

For \_\_\_\_\_

---

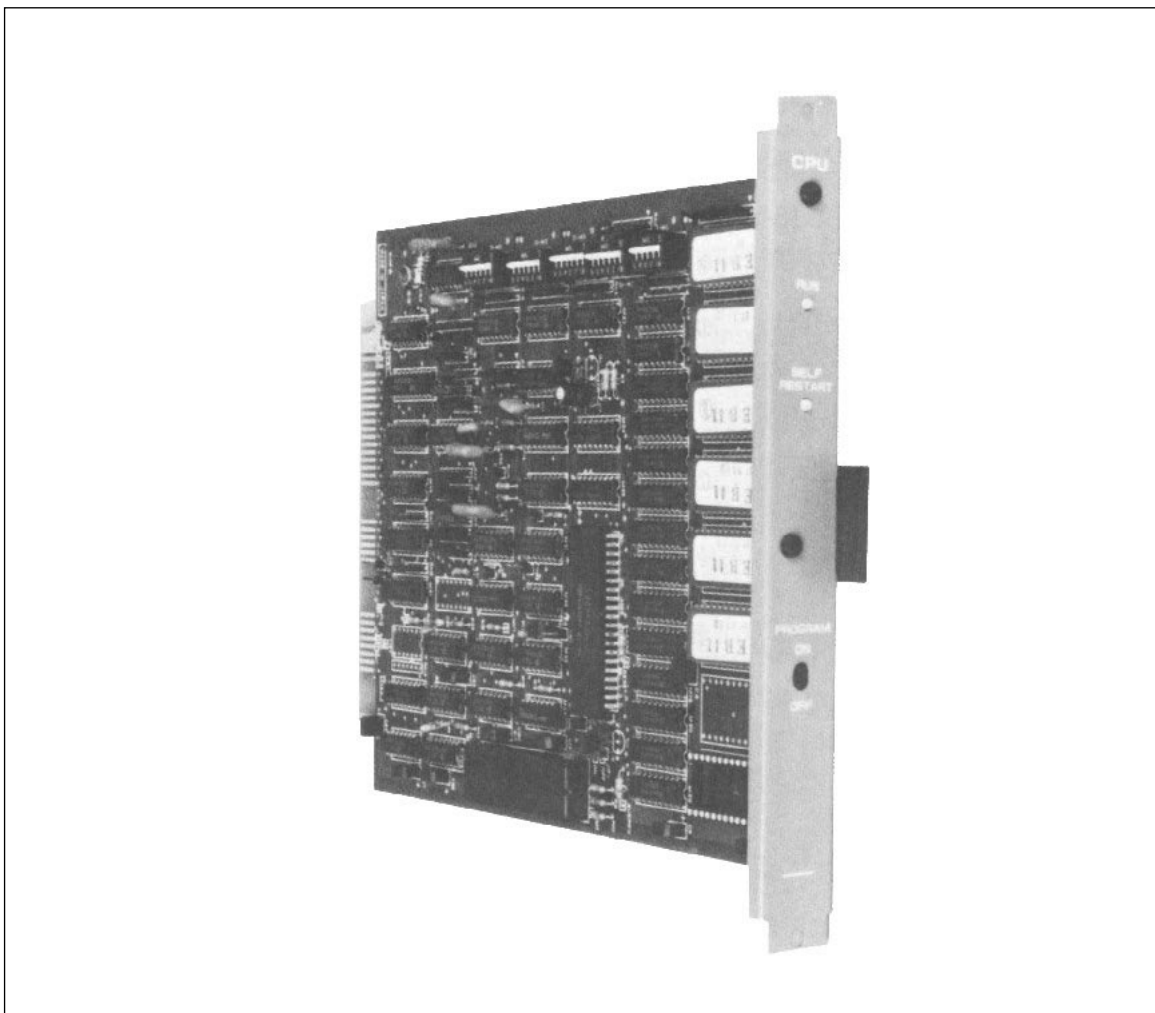
# TOA EXES-5000 INTERCOM SYSTEM

---

Central Processing Unit

**CPU-56**

## INSTALLATION HAND BOOK



## CONTENTS

	Page
• <b>INTRODUCTION TO THE INSTALLATION MANUAL FOR EXES - 5000</b> .....	3
• <b>FUNCTIONS WHICH REQUIRE ADDITIONAL UNITS</b> .....	4
• <b>TIELINE CONNECTION OF EXCHANGES</b> .....	6
• <b>WIRING FOR TIELINE CONNECTION OF THE EXCHANGES</b> .....	8

– **PART 1. Operating of CPU Unit and No. 200 Programming** –

1. Precautions for Installation of CPU-56 .....	10
2. <b>Initial CPU-56 set up</b> .....	11
3. Trouble Shooting .....	13
4. CPU-56 DIP-Switches for Function Selection .....	17
5. Function Code Table for Station No. 200 Programming .....	18
6. Station No. 200 Programming for Each Function .....	19

**< Function Group A >**

	FUNCTION CODE	Page
6-1 Executive Priority .....	50	19
6-2 Continuous Calling Tone .....	51	20
6-3 Stations Allowed Access to All Call .....	52	21
6-4 Stations Allowed Access to Conference .....	53	22
6-5 Stations Allowed Access to One-shot Make Output .....	56	23
6-6 Stations Allowed Access to Make/Break Output .....	57	24
6-7 Stations Allowed Access to 8 Selectable/Decimal Output .....	58	25
6-8 Stations Allowed Access to 4 Decimal Digits Output .....	59	26

**< Function Group B >**

6-9 Secretary Transfer .....	60	27
6-10 Master/Sub Relationship .....	61	28

**< Function Group C >**

6-11 Paging Response .....	70	29
6-12 Group Blocking: Establishment of each Group .....	71	30
6-13 Calling Party Indication .....	72	31

**< Function Group D >**

6-14 Group Blocking: Allowing Calls among Groups .....	81	32
6-15 Group Blocking: Allowing Access to Paging .....	82	33

7. Programming Record for Functions.....	34
• Function Table for Stations (1).....	34
• Function Table for Stations (2).....	35
• Function Table for Stations (3).....	36
• Function Table for Stations (4).....	37
• Paging Response Table .....	38
• 3 Examples of Group Blocking .....	39

— **Part 2. Function Selection for Data Transmitting and Receiving Units** —

8. Setting Channel Select Switch of Transmitting Unit (DT-E11) and Word Select Switch of Receiving Unit (DR-B61).....	40
9. DIP Switch Table for Data Transmitting and Receiving Units.....	41
10. System Diagram of Data Transmitting and Receiving Units. ....	42
11. Explanation of Data Transmitting Unit Output Channels .....	44
12. Explanation of Data Receiving Unit Output Channels.....	45
12-1 CH-0 IN-OUT Annunciation (500 contacts).....	45
12-2 CH-1 One-shot Make Output (50 contacts) .....	46
Make/Break Output (100 contacts).....	46
8-Selectable Make Outputs (9 Units) .....	46
Decimal Output (9 Units) .....	46
4 Decimal Digits Output (9 Units) .....	46
Pager Control Output (64 Contacts).....	46
12-3 CH-2 Calling Party Indication (Lamp) (1) .....	47
12-4 CH-3 Calling Party Indication (Lamp) (2).....	48

● INTRODUCTION TO THE OPERATION INSTALLATION MANUAL FOR EXES-5000

This manual forms part of the Installation Manual for TOA INTERCOM SYSTEM EXES-5000.

You may add the CPU-56 to your TOA INTERCOM SYSTEM EXES-5000, according to your specific needs, to obtain various other functions. Correct operation of these additional functions are **not necessarily available only by connection of the additional equipments/devices.**

Provision of such additional functions requires the following:

- (1) connection of the additional equipment, as required,
- (2) selection of functions which satisfy your needs and setting up these functions in the respective equipment

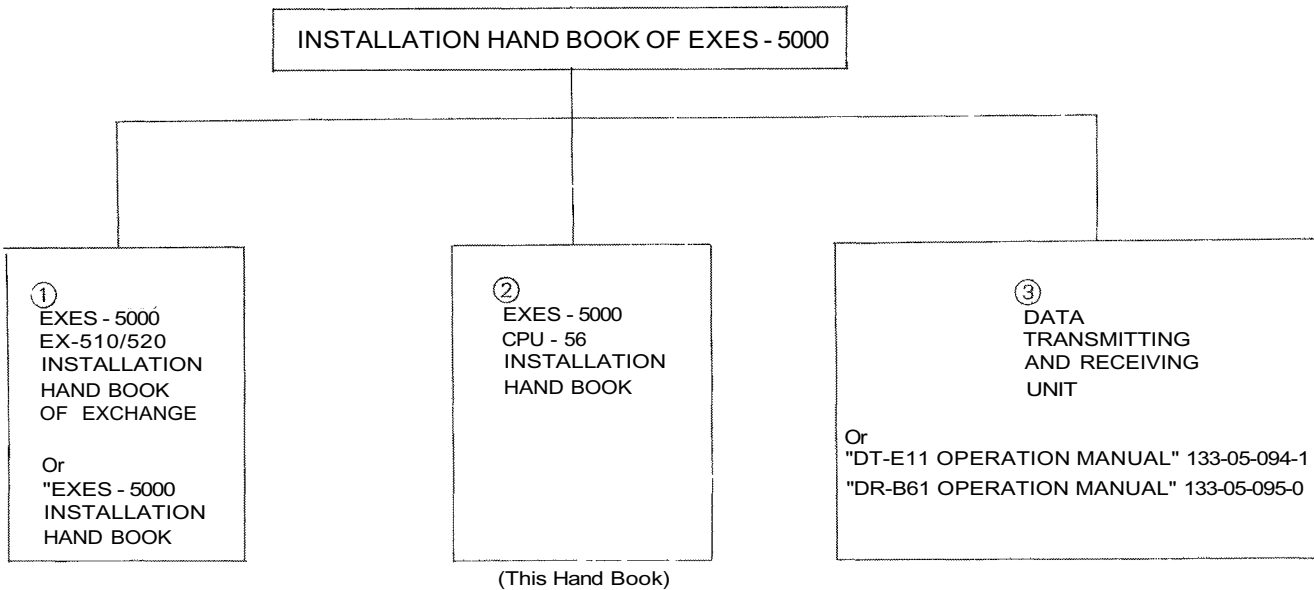
For (1) Connections of Equipment, etc., refer to ① Installation Handbook of Model EX-510/520 EXCHANGE or ③ "Manual for Installation of Data Transmitting and Receiving Units", etc.

This "Installation Handbook of CPU-55" deals principally with (2) selection of functions and setting up of respective equipment,

There are certain minimum installation requirements to be met; even though you may not need many, of the additional **functions or additional equipment, it is still necessary to read "2. Initial CPU-56 Set Up (Page 14)".** When you use only some of the additional functions or equipments, it is not necessary to read instructions on the unrequired functions. Make sure, however, that careful study of the necessary parts of this booklet is be done before proceeding further.

Note 1; Refer to the Installation handbook of CPU-52A", when installing a standard call and Paging system, using the CPU-52A.

Note 2; Refer to respective manuals when other types of CPU and connection equipment/devices are used.



SYSTEMS OF EXES - 5000	REQUIRED INSTALLATION HANDBOOK			
	① EX-510/520 EXCHANGE	② CPU-56	CPU-52A	③ DATA TRANSMITTING AND RECEIVING UNIT
(A) System using CPU-56	<input type="radio"/>	<input type="radio"/>		
(B) System with Display and Control functions using CPU-56	<input type="radio"/>	<input type="radio"/>		<input type="radio"/>
(C) System using CPU-52A	<input type="radio"/>		<input type="radio"/>	

• **FUNCTIONS WHICH REQUIRE ADDITIONAL UNITS**

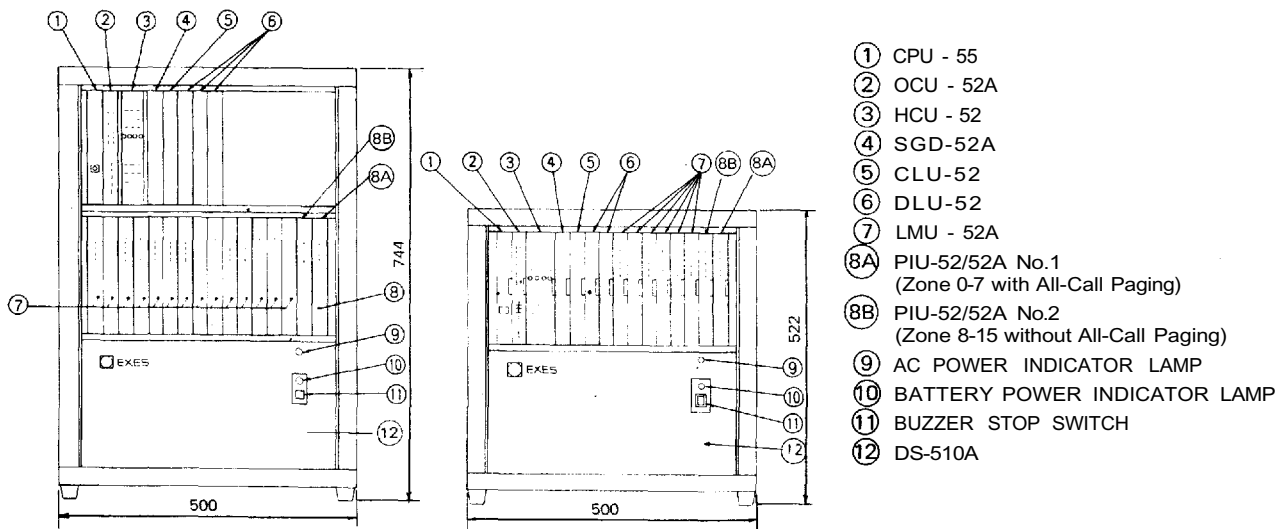
(When the Exchanges are not connected by means of Tie-line.)

Those functions of the CPU-56 which require either the addition of specific units or processing in existing units are as mentioned below. Before installation and adjustment of equipment, make sure to check your system.

(For Data Transmitting and Receiving units, refer to Part 2. "Function Selection for Data Transmitting and Receiving units" Page 43.)

Function	Additional Equipment Required	Unit Model Nos.	Remarks									
Talk-Back from paging speaker	Talk-Back Unit	TKU-11	Optional amplifier (10W max.) may be required depending on application									
Conference	Conference Unit	CLU-52										
External PA Paging	Paging Interface Unit	PIU-52/52A	External PA Equipment is required.									
Station Paging	Paging Interface Unit	PIU-52/52A	1. Wiring of "Station Paging Assignment Plug" located at the back of the frame of the Exchange. 2. Cutting of LMU jumper wire to split station paging system. (Refer to Service Manual for LMU-52/52A, PIU-52/52A).									
All call plus 15 individual paging zones	Paging Interface Unit	PIU-52/52A (2pcs)	1. PIU No.1 is different from PIU No.2 in the following parts being used in each unit. <table border="1" style="margin-left: 20px;"> <thead> <tr> <th>Type</th> <th>PIU No.1 All call +7 Paging zones (No.0-7)</th> <th>PIU No.2 8 zones (No.8-15) without all call</th> </tr> </thead> <tbody> <tr> <td>Jumper wire(JW)</td> <td>Connected</td> <td>Disconnected</td> </tr> <tr> <td>R.100 (220KΩ)</td> <td>Not mounted</td> <td>mounted</td> </tr> </tbody> </table> 2. Pin 46A of PIU No.1 must be connected to pin 46A of PIU No.2 by means of wrapping wire at the back exchange frame.	Type	PIU No.1 All call +7 Paging zones (No.0-7)	PIU No.2 8 zones (No.8-15) without all call	Jumper wire(JW)	Connected	Disconnected	R.100 (220KΩ)	Not mounted	mounted
	Type	PIU No.1 All call +7 Paging zones (No.0-7)	PIU No.2 8 zones (No.8-15) without all call									
	Jumper wire(JW)	Connected	Disconnected									
R.100 (220KΩ)	Not mounted	mounted										
Output Control Unit	OCU-52A	OCU-52 must be modified. (Add M9, M17 and TTL IC 7475 2 pcs.)										
Frame	FR-510A/B 520A/B	2 PIU's can be mounted										
Data Transmitting and Receiving Units. DT-E11 and DR-B61	Frame	FR-510B 520B	with terminal for interface output									

**Position of PIU Units for All-Call Paging and 15 Individual Zone Paging**



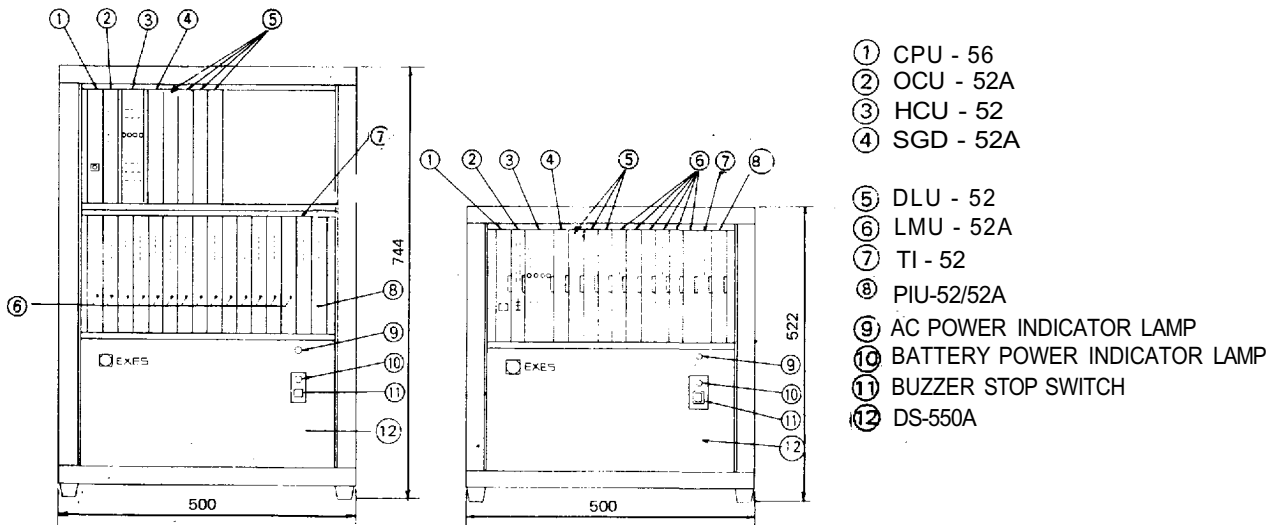
● **FUNCTIONS WHICH REQUIRE ADDITIONAL UNITS**

(When the Exchanges are connected by means of Tie-line.)

Those functions of the CPU-56 which require either the addition of specific units or processing in existing units are as mentioned below. Before installation and adjustment of equipment, make sure to check your system.

(For Data Transmitting and Receiving units, refer to Part 2. "Function Selection for Data Transmitting and Receiving units" Page 43.)

Function	Additional Equipment Required	Unit Model Nos.	Remarks
Talk-Back from paging speaker	Talk-Back Unit	TKU-11	Optional amplifier (10W max.) may be required depending on application
Conference	Conference Unit	CLU-52	
External PA Paging	Paging Interface Unit	PIU-52/52A	External PA Equipment is required.
Station Paging	Paging Interface Unit	PIU-52/52A	1. Wiring of "Station Paging Assignment Plug" located at the back of the frame of the Exchange. 2. Cutting of LMU jumper wire to split station paging system. (Refer to Service Manual for LMU-52/52A, PIU-52/52A).
Tieline connection of exchanges	Tieline Unit	TI-52	Turn off the DIP switch for tieline links not used when the exchanges are connected by tielines
	Output Unit	OCU-52A	OCU-52 must be modified. (Add M9, M17 and TTL IC 7475 2 pcs.)
	Frame	FR-510A/B 520A/B	PIU-52A and TI-52 can be mounted.
Data Transmitting and Receiving Units DT-E11 and DR-B61	Frame	FR-510B 520B	with terminal for interface output



● TIELINE CONNECTION OF THE EXCHANGES

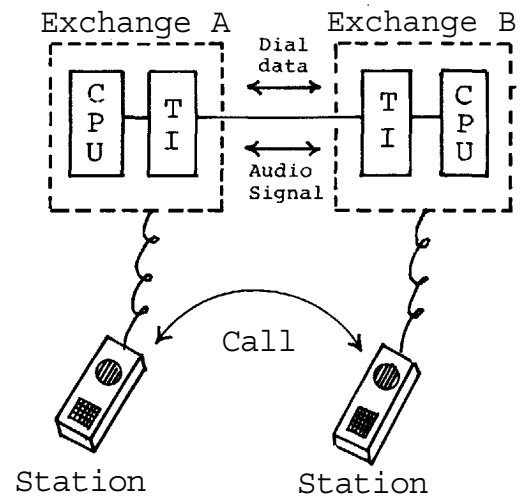
1. Function of the Central Processing Unit CPU-56

To make communications between exchanges possible in the EXES-5000 system, the CPU-56 and the Tieline Unit TI-52 are required in addition to the exchange EX-510 or the EX-520.


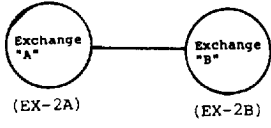
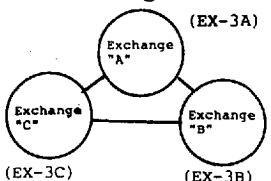
The TI-52 is the interface unit for transmitting and receiving audio signals and dial data signals between the exchanges.

After receiving dial signals from the station, the CPU-56 transmits the dial data signals to the TI-52 and instructs it to make calls to the other exchange. The CPU-56 also receives the dial data signals from the other exchange through the TI-52 and calls the station which it is instructed to call by the other exchange.

Overall functions of the system using the tieline function are determined by programming made in the CUP-56.



## 2. Number of station, paging zones and links

Composition of exchange(s)	Maximum number of links within own exchange		Number of links between tielined exchanges	Number of exchange	Maximum number of paiging zones	Maximum number of stations					
	EX-510	EX-520				Without Paging		Paging: all call+7zones		Paging: all call+15zones	
						EX-510	EX-520	EX-510	EX-520	EX-510	EX-520
① Without tielines  (EX-1)	12	16	X	1	All call +15zones	64	128	56	120	48	112
② 2 exchanges  (EX-2A) (EX-2B)	12	16	8	1	All call +7zones	56	120	48	112	X	
	*	*		2	All call +14zones	112	240	96	224		
③ 3 exchanges  (EX-3C) (EX-3B) (EX-3A)	12	16	4 between each tielined station	1	All call +7zones	56	120	48	112	X	
	*	*		3	All call +21zones	168	360	144	336		

\* The links within own exchange as well as the tieline links are used in each tieline communication.

## 3. Numbering for stations and paging zones

Type of exchange	Numbering for stations				Numbering for paging zones			
	Model	Without Paging	with paging 7 zones per exchange	With paging 15 zones per exchange	Paging zone per exchange		Paging 15 zones per exchange	
					All call	Zone page	All call	Zone page
Single Exchange (EX-1)	EX-510	200~263	200~255	200~247	0	1~7	00	01~15
	EX-520	200~327	200~319	200~311				
Exchange "A" (EX-2A/3A)	EX-510	200~247, 256~263	200~247	X	00	01~07	X	X
	EX-520	200~311, 320~327	200~311					
Exchange "B" (EX-2B/3B)	EX-510	470~517, 526~533	470~517	X				
	EX-520	470~581, 590~597	470~581					
Exchange "C" (EX-3C)	EX-510	740~787, 796~803	740~787	X	15~21	X	X	
	EX-520	740~851, 860~867	740~851					



4. Reduction of the number of stations and paging zones which results from the use of the Tieline Unit TI-52.
  1. Mounting one (1) piece of the TI-52 decreases the number of the LMU-52A (the 7th or the 15th LMU-52A) by one (1).
  2. Unless the PIU-52A is used, the system can have up to 8 more stations by placing an LMU-52A in the 8th or the 16th position.
  3. When the system uses the tieline function, the second unit of the PIU-52A (paging zones 8 - 15) cannot be used.

<EX-510>

LMU	station No.		
1	200 - 207		
2	208 - 215		
3	216 - 223		
4	224 - 231		
5	232 - 239		
6	240 - 247		
7	248 - 255	PIU III	TI
8	256 - 263	PIU I	

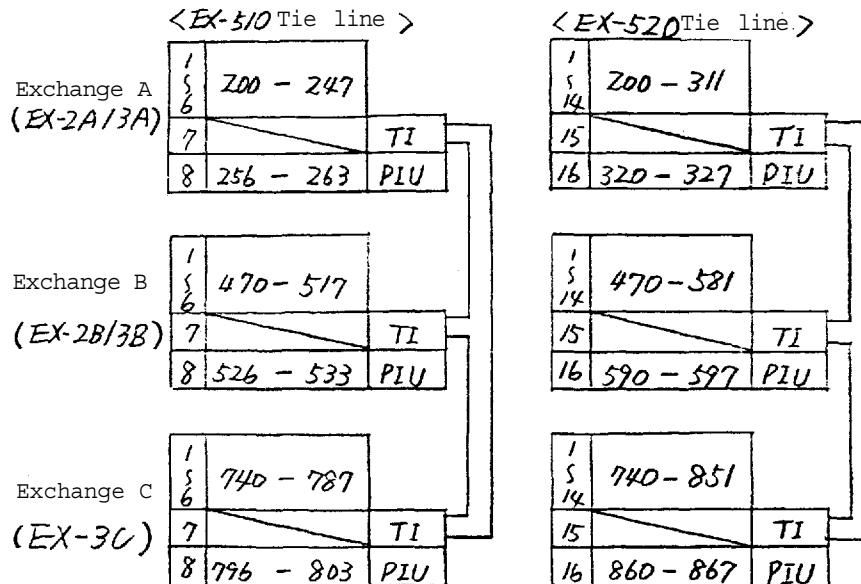
<EX-520>

LMU	station No.		
1	200 - 207		
2	208 - 215		
3	216 - 223		
4	224 - 231		
5	232 - 239		
6	240 - 247		
7	248 - 255		
8	256 - 263		
9	264 - 271		
10	272 - 279		
11	280 - 287		
12	288 - 295		
13	296 - 303		
14	304 - 311		
15	312 - 319	PIU III	TI
16	320 - 327	PIU I	

Note.

LMU:Line Modem Unit  
 PIU:Paging Unit  
 PIUI:Zone No. 0~7  
 PIU II:Zone No. 8~15  
 TI:Tie line Unit

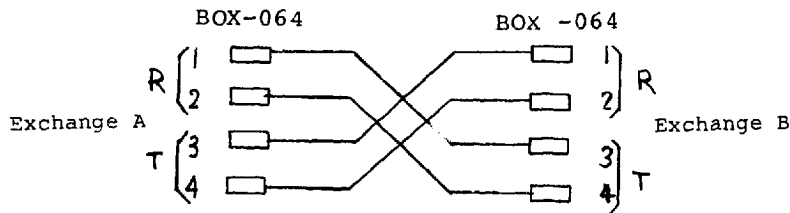
5. Block diagram for tielined exchanges.



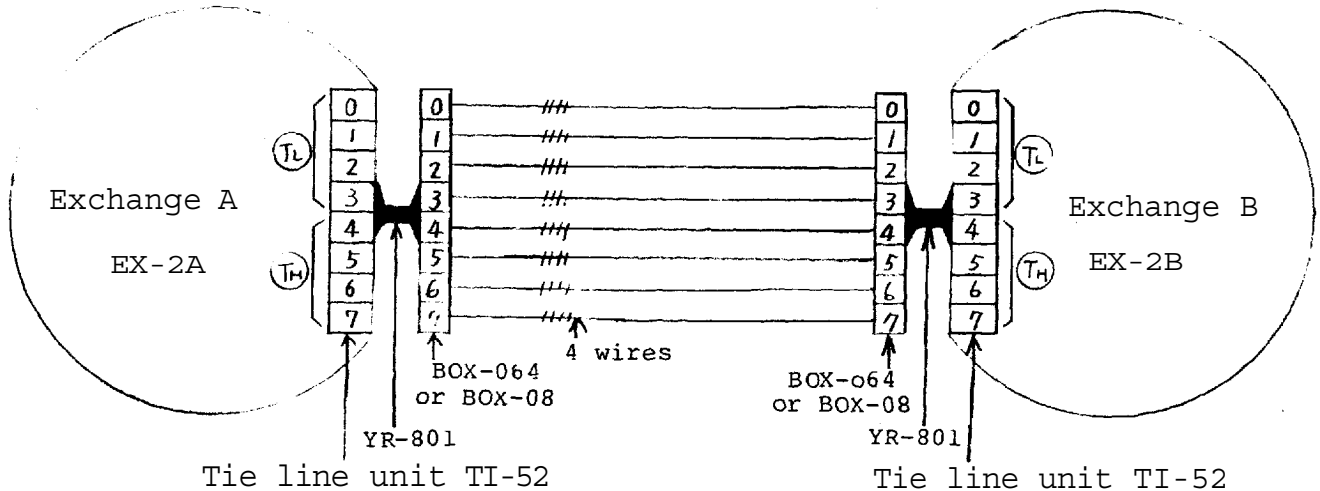
Note. Tieline connection of EX-510 to EX-520 Exchanges is also possible.

• WIRING FOR TIELINE CONNECTION OF THE EXCHANGES

- o Each exchange can be connected by means of a cable with a diameter of 0.65mm for a distance of up to 2km.
- o Regarding the tieline links which are not used, turn off the DIP switch of each unused tieline link inside the Tieline Unit TI-52.
- o Connect "T" line (2 wires) of the 4 wires of each link to "R" line (2 wires) of the other exchange.
- o The 2 wires of the "T" line and "R" line have no polarity. If the BOX-064 is used, its terminals No. 1 and 2 are for the "R" line and No. 3 and 4 are for the "T" line.

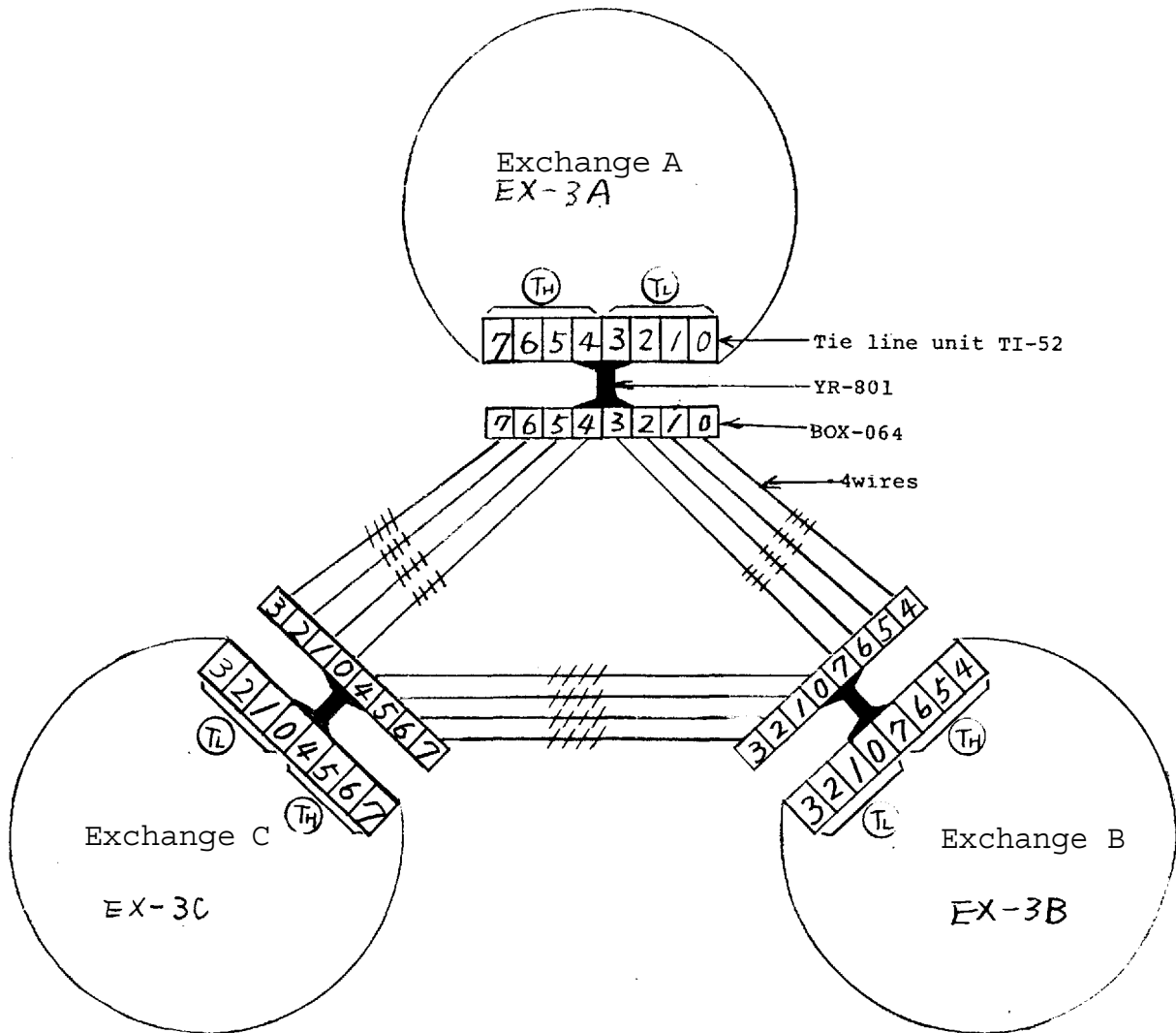


1. Wiring for tieline connection of 2 exchanges



Note 1. Any combination of tieline links between exchanges "A" and "B" is possible. But, in consideration of possible increase in the number of exchanges to be connected from 2 to 3 in the future, we suggest you connect TL (link No. 0, 1, 2, 3) of exchange "A" to TH (link No. 4, 5, 6, 7) of exchange "B".

2. Wiring for tieline connection of 3 exchanges

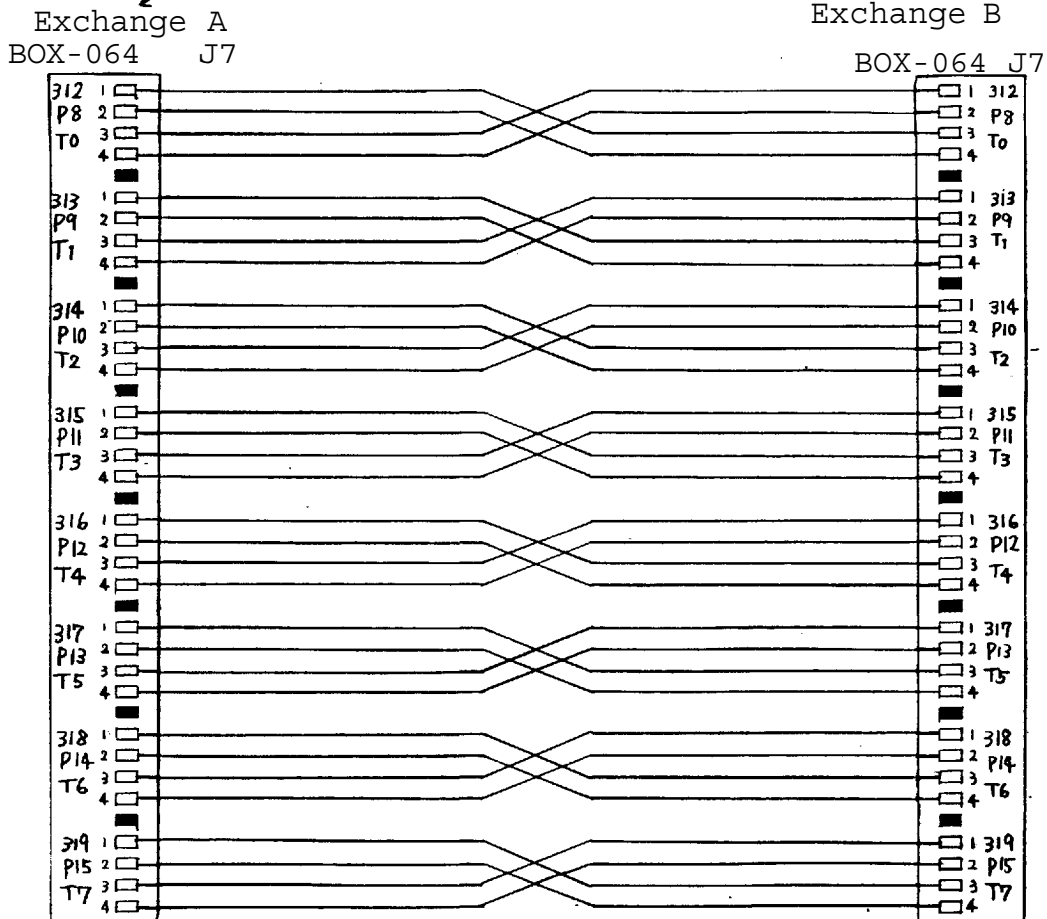
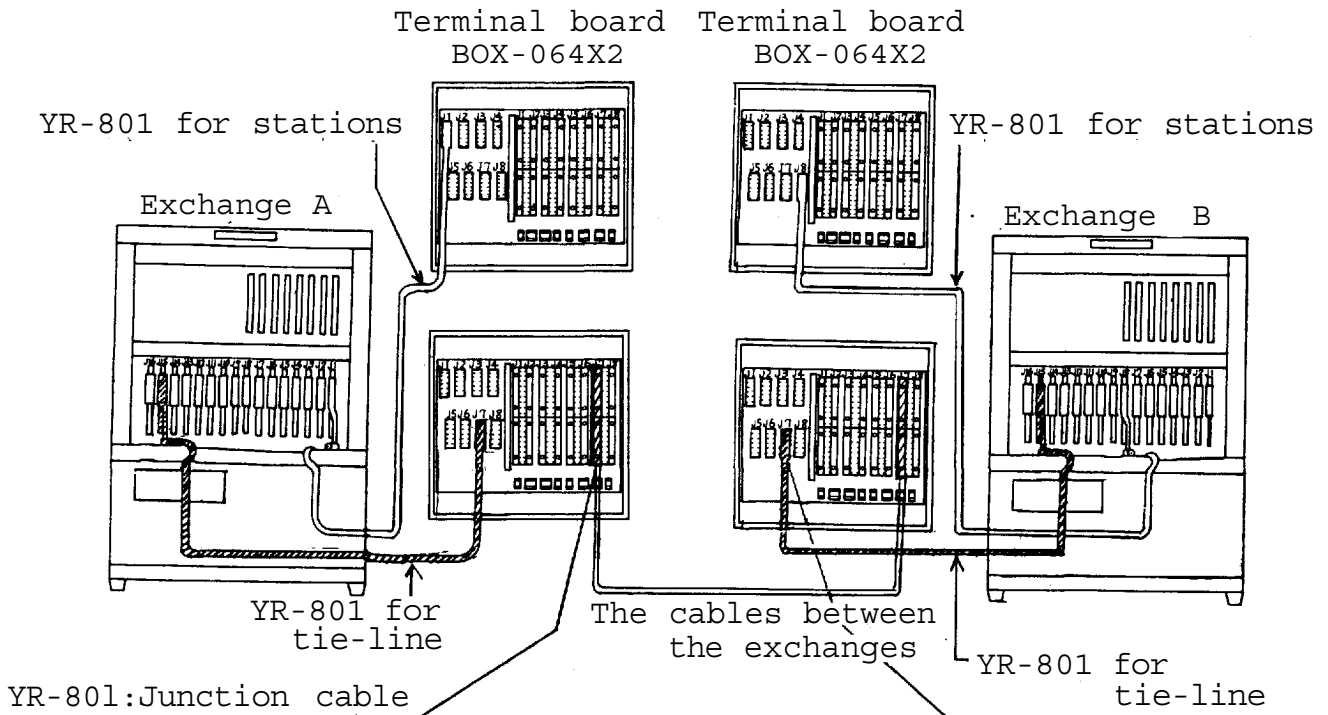


Note 2. Be sure to connect TL (link No. 0,1,2,3) to TH (link No. 4,5,6,7) between the exchanges. Connection of TH to TH or TL to TL will lead to failure of proper operation of the system.

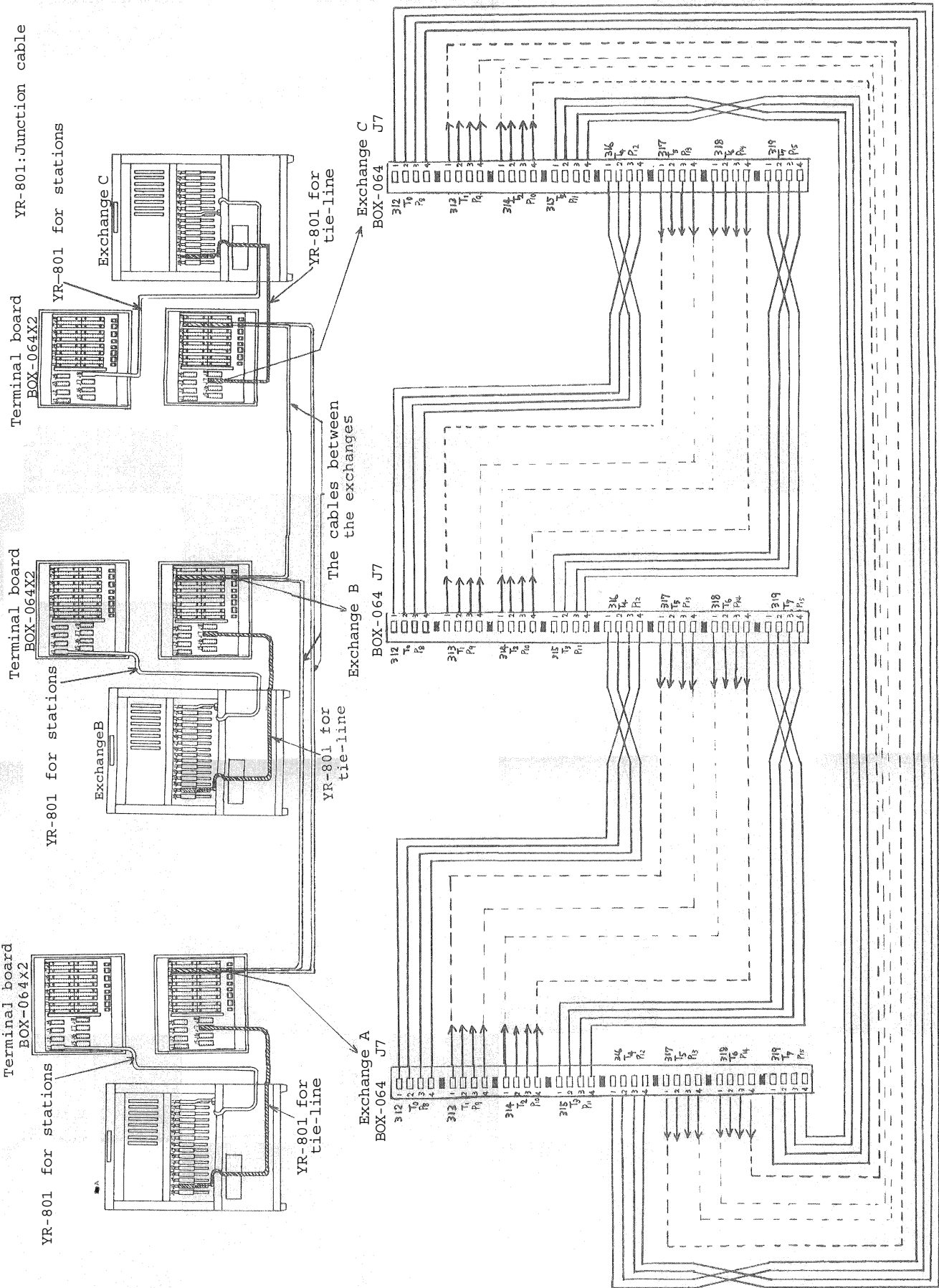
Note 3. Switching arrangements of DIP switches (E-1, E-2, E-3) in the CPU-56 make each exchange to be of "EX-1" or "EX-2A" or "EX-2B" or "EX-3A" or "EX-3B" or "EX-3C" type.

### 3. The Example of connection of 2 EX-520 exchanges

(YR-801 must be connected to J15 for EX-520 exchange or to J7 for EX-510 Exchange)



4. The Example of connection of 3 EX-520 exchanges  
 (YR-801 must be connected to J15 for EX-520 exchange or to J7 for EX-510 exchange)



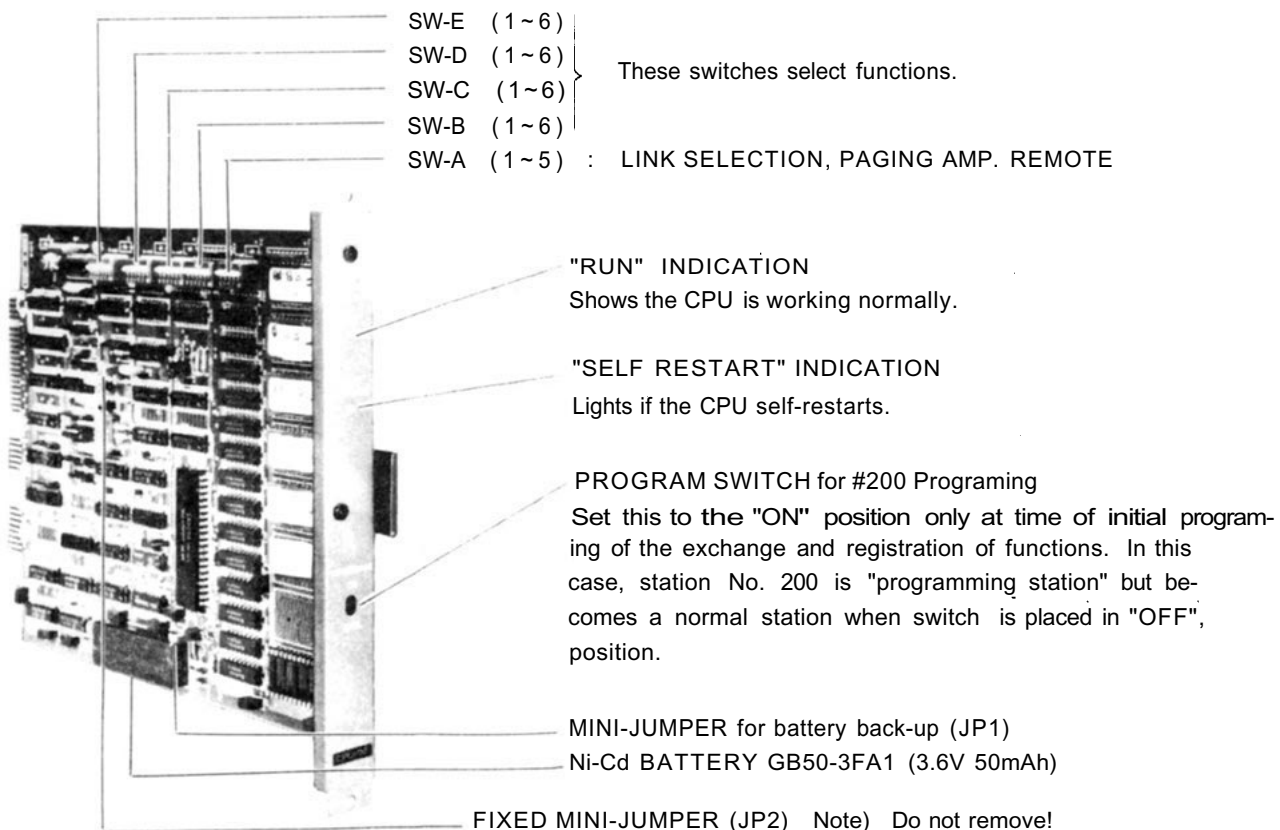
# PART 1. OPERATION OF CPU UNIT AND NO. 200 PROGRAMMING

## 1. PRECAUTIONS FOR INSTALLATION OF CPU-56

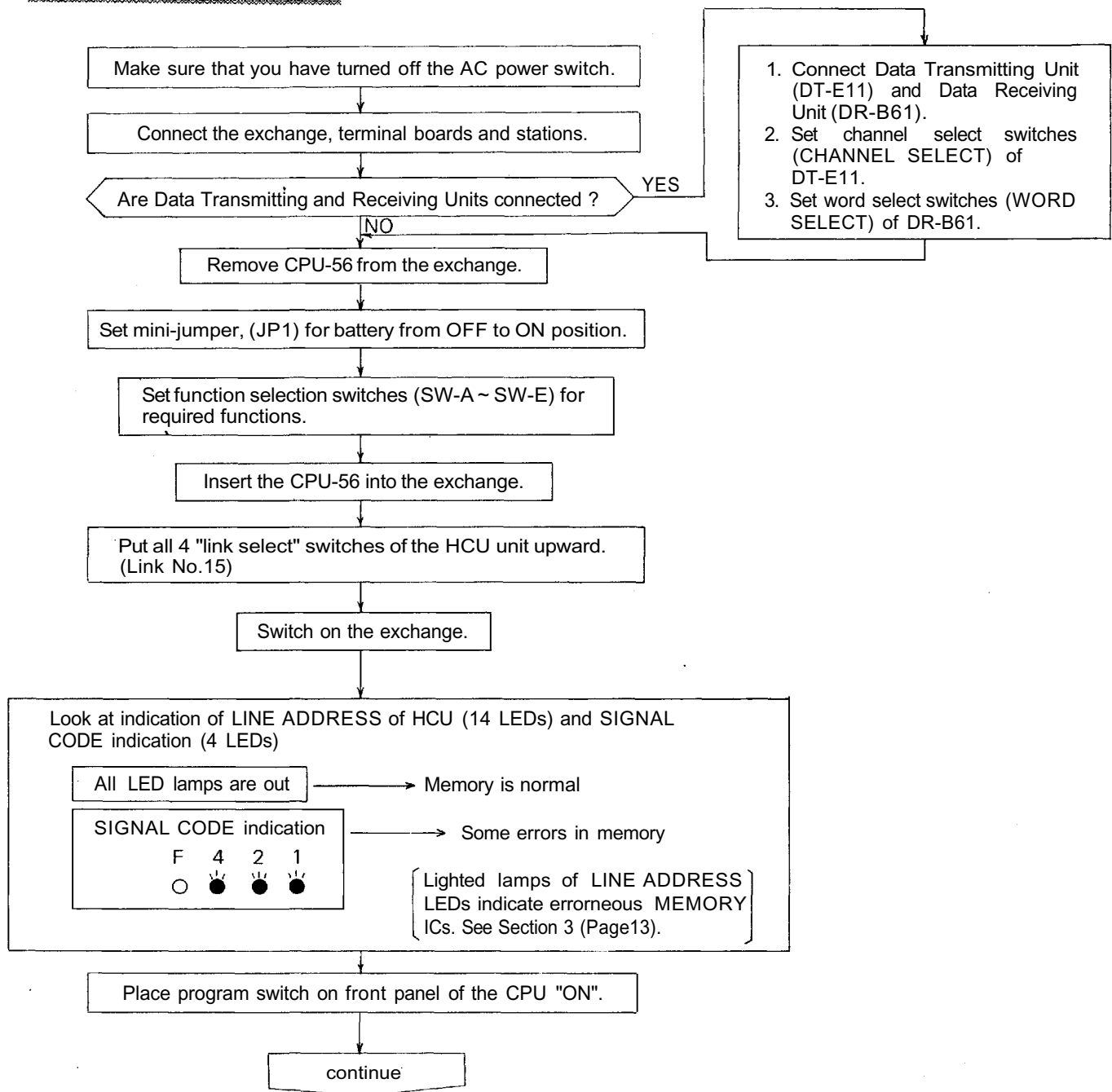
Please read the following instructions carefully to ensure proper operation of the CPU-56.

1. Be careful about damage by static electricity as the CPU-56 incorporates CMOS IC's. Do not touch components and connectors.
2. Turn off the AC power switch when you take out or insert the CPU-56 unit, or any other unit.
3. Always insert the CPU-56 unit into the "CPU" slot. Otherwise, there is a danger that the unit will be damaged.
4. Make sure mini-jumper for battery back-up is always placed in the **ON position each time it is used.**
5. Incorrect setting of function select switches may lead to incorrect performance.
6. Even if you do not need any programming functions, be sure to carry out initial programming and registration at station No. 200 when you install the new unit. Otherwise, **other functions may not work properly.**
7. The Ni-Cd battery GB50-3FA1 is capable of saving important memory registration data even at times of power failure and we suggest you replace it at least every 4 or 5 years.  
After the change again set up station No.200 programming of the previous functions in the exchange.
8. **When shipping the CPU-56 unit independently, place the mini-jumper for battery back-up in "OFF" position. Then cover CPU back with cardboard, wrap connector section in aluminium foil and put it in a conductive bag.**

### FUNCTION SELECT SWITCHES



## 2. INITIAL CPU-56 SET UP



Dial operation from station No. 200.

— Initial programming of the exchange —

Dial the Following:

1. **C** ; Dial tone will be heard (Station No.200 becomes a programming station)
2. **5 5.....5** ; Confirmation tone will be heard.  
10 times (Clears function group A)
3. **6 6.....6** ; Confirmation tone will be heard.  
10 times (Clears function group B)
4. **7 7.....7** ; Confirmation tone will be heard.  
10 times (Clears function group C)
5. **8 8.....8** ; Confirmation tone will be heard.  
10 times (Clears function group D)
6. **0 0.....0** ; Confirmation tone will be heard.  
10 times (Clears personal numbers and single digit dial numbers)

Program necessary functions

(Refer to separate instructions for each function)

Remark: If there is any error in CMOS memory, you hear calling tone instead of confirmation tone.

Place program switch on front panel of the CPU in "OFF" position.

Dial operation from station No. 200.

**C** (Station No. 200 becomes a normal station.)

Note 1. When the exchanges are connected by tielines, perform this operation in the CPU-56 unit of all exchanges.

Note 2. The programming station of each exchange is as follows:

No. 200 (exchange "A")

No. 470 (exchange "B")

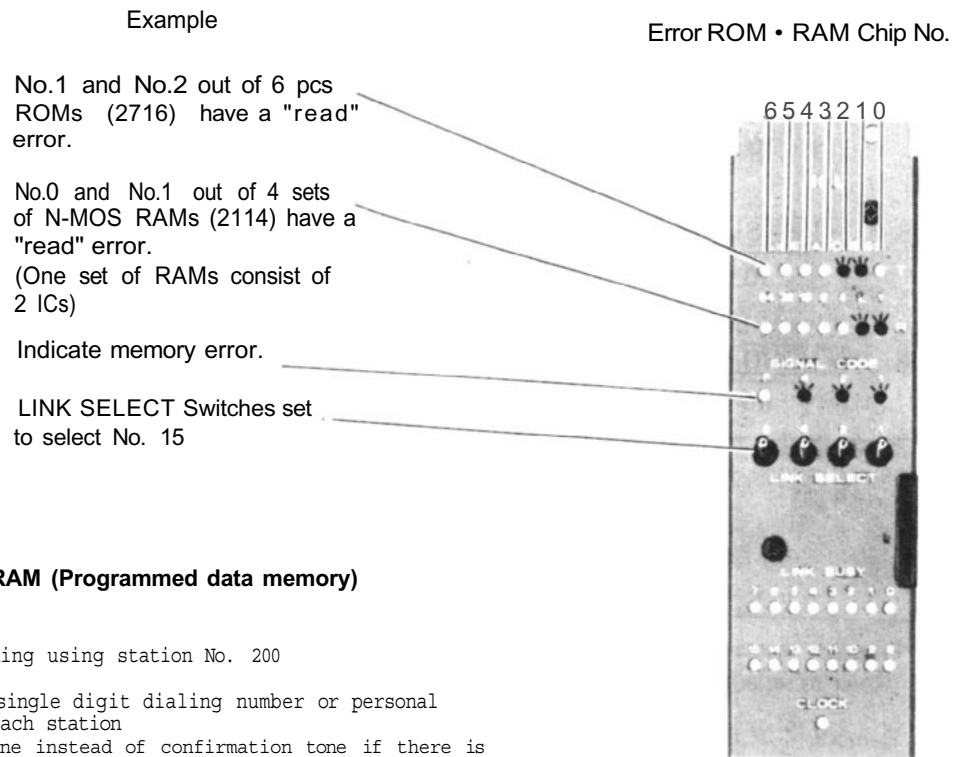
No. 740 (exchange "C")



### 3. TROUBLE SHOOTING

#### 3-1 Check of ROM & NMOS-RAM - No calls on the system.

1. Put the 4 "LINK SELECT" switches of the HCU upward (Link No. 15 SELECT) and switch on the AC power of the exchange.
2. If there is no error, no HCU indication lamps will light.
3. In the event of a memory error, the lamps may light as shown in the example of Fig. 1.
4. The error indications will remain on until you use Link No. 15 for communications.



#### 3-2 Check of CMOS-RAM (Programmed data memory)

At the time of

1. initial programming using station No. 200 and
2. registration of single digit dialing number or personal number made at each station

you hear calling tone instead of confirmation tone if there is CMOS memory error.

(When the system does not work properly and the CPU unit is considered to be its cause, put the system in the same condition and again operate it using the same CPU to see if the same problems occur again. In the event of error repetition, change the CPU unit for the new one.)

Fig. 1

HCU indications

#### 3-3 Indication on front panel of the CPU.

##### "RUN" LED indicator

When the system is working normally, LED is "on".  
Check its condition when the system fails to work normally.

##### "SELF RESTART" LED indicator

This does not light when the system is working normally. Even if high noise from outside of the exchange causes the CPU to work abnormally, the CPU "self-restarts" and the system keeps on working normally. Once the CPU "self-restarts", the LED indicator is on, but it does not affect the system. If you again cycle the AC power source, the LED indicator is turned off.

### 3-4. Dial receiving test

If you place all "LINK SELECT" switches (1 ~ 4) of SW-A on the CPU-55 in "OFF" position, conversation is impossible but the dial code from each station is indicated on the LED's of the PIU as dialed. Use this to find the cause of any fault of receiving dial information.

DIP switches  
(SW-A of the CPU)

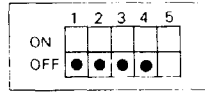


Fig. 2

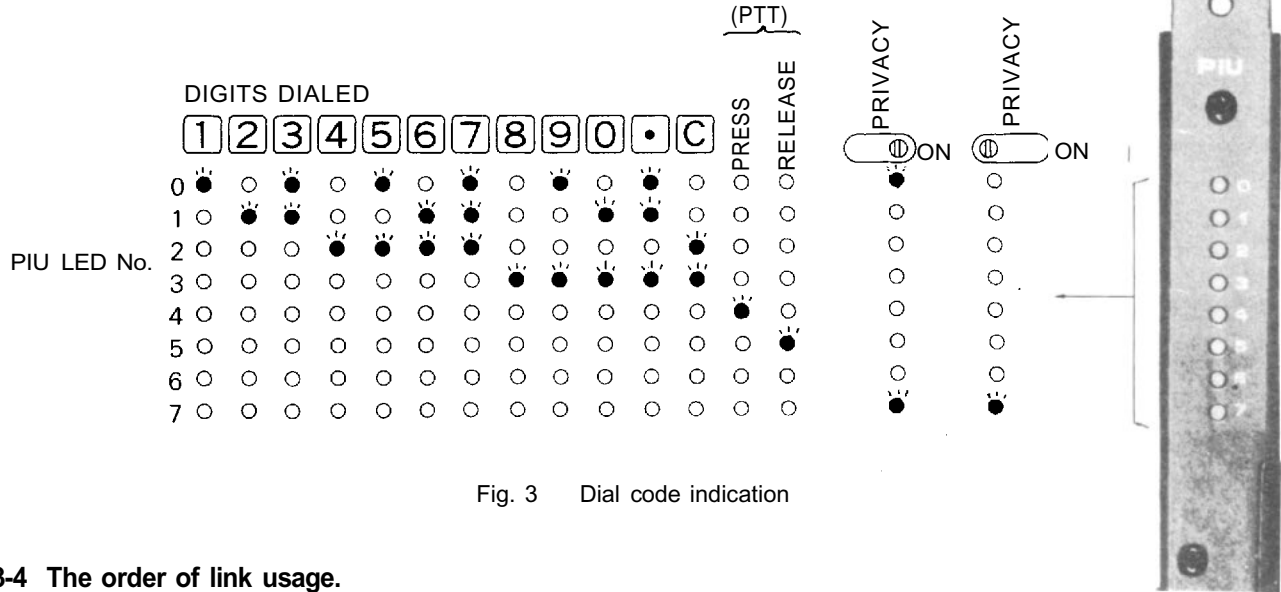


Fig. 3 Dial code indication

### 3-4 The order of link usage.

After power is on, links are used in numerical order for each communication. Remember this to help you when problems are found with specific links.

Remarks:

1. Be sure to avoid mistakes at the time of DIP switch installation and No. 200 Programming since such mistakes may lead to trouble later.
2. Be sure to make "No. 200 Programming" after "Function Registration List" (attached to this manual) is filled out. Keep the finished "Function Registration List" (Initial Checking Sheet for the System 133-21-024-4) as a part of complete drawings for each installation.

3-6. The order of Tie Line link usage.

The Tieline Link Number which is used in calls between exchanges is not directly indicated, but you can possibly get it from the link number which is indicated on the HCU-52.

When one Tieline Link brings up some problems which cause the system not to work properly, try to find which link number is causing the problems from the indication on the HCU-52 of the exchange making the call.

As diagram No1 and No2 shows, in the exchanges which make calls, the DLU Link Number corresponds with TI Tieline Link Number.

In the exchange which is called, the Tieline Link Number of the TI Unit is fixed by connection between exchanges.

DLU Links are used in numerical order.

1. Tieline for 2 exchanges

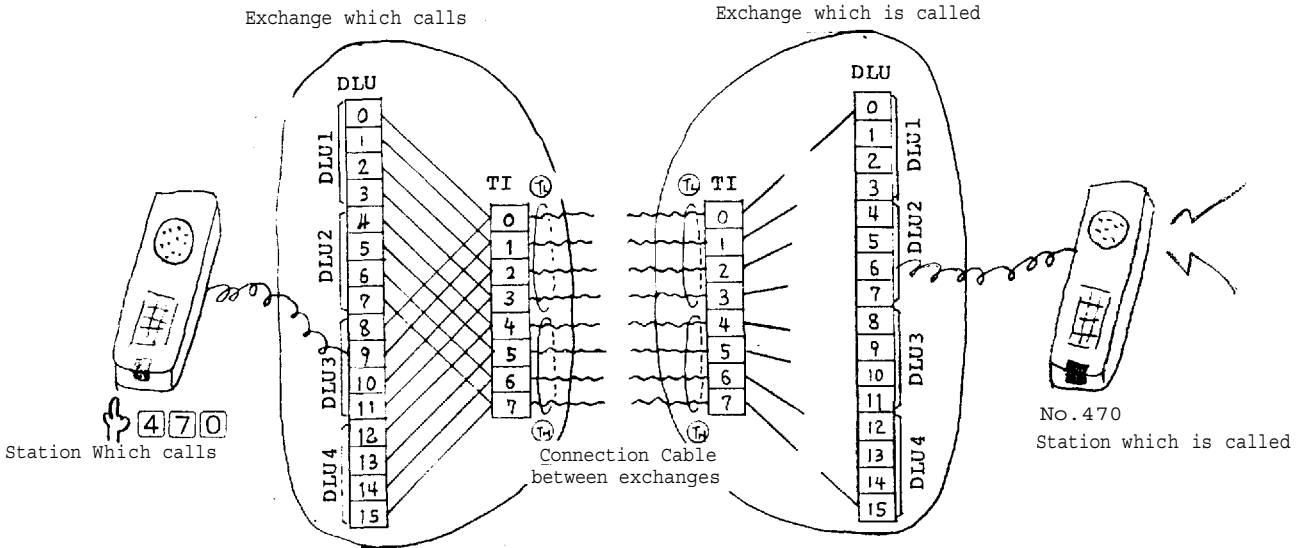


Diagram 1

2. Tieline for 3 exchanges

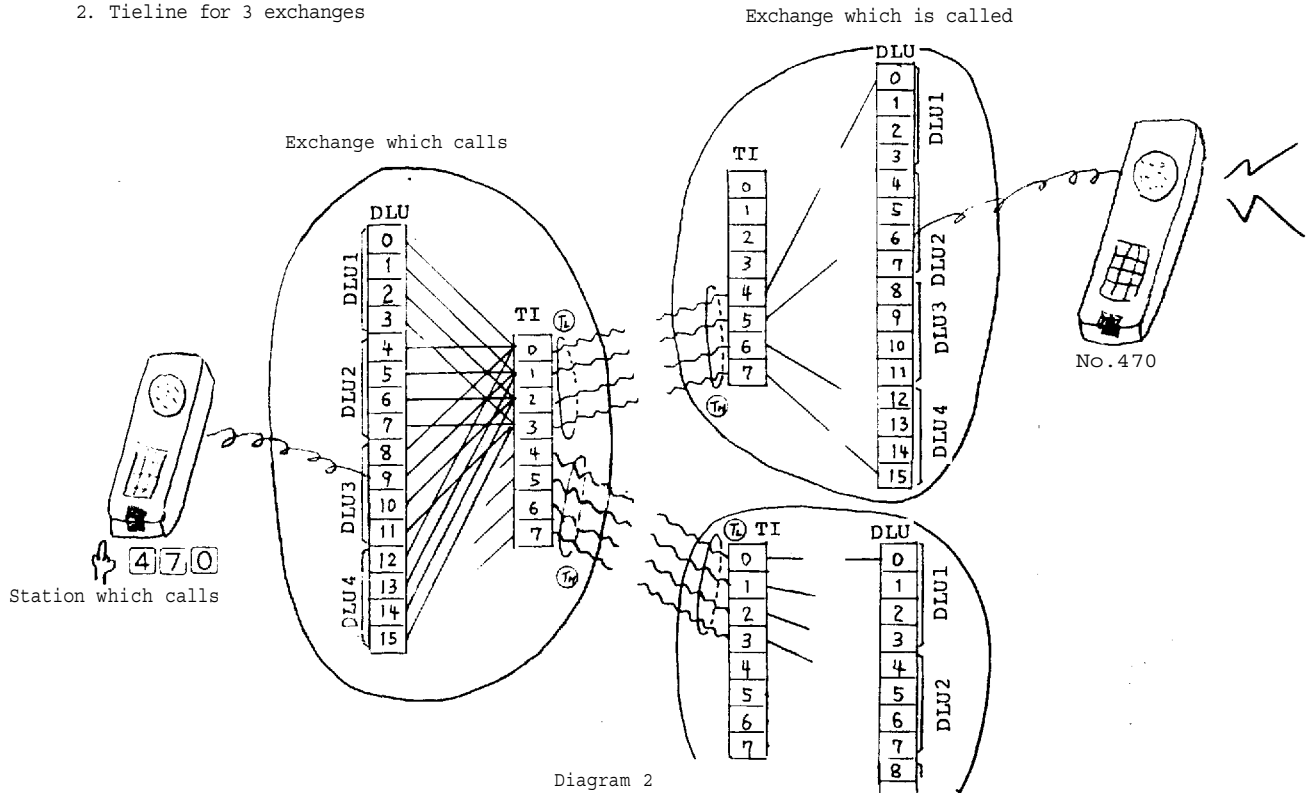


Diagram 2

Reference for Connection Link Number between DLU and TI Link

DLU Link No	Exchange which calls			Exchange which is called	
	TI Tieline Link Number			TI Tieline Link Number	Tieline Link
	2 Tielines		3 Tielines		
To (T <sub>1</sub> , T <sub>2</sub> )	To (T <sub>1</sub> )	To (T <sub>2</sub> )			
0	0	0	4		
1	1	1	5		
2	2	2	6		
3	3	3	7		
4	4	0	4	Fixed by Connection Cable between Exchanges	After switch is or Links are used in numerical order
5	5	1	5		
6	6	2	6		
7	7	3	7		
8	0	0	4		
9	1	1	5		
10	2	2	6		
11	3	3	7		
12	4	0	4		
13	5	1	5		
14	6	2	6		
15	7	3	7		

Notice:

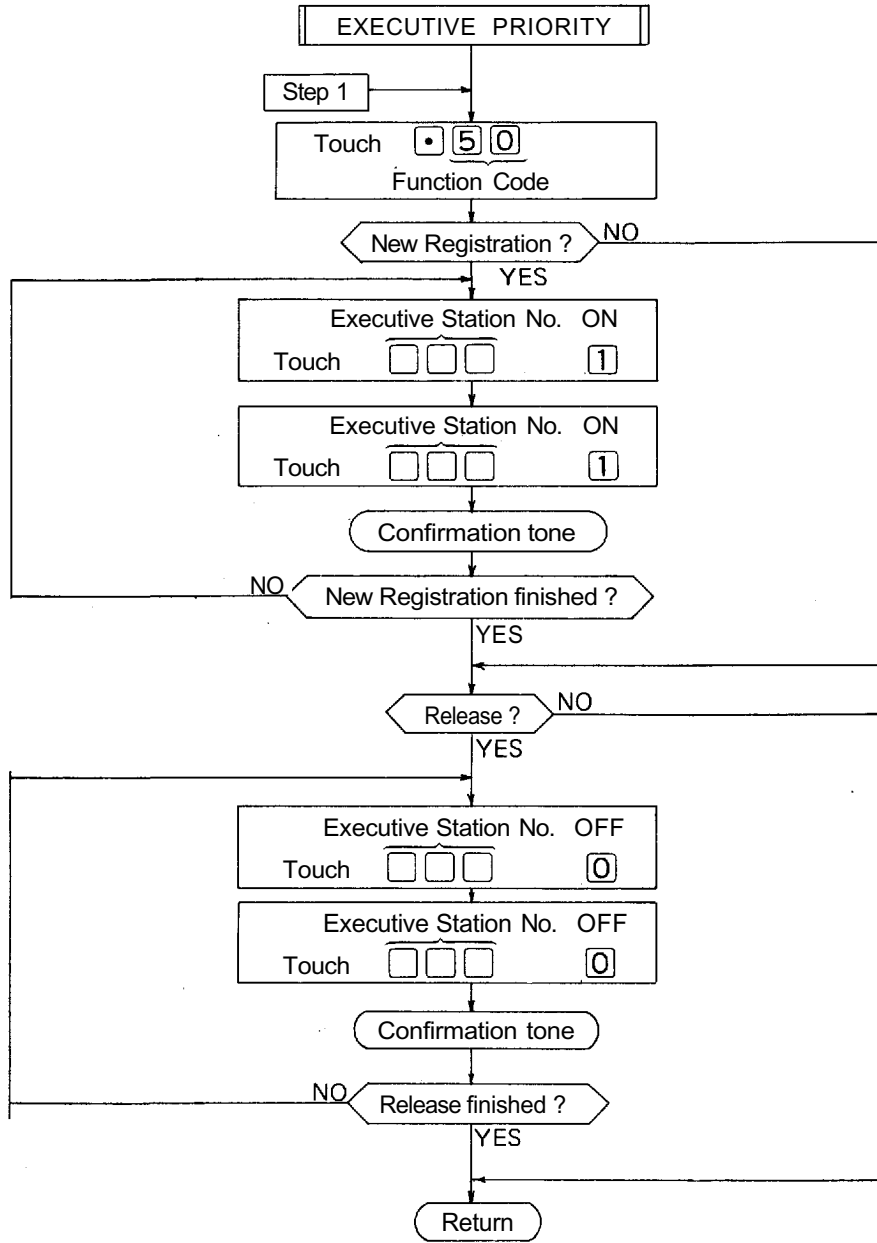
If the TI Tieline Link which correspond with the DLU Link No is already busy, then, the next Tieline Link is automatically used.

#### 4. CPU-56 DIP SWITCH FUNCTION SELECTION

		Functions	Switch	On	Off				
SW-A	OFF QN	1	Link Selection ; Link No. 0 ~ 3	Activate	Not Activate				
		2	Link Selection ; Link No. 4 ~ 7						
		3	Link Selection ; Link No. 8 ~ 11						
		4	Link Selection ; Link No. 12 ~ 15						
		5	Time Interval Adjustment for Paging Pre-announce tone	1 Sec.	None				
SW-B	OFF ON	1	Conference	Activate	Not Activate				
		2	Call Transfer						
		3	Priority & Executive Priority						
		4	Paging, Paging During Normal Calls						
		5	Call Forwarding	Activate	Not Activate				
		6	System Size Selection	EX-520	EX-510				
SW-C	OFF ON	1	Paging Pre-announce Tone Duration Selection	1 Sec.	2 Sec.				
		2	Off						
		3	Off						
		4	Off						
		5	15 Individual Paging Zones	15 Zones	7 Zones				
		6	2-Digit Dialing (#20 ~ #99)	Activate	Not Activate				
SW-D	OFF ON	1	Stations Allowed Access to All Call	Activate	Not Activate				
		2	Stations Allowed Access to Conference						
		3	Stations Allowed Access to General Purpose Control						
		4	Group Blocking						
		5	Off						
		6	General Purpose Control	Activate	Not Activate				
SW-E	OFF ON	1	EX - 1	Off	Off	Off	On	On	On
		2	EX - 2A	Off	On	Off	On	Off	On
		3	EX - 2B	Off	Off	On	Off	On	On
		4	EX - 3A	Off	Off	Off	On	On	On
		5	EX - 3B	Off	Off	Off	On	Off	On
		6	EX - 3C	Off	Off	Off	On	On	On
				Pager (64 Contacts Output)				Activate	Not Activate
			Off						
			Continuous Calling Tone				Activate	Not Activate	
			Functions	Switch	On	Off			



**6. STATION NO. 200 PROGRAMMING FOR EACH FUNCTION**  
**6-1 EXECUTIVE PRIORITY (FUNCTION CODE 50)**



**NOTES**

1. To register all stations at one time,

Touch **5011...1**  
 10 times

(Confirmation tone will be heard.)

2. To release all registered stations at one time,

Touch **5000...0**  
 10 times

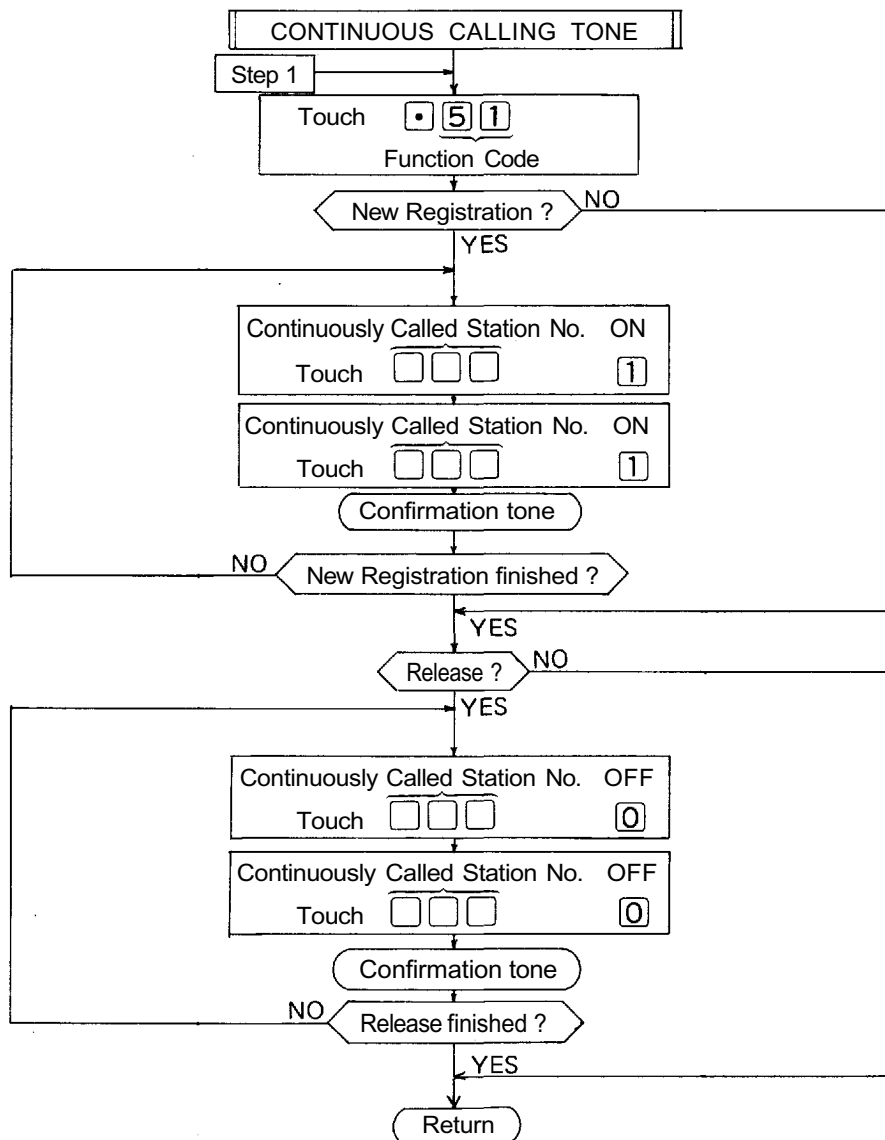
(Confirmation tone will be heard.)

3. Re-start at Step 1 when mis-dialing occurs.  
 (All other registrations remain valid.)

4. Station No. should be 2 digits in length when 2 Digit Dialing function is employed.

5. CPU DIP switch B-3 must be "ON" to employ this function.

## 6-2 CONTINUOUS CALLING TONE (FUNCTION CODE 51)



### NOTES

1. To register all stations at one time,

Touch  $\cdot \overline{5} \overline{1} \overline{1} \overline{1} \dots \overline{1}$   
10 times

(Confirmation tone will be heard.)

2. To release all registered stations at one time,

Touch  $\cdot \overline{5} \overline{1} \overline{0} \overline{0} \dots \overline{0}$   
10 times

(Confirmation tone will be heard.)

3. Re-start at Step 1 when mis-dialing occurs.

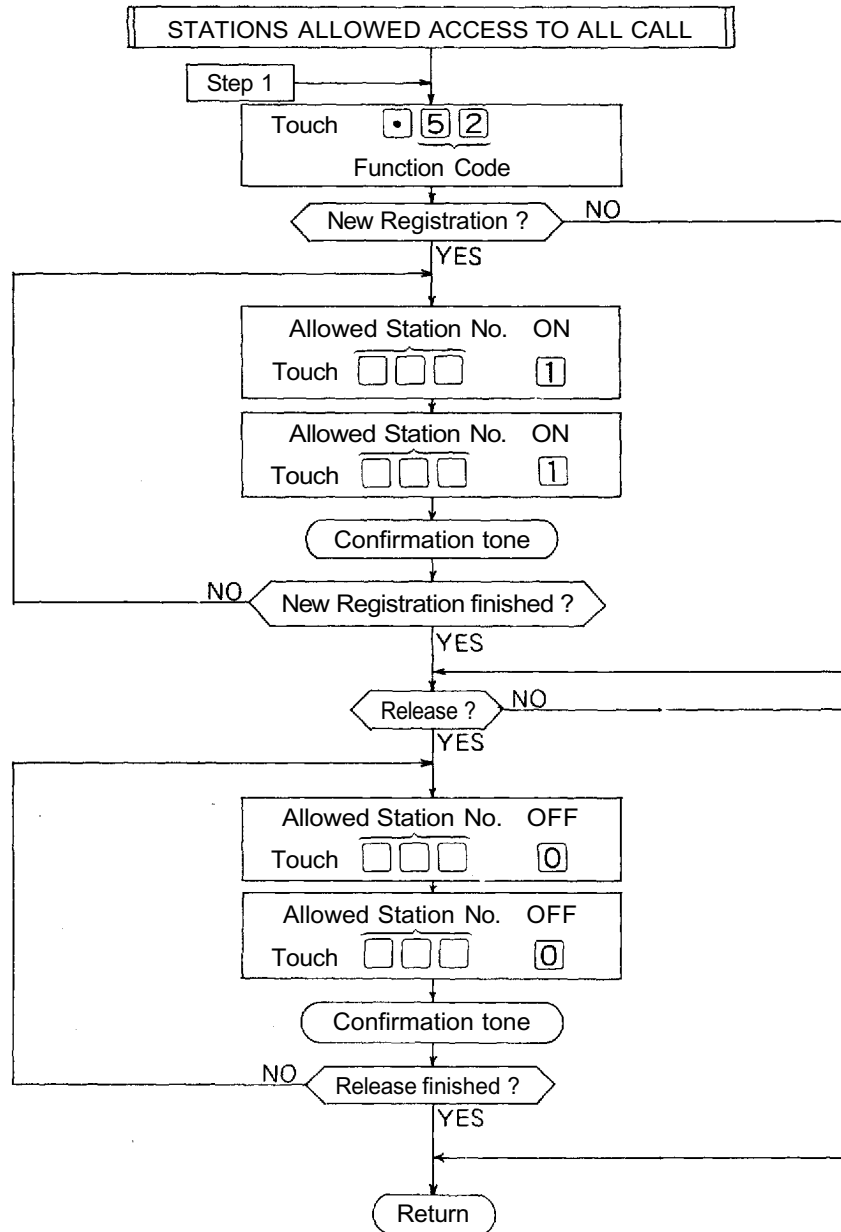
(All other registrations remain valid.)

4. Station No. should be 2 digits in length, when 2 Digit Dialing function is employed.

5. CPU DIP switch E-6 must be "ON" to employ this function.



### 6-3 STATIONS ALLOWED ACCESS TO ALL CALL (FUNCTION CODE 52)



#### NOTES

1. To register all stations at one time,

Touch \*5211 ... 1  
10 times

(Confirmation tone will be heard.)

2. To release all registered stations at one time,

Touch \*5200 ... 0  
10 times

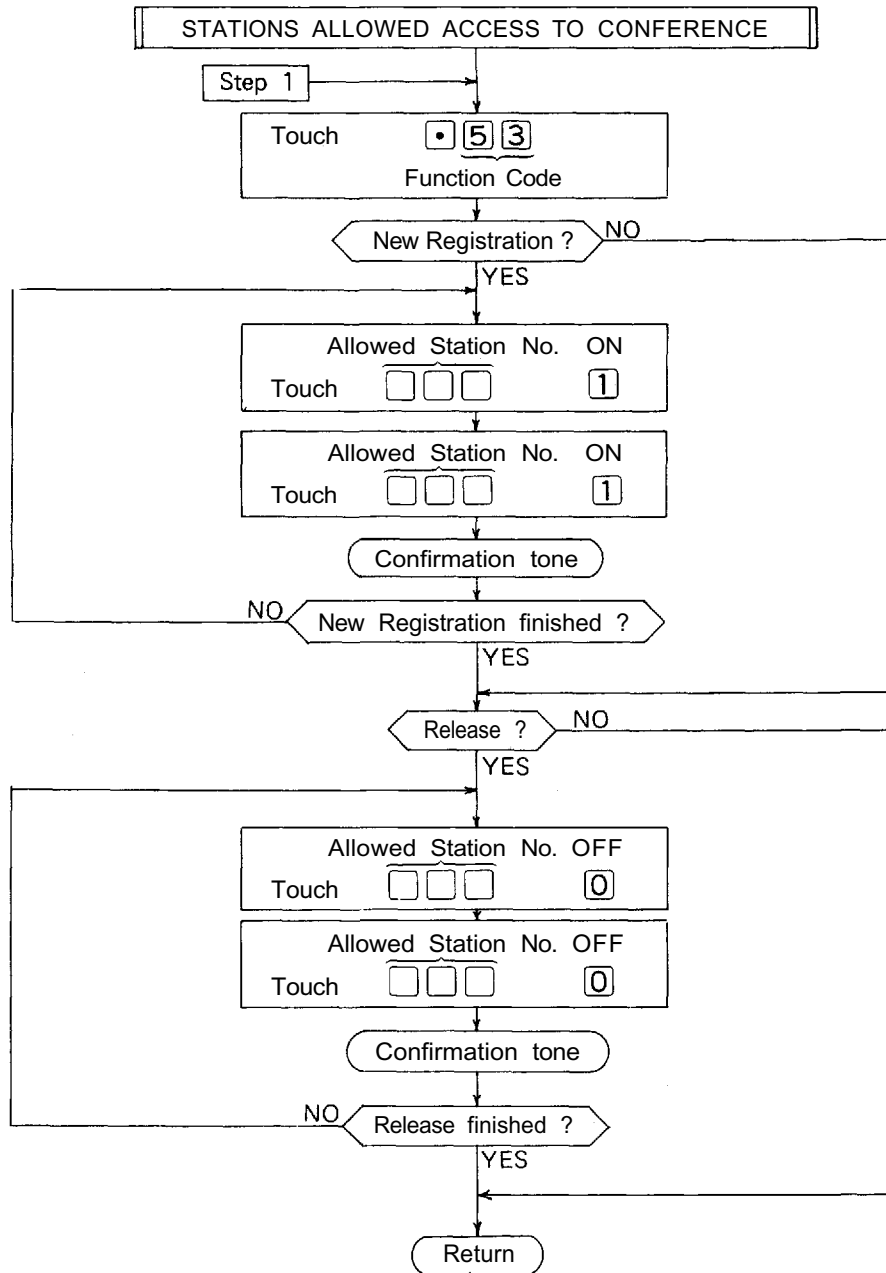
(Confirmation tone will be heard.)

3. Re-start at Step 1 when mis-dialing occurs.  
(All other registrations remain valid.)

4. Station No. should be 2 digits in length, when 2 Digit Dialing function is employed.

5. Programming is necessary only if CPU DIP switch D-1 is "ON".

6-4 STATIONS ALLOWED ACCESS TO CONFERENCE (FUNCTION CODE 53)



NOTES

1. To register all stations at one time,

Touch 5 3 1 1 ... 1  
10 times

(Confirmation tone will be heard.)

2. To release all registered stations at one time,

Touch 5 3 0 0 ... 0  
10 times

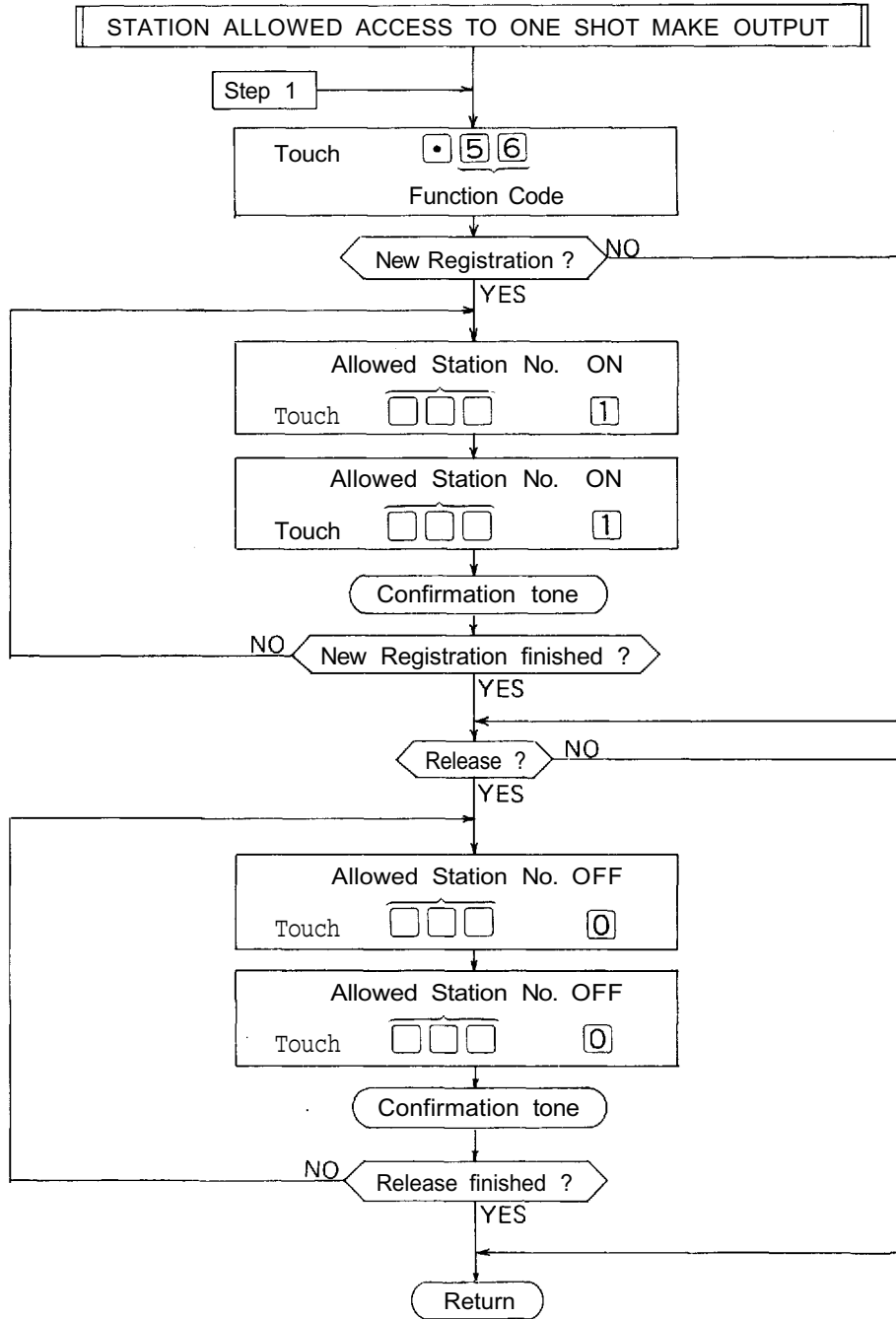
(Confirmation tone will be heard.)

3. Re-start at Step 1 when mis-dialing occurs.  
(All other registrations remain valid.)

4. Station No. should be 2 digits in length when 2 Digit Dialing function is employed.

5. Programming is necessary only if CPU DIP switch D-2 is "ON". Switch B-1 must be "ON" to employ this function.

6-5 STATIONS ALLOWED ACCESS TO ONE SHOT MAKE OUTPUT (FUNCTION CODE 56)



NOTES

1. To register all stations at one time,  
Touch [5][6][1][1]...[1]  
10 times  
(Confirmation tone will be heard.)

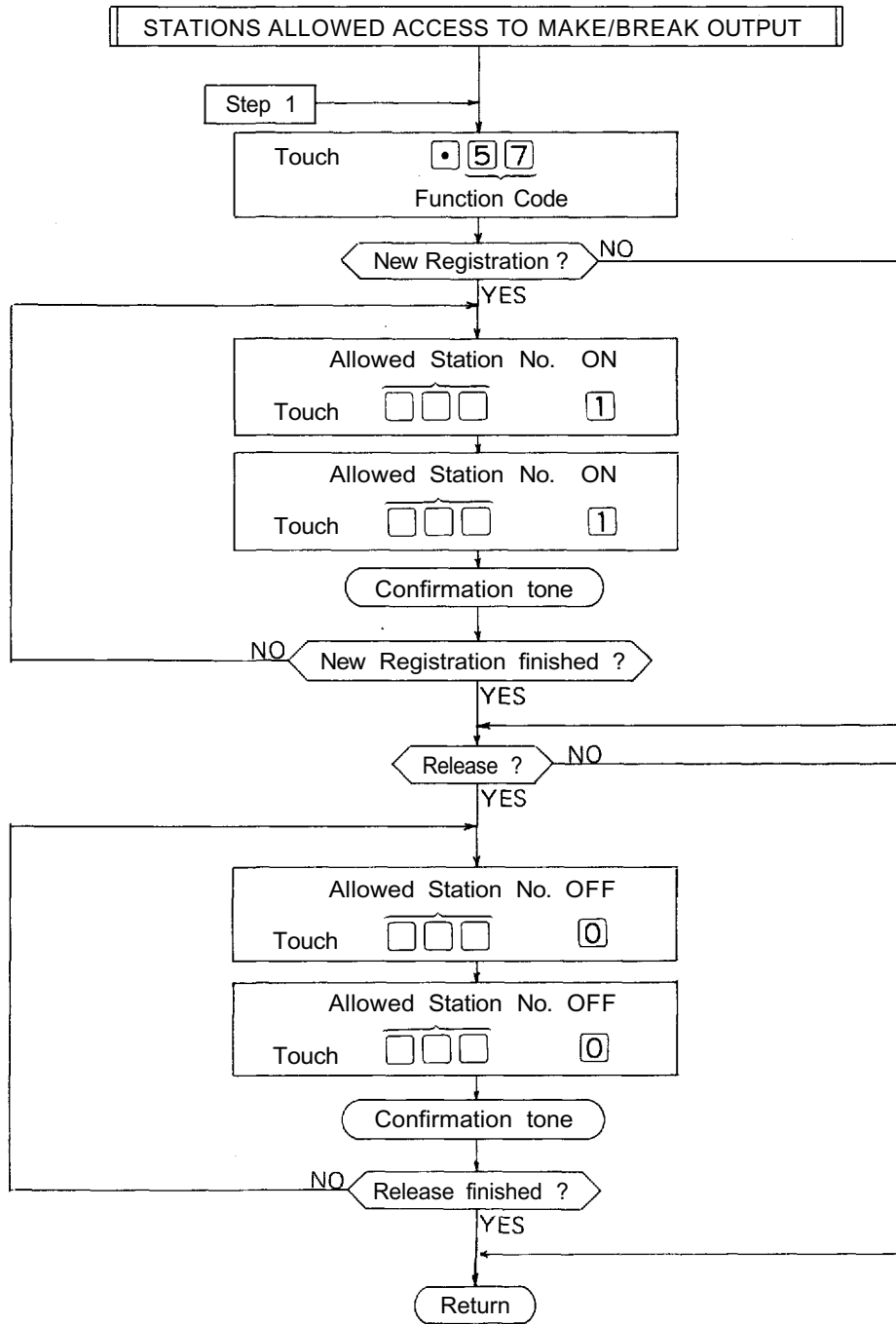
2. To release all registered stations at one time,  
Touch [5][6][0][0]...[0]  
10 times  
(Confirmation tone will be heard.)

3. Re-start at Step 1 when mis-dialing occurs.  
(All other registrations remain valid.)

4. Station No. should be 2 digits in length when 2 Digit Dialing function is employed.

5. Programming is necessary only if CPU DIP switch D-3 is "ON". Switch D-6 must be "ON" to employ this function.

6-6 STATIONS ALLOWED ACCESS TO MAKE/BREAK OUTPUT (FUNCTION CODE 57)



NOTES

1. To register all stations at one time,  
 Touch [5][7][1][1]...[1]  
 10 times  
 (Confirmation tone will be heard.)

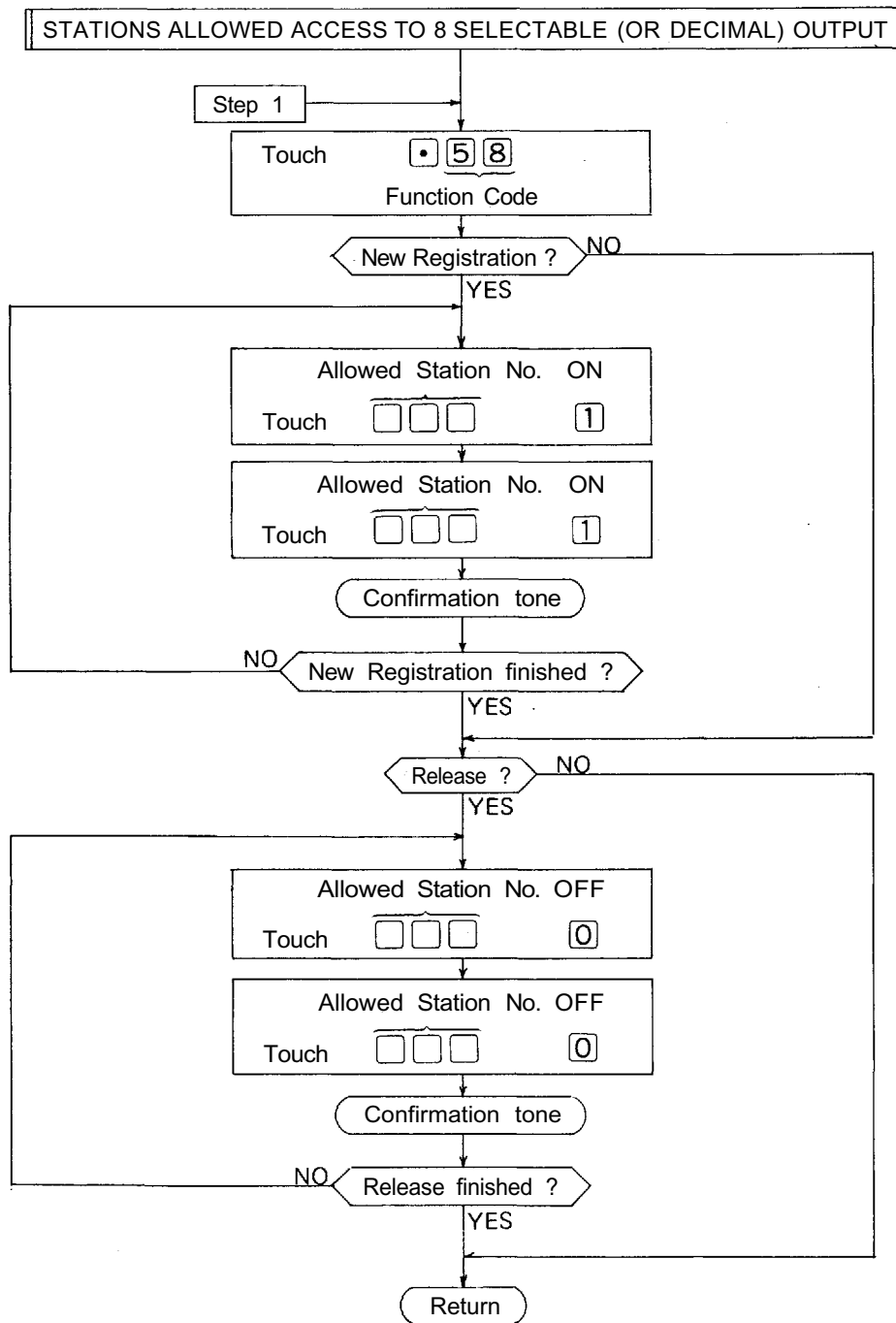
2. To release all registered stations at one time,  
 Touch [5][7][0][0]...[0]  
 10 times  
 (Confirmation tone will be heard.)

3. Re-start at Step 1 when mis-dialing occurs.  
 (All other registrations remain valid.)

4. Station No. should be 2 digits in length when 2 Digit Dialing function is employed.

5. Programming is necessary only if CPU DIP switch D-3 is "ON". Switch D-6 must be "ON" to employ this function.

6-7 STATIONS ALLOWED ACCESS TO 8 SELECTABLE (OR DECIMAL) OUTPUT (FUNCTION CODE 58)



NOTES

1. To register all stations at one time,

Touch [5][8][1][1]...[1]

10 times

(Confirmation tone will be heard.)

2. To release all registered stations at one time,

Touch [5][8][0][0]...[0]

10 times

(Confirmation tone will be heard.)

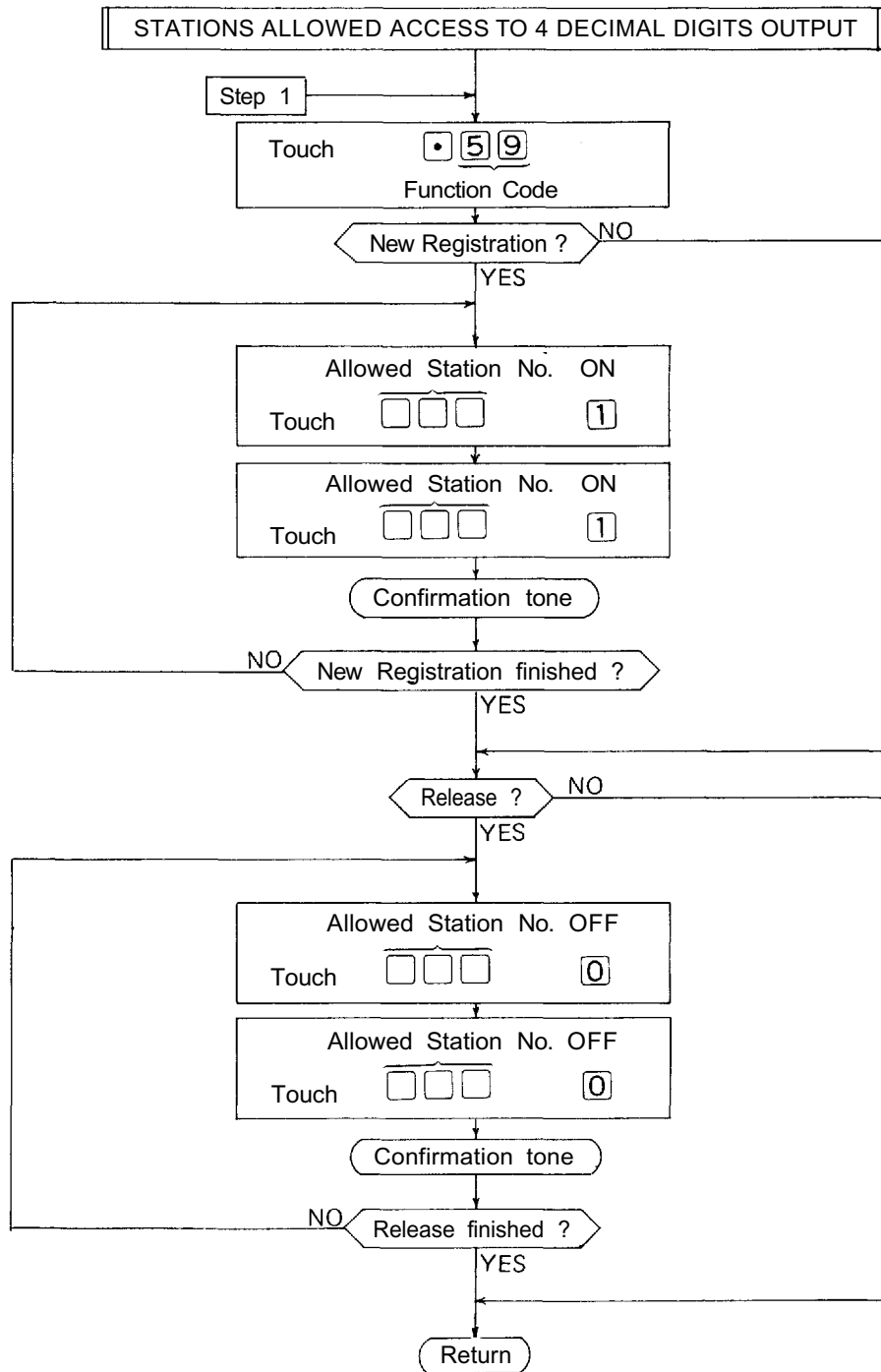
3. Re-start at Step 1 when mis-dialing occurs.

(All other registrations remain valid.)

4. Station No. should be 2 digits in length when 2 Digit Dialing function is employed.

5. Programming is necessary only if CPU DIP switch D-3 is "ON". Switch D-6 must be "ON" to employ this function.

6-8 STATIONS ALLOWED ACCESS TO 4 DECIMAL DIGITS OUTPUT (FUNCTION CODE 59)



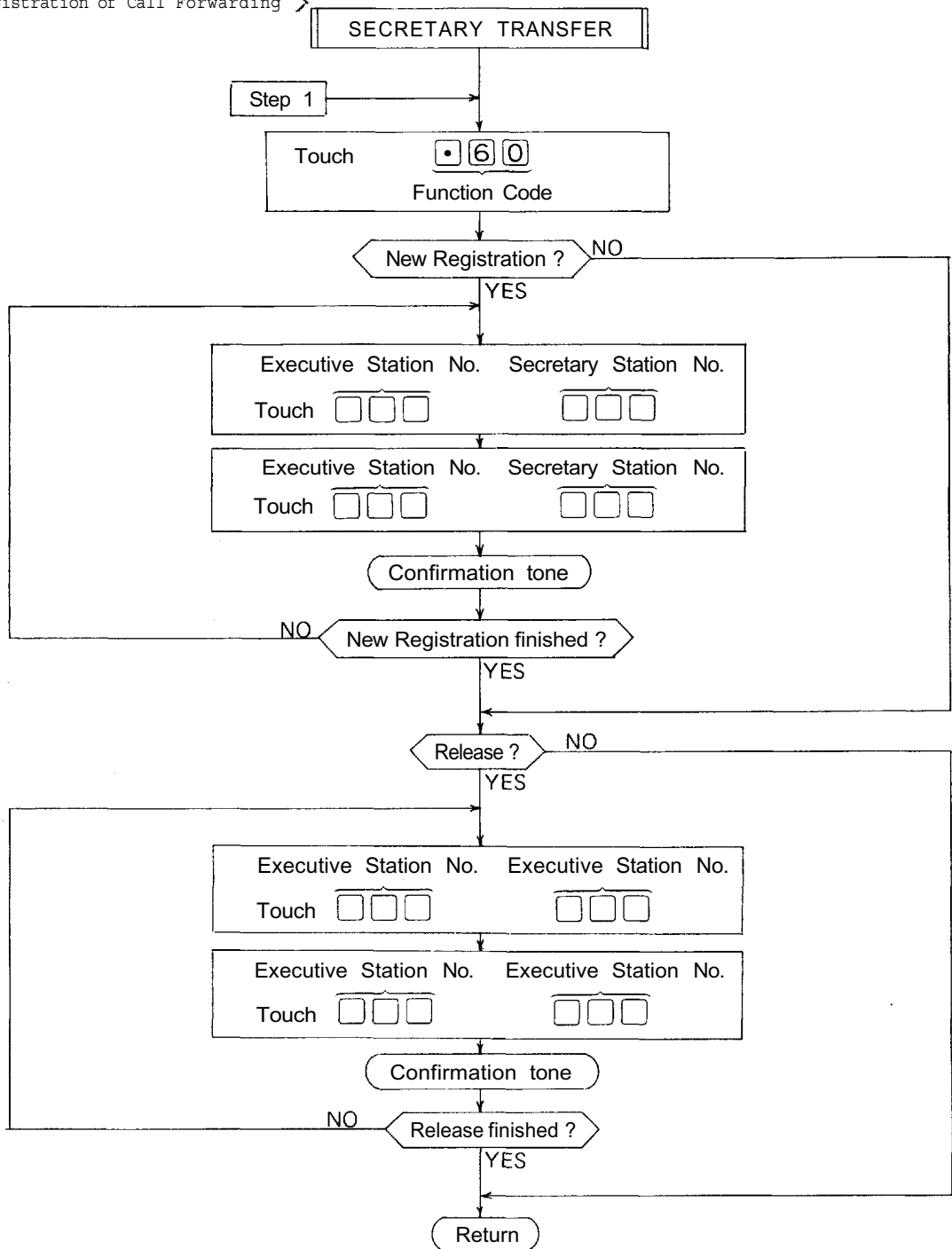
NOTES

- To register all stations at one time,  
Touch [5][9][1][1]...[1]  
10 times  
(Confirmation tone will be heard.)
- To release all registered stations at one time,  
Touch [5][9][0][0]...[0]  
10 times  
(Confirmation tone will be heard.)

- Re-start at Step 1 when mis-dialing occurs.  
(All other registrations remain valid.)
- Station No. should be 2 digits in length when 2 Digit Dialing function is employed.
- Programming is necessary only if CPU DIP switch D-3 is "ON". Switch D-6 must be "ON" to employ this function.

**6-9 SECRETARY TRANSFER (FUNCTION CODE 60)**

< Registration of Call Forwarding >



**NOTES**

1. To release all registered stations at one time,

Touch 60000 ... 0  
 10 times

(Confirmation tone will be heard.)

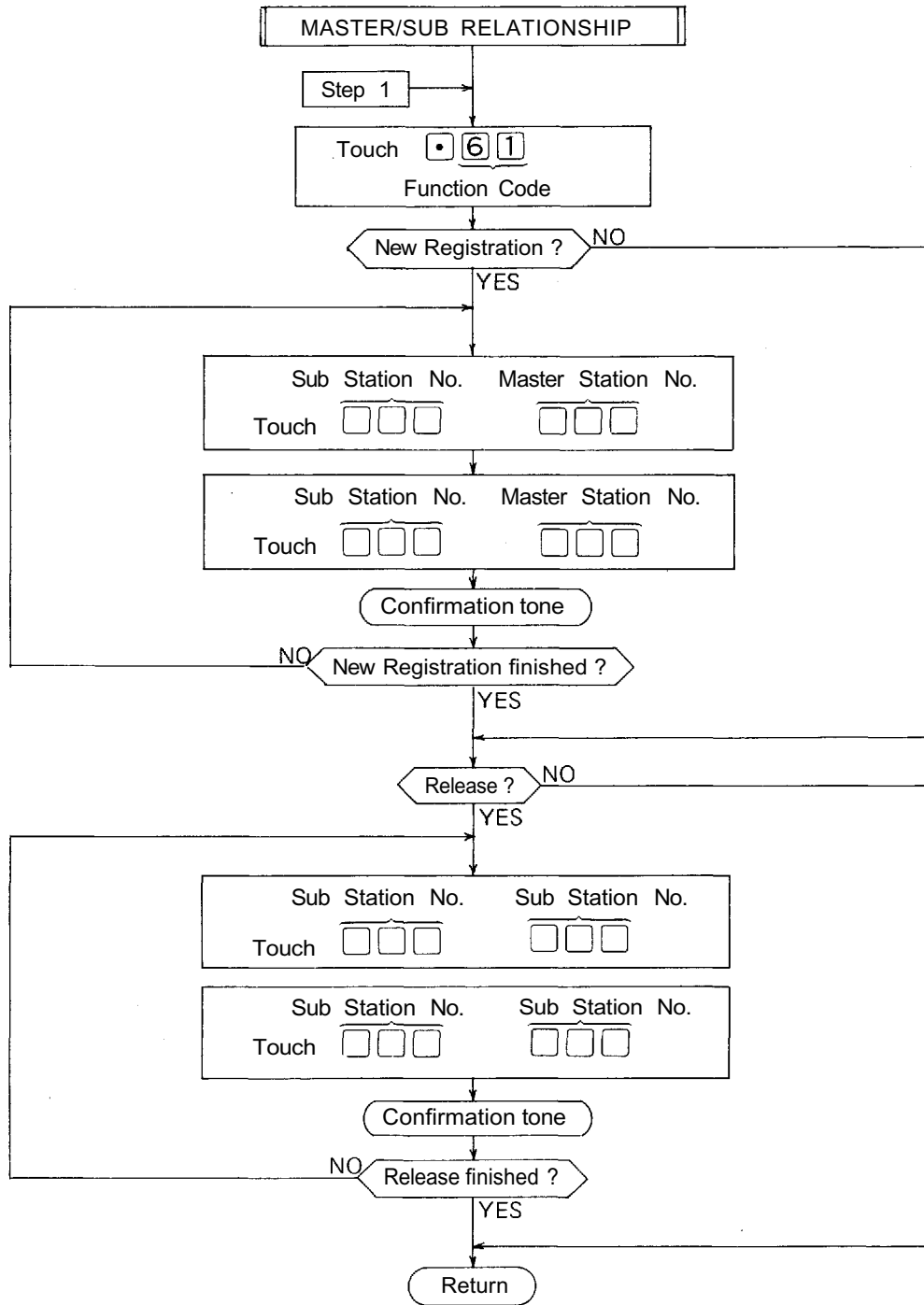
2) Re-start at Step 1 when mis-dialing occurs.

(All other registrations remain valid.)

3) Station No. should be 2 digits in length when 2 Digit Dialing function is employed.

4) Employment of Call Forwarding function makes the Secretary's station to be the station the call is to be rerouted to when the station called first is busy.

6-10 MASTER/SUB RELATIONSHIP (FUNCTION CODE 61)



NOTES

1. To release all registered stations at one time,

Touch 6100 ... 0  
10 times

(Confirmation tone will be heard.)

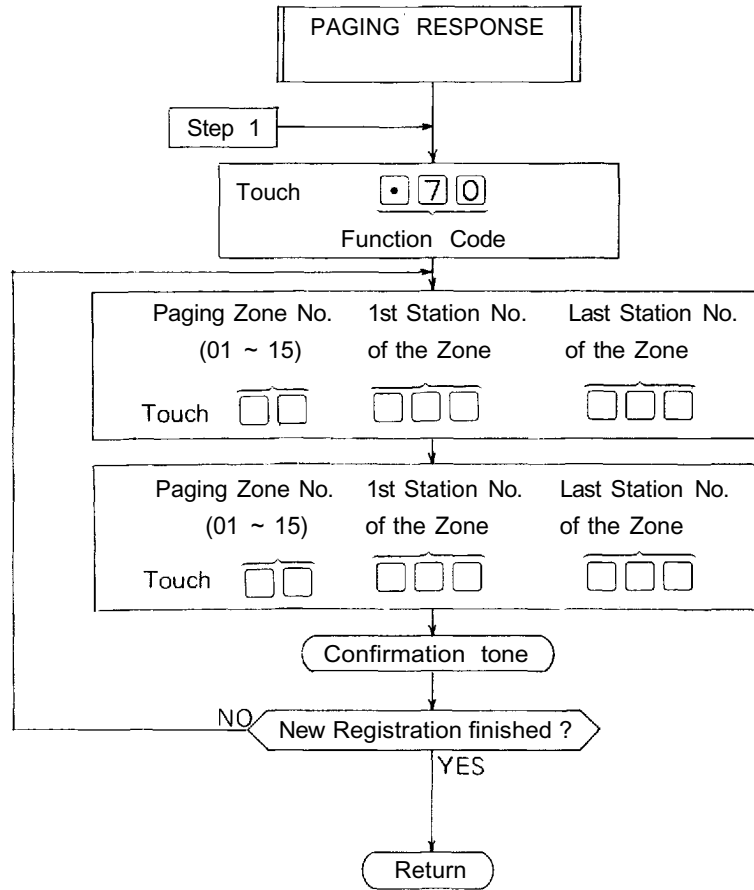
2. Re-start at Step 1 when mis-dialing occurs.

(All other registrations remain valid.)

3. Station No. should be 2 digits in length when 2 Digit Dialing function is employed.



6-11 PAGING RESPONSE (FUNCTION CODE 70)



**NOTES**

1. To release all registered Zones at one time,

Touch • 7 0 0 0 ... 0

10 times

(Confirmation tone will be heard.)

2. Re-start at Step 1 when mis-dialing occurs.

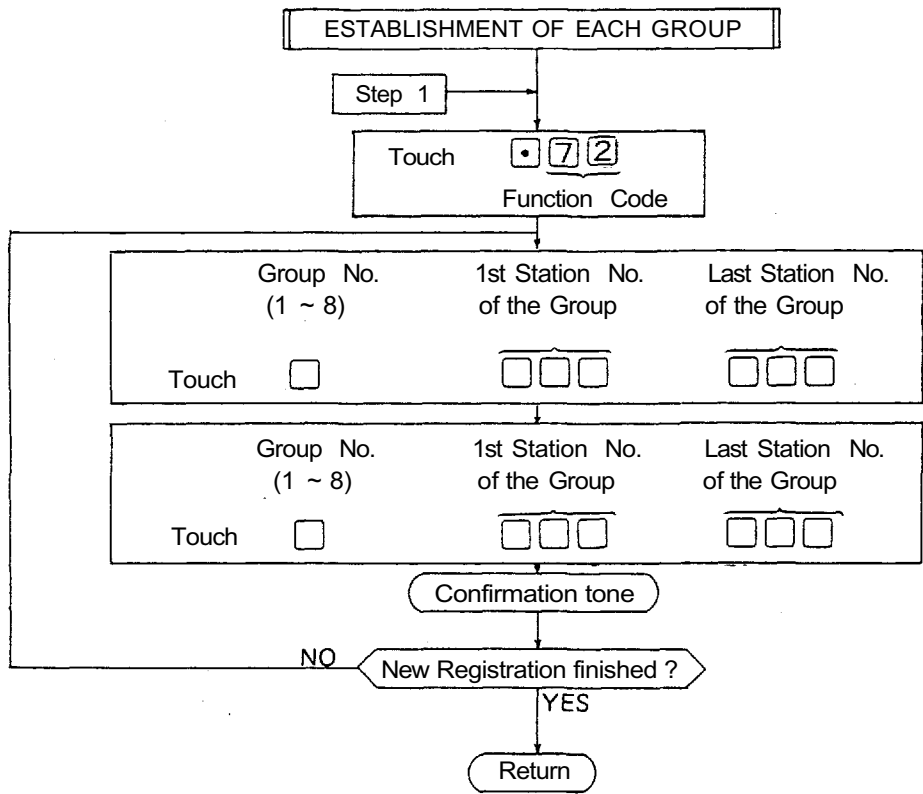
(All other registrations remain valid.)

3. Station No. should be 2 digits in length when 2 Digit Dialing function is employed.

4. Switch B-4 must be "ON" to employ this function.



**6-13 THE GROUPS OF STATIONS FOR CALLING PARTY INDICATION**  
 (Lamp Type) . (FUNCTION CODE 72)



**NOTES**

1. To release all registered Groups at one time,

Touch 7200...0  
 10 times

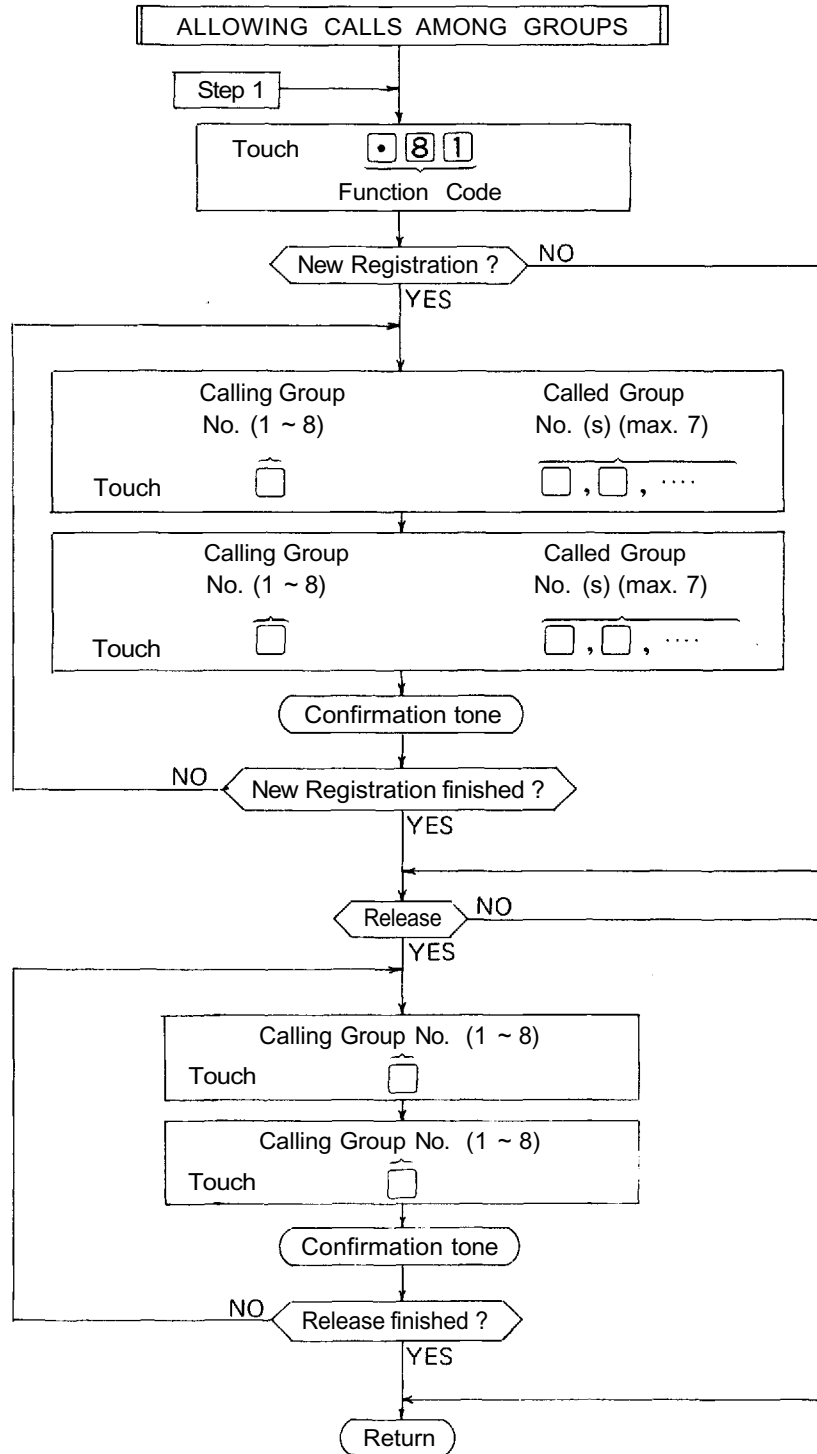
(Confirmation tone will be heard.)

3. Station No. should be 2 digits in length when 2 Digit Dialing function is employed.

2. Re-start at Step 1 when mis-dialing occurs.

(All other registrations remain valid.)

GROUP BLOCKING 2



NOTES

1. To release all registered Calling Groups at one time,  
Touch    
10 times  
(Confirmation tone will be heard.)

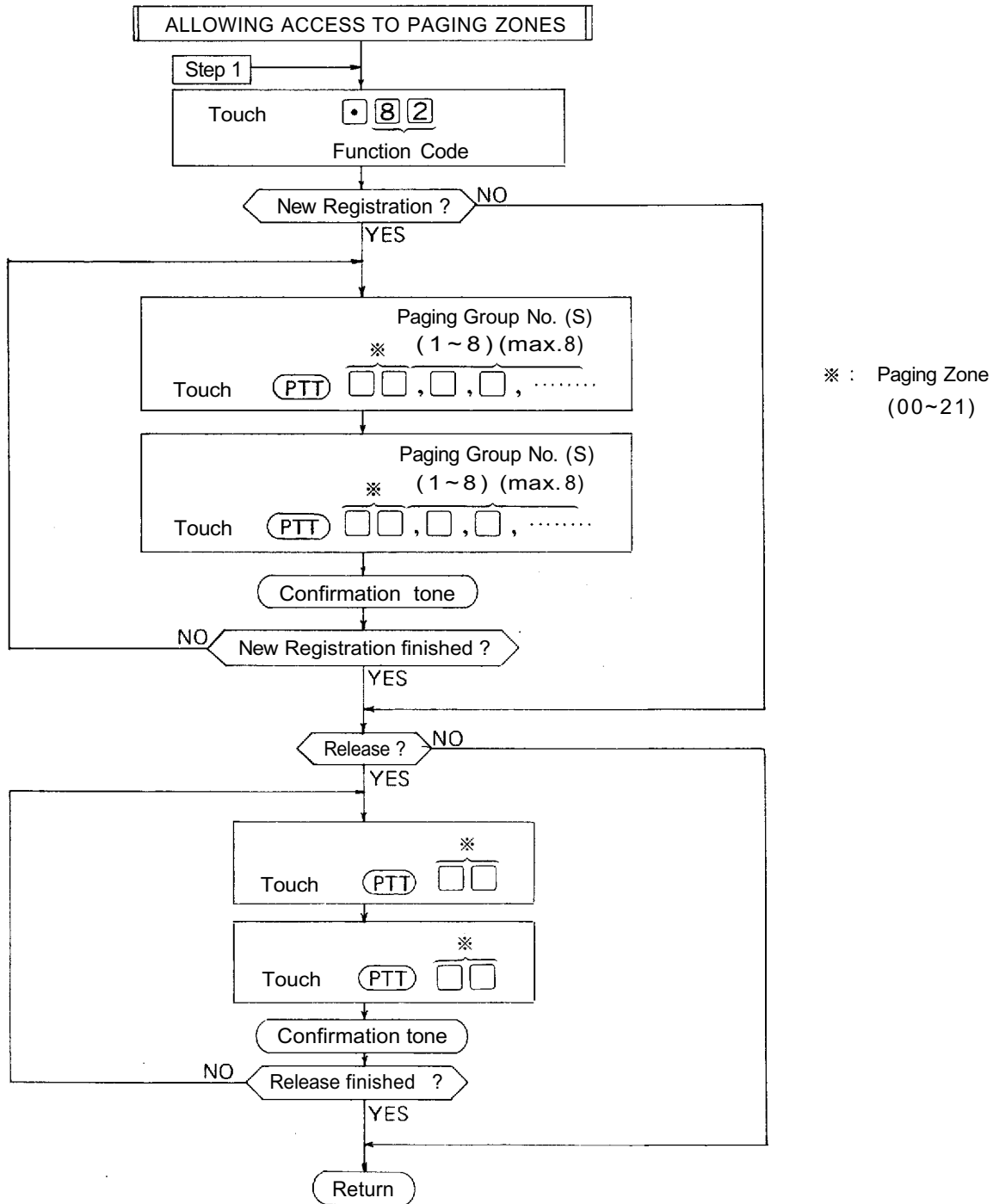
2. Re-start at Step 1 when mis-dialing occurs  
(All other registrations remain valid.)

3. Do not register a Group to call itself.  
This cancels calling ability to other groups.

4. CPU DIP switch D-4 must be "ON" to employ this function.

5. Group No.8 is not needed in case 2 exchanges are tied.

**GROUP BLOCKING 3**



**NOTES**

1. To release all registered Paging Zones at one time,  
Touch \* 8 2 0 0 ... 0  
10 times  
(Confirmation tone will be heard.)

2. Re-start at Step 1 when mis-dialing occurs  
(All other registrations remain valid.)
3. CPU DIP switch D-4 must be "ON" to employ this function.
4. Group No.7 and 8 are not needed the programming in case the exchanges are tielined.

## 7. PROGRAMMING RECORD FOR FUNCTIONS

Use these tables to keep a record of those functions assigned to each station.

Function Table for Stations (1)

Function Group				A									B		C	
Station No.	Function Code	Function	Executive Priority	Continuous Calling Tone	Stations Allowed Access to All Call	Stations Allowed Access to Conference	Stations Allowed Access to One Shot Make Output	Stations Allowed Access to Make/Break Output	Stations Allowed Access to 1/8 Select (or Decimal) Output	Stations Allowed Access to 4 Decimal Digits Output	Secretary (Call Forwarding) Station No. Station No.	Master Station No.	Paging Zone No.	Group No. for Group Blocking	Group No. for Calling Party Indication	
																Name
			50	51	52	53	56	57	58	59	60	61	70	71	72	
1	200 (20)	470	740													
	201 (21)	471	741													
	202 (22)	472	742													
	203 (23)	473	743													
	204 (24)	474	744													
	205 (25)	475	745													
	206 (26)	476	746													
	207 (27)	477	747													
2	208 (28)	478	748													
	209 (29)	479	749													
	210 (30)	480	750													
	211 (31)	481	751													
	212 (32)	482	752													
	213 (33)	483	753													
	214 (34)	484	754													
	215 (35)	485	755													
3	216 (36)	486	756													
	217 (37)	487	757													
	218 (38)	488	758													
	219 (39)	489	759													
	220 (40)	490	760													
	221 (41)	491	761													
	222 (42)	492	762													
	223 (43)	493	763													
4	224 (44)	494	764													
	225 (45)	495	765													
	226 (46)	496	766													
	227 (47)	497	767													
	228 (48)	498	768													
	229 (49)	499	769													
	230 (50)	500	770													
	231 (51)	501	771													

Function Table for Stations (2)

Function Group				A										B		C	
Name	Station No.			Executive Priority	Continuous Calling Tone	Stations Allowed Access to All Call	Stations Allowed Access to Conference	Stations Allowed Access to One Shot Make Output	Stations Allowed Access to Make/Break Output	Stations Allowed Access to 1/8 Select (or Decimal) Output	Stations Allowed Access to 4 Decimal Digits Output	Secretary (Call Forwarding) Station No. Station No.	Master Station No.	Paging Zone No.	Group No. for Group Blocking	Group No. for Calling Party Indication	
	single A	B	C														
5	232 (52)	502	772														
	233 (53)	503	773														
	234 (54)	504	774														
	235 (55)	505	775														
	236 (56)	506	776														
	237 (57)	507	777														
	238 (58)	508	778														
	239 (59)	509	779														
6	240 (60)	510	780														
	241 (61)	511	781														
	242 (62)	512	782														
	243 (63)	513	783														
	244 (64)	514	784														
	245 (65)	515	785														
	246 (66)	516	786														
	247 (67)	517	787														
7	248 (68)	518	788														
	249 (69)	519	789														
	250 (70)	520	790														
	251 (71)	521	791														
	252 (72)	522	792														
	253 (73)	523	793														
	254 (74)	524	794														
	255 (75)	525	795														
8	256 (76)	526	796														
	257 (77)	527	797														
	258 (78)	528	798														
	259 (79)	529	799														
	260 (80)	530	800														
	261 (81)	531	801														
	262 (82)	532	802														
	263 (83)	533	803														

Function Table for Stations (3)

Function Group			A							B		C			
Name	Station No.		Executive Priority	Continuous Calling Tone	Stations Allowed Access to All Call	Stations Allowed Access to Conference	Stations Allowed Access to One Shot Make Output	Stations Allowed Access to Make/Break Output	Stations Allowed Access to 1/8 Select (or Decimal) Output	Stations Allowed Access to 4 Decimal Digits Output	Secretary (Call Forfarding Station No.)	Master Station No.	Paging Zone No.	Group No. for Group Blocking	Group No. for Calling Party Indication
	single A	B													
9	264 (84)	534	804												
	265 (85)	535	805												
	266 (86)	536	806												
	267 (87)	537	807												
	268 (88)	538	808												
	269 (89)	539	809												
	270 (90)	540	810												
	271 (91)	541	811												
10	272 (92)	542	812												
	273 (93)	543	813												
	274 (94)	544	814												
	275 (95)	545	815												
	276 (96)	546	816												
	277 (97)	547	817												
	278 (98)	548	818												
	279 (99)	549	819												
11	280	550	820												
	281	551	821												
	282	552	822												
	283	553	823												
	284	554	824												
	285	555	825												
	286	556	826												
	287	557	827												
12	288	558	828												
	289	559	829												
	290	560	830												
	291	561	831												
	292	562	832												
	293	563	833												
	294	564	834												
	295	565	835												



Function Table for Stations (4)

Function Group				A								B		C		
Name	Station No.			Executive Priority	Continuous Calling Tone	Stations Allowed Access to All Call	Stations Allowed Access to Conference	Stations Allowed Access to One Shot Make Output	Stations Allowed Access to Make/Break Output	Stations Allowed Access to 1/8 Select (or Decimal) Output	Stations Allowed Access to 4 Decimal Digits Output	Secretary (Call Forwarding) Station No. Station No.	Master Station No.	Paging Zone No.	Group No. for Group Blocking	Group No. for calling Party Indication
	single A	B	C													
▽13	296	566	836													
	297	567	837													
	298	568	838													
	299	569	839													
	300	570	840													
	301	571	841													
	302	572	842													
	303	573	843													
▽4	304	574	844													
	305	575	845													
	306	576	846													
	307	577	847													
	308	578	848													
	309	579	849													
	310	580	850													
	311	581	851													
▽15	(312)															
	(313)															
	(314)															
	(315)															
	(316)															
	(317)															
	(318)															
	(319)															
▽16	320	590	860													
	321	591	861													
	322	592	862													
	323	593	863													
	324	594	864													
	325	595	865													
	326	596	866													
	327	597	867													

### Paging Response Table

< When a single exchange is used >

Function Code 70	Station Paging Zone		1st Station No.	Last Station No.
	Department	No.		
		01		
		02		
		03		
		04		
		05		
		06		
		07		
		08		
		09		
		10		
		11		
		12		
		13		
		14		
		15		

1 X PIU-52A  
 2 X PIU-52A

< When the exchanges are connected by tielines >

Function Code 70	Station Paging Zone				1st Station No.	Last Station No.
	Department	type of exchange				
		A	B	C		
	01	08	15			
	02	09	16			
	03	10	17			
	04	11	18			
	05	12	19			
	06	13	20			
	07	14	21			

Station numbers for Calling Party Indication (Lamp Type)

Function Code 72	Calling Party Indication		1st Station No.	Last Station No.
	Name	Group No.		
		1		
		2		
		3		
		4		
		5		
		6		
		7		
		8		

## Tables for Group Blocking

① Group Blocking for each Group

Function Code 71				Group	No.	1st Station No.	Last Station No.
					1		
					2		
					3		
					4		
					5		
					6		
Tieline T <sub>1</sub>	3A→3B	3B→3C	3C→3A		7	* 1	* 1
Tieline T <sub>2</sub>	3A→3C	3B→3A	3C→3B		8	* 1	* 1

② Group Blocking among Groups

Function Code 81		Calling Group No.	Called Group No.								Others
			1	2	3	4	5	6	Tie line T <sub>1</sub>	Tie line T <sub>2</sub>	
		1	*								*
		2		*							*
		3			*						*
		4				*					*
		5					*				*
		6						*			*
Tieline T <sub>1</sub>	3A→3B	3B→3C	3C→3A		7				*		*
Tieline T <sub>2</sub>	3A→3C	3B→3A	3C→3B		8	*2				*	*
Others				*	*	*	*	*	*	*	*

③ Group Blocking for Paging Groups

Function Code 82			Paging Zone		Paging Group No.								Others		
			Department	No.	1	2	3	4	5	6	Single exchange				
Individual Paging Zones		All Call	00											*	
			01												*
			02												*
			03												*
			04												*
			05												*
			06												*
			07												*
			08												*
			09												*
			10												*
			11												*
			12												*
			13												*
			14												*
			15												*
			16												*
			17												*
			18												*
			19												*
			20												*
	21												*		

Exchange A

Exchange B

Exchange C

(when a single exchange is used)

- \* 1 Only when the exchange without tieline.
- \* 2 Not used when 2 exchanges are tielined.
- \* Activated without No.200 programming.

# PART 2. FUNCTION SELECTION FOR DATA TRANSMITTING AND RECEIVING UNITS

## 8. SETTING CHANNEL SELECT SWITCHES OF TRANSMITTING UNITS (DT-E11) AND WORD SELECT SWITCH OF RECEIVING UNITS (DR-B61)

### NOTE

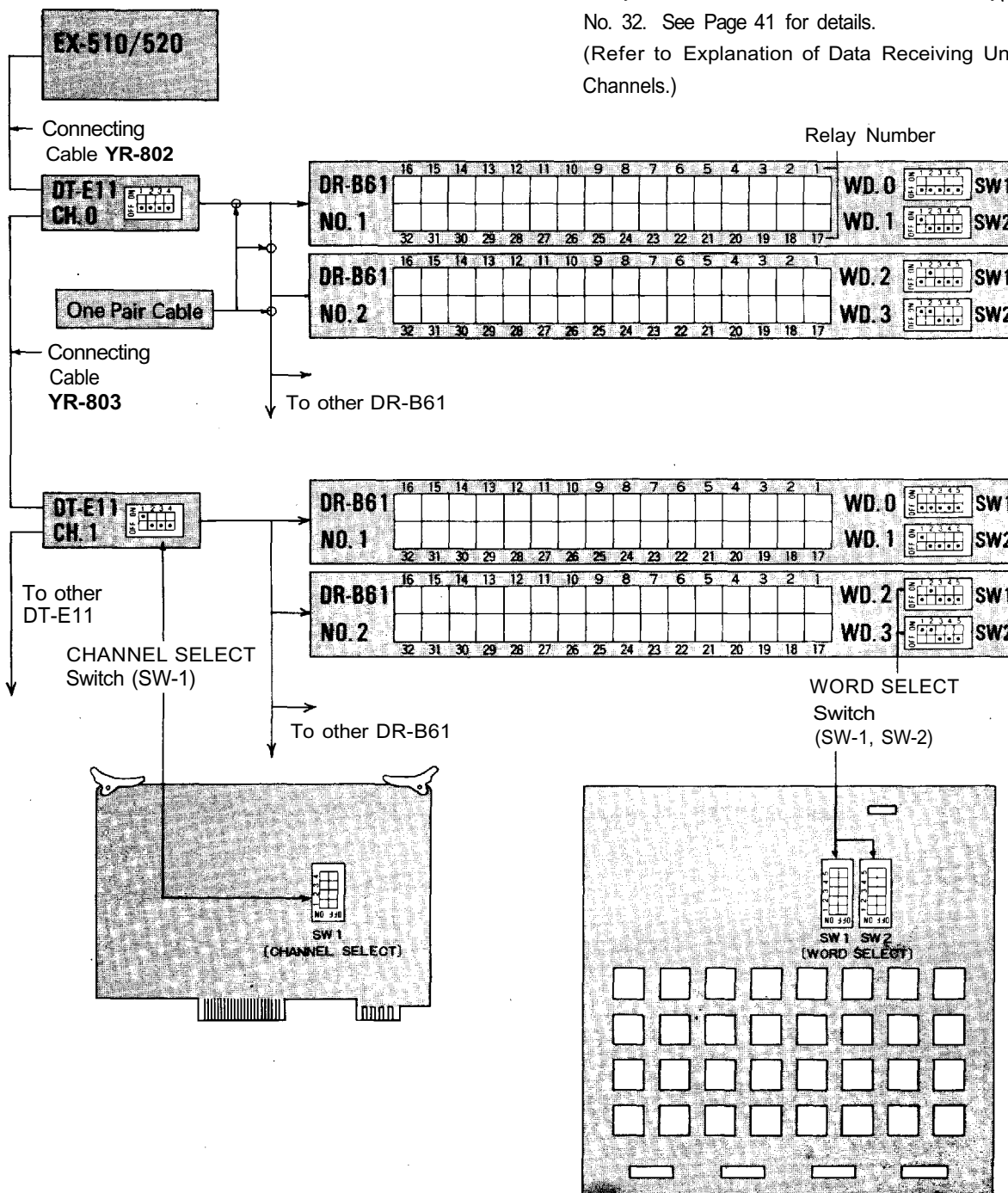
1. Connect the DT-E11 and DR-B61 to Exchange correctly. (Refer to installation manuals of DT-E11 and DR-B61.)
2. Set the function select switches (DIP SWITCH) on CPU-55 correctly and be sure to enter initial programming and function registration at programming station No. 200.
3. Remove the front panel of Data Transmitting Unit (DT-E11) and take out the printed circuit board. Then

set the channel select switches located on the printed circuit board, according to the necessary functions such as IN/OUT Annunciation, Calling Party Indication etc, and replace in the Unit.

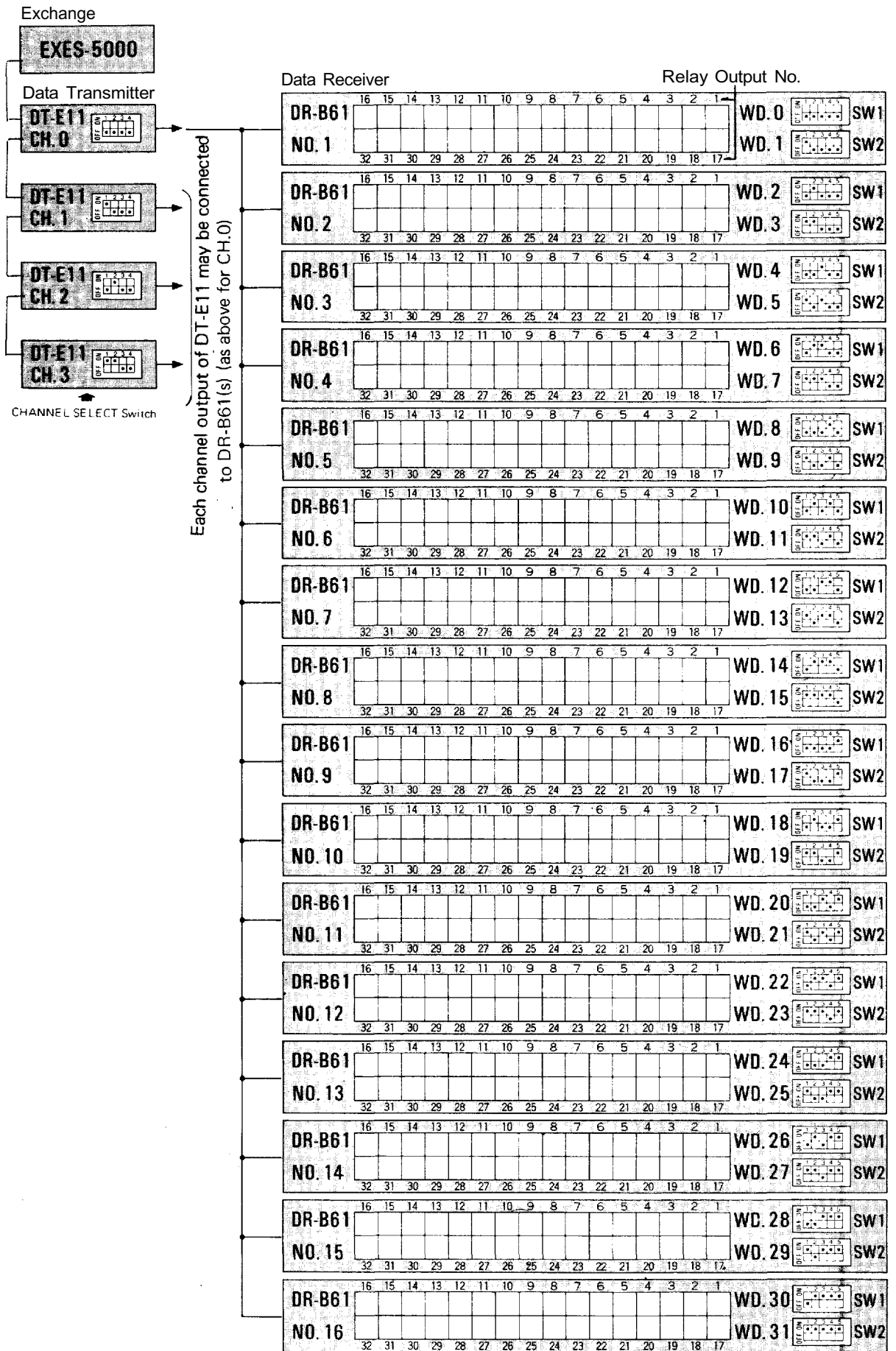
(Refer to 12. Explanation of Data Transmitting Unit Output Channels, Page 39).

4. The DT-E11 sends out 512 bit data (16 bit x 32 words) to control relays on Data Receiving Unit (DR-B61). Therefore set the two word select switches on DR-B61, according to necessary output mode. SW-1 is for Relay No.1 to No.16 and SW-2 is for Relay No.17 to No. 32. See Page 41 for details.

(Refer to Explanation of Data Receiving Unit Output Channels.)



# 9. DIP SWITCH TABLE FOR DATA TRANSMITTING AND RECEIVING UNIT

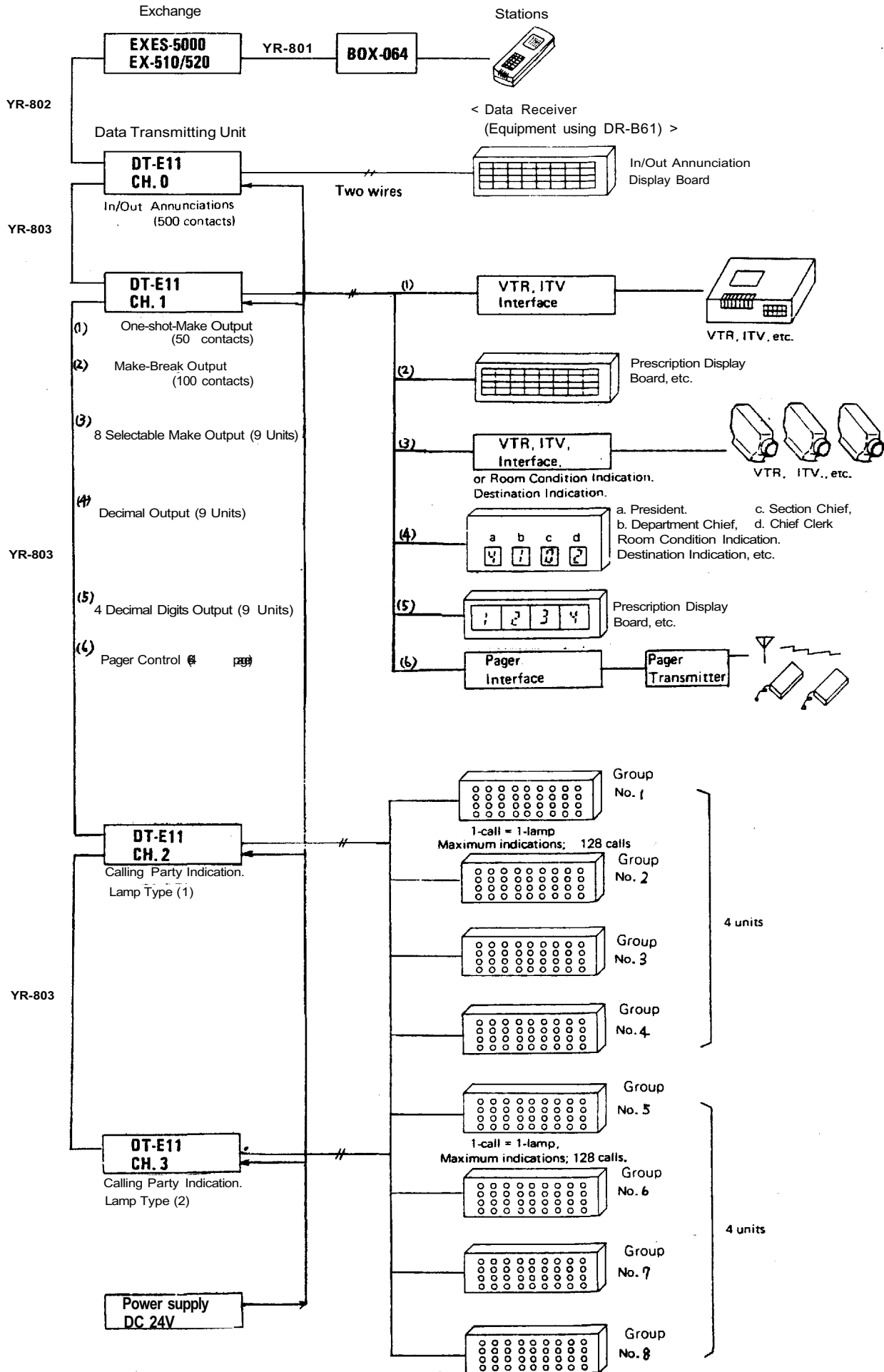


Note:  (  ) shows the Head of a Slide Switch

WORD SELECT Switch

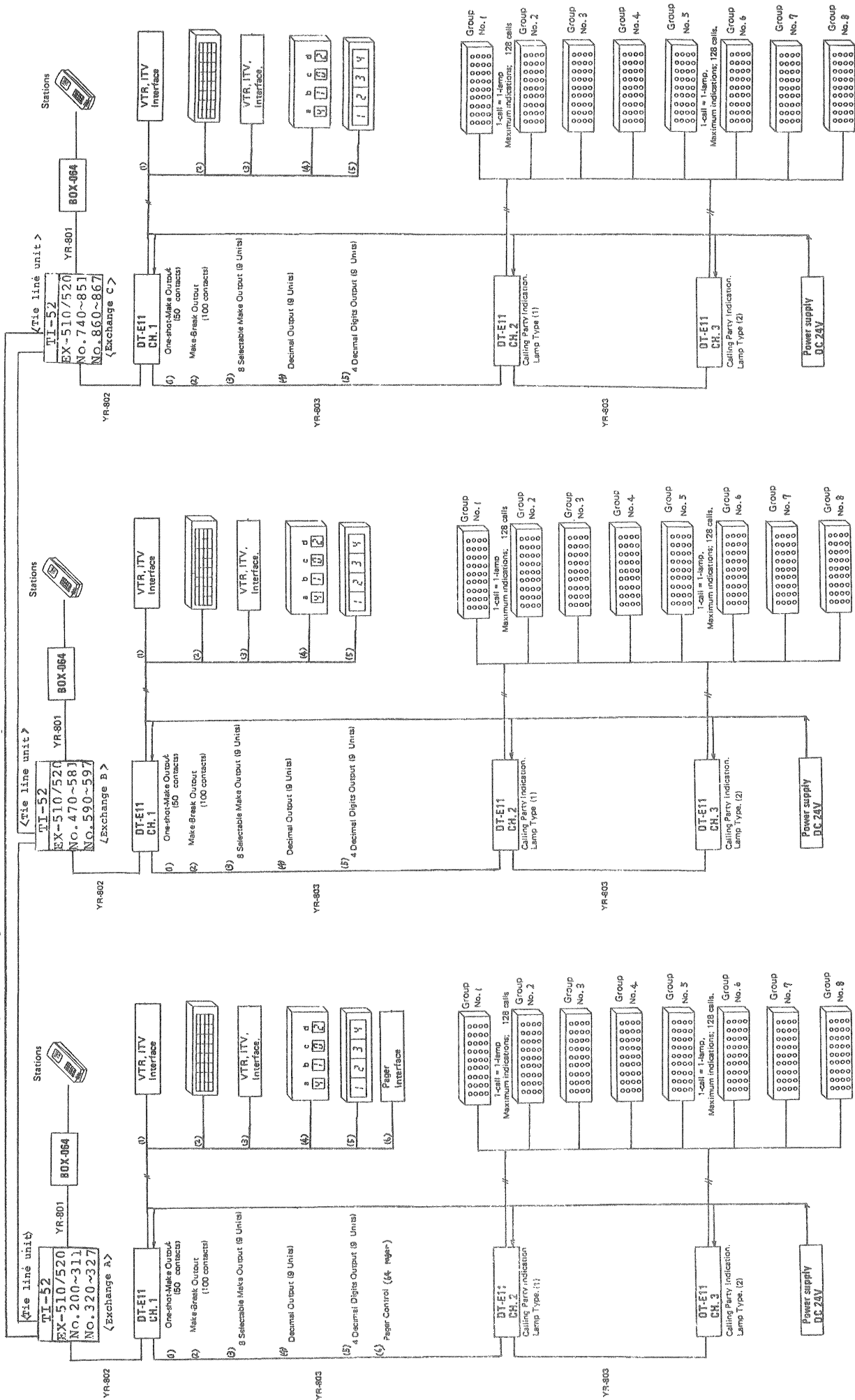
# 10. System Diagram of Data Transmitting and Receiving Units

(When the Exchanges are not connected by means of Tie-line.)

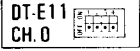

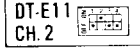



# System Diagram of Data Transmitting and Receiving Units

(When the Exchanges are connected by means of Tie-Line.)



## 11. EXPLANATION OF DATA TRANSMITTING UNIT OUTPUT CHANNELS

CHANNEL SELECT	FUNCTIONS	DESCRIPTION	APPLICATION
<b>CH.0</b> 	IN/OUT Annunciation	Personel in and put registration can be accomplished at any Master station by using personal numbers Max. 500 IN/OUT annunciations may be done.	<ul style="list-style-type: none"> <li>• IN/OUT Annunciation</li> </ul>
<b>CH. 1</b> 	(1) One-shot Make Output	50 One-shot make contacts can be available at any Master station.	<ul style="list-style-type: none"> <li>• ITV camera select</li> <li>• VTR control</li> </ul>
	(2) Make/Break Output	100 Make/Break contacts can be available at any Master station.	<ul style="list-style-type: none"> <li>• Door Remote</li> <li>• IN/OUT Annunciation</li> </ul>
	(3) 8 Selectable Make Output (9 unit blocks)	One contact out of 8 selectable make output is obtained.	<ul style="list-style-type: none"> <li>• Destination indication</li> </ul>
	(4) Decimal Output (9 unit blocks)	10 Selectable Decimal Outputs are available with 7 segments LEDs.	<ul style="list-style-type: none"> <li>• Room condition indication.</li> </ul>
	(5) 4 Decimal digits output (9 unit blocks)	Indicate by 7 segments LEDs.	<ul style="list-style-type: none"> <li>• Prescription annunciation</li> </ul>
	(6) Pager Control Output	Make output (64 contacts) are available for pager control.	<ul style="list-style-type: none"> <li>• Pager</li> </ul>
<b>CH. 2</b> 	Calling Party Indication (One Station; One Lamp)	Max. 128 Calling station numbers can be indicated when designated called station with Display Board is called.	<ul style="list-style-type: none"> <li>• The number of called stations are No. XXX~No. XXX</li> </ul>
<b>CH. 3</b> 	Calling Party Indication (One Station; One Lamp)	Same as above except called station number	<ul style="list-style-type: none"> <li>• The number of called stations are No. XXX~No. XXX</li> </ul>



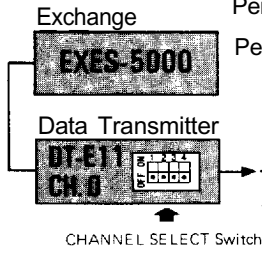
# 12. EXPLANATION OF DATA RECEIVING UNIT OUTPUT CHANNELS

## 12-1 Channel 0 (CH. 0) In/Out Annunciation

(Dial Operation)

Personal Number Registration   6  1  X  X  X (Relay Make) XXX: 000 ~ 499 (500 contacts)

Personal Number Cancellation    1  X  X  X (Relay Break)



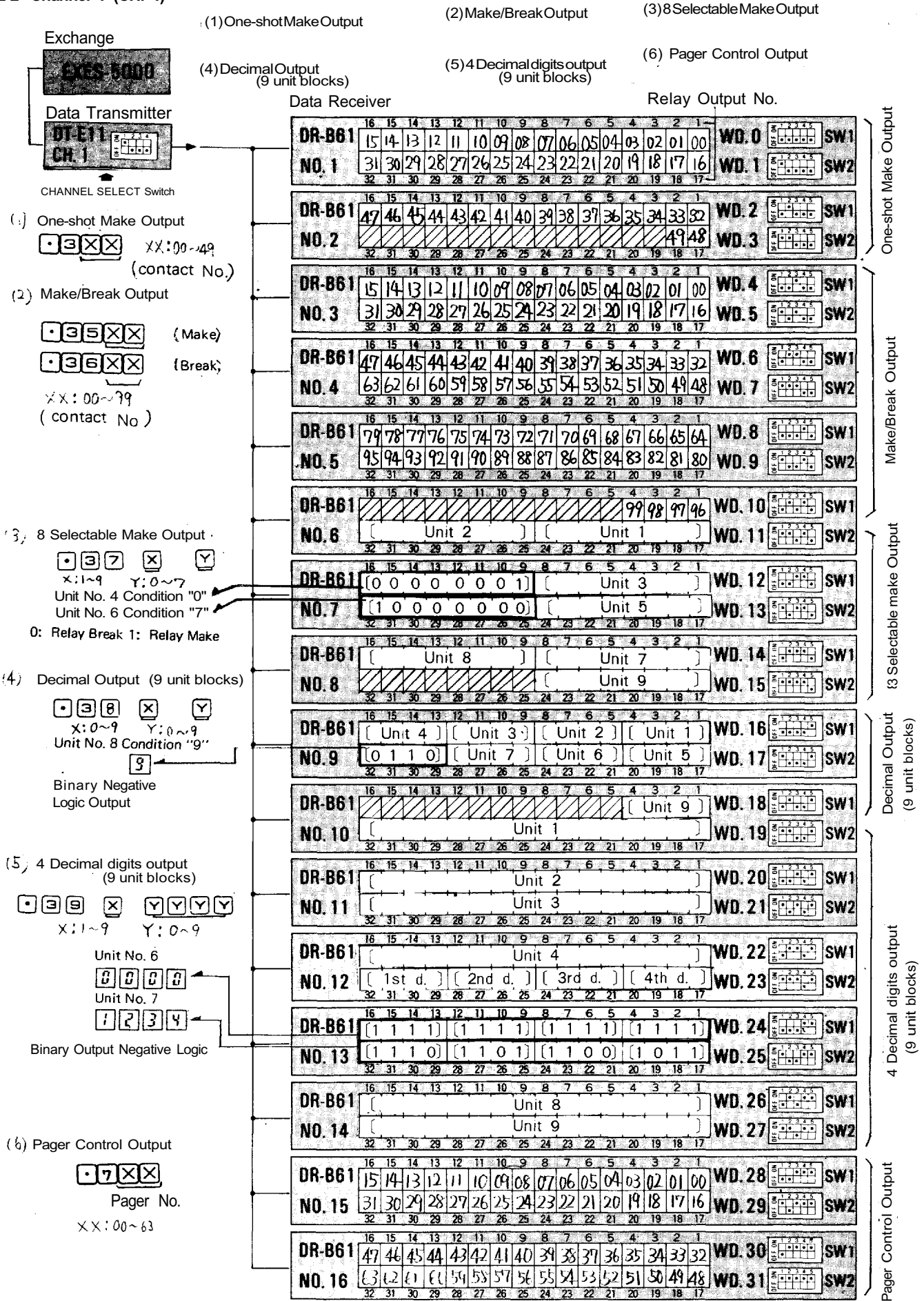
		Data Receiver																Relay Output No.	
		16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	WD. 0	SW1
DR-B61 NO. 1	015	014	013	012	011	010	009	008	007	006	005	004	003	002	001	000	WD. 1	SW2	
	031	030	029	028	027	026	025	024	023	022	021	020	019	018	017	016			
		32	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17		
DR-B61 NO. 2	047	046	045	044	043	042	041	040	039	038	037	036	035	034	033	032	WD. 2	SW1	
	063	062	061	060	059	058	057	056	055	054	053	052	051	050	049	048			
		32	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17		
DR-B61 NO. 3	079	078	077	076	075	074	073	072	071	070	069	068	067	066	065	064	WD. 4	SW1	
	095	094	093	092	091	090	089	088	087	086	085	084	083	082	081	080			
		32	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17		
DR-B61 NO. 4	111	110	109	108	107	106	105	104	103	102	101	100	099	098	097	096	WD. 6	SW1	
	127	126	125	124	123	122	121	120	119	118	117	116	115	114	113	112			
		32	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17		
DR-B61 NO. 5	143	142	141	140	139	138	137	136	135	134	133	132	131	130	129	128	WD. 8	SW1	
	159	158	157	156	155	154	153	152	151	150	149	148	147	146	145	144			
		32	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17		
DR-B61 NO. 6	175	174	173	172	171	170	169	168	167	166	165	164	163	162	161	160	WD. 10	SW1	
	191	190	189	188	187	186	185	184	183	182	181	180	179	178	177	176			
		32	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17		
DR-B61 NO. 7																	WD. 12	SW1	
DR-B61 NO. 7									199	198	197	196	195	194	193	192	WD. 13	SW2	
	215	214	213	212	211	210	209	208	207	206	205	204	203	202	201	200			
		32	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17		
DR-B61 NO. 8	231	230	229	228	227	226	225	224	223	222	221	220	219	218	217	216	WD. 14	SW1	
	247	246	245	244	243	242	241	240	239	238	237	236	235	234	233	232			
		32	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17		
DR-B61 NO. 9	263	262	261	260	259	258	257	256	255	254	253	252	251	250	249	248	WD. 16	SW1	
	279	278	277	276	275	274	273	272	271	270	269	268	267	266	265	264			
		32	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17		
DR-B61 NO. 10	295	294	293	292	291	290	289	288	287	286	285	284	283	282	281	280	WD. 18	SW1	
	311	310	309	308	307	306	305	304	303	302	301	300	299	298	297	296			
		32	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17		
DR-B61 NO. 11	327	326	325	324	323	322	321	320	319	318	317	316	315	314	313	312	WD. 20	SW1	
	343	342	341	340	339	338	337	336	335	334	333	332	331	330	329	328			
		32	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17		
DR-B61 NO. 12	359	358	357	356	355	354	353	352	351	350	349	348	347	346	345	344	WD. 22	SW1	
	375	374	373	372	371	370	369	368	367	366	365	364	363	362	361	360			
		32	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17		
DR-B61 NO. 13	391	390	389	388	387	386	385	384	383	382	381	380	379	378	377	376	WD. 24	SW1	
	407	406	405	404	403	402	401	400	399	398	397	396	395	394	393	392			
		32	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17		
DR-B61 NO. 14	423	422	421	420	419	418	417	416	415	414	413	412	411	410	409	408	WD. 26	SW1	
	439	438	437	436	435	434	433	432	431	430	429	428	427	426	425	424			
		32	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17		
DR-B61 NO. 15	455	454	453	452	451	450	449	448	447	446	445	444	443	442	441	440	WD. 28	SW1	
	471	470	469	468	467	466	465	464	463	462	461	460	459	458	457	456			
		32	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17		
DR-B61 NO. 16	487	486	485	484	483	482	481	480	479	478	477	476	475	474	473	472	WD. 30	SW1	
					499	498	497	496	495	494	493	492	491	490	489	488			
		32	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17		

Each Relay Output shows last 3 digits (xxx) of Personal Number

Note:  (  ) shows the Head of a Slide Switch

WORD SELECT Switch

12-2 Channel 1 (CH. 1)



- (1) One-shot Make Output
- (2) Make/Break Output
- (3) 8 Selectable Make Output
- (4) Decimal Output (9 unit blocks)
- (5) 4 Decimal digits output (9 unit blocks)
- (6) Pager Control Output

(1) One-shot Make Output  
 3XX XX:00~49  
 (contact No.)

(2) Make/Break Output  
 35XX (Make)  
 36XX (Break)  
 X: 00~99  
 (contact No.)

(3) 8 Selectable Make Output  
 37X Y  
 X: 1~9 Y: 0~7  
 Unit No. 4 Condition "0"  
 Unit No. 6 Condition "7"  
 0: Relay Break 1: Relay Make

(4) Decimal Output (9 unit blocks)  
 38X Y  
 X: 0~9 Y: 0~9  
 Unit No. 8 Condition "9"  
 Binary Negative Logic Output

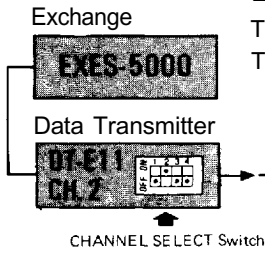
(5) 4 Decimal digits output (9 unit blocks)  
 39X YYY  
 X: 1~9 Y: 0~9  
 Unit No. 6  
 0000  
 Unit No. 7  
 1234  
 Binary Output Negative Logic

(6) Pager Control Output  
 7XX  
 Pager No.  
 XX: 00~63

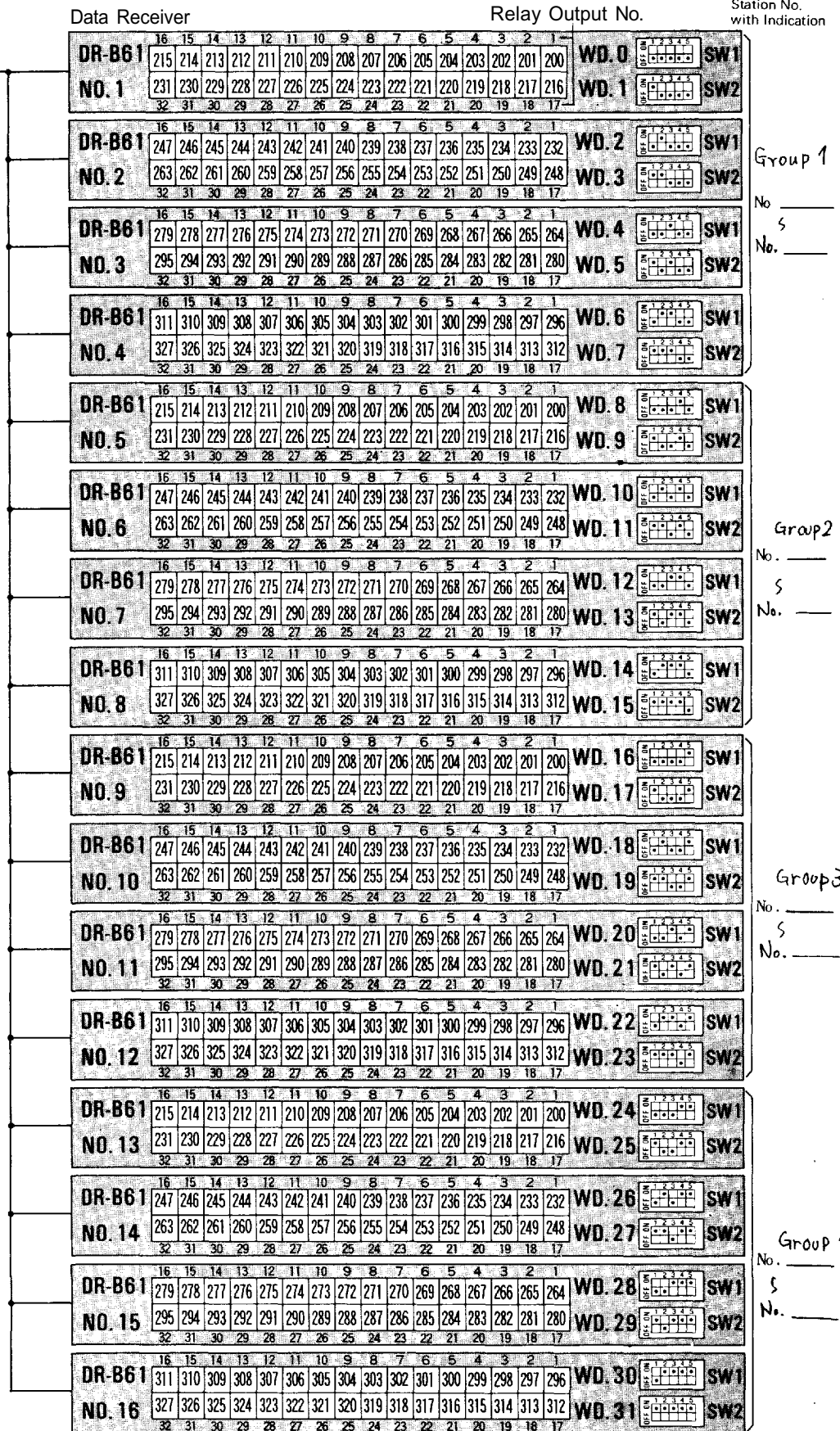
Note: □ (凸) shows the Head of a Slide Switch

WORD SELECT Switch

12-3 Channel 2 (CH. 2) Calling Party Indication Lamp Type (1)



Each "Calling Station" or "Waiting Station" is shown by Each Indication Lamp.  
 Total Number of Stations with Indications : 4 Stations/Channel (8 Stations/2 Channels)  
 Total Number of Calling Stations : Max. 128 Stations/Each Indication



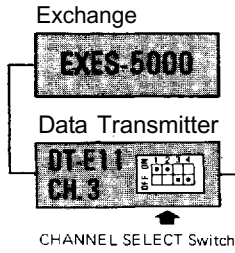
Each Relay Output shows "Calling Station No."

Note: □ (▢) shows the Head of a Slide Switch

WORD SELECT Switch

12-4 Channel 3 (CH. 3) Calling Party Indication Lamp Type (2)

Each "Calling Station" or "Waiting Station" is shown by  
 Each Indication: Lamp.  
 Total Number of Station with Indications : 4 Stations/Channel (8 Stations/2 Channels)  
 Total Number of Calling Stations : Max. 128 Stations/Each Indication



Data Receiver		Relay Output No.																Station No. with Indication
DR-B61 NO. 1	16 15 14 13 12 11 10 9 8 7 6 5 4 3 2 1	215 214 213 212 211 210 209 208 207 206 205 204 203 202 201 200	WD. 0		SW1	No. _____ 5 No. _____												
	231 230 229 228 227 226 225 224 223 222 221 220 219 218 217 216	WD. 1		SW2														
DR-B61 NO. 2	16 15 14 13 12 11 10 9 8 7 6 5 4 3 2 1	247 246 245 244 243 242 241 240 239 238 237 236 235 234 233 232	WD. 2		SW1	No. _____ 5 No. _____												
	263 262 261 260 259 258 257 256 255 254 253 252 251 250 249 248	WD. 3		SW2														
DR-B61 NO. 3	16 15 14 13 12 11 10 9 8 7 6 5 4 3 2 1	279 278 277 276 275 274 273 272 271 270 269 268 267 266 265 264	WD. 4		SW1	No. _____ 5 No. _____												
	295 294 293 292 291 290 289 288 287 286 285 284 283 282 281 280	WD. 5		SW2														
DR-B61 NO. 4	16 15 14 13 12 11 10 9 8 7 6 5 4 3 2 1	311 310 309 308 307 306 305 304 303 302 301 300 299 298 297 296	WD. 6		SW1	No. _____ 5 No. _____												
	327 326 325 324 323 322 321 320 319 318 317 316 315 314 313 312	WD. 7		SW2														
DR-B61 NO. 5	16 15 14 13 12 11 10 9 8 7 6 5 4 3 2 1	215 214 213 212 211 210 209 208 207 206 205 204 203 202 201 200	WD. 8		SW1	No. _____ 5 No. _____												
	231 230 229 228 227 226 225 224 223 222 221 220 219 218 217 216	WD. 9		SW2														
DR-B61 NO. 6	16 15 14 13 12 11 10 9 8 7 6 5 4 3 2 1	247 246 245 244 243 242 241 240 239 238 237 236 235 234 233 232	WD. 10		SW1	No. _____ 5 No. _____												
	263 262 261 260 259 258 257 256 255 254 253 252 251 250 249 248	WD. 11		SW2														
DR-B61 NO. 7	16 15 14 13 12 11 10 9 8 7 6 5 4 3 2 1	279 278 277 276 275 274 273 272 271 270 269 268 267 266 265 264	WD. 12		SW1	No. _____ 5 No. _____												
	295 294 293 292 291 290 289 288 287 286 285 284 283 282 281 280	WD. 13		SW2														
DR-B61 NO. 8	16 15 14 13 12 11 10 9 8 7 6 5 4 3 2 1	311 310 309 308 307 306 305 304 303 302 301 300 299 298 297 296	WD. 14		SW1	No. _____ 5 No. _____												
	327 326 325 324 323 322 321 320 319 318 317 316 315 314 313 312	WD. 15		SW2														
DR-B61 NO. 9	16 15 14 13 12 11 10 9 8 7 6 5 4 3 2 1	215 214 213 212 211 210 209 208 207 206 205 204 203 202 201 200	WD. 16		SW1	No. _____ 5 No. _____												
	231 230 229 228 227 226 225 224 223 222 221 220 219 218 217 216	WD. 17		SW2														
DR-B61 NO. 10	16 15 14 13 12 11 10 9 8 7 6 5 4 3 2 1	247 246 245 244 243 242 241 240 239 238 237 236 235 234 233 232	WD. 18		SW1	No. _____ 5 No. _____												
	263 262 261 260 259 258 257 256 255 254 253 252 251 250 249 248	WD. 19		SW2														
DR-B61 NO. 11	16 15 14 13 12 11 10 9 8 7 6 5 4 3 2 1	279 278 277 276 275 274 273 272 271 270 269 268 267 266 265 264	WD. 20		SW1	No. _____ 5 No. _____												
	295 294 293 292 291 290 289 288 287 286 285 284 283 282 281 280	WD. 21		SW2														
DR-B61 NO. 12	16 15 14 13 12 11 10 9 8 7 6 5 4 3 2 1	311 310 309 308 307 306 305 304 303 302 301 300 299 298 297 296	WD. 22		SW1	No. _____ 5 No. _____												
	327 326 325 324 323 322 321 320 319 318 317 316 315 314 313 312	WD. 23		SW2														
DR-B61 NO. 13	16 15 14 13 12 11 10 9 8 7 6 5 4 3 2 1	215 214 213 212 211 210 209 208 207 206 205 204 203 202 201 200	WD. 24		SW1	No. _____ 5 No. _____												
	231 230 229 228 227 226 225 224 223 222 221 220 219 218 217 216	WD. 25		SW2														
DR-B61 NO. 14	16 15 14 13 12 11 10 9 8 7 6 5 4 3 2 1	247 246 245 244 243 242 241 240 239 238 237 236 235 234 233 232	WD. 26		SW1	No. _____ 5 No. _____												
	263 262 261 260 259 258 257 256 255 254 253 252 251 250 249 248	WD. 27		SW2														
DR-B61 NO. 15	16 15 14 13 12 11 10 9 8 7 6 5 4 3 2 1	279 278 277 276 275 274 273 272 271 270 269 268 267 266 265 264	WD. 28		SW1	No. _____ 5 No. _____												
	295 294 293 292 291 290 289 288 287 286 285 284 283 282 281 280	WD. 29		SW2														
DR-B61 NO. 16	16 15 14 13 12 11 10 9 8 7 6 5 4 3 2 1	311 310 309 308 307 306 305 304 303 302 301 300 299 298 297 296	WD. 30		SW1	No. _____ 5 No. _____												
	327 326 325 324 323 322 321 320 319 318 317 316 315 314 313 312	WD. 31		SW2														

Each Relay Output shows "Calling Station No."

Note: ( ) shows the Head of a Slide Switch

WORD SELECT Switch



**TOA ELECTRIC CO., LTD.**  
KOBÉ, JAPAN

## Free Manuals Download Website

<http://myh66.com>

<http://usermanuals.us>

<http://www.somanuals.com>

<http://www.4manuals.cc>

<http://www.manual-lib.com>

<http://www.404manual.com>

<http://www.luxmanual.com>

<http://aubethermostatmanual.com>

Golf course search by state

<http://golfingnear.com>

Email search by domain

<http://emailbydomain.com>

Auto manuals search

<http://auto.somanuals.com>

TV manuals search

<http://tv.somanuals.com>