NEC

SL2100

ACD Installation Manual

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Introduction

SECTION 1 WHAT IS ACD?

1.1 Equitable Distribution of Calls Among Agents

Automatic Call Distribution (ACD) uniformly distributes calls among member agents of a programmed ACD Group. When a call rings into an ACD Group, the system automatically routes the call to the agent that has been idle the longest. Automatic Call Distribution is much more sophisticated and comprehensive than Department Calling and other group services – it can accurately judge the work load at each agent and distribute calls accordingly. Automatic Call Distribution operation is further enhanced by:

- ACD Announcements (which play to incoming callers)
- ACD Call Queuing
- ACD Overflow
- Agent Log In and Log Out Services
- Flexible Time Schedules

1.2 Unique Considerations

Simplifying Multiline Operation with One-Touch Keys

A Multiline user can access many features through Service Codes (e.g., Service Code *0 answers a Message Waiting from a co-worker). To streamline the operation of their phone, a Multiline user can store these codes under One-Touch Keys. This provides one-button operation for almost any feature. To find out more, read the One-Touch Calling and One-Touch Serial Operation features in your Features and Specifications Manual.

Programmable Keys

When reading an instruction using programmable keys, you will see a notation similar to (*Program 15-07-01 or SC 751: 05*). This means that the key requires function code 05, and you can program this code through Program 15-07-01 or by dialing Service Code 751. Service Code 752 is also used and requires a previously programmed "751" key to be undefined before the system will accept the 752 programming (if a key is programmed with a function using the 751 code, undefine the key using 751 + 000). Refer to the Programmable Function Keys feature in your Features and Specifications Manual if you need more information.

Using Handsfree

The manual assumes each extension has Automatic Handsfree. This lets a user just press a line key or the SPEAKER key to answer or place a call. For extensions without Automatic Handsfree, the user must:

- Lift the handset or press the SPEAKER key for Intercom dial tone
- Lift the handset or press the SPEAKER key, then press a line key for trunk dial tone

ACD Agents and Non-ACD Ring Groups

If an ACD agent is assigned to several different ring groups (Program 22-04-01), while they are logged into the ACD group, they will only receive calls from the ACD ring group. Calls from other ring groups will only ring the agent's extension while they are logged out.

Setting Up ACD for the First Time

When setting up ACD for the first time, perform the following procedures in the sequence listed below.

1. Arrange Extensions into ACD Groups.
2. Set up Work Schedules and Work Periods.
3. Assign Extension to ACD Groups for each Work Period.
4. Arrange Trunks into incoming Ring Groups.
5. Determine Trunk Work Schedules.
6. Assign incoming Ring Groups to ACD Groups.

SECTION 1 ARRANGE EXTENSIONS INTO ACD GROUPS

Your first step in setting up ACD is to find out how many ACD Groups you need and which extensions should be in each group. Use the Table 2-1 Sample ACD Group Worksheet on page 2-2 to arrange extensions into ACD Groups.

- ACD requires that the IP7[ ]-CPU-C1 have the ACD license.
- There are 8 ACD Groups, 128 ACD Agents Max per group, and 128 Trunks.

1. Select the ACD Group Number.
   The system allows up to 8 ACD Groups. You can have up to 128 ACD agents per group. You can put any agent in any group. In addition, an agent can be logged into only one group at a time, but a SIE key can be programmed for other groups. This allows, for example, a Technical Service representation to answer Customer Service calls at lunch time when many of the Customer Service reps are unavailable.
   In the Table 2-1 Sample ACD Group Worksheet on page 2-2, in the *Member Extensions* column, enter the member extensions for each ACD Group.

   > 🖉 *If an extension is a member of more than one ACD Group, ensure that extension is active in only one ACD Group during a particular Work Period. Refer to ASSIGN EXTENSIONS FOR EACH WORK PERIOD on page 2-4.*

   The Table 2-1 Sample ACD Group Worksheet on page 2-2 shows extensions 105, 107, 117 and 139 in ACD Group 1. Extensions 109, 111 and 115 are shown in ACD Group 2.

2. Choose an ACD Master Number.
   The ACD Master Number is the *extension number* for the ACD Group. Calls transferred to an ACD Master Number enter that ACD Group and are routed to the group member extensions accordingly. Although the master number can be any valid extension number, it is recommended you choose a number that is not in close sequence with those numbers typical for that group of member extensions.
   In the Table 2-1 Sample ACD Group Worksheet on page 2-2, enter the Master Number for each of the ACD Groups. The sample worksheet below uses 3998 for ACD Group 1 and 3999 for ACD Group 2.

3. Enter an ACD Group Name.
   In the **ACD Group Worksheet,** enter a name for each group. The sample worksheet below uses Tech Service for ACD Group 1 and Customer Support for ACD Group 2.

4. Set the Skip Time.

   When a call comes into an ACD Group, it rings each available ACD Agent for a preset time and then routes to the next agent. This preset time is called the Skip Time. The default Skip Time setting is 10 seconds.

   In ACD Group 1, for example, a call would ring the ACD Agent at extension 105 before trying the next available extension. If 10 seconds is too long to keep callers waiting, shorten the interval. If you want callers to ring for more than 10 seconds, lengthen the Skip Time interval. Your Skip Time setting is the same for all ACD Groups.

   In the **ACD Group Worksheet**, enter the Skip Time interval. The sample worksheet below uses 10 seconds for the Skip Time.

Table 2-1 Sample ACD Group Worksheet

Sample ACD Group Worksheet			
ACD Group Number (1-8) (41-02-01)	**ACD Master Number (11-17-01)**	**ACD Group Name**	**Member Extensions (41-02-01)***1*
1	3998	Tech Service	105, 107, 117, 139
2	3999	Customer Support	109, 111, 115
Skip Time Interval (41-14-10)	10		

1. Indicate if extension is a member of more than one ACD Group.

SECTION 2 SET UP WORK SCHEDULES AND WORK PERIODS

A Work Schedule allows you to divide a day into segments (called Work Periods) for scheduling the activity in your ACD Groups.

- You can set up as many as four Work Schedules, with up to eight Work Periods in each Work Schedule.
- Each day of the week has one Work Schedule.
- Different days can share the same Work Schedule.

For example, you can designate two Work Periods for the work week, Monday through Friday. Work Period 1 can be from 8:00 AM to 5:00 PM, when your business is open. Work Period 2 can be from 5:00 PM to 8:00 AM, when your business is closed.

Use the to set up your Work Schedules and Work Periods. Refer to .

🖉 *To set up the work schedule for trunks, refer to .*

1. Designate a worksheet for each Work Schedule.

Make additional copies of the Table 2-3 ACD Agent Work Schedule Worksheet (41-05-01) on page 2-3 so you will have enough for all of your work schedules.
In the upper right corner of each worksheet, write the number of the corresponding work schedule.

2. Assign Days of the Week to each Work Schedule.
    In the *Day(s) of Week* row of each worksheet, indicate which days of the week to use the Work Schedule. The sample worksheet is for Monday through Friday.

3. Set the start and stop time of each work Period.
    Enter a start and stop time for each Work Period. Keep in mind that if you leave *holes* in your Work Schedule, there will be periods during the day when no ACD service is available. Try to accommodate the typical divisions of time during the day. For example, the sample worksheet below shows five Work Periods corresponding to mornings (1), lunch (2), afternoons (3), evenings (4) and late night (5).

Table 2-2 Sample ACD Agent Work Schedule Worksheet (41-05-01)

Sample ACD Agent Work Schedule Worksheet (41-05-01)		
ACD Work Schedule Number (1-4)		1
Day(s) of Week (41-07-01)		Monday-Friday
Work Period	Start Time	End Time
1	8:00 AM	Noon
2	Noon	1:00 PM
3	1:00 PM	5:00 PM
4	5:00 PM	Midnight
5	Midnight	8:00 AM

Table 2-3 ACD Agent Work Schedule Worksheet (41-05-01)

ACD Agent Work Schedule Worksheet (41-05-01)		
ACD Work Schedule Number (1-4)		
Day(s) of Week (41-07-01)		
Work Period	Start Time	End Time
1		
2		

ACD Agent Work Schedule Worksheet (41-05-01)		
3		
4		
5		
6		
7		
8		

SECTION 3 ASSIGN EXTENSIONS FOR EACH WORK PERIOD

In this step you will assign ACD Groups and the member extensions, set up in ARRANGE EXTENSIONS INTO ACD GROUPS on page 2-1, for each daily Work Period. ACD will use the Work Schedules and Work Period durations you have already set up in SET UP WORK SCHEDULES AND WORK PERIODS on page 2-2. Your system automatically implements the schedules and periods you have set up.

Use the Table 2-5 ACD Assignment Worksheet (41-02-01) on page 2-5 and the Table 2-4 Sample ACD Assignment Worksheet (41-02-01) on page 2-5 to assign ACD Groups and the member extensions for each daily Work Period.

1. Enter the extension number in an ACD Group.
    In the *Extension* column of the worksheet, enter the extension you entered in the Table 2-1 Sample ACD Group Worksheet on page 2-2. Make additional copies of the *ACD Assignment Worksheet* as required. The sample worksheet below includes extensions 105, 107, 117, 139, 109, 111, and 115. To make it easier to visualize the groups, the extensions are entered consecutively by ACD Group.
2. Enter an ACD Number for each extension number.
    ACD numbers are software assignments the system needs when configuring ACD. There are 128 possible ACD numbers. Wherever possible, try to make your ACD numbers in consecutive order. In the *ACD Number* column of the Table 2-5 ACD Assignment Worksheet (41-02-01) on page 2-5, enter the ACD number for each extension number. In the sample below, the ACD numbers are consecutive within each basic ACD Group.
3. Assign Extensions to ACD Groups for each Work Period
    Set up the ACD groups by assigning extensions to ACD Groups for each Work Period. For example, if you assign four extensions to the same ACD Group for the same Work Period, the extensions function together as an integrated ACD group. You have great flexibility in which extensions are in each group for different times of the day.
    Using the Table 2-5 ACD Assignment Worksheet (41-02-01) on page 2-5, enter the ACD Group number (1~2) for each extension for each available Work Period WP1~WP8. Refer to Table 2-3 ACD Agent Work Schedule Worksheet (41-05-01) on page 2-3 to review Work Schedule setup.
    In the sample below, extension ports 105, 107 and 117 are in ACD Group 1 for WP1 (morning) and WP3 (afternoon). These extensions are not part of the group during lunch, evenings or late night. Extension 139 covers group 1 calls during the evenings. ACD Group 1 is unavailable during lunch. Extensions 109, 111 and115 are in ACD Group 2 from 8:00 AM to 5:00 PM. Extension 109 is part of ACD Group 1 in the evening, and extension 139 is part of ACD Group 2 during lunch.

Table 2-4 Sample ACD Assignment Worksheet (41-02-01)

Sample ACD Assignment Worksheet (41-02-01)									
ACD Number (1-128)	Extension Number	For each extension number, enter ACD Group for each work period (WP) (41-05-01)							
		WP 1	WP 2	WP 3	WP 4	WP 5	WP 6	WP 7	WP 8
1	105	1		1					
2	107	1		1					
3	117	1		1					
4	139		2		1				
5	109	2	2	2	1				
6	111	2	2	2					
7	115	2	2	2					

Table 2-5 ACD Assignment Worksheet (41-02-01)

ACD Assignment Worksheet (41-02-01)									
ACD Number (1-128)	Extension Number	For each extension number, enter ACD Group for each work period (WP) (41-05-01)							
		WP 1	WP 2	WP 3	WP 4	WP 5	WP 6	WP 7	WP 8

ACD Assignment Worksheet (41-02-01)									
ACD Num- ber (1-128)	Extension Number	For each extension number, enter ACD Group for each work period (WP) (41-05-01)							
		WP 1	WP 2	WP 3	WP 4	WP 5	WP 6	WP 7	WP 8

SECTION 4 ARRANGE TRUNKS INTO INCOMING RING GROUPS

ACD can be set to automatically answer incoming calls.

Incoming trunk calls can automatically route to specific ACD Group (128 trunks ports and 50 Ring groups are available). These types of calls ring directly into the ACD Group without being transferred by a co-worker or the Automated Attendant. Calls can route directly to ACD:

- Assign the trunk to an Incoming Trunk Ring Group (in this section).
- Set up the trunk work schedules (Refer to DETERMINE TRUNK WORK SCHEDULES on page 2-7.)
- Assign Incoming Ring Groups to ACD Groups (Refer to ASSIGN INCOMING TRUNK RING GROUPS TO ACD GROUPS on page 2-8.)

> 🖊 *DISA, DID and tie trunks can ring an ACD master number directly.*

Use the Table 2-7 ACD Incoming Trunk Ring Group Worksheet (22-05-01) on page 2-7 and the sample below when completing this step.

1. Determine which trunks you want answered by ACD Groups.
    In the *Trunk Port* column of the worksheet, enter the number of each trunk you want ACD to automatically answer. In the example below, trunks 1 and 2 will be automatically answered by ACD.
2. Assign the trunk ports to Incoming Ring Groups.
    In the *Incoming Ring Group* columns, enter the Incoming Trunk Ring Group for each trunk port, for each Night Service mode. Trunks that have the same basic function and that will be assigned the same priority in ASSIGN INCOMING TRUNK RING GROUPS TO ACD GROUPS on page 2-8 should be in the same incoming Ring Group.
    For example, if you have trunks 1~4 that will be primarily answered by the same ACD Group, put trunks 1~4 in the same incoming group.

> 🖊 *You can mix assignments if the trunks have different functions during the different Night Service modes.) In the example below, trunk 1 is in incoming group 2, while trunk 2 is in incoming group 3.*

> 🖊 *ASSIGN INCOMING TRUNK RING GROUPS TO ACD GROUPS on page 2-8 sets the Incoming Trunk Ring Group priority. Priority groups always have precedence over normal groups. For example, if a call from a priority group rings in when while a normal group call is already ringing, ACD services the priority call first. ACD services multiple priority calls on a first-come, first-served basis. Keep this in mind when assigning the trunk ports to incoming Ring Groups.*

Table 2-6 Sample ACD Incoming Trunk Ring Group Worksheet (22-05-01)

Sample ACD Incoming Trunk Ring Group Worksheet (22-05-01)								
Trunk Number	Incoming Ring Group							
	Day	Night	Rest	Midnight	Day 2	Night 2	Rest 2	Midnight 2
1	2	2	2	2				

Sample ACD Incoming Trunk Ring Group Worksheet (22-05-01)							
Trunk Number	Incoming Ring Group						
	Day	Night	Rest	Midnight	Day 2	Night 2	Rest 2	Midnight 2
2	3	3	3	3				

Table 2-7 ACD Incoming Trunk Ring Group Worksheet (22-05-01)

ACD Incoming Trunk Ring Group Worksheet (22-05-01)							
Trunk Number	Incoming Ring Group						
	Day	Night	Rest	Midnight	Day 2	Night 2	Rest 2	Midnight 2

SECTION 5 DETERMINE TRUNK WORK SCHEDULES

Trunk Work Schedules are similar to normal ACD Work Schedules except that they apply only to trunks assigned to ACD groups. Refer to ASSIGN INCOMING TRUNK RING GROUPS TO ACD GROUPS on page 2-8. The Trunk Work Schedule allows you to divide a day into segments (called Work Periods) to determine when trunks route to ACD Groups. You can set as many as four Work Schedules, with up to eight Work Periods in each Work Schedule. Each day of the week has one Trunk Work Schedule, but different days can share the same schedule.

For example, Monday-Friday can have the same daily schedule where Work Period 1 lasts from 8:00 AM to 5:00 PM. Saturday can have a Work Period 1 lasting from 8:00 AM to 1:00 PM. Use the Table 2-9 Trunk Work Schedule Worksheet (41-06-01) on page 2-8 and the sample below to set up Trunk Work Schedules.

1. Designate a worksheet for each Trunk Work Schedule.
   Make additional copies of the Table 2-9 Trunk Work Schedule Worksheet (41-06-01) on page 2-8 so you will have one worksheet for each Work Schedule.
   In the upper right corner of each worksheet, write the number of the corresponding Trunk Work Schedule (1~8). The sample worksheet below is for Trunk Work Schedule 1.

2. Assign Days of the week to each Work Schedule.
   The day of the week assignment for each Trunk Work Schedule must correspond to the weekday assignments made in SET UP WORK SCHEDULES AND WORK PERIODS on page 2-2. For example, if Work Schedule 1 is set for Monday through Friday in SET UP WORK SCHEDULES AND WORK PERIODS on page 2-2, that assignment must be reflected in the Trunk Work Schedule.

3. Set the start and stop time of each work period.
   Enter a start and stop time for each Work Period. Keep in mind that if you leave *holes* in your Work Schedule there will be periods during the day when the trunk does not ring the ACD Group. Also, try to accommodate the typical divisions of time periods during the day. For example, the sample worksheet below shows two Work Periods corresponding to day (1) and night (2).

Table 2-8 Sample Trunk Work Schedule Worksheet (41-06-01)

Sample Trunk Work Schedule Worksheet (41-06-01)		
Trunk Work Schedule Number (1-4)		1
Day(s) of Week (41-07-01)		Monday-Friday
Work Period	Start Time	End Time
1	8:00 AM	5:00 PM
2	5:00 PM	8:00 AM

Table 2-9 Trunk Work Schedule Worksheet (41-06-01)

Trunk Work Schedule Worksheet (41-06-01)		
Trunk Work Schedule Number (1-4)		
Day(s) of Week (41-07-01)		
Work Period	Start Time	End Time
1		
2		
3		
4		
5		
6		
7		
8		

SECTION 6 ASSIGN INCOMING TRUNK RING GROUPS TO ACD GROUPS

This section explains how to customize Trunk Ring ACD Groups for each Work Period. You will assign Incoming Trunk Ring Groups to ACD Groups for each daily Work Period. If a trunk within the incoming group is assigned to an ACD Group, incoming calls on that trunk directly ring the first available ACD agent. The system always knows the day of the week, so ACD can implement the schedules and periods you program automatically. Use the Table 2-12 ACD Incoming Trunk Ring Group Assignment Worksheet (41-03-xx) on page 2-10 and the sample below when completing this step.

📝 *There are 50 Ring Groups, eight Work Periods and 8 ACD Groups.*

You can assign whether the night announcement is used for the ring group. The night announcement function is not available for ACD pilot number calls.

Set the Incoming Trunk Ring Group priority. Priority groups always have precedence over normal groups. For example, if a call from a priority group rings in when while a normal group call is already ringing, ACD services the priority call first. ACD services multiple priority calls on a first-come, first-served basis.

1. Select the Incoming Trunk Ring Group you want to program.
   In the *Incoming Trunk Ring Group* field at the top of the worksheet, enter the number of the incoming group you are programming. To see which trunks you assigned to the ring group, refer to DETERMINE TRUNK WORK SCHEDULES on page 2-7. The sample worksheets on the next page are for Incoming Ring Groups 2 and 3.

2. Enter the Incoming Trunk Ring Group for each Work Period.
   In the *ACD* column for each Work Period, enter the number of the ACD group (1~8) that will answer the Incoming Ring Group calls. Only one ACD Group can answer an Incoming Ring Group calls during any single Work Period. In the sample worksheet on the next page for Ring Group 2, for example, Incoming Trunk Ring Group 1 rings into ACD Group 1 during Work Periods 1 and 3. It rings into ACD Group 2 during Work Period 2.

3. Set whether or not the Incoming Trunk Ring Group entered in the previous step should play the Night Announcement.
   Select whether the Incoming Trunk Ring Group should have the Night Announcement enabled. Night Announcement used is selected from the VRS.

4. Set the priority of the Incoming Trunk Ring Group being defined.
   Set the Incoming Trunk Ring Group for Priority or Normal operation. Priority Ring Groups have precedence over Normal Ring Groups. For example, if a normal trunk is already ringing an ACD group when a priority trunk rings in, the new call starts ringing and the normal trunk waits in queue behind it. Two priority trunks ringing at the same time will ring the ACD Group on a first-come, first-served basis.

Table 2-10 Sample ACD Incoming Trunk Ring Group Assignment Worksheet (41-03-xx)

Sample ACD Incoming Trunk Ring Group Assignment Worksheet (41-03-xx)											
Incoming Trunk Ring Group (22-05-01)									2		
For each work period (WP 1-8) enter:											
ACD			ACD Group that should answer the Incoming Ring Group trunks (ACD Groups: 1-8) (41-03-01)									
N			Night Announcements (0 = Disable, 1 = Enable) (41-03-02)									
P			Trunk priority (0 = Normal, 1 ~ 7 = Priority) (41-03-03)									
WP1			WP2			WP3			WP4		
ACD	N	P	ACD	N	P	ACD	N	P	ACD	N	P
1	1	1	2	1	0	1	0	0			
WP5			WP6			WP7			WP8		
ACD	N	P	ACD	N	P	ACD	N	P	ACD	N	P
Work periods use the same Work Schedules as ACD Agents. See Table 2-3 ACD Agent Work Schedule Worksheet (41-05-01) on page 2-3.											

Table 2-11 Sample ACD Incoming Trunk Ring Group Assignment Worksheet (41-03-xx)

Sample ACD Incoming Trunk Ring Group Assignment Worksheet (41-03-xx)	
Incoming Trunk Ring Group (22-05-01)	3

Sample ACD Incoming Trunk Ring Group Assignment Worksheet (41-03-xx)											
For each work period (WP 1-8) enter:											
ACD			ACD Group that should answer the Incoming Ring Group trunks (ACD Groups: 1-8) (41-03-01)									
N			Night Announcements (0 = Disable, 1 = Enable) (41-03-02)									
P			Trunk priority (0 = Normal, 1 ~ 7 = Priority) (41-03-03)									
WP1			WP2			WP3			WP4		
ACD	N	P	ACD	N	P	ACD	N	P	ACD	N	P
2	1	1	1	1	0	2	0	0			
WP5			WP6			WP7			WP8		
ACD	N	P	ACD	N	P	ACD	N	P	ACD	N	P
Work periods use the same Work Schedules as ACD Agents. See Table 2-3 ACD Agent Work Schedule Worksheet (41-05-01) on page 2-3.											

Table 2-12 ACD Incoming Trunk Ring Group Assignment Worksheet (41-03-xx)

ACD Incoming Trunk Ring Group Assignment Worksheet (41-03-xx)											
Incoming Trunk Ring Group (22-05-01)											
For each work period (WP 1-8) enter:											
ACD			ACD Group that should answer the Incoming Ring Group trunks (ACD Groups: 1-8) (41-03-01)									
N			Night Announcements (0 = Disable, 1 = Enable) (41-03-02)									
P			Trunk priority (0 = Normal, 1 ~ 7 = Priority) (41-03-03)									
WP1			WP2			WP3			WP4		
ACD	N	P	ACD	N	P	ACD	N	P	ACD	N	P
WP5			WP6			WP7			WP8		
ACD	N	P	ACD	N	P	ACD	N	P	ACD	N	P
Work periods use the same Work Schedules as ACD Agents. See Table 2-3 ACD Agent Work Schedule Worksheet (41-05-01) on page 2-3.											

SECTION 7 BASIC PROGRAMMING

Program No.	Program Name / Description
11-13-01 through 11-13-06	**Service Code Setup (For ACD)** If required, customize the service codes used with the ACD feature.
11-17-01	**ACD Group Pilot Number** Enter the master number, up to eight digits, for each ACD Group (1~8). Try to use entries that are not part of your normal extension numbering range.
15-07-01	**Programmable Function Keys** Assign an ACD Log In/Log Out key (code *10) for one-button Log In/Log Out operation.
20-06-01	**Class of Service for Extensions** Assign a Class of Service (1~15) to an extension.
22-05-01	**Incoming Trunk Ring Group Assignment** Assign each trunk that should directly ring an ACD Group to an Incoming Trunk Ring Group (1~50). Then, use Program 41-03-xx to assign Incoming Trunk Ring Groups to ACD Groups for each Work Period.

Program No.	Program Name / Description
41-02-01	**ACD Group and Agent Assignments** For each ACD extension number, assign an ACD Group (1~8). An ACD Group number is assigned to each Work Period number (1~8).
41-03-01	**Incoming Ring Group Assignment for ACD Group – ACD Group Number** For each Incoming Trunk Ring Group (1~50) set up in Program 22-05-01, designate into which ACD Group (1~8) the trunks should ring for each of the eight Work Periods.
41-03-02	**Incoming Ring Group Assignment for ACD Group – Night Announcement Service** For each Incoming Trunk Ring Group (1~50) set up in Program 22-05-01, designate whether the Night Announcement Service should be enabled (1) or disabled (0).
41-03-03	**Incoming Ring Group Assignment for ACD Group – Priority Data** For each Incoming Trunk Ring Group (1~50) set up in Program 22-05-01, assign an Incoming Trunk Ring Group as normal (0) or define the priority (1~7).
41-05-01	**ACD Agent Work Schedules** Set up the Work Schedules for ACD Agents and Groups. For each ACD Work Schedule (1~4), designate the start and stop times for each of the eight Work Periods. Once you set up the schedules, assign them to days of the week in Program 41-07-01. (This is the same program used by the ACD Agent Work Schedules.)
41-06-01	**Trunk Work Schedules** Set up the Work Schedules for trunks. For each Trunk Work Schedule (1~4), designate the start and stop times for each of the eight Work Periods. Once you set up the schedules, assign them to days of the week in Program 41-07-01. (This is the same program used by the Trunk Work Schedules.)
41-07-01	**ACD Weekly Schedule Setup** Assign the Work Schedule (1~4) to days of the week (1=Sunday, 7=Saturday). The assignments you make in this program apply to both the ACD Agent Work Schedules (Program 41-05-01) and the Trunk Work Schedules (Program 41-06-01).
41-12-03	**Night Announcement Setup – ACD Night Announce Sending Time** Define the night announce sending time (0~64800) for each ACD group (1~8).
41-13-01	**VRS Message Number for Night Announcement – VRS Message Number** For each ACD Group (1~8), define the VRS message number (0~100) to be used as the night announcement.
41-13-02	**VRS Message Number for Night Announcement – Tone Kind at Message Interval** For each ACD Group (1~8), define the what the caller will hear between the night announcements (0=Ring Back Tone, 1=MOH Tone, 2=BGM Source).
41-14-10	**ACD Options Setup – ACD No Answer Skip Time** For each ACD Group (1~8), set how long the system waits before transferring an unanswered call to the next ACD agent (0=disabled or 1~64800 seconds).

7.1 Default Settings

ACD is not set up.

SECTION 8 BASIC OPERATIONS

8.1 Transferring Calls to an ACD Group

To Transfer a call to an ACD Group:

1. At the multiline telephone, press the **Transfer** key.
   - OR -
   At single line telephone, hookflash.

   📝 *You hear Transfer dial tone.*

2. Dial ACD Group Master number.

   📝 *You can press a One-Touch Key for the master instead.*

3.   Hang up.

8.2 Answering Outside Calls that Ring Your ACD Group

To answer an outside call that rings your ACD Group:

DISA, DID and tie trunks can ring an ACD master number directly.
Refer to ARRANGE TRUNKS INTO INCOMING RING GROUPS on page 2-6, DETERMINE TRUNK
WORK SCHEDULES on page 2-7 and ASSIGN INCOMING TRUNK RING GROUPS TO ACD
GROUPS on page 2-8 for information on setting up other trunk types to ring ACD Groups. Trunks can also
be transferred to ACD master numbers.

1.   Lift handset.
2.   If you don't automatically answer the call, press the flashing line key.

8.3 Agent Log In and Log Out

8.3.1 To log your extension into the ACD Group

8.3.1.1 Multiline

Your display shows: WAIT ACD LOGIN. If Program 12-07-01 has a customized Day/Night mode
message defined, the ACD agent's display will not indicate the WAIT ACD LOGIN status (however, the
agent may still log in using the following procedure).

1.   Press the **Speaker** key.
2.   Dial ***5**.

You hear confirmation tone.

- OR -
Press ACD Log On/Off key (PRG 15-07-01 or SC 752: code *10).

You hear a single beep.
Your display will show the ACD Group to which you are logged in.

8.3.1.2 Single Line Telephone

1.   Lift handset.
2.   Dial ***5**.

You hear confirmation tone.

8.3.2 To log your extension out of an ACD Group

8.3.2.1 Multiline

Your display shows the ACD Group where you are logged in.

1.   Press the **Speaker** key.
2.   Dial ***5**.
     - OR -
     Press ACD Log On/Off key (PRG 15-07-01 or SC 752: code *10).

Your display shows: ACD LOGOUT (1:Yes, 0:No)

3.   Dial **1** to log out.

> 🖉 *You hear confirmation tone (if you dialed *5) or a single beep (if you pressed the ACD Log On/Log Off key.*

- OR -
Dial 0 to cancel the log out and return to the group.

8.3.2.2 Single Line Telephone

1.   Lift handset.
2.   Dial **655**.

MEMO

Advanced ACD Features

SECTION 1 DETERMINING WHICH ADVANCED FEATURES ARE NEEDED

Now that you have your basic ACD Groups up and running, you may want to fine tune their operation. The chart below lists the Advanced ACD Features that will help you get the most out of your system. Review each capability below and then turn to the indicated page if the feature is something you need.

Table 3-1 Advanced Features Guide

<table>
<tr><td colspan="2" align="center">Advanced Features Guide</td></tr>
<tr><td align="center">ACD Capability</td><td align="center">Advanced ACD Feature</td></tr>
<tr><td>A supervisory extension that can manage an individual ACD Group.</td><td align="center">Supervisor, ACD Group on page 3-27</td></tr>
<tr><td>A supervisory extension that can log an ACD Agent into or out of the group.</td><td align="center">Supervisor, ACD Group on page 3-27</td></tr>
<tr><td>A supervisory extension that can manage an individual ACD Group.</td><td align="center">Supervisor, ACD Group on page 3-27</td></tr>
<tr><td>As a Group or System Supervisor, listen in on an ACD Agent's call.</td><td align="center">Supervisor Monitor / ACD Monitor on page 3-33</td></tr>
<tr><td>When all agents are busy, incoming calls can route to other extensions, ACD groups or Voice Mail.</td><td align="center">Overflow Options on page 3-15</td></tr>
<tr><td>Set various options for ACD Groups.</td><td align="center">ACD Setup Options on page 3-2</td></tr>
<tr><td>Temporarily log out an ACD Agent.</td><td align="center">Off-Duty Mode on page 3-13</td></tr>
<tr><td>See the status of your ACD Group's calls at a glance.</td><td align="center">Queue Status Display on page 3-24</td></tr>
<tr><td>Set up SIE keys for ACD Groups.</td><td align="center">SIE Key for ACD Groups on page 3-10</td></tr>
<tr><td>Get one-button ACD Group calling and Transfer as well as a unique BLF for ACD agents.</td><td align="center">Hotline for ACD Agents on page 3-8</td></tr>
<tr><td>Temporarily busy out your phone to the ACD Group when you need to work at your desk.</td><td align="center">Wrap-Up Time on page 3-41</td></tr>
<tr><td>Use a headset for privacy and convenience, and optionally answer calls automatically.</td><td align="center">Headset Operation (with Automatic Answer) on page 3-6</td></tr>
<tr><td>Set up AIC log-in for specific agents using a verified code. This also allows for multiple group log-ins by an agent.</td><td align="center">Identification Codes for ACD Agents on page 3-35</td></tr>
<tr><td>Analyze system usage and calling patterns.</td><td align="center">Traffic Reports on page 3-39</td></tr>
<tr><td>Press a key to have your ACD Group Supervisor monitor your call.</td><td align="center">Emergency Call on page 3-4</td></tr>
</table>

Advanced ACD Features

ACD Setup Options

Description

Use the ACD Setup Options to set various functions for ACD Groups. Each ACD Group (50 ACD groups available) can have a unique setup. When you set an option for an ACD Group, the setting is in force (if applicable) for all agents within the group. The chart below shows each of the ACD options and the ACD feature to which that option relates.

Table 3-2 ACD Setup Options (Program 41-14-xx)

ACD Setup Options (Program 41-14-xx)				
Item	Name	Option Function	Related Features	Default
02	Automatic Wrap-Up Mode	Enables (1) or disables (0) Automatic Wrap-Up.	Wrap-Up Time on page 3-41	0 (Disabled)
03	ACD Priority for Overflow Calls	Defines whether the ACD group should use its own priority assignment or if it should follow the priority assigned in Program 41-03-03.	-	0 (Own Group's Priority)
04	Automatic Answer at Headset	Enables (1) or disables (0) Automatic Answer for agents using headsets.	Headset Operation (with Automatic Answer) on page 3-6	0 (Disabled)
06	Call Queuing after 2nd Announcement	Enables (0) or disables (1) Call Queuing after the 2nd Announcement.	-	0 (Enabled)
07	Automatic Off Duty for SLT	Enables (1) or disables (0) Automatic Off-Duty Mode for SLTs.	Off-Duty Mode on page 3-13	0 (Disabled)
08	ACD Off Duty Mode	Enable (1) or Disable (0) the ability to receive internal calls when in Off Duty Mode.	Off-Duty Mode on page 3-13	0 (No Internal Calls)
09	Automatic Wrap Up End Time	Defines how long the system waits before automatically ending Wrap-Up time.	Wrap-Up Time on page 3-41	0 (Disabled)
10	ACD No Answer Skip Time	Sets how long a call into an ACD Group will ring an idle extension before routing to the next agent.	-	10 Seconds
12	Start Headset Ear Piece Ringing (for SLT)	-	-	0
17	Operation Mode When Transfer No Login ACD Group	Allows CTI Server transfers of trunk calls to ACD Pilot numbers when the ACD Group has no agents logged in 3rd Party CTI Mode.	-	0

Conditions

None

Default Settings

Refer to Table 3-2 ACD Setup Options (Program 41-14-xx) on page 3-2.

Programming

Program No.	Program Name / Description
41-14-02 through 41-14-17	**ACD Options Setup** Set various options for each ACD Group. Refer to Table 3-2 ACD Setup Options (Program 41-14-xx) on page 3-2.

Related Features

Class of Service

Operation

Refer to Table 3-2 ACD Setup Options (Program 41-14-xx) on page 3-2.

A

Emergency Call

Description

If an ACD Agent needs assistance with a caller, they can place an Emergency Call to their ACD Group Supervisor. Once the supervisor answers the Emergency Call, they automatically monitor both the ACD Agent and the caller. If the agent needs assistance, the supervisor can press their Emergency Call key and join in the conversation. Emergency Call can be a big help to inexperienced ACD Agents that need technical advise or assistance with a difficult caller. The supervisor can easily listen to the conversation and then jump in if the situation gets out of hand.

If an ACD Supervisor is on an Emergency Call, you can allow calls to the ACD Supervisor to be transferred to the System Supervisor by setting Program 41-14-01 to '0.' The System Supervisor can be programmed to have an Emergency Call key and Supervisor Split key assigned.

Conditions

None

Default Settings

• Emergency Call Overflow enabled (Program 41-14-01 = 0)
• No Emergency Call keys assigned (Program 15-07-01: ∗12)

Programming

Program No.	Program Name / Description
15-07-01	**Programmable Function Keys** • Assign an Emergency Call key (code ∗12) to both the ACD Group Supervisor and the ACD Agent.
41-14-01	**ACD Options Setup – Automatic Answer at Headset** Set the Emergency Call Operation Mode (0=Call system supervisory extension when group supervisory extension is busy, 1=No call to system supervisory extension when group supervisory extension is busy) for ACD Groups (1 ~ 8). *The supervisor must be logged in and have an Emergency Key programmed.* *By pressing the key once, the supervisor can monitor the call - pressing twice barges in on the call.*

Related Features

Barge-In

Operation

To place an Emergency Call to your ACD Group Supervisor:

1.   While talking to your caller, press Emergency Call Key (Program 15-07-01 or SC 752: ∗12).

   • *Your Emergency Call key lights steadily. Your display shows: EMG CALL CALLING*
   • *The Emergency Call key on your ACD Group Supervisor's telephone flashes fast.*

To answer an Emergency Call (from an agent in the ACD Group you supervise):

🖊️ *Your Emergency Call key flashes fast and your phone rings. Your display shows: EMG CALL CALL FROM.*

1. Lift handset.
2. Press the **flashing Emergency Call** Key (Program 15-07-01 or SC 752: *12).

   🖊️ *You can hear both your ACD Agent and the outside caller, but you cannot talk to either party.*

   🖊️ *The display on both your phone and your agent's phone changes to: EMG CALL MONITOR.*

To break into your ACD Agent's call (after answering their Emergency Call):

1. Press Emergency Call Key again.

   🖊️ *The display on both your phone and your agent's phone changes to: EMG CALL BREAK IN.*

   🖊️ *You can converse with all three parties simultaneously.*

   🖊️ *The initial call will continue if you hang up.*

E

Headset Operation (with Automatic Answer)

Description

An ACD Agent can utilize a customer-provided headset in place of the handset. The headset conveniently frees up the user's hands for other work and provides privacy while on the call. In addition, an ACD Agent with a headset can have Automatic Answer. This allows an agent busy on a call to automatically connect to the next waiting call when they hang up.

Conditions

None

Default Settings

- No headset keys defined (Program 15-07-01 = 05).
- Automatic Answer disabled (Program 41-14-04 = 0).

Programming

Program No.	Program Name / Description
15-07-01	**Programmable Function Keys** Assign a function key for Headset operation (05).
20-13-06	**Class of Service Options (Supplementary Service) – Automatic Off-Hook Signaling (Automatic Override)** Allows a busy extension ability to manually (0) or automatically (1) receive off-hook signals.
41-14-04	**ACD Options Setup – Automatic Answer at Headset** For each ACD Group, disable (0) or enable (1) Automatic Answer for agents using headsets.

Related Features

Handsfree and Monitor

Handsfree Answerback/Forced Intercom Ringing

Operation

While in the headset mode, the hook switch is not functional.

To enable the headset

1. Plug in the headset into the bottom of the phone.
2. Program a Headset Key (Program 15-07-01 or SC 751: 05).

To use the headset

1.   Press the **Headset** Key (Program 15-07-01 or SC 751: 05).
2.   Press a line key to make a trunk call.

> ✎   *The Headset Key lights when you are in the headset mode.*

> ✎   *If your ACD Group has Automatic Answer enabled and the mode is enabled on the multiline telephone, the next waiting call is automatically answered by the agent.*

To Enable Automatic Answer for an Agent

1.   Press the **Feature** key and then press the **Headset** Key (Program 15-07-01 or SC 751: 05).

> ✎   *The Headset key flashes while Automatic Answer is active. Program 41-14-04 must also be set to allow Automatic Answer for the ACD group.*

> ✎   *Incoming CO calls to the agent will automatically be answered. Ringing intercom calls are not automatically answered. Voice-announced intercom calls can be responded to handsfree.*

To Disable Automatic Answer for an Agent

1.   Press the **Feature** Key and then press the **Headset** Key (Program 15-07-01 or SC 751: 05).

> ✎   *The Headset key goes out.*

H

Hotline for ACD Agents

Description

Hotline gives a multiline terminal user One-button Calling and Transfer to another extension (the Hotline partner). Hotline helps co-workers that work closely together. The Hotline partners can call or transfer calls to each other just by pressing a single key.

Enhanced for ACD applications, Hotline provides a unique Busy Lamp Field (BLF) for ACD agents as well as a BLF for co-workers that are not ACD agents. The charts below show both sets of BLF indications.

Table 3-3 BLF For ACD Agents

BLF For ACD Agents	
BLF Indicator	**ACD Agent Status**
Off	Idle and is not an ACD Agent
On	Busy
Double Wink Off	Making an emergency call
Wink Off	Logged off or not installed
Double Wink On	Logged on

Table 3-4 BLF for co-workers who are not ACD Agents

BLF for co-workers who are not ACD Agents	
BLF Indicator	**Co-worker Status**
Off	Idle
On	Busy or ringing
Fast Flash	In Do Not Disturb — All calls (option 3) or intercom calls (option 2)

Conditions

- An extension user cannot use Hotline to pick up a call ringing their Hotline partner's extension.
- Hotline does not override Do Not Disturb.
- Hotline always follows the Handsfree Answerback/Forced Intercom Ringing mode set at the called extension. The Hotline caller can override the setting, if desired.
- If the partner's extension is busy, Hotline does not automatically activate Off Hook Signaling.

Default Settings

- No Hotline keys programmed (no keys assigned code 01 in Program 15-07-01).

Programming

Program No.	Program Name / Description
15-07-01	**Programmable Function Keys** Assign a function key for Hotline (code 01 + partner's extension number).

Program No.	Program Name / Description
20-13-06	**Class of Service Options (Supplementary Service) – Automatic Off-Hook Signaling (Automatic Override)** Program 20-13-06 sets the conditions under which a Hotline key for a non-ACD Agent indicates that the covered extension is busy. This also applies to Reverse Voice Over and DSS Console keys for all co-workers. With condition 1 in the following chart, the BLF LED is on only when both extension line appearances are busy. In conditions 2~4, the BLF LED is on when one line appearance is busy.

Related Features

Do Not Disturb

Handsfree Answerback/Forced Intercom Ringing

Off-Hook Signaling

Programmable Function Keys

H

Operation

To place a call to your Hotline partner:

1. Press the **Hotline** key (PRG 15-07-01 or SC **751**: 01 + partner's extension number).

   ✏ *You can optionally lift the handset after this step for privacy.*

To transfer your outside call to your Hotline partner:

1. Press the **Hotline** key.
2. Announce the call and hang up.
   - OR -
   Hang up to have the call wait at your Hotline partner unannounced.

   ✏ *If unanswered, the call recalls like a regular transferred call.*

To answer a call from your Hotline partner:

1. If you hear two beeps, speak toward the telephone.
   - OR -
   If your telephone rings, lift the handset.

SIE Key for ACD Groups

Description

Any Multiline Terminal can have SIE keys for ACD Groups. When a call comes into a covered ACD Group, the SIE key will ring immediately, ring after a delay or just flash (depending on system programming and user-set options). The Multiline Terminal user can answer the call by just lifting the handset and pressing the SIE key. ACD SIE keys help maximize ACD service during high traffic periods or when agents are unavailable.

The covering extension does not have to be a member of the ACD Group. In addition, an extension can have SIE keys for as many ACD Groups as it has available programmable keys.

An ACD Group SIE key also allows for one-button Transfer to an ACD Group.

Conditions

Ringing for SIE keys may need to be programmed through the telephone.

Default Settings

- SIE key delayed ringing occurs after 10 seconds (Program 20-04-03= 10).
- ACD SIE keys ring with the mid range tone (Program 15-02-02 = 2).
- No ACD SIE keys assigned (Program 15-07-01 not set for *03 + ACD master).
- Ring tones use the following priority (Program 15-10-01).

Priority	Ring Tone (set in Program 15-08-01)
1	0
2	1
3	2
4	3

- All SIE keys use Tone Pattern 1 (Program 15-08-01 = 0).

Programming

Program No.	Program Name / Description
15-02-02	**Multiline Telephone Basic Data Setup – Trunk Ring Tone** For the SIE key ring tone range assigned in Program 15-08-01 below, choose the extension's desired ring tone (pitch) within the range selected. The choices are 1 (high), 2 (mid range), 3 (low), or 4~8 (Ring Tones 1~5). This also affects how certain trunk calls (such as DILs) ring the extension.
15-07-01	**Programmable Function Keys** Assign function keys for ACD SIE (code *03 + ACD Group master number).
15-08-01	**Incoming Virtual Extension Ring Tone Setup** Assign a ring tone range (0~4) to each extension. When a SIE key rings, it uses the range assigned in this option. The choices are 0 (tone pattern 1), 1 (tone pattern 2), 2 (tone pattern 3), 3 (tone pattern 4) and 4 (extension ring tone). The ring the user hears also depends on the setting of Program 15-02-02 above and Service Code 720.
15-09-01	**Virtual Extension Ring Assignment** Individually program an extension's SIE keys to either ring (1) or not ring (0).

Program No.	Program Name / Description
15-10-01	**Incoming Virtual Extension Ring Tone Order Setup** Set the priority (1~4) for the ring tone ranges set in program 15-08-01 below. When more than one SIE key rings simultaneously, the tone with the highest priority (e.g., 1) rings. The other keys just flash.
15-11-01	**Virtual Extension Delayed Ring Assignment** Individually program an extension's SIE keys for Delayed Ringing (1) or Immediate Ringing (0). Also see Program 20-04-03 below.
20-04-03	**System Options for Virtual Extensions – CAR/SIE/Virtual Extension Delay Interval** SIE keys set for delayed ringing (see Program 15-11-01 below) ring the covering extension after this interval.
22-03-01	**Incoming Call Setup – Trunk Ring Tone Range** Select the ring tone range (0~8) for each trunk to ring in an ACD group. The trunk uses a ring tone within the range selected when it rings an extension There are four ring tones available.

S

Related Features

Programmable Function Keys

Operation

To answer a call ringing an ACD Group key

1. Press flashing **SIE** key (Program 15-07-01 or SC 752: *03 + ACD master).

   📝 *The SIE key may flash only, ring after a delay or ring immediately.*

To Transfer a call to an ACD Group

1. Place or answer call.
2. Press ACD Group **SIE** key.
3. Hang up to have call go through.

   📝 *You cannot place a screened Transfer to an ACD Group.*

To set up an ACD Group SIE key

1. Press the **Speaker** key.
2. Dial **752**.
3. Press the programmable key you want to program.

   📝 *The previously programmed entry displays.*

4. Dial ***03**.
5. Dial the ACD Group master number and press **Hold**.

   📝 *You see the SET RING option.*

6. Dial **1**, **2**, **3**, **4**, **5**, **6**, **7** and **8** to immediate ring for the Day, Night, Midnight, Rest, Day2, Night2, Midnight2, and Rest2 modes respectively.
    - OR -
    Press **Hold** and dial **1**, **2**, **3**, **4**, **5**, **6**, **7** and **8** to delay ring for the Day, Night, Midnight, Rest, Day2, Night2, Midnight2, and Rest2 modes respectively.

    You can make flexible entries. For example, you can have immediate ringing in the day and night modes and delay ringing for the midnight and rest modes.

    The ringing mode (delayed or immediate) follows system programming.

7. Press the **Speaker** key to hang up.

S

Off-Duty Mode

Description

Off-Duty Mode temporarily logs-out an ACD agent's phone. There are two types of Off-Duty Mode:

Manual Off-Duty Mode

An ACD Agent can enable Manual Off-Duty Mode anytime they want to temporarily log out of the ACD Group. They might want to do this if they go to a meeting or get called away from their work area. While logged out, calls to the ACD Group will not ring the agent's phone.

Automatic Off-Duty Mode

When an ACD Group has Automatic Off-Duty Mode, the system will automatically put an agent's telephone in Off-Duty Mode if it is not answered. This ensures callers will not have to wait while ACD rings an extension that won't be answered. For multiline terminals, the system enables Automatic Off-Duty Mode for all phones with Off-Duty Mode keys. For single line telephones, you must set an option in programming to enable Automatic Off-Duty Mode.

Conditions

- Automatic Off-Duty Mode does not time out. Once enabled, an agent must cancel Off-Duty Mode to return to service.
- While active the agent will not receive any type of calls (in DND mode).

Default Settings

- No Off-Duty Mode keys programmed (Program 15-07-01 = code *13).
- Automatic Off-Duty Mode for single line telephone disabled (Program 41-14-07 = 0).

Programming

Program No.	Program Name / Description
15-07-01	**Programmable Function Keys** To enable Off-Duty Mode at a multiline telephone, assign an Off-Duty Mode key (code *13).
41-14-07	**ACD Options Setup – Automatic Off-Duty for SLT** For each ACD Group (1~8), determine whether or not a single line telephone automatically changes to off-duty mode (0=No Change, 1=Change automatically).
41-14-08	**ACD Options Setup – ACD Off Duty Mode** For each ACD Group (1~8), determine whether or not an agent can receive in internal call in off-duty mode (0=Can Not Receive, 1=Can Receive).

Related Features

Overflow Options

Wrap-Up Time

Operation

To activate Off-Duty Mode

When you have a Off-Duty Mode key, the system automatically activates Off-Duty Mode if a call rings your phone and you do not pick it up.

Multiline

1.   Press your Off-Duty Mode Key (Program 15-07-01 or SC 752: *13)

     🖉 *Your Off-Duty Mode Key lights.*

Single Line Telephone

1.   Lift the handset.
2.   Dial **658**.

To cancel Off-Duty Mode

Multiline

1.   Press your Off-Duty Mode Key (Program 15-07-01 or SC 752: *13)

     🖉 *Your Off-Duty Mode Key goes out.*

Single Line Telephone

1.   Lift the handset.
2.   Dial **659**.

Overflow Options

Description

ACD offers extensive overflow options for each ACD Group. For example, a caller ringing in when all agents are unavailable can hear an initial announcement, called the 1st Announcement. This announcement can be a general greeting.

📝 *1st Announcement: Thank you for calling. All of our agents are currently busy helping other customers. Please stay on the line and we will help you shortly.*

If the caller continues to wait, you can have them hear another announcement, called the 2nd Announcement.

📝 *2nd Announcement: Your business is important to us. Your call will be automatically answered by the first available agent. Please stay on the line.*

If all the ACD Group's agents still are unavailable, the call can automatically overflow to another ACD Group, offsite via a speed dial bin, Ring Group, or the Voice Mail. If all agents in the overflow ACD Group are busy, Lookback Routing automatically ensures that the waiting call will ring into the first agent in either group that becomes free.

You can assign an ACD Group with any combination of 1st Announcement, 2nd Announcement and overflow method. You can have, for example, a Technical Service group that plays only the 2nd Announcement to callers and then immediately overflows to Voice Mail. At the same time, you can have a Customer Service group that plays both announcements and does not overflow.

The following overflow options are available:

- **No Overflow (Mode 0)**
  A call waits in queue indefinitely for an available agent without an announcement. If no agents are logged in when the call rings the group, the caller hears ringback until they hang up or an agent logs in.

- **Overflow with No Announcement (Mode 1)**
  If all agents are unavailable, a call to the ACD Group will overflow (i.e., reroute) to another ACD Group, offsite via a speed dial bin, Ring Group, or the Voice Mail after a programmed interval. The caller does not hear any messages as the call is rerouted.

- **No Overflow with 1st Announcement Only (Mode 2)**
  A call waits in queue for an available agent, but the caller periodically hears the 1st Announcement message. This message can be a unique VRS message, or a message from an InMail. In either case, the message repeats after a programmed interval.

- **No Overflow with 1st and 2nd Announcements (Mode 3)**
  When all agents are unavailable, the caller initially hears the 1st Announcement message. After a programmed interval, the caller hears the 2nd Announcement. The second announcement periodically repeats while the caller continues to wait. Each announcement can be a VRS message, or a message from an InMail. Refer to Setting Up the 1st Announcement for Overflow Modes 2 and 4 on page 3-16.

- **Overflow with 1st Announcement Only (Mode 4)**
  If all agents are unavailable, a call to the ACD Group will overflow (i.e., reroute) to another ACD Group, offsite via a speed dial bin, Ring Group, or the Voice Mail after a programmed interval. In addition, the caller periodically hears the 1st Announcement message. This message can be a VRS message, or a message from an InMail. In either case, if the overflow destination is another ACD Group the message repeats after a programmed interval.

- **Overflow with 1st and 2nd Announcements (Mode 5)**
  When all agents are unavailable, a call to the ACD Group will overflow (i.e., reroute) to another ACD Group, offsite via a speed dial bin, Ring Group, or the Voice Mail after a programmed interval. In addition, the caller initially hears the 1st Announcement message. After a programmed interval, the caller hears the 2nd Announcement. If the overflow destination is another ACD Group, the second announcement periodically repeats while the caller continues to wait. Each announcement can be a VRS message, or a message from an InMail.

- **No Overflow with 2nd Announcement Only (Mode 8)**
  A call waits in queue for an available agent, but the caller periodically hears the 2nd Announcement message. This message can be a VRS message, or a message from an InMail. In either case, the message repeats after a programmed interval.

- **Overflow with 2nd Announcement Only (Mode 9)**
  If all agents are unavailable, a call to the ACD Group will overflow (i.e., reroute) to another ACD Group, offsite via a speed dial bin, Ring Group, or the Voice Mail after a programmed interval. In addition, the caller periodically hears the 2nd Announcement message. This message can be a VRS message, or a message from an InMail. In either case, if the overflow destination is another ACD Group the message repeats after a programmed interval.

Music on Hold for Queued Callers

The system will optionally play ringback tone or Music on Hold to callers waiting in an ACD Group's queue. The source for the Music on Hold can be an internal tone or an external customer-provided source. The customer-provided source can connect to a connector on the 082U-B1. Refer to the Hardware Manual for more on connecting external music sources. Refer to the Features and Specifications Manual for details on setting up Music on Hold.

Multiple ACD Groups Programmed As Overflow Destination

The system can be programmed to transfer an overflow call to a specific ACD Group using Program 41-09-01. (In order to overflow to voice mail, offsite via a speed dial bin, Ring Group, use Program 41-08-02.) This option allows you to set the priority of each of the defined overflow destinations. Up to two different ACD Groups can be programmed as overflow destinations for each group. The system, however, will not allow you to program an ACD Group with that same ACD Group as the overflow. (Example: ACD Group 1 cannot overflow to ACD Group 1.)

Setting Up the 1st Announcement for Overflow Modes 2 and 4

- Mode 2 = No Overflow with 1st Announcement Only
- Mode 4 = Overflow with 1st Announcement Only

For overflow modes 2 and 4, the system handles overflow timing and playing of the 1st Announcement Message to callers based on the interaction of the following ACD programming:

Program No.	Program Name / Description
41-08-04	**ACD Overflow Options – ACD Overflow Transfer Time** Overflow out of the ACD queue (mode 4 only) occurs after this timer expires. The system starts this timer as soon as a call goes into queue. Disable this timer (0) if you want queued callers to stay in queue until they are answered or they hang up. When it times out, the system overflows the caller to the destination defined in Program 41-09-01.

With a VRS set as the announcement source:

Program No.	Program Name / Description
22-01-11	**System Options for Incoming Calls – VRS Waiting Message Interval Time** Set the timer for the interval between the Delayed Messages (0~64800 seconds).
41-11-01	**VRS Delay Announcement – Delay Message Start Time** For each ACD group (1~8), set how long the system waits before playing the first delay announcement (0~64800 seconds).

Program No.	Program Name / Description
41-11-02	**VRS Delay Announcement – 1st Delay Message Number** For each ACD group (1~8), set the 1st Delay Message Number (01~101).
41-11-03	**VRS Delay Announcement – 1st Delay Message Sending Count** For each ACD group (1~8), determine how many times the 1st Delay Message is played to the caller (0~255).
41-11-08	**VRS Delay Announcement – Queue Depth Announcement** For each ACD Group (1~8), use (0) to disable the Queue Depth Announcements, (1) after the 1st Delay Announcement only, (2) after the 2nd Delay Announcement only, or (3) after both the 1st and 2nd.

With InMail set as the announcement source:

Program No.	Program Name / Description
41-19-01	**ACD Voice Mail Delay Announcement – Delay Message Start Time** For each ACD Group (1~8), set how long the system waits before playing the first Delay Announcement (0~64800 seconds).
41-19-02	**ACD Voice Mail Delay Announcement – Mailbox Number for 1st Announcement Message** For each ACD Group (1~8), set the mailbox number to be used for the 1st Delay Announcement.
41-19-03	**ACD Voice Mail Delay Announcement – 1st Delay Message Sending Count** For each ACD Group (1~8), determine how many times the 1st Delay Message is played to the caller (0~255).
41-19-08	**ACD Voice Mail Delay Announcement – Delay Message Interval Time** For each ACD Group (1~8), set the timer for the interval between the Delayed Messages (0~64800 seconds).
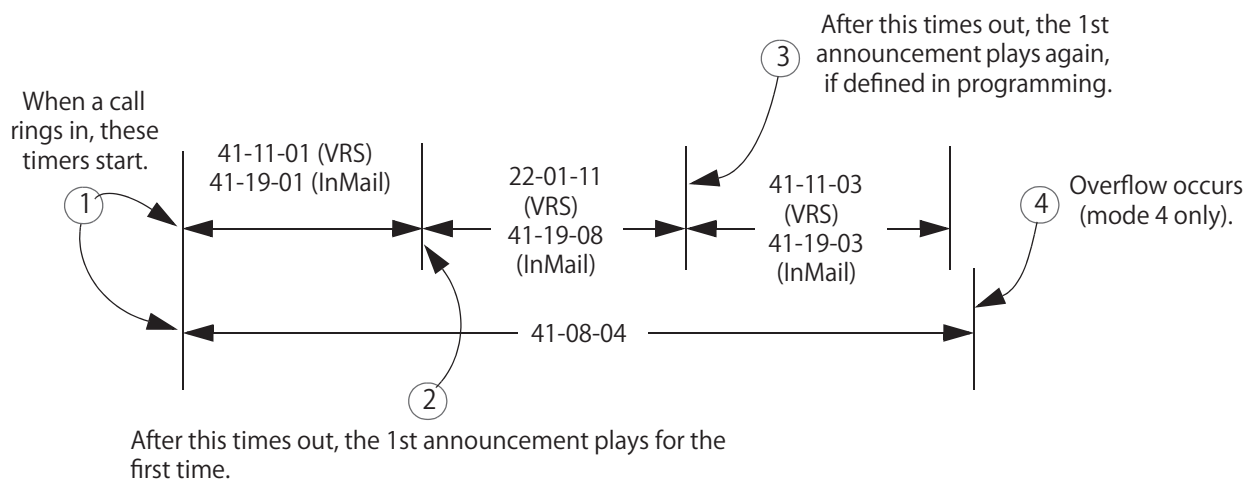
Setting Up 1st and 2nd Announcements for Overflow Modes 3 and 5

- Mode 3 = No Overflow with 1st and 2nd Announcements
- Mode 5 = Overflow with 1st and 2nd Announcements

For overflow modes 3 and 5, the system plays the 1st and 2nd Announcements to callers and overflows based on the interaction of the following ACD programming:

Program No.	Program Name / Description
41-08-04	**ACD Overflow Options – ACD Overflow Transfer Time** Overflow out of the ACD queue (mode 5 only) occurs after this timer expires. It starts as soon as a call goes into queue. Disable this timer (0) if you want queued callers to stay in queue until they are answered or they hang up. ✏️ *If Program 41-11-07 or 41-19-07 is set, call will disconnect.* When it times out, the system overflows the caller to the destination defined in Program 41-09-01.

With a VRS set as the announcement source (Program 41-08-03):

Program No.	Program Name / Description
41-11-01	**VRS Delay Announcement – Delay Message Start Timer** For each ACD group (1~8), determine how long the system waits before playing the Delay Message (0~64800 seconds).
41-11-02	**VRS Delay Announcement – 1st Delay Message Number** For each ACD group (1~8), set the 1st Delay Message Number (01~101).
41-11-03	**VRS Delay Announcement – 1st Delay Message Sending Count** For each ACD group (1~8), determine how many times the 1st Delay Message is played to the caller (0~255).
41-11-04	**VRS Delay Announcement – 2nd Delay Message Number** For each ACD group (1~8), set the 2nd Delay Message Number (01~101).
41-11-05	**VRS Delay Announcement – 2nd Waiting Message Sending Count** For each ACD group (01~8), determine how many times the 2nd Delay Message is played to the caller (0~255).
41-11-07	**VRS Delay Announcement – ACD Forced Disconnect Time After the 2nd Message** For each ACD group (1~8), assign how long the system should wait after the end of the 2nd Announcement Message before disconnecting the call (0~64800).
41-11-08	**VRS Delay Announcement – Queue Depth Announcement** For each ACD Group (1~8), use (0) to disable the Queue Depth Announcements, (1) after the 1st Delay Announcement only, (2) after the 2nd Delay Announcement only, or (3) after both the 1st and 2nd.
22-01-11	**System Options for Incoming Calls – VRS Waiting Message Interval Time** Set the timer for the interval between the Delayed Messages (0~64800 seconds).

With an InMail set as the announcement source:

Program No.	Program Name / Description
41-19-01	**ACD Voice Mail Delay Announcement – Delay Message Start Time** For each ACD Group (1~8), set how long the system waits before playing the first Delay Announcement (0~64800 seconds).
41-19-02	**ACD Voice Mail Delay Announcement – Mailbox Number for 1st Announcement Message** For each ACD Group (1~8), set the mailbox number to be used for the 1st Delay Announcement.
41-19-03	**ACD Voice Mail Delay Announcement – 1st Delay Message Sending Count** For each ACD Group (1~8), determine how many times the 1st Delay Message is played to the caller (0~255).
41-19-04	**ACD Voice Mail Delay Announcement – Mailbox Number for 2nd Announcement Message** For each ACD Group (1~8), set the mailbox number to be used for the 2nd Delay Announcement.
41-19-05	**ACD Voice Mail Delay Announcement – 2nd Delay Message Sending Count** For each ACD Group (1~8), determine how many times the 2nd Delay Message is played to the caller (0~255).
41-19-07	**ACD Voice Mail Delay Announcement – ACD Forced Disconnect Time After 2nd Announcement** For each ACD Group (1~8), assign how long the system should wait after the end of the 2nd Announcement Message before disconnecting the call (0~64800 seconds).

Program No.	Program Name / Description
41-19-08	**ACD Voice Mail Delay Announcement – Delay Message Interval Time** For each ACD Group (1~8), set the timer for the interval between the Delayed Messages (0~64800 seconds).

After this times out, the 1st announcement plays.

When a call rings in, these timers start.

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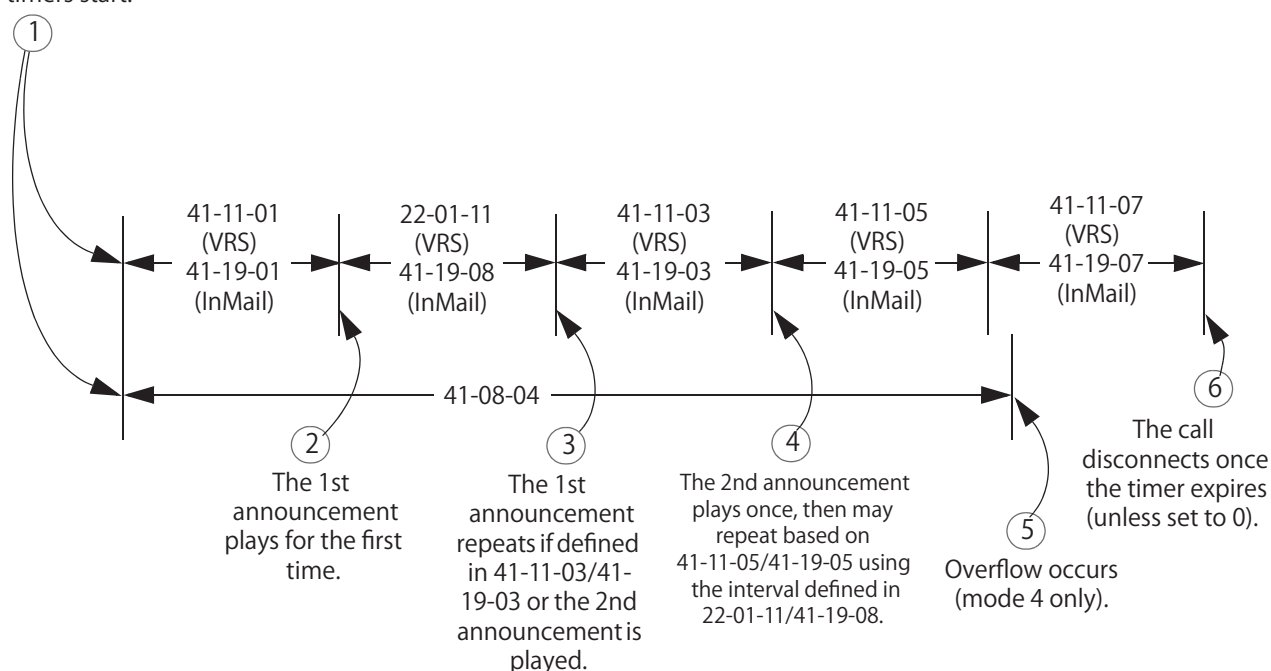
Setting Up the 2nd Announcement for Overflow Modes 8 and 9

• Mode 8 = No Overflow with 2nd Announcement Only
• Mode 9 = Overflow with 2nd Announcement Only

For overflow modes 8 and 9, the system handles overflow timing and playing of the 2nd Announcement to callers based on the interaction of the following ACD programming:

| Program No.	Program Name / Description
41-08-04	**ACD Overflow Options – ACD Overflow Transfer Time** Overflow out of the ACD queue (mode 9 only) occurs after this timer expires. The timer starts as soon as a call goes into queue. Disable this timer (0) if you want queued callers to stay in queue until they are answered or they hang up (as long as Program 41-11-07 or 41-19-07 is not set which will disconnect the call). When it times out, the system overflows the caller to the destination defined in Program 41-09-01.

With a VRS set as the announcement source:

Program No.	Program Name / Description
22-01-11	**System Options for Incoming Calls – VRS Waiting Message Interval Time** For each ACD group (1~8), set the timer for the interval between the Delayed Messages (0~64800 seconds).
41-11-01	**VRS Delay Announcement – Delay Message Start Timer** For each ACD group (1~8), set how long the system waits before playing the first delay announcement (0~64800 seconds).

Program No.	Program Name / Description
41-11-04	**VRS Delay Announcement – 2nd Delay Message Number** For each ACD group (1~8), set the 2nd Delay Message Number (01~101).
41-11-05	**VRS Delay Announcement – 2nd Waiting Message Sending Count** For each ACD group (1~8), determine how many times the 2nd Announcement Message will be played to a caller in queue for modes 8 and 9 (0~255).
41-11-07	**VRS Delay Announcement – ACD Forced Disconnect Time After 2nd Message** For each ACD group (1~8), assign how long the system should wait after the end of the 2nd Announcement Message before disconnecting the call (0~64800).
41-11-08	**VRS Delay Announcement – Queue Depth Announcement** For each ACD Group (1~8), use (0) to disable the Queue Depth Announcements, (1) after the 1st Delay Announcement only, (2) after the 2nd Delay Announcement only, or (3) after both the 1st and 2nd.

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With InMail set as the announcement source:

Program No.	Program Name / Description
41-19-01	**ACD Voice Mail Delay Announcement – Delay Message Start Time** For each ACD Group (1~8), set how long the system waits before playing the first Delay Announcement (0~64800 seconds).
41-19-04	**ACD Voice Mail Delay Announcement – Mailbox Number for 2nd Announcement Message** For each ACD Group (1~8), set the mailbox number to be used for the 2nd Delay Announcement.
41-19-05	**ACD Voice Mail Delay Announcement – 2nd Delay Message Sending Count** For each ACD Group (1~8), determine how many times the 2nd Delay Message is played to the caller (0~255).
41-19-07	**ACD Voice Mail Delay Announcement – ACD Forced Disconnect Time After 2nd Announcement** For each ACD Group (1~8), assign how long the system should wait after the end of the 2nd Announcement Message before disconnecting the call (0~64800 seconds).
41-19-08	**ACD Voice Mail Delay Announcement – Delay Message Interval Time** For each ACD Group (1~8), set the timer for the interval between the Delayed Messages (0~64800 seconds).

When a call rings in, these timers start.

① 41-11-01 (VRS) 41-19-01 (InMail)   22-01-11 (VRS) 41-19-08 (InMail)   41-11-05 (VRS) 41-19-05 (InMail)   41-11-07 (VRS) 41-19-07 (InMail)

41-08-04

② The 2nd announcement is played.

③ The 2nd announcement may repeat based on 41-11-05 or 41-19-05.

④ Overflow occurs (mode 9 only).

⑤ The call disconnects once the timer expires (unless set to 0).

ACD Overflow Options Worksheet

ACD Overflow Options Worksheet (41-08)	
ACD	**ACD Group you want to program (1-8)**
Overflow Mode	**ACD Overflow Mode [Program 41-08-01]** 0 = No overflow with no announcements 1 = Overflow with no announcements 2 = No overflow with 1st announcement only 3 = No overflow with 1st and 2nd announcements 4 = Overflow with 1st announcement only 5 = Overflow with 1st and 2nd announcements 8 = No overflow with 2nd announcement only 9 = Overflow with 2nd announcement only
Overflow Dest.	**ACD Overflow Destination [Program 41-08-02]** 0 = No Setting, 1~8 = ACD Group, 9 = Overflow Table (Program 41-09), 10 = Voice Mail Integration, 11 = System Speed (Program 41-08-04), 12 = Incoming Ring Group (41-08-06).
Multiple Overflow Dest.	**ACD Overflow Destination Priority** (1-8 = ACD Groups 1-8) **[Program 41-14-03]**
Type	**ACD Announcement Type [Program 41-08-03]** 1 = From VRS, 2 = InMail
Source	**Source for ACD Announcement (not applicable to modes 0 and 1)** VRS (see Program 41-11-02 and 41-11-04) InMail (see Program 41-19-02 and 41-19-04)

ACD	Over-flow Mode (41-08-01)	Over-flow Dest. (41-08-02)	Overflow Destination Priority (41-14-03)							1st ACD Announcement		2nd ACD Announcement	
			1	2	3	4	5	6	7	Type (41-08-03)	Source (41-11-02) (41-19-02)	Type (41-08-03)	Source (41-11-04) (41-19-04)
1													
2													
3													
4													
5													
6													
7													
8													

Conditions

• The queue Announcements will not play to a caller when agents are available and ringing.
• After recording the VRS overflow message, the VRS may have to be reset before the message will be played.
• InMail can be used to play Delay Announcements.
• When all InMail talk paths (ports) are simultaneously being accessed by an InMail Mailbox subscribers or Voice Mail Delay Announcements, or combination of the two, the next incoming call to the InMail will Ring No Answer until an available talk path becomes idle (First Come – First Served).

Default Settings

• ACD not set up.

Programming

Program No.	Program Name / Description
22-01-11	**System Options for Incoming Calls – VRS Waiting Message Interval Time** For each ACD group (1~8), set the timer for the interval between the Delayed Messages (0~64800 seconds).
41-08-01	**ACD Overflow Options – Overflow Operation Mode** For each ACD Group (1~8), assign the overflow mode (0~9). Each ACD Group can have unique overflow options.
41-08-02	**ACD Overflow Options – ACD Overflow Destination** For each ACD Group (1~8), assign the destination: 0 = No Setting, 1~8 = ACD Group, 9 = Overflow Table (Program 41-09), 10 = Voice Mail Integration, 11 = System Speed (Program 41-08-04), 12 = Incoming Ring Group (41-08-06).
41-08-03	**ACD Overflow Options – Delay Announcement Source Type** For each ACD Group (1~8), assign the announcement message types. Delay announcement functions are not available for ACD pilot number call. Each ACD Group can have unique overflow options.
41-08-04	**ACD Overflow Options – ACD Overflow Transfer Time** For each ACD Group (1~8), assign the overflow transfer time (0~64800 seconds).
41-08-05	**ACD Overflow Options – System Speed Dial Bin** For each ACD Group (1~8), enter the speed dial area (0~1999) to overflow to when 41-08-05 is set to 11
41-08-06	**ACD Overflow Options – Incoming Ring Group when Overflow** For each ACD Group (1~8), enter the Incoming Ring Group to overflow to when 41-08-02 is set to 12.
41-09-01	**ACD Overflow Table Setting** For each ACD Group (1~8), assign the overflow ACD Groups according to the priority in which the calls should ring the ACD Groups (for each ACD Group, up to seven destinations can be programmed). If, while the call is ringing, the extension to which the call was transferred becomes available, both the extension and the overflow ACD group will ring.
41-11-01	**VRS Delay Announcement – Delay Message Start Timer** For each ACD Group (1~8), determine how long the system waits before playing the delay Message. This program is activated when the delay announcement source and options are assigned as VRS in Program 41-08-03.
41-11-02	**VRS Delay Announcement – 1st Delay Message Number** For each ACD Group (1~8), assign the VRS message number to be used as the message source for the 1st Delay Announcement Message (0~101). This program is activated when the delay announcement source and options are assigned as VRS in Program 41-08-03.
41-11-03	**VRS Delay Announcement – 1st Delay Message Sending Count** For each ACD Group (1~8), determine the 1st Delay Message Sending Count (0~255).
41-11-04	**VRS Delay Announcement – 2nd Delay Message Number** For each ACD Group (1~8), assign the VRS message number to be used as the message source for the 2nd Delay Announcement Message (0~101). This program is activated when the delay announcement source and options are assigned as VRS in Program 41-08-03.
41-11-05	**VRS Delay Announcement – 2nd Waiting Message Sending Count** For each ACD Group (1~8), determine the 2nd Delay Message Sending Count (0~255).
41-11-06	**VRS Delay Announcement – Tone Kind at Message Interval** For each ACD Group (1~8), determine what the caller should hear between messages (0=Ring Back Tone, 1=MOH Tone, 2=BGM source).
41-11-07	**VRS Delay Announcement – ACD Forced Disconnect Time After the 2nd Delay Message** For each ACD Group (1~8) when using ACD Overflow modes 3, 5, 8 and 9, enter how long after the caller hears the 2nd Announcement the system will disconnect (drop) the call. This prevents callers from waiting in queue an excessive amount of time. To disable this option (and allow callers to wait forever), enter **0**.
41-11-08	**VRS Delay Announcement – Queue Depth Announcement** For each ACD Group (1~8), use (0) to disable the Queue Depth Announcements, (1) after the 1st Delay Announcement only, (2) after the 2nd Delay Announcement only, or (3) after both the 1st and 2nd.

Program No.	Program Name / Description
41-14-03	**ACD Options Setup – ACD Priority for Overflow Calls** Set the priority for overflow calls (0=Own Group Priority, 1=Priority Set by Program 41-03-03) for ACD Groups (1~8).
41-14-06	**ACD Options Setup – Call Queuing after 2nd Announcement** Use this option to determine whether the caller should hear the 2nd Delay Announcement and then be taken out of queue [(1=Disable), or placed back into queue (0=Enable)].
41-16-01	**ACD Threshold Overflow – Number of Calls in Queue** For each ACD group (1~8), define the maximum number of calls in ACD queue (0=No Limit, 1~128) before the call overflows.
41-16-02	**ACD Threshold Overflow – Operation Mode for ACD Queue** For each ACD group (1~8), determine how the system handles ACD calls when the maximum number of ACD calls in queue has been reached (0=Last Waiting Call is Transferred, 1=Longest Waiting Call is Transferred, 2=Send Busy Tone).
41-19-01	**ACD Voice Mail Delay Announcement – Delay Message Start Time** For each ACD Group (1~8), set how long the system waits before playing the first Delay Announcement (0~64800 seconds).
41-19-02	**ACD Voice Mail Delay Announcement – Mailbox Number for 1st Announcement Message** For each ACD Group (1~8), set the mailbox number to be used for the 1st Delay Announcement.
41-19-03	**ACD Voice Mail Delay Announcement – 1st Delay Message Sending Count** For each ACD Group (1~8), determine how many times the 1st Delay Message is played to the caller (0~255).
41-19-04	**ACD Voice Mail Delay Announcement – Mailbox Number for 2nd Announcement Message** For each ACD Group (1~8), set the mailbox number to be used for the 2nd Delay Announcement.
41-19-05	**ACD Voice Mail Delay Announcement – 2nd Delay Message Sending Count** For each ACD Group (1~8), determine how many times the 2nd Delay Message is played to the caller (0~255).
41-19-06	**ACD Voice Mail Delay Announcement – Wait Tone Type at Message Interval** For each ACD Group (1~8), determine what the caller should hear between messages (0 = Ring Back Tone, 1 = MOH Tone, 2 = BGM source).
41-19-07	**ACD Voice Mail Delay Announcement – ACD Forced Disconnect Time After 2nd Announcement** For each ACD Group (1~8), assign how long the system should wait after the end of the 2nd Announcement Message before disconnecting the call (0~64800 seconds).
41-19-08	**ACD Voice Mail Delay Announcement – Delay Message Interval Time** For each ACD Group (1~8), set the timer for the interval between the Delayed Messages (0~64800 seconds).

Related Features

Music on Hold

Off-Duty Mode

Voice Response System (VRS) InMail

Operation

Once programmed, overflow operation is automatic.

Queue Status Display

Description

When all agents in an ACD Group are unavailable, an incoming call will queue and cause the Queue Status Display to occur on the ACD agent's display. The display helps the agents keep track of the traffic load within their group. In addition, any display Multiline Terminal can have a Queue Status Display Check programmable function key. The Multiline Terminal user can press this key any time while idle, and using the volume ▲ or ▼, scroll through the Queue Status Displays of all the ACD Groups. The Queue Status Displays shows (see the Queue Status Display illustration below):

- The number of calls queued for an available agent in the group.
- The trunk that has been waiting the longest, and how long it has been waiting.
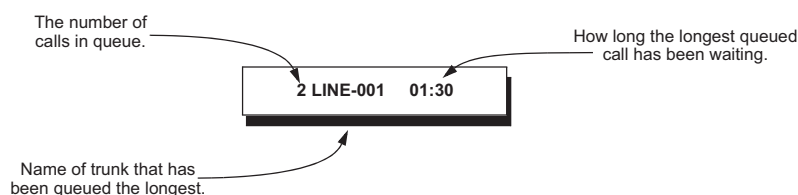
For each ACD Group, you can set the following conditions:

- The number of trunks that can wait in queue before the Queue Status Display occurs.
- How often the time in queue portion of the display reoccurs (see the Queue Status display Timing illustration below).
- Queue Status Display holding time.
- Queue Status Alarm enable/disable.
- Queue Status Alarm sending time.
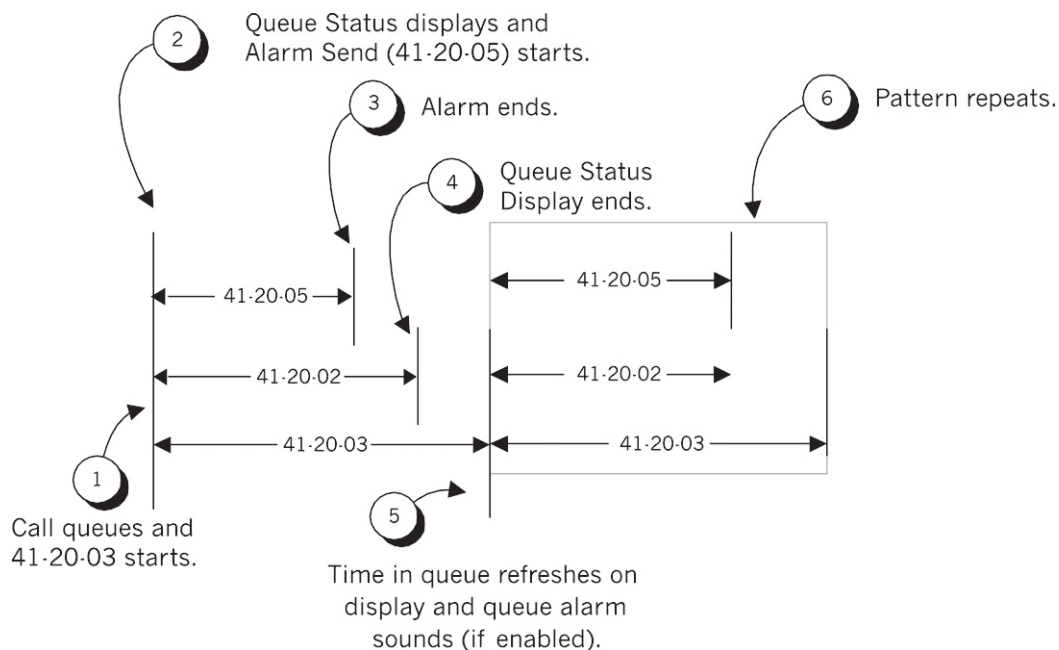
Conditions

- Do not use number of calls in queue and time in queue to set the ACD queue alarm. Select either one or the other for the system to follow.
- If a telephone is not idle, the Queue Status Display Programmable Function key cannot be used.

- The Queue Status Display is not shown and the Queue Alarm is not heard by ACD agents active on a call or those in Off-Duty mode.
- In order to scroll through the ACD groups queue status, the Queue Status Display Programmable Function key must be used. You cannot scroll when the Queue Status Display appears due to an alarm condition.
- If the Queue Status display and alarm are active and the queued called is answered/disconnected, the display and alarm will continue until the timer in Program 41-20-05 expires.
- When an overflowed call is in queue, the call will be included in its original ACD group's queue and not in the group's queue to which it overflowed.

Default Settings

- No Queue Status Display Check keys programmed (Program 15-07-01: *19).
- Queue Status Display and Queue Alarm disabled (Program 41-20-01 = 0).

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Programming

<p align="center">**Table 3-5**</p>

Program No.	Program Name / Description
15-07-01	**Programmable Function Keys** Assign a Queue Status Display Check key, if required for an ACD agent (code: *19).
20-06-01	**Class of Service for Extensions** Assign a Class of Service (1~15) to an extension.
20-13-39	**Class of Service Options (Supplementary Service) – ACD Queue Status Display** Turns Off (0) or On (1) the ACD Queue Status Display for an extension Class of Service. Any extension which has this option enabled also hears the queue alarm.

Feature	Available in Program 41-20-xx
Queue Status Display	Yes
Queue Status Display Time	Yes
Alarm	Yes
Alarm Send Time	Yes
Interval Time of Queue Status Display	Yes
Class of Service	Yes
Timing of alarm and display queue status.	Alarm triggered after the number of calls in Program 41-20-01 is exceeded. Then follows Program 41-20-03 timing for displaying status.

Program No.	Program Name / Description
41-20-01	**ACD Queue Status Display Settings – Number of Calls in Queue** Set the number of calls that can accumulate in the ACD queue before the Queue Status Display (and optional queue alarm) occurs (0=No Display, 1~128; Default=0).
41-20-02	**ACD Queue Status Display Settings – Queue Status Display Time** Set how long the Queue Status display remains on the telephone's display (0~64800 seconds; Default=5).
41-20-03	**ACD Queue Status Display Settings – Queue Status Display Interval** Set the interval that refreshes the Queue Status Alarm time in queue display and causes the optional queue alarm to occur on phones active on a call, logged out, or in wrap-up (0~64800 seconds; Default=60).
41-20-04	**ACD Queue Status Display Settings – ACD Call Waiting Alarm** Enable (1) or disable (0) the queue alarm (Default=0).
41-20-05	**ACD Queue Status Display Settings – ACD Call Waiting Alarm Hold Time** Set how long the Call Waiting Alarm should sound (0~64800 seconds; Default=0).

Related Features

Off-Duty Mode

Operation

None

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Supervisor, ACD Group

Description

You can designate an extension in an ACD Group to be the group's supervisor. Once assigned as an ACD Group Supervisor, the user can:

- Take the entire ACD Group out of service (outside callers will hear ringback).
- Check the log out status of each agent after the group taken down.
- Restore the ACD Group to service.

During programming, you can choose one of three modes of operation for each ACD Group supervisor:

- Supervisor's extension cannot receive calls to the ACD Group (mode 0).
- Supervisor's extension can only receive ACD Group calls during overflow conditions (mode 1).
- Supervisors extension receives calls just like any other ACD Group agent (mode 2).

An ACD Group can have only one supervisor. In addition, an extension can be a supervisor for only one ACD Group. There are 8 available ACD Groups.

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Conditions

- An extension can have supervisory capabilities only while it is logged into the Group.
- A supervisor can not log in/out an AIC member as they are not normal ACD agents.
- An extension assigned as an ACD Group Supervisor cannot also be a System Supervisor.

Default Setting

- ACD Supervisors not programmed.

Programming

Program No.	Program Name / Description
15-07-01	**Programmable Function Keys** Assign the following function keys to the ACD Group Supervisor: • ACD Log In/Log Out key (code *10) for one-button Log In/Log Out operation.
41-04-01	**ACD Group Supervisor – Group Supervisor Extension** For each ACD Group (1~8), assign the Group Supervisor's extension. (You cannot use the port entered in this program in Program 41-01-01 as a System Supervisor.)
41-04-02	**ACD Group Supervisor – Operation Type** For each ACD Group (1~8), assign the operating mode for the Group Supervisor. Operating modes are 0 [do not receive ACD calls (no)], 1 [receive ACD incoming calls in case of overflow (Busy)] and 2 [receive ACD incoming calls all the time (Yes)].

Related Features

Supervisor, System

Operation

Logging On to the ACD Group

To log your supervisor extension into the ACD Group:

You only have Group Supervisor capability while logged into the ACD Group.
Your display shows: WAIT ACD LOGIN

1.   Press the **Speaker** key.
2.   Dial **✳5**.

> 🖉 *You hear confirmation tone.*

> **- OR -**
> Press ACD Log On/Off key (Program 15-07-01 or SC 752: code *10).

> 🖉 *Your Log On/Off key lights and you hear a single beep.*

> 🖉 *Your display will show the ACD Group to which you are logged in.*

To log your supervisor extension out of an ACD Group:

This will end your Group Supervisor capabilities. Your Log On/Off key will be on and your display shows the ACD Group to which you are logged in.

1.   Press the **Speaker** key.
2.   Dial **✳5**.
     - OR -
     Press ACD Log On/Off key (Program 15-07-01 or SC 752: code *10).

> 🖉 *Your display shows: ACD LOGOUT (1:Yes, 0:No)*

3.   Dial **1** to log out.

> 🖉 *You hear confirmation tone (if you dialed *5) or a single beep (if you pressed the ACD Log On/Log Off key).*

> 🖉 *Dial 0 instead to cancel the log out and return to the group.*

Taking an ACD Group out of Service

To check to see which agents have not yet logged out of the ACD Group:

Your display shows: G:n END OF WORK! TERMINAL LOG OUT...

1.   Press your ACD **Log On/Off** key (Program 15-07-01 or SC 752: code *10).

> 🖉 *Your display shows: LOGIN TERMINAL n CHECK SAT non*

> 🖉 *The extension shown in CHECK SAT non has not logged out.*

2.   Press volume ▲ or ▼ to scroll through the list of agents that have not logged out.

> 🖉 *When all agents have logged out (including yourself), your display shows:*

3.   Press ACD **Log On/Off** key (Program 15-07-01 or SC 752: code *10) again.

🖉 *Your displays shows: GROUP No:n*

Logging Agents into and out of their ACD Group

To log an agent into their ACD Group:

You can do this while either logged in or logged out.

1.   Press the **Speaker** key.
2.   Dial **667**.
3.   Dial the ACD Agent's extension number.

🖉 *You hear confirmation tone.*

4.   Press **Speaker** to hang up.

To log an agent out of their ACD Group:

You can do this while either logged in or logged out.

1.   Press the **Speaker** key.
2.   Dial **668**.
3.   Dial the ACD Agent's extension number.

🖉 *You hear confirmation tone.*

4.   Press **Speaker** to hang up.

Assigning Agents to different ACD Groups

To assign an agent to a different ACD Group:

You can do this while either logged in or logged out. You *must* log out of the ACD Agent before reassigning them.

1.   Press the **Speaker** key.
2.   Dial **669**.
3.   Dial the ACD Agent's extension number.
4.   Dial the number of the ACD Group to which you want to assign the agent.

🖉 *You hear confirmation tone.*

5.   Press **Speaker** to hang up.

Supervisor, ACD System

Description

You can designate an extension as an ACD System Supervisor. The system can have only one ACD System Supervisor.

Once a user is assigned as an ACD System Supervisor, he can perform the following tasks:
- Take all the system's ACD Groups out of service simultaneously. Outside callers will hear ringback.
- Check the log out status of each agent after the groups are taken down.
- Restore all the ACD Groups to service simultaneously.
- Log an agent into or out of an ACD Group.
- Reassign an agent to a different ACD Group.

Conditions

- A supervisor can not log in/out an AIC member as they are not normal ACD agents.
- An extension assigned as an ACD System Supervisor cannot also be an ACD Group Supervisor.

Default Setting

- ACD System Supervisors not programmed.

Programming

Program No.	Program Name / Description
11-13-10	**Service Code Setup (for ACD) – ACD Agent Login by Supervisor** This Service Code (normally 667) allows the System Supervisor to log an agent back into an ACD Group.
11-13-11	**Service Code Setup (for ACD) – ACD Agent Logout by Supervisor** This Service Code (normally 668) allows the System Supervisor to log an agent out of an ACD Group.
11-13-12	**Service Code Setup (for ACD) – Change Agent ACD Group by Supervisor** This Service Code (normally 669) allows the System Supervisor to assign an agent to a different ACD Group.
15-07-01	**Programmable Function Keys** Assign the following function keys to the ACD Group Supervisor: • ACD Log In/Log Out key (code *10) for one-button Log In/Log Out operation. The System Supervisor must have a Log In/Log Out key.
20-06-01	**Class of Service for Extensions** Assign a Class of Service (1~15) to an extension.
20-13-33	**Class of Service Options (Supplementary Service) – ACD Supervisor's Position Enhancement** In an extension's Class of Service, enable this option (1) to allow the System Supervisor to change the login and ACD Group assignment for an agent. This option also allows agents to change their own ACD Group assignment.
41-01-01	**System Options for ACD – System Supervisory Extension** Assign an extension as the ACD System Supervisor.
41-04-01	**ACD Group Supervisor – Group Supervisor Extension** For each ACD Group (1~8), assign the Group Supervisor's extension. (You cannot use the port entered in this program in Program 41- 01-01 as a System Supervisor.)

Program No.	Program Name / Description
41-04-02	**ACD Group Supervisor – Operation Type** For each ACD Group (1~8), assign the operating mode for the Group Supervisor. Operating modes are 0 [do not receive ACD calls (no)], 1 [receive ACD incoming calls in case of overflow (Busy)] and 2 [receive ACD incoming calls all the time (Yes)].

Related Features

Supervisor, ACD Group

Operation

Logging on as the ACD System Supervisor

To log on as the ACD System Supervisor:

You only have System Supervisor capability while logged on.

1. Press the **Speaker** key.
2. Dial **✳5**.

    🖊 *You hear confirmation tone.*

    - OR -
    Press ACD **Log On/Off** key (Program 15-07-01 or SC 752: code *10).

    🖊 *Your Log On/Off key lights and you hear a single beep.*

    🖊 *Your display will show: SUPERVISOR.*

Logging off as the ACD System Supervisor

To log off as the ACD System Supervisor:

This will end your System Supervisor capabilities. Your Log On/Off key is lit and your display shows: SUPERVISOR

1. Press the **Speaker** key.
2. Dial **✳5**.
    - OR -
    Press ACD **Log On/Off** key (Program 15-07-01 or SC 752: code *10).

    🖊 *Your display shows: ACD LOGOUT (1:Yes, 0:No)*

3. Dial **1** to log out.

    🖊 *You hear confirmation tone (if you dialed *5) or a single beep (if you pressed the ACD Log On/Log Off key) and the Log On/Off key goes out.*

    🖊 *Dial 0 instead to cancel the log out.*

Taking all the ACD Groups Simultaneously Out Of Service

To check to see which agents have not yet logged out of their ACD Group:

Your display shows: END OF WORK! TERMINAL LOG OUT...

1. Press your ACD **Log On/Off** key (Program 15-07-01 or SC 752: code *10).

    🖉   *Your display shows: LOGIN TERMINAL n CHECK STA nnn*

    🖉   *The extension shown in CHECK STA nnn has not logged out.*

2. Press volume ▲ or ▼ to scroll through the list of agents that have not logged out.
3. Press ACD **Log On/Off** key (Program 15-07-01 or SC 752: code *10) again.

    🖉   *Your displays shows: SUPERVISOR*

Logging Agents into and out of their ACD Group

To log an agent into their ACD Group:

You can do this while either logged in or logged out.

1. Press the **Speaker** key.
2. Dial **667**.
3. Dial the ACD Agent's extension number.

    🖉   *You hear confirmation tone.*

4. Press **Speaker** to hang up.

To log an agent out of their ACD Group:

You can do this while either logged in or logged out.

1. Press the **Speaker** key.
2. Dial **668**.
3. Dial the ACD Agent's extension number.

    🖉   *You hear confirmation tone.*

4. Press **Speaker** to hang up.

Assigning Agents to different ACD Groups

To assign an agent to a different ACD Group:

You can do this while either logged in or logged out. You must log out the ACD Agent before reassigning them.

1. Press the **Speaker** key.
2. Dial **669**.
3. Dial the ACD Agent's extension number.
4. Dial the number of the ACD Group to which you want to assign the agent.

    🖉   *You hear confirmation tone.*

5. Press **Speaker** to hang up.

Supervisor Monitor / ACD Monitor

Description

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

Supervisor Monitor (ACD Monitor) allows an ACD System or Group Supervisor with a uniquely programmed ACD Monitor key to listen in on an ACD Agent's call. The ACD Agent and the outside caller are unaware that their call is being monitored. ACD Monitor helps supervisors that want to make spot checks on an ACD Agent's performance. This encourages agents to always provide the highest levels of courtesy and performance since the supervisor can listen in unobtrusively at any time.

S

Conditions

None

Default Setting

- An extension automatically sends off hook signals to a busy extension (Program 20-13-06 = 1). The caller does not hear busy tone.
- No ACD Monitor keys assigned (Program 15-07-01: *15).

Programming

Program No.	Program Name / Description
15-07-01	**Programmable Function Keys** Assign an ACD Monitor key (code *15) to each supervisor that should be able to monitor an ACD Agent's call.
20-02-05	**System Options for Multiline Telephones – Headset Busy Mode** Set this option to 0 for all ACD Agents with headsets that should be monitored. This makes the headset extension busy when only one extension appearance is busy. The supervisor can set up ACD Monitor only if the agent's phone is busy (i.e., while the supervisor hears busy tone).
20-06-01	**Class of Service for Extensions** Assign a Class of Service (1~15) to an extensions.
20-13-06	**Class of Service Options (Supplementary Service) – Automatic Off-Hook Signaling (Automatic Override)** Allows a busy extension ability to manually (0) or automatically (1) receive off-hook signals.

Related Features

Supervisor, ACD Group

Supervisor, ACD System

Operation

To monitor an ACD Agent's call:

Only ACD Supervisors (Group or System) can use ACD Monitor.

1. Call the busy ACD Agent.

    🖉 *You must hear busy tone.*

2. Press your ACD Monitor Key (Program 15-07-01 or SC 752: *15).

    🖉 *Your ACD Monitor Key lights.*

    🖉 *You hear the agent's conversation but the agent is not aware that you are monitoring their call.*

    🖉 *Monitoring will continue until you press the ACD Monitor key or the ACD Agent hangs up. For example, if the agent places a call on Hold but does not hang up, you will hear Music on Hold.*

To stop monitoring an ACD Agent's call:

1. Press the lit ACD Monitor Key (Program 15-07-01 or SC 752: *15).

    🖉 *Monitoring also stops when the ACD Agent hangs up.*

Identification Codes for ACD Agents

Description

Agent Identity Code (AIC)

An Agent Identity Code (AIC) allows ACD agents to log in any extension without setting Program 41-02-01 (ACD Log In). AIC also allows ACD agents to log in to multiple ACD groups at the same time. AIC and ACD groups for each work period can be set in Program 41-18-01 as shown in the following example.

Table #	AIC	Operation Group	Work Period 1	2	3	4	5	6	7	8
1	789	1	1	1	-	-	-	-	-	-
2	789	1	2	1	-	-	-	-	-	-
3	789	1	8	1	-	-	-	-	-	-
4	567	6	6	6	6	6	6	6	6	6
5	678	2	2	2	2	2	2	2	2	2
6	678	2	3	3	3	3	3	3	3	3
7	678	2	5	5	5	5	5	5	5	5

With this example, ACD will work as follows:

Example 1: Log In with AIC 789
- During Work Period 1, ACD agents will belong to ACD groups 1, 2, and 8 at the same time.
- During Work Period 2, ACD agents will belong to only ACD group 1.
- During Work Periods 3~8, ACD agents will not belong to any ACD group and the ACD extensions will work as normal extensions.

Example 2: Log In with AIC 567
- During Work Periods 1~8, ACD agents will belong to only ACD group 6.

Example 3: Log In with AIC 678
- During Work Periods 1~8, ACD agents will belong to ACD groups 2, 3 and 5 at the same time.

  🖊 *A supervisor cannot log in/out an AIC member as they are not normal ACD agents.*

Multiple Agent Log In

ACD agents can log in any extension with multiple AICs (up to three). Using the example setup above, ACD will work as follows:

Example 1: Log In with AIC 789 and 567
- During Work Period 1, ACD agents will belong to ACD groups 1, 2, 6 and 8 at the same time.
- During Work Period 2, ACD agents will belong to ACD groups 1 and 6.
- During Work Periods 3~8, ACD agents will belong to only ACD group 6.

Example 2: Log In with AIC 789, 567 and 678
- During Work Period 1, ACD agents will belong to ACD groups 1, 2, 3, 5, 6 and 8 at the same time.
- During Work Period 2, ACD agents will belong to ACD groups 1, 2, 3, 5 and 6.
- During Work Periods 3~8, ACD agents will belong to only ACD groups 2, 3, 5 and 6.

Some conditions with Multiple Agent Log In:
- ACD agents cannot log in to the system supervisor or group supervisor's extension.
- In order to log in with AIC, the extension should be set to AIC Log In mode in Program 41-17-01.

- If the extension is set to AIC log in mode in Program 41-17-01, the system will ignore the setting of Program 41-02-01 for the extension.
- ACD agents can log in multiple extensions (up to the maximum capacity of the extension) with one AIC. For example, even if ACD agent "A" logs in extension 151 with the same AIC 789, ACD agent "B" can also log in to extension 351 with the same AIC 789 at the same time.

Conditions

- A LAN connection from the ACD system to a PC which has the ACD Server program installed. Refer to the ACD Supervisor's Manual, for further information.
- If the system has ID codes enabled, an agent must enter their ID code each time they log into an ACD Group.

Default Setting

- Identification codes disabled (Program 41-01-02 = 0).
- Each ACD Agent is set to normal mode, not AIC (Program 41- 17-01).

Programming

Program No.	Program Name / Description
41-01-02	**System Options for ACD – Login ID Code Digit** Enter the number of digits agents must enter for their ID code (0~20). Enter 0 to disable the Login Codes for ACD Agents. If enabled, an ACD Agent can enter any code of valid length.
41-01-03	**System Options for ACD – ACD Server Connection Ports** Assign to LAN if you are going to use the ACD ACD Server.
41-17-01	**ACD Login Mode Setup** Define the ACD login mode (0=Normal Login, 1=AIC Login) for each extension. If set to 1, a supervisor can not log in/out an AIC member as they are not normal ACD agents.
41-18-01	**ACD Agent Identity Code Setup – ACD Agent Identity Code** For each AIC Table (1~128), define the ACD Agent Identity Code (four digits).
41-18-02	**ACD Agent Identity Code Setup – Default ACD Group Number** For each AIC Table (1~128), define the default ACD group number that is displayed with Queue Status (0=no setting, 1~8).
41-18-03	**ACD Agent Identity Code Setup – ACD Group Number in Mode 1** For each AIC Table (1~128), define the ACD group number (0=No Setting, 1~8) in mode 1 work period.
41-18-04	**ACD Agent Identity Code Setup – ACD Group Number in Mode 2** For each AIC Table (1~128), define the ACD group number (0=No Setting, 1~8) in mode 2 work period.
41-18-05	**ACD Agent Identity Code Setup – ACD Group Number in Mode 3** For each AIC Table (1~128), define the ACD group number (0=no setting, 1~8) in mode 3 work period.
41-18-06	**ACD Agent Identity Code Setup – ACD Group Number in Mode 4** For each AIC Table (1~128), define the ACD group number (0=no setting, 1~8) in mode 4 work period.
41-18-07	**ACD Agent Identity Code Setup – ACD Group Number in Mode 5** For each AIC Table (1~128), define the ACD group number (0=no setting, 1~8) in mode 5 work period.
41-18-08	**ACD Agent Identity Code Setup – ACD Group Number in Mode 6** For each AIC Table (1~128), define the ACD group number (0=No Setting, 1~8) in mode 6 work period.
41-18-09	**ACD Agent Identity Code Setup – ACD Group Number in Mode 7** For each AIC Table (1~128), define the ACD group number (0=No Setting, 1~8) in mode 7 work period.

Program No.	Program Name / Description
41-18-10	**ACD Agent Identity Code Setup – ACD Group Number in Mode 8** For each AIC Table (1~128), define the ACD group number (0=No Setting, 1~8) in mode 8 work period.

Related Features

Setting Up ACD for the First Time, Basic Operation

I

Operation

To log your extension into the ACD Group (when ID codes enabled in Program 41-01-02):

Multiline

> 📝 *Your display shows: WAIT ACD LOGIN*

1. Press the **Speaker** key.
2. Dial ✳**5**.

    > 📝 *You hear confirmation tone.*

    - OR -
    Press ACD **Log On/Off** key (Program 15-07-01 or SC 752: code *10).
3. Dial the ID code.

    > 📝 *You hear a single beep. Your display will show the ACD Group to which you are logged in. Although you can enter a code of any valid length, ask your supervisor which ID code you should enter.*

Single Line Telephone

1. Lift handset.
2. Dial ✳**5**.
3. Dial the ID code.

    > 📝 *You hear confirmation tone. Although you can enter a code of any valid length, ask you supervisor which ID code you should enter.*

AIC Agent Log In (when your system has AIC enabled in Program 41-17-01):

To log in:

Multiline

1. Press the ACD **Log In/Log Out** key (Program 15-07-01 or SC 752: *10).
    - OR -
    Press the **Speaker** key and dial the AIC Log In service code (Program 11-13-08).
2. Dial the log in code (up to 20 digits).

    > 📝 *This step is not required if the ID code is disabled in Program 41-01-02.*

3.   Dial the Agent Identity Code (AIC) (up to four digits).

> 🖉   *The ACD Log In/Log Out key lights.*

To log out (for single or multiple agent logins):

Multiline

All AIC log ins become logged out.
1.   Press the ACD **Log In/Log Out** key (Program 15-07-01 or SC 752: *10).
2.   Dial **1** to accept.
- OR -
1.   Press the **Speaker** key and dial the AIC Log Out service code (Program 11-13-09).

> 🖉   *The ACD Log In/Log Out key goes out.*

Single Line Telephone

All AIC log ins become logged out.
1.   Lift the handset.
2.   Dial the AIC Log Out service code (Program 11-13-09).
- OR -
1.   To log out of an ACD group without using AIC: Lift the handset.
2.   Dial the ACD Log Out service code **655** (Program 11-13-02).

Multiple Agent Log In:

To log in:

Multiline

1.   Once logged in with first AIC, press the ACD **Log In/Log Out** key (Program 15-07-01 or SC 752: *10).
2.   Dial **0** to cancel the log out option.
3.   Dial the Agent Identity Code (AIC) (up to four digits).

> 🖉   *The ACD Log In/Log Out key lights.*

- OR -

1.   Press the **Speaker** key and dial the AIC Log In service code (Program 11-13-08).
2.   Dial the Agent Identity Code (AIC) (up to four digits).

> 🖉   *The ACD Log In/Log Out key lights.*

Single Line Telephone
Follow Steps 1~3 to log in with additional AICs at any time.

1.   Lift the handset and dial the AIC Log In service code (Program 11-13-08).
2.   Dial the log in code (up to 20 digits).

> 🖉   *This step is not required if the ID code is disabled in Program 41-01-02.*

3.   Dial the Agent Identity Code (AIC) (up to four digits).

> 🖉   *You will hear a confirmation tone.*

Complete Steps 4 and 5 when immediately logging in with additional AICs.

Traffic Reports

Description

The system provides the ability to send data to a PC connected to the SL2100. The telephone call traffic data for each extension is captured for use with the Station Message Detail Recording (SMDR) feature.

Total Report - Sample Report

Terminal	OTG	Duration	Cost	ICM	Answer	Duration	Ringing	Abandon
301	54	01:45:14	720	326	115	02:11:52	00:09:36	
301	92	02:37:22	1855	84	84	01:58:31	00:04:19	
LINE001	- —	- —	- —	79	71	01:05:26	- —	8

Term	Definition
Terminal	Terminal Number/Called Party Number (maximum 24 digits)
OTG	Outgoing Call Frequency/number of outgoing calls (maximum 65535 calls)
Duration	Call Duration for an Outgoing Call
Cost	Call Charge (Not Used)
ICM	Incoming Call Frequency/number of incoming calls (maximum 65535 calls)
Answer	Answer Frequency (maximum 65535 calls)
Duration	Call Duration for an Incoming Call
Ringing	Ringing Duration
Abandon	Number of Abandoned Calls (maximum 65535 calls)

Call Traffic

The total of outgoing call frequency, outgoing call duration, incoming call frequency, answer frequency, incoming call duration, ringing duration for each line and extension, and abandon call frequency for each line is logged. The total of incoming calls, answer frequency, call duration for each line and extension, and abandon call frequency of each line is logged and the data is outputted to the PC. The system totals the hour, day, week, and month for each terminal and trunk number. This information is used by the SMDR feature. The extension which is totaled is determined by system programming. The system outputs this data to the PC for the total period.

Conditions

• The SMDR call buffer stores 4000 calls. The buffer stores calls when the SMDR device is unavailable. When the buffer fills, the oldest record is deleted to allow the new record to be saved.
• If connected to the output device, the reports print hourly. If not connected and the data is not output at the end of the hour, the traffic data is overwritten by new incoming data.
• The traffic data is lost if power failure occurs.
• Traffic Reports require connection to the serial connector on the CPU. Additional programming and a customer-provided printer are also required. Refer to the SL2100 System Hardware Manual for more on setting up and connecting to the SL2100 system.
• SMDR provides additional information about the system trunk calling patterns. Refer to **Station Message Detail Recording** for more information.

Default Settings

Disabled

Programming

Program No.	Program Name / Description
90-20-01	**Traffic Report Data Setup – Call Traffic Output** Determine whether or not the Call Traffic Output should be measured (0=no, 1=yes).
90-21-01	**Traffic Report Output – Output Port Type** Define the output port to be used for the traffic reports (0=No Setting, 3=LAN). The reports will print hourly when connected to the output device.

Related Features

Data Communications

Station Message Detail Recording

Operation

Operation is automatic once programmed.

Wrap-Up Time

Description

Wrap-Up Time temporarily busies-out an ACD agent's phone from receiving ACD calls so they can work at their desk uninterrupted, although other types of calls can still be received. This gives the agent time to fill out important logs and records as soon as they are finished with their call. There are two types of Wrap-Up Time:

Manual Wrap-Up Time

An ACD Agent can enable Manual Wrap-Up Time any time they need to work at their desk undisturbed. You might prefer this Wrap-Up Time mode if an agent only occasionally has to fill out follow-up paper work after they complete their call. When the agent is through catching up with their work, they manually return themselves to the ACD Group.

Automatic Wrap-Up Time

The system implements Automatic Wrap-Up Time for the agent as soon as they hang up their current call. This is helpful in applications (such as Tech Service groups) where follow-up paperwork is a requirement for every call. When the agent is done with their work, they manually return themselves to the ACD Group. Optionally, Auto Wrap-up can automatically log the agent back into their group after a programmed interval (termed the Auto Wrap-up Time).

Conditions

None

Default Settings

- Service Code to set Wrap-Up Mode for SLT is 656 (Program 11-13-03).
- Service Code to cancel Wrap-Up Mode for SLT is 657 (Program 11-13-04).
- No Wrap-Up Time keys programmed (Program 15-07-01 = *17).
- Automatic Wrap-Up disabled (Program 41-14-02 = 0).
- Auto Wrap-Up Time disabled (Program 41-14-09 = 0).

Programming

Program No.	Program Name / Description
11-13-03	**Service Code Setup (for ACD) – Set ACD Wrap-Up Time (for SLT)** Assign the service code to be used by a single line telephone user to enter Wrap-Up mode.
11-13-04	**Service Code Setup (for ACD) – Cancel ACD Wrap-Up Time (for SLT)** Assign the service code to be used by a single line telephone user to cancel Wrap-Up mode.
15-07-01	**Programmable Function Keys** If extension should have Wrap-Up Time capability, assign a Wrap-Up Time programmable key (code *17).
41-14-02	**ACD Options Setup – Automatic Wrap Up Mode** Set the Wrap Up Mode option (0=After wrap up mode key is pressed, 1=After call is finished automatically) for ACD Groups (01~08).

Program No.	Program Name / Description
41-14-09	**ACD Options Setup – Automatic Wrap-Up End Time** For each ACD Group (01~08), set how long the system waits before automatically ending wrap up time. After this interval expires, Auto Wrap-Up will automatically log the agent back into their group. To disable the Auto Wrap-up option, enter 0 (0=disabled, 1~64800 seconds).

Related Features

Off-Duty Mode

W

Operation

To activate Wrap-Up Time

Your ACD Group setup may automatically activate Off-Duty Mode after you complete a call. If you group has Automatic Wrap-Up Time, your Wrap-Up Time key flashes while you are on a call. In addition, Auto Wrap-up may automatically return you to your ACD Group after a preset time.

Multiline

1. Press your Wrap-Up Time Key (Program 15-07-01 or SC 752: *17).

    📝 *Your Wrap-Up Time Key lights.*

Single Line Telephone

1. Lift the handset.
2. Dial **656**.

    📝 *You hear a fast busy.*

To cancel Wrap-Up Time

Multiline

1. Press your Wrap-Up Time Key (Program 15-07-01 or SC 752: *17).

Single Line Telephone

1. Lift the handset.
2. Dial **657**.

    📝 *You hear a confirmation tone.*

PROGRAMMING

The remainder of this chapter provides instructions for programming individual program blocks.

SECTION 1 BEFORE YOU START PROGRAMMING

This chapter provides detailed information about the system programs. By changing a program, you change the way the feature associated with that program works. In this chapter, you find out about each program, the features that the program affects and how to enter the program data into system memory.

> *Do not start customizing your system before reading*
> *Setting Up ACD for the First Time on page 2-1.*

SECTION 2 HOW TO USE THIS MANUAL

This section lists each program in numerical order. For example, Program 10-01 is at the beginning of the section and Program 92-01 is at the end. The information on each program is subdivided into the following headings :

Description describes what the program options control. The Default Settings for each program are also included. When you first install the system, it uses the Default Setting for all programs. Along with the Description are the ***Conditions*** which describe any limits or special considerations that may apply to the program.

The program access level is just above the Description heading. You can only use the program if your access level meets or exceeds the level the program requires. Refer to How to Enter Programming Mode on page 4-2 for a list of the system access levels and passwords.

Feature Cross Reference provides you with a table of all the features affected by the program. You will want to keep the referenced features in mind when you change a program. Customizing a feature may have an effect on another feature that you did not intend.

Telephone Programming Instructions shows how to enter the program data into system memory. For example :

1. Enter the programming mode.
2. 15-07-01

```
15-07-01    TEL
KY01 = *01
     ←      –      +      →
```

Digital (2W) Multiline Terminal

```
┌─────────────────────────────────┐
│ 15-07-01     TEL                │
│ KY01 = *01                      │
│      ←        −        +      → │
└─────────────────────────────────┘
```

IP Multiline Terminal

tells you to enter the programming mode, dial 150701 from the telephone dial pad. After you do, you will see the message "15-07-01 TEL" on the first line of the telephone display. This indicates the program number (15-07), item number (01), and that the options are being set for the extension. The second row of the display "KY01 = *01" indicates that Key 01 is being programmed with the entry of *01. The third row allows you to move the cursor to the left or right, depending on which arrow is pressed. To learn how to enter the programming mode, refer to How to Enter Programming Mode on page 4-2.

SECTION 3 UNIQUE PROGRAMMING CONSIDERATIONS

When entering data, you must consider three characteristics of a program: if the program Sorts Data, Updates the CEU or Can be Copied. The check boxes below each program heading indicate when these options apply. If the option applies, there is a check in the appropriate box. If the option doesn't apply, the box is empty. Following is a more detailed explanation of each option.

- **Sorts Data –** After you enter data for a program, the system spends several seconds sorting the system database. Program 10-12 (Call Pickup Group) is an example of a program that sorts data. You can continue programming normally after the sort completes. Sorting may momentarily affect the system performance.

- **Updates CEU –** The system updates blades in the CEU after you change the program data. The update may occur a minute or so after you change the data, depending on system traffic. Updating may briefly affect the normal operation of the system.

- **Can be Copied –** You can use Program 92-01 to copy the program data. For example, you can copy many of the trunk and extension programs. This saves a lot of time during initial system programing.

SECTION 4 HOW TO ENTER PROGRAMMING MODE

To enter programming mode :

1. Go to any working display telephone.

    ✎ *In a newly installed system, use extension (port 1).*

2. Do not lift the handset.
3. Press **Speaker**.
4. # * # *.

Password

5.   Dial the system password + **Hold**.
     Refer to the following table for the default system passwords. To change the passwords, use
     90-02 : Programming Password Setup.

```
┌─────────────────────────────────┐
│                                 │
│         Program Mode            │
│    Base Service OP1  OP2        │
│                                 │
└─────────────────────────────────┘
```

Digital (2W) Multiline Terminal, IP Multiline Terminal

Password	User Name	Level	Programs at this Level
12345678	**tech**	2 (IN)	Installation (IN) : IN, SA and SB levels defined by 90-26 are available.
0000	**ADMIN1**	3 (SA)	System Administrator - Level 1 (SA) : 10-01, 10-02, 10-12, 10-13, 10-14, 10-15, 10-16, 10-23, 10-28, 10-29, 10-45, 10-67, 12-02, 12-03, 12-04, 12-08, 15-01, 15-07, 15-09, 15-10, 15-11, 20-16, 20-34, 20-57, 20-63, 20-64, 20-66, 20-70, 21-07, 21-14, 22-04, 22-11, 22-17, 25-08, 30-03, 30-04, 32-02, 41-02, 41-03, 41-04, 41-05, 41-06, 41-07, 41-08, 41-09, 41-11, 41-12, 41-13, 41-14, 41-16, 41-17, 41-18, 41-19, 41-20, 45-02, 84-16, 84-22, 90-03, 90-04, 90-06, 90-07, 90-16, 90-19, 90-65, 93-01, 93-02, 93-03, 93-04, 93-05, 93-06
9999	**ADMIN2**	4 (SB)	System Administrator - Level 2 (SB) : 13-04, 13-05, 13-06, 13-11, 15-14, 21-20

SECTION 5   HOW TO EXIT PROGRAMMING MODE

To exit the programming mode :

When you are done programming, you must be out of a program option to exit (pressing the **Mute** key
will exit the program option).

1.   Press **Mute** key to exit the program options, if needed.

```
┌─────────────────────────────────┐
│                                 │
│         Program Mode            │
│    Base Service OP1  OP2        │
│                                 │
└─────────────────────────────────┘
```

Digital (2W) Multiline Terminal, IP Multiline Terminal

2.   Press **Speaker**. If changes were to the system programming, "Saving System Data" is displayed.
3.   The display shows "Complete Data Save" when completed and exits the telephone to an idle
     mode.

*To save a customer's database, a blank SD Card is required. Insert the SD Card into the CPU and, using
Program 90-03, save the software to the SD Card. (Program 90-04 is used to reload the customer data if
necessary.) Note that a SD Card can only hold one customer database. Each database to be saved requires
a separate drive.*
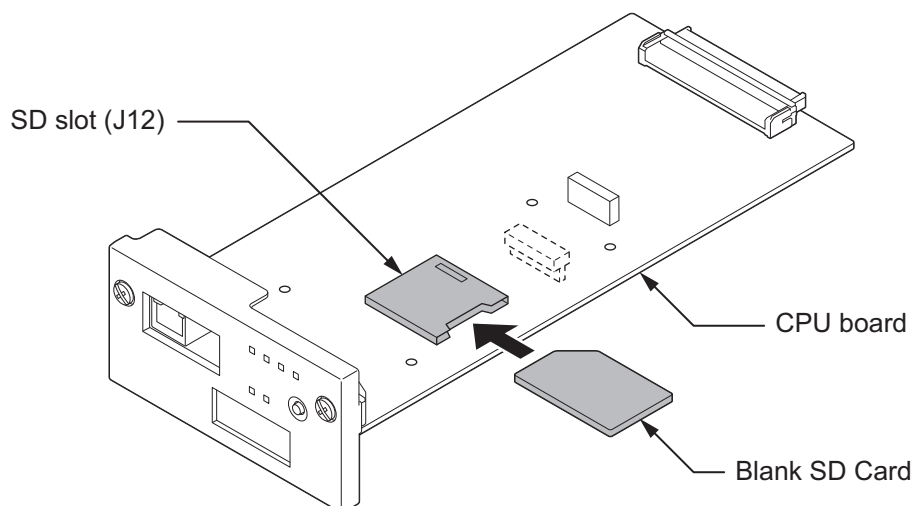
Section 6 USING KEYS TO MOVE AROUND IN THE PROGRAMS

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

Table 4-1 Keys for Entering Data (Digital (2W) Multiline Terminal, IP Multiline Terminal)

When you want to ...	Telephone Programming
Enter Data into program	0 ~ 9, $*$, # Line Key (1 ~ 6)
Next Index	Cursor Key (Up)
Prior Index	Cursor Key (Down)
Select Data	Line Key (1 ~ 6)
All Clear	Flash
Apply	Hold Enter
Go Back to Prior Screen	Mute Clear / Back
Move Cursor Jump Up/Down	DND
Delete single character	Clear / Back
Next Page	Help
Toggle between Number/Character	
While in a Entering Number	
Prior Page	Transfer
Quit the programming	Speaker Exit
Move Cursor to Left	Cursor Key (Left) Soft Key1
Change Program Number	Soft Key2
Change Index Number	
Change Program Number	Soft Key3
Change Index Number	
Move Cursor to Right	Cursor Key (Right) Soft Key4

SECTION 7 PROGRAMMING NAMES AND TEXT MESSAGES

Several programs (e.g., Program 20-16 : Selectable Display Messages) require you to enter text. Use the following chart when entering and editing text. When using the keypad digits, press the key once for the first character, twice for the second character, etc. For example, to enter a C, press the key **2** three times. Press the key six times to display the lower case letter. The name can be up to 12 digits long.

Table 4-2 Keys for Entering Names

Use this keypad digit ...	When you want to ...
1	Enter characters : **1 @ [¥] ^ _ ` {	} → ← Á À Â Ã Å Æ Ç É Ê ì ó 0**
2	Enter characters : **A-C, a-c, 2**.
3	Enter characters : **D-F, d-f, 3**.
4	Enter characters : **G-I, g-i, 4**.
5	Enter characters : **J-L, j-l, 5**.
6	Enter characters : **M-O, m-o, 6**.
7	Enter characters : **P-S, p-s, 7**.
8	Enter characters : **T-V, t-v, 8**.
9	Enter characters : **W-Z, w-z, 9**.
0	Enter characters : **0 ! " # $ % & ' ( ) ô õ ú å ä æ ö ü α ε θ B**
∗	Enter characters : **∗ + , - . / : ; < = > ? π Σ σ Ω ∞ ¢ £**
#	# = Accepts an entry (only required if two letters on the same key are needed - ex : TOM). Pressing # again = Space. (In system programming mode, use the right arrow Softkey instead to accept and/or add a space.)
Clear/Back or **DND** (2W Digital/IP Multiline Terminal)	Clear the character entry one character at a time.
Flash	Clear all the entries from the point of the flashing cursor and to the right.

SECTION 8 USING SOFTKEYS FOR PROGRAMMING

(This Feature is available for Digital (2W) Multiline Terminal and IP Multiline Terminal Only.)

Each Display telephone with Softkeys provides interactive Softkeys for intuitive feature access. The options for these keys will automatically change depending on where you are in the system programming. Simply press the Softkey located below the option you wish and the display will change accordingly.

```
 _      Program Mode
Base  Service  OP1    OP2
  ◯       ◯       ◯       ◯
```

Pressing the Cursor key Up or Down will scroll between the menus.

```
 _      Program Mode
        Hard Mtnance
  ◯       ◯       ◯       ◯
```

SECTION 9 WHAT THE SOFTKEY DISPLAY PROMPTS MEAN

(This Feature is available for Digital (2W) Multiline Terminal and IP Multiline Terminal Only.)

When using a display telephone in programming mode, various Softkey options are displayed. These keys will allow you to easily select, scan, or move through the programs.

Table 4-3 Softkey Display Prompts

Softkey Display Prompts	
If you press this Soft-key ...	**The system will ...**
back	Go back one step in the program display. You can press Cursor Key (UP) or Cursor Key (Down) to scroll forward or backward through a list of programs.
↑	Scroll down through the available programs.
↓	Scroll up through the available programs.
select	Select the currently displayed program.
←	Move the cursor to the left.
→	Move the cursor to the right.
- 1	Move back through the available program options.
+ 1	Move forward through the available program options.

SECTION 10 PROGRAMMING YOUR SYSTEM

The remainder of this chapter provides instructions for programming individual program blocks.

Program 11 : System Numbering

11-13 : Service Code Setup (for ACD)

Level:
IN

Description

Use **Program 11-13 : Service Code Setup (for ACD)** to customize the Service Codes which are used with the Automatic Call Distribution (ACD) feature. You can customize additional Service Codes in Programs 11-10 ~ 11-12 and 11-14 ~ 11-16. The following chart shows:

- The number of each code (01 ~ 13).
- The function of the Service Code.
- The type of telephones that can use the Service Code.
- The default entry.

Input Data

🖉 *If you change a Service Code, be sure to record your entry in the New column.*

Item No.	Item	Terminals	Default	New
01	ACD Log In / Log Out (for KTS)	MLT, SLT	* 5	
02	ACD Log Out (for SLT)	SLT	655	
03	Set ACD Wrap-Up Time (for SLT)	SLT	656	
04	Cancel ACD Wrap-Up Time (for SLT)	SLT	657	
05	Set ACD Off Duty (for SLT)	SLT	658	
06	Cancel ACD Off Duty (for SLT)	SLT	659	
07	-- Not used --			
08	**Agent ID Code Login** Allows an AIC Agent to log into a group.	MLT	No Setting	
09	**Agent ID Code Logout** Allows an AIC Agent to log out of a group.	MLT	No Setting	
10	**ACD Agent Login by Supervisor** Allows an ACD Supervisor to log into a group.	MLT	667	
11	**ACD Agent Logout by Supervisor** Allows an ACD Supervisor to log out of a group.	MLT	668	
12	**Change Agent ACD Group by Supervisor** When using service code 669 to change an agent ACD group, the supervisor must enter a 2-digit number for the group. For example, to change to ACD group 4, the entry would be 669 04.	MLT	669	
13	**ACD Agent Changing Own ACD Group** Using this service code, an ACD Agent can reassign themselves to another ACD Group.	MLT	670	

🖉 *MLT = Multiline Terminal*

🖉 *SLT = Single Line Telephone*

Conditions

None

Feature Cross Reference

• Automatic Call Distribution (ACD)

Program

11

Program 11 : System Numbering

11-17 : ACD Group Pilot Number

Level:
__IN__

Description

Use **Program 11-17 : ACD Group Pilot Number** to assign the ACD Master Number for each ACD Group. This is the number a user dials to transfer calls to the ACD Group. Normally, you should use unassigned extension numbers for the master number. If you want to use an extension number which, by default, has a port number assigned, first remove the default assignment.

Input Data

ACD Group Number	1 ~ 8

Item No.	Item	Input Data	Description	Default
01	**ACD Group Pilot Number**	Dial (Up to eight digits)	Assign the ACD Master Number for each ACD Group.	No Setting

Default

No ACD Group Pilot Numbers assigned to any ACD Group (1~8).

Conditions

None

Feature Cross Reference

• Automatic Call Distribution (ACD)
• Multiple Directory Numbers/Call Coverage Keys

Program 15 : Extension, Basic Setup

15-02 : Multiline Telephone Basic Data Setup

Level:
IN

Program

15

Description

Use **Program 15-02 : Multiline Telephone Basic Data Setup** to set up various Multiline telephone options.

Input Data

Extension Number	Maximum eight digits

Item No.	Item	Input Data	Description	Default	Related Program
01	**Display Language Selection**	1 = English 2 = German 3 = French 4 = Italian 5 = Spanish 6 = Dutch 7 = Portuguese 8 = Norwegian 9 = Danish 10 = Swedish 11 = Turkish 12 = Latin American Spanish 13 = Romanian 14 = Polish 17 = Simplified Chinese 18 = Traditional Chinese 99 = Flexible Language (Not Used)	This program sets the Display Language for the extension port you are programming. (To select options 6 ~ 11, dial 6 or press Help until 2 shows in the far right of screen , then press line keys 1 ~ 6. To select options 12 ~ 16, dial 12 or press Help until 3 shows in the far right of screen, then press line keys 1 ~ 6.)	1	
02	**Trunk Ring Tone**	1 = High (2W Digital, IP Multiline Terminal) 2 = Medium (2W Digital, IP Multiline Terminal) 3 = Low (2W Digital, IP Multiline Terminal) 4 = Melody 1 (2W Digital, IP Multiline Terminal) 5 = Melody 2 (2W Digital, IP Multiline Terminal) 6 = Melody 3 (2W Digital, IP Multiline Terminal) 7 = Melody 4 (2W Digital, IP Multiline Terminal) 8 = Melody 5 (2W Digital, IP Multiline Terminal)	Use this option to set the tone (pitch) of the incoming trunk ring for the extension port you are programming.	2	22-03

Item No.	Item	Input Data	Description	Default	Related Program
03	**Internal Incoming Ring Tone**	1 = High (2W Digital, IP Multiline Terminal) 2 = Medium (2W Digital, IP Multiline Terminal) 3 = Low (2W Digital, IP Multiline Terminal) 4 = Melody 1 (2W Digital, IP Multiline Terminal) 5 = Melody 2 (2W Digital, IP Multiline Terminal) 6 = Melody 3 (2W Digital, IP Multiline Terminal) 7 = Melody 4 (2W Digital, IP Multiline Terminal) 8 = Melody 5 (2W Digital, IP Multiline Terminal)	Use this option to set the tone (pitch) of the incoming extension call ring for the extension port you are programming. Also refer to Program 15-08.	8	
04	**Redial (Speed Dial) Control**	0 = Common and Individual Speed Dialing 1 = Group Speed Dialing	Use this option to control the function of the extension Redial key when used with Speed Dialing. The Redial key can access either the Common/Individual or Group Speed Dialing numbers.	0	
05	**Transfer Key Operation Mode**	0 = Transfer 1 = Serial Call (call back) 2 = Hook (Flash)	Use this option to set the operating mode of the extension Transfer key. The keys can be for Call Transfer, Serial Calling or Flash. When selecting the Flash option (selection 2), refer also to Program 81-01-14.	0	
06	**Hold Key Operating Mode**	0 = Normal Hold 1 = Exclusive Hold	Use this option to set the function of the Multiline Hold key. The Hold key can activate normal Hold or Exclusive Hold.	0	
07	**Automatic Hold for CO Lines**	0 = Hold 1 = Disconnect (Cut)	When talking on a CO call and another CO line key is pressed, the original trunk is placed on Hold (0) or Disconnected (1).	1	
08	**Automatic Handsfree**	0 = Preselect 1 = One-Touch (Automatic Handsfree)	Use this option to set whether pressing a key access a One-Touch Key or if it preselects the key.	1	
10	**Ringing Line Preference for Trunk Calls**	0 = Idle (Off) 1 = Ringing (On)	Use this option to select between Idle and Ringing Line Preference for trunk calls.	1	
11	**Callback Automatic Answer**	0 = Off 1 = On	Use this option to enable or disable automatic answer of calls recalling to a station. For example, if a Transfer Recall or Hold Recall is ringing back to a station, the following happens: If Program 15-02-11 is enabled, the station will automatically answer the recall when it goes off-hook. If Program 15-02-11 is disabled, a station does not automatically answer the recall when it goes off-hook. The user must first press the line appearance of the recalling call or press the answer key.	1	

Program

15

Program

15

Item No.	Item	Input Data	Description	Default	Related Program
12	**Off-Hook Ringing**	0 = Muted Off-Hook Ringing 1 = No Off-Hook Ringing 2 = Not Used 3 = Beep in Speaker (SP) 4 = Beep in Handset (HS) 5 = Speaker and Handset Beep	Use this option to set the telephone Off-hook signaling. Off-hook signaling occurs when a telephone user receives a second call while busy on a handset call. To enable/disable Off-hook signaling for an extension Class of Service, use Program 20-13-06.	5	
13	**Redial List Mode**	0 = ICM/Trunk (Extension/Trunk Mode) 1 = Trunk Mode	Select whether the Redial List feature should store internal and external numbers (0), or only external numbers (1).	0	
15	**Storage of Caller-ID for answered call**	0 = Disable (Off) 1 = Enable (On)		1	
16	**Handsfree Operation**	0 = Disable (Off) 1 = Enable (On)	Enable or disable an extension ability to use the speakerphone on outside calls. When disabled, users can hear the conversation, but cannot respond handsfree.	1	
18	**Power-Saving Mode**	0 = Normal mode 1 = Power-Saving Mode (Eco-Mode)		1	
21	**Virtual Extension Access Mode (when idle Virtual Extension key pressed)**	0 = DSS 1 = Outgoing (OTG) 2 = Ignore	Determine whether a Virtual Extension (VE) should function as a DSS key or a Virtual Extension. When DSS (0) is selected, the key functions as a DSS key to the extension and for incoming calls to that extension. When Outgoing (1) is selected, the key functions as a virtual extension and can be used for incoming and outgoing calls. When Ignore (2) is selected, the key functions can receive incoming calls only.	2	
22	**Multiple Incoming From Intercom and Trunk**	0 = Disable 1 = Enable	If enabled, this affects how a Hotline key lights, based on the setting in Program 22-01-01. If 22-01-01 is set to 1 for trunk priority, the Hotline key lights solid when a trunk call rings in. If 22-01-01 is set to 0 for intercom priority, the Hotline key does not light for incoming trunk calls, but lights solid for intercom calls. If 15-02-22 is disabled, Hotline keys light solid for any incoming calls regardless of the setting in Program 22-01-01.	1	22-01-01
23	**Speed Dial Preview Mode**	0 = Preview 1 = Outgoing Immediately	This option defines how a speed dial key functions when pressed. If set to Preview (0), the speed dial number can be previewed before dialing. If set to Outgoing Immediate (1), the number is dialed immediately.	0	

Item No.	Item	Input Data	Description	Default	Related Program
27	**Handset Volume**	0 = Back to Default (Back) 1 = Stay at previous level (Stay)	Determine how an extension handset volume is set after it is adjusted during a call. 🖉 *When 1 is assigned in this program and a user sets the volume to maximum, the volume is reset to a level to meet FCC standards when the user hangs up.*	1	
28	**Message Waiting Lamp Color**	0 = Green 1 = Red	Determine whether an extension Message Waiting Lamp lights Green (0) or Red (1) when a message is received.	1	
29	**PB Back Tone Level**	1 ~ 57 (- 15.5 dB ~ + 12.5 dB)	This program allows adjustment of the PB Back Tone Level when you are calling an ISDN Line.	32 (0 dB)	
30	**Toll Restriction Class**	0 = Virtual Extension (Follows virtual extension Toll Class in PRG 21-04.) 1 = Real Extension (Follows physical stations Toll Class in PRG 21-04.)	Select the Toll Restriction Class to use when placing a call from a virtual extension.	1	15-02-21
34	**Call Register Mode**	0 = Trunk Mode 1 = Extension/Trunk Mode	The Caller ID Scroll stores Trunk calls only (0), or both Internal and Trunk calls (1).	0	
35	**Message Waiting Lamp Cycle for Calling Extension**	1 = Cycle 1 2 = Cycle 2 3 = Cycle 3 4 = Cycle 4 5 = Cycle 5 6 = Cycle 6 7 = Cycle 7	Select the cycle method that the Large LED flashes when the extension has set Message Waiting.	3	
36	**Message Waiting Lamp Cycle for Called Extension**	1 = Cycle 1 2 = Cycle 2 3 = Cycle 3 4 = Cycle 4 5 = Cycle 5 6 = Cycle 6 7 = Cycle 7	Select the cycle method that the Large LED flashes when the extension has Message Waiting set to the extension.	2	
37	**Voice Mail Message Wait Lamp Color**	0 = Green 1 = Red	Select the color of the Large LED when a voice mail message is waiting at the extension.	1	
38	**Voice Mail Message Wait Lamp Cycle**	1 = Cycle 1 2 = Cycle 2 3 = Cycle 3 4 = Cycle 4 5 = Cycle 5 6 = Cycle 6 7 = Cycle 7	Select the cycle method that the Large LED flashes when the extension has a VM Message Waiting set to the extension.	2	
40	**Additional Dial for Caller ID Call Return**	Up to four digits (0, 1 ~ 9, #, ∗)	Enter the digits to be dialed in front of the Caller ID when using the Caller ID Return function.	No Setting	
41	**Incoming Ring Setup**	0=Speaker Normal Ring 1=Headset Ring		0	11-11-37 11-11-62 15-02-12 15-02-42 20-13-06
42	**Incoming Off-Hook Ring Setup**	0=Speaker Off-Hook Ring 1=Headset Off-Hook Ring		0	11-11-37 11-11-62 15-02-12 15-02-41

Program

15

Program

15

Item No.	Item	Input Data	Description	Default	Related Program
43	**Headset Ring Duration**	0=No Switch to Speaker Ring 1=10 sec 2=20 sec 3=30 sec 4=40 sec 5=50 sec 6=1 minute		0	11-11-62 15-02-41 15-02-42
44	**Reversing Display Indication**	0 = Normal Indication 1 = Reversing Indication	Reversing Display Indication	0	
45	**Double height character Indication**	0 = Normal Indication 1 = Double height character Indication of calendar display line. 2 = Double height character Indication of status display line.	Double height character Indication	0	
46	**Backlight LCD duration**	0 = Continuous on 1 = 5 seconds 2 = 10 seconds 3 = 15 seconds 4 = 30 seconds 5 = 60 seconds	Set how long the Backlight LCD stays on.	2	
47	**Icon display mode of DESI-less**	0 = OFF 1 = ON		0	11-11-17 15-07-01 15-20-01
48	**Short Ring Setup**	0 = Disable 1 = Enable		0	80-09-01 80-09-02 80-09-03
49	**Button kit Information of Multi-line Telephone**	0 ~ 15		0	
50	**Mute Lamp Status Change**	0 = normal 1 = Lamp Status Change		0	
52	**Voice Mail Message Waiting Lamp Setup**	0 = Light the VM F-Key only 1 = Light the MW lamp only 2 = Light both MW Lamp and VM Key	This program is not followed if one of the F-keys is assigned as a VM key of some other mailbox.	0	15-07-01
54	**Menu Operation Mode**	0 = Automatic Close 1 = Manual Close		0	
55	**VRS Message Number**	0 ~ 100		0	
57	**Caller Log on busy**	0 = Off 1 = On	When call is received during the user is calling, the Caller Log is registered. When the Caller Log is displayed, "BUSY" is displayed in the left end.	1	15-02-34
60	**Soft Key/Navigation key Mode**	0 = Standard Mode 1 = Advanced Mode1 2 = Advanced Mode2		2	
61	**Backlight Max Brightness**	0 ~ 8		6	
62	**Backlight Min Brightness**	0 ~ 8		0	
66	**Dial Button Backlight**	0 = Off 1 = On		1	

Item No.	Item	Input Data	Description	Default	Related Program
68	**Mode setting for incoming call from extension**	0 = Voice 1 = Signal	🖉 *This program can only be change by using PC Programming.*	1	
69	**Mute Operation on Handsfree**	0 = Do not change Mute status 1 = Start with enabled Mute 2 = Start with muted Mute		0	
70	**Mute Key Operation**	0 = Enabled (Active) 1 = Disabled	A flag shall control if the microphone key is disabled (1) or active(0) SL2100 system has Mute key instead of microphone key.	0	
71	**Disable Softkey**	0 = Off 1 = On	When set to 1 (On), disable Softkey and cursor key operation at the terminal.	0	
73	**Calling Party History View Mode**	0 = pack 1 = unpack	If this data is 1 (unpack), Dialed data is saved as each history in case of different time even if the numbers are same.	0	
74	**Ten key Backlit Control**	0 = Normal 1 = Half	This program defines the control of ten key backlit.	0	

Program 15

Lamp Cycle On/Off Timing Pattern (Program 15-02-35, 36, 38)

Programs 15-02-35, 36, and 38		
Input		**Cycle**
1	Cycle 1	500 ms - ON / 500 ms - OFF
2	Cycle 2	250 ms - ON / 250 ms - OFF
3	Cycle 3	125 ms - ON / 125 ms - OFF
4	Cycle 4	125 ms - ON / 125 ms - OFF / 125 ms - ON / 625 ms - OFF
5	Cycle 5	875 ms - ON / 125 ms - OFF
6	Cycle 6	625 ms - ON / 125 ms - OFF / 125 ms - ON / 125 ms - OFF
7	Cycle 7	1000 ms - ON

Program 15-02 - Incoming Signal Frequency Patterns

Incoming Signal Frequency Pattern	Type	Frequency 1	Frequency 2	Modulation
External Incoming Signal Frequency (Pattern 1)	High Middle Low	1100 Hz 660 Hz 520 Hz	1400 Hz 760 Hz 660 Hz	16 Hz 16 Hz 16 Hz
External Incoming Signal Frequency (Pattern 2)	High Middle Low	1100 Hz 660 Hz 520 Hz	1400 Hz 760 Hz 660 Hz	8 Hz 8 Hz 8 Hz
External Incoming Signal Frequency (Pattern 3)	High Middle Low	2000 Hz 1400 Hz 1100 Hz	760 Hz 660 Hz 540 Hz	16 Hz 16 Hz 16 Hz
External Incoming Signal Frequency (Pattern 4)	High Middle Low	2000 Hz 1400 Hz 1100 Hz	760 Hz 660 Hz 540 Hz	8 Hz 8 Hz 8 Hz
Internal Incoming Signal Frequency	High Middle Low	1100 Hz 660 Hz 520 Hz	1400 Hz 760 Hz 660 Hz	8 Hz 8 Hz 8 Hz

Conditions

None

Feature Cross Reference

- Refer to the Input Data chart.

Program

15

Program 15 : Extension, Basic Setup

15-07 : Programmable Function Keys

Program

15

Description

Use **Program 15-07 : Programmable Function Keys** to assign functions to a multiline terminal line keys.

For certain functions, you can append data to the key basic function. For example, the function 26 appended by data 1 makes a Group Call Pickup key for Pickup Group 1. You can also program Function Keys using Service Codes.

To clear any previously programmed key, press **000** to erase any displayed code.

Input Data

Extension Number	Maximum eight digits

Key Number	1 ~ 32

Default Settings

Line Key	Function Number	Additional Data
LK01	*01 (Trunk Line Key)	1
:	:	:
LK12	*01 (Trunk Line Key)	12
LK13	0 (No Setting)	0 (No Setting)
:	:	:
LK32	0 (No Setting)	0 (No Setting)

Item No.	Item	Input Data	Additional Data
01	**Line Key Number**	1 ~ 32	Refer to Table 4-4 Function Number List on page 4-18.
	Function Number	0 ~ 99, #0 ~ #99	Refer to Table 4-4 Function Number List on page 4-18.

Default

Programmable keys 1 ~ 12 are Trunk Line keys (key 1 = Trunk Line 1, key 2 = Trunk Line 2, etc.). All other programmable keys are undefined.

Function Number List

Table 4-4 Function Number List

[1] Normal Function Code (00 ~ 99, #00 ~ #99) (Service Code 751)

Program

15

Function Number	Function	Additional Data	LED Indication	Note
01	DSS/One-Touch	Extension number or any numbers (up to 36 digits)	**On (Red) :** DSS Ext. Busy **Off :** DSS Ext. Idle **Fast Blink (Red) :** DND or Call Forward Setup	
02	Microphone (Mute) Key (ON/ OFF)		**On (Red) :** Mic On **Off :** Mic Off	
03	DND Key		**On (Red) :** DND Setup	
04	BGM (ON/OFF)		**On (Red) :** Active	
05	Headset		**On (Red) :** Headset Operating	
06	Transfer Key		None	
07	Conference Key		**On (Red) :** Conference Operating	
08	Incoming Call Log		**Fast Blink (Red) :** Existing New CID **On (Red) :** Existing Checked CID **Off :** No CID **Slow Blink (Red) :** Existing New CID **On (Red):** Existing Checked CID **Off:** No CID	
09	Day/Night Mode Switch	Mode number (1 ~ 8) (0 = toggle)	**On :** While each mode	
10	Call Forward - Immediate	None/Extension number or Any number (Max. 36 digits)	**Slow Blink (Red) :** SET UP **Fast Blink (Red) :** To be set up	
11	Call Forward - Busy	None/Extension number or Any number (Max. 36 digits)	**Slow Blink (Red) :** SET UP **Fast Blink (Red) :** To be set up	
12	Call Forward -No Answer	None/Extension number or Any number (Max. 36 digits)	**Slow Blink (Red) :** SET UP **Fast Blink (Red) :** To be set up	
13	Call Forward - Busy/No Answer	None/Extension number or Any number (Max. 36 digits)	**Slow Blink (Red) :** SET UP **Fast Blink (Red) :** To be set up	
14	Call Forward - Both Ring	None/Extension number or Any number (Max. 36 digits)	**Slow Blink (Red) :** SET UP **Fast Blink (Red) :** To be set up	
15	Call Forward - Follow Me		**Fast Blink (Red) :** Setup **Slow Blink :** To be setup	
18	Text Message Setup	Selectable Display Message Numbers (1 ~ 20)	**On (Red) :** Setup	
19	External Group Paging	External Paging Number (1 ~ 3)	**On (Red) :** Active	
20	External All Call Paging		**On (Red) :** Active	
21	Internal Group Paging	Internal Paging Number (1 ~ 50)	**On (Red) :** Active	
22	Internal All Call Paging		None	
23	Meet-me Answer to Internal Paging		None	

Function Number	Function	Additional Data	LED Indication	Note
24	Call Pickup for own group		None	
25	Call Pickup for Another Group		None	
26	Call Pickup for Specified Group	Call Pickup Group Number	None	
27	Speed Dial - Common/Private	Speed Dial Number (Common / Private)	None	
28	Speed Dial - Group	Speed Dial Number (Group)	None	
29	Repeat Dial		**On (Red) :** Repeat Dialing	
30	Saved Number Redial		None	
31	Memo Dial		None	
32	Meet - Me Conference		None	
33	Override (Off-Hook Signaling)		None	
34	Break - In	nodata or Extension number(not Virtual Extension) or " * ". In the case " * ", refer to the extension number (not Virtual Extension) set to PRG24-09-03.	None	
35	Camp On		**On (Red) :** Active	
36	Step Call		None	
37	DND/FWD Override Call		None	
38	Message Waiting		None	
39	Room Monitoring		**Slow Blink (Red) :** Monitoring **Fast Blink (Red) :** To be monitored	
40	Handset Transmission Cut-off		**On (Red) :** Activated	
41	Buzzer	Extension Number	**On (Red) :** Calling party **Fast Blink (Red) :** Called party	
42	Boss - Secretary Call	Extension Number	**On (Red) :** Active	
43	Series Call		None	
44	Common Hold		None	
45	Exclusive Hold		None	
46	Department Group Log Out		**On (Red) :** Withdrawing	
47	Reverse Voice Over *Softphone doesn't support Reverse Voice Over.*	Extension Number		
48	Voice Over		**On (Red) :** Responding **Slow Blink (Red) :** Listening	

Program

15

Function Number	Function	Additional Data	LED Indication	Note
49	Call Redirect	Extension Number or Voice Mail Number	None	
50	Account Code		**On (Red) :** While Account Code is input **Off :** While a dial is input	
52	Automatic Answer with Delay Message Setup	Incoming Ring Group (1 ~ 50)	**On (Red) :** Setup	
53	Automatic Answer with Delay Message Start		**On (Red) :** Delay Message Answering	
54	External Call Forward by Door Box		**On (Red) :** Setup	
55	Extension Name Change		None	
56	General Purpose LED Operation	1 ~ 100 : (Red) On ⇔ Off 101 ~ 200 : (Green) On ⇔ Off 201 ~ 300 : (Red) On ⇒ (Green) On ⇒ Off	1 ~ 100 : (Red) On ⇔ Off 101 ~ 200 : (Green) On ⇔ Off 201 ~ 300 : (Red) On ⇒ (Green) On ⇒ Off	
57	General Purpose LED Indication	1 ~ 100 : (Red) On ⇔ Off 101 ~ 200 : (Green) On ⇔ Off 201 ~ 300 : (Red) On ⇒ (Green) On ⇒ Off	1 ~ 100 : (Red) On ⇔ Off 101 ~ 200 : (Green) On ⇔ Off 201 ~ 300 : (Red) On ⇒ (Green) On ⇒ Off	
58	Automatic Transfer at Department Group Call	Extension Group Number (1 ~ 50)	**On (Red) :** Set **Off :** Cancel	
59	Delayed Transfer at Department Group Call	Extension Group Number (1 ~ 50)	**On (Red) :** Set **Off :** Cancel	
60	DND at Department Group Call	Extension Group Number (1 ~ 50)	**On (Red) :** Set **Off :** Cancel	
62	Flash Key		None	
63	Outgoing Call Without Caller ID (ISDN)		**On (Red) :** Mode enabled	
72	Keypad Facility Key			
73	Keypad Hold Key			
74	Keypad RETRIEVE Key			
75	Keypad Conference Key			
76	Application Key	Any dial data (8 digit)	None	

Program 15

Function Number	Function	Additional Data	LED Indication	Note
77	Voice Mail (In-Skin)	Extension Number or Pilot Number	**\<InMail\>** **Fast Blink (Green) :** New Message (s) in own Mailbox. **Slow Blink (Red) :** New Message (s) in other Mailbox. **\<External VM\>** **On (Red) :** Access to Voice Mail **Fast Blink (Green) :** New Message (s) in own Mailbox. **Slow Blink (Red) :** New Message (s) in other Mailbox.	
78	Conversation Recording - Voice Mail		**Slow Blink :** Recording	
79	Automated Attendant (In-Skin)	Extension Number or Pilot Number	**Fast Blink :** Recording	
80	Tandem Ringing	Extension Number		
81	Automatic Transfer to Transfer Key	Trunk Line No. (001-128)	**Off :** Cancel **Slow Blink (Red) :** Set	
83	Conversation Recording Function (VMSU)	0 = Pause 1 = Re-recording 2 = Address 3 = Erase 4 = Urgent Page		
84	Drop Key	None		
86	Private Call Refuse	None	**Off :** Pattern 1, Pattern 5 ~ 8 **On (Red) :** Pattern 2 **Slow Blink (Red) :** Pattern 3 **Fast Blink (Red) :** Pattern 4	
87	Caller ID Refuse	None	**Off :** Cancel **Slow Blink (Red) :** Set	
88	Dial-In Mode Switching	Program 22-17 Table No. (1 ~ 500)	**Off :** Pattern 1, Pattern 5 ~ 8 **On (Red) :** Pattern 2 **Slow Blink (Red) :** Pattern 3 **Fast Blink (Red) :** Pattern 4	
89	Do-Not-Call Setup		**On (Red) :** Set **Off :** Cancel	
91	Live Recording Key		**Slow Blink (Green) :** Set	
94	Call Attendant		**Fast Blink (Red) :** Setup - No answer calls **(125 msec : on ⇒ 125 msec : off ⇒ 125 msec : on ⇒ 625 msec : off) (Red) :** Setup - Busy calls **On (Red) :** Setup - Busy/No answer calls	
97	Door Box Access Key	Door Box Number (1-6)	**On (Red) :** Doorphone Busy **Off :** Doorphone Idle **Fast Blink (Red) :** Doorphone Incoming	
#02	-- Cutting the telephone power --	Package Number (2-12)	**On (Red) :** Set **Off :** Cancel	
#03	-- Remote Monitor Permit --		**Slow Blink (Red) :** Remote Monitor Permit **Off :** Remote Monitor Deny	
#04	Change Restriction Class	None/Password (PRG 21-14)		
#07	Fix Operation Mode	Night Mode Service Group No. (1-4)	**On (Red) :** Set **Off :** Cancel	
#08	Bluetooth Connect			
#09	Bluetooth Path			

Program

15

Function Number	Function	Additional Data	LED Indication	Note
#10	Conference Record		**On (Red):** Recording	
#11	Major Alarm		**On (Red):** Alarm **Off :** No Alarm	
#12	Minor Alarm		**On (Red):** Alarm **Off :** No Alarm	
#13	Calling Party Number Notification	Any number (Max. 36 digits)	**On (Red):** Set **Off :** Cancel	
#14	Multi Device Support		**On (Red):** Set **Off :** Cancel	

Table 4-5 Function Number List

[2] Appearance Function Level (∗00 ~ ∗99) (Service Code 752)

Function Number	Function	Additional Data	LED Indication	Note
∗00	ICM Key	None		
∗01	Trunk Key	Trunk Number (1 ~ 128)	**Fast Blink (Red) :** Incoming(other) **On (Green) :** Speaking(own) **On (Red) :** Speaking(other) **Slow Blink (Green) :** Holding(own)/Transferring(own) **Slow Blink (Red) :** Holding(other)/Transferring(other)/Recall(other)	
∗02	Trunk Group	Trunk Group Number (1 ~ 50)	**Fast Blink (Red) :** Incoming (own/other)	
∗03	Virtual Extension Key	Extension Number or Department Group Number	**Fast Blink (Red) :** Incoming(own/other)/Recall(own) **On (Green) :** Speaking(own) **On (Red) :** Speaking(other) **Slow Blink (Green) :** Holding(own)/Transferring(own) **Slow Blink (Red) :** Holding(other)/Transferring(other)/Recall(other)	
∗04	Park Key	Park Number (1 ~ 50)	**Slow Blink (Green) :** Holding(own) **Fast Blink (Green) :** Recall(own) **Slow Blink (Red) :** Holding(other)	
∗05	Loop Keys *Use Programs 15-13-01 and/or 15-13-02 to assign the loop key to a trunk group.*	0 = Incoming 1 = Outgoing 2 = Both	None	
∗06	Trunk Access via Networking	Network System No. 1 ~ 50	None	
∗07	Station Park Hold	None	**Slow Blink (Green) :** Holding(own) **Fast Blink (Green) :** Recall(own)	
∗10	ACD Log in / Log out		**On :** Logged in **Off :** Logged out	
∗12	ACD Emergency call		**On :** While calling your supervisor or after being answered by your supervisor **Fast Blink :** Supervisor while Ringing **Slow Blink :** Failed to Emergency call	
∗13	ACD off-duty mode (Rest Mode)		**On :** While Setup **Slow Blink :** Rest Mode Setup	
∗15	ACD Terminal Speech Monitor		**On :** While Speech Monitor	

Func-tion Number	Function	Additional Data	LED Indication	Note
*17	ACD Work wrap up time		**On :** While wrap up time **Slow Blink :** While setup wrap up time	
*19	ACD Queue Status Display		None	
*32	Warning Message		**On (Red) :** Play warning message **Off :** Stop warning message	
*33	Sensor Mode		**On (Red) :** Security Sensor On **Off :** Security Sensor Off **(125msec:on / 125msec:off / 125msec:on / 625msec:off) :** Security Sensor Delay Timer (PRG20-50-01) is starting.	
*35	System Call History		**On (Green) :** Using **On (Red) :** Other using **Off :** Not using	

Program

15
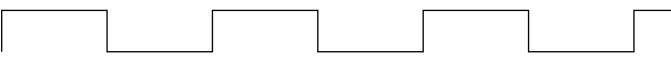
LED Pattern 0:[OFF]

On
Off
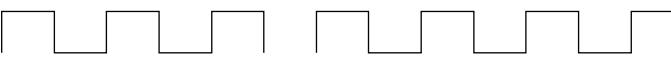
LED Pattern 1:[FL: On(500ms)/Off(500ms)]

On
Off

LED Pattern 2:[WK: On(250ms)/Off(250ms)]

On
Off

LED Pattern 3:[RW: On(125ms)/Off(125ms)]

On
Off

LED Pattern 4:[IR: On(125ms)/Off(125ms)/ On(125ms)/Off(625ms)]

On
Off

LED Pattern 5:[IL On(875ms)/Off(125ms)]

On
Off

LED Pattern 6:[IW On(625ms)/Off(125ms)/On(125ms)/Off(125ms)]

On
Off

LED Pattern 7:[ON]

On
Off

2W Digital/IP Multiline Terminal

LED Indication Reference :

ON = LED pattern 7. (2W Digital/IP Multiline Terminal)

OFF = LED pattern 0. (2W Digital/IP Multiline Terminal)

Rapid Blink = LED pattern 3. (2W Digital/IP Multiline Terminal)

Slow Blink (General Function Level) = LED pattern 5 (2W Digital/IP Multiline Terminal).

Slow Blink (Appearance Function Level) = LED pattern 1.

Fast Blink = LED pattern 3 (2W Digital/IP Multiline Terminal).

Stutter Blink = LED pattern 4 (2W Digital/IP Multiline Terminal).

Conditions

- When a key is programmed using service code 752, it cannot be programmed with a function using the 751 code until the key is undefined (000). For example with a Park Key programmed by dialing 752 + ∗04 must be undefined by dialing 752 + 000 before it can be programmed as a Voice Over key by dialing 751 + 48.

Program

15

Feature Cross Reference

- Refer to Table 4-4 Function Number List on page 4-18.

Telephone Programming Instructions

To enter data for Program 15-07 (Programmable Function Keys):

1. Enter the programming mode.
2. 15 07

```
15-07-01   TEL301200
KY01 = *01
 back    ↑        ↓    select
```

3. Enter the number of the item you want to program.

```
15-07-nn    TELnnn
nnnnn
        ←              →
```

4. To select the telephone number to be programmed, press the **FLASH** or the volume ▲ or ▼ keys.
5. Enter data for the item you selected + **Hold**.
6. Enter data for the next item in the program.
   - OR -
   Press **MSG** once to enter a new item number.
   - OR -
   Press **MSG** until you exit that series programming section.

Program 15 : Extension, Basic Setup

15-08 : Incoming Virtual Extension Ring Tone Setup

Level:
IN

Program

15

Description

Use **Program 15-08 : Incoming Virtual Extension Ring Tone Setup** to assign a ring tone range (0 ~ 8) to incoming virtual extensions assigned to a Virtual Extension key (Program 15-07). If you enable ringing for the key in Program 15-09, the key rings with the tone you set in this program. Also see Program 22-03. The chart below shows the available tones. There are 128 available extension ports.

Input Data

Extension Number	Maximum eight digits

Item No.	Item	Input Data	Description	Default
01	**Incoming Ring Pattern**	0 ~ 8 0 = Tone Pattern 1 1 = Tone Pattern 2 2 = Tone Pattern 3 3 = Tone Pattern 4 4 = Incoming extension ring tone 5 = Melody1 (2W Digital/IP Multiline Terminal) 6 = Melody2 (2W Digital/IP Multiline Terminal) 7 = Melody3 (2W Digital/IP Multiline Terminal) 8 = Melody4 (2W Digital/IP Multiline Terminal)	When an extension or a virtual extension is assigned to the function key on the key telephone, select the ring tone when receiving a call on that key.	0

Table 4-6 Program 15-08 - Incoming Signal Frequency Patterns

Incoming Signal	Type	Frequency 1	Frequency 2	Modulation
Pattern 1	High Middle Low	1100 Hz 660 Hz 520 Hz	1400 Hz 760 Hz 660 Hz	16 Hz 16 Hz 16 Hz
Pattern 2	High Middle Low	1100 Hz 660 Hz 520 Hz	1400 Hz 760 Hz 660 Hz	8 Hz 8 Hz 8 Hz
Pattern 3	High Middle Low	2000 Hz 1400 Hz 1100 Hz	760 Hz 660 Hz 540 Hz	16 Hz 16 Hz 16 Hz
Pattern 4	High Middle Low	2000 Hz 1400 Hz 1100 Hz	760 Hz 660 Hz 540 Hz	8 Hz 8 Hz 8 Hz

Incoming Signal	Type	Frequency 1	Frequency 2	Modulation
Incoming extension ring tone	High Middle Low	1100 Hz 660 Hz 520 Hz	1400 Hz 760 Hz 660 Hz	8 Hz 8 Hz 8 Hz
Pattern 5	High Middle Low	1400 Hz 760 Hz 660 Hz	540 Hz 540 Hz 540 Hz	16 Hz 16 Hz 16 Hz
Pattern 6	High Middle Low	1400 Hz 760 Hz 660 Hz	540 Hz 540 Hz 540 Hz	8 Hz 8 Hz 8 Hz
Pattern 7	High Middle Low	2000 Hz 2000 Hz 1100 Hz	1100 Hz 540 Hz 760 Hz	16 Hz 16 Hz 16 Hz
Pattern 8	High Middle Low	2000 Hz 2000 Hz 1100 Hz	1100 Hz 540 Hz 760 Hz	8 Hz 8 Hz 8 Hz

Program

15

Conditions

None

Feature Cross Reference

None

Program 15 : Extension, Basic Setup

15-09 : Virtual Extension Ring Assignment

Program

15

Level:

SA

Description

Use **Program 15-09 : Virtual Extension Ring Assignment** to assign the ringing options for an extension Virtual Extension Key or Virtual Extension Group Answer Key which is defined in Program 15-07. You make an assignment for each Night Service Mode.

Assign extension numbers and names to virtual extension ports in Program 15-01. Program Virtual Extension keys in Program 15-07 (code *03). There are 50 Virtual Extension Ports.

Input Data

Extension Number	Maximum eight digits

Key Number	01 ~ 32

Day/Night Mode	1 ~ 8

Item No.	Item	Input Data	Default
01	**Ringing**	0 = No Ringing 1 = Ring	0

Conditions

• Program the Multiple Directory Number function keys **NOT** to ring before removing the key from telephone programming.

Feature Cross Reference

• Multiple Directory Number / Call Coverage

Program 15 : Extension, Basic Setup

15-10 : Incoming Virtual Extension Ring Tone Order Setup

Level:

SA

Program

15

Description

Use **Program 15-10 : Incoming Virtual Extension Ring Tone Order Setup** to set the priority (1 ~ 4) for the Virtual Extension Ring Tones set in Program 15-08. When Virtual Extension calls ring an extension simultaneously, the tone with the highest order number (e.g., 1) rings. The other keys only flash. There are 50 Virtual Extension ports.

Input Data

Extension Number	Maximum eight digits

Item No.	Item	Input Data	Description	Related Program
01	**Priority Order**	1 ~ 4	When two or more virtual extensions are set on a function key on the telephone, and the tone pattern by which the sound of each extension differs, the priority of ring sound is set up.	15-08
	Data	0 ~ 8 0 = Tone Pattern 1 1 = Tone Pattern 2 2 = Tone Pattern 3 3 = Tone Pattern 4 4 = Incoming extension ring tone 5 = Melody1 (2W Digital/IP Multiline Terminal) 6 = Melody2 (2W Digital/IP Multiline Terminal) 7 = Melody3 (2W Digital/IP Multiline Terminal) 8 = Melody4 (2W Digital/IP Multiline Terminal)		

Default

- By default, Virtual Extension ring tones have the following order :

Priority Order	Ring Tone (Set in Program 15-08)
1	0 (Tone Pattern 1)
2	1 (Tone Pattern 2)
3	2 (Tone Pattern 3)
4	3 (Tone Pattern 4)

Conditions

None

Feature Cross Reference

- Multiple Directory Number / Call Coverage

Program 15 : Extension, Basic Setup

15-11 : Virtual Extension Delayed Ring Assignment

Level:
SA

Program

15

Description

Use **Program 15-11 : Virtual Extension Delayed Ring Assignment** to assign the delayed ringing options for an extension Virtual Extension or Virtual Extension Group Answer keys (defined in Program 15-09). You make an assignment for each Night Service Mode. There are 50 Virtual Extension Ports.

Assign extension numbers (Program 11-04) and names (Program 15-01) to virtual extension ports. Program Multiple Directory Number (virtual extension) keys in Program 15-07 (code ∗03).

Input Data

Extension Number	Maximum eight digits

Key Number	01 ~ 32

Day/Night Mode	1 ~ 8

Item No.	Item	Input Data	Default	Related Program
01	**Ringing**	0 = Immediate Ring 1 = Delayed Ring	0	20-04-03 15-09-01

Conditions

• Program the Virtual Extension keys **NOT** to ring before removing the key from telephone programming.
• Program 15-09-01 has to be assigned to Ring Immediately before assigning the VE key to Delay Ring.

Feature Cross Reference

• Multiple Directory Number / Call Coverage

Program 20 : System Option Setup

20-02 : System Options for Multiline Telephones

Level:
IN

Description

Use **Program 20-02 : System Options for Multiline Telephones** to set various system options for multiline telephones.

Program

20

Input Data

Item No.	Item	Input Data	Description	Default	Related Program
01	**Trunk Loop Key Operation Mode**	0 = Keep Lamp 1 = Extinction *Mode 0 = Keep Lamp 1 = LED Off* *Incoming : 300 IPM Red blink* *Talking : Green Lighting LED Off* *(on Talking TEL)* *Holding : 60 IPM Green LED Off* *blink (on holding TEL)*		1	
04	**Retrieve the Line After Transfer**	0 = Extinction 1 = Keep Lamp	Enable (1) or disable (0) an extension ability to answer a call after it has been transferred, but before it is answered.	1	
05	**Headset Busy Mode**	0 = No (Disable) 1 = Yes (Enable)	Set the conditions under which a headset extension is busy to incoming callers.	0	20-09-07
06	**Pre-selection Time**	0 ~ 64800 seconds	When a multiline terminal user pre-selects a line key, the system remembers the pre-selection for this time.	5	
07	**Display mode of Date and Time**	1 ~ 10	Set how the Time and Date appear on display telephones. There are eight display modes.	3	
08	**LCD Display Holding Time**	0 ~ 64800 seconds		5	
09	**Disconnect Supervision**	0 = Disable (Off) 1 = Enable (On)	Use this option to enable or disable disconnect supervision for the system trunks.	1	

Program

20

Item No.	Item	Input Data	Description	Default	Related Program
10	**Time Before Shifting to Power-Saving Mode**	0 = No Shift (Power saving mode off) 1 = 1 minute 2 = 2 minutes 3 = 4 minutes 4 = 8 minutes 5 = 16 minutes 6 = 32 minutes 7 = 64 minutes		0	15-02-18
11	**Handsfree Microphone Control**	0 = Off 1 = On	Use this option to control the setting for Multiline Terminal Handsfree microphone after being disconnected and reconnected. If set to 0, the microphone is always off when the terminal is reconnected. If set to 1, the microphone remains in the same state it was in when the terminal is reconnected.	1	
12	**Forced Intercom Ring (ICM Call Type)**	0 = Disable (Voice) 1 = Enable (Signal)	Use this option to enable or disable Forced Intercom Ringing. If enabled, incoming Intercom calls normally ring. If disabled, Intercom calls voice-announce.	1	
15	**Caller ID Display Mode**	0 = Name and Number (Both) 1 = Name Preference 2 = Number Preference		0	
18	**Dialing Record Display Time**	0 ~ 64800 seconds		30	
19	**DSS Key - Virtual Extension Mode**	0 = No 1 = Yes	Sets the mode of a virtual extension key that appears on a DSS console.	0	99-01-46
24	**LCD scroll mode**	0 = Character 1 = Dot		0	
26	**F-Route outgoing mode from incoming history**	0 : OFF 1 : ON		0	
27	**ACD Monitor for Business Mode**	0 : OFF 1 : ON	ACD Monitor can be used at any time.	0	41-02-01 41-05-01 41-06-01 41-07-01 15-07-01

Table 4-7 Note [Digital (2W)/IP Multiline Terminal]

Clock display mode
type1 "DD MMM WWW hh:mmAP" (12H)

Clock display mode	
type2 "hh:mmAP MMM DD WWW" (12H)	
type3 "MM-DD WWW hh:mmAP" (12H)	
type4 "hh:mmAP WWW DD MMM" (12H)	
type5 " DD MMM WWW hh:mm" (24H)	
type6 "hh:mm MMM DD WWW" (24H)	
type7 "MM-DD WWW hh:mm" (24H)	
type8 "hh:mm WWW DD MMM" (24H)	
MM --- Month	Ex.) "1", "10"
MMM -- Month	Ex.) "JAN"
DD --- Day	Ex.) "1", "31"
WWW -- Day of Week	Ex.) "MON"
AP --- AM/PM	
hh --- Hour	Ex.) "6", "18"
mm --- Minute	Ex.) "05"

Program

20

Conditions

None

Feature Cross Reference

• Class of Service

Program 20 : System Option Setup

20-04 : System Options for Virtual Extensions

Level:
IN

Program

20

Description

Use **Program 20-04 : System Options for Virtual Extensions** to set up various system options for Virtual Extensions. There are 50 available Virtual Extension ports.

Input Data

Item No.	Item	Input Data	Description	Default	Related Program
03	**Call Coverage Delay Interval**	0 ~ 64800 seconds	Virtual Extensions set for Delayed Ringing (see Program 15-11) ring the extension after this time.	10	
04	**Virtual Extension Key Seize Mode**	0 = Normal 1 = Enhanced Option	When set to **Enhanced**, the BLF will not show as being busy when the station is on a trunk call. When set to **Normal**, the BLF will show as being busy when on a trunk call.	1	
05	**Ringtone mode for incoming to VE**	0 = Off 1 = On	Enable the distinctive ring tone when incoming ring.	0	22-03-01 15-08-01

Conditions

None

Feature Cross Reference

• Call Arrival Keys (CAR/Secondary Incoming Extensions / Virtual Extensions)

Program 20 : System Option Setup

20-06 : Class of Service for Extensions

Level:
IN

Program

20

Description

Use **Program 20-06 : Class of Service for Extensions** to assign a Class of Service (COS) to an extension. There are 15 Classes of Service that can be assigned. To specify the options in each Class of Service, refer to Programs 20-07 through 20-13. You make eight entries for Program 20-06, one for each Night Service Mode.

Input Data

Extension Number	Maximum eight digits

Day/Night Mode	1 ~ 8

Item No.	Item	Input Data	Default
01	**Class of Service for Extensions**	1 ~ 15	Extension 101 is Class 15 and other Extension are Class 1

Conditions

None

Feature Cross Reference

• Class of Service

Program 20 : System Option Setup

20-13 : Class of Service Options (Supplementary Service)

Level:
IN

Description

Use **Program 20-13 : Class of Service Options (Supplementary Service)** to define the supplementary feature availability for each extension Class of Service (COS).

Input Data

Class of Service Number	1 ~ 15

Item No.	Item	Input Data	Description	Default	Related Program
01	**Long Conversation Alarm**	0 = Off 1 = On	Turns off or on the Warning Tone for Long Conversation (not for single line telephones).	COS 1 ~ 15 = 0	
02	**Long Conversation Cutoff (Incoming)**	0 = Off 1 = On	Turns off or on an extension ability to use Long Conversation Cutoff for incoming calls.	COS 1 ~ 15 = 0	
03	**Long Conversation Cutoff (Outgoing)**	0 = Off 1 = On	Turns off or on an extension ability to use Long Conversation Cutoff for outgoing calls.	COS 1 ~ 15 = 0	
04	**Call Forward/DND Override (Bypass Call)**	0 = Off 1 = On	Turns off or on an extension ability to use Call Forwarding/DND Override.	COS 1 ~ 15 = 1	
05	**Intercom Off-Hook Signaling**	0 = Off (ICM off hook signaling disabled.) 1 = On (ICM off hook signaling enabled.)	Turns off or on an extension ability to receive off-hook signals.	COS 1 ~ 15 = 1	
06	**Automatic Off-Hook Signaling (Automatic Override)**	0 = Off (manually) 1 = On (automatically)	Allows a busy extension ability to manually (0) or automatically (1) receive off-hook signals.	COS 1 ~ 15 = 1	
07	**Message Waiting**	0 = Off 1 = On	Turns off or on an extension ability to leave Message Waiting.	COS 1 ~ 15 = 1	
08	**Conference**	0 = Off 1 = On	Turns off or on an extension user ability to initiate a conference or Meet-Me Conference.	COS 1 ~ 15 = 1	
09	**Privacy Release**	0 = Off 1 = On	Turns off or on an extension user ability to initiate a Voice Call Conference.	COS 1 ~ 15 = 1	
10	**Barge-In Monitor**	0 = Speech 1 = Monitor	Enables the extension Barge-In Mode to be Speech mode (0) or Monitor mode (1).	COS 1 ~ 15 = 0	20-13-45
11	**Room Monitor, Initiating Extension**	0 = Off 1 = On	Turns off or on extension user ability to Room Monitor other extensions.	COS 1 ~ 15 = 1	

Item No.	Item	Input Data	Description	Default	Related Program
12	Room Monitor, Extension Being Monitored	0 = Off 1 = On	Turn off or on an extension ability to be monitored by other extensions.	COS 1 ~ 15 = 1	
13	Continued Dialing (DTMF) Signal on ICM Call	0 = Off 1 = On	Turn off or on an extension user ability to use Continued Dialing, which allows DTMF signal sending while talking on extension.	COS 1 ~ 15 = 1	
14	Department Calling (PLT No Called Extension)	0 = Off 1 = On	Turns off or on an extension user ability to call a Department Group Pilot.	COS 1 ~ 15 = 1	
15	Barge-In, Initiate	0 = Off 1 = On	Turns off or on an extension user ability to barge-in on other's calls.	COS 1 ~ 15 = 0	
16	Barge-In, Receive	0 = Off 1 = On	Turns off or on an extension ability to have other extensions barge-in on calls.	COS 1 ~ 15 = 0	
17	Barge-in Tone/ Display (Intrusion Tone)	0 = Off 1 = On	Turns off or on the Barge-In tone. If on, callers hear an alert tone and their display indicates the Barge-In when another extension barges into their conversation. If off, there is no alert tone or display indication.	COS 1 ~ 15 = 1	
18	Programmable Function Key Programming (General Level)	0 = Off 1 = On	Turns off or on extension user ability to program General function keys using Service Code 751 (by default). (Refer to Program 20-07-10 for Service Code 752.)	COS 1 ~ 15 = 1	
19	Selectable Display Messaging (Text Messaging)	0 = Off 1 = On	Turns off or on an extension user ability to use Selectable Display Messaging.	1	
20	Account Code/ Toll Restriction Operator Alert (Restricted Operation Transfer)	0 = Off (Call restricted.) 1 = On (Call routed to operator.)	Turns off or on operator alert when an extension user improperly enters an Account Code or violates Toll Restriction.	COS 1 ~ 15 = 0	
21	Extension Name	0 = Off 1 = On	Turns off or on an extension user ability to program its name.	COS 1 ~ 15 = 1	
22	Busy Status Display (Called Party Status)	0 = Off 1 = On	Turns off or on the ability to display the detailed state of the called party.	COS 1 ~ 15 = 0	20-13-06
23	Display the Reason for Transfer	0 = Off 1 = On	Select whether an extension should display the reason a call is being transferred to their extension (Call Forward Busy, Call Forward No Answer, and DND).	COS 1 ~ 15 = 0	
24	Privacy Release by Pressing Line Key	0 = Off 1 = On	Turns off or on a user ability to press a line key to barge into an outside call. The Barge-In feature must be enabled if this option is to be used.	COS 1 ~ 15 = 0	
26	Group Listen	0 = Off 1 = On	Turns off or on an extension user ability to use Group Listen.	COS 1 ~ 15 = 1	
27	Busy on Seizing Virtual Extension	0 = Off 1 = On	If set to 1, you can call a busy extension which is talking on a virtual extension key. Program 20-13-06 (Call Waiting) must be set to 0 for this option to work.	COS 1 ~ 15 = 1	
28	Allow Class of Service to be Changed	0 = Off 1 = On	Turns off or on the ability of an extension Class of Service to be changed via Service Code 677.	COS 1 ~ 15 = 0	

Program

20

Program

20

Item No.	Item	Input Data	Description	Default	Related Program
29	**Paging Display**	0 = Off 1 = On	Turns off or on an extension user ability to display paging information.	COS 1 ~ 15 = 1	
30	**Background Music**	0 = Deny (user cannot control background music on their station.) 1 = Allow (user can control background music on their station.)	Allow or Deny an extension user to turn Background Music on and off.	COS 1 ~ 15 = 1	
31	**Connected Line Identification (COLP)**	0 = Off 1 = On		COS 1 ~ 15 = 0	
32	**Deny Multiple Barge-Ins**	0 = Off 1 = On	Allows or Denies an extension from having multiple users Barge into their conversation.	COS 1 ~ 15 = 0	
33	**ACD Supervisor's Position Enhancement**	0 = Off 1 = On		COS 1 ～ 15 = 0	
34	**Block Manual Off-Hook Signaling**	0 = Off 1 = On	Turns off or on an extension user ability to block off-hook signals manually sent from a co-worker.	COS 1 ~ 15 = 0	
35	**Block Camp On**	0 = Off (Camp On blocked.) 1 = On (Camp On allowed.)	Turns off or on an extension user ability to block callers from dialing to Camp On.	COS 1 ~ 15 = 0	
36	**Call Duration Timer Display**	0 = Off 1 = On	Turns off or on an extension display of the Call Duration Time. The system waits until the interdigit time (Program 21-01-01) expires before beginning this timer.	COS 1 ~ 15 = 1	
38	**Headset Ringing for SLT**	0 = Off 1 = On	Turn off or on an extension user ability to use the Headset ringing	COS 1 ~ 15 = 0	
39	**ACD Queue Status Display**	0 = Off 1 = On	Turn off or on the ACD Queue Status Display for an extension Class of Service. Any extension, which has this option enabled, also hears the queue alarm.	COS 1 ~ 15 = 0	41-20
40	**Do Not Disturb**	0 = Off 1 = On	Turn off or on an extension user ability to set or cancel Do Not Disturb.	COS 1 ~ 15 = 1	11-11-08 15-07-03
41	**Voice Mail Message Indication on DSS**	0 = Off 1 = On	Turn off or on the Voice Mail Message Indication for an extension on a DSS console.	COS 1 ~ 15 = 0	
42	**Extension Data Swap Enabling**	0 = Off 1 = On	Turn off or on an extension user ability to use Extension Data Swap.	COS 1 ~ 15 = 1	11-15-12
43	**Disconnected Supervision**	0 = Off 1 = On	Set PRG 20-13-43 1: Enable and PRG 20-03-09 0: Off order to use this feature. By Setting this feature it will automatically change it to idle when caller ends the call.	1	20-02-09
44	**Live Monitor Enabling**	0 = Off 1 = On	Turn off or on an extension user ability to use Live Monitor.	COS 1 ~ 15 = 1	
45	**Mute Key Mode while Call Monitoring**	0 = Off 1 = On	Set per class of service, when in Call Monitoring Mode determines if the monitored parties receive the barge in alert tone when Coaching Mode is enabled.	COS 1 ~ 15 = 1	20-13-10
46	**Remote Conference**	0 = Off 1 = On		COS 1 ~ 15 = 1	11-19 20-34

Item No.	Item	Input Data	Description	Default	Related Program
47	**Station Number Display**	0 = Off 1 = On	Determine if a station Number will be displayed (On) or not displayed (Off) in the LCD when the phone is in an idle state.	COS 1 ~ 15 = 1	
48	**Station Name Display**	0 = Off 1 = On	Determine if a station Number will be displayed (On) or not displayed (Off) in the LCD when the phone is in an idle state.	COS 1 ~ 15 = 1	
49	**BLF Indication on CO Incoming State**	0 = Off (Disabled) 1 = On (Enabled)	Determine if a BLF of the station will light when a Normal CO call is ringing the phone.	COS 1 ~ 15 = 0	
51	**Number and Name appear in the Directory**	0 = Off 1 = On	Determine if an extension name and number will be listed (On) or unlisted (Off) in the directory.	COS 1 ~ 15 = 1	
52	**VoIPDB All DSP Busy Display**	0 = Disable 1 = Enable	Set whether "All DSP Busy" alarm displays on LCD when the caller makes an IP call and there is no VoIPDB DSP resource.	COS 1 ~ 15 = 1	
53	**Language Selection for specific extension**	0 = Disable 1 = Enable		COS 1 ~ 15 = 0	11-11-68 15-02-01 47-02-16
54	**Call waiting for standard SIP terminal**	0 = Disable 1 = Enable		COS 1 ~ 15 = 0	20-13-05 20-13-06 20-09-01 20-09-07
55	**Intercom Call to Room Monitor**	0 = Off 1 = On		COS 1 ~ 15 = 1	

Program

20

Conditions

None

Feature Cross Reference

• Class of Service

Program 22 : Incoming Call Setup

22-01 : System Options for Incoming Calls

Level:
_IN_

Program

22

Description

Use Program 22-01 : System Options for Incoming Calls to define the system options for incoming calls.

Input Data

Item No.	Item	Input Data	Description	Default	Related Program
01	**Incoming Call Priority**	0 = Intercom Call Priority 1 = Trunk Call Priority	Use this option to determine if Intercom calls or trunk calls have answer priority when both are ringing simultaneously.	1	15-02-22
02	**Incoming Call Ring No Answer Alarm**	0 = Disable (Off) 1 = Enable (On)	If enabled, an incoming call that rings longer than the Ring No Answer Alarm interval (22-01-03), changes to a unique ring cadence to indicate that the call has been ringing too long. If disabled, this does not occur.	0	22-01-03 22-01-04
03	**Ring No Answer Alarm Time**	0 ~ 64800 seconds	If a trunk rings a multiline telephone longer than this interval, the system changes the ring cadence. This indicates to the user that the call has been ringing too long.	60	22-01-02
04	**DIL No Answer Recall Time**	0 ~ 64800 seconds 0 = No Overflow	A DIL that rings its programmed destination longer than this interval diverts to the DIL No Answer Ring Group (set in Program 22-08).	0	
06	**DID Ring-No-Answer Time**	0 ~ 64800 seconds	In systems with DID Ring-No-Answer Intercept, this sets the Ring-No-Answer time. This time is how long a DID call rings the destination extension before rerouting to the intercept ring group.	20	22-12
07	**DID Incoming Ring Group No Answer Time**	0 ~ 64800 seconds		20	
08	**DID Pilot Call No Answer Time**	0 ~ 64800 seconds		60	
09	**DID to Trunk to Trunk no answer timer**	0 ~ 64800 seconds		20	
10	**VRS Waiting Message Operation**	0 = Automatic Operation 1 = Manual Operation	Set up the operation mode for Auto Attendant and Queuing Message.	0	22-14 22-15 22-08 22-04 22-01-04 20-15-11 15-07

Item No.	Item	Input Data	Description	Default	Related Program
11	**VRS Waiting Message Interval Time**	0 ~ 64800 seconds	Setup the sending duration time of the Auto - Attendant & Queuing. The message is repeatedly sent out during the specified time.	20	22-14-06 22-15-06 41-11-06
12	**Mobile Extension answer time**	0~ 64800 seconds		3	15-22-04

Conditions

None

Feature Cross Reference

• Central Office Calls, Answering

Program

22

Program 22 : Incoming Call Setup

22-03 : Trunk Ring Tone Range

Level:
IN

Program

22

Description

Use **Program 22-03 : Trunk Ring Tone Range** to select the ring tone range for the trunk. The trunk uses a ring tone in the range selected when it rings an extension. Eight ring tones are available. Customize the Trunk Ring Tones in Program 82-01.

Input Data

Trunk Port Number	1 ~ 128

Item No.	Item	Input Data	Description	Default	Related Program
01	**Ring Tone Pattern**	0 = Tone 1 1 = Tone 2 2 = Tone 3 3 = Tone 4 4 = Melody 1 5 = Melody 2 6 = Melody 3 7 = Melody 4 8 = Melody 5 9 = Tone 5 10 = Tone 6 11 = Tone 7 12 = Tone 8	Use this program to select the ring tone range for the trunk. The trunk uses a ring tone in the range selected when it rings an extension. Eight Ring Tones are available.	0	15-02

Table 4-8 Program 22-03 - Incoming Signal Frequency Patterns

Incoming Signal Frequency Pattern	Type	Frequency 1	Frequency 2	Modulation
Pattern 1	High Middle Low	1100Hz 660Hz 520Hz	1400Hz 760Hz 660Hz	16Hz 16Hz 16Hz
Pattern 2	High Middle Low	1100Hz 660Hz 520Hz	1400Hz 760Hz 660Hz	8Hz 8Hz 8Hz
Pattern 3	High Middle Low	2000Hz 1400Hz 1100Hz	760Hz 660Hz 540Hz	16Hz 16Hz 16Hz
Pattern 4	High Middle Low	2000Hz 1400Hz 1100Hz	760Hz 660Hz 540Hz	8Hz 8Hz 8Hz
Pattern 5	High Middle Low	1400Hz 760Hz 660Hz	540Hz 540Hz 540Hz	16Hz 16Hz 16Hz
Pattern 6	High Middle Low	1400Hz 760Hz 660Hz	540Hz 540Hz 540Hz	8Hz 8Hz 8Hz

Incoming Signal Frequency Pattern	Type	Frequency 1	Frequency 2	Modulation
Pattern 7	High Middle Low	2000Hz 2000Hz 1100Hz	1100Hz 540Hz 760Hz	16Hz 16Hz 16Hz
Pattern 8	High Middle Low	2000Hz 2000Hz 1100Hz	1100Hz 540Hz 760Hz	8Hz 8Hz 8Hz

Conditions

None

Program

22

Feature Cross Reference

• Selectable Ring Tones

Program 22 : Incoming Call Setup

22-05 : Incoming Trunk Ring Group Assignment

Level:
IN

Program

22

Description

Use **Program 22-05 : Incoming Trunk Ring Group Assignment** to assign trunks to incoming Ring Groups. There are 50 available Ring Groups.

Input Data

Trunk Port Number	1 ~ 128

Day/Night Mode	1 ~ 8

Item No.	Item	Input Data	Description	Default	Related Program
01	**Incoming Group Number**	0 = No Setting 1 ~ 50 = Incoming Ring Group 101 = Not Used 102 = InMail 103 = Centralized VM	Use this program to assign Normal Ring Trunks (22-02) to Incoming Ring Groups (22-04).	1	14-02 22-04 22-06

Conditions

None

Feature Cross Reference

• Ring Groups

Program 41 : ACD Setup
41-02 : ACD Group and Agent Assignments

Program

41

Level:
SA

Description

In **Program 41-02 : ACD Group and Agent Assignments**, to set the name of Speed Dial Group Name. for each ACD extension number, assign an ACD Group (1 ~ 8). An ACD Group number is assigned to each Work Period number (1 ~ 8).

The assigned extension works as an ACD agent extension in the following cases:
* The trunk belonging to an ACD group receives an incoming call while an ACD agent is logged in.
* An extension transfers a call to an ACD group using the ACD group pilot number.
* An incoming call is received with a DUD/DID/DISA number which is assigned as an ACD pilot number.

Input Data

Extension Number	Up to eight digits

ACD Work Period Mode Number	1 ~ 8

Item No.	Item	Input Data	Description	Default
01	**ACD Group No.**	0 ~ 8 0 = No Setting	Designate for each incoming trunk, whether or not Night Announcement Service is assigned.	0

Conditions

None

Feature Cross Reference

* Automatic Call Distribution (ACD)

Program 41 : ACD Setup

41-03 : Incoming Ring Group Assignment for ACD Group

Level:

SA

Program

41

Description

In **Program 41-03 : Incoming Ring Group Assignment for ACD Group** for each incoming trunk group set up in Program 22-05, designate which ACD Group (1 ~ 8) the trunks should ring for each of the eight Work Periods. Also use this program to assign an Incoming Trunk Ring Group as priority or normal. Use Program 41-06 to set up the Work Schedules and Work Periods for trunks. Use Program 41-07 to assign the Work Schedules to the days of the week.

Input Data

Incoming Ring Group Number	1 ~ 50

ACD Work Period Mode Number	1 ~ 8

Item No.	Item	Input Data	Description	Default
01	**ACD Group Number**	0 ~ 8 0 = No Setting	For each incoming trunk group set up in Program 22-05, designate which ACD Group (1 ~ 8) the trunks should ring for each of the eight Work Periods.	0
02	**Night Announcement Service**	0 = No 1 = Yes	Designate for each incoming trunk, whether or not Night Announcement Service is assigned.	0
03	**Priority Data**	0 = No priority 1 = Highest priority : 4 = Low priority	Determine whether or not an incoming call to a trunk ring group should follow a priority assignment.	0

Conditions

None

Feature Cross Reference

• Automatic Call Distribution (ACD)
• Ring Groups

Program 41 : ACD Setup

41-05 : ACD Agent Work Schedules

Level:
SA

Program

41

Description

Use **Program 41-05 : ACD Agent Work Schedules** to set up the Work Schedules for ACD Agents and Groups. For each ACD Work Schedule (1~4), designate the start and stop times for each of the eight Work Periods. After you set up the schedules in this program, assign them to days of the week in Program 41-07. (This is the same program used by the Trunk Work Schedules.)

ACD extensions can log in only during their work period. ACD extensions receive the following calls when they are logged in.

• ACD Call on a Trunk
  When the incoming ring group is assigned in the operating time (Programs 41-03 and 41-06).

• ACD Pilot Number Call
  Any time - if ACD extensions are available.

Input Data

ACD Work Schedule Time Pattern	1 ~ 4

ACD Operation Mode Number	1 ~ 8

Item No.	Item	Input Data	Default
01	**Start Time**	0000 ~ 2359	(Start) 0000
	End Time	0000 ~ 2359	(End) 0000

Conditions

None

Feature Cross Reference

• Automatic Call Distribution (ACD)

Program 41 : ACD Setup

41-06 : Trunk Work Schedules

Level:

SA

Program

41

Description

Use **Program 41-06 : Trunk Work Schedules** to set up the Work Schedules for trunks. For each Work Schedule (1 ~ 4), designate the start and stop times for each of the eight Work Periods. After you set up the schedules, assign them to days of the week in Program 41-07. (This is the same program used by the ACD Agent Work Schedules.)

Input Data

ACD Work Schedule Time Pattern Number	1 ~ 4

ACD Operation Mode Number	1 ~ 8

Item No.	Item	Input Data	Default
01	**Start Time**	0000 ~ 2359	(Start) 0000
	End Time	0000 ~ 2359	(End) 0000

Conditions

None

Feature Cross Reference

• Automatic Call Distribution (ACD)

Program 41 : ACD Setup

41-07 : ACD Weekly Schedule Setup

Level:
SA

Program

41

Description

Use **Program 41-07 : ACD Weekly Schedule Setup** to assign the four Work Schedules (1 ~ 4) to days of the week. The assignments you make in this program apply to both the ACD Agent Work Schedules (Program 41-05) and the Trunk Work Schedules (Program 41-06).

Input Data

Item No.	Item	Input Data	Default
01	**Day Number**	1 = Sunday 2 = Monday 3 = Tuesday 4 = Wednesday 5 = Thursday 6 = Friday 7 = Saturday	0
	Time Pattern	0 ~ 4 0 = No ACD	

Conditions

None

Feature Cross Reference

• Automatic Call Distribution (ACD)

Program 41 : ACD Setup

41-08 : ACD Overflow Options

Level:

SA

Description

Program

41

For each ACD Group (1 ~ 8), use **Program 41-08 : ACD Overflow Options** to assign the overflow mode (0 ~ 9), destination and announcement message types. Delay Announcement functions are not available for ACD pilot number calls. Each ACD Group can have unique overflow options. The table below outlines the entry options.

Input Data

ACD Group No.	1 ~ 8

Item No.	Item	Input Data	Description	Default
01	**Overflow Operation Mode**	0 = No Overflow (None) 1 = Overflow with No Announcement 2 = No Overflow with First Announcement Only 3 = No Overflow with First & Second Announcements 4 = Overflow with First Announcement Only 5 = Overflow with First & Second Announcement 6 = Not Used 7 = Not Used 8 = No Overflow with Second Announcement Only 9 = Overflow with Second Announcement Only	Assign the overflow mode (0 ~ 9), destination and announcement message types. Delay Announcement functions are not available for ACD pilot number calls. Each ACD Group can have unique overflow options.	0
02	**Transferred Destination when overflow**	0 ~ 8 (0: No Setting) 9 = Extended Table(PRG 41-09) 10 = Voice Mail Integration (In-skin VM) 11 = Speed Dial areas (PRG 41-08-05) 12 = Incoming Ring Group(PRG 41-08-06)	Assign the overflow mode (0 ~ 9), destination and announcement message types. Delay Announcement functions are not available for ACD pilot number calls. Each ACD Group can have unique overflow options.	0
03	**Delay Announcemen Source Type**	1 = VRS 2 = InMail	Assign the overflow mode (0 ~ 9), destination and announcement message types. Delay Announcement functions are not available for ACD pilot number calls. Each ACD Group can have unique overflow options.	1
04	**ACD Overflow Transfer Time**	0 ~ 64800 (seconds) 0 = Don't transfer	Define the time before ACD overflow occurs. Each ACD Group can have unique overflow options.	30

Item No.	Item	Input Data	Description	Default
05	**Speed Dial Area Overflow Destination**	0 ~ 999 (Used when 41-08-02 is set to 11)	Assign the speed dial bin to be used as the ACD overflow destination. Using a speed dial bin for ACD Overflow is supported only for off premise calls.	999
06	**Incoming Ring Group when Overflow**	1 ~ 50 (Used when 41-08-02 is set to 12)	Assign the Ring Group for ACD overflow calls to go to.	1

Conditions

None

Feature Cross Reference

- Automatic Call Distribution (ACD)

Program

41

Program 41 : ACD Setup

41-09 : ACD Overflow Table Setting

Level:

SA

Program

41

Description

Use **Program 41-09 : ACD Overflow Table Setting** to define the ACD group to which a call is transferred when overflow occurs.

Input Data

ACD Group No.	1 ~ 8

Priority Order No.	1 ~ 4

Item No.	Item	Input Data	Description	Default
01	**Destination ACD Group**	0 ~ 9 0 = No Setting 9 = InMail	Define the ACD group to which a call is transferred when overflow occurs.	0

Conditions

None

Feature Cross Reference

• Automatic Call Distribution (ACD)

Program 41 : ACD Setup

41-11 : VRS Delay Announcement

Level:

SA

Program

41

Description

Use **Program 41-11 : VRS Delay Announcement** to assign the VRS message number to use as the message source for the 1st and 2nd Delay Announcement Messages. Refer to Program 41-08 for more on setting up the ACD overflow options.

This program is activated when the delay announcement source and options are assigned as VRS in Program 41-08-03.

Input Data

ACD Group No.	1 ~ 8

Item No.	Item	Input Data	Description	Default
01	**Delay Message Start Timer**	0 ~ 64800 (seconds)	Input the time before the 1st Delay Message Starts.	0
02	**1st Delay Message Number**	0 ~ 101 0 = No Message 101 = Fixed Message	Input the VRS Message to be played as the 1st Delay Message.	0
03	**1st Delay Message Sending Count**	0 ~ 255	Input the number of times the 1st Delay Message is sent. If set to 0, the message is not played.	0
04	**2nd Delay Message Number**	0 ~ 101 0 = No Message 101 = Fixed Message	Input the VRS Message to be played as the 2nd Delay Message.	0
05	**2nd Waiting Message Sending Count**	0 ~ 255	Input the number of times the 2nd Delay Message is sent. If set to 0, the message is not played.	0
06	**Tone Kind at Message Interval**	0 = Ring Back Tone 1 = MOH Tone 2 = BGM Source	Input what is heard between the Delay messages.	0
07	**ACD Forced Disconnect Time after the 2nd DelayMessage**	0 ~ 64800 (seconds) (0 = No Disconnect)	Set the time, after the last 2nd Delay Message is played, before the call is disconnected.	60
08	**Queue Depth Announcement**	0 = Disable 1 = After 1st (1st) 2 = After 2nd (2nd) 3 = After 1st and 2nd (1st and 2nd)	Input when the Queue Depth Announcement is played.	0

Conditions

None

Feature Cross Reference

- Automatic Call Distribution (ACD)

Program

41

Program 41 : ACD Setup

41-12 : Night Announcement Setup

Level:

SA

Program

41

Description

Use **Program 41-12 : Night Announcement Setup** to set Night Announce time for each ACD group. Night announcement availability depends on the setting in Program 41-03-02. The night announcement function is not available for ACD pilot number calls.

Input Data

ACD Group Number	1 ~ 8

Item No.	Item	Input Data	Description	Default
03	**ACD Night Announce Sending Time**	0 ~ 64800 (seconds)	Define the time the ACD night Announcement plays. Night announcement availability depends on the setting in Program 41-03-02.	30

Conditions

• The Night Announcement function is not available for ACD pilot number call.

Feature Cross Reference

• Automatic Call Distribution (ACD)

Program 41 : ACD Setup

41-13 : VRS Message Number for Night Announcement

Level:

SA

Program

41

Description

Use **Program 41-13 : VRS Message Number for Night Announcement** to define the VRS message number to use as the night announcement. This program is activated when the night announcement source is assigned as VRS in Program 41-12-01.

Input Data

ACD Group No.	1 ~ 8

Item No.	Item	Input Data	Description	Default
01	**VRS Message Number**	0 ~ 100 0 = No Message	Input the VRS message number to be used as the night announcement.	0
02	**Tone Kind at Message Interval**	0 = Ring Back Tone 1 = MOH Tone 2 = BGM Source	Input what is heard between the Night Announcements.	0

Conditions

None

Feature Cross Reference

• Automatic Call Distribution (ACD)

Program 41 : ACD Setup

41-14 : ACD Options Setup

Level:

SA

Description

Use **Program 41-14 : ACD Options Setup** to set various options for ACD Groups. When you set an option for an ACD Group, the setting is in force (if applicable) for all agents in the group. The chart below shows each of the ACD options, the entries available, and the default entry.

Input Data

ACD Group No	1 ~ 8

Item No.	Item	Input Data	Description	Default
01	**EMG call operation mode**	0 = Call to system supervisory extension when group supervisory extension is busy. 1 = Not call to system supervisory extension when group supervisory extension is busy.		0
02	**Automatic Wrap Up Mode**	0 = After wrap up the mode key is pressed. (Manual) 1 = After call is finished automatically. (Auto)	Enable/Disable Automatic Wrap Up mode.	0
03	**ACD Priority for Overflow Calls**	0 = Own group priority 1 = Priority order by Program 41-03-03	Determines whether the ACD group should use its own priority assignment or if it should follow the priority assigned in Program 41-03-03.	0
04	**Automatic Answer at Headset**	0 = Off 1 = On	Enable (1)/Disable (0) Automatic Answer for agents using headsets.	0
06	**Call Queuing after 2nd Announcement**	0 = Enable (Yes) 1 = Disable (No)	Determine whether the caller should hear the 2nd Delay Announcement and then be taken out of queue (1), or be placed back into queue (0).	0
07	**Automatic Off Duty for SLT**	0 = No change to Off Duty mode 1 = Change to Off Duty mode automatically (Skip)	Enable (1)/Disable (0) Automatic Off Duty (rest) mode for agents with single line telephones.	0
08	**ACD Off Duty Mode**	0 = Cannot receive internal call 1 = Can receive internal call	Enable (1)/Disable (0) the agent's ability to receive internal calls in ACD Off Duty Mode.	0
09	**Automatic Wrap Up End Time**	0 ~ 64800 (seconds)	Input the time the agent is in Automatic Wrap Up End Time when Wrap key is pressed, or automatically put into Wrap mode.	0

Item No.	Item	Input Data	Description	Default
10	**ACD No Answer Skip Time**	0 ~ 64800 (seconds)	Set the time a call to the ACD Group rings an idle extension before routing to the next agent.	10
12	**Start Headset Ear Piece Ringing (for SLT)**	0 ~ 64800 (seconds)	Set the ringing start time for the headset ear piece on a single line telephone.	0
17	**CTI : Operation mode when transfer no log-in ACD groups**	0 = Transfer to ACD group 1 = Error notice	This program allows CTI Server transfers a trunk call to ACD Pilot number which group has no login agent in 3rd Party CTI.	0

Program

41

Conditions

None

Feature Cross Reference

• Automatic Call Distribution (ACD)

Program 41 : ACD Setup

41-16 : ACD Threshold Overflow

Level:
SA

Program

41

Description

Use **Program 41-16 : ACD Threshold Overflow** to define the value of the ACD threshold call overflow and the mode for each ACD group.

Input Data

ACD Group No.	1 ~ 8

Item No.	Item	Input Data	Description	Default
01	**Number of Calls in Queue**	0 ~ 128 0 = No Limitation	Define the maximum number of calls allowed in the ACD queue before overflow occurs.	0
02	**Operation Mode for ACD Queue**	0 = The last waiting call is transferred 1 = The longest waiting call is transferred 2 = Send Busy Tone	Define how the system should handle calls when the number of calls in queue exceeds the threshold.	0

Conditions

None

Feature Cross Reference

• Automatic Call Distribution (ACD)

Program 41 : ACD Setup

41-17 : ACD Login Mode Setup

Level:

SA

Program

41

Description

Use **Program 41-17 : ACD Login Mode Setup** to define the ACD login mode for each extension. If the AIC Login Mode is enabled, set the AIC Login and AIC Logout service codes for the AIC members in Program 11-13-08 and 11-13-09.

Input Data

Extension Number	Up to eight digits

Item No.	Item	Input Data	Default	Related Program
01	**Login Mode**	0 = Normal Login Mode 1 = AIC Login Mode	0	41-18-01

Conditions

• If set to **1**, note that a supervisor can not log in/out an AIC member as they are not normal ACD agents.

Feature Cross Reference

• ACD (Automatic Call Distribution)

Program 41 : ACD Setup

41-18 : ACD Agent Identity Code Setup

Level:

SA

Program

41

Description

Use **Program 41-18 : ACD Agent Identity Code Setup** to define the ACD Agent Identity Code Table.

Input Data

AIC Table No.	1 ~ 128

Item No.	Item	Input Data	Default	Related Program
01	**ACD Agent Identity Code**	Up to four digits	No Setting	41-17
02	**Default ACD Group Number**	0 ~ 8 0 = No Setting	0	
03	**ACD Group Number in Mode 1**	0 ~ 8 0 = No Setting	0	
04	**ACD Group Number in Mode 2**	0 ~ 8 0 = No Setting	0	
05	**ACD Group Number in Mode 3**	0 ~ 8 0 = No Setting	0	
06	**ACD Group Number in Mode 4**	0 ~ 8 0 = No Setting	0	
07	**ACD Group Number in Mode 5**	0 ~ 8 0 = No Setting	0	
08	**ACD Group Number in Mode 6**	0 ~ 8 0 = No Setting	0	
09	**ACD Group Number in Mode 7**	0 ~ 8 0 = No Setting	0	
10	**ACD Group Number in Mode 8**	0 ~ 8 0 = No Setting	0	

Conditions

None

Feature Cross Reference

None

Program 41 : ACD Setup

41-19 : ACD Voice Mail Delay Announcement

Level:

SA

Program

41

Description

Use **Program 41-19 : ACD Voice Mail Delay Announcement** to assign InMail Master Mailboxes (Program 47-03) as ACD Delay Announcement Mailboxes.

Input Data

ACD Group Number	1 ~ 8

Item No.	Item	Input Data	Description	Default
01	**Delay Message Start Timer**	0 ~ 64800 (seconds)	Determine the time the system waits before playing the Delay Message.	0
02	**Mailbox Number for 1st Announcement Message**	Dial (up to eight digits)	Assign the Voice Mail ACD Announcement Mailbox as the message source for the 1st Announcement Message.	No Setting
03	**1st Delay Message Sending Count**	0 ~ 255 0 = No message is played.	Determine the 1st Delay Message Sending Count. This entry must be set to 1 or higher for the message to play.	0
04	**Mailbox Number for 2nd Announcement Message**	Dial (up to eight digits)	Assign the Voice Mail ACD Announcement Mailboxes as the message source for the 2nd Announcement Message.	No Setting
05	**2nd Delay Message Sending Count**	0 ~ 255 0 = No message is played.	Determine the 2nd Delay Message Sending Count. This entry must be set to 1 or higher for the message to play.	0
06	**Wait Tone Type at Message Interval**	0 = Ring Back Tone 1 = Music On Hold Tone 2 = Background Music Source	Determine what the caller hears between the messages.	0
07	**ACD Forced Disconnect Time after 2nd Announcement**	0 ~ 64800 (seconds)	Assign the time the system should wait after the end of the ACD Delay Message before disconnecting.	0
08	**Delay Message Interval Time**	0 ~ 64800 (seconds)	Set the time for the interval between the Delay Messages.	20

Conditions

None

Feature Cross Reference

None

Program 41 : ACD Setup

41-20 : ACD Queue Display Settings

Level:

SA

Program

41

Description

Use **Program 41-20 : ACD Queue Display Settings** to assign the options for the ACD Queue Status Display feature. This program allows the Queue Status Display, and causes an alarm to sound, when the parameters in this program are met.

Input Data

ACD Group No.	1 ~ 8

Item No.	Item	Input Data	Description	Default	Related Program
01	**Number of Calls in Queue**	0 ~ 128 0 = No Display	Set the number of calls that can accumulate in the ACD queue before the Queue Status Display (and optional queue alarm) occurs.	0	
02	**Queue Status Display Time**	0 ~ 64800 (seconds)	Set the time the Queue Status display remains on the telephone display.	5 (seconds)	
03	**Queue Status Display Interval**	0 ~ 64800 (seconds)	Determine whether or not an incoming call to a trunk ring group should follow a priority assignment. Set the time that refreshes the Queue Status Alarm time in queue display and causes the optional queue alarm to occur on phones active on a call, logged out, or in wrap-up.	60 (seconds)	
04	**ACD Call Waiting Alarm**	0 = Disable (Off) 1 = Enable (On)	Enable/Disable the queue alarm.	0	
05	**ACD Call Waiting Alarm Hold Time**	0 ~ 64800 (seconds)	Set the time the Call Waiting Alarm should sound.	0	
06	**Number of calls to switch the state of ACD Queue Alarm Display Key**	0 ~ 128 0 = Not switch		0	41-20-01

Conditions

None

Feature Cross Reference

• Automatic Call Distribution (ACD)

Program 47 : InMail

47-03 : InMail Group Mailbox Options

Level:
IN

Program

47

Description

Use **Program 47-03 : InMail Group Mailbox Options** to set up the 32 Group Mailboxes (1 ~ 32). A Group Mailbox is used for Department Group overflow and can be a Subscriber or Call Routing.

Input Data

Group Mailbox Number	1 ~ 32

Item No.	Item	Input Data	Description	Default
02	**Mailbox Number**	Up to eight digits	(Mailbox Number) The Group Mailbox Number is the same as the Department Group master (pilot) number. Use this option to select the Department Group master (pilot) number associated with the Group Mailbox you are programming.	Group Mailbox 1-31 = 3101-3131 Group Mailbox 32 = No Setting
03	**Mailbox Type**	0 = None 1 = Subscriber 2 = Routing	0: Skip Mailbox No. setting 1: Skip Mailbox No. setting 2: Mailbox No. should be 1 ~ 32. Refer to <PRG 47-07>	1
03	**Routing Mailbox Number**	1 ~ 32		1

Conditions

None

Feature Cross Reference

None

Program 90 : Maintenance Program

90-20 : Traffic Report Data Setup

Program

90

Level:
IN

Description

Use **Program 90-20 : Traffic Report Data Setup** to define the details of the traffic report.

Input Data

Item No.	Item	Input Data	Description	Default
01	**Call Traffic Output**	0 = Not Measured 1 = Measure		0
03	**All Line Busy Output**	0 = Not Detected 1 ~ 256 (Report when the data reaches the defined value)		0
04	**DTMF Receiver Busy Output**	0 = Not Detected 1 ~ 256 (Report when the data reaches the defined value)		0
05	**Dial Tone Detector Busy Output**	0 = Not Detected 1 ~ 256 (Report when the data reaches the defined value)		0
06	**Caller ID Receiver Busy Output**	0 = Not Detected 1 ~ 256 (Report when the data reaches the defined value)		0
07	**Voice Mail Channel All Busy Output**	0 = Not Detected 1 ~ 256 (Report when the data reaches the defined value)		0
09	**Attendant Channel All Busy Output**	0 = Not Detected 1 ~ 256 (Report when the data reaches the defined value)		0
11	**Security Sensor Dial Record**	0 = Not Recorded 1 = Recorded	Record Security sensor dialing and Remote Inspection dialing to security report	1

Conditions

None

Feature Cross Reference

- Traffic Reports

Program 90 : Maintenance Program

90-21 : Traffic Report Output

Level:
IN

Program

90

Description

Use **Program 90-21 : Traffic Report Output** to define the output port to be used as the traffic report output.

Input Data

Item No.	Item	Input Data	Default
01	**Output Port Type**	0 = No Setting 3 = LAN	0

Conditions

None

Feature Cross Reference

• Traffic Reports

MEMO

Program

90

MEMO

SL2100

ACD Installation Manual

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