

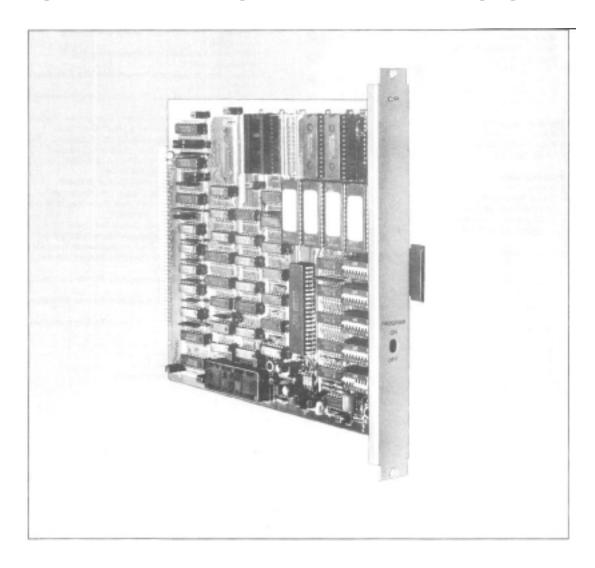
For		
i Oi		

TOA EXES-6000 INTERCOM SYSTEM

Central Processing Unit for Single Exchange System or Tie-line System

CP-66

INSTALLATION HAND BOOK



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• INTRODUCTION TO THE INSTALLATION MANUAL FOR EXES-6000

This manual forms part of the Installation Manual for TOA INTERCOM SYSTEM EXES-6000.

You may add the CP-66 to your TOA INTERCOM SYSTEM EXES-6000, according to your specific needs, to obtain various other functions. Correct operation of these additional functions is **not performed by simply connecting the additional equipmets /devices.** Provision of such additional function 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.

There are certain minimum installation requirements to be met even through you may not need many additional functions or additional equipment, It is still necessary to read "2. Initial CP-66 Set Up. When you may use only some of the additional functions or equipments, it is not necessary to read instructions on unrequired functions. Make sure, however, that careful study of the necessary parts of this bookets should be done before proceeding further.

PART 1. TIE-LINE SYSTEM -

• TIE-LINE CONNECTION OF THE EXCHANGES

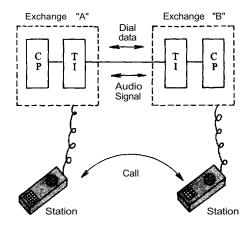
1. Functions of the Central Processing Unit CP-66 and Tie-line Interface Unit TI-62

To make communications between exchanges possible in the EXES-6000 system, the CP-66 and the Tie-line Interface Unit TI-62 are required in addition to the exchange.

The TI-62 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 CP-66 transmits the dial data signals to the TI-62 and instructs it to make calls to the other exchange. The CP-66 also receives the dial data signals from the other exchange through the TI-62 and calls the station which is instructed to call by the other exchange.

Overall functions of the system using the Tie-line function are determined by programming made in the CP-66.



2. Number of stations, paging zones and links

2. Number of stations	, paging zon	co una m	11113				
		I Maximum number of	Number of links	Number		Maximum number of sta	itions in each exchange
Composition of excl	hange	links within one's own exchange	between Tie-lined exchanges	of exchanges	Maximum number of paging zones	Without paging	With paging
① Without Tie-line	EX-610	12	_	1	All station calls +7zones	56	48
Single exchan		16	_	1	All station calls + 7 zones	120	112
EX-	1 EX-630	16	_	1	All station calls + 31 zones	256	256
② 2 exchanges Tie-lined	EX-610	12* ¹	8	2	All station calls + 14 zones*4	112	96
Exchange A Exchange	EX-620	16* ¹	8	2	All station calls + 14 zones*4	240	224
EX-2A EX-2	2B EX-630	16* ¹	16*²	2	All station calls + 30 zones*4	512	512
3 exchanges EX-3	BA EX-610	12* ¹	4 per Tie line	3	All stations calls + 21 zones*4	168	144
Exchange Exchange	EX-620	16* ¹	4 per Tie line	3	All stations calls + 21 zones*4	360	336
EX-3C EX-3	EX-630	16*¹	8 per Tie line*3	3	All stations calls + 45 zones*4	768	768

^{*1} The links within one's own exchange are used for communication between Tie-line exchanges.

^{*2} One (8 links) or two Tie-line units (TI-62) are required per exchange.

^{*3} Two Tie-line units (TI-62) are required per exchange.

^{*4} All-station paging is equivalent to all-zone paging in exchanges connected by Tie-lines.

^{*5} Mixed Tie- line of EX-610/620/630 is also available.

3. Numbering schedule for station and paging zones

① Standard plan (when personal Nos. are provided)

		Numbering	for stations	Numbering	Numbering for paging zones		
Type of exchange	System	Without paging	With paging	Paging z	zones/exchange		
		without paging	with paying	All station calls	Zones		
	EX-610	200~263	200~255(247)*1		01~07(15)*1		
EX-1 (Single)	EX-620	200~327	200~319(311)*1		01~07(15)* 1		
A EX-2A/EX-3A	EX-630	200~455	200~455		01~07(31)*1		
	EX-610	200~247, 256~263	200~247		01~07		
	EX-620	200~311,320~327	200~311		01~07		
	EX-630	200~455	200~455	00	01~15		
В	EX-610	470~517, 526~533	470~517		08~14(16~22)*2		
EX-2B/EX-3B	EX-620	470~581, 590~597	470~581		08~14(16~22)*2		
EX-20/EX-30	EX-630	470~725	470~725		16~30		
С	EX-610	740~787, 796~803	740~787		15~21(31~37)*2		
EX-3C	EX-620	740~851,860~867	740~851		15~21(31~37)*2		
EX-3C	EX-630	740~995	740~995		31~45		

^{*1} When the following are specified in the pager dialing operation; \bullet \blacksquare X

② When no personal Nos. are provided

		Numbering	for stations	Numbering for paging zones			
Type of exchange	System	Mith and paging	With paging	Paging zones/exchange			
		Without paging	with paging	All station calls	Zones		
	EX-610	100~163	100~155(147)*'		01~07(15)*1		
EX-1 (Single)	EX-620	100~227	100~219(211)*1		01~07(15)*1		
	EX-630	100~355	100~355		01~07(31)*'		
A	EX-610	100~147, 156~163	100~47		01~07		
EX-2A/EX-3A	EX-620	100~211,220~227	100~211		01~07		
EX EVEX OX	EX-630	100~355	100~355	00	01~15		
В	EX-610	400~447, 456~463	400~447		08~14(16~22)*2		
EX-2B/EX-3B	EX-620	400~511,520~527	400~511		08~14(16~22)*2		
EX ESIEN OB	EX-630	400~655	400~655		16~30		
С	EX-610	700~747, 756~763	700~747		15~21(31~37)*2		
EX-3C	EX-620	700~811,820~827	700~811		15~21(31~37)*2		
	EX-630	700~955	700~955		31~45		

^{*1} When the following are specified in the pager dialing operation; \bullet a $\overline{\mathbf{X}}$

^{*2} When the Tie-line system consists of either the EX-610 and EX-630, or the EX-620 and EX-630.

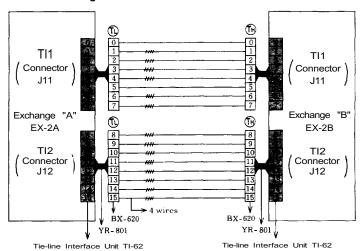
^{*2} When the Tie-line system consists of either the EX-610 and EX-630, or the EX-620 and EX-630.

WIRING FOR TIE-LINE CONNECTION OF THE EXCHANGES

- Each exchange can be connected by means of a cable with diameter of 0.65mm (25.6 mils.) for distance of up to 2km (5600 ft).
- Regarding the tieline links which are not used, turn off the DIP switch of each unused tieline link inside the Tie-line UnitTI-62.
- Connect "T" line (2 wires) of the 4 wires of each link to "R" line (2 wires) of the other exchange.
- The 2 wires of the "T" line and "R" line have no polarity.
 If the BX-620 is used, its terminals No.1 and 2 are for the "R" line and No.3 and 4 are for the "T" line.

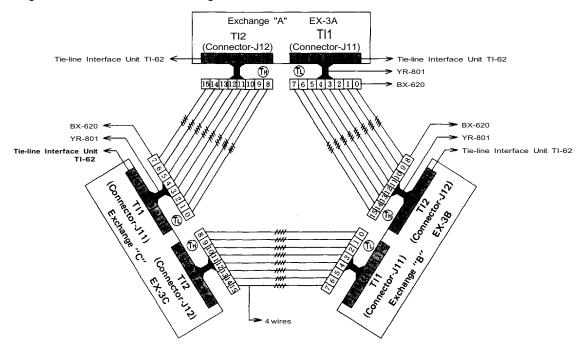


1. Wiring for tie-line connection of 2 exchanges



- Note 1. Any combination of tie-line links between exchanges "A" and "B" is possible.
- Note 2. Mount only one Tie-line Interface unit when the number of tie-line links is within 8.

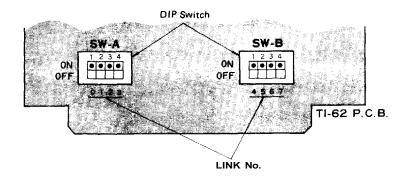
2. Wiring for tie-line connection of 3 exchanges



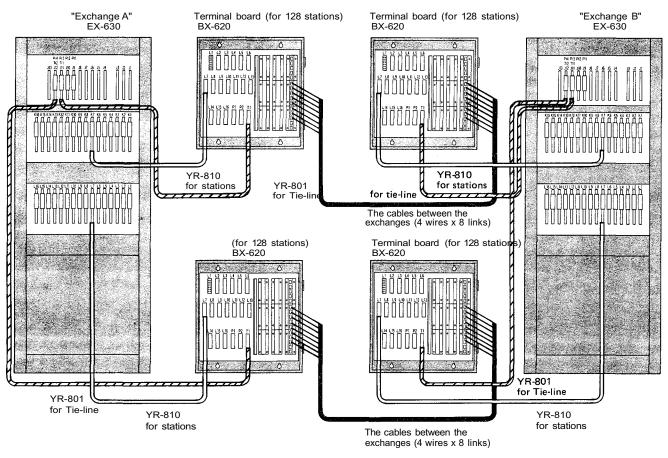
- Note 1. TI-62 (T11) (connector J11) is the left-hand unit and TI-62 (TI2) (connector J12) is the right-hand unit, when viewed from the front.
- Note 2. Be sure to connect connector TI1(J11) to TI2U12) between the exchanges. Connection of TI1 (J11) to TI1(J11) or TI2(J12) to TI2(J12) will lead to failure of proper operation of the system.

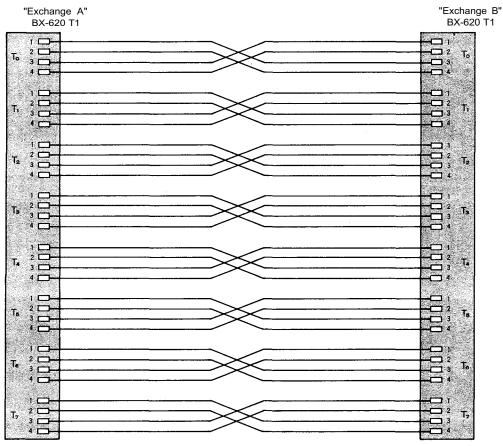
3. DIP Switch selection

- Set DIP switches of each CP to E1, E2, and E3 to determine the type of exchange (EX-1, EX-2A/28, EX-3A/3B/3C). (See "4. CP-66 DIP switches for Function Selection"P14.)
- 2. If some tie-line links are left idle, set the corresponding DIP switch(es) to OFF.

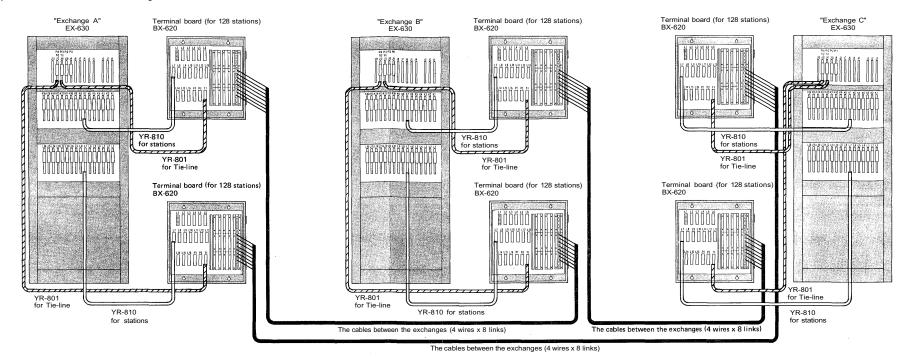


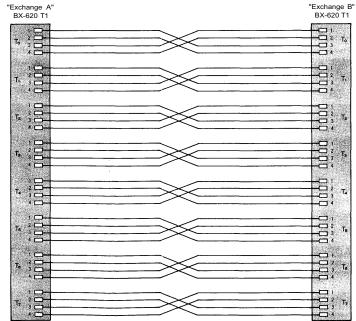
4. Example of connection of two EX-630 exchanges





5. The Example of connection of three EX-630 exchanges





PART 2. OPERATING OF CP UNIT AND NO. 200 PROGRAMMING ——

1. PRECAUTIONS FOR INSTALLATION OF CP-66

Please read following instructions carefully to ensure proper operation of the CP-66

- 1. Be careful about damage by static electricity as the CP-66 incorporates CMOS IC's. Do not touch components and connectors.
- 2. Turn off the AC power switch when you take out or insert the CP-66 unit, or any other unit.
- 3. Always insert the CP-66 unit into the "CP" slot. Otherwise, there is a danger that the unit will be damaged.
- Make sure mini-jumper for battery back-up is always placed in 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 programming functions, be sure to carry out initial programming and registration at station No.200 when you install the new unit. Otherwise, some 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.

To keep the battery fully charged, do not cut the power off for long hours during the first 8 days after new installation. The CP-66 unit is capable of maintaining the programmed data for the period of 4 weeks after fully charged even in the event of long hours of power failure.

(About 4 weeks (25°C), About 8 days (40°C))

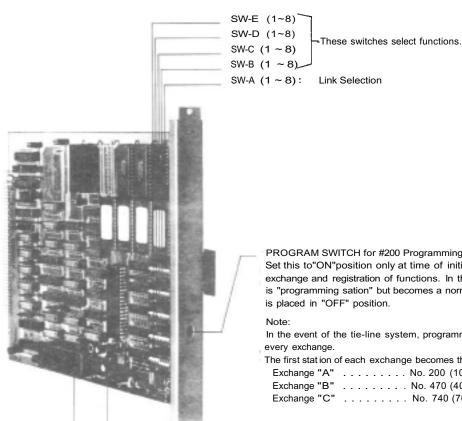
- 8. We suggest you replace the soldered button batteryGB50-3FA1 (115-42-031-9) with the new one according to the following list that shows an expected life span of the battery.
 - Be sure to make the station No.200 programming after replacement of the battery.

• Expected Life Span of small Ni-Cd Battery

Ambient temperature of exchange	Ambient temperature of battery	Life span		
0° C	10°C	About 5 years		
25° C	35°C	About 4 years		
40° C	50° C	About 2 years		

9. When shipping the CP-66 unit independently, place the minijumper for battery back-up in "OFF" position. Cover the CP back with cardboard, wrap connector section in aluminium foil and put it in a conductive bag.

FUNCTION SELECT SWITCHES



PROGRAM SWITCH for #200 Programming

Set this to "ON" position only at time of initial programming of the exchange and registration of functions. In this case, station No.200 is "programming sation" but becomes a normal station when switch is placed in "OFF" position.

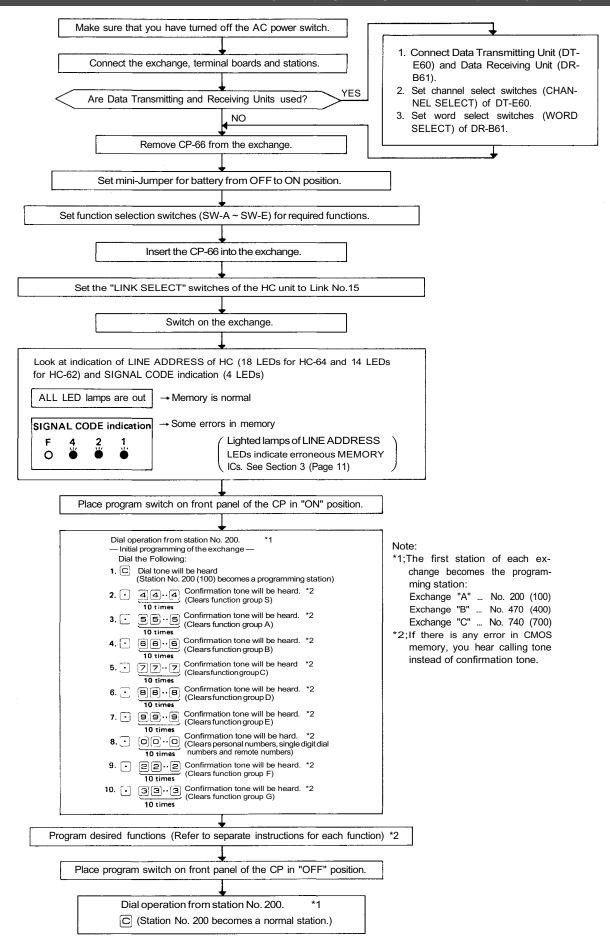
In the event of the tie-line system, programming has to be set up in

The first station of each exchange becomes the Programming station:

Exchange "A" No. 200 (100) Exchange "B" No. 470 (400) Exchange "C" No. 740 (700)

MINI-JUMPER for battery back-up

Ni-Cd BATTERY GB50-3FA1 (3.6V 50mAh)



3. TROUBLE SHOOTING

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

1. HC-64 (when EX-630 is used)

- (1) Set the "LINK SELECT" switches of the HC to F (between E and 0) and switch on the AC power of the exchange.
- (2) If there is no error, the indication lamps will not 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.

2. HC-62 (when EX-610 or EX-620 is used)

- (1) Lift 4 Link Select switches (Link No. 15 Select) and then set the exchange power switch to ON.
- (2) The indicators remain lit if there is no error.
- (3) The indicators light as shown in Fig. 2 if there is a memory error.
- (4) The indicators remain lit till the link No. 15 is used for conversation.

3-2 Confirming of the CP normal working

If the CP, OC and HC are working normally, the HC's indication lamps of LINE BUSY, LINE ADDRESS and SIGNAL CODE go out.

When any of the lamps remains lit, it is possible that any of the CIP, OC or HC is faulty.

Check first that the CLOCK lamp of the HC is lighting, then confirm that the CP is working normally by hearing the clicking sound of the PI unit's relay which is produced when the relay is activated through dial operation of the paging. If the CP is found working normally, chances are that the HC is faulty, followed by the OC.

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

You hear calling tone instead of confirmation tone, if there is CMOS memory error at the time of initial programming and registration using station No. 200, or at the time of registration to Single Digit Number or Personal Number or Remote Number.

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

- Be sure to avoid mistake at the time of DIP switch installation and No. 200
 Programming since such mistake can lead to later troubles.
- Be sure to make "No. 200 Programming" after "Programming Data Table" (attached to this manual) is filled out. Keep the finished "Programming Data Table" (Initial Checking Sheet for the System) as a part of complete drawings for each installation.

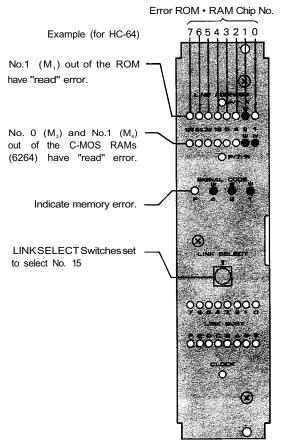


Fig. 1

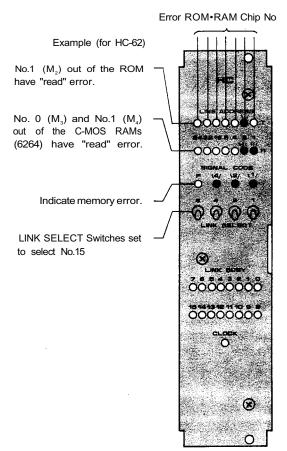


Fig. 2

3-5 The order of Tie-line link usage

The Tie-line 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 HC-64 or HC-62.

When one Tie-line 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 HC-64 of the exchange making the call.

As Fig. 1 and Fig. 2 show, in the exchanges which make calls, the DL Link Number corresponds with TI Tie-line Link Number.

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

DL Links are used in numerical order.

1. Tie-line for 2 exchanges

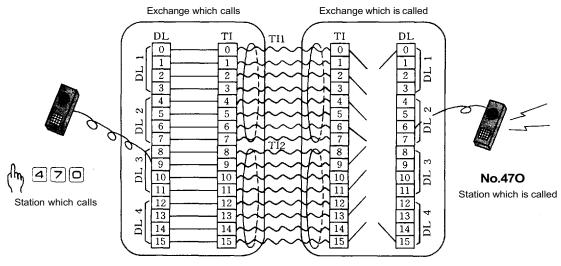


Fig. 1

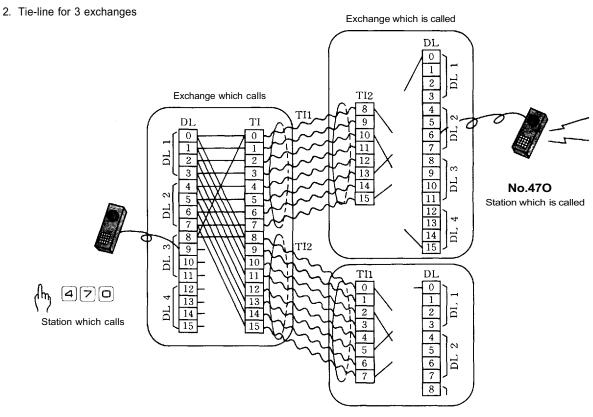


Fig. 2

Reference for Connection Link Number between DL and TI Link

	Exchange which	calls	Exchange w	hich is called					
	TI Tie-	line Link Nu	e Link Number						
DL Link No	2 Tie-lines		3 Tie	e-lines		TI Tie-line Link Number	DL Link Number		
	To TI1, TI2	То	TI1	ToTl2					
0	0	(1	8	1				
1	1			9					
2	2	2	!	10					
3	3	3		11			After power switch		
4	4	4		12					
5	5	Ę	;	13					
6	6	(;	14					
7	7	-	•)	15	Г	Fixed by Cable Connection between Exchanges	is on. Links are used in numerical		
8	8	(7	8 \	ì	tion between Exchanges	order		
9	9	,		9					
10	10	2	2	10					
11	11		3	11					
12	12	4		12					
13	13		5	13					
14	14	(;	14					
15	15		,)	15 /	J				

Note.

If the TI Tie-line Link which corresponds with the DL Link No. is already busy, then the next Tie-line Link is automatically used.

4. CP-66 DIP SWITCHS FOR FUNCTION SELECTION

Functions Functions Switch OFF Individual Selection; Link No. 0 ~ 3 Unavailable Available OFF ON OFF ON ON EX-610 EX-620 EX-630 Exchange type setting OFF ON OFF ON OFF ON OFF ON OFF ON OFF ON ON ON EX-610 EX-620 EX-630 Exchange type setting OFF ON OFF ON OFF ON OFF ON OFF ON OFF ON	
SW-A Link Selection; Link No. 4~ 7 Link Selection; Link No. 8~11 Unavailable Available BL CL Conference unit selection No. 1 DL CL CL DL CL CL Available	
SW-A Link Selection; Link No. 8~11 Unavailable Available BY-610 EX-620 EX-630 Exchange type setting BY-610 CCL Conference unit selection No. 1 DL CL CL DL CL CL DL CL CL Available	\dashv
SW-A O	
SW-B PTT Control Idle OFF OFF OFF OFF ON OFF ON OFF ON OFF ON EX-610 EX-620 EX-630 Exchange type setting OFF ON OFF ON OFF ON ON EX-610 EX-620 EX-630 Exchange type setting OFF ON OFF ON ON EX-630 Exchange type setting OFF ON OFF ON ON EX-630 Exchange type setting DL CL CL OIL OIL OIL OIL OIL OIL	\dashv
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EX-610 EX-620 Exchange type setting OFF ON I Conference unit selection No. 1 CL Conference unit selection No. 2 DL CL CL Conference unit selection No. 3 DL CL CL Conference unit selection No. 4 DL CL Cl Cl Cl Cl Conference unit selection No. 4 DL CL Cl Cl Cl Cl Cl Cl Cl Cl C	
SW-B Conference unit selection No. 1 DL CL	
SW-B OFF ON Conference unit selection No. 1 Conference unit selection No. 2 DL CL DL CL Conference unit selection No. 3 DL CL Conference unit selection No. 3 DL CL CL Conference unit selection No. 4 DL CL CL Cu Conference unit selection No. 4 DL CL CL Cu Conference unit selection No. 4 DL CL CL Cu Conference unit selection No. 4 DL CL CL Cu Conference unit selection No. 4 DL CL CL Cu Conference unit selection No. 4 DL CL CL Cu Conference unit selection No. 4 DL CL CL Cu Conference unit selection No. 3 DL CL CL CL Cu Conference unit selection No. 3 DL CL CL CL CL CL CL CL CL CL	\dashv
SW-B Output	
SW-B Output	
SW-B Onference unit selection No. 3 DL CL Conference unit selection No. 4 DL CL DL CL Priority / Executive priority / Highest executive priority Priority or Highest executive priority setting Priority / Evecutive priority setting Priority / Highest executive priority General purpose control Unavailable Available Available Greater digit length	
SW-B 4 Conference unit selection No. 4 DL CL To priority / Executive priority / Highest executive priority Unavailable Priority or Highest executive priority setting Priority Highest executive priority Priority or Highest executive priority setting Priority Highest executive priority General purpose control Unavailable Available General purpose control Less digit in length Greater digit length General purpose control Less digit in length Greater digit length General purpose control Less digit in length Greater digit length General purpose control Less digit in length Greater digit length General purpose control Less digit in length Greater digit length General purpose control Less digit in length Greater digit length General purpose control Less digit in length Greater digit length General purpose control Less digit in length Greater digit length General purpose control Less digit in length Greater digit length General purpose control Less digit in length Greater digit length General purpose control Less digit in length Greater digit length General purpose control Less digit in length Greater digit length General purpose control Less digit in length Greater digit length General purpose control Less digit in length Greater digit length General purpose control Less digit in length Greater digit length General purpose control Less digit in length Greater digit length Greater digit length General purpose control Greater digit length Great	
5 Priority / Executive priority / Highest executive priority Unavailable Available 6 Priority or Highest executive priority setting Priority Highest executive priority 7 General purpose control Unavailable Available 8 General purpose control priority Less digit in length Greater digit length	
6 Priority or Highest executive priority setting Priority Highest executive priority 7 General purpose control Unavailable Available 8 General purpose control operation Less digit in length Greater digit length	
General purpose control General purpose control General purpose control Less digit in length Greater digit length	*2
General purpose control operation Less digit in length Greater digit length	ive *2
General purpose control operation Less digit in length length	
	in *4
OFF ON	
1 Paging Unavailable Available	*3
2 Emergency all-call paging Unavailable Available	*1
3 Priority station paging Unavailable Available	*1
SW-C Paging zone selection (21 or 45) 45 21	*1
Paging dial operation • B X • B X	×
6 Personal number paging or call Call Paging	*1
Paging response dial operation	
Paging amp delay remote operation Unavailable Available	_
OFF ON Calling party indication or conversation partner indication Calling party Conversation	
indication partner indic	tion
Calling party indication memory Unavailable Available 3 digits 2 digits	
SW-D 4 4-digit dialling 3 digits 4 digits	\dashv
Numbering schedule Standard schedule Programmal	e *5
6 Call transfer / paging transfer Unavailable Available	− *1
Absence transfer Unavailable Available	
S Function operation X	\dashv
	_
1 x Exchange 2 x Exchange 3 x Exchange	
OFF ON EX-1 EX-2 A EX-2B EX-3 A EX-3B EX-3C	Exchange Selection
OFF OFF ON ON	
2 OFF ON OFF ON	T Specification of the property of the propert
OFF OF ON OFF ON ON	
SW-E In-house pager Unavailable Available	
● 5 Pager type setting Tone only with voice a indicate	l n
● 6 Speech message remote hearing Unavailable Available	
• 7 Idle (OFF) —	
Selection of continuous call tone or privacy function when privacy switch is on. Privacy Continuous call	\Box
Functions Switch OFF Switch ON	tone

Note: CP DIP SWITCHES FOR FUNCTION SELECTION

- *1 Be sure to place the SW-C-1 (Paging) switch in the ON position when paging and its allied functions are used.
- *2 To perform the "Highest Executive Priority" function in Tie-line system, place this switch of each exchange in the ON position.
- *3 Turn on this switch of each exchange even if not all the exchanges require paging function in Tie-line system. Otherwise, the exchange with this switch off can not perform all-call paging.
- *4 If the small-digit number is selected, the function can be operated without pressing the figure enclosed in parenthesis () in the following example.

Example: • 3 (X) X X

*5 Standard (SW-D-5 OFF):

Exchange	Α	В	С
Hardwired station number	200~455	470~725	740~995

Programming (SW-D-5 ON):

The first station number of each exchange in order of the exchanges. A, B and C can be set as any of the following numbers:

100/200/300/400/500/600/700/800/900

(Hardwired station number)

For the personal number call, use the station number of 100s.

5. FUNCTION CODE TABLE FOR STATION NO. 200 PROGRAMMING

A. Clearance at one time

Function Group	Function	Func- tion Code	Clearance of Function	Function Registration on All Stations	Clearance of Function by Function Group	
	Numbering schedules of Tie-line system	40	O Confirmation tone			
	Call tone selection	41	Confirmation tone (Trill tone 0.3 second)			:
İ	Selection of Paging Pre-announcement Tone duration	42	Confirmation tone (Pre- announcement tone 2 seconds)			
	Single-digit dialling key selection	430	•430 O Confirmation (D)			
	Selection of 1st digit of 4-digit dialling	431	Confirmation tone (none)			
S	Time-out of Conversation	45	• 4 5 O Confirmation tone (No time-out)		Confirmation (Clears function group	s)
5	Time-out of Paging Call	46	• 4 6 O Confirmation tone (No time-out)		tone tone	-/
	Pager call output digit selection	470	Confirmation tone (2 digits)			ĺ
	Pager call function code output mode selection	471	Confirmation tone (output before pager number)			
Ì	Pre-pause time selection	48	Confirmation tone (0.6 second)			
	Number of SM-600 units connected	490	Confirmation tone (No unit connected)			
	Message recording hurry-up- tone mode selection	491	• 4 9 1 O Confirmation tone (Hurry-up tone is transmitted)	/		
	Executive Priority	50				
	Continuous Calling Tone	51				
	Station Allowed Access to All Call	52	·			
	Stations Allowed Access to Conference	53				
A	Automatic Access to Paging	54	S X O O · · · · O O Confirmation tone	mation 555	Confirmation (Clears function group	on (Clears function group A)
	Stations Allowed Access to One Shot Make Output	56	x:0~4 6~9 10 times		tone	
	Stations Allowed Access to Make/Break Output	57				
	Stations Allowed Access to 8 Selectable/Decimal Output	58				
	Stations Allowed Access to 4 Decimal Digits Output	59				
	Secretary Transfer	60			Confir-	
В	Master/Sub	61	S X O O · · · · · O O Confirmation tone		Confirmation tone (Clears function group	э B)
1	Group Hunting	62	10 times		10 times	
	Paging Response, Paging Priority	70			Confir-	
С	Group Blocking of Each Group	71	×:0,1,2		mation (Clears function group tone	nction group C)
	Group of Calling Party Indication	72	10 times		10 times	

Function Group	Function	Func- tion Code		Clearance of Fund	ction	Function Registration on All Stations		Clearance o	f Function	n by Function Group
	Combination Paging	80		-			7			
D	Group Blocking: Allowing Calls Among Groups	81	∙8 X X : 0, 1, 2	0 0 · · · · ·	Confirmation tone		0	888	Confir- mation tone	(Clears function group D)
	Group Blocking: Allowing Access to Paging Zones	82		10 111100				10 times		
E	Programable Station Numbering	90	.90	10 times	Confirmation tone			9 9 9 10 times	Confir- mation tone	(Clears function group E)
	OD-600 Rented line allocation	23								
1	LD-600 Rented line allocation	24								
	CB-600 Telephone line allocation	25			Confirmation tone				Confir-	
F	TI-600 Rented line allocation	26	x:3~9			\rightarrow		[2] [2] ··· [2]	mation tone	(Clears function group F)
1	CB-600 Telephone line allocation to station group	27						10 times		
	Telephone line allocation to city pager	28								
	Fixed speed dialling	29								
	Handset station	30								
1	Stations Allowed Access to outgoing phone call	31]							
	Stations Allowed Access to incoming phone call	32								
1	Automatic pager transfer	34				Confirmation			Confir-	
G	Door station	35		10 times	Confirmation tone	PTT PTT tone	' <u>C</u>	10 times	mation tone	(Clears function group G)
	Stations Allowed to refuse voice call	36	X:0~2 4~9	10 times		X:0~2 10 times 4~9		10 times		
	Stations Allowed to refuse priority interruption	37								
	Stations Allowed Access to zone paging	38]				i			
	Stations Allowed to refuse station paging	39								
*	Personal Number Single Digit Dialing Remote Response	_						0 0 0	Confir- mation tone	(Clears functions of Personal No., Single Digit Dialing and Remote Response)

B. Programming of System

Function Group	Function	Func- tion Code	Remarks	Operating for Programming	Initially Programmed Mode
	Numbering Schedules of Tie-line System Selectable first station	40	The following standard station numbering schedules of the exchanges A, B and C are obtainable. (Hardwired station number) SW-D-5 A B C OFF 200~455 470~725 740~995 ON 200~455 500~755 800~999	•40 0	Standard Station Numbering A/B/C= 200/470/740 (SW-D-5 OFF) or
	number of each exchange		The first station number of each exchange in order of the exchanges. A, B and C can be set as any of the following numbers: 100/200/300/400/500/600/700/600/900 (Hardwired station number)	First Station No. of Exchange "A" of Exchange "B" of Exchange "C" 3-9 (First digit)	A/B/C= 200/500/800 (SW-D-5ON)
	Call tone selection	41	Two different calling tones, single note tone or trill note tone, are available in selection for the Hands-free system except the continuous calling tone.	0: Without Calling Tone 1: Single Note Tone (0.2 sec.) 2: Trill note Tone (0.3 sec.)	Trill note Tone (0.3 sec.)
	Selection of Paging Pre-announcement Tone Duration	42	You can select the length of time of paging pre-announcement tone.	0: Without Paging pre-announcement Tone 1: Paging Pre-announcement Tone (1 sec.) 2: Paging Pre-announcement Tone (2 sec.)	Paging Pre-announcement Tone (2 sec.)
	Single-digit dialling key selection	430	It is possible to operate the single-Digit Dialling with any other dial key than .	•430 o: 0 5-9: 5~9	0
s	Selection of 1st digit of 4-digit dialling	431	Program the 1st digit for a local exchange under 4-digit dialling, choosing from among the following schedules: 2000/3000/4000/5000/5000/7000/8000/2000	•431 ₂-9:2~9	
	Time-out Conversation	45	Programming is possible so that stations can be disconnected automatically from the speech path in the unit of Minut and the Hurry-up Signal Tone can be heard 10 seconds before the disconnection.	00: Without Time-out function 01-99: Length limited (minute)	Without Time-out
	Time-out Paging Call	46	Programming is possible so that stations can be disconnected automatically from the Paging circuit in the unit of Minute and the Hurry-up Signal Tone can be heard 10 seconds before the disconnection.	O0: Without Time-out function	Without Time-out
	Pager call output digit selection	470	The number of digits in length may be selected to call a pager.	• 4 7 0 0 0: 2 digits 1: 3 digits 2: 4 digits	2 digits
	Pager call function code output mode selection	471	Function code transmission order may be selected according to the type of pager.	O: Output before pager number 1: Output after pager number 2: No output	Output before pager number
	Pre-pause time setting	48	It is possible to set pre-pause time of OD-600, LD-600 and CB-600.	0: 0.06 sec., 1: 1 sec., 2: 1.5 sec., 3: 2 sec., 4: 2.5 sec., 5: 3 sec., 6: 3.5 sec., 7: 4 sec., 8: 4.5 sec., 9: 5 sec	0.6 sec.
	Number of SM-600 units connected	490	Program the number of the SM-600 units to be connected.	O: No unit connected 1 ~4: Number of units connected	No unit connected
	Message recording hurry- up tone mode selection	491	A Hurry-up tone may be transmitted 2 seconds before the programmed recording time in up.	0: Hurry-up tone is transmitted 1: No Hurry-up tone	Hurry-up tone is transmitted

C. Programming of each Function

<u> </u>	rogramming of	eaci	i Function								
Func- tion Group	Function	Func- tion Code	1st Parameter	2nd Parameter	3rd Parameter	4th Parameter	OPERATING FOR PROGRAMMING				
	Executive Priority	50	Station No.	ON/OFF (1/0)	/						
	Continuous Calling Tone	51	Station No.	ON/OFF (1/0)]\ /						
A	Station Allowed Access to All Call	52	Station No.	ON/OFF (1/0)							
	Stations Allowed Access to Conference	53	Station No.	ON/OFF (1/0)							
	Automatic Access to Paging	54	Station No.	ON/OFF (1/0)							
	Stations Allowed Access to One Shot Make Output	56	Station No.	ON/OFF (1/0)	X		*: 9~4 \$tation No. 1/0 \$tation No. 1/0				
	Stations Allowed Access to Make/ Break Output	57	Station No.	ON/OFF (1/0)			6~9 (1st) (2nd) Repeat Repeat				
	Stations Allowed Access to 8 Selectable (One Shot Make)/ Decimal Output	58	Station No.	ON/OFF (1/0)							
	Stations Allowed Access to 4 Decimal Digits Output	59	Station No.	ON/OFF (1/0)							
В	Secretary Transfer	60	Executive Station No.	Secretary Station No.			(•) (5) (×). Confirmation Confirmation				
	Master/Sub	61	Sub Station No.	Mater Station No.	\times		x:0,1,2 Station No. Station No. Station No. (1st) (2nd) (1st) (2nd) (2nd)				
	Group Hunting	62	Main station No.	Transfered Station No.			Repeat Repeat				
С	Paging Zone	70	Zone No. (01 -15)	The First Station No. of the Zone	The Last Station No. of the Zone		• 7 ×,,,				
	Group Blocking: Establishment of Each Group	71	Group No. (1 -8)	The First Station No. of the Group	The Last Station No. of the Group	$\mid \times \mid$	x:0,1,2 Zone No. The 1st Station The Last Ol~45 No. Station No. Group No. 1-8 Group No				
	Group of Calling Party Indication	72	Group No. (1-8)	The First Station No. of the Group	The Last Station No. of the Group		Repeat Repeat				
	Combination Paging	80	Combination Zone No. (90-99)	Zone No. (s) (01 ~3	(Plural)		BX,,				
D	Group Blocking: Allowing Calls Among Groups	81	Calling Group No. (1-8)	Called Group No.((Plural)	s) (1-8)		Group No. of Calling Group Group No. (s) of Called Group Partes 1~8 Repeat Repeat				
U	Group Blocking: Allowing Access to Paging Zones	82	Paging Zone No.of Paged Group (00-15,90-99)	Paing Group No.(s (Plural)	;) (1-8)		Paging Zone No. Group No. (1~8) Paging Zone No. Group No. (1~8) (00~45, 90~99) Repeat Confirmation Paging Zone No. Group No. (s). (1~8) Paging Zone No. (00~45, 90~99) Repeat Repeat				
E	Programable Station Numbering	90	Hardwired Statior No. *2	Programmed Station No. *2			90, Confirmation Confirmation Hardwired Programmed Hardwired Programmed Station No. Station No. Station No. Repeat Repeat				
			The First Hardwired Station No.	The Last Hardwired Station No.	The First Programmed Station No.	The Last Programmed Station No.	The first The Last Hardwired Station No. Station No. Station No. Repeat				

^{*1} Station No.'s except Programmed Station No.'s are Hardwired Station No.'s No.100~/200~/300~/400~/470~/500~/600~/700~/740~/800~/900~. 2 digits in the event of 2-digit dialling.
*2 Programmed Station No: s are No.200~999/No.100~999. 2 digits in the event of 2-digit dialling.

Function Group	Function	Func- tion Code	1st parameter	2nd parameter	3rd parameter	4th parameter	Dial key operation for programming		
F	OD-600 rented line allocation	23	Trunk seizure operation	First subscriber line No.	Last subscriber line No.		• 2 X,, Confirmation tone Confirmation tone		
	LD-600 rented line allocation	24	Trunk seizure operation	First subscriber line No.	Last subscriber line No.		Trunk seizure operation 1st line No. Last line No. X: 3,4 Twice Trunk seizure operation 1st line No. Last line No. Trunk seizure operation 1st line No. Last line No.		
	CB-600 telephone line allocation	25	Trunkseizure operation	Incoming call catch operation	First subscriber line No.	Last line No.	Confirmation tone Trunk seizure operation Incoming call catch operation 1st line No. Twice		
	TI-600 rented line allocation	26	Trunk seizure operation	First subscriber line No.	Last subscriber line No.		Confirmation tone Trunk seizure operation 1st line No. Lest line No. Trunk seizure operation 1st line No. Last line No. Twice Twice		
	CB-600 telephone line allocation to station group	27	Paging zone No. (01 to 45)	First subscriber line No.	Last subscriber line No.	Ringing tone transmission mode (0/1)	Paging zone No. 1st line No. Last line No. 2 (01~45) Twice Confirmation tone Paging zone No. 1st line No. Last line No. 1st lin		
	Telephone line allocation to city pager	28	Trunk seizure operation	Subscriber line No.			Confirmation tone Trunk seizure Line No. operation Twice		
	Fixed speed dialling	29	Speed dial (20~99)	Phone No. registered for this function (up to 40 digits)			Speed dial Phone No. Twice Confirmation tone Speed dial Phone No. Twice Confirmation tone PTT PTT mation tone Phone No. Twice		
	Handset station	30	Station No.	ON/OFF (1/0)					
	Restricted outgoing call	31	Station No.	ON/OFF (1/0)					
	Restricted incoming call	32	Station No.	ON/OFF (1/0)					
	Automatic pager transfer	34	Station No.	ON/OFF (1/0)			● ③ × , □ □ , □ Confirmation · · · · tone tone		
G	Door station	35	Station No.	ON/OFF (1/0)			X:0~2 Station No. 1/2 Twice Station No. 1/2		
	Restricted PTT call	36	Station No.	ON/OFF (1/0)					
	Restricted PTT call	37	Station No.	ON/OFF (1/0)					
	Restricted zone paging	38	Station No.	ON/OFF (1/0)		/ \			
	Restricted priority station paging	39	Station No.	ON/OFF (1/0)		/			

^{*1.} Unless otherwise stated, the station No. is the hardwired station No.100~/200~/300~/400~/470~/500~/600~/700~/700~/800~/900~ (2 digits in the event of 2-

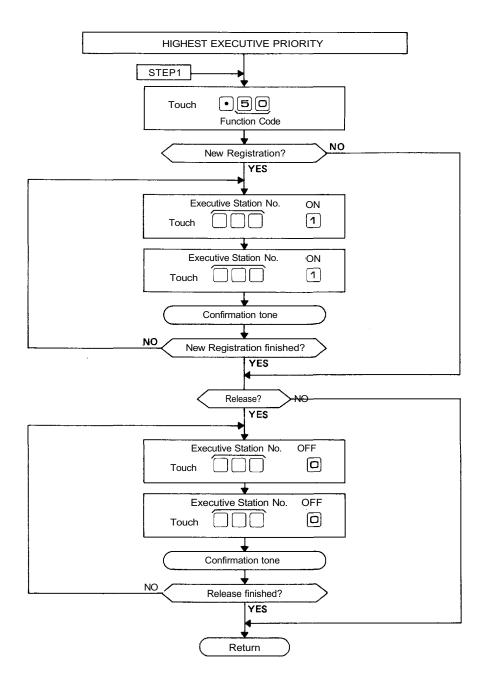
^{*2.} The programmed station No. is No.200 to No.999/No.100 to No.999. (2 digits in the event of 2-digit dialling)

*3. Unless otherwise stated, the number available for trunk seizure operation and incoming call catch operation is 0, 2 to 9, and 20 to 99. To achieve both operations by dialling a single digit, press X PTT. (x:0 and 2 to 9)

*4. The subscriber line No. is 0 to 15 (0 to 7 for EX-610).

6. STATION NO. 200 PROGRAMMING FOR EACH FUNCTION

6-1 EXECUTIVE PRIORITY (HIGHEST EXECUTIVE PRIORITY)-(FUNCTION CODE 50)



NOTES

1. To allow all the stations to have this function,

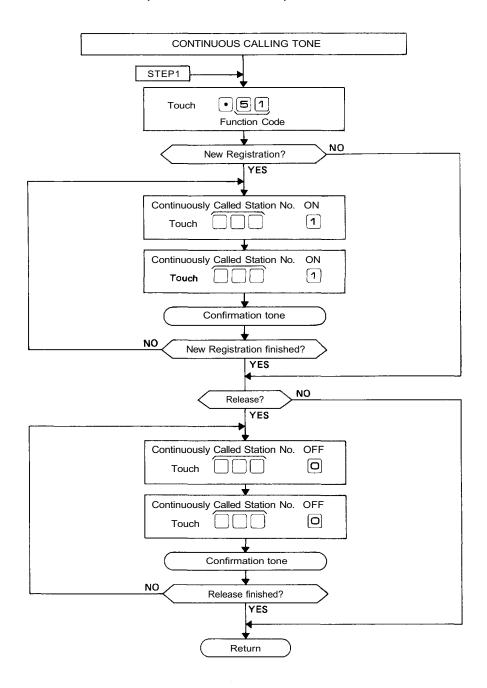
Touch • 5 0 PTT PTT ... PTT (Confirmation tone will be heard.)

Be sure to depress the PTT key steadily.

2. To release at one time the data programmed into all the stations for this function,

- Re-start at Step 1 when mis-dialing occures. (All other registrations remain valid.)
- 4. CP DIP switch B-5 must be "ON" to employ this function.
- Dial 2 digits when programming the station for 2-digit dialling. Dial last 3 digits for station programming when 4-digit dialling is employed.

6-2 CONTINUOUS CALLING TONE (FUNCTION CODE 51)



NOTES

- 1. To allow all the stations to have this function,
 - Touch 5 1 PTT PTT ... PTT (Confirmation tone will be heard.)

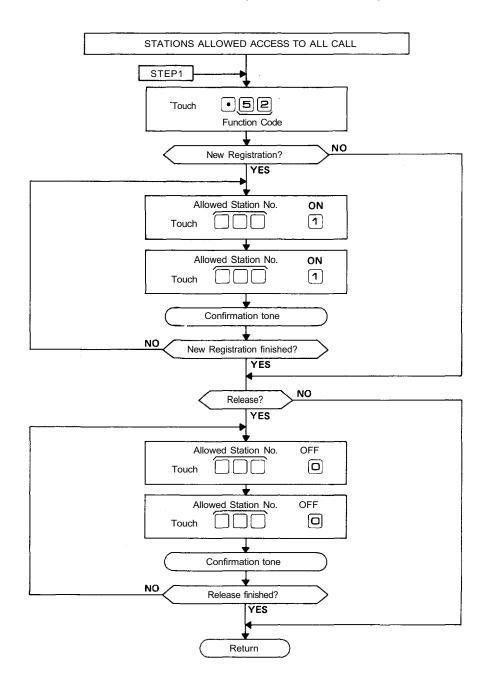
Be sure to depress the PTT lkey steadily.

2. To release at one time the data programmed into all the stations for this function,



- Re-start at Step 1 when mis-dialing occures.(All other registrations remain valid.)
- Dial 2 digits when programming the station for 2-digit dialling. Dial last 3 digits for station programming when 4-digit dialling is employed.

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



NOTES

- 1. To allow all the stations to have this function,
 - Touch 5 2 PIT PIT ... PIT (Confirmation tone will be heard.)

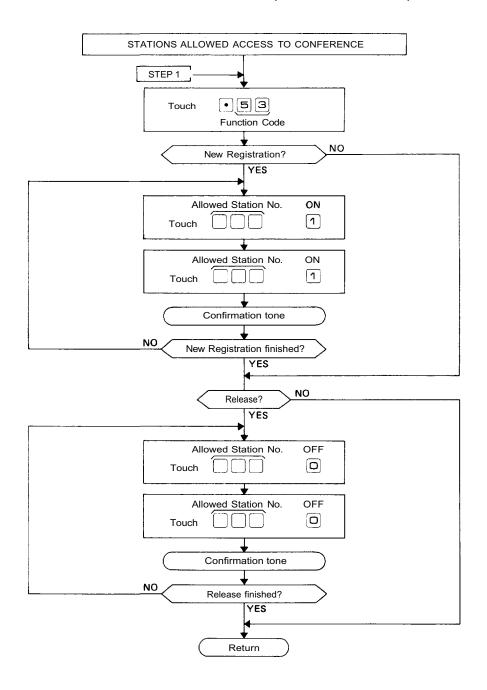
Be sure to depress the PTT key steadily,

2. To release at one time the data programmed into all the stations for this function,



- Re-start at Step 1 when mis-dialing occures. (All other registrations remain valid.)
- Dial 2 digits when programming the station for 2-digit dialling. Dial last 3 digits for station programming when 4-digit dialling is employed.

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



NOTES

1. To allow all the stations to have this function,

Touch • 5 3 PTT PTT ... PTT Will be heard.)

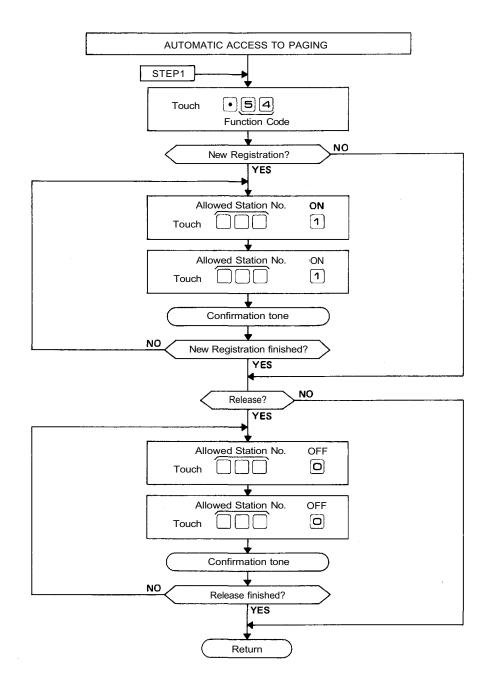
Be sure to depress the PTT key steadily.

2. To release at one time the data programmed into all the stations for this function,

Touch [•] [5] [0] [0] [0] (Confirmation tone will be heard.)

- 3. Re-start at Step 1 when mis-dialing occures. (All other registrations remain valid.)
- Dial 2 digits when programming the station for 2-digit dialling. Dial last 3 digits for station programming when 4-digit dialling is employed.

6-5 AUTOMATIC ACCESS TO PAGING (FUNCTION CODE 54)



NOTES

- 1. To allow all the stations to have this function,
 - Touch 5 4 PTT PTT ... PTT (Confirmation tone will be heard.)

Be sure to depress the PTT key steadily.

2. To release at one time the data programmed into all the stations for this function,

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- Re-start at Step 1 when mis-dialing occures.
 (All other registrations remain valid.)
- Dial 2 digits when programming the station for 2-digit dialling. Dial last 3 digits for station programming when 4-digit dialling is employed.

COMPLEMENTARY NOTES

- (1) Automatic Access to Paging
 - This function facilitates Paging / Paging response from a Substation TL-600S. Just picking up the Handset of Substation automatically activates Paging or Paging Response mode.
- Required Programming for Automatic Access to Paging from Handset Substation.
- 2-1) First, connect a Master Station HF-200 or TL-600M in place of a Substation TL-600S.
- 2-2) Register at that station such functions as Paging, Paging Response, Personal number call, etc. desired to be operated under Single Digit Dialing.
- 2-3) Then, replace the Master Station with a Substation TL-600S.
- 2-4) Program "Automatic Access to Paging from Handset Substation (Function Code 54)" at the Station No. 200 according to the programming instructions.
- (3) Single Digit Dialing and Automatic Access to Paging Single digit of a station call, personal call, paging or paging response can be accomplished by one-touch dialing from any master station registered for this function. To accomplish Automatic Access to Paging by simply lifting the handset, station No.200 programming for Function Code 54 is required.
- (4) Call to Master Station from Handset Station or from Hands free/Handset Station

The TL-600S handset or handsfree/handset substation can be registered for Master/Sub Relationship. Once this relationship has been established, the substation can be connected to its designated master station by either one-touch dialing or by merely lifting the handset. If the HF-600S station is used and it is desirable that it can call the master station by simply lifting the handset, set its Privacy switch to ON.

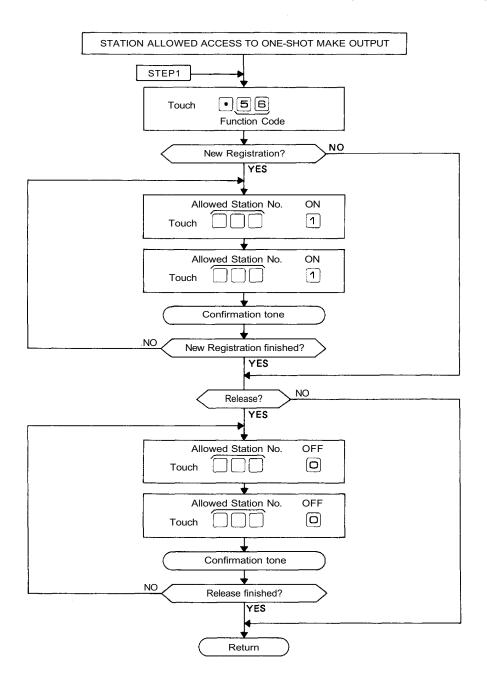
Function	Necessary	Call to Mas	ster Station	Paging Call, Paging Response or Personal Number Call	
runcion	Programming	By dialing 🔘	By picking up Handset	By dialing 🔘	By picking up Handset
Single Digit Dialing *1	Single Digit Registration at Station	(0)	×	0	×
Master/sub Relationship *2	Programming at Station No. 200 (Function Code 61)	0	0	×	×
Automatic Access to Paging (or Calling) from Handset Substation	Single Digit Registration at Station Programming at Station No.200 (Function Code 54)	(0)	(O)	0	0

Note. O : Possible

X : Impossible

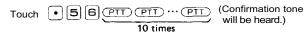
(O) : Possible but usually Not to be used
*1 : Possible across the tie-lined exchange.
*2 : Impossible across the tie-lined exchange.

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



NOTES

1. To allow all the stations to have this function,



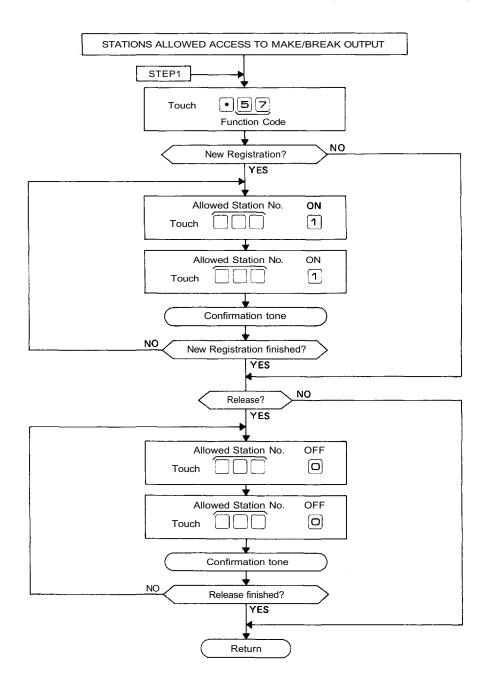
Be sure to depress the PTT key steadily.

2. To release at one time the data programmed into all the stations for this function,



- Re-start at Step 1 when mis-dialing occures. (All other registrations remain valid.)
- Dial 2 digits when programming the station for 2-digit dialling. Dial last 3 digits for station programming when 4-digit dialling is employed.

6-7 STATIONS ALLOWED ACCESS TO MAKE/BREAK OUTPUT (FUNCTION CODE 57)



NOTES

- 1. To allow all the stations to have this function,
 - Touch 5 7 PTT PTT ... PTT Will be heard.)

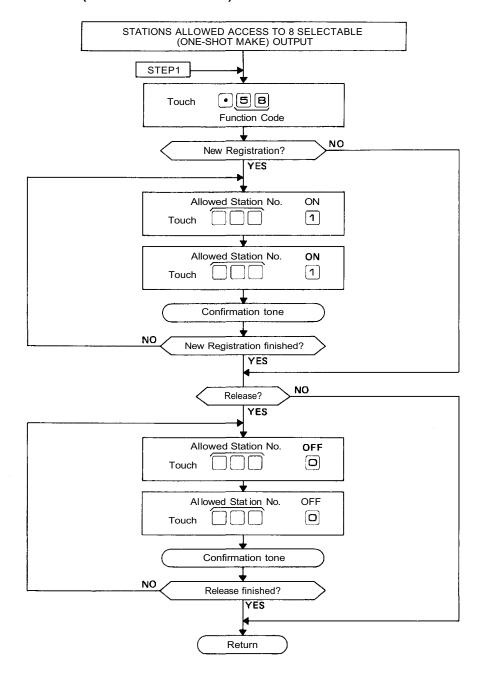
Be sure to depress the PTT key steadily.

2. To release at one time the data programmed into all the stations for this function,

Touch • 5 7 0 0 0 (Confirmation tone will be heard.)

- Re-start at Step 1 when mis-dialing occures. (All other registrations remain valid.)
- Dial 2 digits when programming the station for 2-digit dialling. Dial last 3 digits for station programming when 4-digit dialling is employed.

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



NOTES

1. To allow all the stations to have this function,

Touc h • 5 8 PTT PTT ... PTT (Confirmation tone will be heard.)

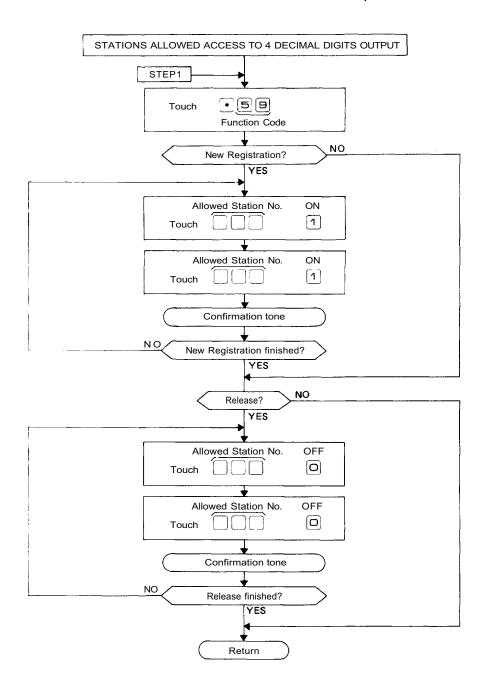
Be sure to depress the PTT key steadily.

2. To release at one time the data programmed into all the stations for this function,

Touch • 5 8 0 0 ... 0 (Confirmation tone will be heard.)

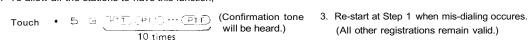
- Re-start at Step 1 when mis-dialing occures. (All other registrations remain valid.)
- Dial 2 digits when programming the station for 2-digit dialling. Dial last 3 digits for station programming when 4-digit dialling is employed.

6-9 STATIONS ALLOWED ACCESS TO 4 DECIMAL DIGITS OUTPUT (FUNCTION CODE 59)



NOTES

1. To allow all the stations to have this function,

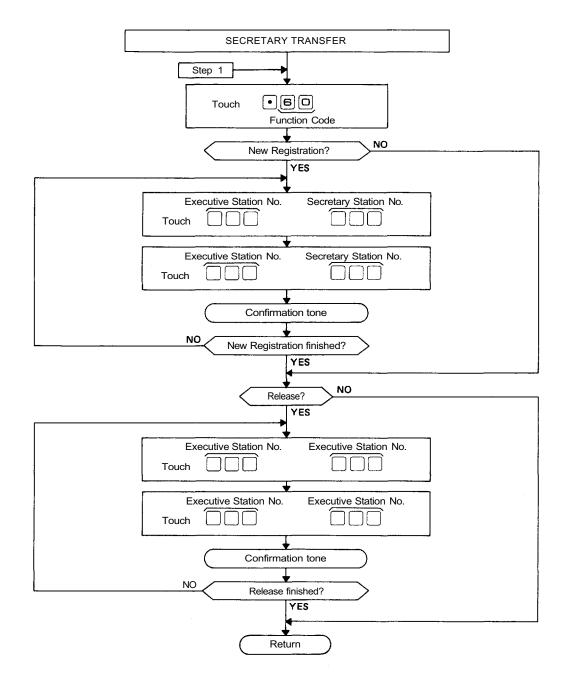


Be sure to decrease the PTT key steadily.

2. To release at one time the data programmed into all the stations for this function,

- 4. Dial 2 digits when programming the station for 2-digit dialling. Dial last 3 digits for station programming when 4-digit dialling is employed.

6-10 SECRETARY TRANSFER (FUNCTION CODE 60)



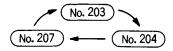
NOTES

 To release at one time the data programmed into all the stations for this function,

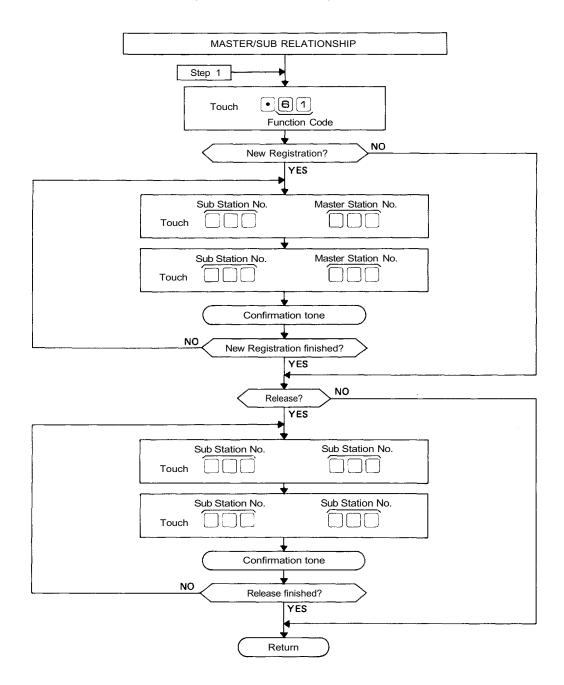


Re-start at Step 1 when mis-dialing occurs. (All other registrations remain valid.)

- Dial 2 digits when programming the station for 2-digit dialling. Dial last 3 digits for station programming when 4-digit dialling is employed.
- Programming of Secretary Transfer can be made in a daisy chain method. For their examples, refer to the following sketch.



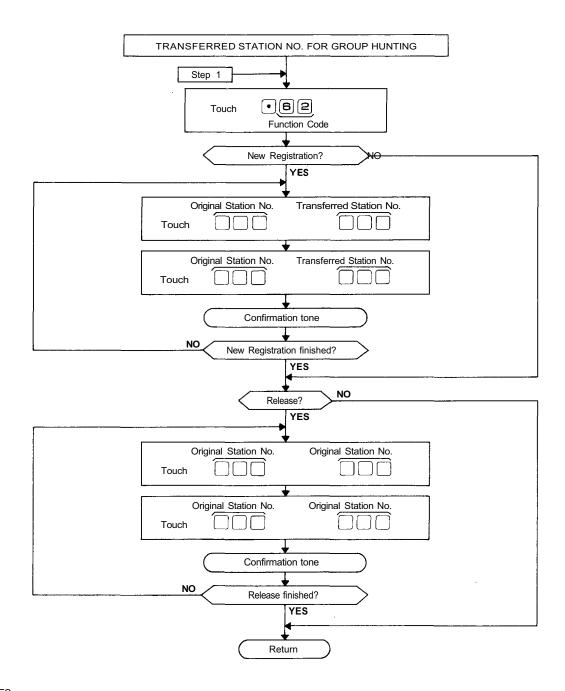
6-11 MASTER/SUB RELATIONSHIP (FUNCTION CODE 61)



NOTES

- 1. To release at one time the data programmed into all the stations for this function,
- Re-start at Step 1 when mis-dialing occurs. (All other registrations remain valid.)
- Dial 2 digits when programming the station for 2-digit dialling. Dial last 3 digits for station programming when 4-digit dialling is employed.

6-12 GROUP HUNTING (FUNCTION CODE 62)



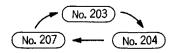
NOTES

1. To release at one time the data programmed into all the stations for this function,

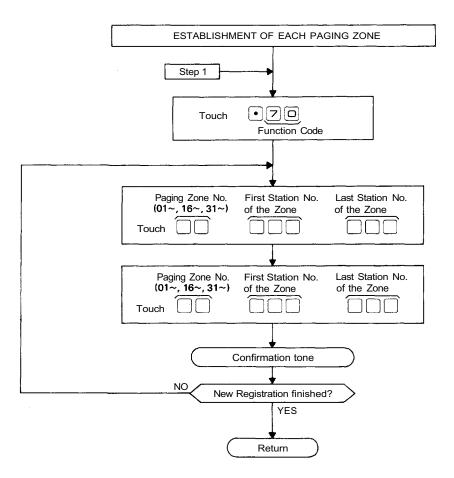


2. Re-start at Step 1 when mis-dialing occurs. (All other registrations remain valid.)

- Dial 2 digits when programming the station for 2-digit dialling. Dial last 3 digits for station programming when 4-digit dialling is employed.
- Programming of Group Hunting can be made in a daisy chain method. For their examples, refer to the following sketch.



6-13 PAGING ZONE (FUNCTION CODE 70)



NOTES

1.	To release at one time the data programmed into all the	ıe
	Zones for this function.	

- 2. Re-start at Step 1 when mis-dialing occurs. (All other registrations remain valid.)
- 3. Switch C-1 must be "ON" to employ this function.

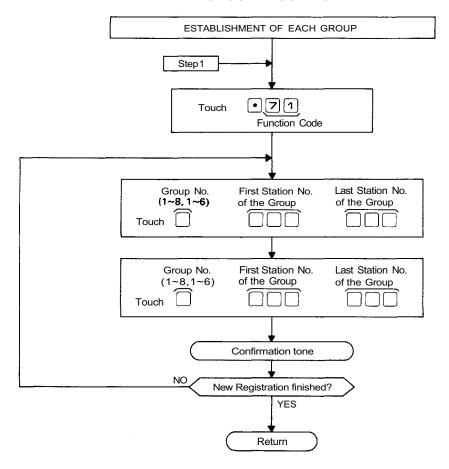
- 5. When "Paging Response Without Zone Number" mode (①, ⑤) is selected by the DIP Switch SW-C-7, this registration is essential.
- When "Paging Priority" function is adopted by the DIP Switch SW-C-3, this registration should be made for each Paging Zone of No.01 to No.31.
- 7. The programming is required for zones 01 to 31 when the telephone line interface is in use.
- 8. Zone numbers of each exchange in Tie-line system.

Exchange "A" ---- No.01~15
Exchange "B" ---- No.16~30
Exchange "C" ---- No.31~45

 Dial 2 digits when programming the station for 2-digit dialling. Dial last 3 digits for station programming when 4-digit dialling is employed.

6-14 GROUP BLOCKING 1: ESTABLISHMENT OF EACH GROUP (FUNCTION CODE 71)

GROUP BLOCKING 1



NOTES

1. To release at one time the data programmed into all the groups for this function,

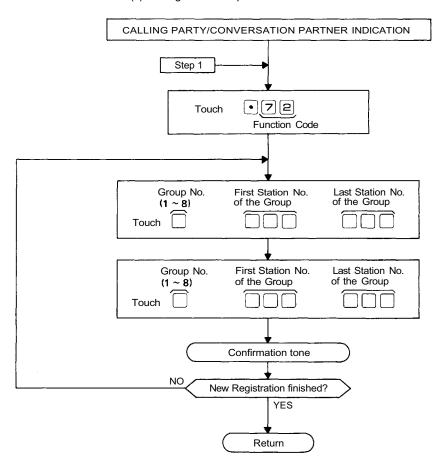
Touch	•71000	(Confirmation tone will be heard.)
	10 times	,

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

- Dial 2 digits when programming the station for 2-digit dialling. Dial last 3 digits for station programming when 4-digit dialling is employed.
- 4. Group No.
 Single exchange No.1 ~8
 Tie-line exchange No.1 ~6

6-15 CALLING PARTY/CONVERSATION PARTNER INDICATION (LAMP TYPE) (FUNCTION CODE 72)

Registration of station number(s) having indication panel.



NOTES

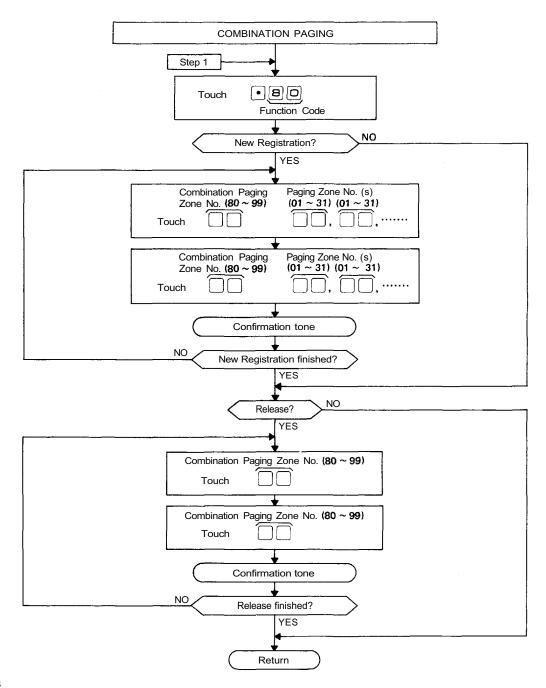
1. To release at one time the data programmed into all the groups for this function,



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

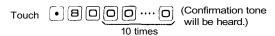
- 3. When the Indication Panel is set up only for one (1) station, you should write the station number in both "First Station No." and "Last Station No." columns.
- Dial 2 digits when programming the station for 2-digit dialling. Dial last 3 digits for station programming when 4-digit dialling is employed.

6-16 COMBINATION PAGING (FUNCTION CODE 80)



NOTES

 To release at one time the data programmed into all the Zones for this function,

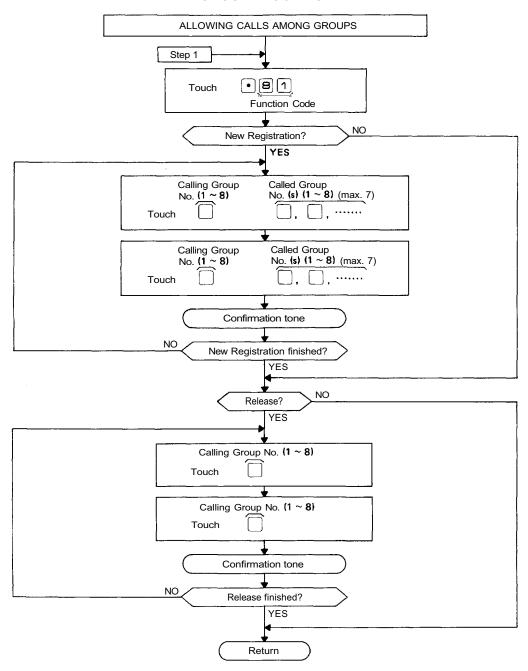


2. Re-start at Step 1 when mis-dialing occurs. (All other registrations remain valid.)

3. CP DIP switch C-1 must be "ON" to employ this function.

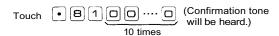
6-17 GROUP BLOCKING 2: ALLOWING CALLS AMONG GROUPS (FUNCTION CODE 81)

GROUP BLOCKING 2



NOTES

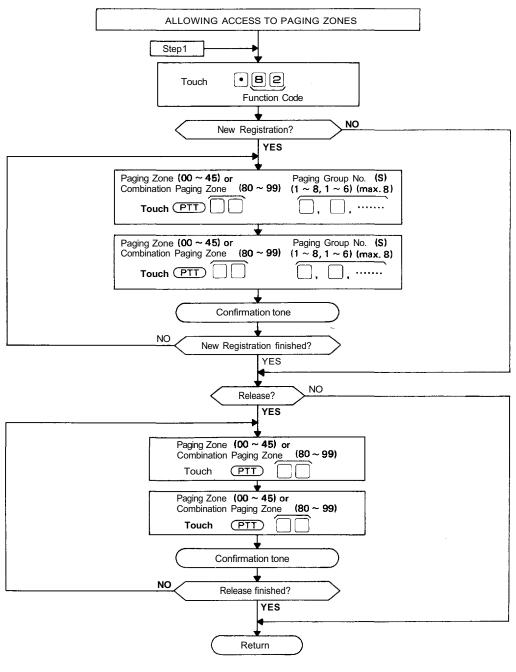
 To release at one time the data programmed into all the groups for this function,



Re-start at Step 1 when mis-dialing occurs. (All other registrations remain valid.) 3. Do not assign the same group to both the calling and called groups.

6-18 GROUP BLOCKING 3: ALLOWING GROUP ACCESS TO PAGING (FUNCTION CODE 82)

GROUP BLOCKING 3



1. To release at one time the data programmed into all the groups for this function,

Touch

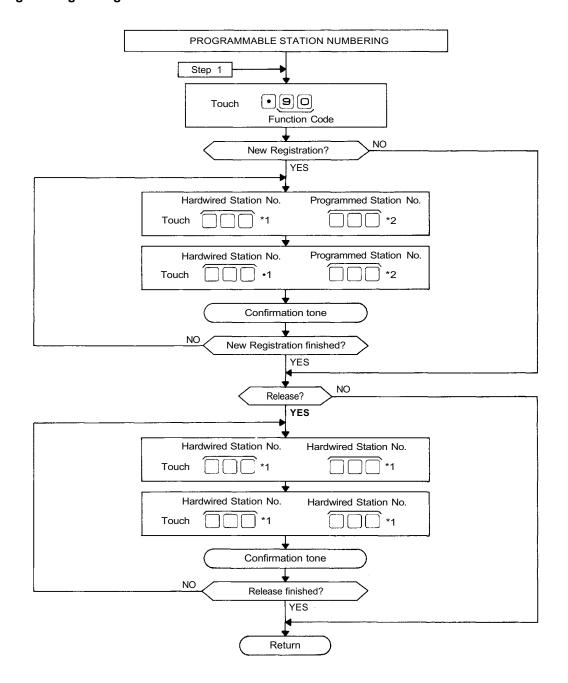
B 2 0 0 0 (Confirmation tone will be heard.)

3. Group No. Single exchange No.1 \sim 8 Tie-line exchange No.1 \sim 6

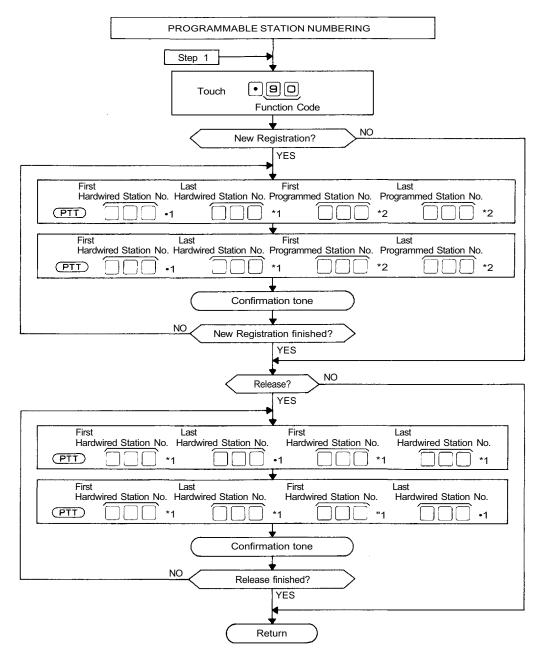
Re-start at Step 1 when mis-dialing occurs (All other registrations remain valid.)

6-19 PROGRAMMABLE STATION NUMBERING (FUNCTION CODE 90)

A. Programming of Single Station Number



B. Programming of Consecutive Station Numbers



NOTES

- 1. To release all registered Programmed Station No.'s at one time.
- 2. Any one Programmed Station No. cannot be assigned to more than one Hardwired Station.
- Dial 2 digits when programming the station for 2-digit dialling. Dial last 3 digits for station programming when 4-digit dialling is employed.

C. Limitation of change of station numbering

It is possible to change station numbering within a range of station numbering programmed for exchanges A, B, and C in the head number establishment of tie-line numbering schedule (p17).

Restriction of station numbers (*1) and (*2)

<Example 1> With personal number (Standard) <Example 2> Without personal number

~Example 12 With personal number (Standard)							
Exchange	Hardwired Station No.	Programmed Station No.					
Α	200~455	200~469					
В	470~725	470~739					
С	740~995	740~999					

Example 27 Without personal number							
Exchange	Hardwired Station No.	Programmed Station No.					
Α	100~355	100~399					
В	400~655	400~699					
С	700~955	700~999					

<example 3=""></example>		
Exchange	Hardwired Station No.	Programmed Station No.
Α	200~455	200~499
В	500~755	500~799
· C	800~999	800~999

<Functions and Operating Procedures of External Interface System>

External interfaces

1. Types of external interfaces

The external interfaces are classified into four types: OD interface, LD interface, CB interface, and Tie-line interface (depending upon their external equipment).

- (1) The OD interface is connected to an OD trunk of PBX via 4 wires.
- (2) The LD interface is connected to an LD trunk of PBX via 2 wires.
- (3) The CB interface is connected to PBX extension lines or to telephone lines.
- (4) The tie-line interface connects more than one intercom exchange via rented lines.

2. Features of interfaces

(1) OD interface

When mounted on the EXES-6000 series exchange (EX-610/620/630) and connected to the remote PBX, the OD interface provides the system with mutual paging and calling functions via the PBX extension telephones of a distant area.

(2) LD interface

When mounted on the EXES-6000 series exchange (EX-610/620/630) and connected to a nearby PBX, the LD interface provides the system with mutual paging and calling functions via the PBX extension telephones.

(3) CB interface

When mounted on the EXES-6000 series exchange (EX-610/620/630) and directly connected to the PBX extensions, the CB interface provides the system with direct calling and call answering functions via telephone lines.

Use this interface when you wish to directly linkup with a telephone line.

In addition, you can use the CB-600 lines in order to interface with pagers and to page/answer city pagers.

(4) Tie-line interface

When mounted on the EXES-6000 series exchange (EX-610/620/630) and connected to the remote extension system, the Tie-line interface provides the system with mutual paging, calling, and conversation functions.

3. Numbering schedule external interfaces

Before the external interfaces can function, they first need to be registered. The calling procedure to the respective interface line (selected number) should be registered through station No. 200. (For the details of registration, refer to the Installation Manual for the CP-66).

(1) OD interface

When using the OD interface, program the line number to be used into the line seizure operation (1 digit or 2 digits) according to the OD-600 line registration (Function Code 23 of No. 200 programing). If the OD line is divided into more than one group and each group is registered in separate line seizure operations, the interface can be connected to more than one PBX.

(2) LD interface

Similarly, the LD line number to be used has to be registered when using the interface. (See LD-600 line registration of Function Code 24 of No. 200 programing.) By dividing the line into more than one group and registering each group in separate line seizure operation, the interface can be connected to more than one PBX.

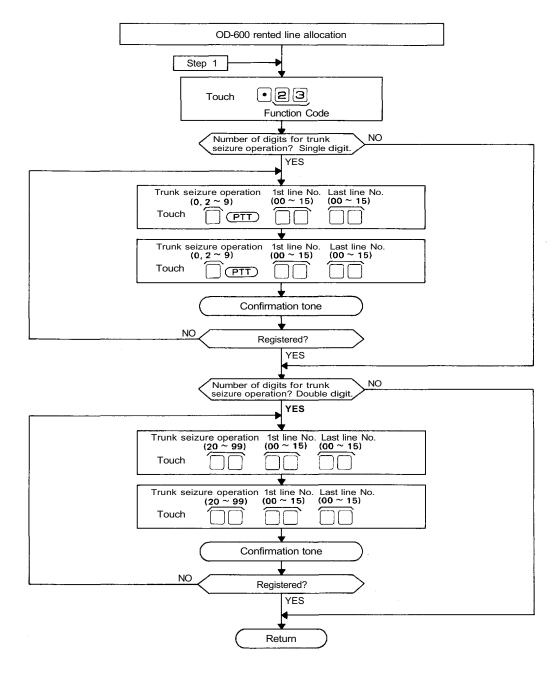
(3) CB interface

Similarly, the line number to be used has to be registered when using the interface. Also register the group number of stations which ring when there are incoming telephone calls and from which the calls are answered.

(4) Tie-line interface

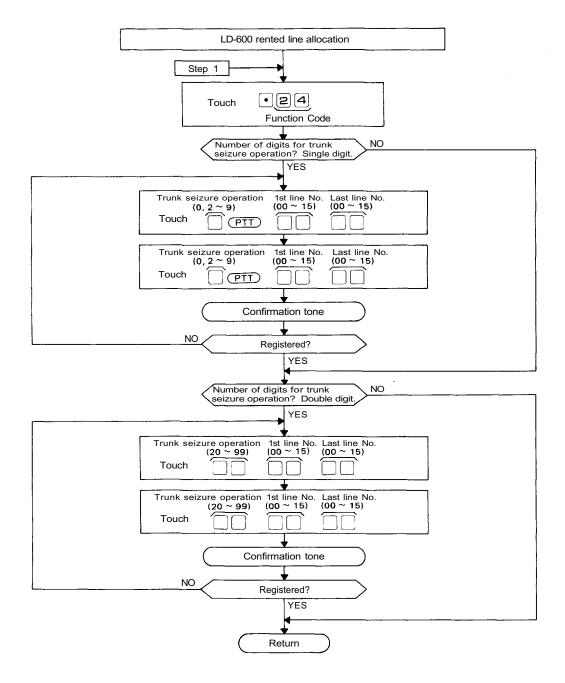
Similarly, the line number to be used has to be registered when using the Tie-line interface. Dividing the line into more than one group and registering each group in separate line seizure operations allow the interface to be connected to more than one PBX.

6-20 <OD-600 Rented line allocation> (FUNCTION CODE 23)



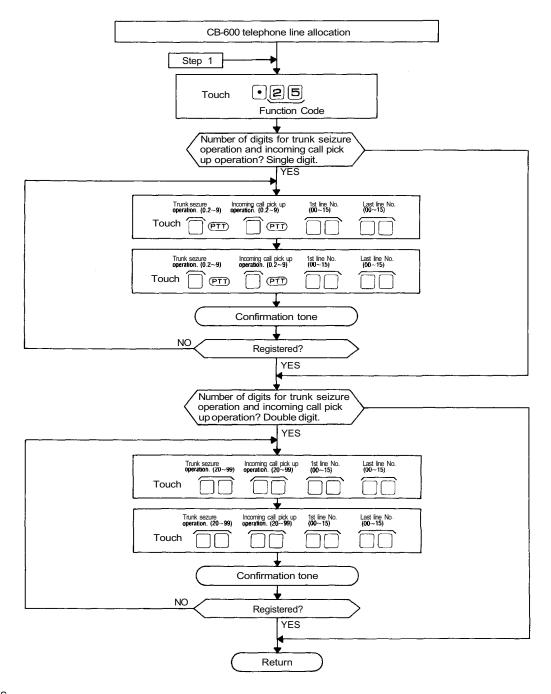
- 1. To clear registration on all rented lines
- Re-start at Step 1 when mis-dialing occurs. (All other registrations remain valid.)
- 3. Rented line No.: 00~07 for EX~610.

6-21 <LD-600 Rented line allocation> (FUNCTION CODE 24)



- 1. To clear registeration on all rented lines.
 - Touch \bullet 24000...0 (Confirmation tone 10 times will be heard.)
- 2. Re-start at Step 1 when mis-dialing occurs. (All other registrations remain valid.)
- 3. Rented line No.: 00~07 for EX-610.

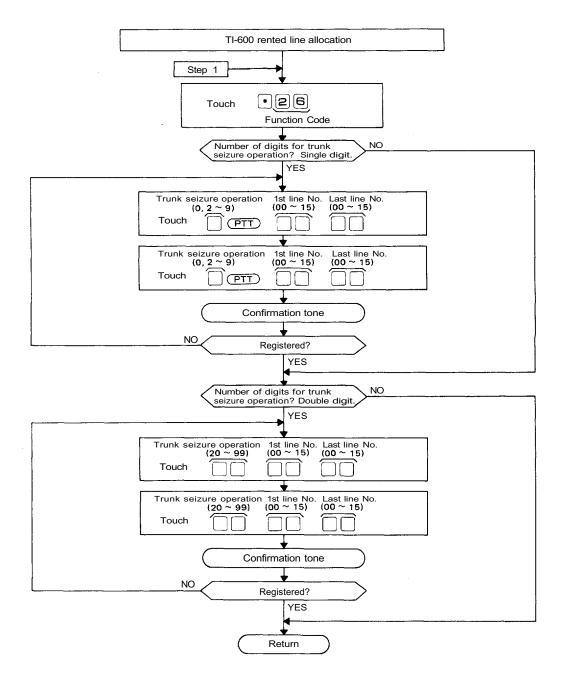
6-22 <CB-600 Telephone line allocation> (FUNCTION CODE 25)



- 1. To clear registration on all rented lines.
 - Touch 25 00 (Confirmation tone will be heard.)
- 2. Re-start at Step 1 when mis-dialing occurs. (All other registrations remain valid.)

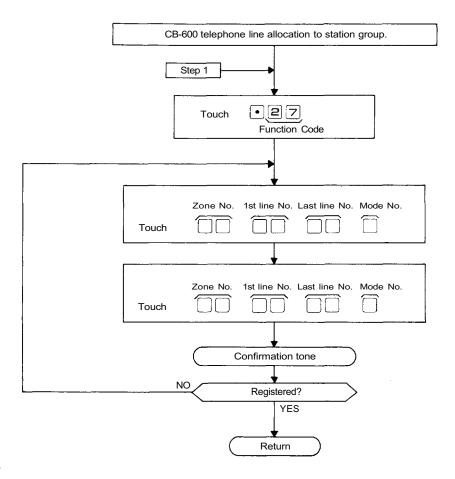
- 3. Telephone line No.: 00~07 for EX-610.
- Line No. 0 is impossible to use when CB-600 is used in pager call.
- If the station does not need to receive an incoming telephone call, the trunk seizure operation and incoming call pick up operation are identical.

6-23 <TI-600 Rented line allocation> (FUNCTION CODE 26)



- 1. To clear registrations on all rented lines.
 - Touch Page 10 0 0 (Confirmation tone will be heard.)
- 2. Re-start at Step 1 when mis-dialing occurs. (All other registrations remain valid.)
- 3. Rented line No.: 00~07 for EX-610.

6-24 <CB-600 Telephone line allocation to station group> (FUNCTION CODE 27)



NOTES

1. To clear registrations on all telephone lines.

- 2. Re-start at Step 1 when mis-dialing occurs. (All other registrations remain valid.)
- 3. Switch C-1 must be "ON" to employ this function.
- 4. Also dial 2 digits (01 to 07) to programme the system having paging zones 1 to 7.
- 5. Line No. 0 is impossible to use when CB-600 is used in pager call.

6. Zone number of each exchange in Tie-line system.

Exchange "A" ---- No.01 ~ 15 Exchange "B" ---- No.16~30

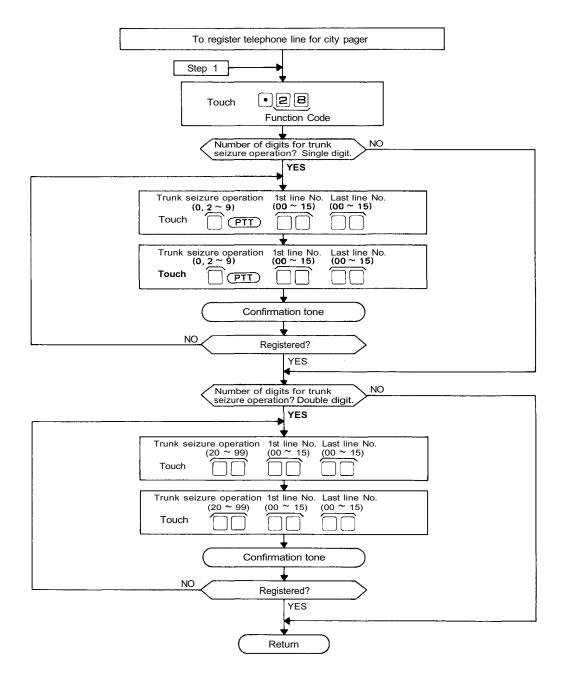
Exchange "C" ---- No.31 ~45

- 7. Telephone line No.: 00∼15 (00-07 for EX-610).
- 8. Mode No.

0 : External ringer mode

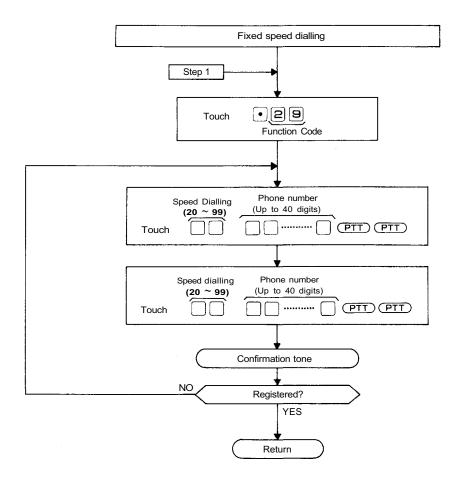
1 : Station paging pre-announcement tone mode

6-25 <To register telephone line for city pager> (FUNCTION CODE 28)

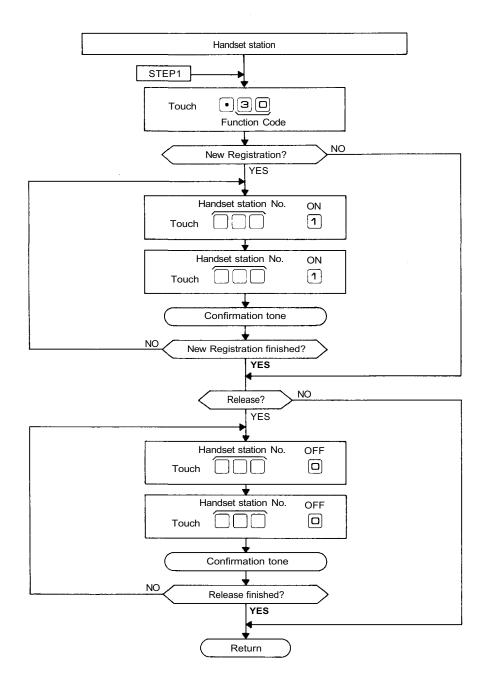


- 1. To clear registrations on all telephone lines.
 - Touch \bullet \blacksquare \blacksquare \blacksquare \boxdot \bigcirc \cdots \bigcirc (Confirmation tone will be heard.)
- 2. Re-start at Step 1 when mis-dialing occurs. (All other registrations remain valid.)
- 3. Line No. O is impossible to use when CB-600 is used in pager call.
- 4. Telephone line No.: 00~15 (00~07 for EX-610).

6-26 <Fixed speed dialling> (FUNCTION CODE 29)



- 1. To clear all data registered for speed dialling.
 - Touch P D O O O (Confirmation tone will be heard.)
- Re-start Step 1 when mis-dialing occurs.
 (All other registrations remain valid.)
- A maximum of 10 telephone numbers may be registered for Speed Dialling. The first digit of each abbreviated number is to be the same.
- 4. Dial PTT to set up pause in the abbreviated number.
- When you need to press to register Single-digit dialling for intercom (not telephone) applications, press
 PTT instead of • .



NOTES

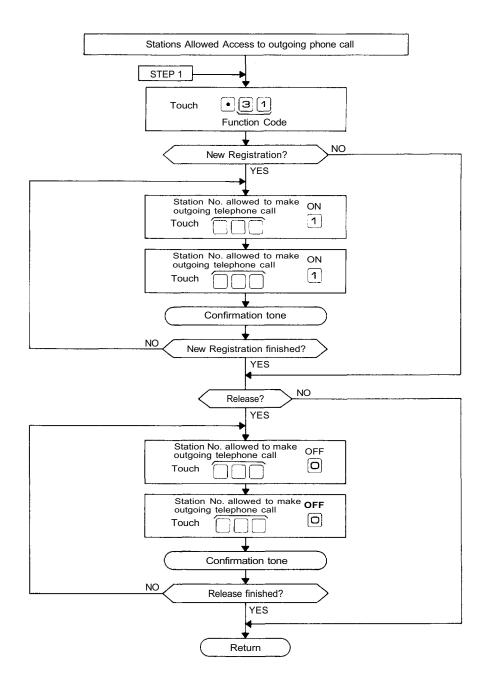
- 1. To allow all the stations to have this function,
 - Touch 3 PTT PTT ··· PTT (Confirmation tone will be heard.)

Be sure to depress the PTT key steadily.



- 3. Re-start at Step 1 when mis-dialing occures. (All other registrations remain valid.)
- Dial 2 digits when programming the station for 2-digit dialling. Dial last 3 digits for station programming when 4-digit dialling is employed.

6-28 <Stations Allowed Access to outgoing phone call> (FUNCTION CODE 31)



NOTES

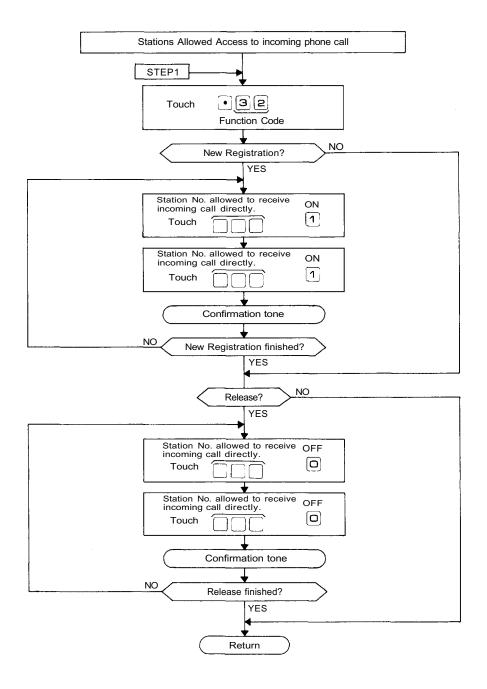
- 1. To allow all the stations to have this function,
 - Touch 3 1 PTT PTT ... PTT (Confirmation tone will be heard.)

Be sure to depress the PTT key steadily.



- Re-start at Step 1 when mis-dialing occures. (All other registrations remain valid.)
- Dial 2 digits when programming the station for 2-digit dialling. Dial last 3 digits for station programming when 4-digit dialling is employed.

6-29 <Stations Allowed Access to incoming phone call> (FUNCTION CODE 32)



NOTES

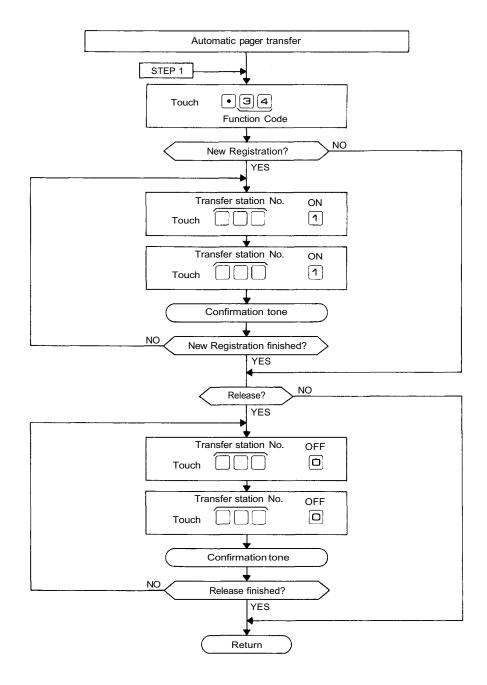
- 1. To allow all the stations to have this function,
 - Touch 3 2 PTT PTT ... PTT (Confirmation tone will be heard.)

Be sure to depress the PTT key steadily.



- Re-start at Step 1 when mis-dialing occures. (All other registrations remain valid.)
- Dial 2 digits when programming the station for 2-digit dialling. Dial last 3 digits for station programming when 4-digit dialling is employed.

6-30 < Automatic pager transfer> (FUNCTION CODE 34)



NOTES

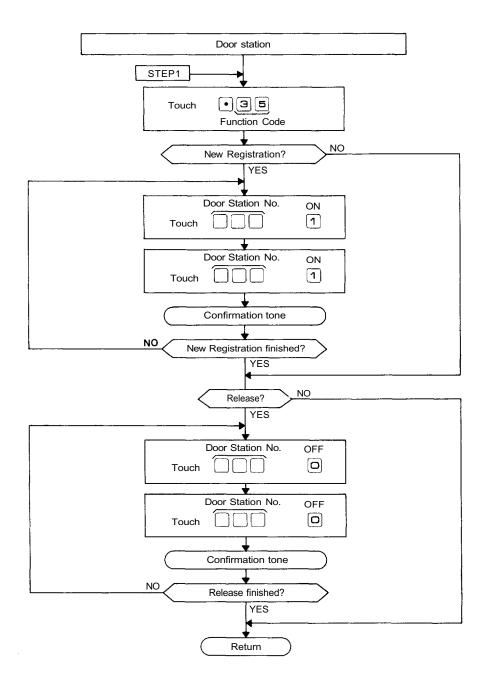
- 1. To allow all the stations to have this function,
 - Touch 3 4 PTT PTT ... PTT (Confirmation tone will be heard.)

Be sure to depress the PTT key steadily.



- Re-start at Step 1 when mis-dialing occures. (All other registrations remain valid.)
- Dial 2 digits when programming the station for 2-digit dialling. Dial last 3 digits for station programming when 4-digit dialling is employed.

6-31 < Door station> (FUNCTION CODE 35)



NOTES

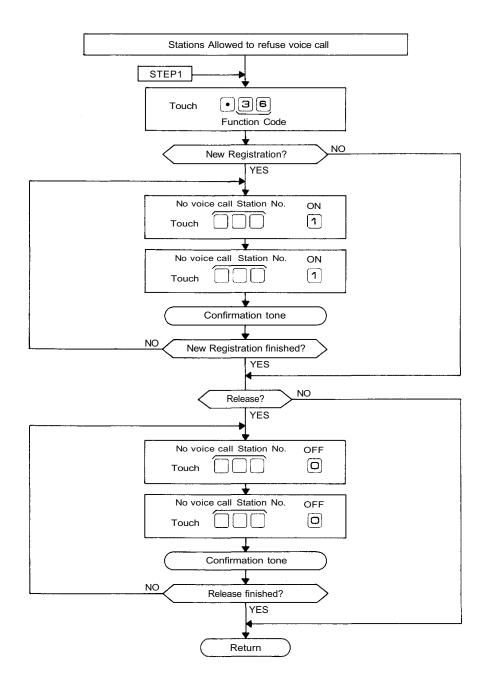
- 1. To allow all the stations to have this function,
 - Touch \bullet 3 5 $\underbrace{\mathsf{PTT}}_{\mathsf{10}}$ times $\overset{\mathsf{PTT}}{\mathsf{10}}$ (Confirmation tone will be heard.)

Be sure to depress the PTT key steadily.



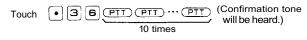
- Re-start at Step 1 when mis-dialing occures. (All other registrations remain valid.)
- Dial 2 digits when programming the station for 2-digit dialling. Dial last 3 digits for station programming when 4-digit dialling is employed.

6-32 <Stations Allowed to refuse voice call> (FUNCTION CODE 36)



NOTES

1. To allow all the stations to have this function,

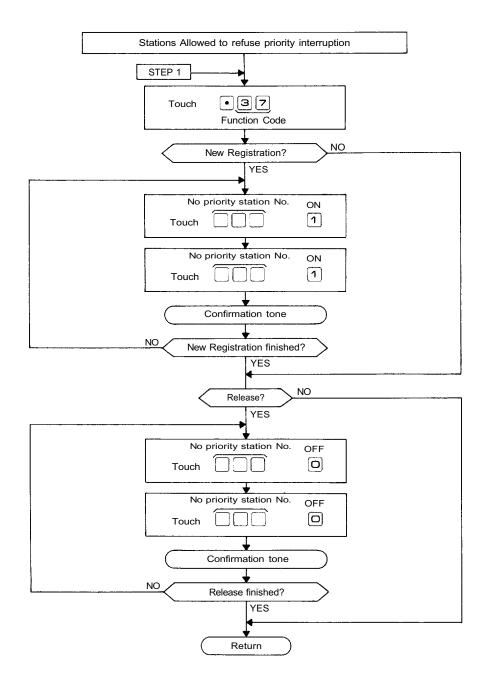


Be sure to depress the $\begin{tabular}{c} \begin{tabular}{c} \begin{$



- Re-start at Step 1 when mis-dialing occures. (All other registrations remain valid.)
- Dial 2 digits when programming the station for 2-digit dialling. Dial last 3 digits for station programming when 4-digit dialling is employed.

6-33 <Stations Allowed to refuse priority interruption> (FUNCTION CODE 37)



NOTES

1. To allow all the stations to have this function,

Touch • 3 7 PTT PTT ... PTT (Confirmation tone will be heard.)

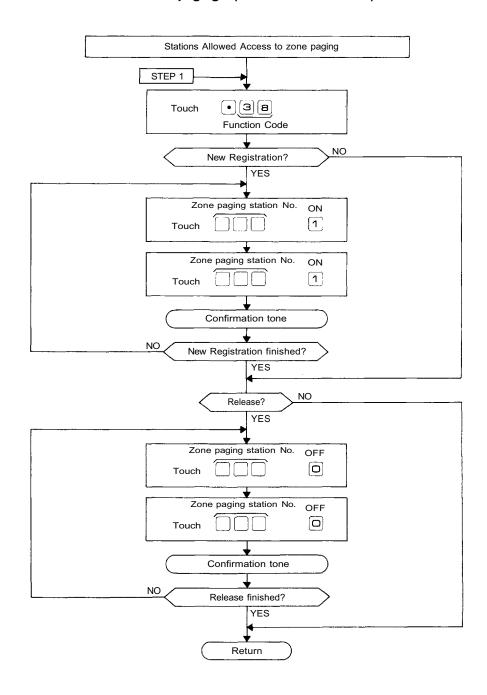
Be sure to depress the PTT key steadily.

2. To release at one time the data programmed into all the stations for this function,

Touch \bullet \bigcirc \bigcirc \bigcirc \bigcirc \bigcirc \bigcirc \bigcirc \bigcirc (Confirmation tone will be heard.)

- Re-start at Step 1 when mis-dialing occures.(All other registrations remain valid.)
- Dial 2 digits when programming the station for 2-digit dialling. Dial last 3 digits for station programming when 4-digit dialling is employed.

6-34 <Stations Allowed Access to zone paging> (FUNCTION CODE 38)



NOTES

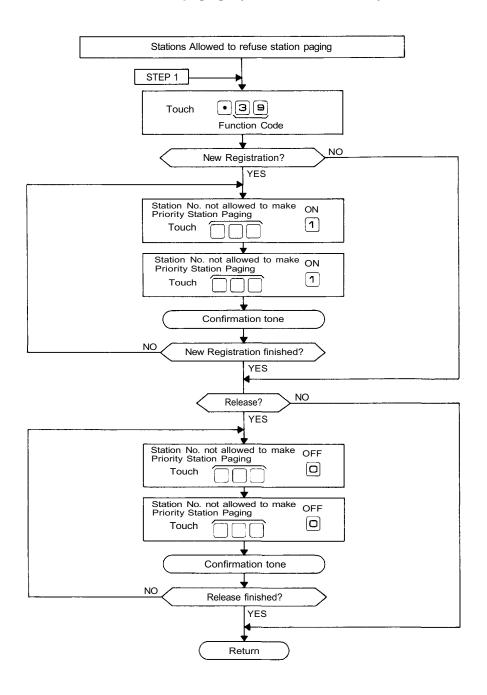
- 1. To allow all the stations to have this function,
 - Touch 3 8 PTT PTT ... PTT (Confirmation tone will be heard.)

Be sure to depress the PTT key steadily.



- Re-start at Step 1 when mis-dialing occures. (All other registrations remain valid.)
- Dial 2 digits when programming the station for 2-digit dialling. Dial last 3 digits for station programming when 4-digit dialling is employed.

6-35 <Stations Allowed to refuse station paging> (FUNCTION CODE 39)



NOTES

- 1. To allow all the stations to have this function.
 - Touch 3 9 PTT PTT ... PTT (Confirmation tone will be heard.)

Be sure to depress the PTT key steadily.



- 3. Re-start at Step 1 when mis-dialing occures. (All other registrations remain valid.)
- Dial 2 digits when programming the station for 2-digit dialling. Dial last 3 digits for station programming when 4-digit dialling is employed.

7. PROGRAMMING DATA TABLE

• INITIAL PROGRAMMING

MMING										
-	Mark *)									
	st station of each exchange becomes the Programming Station:									
	ange "A" No. 200 (100)									
	inge "B" No. 470 (400)									
Excha	Exchange "C" No. 740 (700)									
— Initial	Initial Programming of the Exchange									
	Place CP front-mounted program switch in "ON" position. Dial operation from station No. 200 (100). *									
	. ,									
2.	Dial tone will be heard (Station No. 200 (100) becomes a programming station)									
3.	Confirmation tone will be heard (Clears function group S)									
4.	Confirmation tone will be heard (Clears function group A)									
5.	• BB···B Confirmation tone will be heard (Clears function group B)									
6.	• 77.7 Confirmation tone will be heard (Clears function group C)									
7.	BB··B Confirmation tone will be heard (Clears function group D) 10 times									
8.	• 99.9 Confirmation tone will be heard (Clears function group E)									
	10 times									
9.	Confirmation tone will be heard. (Clears personal numbers, single digit dial numbers and remote numbers)									
10.	• (Clears function group F) 10 times									
11.	• (Clears function group G)									
	Dial operation to programme required functions. (Refer to other instructions for each function)									
13. \$	Set the CP front-mounted programme switch to OFF.									
14.	(Station No. 200 (100) becomes a normal station.) *									
= Simul	taneous clearance of each function programmed into all stations.									
(
į	• XX									
	Function Code 10 times									
— Simul	taneous programming of each function into all stations. ==									
	• 3 X PTT PTTPTT Confirmation tone									
	PTT PTT PTT Confirmation tone									
	Function Code 10 times									

Function Table for the System

•40, [], [], [• 4 X ,	• 4 X ,
• 4 X X		

System function table

System	function table		XX: 30.31	, 70,71.90,91			
Function Group	Function	Function code	Registered data	Remark	Initial setting mode		
	Numbering schedule of tie-line system. Setting of the head station number of each exchange	40	A —00 B —00 C —00	Head station number of each exchange to be selected from among the following schedules. 100/200/300/400/500/600/700/800/900	A/B/C= 200/470/740 (SW-D-5 off) 200/500/800 (SW-D-5ON)		
	Call tone selection	41		0: No call tone 1: Single tone (0.2 second) 2: Trill tone (0.3 second)	Trill tone (0.3 second)		
	Selection of paging pre-announcement tone duration	42	_	No pre-announcement tone Pre-announcement tone (1 second) Pre-announcement tone (2 seconds)	Pre-announcementone (2 seconds)		
	Single-digit dialling key selection	430	_	0: O 5~9: 5 ~ 9	0		
	Selection of 1st digit of 4-digit dialling		— 000	1st digit of station No. of local exchange 2000/3000/4000/5000/6000/7000/ 8000/9000	(None)		
S	Time-out of conversation	45		00: No time-out 01~99: Time-out (minutes)	No time-out		
	Time-out of paging call	46		00: No time-out 01~99: Time-out (minutes)	No time-out		
	Pager call output digit selection	470	_	0: 2 digits 1: 3 digits 2: 4 digits	2 digits		
	Pager call function code output mode selection	471	_	O: Output before pager No. Output after paper No. No function code	Output before pager No.		
	Pre-pause time selection		_	0: 0.6 sec 4: 2.5 sec 8: 4.5 sec 1: 1 sec 5: 3 sec 9: 5 sec 2: 1.5 sec 6: 3.5 sec 3: 2 sec 7: 4 sec	0.6 second		
Number of SM-600 units connected		490	_	0: No unit connected 1~4: Number of SM-600 units connected	No unit connected		
	Message recording hurry-up tone mode selection	491	_	O: Hurry-up tone is transmitted T: No hurry-up tone	Hurry-up tone is transmitted		

Note. Write numerical value over horizontal lines (—).

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131	130	129	128	127	126	125	124	123		122	121	120	119	118	117	116	115	114	113	112	111	110	109	108	107	106	105	104	103	102	101	100	Without Personal No.	on No.	Hardwired	Function Code	Function		Ť
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																																	22	Stations to Confe	Allov erence	wed Acc	ess		
																																	54	Automa	itic Ac	cess to	Paging		
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																																	62	Transfe Station	rred No. fe	or Group	Hunting *	1	
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																																	2	Stations outgoin	Allov g pho	ved Acco	ess to		
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																																Š	37	Stations priority	Allov	ved to re uption	fuse		
						Ĩ																											38	Stations zone pa	Allov	ved Acce	ess to		
									T	1												<u> </u>											39	Stations station	Allov	ved to re	fuse		

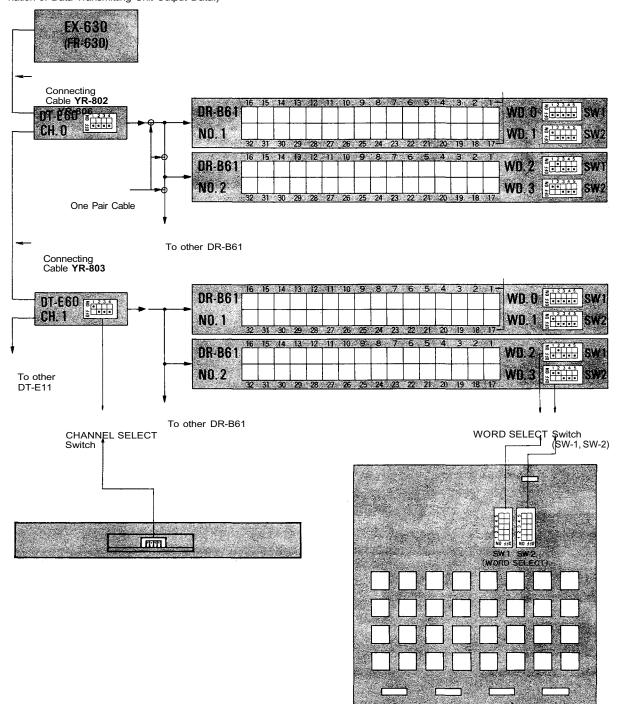
	Paging Zone			Last Station No.	1	
	Department	No.	First Station No.	Last Station No.	_	
		01]\`	
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PART 3. FUNCTION SELECTION FOR DATA TRANSMITTING AND RECEIVING UNITS

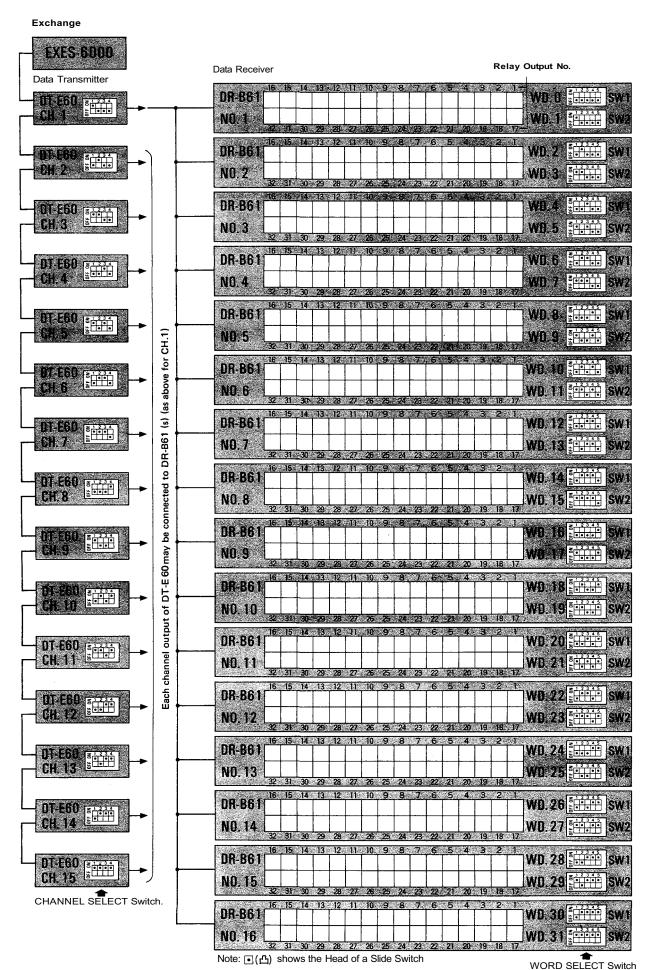
8. SETTING OF CHANNEL SELECT SWITCH OF TRANSMITTING UNIT (DT-E60) AND WORD SELECT SWITCH OF RECEIVING UNIT (DR-B61)

NOTE

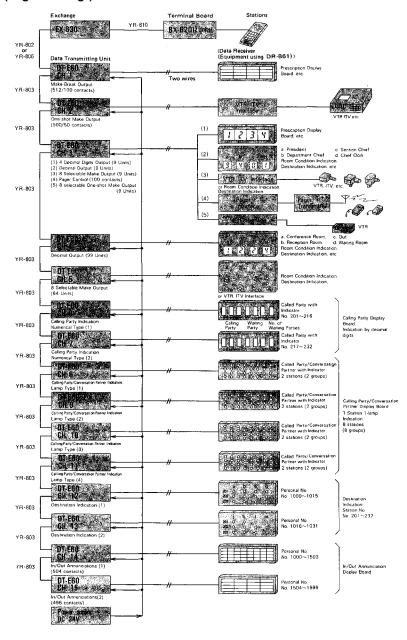
- Connect the DT-E60 and DR-B61 to Exchange correctly. (Refer to operation manuals of DT-E60 and DR-B61).
- Set the function select switches (DIP SWITCH) on CP-66 correctly and be sure to enter initial programming and function registration at programming station No.200.
- Remove the Data Transmitting Unit (DT-E60) front cover by pulling its handle toward you, and the channel select switches can be seen. Set the channel select switches to enable IN/OUT Annunciation, Calling Party Indication, etc. (Refer to 12. Explanation of Data Transmitting Unit Output Data.)
- 4. The DT-E60 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 51 for details. (Refer to Explanation of Date Receiving Unit Output Channels.)
- Connecting Cable YR-802 is used for the Rack mounting system.
 Connecting Cable YR-806 is used for the Standard Cabinet mounting system with only One (1) DT-E60 unit.



9. DIP SWITCH TABLE FOR DATA TRANSMITTING AND RECEIVING UNITS

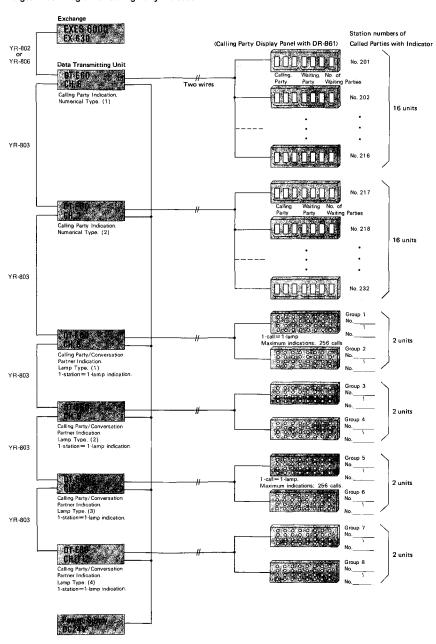


10. SYSTEM DIAGRAM OF DATA TRANSMITTING AND RECEIVING UNITS (Single Exchange)

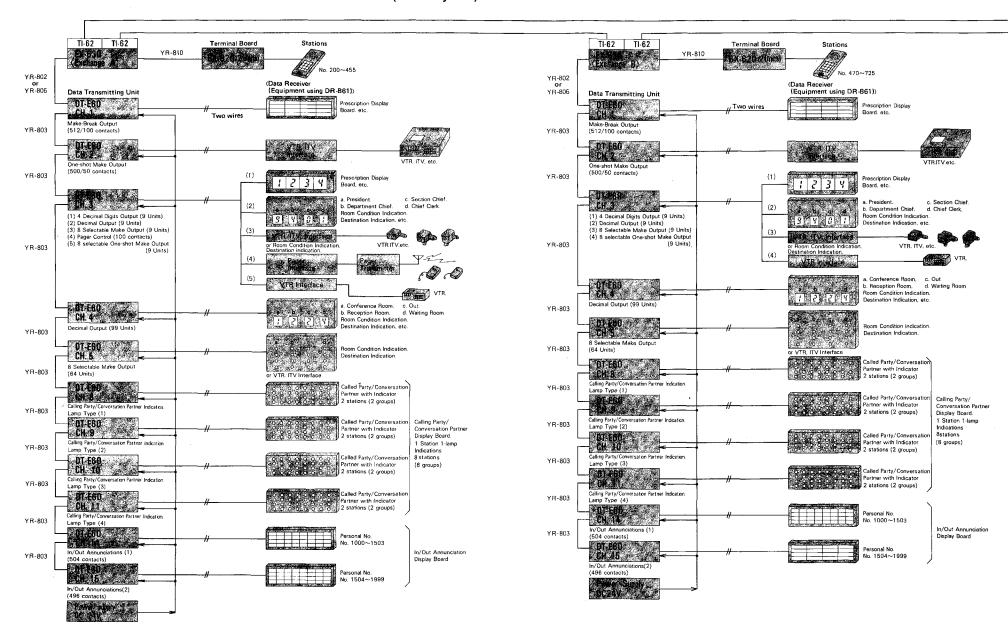


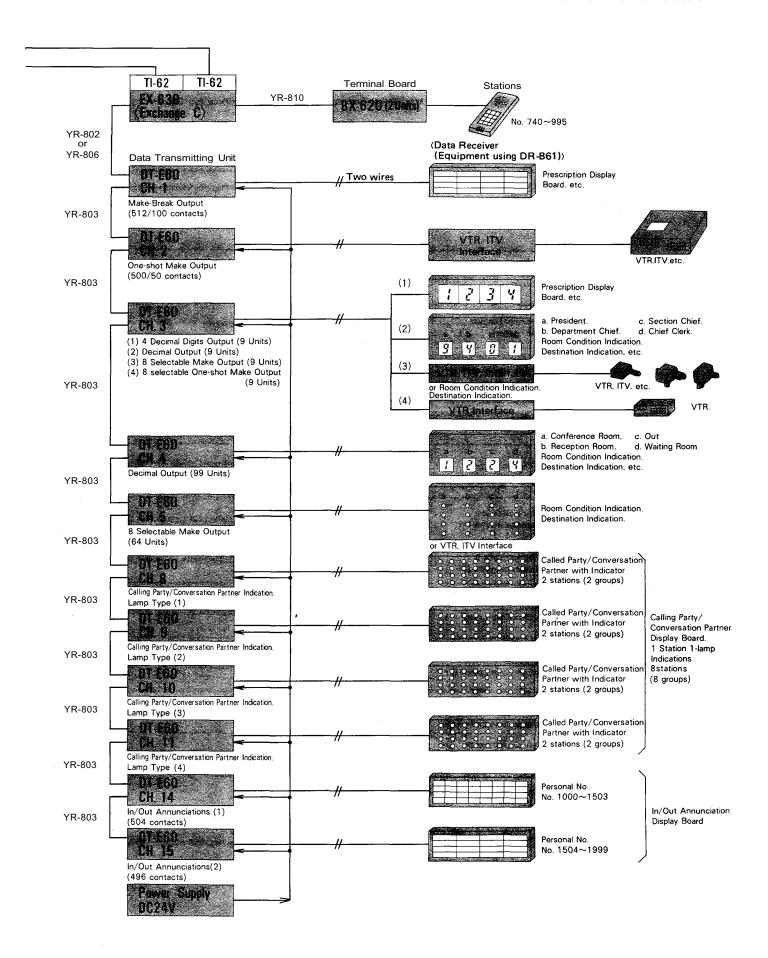
-65-

Enlarged Block Diagram of Calling Party Indication



11. SYSTEM DIAGRAM OF DATA TRANSMITTING AND RECEIVING UNITS (Tie-line System)





12. EXPLANATION OF DATA TRANSMITTING UNIT OUTPUT CHANNELS

CHANNEL SELECTION	FUNCTIONS	DESCRIPTION	APPLICATION
DT-E60 GH. 1	Make/Break Output (512/100 contacts)	Make/Break contacts can be available at any Master station.	Door Remote IN/OUT Annunciation
DT-E60 (1994) CH. 2	One-shot Make Output (500/50 contacts)	One-shot make contacts can be available at any Master station.	ITV camera select VTR control
	(1) 4 Decimal digits output (9 units)	Indicate by 7 segments LEDs.	Prescription annunciation
	(2) Decimal Output (9 units)	Selectable Decimal Outputs are available with 7 segments LEDs.	Room condition indication
DT-E60	(3) 8 Selectable Make Output. (9 units)	One contact out of 8 selectable make outputs is obtained. "Clear" operation makes all 8 relays break.	Destination indication
	(4) Pager Control Output (100 pagers)	Make output (100 contacts) is available for pager control.	• Pager
	(5) 8 Selectable One-shot Make Output (9 unit)	One contact out of 8 selectable make outputs is obtained for about 1 or 2 seconds.	• VTR control
07-E60 (1997) CH. 4	Decimal Output (99 units)	10 Selectable Decimal Outputs are available with 7 segments LEDs.	Room condition indication Destination indication
DT-E60 CH.5	8 selectable make Output (64 units)	One contact out of 8 selectable make outputs is obtained. "Clear" operation makes all 8 relays break.	Room condition indication Destination indication
DT-E60 CH. 6	Calling Party Indication Numerical-type (1)	When a station with a Display Board is called, calling party number is	Called stations are No.201~No.216.
OT-E60 CH. 7	Calling Party Indication Numerical-type (2)	over and also when the called station is busy or in privary.	Called stations are No .217- No.232.
DT-E60 CH. 8	Calling Party/Conversation Partner Indication (One Station; One Lamp) (1)	Calling party indication (lamp type) This function permits a maximum of 256 calling stations to be indicated on the display panel installed at a certain station or group	Called station(s). No.1~2.
DT-E60 CH. 9	Calling Party/Conversation Partner Indication (One Station; One Lamp) (2)	display panel indicates all calls received while the called stations is busy or in Privacy mode. This lamp indication is maintained till the con- versation with the calling party is terminated	Called station (s). No .3-4.
DT-E60 5 2 4 CH. 10	Calling Party/Conversation Partner Indication (One Station; One Lamp) (3)	has cancelled his call while waiting. Conversation partner indication (lamp type) A conversation partner is indicated on the dis-	Called station(s). No.5~6.
DT-E60 (\$1234) CH, 11	Calling Party/Conversation Partner Indication (One Station; One Lamp) (4)	group having stations with consecutive num- ber. The lamp goes out when the conversa- tion is finished.	Called station(s). No.5~6.
DT-E60 (5) (2) (1) (1) (1) (1)	Destination Indication (1)	When a person makes his own Personal Number Programming at the	Personal number 1000-1015
DT-E60 (5)	Destination Indication (2)	the registration was made can be indicated by the lamp.	Personal number 1016~1031
DT-E60 CH, 14	In/Out Annunciation (1)	Personal in and out registration can be accomplished at any Master	Personal number 1000~1503
DT-E60 CH. 15	In/Out Annunciation (2)	Max. 1000 IN/OUT annunciations may be done.	Personal number 1504~1999

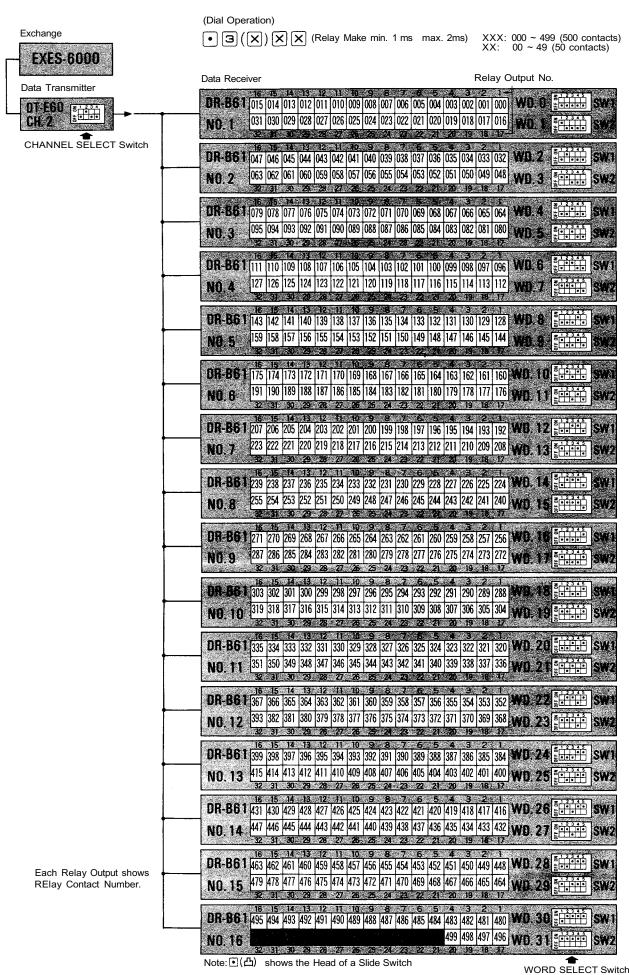
13. EXPLANATION OF DATA RECEIVING UNIT OUTPUT DATA

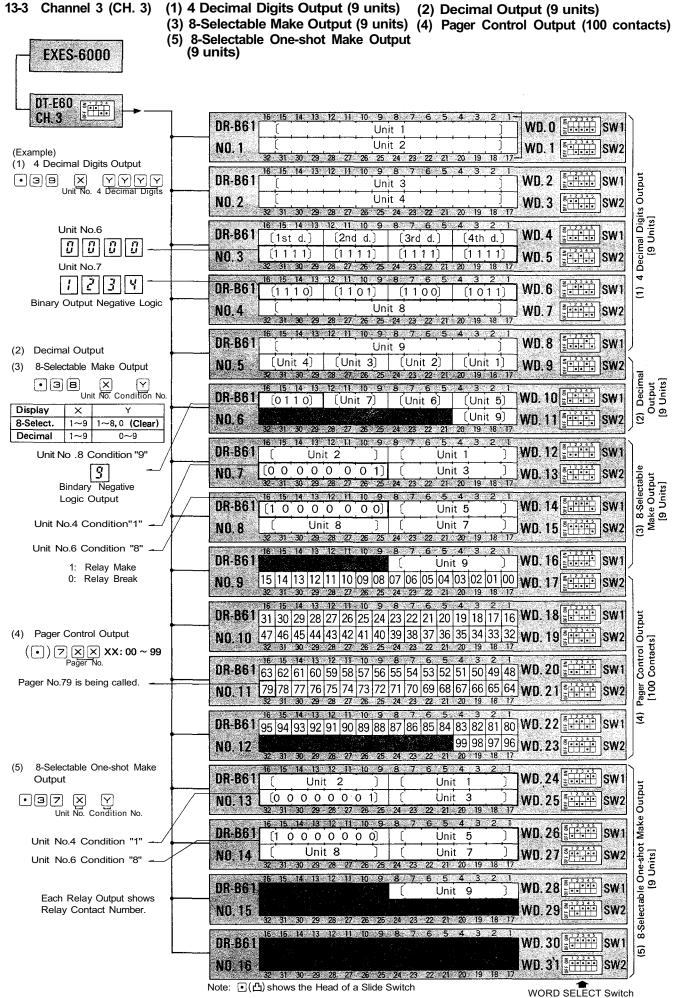
13-1 Channel 1 (CH. 1) Make/Break Output

5-1 Chamile I (Ch. I) W	(Dial Operation)
Exchange	
EXES-8000	(Relay Break)
Data Transmitter	Data Receiver Relay Output No.
0T-E60	DR-B61 015 014 013 012 011 010 009 008 007 006 005 004 003 002 001 000 WD. 0 \$\frac{1}{2}\$ \$\frac{1}
CHANNEL SELECT Switch	DR-B61 047 046 045 044 043 042 041 040 039 038 037 036 035 034 033 032 WD. 2
	NO. 2 063 062 061 060 059 058 057 056 055 054 053 052 051 050 049 048 WD. 3 32 31 30 29 28 27 26 25 24 23 22 21 20 19 18 17
	DR-B61 079 078 077 076 075 074 073 072 071 070 069 068 067 066 065 064 WD. 4 WB.5 SW2
	32 31 30 29 28 27 25 25 24 23 22 21 20 19 18 17
	OR-B61
	DH-B61
	22 31 30 29 28 27 26 25 24 23 22 21 20 19 18 17
	DR-B61 175 174 173 172 171 170 169 168 167 166 165 164 163 162 161 160 WD. 10 100
	DR-B61 207 206 205 204 203 202 201 200 199 198 197 196 195 194 193 192 WD. 12
	NO. 7 223 222 221 220 219 218 217 216 215 214 213 212 211 210 209 208 WD. 13
	OR-B61 239 238 237 236 235 234 233 232 231 230 229 228 227 226 225 224 WD. 14
	NO. 8 255 254 253 252 251 250 249 248 247 246 245 244 243 242 241 240 WD. 15 SW2
	DR-B61 271 270 269 268 267 266 265 264 263 262 261 260 259 258 257 256 WD 16 3 287 286 285 284 283 282 281 280 279 278 277 276 275 274 273 272 WD 17 3 2 2 3 3 2 3 3 2 3 2 3 2 3 2 3 3 2 3 2 3 3 2 3 2 3 3 2 3 2 3
	DR-B6 1 303 302 301 300 299 298 297 296 295 294 293 292 291 290 289 288 WD. 18 *** SW*** SW***
	NO. 10 319 318 317 316 315 314 313 312 311 310 309 308 307 306 305 304 WD. 19 5 32 31 36 29 28 27 26 25 24 23 22 21 20 19 18 17
	DR-B61 335 334 333 332 331 330 329 328 327 326 325 324 323 322 321 320 WD. 20 5 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3
	NO. 11 351 350 349 348 347 346 345 344 343 342 341 340 339 338 337 336 WD. 21 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5
	OR-B61 367 366 365 364 363 362 361 360 359 358 357 356 355 354 353 352 WD. 22 WD. 23 WD. 23 WD. 23 WD. 23
	32 31 30 29 28 27 26 25 24 23 22 21 20 19 18 17
	DR-B61 399 388 397 396 395 394 393 392 391 390 389 388 387 386 385 384 WD. 24 SW1 NO. 13 415 414 413 412 411 410 409 408 407 406 405 404 403 402 401 400 WB. 25 SW2
	DR-B61 431 430 429 428 427 426 425 424 423 422 421 420 419 418 417 416 WD 28
	NO. 14 447 446 445 444 443 442 441 440 439 438 437 436 435 434 433 432 WD. 27 45 55 8W2
Each Relay Output shows	DR-B61 463 462 461 460 459 458 457 456 455 454 453 452 451 450 449 448 WD, 28 WD, 28 WD, 28
Relay Contact Number.	NO. 15 479 478 477 476 475 474 473 472 471 470 469 468 467 466 465 464 WB. 29 5 20 28 27 26 25 24 23 22 21 20 19 18 17
	OR-B61 495 494 493 492 491 490 489 488 487 486 485 484 483 482 481 480 WD. 30 €
	Note: (F) (F) shows the Head of a Slide Switch

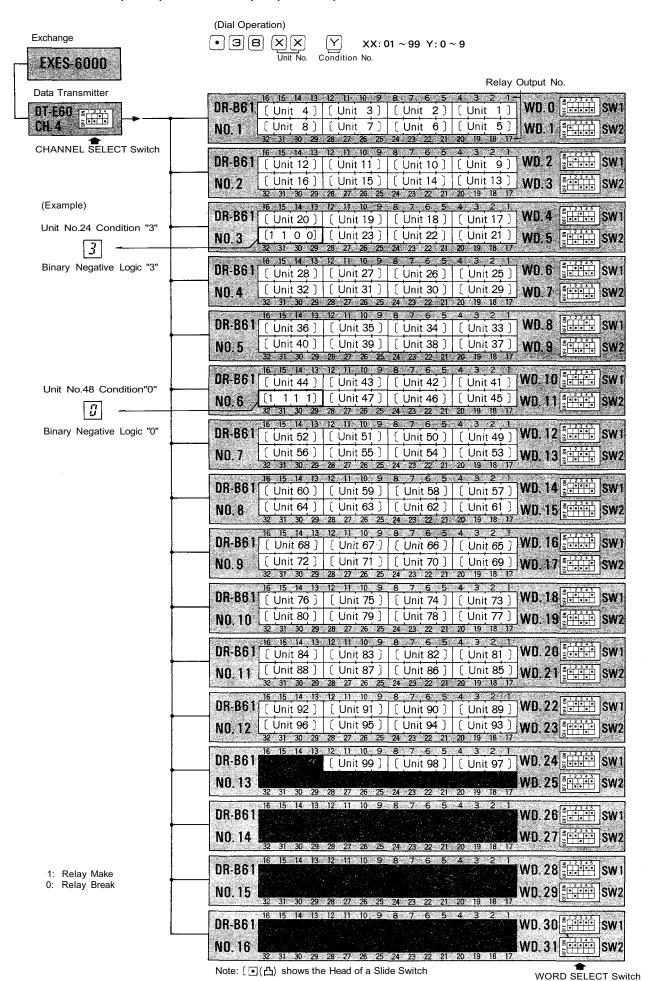
Note: (凸) shows the Head of a Slide Switch

13-2 Channel 2 (CH. 2) One-Shot Make Output



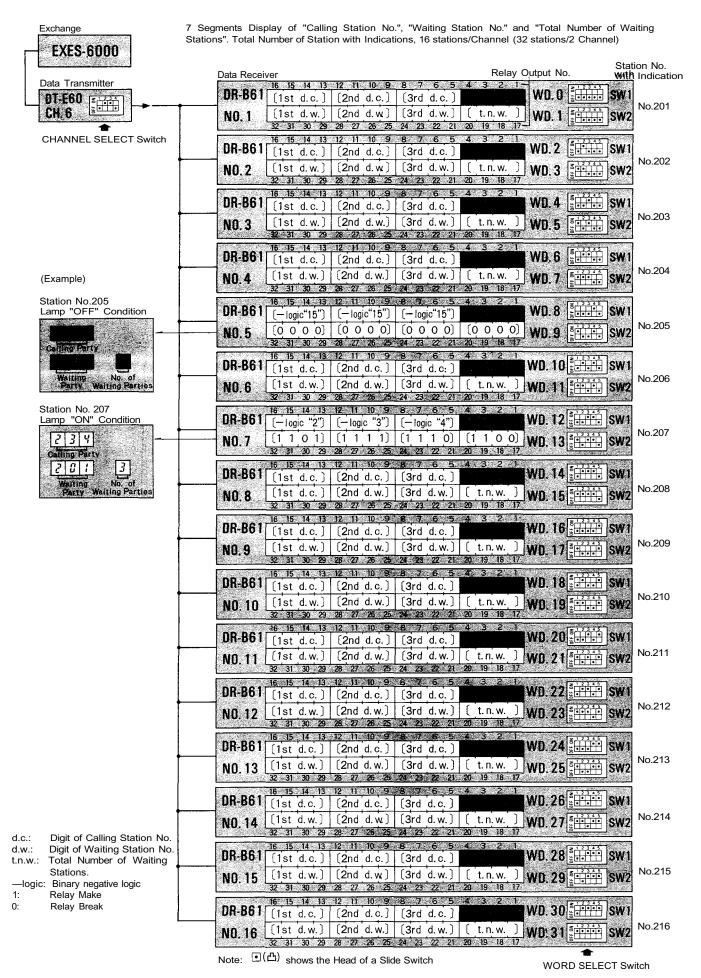


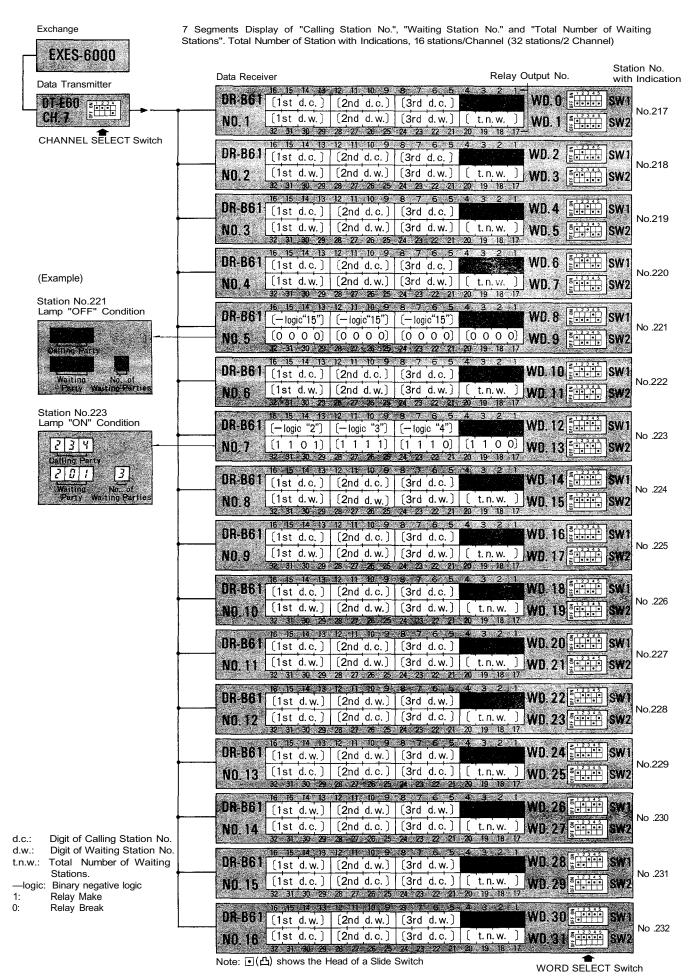
13-4 Channel 4 (CH. 4) Decimal Output (99 Units)



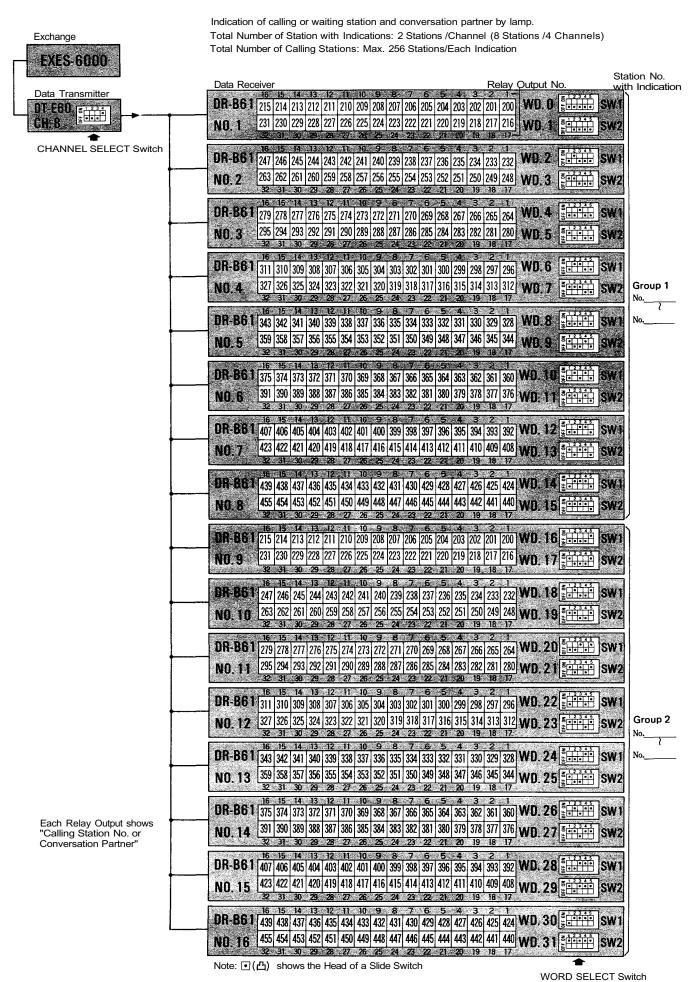
13-5 Channel 5 (CH. 5) 8-Selectable Make Output (64 Units)

Exchange EXES-6000 Data Transmitter OT-E60 CH.5 CHNNEL SELECT Switch (Example) Unit No.8 Condition "1" Unit No.10 Condition "8"	(Dial Operation) • 3 8 XX Y Unit No. Condit	$xx: 01 \sim 64 \ Y: 1 \sim 8, 0$ (Cleation No.	r)
	DR-B61	10 9 8 7 6 5 4 3 2 1 Unit 1 Unit 3	Output No. WD. 0 States SW1 WD. 1 States SW2
	DR-B61 00 29 28 27 10 16 15 14 33 12 14 15 16 15 14 13 12 14 15 16 16 15 14 13 12 14 15 16 16 16 16 16 16 16 16 16 16 16 16 16	26 25 24 23 2 21 20 19 18 17 10 9 8 7 6 5 4 3 2 1	WD. 2 SW1
	DR-B61 16 15 14 13 12 11 11 12 11 12 11 12 11 12 11 12 11 12 11 12 11 12 11 11 12 12 13 12 13 12 13 13	0 0)	[=12745]
	NO.4 Unit 14 Unit 16 32 31 30 28 38 27 DR-B61 Unit 18	· · · · · · · · · · · · · · · · · · ·	WD. 7 SW2 WD. 8 SW1 WD. 8 SW1
	NO.5 Unit 20 32 31 30 29 28 27 DR-B61 Unit 22 Unit 20 Unit 20 Unit 20 Unit 22	Unit 17 Unit 19 Unit 21 Unit 2	WD. 9
	NO.6 Unit 24 32 31 30 29 28 27 UR-B61 Unit 26 NO.7 Unit 28	Unit 23 26 25 24 23 22 21 20 19 18 17 10 9 8 7 6 5 4 3 2 1 Unit 25 Unit 27	WD. 12 SW1
	32 31 30 8 28 27 DR-B61 Unit 30 N0.8 Unit 32	10 9 8 7 6 5 4 3 2 1) [Unit 29]) [Unit 31]	WD. 13 SW2 SW1 SW1 SW2 WD. 15 SW2 SW2 SW2 SW2 WD. 15 SW2 SW2 WD. 15 SW2 SW2 SW2 SW2 WD. 15 SW2 SW2 WD. 15 WD. 15 SW2 WD. 15 WD. 15 SW2 WD. 15 WD. 15 SW2 WD. 15 W
	0R-B61	26 25 24 23 22 21 20 19 18 17 10 9 8 7 6 5 4 3 2 1 Unit 33 Unit 35 26 25 24 23 22 21 20 19 18 17	WD. 16 SW1
	DR-861	Unit 37 Unit 39 Unit 39 326 25 24 23 22 21 20 19 18 17	WD. 18 SW1 SW2
	DR-B61 Unit 42 NO. 11 Unit 44 32 31 30 29 38 27 16 15 14 13 12 11	10 9 8 7 6 5 4 3 2 1 1 Unit 41 26 25 24 23 2 21 20 19 18 17 10 9 8 7 6 5 4 3 2 1	
	NO. 12 Unit 46 NO. 12 Unit 48 32 31 30 29 28 27 DR-861 Unit 50	10 9 8 7 6 5 4 3 2 1	WD. 23 SW2
	NO.13	Unit 49 Unit 51 Unit 51 Unit 51 Unit 51 Unit 51 Unit 53 Unit 53 Unit 53	WD. 25 SW2
1: Relay Make 0: Relay Break	DR-861 Unit 58	Unit 55 26 25 24 23 22 21 20 19 18 17 10 9 8 7 6 5 4 3 2 1 Unit 57 Unit 59	WD. 27 \$ SW2
	NO. 15 Unit 60 32 31 30 29 28 27 DR-B61 Unit 62 NO. 16 Unit 64	26 25 24 23 22 21 20 19 18 17	WD. 30 5 5 5 8 W2 WD. 31 5 5 5 8 W2
	32 31 30 29 28 27 Note: ●(凸) shows the Head of a	26 25 24 23 22 21 20 19 18 17 a Slide Switch	WORD SELECT Switch

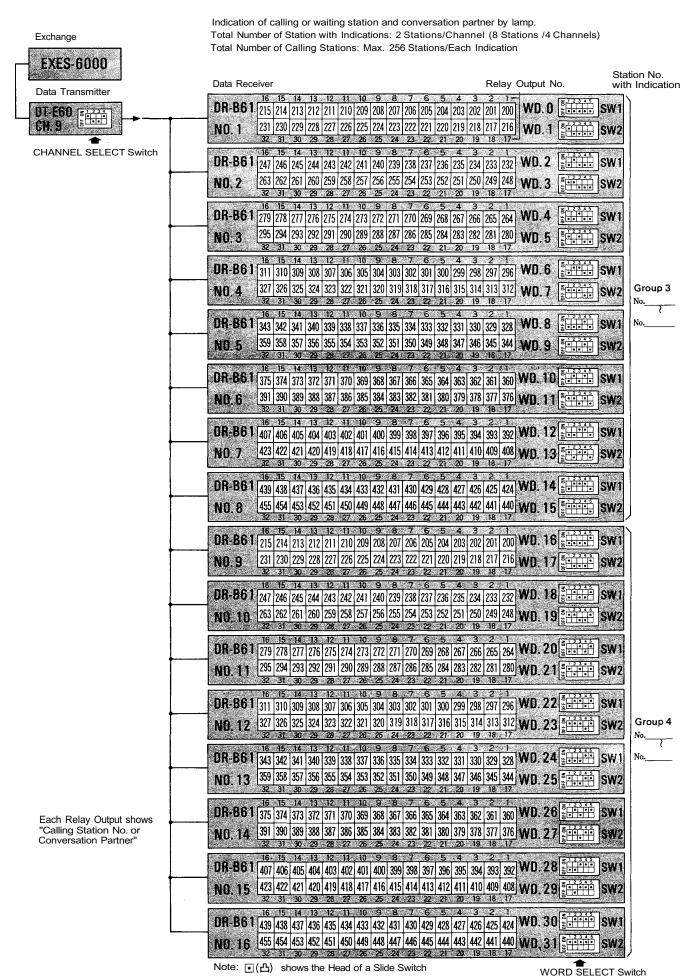




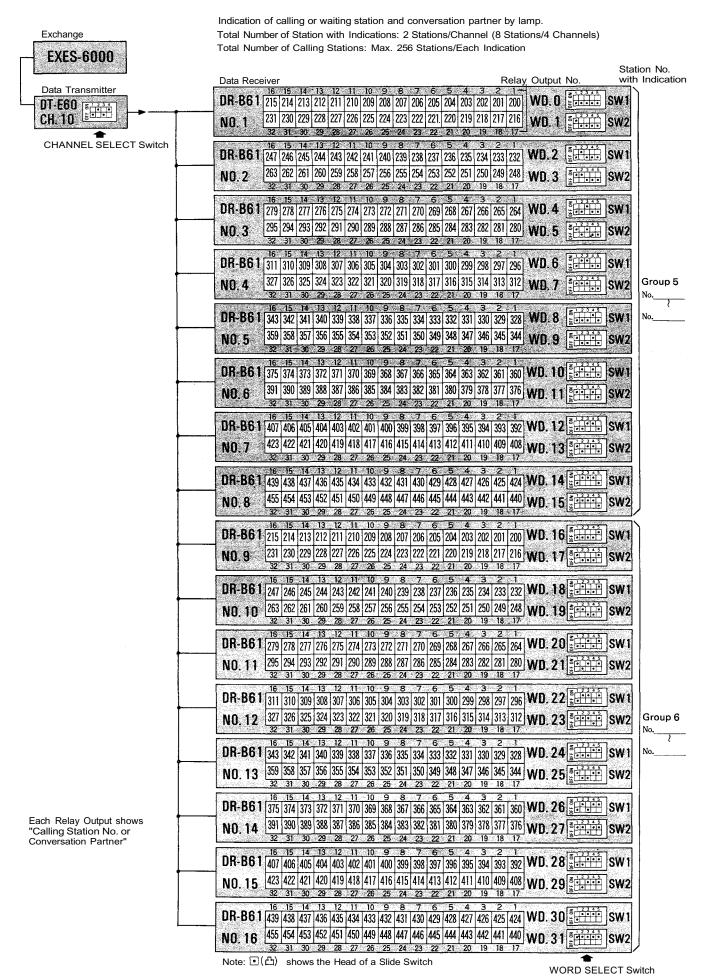
13-8 Channel 8 (CH. 8) Calling Party/Conversation Partner Indication (Lamp Type) (1)



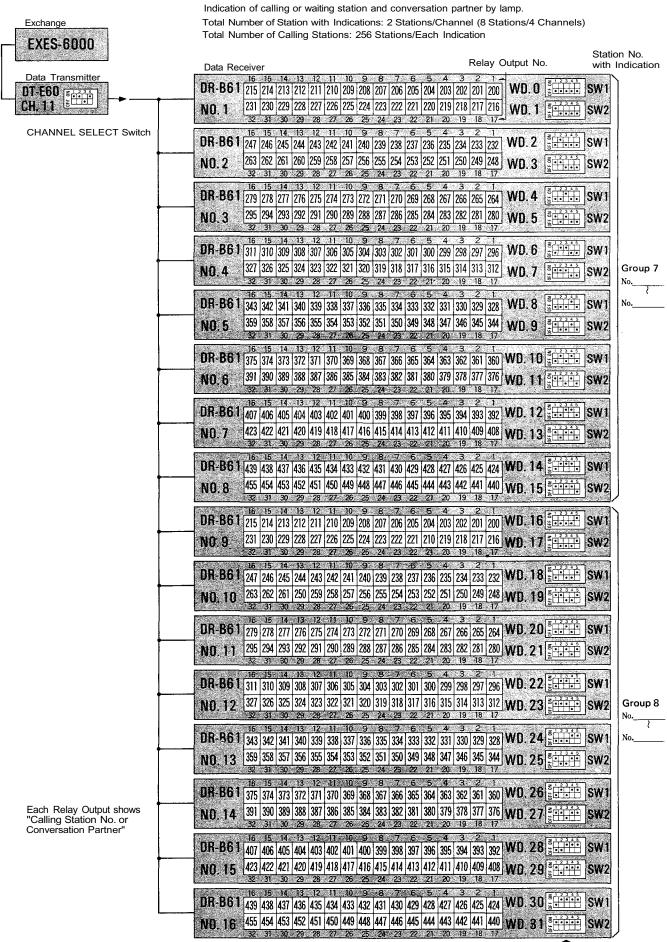
13-9 Channel 9 (CH. 9) Calling Party/Conversation Partner Indication (Lamp Type) (2)



13-10 Channel 10 (CH. 10) Calling Party/Conversation Partner Indication (Lamp Type) (3)



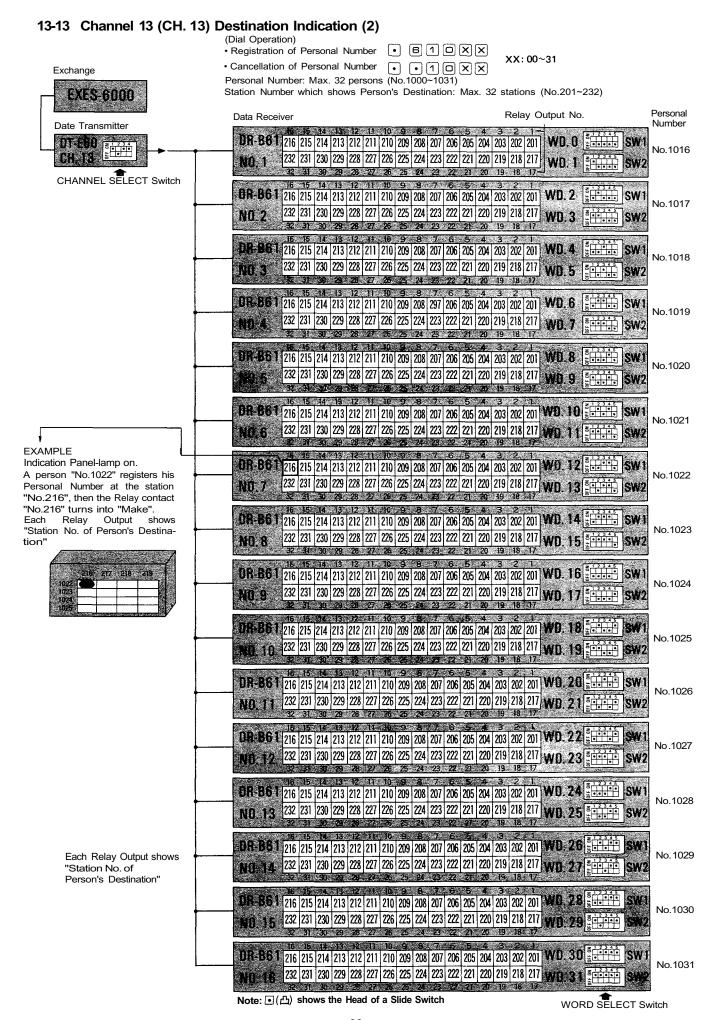
13-11 Channel 11 (CH. 11) Calling Party/Conversation Partner Indication (Lamp Type) (4)



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

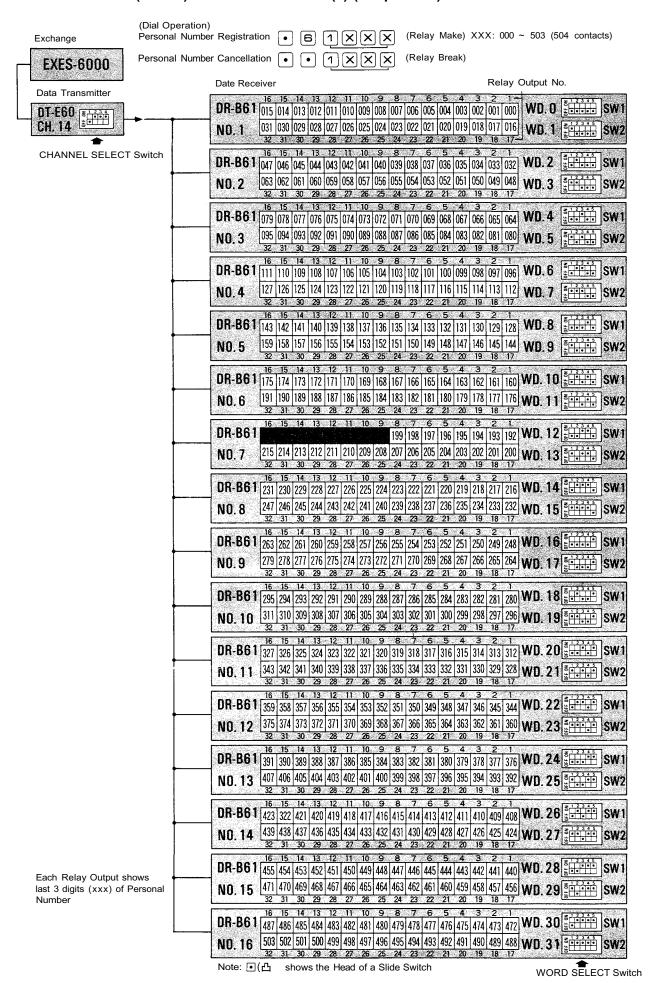
13-12 Channel 12 (CH. 12) Destination Indication (1) (Dial Operation) Registration of Personal Number 610 X X XX:00~31 • Cancellation of Personal Number • 10 x x Exchange Personal Number: Max. 32 persons (No.1000~1031) Station Number which shows Person's Destination: Max. 32 stations (No.201~232) **EXES-6000** Personal Data Receiver Relay Output No. Number Date Transmitter 16 15 14 13 12 11 10 9 8 7 6 5 4 DR-B61 216 215 214 213 212 211 210 209 208 207 206 205 204 203 202 201 WD. O DT-E80 (1234) CH. 12 No .1000 232 | 231 | 230 | 229 | 228 | 227 | 226 | 225 | 224 | 223 | 222 | 221 | 220 | 219 | 218 | 217 | WD 1 32 31 30 29 28 27 28 25 24 23 22 21 20 19 18 17 CHANNEL SELECT Switch 16 15 14 13 12 11 10 9 8 7 6 5 4 3 2 1 DR-B61 216 215 214 213 212 211 210 209 208 207 206 205 204 203 202 201 WD. 2 SW1 No.1001 232 | 231 | 230 | 229 | 228 | 227 | 226 | 225 | 224 | 223 | 222 | 221 | 220 | 219 | 218 | 217 | WD. 3 <u>≛∺ే....</u> SW2 32 31 30 29 28 27 26 25 24 23 22 21 20 19 18 17 16 15 14 13 12 11 10 9 8 7 6 5 4 3 2 1 DR-B61 216 215 214 213 212 211 210 209 208 207 206 205 204 203 202 201 WD. 4 No.1002 232 231 230 229 228 227 226 225 224 223 222 221 220 219 218 217 WB. 5 NO. 3 32 31 30 29 28 27 26 25 24 23 22 21 20 19 18 17 16 15 14 15 12 11 10 9 8 7 6 5 4 3 2 1 DR-861 216 215 214 213 212 211 210 209 208 297 206 205 204 203 202 201 WD 6 No.1003 232 231 230 229 228 227 226 225 224 223 222 221 220 219 218 217 WD 7 5 345 SW2 NO.4 31 30 29 28 27 26 25 24 23 22 21 20 19 18 17 SW1 DR-86 1 216 215 214 213 212 211 210 209 208 207 206 205 204 203 202 201 WD. 8 No 1004 232 | 231 | 230 | 229 | 228 | 227 | 226 | 225 | 224 | 223 | 222 | 221 | 220 | 219 | 218 | 217 | WD. 9 | 32 **31 30 29 28 27 26 25 24 23 22 21 20 19 18** 17 DR-B6 1 216 215 214 213 212 211 210 209 208 207 206 205 204 203 202 201 WD 10 No.1005 232 231 230 229 228 227 226 225 224 223 222 221 220 219 218 217 WD. 1 1 5 SW2 NO.6 32 31 30 29 28 27 26 25 24 23 22 21 20 19 18 1 **EXAMPLE** 16 15 14 13 12 11 10 9 8 7 6 5 4 3 2 Indication Panel-lamp on. DR-B6 1 216 215 214 213 212 211 210 209 208 207 206 205 204 203 202 201 WD. 12 A person "No.1006" registers his No.1006 232 231 230 229 228 227 226 225 224 223 222 221 220 219 218 217 WD 13 Personal Number at the station "No.216", then the Relay contact 32 31 30 29 28 27 26 25 24 23 22 21 20 19 18 17 "No.216" turns into "Make". Each Relay Output shows DR-B61 216 215 214 213 212 211 210 209 208 207 206 205 204 203 202 201 WD. 14 \$ 30 100 1 "Station No. of Person's Destina-No.1007 232 231 230 229 228 227 226 225 224 223 222 221 220 219 218 217 WD. 15 5 SW2 NO. 8 16 15 14 13 12 11 10 9 8 7 6 5 **4** 3 2 1 UR-B61 216 215 214 213 212 211 210 209 208 207 206 205 204 203 202 201 WD. 16 No. 1008 232 231 230 229 228 227 226 225 224 223 222 221 220 219 218 217 WD. 17 31 30 29 28 27 26 25 24 23 22 21 20 19 18 17 16 15 14 13 12 11 10 9 8 7 6 5 4 3 2 1 UR-B6 1 216 215 214 213 212 211 210 209 208 207 206 205 204 203 202 201 W.D. 18 1 SW 1 No. 1009 232 231 230 229 228 227 226 225 224 223 222 221 220 219 218 217 WD. 19 5 3 3 5 5 SW2 32 31 30 29 28 27 26 25 24 23 22 21 20 19 18 17 16 15 14 13 12 11 10 9 8 7 6 5 4 3 2 1 No.1010 NO. 11 232 231 230 229 228 227 226 225 224 223 222 221 220 219 218 217 WD. 21 5 3 4 5 SW2 32 31 30 29 28 27 26 25 24 23 22 21 20 19 18 17 15 14 13 12 1 10 9 8 7 6 5 4 3 2 1 No.1011 NO 12 232 231 230 229 228 227 226 225 224 223 222 221 220 219 218 217 WD 23 32 31 30 29 28 27 26 25 24 23 22 21 20 19 18 17 16 15 14 19 12 11 10 9 8 7 6 5 4 3 2 DR-B6 1 216 215 214 213 212 211 210 209 208 207 206 205 204 203 202 201 WD. 24 \$ SW1 No.1012 NO. 13 232 231 230 229 228 227 226 225 224 223 222 221 220 219 218 217 WD. 25 3 3 3 5 SW2 32 31 30 29 28 27 26 25 24 23 22 21 20 19 18 17 6 15 14 13 12 11 10 9 8 7 6 5 4 3 2 DR-861 216 215 214 213 212 211 210 209 208 207 206 205 204 203 202 201 WD. 26 : SW1 Each Relay Output shows No.1013 NO. 14 232 231 230 229 228 227 226 225 224 223 222 221 220 219 218 217 WD. 27 "Station No. of Person's Destination" 16 15 14 13 12 11 10 9 8 7 6 5 4 3 2 DR-B6 1 216 215 214 213 212 211 210 209 208 207 206 205 204 203 202 201 WD. 28 () SW 1 No.1014 NO 15 232 231 230 229 228 227 226 225 224 223 222 221 220 219 218 217 WD 29 50 20 SW2 31 30 29 28 27 26 25 24 23 22 21 20 19 18 17 15 14 13 12 11 10 9 8 7 6 5 4 3 2 1 DR-B6 1 216 215 214 213 212 211 210 209 208 207 206 205 204 203 202 201 WD. 30 1 301 301 301 301 No.1015 NO. 16 232 231 230 229 228 227 226 225 224 223 222 221 220 219 218 217 WD 3 1 3 1 32 31 30 29 28 27 26 25 24 23 22 21 20 19 18 17

Note: lacktriangle (Δ) shows the Head of a Slide Switch

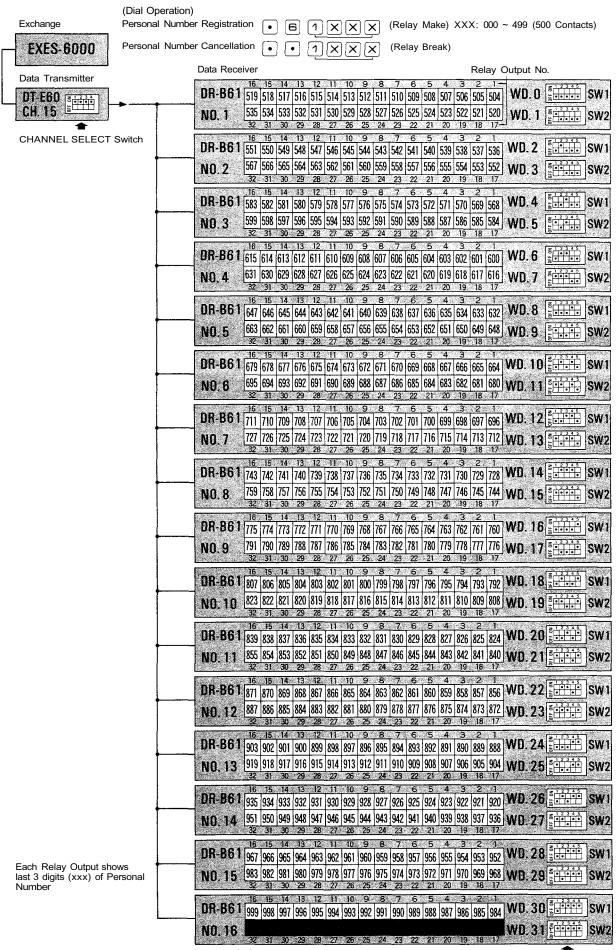


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13-14 Channel 14 (CH. 14) In/Out Annunciation (1) (504 persons)



13-15 Channel 15 (CH. 15) In/Out Annunciation (2) (496 persons)



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

