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NEAX® 2400 IMX

Direct Station Selection (DSS) Console System Manual

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NEC America, Inc.

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NEAX2400 IMX
Direct Station Selection (DSS)
Console System Manual

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CHAPTER 1 OVERVIEW

1. General

This manual provides technicians with information about the Direct Station Selection (DSS) console shown in Figure 1-1 below. To complete installation tasks, refer to the NEAX2400 IMX Installation Manual for the PBX system to which the DSS console is connected. When the DSS console is located in a Distributed Access Unit (DAU), the NEAX2400 IMX Installation Manual for the DAU is also required.

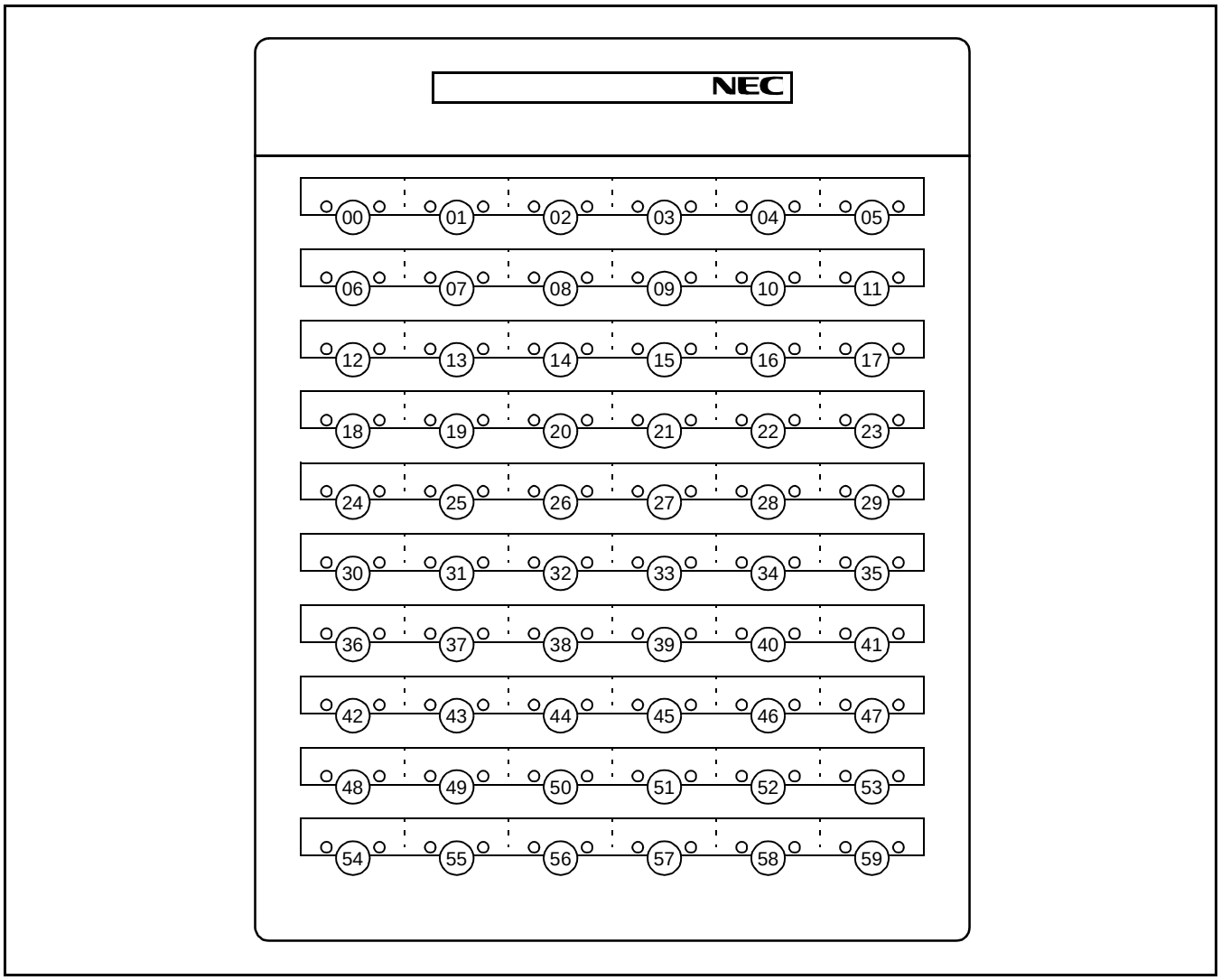


Figure 1-1 Outer View of DSS

2. How to Follow This Manual

The contents of this manual are:

- CHAPTER 1 (OVERVIEW)

  This chapter explains how the DSS console is used, and the system specifications for the DSS.

- CHAPTER 2 (INSTALLATION PROCEDURE)

  This chapter explains how to install a DSS console and contains cabling diagrams showing how to connect the console to a PBX.

- CHAPTER 3 (OFFICE DATA ASSIGNMENT)

  This chapter explains how to program the Office Data used by the DSS. A sample office data assignment sheet is shown in this chapter. To plan your data assignment, blank sheets for each DSS-related command are included at the end of Chapter 3.

Note: *The word Distributed Access Unit (DAU) in this manual can be replaced with Digital Remote Unit (DRU).*

3. DSS Console Modes

The DSS can be used as a Direct Station Selection/Busy Lamp Field (DSS/BLF) or an Add-On Module depending on the following two factors:

- Level Number (even or odd) of the allocated LENs for the DSS console
- Office Data programming

3.1 Direct Station Selection/Busy Lamp Field (DSS/BLF) Mode

In this mode, a DSS console is used with a D^{term} that receives a Direct Inward Dialing (DID) and/or Direct-In Termination (DIT) call. When the DSS console receives a call, the D^{term} user can transfer the incoming call to a preassigned destination by pressing the appropriate key on the console. The caller is automatically placed on hold. This function is called the Direct Station Selection (DSS). Each key on the console has a Light Emitting Diode (LED) to indicate the Busy/Idle status of each assigned station so the DSS can also provide a D^{term} user with the Busy Lamp Field (BLF) function.

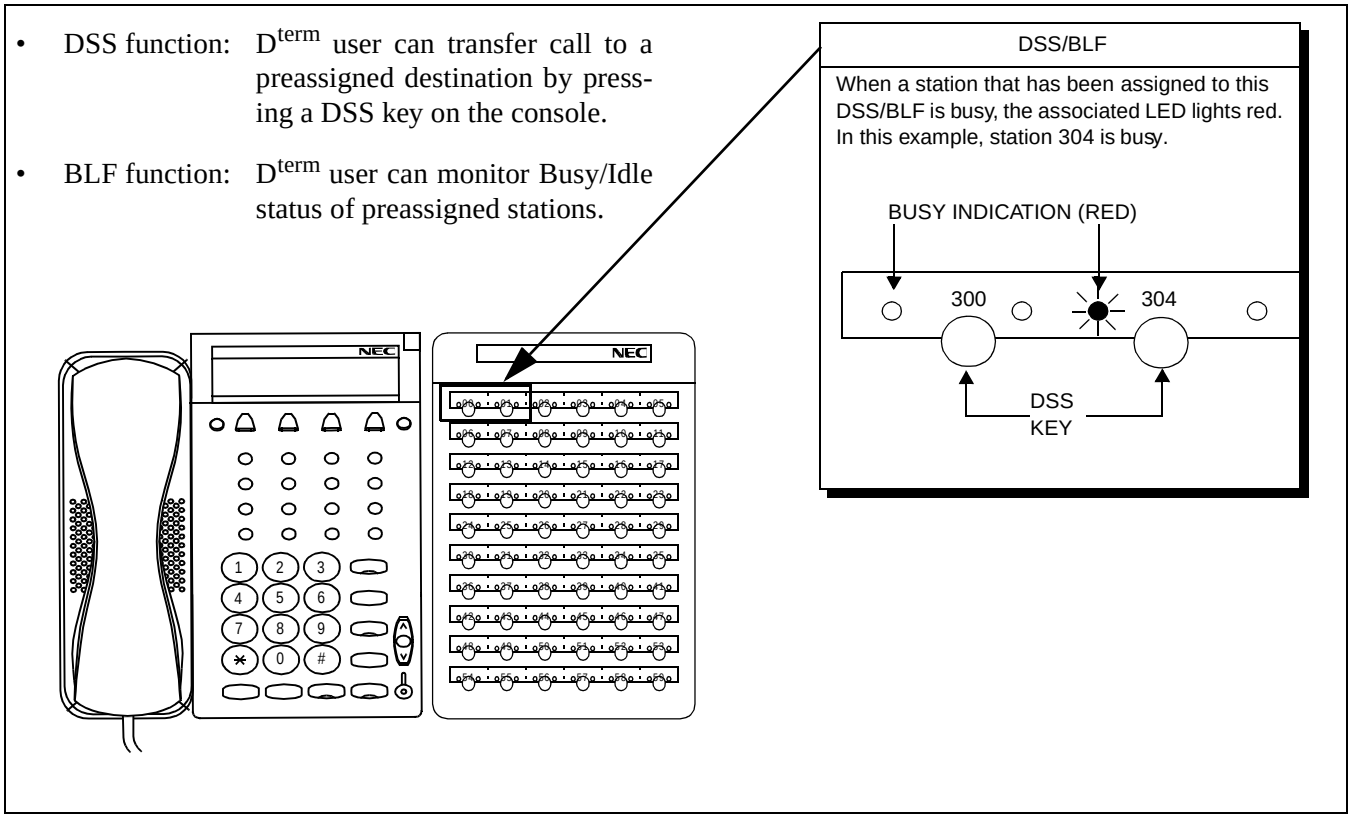


Figure 1-2 Direct Station Selection (DSS)/Busy Lamp Field (BLF) Mode

3.2 Add-On Module (ADM) Mode

In this mode, a DSS console is used to expand the Line/Feature Access keys of a D^{term}. In addition to the existing Line/Feature Access keys on each D^{term}, the DSS console has a maximum of 60 keys.

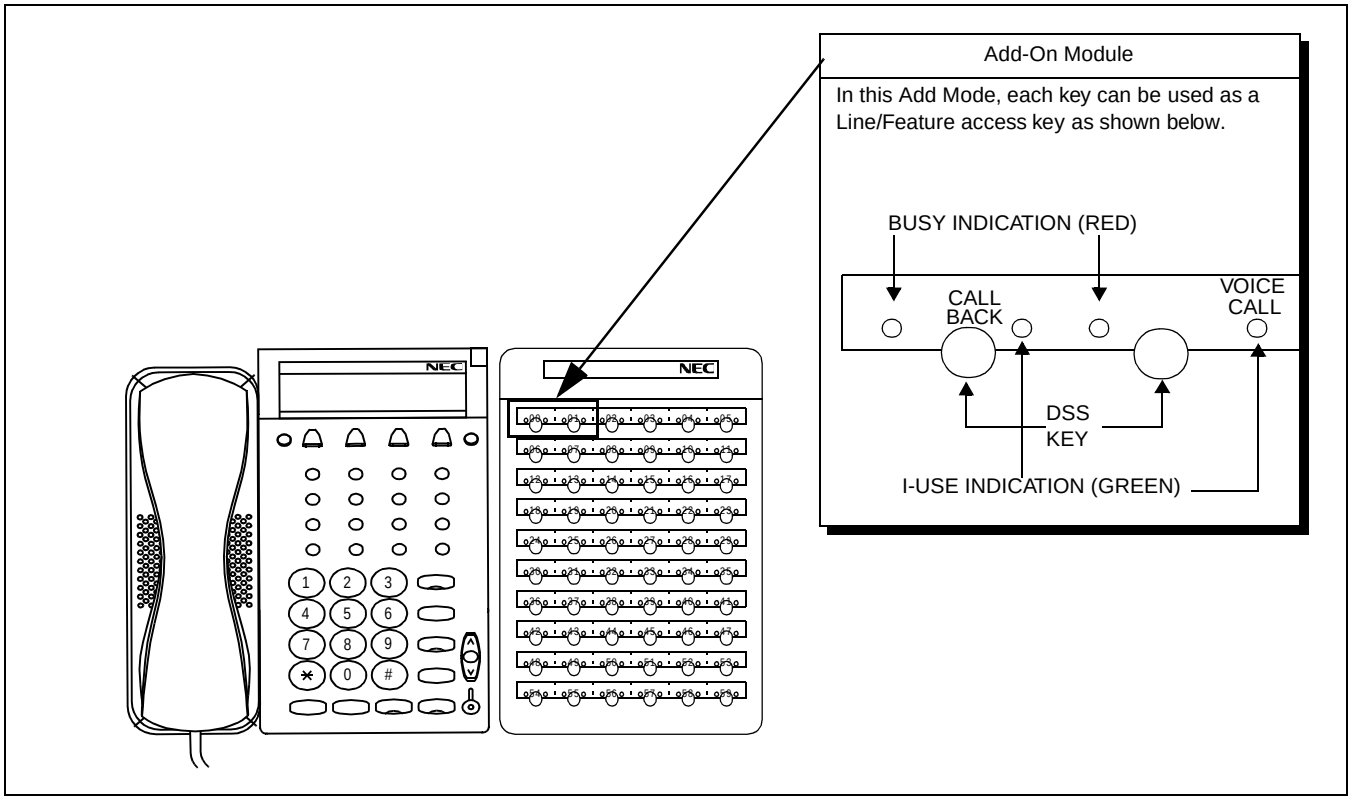


Figure 1-3 Add-On Module (ADM) Mode

Table 1-1 Relationship between the Mode Designation and the Mounting Level Numbers

MODE	ALLOWABLE LEVEL NUMBERS	
DSS mode	Even Number	LV0, LV2, LV4, LV6
ADM mode	Odd Number	LV1, LV3, LV5, LV7

4. DSS Specifications

System specifications for the DSS are shown in Table 1-2.

Table 1-2 System Specifications for DSS

ITEM	SPECIFICATIONS	
Number of KEYs	× 60	
Number of Light Emitting Diodes (LEDs)	× 60 (RED) × 60 (GREEN)	
Power Source	AC 100 Volt ± 10 % (0.1A)	
Allowable Cable Length **Note:** *See Table 1-3 for maximum cable distance information.*	850 m (2800 feet) • AC adapter is required.	
Interface Card for the PBX	PA-16ELCJ, PA-DAIG-A, PA-DAIJ-A	
Dimensions	WIDTH	177 mm (6.9 inches)
	DEPTH	218.2 mm (8.5 inches)
	HEIGHT (1)	74.2 mm (2.9 inches) • When tilt legs are folded.
	HEIGHT (2)	101.8 mm (4 inches) • When tilt legs are raised.
Weight	0.69 kg (2.49 pounds)	

Table 1-3 shows the maximum cable distances allowed, depending on the type of cable used.

Table 1-3 Cable Distance Limitations

CABLE LOCATION		CABLE	0.4 mm/26 AWG		0.5 mm/24 AWG	
		UNIT	METERS	FEET	METERS	FEET
1	PBX-DSS		540	1800	850	2800
2	DAU-DSS		–	–	200	650

As shown in Figure 1-4, the cable distance allowed includes the 25-pair installation cable.

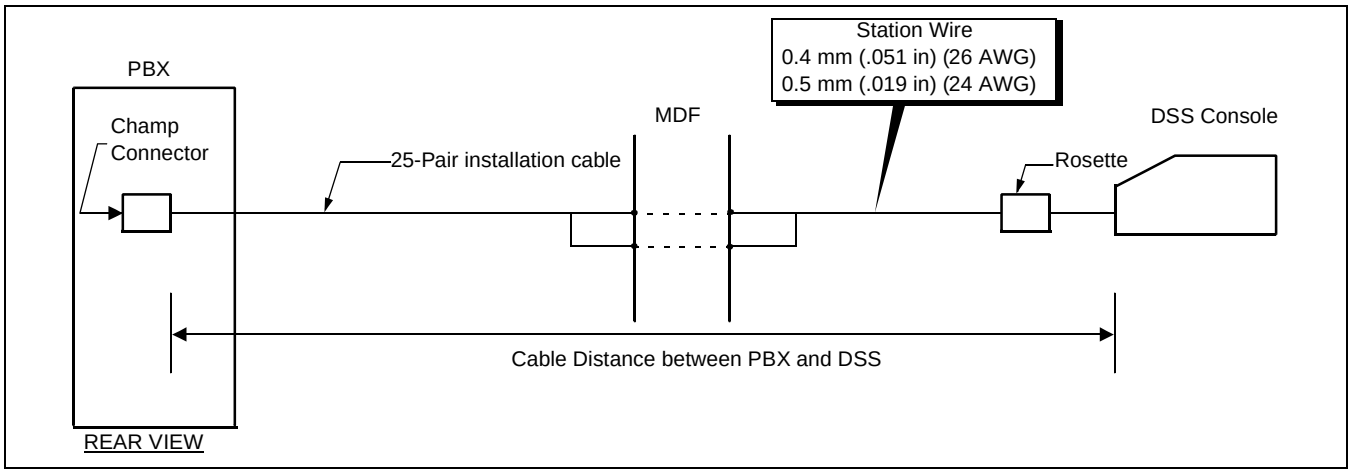


Figure 1-4 Cable Distance Definition

5. General Service Conditions

The following service conditions apply to both a DSS/BLF and Add-On Module.

1. A DSS/BLF and an Add-On Module can coexist on one circuit card. Figure 1-5 illustrates an example of port allocation on an ELC circuit card.

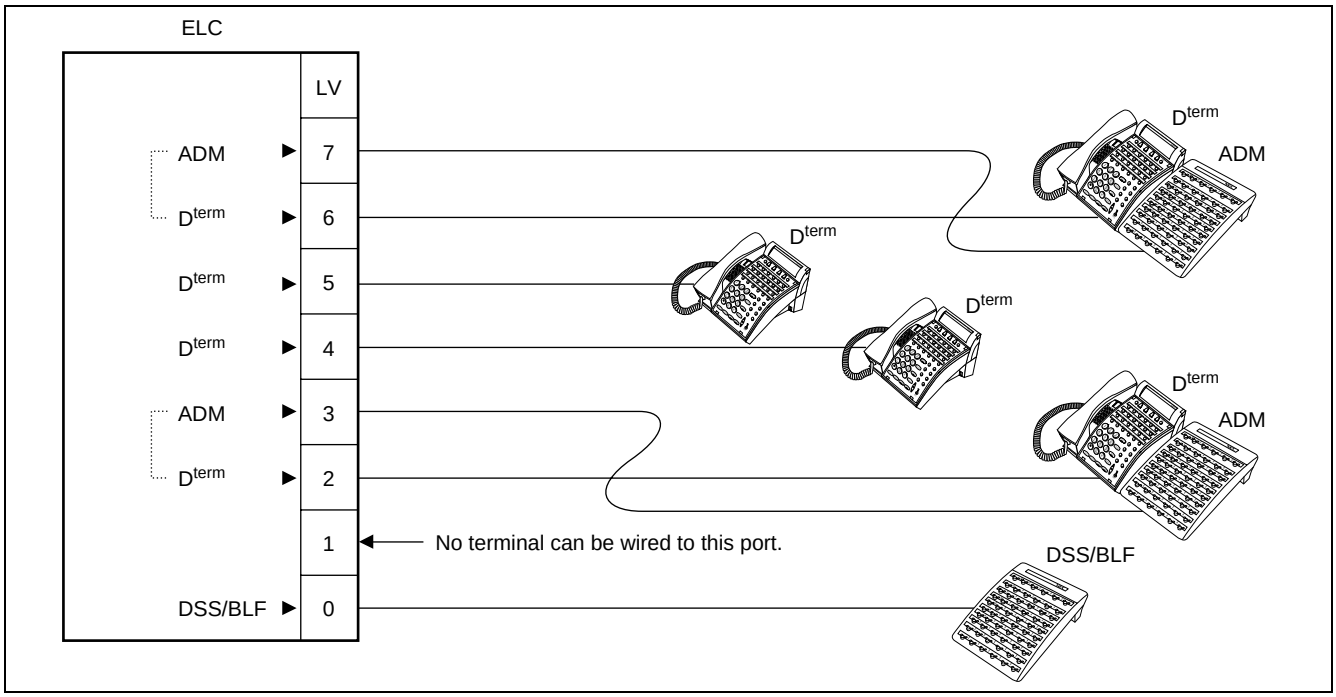


Figure 1-5 Example of Port Allocation on an ELC Card

2. DSS consoles, their associated D^{term}s, and stations which are to be assigned to the DSS keys must belong to the same Inter Module Group.

3. Multiple D^{term}s cannot use one DSS console.

4. Circuit cards for the DSS are as follows:

- PA-16ELCJ
- PA-DAIG-A (DAI)
- PA-DAIJ-A (DAI)

The previous conditions also apply when a Distributed Access Unit (DAU) is used between the PBX and the DSS.

6. DSS/BLF

One DSS/BLF console requires 2 consecutive ports on an ELC/DAI card.

When a DSS console is used as a DSS/BLF, be sure to assign and wire the DSS/BLF to a specific LEN whose level (LV) is an even number (LV = 0, 2, 4, 6). Since a DSS/BLF requires 2 consecutive ports to program the DSS keys, the port following the designated port, to which the DSS/BLF is wired, must be reserved.

Table 1-4 Level Assignment Conditions for DSS/BLF

LEVEL NUMBER	CONDITIONS
2n	A DSS console can be connected.
2n + 1	Must be reserved for the DSS console.

Note: *In Table 1-4, "n" represents 0, 1, 2, 3.*

As an example, Figure 1-6 shows a DSS/BLF connected to Port 0 on an ELC card. In this instance, no terminal can be wired to Port 1. The DSS/BLF mode can only use an even-numbered level.

- Only even-numbered level is applicable to the DSS/BLF mode.
- When a DSS/BLF is assigned to LV 0, the subsequent port, in this instance LV 1, must be retained for programming the DSS keys on the DSS/BLF console.

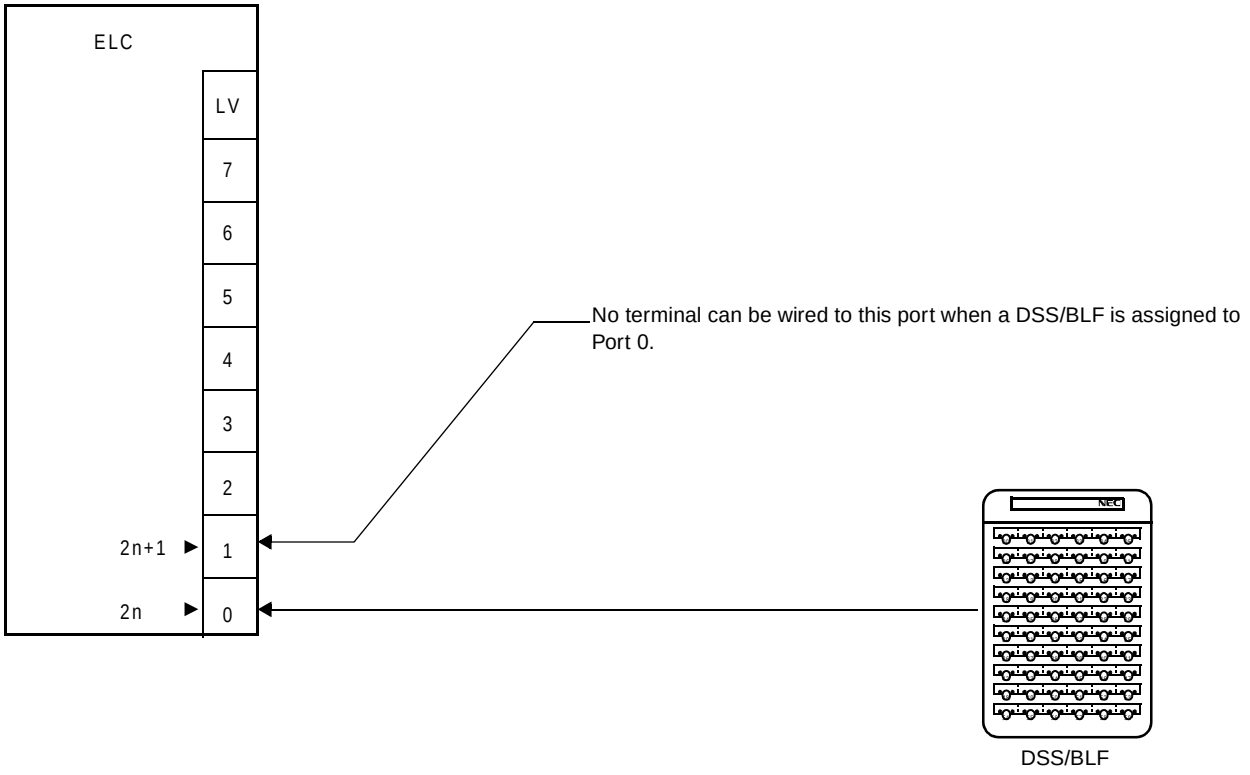


Figure 1-6 Port Designation for DSS/BLF Mode

Key Numbers (KYN: 1-40), which appear in the AKYD command, correspond to the 60 DSS keys as shown below. As an example, Figure 1-7 shows DSS/BLF connected to LV 0.

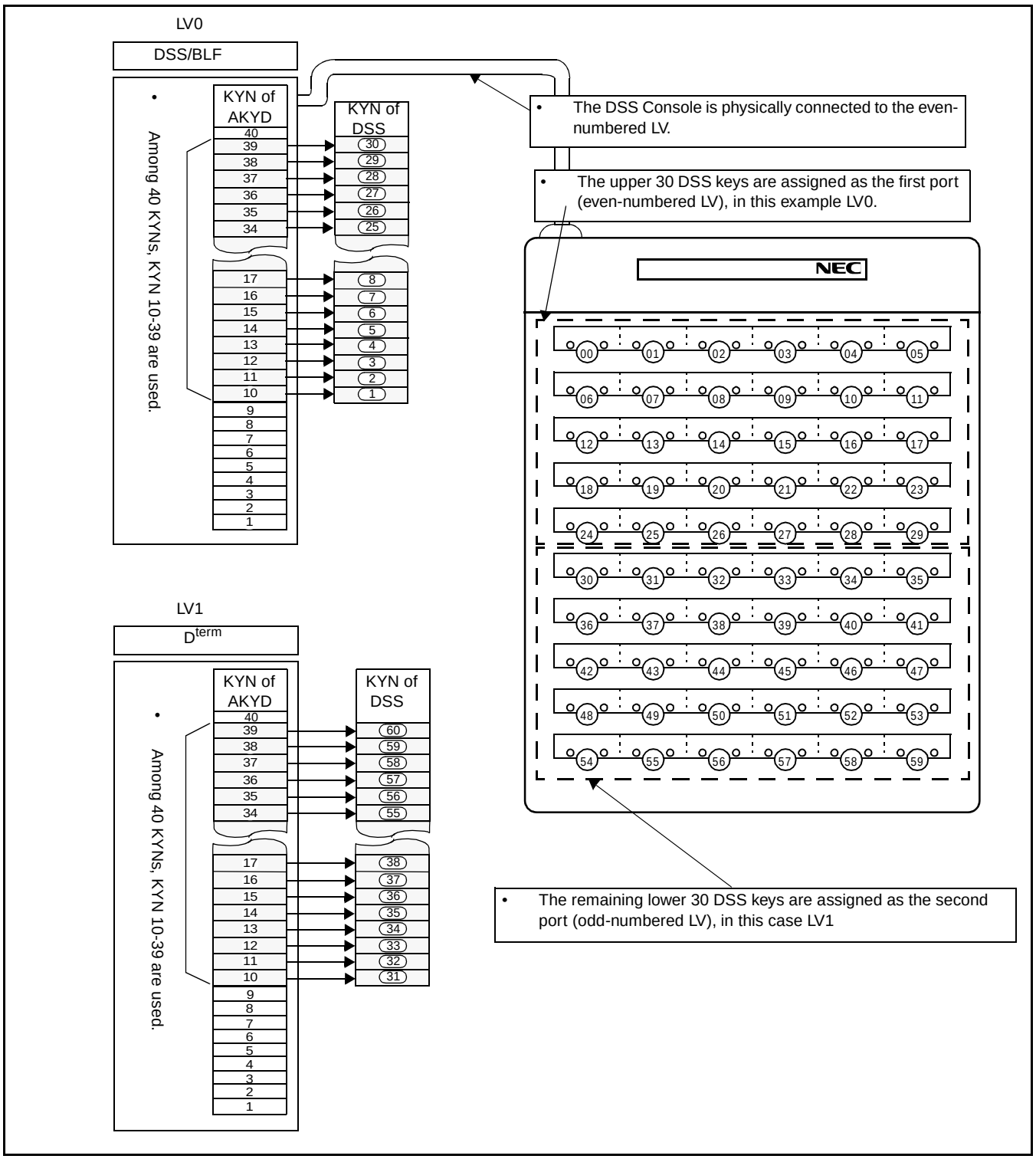


Figure 1-7 DSS Key Allocation (DSS/BLF)

The following features cannot be used when a DSS/BLF console encounters a busy station.

- CALL BACK
- CALL WAITING
- EXECUTIVE RIGHT-OF-WAY
- STEP CALL

A station user cannot activate the following features for an incoming call from a DSS/BLF console. **Note**

- CALL FORWARDING-OUTSIDE (including ALL CALLS, BUSY LINE, DON'T ANSWER)
- MULTIPLE CALL FORWARDING (including ALL CALLS, BUSY LINE, DON'T ANSWER)
- STATION HUNTING

Note: *UNIFORM CALL DISTRIBUTION can be activated for an incoming call from a DSS/BLF as usual when this feature has been set to the terminal.*

7. Add-On Module

A maximum of 48 lines and 12 feature keys may be programmed for an Add-On Module.

One Add-On Module occupies only one port on an ELC/DAI card.

When a DSS console is used as an Add-On Module, be sure to assign the DSS console to a specific LEN whose level (LV) is an odd number (LV = 1, 3, 5, 7). Also, the D^{term} used in conjunction with the Add-On Module must be assigned to the preceding even-numbered LEN level (LV = 0, 2, 4, 6).

Table 1-5 Level Assignment Conditions for the Add-On Module Mode

LEVEL NUMBER	CONDITIONS
2n + 1	Add-On Modules are connected.
2n	The D^{term}s which use keys on the Add-On Modules as additional Line Feature access keys are connected.

Note: *In Table 1-5, "n" represents 0, 1, 2, 3.*

As an example, Figure 1-8 shows an Add-On Module connected to Port 1 on an ELC card. In this instance, the associated D^{term} must be assigned to Port 0.

- Only odd-numbered level is applicable to Add-On Modules.
- When an Add-On Module is assigned to LV 1, the preceding port, in this case LV 0 must be used for the associated D^{term}.

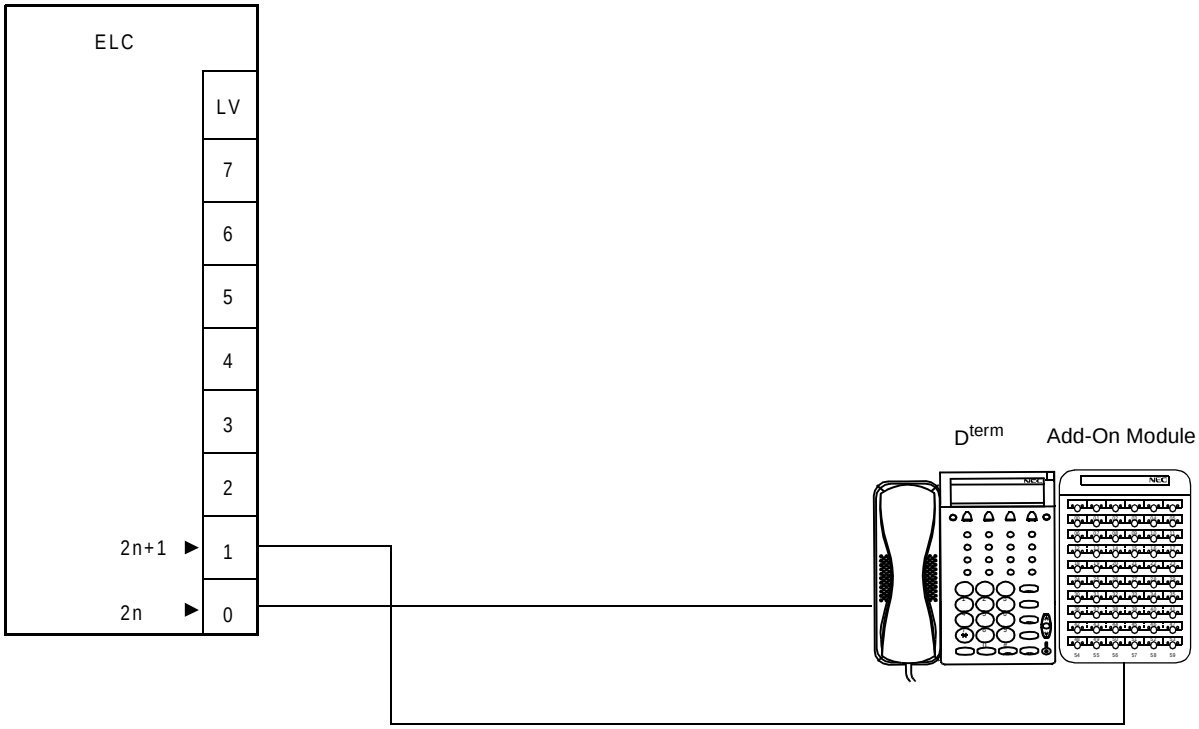


Figure 1-8 Example of Port Designation for Add-On Module

To designate the meaning of the upper 24 keys on an Add-On Module, FKYs 17 through 40 of the D^{term} that works in combination with the DSS are used. The remaining 36 keys on the Add-On Module are assigned using FKYs 5 through 40 of the original port of the Add-On Module. The relationship between KYN, which appears in the AKYD command, and 60 keys on an Add-On Module is illustrated below. In Figure 1-9, an Add-On Module is connected to LV 1 as an example.

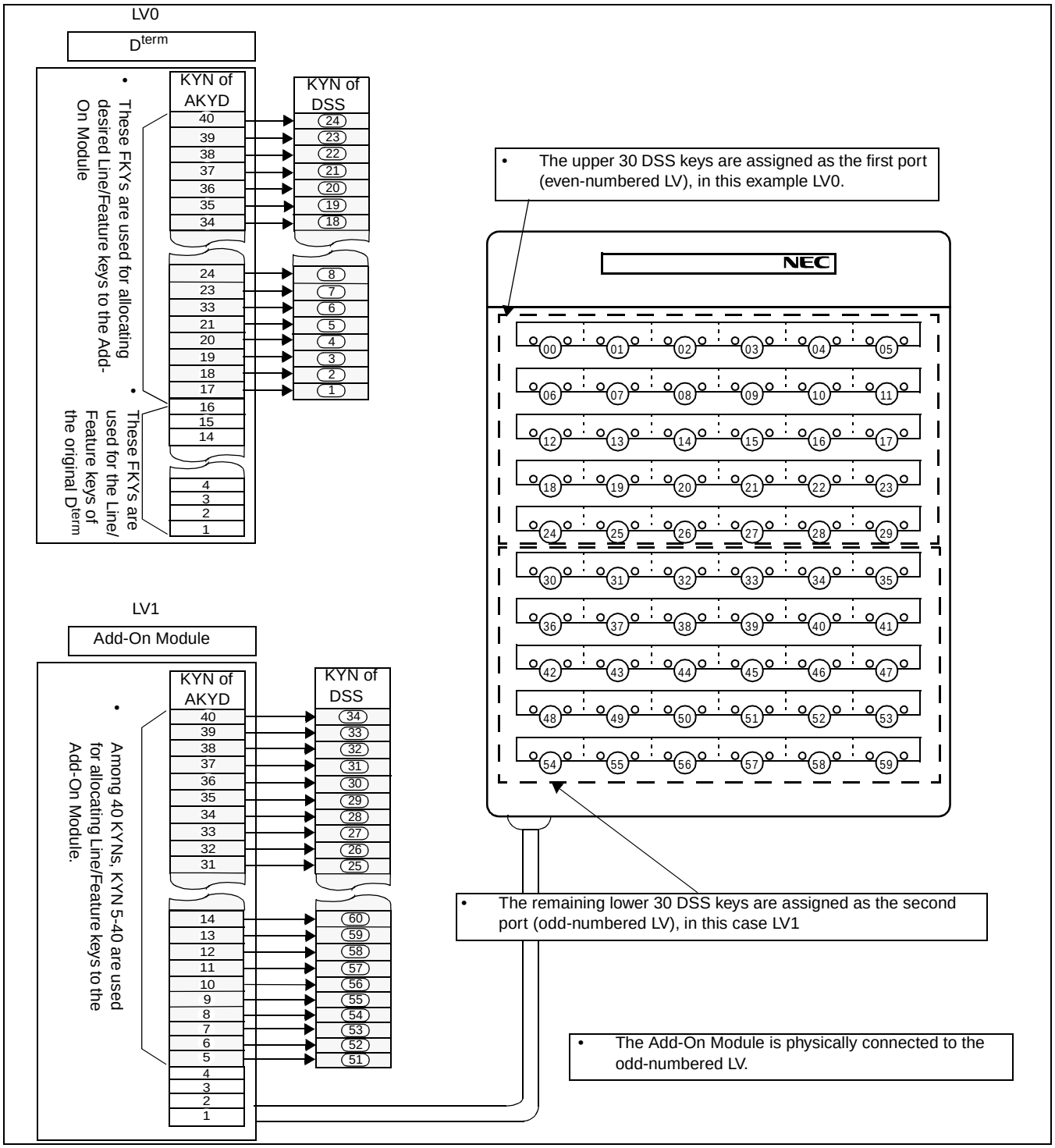


Figure 1-9 Line/Feature Access Key Allocation (Add-ON Module)

The following Line/Feature keys must be assigned for KYNs 1 through 24:

- MESSAGE REMINDER (FKY = 6)
- My Line and/or Prime Line of the master D^{term}.

KYNs 49 through 60 cannot be assigned for line features. (I-USE INDICATION, I-HOLD INDICATION can not be used since these keys are not equipped with LEDs.)

To assign Speed Calling-One Touch (FKY = 49), use KYNs 1 through 16 and 25 through 52, since the memory area is retained for these KYNs only.

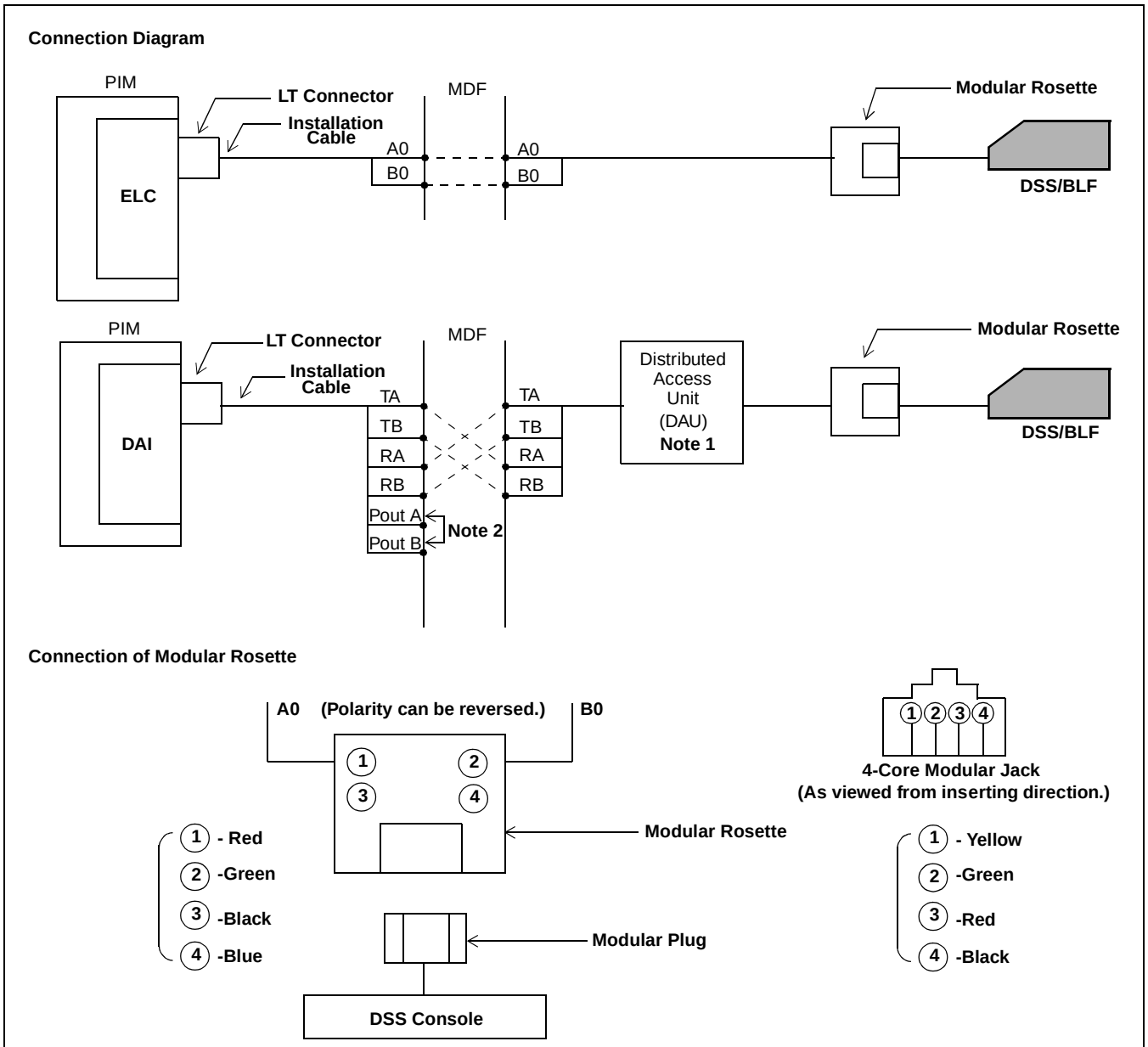
This page is for your notes.

CHAPTER 2 INSTALLATION PROCEDURE

This chapter describes the installation procedure for the DSS console. It includes a connection diagram and the locations of the cable leads.

1. Connection Diagram for DSS/BLF

When the DSS console is used as a DSS/BLF, connect the associated cables referring to Figure 2-1.



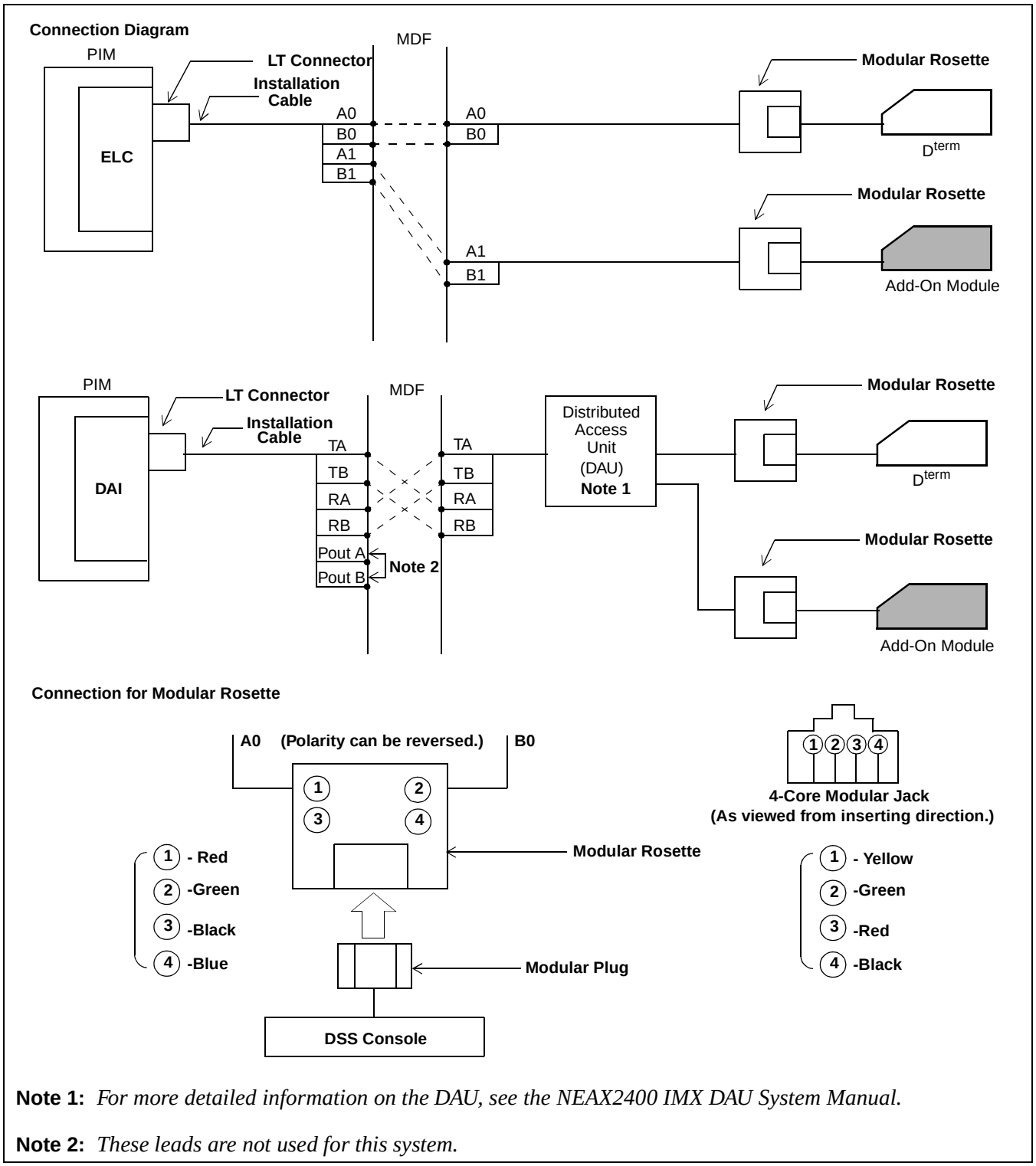
Note 1: *For more detailed information on the DAU, see the NEAX2400 IMX DAU System Manual.*

Note 2: *These leads are not used for this system.*

Figure 2-1 Connection Diagram for the DSS/BLF

2. Connection Diagram for the Add-On Module

When the DSS console is used as an Add-On Module, connect the associated cables referring to Figure 2-2.



Note 1: *For more detailed information on the DAU, see the NEAX2400 IMX DAU System Manual.*

Note 2: *These leads are not used for this system.*

Figure 2-2 Connection Diagram for the Add-On Module

3. Cable Lead Location

The leads appear as shown below. Figure 2-3 illustrates an example of cable lead locations. For more detailed information on each card, see the NEAX2400 IMX Circuit Card Manual and/or the NEAX2400 IMX DAU System Manual.

(1) PA-ELCH (ELC)

26	B0	1	A0
27	B1	2	A1
28	B2	3	A2
29	B3	4	A3
30	B4	5	A4
31	B5	6	A5
32	B6	7	A6
33	B7	8	A7
34	B8	9	A8
35	B9	10	A9
36	B10	11	A10
37	B11	12	A11
38	B12	13	A12
39	B13	14	A13
40	B14	15	A14
41	B15	16	A15
42		17	
43		18	
44		19	
45		20	
46		21	
47		22	
48		23	
49		24	
50		25	

(2) PA-DAIG-A/DAIJ-A

26		1	
27	E	2	E
28		3	
29	RB	4	RB
30	POUTB	5	POUTA
31		6	
32		7	
33	TB	8	TA
34		9	
35		10	
36		11	
37		12	
38		13	
39		14	
40		15	
41		16	
42		17	
43		18	
44		19	
45		20	
46		21	
47		22	
48		23	
49		24	
50		25	

Figure 2-3 Example of Cable Lead Location

This page is for your notes.

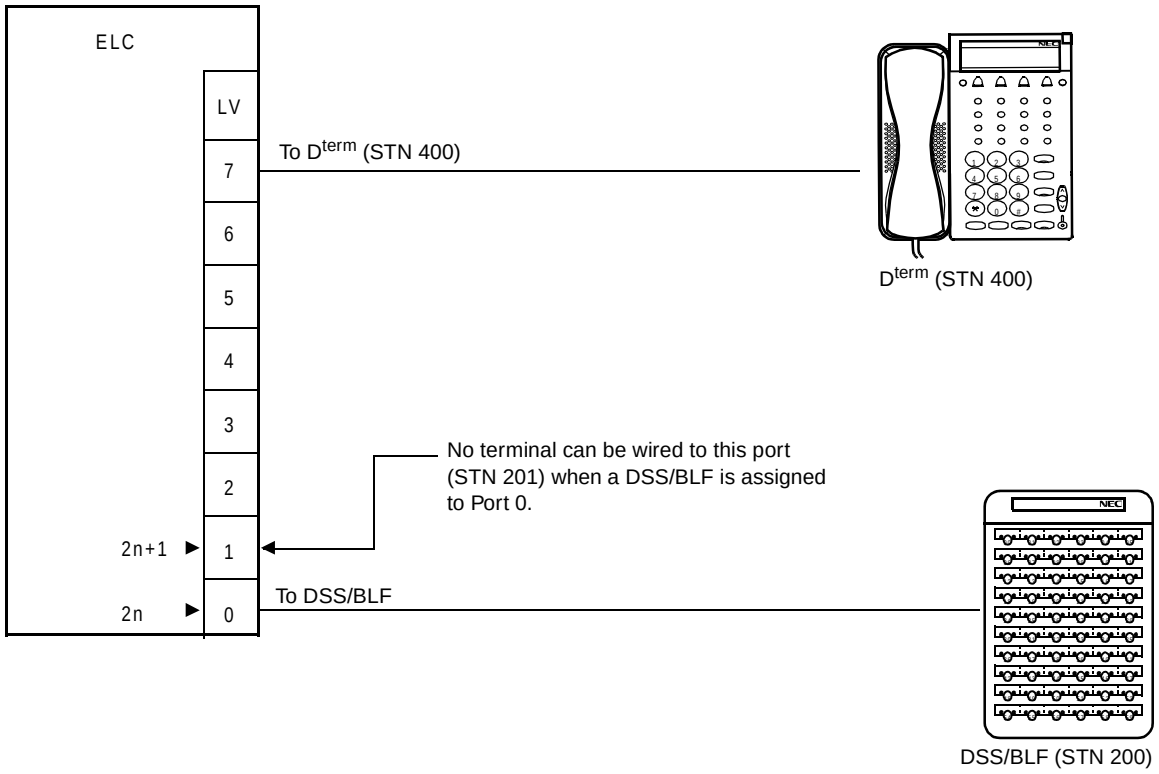
CHAPTER 3 DATA PROGRAMMING

This chapter describes how to program office data associated with the DSS.

1. DSS/BLF

This section covers how to assign Office Data for a DSS/BLF. A sample data assignment is shown in Figure 3-1. In this example the DSS/BLF and the D^{term} are assigned as follows:

TERMINAL	LINE EQUIPMENT NUMBER (LEN)	STATION NUMBER (STN)
DSS/BLF	000100	200 - 201 **Note**
D^{term}	000107	400



Note: *Only two station numbers are required to program DSS keys. Accordingly, these numbers are not used when operating the DSS/BLF.*

Figure 3-1 Example of Data Programming for DSS/BLF

2. Data Programming Procedure (DSS/BLF)

When assigning DSS/BLF data, perform the following procedure. "X" indicates the value should be tailored to the existing system.

STEP 1: ASYD

Assign the DSS/BLF to an even-numbered LEN level. (In this example LV 0 is used.)

```
TN  :  X
STN :  200
LEN :  0 0 0 1 0 (0)  <----  Even-numbered LEN level
TEC :  (1 2)          <----  Fixed
RSC :  X
SFC :  X
```

Assign a station to be used for programming DSS keys (KYNs 31-60) to the subsequent LENS. (In this example, LV 1 is used.

```
TN  :  X
STN :  201
LEN :  0 0 0 1 0 (1)  <----  Subsequent LEN level
TEC :  (1 2)          <----  Fixed
RSC :  X
SFC :  X
```

STEP 2: AKYD

Assign key data for the 60 DSS keys. The upper 30 DSS keys (KYNs 1-30) are assigned using the first port (LV 0 in this example) and the remaining lower DSS keys (KYNs 31-60) are assigned using the second port (LV 1 in this example). Either KYN 1 or KYN 2 can be assigned first.

Be sure to assign the associated D^{term} station number as the "Station Number of Prime Line."

```
TN      :  X
STN     :  200 or 201
TP      :  (1)    <----  Buttons 1-40 are assignable
PRI     :  0
PL TN   :  X
PL STN  :  (400)  <----  Enter the associated D^term as a PL STN.
S       :  0             = Off Hook Suppression is off
MWD     :  0
LN PRE  :  0             = Prime Line Pickup
```

KYN 1 must be programmed as the DSS/BLF station that has been assigned by the ASDT command.

```
KYN  :  1
KY1  :  2                = Multi Line
KD   :  0                = Line
TN   :  X
STN  :  (200 or 201)  <--  DSS/BLF number
RG   :  X
```

KYN 2 must be programmed as the associated D^{term} station.

KYN	:	2	
KY1	:	2	= Multi Line
KD	:	0	= Line
TN	:	X	
STN	:	400	← Associated D^{term}
RG	:	X	

Assign desired station numbers to the corresponding DSS keys on the console. In this instance, KYNs 10-39 are used. The upper and lower 30 keys are associated with even-numbered ports and odd-numbered ports as shown below.

KYN	:	1	0-39
KY1	:	2	= Multi Line
KD	:	2	For DSS Console Key
TN	:	X	
STN	:	XXXXX	← Desired station number (maximum 5 digits)

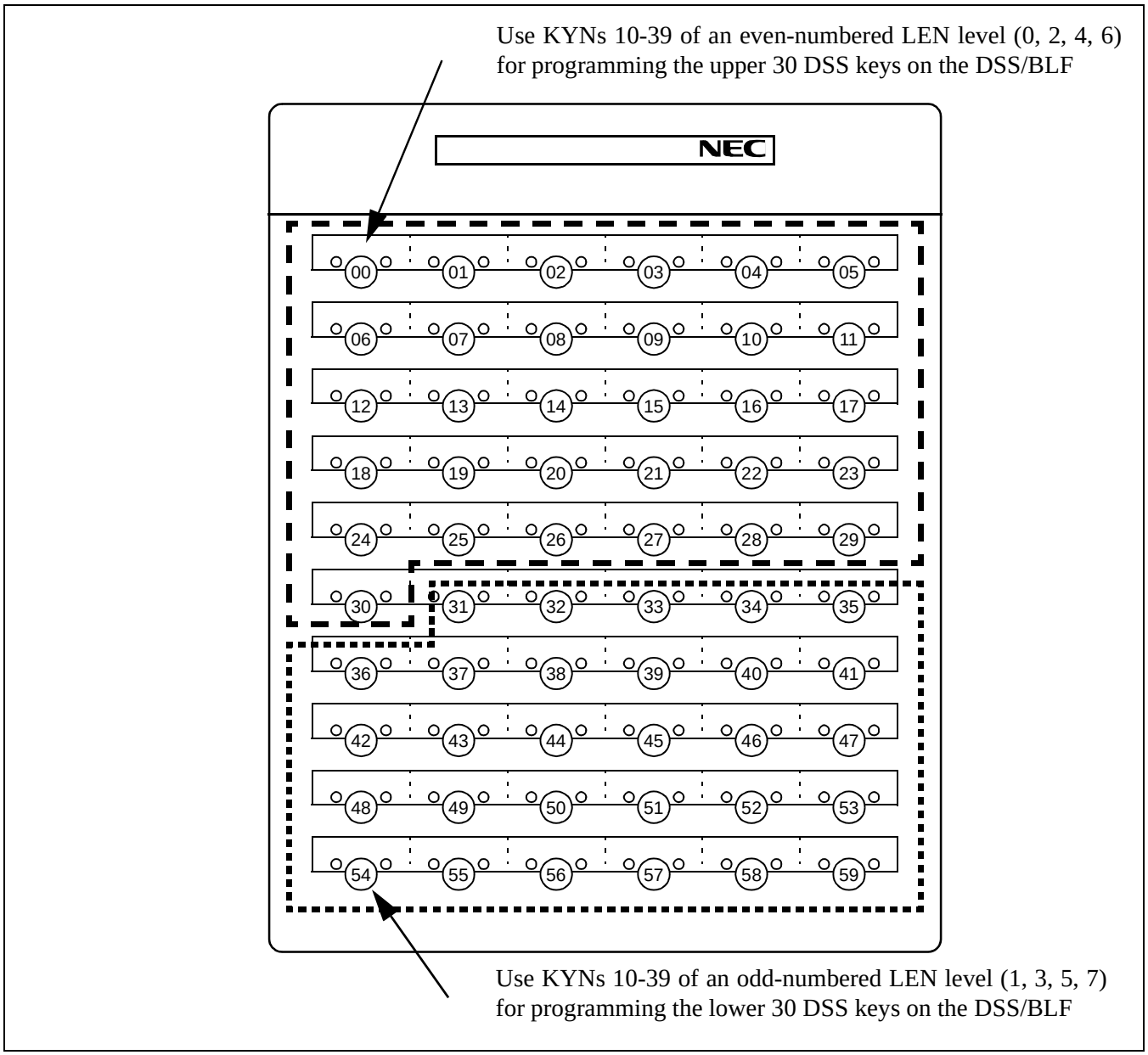


Figure 3-2 DSS Key Assignment for DSS/BLF

2.1 Example of Data Programming for DSS/BLF

2.1.1 ASDT

TENANT NUMBER (TN) 1-63	STATION NUMBER (STN) Max. 5 Digits	LINE EQUIPMENT NUMBER (LENS)				TELEPHONE EQUIPMENT CLASS (TEC) 1-31	ROUTE RESTRICTION CLASS (RSC) 0-15	SERVICE FEATURE CLASS (SFC) 0-15	REMARKS
		MG	U	G	LV				
X	200	0 0	0	1 0	*0	12	×	×	For DSS/BLF
	201	0 0	0	1 0	**1	12	×	×	For DSS/BLF
	400	0 0	0	1 0	7	12	×	×	For Associated D^{term}

Note: **0 = Even-numbered LEN level / **1 = Odd-numbered LEN level*

2.1.2 AKYD

The following table shows DSS key assignment for even-numbered LV (2n).

MY LINE	
TENANT NUMBER (TN)	STATION NUMBER (STN)
X	200

PRIORITY FOR ANSWERING CALL (PRI) 0 - 4	PRIME LINE		ALLOW OG FROM PRIME LINE (S) 0/1	MESSAGE WAITING DATA DISPLAY SELECTION (MWD) 0/1	LINE PREFERENCE (LN PRE) 0/1	LINE PREFERENCE FOR SPEAKER BUTTON (SPK) 0 - 3	LINE PREFERENCE FOR ANSWER BUTTON (ANS) 0 - 2	LINE PREFERENCE FOR OUTGOING BUTTON (ORG) 0/1	TYPE OF D^{term} (TP) 0 - 3
	TENANT NUMBER (PL TN)	STATION NUMBER (PL ST)							
0	X	400 (= D^{term})	0	X	0	0	_	_	1

KEY NUMBER (KYN) 1-16	SERVICE CONDITION (KY) 0 - 2	FEATURE KEY CODE (FKY) 1 - 320	KIND OF LINE (KD) 0 - 2	MULTI-LINE			INTERCOM	
				TENANT NUMBER (TN) 1-15	STATION NUMBER (STN)	RING INFORMATION FOR EACH LINE (RG) 0-7	KIND OF INTERCOM (ICM) 0 - 2	GROUP ID NUMBER (G-ID) 1 - 50
1	2 (= Multi Line)	–	0 (= Line)	X	200	**X**	–	–
2	2 (= Multi Line)	–	0 (= Line)	X	400 (D^{term})	**X**	–	–
3								
4								
5								
6								
7								
8								
9								
10	2 (= Multi Line)	–	2 (= DSS)	X	X	–	–	–
11	2 (= Multi Line)	–	2 (= DSS)	X	X	–	–	–
12	2 (= Multi Line)	–	2 (= DSS)	X	X	–	–	–
13	2 (= Multi Line)	–	2 (= DSS)	X	X	–	–	–
14	2 (= Multi Line)	–	2 (= DSS)	X	X	–	–	–
15	2 (= Multi Line)	–	2 (= DSS)	X	X	–	–	–
16	2 (= Multi Line)	–	2 (= DSS)	X	X	–	–	–
17	2 (= Multi Line)	–	2 (= DSS)	X	X	–	–	–
18	2 (= Multi Line)	–	2 (= DSS)	X	X	–	–	–
19	2 (= Multi Line)	–	2 (= DSS)	X	X	–	–	–
20	2 (= Multi Line)	–	2 (= DSS)	X	X	–	–	–
21	2 (= Multi Line)	–	2 (= DSS)	X	X	–	–	–
22	2 (= Multi Line)	–	2 (= DSS)	X	X	–	–	–
23	2 (= Multi Line)	–	2 (=DSS)	X	X	–	–	–

MY LINE	
TENANT NUMBER (TN)	**STATION NUMBER (STN)**
X	200

PRIORITY FOR ANSWERING CALL (PRI) 0 - 4	PRIME LINE		ALLOW OG FROM PRIME LINE (S) 0/1	MESSAGE WAITING DATA DISPLAY SELECTION (MWD) 0/1	LINE PREFERENCE (LN PRE)	LINE PREFERENCE FOR SPEAKER BUTTON (SPK) 0 - 3	LINE PREFERENCE FOR ANSWER BUTTON (ANS) 0 - 2	LINE PREFERENCE FOR OUTGOING BUTTON (ORG) 0/1	TYPE OF D^{term} (TP) 0 -3
	TENANT NUMBER (PL TN)	STATION NUMBER (PL ST)							
0	X	400 (= D^{term})	0	X	0	0	_	_	1

KEY NUMBER (KYN) 1-16	SERVICE CONDITION (KY) 0 - 2	FEATURE KEY CODE (FKY) 1 - 320	KIND OF LINE (KD) 0 - 2	MULTI-LINE			INTERCOM	
				TENANT NUMBER (TN)	STATION NUMBER (STN)	RING INFORMATION FOR EACH LINE (RG)	KIND OF INTERCOM (ICM) 0 - 2	GROUP ID NUMBER (G-ID) 1 - 50
24	2 (= Multi Line)	–	2 (= DSS)	X	X	–	–	–
25	2 (= Multi Line)	–	2 (= DSS)	X	X	–	–	–
26	2 (= Multi Line)	–	2 (= DSS)	X	X	–	–	–
27	2 (= Multi Line)	–	2 (= DSS)	X	X	–	–	–
28	2 (= Multi Line)	–	2 (= DSS)	X	X	–	–	–
29	2 (= Multi Line)	–	2 (= DSS)	X	X	–	–	–
30	2 (= Multi Line)	–	2 (= DSS)	X	X	–	–	–
31	2 (= Multi Line)	–	2 (= DSS)	X	X	–	–	–
32	2 (= Multi Line)	–	2 (= DSS)	X	X	–	–	–
33	2 (= Multi Line)	–	2 (= DSS)	X	X	–	–	–
34	2 (= Multi Line)	–	2 (= DSS)	X	X	–	–	–
35	2 (= Multi Line)	–	2 (= DSS)	X	X	–	–	–
36	2 (= Multi Line)	–	2 (= DSS)	X	X	–	–	–
37	2 (= Multi Line)	–	2 (= DSS)	X	X	–	–	–
38	2 (= Multi Line)	–	2 (= DSS)	X	X	–	–	–
39	2 (= Multi Line)	–	2 (= DSS)	X	X	–	–	–

The following table shows DSS key assignment for odd-numbered LV (2n + 1)

MY LINE	
TENANT NUMBER (TN)	STATION NUMBER (STN)
X	201

PRIORITY FOR ANSWERING CALL (PRI) 0 - 4	PRIME LINE		ALLOW OG FROM PRIME LINE (S) 0/1	MESSAGE WAITING DATA DISPLAY SELECTION (MWD) 0/1	LINE PREFERENCE (LN PRE) 0/1	LINE PREFERENCE FOR SPEAKER BUTTON (SPK) 0 - 3	LINE PREFERENCE FOR ANSWER BUTTON (ANS) 0 - 2	LINE PREFERENCE FOR OUTGOING BUTTON (ORG) 0/1	TYPE OF D^{term} (TP) 0 - 3
	TENANT NUMBER (PL TN)	STATION NUMBER (PL STN)							
0	X	400 (=D^{term})	0	X	0	0	–	–	1

KEY NUMBER (KYN) 1-16	SERVICE CONDITION (KY) 0 - 2	FEATURE KEY CODE (FKY) 1 - 320	KIND OF LINE (KD) 0 - 2	MULTI-LINE			INTERCOM	
				TENANT NUMBER (TN)	STATION NUMBER (STN)	RING INFORMATION FOR EACH LINE (RG) 0-7	KIND OF INTERCOM (ICM) 0 - 2	GROUP ID NUMBER (G-ID) 1 - 50
1	2 (= Multi Line)	–	0 (= Line)	X	200	X	–	–
2	2 (= Multi Line)	–	0 (= Line)	X	400 (D^{term})	X	–	–
3								
4								
5								
6								
7								
8								
9								
10	2 (= Multi Line)	–	2 (= DSS)	X	X	–	–	–
11	2 (= Multi Line)	–	2 (= DSS)	X	X	–	–	–
12	2 (= Multi Line)	–	2 (= DSS)	X	X	–	–	–
13	2 (= Multi Line)	–	2 (= DSS)	X	X	–	–	–
14	2 (= Multi Line)	–	2 (= DSS)	X	X	–	–	–
15	2 (= Multi Line)	–	2 (= DSS)	X	X	–	–	–
16	2 (= Multi Line)	–	2 (= DSS)	X	X	–	–	–
17	2 (= Multi Line)	–	2 (= DSS)	X	X	–	–	–
18	2 (= Multi Line)	–	2 (= DSS)	X	X	–	–	–
19	2 (= Multi Line)	–	2 (= DSS)	X	X	–	–	–
20	2 (= Multi Line)	–	2 (= DSS)	X	X	–	–	–
21	2 (= Multi Line)	–	2 (= DSS)	X	X	–	–	–
22	2 (= Multi Line)	–	2 (= DSS)	X	X	–	–	–
23	2 (= Multi Line)	–	2 (=DSS)	X	X	–	–	–

MY LINE	
TENANT NUMBER (TN)	**STATION NUMBER (STN)**
X	**200**

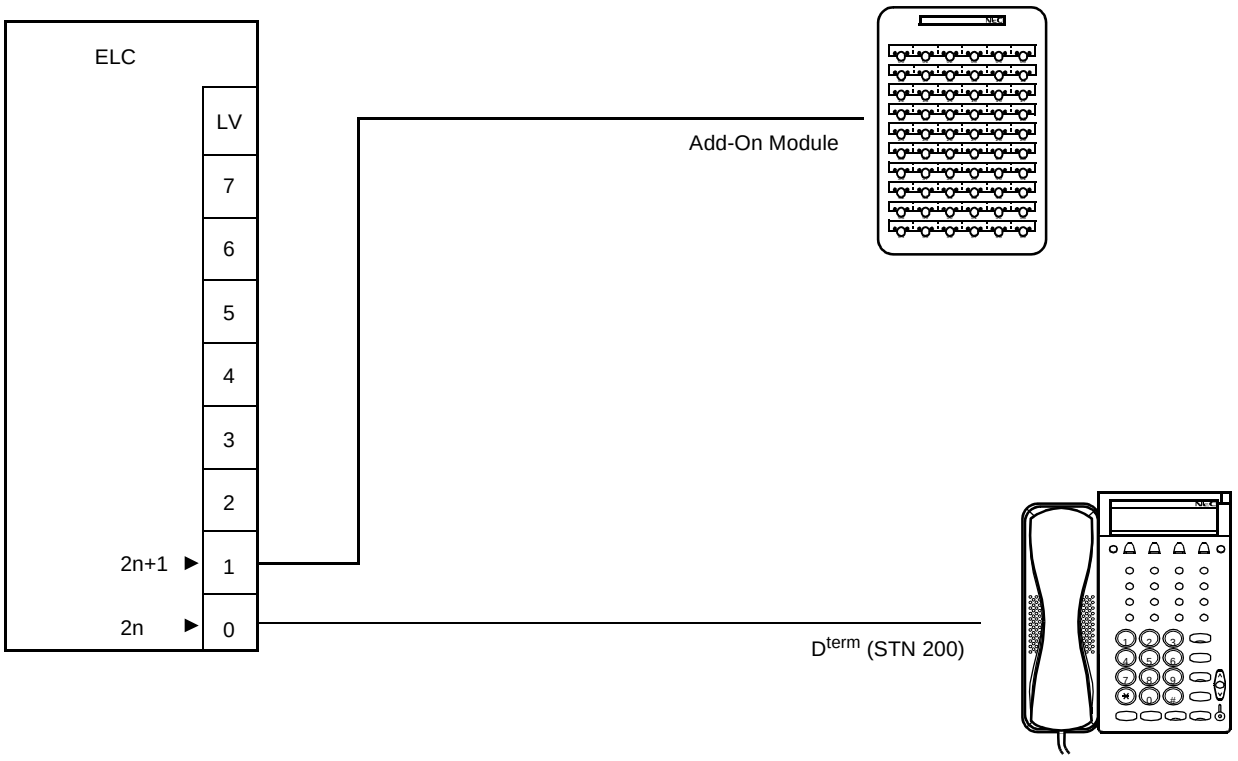
PRIORITY FOR ANSWERING CALL (PRI) 0 - 4	PRIME LINE		ALLOW OG FROM PRIME LINE (S) 0/1	MESSAGE WAITING DATA DISPLAY SELECTION (MWD) 0/1	LINE PREFERENCE (LN PRE)	LINE PREFERENCE FOR SPEAKER BUTTON (SPK) 0 - 3	LINE PREFERENCE FOR ANSWER BUTTON (ANS) 0 - 2	LINE PREFERENCE FOR OUTGOING BUTTON (ORG) 0/1	TYPE OF D^{term} (TP) 0 -3
	TENANT NUMBER (PL TN)	STATION NUMBER (PL ST)							
0	X	400 **(=D^{term})**	0	X	0	0	–	–	1

KEY NUMBER (KYN) 1-16	SERVICE CONDITION (KY) 0 - 2	FEATURE KEY CODE (FKY) 1 - 320	KIND OF LINE (KD) 0 - 2	MULTI-LINE			INTERCOM	
				TENANT NUMBER (TN)	STATION NUMBER (STN)	RING INFORMATION FOR EACH LINE (RG)	KIND OF INTERCOM (ICM) 0 - 2	GROUP ID NUMBER (G-ID) 1 - 50
24	2 (= Multi Line)	–	2 (= DSS)	X	X	–	–	–
25	2 (= Multi Line)	–	2 (= DSS)	X	X	–	–	–
26	2 (= Multi Line)	–	2 (= DSS)	X	X	–	–	–
27	2 (= Multi Line)	–	2 (= DSS)	X	X	–	–	–
28	2 (= Multi Line)	–	2 (= DSS)	X	X	–	–	–
29	2 (= Multi Line)	–	2 (= DSS)	X	X	–	–	–
30	2 (= Multi Line)	–	2 (= DSS)	X	X	–	–	–
31	2 (= Multi Line)	–	2 (= DSS)	X	X	–	–	–
32	2 (= Multi Line)	–	2 (= DSS)	X	X	–	–	–
33	2 (= Multi Line)	–	2 (= DSS)	X	X	–	–	–
34	2 (= Multi Line)	–	2 (= DSS)	X	X	–	–	–
35	2 (= Multi Line)	–	2 (= DSS)	X	X	–	–	–
36	2 (= Multi Line)	–	2 (= DSS)	X	X	–	–	–
37	2 (= Multi Line)	–	2 (= DSS)	X	X	–	–	–
38	2 (= Multi Line)	–	2 (= DSS)	X	X	–	–	–
39	2 (= Multi Line)	–	2 (= DSS)	X	X	–	–	–

3. Add-On Module

This section covers how to assign an Add-On Module. In Figure 3-3, an Add-On Module and the associated D^{term} are assigned as follows:

TERMINAL	LINE EQUIPMENT NUMBER (LEN)	STATION NUMBER (ST)
Add-On Module	000101	201 **Note**
D^{term}	000100	200



Note: *Station number 201 is only used to assign Line/Feature access keys for the Add-On Module. Accordingly, these numbers are not used when operating the Add-On Module.*

Figure 3-3 Example of Data Programming for Add-On Module

4. Data Programming Procedure for Add-On Module

When assigning Add-On Module data, perform the following procedure. "X" indicates the value should be tailored to the existing system.

STEP 1: ASDT

Assign a D^{term} to an even-numbered LEN level. (In this example, LV 0 is used.) Assign the Add-On Module to the subsequent odd-numbered LEN level. (In this example LV 1 is used.)

```
TN  :  X
STN :  201
LEN :  0 0 0 1 0 (1) <-- Odd-numbered LEN level
TEC :  (1 2)  <-- Fixed
RSC :  X
SFC :  X
```

STEP 2: AKYD

Assign Line/Feature access keys to the Add-On Module. The upper 24 Line/Feature access keys belong to the associated D^{term} and the remaining lower 36 Line/Feature access keys belong to the Add-On Module.

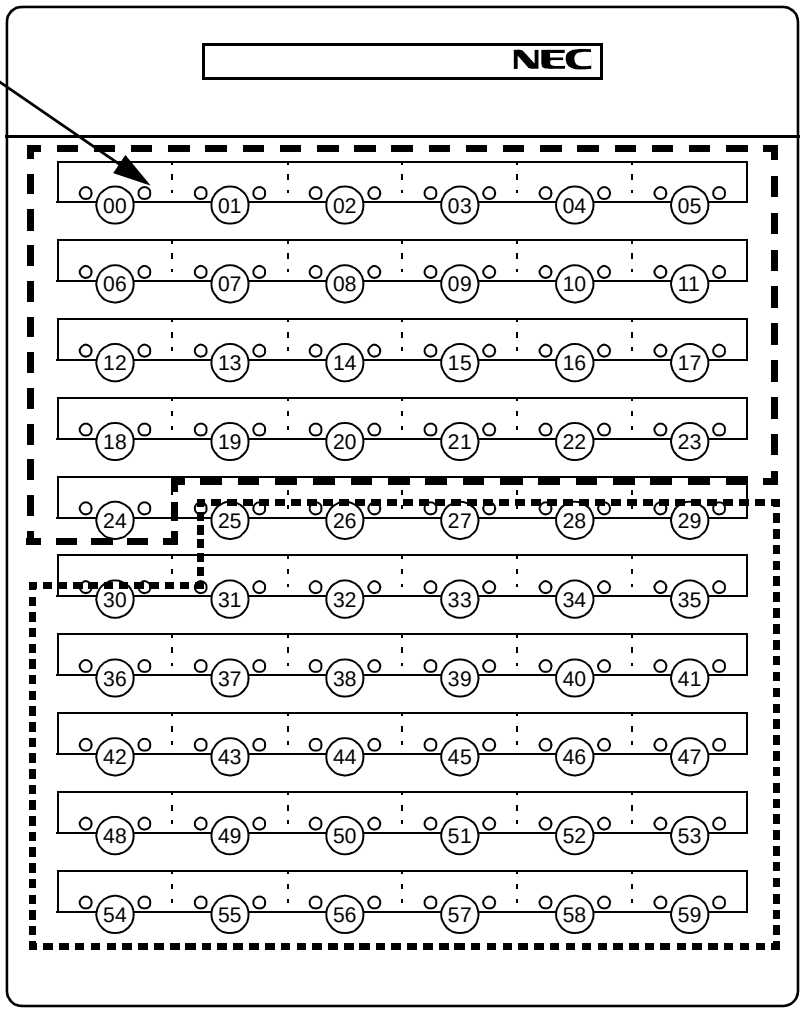
Use the associated D^{term} port to assign information for the D^{term} and first 24 keys on the ADM.

```
TN       :  X
STN      :  200
TP       :  (1)      <-- Buttons 1-39 are assignable
PRI      :  0
PL TN    :  X
PL STN   :  200
S        :  0        = Off Hook Suppression is off
MWD      :  X
LN PRE   :  0        = Prime Line Pickup
KYN      :  1-16     For D^term
            (17-40)  <-- Correspond to KYNs (1-24) on the Add-On Module
KY1      :  X
KD       :  X
TN       :  X
STN      :  XXXX
RG       :  X
ICM      :  X
G-ID     :  X
```

Use the Add-On Module port to assign key information for the last 36 keys on the ADM.

TN	:	X	
STN	:	201	
TP	:	1	Buttons 1-39 are assignable
PRI	:	0	
PL TN	:	X	
PL STN	:	200	Enter the associated D^{term} as a PL STN
S	:	0	= Off Hook Suppression is off
MWD	:	X	
LN PRE	:	0	= Prime Line Pickup
KYN	:	5-40	Corresponds to KYNs 25-60 on the Add-On Module
KYI	:	X	
KD	:	X	
TN	:	X	
STN	:	XXXX	
RG	:	X	
ICM	:	X	
G-ID	:	X	

Use KYNs 17-40 of the associated D^{term} for programming the first 24 Line/Feature access keys on the Add-On Module.



Use KYNs 5-40 of the Add-On Module for programming the remaining 36 Line/Feature access keys on the Add-On Module.

Figure 3-4 DSS Key Assignment for Add-On Module

4.1 Example of Data Programming for Add-On Module

4.1.1 ASDT

TENANT NUMBER (TN) 1-63	STATION NUMBER (STN) Max. 5 Digits	LINE EQUIPMENT NUMBER (LENS)				TELEPHONE EQUIPMENT CLASS (TEC) 1-31	ROUTE RESTRICTION CLASS (RSC) 0-15	SERVICE FEATURE CLASS (SFC) 0-15	REMARKS
		MG	U	G	LV				
X	200	0 0	0	1 0	*0	X	X	X	For D^{term}
	201	0 0	0	1 0	**1	X	X	X	For Add-On Module

Note: **0 = Even numbered LEN level / **1 = Odd numbered LEN level*

4.1.2 AKYD

For Line/Feature access keys: KYNs 1 - 24 (D^{term})

MY LINE	
TENANT NUMBER (TN)	STATION NUMBER (STN)
X	200 (= D^{term})

PRIORITY FOR ANSWERING CALL (PRI)	PRIME LINE		ALLOW OG FROM PRIME LINE (S) 0/1	MESSAGE WAITING DATA DISPLAY SELECTION (MWD) 0/1	LINE PREFERENCE (LN PRE) 0/1	LINE PREFERENCE FOR SPEAKER BUTTON (SPK) 0 - 3	LINE PREFERENCE FOR ANSWER BUTTON (ANS) 0 - 2	LINE PREFERENCE FOR OUTGOING BUTTON (ORG) 0/1	TYPE OF D^{term}
	TENANT NUMBER (PL TN)	STATION NUMBER (PL STN)							
0	X	200 (= D^{term})	0	X	0	0	–	–	1

KEY NUMBER (KYN)	SERVICE CONDITION (KY) 0 - 2	FEATURE KEY CODE (FKY) 1 - 320	KIND OF LINE (KD) 0 - 2	MULTI-LINE			INTERCOM	
				TENANT NUMBER (TN)	STATION NUMBER (STN)	RING INFORMATION FOR EACH LINE (RG) 0 - 7	KIND OF INCOM (CM) 0 - 2	GROUP ID NUMBER (G-ID) 1 - 50
1	2	X	0	1	200	X	X	X
2	X	X	X	X	X	X	X	X
3	X	X	X	X	X	X	X	X
4	X	X	X	X	X	X	X	X
5	X	X	X	X	X	X	X	X
6	X	X	X	X	X	X	X	X
7	X	X	X	X	X	X	X	X
8	X	X	X	X	X	X	X	X

MY LINE	
TENANT NUMBER (TN)	STATION NUMBER (STN)
X	200 (= D^{term})

PRIORITY OF ANSWERING CALL (PRI)	PRIME LINE		ALLOW OG FROM PRIME LINE (S) 0/1	MESSAGE WAITING DATA DISPLAY SELECTION (MWD) 0/1	LINE PREFERENCE (LN PRE)	LINE PREFERENCE FOR SPEAKER BUTTON (SPK) 0 - 3	LINE PREFERENCE FOR ANSWER BUTTON (ANS) 0 - 2	LINE PREFERENCE FOR OUTGOING BUTTON (ORG) 0/1	TYPE OF D^{term}
	TENANT NUMBER (PL TN)	STATION NUMBER (PL STN)							
0	X	200 (= D^{term})	0	X	0	0	–	–	1

KEY NUMBER (KYN)	SERVICE CONDITION (KY) 0 - 2	FEATURE KEY CODE (FKY) 1 - 320	KIND OF LINE (KD) 0 - 2	MULTI-LINE			INTERCOM	
				TENANT NUMBER (TN)	STATION NUMBER (STN)	RING INFORMATION FOR EACH LINE (RG) 0 - 7	KIND OF INCOM (CM) 0 - 2	GROUP ID NUMBER (G-ID) 1 - 50
9	X	X	X	X	X	X	X	X
10	X	X	X	X	X	X	X	X
11	X	X	X	X	X	X	X	X
12	X	X	X	X	X	X	X	X
13	X	X	X	X	X	X	X	X
14	X	X	X	X	X	X	X	X
15	X	X	X	X	X	X	X	X
16	X	X	X	X	X	X	X	X
17	X	X	X	X	X	X	X	X
18	X	X	X	X	X	X	X	X
19	X	X	X	X	X	X	X	X
20	X	X	X	X	X	X	X	X
21	X	X	X	X	X	X	X	X
22	X	X	X	X	X	X	X	X
23	X	X	X	X	X	X	X	X
24	X	X	X	X	X	X	X	X
25	X	X	X	X	X	X	X	X
26	X	X	X	X	X	X	X	X
27	X	X	X	X	X	X	X	X
28	X	X	X	X	X	X	X	X
29	X	X	X	X	X	X	X	X
30	X	X	X	X	X	X	X	X
31	X	X	X	X	X	X	X	X
32	X	X	X	X	X	X	X	X

MY LINE	
TENANT NUMBER (TN)	**STATION NUMBER (STN)**
X	200 (= D^{term})

PRIORITY OF ANSWERING CALL (PRI)	PRIME LINE		ALLOW OG FROM PRIME LINE (S) 0/1	MESSAGE WAITING DATA DISPLAY SELECTION (MWD) 0/1	LINE PREFERENCE (LN PRE)	LINE PREFERENCE FOR SPEAKER BUTTON (SPK) 0 - 3	LINE PREFERENCE FOR ANSWER BUTTON (ANS) 0 - 2	LINE PREFERENCE FOR OUTGOING BUTTON (ORG) 0/1	TYPE OF D^{term}
	TENANT NUMBER (PL TN)	STATION NUMBER (PL STN)							
0	X	200 (= Dterm)	0	X	0	0	–	–	1

KEY NUMBER (KYN)	SERVICE CONDITION (KY) 0 - 2	FEATURE KEY CODE (FKY) 1 - 320	KIND OF LINE (KD) 0 - 2	MULTI-LINE			INTERCOM	
				TENANT NUMBER (TN)	STATION NUMBER (STN)	RING INFORMATION FOR EACH LINE (RG) 0 - 7	KIND OF INCOM (CM) 0 - 2	GROUP ID NUMBER (G-ID) 1 - 50
33	X	X	X	X	X	X	X	X
34	X	X	X	X	X	X	X	X
35	X	X	X	X	X	X	X	X
36	X	X	X	X	X	X	X	X
37	X	X	X	X	X	X	X	X
38	X	X	X	X	X	X	X	X
39	X	X	X	X	X	X	X	X
40	X	X	X	X	X	X	X	X

Note: **Buttons 1-40 are assignable / **Assignment of Line/Feature access keys (KYNs 1-16) on D^{term} "200" / **Assignment of Line/Feature access keys (KYNs 1-24) on Add-On Module "201"*

For Line/Feature access keys: KYNs 25-60 (Add-On Module)

MY LINE	
TENANT NUMBER (TN)	STATION NUMBER (STN)
X	201 (= Add-On Module)

PRIORITY FOR ANSWERING CALL (PRI)	PRIME LINE		ALLOW OG FROM PRIME LINE (S) 0/1	MESSAGE WAITING DATA DISPLAY SELECTION (MWD) 0/1	LINE PREFERENCE (LN PRE)	LINE PREFERENCE FOR SPEAKER BUTTON (SPK) 0 - 3	LINE PREFERENCE FOR ANSWER BUTTON (ANS) 0 - 2	LINE PREFERENCE FOR OUTGOING BUTTON (ORG) 0/1	TYPE OF D^{term}
	TENANT NUMBER (PL TN)	STATION NUMBER (PL STN)							
0	X	201 (= Add-On Module)	0	X	0	0	–	–	1

KEY NUMBER (KYN)	SERVICE CONDITION (KY) 0 - 2	FEATURE KEY CODE (FKY) 1 - 320	KIND OF LINE (KD) 0 - 2	MULTI-LINE			INTERCOM	
				TENANT NUMBER (TN)	STATION NUMBER (STN)	RING INFORMATION FOR EACH LINE (RG) 0 - 7	KIND OF INCOM (CM) 0 - 2	GROUP ID NUMBER (G-ID) 1 - 50
1	2 (= Multi Line)	–	0 (= Line)	X	201 (Add-on Module)	X	–	–
2								
3								
4								
5	X	X	X	X	X	X	X	X
6	X	X	X	X	X	X	X	X
7	X	X	X	X	X	X	X	X
8	X	X	X	X	X	X	X	X
9	X	X	X	X	X	X	X	X
10	X	X	X	X	X	X	X	X
11	X	X	X	X	X	X	X	X
12	X	X	X	X	X	X	X	X
13	X	X	X	X	X	X	X	X
14	X	X	X	X	X	X	X	X
15	X	X	X	X	X	X	X	X
16	X	X	X	X	X	X	X	X
17	X	X	X	X	X	X	X	X
18	X	X	X	X	X	X	X	X
19	X	X	X	X	X	X	X	X
20	X	X	X	X	X	X	X	X
21	X	X	X	X	X	X	X	X
22	X	X	X	X	X	X	X	X
23	X	X	X	X	X	X	X	X

MY LINE	
TENANT NUMBER (TN)	**STATION NUMBER (STN)**
X	201 (= Add-On Module)

PRIORITY FOR ANSWERING CALL (PRI)	PRIME LINE		ALLOW OG FROM PRIME LINE (S) 0/1	MESSAGE WAITING DATA DISPLAY SELECTION (MWD) 0/1	LINE PREFERENCE (LN PRE)	LINE PREFERENCE FOR SPEAKER BUTTON (SPK) 0 - 3	LINE PREFERENCE FOR ANSWER BUTTON (ANS) 0 - 2	LINE PREFERENCE FOR OUTGOING BUTTON (ORG) 0/1	TYPE OF D^{term}
	TENANT NUMBER (PL TN)	STATION NUMBER (PL STN)							
0	X	201 (= Add-On Module)	0	X	0	0	–	–	1

KEY NUMBER (KYN)	SERVICE CONDITION (KY) 0 - 2	FEATURE KEY CODE (FKY) 1 - 320	KIND OF LINE (KD) 0 - 2	MULTI LINE			INTERCOM	
				TENANT NUMBER (TN)	STATION NUMBER (STN)	RING INFORMATION FOR EACH LINE (RG) 0 - 7	KIND OF INCOM (CM) 0 - 2	GROUP ID NUMBER (G-ID) 1 - 50
24	X	X	X	X	X	X	X	X
25	X	X	X	X	X	X	X	X
26	X	X	X	X	X	X	X	X
27	X	X	X	X	X	X	X	X
28	X	X	X	X	X	X	X	X
29	X	X	X	X	X	X	X	X
30	X	X	X	X	X	X	X	X
31	X	X	X	X	X	X	X	X
32	X	X	X	X	X	X	X	X
33	X	X	X	X	X	X	X	X
34	X	X	X	X	X	X	X	X
35	X	X	X	X	X	X	X	X
36	X	X	X	X	X	X	X	X
37	X	X	X	X	X	X	X	X
38	X	X	X	X	X	X	X	X
39	X	X	X	X	X	X	X	X
40	X	X	X	X	X	X	X	X

5. Office Data Setting Sheets

This section contains blank data setting sheets for commands used by DSS. You can use these sheets to plan your data before installing the DSS.

5.1 ASDT

TENANT NUMBER (TN) 1-63	STATION NUMBER (STN) 5 DIGITS	LINE EQUIPMENT NUMBER (LENS)				TELEPHONE EQUIPMENT CLASS (TEC) 1-31	ROUTE RESTRICTION CLASS (RSC) 0-15	SERVICE FEATURE CLASS (SFC) 0-15	MAKE BUSY INFORMATION (MB) 0/1	REMARKS
		MG	U	G	LV					

5.2 AKYD

MY LINE	
TENANT NUMBER (TN)	STATION NUMBER (STN)

PRIORITY FOR ANSWERING CALL (PRI) 0-4	PRIME LINE		ALLOW OG FROM PRIME LINE (S) 0/1	MESSAGE WAITING DATA DISPLAY SELECTION (MWD) 0/1	LINE PREFERENCE (LN PRE) 0/1	LINE PREFERENCE FOR SPEAKER BUTTON (SPK) 0-3	LINE PREFERENCE FOR ANSWER BUTTON (ANS) 0-2	LINE PREFERENCE FOR OUTGOING BUTTON (ORG) 0/1	TYPE OF D^{term} (TP) 0-3
	TENANT NUMBER (PL TN)	STATION NUMBER (PL STN)							

KEY NUMBER (KYN)	SERVICE CONDITION (KYI) 0 – 2	FEATURE KEY CODE (FKY) 1-320	KIND OF LINE (KD) 0-2	MULTI LINE			INTERCOM	
				TENANT NUMBER (TN)	STATION NUMBER (STN)	RING INFORMATION FOR EACH LINE (RG) 0-7	KIND OF INCOM (ICM) 0-2	GROUP ID NUMBER (G-ID) 1-50
1								
2								
3								
4								
5								
6								
7								
8								
9								
10								
11								
12								
13								
14								
15								
16								
17								
18								
19								
20								
21								
22								
23								
24								
25								
26								

KEY NUMBER (KYN)	SERVICE CONDITION (KYI) 0 – 2	FEATURE KEY CODE (FKY) 1-320	KIND OF LINE (KD) 0-2	MULTI LINE			INTERCOM	
				TENANT NUMBER (TN)	STATION NUMBER (STN)	RING INFORMATION FOR EACH LINE (RG) 0-7	KIND OF INCOM (ICM) 0-2	GROUP ID NUMBER (G-ID) 1-50
27								
28								
29								
30								
31								
32								
33								
34								
35								
36								
37								
38								
39								
40								
F1								
F2								
F3								
F4								
F5								
F6								
F7								
F8								

Note 1: *When KYI = None, it is not necessary to assign any data.*

Note 2: *When KYI = FUNCTION, assign data for FKY only.*

Note 3: *When KYI = Multi-Line, assign data for multiple telephone only.*

MY LINE	
TENANT NUMBER (TN)	STATION NUMBER (STN)

PRIORITY FOR ANSWERING CALL (PRI) 0-4	PRIME LINE		ALLOW OG FROM PRIME LINE (S) 0/1	MESSAGE WAITING DATA DISPLAY SELECTION (MWD) 0/1	LINE PREFERENCE (LN PRE) 0/1	LINE PREFERENCE FOR SPEAKER BUTTON (SPK) 0-3	LINE PREFERENCE FOR ANSWER BUTTON (ANS) 0-2	LINE PREFERENCE FOR OUTGOING BUTTON (ORG) 0/1	TYPE OF D^{term} (TP) 0-3
	TENANT NUMBER (PL TN)	STATION NUMBER (PL STN)							

KEY NUMBER (KYN)	SERVICE CONDITION (KYI) 0 – 2	FEATURE KEY CODE (FKY) 1-320	KIND OF LINE (KD) 0-2	MULTI LINE			INTERCOM	
				TENANT NUMBER (TN)	STATION NUMBER (STN)	RING INFORMATION FOR EACH LINE (RG) 0-7	KIND OF INCOM (ICM) 0-2	GROUP ID NUMBER (G-ID) 1-50
1								
2								
3								
4								
5								
6								
7								
8								
9								
10								
11								
12								
13								
14								
15								
16								
17								
18								
19								
20								
21								
22								
23								
24								
25								
26								

KEY NUMBER (KYN)	SERVICE CONDITION (KYI) 0 – 2	FEATURE KEY CODE (FKY) 1-320	KIND OF LINE (KD) 0-2	MULTI LINE			INTERCOM	
				TENANT NUMBER (TN)	STATION NUMBER (STN)	RING INFORMATION FOR EACH LINE (RG) 0-7	KIND OF INCOM (ICM) 0-2	GROUP ID NUMBER (G-ID) 1-50
27								
28								
29								
30								
31								
32								
33								
34								
35								
36								
37								
38								
39								
40								
F1								
F2								
F3								
F4								
F5								
F6								
F7								
F8								

Note 1: *When KYI = None, it is not necessary to assign any data.*

Note 2: *When KYI =FUNCTION, assign data for FKY only.*

Note 3: *When KYI = Multi-Line, assign data for multiple telephone only.*

This page is for your notes.