



MU-100 VERSION
FUNCTIONS AND
OPERATING INSTRUCTIONS

INSTITUTIONAL
COMMUNICATION
SYSTEM

IC-100

Please follow the instructions in this manual to obtain the optimum results from this system.
We also recommend that you keep this manual handy for future reference.

TOA Corporation

WARNING : (For U.S.A. only)

This equipment generates, uses, and can radiate radio frequency energy and if not installed and used in accordance with the instructions manual, may cause interference to radio communications. It has been tested and found to comply with the limits for a Class A computing device pursuant to Subject J of Part 15 of FCC Rules, which are designed to provide reasonable protection such interference when operated in a commercial environment.

Operation of this equipment in a residential area is likely to cause interference in which case the user at his own expense will be required to take whatever measures may be required to correct the interference.

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Introduction

This manual explains all of the functions and operation of the TOA Institutional Communication System. This includes functions that cannot be performed by the system as initially purchased. This manual is divided into the following five sections, so only the sections directly related to your application need be referred to.

Section 1. Sub-station Operation

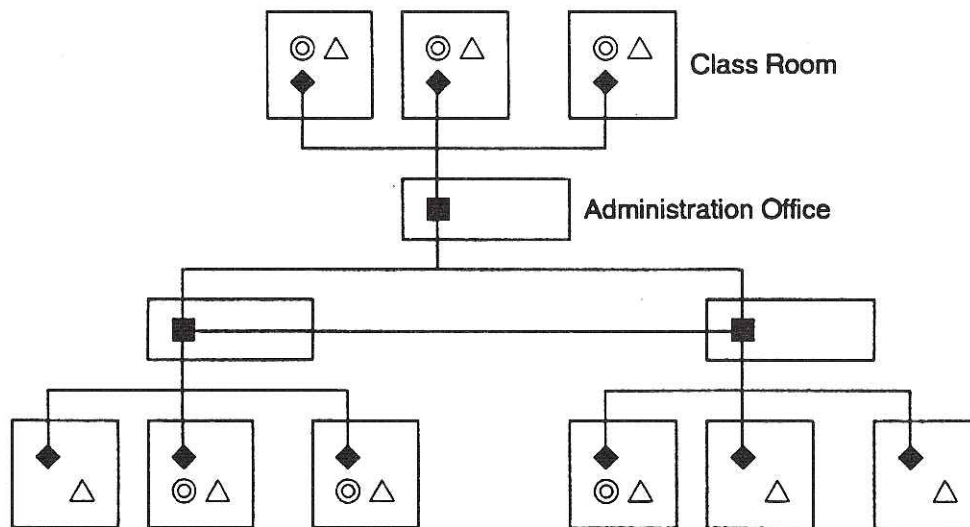
Section 2. Basic Control Station Operation

Section 3. Convenient Control Station Functions

Section 4. Auxiliary Functions and Operating Precautions

Section 5. Function & Operation Tables

The TOA Institutional Communication System is designed to provide efficient administrative communication capability in schools, correctional, and other related facilities. Its basic communication network is illustrated below.

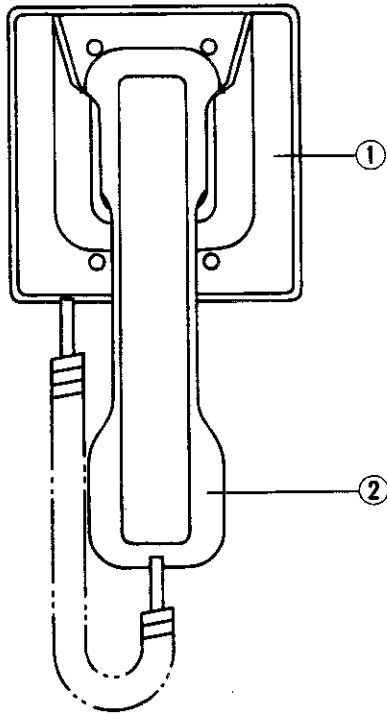


- Control Station
- ◆ Switch Panel
- △ Sub-station Speaker
- ◎ Sub-station Handset

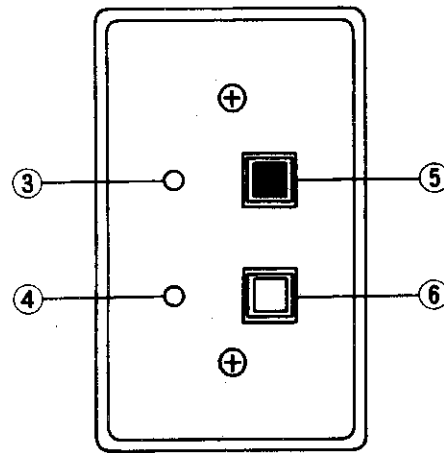
The term "sub-station" refers to the combination of the RS-100 Switch Panel, the RS-110 Sub-station Handset, and a remote speaker unit. Although the sub-station handset may not be installed in some rooms, the remaining switch panel/ speaker set will still be referred to as the sub-station.

SECTION 1. SUB-STATION OPERATION

1.1 Nomenclature



**[RS-110 Sub-station Handset
(Room Station Handset)]**



[RS-100 Switch panel]

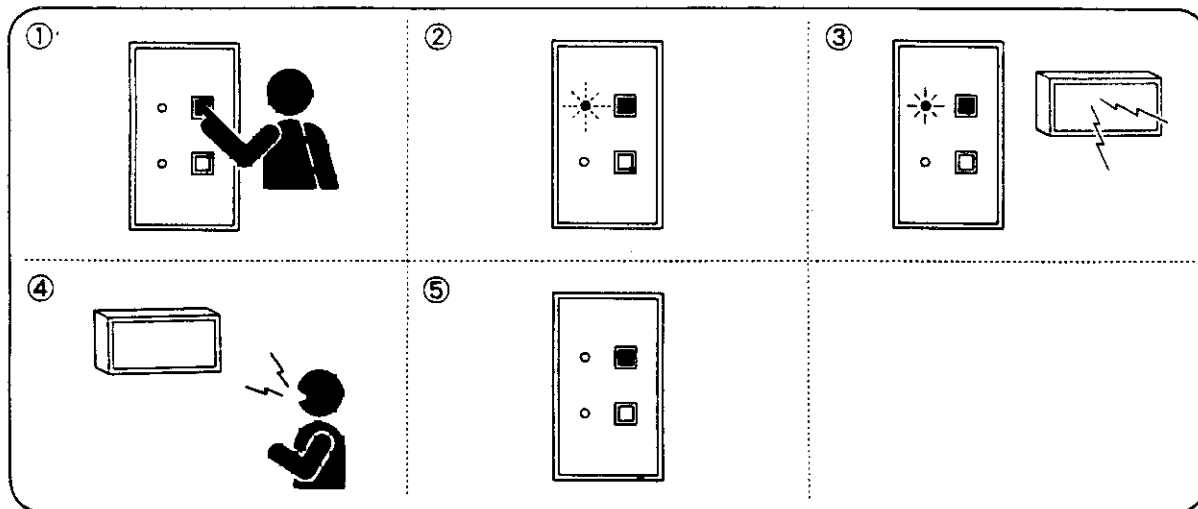
- ① Wall-mounted Handset Cradle
- ② Handset
- ③ Upper LED
- ④ Lower LED
- ⑤ [CALL] switch button
- ⑥ [PRIVACY] switch button

1.2 Sub-station Speaker Communication

The sub-station speaker is used exclusively for inter-station communication in rooms not equipped with a sub-station handset. Although either the sub-station handset or sub-station speaker can be used in rooms equipped with both, only sub-station speaker use will be explained in this section.

(1) Calling

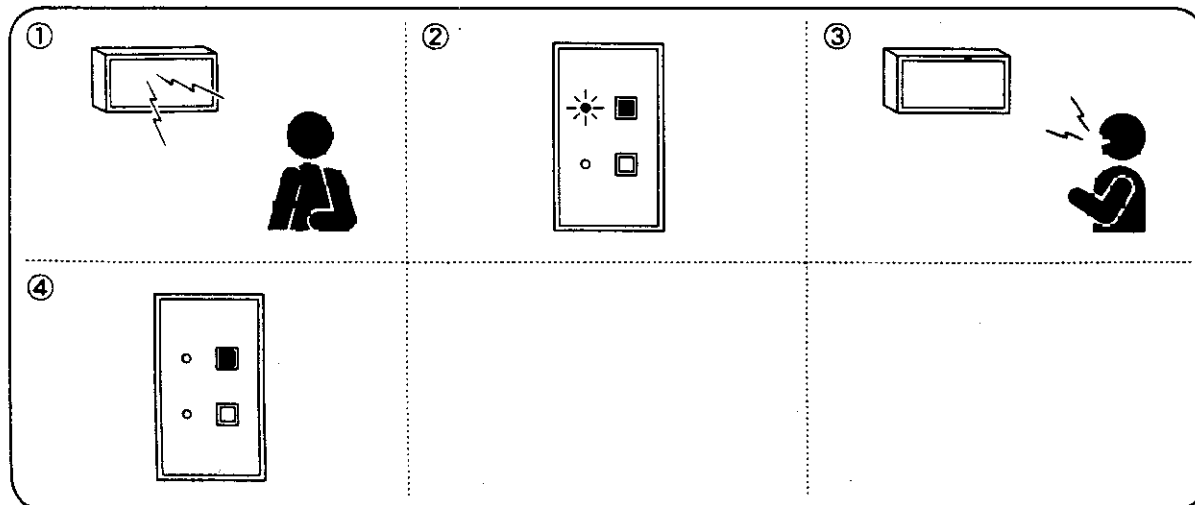
- ① Depress the red **CALL** switch on the switch panel.
- ② The corresponding upper LED flashes.
- ③ The flashing LED turns to steady when the party being called answers.
- ④ Conversation possible.
- ⑤ When the conversation ends, the LED goes out.



[Note] : If the party being called in Step ③ is on another line or otherwise busy, the LED continues to flash until the party answers.

(2) Being Called

- ① Following a brief tone, the calling party's voice is heard.
- ② The upper LED lights.
- ③ Conversation possible.
- ④ When the conversation ends, the LED goes out.



● **Conversation Method**

Only one party may speak at a time, therefore it is necessary for the other party to finish talking before speaking. The speaker will then function as a microphone to convey your voice. This method of communication is referred to as "half-duplex."

In rooms equipped with sub-station handsets, the handset may be picked up at any time to continue the conversation in "full-duplex" mode. For further information, refer to Section 2. 2-(4) Summary of conversation method.

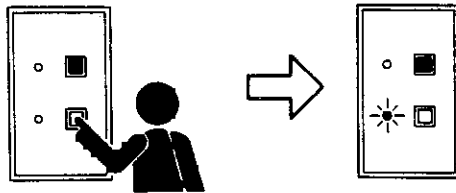
[Note] : An intermittent signal tone can be heard over the speaker if another party is calling or listening in.

(3) Privacy Switch Use

This switch is used to stop incoming calls or prevent in-room conversations from being overheard.

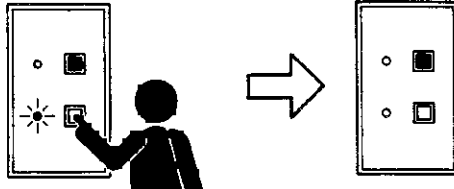
[Privacy Mode Registration]

Press the white **PRIVACY** switch, lighting the lower LED.



[Privacy Mode Cancellation]

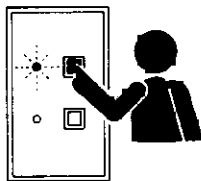
Press the same switch again, extinguishing the LED.



- [Note]: (1) The sub-station can still be called while the privacy mode is enabled, although in-room conversation cannot be heard. To answer the call, press the **PRIVACY** switch (extinguishing the lower LED) and proceed with the conversation.
- (2) Call switch operation remains possible even while the privacy mode is enabled. The privacy mode is resumed when the conversation ends.

(4) Emergency Calls

In emergency situations, continuously press the red **CALL** switch for at least 3 seconds.



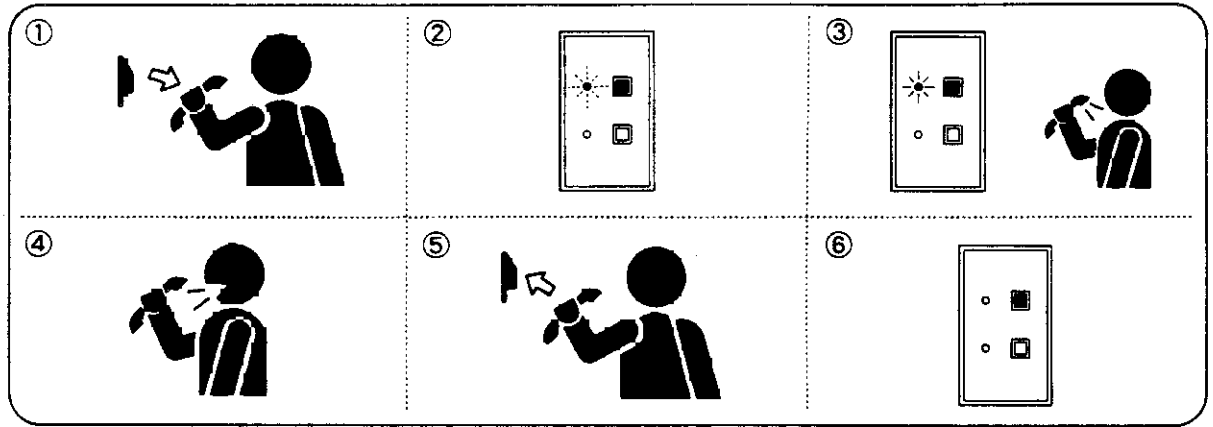
For at least 3 seconds

1.3 Sub-station Handset Use

All sub-stations include the switch panel, whether the sub-station handset is installed or not. Although either the sub-station handset or sub-station speaker can be used in rooms equipped with both, only sub-station handset use will be explained in this section. Refer to Section 1.2 for Sub-station speaker applications.

(1) Calling

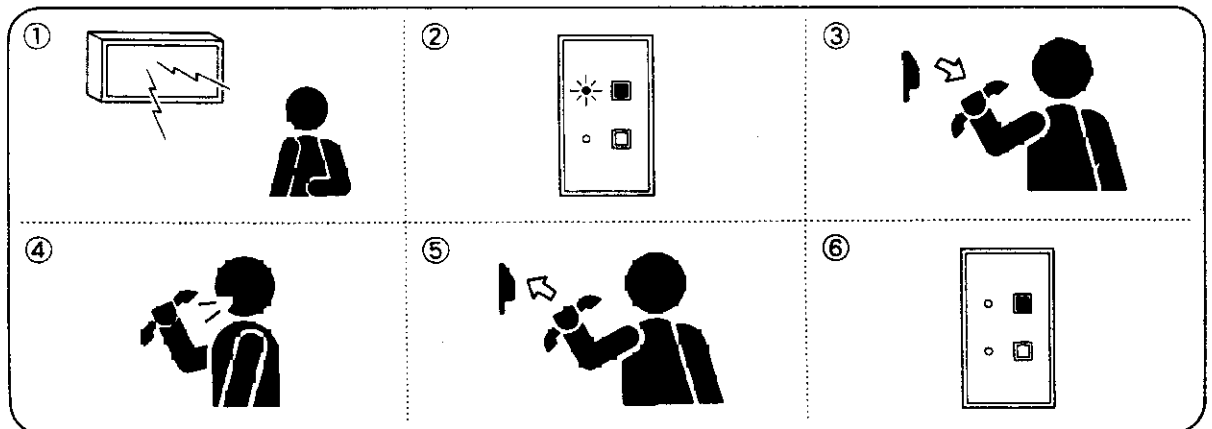
- ① Lift up the sub-station handset.
- ② The corresponding upper LED on the switch panel flashes.
- ③ The flashing LED remains lit when the party being called answers.
- ④ Conversation possible.
- ⑤ Replace the handset when the conversation ends.
- ⑥ The LED goes out.



[Note]: If the party being called in Step ③ is on another line or otherwise busy, the LED continues to flash until the party answers. In this case, simply wait for the other party to answer by either holding the handset or replacing it in its cradle.

(2) Being Called

- ① Following a brief tone, the calling party's voice is heard.
- ② The upper LED on the switch panel lights.
- ③ Lift up the sub-station handset.
- ④ Conversation possible.
- ⑤ Replace the handset when the conversation ends.
- ⑥ The LED goes out.



● **Conversation Method**

While the control station handset remains in its cradle, the conversation method will be half-duplex like the conversation through the sub-station speaker. When the handset is used, regular 2-way telephone (full-duplex) conversation becomes possible.

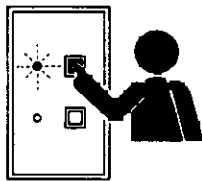
(3) Privacy Mode Conversation (Lower LED lit)

The sub-station can still be called while the privacy mode is enabled, although in-room conversation cannot be heard. To answer the call, press the **PRIVACY** switch (extinguishing the lower LED) and proceed with the conversation.

Picking up the sub-station handset makes a call even while the privacy mode is enabled. The privacy mode is resumed when the handset is replaced.

(4) Emergency Calls

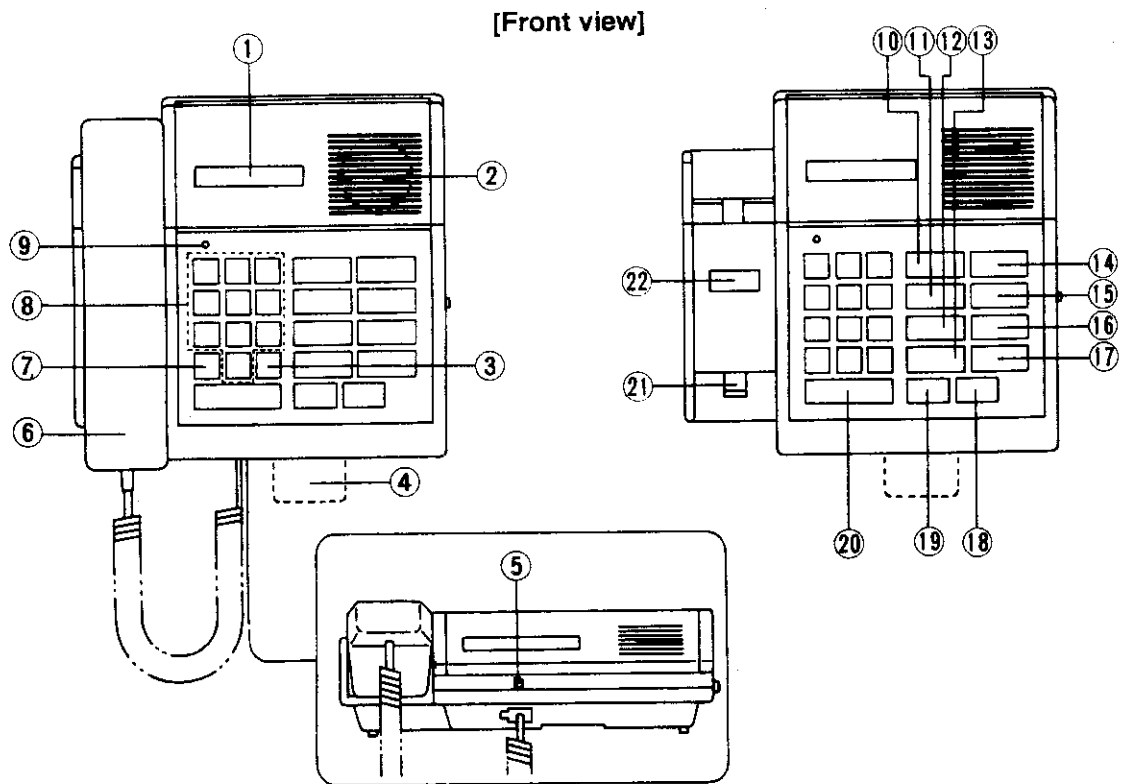
In emergency situations while the handset is in use, continuously press the red **CALL** switch for at least 3 seconds.



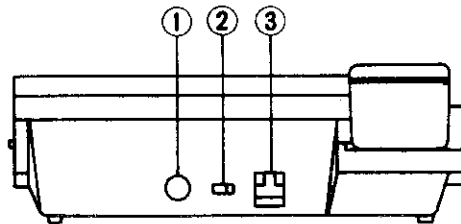
For at least 3 seconds

SECTION 2. Basic Control Station Operation

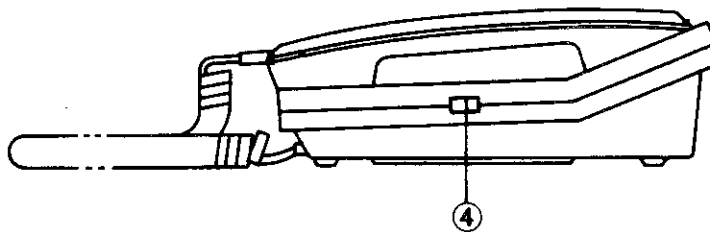
2.1 Nomenclature and Functions



- ① **Display panel** : Shows connection status and registered data.
- ② **Internal speaker** : Sounds call tones and permits "handsfree" conversation.
- ③ **[C/#] key** : Terminates calls and accesses special C/O line functions as well as other special programming functions.
- ④ **Station number directory**
- ⑤ **Internal microphone** : Used in "handsfree" operation.
- ⑥ **Handset**
- ⑦ **[*] key** : Used for privacy mode selection and other special programming functions.
- ⑧ **[0]-[9] keypad** : Used for dialing.
- ⑨ **In-use lamp**
- ⑩ **[DISPLAY CALLS] key** : Displays waiting station numbers, as well as registered data.
- ⑪ **[TELEPHONE] key** : Accesses outside telephone lines.
- ⑫ **[CONFERENCE] key** : Used to enable conference function.
- ⑬ **[PAGE] key** : Used for paging.
- ⑭ **[TIME FUNCTION] key** : Selects pre-programmed time schedules ; Permits manual operation of time signals.
- ⑮ **[REDIAL] key** : Automatically redials last dialed number.
- ⑯ **[PROGRAM] key** : Programs zone distribution of program source.
- ⑰ **[PRIORITY] key** : Establishes sub-station priority.
- ⑱ **[ALL] key** : Broadcasts paging, time signal, and program source over entire area.
- ⑲ **[ZONE] key** : Broadcasts paging, time signal, and program source to selected zones.
- ⑳ **[PUSH TO TALK] key** : Used in PTT operation ; Permits contact with stations in privacy mode ; Selects and dials displayed station.
- ㉑ **Hook switch**
- ㉒ **Station number card**



[Top view]



[Side view]

- ① [EXTERNAL MIC/HEAD SET] : External microphone or headset jack.
- ② [REGISTER ON/OFF] : Enables or disables system programming functions.
Normally set to OFF.
- ③ [LINE] connector : Used for connection to exchange.
- ④ [SP.VOL.(H/L)] : Internal speaker volume selection.

[Note]: (1) Although use of the above-mentioned external headset and microphone are not explained in this manual, if a headset is connected, its operation is essentially the same as that of the handset. Likewise, if an external microphone is connected, its operation is essentially the same as that of the internal microphone.

(2) Dialing can be performed with either the handset lifted or in place (handsfree operation). Likewise calls can be answered in either condition if the calls are from internal stations.

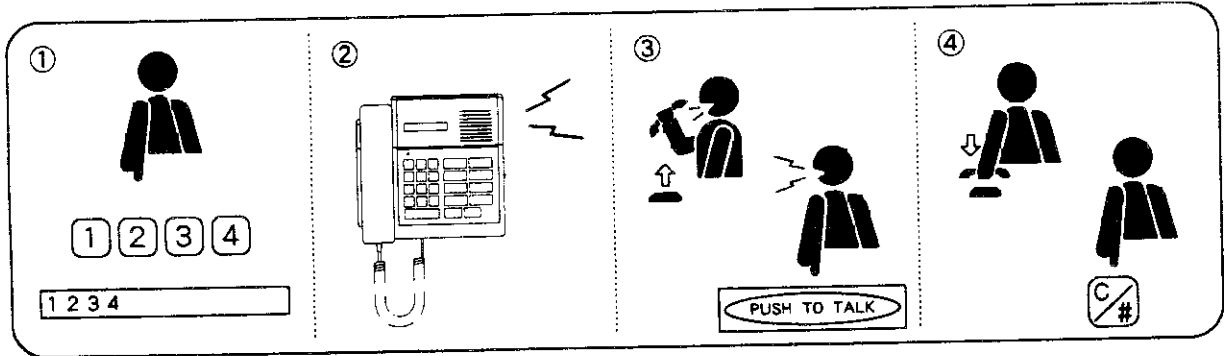
(3) System programming procedures are not provided in this manual. Refer to the accompanying Installation Manual for this information.

2.2 Internal Line Call Operation

(1) Calling

(1.1) Control Station to Control Station

- ① Dial the desired station number.
(Dialing can be performed with the handset lifted or replaced.)
- ② A brief call tone is heard at the calling station.
- ③ Conversation can proceed when the called party answers.
- ④ To terminate the conversation, replace the handset or press the **C/#** key.

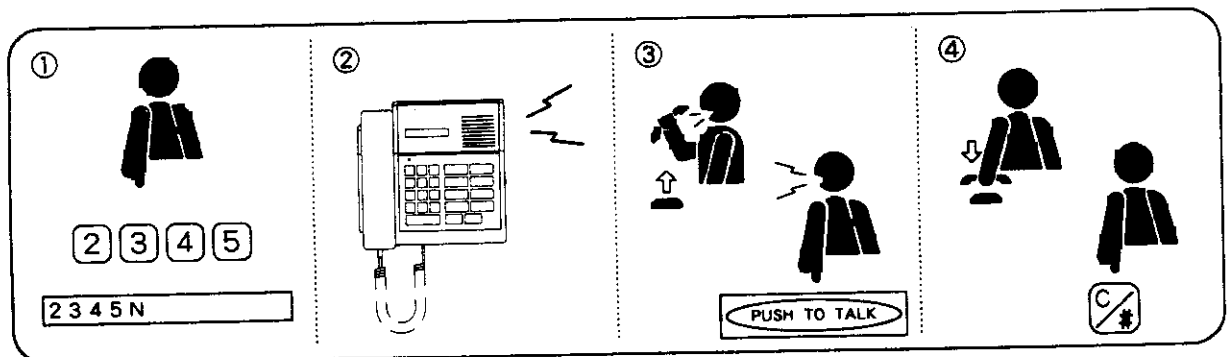


[Note]: Dialing can be performed with the handset either lifted or in place (handsfree dialing). Simultaneous full-duplex conversation is possible with the handset lifted once the called party answers.

Full-duplex conversation is also possible when the calling station is in handsfree mode and the called party uses its handset. When both stations are in handsfree mode, only one-way PTT (Push to talk) conversation is possible, and the **PUSH TO TALK** key has to be pressed to talk and released to listen. However, should either party lift its handset during PTT operation, the conversation will automatically be switched to full-duplex operation.

(1.2) Control Station to Sub-Station

- ① Dial the desired room station number.
- ② A brief call tone is heard. Lift up the handset or press **PUSH TO TALK** key.
- ③ Conversation can proceed.
- ④ To terminate the conversation, replace the handset or press the **C/#** key.

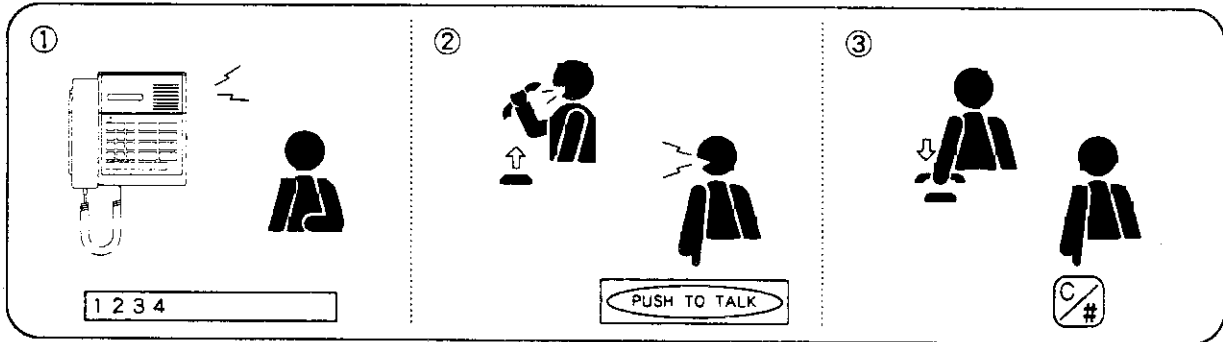


[Note]: Full-duplex conversation is possible when both the control station handset and sub-station handset are lifted. When the control station handset is lifted and sub-station communication is via the sub-station speaker, only half-duplex voice-actuated conversation is possible. When the control station is in handsfree mode, only half-duplex PTT conversation is possible, regardless of the sub-station mode. Once the **PUSH TO TALK** key is pressed, full-duplex conversation becomes no longer possible.

(2) Being Called

(2.1) Control Station to Control Station

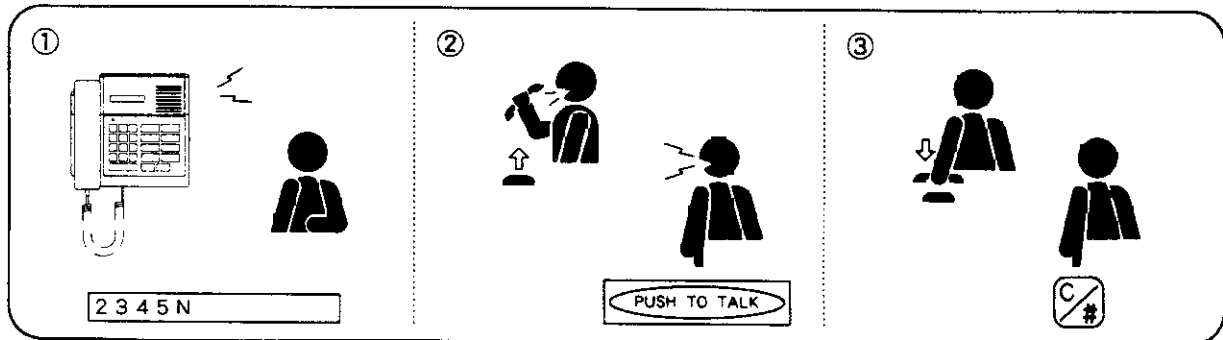
- ① A brief call tone is heard.
- ② Conversation possible upon answering.
- ③ Conversation ends.



If the conversation has been terminated by the calling party, the called party need not operate any key for termination. The called party can terminate the conversation by replacing the handset or pressing the **C/#** key.

(2.2) Sub-station to Control Station

- ① A call tone is heard.
- ② Conversation possible upon answering.
- ③ To terminate the conversation, either replace the handset or press the **C/#** key.



[Note]: (1) The call tone differs depending on the priority level of the station. Refer to the "Section (5) Sub-station Priorities" of this operation manual.

(2) Refer to the "Section 3.2 Internal Line calls (1) Selective Response" and "Section 5.2 Priority Order" of IC-100's Functions and Operating Instructions.

(3) Privacy Function

This function is used to refuse all incoming calls. The control station can be put in Privacy mode by pressing the [*] key twice, showing "PV" and the current time on the station display ([PV A 10:34pm]). If a call is received while in the Privacy mode, a privacy tone is heard. Pressing the [*] and [C/#] keys cancels the Privacy mode and extinguishes the "PV" display ([A 10:34pm]). Response to calls can still be made from the control station while the Privacy mode is enabled. If a call is made from the control station to another control station in the Privacy mode, a Privacy signal sounds at the calling and called stations for a period of time. This signal is different from that heard when calling a sub-station in Privacy mode. (Control station privacy tone : Intermittent trill tone, Sub-station privacy tone : Intermittent single tone)

(4) Summary of Conversation Method

In summary, there are three different conversation methods:

(4.1) Simultaneous conversation (Duplex)

Similar to that of a standard telephone.

(4.2) Voice-actuated two-way conversation (V.S.)

The conversation flow is automatically switched via the voice switch. In quiet areas, this is similar to simultaneous conversation. However, when the ambient noise level at the control station is too high, interfering with smooth conversation, the [PUSH TO TALK] key can be depressed to switch to the PTT conversation mode.

(4.3) PTT conversation (PTT)

The control station [PUSH TO TALK] key is pressed to talk, and released to listen.

The following table shows the conversation modes for all of the various station combinations.

| | | Control Station | | |
|---------------------|-----------|-----------------|----------|-----------------------|
| | | Handsfree | Handset | |
| Control Station | Handsfree | PTT | Duplex | |
| | Handset | Duplex | Duplex | |
| Sub-station Speaker | | PTT | V.S./PTT | |
| Sub-station Handset | | PTT | Duplex | Duplex |
| | | | | * Sub-station Handset |

[Note]: Conversation between sub-station handsets is possible only when a call from either handset is transferred to the other handset via the control station.

(5) Sub-station Display Priorities

The numbers of all stations calling a control station are automatically stored and displayed in the priority order registered for each station. The control station can only display one of these "waiting" stations. When more than one station is waiting, the other waiting station number can be displayed with subsequent depressions of the **DISPLAY CALLS** key.

The following four priority indications are programmable:

(1) Priority (2) Alarm (3) Normal (4) Staff

[Note] : (1) : User programmable only at the control station assigned to the "Priority" sub-station.

(2) (3) (4) : Programmable at the time of installation.

Taking precedence over these priorities is an Emergency Call. Emergency Calls can be made with special key operations. Regardless of its arrival order, it is always displayed first whatever the priority of the other waiting stations. Priority levels of control stations are fixed to be lower than those of sub-stations.

Shown below are the registered priority displays and call tone types produced at the called control station. Call tones are not sounded at the called station if busy, in which case a busy tone is heard at the calling station.

| DISPLAY PRIORITY | CALL DISPLAY | CALL TONE |
|--------------------|-------------------------------------|--|
| 1. Emergency Call | <input type="text" value="Emerg."/> | Intermittent trill tone |
| 2. Priority Call | <input type="text" value="P"/> | Intermittent single tone (Short pulse tone) |
| 3. Alarm Call | <input type="text" value="A"/> | |
| 4. Normal Call | <input type="text" value="N"/> | Intermittent single tone (Long pulse tone) |
| 5. Staff Call | <input type="text" value="S"/> | |
| 6. Control Station | <input type="text" value="(*)"/> | |

= Station number display

[Note]: (1) Waiting stations are arranged in priority order, with those having the same priority displayed on a first-come-first-served basis.

(2) The numbers of calling control stations are also stored if the called control station has been called from other stations.

(3) Incoming calls cannot be accepted while busy without terminating the current conversation.

(*1) A brief trill tone is heard when an unused control station is called.

[CALL DISPLAY EXAMPLES]

- | | | |
|---|---|--|
| ① | <input type="text" value="1234N"/> | No.1234 calling. |
| ② | <input type="text" value="1234N M"/> | Other stations calling. |
| ③ | <input type="text" value="1234N"/> | Connect to No.1234. |
| ④ | <input type="text" value="1234N:2345S"/> | No.2345 calling during conversation with No.1234. |
| ⑤ | <input type="text" value="1234N:2345SM"/> | Other stations besides No.2345 calling during conversation with No.1234. |

[Note]: The suffix "M" indicates other waiting stations, which can be displayed with subsequent depressions of the **DISPLAY CALLS** key.

(6) Emergency Functions

(6.1) Emergency Call

This function is applicable only to sub-stations.

In emergency situations, continuously press the red **CALL** switch for at least 3 seconds.

The emergency call has the highest priority of all station calls.

(6.2) Duress Alarm

This function is applicable only to control stations. In case of an emergency, simply take handset off its hook. The message **Off-Hook** will be displayed at the station six seconds after the handset is displaced, causing all other connected control stations to display the message **XXXX Duress**, accompanied by an emergency tone (not audible at the busy station).

The duress alarm function can be cancelled by replacing the handset after the **C/#** key presson.

[Note] : Voice transmission is not enabled by this function. To establish contact with the station in duress, its station No. must be first dialed at any of the receiving stations. However, it may be difficult to monitor the station in duress owing to the relatively poor sensitivity of the handset microphone in comparison with the station's "Handsfree" mode microphone.

(6.3) Summary of Emergency Functions

When any emergency communication has been received as indicated by the message as well as by an emergency tone (not audible at the busy station), first contact the calling station. The following examples show the emergency status :

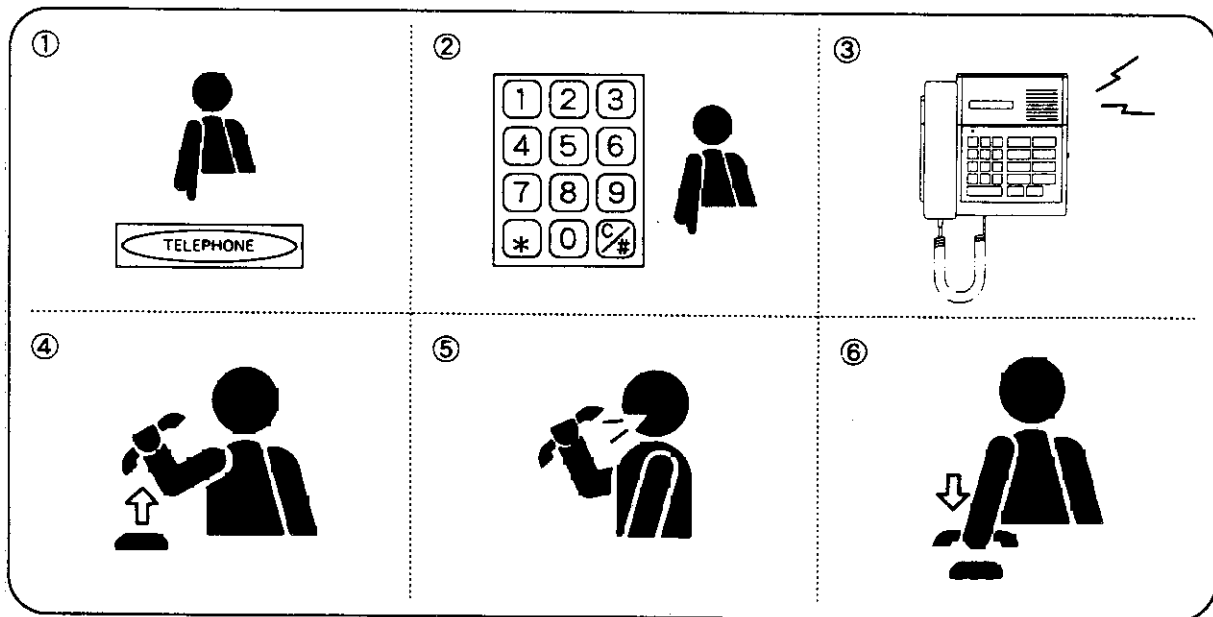
- | | |
|-----------------------|---|
| ① 3456 Emerg. | Emergency call from No.3456 sub-station. To contact, press the PUSH TO TALK key or lifting the handset. To answer in busy mode, the current conversation must first be terminated.) |
| ② 5678 Duress | Duress alarm from No.5678 control station. (No.5678's handset off the hook) |
| ③ 3456 Emerg.E | ① Emergency calls from No.3456 and other sub-stations, or ② Emergency call from No.3456 and duress alarm from certain control station. |
| ④ 5678 DuressE | Duress alarm from No.5678 and other control stations. |
| ⑤ Emerg. Page | ① Emergency all-call paging during emergency call or duress alarm. (Emergency call or duress alarm is displayed upon emergency all-call paging completion.) ② Emergency call or duress alarm entry during emergency all-call paging. (Neither emergency call nor duress alarm can be accepted during emergency all-call paging. In such a case, operate from the beginning.) |

[Note] : The suffix "E" indicates waiting emergency calls or duress alarm, which can be displayed with subsequent depressions of the **DISPLAY CALLS** key.

2.3 Outside Call Operation

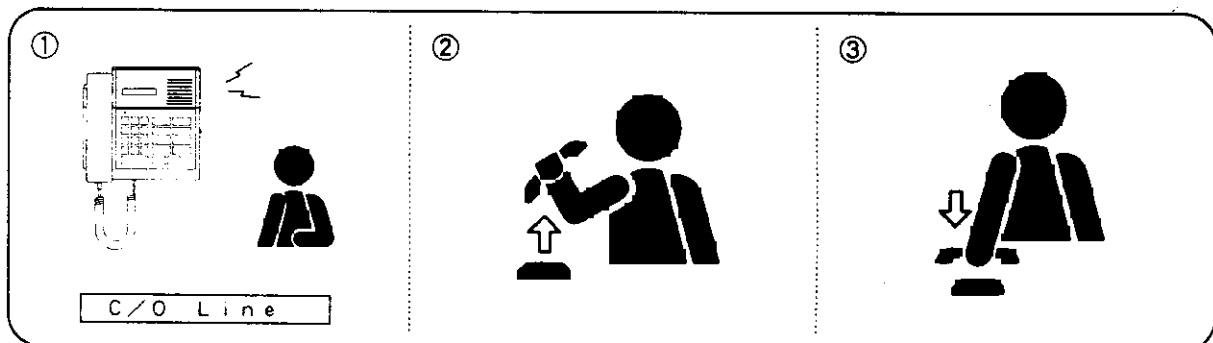
(1) Calling

- ① Press **TELEPHONE** key.
- ② Dial. **TeI:0797712**
- ③ Outside telephone call tone is heard.
- ④ Lift up the handset. (The handset can be lifted before dialing.)
- ⑤ Conversation can proceed when called party answers.
- ⑥ Replace the handset to terminate the conversation.



(2) Being Called

- ① Outside telephone call tone is heard. **C/O Line**
- ② Conversation can proceed by lifting up the handset.
- ③ Replace the handset to terminate the conversation.

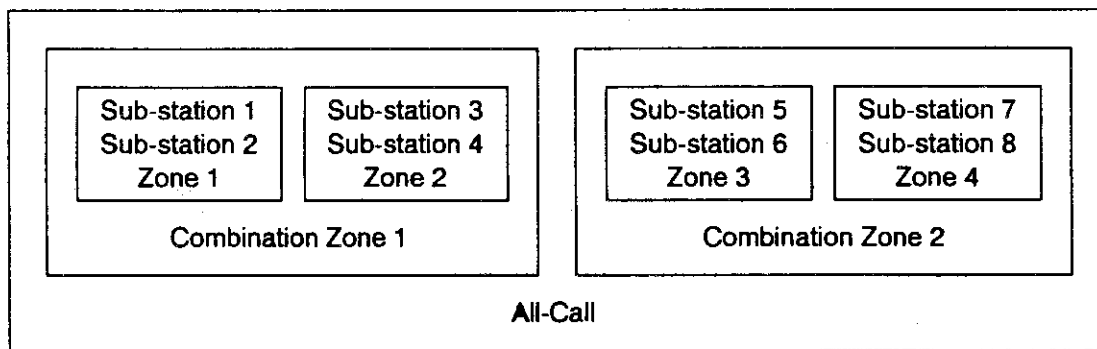


2.4 Paging

Five different paging methods, including All-Call paging, can be selected with the IC-100 system.

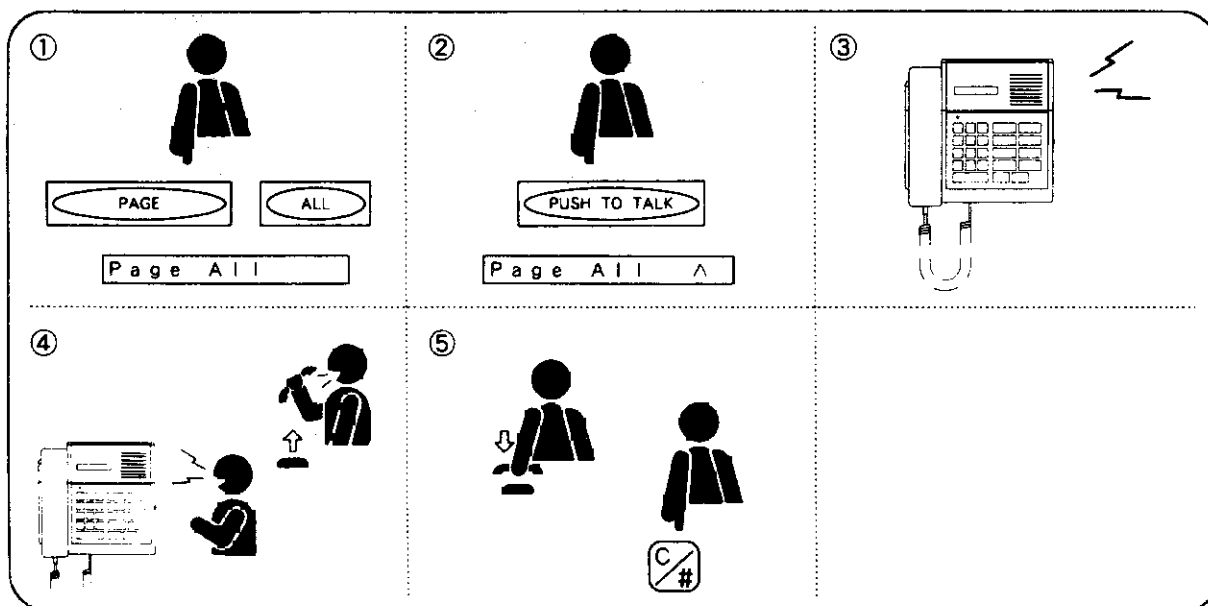
- 1) All-Call Paging : Permits simultaneous paging through all zones and connected external speakers.
- 2) Zone Paging : Permits simultaneous paging of up to nine pre-programmed individual zones.
- 3) Combination Zone Paging : Permits simultaneous paging of up to nine pre-programmed combinations of zones.
- 4) Sub-station Paging : Permits simultaneous paging of up to ten individual sub-stations.
- 5) Emergency All-call Paging : Permits simultaneous emergency paging through all zones and connected external speakers.

[PAGING ASSIGNMENT EXAMPLE]



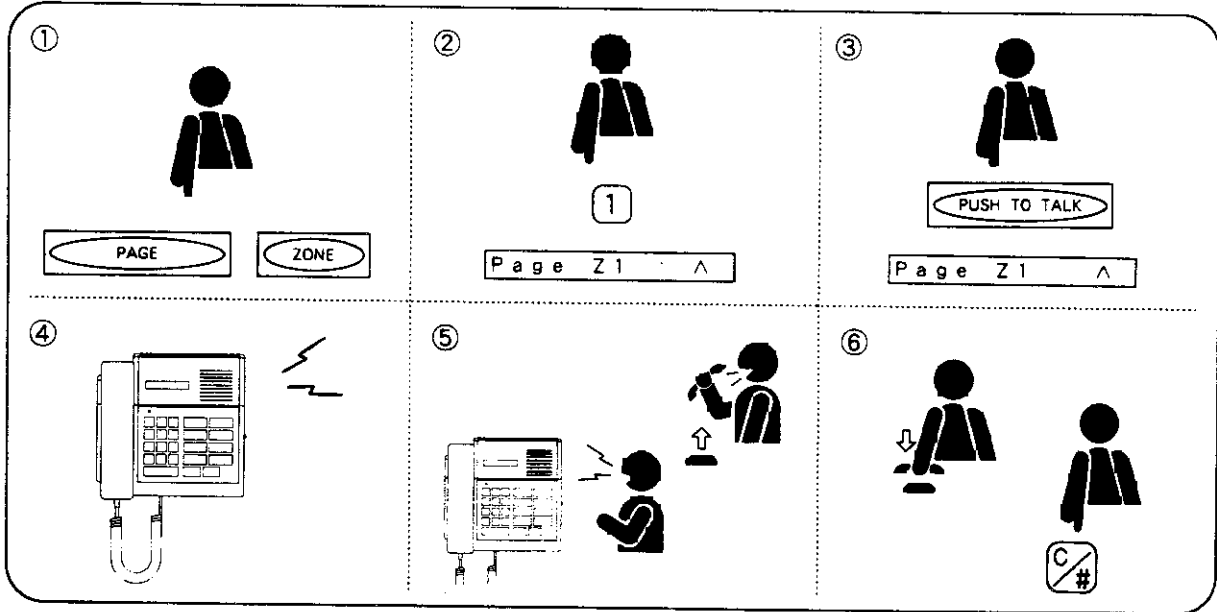
(1) All-Call Paging

- ① Press **PAGE** **ALL** keys.
- ② Press **PUSH TO TALK** key or lift handset. (Paging possible.)
- ③ A 4-note chime or paging pre-announcement tone sounds.
- ④ Place a paging call.
- ⑤ Replace handset or press **C/#** key to terminate the call.



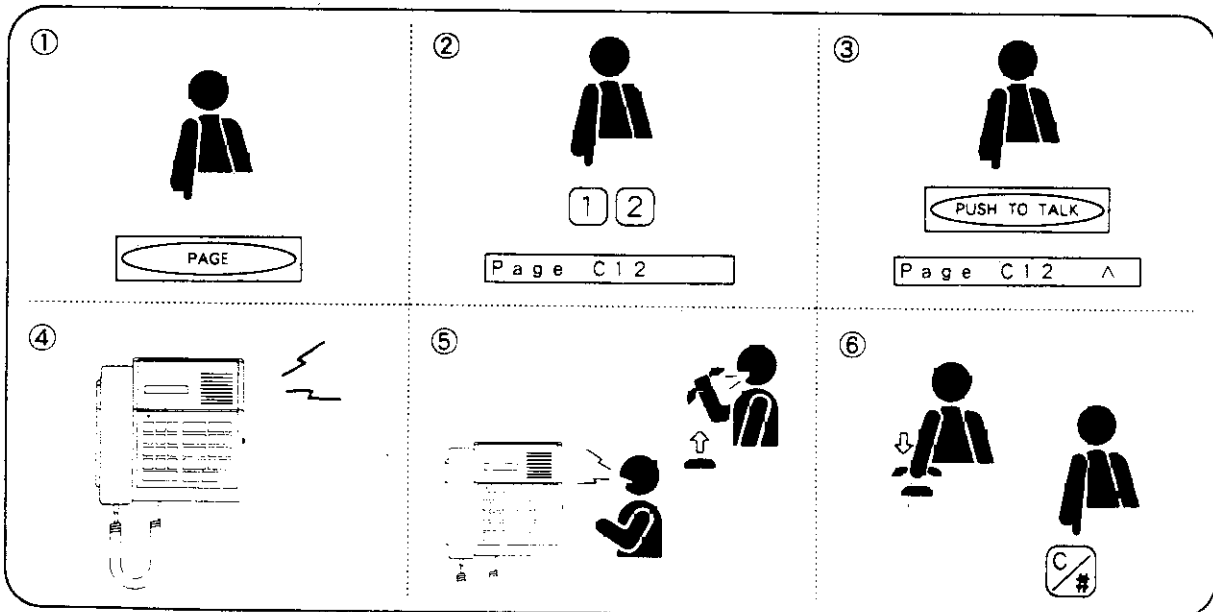
(2) Zone Paging

- ① Press **PAGE** **ZONE** keys.
- ② Dial the desired zone number(s). (Max. 9 zones)
- ③ Press **PUSH TO TALK** key or lift handset. (Paging possible.)
- ④ A 4-note chime or paging pre-announcement tone sounds.
- ⑤ Place a paging call.
- ⑥ Replace handset or press **C/#** key to terminate the call.



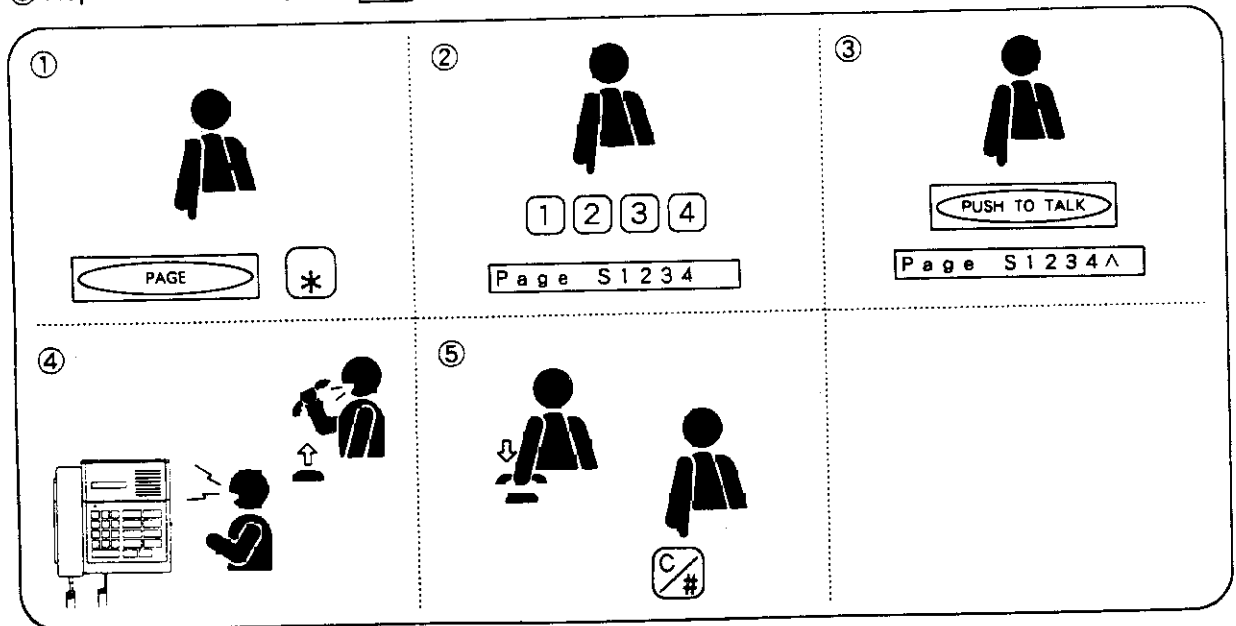
(3) Combination Zone Paging

- ① Press **PAGE** key.
- ② Dial the desired combination zone number(s). (Max. 9 combination zones)
- ③ Press **PUSH TO TALK** key or lift handset. (Paging possible.)
- ④ A 4-note chime or paging pre-announcement tone sounds.
- ⑤ Place a paging call.
- ⑥ Replace handset or press **C/#** key to terminate the call.



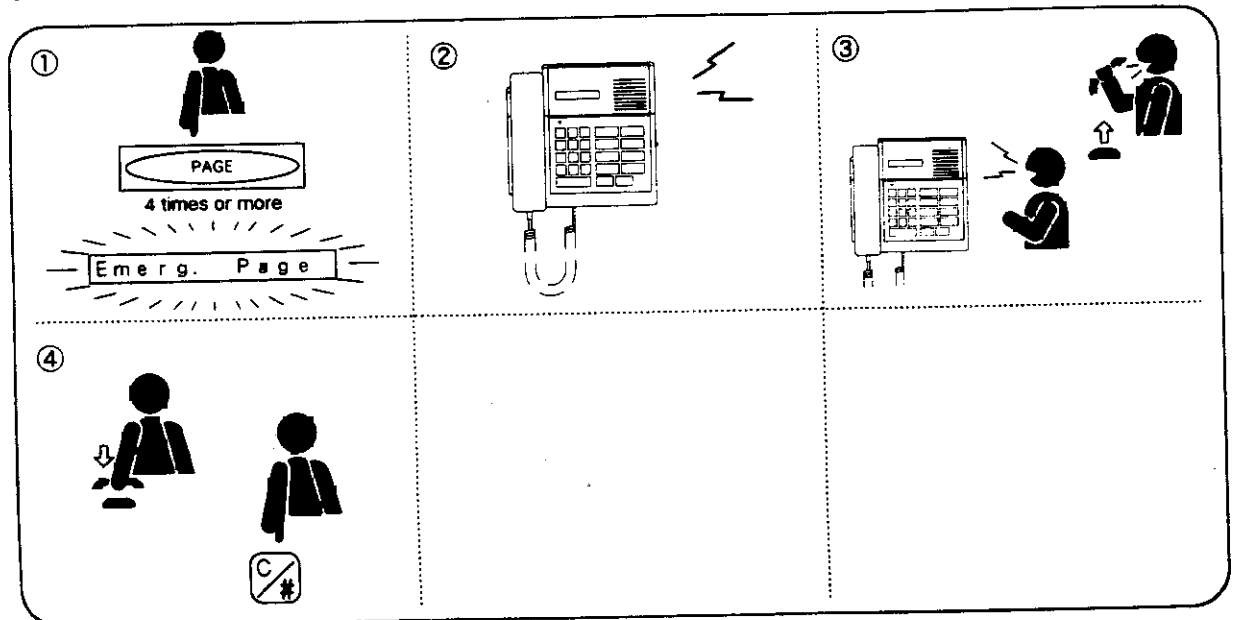
(4) Sub-station Paging

- ① Press **PAGE** * keys.
- ② Dial the desired sub-station number(s). (Max. 10 stations)
- ③ Press **PUSH TO TALK** key or lift handset. (Paging possible.)
- ④ A 4-note chime or paging pre-announcement tone sounds.
- ⑤ Place a paging call.
- ⑥ Replace handset or press **C/#** key to terminate the call.



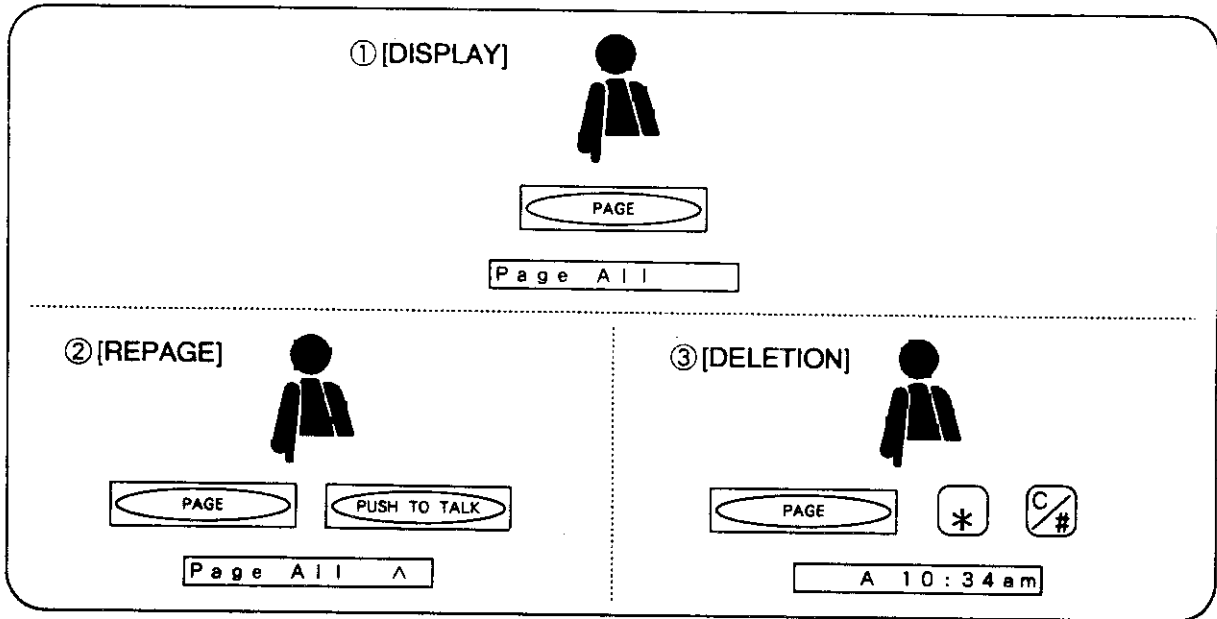
(5) Emergency All-call Paging

- ① Press **PAGE** key four times or more in rapid sequence.
(The emergency page cannot be performed if the interval between any of the depressions exceeds 0.5 seconds.)
- ② An emergency all-call paging pre-announcement tone sounds.
- ③ Place a paging call.
- ④ Replace handset or press **C/#** key to terminate the call.



- The last paged paging area is automatically stored in memory, permitting repaging of the same area via a simple key operation. The stored paging area can also be displayed for confirmation or deleted from memory.

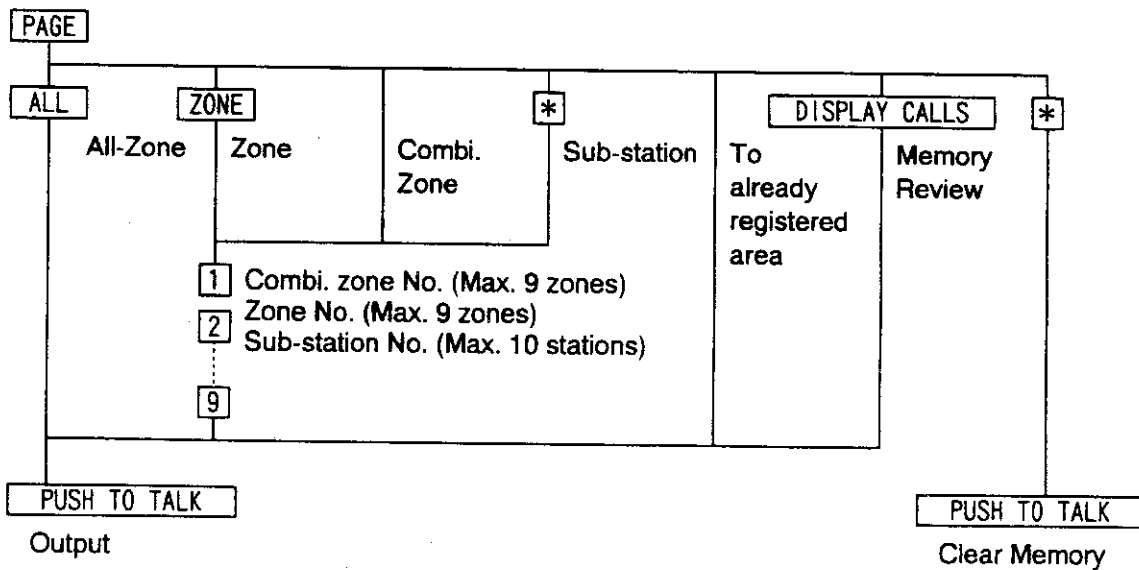
- ① To repage, press **PAGE** **PUSH TO TALK** keys.
- ② To display, press **PAGE** **DISPLAY CALLS** keys.
- ③ To delete, press **PAGE** ***** **PUSH TO TALK** keys.



● PA Paging

All-Call and emergency all-call paging can also be performed through any connected external PA speakers.

(6) Summary of Paging Operation



(7) Transmission Priority List

- ① Emergency all-call paging *1
- ② Emergency call
- ③ All-call paging *2
- ④ Zone/Combination zone/Sub-station paging *2
- ⑤ Conversation

[Note] : *1 : Overridden lower priority functions not restored, even after function completion.

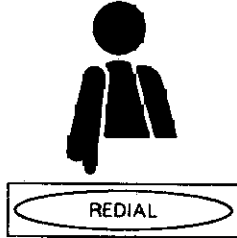
*2 : Overridden lower priority functions restored after function completion.

SECTION 3. CONVENIENT CONTROL STATION FUNCTIONS

3.1 Applicable to both internal and outside calls

(1) Redialing

Press **REDIAL** key to automatically call the last dialed number.



(2) Speed Dialing

Press two numerical keys to dial the pre-programmed number.

Key Operation

Single-digit dialing : **X**

2-digit dialing : **X** **Y**

X is a number determined at the time of installation.

Y is a user programmable number (0 through 9).

A maximum of 10 speed dialing numbers can be registered per control station in 2-digit dialing, or only one in single-digit dialing.

● Speed Dialing Registration

(1) Single-digit dialing : ***** **7** **X** **Z 1** ... **Z 3 2** **PUSH TO TALK** Confirmation tone

(2) 2-digit dialing : ***** **7** **X** **Y** **Z 1** ... **Z 3 2** **PUSH TO TALK** Confirmation tone

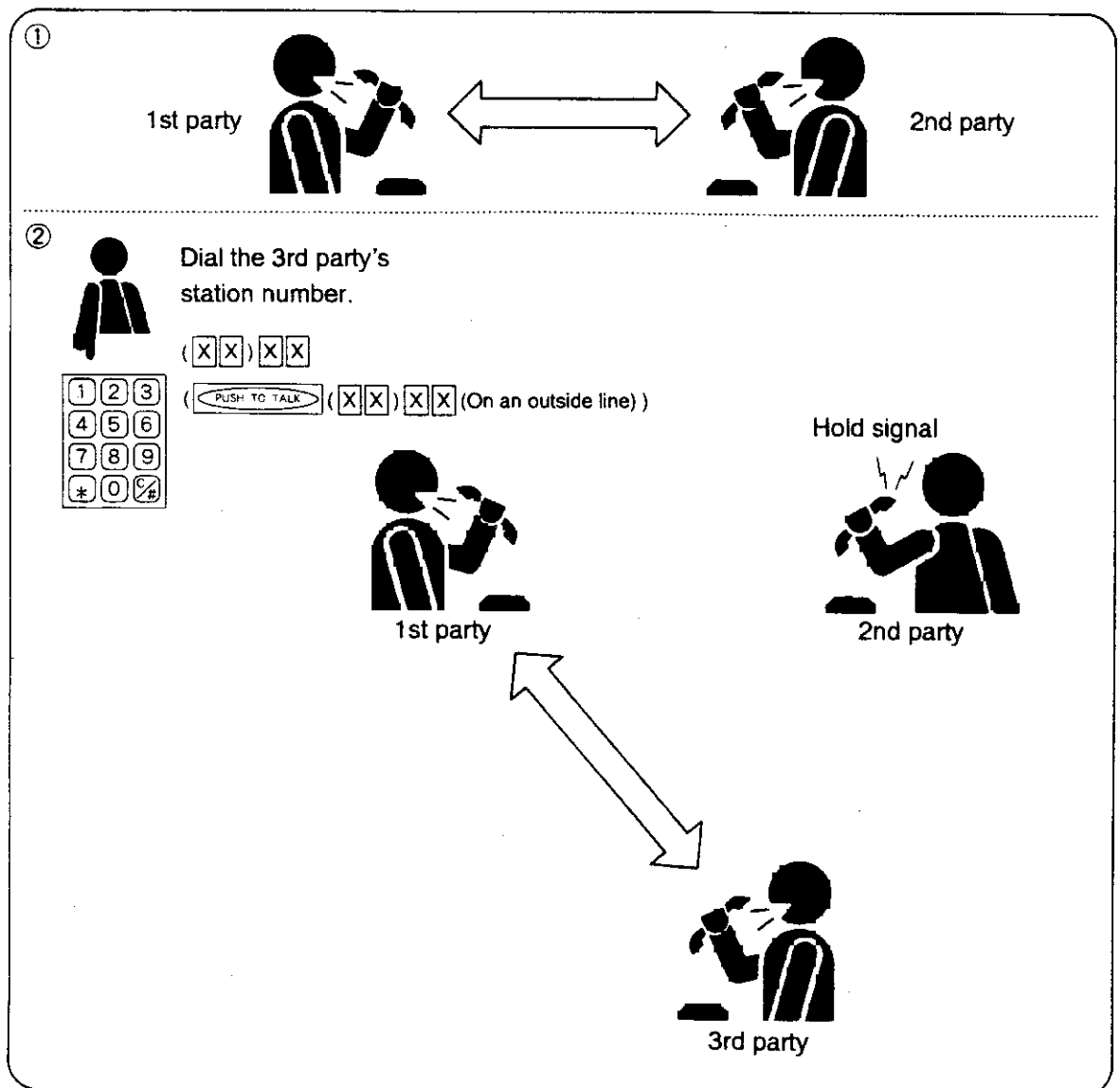
- *** **7** : Function registration selection
- X** : Pre-determined number
- Y** : User programmable number (0 through 9)
- Z** : Dialing (numerical key) or other function (function key) data, Max. 32 digits, excluding **DISPLAY CALLS**, **REDIAL**, and **PUSH TO TALK**.

(3) Call Transfer

When two parties are talking, either party can be placed on hold to permit the calling of a third party for possible call transfer.

- ① Dial the third party's station number.
(If on an outside line, dial the **PUSH TO TALK** key and the third party's station number.)
If on an outside line, the second party is temporarily placed on hold and a hold signal is heard as the third party is called. If on an internal line, no hold tone will be heard at the second party's station.
- ② Talk with the third party.
- ③ To connect the second party with the third party, press **C/#** key. (The previous conversation is terminated.)
Pressing ***** key or replacing the third party's handset restores contact with the second party, thus terminating the conversation with the third party.

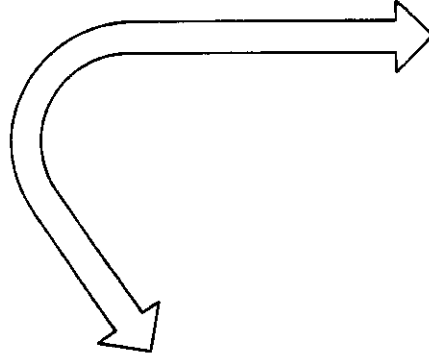
- [Note]:** (1) Calls can only be transferred to stations having a handset.
(2) The RS-100 Sub-station handset placed on hold remains held regardless of whether or not its handset is replaced.



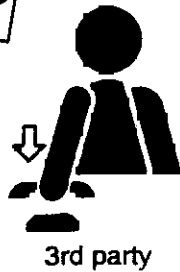
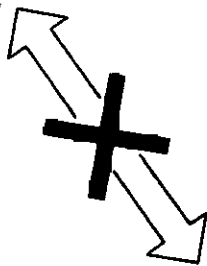
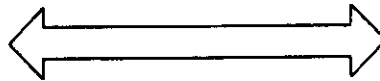
③



To connect the 2nd party with the 3rd party.

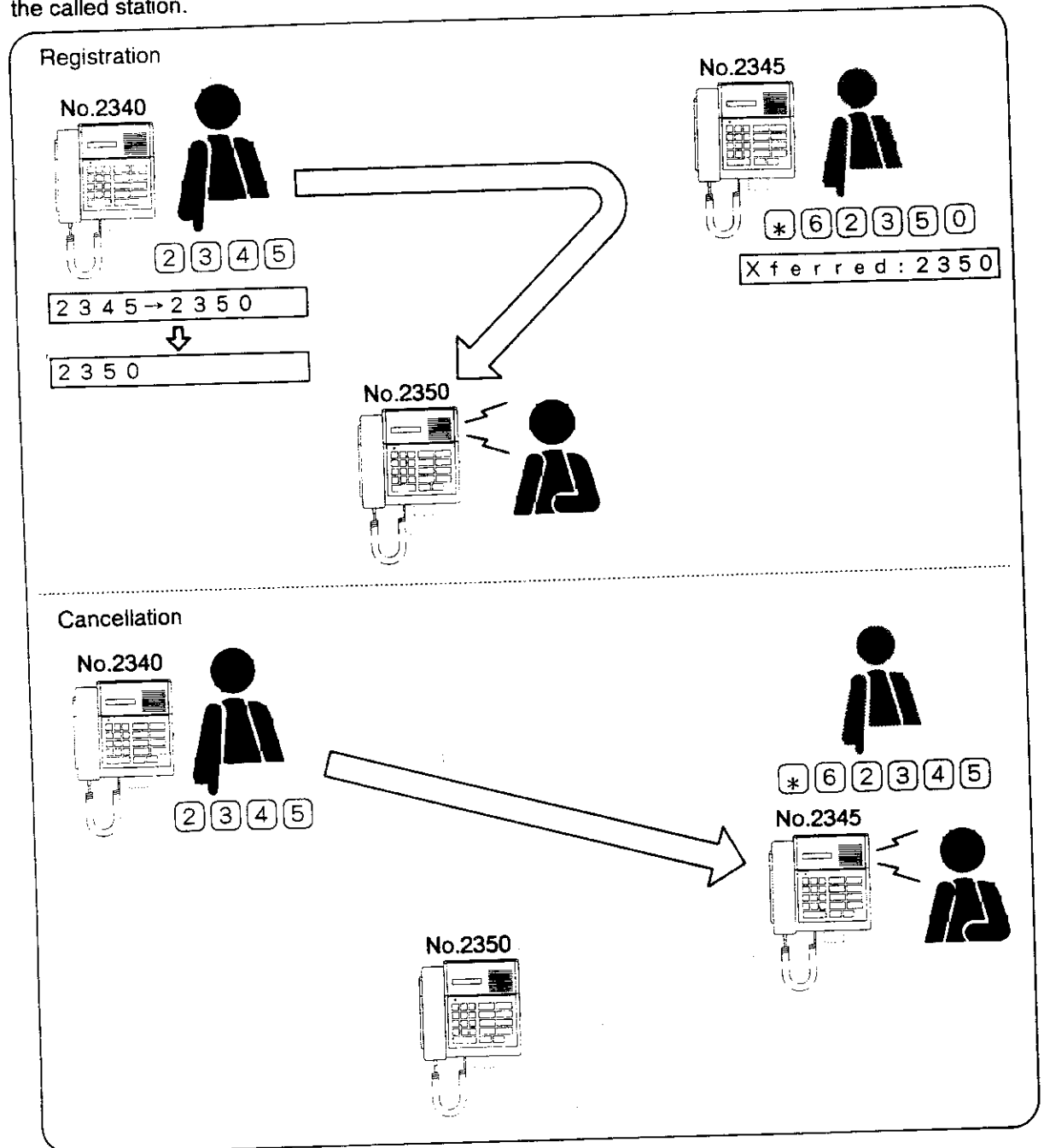


Restores contact with the 2nd party.



(4) Call Forwarding

This function permits all incoming calls to be automatically rerouted to other station registered at the called station.



- [Note]: (1) Outside telephone calls cannot be forwarded.
(2) The station to which calls are to be forwarded must have a handset.

● Call Forwarding Registration & Cancellation

| | | | | | | | |
|--------------|---|------------------------------------|---|-----|-----|---|---|
| Registration | : | * | 6 | (X) | (X) | X | X |
| Cancellation | : | * | 6 | (Y) | (Y) | Y | Y |
| * 6 | : | Call Forwarding function selection | | | | | |
| (X) (X) X X | : | Forwarding station number | | | | | |
| (Y) (Y) Y Y | : | Local station number | | | | | |

3.2 Internal Line Calls

(1) Selective Response

(1.1) Incoming calls to an unused control station

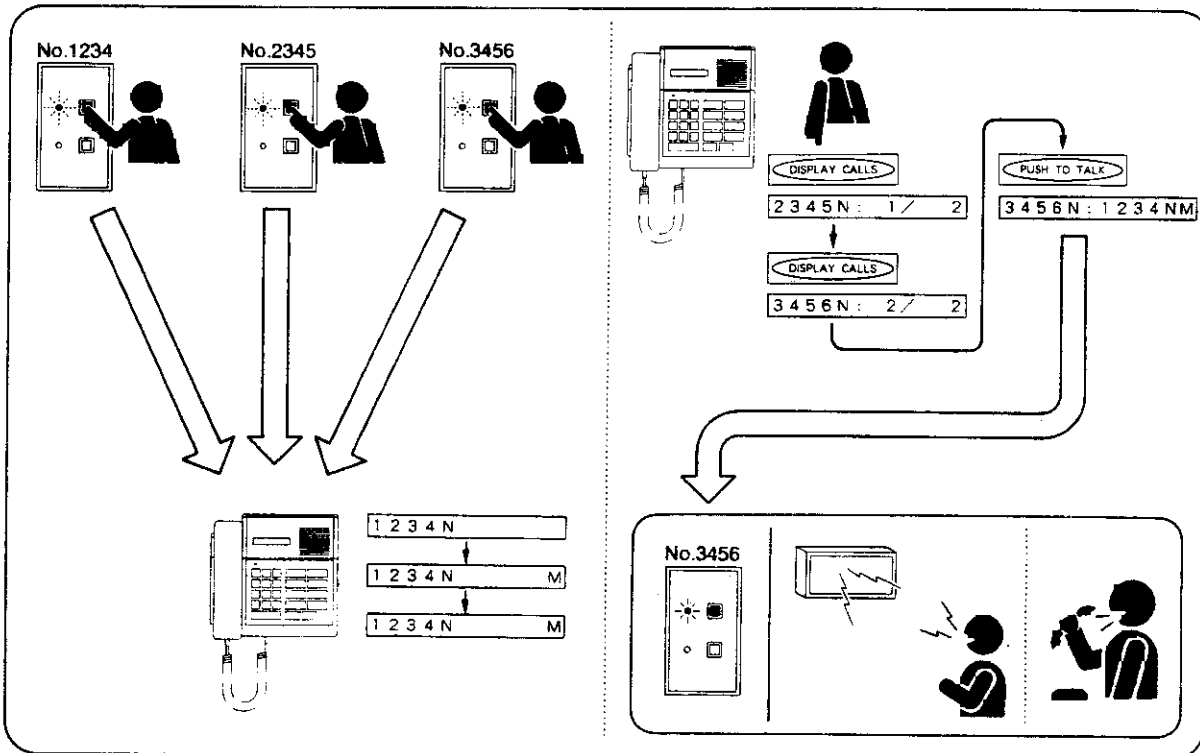
The station Nos. of all stations simultaneously calling an unused control station are automatically stored, with the highest priority station No. indicated on its display. When more than one station is waiting, as indicated by suffix "M", the other waiting station numbers can be displayed with subsequent depressions of the **DISPLAY CALLS** key. To answer, advance the display to the desired station No. and press the **PUSH TO TALK** key or lift the handset.

[Note]: (1) Waiting stations are arranged in priority order, with those having the same priority displayed on a first-come-first-served basis.

(2) The display returns to its initial status after the last of the waiting stations is displayed with the **DISPLAY CALLS** key, or when the **C/#** key is depressed.

[Example]

| KEY OPERATION | DISPLAY | STATUS |
|------------------------|--------------|--------------------------------------|
| ① | 1234N | (No.1234 calling.) |
| ② | 1234N M | (No.2345 calling.) |
| ③ | 1234N M | (No.3456 calling.) |
| ④ DISPLAY CALLS | 2345N: 1/ 2 | |
| ⑤ DISPLAY CALLS | 3456N: 2/ 2 | |
| ⑥ PUSH TO TALK | 3456N:1234NM | (Automatically connected to No.3456) |



(1.2) Incoming calls to a busy control station

When a busy control station is called from more than one station, only the currently connected station and one waiting station are displayed. The other waiting stations are indicated by a letter "M" and displayed in turn with depression of the **DISPLAY CALLS** key.

To answer, first terminate the current conversation, then advance the display to the desired station No. before pressing the **PUSH TO TALK** key or lifting the handset. Simply displaying the desired station No. during conversation does not permit the connection to that station even after conversation completion because the display returns to the original status when the conversation is terminated.

[Note]: Incoming calls from an outside line can also be stored. When there is an outside line call to a busy control station, the message "C/O Line" is displayed. Once the **DISPLAY CALLS** key has been pressed to display other waiting stations during conversation, the message can no longer be displayed with the **DISPLAY CALLS** key. It can be displayed only when the current conversation is terminated.

[Example]

| KEY OPERATION | DISPLAY | STATUS |
|------------------------|--------------|-----------------------------------|
| ① | 1234N | (Talking with No.1234.) |
| ② | 1234N:2345N | (No.2345 calling.) |
| ③ | 1234N:2345NM | (No.3456 calling.) |
| ④ DISPLAY CALLS | 3456N: 1/ 1 | |
| ⑤ C/# *1 | 1234N:2345NM | (Return to initial display.) |
| ⑥ C/# | 2345N M | (Terminate No.1234 conversation.) |
| ⑦ DISPLAY CALLS | 3456N: 1/ 1 | |
| ⑧ PUSH TO TALK | 3456N:2345N | (Connect No.3456.) |

*1 Replacing the handset terminates the original conversation.

(1.3) Incoming call during paging

[Example]

| KEY OPERATION | DISPLAY | STATUS |
|------------------------|-------------|---|
| ① | A 11:50am | (Page received.) |
| ② | 1234N | (No.1234 calling.) |
| ③ DISPLAY CALLS | 1234N M | (No.2345 calling.) |
| ④ PUSH TO TALK | 2345N: 1/ 1 | |
| ⑤ | 2345N:1234N | (Disconnect from paging; connect to No.2345.) |

(1.4) Incoming outside C/O line call

[Example]

| KEY OPERATION | DISPLAY | STATUS |
|-----------------|-------------|------------------------------------|
| ① | C/O Line | (Call received from outside line.) |
| ② | C/O Line M | (No.1234 calling) |
| ③ DISPLAY CALLS | 1234N: 1/ 1 | |
| ④ PUSH TO TALK | 1234N | (Connect to No.1234.) |

(1.5) Incoming outside C/O call during internal conversation

[Example]

| KEY OPERATION | DISPLAY | STATUS |
|---------------|------------|--|
| ① | 1234N | (Talking with No.1234.) |
| ② | C/O Line | (C/O line calling) |
| ③ | C/O Line M | (No.2345 calling) |
| ④ C/# | C/O Line M | (Terminate No.1234 conversation.) |
| ⑤ | C/O Line M | (Connect to C/O line.) (Lift handset.) |

(2) Conference

"Conference" conversations can be held with up to three parties if each station is equipped with a handset.

KEY OPERATION

- ① Press **CONFERENCE** key, then dial the 2nd party's station number.
- ② Tell the 2nd party on the conference.
- ③ Dial the 3rd party's station number.
- ④ Three-party conference conversation possible.
- ⑤ The conference is terminated if any one of participants (must be the control station) puts down his handset or presses **C/#** key.

DISPLAY

Conf:1234

C:1234:

Conf:3456

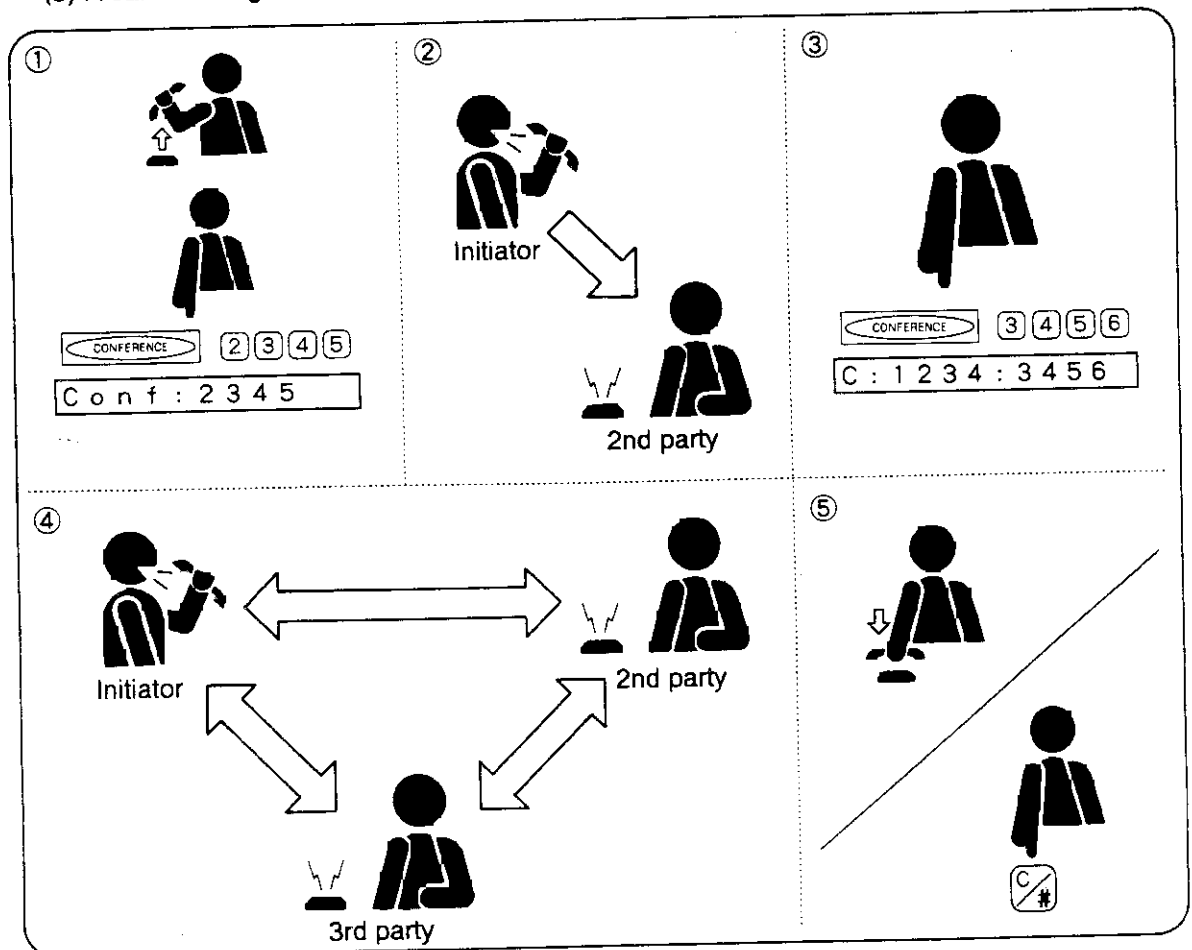
C:1234:3456

[Note]: (1) Conference calls can also be initiated during regular station-to-station conversations by pressing **CONFERENCE** key and then dialing the third party. (In this event, the caller of the conversation must dial.)

If the conference began as a station-to-station conversation, the party first pressing the **CONFERENCE** key becomes the conference initiator.

(2) Only the third party can drop out of the conference if the conference initiator presses the ***** key before the third party lifts handset.

(3) A call-in during conversation is displayed as **C:1234:3456M**.



SECTION 4. AUXILIARY FUNCTIONS AND OPERATING PRECAUTIONS

4.1 Time Setting and Adjustment

(1) Time Setting

Press , displaying current time.

: 00-23 (hour) : 00-59 (minute) : Second synchronization
[24-hour mode only]

(2) 12-/24-hour Mode Switching

Current time can be displayed in either 12-hour or 24-hour mode. Entering automatically toggles between the two modes.

(3) Second Synchronization

[EXAMPLE]

KEY OPERATION

- ① Enter
- ② Press the key.
- ③ Press the key.

DISPLAY

| |
|----------|
| 13:45:27 |
| 13:45:00 |
| A 1:45pm |

Time display 13:45:27

Second display reset to "00".

Display returns to original time display mode.

Second count 0-29: Zero reset to same minute.

Second count 30-59: Zero reset to next minute.

[Note] : Zero reset can be performed as often as necessary with subsequent depressions of the key.

4.2 Station Priority Registration and Calling

As described in "Section 2.2 (5) Sub-station Display Priorities" any one of three priorities ("Alarm", "Normal" and "Staff") can be assigned to each sub-station. Basically these priorities are determined at the time of system programming. However, the higher "Priority" level than "Alarm", "Normal" and "Staff" level can be temporarily registered at the control station assigned to the sub-stations its level is registered to.

(1) Registration

KEY OPERATION

- ① **PRIORITY** (Enters into Registration Mode)
- ② **1** **2** **3** **4** (Sub-station number entry)
- ③ **PUSH TO TALK** (Determination)

DISPLAY

Prio:
 Prio: 1234N
 Prio: 1234P

"Priority" level is registered.

[Note] : Registration will be completed one second after depression of **PUSH TO TALK** key, whether or not **C/#** key is depressed.

(2) Cancellation

KEY OPERATION

- ① **PRIORITY** (Enters into Registration Mode)
- ② **1** **2** **3** **4** (Sub-station number entry)
- ③ **PUSH TO TALK** (Determination)

DISPLAY

Prio:
 Prio: 1234P
 Prio: 1234N

Originally designated priority level ("N") is resumed.

(3) Reviewing the registered stations & call to them

KEY OPERATION

- ① **PRIORITY**
- ② **DISPLAY CALLS**
- ③ **DISPLAY CALLS**
- ④ **DISPLAY CALLS**
- ⑤ **PUSH TO TALK** (Automatically connected to No.6789)
- ⑥ **C/#** (Exits to Normal Mode)

DISPLAY

Prio:
 Prio: 1234P
 Prio: 2345P
 Prio: 6789P

4.3 Time Signal

This function sounds a time signal either automatically at pre-programmed times determined by one of two preset time schedules, or manually at any desired time.

(1) Time Schedule Selection (Automatic output)

Select Schedule A, B, or Output Stop. The system is factory-preset to Output Stop.

- ① ***** **3** **0** **PUSH TO TALK** (Output Stop)
- ② ***** **3** **1** **PUSH TO TALK** (Schedule A)
- ③ ***** **3** **2** **PUSH TO TALK** (Schedule B)

(2) Manual Output

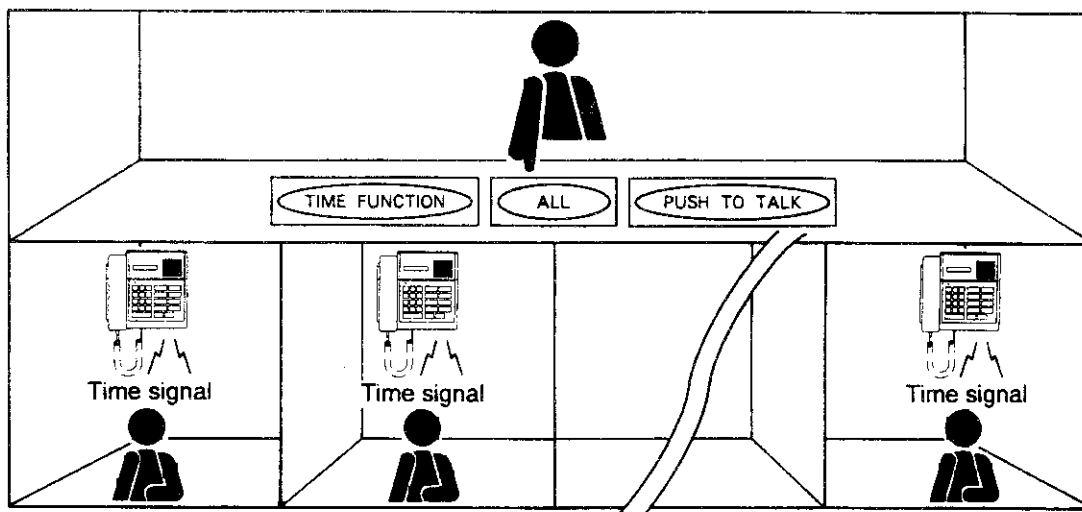
Time signals can be manually initiated.

(2.1) All-zone Output

- ① Press the **TIME FUNCTION** key.
- ② Press the **ALL** key.
- ③ Press the **PUSH TO TALK** key.

Time ALL ^

All-zone signal output



(2.2) Zone Output

- ① Press the **TIME FUNCTION** key.
- ② Press the **ZONE** key.
- ③ Enter Zone No. (i.e. **2** **4** **6**)

Time Z 2 4 6 ^

Signal output to designated zones 2, 4, and 6.

(2.3) Combination Zone Output

- ① Press the **TIME FUNCTION** key.
- ② Enter Combination Zone No. (i.e. **1** **2** **3**)
- ③ Press the **PUSH TO TALK** key.

Time C 1 2 3 ^

Signal output to designated Combination Zones 1, 2, and 3.

(2.4) Sub-Station Output

- ① Press the **TIME FUNCTION** key.
- ② Enter Sub-station No. (Max. 10: i.e. **2** **0** **0** **1** **2** **0** **0** **2**)
- ③ Press the **PUSH TO TALK** key.

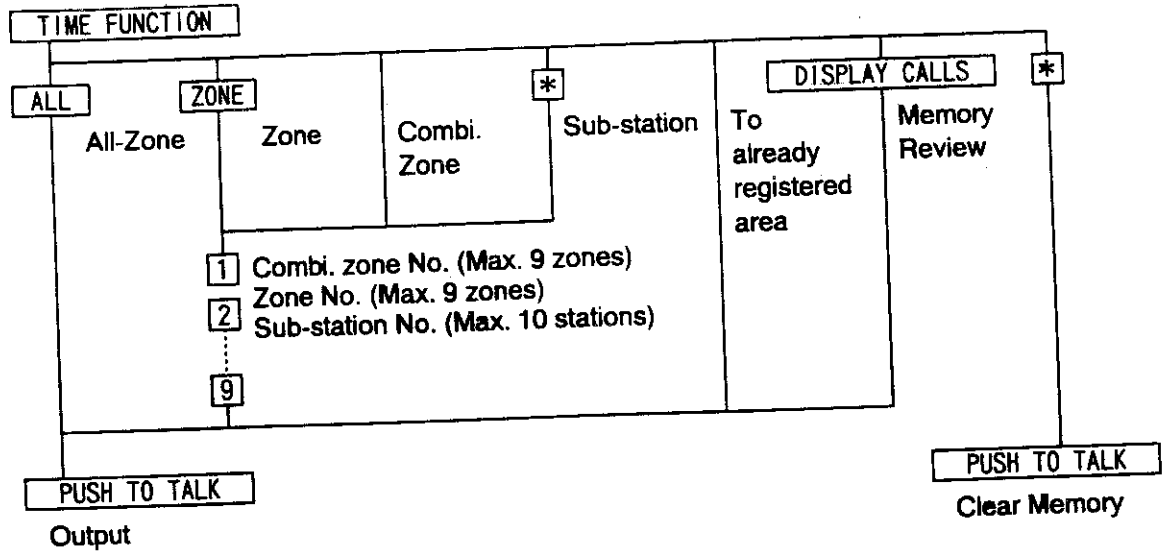
Time S 2 0 0 2 ^

Signal output to designated Sub-stations No.2001 and No.2002.

(2.5) Confirmation and re-output of registered programs

- ① Press the **TIME FUNCTION** key.
Designated signal output areas displayed. To check for other undisplayed output areas.
- ② Press the **DISPLAY CALLS** key.
Other designated signal output areas are displayed with subsequent depressions of the **DISPLAY CALLS** key.
- ③ Next,
Press the **PUSH TO TALK** key.
Start signal output to designated areas.

(3) Summary of Time Signal Manual Output Operation



4.4 Program Source Output

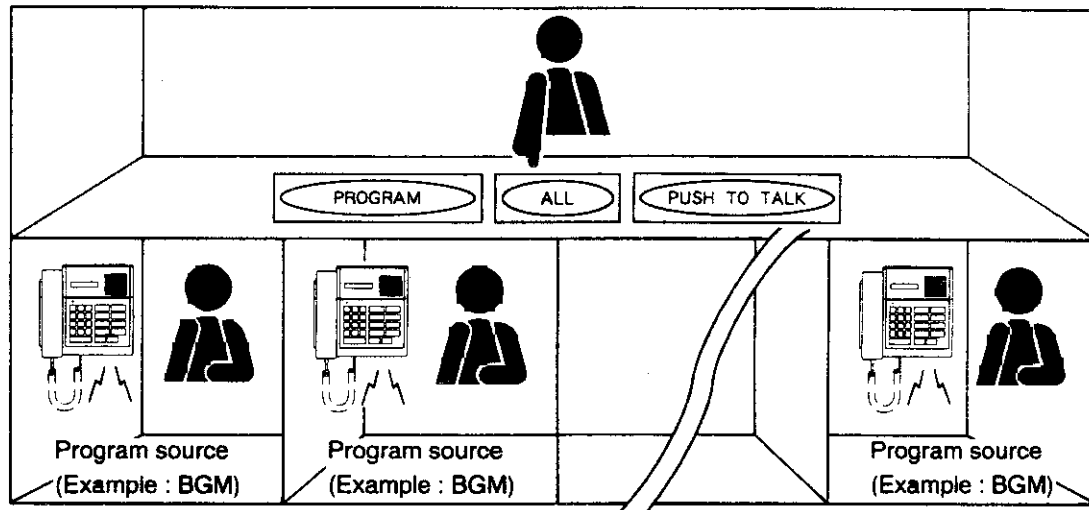
The IC-100 system can output program source material (such as back-ground music) to selected area.

(1) All-zone Output

(1.1) To initiate program source output,

- ① Press the **PROGRAM** key.
- ② Press the **ALL** key.
- ③ Press the **PUSH TO TALK** key.

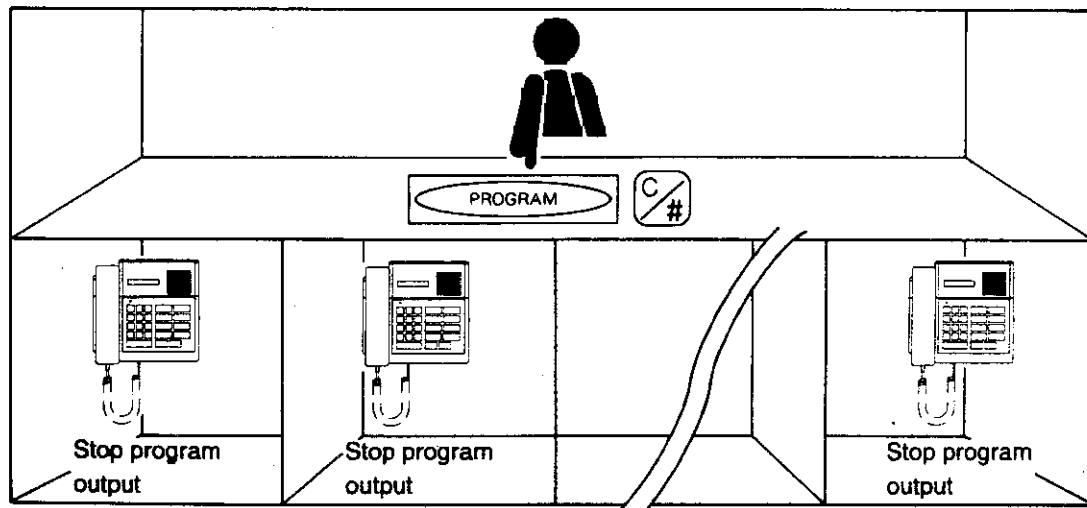
Prog All ^
All-zone program output start.



(1.2) To terminate program source output,

- ① Press the **PROGRAM** key.
- ② Press the **C/#** key.

Prog All
Output status display.
Prog All
All-zone program output stop.



(2) Zone Output

(2.1) To initiate program source output,

- ① Press the **PROGRAM** key.
- ② Press the **ZONE** key.
- ③ Enter Zone No. (i.e. **2** **4** **6**)
- ④ Press the **PUSH TO TALK** key.

Prog Z 2 4 6 ^

Start program output to Zones 2, 4, and 6.

(2.2) To terminate program source output,

- ① Press the **PROGRAM** key.
- ② Press the **C/#** key.

Prog Z 2 4 6

Output status display.

Prog Z 2 4 6

Stop program output to Zones 2, 4, and 6.

(3) Combination Zone Output

(3.1) To initiate program source output,

- ① Press the **PROGRAM** key.
- ② Enter Combination Zone No. (i.e. **1** **2** **3**)
- ③ Press the **PUSH TO TALK** key.

Prog C 1 2 3 ^

Start program output to Combination Zones 1, 2, and 3.

(3.2) To terminate program source output,

- ① Press the **PROGRAM** key.
- ② Press the **C/#** key.

Prog C 1 2 3

Output status display.

Prog C 1 2 3

Stop program output to Combination Zones 1, 2, and 3.

(4) Sub-station Output

(4.1) To initiate program source output,

- ① Press the **PROGRAM** key.
- ② Press the ***** key.
- ③ Enter Sub-station No. (Max. 10: i.e. **2** **0** **0** **1** **2** **0** **0** **2**)
- ④ Press the **PUSH TO TALK** key.

Prog S 2 0 0 2 ^

Start program output to Sub-stations No.2001 and No.2002.

(4.2) To terminate program source output,

- ① Press the **PROGRAM** key.
- ② Press the **C/#** key.

Prog S 2 0 0 2

Output status display.

Prog S 2 0 0 2

Stop program output to Sub-Stations No.2001 and No.2002.

(5) Confirmation, Re-output and Output Stop of Registered Programs

① Press the **PROGRAM** key.

Prog: Z 1 2 3 4

Designated program output areas displayed.

To check for other undisplayed output areas.

② Press the **DISPLAY CALLS** key.

Prog: Z 5 6 7

③ Next,

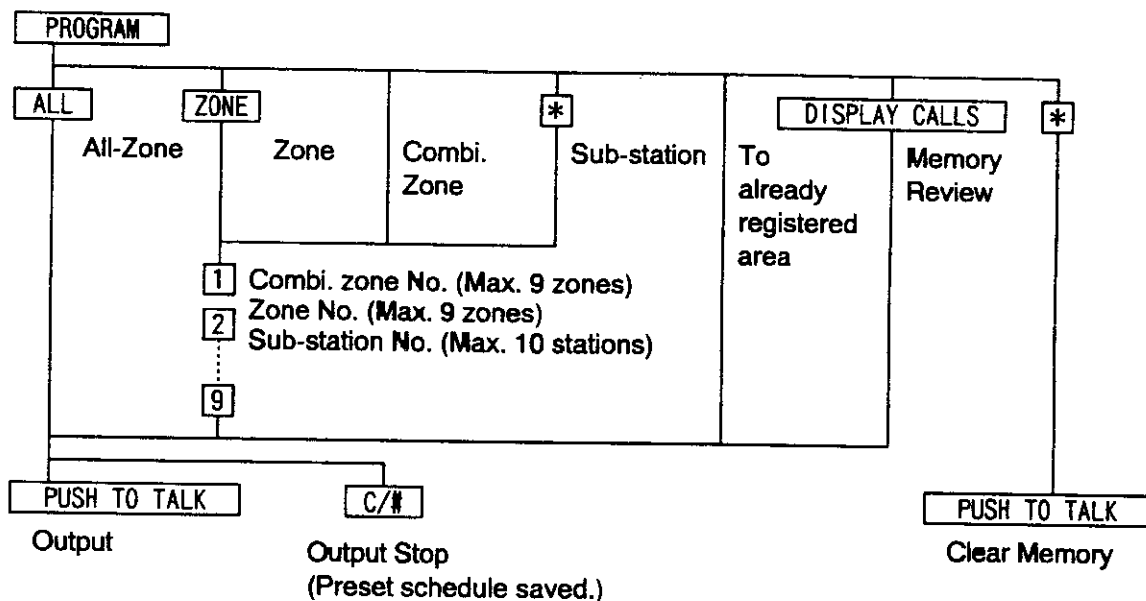
Press the **PUSH TO TALK** key.

Start program source output to designated areas,

or press **C/#** key.

Terminate the program source output.

(6) Summary of Program Source Output Operation



4.5 Computer Connection

Connection of the exchange to a personal computer makes available the following functions. (For details, refer to the separate "IC-100 Computer Connection" manual.)

- (1) To facilitate system programming, various user-programable functions can be easily registered with a personal computer, and the registered data printed out.
- (2) Records of the most recent exchange operations can be printed out or shown on the computer display.
- (3) Station connections, disconnections, or dialing tests can be performed via the computer keyboard to assist system troubleshooting.
- (4) Messages entered at the computer keyboard can be shown on the connected AS-100 displays or any other external monitors.

SECTION 5. FUNCTION & OPERATION TABLES

5.1 Dialing Operations

(1) Quick Reference to Dialing Operations

(1.1) Room Station

| Function | | Operation | Remarks |
|-------------------|-------------------|--|-------------------------------------|
| Call Transmission | Call | CALL or lift handset | |
| | Emergency Call *3 | CALL for over 3 seconds | |
| Privacy | Privacy | Press PRIVACY Press PRIVACY again | Privacy mode ON Privacy mode OFF |

(1.2) Control Station

| Function | | Operation | Remarks |
|---------------------|----------------------|--|--|
| Calling/Response | Call | X X X X X X X X X | XX: 00-99 XXX: 000-999 XXXX: 0000-9999 |
| | Response to Call | PTT or Lift handset | |
| | Selective Response | DISP PTT or DISP Lift handset | |
| Conversation Format | Simplex | Press PTT to talk. Release PTT to listen. | |
| | Duplex | Lift handset (Both stations OFF-HOOK) | (1)Control- to Sub-station (2)Sub-station to Sub-station |
| | | Lift handset (Either of Calling or Called Station OFF-HOOK) | Control- to Control Station |
| Privacy | Registration | * * | |
| | Cancellation | * C/# | |
| | Response | Push any key or lift handset. | |
| Conference | Calling | CONF (X X) X X | Only available to handset stations. |
| | Last Station Dropout | * (Before the last station lifts handset) | From station that originated conference. |
| | Termination | C/# or Replace handset | Can only be terminated from a participating control station. |

| Function | | Operation | Remarks | |
|------------------------|-------------------------|--|---|--|
| Paging | Emergency Paging | PAGE PAGE PAGE PAGE | Operation time interval: under 0.5 sec. (PA/Station paging) | |
| | All-call paging | PAGE ALL PTT *2 | (PA/Station paging) | |
| | Zone Paging | PAGE ZONE X X PTT *2 max.9 zones | X: Zone No.1-9 | |
| | Combination Zone Paging | PAGE X X PTT *2 max.9 zones | X: Combination zone No.1-9 | |
| | Sub-staion Paging | PAGE * (X X) X X (X X) X X PTT *2 max. 10 stations | (XX)XX: Sub-staion No. (00)00-(99)99 | |
| Program Source Output | Output | All-zone | PROG ALL PTT *2 | |
| | | Zone | PROG ZONE X X PTT *2 | X: Zone No.1-9 |
| | | Combi. Zone | PROG X X PTT *2 | X: Combination zone No.1-9 |
| | | Sub-staion | PROG (X X) X X PTT *2 | (X X) X X: Sub-staion No. (00)00-(99)99 |
| | Output Stop | PROG C/# | | |
| Individual Output Stop | C/# | | | |
| Time Signal | Manual Output | All-zone | TIME ALL PTT *2 | |
| | | Zone | TIME ZONE X X PTT *2 | X: Zone No.1-9 |
| | | Combi. Zone | TIME X X PTT *2 | X: Combination zone No.1-9 |
| | | Sub-staion | TIME (X X) X X PTT *2 | (X X) X X: Sub-staion No. (00)00-(99)99 |
| | Schedule Selection *1 | * 3 X PTT (Conf.Tone) | X: 0(Output stop) 1(A), 2(B) | |
| Outside C/O Line *3 | Calling | TEL X X | X : Telephone No. | |
| | Receiving | Lift handset | | |
| | Call Transfer | PTT (X X) X X Call hold C/# or Replace handset | (XX)XX: Station No. to be transferred to | |
| | Call Re-connection | PTT (X X) X X Call hold * or Replace the third party's handset | | |
| Internal Line | Call Transfer | (X X) X X Call hold C/# or Replace handset | (XX)XX: Station No. to be transferred to | |
| | Call Re-connection | (X X) X X Call hold * or Replace the third party's handset | | |

| Function | | Operation | Remarks |
|--------------------------------|----------------------------|---|---|
| Call Forwarding | Registration | * 6 (X X) X X (Conf. Tone) | (XX)XX: Station No. to be transferred to |
| | Cancellation | * 6 (X X) X X (Conf. Tone) | (XX)XX: Originally assigned station No. |
| Speed Dialing *3 | Single-digit Dialing | X | X: Designated No. Y: User programmable No.(0-9) |
| | 2-digit Dialing | X Y | Z: No. to be registered (max.32 digits) |
| | Registration | * 7 X (Y) Z Z PTT (Conf.Tone) | |
| Redialing | | REDIAL | Max. 24 digits can be redialed. |
| Duress Alarm *3 | Operation | Take handset off for over 6 seconds | |
| | Cancellation | C/# and Replace handset | |
| Time Setting and Adjustment *1 | Time Setting | * 4 H H M M PTT (Conf.Tone) | HH: 00-23(Hour) MM: 00-59(Minute) |
| | 12-/24-hour Mode Switching | * 5 PTT (Conf.Tone) | Toggles between 12-hour and 24-hour modes. |
| | Second Synchronization | * 4 PTT PTT (Reset to "00") C/# (Initial status display) | 1-30 sec: Zero reset to same minute. 31-59 sec: Zero reset to next minute. |
| Priority *1 | Registration | PRI0 (X X) X X PTT (Conf.Tone) | X: Sub-station No. Only possible at control station assigned to "Priority" sub-station. |
| | Confirmation/Call | PRI0 DISP (Registration confirmation) PTT (Call) | Toggles between "priority" and originally designated priority. |

[Note] : (1) *1 : Only possible with the "Unrestricted" control station.

*2 : PUSH TO TALK or Lift handset.

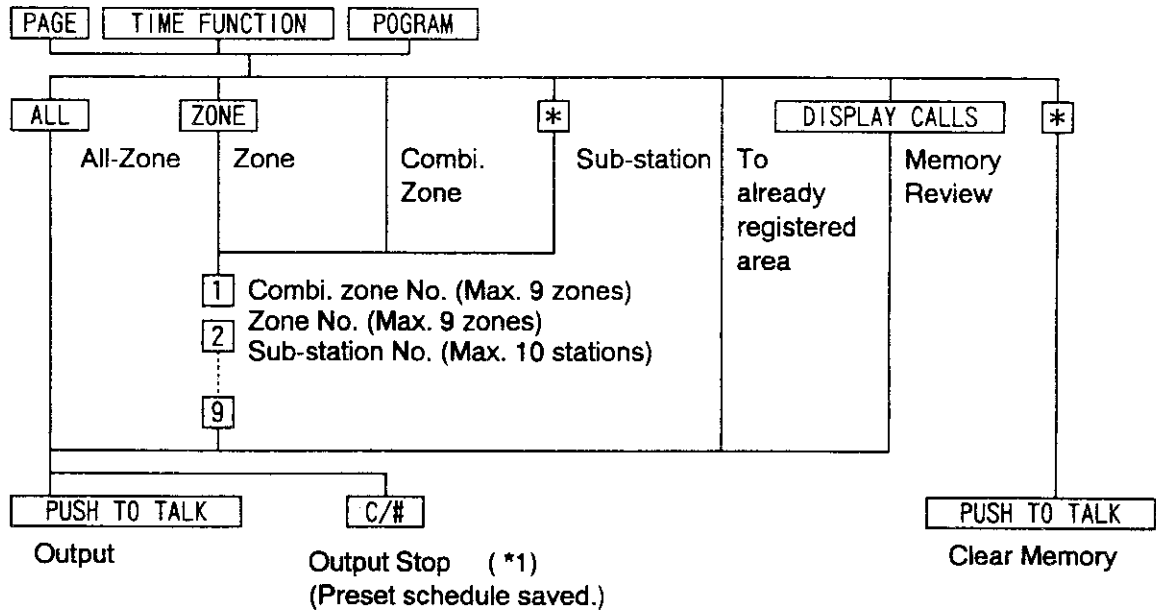
(2) Some keys and words are abbreviated in this reference list.

| | | | |
|------|---------------------|------------|---------------------|
| PTT | : PUSH TO TALK key | TIME | : TIME FUNCTION key |
| DISP | : DISPLAY CALLS key | PRI0 | : PRIORITY key |
| CONF | : CONFERENCE key | Conf. Tone | : Confirmation Tone |
| PROG | : PROGRAMC key | | |

(3) *3 : Selectable function.

(2) Transmission Area Registration

[PAGING] [TIME SIGNAL MANUAL OUTPUT] [PROGRAM SOURCE OUTPUT]



(*1) : Only available for "Program Source Output" function.

5.2 Priority Order

The IC-100 system has two separate priority orders: (1) Broadcast/conversation priority and (2) Call display priority.

(1) Broadcast/Conversation Priority

- (1.1) Higher priority functions such as paging or time signal can override lower priority broadcasts or conversations.
- (1.2) The interrupted broadcast or conversation is resumed upon completion of higher priority function override.
- (1.3) Broadcasts or conversations overridden by Emergency All-call Paging are not resumed.
- (1.4) Conversation cannot be overridden by regular or emergency calls from a sub-station.
- (1.5) Handsfree conversation is not possible when a sub-station is calling. Waiting calls are received in the handsfree mode when the current sub-station conversation is terminated.

<Broadcast and Conversation Priority List>

- (1) Outside C/O line call
- (2) Emergency all-call paging *1
- (3) Emergency call
- (4) Duress alarm
- (5) Time signal *2
- (6) All-call paging *2
- (7) Zone/Combination zone/Sub-station paging *2
- (8) Conversation
- (9) Program output

*1. Overridden lower priority functions not restored, even after function completion.

*2. Overridden lower priority functions restored after function completion.

(2) Call Display Priority

- (2.1) The numbers of all stations calling an unused station are displayed in priority order, with those having the same priority shown on a first-come-first-served basis.
- (2.2) With subsequent depressions of **DISPLAY CALLS** key, lower priority waiting stations can be displayed.
- (2.3) Current conversations or received broadcasts are not overridden by incoming station calls, which are displayed in priority order. To answer, the conversation or broadcast must first be terminated.

<Call Display Priority List>

- (1) Emergency all-call paging
- (2) Emergency call
- (3) Duress alarm
- (4) Outside C/O line call
- (5) Priority sub-station call
- (6) Alarm priority sub-station call
- (7) Normal priority sub-station call
- (8) Staff priority sub-station call
- (9) Control station call

| |
|-------------|
| Emerg. Page |
| 1234 Emerg. |
| 5678 Duress |
| C/O Line |
| 1234P |
| 2345A |
| 3456N |
| 4567S |
| 5678 |

5.3 Signal Tones

| Signal tone | | Signal source and Output timing |
|--|--------------------------|---------------------------------|
| ① Dial Confirmation Tone | Brief Single Tone | |
| ② Error Tone | Brief Single Tone | |
| ③ Busy Tone | Intermittent Single Tone | |
| ④ Sub-station Call Tone (Normal and Staff) | Intermittent Single Tone | |
| ⑤ Sub-station Call Tone (Priority and Alarm) | Intermittent Single Tone | |
| ⑥ Emergency Call Tone | Intermittent Trill Tone | |
| ⑦ Confirmation Tone | Intermittent Single Tone | |
| ⑧ Call Forwarding Tone | Intermittent Single Tone | |
| ⑨ Sub-station Privacy Tone | Intermittent Single Tone | |
| ⑩ Control Station Privacy Tone | Intermittent Trill Tone | |
| ⑪ Sub-station Conversation Start Tone | Brief Single Tone | |
| ⑫ Control Station Conversation Start Tone | Brief Trill Tone | |
| ⑬ Emergency All-call Paging Tone | Intermittent Trill Tone | |
| ⑭ Paging Pre-Announcement Tone (All-call/Zone /Combi.Zone) | (1) 4-note Chime | |
| | (2) Brief Single Tone | |
| ⑮ C/O Line Hold Tone | Intermittent Single Tone | |
| ⑯ C/O Line Call Tone | Intermittent Trill Tone | |
| ⑰ Duress Alarm Tone | Intermittent Trill Tone | |
| ⑱ Time Signals | (1) Westminster Chime | |
| | (2) Trill Tone | |
| | (3) External Bell | |

Note: (1) Single Tone
 (2) Trill Tone

(3) Intermittent Single Tone
 (4) Intermittent Trill Tone

5.4 Operation Display Examples

(1) Reception

- | | | |
|---|---------------|--|
| ① | 1234N | No.1234 calling. |
| ② | 1234N M | Other stations calling. |
| ③ | 1234N | Connect to No.1234. |
| ④ | 1234N:2345N | No.2345 calling during conversation with No.1234. |
| ⑤ | 1234N:2345NM | Other stations besides No.2345 calling during conversation with No.1234. |
| ⑥ | 3456 Emerg. | (1) Emergency call from No.3456. |
| | | (2) Connect to No.3456. |
| | | (3) Emergency call from No.3456 during conversation with No.1234. |
| ⑦ | 3456 Emerg. E | (1) Emergency calls from No.3456 and other sub-stations. |
| | | (2) Another emergency call made during conversation with No.3456. |
| | | (3) Emergency call from No.3456 and duress alarm from other control station. |
| ⑧ | 3456N:4567E | Emergency call from No.4567 during conversation with No.3456. (*1) |
| ⑨ | 3456N:4567EE | Emergency call from No.4567 and other station during conversation with No.3456. (*1) |
| ⑩ | C/O Line | (1) Call from C/O line. |
| | | (2) Conversation with C/O line. |
| | | (3) Call from C/O line during conversation with internal line. |
| ⑪ | C/O Line M | (1) Calls from both C/O and internal lines. |
| | | (2) Call from internal line during conversation with C/O line. |
| ⑫ | 5678 Duress | Duress alarm from No.5678 control station. |
| ⑬ | 5678 DuressE | Duress alarm from No.5678 and other control station. |
| ⑭ | Emerg. Page | (1) Emergency all-call paging during emergency call or duress alarm. (Emergency call or duress alarm is displayed upon emergency all-call paging completion.) |
| | | (2) Emergency call or duress alarm entry during emergency all-call paging. (neither emergency call nor duress alarm can be accepted during emergency all-call paging. In such a case, operate from the beginning.) |

(*1) Initial display after confirming undisplayed waiting stations with the **DISPLAY CALLS** key.

[Note] : (1) The suffix "M" indicates other waiting stations, which can be displayed with subsequent depressions of the **DISPLAY CALLS** key.

(2) The suffix "E" indicates waiting emergency calls or duress alarm, which can be displayed with subsequent depressions of the **DISPLAY CALLS** key.

(2) Transmission

| | | |
|---|-----------------------|---|
| ① | Emerg. Page | Emergency all-call paging |
| ② | Page All | All-call paging |
| ③ | Page Z 2 4 6 | Zone paging |
| ④ | Page C 1 2 3 | Combination zone paging |
| ⑤ | Page S 1 2 3 4 | Sub-station paging |
| ⑥ | Time Z 2 4 6 | Manually activated time signal |
| ⑦ | Prog Z 2 4 6 | Program output |
| ⑧ | Tel : 0 7 9 7 7 1 2 | Outside C/O line calling |
| ⑨ | 2 3 4 5 N | Internal calling |
| ⑩ | C : 1 2 3 4 : 2 3 4 5 | Conference calling |
| ⑪ | 1 2 3 4 → 2 3 4 5 | Call forwarding from No.1234 to No.2345 |
| ⑫ | Off - Hook | Duress alarm |

(3) Miscellaneous

| | | |
|---|------------------|----------------------------------|
| ① | Prio: 1 2 3 4 P | "Priority" station registration. |
| ② | Xferred: 2 3 4 5 | Call forwarding registration. |

5.5 Note on Operation

(1) Emergency Call

- (1.1) when a control station simultaneously receives more than two regular sub-station calls while paging is being established in the system, the regular calls can be converted into emergency calls.
- (1.2) Answering an incoming emergency call to a control station by pressing its **PUSH TO TALK** key or lifting its handset while paging is being established in the system can terminate current conversations and paging, including those at other stations.

(2) Paging

- (2.1) No paging call can be made from any control station when there are more than two simultaneous incoming sub-station calls to a control station.



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