—Assign the number of the modem pool to be defined, from 1 to 32 (1 or 2 digits).
DESTINATION NUMBER	**High Usage Destination**—Enter the frequently dialed destination by entering dialing digits. 0 to 9, *, # (up to 24 digits allowed)

LEAST COST ROUTING ASSIGNMENTS

The PERCEPTION 4000 system is equipped with a Least Cost Routing (LCR) program that allows you to configure the system for automatic selection of the least cost route or to provide facility access by grade of service. The latter is important in shared tenant systems where resale of services are desired and grade of service is a component of pricing these services.

Commands included in this section include:

- Common Carrier Assignment (CMD 344)
- LCR Digit Translation Profile Assignment (CMD 386)
- LCR Routing Table Assignment (CMD 383)
- LCR Country Code Routing Assignment (CMD 380)
- LCR Area/Office Code Routing Assignment (CMD 382)
- LCR Area Code Routing Assignment (CMD 381)
- UNP Routing Assignment (CMD 302)
- LCR Special Routing Assignment (CMD 384)
- Facility Restriction Level Profile Assignment (CMD 387)

COMMON CARRIER ASSIGNMENT TABLE (CMD 344)

The Common Carrier Assignment is for defining equal access codes which can be called up by the Least Cost Routing program when required. Up to 10 equal access codes, each five digits long and beginning with the number 10, may be defined. (Equal access codes may be otherwise referred to as "10XXX" codes.) Each of the 10 index numbers may be assigned one and only one equal access code.

■ This command has no prerequisites.

This command may be needed by:
☐ LCR Routing Table Assignment (CMD 383)

COMMON CARRIER ASSIGNMENT

INDEX	10XXX CODE	INDEX	10XXX CODE	INDEX	10XXX CODE	INDEX	10XXX CODE

Figure 9-1
Common Carrier Assignment Table (CMD 344)

FIELD	EXPLANATION
INDEX	**Carrier Index—**Assign an index number to the common carrier, from 1 to 10 (1 to 2 digits).
10XXX CODE	**Equal Access Code**—Enter up to 10 equal access codes from 10000 to 10999 (5 digits). Use the following format for equal access codes: **10 + XXX** (X = any digit, from 0 through 9)

LCR DIGIT TRANSLATION PROFILE ASSIGNMENT (CMD 386)

This form is for creating translation profiles which may be used by the Least Cost Routing program. Translation profiles contain instructions for adding or deleting area codes or toll prefixes, or for defining new prefix and suffix strings so that the final number meets the requirements for interpretation. One example is setting up a profile which can delete the area code of a 10-digit number.

Some profiles can be used by a number of different route tables. For this reason, the 32 profiles provided by the PERCEPTION 4000 system should be more than ample.

- This command has no prerequisites.

Related commands:
- Dialing Definition (CMD 317)
- Uniform Numbering Plan Assignment (CMD 301)
- LCR Routing Table Assignment (CMD 383)
- LCR Special Routing Assignment (CMD 384)

Dependent command:
- ☐ LCR Routing Table Assignment (CMD 383)

LCR DIGIT TRANSLATION PROFILE ASSIGNMENT

PFL#	DDN	DUNP	TPTMT	OPFX	DEAC	ACTMT	PREFIX STRING	SUFFIX STRING

Figure 9-2
LCR Digit Translation Profile Assignment (CMD 386)

FIELD	EXPLANATION
PFL#	**Digit Translation Profile Number**—Specify the digit translation profile to be defined by entering its corresponding number, from 1 to 32 (1 to 2 digits). The Digit Translation Profile Number field represents the information which follows, such as Delete Dialed Number, Delete UNP Location, etc., and it's used to reference the instructions from the LCR Routing Table Assignment (CMD 383) via the profile field on that form.
DDN	**Delete Dialed Number—**Specify whether the system should or should not delete the entire dialed number. ALL (Delete all dialed numbers) D01 (Delete the first dialed number) D02 (Define the first two dialed numbers) . . D24 (Delete the first 24 dialed digits) K01 (Keep the last dialed digit) K02 (Keep the last two dialed digits) . . K24 (Keep the last 24 dialed digits) NON (No deletion) This is useful for routing all special dialing to the corporate operator instead of directly to the network. In this way, calls can be screened to ensure the necessity of such a call.
DUNP	**Delete Uniform Numbering Plan (UNP) Location Code—**Specify whether the dialed UNP location codes should be deleted or not by the system. DEL (Delete UNP location code) NON (Do not delete UNP location code) The UNP code is set up through the Uniform Numbering Plan Assignment (CMD 301) and the UNP Routing Assignment (CMD 302).
TPTMT	**Toll Prefix Treatment**—Indicate whether you want the system to delete the area code, add the home area code, or leave the existing area code as is by entering area code digits or use the following keywords: ADD (Add toll prefix) DEL (Delete toll prefix—default for ISDN trunks) A10TP (Add toll prefix for 10-digit DDD call) D7TP (Delete 7 digits' toll prefix) D7A10 (Delete 7 digits' toll prefix and add toll prefix for 10-digit DDD calls) NON (Leave toll prefix unchanged—default for non-ISDN trunks) If "ADD" is entered, the toll prefix from the "TP" field of the Dialing Definition (CMD 317) is

added. Entering digits as a value replaces the toll prefix.

OPFX **Operator Prefix**—Specify whether or not the operator prefix is to be deleted. (The operator prefix is defined by the Dialing Definition command—CMD 317.)

DEL	(Delete operator prefix—default for non-ISDN trunks)
NON	(Leave operator prefix unchanged—default for ISDN trunks)

DEAC **Delete Equal Access Code**—Specify whether or not the Equal Access Code (10XXX) is to be deleted. (The Equal Access Code is defined by the Common Carrier Assignment command—CMD 344.)

DEL	(Delete 10XXX Equal Access Code—default for non-ISDN trunks)
NON	(Leave Equal Access Code unchanged—default for ISDN trunks)

ACTMT **Area Code Treatment**—Specify how the area code should be treated.

DEL	(Delete the area code)
ADD	(Add the home area code)
NON	(Leave area code as is)

PREFIX STRING **Prefix String**—In this field, you can define a string of up to 20 digits or functions, or a combination of both, that will be added as a prefix to the resultant number from the previous operations. The following digits are valid for creating a prefix string.

0 to 9, #, *

"Functions" means pauses and dial tone detection.

SUFFIX STRING **Suffix String—**In this field, you can define a string of up to 20 digits or functions, or a combination of both, that will be appended to the resultant number from the previous operations. Use the following valid digits to create a suffix string.

0 to 9, #, *

LCR ROUTING TABLE ASSIGNMENT (CMD 383)

The Least Cost Routing Table Assignment defines the available routes for a call, in the order of least to most cost routes. Each table can define at least eight routes that can be examined for an available trunk circuit to place the call.

To provide a warning tone to callers who are dialing out, certain routes can be marked with warning tone flags. Each route may call up an equal access number from the Common Carrier Assignment Table (CMD 344). Only callers who are marked to receive warning tones (according to their Queuing Priority Level) will hear them. Refer to the LCR Digit Translation Profile Assignment form (CMD 384).

Manipulation of the dialed number is also available to each route according to a set of instructions provided by the digit translation program for the assigned profile. (Refer to the LCR Digit Translation Profile Assignment form (CMD 386)).

Each route is also assigned a Facility Restriction Level Profile (FRLP) which can be used to allow a certain set of callers to access a route while denying others. This capability is defined by the relationship established by the Facility Restriction Level Profile Assignment form (CMD 387).

Prerequisite commands:
- Trunk Group Assignment (CMD 310)
- Common Carrier Assignment (CMD 344)
- LCR Digit Translation Profile Assignment (CMD 386)
- LCR Special Routing Assignment (CMD 384)

Related commands:
- LCR/Authorization Time Zone Change Assignment (CMD 343)—If time of day changes are required, this command is a prerequisite.
- Facility Restriction Level Assignment (CMD 387)

LCR ROUTING TABLE ASSIGNMENT

TBL#	ROUTE #	TGN	CARR #	FRL	WARN	PFL#	CALL TYPE	TBL#	ROUTE #	TGN	CARR #	FRL	WARN	PFL#	CALL TYPE

TBL#	ROUTE #	TGN	CARR #	FRL	WARN	PFL#	CALL TYPE	TBL#	ROUTE #	TGN	CARR #	FRL	WARN	PFL#	CALL TYPE

Figure 9-3
LCR Routing Table Assignment (CMD 383)

FIELD	EXPLANATION
TBL#	**LCR Routing Table Number**—Enter an LCR routing table number from 1 to 100, or to the system configured maximum number, whichever is smaller (1 to 3 digits). This field is for denoting an index number which is the link from the LCR/Authorization Time Zone Change Assignment (CMD 343). The PERCEPTION 4000 system supports 100 routing tables.
ROUTE #	**Route Number**—Enter a route number from 1 to 8. The system will examine the lowest numbered route choice first; therefore, it should be the lowest cost route.
TGN	**Trunk Group Number**—This field specifies which the trunk group which will be used to make the LCR call. Enter a trunk number from 1 to 256, or to the system configured maximum (1 to 3 digits). The trunk group must be a bothway or outgoing only trunk group and must be reserved for network access, and not for paging or dictation machines, etc. It cannot be duplicated among routes within one routing table.

CARR # **Carrier Number**—Enter a carrier number from 1 to 10.

This field is used to call up the indicated equal access number when a call is placed over a long distance carrier other than the facility's primary carrier.

A primary carrier is the carrier that routes long distance calls placed over the standard CO trunks and does not require an equal access (10XXX) code to be dialed. If a carrier number is defined here, the system will get the appropriate 10XXX code from the Common Carrier Assignment Table (CMD 344) and will outpulse it to the central office prior to outpulsing the destination number.

FRL **Facility Restriction Level**—Enter an FRL of 1 to 16.

This field is used for controlling caller access to certain routes in the route table while allowing access to others. This is accomplished through the relationship defined between a caller's FRLP and the route's Facility Restriction Level. This relationship is established in the Facility Restriction Level Profile Assignment form (CMD 387).

WARN **Warning Flag**—Indicate whether or not a warning tone is given to users when a route about to be examined is considered a high-cost route.

YES	(Warning flag is on)
NO	(Warning flag is off)

Any route may be flagged with the exception of the first route choice which is always considered least cost. Any number of routes may be flagged in a given route table, however only one warning tone will be issued to a caller regardless of how many high-cost routes are examined. The caller's queue priority level (QPL) is flagged to allow/deny the caller to receive a warning tone when one is encountered. (Refer to the LCR Special Routing Assignment (CMD 384)

PFL# **Translation Profile Number—**Define which digit translation profile should be used for manipulation of the dialed digit string by entering a translation profile number of 1 to 32 (1 to 2 digits).

Entering **NONE** for non-ISDN trunks indicates no digit translation. For ISDN trunks, an entry of **NONE** indicates no digit translation except for the deletion of operator prefix, toll prefix, international toll prefix, and equal access code.

These profiles are used to add or delete area codes, toll prefixes, and are extremely powerful in their capability to add and delete digits as well as define entirely new prefix and suffix strings.

CALL TYPE **Call Type**—Specify the type of ISDN service being used. Entering **<CTRL> D** in this field will delete the assigned call type. For non-ISDN trunks, skip this field.

NAT	(National Service)
INT	(International Service)
SUB	(Subscriber Service)
UNK	(Unknown)

LCR COUNTRY CODE ROUTING ASSIGNMENT (CMD 380)

This LCR Country Code Assignment form is for assigning country codes to route patterns. Each route pattern is identified by its route pattern number (RPN). All country codes not intended for default routing must be assigned to a route pattern number.

In order to perform routing over the least cost facility to international direct distance dialing, the Network Digit Analysis (NDA) feature of the PBX will examine the dialed number, identify the country code, and examine the least cost routing country code tables to determine which route pattern will ultimately be used to establish the call routing.

Numerous commands are dependent on or related to the numbering plan. Those commands are not listed here, since the Numbering

Prerequisite commands:

- Country Code Assignment (CMD 335)

Related commands:

- LCR Routing Table Assignment (CMD 383)
- LCR/Authorization Time Zone Change Assignment (CMD 343)
- LCR Special Routing Assignment (CMD 384)

☐ There are no dependent commands.

LCR COUNTRY CODE ROUTING ASSIGNMENT

RPN	CC	CC	CC	CC	CC	CC	CC	CC	CC	CC	CC	CC

Figure 9-4
LCR Country Code Routing Assignment (CMD 380)

FIELD	EXPLANATION
RPN	**Route Pattern Number**—Enter an RPN from 1 to 100 (1 to 3 digits). A routing pattern is assigned to the country code table which represents the least cost routing table to use based on the time zone in effect. Routing patterns are defined via the LCR Routing Table Assignment command (CMD 383).
CC	**Country Code**—Enter the country codes from 1 to 999 (1 to 3 digits) which will use the previous route pattern. After the route pattern number has been entered, all country codes using this routing are entered in the table. The country codes must be listed on the Country Code Assignment form (CMD 335). *NOTES:* *1. Multiple country code tables may be defined, each using a different routing pattern.* *2. A given country code may exist in one and only one Least Cost Routing Country Code table.* *3. Country codes which are dialed, but not represented in a country table will receive routing via the default routing pattern number defined in the LCR Special Routing Assignment form (CMD 384).*

LCR AREA/OFFICE CODE ROUTING ASSIGNMENT (CMD 382)

This table allows you to designate specific area/office codes to be used in Least Cost Routing (LCR). The Least Cost Routing (LCR) Area/Office Code tables are the first tables that the Network Digit Analysis (NDA) feature of the PERCEPTION 4000 PBX will examine when routing for long distance direct dialing when the least cost facility is needed. If an AC/OC table is not found, then it will examine the LCR Area Code Routing Assignment (CMD 381) to determine the route pattern to be used for the call.

Related commands:

- LCR Area Code Routing Assignment (CMD 381)
- LCR/Authorization TZ Change Assignment (CMD 343)
- LCR Routing Table Assignment (CMD 383)
- Time Zone Assignment (CMD 336)

☐ There are no dependent commands.

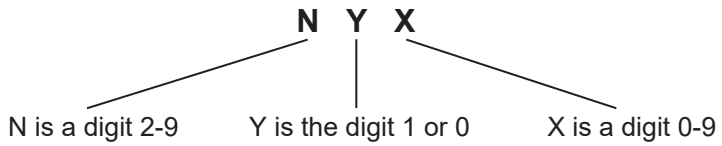
LCR AREA/OFFICE CODE ROUTING ASSIGNMENT

RPN	AC	OC	OC	OC	OC	OC	OC	OC	OC	OC	OC	OC

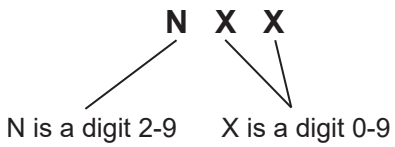
Figure 9-5
LCR Area/Office Code Routing Assignment (CMD 382)

FIELD	EXPLANATION
RPN	**Route Pattern Number**—Enter routing pattern number(s) which were previously defined on the LCR Routing Table Assignment form (CMD 383), from 1 to 100 (1 to 3 digits). The routing pattern number assigned to the table represents the Least Cost Routing table to be used based on the Time Zone in effect.

AC **Area Code**—Assign the area codes which will use the previous route pattern. Enter area codes from 200 to 919 in the "NYX" format.



OC **Office Code**—Specify the office codes which will use the previous route pattern. Enter office codes from 200 to 999 (3 digits).



Office codes within the area code to receive the same routing treatment should be listed in this field. Multiple area/office code tables may be defined, each using a different routing pattern. A given office code may exist in one and only one Least Cost Routing Area/Office Code table for a given area code.

Each Route Pattern number has a list of area codes. If two different Route Pattern numbers have the same area code, the office codes within those area codes cannot be the same.

LCR AREA CODE ROUTING ASSIGNMENT (CMD 381)

The PERCEPTION 4000 system uses the LCR Area Code tables similar to the way that it uses the LCR Country Code Routing Assignment (CMD 380). When a long distance number is dialed, the system uses Network Digit Analysis (NDA) to analyze the dialed number and examine the Least Cost Routing Area/Office Code tables first. If an AC/OC table is not found, then it will examine Least Cost Routing Area Code tables to determine the route pattern to be used for the call.

Prerequisite command:
- LCR Routing Table Assignment (CMD 383)

Related command:
- LCR/Authorization TZ Change Assignment (CMD 343)
- LCR Special Routing Assignment (CMD 384)
- Time Zone Assignment (336)

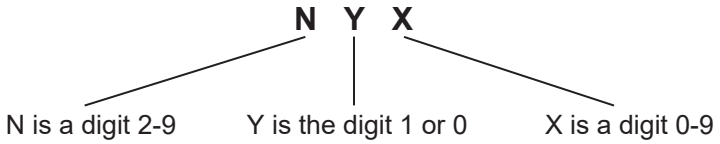
☐ There are no dependent commands.

LCR AREA CODE ROUTING ASSIGNMENT

RPN	AC	AC	AC	AC	AC	AC	AC	AC	AC	AC	AC	AC

Figure 9-6
LCR Area Code Routing Assignment (CMD 381)

FIELD	EXPLANATION
RPN	**Route Pattern Number**—Enter an RPN from 1 to 100 (1 to 3 digits).
AC	**Area Code—**Assign the area codes which will use the previous route pattern. Enter area codes from 200 to 919 in the "NYX" format.



After the route pattern number has been entered, all area codes using this routing are entered in the table. Multiple area code tables may be defined, each using a different routing pattern. A given area code may exist in one and only one Least Cost Routing Area Code table. Area codes which are dialed, but not represented in an area code table will receive routing via the default routing pattern number defined in the LCR Special Routing Assignment (CMD 384).

UNP ROUTING ASSIGNMENT (CMD 302)

This form takes the network location codes previously defined on the Uniform Numbering Plan Assignment form (CMD 301) and specifies a Route Pattern (RPN. The RPN is then used by the LCR/Authorization TZ Change Assignment (CMD 343) to direct the call over the proper facility.

This form is similar to the Country Code, Area Code, and Area/Office Code forms used to direct public network calls by Least Cost Routing. One form is required for each particular routing needed to accommodate private network calls. An RNX may be assigned to one route pattern only.

Prerequisite command:

- Uniform Numbering Plan Assignment (CMD 301)

Related command:

- LCR/Authorization TZ Change Assignment (CMD 343)

  - There are no dependent commands.

UNP ROUTING ASSIGNMENT

RPN	RNX	RNX	RNX	RNX	RNX	RNX	RNX	RNX	RNX	RNX	RNX	RNX	RNX

Figure 9-7
UNP Routing Assignment (CMD 302)

FIELD	EXPLANATION
RPN	**Route Pattern Number**—Enter an RPN from 1 to 100, or up to the configured value in the system (1 to 3 digits). The "RPN" field defines a pattern number used by the LCR/Authorization TZ Change Assignment (CMD 343) to direct a call to the proper LCR routing table. Up to 16 UNP Routing Assignment Tables may be defined in the system. A routing pattern number is required for all RNXs not intended for default routing.

RNX **Uniform Numbering Plan Location Code**—Enter a directory number from 0 to 999.

Each Route Pattern number has a list of UNP Location Codes (RNXs). A Routing Pattern Number is required for all RNXs not intended for default routing.

LCR SPECIAL ROUTING ASSIGNMENT (CMD 384)

This form is key to the configuration of the Least Cost Routing (LCR) feature. It provides the system with a dialing definition to reference whenever a call is placed via LCR. For 7-digit dialing, it defines one home area code for all calls placed through LCR so that the proper area/office or area code table may be screened for call routing.

In addition, the information in this table provides default routing for numbers dialed which are not found in LCR code tables. It defines a route pattern for special numbers, such as operators and N11 numbers. For private networking using a Uniform Numbering Plan (UNP), it provides default routing for network calls not found in the UNP Assignment (CMD 302). Finally, it defines the relationship between queuing priority levels and warning tone presentation.

Related commands:
- Dialing Definition (CMD 317)
- LCR Routing Table Assignment (CMD 383)
- Station Assignment (CMD 330)
- Trunk Group Assignment (CMD 310)
- UNP Routing Assignment (CMD 302)

LCR SPECIAL ROUTING ASSIGNMENT

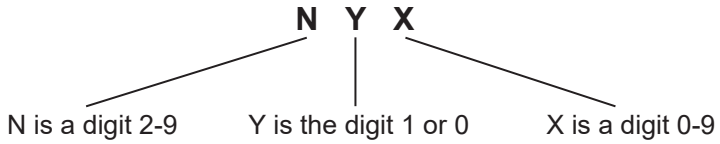
LCR DIAL PLAN	LCR HAC	DEF RPN	SPC RPN	UNP RPN	QPL	WARN

LCR DIAL PLAN	LCR HAC	DEF RPN	SPC RPN	UNP RPN	QPL	WARN

Figure 9-8
LCR Special Routing Assignment (CMD 384)

FIELD	EXPLANATION
LCR DIAL PLAN	**Least Cost Routing (LCR) Dial Plan Number—**Select one of the defined dialing definitions for all LCR calls. Since dialing definition 1 is undefined and reserved for TIE lines, the dialing definitions entered must be 2, 3, or 4 (1 digit).

LCR HAC **LCR Home Area Code—**Define the area code where the switch is located. Enter an area code from 200 to 919 in the "NYX" format.



The LCR home area code is required so seven-digit calls may be analyzed by the area/office and/or area code tables for proper route selection.

DEF RPN **Default Route Pattern—**Specify which route pattern will be used for all international, 10 digit, 1 + 10 digit, 7 digit, and 1 + 7 digit calls that aren't found in any of their respective LCR code tables.

Enter a route pattern number from 1 to 100 (1 to 3 digits).

SPC RPN **Special Dialing Number Default Route Pattern—**Enter a route pattern number from 1 to 100 (1 to 3 digits) to define which route pattern is used for 0, 0+, 00+, 01+, and N11 call routing.

UNP RPN **Uniform Numbering Plan Default Route Pattern—**This field is used for routing UNP calls that had no match in the UNP routing tables.

Enter a route pattern number from 1 to 100 (1 to 3 digits).

QPL **Queue Priority Level**—Assign a QPL from 1 to 8.

If a "QPL" value is entered, then a keyword must be entered in the "WARN" field. These two fields define whether a warning tone is heard by a caller when a more costly route is accessed if the least costly route is unavailable.

WARN **Warning Tone Flag—**Define whether or not any of the eight Queuing Priority Levels in the system will or will not have warning tones linked to higher cost calls by entering one of the following keywords:

YES	(Warning tone on)
NO	(Warning tone off)

Warning tone may be given if the preferred route is busy. Only one warning tone will be given. The warning tone is defined in the LCR Routing Table Assignment (CMD 383).

FACILITY RESTRICTION LEVEL PROFILE ASSIGNMENT (CMD 387)

The Facility Restriction Level Profile (FRLP) Assignment provides the definition of the relationships between the originator's facility restriction level profile number and the facility restriction levels assigned to the various routes within each Least Cost Routing (LCR) route table.

You should assign all desired facility restriction levels (FRL) to each FRLP number being used in the system. When a caller with a given FRLP makes a call through LCR, each route that is in the route table is checked for its respective FRL. All routes which have an FRL, and are allowed in the caller's FRLP, can be used to place the call. If a route has an FRL, but is not defined in the caller's FRLP, it will not be available for call routing.

FRL/FRLP relationships can be used to:

- Control calling party access to higher cost routes.
- Perform outgoing call restriction.
- Provide grade of service operations for shared tenant or resale of service applications.

Related commands:

- Attendant Position Assignment (CMD 370)
- Authorization Code Assignment (CMD 349)
- Data Station Assignment (CMD 360)
- Station Assignment (CMD 330)
- LCR Routing Table Assignment (CMD 383)

FACILITY RESTRICTION LEVEL PROFILE ASSIGNMENT

FRLP	F1	F2	F3	F4	F5	F6	F7	F8	F9	F10	F11	F12	F13	F14	F15	F 16

Figure 9-9
Facility Restriction Level Profile Assignment (CMD 387)

FIELD	EXPLANATION
FRLP	**Facility Restriction Level Profile (FRLP) Number**—Enter an FRLP number from 1 to 32 (1 to 2 digits).
F1 to F16	**Facility Restriction Level 1 to 16**—Enter an "X" under any of the facility restriction level columns from 1 to 16 which you wish to mark as a valid restriction.

Chapter 10

MISCELLANEOUS ASSIGNMENTS

Commands included in this section are:

- Voice Paging/Code Call Assignment (CMD 319)
- System DISA Security Code Assignment (CMD 321)
- Dictation Group/Machine Assignment (CMD 401)
- System Speed Calling Assignment (CMD 402)
- M&A Security Level and Access Assignment (CMD 403)
- System Holiday Assignment (CMD 404)
- Night Bell Assignment (CMD 405)
- System Timer Assignment (CMD 407)
- System Option Flag Assignment (CMD 408)
- SMDR Configuration Assignment (CMD 409)
- I/O Port Configuration Assignment (CMD 414)
- I/O Port Assignment (CMD 415)
- DTMF Receiver Assignment (CMD 416)
- Canned Text/Advisory Message Creation (CMD 328)

VOICE PAGING/CODE CALL ASSIGNMENT (CMD 319)

The information entered on this form defines the linkage between various types of paging, trunk circuits, and trunk groups used for hardware interface. Additionally, the translation from PERCEPTION 4000 paging zones to control code usage selection are defined here. The control codes are sent via inband Dual-tone Multi-frequency (DTMF) signaling prior to the PBX connecting the paging party. This sequence occurs quickly and automatically, so that the translation process is not apparent to users.

Prerequisite command:
- Trunk Group Assignment (CMD 310)

Related commands:
- Numbering Plan Assignment (CMD 300)
- Attendant Feature Key Assignment (CMD 371)
- Station Feature Key Assignment (CMD 331)

☐ There are no dependent commands.

VOICE PAGING/CODE CALL ASSIGNMENT

TYPE	ZONE #	TGN	CONTROL CODE #	TYPE	ZONE #	TGN	CONTROL CODE #

Figure 10-1
Voice Paging/Code Call Assignment (CMD 319)

FIELD	EXPLANATION
TYPE	**Feature Type**—Enter the keywords of the Voice Paging/Code Call features to be defined.

CC (Code Calling feature)
SPAG (System Paging feature)
EPAG (Emergency Paging feature)
ZPAG (Zone Paging feature)

ZONE #

Trunk Port Code—This field represents the System Paging Zone Number or the Code Calling Access Code that is dialed following the Paging Access Code.

The number of digits entered must correspond to the entry in the "LEN PD1" field following the appropriate paging type on the Numbering Plan Assignment form (CMD 300). This field is not used by System Paging (SPAG) or Emergency Paging (EPAG) features.

If LEN PD1 = 1	ZONE # = 0 to 9
If LEN PD1 = 2	ZONE # = 0 to 31 for Code Calling, 0 to 99 for Zone Paging

TGN

Trunk Group Number—An entry in this field is required for all feature types. Enter the number of the trunk group that the paging trunk circuit is assigned to.

Enter trunk numbers from 1 to 256, or to the maximum system configuration (1 to 3 digits).

Each circuit can be assigned to only one supporting trunk group.

Refer to the "TYPE" field in the Trunk Group Assignment form (CMD 310) to determine the trunk group types for the following definitions.

- For Code Calling (CC), the trunk group must be defined as a Code Calling type on command form 310.
- For all other features, the trunk group must be listed as a Voice Paging type on command form 310.

CONTROL CODE #

Device Control Code Number—This field specifies the device to be accessed.

Control code is not needed for the Code Calling feature. To define the Zone Paging feature, enter a numeric code from 0 to 9 to indicate which device number will be used. Enter the keyword "NON" for paging devices that do not support control codes.

When the paging access code is dialed, followed by a zone number, the information on this form provides the PBX with the information needed to select the proper trunk group and then send the required control codes to the outband device.

SYSTEM DISA SECURITY CODE ASSIGNMENT (CMD 321)

If a security code is required to access the Direct Inward System Access (DISA) feature, then this form must be filled out. Refer to the System Option Flag Assignment form (CMD 408) to determine whether or not a security code is defined for the system. (See the "DISA" option field.)

Each security code may also be assigned a unique Station Message Detail Report (SMDR) identification code. These codes will be printed out on the SMDR call record when DISA access has been successful and can be used to identify the calling party for accounting purposes.

- This command has no prerequisites or dependents.

Related command:
- System Option Flag Assignment form (CMD 408)
- Trunk Group Assignment (CMD 310)

SYSTEM DISA SECURITY CODE ASSIGNMENT

SEC LENGTH	INDEX	SEC CODE	SMDR ID	INDEX	SEC CODE	SMDR ID

Figure 10-2
System DISA Security Code Assignment (CMD 321)

FIELD	EXPLANATION
SEC LENGTH	**Security Code Length**—Set the length of all security codes in this first field by entering a value from 3 to 6 (1 digit). The default value is 6. To change the length of the security codes, refer to the System DISA Security Code Assignment command (CMD 321) in the *Maintenance & Administration Manual*.
INDEX	**Security Code Index Number**—Enter an index number from 1 to 64 (1 to 2 digits) which will be used by the DISA security table.
SEC CODE	**Security Code**—Enter from 3 to 6 dialing digits to be used as a security code. The code may be from 3 to 6 decimal digits, depending on the length specified in the "SEC LENGTH" field. Up to 64 security codes may be defined for the system and they must all be the same length.
SMDR ID	**Station Message Detail Report Identification code**—Enter an SMDR ID code, using the numbers 001 to 99999 (3 to 5 digits). SMDR identification codes need not be the same length, but must meet the 3 to 5 digit requirement. Each SMDR ID code is associated with a DISA security code and is used to be printed out in SMDR record. SMDR ID code must be unique.

DICTATION GROUP/MACHINE ASSIGNMENT (CMD 401)

You can install dictation machines on analog line circuits (BSTI, XSTI) and configure the dictation machine groups on this form. The PERCEPTION 4000 system supports up to 16 dictation machine groups, each of which may be configured with a maximum of eight dictation machines. The dictation machine group is assigned when the trunk group is defined as the dictation machine type.

Prerequisite command:

- Trunk Group Assignment (CMD 310)

This command may be needed by:

- ☐ Trunk Hunting Assignment (CMD 309)

DICTATION GROUP/MACHINE ASSIGNMENT

GRP#	DEV	EQUIP #	NAME

GRP#	DEV	EQUIP #	NAME

Figure 10-3
Dictation Group/Machine Assignment (CMD 401)

FIELD	EXPLANATION
GRP#	**Dictation Machine Group Number**—Enter the number of the dictation machine group, from 1 to 16 (1 to 2 digits), to be assigned.
DEV	**Device Identifier**—Use the numbers from 1 to 8 (1 digit) to index the machines in the group. If you want to specify a particular hunting order, remember that dictation machine groups hunt from the lowest to the highest index number.

EQUIP # **Equipment Number**—Assign each dictation machine in the group to a standard ground start circuit card.

Use the following chart to determine the valid ranges for various types of equipment. All equipment numbers must be 5 to 6 digits long. (If the first digit is a zero, then it can be dropped.)

For BSTI equipment cards, the following ranges apply:

Digits	Range	Hardware
First two digits	01~10	Shelf no.
Second two digits	01~11, 13	Card slot no.
Last two digits	01~16	Circuit no.

For XSTI equipment cards, the following ranges apply:

Digits	Range	Hardware
First two digits	01~10	Shelf no.
Second two digits	01~14	Card slot no.
Last two digits	01~08	Circuit no.

The trunk group supporting these circuits must be defined for dictation machine usage. Please refer to the Trunk Group Assignment (CMD 310).

On the actual computer form of Command 401, there is an interface field which allows the craftsperson to indicate anything special about the hardware interface. The information in this field is for notation only and has no bearing on the database.

NAME **Name Text**—Enter the name of the dictation group or machine (9 characters max.).

SYSTEM SPEED CALLING ASSIGNMENT (CMD 402)

This form defines the destination for each system Speed Calling number. Up to 1,000 system Speed Calling numbers can be programmed on the PERCEPTION 4000 system.

System Speed Calling can be used to address internal destinations, external public network destinations, and external private network destinations.

For private network numbers, and numbers that have an unconventional arrangement (such as international numbers), the pound sign (**#**) may be used to signal end-of-dialing to the system which eliminates the need for a timeout before performing cutthrough.

Related commands:

- Numbering Plan Assignment (CMD 300)
- Attendant Position Assignment (CMD 370)
- Attendant Group Assignment (CMD 372)
- Data Station Assignment (CMD 360)
- Trunk Assignment (CMD 313)
- Trunk Group Assignment (CMD 310)
- Station Assignment (CMD 330)
- Station Feature Key Assignment (CMD 331)
- Station Hunting Assignment (CMD 342)
- UCD Group Assignment (CMD 354)
- ACD Group Assignment (CMD 355)

☐ This command has no dependents.

SYSTEM SPEED CALLING ASSIGNMENT

INDX	DESTINATION NUMBER	INDX	DESTINATION NUMBER	INDX	DESTINATION NUMBER

Figure 10-4
System Speed Calling Assignment (CMD 402)

FIELD	EXPLANATION
INDX	**Index Number**—Assign Speed Calling digits, from 000 to 999 (3 digits), which system users can dial in place of the Destination Number listed in the next field on the right. The destination cannot be replaced by another system speed calling number or group speed calling number. Internal numbers can be any legal directory number, including hunt, Automatic Call Distribution (ACD), and Uniform Call Distribution (UCD) pilot numbers.
DESTINATION NUMBER	**Dialing Destination Number—**Use the following dialing digits to assign a dialing destination. An entry in this field can be up to 24 digits/function in length. 0 to 9, *, #, ** (1 to 24 digits). Each function designator is counted as one place in the possible 24, even if it takes two places to define. The functions are defined as follows:

**	**Dial tone detect**
***n**	**Timed Pause**—Where n =0-9 seconds. This key requires an additional following digit which shows how many seconds to delay execution of the remaining destination number.
#	**End of Dialing Character**—Indicates beginning of a feature access code, or the termination of the dialing digit. Timed pauses of greater than 9 seconds can be achieved via back-to-back definitions. For example, a pause of 13 seconds could be achieved by ***9*4**. This would count as 2 of the possible 24.

External destination must include a direct trunk group access code, the Least Cost Routing feature access code, or the Networking feature access code.

- The Trunk/LCR access codes must be defined in the Numbering Plan Assignment (CMD 300) prior to entering them in the "DESTINATION NUMBER" field.
- The Speed Calling access codes (both group and system) cannot be used in the "DESTINATION NUMBER" field.
- The destination number entered can be a pilot to any type of group or a directory number for a station, attendant, or data station.

M&A SECURITY LEVEL AND ACCESS ASSIGNMENT (CMD 403)

A security code must be entered to gain access to the PERCEPTION 4000 system database. The four basic levels are listed beginning with the highest capability (Manufacturer) to the lowest capability (Tenant). The capability levels are:

- Manufacturer
- Distributor
- End User
- Tenant

This form allows you to define (within the scope of your own capability) which commands are allowed or denied for a particular level, as well as the next lower level. You can also define which operations are allowed or denied within each command.

Distributor capabilities will come predefined from Toshiba. The distributor may define the remaining lower levels.

- This command has no prerequisites or dependents.

M&A SECURITY LEVEL AND ACCESS ASSIGNMENT

SEC LVL	CMD	OPER	OPER	OPER	OPER	OPER	OPER	OPER	OPER	OPER	OPER	OPER

Figure 10-5
M&A Security Level and Access Assignment (CMD 403)

FIELD	EXPLANATION
SEC LVL	**Security Level**—Define the user access level by entering one of the following security level assignments:

MFG	(Manufacturer)
DIST	(Distributor)
USER	(User)
TN1 to TN32	(Tenant 1 to Tenant 32)

Manufacturer is the most privileged level. Distributor is the second privileged level. User is the third privileged level. The lowest privileged levels are the tenant levels. There are 32 tenant levels. Each SEC LVL is assigned a SECURITY PASSWORD, a list of commands that it can access, and the degree of access for each command.

There are actually 32 different tenant security codes, each of which must be defined by the end-user or greater. Tenants may not modify any security levels.

The SEC LEV affects the capabilities of the user to access all commands in the Maintenance and Administration subsystem. The SEC LEV also is used to define the capability within each command, i.e., whether the user may only display reports or is permitted to modify the data controlled by the command.

CMD **Command Identification Number**—Enter an identification number from 000 to 999 (1 to 3 digits).

This field is used to define commands which are available for the selected security level and the capabilities of the command. You can assign capabilities that are equal to or lesser than your own capabilities; however, you cannot assign capabilities greater than those assigned to you.

OPER **Operation Keyword**—Assign which operations are available for the selected command ID, using the following keywords:

ADD	(Add)	INI	(Initialize)
ALM	(Alarm Operation)	INL	(Install)
BKP	(Backup Operation)	INS	(In-Service)
CHG	(Change)	MKB	(Make Busy)
CMP	(Compare)	MOD	(Modify)
CNT	(Count)	OOS	(Out of Service)
CPY	(Copy)	PSWD	(Password)
CRT	(Create Operation)	RES	(Restore)
DEL	(Delete)	RMV	(Remove)
DIR	(Display Directory)	RST	(Reset)
DIS	(Disable)	SET	(Set)
DSP	(Display)	SHW	(Show)
ENB	(Enable)	SUP	(Setup Operation)
FMT	(Format)	SWH	(Switchover)
FRE	(Free)	SWP	(Swap)
IDL	(Idle)	ALL	(Allow/disallow the command)

You can assign capabilities that are equal to or lesser than your own capabilities; however, you cannot assign capabilities greater than those assigned to you.

- The command access capability must be passed to each command as they are invoked by the user. MMI will use this information to control the type of access into each command.

SYSTEM HOLIDAY ASSIGNMENT (CMD 404)

On this form, you can define up to 16 holidays to be marked with various time-of-day/day-of-week controls. The set controls can affect inward routing, Class of Service definition, Destination Restriction Level definition, Facility Restriction Level definition, Queuing Priority level definition, and Least Cost Routing table selection.

Related command:

- Time Zone Assignment (CMD 336)

SYSTEM HOLIDAY ASSIGNMENT

INDEX	DATE	INDEX	DATE	INDEX	DATE	INDEX	DATE

Figure 10-6
System Holiday Assignment (CMD 404)

FIELD	EXPLANATION
INDEX	**Index Number**—Enter an index number for identification purposes, from 1 to 16 (1 to 2 digits).
DATE	**Holiday**—Enter any dates that require special holiday routing. Enter dates in the mmdd format, where mm (month) is 01 to 12, and dd (day) is 01 to 31. Use the following valid dates: 0101 to 1231 (4 digits). The entered holidays will be sorted according to date, regardless of the order that they are listed on the form.

NIGHT BELL ASSIGNMENT (CMD 405)

Night bells or chimes can be assigned to analog line circuits on this form. These analog line circuits interface with a Basic Standard Telephone Interface (BSTI) card. Night bells can be used as universal night answering devices, as well as attendant overflow devices or alternate call termination points.

- This command has no prerequisites.

Related command:
- Trunk Group Assignment (CMD 310)

This command may be needed by:
- ☐ Trunk Group Routing Assignment (CMD 307)
- ☐ Trunk Routing Assignment (CMD 308)
- ☐ DID/CCSA Trunk Group Assignment (CMD 314)
- ☐ DID/CCSA LDN Assignment (CMD 316)
- ☐ Attendant Group Assignment (CMD 372)
- ☐ Internal Call Alternate Routing Assignment (CMD 374)

NIGHT BELL ASSIGNMENT

UNA BELL #	EQUIP #	UNA BELL #	EQUIP #	UNA BELL #	EQUIP #

Figure 10-7
Night Bell Assignment (CMD 405)

FIELD	EXPLANATION
UNA BELL #	**Universal Night Answer (UNA) Bell Number**—Enter a UNA Night Bell number from BL01 to BL64 (4 alphanumeric characters).

This field assigns the device designator. UNA Night Bell is currently connected to BSTI card only.

EQUIP # **Equipment Number**—Enter the equipment number for the UNA Night Bell, from 10101 to 101408 (5 or 6 digits).

The equipment number must be unique in the system. The Equipment Number field assigns analog line circuits to the device.

Use the following charts to determine the valid ranges for various types of equipment. All equipment numbers must be 5 to 6 digits long. (If the first digit is a zero, then it can be dropped.)

For BSTI equipment cards, the following ranges apply:

Digits	Range	Hardware
First two digits	01~10	Shelf no.
Second two digits	01~11, 13	Card slot no.
Last two digits	01~16	Circuit no.

For XSTI equipment cards, the following ranges apply:

Digits	Range	Hardware
First two digits	01~10	Shelf no.
Second two digits	01~14	Card slot no.
Last two digits	01~08	Circuit no.

SYSTEM TIMER ASSIGNMENT (CMD 407)

This form is for modifying system timers which are used for some features that require timers for recalls or tone duration.

- This command has no prerequisites or dependents.

SYSTEM TIMER ASSIGNMENT

INDEX	TIMER	NAME	INDEX	TIMER	NAME

Figure 10-8
System Timer Assignment (CMD 407)

The definitions for all system timers are made on this form. Each timer has a range of values. Following are the timer index numbers, their names, ranges, defaults, and a brief description of each timer. Note that the maximum entry allowed for timer values far exceeds current needs. These values are provided to allow users flexibility in customizing their systems.

Index #	Name	Timer Value	Default	Description
1	Camp-on Timer	1 - 3600	10	The amount of time busy tone rings before off-hook Camp-on occurs
2	Callback Timer	1 - 72000	8000	The amount of time a Camp-on will exist without a callback before being automatically cancelled by the system
3	Success Tone Duration	1 - 3600	5	The length of time success tone is heard

Index #	Name	Timer Value	Default	Description
4	LCR Warning Tone Duration	1 - 3600	5	The length of time expensive route warning tone is heard
5	Station Callback Ring Duration	1 - 3600	15	The amount of time a Camp-on callback will ring a station before cancelling the station Camp-on
6	Trunk Callback Ring Duration	1 - 3600	15	The amount of time a Camp-on callback will ring a station before ceasing to wait for the next attempt or before cancelling the trunk Camp-on
7	Trunk Callback Interval Timer	1 - 14400	300	The amount of time between Camp-on callbacks due to no-answer conditions at the station being rung
8	Long Hold Recall	1 - 3600	120	The length of time a call will sit on hard hold before recalling to the station
9	Reorder Tone Timer	1 - 3600	20	The amount of time reorder tone will be given before station lockout or off-hook idle occurs
10	UNA Bell No Answer Timer	1 - 3600	300	The amount of time a call rings at the night bell before being dropped
11	Unscreened RBT Timer	1 - 3600	60	The maximum amount of time that an unscreened transfer will go unanswered before recalling the initiating party. (This includes recalling trunks for ringing transfers and recalling stations for both ringing and camp-on transfers.)
12	Call Forward - No Answer Timer	1 - 3600	30	The amount of time that a call rings at a station before forwarding - applicable to Call Forward No Answer and Call Forward Busy/No Answer features
13	Recall No Answer Timer	1 - 3600	30	The amount of time that a trunk recall will ring at a station before recalling to the attendant
14	Park Recall Timer	1 - 3600	120	The amount of time that a call may remain parked before recalling to the park originator
15	Overflow Timer	1 - 3600	120	The time a call will remain in the attendant queue before overflowing to a secondary location

Index #	Name	Timer Value	Default	Description
16	Analog Hold Timer	1 - 3600	5	The length of time a call will sit on hard hold before recalling to the station
17	Camp-on RBT Timer	1 - 3600	60	The maximum amount of time that a Camp-on transfer will go unanswered before recalling to the initiating party. (This applies only to trunk recalls.)
30	Detect Dial Tone Timer	1 - 3600	15	The amount of time a CO trunk detects dial tone.
31	Interchangeable Office Code Timer	1 - 3600	4	The amount of time the system waits for additional digits after receiving seven digits. If the timer expires before receiving more digits, the first three digits are treated as an office code. If more digits are received before the timer expires, then the first three digits are treated as an area code.
33	Voice Page Recall Timer	1 - 3600	120	The amount of time a parked call due to a meet-me paging attempt will remain parked before recalling to the initiator
34	Code Call Recall Timer	1 - 3600	120	The amount of time a parked call due to a meet-me code-call attempt will remain parked before recalling to the initiator
35	LED Error Flashing Duration	1 - 3600	5	The length of time the red LED flashes when an error occurs while programming a feature or a key
36	Supervisor Warning Tone Timer	1 - 3600	1	The amount of time that a warning tone sounds during an attendant break-in function
37	Announcement Release Timer	1 - 3600	180	The amount of time that incoming trunk calls that have no routing and are intercepted by an announcement machine are held before the call is disconnected
38	Attendant BLF Timer	1 - 3600	5	Interval of time between scans of the system to update the Busy Lamp Field on the attendant console to the current state

Index #	Name	Timer Value	Default	Description
39	Attendant Forced PB Timer	1 - 3600	30	The amount of time allowed for the attendant to answer incoming calls. If an incoming call is not answered before this timer expires, the attendant console goes to the position busy state.
40	Break-in Warning Tone Timer	1 - 3600	1	The amount of time that a warning tone sounds during an attendant break-in function (Use #36 when modifying the warning tone.)
41	ACD Call Ring No Answer Timer	0 - 3600	20	The amount of time that a call rings at an ACD station before the system redirects the call to another ACD agent. If none is available, the call rings again at the original ACD agent's station. If the timer expires before the agent answers, that station is placed into the Unavailable mode and the call is disconnected.
42	Station/Attendant ACD Queue Priority Advance Timer	0 - 9999	0	The amount of time that a station or attendant caller must wait in the ACD queue before the caller's priority level is increased.
43	Station/Attendant ACD Overflow Timer	0 - 9999	0	The amount of time that a station or attendant caller must wait in the ACD queue before overflow to another group will be attempted.

SYSTEM OPTION FLAG ASSIGNMENT (CMD 408)

This form is for defining system options. They are listed as follows, along with explanations of their functions.

Related commands:
- Numbering Plan Assignment (CMD 300)
- Attendant Group Assignment (CMD 372)
- Attendant Position Assignment (CMD 370)
- ACD Group Assignment (CMD 355)
- Miscellaneous Device Assignment (CMD 400)
- Class of Service Assignment (CMD 334)
- Destination Restriction Level Assignment (CMD 337)
- SMDR Configuration Assignment (CMD 409)

☐ This command has no dependents.

SYSTEM OPTION FLAG ASSIGNMENT

OPTION	VALUE	OPTION	VALUE	OPTION	VALUE	OPTION	VALUE	OPTION	VALUE	OPTION	VALUE

Figure 10-9
System Option Flag Assignment (CMD 408)

FIELD	EXPLANATION
OPTION	**System Option**—Enter the keyword of any features that you wish to add to the system. For each option entered, there is a corresponding value. Values for all of these options are listed under the option that they pertain to.

"OPTION" KEYWORDS

ACD (Automatic Call Distribution)

If "ACD" is entered, define how ACD calls will be distributed by entering one of the following values:

Values:	NAF	(Next available agent first, default)
	MIF	(Most idle agent first)

CAMP (Direct Inward Dialing (DID) camp-on flag)

Allow or don't allow a Direct Inward Dialed call to camp-on to a busy station.

Values:	YES	(Enable, default)
	NO	(Disable)

CAMQ (Camp-on queue preemption)

Enable or disable this function with the following "VALUE" keywords.

Values:	YES	(Enable, default)
	NO	(Disable)

DISA (Direct Inward System Access security code requirement)

Specify whether it is required or not.

Values:	YES	(Enable, default)
	NO	(Disable)

FACL (Forced Account Code Length to be Validated)

Specify valid forced account code length.

Values:	DIG0 ~ DIG15	(Code Length)
	DIG0	(Default)

"OPTION" KEYWORDS

IQP1 (First Incoming ACD Call Queueing Priority)

Specify priority for first ACD call in queue.

Values:	1 ~ 16	(Priority Level)
	16	(Default)

IQP2 (Second Incoming ACD Call Queueing Priority)

Specify priority for second ACD call in queue. Priority must be lower than that assigned to “IQP1.”

Values:	1 ~ 16	(Priority Level)
	NONE	(DISA security code required—default)

ISMDR (Internal Call SMDR Flag)

Enable or disable this function with the following "VALUE" keywords.

Values:	YES	(Enable)
	NO	(Disable, default)

LCR (Least Cost Routing call restriction method)

If you enter "LCR" in the "OPTION' field, then you must also enter a corresponding keyword in the "VALUE" field.

Indicate whether LCR call restriction should be by facility restriction level only or by facility restriction level and destination restriction level.

Values:	FRLP	(FRLP only, default)
	BOTH	(DRL and FRLP)

MUSC (Music-on-Hold tone)

Assign either internal synthesized music or one of four external music sources by entering one of the following values.

Values:	IMT	(Internal music tone, default)
	MS01	(External music tone 1)
	MS02	(External music tone 2)
	MS03	(External music tone 3)
	MS04	(External music tone 4)
	QT	(Quiet Tone)

"OPTION" KEYWORDS

MXCM (Maximum Number of Camp-on Calls)

Assign the maximum number of Camp-on calls allowed per station.

Values: 1 - 256 (Default = 4)

NCFA (No Class of Service Feature Access Code intercept treatment method)

Enter one of the following values to indicate the treatment when dialing a Feature Access Code which is not allowed by the Class of Service.

Values:	AP01~AP50	(Announcement pattern 1 to 50)
	ROT	(Re-order tone, default)

NCTA (No Class of Service trunk access code intercept treatment method)

Indicate the type of treatment caused by dialing a trunk access code which has no user Class of Service assigned. Specify whether the call will be handled by an attendant or attendant group, announcement pattern, or reorder tone.

Values:	0-99999	(An attendant or attendant group directory number, 1 to 5 digits)
	AP01~AP50	(Announcement pattern 1 to 50)
	ROT	(Re-order tone, default)

PX1~PX16 (Station ID Prefix))

Assign station ID preflix.

Values: 1~16 (Prefix)

QUE (Trunk queuing method)

Select either First-in/First-out (FIFO) queuing or priority queuing for the "QUE" option.

Values:	FIFO	(First In/First Out queuing)
	PRI	(Priority queuing, default)

"OPTION"
KEYWORDS

RDRL (Restrict Destination Restriction Level (DRL) intercept treatment method)

Define the type of treatment for dialing an outside number which is restricted by DRL. Enter one of the following values.

Values:	0-99999	(An attendant or attendant group directory number, 1 to 5 digits)
	AP01~AP50	(Announcement pattern 1 to 50)
	ROT	(Re-order tone, default)

VACC (Verified Option Flag for Account Code)

Specify whether or not account codes will be verified.

Values:	YES	(Verify account codes—default)
	NO	(Do not verify account codes)

VDNI (Vacant directory number intercept treatment method)

Specifies the treatment caused by dialing a number which is not in the system Numbering Plan Assignment (CMD 300). Indicate whether these calls will be sent to an attendant or attendant group, announcement pattern, or reorder tone treatment.

Values:	0-99999	(An attendant or attendant group directory number, 1 to 5 digits)
	AP01~AP50	(Announcement pattern 1 to 50)
	ROT	(Re-order tone, default)

WARN (Attendant/ACD monitor warning tone)

Indicate whether or not Attendant and ACD supervisor monitoring warning tones should be applied.

Values:	YES	(A warning tone is sent)
	NO	(No warning tone is sent, default)

SMDR CONFIGURATION ASSIGNMENT (CMD 409)

The PERCEPTION 4000 system allows you to select whether the Station Message Detail Recording (SMDR) will log internal or external calls on a system-wide basis or only those calls using specific trunk groups. With external calls, either all calls or only toll calls can be recorded.

Prerequisite command:

- Trunk Group Assignment (CMD 310)

Related command:

- Forced Account Code Toll-free Tables (CMD 352)
- System Option Flag Assignment (CMD 408)

☐ There are no dependent commands.

SMDR CONFIGURATION ASSIGNMENT

TIMER	SMDR INC	SMDR OUT	TGN	INC CALLS	OUT CALLS	TOLL CALLS ONLY

Figure 10-10
SMDR Configuration Assignment (CMD 409)

FIELD	EXPLANATION
TIMER	**Station Message Detail Report (SMDR) Threshold Timer**—Enter the number of seconds an outgoing trunk call must exist before determining that the call should be recorded. Use from 0 to 40 seconds (1 or 2 digits). This timer is used in the absence of answer supervision by the central office.

SMDR INC **Enable Incoming Station Message Detail Report (SMDR) Recording**—Enter one of the following to enable or disable the SMDR recording for incoming calls.

YES (Enable)
NO (Disable)

SMDR OUT **Enable the Outgoing Station Message Detail Recording (SMDR)**—Enter one of the following to enable or disable the SMDR recording for outgoing calls.

YES (Enable)
NO (Disable)

TGN **Trunk Group Number to be Monitored**—Enter a TGN from 1 to 256, or to maximum system configuration (1 to 3 digits).

The maximum trunk group number will be based on system's configuration.

The Trunk Group Number, Screen Incoming Calls, Screen Outgoing Calls, and Toll Calls Only fields allow you to indicate for all trunk groups defined in the system whether incoming and/or outgoing trunks will be allowed or denied. For outbound calls, you can specify for each trunk group whether all outgoing calls, or only toll calls should get recorded.

INC CALLS **Screen Incoming Calls**—Enable or disable the selection of the incoming SMDR recording for the specified trunk group number.

YES (Enable)
NO (Disable)

OUT CALLS **Screen Outgoing Calls**—Enable or disable the selection of the outgoing SMDR recording for the specified trunk group number. If this field is set to **YES** (On), outgoing calls will be recorded. If set to **NO** (Off), the following field selection (for TOLL CALLS ONLY) has no effect.

YES (Enable)
NO (Disable)

*NOTE: The next field, "TOLL CALLS ONLY", is a subset of the "OUT CALLS" field. To record **all outgoing calls**, set "OUT CALLS" to **YES** and "TOLL CALLS ONLY" to **NO**. To record **toll calls only**, set both "OUT CALLS" and "TOLL CALLS ONLY" to **YES**.*

TOLL CALLS ONLY **Toll Calls Only Recording—**Define the selection of toll calls only recording. If this field is set to **YES**, the Forced Account Code Toll-free tables (programmed in CMD 352) must be defined.

YES (Enable)
NO (Disable)

I/O PORT CONFIGURATION ASSIGNMENT (CMD 414)

This form is for defining the protocols, timers, and controls necessary for the I/O port to communicate with the outboard device. The type of flow control, baud rate, parity, number of bits, etc., are assigned on this form.

- This command has no prerequisites or dependents.

I/O PORT CONFIGURATION ASSIGNMENT

FCT	MCT	IOP#	TYPE	MC	MC CODE	LOT	DATA BIT	STOP	PRTY	SPEED

FCT	MCT	IOP#	TYPE	MC	MC CODE	LOT	DATA BIT	STOP	PRTY	SPEED

FCT	MCT	IOP#	TYPE	MC	MC CODE	LOT	DATA BIT	STOP	PRTY	SPEED

Figure 10-11
I/O Port Configuration Assignment (CMD 414)

FIELD	EXPLANATION
FCT	**Flow Control Timer**—Enter the number of seconds that the flow control timer will be based on, from 1 to 600 (1 to 3 digits). The initial value is set at 60 seconds. *NOTE: Data entered in in the "FCT" (Flow Control Timer) and "MCT" (Motor Control Timer) fields will apply to all I/O ports.*
MCT	**Motor Control Timer**—Define the number of seconds that an idle terminal will be allowed to run before the motor will be turned off. Enter the number of seconds, from 1 to 1800 (1 to 4 digits). The initial value is set at 600 seconds.

IOP# **I/O Port Numbe**r—Enter the number of the I/O port on the MISC card that is being defined, from 1 to 4 (1 digit).

If port "1" is entered, the "DATA BIT", "STOP", "PRTY", and "SPEED" fields pertaining to port "1" will not require entries because these fields will be locked.

The following information is defined uniquely for each I/O port.

TYPE **Flow Control Type**—Specify what type of flow control protocol will be used by entering one of the following keywords:

RCFC (Request-to-Send/Clear-to-Send (RTS/CTS) control method based on signals at the hardware interface)
DC13 (DC1/DC3 control method, i.e., XON/XOFF method)
BOTH (Use both handshake methods above)
NON (Use no flow control)

MC **Motor Control Setting**—This field allows you to enable or disable the motor control.

YES (Enabled)
NO (Disabled)

MC CODE **Motor Control Codes**—Define the motor control ON/OFF codes in hexadecimal by entering a value from 0000 to 7f7f (4 digits).

The first two digits are the code for the motor ON command and the next two are the code for the motor OFF command.

LOT **Logout Timer Value**—This field is for checking if a login session has been idle long enough to warrant automatic logout. Enter the time in seconds, from 1 to 1800 (1 to 4 digits).

The initial value is set at 600 seconds (10 minutes).

DATA BIT **Number of Data Bits**—Define how many data bits are being set in the communications framing.

7BIT (Specifies 7 data bits in the communication framing)
8BIT (Specifies 8 data bits in the communication framing)

STOP **Number of Stop Bits**—Define the number of stop bits in the communications framing.

1BIT (To specify 1 stop bit in the communication framing)
2BIT (To specify 2 stop bits in the communication framing)

PRTY **Parity Setting**—Define the type of parity being used by entering one of the following. An entry must be made in this field.

ODD (Odd parity is used to determine the parity bit's value)
EVEN (Even parity is used in determining the parity bit)
NON (No parity checking, i.e., no parity check)

SPEED **Speed Rate Selection**—Enter one of the following valid speed rates:

300	(Baud rate is 300 bits per second, i.e., bps)
1200	(Baud rate is 1200 bps)
9600	(Baud rate is 9600 bps)
19200	(Baud rate is 19200 bps)

RELATIONSHIPS

- The flow control and the motor control timer affect every port. So they are independent of the I/O port number.
- All port dependent fields (from the "TYPE" field to "BAUD" field) require that the I/O port number be specified in the "IOP#" field.
- The "MC CODE" field is significant only when motor control is selected, i.e,. when keyword "Y" is specified in the "MC" field.

I/O PORT ASSIGNMENT (CMD 415)

On this form, you can define each I/O port as either a standard maintenance and administration (TTY type) port, or as an applications processor port. And, if the I/O port is configured as a TTY port, multiple applications can interface with one physical circuit.

- This command has no prerequisites or dependents.

Related command:
- I/O Port Configuration Assignment (CMD 414)

I/O PORT ASSIGNMENT

IOP#	TYPE	APPL	APPL	APPL	APPL	APPL	APPL	APPL	APPL	APPL	APPL	APPL

IOP#	TYPE	APPL	APPL	APPL	APPL	APPL	APPL	APPL	APPL	APPL	APPL	APPL

IOP#	TYPE	APPL	APPL	APPL	APPL	APPL	APPL	APPL	APPL	APPL	APPL	APPL

Figure 10-12
I/O Port Assignment (CMD 415)

FIELD	EXPLANATION
IOP#	**I/O Port Number**—Enter the number of the I/O port to be assigned, from 1 to 4 (1 digit).
TYPE	**I/O Port Type**—Define the I/O port type as an M&A console or an applications processor by entering one of the following keywords: TTY (Maintenance and administration console) AP (Application processor) **TTY:** If "TTY" is entered, then the I/O port can be assigned the usage of maintenance console 1 through 4, system status report, error or fault report, traffic report, or Station Message Detail Report (SMDR). Combinations of some or all of the above may be assigned to any port designated as "TTY" type.

AP: If the I/O port is defined as an applications processor by entering "AP" in the "TYPE" field, then the Automatic Call Distribution/Management Information System (ACD/MIS) and Voice Messaging System (VMS) applications may be assigned to this port. Both of these applications require a dedicated I/O port and may not share that port with other devices or subsystems for any other reason.

APPL **Application Usage**—Defines the usage of the I/O port, using the following:

TTY type:

MA	(Maintenance console)
SSR	(System Status Report)
EFR	(Error or Fault Report)
TFR	(Traffic Report)
SMDR	(Station Message Detail Report)

AP type:

ACD	(Automatic Call Distribution)
VMS1	(Voice Message Status Type 1)
VMS2	(Voice Message Status Type 2)
VMS3	(Voice Message Status Type 3)

DTMF RECEIVER ASSIGNMENT (CMD 416)

This form is for defining how Dual-tone Multi-frequency (DTMF) receivers are installed in the system. DTMF receivers are required for DTMF Direct Inward Dialing (DID) trunks, DISA trunks, and all single-line DTMF analog telephones in the system. Each DTMF receiver contains 16 circuits.

- This command has no prerequisites or dependents.

DTMF RECEIVER ASSIGNMENT

SHELF #	CARD #	SHELF #	CARD #	SHELF #	CARD #

Figure 10-13
DTMF Receiver Assignment (CMD 416)

FIELD	EXPLANATION
SHELF #	**Shelf Number of DTMF Receiver**—Enter a shelf number from 1 to 10 (1 to 2 digits).
CARD #	**Card Number of DTMF Receiver**—Enter a card number from 1 to 11, 13 (1 to 2 digits). *NOTE:* *Cards 11 and 12 are installed together; card 11 represents both.* *Cards 13 and 14 are installed together; card 13 represents both.*

CANNED TEXT/ADVISORY MESSAGE CREATION (CMD 328)

This form is used to modify canned text and advisory message information that appears on HDT2020SD telephones and the attendant console displays. It is also used to modify the console identification information that appears on the console's electroluminescent display unit and the greeting that is sent whenever a data call is placed into the system.

This command has no prerequisites.

CANNED TEXT/ADVISORY MESSAGE CREATION

TYPE	INX	MESSAGE TEXT	TYPE	INX	MESSAGE TEXT	TYPE	INX	MESSAGE TEXT

Figure 10-14
Canned Text/Advisory Message Creation (CMD 328)

FIELD	EXPLANATION
TYPE	**Message Type**—Enter the type of message that is to be modified. CAN (Canned Text) ADV (Advisory Message) ATT (Attendant EL Display Text) DAT (System Message for Data Calls)
INX	**Index Number**—Identify the specific text line or advisory message (1-8), which type of EL display information (1-3), or which system message for data calls (1-2) will be modified.
MESSAGE TEXT	**Message Text**—Enter the text that the selected message type will be modified with: 30 characters maximum for canned text and advisory messages; 70 characters maximum for attendant EL display messages and system messages for data calls.

ISDN ASSIGNMENTS

This chapter contains the forms necessary to program Release 2 features that enable the Perception 4000 user to take advantage of the Integrated Services Digital Network (ISDN).

This chapter covers the following data base commands:

- ISDN Channel Group Assignment (CMD 423)
- ISDN Channel Group Hunting Assignment (CMD 424)
- ISDN IPRC and IPRI Card Assignment (CMD 422)
- ISDN Service Min/Max Assignment (CMD 425)
- ISDN Trunk Group Parameter Assignment (CMD 421)

For ease in programming ISDN, a section is provided in this chapter, which describes the appropriate order in which ISDN commands should be administered. Within this section—entitled *ISDN-PRI Administration Procedures*—the purpose of each ISDN command is summarized, indicating the command's role in ISDN-PRI operation.

ISDN-PRI ADMINISTRATION PROCEDURES

The following steps are necessary to configure ISDN-PRI in P-4000.

Step 1: MANDATORY
Install IPRI and IPRC Cards (CMD 422)

Step 2: OPTIONAL
Configure Time Zones for ISDN (CMD 336)

This will specify the time zone definitions for ISDN zone class (IS01 to IS04) which will be used in command 423. Each zone class can have up to four time zones.

The default value for this command is zone-1 during all the 24 hours for IS01 to IS04.

Step 3: MANDATORY
Configure ISDN Channel Group (CMD 423)

This command configures the ISDN channel group by specifying the channel group number and the associated B-channels in that group. B-channels are specified as IPRI-card port numbers (1-24).

Step 4: OPTIONAL
Configure Channel Hunting Direction (CMD 424)

This command is used to specify the channel hunting sequence of channels within a given Channel Group.

Step 5: MANDATORY
Configure ISDN Trunk Group (CMD 310)

This command configures the ISDN Trunk Groups (TGN) by specifying the trunk group number and the associated channel group (CGN). Each subscribed ISDN service corresponds to one ISDN TGN. Unlike TGNs associated with traditional trunks (Tie, T1, FX, etc.), ISDN TGNs generally do not have

dedicated channels associated with them. All the TGNs corresponding to one Channel Group share the channels in that Channel Group.

Step 6: MANDATORY
Configure min-max and BCC (CMD 425)

This command is used to control the level of service for a given ISDN service in a given time zone, indicated by its TGN, by specifying two channel thresholds:

MIN: This specifies a minimum number of channels to be always available for this service, such as SDN, Megacom, Megacom-800, etc.

MAX: This specifies the maximum number of channels that can ever be used for this service.

In addition to controlling the level of service, this command can also be used to specify whether the service should be restricted to voice or data calls.

Step 7: OPTIONAL
Configure Incoming Dialing and Display Mode (CMD 421)

Step 8: OPTIONAL
Configure DID prefix numbers (CMD 408)

This command is used to configure the DID prefix number to be appended to the station DN, which then becomes the calling party number to be sent to network for an outgoing call.

Step 9: OPTIONAL
Configure Station DID prefix (CMD 329)

This command is modified to add a parameter which is used to specify if the station DN is a DID number or not.

The DEFAULT value for this parameter is non DID station number.

Step 10: MANDATORY
Configure ISDN TGN Access Codes (CMD 300)

This command is used to configure the access code for the TGN (ISDN Service) configured in command 310.

Step 11: OPTIONAL
Configure Class of Service (CMD 334)

This command will add the service (ISDN TGN) to a given COS, which is used by the station to access the ISDN TGN.

Step 12: MANDATORY (For DIT Mode)
Configure Incoming TGN routing for DIT trunks (CMD 307)

This command is used to specify the incoming termination destination for ISDN TGN having DIT termination mode.

Step 13: MANDATORY (For DNIS Mode)
Configure DNIS (DID/CCSA) LDN assignment (CMD 316)

This command will configure the LDN and the corresponding internal termination destination for the specified LDN for a given time zone.

Step 14: OPTIONAL
Configure DNIS name (CMD 359)

This command is used to configure the DNIS name to be associated with a given LDN as defined in command 316 above.

ISDN CHANNEL GROUP ASSIGNMENT (CMD 423)

This form is used to add, delete, display, or modify one or more ISDN channel groups. It can also be used to adjust each channel group's related time zone class, equipment number, and channel structure.

Prerequisite commands:
- ISDN IPRC and IPRI Card Assignment (CMD 422).
- Time Zone Definition (CMD 336)

ISDN CHANNEL GROUP ASSIGNMENT

CGN	TZ CLS	EQUIP#	B STR	H0 STR	H11 STR

Figure 11-1
ISDN Channel Group Assignment (CMD 423)

FIELD	EXPLANATION
CGN	**Channel Group Number**—Assign the channel group number (1-32).
TZ CLS	**Time Zone Class**—Assign the channel group to a time zone class. (Time zones are assigned to classes by CMD 336.) IS01 (ISDN time zone class 1) IS02 (ISDN time zone class 2) IS03 (ISDN time zone class 3) IS04 (ISDN time zone class 4)
EQUIP #	**Equipment Number**—Designate the equipment number (10101-101424) of the channel group's associated trunk group (IPRI card). The first one or two digits of the entry represent the number of the shelf containing the trunk circuit card. The second two digits represent the card number; and the last two digits represent the circuit number.

B STR	**B Channel Structure**—Enter “YES” to enable calls requiring a B channel. The “NO” option is reserved for future use.
H0 STR	**H0 Channel Structure**—This is a locked field. No entry can be made.
H11 STR	**H11 Channel Structure**—This is a locked field. No entry can be made.

ISDN CHANNEL GROUP HUNTING ASSIGNMENT (CMD 424)

This form is used to modify or display the channel group hunting sequence between two IPRI cards. It also is used to modify the hunting direction between channel groups/channels.

Prerequisite command:

- ISDN IPRC and IPRI Card Assignment (CMD 422)

ISDN CHANNEL GROUP HUNTING ASSIGNMENT

CGN	SEQ#	IPRI	DIR	CGN	SEQ#	IPRI	DIR	CGN	SEQ#	IPRI	DIR

Figure 11-2
ISDN Channel Group Hunting Assignment (CMD 424)

FIELD	EXPLANATION
CGN	**Channel Group Number**—Specify the Channel Group (1-32) for which hunting assignments are to be defined.
SEQ#	**Sequence Number**—Assign a sequence number (1 or 2) to the channel group. This number defines which trunk groups/channel groups will have hunting priority.
IPRI	**Related IPRI Card Position**—Specify the equipment number (101 to 1012) of the IPRI card associated with the channel group. The first one or two digits represent the number of the shelf in which the IPRI card is installed. The last two numbers represent the card slot number.
DIR	**Hunting Direction**—Specify the direction used for hunting among the channel groups/channels supported by the IPRI card. The default value is Backward. FRWD (Forward—from channel 1 to channel 24) BACK (Backward—from channel 24 to channel 1)

ISDN IPRC AND IPRI CARD ASSIGNMENT (CMD 422)

This form is used to assign the ISDN Primary Rate Controller (IPRC) and ISDN Primary Rate Interface (IPRI) cards. It is also used to add, delete, modify, or display IPRC protocol type, layer 2 mode, the HDLC inversion flag, D-channel position, IPRI interface identifier, IPRI D4/ESF framing and the line code scheme.

Prerequisite command:
There are no prerequisites for this command.

ISDN IPRC AND IPRI CARD ASSIGNMENT

CARD#	PROTOCOL	L2 MODE	HDLC	T303	IPRI	INF ID	D CH	FRAME	CODE

Figure 11-3
ISDN IPRC and IPRI Card Assignment (CMD 422)

FIELD	EXPLANATION
CARD #	**IPRC Card Number**—Specify the equipment number (101 to 1014) of the IPRC card. The first one or two digits represent the number of the shelf containing the card; the last one or two digits represent the number of the utilized card slot.
PROTOCOL	**Protocol Type**—Specify the protocol type that will be used by the ISDN Primary Rate Controller (IPRC) card. 4ESS (AT&T user protocol) 5ESS (AT&T user protocol) TPVT (Toshiba Private Protocol, reserved for future use)

L2 MODE **Layer 2 Mode**—This field is locked. The display in this field indicates which mode is used for the ISDN Layer 2.

NET (Network mode)
USER (User mode)

HDLC **HDLC Inversion Flag**—This field is locked. If B8ZS has been specified in the "CODE" field, then the keyword "NO" will be displayed in this field.

NO (Without HDLC inversion—default)
YES (With HDLC inversion)

T303 **Layer 3 Timer**—Specify the timer (2-255 seconds) that will be used for Layer 3. Default is 4 seconds.

IPRI **Related IPRI Card Position**—Specify the equipment number (101 to 1012) of each IPRI card that is associated with the IPRC card (two maximum). The first one or two digits represent the shelf on which the card is located; the second one or two digits represent the card slot in which the card is installed.

INF ID **Interface Identifier**—Enter the interface ID (0 or 1) for the IPRC card. If a D-channel IPRI card is used, the interface ID must be set at 0.

D CH **D-Channel Card Position**—Default value for this field is **NO.** However, when the IPRC and the first IPRI cards are assigned, **YES** must be entered. If a second IPRI card is assigned to the IPRC card, then a **NO** entry is allowed. At least one IPRI card assigned to the IPRC must have a D-channel assigned.

FRAME **IPRI Card Framing**—This field is locked and displays the type of framing (D4 or ESF) used by the IPRI card.

CODE **Line Code Scheme**—This field is locked and displays the type of line code scheme used by the IPRC (B8ZS or ZCS).

ISDN SERVICE MIN/MAX ASSIGNMENT (CMD 425)

This form is used to modify (or display) an ISDN trunk group's bearer capability class (BCC). It is also used to modify or display the minimum and maximum limits used for both Call-by-Call Service Selection (non-dedicated ISDN service) and dedicated ISDN service.

With Call-by-Call Service Selection, the assigned minimum and maximum limits define how many channels in a group can be used for a specific ISDN service. With dedicated ISDN service, minimum and maximum limits define user access to channels during specified time periods.

Prerequisite commands:

- Trunk Group Assignment (CMD 310)
- Channel Group Assignment (CMD 424)
- Time Zone Assignment (CMD 336)

ISDN SERVICE MIN/MAX ASSIGNMENT

TGN	TIME ZONE#	MIN SVC	MAX SVC	VOC	31K	64U	64R	H0U	H0R	H11U	H11R

Figure 11-4
ISDN Service Min/Max Assignment (CMD 425)

FIELD	EXPLANATION
TGN	**Trunk Group Number**—Specify the Trunk Group (Number 1-256) to be modified.

TIME ZONE # **ISDN Time Zone Class Number**—Specify the Time Zone Class (1~4) to which the assigned minimum/maximum limits will apply. The actual day/hour time periods are defined by CMD 336. Time periods are assigned to ISDN Time Zone Classes by CMD 423.

1 = ISO1 (ISDN Time Zone Class 1)
2 = ISO2 (ISDN Time Zone Class 2)
3 = ISO3 (ISDN Time Zone Class 3)
4 = ISO4 (ISDN Time Zone Class 4)

MIN SVC **Minimum Number of Channels Reserved**—Define the number of channels (0-47) within the trunk group's associated channel group that will always be available for the trunk group's assigned ISDN service.

MAX SVC **Maximum Number of Channels Reserved**—Define the maximum number of channels (0-47) within the trunk group's associated channel group that will ever be used for the trunk group's assigned ISDN service.

VOC **Bearer Capability**—**Voice or Voice-Grade Data**—If the trunk group is to be used for voice transmission, enter **YES.** If the trunk group is to be used for data transmission only, enter **NO.**

31K **3.1 KHz Audio**—If the trunk group is to be used for data transmission only, enter **YES.** If the trunk group is to be used for voice transmission, enter **NO.**

64U **64K Unrestricted Digital**—This is a locked field and is reserved for future use.

64R **64K Restricted Digital**—This is a locked field and is reserved for future use.

H0U **H0-384K, Unrestricted Digital**—This field is locked and is reserved for future use.

H0R **H0-384K, Restricted Digital**—This field is locked and is reserved for future use.

H11U **H11-1536K, Unrestricted Digital**—This field is locked and is reserved for future use.

H11R **H11-1536K, Restricted Digital**—This field is locked and is reserved for future use.

ISDN TRUNK GROUP PARAMETER ASSIGNMENT (CMD 421)

This form defines the attributes of one or more ISDN trunk groups. The total number of ISDN trunks with DNIS/DDI inward-routing mode assigned and the total number of non-ISDN DID/DNIS/CCSA trunks combined can not exceed 16.

Prerequisite commands:

- Trunk Group Assignment (CMD 310)

ISDN TRUNK GROUP PARAMETER ASSIGNMENT

TGN	MODE	DISP	OUT CPN	CPN LDN	TRK GRP NAME

Figure 11-5
ISDN Trunk Group Parameter Assignment (CMD 421)

FIELD	EXPLANATION
TGN	**Trunk Group Number**—Specify the trunk group (Number 1-256) whose attributes will be modified.
MODE	**Inward Routing Mode**—Define the inward routing procedure that will be applied to the ISDN trunk group. DIT (Direct Inward Termination Mode—destination is determined by the termination point assigned to the channel group for the current time zone—CMD 307) DDI (Direct Dial-In Mode—destination is determined by the Called Party Number) DNIS (Dialed Number Identification Service—destination is determined by the current time zone; similar to DIT, but DNIS does not use any digit translation)

DISP **Display Option for Incoming Calls**—Define the type of information that will appear on display telephones or display screens when calls are received across the ISDN trunk.

NAME (Trunk group's name)
CDPN (Called party number)
CGPN (Calling party number)
DNIS (DNIS name—DNIS must have been set in the "MODE" field)
CGDN (Calling party number plus the first three characters of the DNIS name—DNIS must have been set in the "MODE" field)

OUT CPN **Outgoing Call Number Presentation Flag**—Specify whether the calling party's number will be presented at the distant end on out-bound calls.

ALW (Outgoing call number presentation is allowed)
DNY (Outgoing call number presentation is restricted)
BAR (Outgoing call number presentation is barred)

CPN LDN **ISDN TGN's Listed Directory Number for Called Party Number Presentation**—Enter the Called Directory Number (1-15 digits; * and # also allowed) that will be displayed at receiving display telephones whenever calls enter the system over the ISDN trunk group.

TRK GRP NAME **Trunk Group Name**—Enter the name (0-14 characters) that will be displayed at receiving display telephones whenever calls enter the system over the ISDN trunk group.

Appendix A

FEATURE ASSIGNMENT SUMMARY

The features shown in the Trunk and Feature Assignments chart can be assigned by the following four commands

1. Numbering Plan Assignment (CMD 300)
2. Class of Service Assignment (CMD 334)
3. Station Feature Key Assignment (CMD 331)
4. Attendant Feature Key Assignments (CMD 371)

The Trunk and Feature Assignments chart contains the following fields:

- FNO - Feature Number
- Feature Name
- ACCESSIBLE CMDS - A "Y" appears in the column of the command which defines the listed feature. Those features marked with a "–" are not defined by the command.

ACC **Numbering Plan Assignment (CMD 300)**—Assign the feature access code to the corresponding feature number, FNO.

COS **Class of Service Assignment (CMD 334)**—Assign the features with "FNO" to various class of service levels.

HDT **Station Feature Key Assignment (CMD 331)**—Assign station features to the flexible keys.

ATT **Attendant Feature Key Assignments (CMD 371)**—Assign features to the flexible keys on the attendant console.

ABBREV **Abbreviated Feature Names**

TRUNK AND FEATURE ASSIGNMENTS

FNO	FEATURE NAME	ACCESSIBLE CMDS ACC	COS	HDT	ATT	ABBREV	
1	DIRECT TRUNK ACCESS - TG 1	Y	Y	-	Y	TG001	*
NNN	DIRECT TRUNK ACCESS - TG NNN (1<NNN<256)	Y	Y	-	Y	TGNNN	*
256	DIRECT TRUNK ACCESS - TG 256	Y	Y	-	Y	TG256	*
257	TRUNK-TO-TRUNK CONNECTION	-	Y	-	-	TKTK	
258	CODE CALLING ACCESS	Y	Y	Y	Y	CC	
259	VOICE PAGING ACCESS – ZONE	Y	Y	Y	Y	VP_Z	
260	VOICE PAGING ACCESS – SYSTEM	Y	Y	Y	Y	VP_S	
261	VOICE PAGING ACCESS – EMERGENCY	Y	Y	Y	Y	VP_E	
262	CALL PICKUP GROUP	Y	-	Y	-	GPU	
263	DICTATION ACCESS–GROUP	Y	Y	Y	-	DC_G	
264	DICTATION ACCESS–INDIVIDUAL	Y	Y	Y	-	DC_I	
265	VOICE PAGING RETRIEVAL–ZONE	Y	Y	Y	Y	VPMM	
266	VOICE PAGING RETRIEVAL–SYSTEM	Y	Y	Y	Y	PR_S	
267	CODE CALLING RETRIEVAL	Y	Y	Y	Y	CCMM	
268	RELEASE OF PRIVACY	-	-	Y	-	PRLS	
269	NIGHT ANSWER ACCESS	Y	Y	Y	Y	UNA	
270	DO NOT DISTURB KEY	-	Y	Y	-	DND	
271	CALL FORWARD - ALL CALLS KEY	-	Y	Y	-	CFAC	
272	CALL FORWARD – BUSY/NO ANSWER KEY	-	Y	Y	-	CFBN	
273	CALL FORWARD – NO ANSWER KEY	-	Y	Y	-	CFNA	
274	PROGRAM MODE KEY	-	-	Y	Y	PRGM	
275	CALL FORWARD – PREREGISTERED	-	-	Y	-	PRCF	
276	VOICE CALLING KEY	-	-	Y	-	VC	
277	SAVE AND REPEAT KEY	-	-	Y	-	S&R	
278	AUTODIAL KEY	-	-	Y	Y	ADL	
279	AUTOMATIC ANSWER KEY	-	-	Y	-	AUTO	
280	EIGHT PARTY CONFERENCE KEY	-	-	-	Y	CONF	
281	CAMP-ON CANCELLATION KEY	-	-	Y	-	CAMP	
282	MODEM POOLING ACCESS	Y	-	-	-	MPAC	
283	LAST NUMBER REDIAL	Y	-	-	Y	LND	
284	CALL PICKUP – DIRECTED	Y	Y	Y	-	DPU	
285	CALL PICKUP – DIRECTED GROUP	Y	-	Y	-	DGPU	
286	CAMP-ON CALLBACK CANCELLATION	Y	-	-	-	CBCL	
287	SWAP	Y	-	Y	-	SWAP	
288	DO NOT DISTURB REGISTRATION	Y	Y	-	-	DNDR	
289	DO NOT DISTURB CANCELLATION	Y	-	-	-	DNDC	
290	SPEED CALLING – SYSTEM	Y	-	Y	Y	SYSD	
291	SPEED CALLING – GROUP	Y	-	Y	-	SC_G	
292	ATTENDANT ACCESS–UNIVERSAL	Y	-	-	-	OPER	
293	STATION DIALING	-	-	-	-	STDL	
294	LEAST COST ROUTING ACCESS	Y	-	-	-	LCR	
295	CALL FWD – BUSY/ALL CALLS REGISTER	Y	Y	-	-	ACFR	
296	CALL FWD– BUSY/NO ANS REGISTER	Y	Y	-	-	BNFR	

* In case the type of trunk group is defined as 'PRIVATE LINE', the corresponding feature number is not under Class of Service control.

TRUNK AND FEATURE ASSIGNMENTS *(continued)*

FNO	FEATURE NAME	ACCESSIBLE CMDS ACC	COS	HDT	ATT	ABBREV
297	CALL FWD – NO ANS REGISTER	Y	Y	-	-	NAFR
298	CALL FWD – CANCELLATION	Y	-	-	-	CFCL
299	AUTHORIZATION CODE	Y	-	Y	-	AUTH
300	CALL HOLD – ANALOG	Y	-	-	-	AHLD
301	CALL PARK – LOCAL ACCESS/RET	Y	-	Y	-	CP_L
302	CALL PARK – REMOTE ACCESS/RET	Y	-	Y	-	CP_R
303	DATA ACCESS BY CODE DIALING	Y	-	-	-	DAD
304	MESSAGE WAITING REGISTRATION	Y	-	-	-	MW_R
305	MESSAGE WAITING RETRIEVAL	Y	-	-	-	MW_B
306	MESSAGE WAITING CANCELLATION	Y	-	-	-	MW_C
307	ACCOUNT CODE	Y	-	Y	-	ACCT
308	UNIFORM NUMBERING PLAN	Y	-	-	-	UNP
309	UCD AVAILABLE/UNAVAILABLE KEY	Y	-	Y	-	UCD
310	UCD AVAILABLE	Y	-	-	-	UCDA
311	UCD UNAVAILABLE	Y	-	-	-	UCDU
312	DATA PRIVACY	Y	Y	Y	-	DPVY
313	EIGHT PARTY CONFERENCE ACCESS	Y	Y	-	-	8WY
314	EIGHT PARTY CONFERENCE RELEASE	Y	-	-	-	8WYR
315	ACD LOGIN	Y	-	-	-	LOGI
316	ACD LOGOUT	Y	-	-	-	LOGO
317	ACD LOG KEY	-	-	Y	-	LOG
318	ACD AVAILABLE	Y	-	-	-	ACD
319	ACD UNAVAILABLE	Y	-	-	-	ACDU
320	ACD STATUS KEY	-	-	Y	-	STAT
321	ACD WORK MODE CANCELLATION	Y	-	Y	-	CANC
322	ACD WORK UNIT	Y	-	Y	-	WRKU
323	ACD INTRA-GROUP CALL PICKUP	Y	-	Y	-	ACDP
324	ACD ASSISTANCE	Y	-	Y	-	ASST
325	ACD INTRA-GROUP TAP KEY	-	-	Y	-	TAP
326	ACD ALARM KEY	-	-	Y	-	ALRM
327	ATTENDANT OVERFLOW CONTROL KEY	-	-	-	Y	OVF
328	ICI KEY	-	-	-	Y	ICI
329	SPLIT KEY	-	-	-	Y	SPLT
330	SUPERVISE KEY	-	-	-	Y	SPVS
331	BLF CONTROL KEY	-	-	-	Y	BLF
332	ATTENDANT BREAKIN	-	Y	-	-	BRK
333	ATTENDANT PARKED PAGE RET	Y	Y	Y	Y	PR_A
334	TRUNK VERIFICATION	-	Y	-	-	TRKV
335	HELP	-	-	-	Y	HELP
336	ACD INTER-GROUP CALL PICKUP	-	-	Y	-	INTP
337	ACD INTER-GROUP TAP MONITOR	-	-	Y	-	INTM
338	HEADSET MODE KEY	-	-	Y	-	HSM
339	HEADSET CONTROL KEY	-	-	Y	-	HSC
340	LCD CONTRAST KEY	-	-	Y	-	LCDC
341	LCD REMOTE LOGOUT AGENT	-	-	Y	-	RLOG

342	ISDN CPN PRESENTATION ALLOWED	Y	Y	-	-	
343	ISDN CPN PRESENTATION RESTRICTED	Y	Y	-	-	
345	ATTENDANT END-TO-END DTMF SIGNALING	-	Y	-	Y	AEE

Appendix B

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COMMAND KEYWORD LISTING

Numeric ID	Command Name	Command Keyword
300	Numbering Plan Assignment	NUMBERING_PLAN
301	Uniform Numbering Plan Assignment	UNP_ASSIGN
302	UNP Routing Assignment	UNP_ROUTING
303	Coordinated Numbering Plan Assignment	CNP_ASSIGN
305	Trunk-to-Trunk Connection Assignment	TRUNK_CONNECTIONS
307	Trunk Group Routing Assignment	TG_ROUTING
308	Trunk Routing Assignment	TRUNK_ROUTING
309	Trunk Hunting Assignment	TRUNK_HUNTING
310	Trunk Group Assignment	TG_ASSIGN
311	Trunk Group Toll-free Tables	TG_TF_TABLES
313	Trunk Assignment	TK_ASSIGN
314	DID/CCSA/DNIS Trunk Group Assignment	DID/CCSA_TG_ASSIGN
315	DID/CCSA/DNIS DISA LDN Assignment	DID/CCSA_DISA
316	DID/CCSA/DNIS LDN Assignment	DID/CCSA_LDN
317	Dialing Definition	DIALING_DEFINITION
318	Interchangeable Office Code Table	IOC_TABLE
319	Voice Paging/Code Call Assignment	VP/CC_ASSIGN
320	Station Feature Key Pattern Assignment	STA_KEY_PATTERN
321	System DISA Security Code Assignment	DISA_CODES
323	Timeout Routing Destination Assignment	TIMEOUT_ROUTING
328	Canned Text/Advisory Message Creation	MESSAGE_ASSIGN
329	Station-Level Parameter Assignment	STA_PARAMETERS
330	Station Assignment	STA_ASSIGN
331	Station Feature Key Assignment	STA_KEY_ASSIGN
332	Private/Hotline Assignment	PVT/HOT_ASSIGN
334	Class of Service Assignment	CLASS_OF_SERVICE
335	Country Code Assignment	CC_ASSIGN
336	Time Zone Assignment	TZ_ASSIGN
337	Destination Restriction Level Assignment	DRL_ASSIGN
338	Country Code Restriction Tables	CC_RESTRICT
339	Area/Office Code Restriction Tables	AC/OC_RESTRICT_TBL
340	Exceptional Restriction Tables	EXCEPT_RESTRICT
341	Area Code Restriction Tables	AC_RESTRICT
342	Station Hunting Assignment	STA_HUNTING
343	LCR/Authorization TZ Change Assignment	LCR/AUTH_TZ
344	Common Carrier Assignment	COMMON_CARRIERS
345	Emergency Call Destination Assignment	EMERGENCY_CALL
346	Call Pick-up Group Assignment	CALL_PICKUP
347	Modem Pool Assignment	MODEM_POOL_ASSIGN
348	Account Code Assignment	ACCOUNT_CODE_ASSIGN
349	Authorization Code Assignment	AUTHORIZATION_CODES
350	Group Speed Calling Member Assignment	GROUP_SC_MEMBERS
351	Group Speed Calling List Assignment	GROUP_SC_LIST
352	Forced Account Code Toll-free Tables	FAC_TF_TABLES
353	Announcement Pattern Assignment	CALL_TREATMENT
354	UCD Group Assignment	UCD_GROUP_ASSIGN

Numeric ID	Command Name	Command Keyword
355	ACD Group Assignment	ACD_GROUP
356	ACD Agent Assignment	ACD_AGENT_ASSIGN
357	ACD Group Parameter Assignment	ACD_PARAMETERS
359	DID/CCSA/DNIS ACD Parameter Assignment	DID/CCSA/DNIS_ACD
360	Data Station Assignment	DATA_ASSIGN
361	Data Interface Parameter Assignment	DATA_INT_PARAMETERS
362	Data Station Parameter Assignment	DATA_STA_PARAMETERS
364	Trunk PP Parameter Change	TRUNK_PARAMETER_CHANGE
366	Data Hunting Assignment	DATA_HUNTING
367	Name Dialing Assignment	NAME_DIALING
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NUMBERING PLAN ASSIGNMENT

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	Speed Calling-System	290			

FIELD PARAMETERS

CHECK LIST
Check off those items that apply to your system.

NAME
Any feature names added to this list must be 30 characters or less.

FNO (Feature Number)
Printed feature numbers have been assigned by Toshiba and may not be changed.
Each feature number contains 3 characters.
Numbers 258~999 are reserved for features.

ACC (Access Code)
0~9, #, * (1 to 3 digits). ACC must be unique to the system. * or # must be the first character in the digit string, if used.

LEN PD1 (Length of 1st Post Dialing Digits)
0~99 (1 to 2 digits)

LEN PD2 (Length of 2nd Post Dialing Digits)
0~99 (1 to 2 digits)

NUMBERING PLAN ASSIGNMENT

CHECK LIST	NAME	FNO	ACC	LEN PD1	LEN PD2
	Speed Calling-Group	291			
	Attendant Access-Universal	292			
	Least Cost Routing Access	294			
	Call Forward- All Calls Register	295			
	Call Forward-Busy /No Answer Register	296			
	Call Forward-No Answer Register	297			
	Call Forward Cancellation	298			
	Authorization Code	299			
	Call Hold-Analog	300			
	Call Park-Local Access/Retrieval	301			
	Call Park-Remote Access/Retrieval	302			
	Data Access by Code Dialing	303			
	Message Waiting Registration	304			
	Message Waiting Retrieval	305			
	Message Waiting Cancellation	306			
	Account Code	307			
	Uniform Numbering Plan	308			
	UCD Available	310			
	UCD Unavailable	311			
	Data Privacy	312			

FIELD PARAMETERS

CHECK LIST
Check off those items that apply to your system.

NAME
Any feature names added to this list must be 30 characters or less.

FNO (Feature Number)
Printed feature numbers have been assigned by Toshiba and may not be changed. (3 chars. max.)

ACC (Access Code)
0~9, #, * (1 to 3 digits). ACC must be unique to the system. * or # must be the first character in the digit string, if used.

LEN PD1 (Length of 1st Post Dialing Digits)
0~99 (1 to 2 digits)

LEN PD2 (Length of 2nd Post Dialing Digits)
0~99 (1 to 2 digits)

NUMBERING PLAN ASSIGNMENT

CHECK LIST	NAME	FNO	ACC	LEN PD1	LEN PD2
	Eight Party Conference Access	313			
	Eight Party Conference Release	314			
	ACD Login	315			
	ACD Logout	316			
	ACD Available	318			
	ACD Unavailable	319			
	ACD Work Mode Cancellation	321			
	ACD Work Unit	322			
	ACD Intra-Group Call Pickup	323			
	ACD Assistance	324			
	Attendant Parked Page Retrieval	333			
	Trunk Verification from Station	334			
	LCD Remote Logout Agent	341			
	ISDN CPN Present Allowed	342			
	ISDN CPN Present Restricted	343			
	Attendant End-to-End Signaling	345			

FIELD PARAMETERS

CHECK LIST
Check off those items that apply to your system.

NAME
Any feature names added to this list must be 30 characters or less.

FNO (Feature Number)
Printed feature numbers have been assigned by Toshiba and may not be changed. (3 chars. max.)

ACC (Access Code)
0~9, #, * (1 to 3 digits). ACC must be unique to the system. * or # must be the first character in the digit string, if used.

LEN PD1 (Length of 1st Post Dialing Digits)
0~99 (1 to 2 digits)

LEN PD2 (Length of 2nd Post Dialing Digits)
0~99 (1 to 2 digits)

NUMBERING PLAN ASSIGNMENT

TRUNK NAME	FNO	ACC	LEN PD1	LEN PD2

FIELD PARAMETERS

FNO (Assign Trunks)
001~256 (or to maximum system configuration)

ACC (Access Code)
0~9, #, * (1 to 3 digits). ACC must be unique to the system. * or # must be the first character in the digit string, if used.

LEN PD1 (Length of 1st Post Dialing Digits)
0~99 (1 to 2 digits)

LEN PD2 (Length of 2nd Post Dialing Digits)
0~99 (1 to 2 digits)

UNIFORM NUMBERING PLAN ASSIGNMENT

UNP LENGTH	HOME RNX	RNX	RNX	RNX	RNX	RNX	RNX	RNX	RNX	RNX	RNX

FIELD PARAMETERS

UNP LENGTH (Uniform Numbering Plan Length)
4~8 (1 digit)

HOME RNX (Home Location Code)
0~999 (1 to 3 digits)

RNX (Network Location Code)
0~999 (1 to 3 digits)

ATTENDANT PASSWORD ASSIGNMENT

INDEX	ATT PSWD	SMDR ID	INDEX	ATT PSWD	SMDR ID

FIELD PARAMETERS

INDEX (Index No.)
1~64

ATT PSWD (Attendant Password)
0~99999999 (1 to 8 digits)

SMDR ID (Station Message Detail Recording ID Code)
0~99 (1 to 2 digits) (Not used)

ATTENDANT GROUP ASSIGNMENT

GRP#	ATG DN	NAME	OVF TMR	OVF DEST	ICI NO	ICI CAT	CALLS

GRP#	ATG DN	NAME	OVF TMR	OVF DEST	ICI NO	ICI CAT	CALLS

FIELD PARAMETERS

GRP# (Attendant Group No.)
1~30

ATG DN (Attendant Group Directory No.)
0~99999 (1 to 5 digits)

NAME (Attendant Group Name)
1~9 ASCII chars. Spaces allowed.

OVF TMR (Attendant Overflow Timer)
5~180 secs. (1 to 3 digits)

OVF DEST (Overflow Destination)
BL01~BL64
NON (No Overflow Destination)

ICI NO (Incoming Call Identification Key Definition No.)
1~10

ICI CAT (ICI Category Assignment)
ATT (Attendant group)
DATT (Directed attendant calls)
EMR1 (Emergency 1)
EMR2 (Emergency 2)
EMR3 (Emergency 3)
EMR4 (Emergency 4)
ICPT (Intercepts)
IPC (Interposition calls)
LHR (Long hold recall)
NAR (No answer recall)
001~256 (Trunk groups 001~256, or to the maximum system configuration)

CALLS (Number of Calls Per Attendant)
1~32 (1 or 2 digits)

ATTENDANT POSITION ASSIGNMENT

EQUIP #	ATT DN	NAME	GRP DN	COS	DRL	FRLP	QPL	ROB	EMR RNG	PSWD	TYPE	AUD

FIELD PARAMETERS

EQUIP # (Equipment No.),5 to 6 digits
For DSTI cards:

Shelf	**Card Slot**	**Circuit**
01~10	01~11, 13	01~16

An attendant console must be assigned to a digital line card (DSTI) that is strapped for 1B type operation.

ATT DN (Attendant Directory No.)
0~99999

NAME (Attendant Name)
1~9 ASCII char.

GRP DN (Attendant Group Directory No.)
0~99999 (1 to 5 digits)

COS (Class of Service No.)
1~64

DRL (Destination Restriction Level)
1~16, or to maximum system configuration

FRLP (Facility Restriction Level Profile)
1~32, or to maximum system configuration

QPL (Queue Priority Level)
1~8

ROB (Ring Over Busy Flag)
YES (Enable)
NO (Disable)

EMR RNG (Emergency Call Ringing Flag)
YES (Enable)
NO (Disable)

PSWD (Attendant Password Requirement)
YES (Password required)
NO (Password not required)

TYPE (Terminal Type)
EGA (Enhanced graphic display)
EL (Electroluminescent display unit)

AUD (Key Depression Audible Response)
For future use.

ATTENDANT FEATURE KEY ASSIGNMENT

ATT DN	POS	DEF 1	DEF 2	POS	DEF 1	DEF 2
	1			13		
	2			14		
	3			15		
	4			16		
	5			17		
	6			18		
	7			19		
	8			20		
	9			21		
	10			22		
	11			23		
	12			24		

FIELD PARAMETERS

ATT DN (Attendant Directory No.)
0~99999 (1 to 5 digits)

POS (Key Position) 1~24

DEF 1 (Key Definition 1)
Keywords:

ADL	Autodial
AEE	Attendant End-to-End Signaling
BLF	Busy Lamp Field control
CC	Code Calling Access
CCMM	Code Calling Retrieval
CONF	Eight Party Conference Key
HELP	HELP Key
ICI	Incoming Call Identification
LND	Last Number Redial
OVF	Attendant Overflow control
PR_A	Attendant Parked Paging Retrieval
PR_S	Voice Page Retrieve-System
PRGM	Program Mode
SYSD	Speed Calling – System
SPLT	Split Key
SPVS	Supervise Key
TGAC	Trunk Group Access Code
UNA	Night Answer Access
UND	Undefine
VP_E	Voice Page-Emergency
VP_S	Voice Page-System
VP_Z	Voice Page-Zone
VPMM	Voice Page Retrieve-Zone

*Up to 10 feature keys may be assigned as ICI keys.

DEF 2
Use the following chart to fill in "DEF 2" field if the corresponding entries have been made in "DEF 1" field.

DEF 1	DEF 2 Data Field
CC	Zone Number from 0 to 9 or 00 ~ 99 (1 or 2 digits)
CCMM	Zone Number from 0 to 9 or 00 ~ 99 (1 or 2 digits)
VP_Z	Zone Number from 0 to 9 or 00 ~ 99 (1 or 2 digits)
TGAC	Trunk Group Access Code from 0 ~ 9, #, * (1 to 3 digits)
ICI	Incoming Call ID No. from 1 ~ 10 (1 or 2 digits)

NOTE: Zone no. is optional if assigning a general access key. See Numbering Plan (CMD 300) for trunk group access codes.

ATTENDANT INCOMING CALL PRIORITY ASSIGNMENT

ATG DN	RECALL	PRIORITY	CAT	CAT	CAT	CAT	CAT	CAT	CAT	CAT	CAT	CAT

FIELD PARAMETERS

ATG DN (Attendant Directory No.)
0~99999
(1 to 5 digits)

RECALL (Recall Handling Option)
IND (Recall to extending attendant)
GRP (Recall to attendant group)

PRIORITY (Priority Level)
1~18

CAT (Incoming Call Category)
Enter keywords:
EMR3 (Emergency 3)
EMR4 (Emergency 4)
ATT (Dial 0)
DATT (Attendant directory no.)
NAR (No answer recall)
LHR (Long hold recall)
IPC (Interposition calls)
ICPT (Intercepts)
1~256 (Trunk group 1~256, or to maximum system configuration)

INTERNAL CALL ALTERNATE ROUTING ASSIGNMENT

ATT DN/GRP DN	AR TZ 1	AR TZ 2	AR TZ 3	AR TZ 4	ATT DN/GRP DN	AR TZ 1	AR TZ 2	AR TZ 3	AR TZ 4

FIELD PARAMETERS

ATT DN/GRP DN (Attendant or Group DN)
0~99999 (1 to 5 digits)

AR TZ *n* (Alternate Time Zone Route)
Enter 0~99999 (1 to 5 digits) for:

	Station directory number
	Hunt group pilot number
	UCD group pilot number
	ACD group pilot number
AP01~AP50	(Announcement pattern number)
BL01~BL64	(Night bell device number)
NON	(No alternate route)

EMERGENCY CALL DESTINATION ASSIGNMENT

EMR LEVEL	EMR CODE	DESTINATION NUMBER	EMERGENCY DISPLAY MESSAGE
1			
2			
3			
4			

EMR LEVEL	EMR CODE	DESTINATION NUMBER	EMERGENCY DISPLAY MESSAGE
1			
2			
3			
4			

EMR LEVEL	EMR CODE	DESTINATION NUMBER	EMERGENCY DISPLAY MESSAGE
1			
2			
3			
4			

FIELD PARAMETERS

EMR LEVEL (Emergency Level)
1 (highest priority) to 4 (lowest priority)
(1 digit)

EMR CODE (Emergency Access Code)
0~99999
(1 to 5 digits)

DESTINATION NUMBER
0~99999
(1 to 5 digits)

EMERGENCY DISPLAY MESSAGE
(30 characters max.)

DIALING DEFINITION

GRP#	OPP	LOP	IOP	IAC	TP	LDA	REPR	BUS	EMR	AUX1	AUX2	AUX3	IOC
2													
3													
4													

GRP#	OPP	LOP	IOP	IAC	TP	LDA	REPR	BUS	EMR	AUX1	AUX2	AUX3	IOC
2													
3													
4													

GRP#	OPP	LOP	IOP	IAC	TP	LDA	REPR	BUS	EMR	AUX1	AUX2	AUX3	IOC
2													
3													
4													

FIELD PARAMETERS

GRP# (Dialing Group No.)
2~4

OPP (Operator Prefix)
0~999. Default is 0.

LOP (Long Distance Operator Prefix)
0~999. Default is 00.

IOP (International Operator Prefix)
0~999. Default is 01.

IAC (International Direct Dialing Access Code)
0~999. Default is 011.

TP (Toll Prefix)
0~999. Default is 1.

LDA (Local Directory Assistance)
0~999. Default is 411.

REPR (Telephone Repair)
0~999. Default is 611.

BUS (Telephone Business Office)
0~999. Default is 811.

EMR (Emergency Access)
0~999. Default is 911.

AUX1 (Auxiliary Definition 1)
For future use. 0~999

AUX2 (Auxiliary Definition 2)
For future use. 0~999

AUX3 (Auxiliary Definition 3)
For future use. 0~999

IOC (Interchangeable Office Code)
NON (No interchangeable office codes conflict with any area codes)
ITP (Identifiable by toll prefix before area codes)
ITO (Identifiable by timeout)

INTERCHANGEABLE OFFICE CODE TABLE

IOC	IOC	IOC	IOC	IOC	IOC	IOC	IOC	IOC	IOC	IOC	IOC

FIELD PARAMETERS

IOC (Interchangeable Office Code)
200~919.

Use "NYX" format:
N = 2~9
Y = 0~1
X = 0~9

TRUNK GROUP TOLL-FREE TABLES

TBL#	AC	OC	OC	OC	OC	OC	OC	OC	OC	OC	OC	OC	OC

FIELD PARAMETERS

TBL# (Table Code)
1~32 (or to system-configured maximum)

AC (Area Code)
200~919.

Use "NYX" format:
N = 2~9
Y = 0~1
X = 0~9

OC (Toll-Free Office Codes)
200~999.

Use "NXX" format:
N = 2~9
X = 0~9
X = 0~9

TRUNK GROUP ASSIGNMENT

TGN	CGN	TYPE	USE	RG	DG	COS	DRL	FRLP	QPL	ANSPOS	S RG	SUP	RCL DN	HAC	GF

FIELD PARAMETERS

TGN (Trunk Group No.) 1~256 (or to system configured maximum)

CGN (ISDN PRI Channel Group Number) 1 to 32 (or to system-configured maximum)

TYPE (Trunk Type)
NON-ISDN Trunks:
AUX (Auxiliary Use)
CC (Code-Call)
CCSA (Common Control Switching Arrange.)
CO (Central Office)
DID (Direct Inward Dialing)
DM01~DM16 (Dictation Machine group 1 to 16)
DNIS (Dialed Number Identification Service)
FX (Foreign Exchange)
PVT (Private Line)
TIE (TIE Line)
VPG (Voice Paging)
WATS (Wide Area Telecommunication Service)
ISDN USAGE Trunks:
ACCU (ACCUNET)
ATAT (AT&T long distance service)
IMC8 (International AT&T MEGACOM 800 service)
INCW (INWATS)
MAXW (MAXWATS)
MC (AT&T MEGACOM)
MC8 (AT&T MEGACOM 800 service)
MQST (Multiquest 900 service)
OUTW (OUTWATS)
POTS (Plain old telephone service)
PSDN (Private Software Defined Network)
SDN (Public/global Software Defined Network)

USE (Trunk Use)
INC (Incoming)
OUT (Outgoing)
BWY (Both ways)

RG (Restriction Group No.) 1~8 (or to system-configured maximum)

DG (Dialing Definition Group No.) 1~4

COS (Class Of Service) 1~64

DRL (Destination Restriction Level) 1~16 (or to system-configured maximum)

FRLP (Facility Restriction Level) 1~32 (or to system-configured maximum)

QPL (Queuing Priority Level) 1~8

ANSPOS (Answer Position)
0~99999 (1 to 5 digits)

S RG (Station Restriction Group)
(Not used) 1~16

SUP (Answer Supervision)
YES (Will be supplied)
NO (Will not be supplied)

RCL DN (Recall Destination DN)
0~99999 (1 to 5 digits)

HAC (Trunk Group's Home Area Code)
200~919.

Use "NYX" format:
N = 2~9
Y = 0~1
X = 0~9

TF# (Toll Free Table No.) 1~16

GF (Global Net Flag) (Not used)
Y (es)
N (o)

TRUNK ASSIGNMENT

EQUIP #	TGN	ORG	TERM	SIG	CO SUP TYPE	ST	DT	DISA	TRK NAME

FIELD PARAMETERS

EQUIP # (Equipment No.), 5 to 6 digits

For COGI, DIDI, and EM1I cards:

Shelf	Card Slot	Circuit
01~10	01~14	01~08

For EM2I cards:

Shelf	Card Slot	Circuit
01~10	01~14	01~06

TGN (Trunk Group No.)
1~256 (or to maximum system configuration)

ORG (Originating Dialing Mode)
DTMF (Dual-Tone Multi-Freq.)
DP10 (10 Dial Pulses/sec.)
DP20 (20 Dial Pulses/sec.

TERM (Terminating Dial Mode)
DTMF (Dual-Tone Multi-Freq.)
DP10 (10 Dial Pulses/sec.)
DP20 (20 Dial Pulses/sec.
NA (Not Applicable - this field is only for outgoing trunk groups.)

SIG (Signaling)
LP (Loop start)
GND (Ground start)
DID (Direct Inward Dialing)
LTIE (Loop TIE start)
EM1 (E&M 1 can't have more than 6 circuits)
EM2 (E&M 2 can't have more than 6 circuits)

CO SUP TYPE (CO Supervision Type)
CLD (Called party disconnect)
CLG (Calling party disconnect)
EPD (Either party disconnect)
NON (No supervision)

ST (Start Method)
WNK (Wink start)
IMM (Immediate start)
DLY (Delay dial)
DT (Dial tone)
TIM (Timing start)

DT (Dial Tone)
DT (Dial Tone return)
STR (Silence Tone return)

DISA (DISA Flag)
YES
NO

TRK NAME (Trunk Name)
Up to 14 characters

DIGITAL CARRIER CHANNEL ASSIGNMENT

EQUIP #	TGN	SIG	ST	STOUT	DBNK	DT	ORG	TERM	RSPV	DISA	SPD	NAME

FIELD PARAMETERS

EQUIP # (Equipment No.), 5 to 6 digits

For TTRI cards:

Shelf Card Slot	**Circuit**
01~10 02,04,06,08,10,12	01~24

TGN (Trunk Group Number)
1 ~ 256 (or to maximum system configuration).

SIG (Signaling)
- GND (Ground start - for CO, FX, or WATS)
- LP (Loop start - for CO, FX, or WATS)
- DID (Direct Inward Dialing)
- EM (for TIE, E&M)
- DMI (for TIE, DMI)

ST (Signaling Start Method)
- IMM (Immediate–for DID, E&M)
- WNK (Wink–for DID, E&M, or DMI)
- DLY (Delay dial–for DID or E&M)
- TIM (Timeout)
- AUT (Automatic–for DMI)

ST OUT (Start Method for Outgoing Call)
- IMM (Immediate)
- WNK (Wink start)
- DLY (Delay dial)
- TIM (Timing)
- AUTO (Automatic)

DBNK (Data Bank Equivalent)
- FXS (Foreign Exchange Subscriber)
- SAS (Special Access Subscriber)

DT (Dial Tone)
- DT (Dial Tone return)
- STR (Silence Tone Return)

ORG (Originating Dialing Mode)
- DP10 (10 Dial Pulses/sec.)
- DTMF (Dual-Tone Multi-Freq.)

TERM (Terminating Dial Mode)
- DP10 (10 Dial Pulses/sec.)
- DTMF (Dual-Tone Multi-Freq.)
- NON (Not applicable)

RSPV (CO Supervision Type)
- CLD (Called party disconnect)
- CLG (Calling party disconnect)
- EPD (Either party disconnect)
- NON (No supervision)

DISA (DISA Flag)
- YES
- NO

SPD (Transmission Speed)
- 16K (16K bps)
- 64K (64K bps)

NAME (Channel Name)
Up to 14 characters

TRUNK HUNTING ASSIGNMENT

TGN	TYPE	SEQ #	EQUIP #	SEQ #	EQUIP #	SEQ #	EQUIP #

FIELD PARAMETERS

TGN (Trunk Group No.)
1~256 (or to maximum system configuration)

TYPE (Hunting Method)
TERM (Terminal)
DIST (Distributed)

SEQ # (Hunting Sequence No.)
1~64

EQUIP # (Equipment No.), 5 to 6 digits

For COGI, DIDI, and EM1I cards:

Shelf	Card Slot	Circuit
01~10	01~14	01~08

For EM2I cards:

Shelf	Card Slot	Circuit
01~10	01~14	01~06

COORDINATED NUMBERING PLAN ASSIGNMENT

TGN	STDGT	STDGT	STDGT	STDGT	STDGT	STDGT	STDGT	STDGT	STDGT	STDGT	STDGT	STDGT

TGN	STDGT	STDGT	STDGT	STDGT	STDGT	STDGT	STDGT	STDGT	STDGT	STDGT	STDGT	STDGT

TGN	STDGT	STDGT	STDGT	STDGT	STDGT	STDGT	STDGT	STDGT	STDGT	STDGT	STDGT	STDGT

FIELD PARAMETERS

TGN (Trunk Group No.)
1~256 (or to maximum system configuration)

STDGT (Steering Digits)
0~99999 (1 to 5 digits)

TRUNK-TO-TRUNK CONNECTION ASSIGNMENT

APPL	TYPE	INDEX	TGN/ TYPE A	ORG DIRECT	TGN/ TYPE B	ORG DIRECT	APPL	TYPE	INDEX	TGN/ TYPE A	ORG DIRECT	TGN/ TYPE B	ORG DIRECT

FIELD PARAMETERS

APPL (Application)
ATT (Attendant's connectivity table)
STA (Station's connectivity table)

TYPE (Table Type)
ALW (Trunk-to-Trunk connection allowed)
DNY (Denied)

INDEX (Connection Index No.)
1~160 (or to system-configured maximum)

TGN/TYPE A or B (Trunk Type)
1~256 (or to maximum system configuration) or the following keywords:
CO (Central Office)
FX (Foreign Exchange)
WATS (Wide Area Telecommunication Service)
CCSA (Common Control Switching Arrangement)
TIE (Inter-PBX Communication)
DID (Direct Inward Dialing)
VPG (Voice Paging)
CC (Code Call)
PVT (Private Line)
AUX (Auxiliary)

ORG DIRECT (Direction of Origin)
INC (Incoming)
OUT (Outgoing)
BWY (Bothway, IN and OUT)

CLOCK PROVIDER ASSIGNMENT

PRIORITY	CARD#	PRIORITY	CARD#	PRIORITY	CARD#

FIELD PARAMETERS

PRIORITY (Priority) 1~60; 1 = highest;
60 = lowest
NO ≡ No priority

CARD # (Card number) 3 or 4 digits

102 to 1012 in the form SSPP,
where SS is the shelf number 1~10
PP is the Card Slot (Port) Number 01~12

TRUNK GROUP PARAMETER ASSIGNMENT

TGN	PFL#	TF#	TF#	TF#	IQP1	IQP TMR	IQP2	OVF TMR

FIELD PARAMETERS

TGN (Trunk group number)
1~256

PFL# (Profile number)
1~32; enter **NON** if no profile is used

TF# (Toll-free number table)
1~16 (or to system-configured maximum)

IQP1 (Incoming ACD call queuing priority)
1~16

IQPT TMR (Incoming ACD call queuing priority timer)
1~9999 seconds

IQP2 (Second incoming ACD call queuing priority)
1~16

OVF TMR (Overflow timer)
1~9999 seconds

TRUNK PP PARAMETER CHANGE

EQUIP	PARA	VALUE	PARA	VALUE	PARA	VALUE	PARA	VALUE

FIELD PARAMETERS

EQUIP (Equipment number) 6 digits

Shelf	**Card Slot**	**Circuit Number**
01~12	01~14	01~16

PARA (Parameter to be changed)

CKERR (Number of start check errors)
CKTIM (Start check error time)
1TIME (First interdigit timer)
2TIME (Second interdigit timer)
DLWDT (Dial width)
DLTIM (Dial time)
GDTIM (Guard time)
DTONW (Dial tone on width)
DTOFW (Dial tone off width)
SDTON (Secondary dial tone on width)
SDTOFW (Secondary dial tone off width)
BTONW (Busy tone on width)
BTOFW (Busy tone off width)
DISHC (Disconnect time for E&M line or HIC open time for loop line)

VALUE (Value of the parameter)

CKERR (1~100)
CKTIM (1000~10,000 milliseconds)
1TIME (2~40 milliseconds)
2TIME (2~40 milliseconds)
DLWDT (80~600 milliseconds)
DLTIM (80~600 milliseconds)
GDTIM (440~10,200 milliseconds)
DTONW (40~10,200 milliseconds)
DTOFW (40~10,200 milliseconds)
SDTON (40~10,200 milliseconds)
SDTOFW (40~10,200 milliseconds)
BTONW (40~10,200 milliseconds)
BTOFW (40~10,200 milliseconds)
DISHC (160~10,200 milliseconds)

TRUNK ROUTING ASSIGNMENT

EQUIP #	TIME ZONE #	ROUTE CHOICE 1	ROUTE CHOICE 2	ROUTE CHOICE 3

EQUIP #	TIME ZONE #	ROUTE CHOICE 1	ROUTE CHOICE 2	ROUTE CHOICE 3

EQUIP #	TIME ZONE #	ROUTE CHOICE 1	ROUTE CHOICE 2	ROUTE CHOICE 3

FIELD PARAMETERS

EQUIP # (Equipment No.), 5 to 6 digits

For COGI, DIDI, and EM1I cards:

Shelf	**Card Slot**	**Circuit**
01~10	01~14	01~08

For EM2I cards:

Shelf	**Card Slot**	**Circuit**
01~10	01~14	01~06

TIME ZONE # (Time Zone No.)
1~4

ROUTE CHOICE 1 (Routing Choice One)
Directory no. from 0~99999
(1~5 digits)
Speed Access Code (3 digits) + Index (1 to 2 digits)

AP01~AP50	(Announcement Pattern Number)
BL01~BL64	(Night bell)
NON	(No routing)

ROUTE CHOICE 2 (Routing Choice Two)
Same options as Route Choice 1, except “non” is not allowed.

ROUTE CHOICE 3 (Routing Choice Three)
Same options as Route Choice 1, except attendant and attendant group are not valid options and “non” is not allowed.

TRUNK GROUP ROUTING ASSIGNMENT

TGN	TIME ZONE #	ROUTE CHOICE 1	ROUTE CHOICE 2	ROUTE CHOICE 3

TGN	TIME ZONE #	ROUTE CHOICE 1	ROUTE CHOICE 2	ROUTE CHOICE 3

TGN	TIME ZONE #	ROUTE CHOICE 1	ROUTE CHOICE 2	ROUTE CHOICE 3

FIELD PARAMETERS

TGN (Trunk Group No.)
1~256 (or to system configured maximum)

TIME ZONE (Time Zone No.)
1~4

ROUTE CHOICE 1 (Routing Choice One)
Directory no. from 0~99999
(1~5 digits)
Speed Access Code (3 digits) + Index (1 to 2 digits)
AP01~AP50 (Announcement Pattern No.)
BL01~BL64 (Night bell)
NON (No routing)

ROUTE CHOICE 2 (Routing Choice Two)
Same options as Route Choice 1, except “non” is not allowed.

ROUTE CHOICE 3 (Routing Choice Three)
Same options as Route Choice 1, except attendant and attendant group are not valid options and “non” is not allowed.

DID/CCSA/DNIS TRUNK GROUP ASSIGNMENT

TGN	ORG DIGIT	NEW DIGIT	CO DIGIT	KEPT DIGIT	PREFIX	INTER TYPE	INTER ALT

FIELD PARAMETERS

TGN (Trunk Group No.)
1~256 (or to system configured maximum)

ORG DIGIT (Originating Digits)
0~9999999

NEW DIGIT (New Digits)
0~9999999

CO DIGIT (Central Office Sending Digits)
2~7

KEPT DIG (Number of Digits to Be Kept)
1~7 (1~7 digits kept) for non-ISDN trunks
1~15 (1~15 digits kept) for ISDN trunks

ALL (All Digits Kept)

NON (No Digits Kept)

PREFIX (Digit String to Be Added)
0~99999 (1~5 digits)
NON (no digit string to be added)

INTER TYPE (Intercept Treatment Type)
0~99999 (Attendant treatment based on the attendant directory no.)
AP01~AP50 (Announcement Pattern No.)

INTER ALT (Intercept Treatment Alternate)
BL01~BL64 (Night bell device no.)

DID/CCSA/DNIS DISA LDN ASSIGNMENT

TGN	DISA LDN	DISA LDN	DISA LDN	DISA LDN	DISA LDN	DISA LDN	DISA LDN	DISA LDN

FIELD PARAMETERS

TGN (Trunk Group No.)
1~256 (or to system configured maximum)

DISA LDN (Direct Inward System Access Listed Directory No.)
2 to 7 digits for non-ISDN trunks
(00~9999999)
2 to 15 digits for ISDN trunks
(00~999999999999999)
Eight DISA LDN numbers are allowed per trunk group.

DID/CCSA/DNIS LDN ASSIGNMENT

TGN	INDEX	LDN	TIME ZONE #	ROUTE CHOICE 1	ROUTE CHOICE 2	ROUTE CHOICE 3

TGN	INDEX	LDN	TIME ZONE #	ROUTE CHOICE 1	ROUTE CHOICE 2	ROUTE CHOICE 3

TGN	INDEX	LDN	TIME ZONE #	ROUTE CHOICE 1	ROUTE CHOICE 2	ROUTE CHOICE 3

FIELD PARAMETERS

TGN (Trunk Group No.)
1~256 (or to system configured maximum)

INDEX (Index for LDN Entry)
1~256

LDN (Listed Directory No.)
00~999999999999999
2~7 digits for non-ISDN trunks
2~15 digits for ISDN trunks

TIME ZONE # (Time Zone No.)
1~4

ROUTE CHOICE 1 (Routing Choice One)
Enter any of the following:
- Directory no. from 0~99999 (1~5 digits)
- Speed Access Code (3 digits) + Index (1 to 2 digits)
- AP01~AP50 (Announcement Pattern No.)
- BL01~BL64 (Night bell only valid for Route Choice 1)

ROUTE CHOICE 2 (Routing Choice Two)
Applicable only if Route Choice 1 is an attendant or attendant group. Same options as Route Choice 1.

ROUTE CHOICE 3 (Routing Choice Three)
Only applicable if Route Choice 1 and 2 are defined as either attendants or attendant groups. Same options as Route Choice 1, except attendant and attendant group are not valid options.

CLASS OF SERVICE ASSIGNMENT

		CLASS OF SERVICE LEVEL																														
FEATURE NAME	FNO	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32

FIELD PARAMETERS

FEATURE NAME
Enter the feature name to receive a Class of Service assignment.

FNO (Feature No.)
1~345

See “Trunk and Feature Assignments” for a list of feature names and numbers.

CLASS OF SERVICE LEVEL
Enter an "X" under the Class of Service level, from 1~64, that will apply to the feature listed in the left column.

CLASS OF SERVICE ASSIGNMENT

		CLASS OF SERVICE LEVEL																													
FEATURE NAME	FNO	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64

FIELD PARAMETERS

FEATURE NAME
Enter the feature name to receive a Class of Service assignment.

FNO (Feature No.)
1~345

See “Trunk and Feature Assignments” for a list of feature names and numbers.

CLASS OF SERVICE LEVEL
Enter an "X" under the Class of Service level, from 1~64, that will apply to the feature listed in the left column.

STATION FEATURE KEY PATTERN ASSIGNMENT

DEV	PAT	PRM POS	DDN POS	FEA POS	FEA ID	DEV	PAT	PRM POS*	DDN POS	FEA POS	FEA ID*
2010	1	6		1		2010				1	
				2						2	
				3						3	
				4						4	
				5						5	
				6	PRM					6	
				7						7	
				8						8	
				9						9	
				10	RLS					10	RLS

Default Settings

* Enter the "**PRM POS**" designation in the "**FEA ID**" column adjacent to its position.

FIELD PARAMETERS

DEV (Device Category)

2010	(10-key digital telephone)
2020	(20-key digital telephone)
ID10	(10-key digital telephone/DIU)
ID20	(20-key digital telephone/DIU)
EKT1	(Electronic telephone/10 flexible & 4 fixed keys)
EKT2	(Electronic telephone/20 flexible & 4 fixed keys, w or w/o a display)
DKT1	(Digital telephone/10 flexible & 4 fixed keys, w or w/o display)
DKT2	(Digital telephone/20 flexible & 4 fixed keys, w or w/o display)

PAT (Station Feature Key Pattern Number)
2~4

PRM POS (Prime Directory Number Key Position)

1~10	(10-key digital & electronic phones)
1~20	(20-key digital & electronic phones)

DDN POS (Data Directory Number Key Position)

1~10	(10-key digital phones with DIU)
1~20	(20-key digital phones with DIU)

FEA POS (Feature Key Position)
1~10 (10-key digital and electronic telephones)
1~20 (20-key digital and electronic telephones

The following are fixed (unchangeable) feature key positions:

Device	Feature Position	Feature ID
2010	10	RLS
2020	20	RLS
ID10	10	RLS
ID20	20	RLS
EKT1	9	RLS
	10	MSW
EKT2	19	RLS
	20	MSW
DKT1	10	RLS
DKT2	20	RLS

FEA ID (Feature ID Number or Abbreviation)
Enter Digits or Abbreviation:

ACD Alarm Key	326	ALRM
ACD Assistance	324	ASST
ACD Inter-Group Call Pick-up	336	INTP
ACD Inter-Group Tap Key	337	INTM
ACD Intra-Group Call Pickup	323	ACDP
ACD Intra-Group Tap Key	325	TAP
ACD Log Key	317	LOG
ACD Status Key	320	STAT
ACD Work Mode Cancellation	321	CANC
ACD Work Unit	322	WRKU
Account Code	307	ACCT
Attendant Parked Page Ret	333	PR_A
Authorization Code	299	AUTH
Autodial Key	278	ADL
Automatic Answer Key	279	AUTO
Call Forward-All Calls Key	271	CFAC
Call Forward-Busy/No Ans Key	272	CFBN
Call Forward-No Answer Key	273	CFNA
Call Forward-Preregistered	275	PRCF
Call Park-Local Access/Ret	301	CP_L
Call Park-Remote Access/Ret	302	CP_R
Call Pickup - Directed	284	DPU
Call Pickup - Directed Group	285	DGPU
Call Pickup - Group	262	GPU
Camp-on Key	281	CAMP
Code Calling Access	258	CC
Code Calling Retrieval	267	CCMM
Data Privacy	312	DPVY
Dictation Mach. Access-Direct	264	DC_I
Dictation Mach. Access-Group	263	DC_G
Do Not Disturb Key	270	DND
Headset Control Key	339	HSC
Headset Mode Key	338	HSM
LCD Contrast Control Key	340	LCDC
LCD Remote Logout Agent	341	RLOG
Night Answer Access	269	UNA
Privacy Release	268	PRLS
Program Mode Key	274	PRGM
Save and Repeat Key	277	S&R
Speed Calling - Group	291	SC_G
Speed Calling - System	290	SYSD
Swap	287	SWAP
UCD Available/Unavailable Key	309	UCD
Voice Calling Key	276	VC
Voice Pg Access - Emergency	261	VP_E
Voice Pg Access - System	260	VP_S
Voice Pg Access - Zone	259	VP_Z
Voice Pg Retrieval - System	266	PR_S
Voice Pg Retrieval - Zone	265	VPMM

STATION FEATURE KEY PATTERN ASSIGNMENT

DEV	PAT	PRM POS	DDN POS	FEA POS	FEA ID	DEV	PAT	PRM POS*	DDN POS	FEA POS	FEA ID *
2020	1	16		1		2020				1	
				2						2	
				3						3	
				4						4	
				5						5	
				6						6	
				7						7	
				8						8	
				9						9	
				10						10	
				11						11	
				12						12	
				13						13	
				14						14	
				15						15	
				16	PRM					16	
				17						17	
				18						18	
				19						19	
				20	RLS					20	RLS

Default Settings

* Enter the "**PRM POS**" designation in the "**FEA ID**" column adjacent to its position.

STATION FEATURE KEY PATTERN ASSIGNMENT

DEV	PAT	PRM POS	DDN POS	FEA POS	FEA ID	DEV	PAT	PRM POS*	DDN POS*	FEA POS	FEA ID *
ID10	1	6	5	1		ID10				1	
				2						2	
				3						3	
				4						4	
				5	DDN					5	
				6	PRM					6	
				7						7	
				8						8	
				9						9	
				10	RLS					10	RLS

Default Settings

* Enter the "**PRM POS**" and "**DDN POS**" designations in the "**FEA ID**" column adjacent to their positions.

FIELD PARAMETERS

DEV (Device Category)
2010 (10-key digital telephone)
2020 (20-key digital telephone)
ID10 (10-key digital telephone/DIU)
ID20 (20-key digital telephone/DIU)
EKT1 (Electronic telephone/10 flexible & 4 fixed keys)
EKT2 (Electronic telephone/20 flexible & 4 fixed keys, w or w/o a display)
DKT1 (Digital telephone/10 flexible & 4 fixed keys with or without display)
DKT2 (Digital telephone/20 flexible & 4 fixed keys with or without display)

PAT (Station Feature Key Pattern Number)
2~4

PRM POS (Prime Directory Number Key Position)
1~10 (10-key digital & electronic phones)
1~20 (20-key digital & electronic phones)

DDN POS (Data Directory Number Key Position)
1~10 (10-key digital phones with DIU)
1~20 (20-key digital phones with DIU)

FEA POS (Feature Key Position)
1~10 (10-key digital & electronic telephones)
1~20 (20-key digital & electronic telephones)

FEA ID (Feature ID Number or Abbreviation)
Enter Digits or Abbreviation:

ACD Alarm Key	326	ALRM
ACD Assistance	324	ASST
ACD Inter-Group Call Pick-up	336	INTP
ACD Inter-Group Tap Key	337	INTM
ACD Intra-Group Call Pickup	323	ACDP
ACD Intra-Group Tap Key	325	TAP
ACD Log Key	317	LOG
ACD Status Key	320	STAT
ACD Work Mode Cancellation	321	CANC
ACD Work Unit	322	WRKU
Account Code	307	ACCT
Attendant Parked Page Ret	333	PR_A
Authorization Code	299	AUTH
Autodial Key	278	ADL
Automatic Answer Key	279	AUTO
Call Forward-All Calls Key	271	CFAC
Call Forward-Busy/No Ans Key	272	CFBN
Call Forward-No Answer Key	273	CFNA
Call Forward-Preregistered	275	PRCF
Call Park-Local Access/Ret	301	CP_L
Call Park-Remote Access/Ret	302	CP_R
Call Pickup - Directed	284	DPU
Call Pickup - Directed Group	285	DGPU
Call Pickup - Group	262	GPU
Camp-on Key	281	CAMP
Code Calling Access	258	CC
Code Calling Retrieval	267	CCMM
Data Privacy	312	DPVY
Dictation Mach. Access-Direct	264	DC_I
Dictation Mach. Access-Group	263	DC_G
Do Not Disturb Key	270	DND
Headset Control Key	339	HSC
Headset Mode Key	338	HSM
LCD Contrast Control Key	340	LCDC
LCD Remote Logout Agent	341	RLOG
Night Answer Access	269	UNA
Privacy Release	268	PRLS
Program Mode Key	274	PRGM
Save and Repeat Key	277	S&R
Speed Calling - Group	291	SC_G
Speed Calling - System	290	SYSD
Swap	287	SWAP
UCD Available/Unavailable Key	309	UCD
Voice Calling Key	276	VC
Voice Pg Access - Emergency	261	VP_E
Voice Pg Access - System	260	VP_S
Voice Pg Access - Zone	259	VP_Z
Voice Pg Retrieval - System	266	PR_S
Voice Pg Retrieval - Zone	265	VPMM

STATION FEATURE KEY PATTERN ASSIGNMENT

DEV	PAT	PRM POS	DDN POS	FEA POS	FEA ID	DEV	PAT	PRM POS*	DDN POS*	FEA POS	FEA ID *
ID20	1	16	5	1		ID20				1	
				2						2	
				3						3	
				4						4	
				5	DDN					5	
				6						6	
				7						7	
				8						8	
				9						9	
				10						10	
				11						11	
				12						12	
				13						13	
				14						14	
				15						15	
				16	PRM					16	
				17						17	
				18						18	
				19						19	
				20	RLS					20	RLS

Default Settings

* Enter the "**PRM POS**" and "**DDN POS**" designations in the "**FEA ID**" column adjacent to their positions.

STATION FEATURE KEY PATTERN ASSIGNMENT

DEV	PAT	PRM POS	DDN POS	FEA POS	FEA ID	DEV	PAT	PRM POS*	DDN POS	FEA POS	FEA ID*
EKT1	1	1		1	PRM	EKT1				1	
				2						2	
				3						3	
				4						4	
				5						5	
				6						6	
				7						7	
				8						8	
				9	RLS					9	RLS
				10	MSW					10	MSW

Default Settings

* Enter the "**PRM POS**" designation in the "**FEA ID**" column adjacent to its position.

FIELD PARAMETERS

DEV (Device Category)

2010	(10-key digital telephone)
2020	(20-key digital telephone)
ID10	(10-key digital telephone/DIU)
ID20	(20-key digital telephone/DIU)
EKT1	(Electronic telephone/10 flexible & 4 fixed keys)
EKT2	(Electronic telephone/20 flexible & 4 fixed keys, w or w/o a display)
DKT1	(Digital telephone/10 flexible & 4 fixed keys with or without a display)
DKT2	(Digital telephone/20 flexible & 4 fixed keys with or without a display)

PAT (Station Feature Key Pattern Number)
2~4

PRM POS (Prime Directory Number Key Position)

1~10	(10-key digital & electronic phones)
1~20	(20-key digital & electronic phones)

DDN POS (Data Directory Number Key Position)

1~10	(10-key digital phones with DIU)
1~20	(20-key digital phones with DIU)

FEA POS (Feature Key Position)

1~10	(10-key digital & electronic telephones)
1~20	(20-key digital & electronic telephones)

FEA ID (Feature ID Number or Abbreviation)
Enter Digits or Abbreviation:

ACD Alarm Key	326	ALRM
ACD Assistance	324	ASST
ACD Inter-Group Call Pick-up	336	INTP
ACD Inter-Group Tap Key	337	INTM
ACD Intra-Group Call Pickup	323	ACDP
ACD Intra-Group Tap Key	325	TAP
ACD Log Key	317	LOG
ACD Status Key	320	STAT
ACD Work Mode Cancellation	321	CANC
ACD Work Unit	322	WRKU
Account Code	307	ACCT
Attendant Parked Page Ret	333	PR_A
Authorization Code	299	AUTH
Autodial Key	278	ADL
Automatic Answer Key	279	AUTO
Call Forward-All Calls Key	271	CFAC
Call Forward-Busy/No Ans Key	272	CFBN
Call Forward-No Answer Key	273	CFNA
Call Forward-Preregistered	275	PRCF
Call Park-Local Access/Ret	301	CP_L
Call Park-Remote Access/Ret	302	CP_R
Call Pickup - Directed	284	DPU
Call Pickup - Directed Group	285	DGPU
Call Pickup - Group	262	GPU
Camp-on Key	281	CAMP
Code Calling Access	258	CC
Code Calling Retrieval	267	CCMM
Data Privacy	312	DPVY
Dictation Mach. Access-Direct	264	DC_I
Dictation Mach. Access-Group	263	DC_G
Do Not Disturb Key	270	DND
Headset Control Key	339	HSC
Headset Mode Key	338	HSM
LCD Contrast Control Key	340	LCDC
LCD Remote Logout Agent	341	RLOG
Night Answer Access	269	UNA
Privacy Release	268	PRLS
Program Mode Key	274	PRGM
Save and Repeat Key	277	S&R
Speed Calling - Group	291	SC_G
Speed Calling - System	290	SYSD
Swap	287	SWAP
UCD Available/Unavailable Key	309	UCD
Voice Calling Key	276	VC
Voice Pg Access - Emergency	261	VP_E
Voice Pg Access - System	260	VP_S
Voice Pg Access - Zone	259	VP_Z
Voice Pg Retrieval - System	266	PR_S
Voice Pg Retrieval - Zone	265	VPMM

STATION FEATURE KEY PATTERN ASSIGNMENT

DEV	PAT	PRM POS	DDN POS	FEA POS	FEA ID	DEV	PAT	PRM POS*	DDN POS	FEA POS	FEA ID *
EKT2	1	1		1	PRM	EKT2				1	
				2						2	
				3						3	
				4						4	
				5						5	
				6						6	
				7						7	
				8						8	
				9						9	
				10						10	
				11						11	
				12						12	
				13						13	
				14						14	
				15						15	
				16						16	
				17						17	
				18						18	
				19	RLS					19	RLS
				20	MSW					20	MSW

Default Settings

* Enter the "**PRM POS**" designation in the "**FEA ID**" column adjacent to its position.

STATION FEATURE KEY PATTERN ASSIGNMENT

DEV	PAT	PRM POS	DDN POS	FEA POS	FEA ID	DEV	PAT	PRM POS*	DDN POS	FEA POS	FEA ID*
DKT1	1	6		1		DKT1				1	
				2						2	
				3						3	
				4						4	
				5						5	
				6	PRM					6	
				7						7	
				8						8	
				9						9	
				10	PLS					10	RLS

Default Settings

* Enter the "**PRM POS**" designation in the "**FEA ID**" column adjacent to its position.

FIELD PARAMETERS

DEV (Device Category)
2010 (10-key digital telephone)
2020 (20-key digital telephone)
ID10 (10-key digital telephone/DIU)
ID20 (20-key digital telephone/DIU)
EKT1 (Electronic telephone/10 flexible & 4 fixed keys)
EKT2 (Electronic telephone/20 flexible & 4 fixed keys, w or w/o a display)
DKT1 (Digital telephone/10 flexible & 4 fixed keys with or without a display)
DKT2 (Digital telephone/20 flexible & 4 fixed keys with or without a display)

PAT (Station Feature Key Pattern Number)
2~4

PRM POS (Prime Directory Number Key Position)
1~10 (10-key digital & electronic phones)
1~20 (20-key digital & electronic phones)

DDN POS (Data Directory Number Key Position)
1~10 (10-key digital phones with DIU)
1~20 (20-key digital phones with DIU)

FEA POS (Feature Key Position)
1~10 (10-key digital & electronic telephones)
1~20 (20-key digital & electronic telephones)

FEA ID (Feature ID Number or Abbreviation)
Enter Digits or Abbreviation:

ACD Alarm Key	326	ALRM
ACD Assistance	324	ASST
ACD Inter-Group Call Pick-up	336	INTP
ACD Inter-Group Tap Key	337	INTM
ACD Intra-Group Call Pickup	323	ACDP
ACD Intra-Group Tap Key	325	TAP
ACD Log Key	317	LOG
ACD Status Key	320	STAT
ACD Work Mode Cancellation	321	CANC
ACD Work Unit	322	WRKU
Account Code	307	ACCT
Attendant Parked Page Ret	333	PR_A
Authorization Code	299	AUTH
Autodial Key	278	ADL
Automatic Answer Key	279	AUTO
Call Forward-All Calls Key	271	CFAC
Call Forward-Busy/No Ans Key	272	CFBN
Call Forward-No Answer Key	273	CFNA
Call Forward-Preregistered	275	PRCF
Call Park-Local Access/Ret	301	CP_L
Call Park-Remote Access/Ret	302	CP_R
Call Pickup - Directed	284	DPU
Call Pickup - Directed Group	285	DGPU
Call Pickup - Group	262	GPU
Camp-on Key	281	CAMP
Code Calling Access	258	CC
Code Calling Retrieval	267	CCMM
Data Privacy	312	DPVY
Dictation Mach. Access-Direct	264	DC_I
Dictation Mach. Access-Group	263	DC_G
Do Not Disturb Key	270	DND
Headset Control Key	339	HSC
Headset Mode Key	338	HSM
LCD Contrast Control Key	340	LCDC
LCD Remote Logout Agent	341	RLOG
Night Answer Access	269	UNA
Privacy Release	268	PRLS
Program Mode Key	274	PRGM
Save and Repeat Key	277	S&R
Speed Calling - Group	291	SC_G
Speed Calling - System	290	SYSD
Swap	287	SWAP
UCD Available/Unavailable Key	309	UCD
Voice Calling Key	276	VC
Voice Pg Access - Emergency	261	VP_E
Voice Pg Access - System	260	VP_S
Voice Pg Access - Zone	259	VP_Z
Voice Pg Retrieval - System	266	PR_S
Voice Pg Retrieval - Zone	265	VPMM

STATION FEATURE KEY PATTERN ASSIGNMENT

DEV	PAT	PRM POS	DDN POS	FEA POS	FEA ID	DEV	PAT	PRM POS*	DDN POS	FEA POS	FEA ID *
DKT2	1	16		1		DKT2				1	
				2						2	
				3						3	
				4						4	
				5						5	
				6						6	
				7						7	
				8						8	
				9						9	
				10						10	
				11						11	
				12						12	
				13						13	
				14						14	
				15						15	
				16	PRM					16	
				17						17	
				18						18	
				19						19	
				20	RLS					20	RLS

Default Settings

* Enter the "**PRM POS**" designation in the "**FEA ID**" column adjacent to its position.

STATION ASSIGNMENT

EQUIP #	PRM DN	TYPE	PAT	A1	A2	EXT	RNG	COS	DRL	FRL	QPL	ANSPOS	SRG	NAME	DEPT

FIELD PARAMETERS

EQUIP # (Equipment Highway No.) (5 to 6 digits)

For BSTI and 1B-Chan. DSTI cards:

Shelf	Card Slot	Circuit
01~10	01~11, 13	01~16

For a 2B-Channel DSTI card:

Shelf	Card Slot	Circuit
01~10	01, 03, 05, 07, 09, 11	01~16

For EKTI and XSTI cards:

Shelf	Card Slot	Circuit
01~10	01~14	01~08

PRM DN (Prime Directory No.)
0~99999 (1 to 5 digits)

TYPE (Station Type)
2010 (10-key digital)
2020 (20-key digital – display)
ID10 (10-key digital – DIU)
ID20 (20-key digital – DIU)
ANLG (Analog)
AVMS (Analog – Voice Messaging)
ANMW (Analog – Message Waiting)
OPS (Off-premises Station)
EK01 (EKT – 1 line key & 3 fixed keys)
EK10 (EKT – 10 flexible keys & 4 fixed keys)
EK20 (EKT – 20 flexible keys & 4 fixed keys)
EK2D (EKT – 20 flexible keys, 4 fixed keys & display)
DK10 (DKT digital telephone w 10 flexible keys)
DK1D (DKT digital telephone w 10 flexible keys & display)
DK20 (DKT digital telephone w 20 flexible keys)
DK2D (DKT digital telephone w 20 flexible keys & display

PAT (Pattern Number of Feature Key Template)
1~4

A1 (1st Add-on Module Type)
M1 (20 key add-on module)
M2 (60-key add-on module)
NO (No add-on module needed)

A2 (2nd Add-on Module Type)
M1 (20 key add-on module)
NO (No additional add-on module needed)

EXT (For future use)

RNG (Ringing Option – For analog only
RNG (Ring)
NRG (No ring)

COS (Class of Service)
1~64

DRL (Destination Restriction Level)
1~16

FRL (Facility Restriction Level Profile)
1~32

QPL (Queuing Priority Level)
1~8

ANSPOS (Answer Position Directory No.)
0~99999 (Att. Group, Att. Station, UCD, ACD, or hunt) or "NON"

SRG (Station Restriction Group No.)
For future use. 1~16

NAME (Name)
Up to 9 chars.

DEPT (Department Name)
Up to 4 chars.

FORCED ACCOUNT CODE TOLL-FREE TABLES

AC	OC	OC	OC	OC	OC	OC	OC	OC	OC	OC

FIELD PARAMETERS

AC (Area Code)
200~919

Use "NYX" format for area codes:
N = 2~9
Y = 0~1
X = 0~9

OC (Office Code)
200~999

Use "NXX" format for office codes:
N = 2~9
X = 0~9

STATION-LEVEL PARAMETER ASSIGNMENT

EQUIP #	PRM DN	VM DEST	TYPE	ORG/TER	PVT	ASD	TOR#	DID#	DISP	SEC	VMS#

FIELD PARAMETERS

EQUIP # (Equipment Highway Number)
(5 or 6 digits)

For BSTI and 1B-Chan. DSTI cards:

Shelf	Card Slot	Circuit
01~10	01~11, 13	01~16

For a 2B-Channel DSTI card:

Shelf	Card Slot	Circuit
01~10	01, 03, 05, 07, 09, 11	01~16

For EKTI and XSTI cards:

Shelf	Card Slot	Circuit
01~10	01~14	01~08

PRM DN (Prime Directory Number)
0~99999 (1 to 5 digits)

VM DEST (Voicemail Retrieval Destination)
0~99999 (1 to 5 digits)

TYPE (Forced Account Code Type)
ALL (All calls)
TOLL (Toll calls only)
NON (None)

ORG/TER (Originate or Terminate Only)
ORG (Origination allowed & termination denied)
TER (Origination denied & termination allowed)
BOTH (Origination allowed & termination allowed)

PVT (Conversation Privacy)
YES (Privacy enabled)
NO (Privacy disabled)

ASD (Attendant Supervision Disable)
YES (Disable attendant supervision)
NO (Enable attendant supervision)

TOR# (Timeout Routing Index)
1~32 (1 to 2 digits)

DID (DID index number)
1~16

DISP (Outgoing Call Display Flag)
NAME (Trunk name)
DLDN (Dialed number)

SEC (Data Security)
YES (Enabled)
NO (Disabled)

VMS# (Voice Messaging System Port Number)
For future use.

STATION FEATURE KEY ASSIGNMENT

PRM DN	DEV	PREF	PRM VA	ICM VA	AUT VA	ROB	POS	TYPE	DEF 1	DEF 2	DEF 3

FIELD PARAMETERS

PRM DN (Prime Directory No.)
0~99999 (1 to 5 digits)

DEV (Device Category)
4000 (PERCEPTION 4000 Digital telephone)
EKT (Electronic telephone)
DKT (Digital telephone)
AD1 (Add-on module 1)
AD2 (Add-on module 2)

PREF (Line Preference)
RNG (Longest ringing)
IDL (Idle)
PRNG (Prime and ringing)
PIDL (Prime and idle)
RIDL (Ringing and idle)
ALL (All)
NON (No preference)
PRM (Prime)

PRM VA (Receive Voice Announce on Prime Line)
ALW (Allowed)
DNY (Denied)

ICM VA (Receive Voice Announce on Intercom Line)
ALW (Allowed)
DNY (Denied)

AUT VA (Automatic Answerback to Voice Announce)
ALW (Allowed)
DNY (Denied)

ROB (Ring Over Busy)
YES (Yes)
NO (No)

POS (Key Assign. Position No.)
1~10 (10-key digital or electronic telephone)
1~20 (20-key digital, electronic telephone, or 20-key add-on module)
1~60 (60-key add-on module)

TYPE (Key Assign. Type)
FEA (Feature)
LINE (Line)
PRM (Prime line)
LLIN (Logical)
HOT (Hotline)
PVT (Private trunk)
DDN (Integrated data key)
MLIN (Multiple Line)
SUP (ACD line - supervisor)
ICM (Intercom group)
UND (Undefined)
AGE (ACD line - agent)

DEF 1 (Key Assign. Definition 1)
1~256 (For Intercom Group no.) or a directory no. 0~99999 for keys LINE, HOT, PVT, LLIN, PRM, DDN, MLIN
(1~5 digits)

DEF 2 (Key Assign. Definition 2)
RNG (Ring)
NRG (No ring)

DEF 3 (Key Assign. Definition 3)
0~9 (10-member intercom group)
01~20 (20-member intercom group)
1~7 (Multiple Line Index)

PRIVATE/HOTLINE ASSIGNMENT

TYPE	INDEX	HOT/PVT DN	TGN	DESTINATION NUMBER	PRM DN	POS	REMARKS

FIELD PARAMETERS

TYPE (Key Type)
PVT (Private line)
HOT (Hotline)

INDEX (Index No.)
1~256 (or to system configured maximum)

HOT/PVT DN (Directory No.)
0~99999 (1 to 5 digits)

TGN (Trunk Group No.)
1~256 (or to system configured maximum)

DESTINATION NUMBER (Destination No.)
0~9, *, or # (24 digits max.)

PRM DN (Prime Directory No.)
0~99999 (1 to 5 digits)

POS (Key Assignment Position No.)
1~60 (1 to 2 digits)

CALL PICKUP GROUP ASSIGNMENT

GRP#	NAME	INDEX	MEM DN	INDEX	MEM DN	GRP#	NAME	INDEX	MEM DN	INDEX	MEM DN

FIELD PARAMETERS

GRP# (Call Pickup Group No.)
1~128

NAME (Group Name)
Up to 9 chars.

INDEX (Member Index No.)
1~32

MEM DN (Pickup Group Member Directory No.)
0~99999 (1 to 5 digits)

TIME ZONE ASSIGNMENT

TYPE	INDEX	SUN		MON		TUE		WED		THU		FRI		SAT		HOL	
		ST TZ	TZ	ST TZ	TZ	ST TZ	TZ	ST TZ	TZ	ST TZ	TZ	ST TZ	TZ	ST TZ	TZ	ST TZ	TZ

TYPE	INDEX	SUN		MON		TUE		WED		THU		FRI		SAT		HOL	
		ST TZ	TZ	ST TZ	TZ	ST TZ	TZ	ST TZ	TZ	ST TZ	TZ	ST TZ	TZ	ST TZ	TZ	ST TZ	TZ

TYPE	INDEX	SUN		MON		TUE		WED		THU		FRI		SAT		HOL	
		ST TZ	TZ	ST TZ	TZ	ST TZ	TZ	ST TZ	TZ	ST TZ	TZ	ST TZ	TZ	ST TZ	TZ	ST TZ	TZ

FIELD PARAMETERS

TYPE (Type of time/day definition table)
LCR (Least Cost routing)
INW (Inward routing)
COS (COS/DRL/FRLP/QPL)
ISO1 (ISDN time/day change definition table – Class 1)
ISO2 (ISDN time/day change definition table – Class 2)
ISO3 (ISDN time/day change definition table – Class 3)
ISO4 (ISDN time/day change definition table – Class 4)

INDEX (Index of Time Changes Per Day)
1~4

ST TZ (Start Time for Each Time Zone)
00~23 (Hour)
00~59 (Minutes)

TZ (Time Zone No.)
1~4

Default = Zone 1, which applies to all zones 1~4, for all 24 hours.

LCR/AUTHORIZATION TIME ZONE CHANGE ASSIGNMENT
(Route Pattern Table Number Change Form)

TYPE	RPN	TZ1 TBL	TZ2 TBL	TZ3 TBL	TZ4 TBL

FIELD PARAMETERS

TYPE (Type of definition changes table)
LCR (Least Cost Routing selection)

RPN (Route Pattern No. for LCR only)
1~100

In the following four Time Zone fields, enter the route table no.

TZ1 TBL (Time Zone 1)
1~100

TZ2 TBL (Time Zone 2)
1~100

TZ3 TBL (Time Zone 3)
1~100

TZ4 TBL (Time Zone 4)
1~100

LCR/AUTHORIZATION TIME ZONE CHANGE ASSIGNMENT
(Original Definition Time Zone Change Form)

TYPE	ORIG DEF	TZ1 NEW DEF	TZ2 NEW DEF	TZ3 NEW DEF	TZ4 NEW DEF

FIELD PARAMETERS

TYPE (Type of definition changes table)
COS (Class of Service)
DRL (Destination Restriction Level)
FRLP (Facility Restriction Level Profile)
QPL (Queue Priority Level)
LCR (Least Cost Routing)

ORIG DEF (Original Definition for COS, DRL, FRLP, and QPL)

In the following four Time Zone fields, you can enter new definitions for COS, DRL, FRLP, and QPL. See **ORG/DEF RPN** in Database Programming Manual

TZ1 NEW DEF (Time Zone 1)
COS 1 to 64
DRL 1 to 16
FRLP 1 to 32
QPL 1 to 8
RPN 1 to 100

TZ2 NEW DEF (Time Zone 2)
COS 1 to 64
DRL 1 to 16
FRLP 1 to 32
QPL 1 to 8
RPN 1 to 100

TZ3 NEW DEF (Time Zone 3)
COS 1 to 64
DRL 1 to 16
FRLP 1 to 32
QPL 1 to 8
RPN 1 to 100

TZ4 NEW DEF (Time Zone 4)
COS 1 to 64
DRL 1 to 16
FRLP 1 to 32
QPL 1 to 8
RPN 1 to 100

GROUP SPEED CALLING MEMBER ASSIGNMENT

GRP#	INDEX	MEM DN	INDEX	MEM DN	GRP#	INDEX	MEM DN	INDEX	MEM DN

FIELD PARAMETERS

GRP# (Speed Calling Group No.)
1~255

INDEX (Speed Calling Group Member Index)
1~32

MEM DN (Member Primary Directory No.)
0~99999 (1 to 5 digits)

GROUP SPEED CALLING LIST ASSIGNMENT

GRP#	GSCC	DESTINATION NUMBER	GRP#	GSCC	DESTINATION NUMBER

FIELD PARAMETERS

GRP# (Group Speed Calling Group No.)
1~255

GSCC (Group Speed Calling Code)
0~9

DESTINATION NUMBER (Destination Address)
(1~24 digits)
0~9, #, **, and *n, where n = 1 to 9 seconds

TIMEOUT ROUTING DESTINATION ASSIGNMENT

INDEX	DESTINATION NUMBER	INDEX	DESTINATION NUMBER
1		17	
2		18	
3		19	
4		20	
5		21	
6		22	
7		23	
8		24	
9		25	
10		26	
11		27	
12		28	
13		29	
14		30	
15		31	
16		32	

FIELD PARAMETERS

INDEX (Timeout Routing Index Number)
1~32

DESTINATION NUMBER (Destination Address)
0~99999 (1 to 5 digits)
Must be one of the following:
Attendant
Attendant Group
Hunt Group Pilot
Logical Line
Station

AUTHORIZATION CODE ASSIGNMENT

INDEX	AUTH CODE	SMDR ID	COS	DRL	FRLP	QPL	ANS POS	RG

FIELD PARAMETERS

INDEX
1~1024 (1 to 4 digits)

AUTH CODE (Authorization Code)
1~99999999 (1 to 8 digits)

SMDR ID (SMDR Identification Code)
1 to 5 ASCII chars.

COS (Class Of Service)
1~64

DRL (Destination Restriction Level)
1~16

FRLP (Facility Restriction Level Profile)
1~32

QPL (Queue Priority Level)
1~8

ANS POS (Answer Position)
0~99999 (1 to 5 digits)
Must be one of the following:
Attendant
Attendant Group
Station
Hunt Group Pilot
ACD Pilot
UCD Pilot

RG Voice or Data Restriction Group)
Not used. For future use.
1~16

MISCELLANEOUS DEVICE ASSIGNMENT

DEV	EQUIP #	USAGE

FIELD PARAMETERS

DEV (Device No.)
AM01~AM64 (Announcement Machine #1~64)
MS01~MS04 (Music-on-Hold Device #1~4)

EQUIP # (Equipment No.), 5 to 6 digits

For MOH BSTI cards:

Shelf	Card Slot	Circuit
01~10	01~11, 13	01~16

For MOH XSTI and ANN EM1I cards:

Shelf	Card Slot	Circuit
01~10	01~14	01~08

For ANN EM2I cards:

Shelf	Card Slot	Circuit
01~10	01~14	01~06

USAGE (Announcement or Music-on-Hold Usage)
ACD (ACD announcement)
UCD (UCD announcement)
DID (DID announcement)
GEN (General intercept)
AUX (Other)

ACCOUNT CODE ASSIGNMENT

ACCOUNT CODE	ACCOUNT CODE	ACCOUNT CODE	ACCOUNT CODE	ACCOUNT CODE	ACCOUNT CODE

FIELD PARAMETERS

ACCOUNT CODE (Account Code)
1~15 digits

COUNTRY CODE ASSIGNMENT

CC	CC	CC	CC	CC	CC	CC	CC	CC	CC	CC	CC	CC	CC	CC

FIELD PARAMETERS

CC (Country Code)
1~999

DESTINATION RESTRICTION LEVEL ASSIGNMENT

TRGN	DRL	NON TF	EXCEPT DNY	EXCEPT ALW	CC TBL	AC/OC TBL	AC TBL

FIELD PARAMETERS

TRGN (Trunk Restriction Group No.)
2~8 (or to system-configured maximum)

DRL (Destination Restriction Level)
2~16 (or to system-configured maximum)

NON TF (Non Toll-free Calling Zone)
DNY (Deny non toll-free calls)
ALW (Allow non toll-free calls)

COUNTRY CODE RESTRICTION TABLE

TRGN	DRL	TYPE	CC	CC	CC	CC	CC	CC	CC	CC	CC

FIELD PARAMETERS

TRGN (Trunk Restriction Group No.)
2~8 (or to system-configured maximum)

DRL (Destination Restriction Level)
2~16 (or to system-configured maximum)

TYPE (Table Type)
ALW (Allow)
DNY (Deny)

CC (Country Code)
1~999

AREA/OFFICE CODE RESTRICTION TABLE

TRGN	DRL	TYPE	AC	OC	OC	OC	OC	OC	OC	OC	OC	OC

FIELD PARAMETERS

TRGN (Trunk Restriction Group No.)
2~8 (or to system-configured maximum)

DRL (Destination Restriction Level)
2~16 (or to system-configured maximum)

TYPE (Office Code Restriction Type)
ALW (Allow)
DNY (Deny)

AC (Area Code)
200~919

Use “NYX” format for area codes:
N = 2~9
Y = 0~1
X = 0~9

OC (Office Code)
200~999

Use “NXX” format for office codes:
N = 2~9
X = 0~9

AREA CODE RESTRICTION TABLE

TRGN	DRL	TYPE	AC	AC	AC	AC	AC	AC	AC	AC	AC	AC

FIELD PARAMETERS

TRGN (Trunk Restriction Group No.)
2~8 (or to system-configured maximum)

DRL (Destination Restriction Level)
2~16 (or to system-configured maximum)

TYPE (Area Code Restriction Type)
ALW (Allow)
DNY (Deny)

AC (Area Code)
200~919

Use “NYX” format for area codes:
N = 2~9
Y = 0~1
X = 0~9

EXCEPTION RESTRICTION TABLES

TYPE	TRGN	DRL	INDEX	EXCEPTION NUMBER	INDEX	EXCEPTION NUMBER

FIELD PARAMETERS

TYPE (Type of List)
DNY (Exceptional denial list type)
ALW (Exceptional allowance list type)

TRGN (Trunk Restriction Group No.)
2~8 (or to system-configured maximum)

DRL (Destination Restriction Level)
2~16 (or to system-configured maximum)

INDEX (List Index No.)
1~32

EXCEPTION NUMBER
Dialing digits plus X, Y, N, and T (1 to 24 digits)
0-9 (dialed digits)
Y (represents a 1 or 0)
X (represents any digit 0-9)
N (represents any digit 2-9)
T (allows unlimited number of dialed digits, last digit identified by timeout)

STATION HUNTING ASSIGNMENT

GRP #	METHOD	PILOT DN	NAME	OVF DEST	MEM #	MEM DN	ENT PT

FIELD PARAMETERS

GRP # (Hunt Group No.)
1~200

METHOD (Hunt Method)
SER(Serial hunt method)
CIR (Circular hunt method)

PILOT DN (Pilot Directory No.)
0~99999 (1 to 5 digits)

NAME (Group Name)
Up to 9 chars.

OVF DEST (Overflow Destination)
0~99999
(1~3 digits + 3 digits speed call access & code.Total of 4 to 6 digits)

MEM # (Membership Index No.)
1~16

MEM DN (Member Directory No.)
0~99999 (1 to 5 digits)

ENT PT (Entry point for serial hunting)
YES (Yes)
NO (No)

For circular hunt groups, enter “YES”.

ANNOUNCEMENT PATTERN ASSIGNMENT

AP#	RING TIME	ANN1 NUM	INT1 TIME	#1 CYC	ANN2 NUM	INT2 TIME	#2 CYC	ANN3 NUM	INT3 TIME	#3 CYC	2&3 CYC

FIELD PARAMETERS

AP# (Announcement Pattern No.)
1~50

RING TIME (Length of the Ring)
1~60 (seconds)

ANN1 NUM (Announcement No. 1)
AM01~AM64 (4 alphanumeric chars.)

INT1 TIME (Time interval between Announcements)
1~120 (seconds)

#1 CYC (No. of Cycles of Announcement)
0~9 or 00~09 (1 to 2 digits)

ANN2 NUM (Announcement No. 2)
AM01~AM64 (4 alphanumeric chars.)

INT2 TIME (Time interval between Announcements)
1~120 (seconds)

#2 CYC (No. of Cycles of Announcement)
0~9 or 00~09 (1 to 2 digits)

ANN3 NUM (Announcement No. 3)
AM01~AM64 (4 alphanumeric chars.)

INT3 TIME (Interval of Time between Announcements)
1~120 (seconds)

#3 CYC (No. of Cycles of Announcement)
0~9 or 00~09 (1 to 2 digits)

2&3 CYC (Cycle Announcement 2 and 3)
0~9 or 00~09 (1 to 2 digits)

UCD GROUP ASSIGNMENT

GRP#	PILOT DN	NAME	OVF DEST	AP#	OVF TMR	INDEX	MEM DN	INDEX	MEM DN

FIELD PARAMETERS

GRP# (Uniform Call Distribution (UCD) Group No.)
1~8

PILOT DN (Pilot Directory No.)
0~99999 (1 to 5 digits)

NAME (Group Name)
Up to 9 chars.

OVF DEST (Overflow Destination)
0~99999 (1 to 5 digits)

AP# (Announcement Pattern No.)
1~50

OVF TMR (Overflow Timer)
0~1000 (1 to 4 digits)

INDEX
1~16 (appears during the display operation only)

MEM DN (UCD Member Directory No.)
0~99999 (1 to 5 digits)

ACD GROUP ASSIGNMENT

GRP#	PILOT DN	NAME	SUP PWD	GRP MON	MAX TERMS	MAX CALLS

FIELD PARAMETERS

GRP# (Automatic Call Distribution (ACD) Group No.)
1~32 (or to system-configured maximum)

PILOT DN
0~99999 (1 to 5 digits)

NAME (Group Name)
Up to 9 characters

SUP PWD (Supervisor Password)
0~99999999 (1 to 8 digits)

GRP MON (Supervisor Inter-Group Tap Flag)
YES (Enables monitoring)
NO (Disables monitoring)

MAX TERMS (Maximum No. of Agent Terminals)
1~64

MAX CALLS (Maximum No. of Calls Handled Simultaneously)
1~100

ACD AGENT ASSIGNMENT

GRP#	AGT	PU1 FLAG	PU2 FLAG	COS	DRL	FRLP	QPL	NAME

FIELD PARAMETERS

GRP# (Group No.)
1~32 (or to system-configured maximum)

AGT (Agent Identification Code)
000~999 (3 digits)

PU1 FLAG (Call Pickup Flag)
ALW (Agent can perform intra-group call pickup)
DNY (Intra-group pickup is not allowed)

PU2 FLAG (Call Picked-up Flag)
ALW (Allow other agents to pickup this agent's ACD calls)
DNY (ACD calls may not be picked up)

COS (Agent Class of Service)
1~64

DRL (Agent Destination Restriction Level)
1~16 (or to system-configured maximum)

FRLP (Agent Facility Restriction Level Profile)
1~32 (or to system-configured maximum)

QPL (Agent Queue Priority Level)
1~8

NAME (Agent Name)
Up to 9 characters

ACD GROUP PARAMETER ASSIGNMENT

GRP#	DAY DEST	NIT DEST	ALM TON	ALM ON	ALM OFF	INT FLG	AP#	WRK TMR

FIELD PARAMETERS

GRP# (Automatic Call Distribution (ACD) Group No.)
1~32

DAY DEST (Daytime Overflow Destination)
0~99999 (1 to 5 digits)

NIT DEST (Nighttime Overflow Destination)
0~99999 (1 to 5 digits)

ALM TON (Audible Indication of Q-size Alarm)
YES
NO

ALM ON (Q-size Threshold to Turn the Alarm On)
1~100

ALM OFF (Q-sizeThreshold to Turn the Alarm Off)
1~100

INT FLG (Internal Call Restriction Flag)
ALW (Allowed)
DNY (Denied)

AP# (Announcement Pattern No.)
1~50

WRK TMR (After Call Work Timer)
0~255

DID/CCSA/DNIS ACD PARAMETER ASSIGNMENT

TGN	LDN	IQP1	IQP TMR	IQP2	OVF TMR	LDN NAME

FIELD PARAMETERS

TGN (Trunk Group Number)
1~256 (or to system-configured maximum)

LDN (Listed Directory Number)
2~15 digits

IQP1 (First Incoming ACD Call Queuing Priority)
1~16

IQP TMR (Incoming ACD Call Queuing Priority Timer)
1~9999 seconds

IQP2 (Second Incoming ACD Call Queuing Priority)
1~16

OVF TMR (ACD Overflow Timer)
1~9999 seconds

LDN NAME (Listed Directory Number Name)
1~14 characters

MODEM POOL ASSIGNMENT

GRP#	NAME	TYPE	INDEX	MODEM EN	DIU EN	INDEX	MODEM EN	DIU EN

FIELD PARAMETERS

GRP# (Modem Pool Group No.)
1~32 (or to system-configured maximum)

NAME
Up to 9 chars.

TYPE (Call usage type)
INC (Incoming)
OUT (Outgoing)
BWY (Bothway)

INDEX
1~64 (Define the order of modem members)

MODEM EN (Modem Equipment No.)
(5 to 6 digits)

For BSTI cards:

Shelf	Card Slot	Circuit
01~10	01~11, 13	01~16

For XSTI cards:

Shelf	Card Slot	Circuit
01~10	01~14	01~08

DIU EN (Data Interface Unit Equipment No.)
(5 to 6 digits)

For DIU (DSTI) cards:

Shelf	Card Slot	Circuit
01~10	01~11, 13	01~16

NOTE:
(slot 13 is unavailable if the DSTI card is set for 2B operation)

DATA STATION ASSIGNMENT

EQUIP #	DIU DN	TYPE	AS DN	DEF MDM	COS	DRL	FRLP	QPL	DRG	ANS	NAME

FIELD PARAMETERS

EQUIP # (Equipment No.), 5 to 6 digits

For DSTI cards:

Shelf	**Card Slot**	**Circuit**
01~10	01~11, 13	01~16

Do not use slot 13 if the card is a 2B operation type.

DIU DN (DIU Directory No.)
0~99999 (1 to 5 digits)

TYPE (DIU Type, Logically Paired or Standalone)
SAL (Standalone)
ITG (Integrated)
LGP (Logically paired) Not used. Future feature

AS DN (Associate Directory No.)
Not used. 0~99999 (1 to 5 digits)

DEF MDM (Default Modem Pool)
1~32

COS (Class Of Service)
1~64

DRL (Destination Restriction Level)
1~16 (or to system-configured maximum)

FRLP (Facility Restriction Level)
1~32 (or to system-configured maximum)

QPL (Queuing Priority Level)
1~8

DRG (Data Restriction Group)
Not used. 1~16

ANS (Answer Method)
AUTO (Auto-answer)
DTE (Data Terminal Equipment answer)
NON (Neither)

NAME (Directory Name)
Up to 9 chars.

DATA INTERFACE PARAMETER ASSIGNMENT

EQ/MP #	SYN/ASY	DPLX	EMU	CLK	SPEED	PRTY	DATA B	STOP	DTR	DSR	RTS	CTS

FIELD PARAMETERS

EQ/MP # (Equipment or Modem Pool No.)
Equip. No. (5 to 6 digits),
Modem Pool 1~32 (1 to 2 digits)

For DSTI cards:

Shelf	**Card Slot**	**Circuit**
01~10	01~11, 13	01~16

Don't use slot 13 if card is a 2B operation type.

SYN/ASY (Synch./Asynch.)
SYN For future use. (Synchronous)
ASY (Asynchronous)

DPLX (Full/Half Duplex)
HDX (Half duplex)
FDX (Full duplex)

EMU (DTE/DCE Emulation)
DCE (Data Communications Equip.)
DTE (Data Terminal Equip.)

CLK (Clock Selection)
NON For future use. (No clock)

SPEED (Speed Selection in bits per second)
AUTO (Autobaud - asynch. only)
50 (asynch. only)
75 (asynch. only)
110 (asynch. only)
300 (asynch. only)
600~19200 (For future use - see Database Programming Manual)

PRTY (Parity Selection)
NO (No parity check)
ODD (Odd parity)
EVEN (Even parity)
DET (Detect parity–check if odd or even)

DATA B (Data Bit Selection)
7 BIT (7 data bits)
8 BIT (8 data bits)

STOP (Stop Bit Selection)
1 BIT (1 stop bit)
2 BIT (2 stop bits)

DTR (Detect Terminal Ready)
NON (No DTR treatment)
DET (Detect DTR)
HI (Consider DTR high at all times)

DSR (Data Set Ready)
NON (No DSR treatment)
DET (Detect DSR)
HI (Consider DSR high at all times)

RTS (Ready to Send)
NON (No RTS treatment)
DET (Detect RTS)
HI (Consider RTS high at all times)

CTS (Clear to Send)
NON (No CTS treatment)
DET (Detect CTS)
HI (Consider CTS high at all times)

DATA STATION PARAMETER ASSIGNMENT

EQ/MP #	ECHO	FLOW	BRK	AUTO DC	EDIT	B SP	CANCEL	DSPL	UCI	D UCI	REMARKS

FIELD PARAMETERS

EQ/MP # (Equipment/Modem Pool No.)
Equip. No. (5 to 6 digits),
Modem Pool 1~32 (1 to 2 digits)

For DSTI cards:

Shelf	**Card Slot**	**Circuit**
01~10	01~11, 13	01~16

Do not use slot 13 if the card is a 2B operation type.

ECHO (Local Echo Selection)
NON (No local echo)
ECHO (DIU local echo)

FLOW (Flow Control Selection)
NFC (No flow control)
CFC (Character flow control)
RCFC (Ready to Send/Clear to Send flow control)

BRK (Break Handling)
PT (Pass through)
PTD (Pass through then disconnect)

AUTO DC (Automatic Disconnect)
DIS (Autodisconnect disable)
ENB (Autodisconnect enable)

EDIT (Local Editing Selection)
DIS (Disable local editing)
ENB (Enable local editing)

B SP (Backspace character)
0 (Disable function)
1~127 (Character in decimal value)

CANCEL (Cancel Character)
0 (Disable function)
1~127 (Character in decimal value)

DSPL (Display Character)
0 (Disable function)
1~127 (Character in decimal value)

UCI (User Command Interface)
ON (Enable function)
OFF (Disable function)

D UCI (Dial up User Command Interface)
ON
OFF

DATA HUNTING ASSIGNMENT

GRP#	NAME	PILOT DN	MEM #	MEM DN	MEM #	MEM DN	MEM #	MEM DN	MEM #	MEM DN

FIELD PARAMETERS

GRP# (Group No.)
1~32

NAME (Group Name)
1~9 chars.

PILOT DN (Pilot Directory No.)
0~99999 (1 to 5 digits)

MEM # (Member Index No.)
1~64

MEM DN (Member Directory No.)
0~99999 (1 to 5 digits)

NAME DIALING ASSIGNMENT

INDEX	NAME	DESTINATION NUMBER	INDEX	NAME	DESTINATION NUMBER

FIELD PARAMETERS

INDEX
1~128

NAME
1~9 chars.

DESTINATION NUMBER
0~9, *, # (1 to 24 digits)

HIGH USAGE DATA DESTINATION ASSIGNMENT

INDEX	MODEM ID	DESTINATION NUMBER	INDEX	MODEM ID	DESTINATION NUMBER

FIELD PARAMETERS

INDEX
1~64

MODEM ID
1~32

DESTINATION NUMBER
0~9, *, # (1 to 24 digits)

COMMON CARRIER ASSIGNMENT

INDEX	10XXX CODE	INDEX	10XXX CODE	INDEX	10XXX CODE	INDEX	10XXX CODE

FIELD PARAMETERS

INDEX (Common Carrier Index no.)
1~10

10XXX CODE (Equal Access Code)
10000~10999 (5 digits)

LCR DIGIT TRANSLATION PROFILE ASSIGNMENT

PFL#	DDN	DUNP	TPTMT	OPFX	DEAC	ACTMT	PREFIX STRING	SUFFIX STRING

FIELD PARAMETERS

PFL# (Digit Translation Profile No.)
1~32

DDN (Delete Dialed No.)
ALL (Delete all dialed numbers)
D01 (Delete the first dialed number)
D02 (Delete the first two dialed numbers)
.
.
D24 (Delete the first 24 dialed digits)
K01 (Keep the last dialed digit)
K02 (Keep the last two dialed digits)
.
.
K24 (Keep the last 24 dialed digits)
NON (No deletion)

DUNP (Delete UNP Location Code)
DEL (Delete)
NON (Do not delete)

TPTMT (Toll Prefix Treatment)
ADD (Add toll prefix)
DEL (Delete toll prefix – default for ISDN trunks)
A10TP (Add toll prefix for 10-digit DDD call)
D7TP (Delete 7 digits' toll prefix)
D7A10 (Delete 7 digits' toll prefix and add toll prefix for 10-digit DDD calls)
NON (Leave toll prefix unchanged – default for non-ISDN trunks)

OPFX (Operator Prefix)
DEL (Delete operator prefix)
NON (Leave operator prefix)

DEAC (Delete Equal Access Code)
DEL (Delete 10XXX)
NON (Leave 10XXX)

ACTMT (Area Code Treatment)
DEL (Delete area code)
ADD (Add home area code)
NON (Leave area code as is, default)

PREFIX STRING (Prefix String to be added)
0~9, #, *

SUFFIX STRING (Suffix String to be added)
0~9, #, *

LCR ROUTING TABLE ASSIGNMENT

TBL#	ROUTE #	TGN	CARR #	FRL	WARN	PFL#	CALL TYPE	TBL#	ROUTE #	TGN	CARR #	FRL	WARN	PFL#	CALL TYPE

TBL#	ROUTE #	TGN	CARR #	FRL	WARN	PFL#	CALL TYPE	TBL#	ROUTE #	TGN	CARR #	FRL	WARN	PFL#	CALL TYPE

FIELD PARAMETERS

TBL# (LCR Routing Table No.)
1~100

ROUTE # (Route No.)
1~8

TGN (Trunk Group No.)
1~256 (or to system configured maximum)

CARR # (Carrier No.)
1~10

FRL (Facility Restriction Level)
1~16

WARN (Warning Flag)
YES (Warning flag is on)
NO (Warning flag is off)

PFL# (Translation Profile No.)
1~32
NONE (No digit translation)

CALL TYPE (Call Type)
NAT (National service)
INT (International service)
SUB (Subscriber service)
UNK (Unknown)

LCR COUNTRY CODE ROUTING ASSIGNMENT

RPN	CC	CC	CC	CC	CC	CC	CC	CC	CC	CC	CC	CC

FIELD PARAMETERS

RPN (Route Pattern No.)
1~100 (or to system-configured maximum)

CC (Country Code)
1~999

LCR AREA/OFFICE CODE ROUTING ASSIGNMENT

RPN	AC	OC	OC	OC	OC	OC	OC	OC	OC	OC	OC	OC

FIELD PARAMETERS

RPN (Route Pattern No.)
1~100 (or to system-configured maximum)

AC (Area Code)
200~919
Use "NYX" format:
N = 2~9
Y = 0~1
X = 0~9

OC (Office Code)
200~999
Use "NXX" format:
N = 2~9
X = 0~9
X = 0~9

LCR AREA CODE ROUTING ASSIGNMENT

RPN	AC	AC	AC	AC	AC	AC	AC	AC	AC	AC	AC	AC

FIELD PARAMETERS

RPN (Route Pattern No.)
1~100 (or to system-configured maximum)

AC (Area Code)
200~919
Use "NYX" format:
N = 2~9
Y = 0~1
X = 0~9

UNP ROUTING ASSIGNMENT

RPN	RNX	RNX	RNX	RNX	RNX	RNX	RNX	RNX	RNX	RNX	RNX	RNX

FIELD PARAMETERS

RPN (Route Pattern No.)
1~100 (or to system-configured maximum)

RNX (Uniform Numbering Plan Location Code)
0~999

LCR SPECIAL ROUTING ASSIGNMENT

LCR DIAL PLAN	LCR HAC	DEF RPN	SPC RPN	UNP RPN	QPL	WARN

LCR DIAL PLAN	LCR HAC	DEF RPN	SPC RPN	UNP RPN	QPL	WARN

FIELD PARAMETERS

LCR DIAL PLAN (LCR Dial Plan No.)
2~4

LCR HAC (LCR Home Area Code)
200~919
Use "NYX" format:
N = 2~9
Y = 0~1
X = 0~9

DEF RPN (Default Route Pattern)
1~100 (or to system-configured maximum)

SPC RPN (Special Dialing No. Default Route Pattern)
1~100 (or to system-configured maximum)

UNP RPN (UNP Default Route Pattern)
1~100 (or to system-configured maximum)

QPL (Queue Priority Level)
1~8

WARN (Warning Tone Flag)
YES (Warning tone on)
NO (Warning tone off)

FACILITY RESTRICTION LEVEL PROFILE ASSIGNMENT

FRLP	F1	F2	F3	F4	F5	F6	F7	F8	F9	F10	F11	F12	F13	F14	F15	F 16

FIELD PARAMETERS

FRLP (Facility Restriction Level Profile no.)
1~32 (or to system-configured maximum)

F1 to F16 (Facility Restriction Level 1 to 16)
Mark legal facility restriction level by entering an "X".

VOICE PAGING/CODE CALL ASSIGNMENT

TYPE	ZONE #	TGN	CONTROL CODE #	TYPE	ZONE #	TGN	CONTROL CODE #

FIELD PARAMETERS

TYPE (Feature Type)
CC (Code Calling feature)
SPAG (System Paging feature)
EPAG (Emergency Paging feature)
ZPAG (Zone Paging feature)

ZONE # (Trunk Port Code)
Dependent on the LEN PD1 value of the Numbering Plan Assignment Command (CMD 300)
0~9, if LEN PD1 = 1
0~31 (Code Calling), if LEN PD1 = 2
0~99 (Zone Paging), if LEN PD1 = 2

TGN (Trunk Group Number)
1~256 (or to system configured maximum)

CONTROL CODE # (Device Control Code Number)
0~9 (for Zone Paging device)
NON

SYSTEM DISA SECURITY CODE ASSIGNMENT

SEC LENGTH	INDEX	SEC CODE	SMDR ID	INDEX	SEC CODE	SMDR ID

FIELD PARAMETERS

SEC LENGTH (Security Code Length)
3~6. Default is 6.

INDEX (Security Code Index No.)
1~64

SEC CODE (Security Code)
3~6 decimal digits (as defined by "SEC LENGTH")

SMDR ID (SMDR ID code)
001~99999 (3 to 5 digits)

DICTATION GROUP/MACHINE ASSIGNMENT

GRP#	DEV	EQUIP #	NAME

GRP#	DEV	EQUIP #	NAME

FIELD PARAMETERS

GRP# (Dictation Machine Group No.)
1~16

DEV (Device Identifier)
1~8

EQUIP # (Equipment No.), 5 to 6 digits

For BSTI cards:

Shelf	Card Slot	Circuit
01~10	01~11, 13	01~16

For XSTI cards:

Shelf	Card Slot	Circuit
01~10	01~14	01~08

NAME (Device Name)
Up to 9 chars.

SYSTEM SPEED CALLING ASSIGNMENT

INDX	DESTINATION NUMBER	INDX	DESTINATION NUMBER	INDX	DESTINATION NUMBER

FIELD PARAMETERS

INDX (Speed calling code assigned to the destination number entered to the right)
000~999 (3 digits)

DESTINATION NUMBER
0~9, *, #, ** (up to 24 digits)

M&A SECURITY LEVEL AND ACCESS ASSIGNMENT

SEC LVL	CMD	OPER	OPER	OPER	OPER	OPER	OPER	OPER	OPER	OPER	OPER	OPER

FIELD PARAMETERS

SEC LVL (User Access Level)
MFG (Manufacturer)
DIST (Distributor)
USER (User)
TN1 to TN32 (Tenant 1 to Tenant 32)

CMD (Command Identification No.)
000~999 (1 to 3 digits)

OPER (Operation Keyword)
ADD (Add)
ALM (Alarm)
BKP (Backup)
CHG (Change)
CMP (Compare)
CNT (Count)
CPY (Copy)
CRT (Create)
DEL (Delete)
DIR (Display directory)
DIS (Disable)
DSP (Display)
ENB (Enable)
FMT (Format)
FRE (Free)
IDL (Idle)
INI (Initiate)
INL (Install)
INS (In-service)
MKB (Busy)
MOD (Modify)
OOS (Out of service)
PSWD (Password)
RES (Restore)
RMV (Remove)
RST (Reset)
SET (Set)
SHW (Show)
SUP (Setup Operation)
SWH (Switchover)
SWP (Swap)
ALL (Allow/disallow the command)

SYSTEM HOLIDAY ASSIGNMENT

INDEX	DATE	INDEX	DATE	INDEX	DATE	INDEX	DATE

FIELD PARAMETERS

INDEX (Index No.)
1~16

DATE (Holiday)
0101~1231

1st 2 digits = Month
2nd 2 digits = Day

NIGHT BELL ASSIGNMENT

UNA BELL #	EQUIP #	UNA BELL #	EQUIP #	UNA BELL #	EQUIP #

FIELD PARAMETERS

UNA BELL # (Night Bell No.)
BL01~BL64 (4 alphanumeric chars.)

EQUIP # (Equipment No.), 5 to 6 digits

For BSTI cards:

Shelf	**Card Slot**	**Circuit**
01~10	01~11, 13	01~16

For XSTI cards:

Shelf	**Card Slot**	**Circuit**
01~10	01~14	01~08

SYSTEM TIMER ASSIGNMENT

INDEX	TIMER	NAME	INDEX	TIMER	NAME

FIELD PARAMETERS

INDEX (Timer Table Index No.)
1~99 (See Database Programming Manual)

TIMER (Timer Value)
1~99999 seconds (1 to 5 digits, see list)

Name	Value
Camp-on Timer	1-3600
Callback Timer	1-72000
Success Tone Duration	1-3600
LCR Warning Tone Duration	1-3600
Station Callback Ring Duration	1-3600
Trunk Callback Ring Duration	1-3600
Trunk Callback Interval Timer	1-14400
Long Hold Recall	1-3600
Reorder Tone Timer	1-3600
UNA Bell No Answer Timer	1-3600
Unscreened RBT Timer	1-3600
Call Forward - No Answer Timer	1-3600
Recall No Answer Timer	1-3600
Park Recall Timer	1-3600
Overflow Timer	1-3600
Analog Hold Timer	1-3600
Camp-on RBT Timer	1-3600
Detect Dial Tone Timer	1-3600
Interchangeable Office Code Timer	1-3600
Voice Page Recall Timer	1-3600
Code Call Recall Timer	1-3600
LED Error Flashing Duration	1-3600
Supervisor Warning Tone Timer	1-3600
Announcement Release Timer	1-3600
Attendant BLF Timer	1-3600
Attendant Forced PB Timer	1-3600
Break-in Warning Tone Timer	1-3600
ACD Call Ring No Answer Timer	0-3600
Station/Attendant ACD Queue Priority Advance Timer	0~9999
Station/Attendant ACD Overflow Timer	0~9999

SYSTEM OPTION FLAG ASSIGNMENT

OPTION	VALUE	OPTION	VALUE	OPTION	VALUE	OPTION	VALUE	OPTION	VALUE	OPTION	VALUE

FIELD PARAMETERS

Options are listed in bold. Corresponding values are listed below the options.

ACD (Automatic Call Distribution)
NAF (Next available agent first)
MIF (Most idle agent first)

CAMP (Direct Inward Dialing (DID) camp-on flag)
YES (Enable)
NO (Disable)

CAMQ (Camp-on Queue Preemption)
YES (Enable)
NO (Disable)

DISA (Direct Inward System Access security code requirement)
YES (Enable)
NO (Disable)

FACL (Forced Account Code Length to Be Validated)
DIG0~DIG15 (Code length)

IQP1 (First Incoming ACD Call Queuing Priority)
1~16 (Priority level)

IQP2 (Second Incoming ACD Call Queuing Priority)
1~16 (Priority level)

ISMDR (Internal Call SMDR Flag)
YES (Enable)
NO (Disable)

LCR (Least Cost Routing call restriction method)
FRLP (FRLP only)
BOTH (DRL and FRLP)

MUSC (Music-on-hold Tone)
IMT (Internal music tone)
MS01 (External music tone 1)
MS02 (External music tone 2)
MS03 (External music tone 3)
MS04 (External music tone 4)
QT (Quiet Tone)

MXCM (Maximum Number of Camp-on Calls allowed per Station [1~256])

NCFA (No Class of Service Feature Access Code intercept treatment method)
AP01~AP50 (Announcement Pattern 1 to 50)
ROT (Re-order tone)

NCTA (No Class of Service Trunk Access Code intercept treatment method)
0~99999 (An attendant or ATT group directory number, 1 to 5 digits)
AP01~AP50 (Announcement Pattern 1 to 50)
ROT (Re-order tone)

PX1~PX16 (Station ID Prefix)
1~16 (Prefix)

QUE (Trunk Queuing Method)
FIFO (First In/First Out queuing)
PRI (Priority queuing)

RDRL (Restrict Destination Restriction Level (DRL) intercept treatment method)
0~99999 (An attendant or ATT group directory number, 1 to 5 digits)
AP01~AP50 (Announcement Pattern 1 to 50)
ROT (Re-order tone)

VACC (Verified option flag for account code)
YES (Verified account codes)
NO (Account codes not verified)

VDNI (Vacant directory number intercept treatment method)
0~99999 (An attendant or ATT group directory number, 1 to 5 digits)
AP01~AP50 (Announcement Pattern 1 to 50)
ROT (Re-order tone)

WARN (Attendant/ACD Monitor Warning Tone)
YES (A warning tone is sent)
NO (No warning tone is sent)

SMDR CONFIGURATION ASSIGNMENT

TIMER	SMDR INC	SMDR OUT	TGN	INC CALLS	OUT CALLS	TOLL CALLS ONLY

FIELD PARAMETERS

TIMER (Station Message Detail Report Threshold Timer)
0~40 seconds. Default is 20.

SMDR INC (Enable/Disable Incoming SMDR Recording)
YES
NO. Default is NO.

SMDR OUT (Enable/Disable the Outgoing SMDR Recording)
YES
NO. Default is NO.

TGN (Trunk Group No. to be Monitored)
1~256 (or to system configured maximum)

INC CALLS (Screen Incoming Calls)
YES
NO

OUT CALLS (Screen Outgoing Calls)
YES
NO

TOLL CALLS ONLY
YES
NO

I/O PORT CONFIGURATION ASSIGNMENT

FCT	MCT	IOP#	TYPE	MC	MC CODE	LOT	DATA BIT	STOP	PRTY	SPEED

FCT	MCT	IOP#	TYPE	MC	MC CODE	LOT	DATA BIT	STOP	PRTY	SPEED

FCT	MCT	IOP#	TYPE	MC	MC CODE	LOT	DATA BIT	STOP	PRTY	SPEED

FIELD PARAMETERS

FCT (Flow Control Timer)
1~600

MCT (Motor Control Timer)
1~1800 (1 to 4 digits)

IOP# (I/O Port No.)
1~4

TYPE (Flow Control Type)
RCFC (Request-to-Send & Clear-to-Send control)
DC13 (DC1/DC3 control method, i.e., XON/XOFF method)
BOTH (Use both handshake methods above)
NON (Use no flow control)

MC (Motor Control Setting)
YES (Enabled)
NO (Disabled)

MC CODE (Motor Control Codes)
0000~7f7f (4 hexadecimal digits)
First two digits – motor on
Second two digits – motor off

LOT (Logout Timer Value)
1~1800

DATA BIT (No. of Data Bits)
7BIT (7 data bits–communication framing)
8BIT (8 data bits–communication framing)

STOP (No. of Stop Bits)
1BIT (1 stop bit–communication framing)
2BIT (2 stop bits–communication framing)

PRTY (Parity Setting)
ODD (Odd parity used to determine parity bit's value)
EVEN (Even parity used in determining parity)
NON (No parity check)

SPEED (Speed Rate Selection in bps)
300
1200
9600
19200

I/O PORT ASSIGNMENT

IOP#	TYPE	APPL	APPL	APPL	APPL	APPL	APPL	APPL	APPL	APPL	APPL	APPL

IOP#	TYPE	APPL	APPL	APPL	APPL	APPL	APPL	APPL	APPL	APPL	APPL	APPL

IOP#	TYPE	APPL	APPL	APPL	APPL	APPL	APPL	APPL	APPL	APPL	APPL	APPL

FIELD PARAMETERS

IOP# (I/O Port No.)
1~4

TYPE (I/O Port Type)
TTY (Maintenance & Administration Console)
AP (Application Processor)

APPL (Application Usage)
TTY type usage:
MA (Maintenance Console)
SSR (System Status Report)
EFR (Error or Fault Report)
TFR (Traffic Report)
SMDR (Station Message Detailed Report)
AP type usage:
ACD (Automatic Call Distribution)
VMS1 (Voice Message Status Type 1)
VMS2 (Voice Message Status Type 2)
VMS3 (Voice Message Status Type 3)

DTMF RECEIVER ASSIGNMENT

SHELF #	CARD #	SHELF #	CARD #	SHELF #	CARD #

FIELD PARAMETERS

SHELF # (Shelf No. of DTMF Receiver)
1~10

CARD # (Card No. of DTMF Receiver)
1~11, 13

CANNED TEXT/ADVISORY MESSAGE CREATION

TYPE	INX	MESSAGE TEXT	TYPE	INX	MESSAGE TEXT	TYPE	INX	MESSAGE TEXT

FIELD PARAMETERS

TYPE (Message type)
CAN (Canned text)
ADV (Advisory message)
ATT (Attendant EL display text)
DAT (System message for data calls)

INX (Index number)
1~8 (Canned text or advisory message)
1~3 (EL display information)
1~2 (System message for data calls)

MESSAGE TEXT (Message text)
1~30 characters (Canned text or advisory messages)
1~70 characters (EL attendant display messages and system messages for data calls)

ISDN CHANNEL GROUP ASSIGNMENT

CGN	TZ CLS	EQUIP#	B STR	H0 STR	H11 STR

FIELD PARAMETERS

CGN (Channel Group Number)
1~32 (or to system-configured maximum)

TZ CLS (Time Zone Class)
ISO1 (ISDN time zone class 1)
ISO2 (ISDN time zone class 2)
ISO3 (ISDN time zone class 3)
ISO4 (ISDN time zone class 4)

EQUIP # (Equipment Number)
5 to 6 digits

Shelf	Card Slot	Circuit
01~10	01~14	01~08

B STR (B Channel Structure)
Enter **YES**

H0 STR (H0 Channel Structure)
Locked Field

H11 STR (H11 Channel Structure)
Locked Field

ISDN CHANNEL GROUP HUNTING ASSIGNMENT

CGN	SEQ#	IPRI	DIR	CGN	SEQ#	IPRI	DIR	CGN	SEQ#	IPRI	DIR

FIELD PARAMETERS

CGN (Channel Group Number)
1~32 (or to system-configured maximum)

SEQ# (Sequence Number)
1 or 2

IPRI (Related IPRI Card Position)
3 or 4 digits

Shelf	**Card Slot**
01~10	01~12

DIR (Hunting Direction)
FRWD (Forward)
BACK (Backward) – Default

ISDN IPRC AND IPRI CARD ASSIGNMENT

CARD#	PROTOCOL	L2 MODE	HDLC	T303	IPRI	INF ID	D CH	FRAME	CODE

FIELD PARAMETERS

CARD # (IPRC Card Number)
3 or 4 digits

Shelf **Card Slot**
01~10 01~14

PROTOCOL (Protocol Type)
4ESS (AT&T user protocol)
5ESS (AT&T user protocol)
TPVT (Toshiba private protocol – reserved for future use)

L2 MODE (Layer 2 Mode)
Locked field

HDLC (HDLC Inversion Flag)
Locked field

T303 (Layer 3 Timer)
2~255 seconds
Default = 4

IPRI (Relate IPRI Card Position)
3 or 4 digits
Shelf **Card Slot**
1~10 01~12

INF ID (Interface Identifier)
0 or 1
Set to **0** if a D-channel IPRI card is used.

D CH (D-Channel Card Position)
YES IPRI card carries D channel
NO IPRI card does not carry D channel
Default = NO

FRAME (IPRI Card Framing)
Locked field

CODE (Line Code Scheme)
Locked field

ISDN SERVICE MIN/MAX ASSIGNMENT

TGN	TIME ZONE#	MIN SVC	MAX SVC	VOC	31K	64U	64R	H0U	H0R	H11U	H11R

FIELD PARAMETERS

TGN (Trunk Group Number)
1~256 (or to system-configured maximum)

TIME ZONE # (ISDN Time Zone Class Number)
1~4
1 = ISO1 (ISDN time zone class 1)
2 = ISO2 (ISDN time zone class 2)
3 = ISO3 (ISDN time zone class 3)
4 = ISO4 (ISDN time zone class 4)

MIN SVC (Minimum number of channels reserved)
0~47

MAX SVC (Maximum number of channels reserved)
0~47

VOC (Bearer Capability – Voice or Voice-Grade Data)
YES (Voice transmission)
NO (Data transmission only)

31K (3.1 KHz Audio)
YES (Data transmission only)
NO (Voice transmission)

64U (64K unrestricted digital)
Locked field

64R (64K restricted digital)
Locked field

H0U (H0-384K, unrestricted digital)
Locked field

H0R (H0-384K, restricted digital)
Locked field

H11U (H11-1536K, unrestricted digital)
Locked field

H11R (H11-1536K, restricted digital)
Locked field

ISDN TRUNK GROUP PARAMETER ASSIGNMENT

TGN	MODE	DISP	OUT CPN	CPN LDN	TRK GRP NAME

FIELD PARAMETERS

TGN (Trunk Group Number)
1~256 (or to system-configured maximum)

MODE (Inward Routing Mode)
DIT (Direct inward termination mode)
DDI (Direct dial-in mode)
DNIS (Dialed number identification service)

DISP (Display Option for Incoming Calls)
NAME (Trunk group's name)
CDPN (Called party number)
CGPN (Calling party number)
DNIS (DNIS name)
CGDN (Calling party number plus first 3 characters of DNIS name)

OUT CPN (Outgoing Call Number Presentation Flag)
ALW (Outgoing call number presentation allowed)
DNY (Outgoing call number presentation restricted)
BAR (Outgoing call number presentation barred)

CPN LDN (ISDN TGN's Listed Directory Number for Called Party Number Presentation)
1~15 digits; * and # allowed

TRK GRP NAME (Trunk Group Name)
0~14 characters