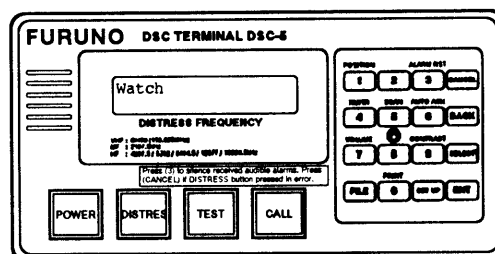


FURUNO

DSC-5/5R



* * * Operator's Guide * * *

(For detailed information, refer to the Operator's manual)

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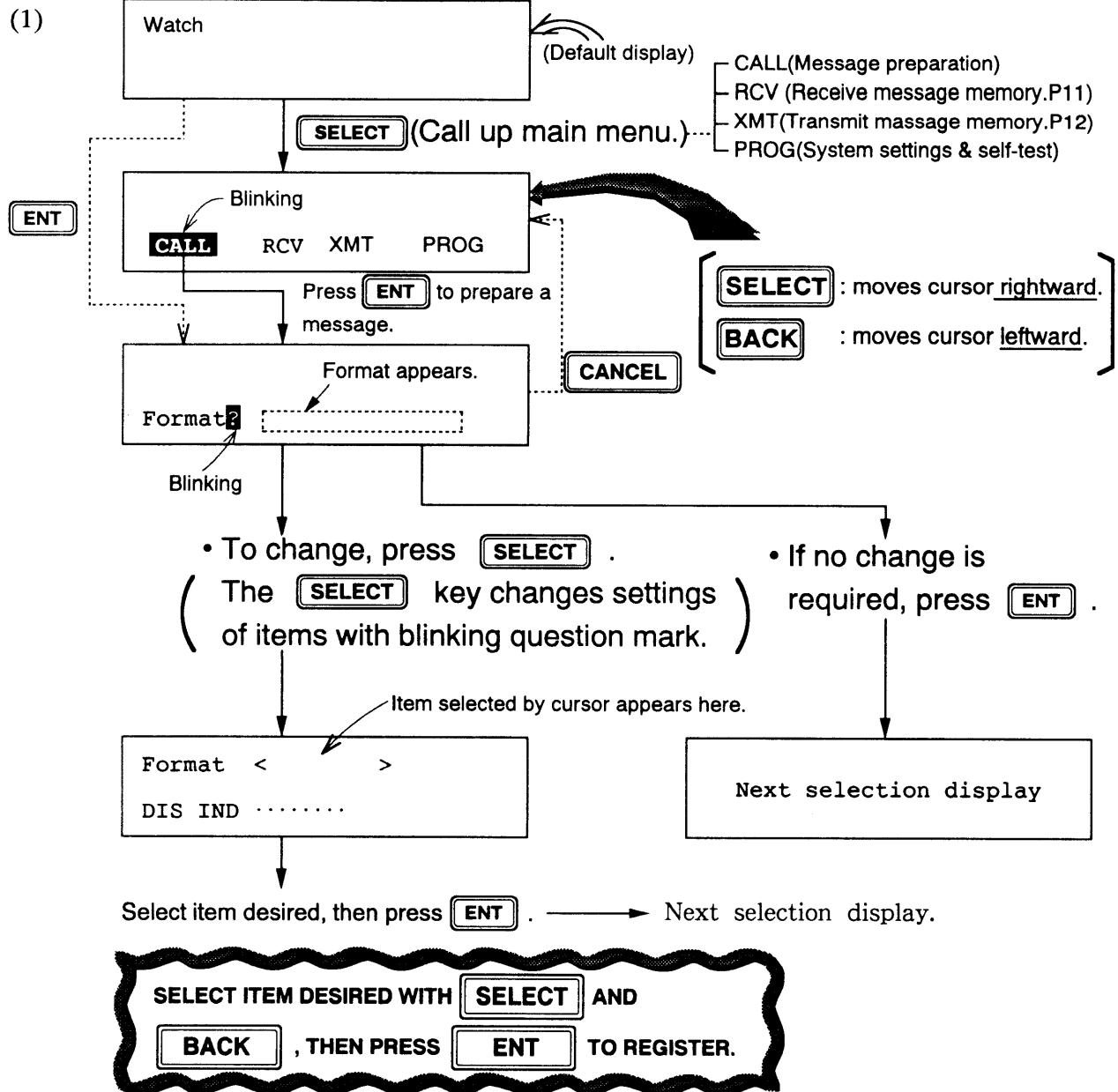
ROM Version No.

(CONTROL PCB: 1.40)
(MODEM PCB: 1.11)

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Rules of Operation

(Basic Operation)



(2) Auto Ack (Automatic Acknowledge) and Remote Control Function

Each press of the **[6]** key enables/disables auto ack and remote control function in the sequence shown below.

LCD Display	Auto Ack	Remote Control
→ "auto"	→ ON	ON
↓ [6] key		
"manual"	→ OFF	OFF
↓ [6] key		
"limit"	→ OFF	ON (except for reception of an individual call or a group call)
↓ [6] key		

(3) **ENT** key : enters item selected with blinking cursor, and enters item with blinking question mark.

(4) **CANCEL** key : returns to default display and cancel wrong data.

(5) Remarks on Numeral Input : (example) Individual call

Address< >
 9 DIGITS= █

Cursor blinking
 Enter other station ID number then press
ENT key.

(6) Connection with early model FURUNO radiotelephones or other make radiotelephones nullifies the remote control function. These radiotelephones require **manual input** of the data listed below.

- {

 - DSC TX/RX frequencies (channels)
 - Working TX/RX frequencies (channels)
 - Class of emission (Type of communication)
 - Tuning (MF/HF only)

}

(7) To turn the power off, press and hold down the POWER switch at least 2 seconds. Then, release the switch after a loud beep is heard.

Key	Function/Purpose	Remarks
POSITION <div style="border: 1px solid black; padding: 2px; display: inline-block;">1</div>	Ship's position and time are shown while pressed and held down.	
ALARM RST <div style="border: 1px solid black; padding: 2px; display: inline-block;">3</div>	Silences the audible alarm. (For call except distress and urgency the alarm stops automatically after five seconds.)	
SCAN <div style="border: 1px solid black; padding: 2px; display: inline-block;">5</div>	Starts and stops frequency scanning(MF/HF).	when scanning, receive frequencies appear on the screen in sequential order and blink.
AUTO ACK <div style="border: 1px solid black; padding: 2px; display: inline-block;">6</div>	Turns automatic call acknowledge (except for distress alert reception and distress relay) and <u>transceiver remote on or off.</u> (Refer to previous page.)	when "AUTO ACK" is ON, "auto" appears on the LCD.
VOLUME <div style="border: 1px solid black; padding: 2px; display: inline-block;">7</div>	Adjusts volume of speaker in eight steps. (Distress and urgency alarm always sounds at maximum volume.)	

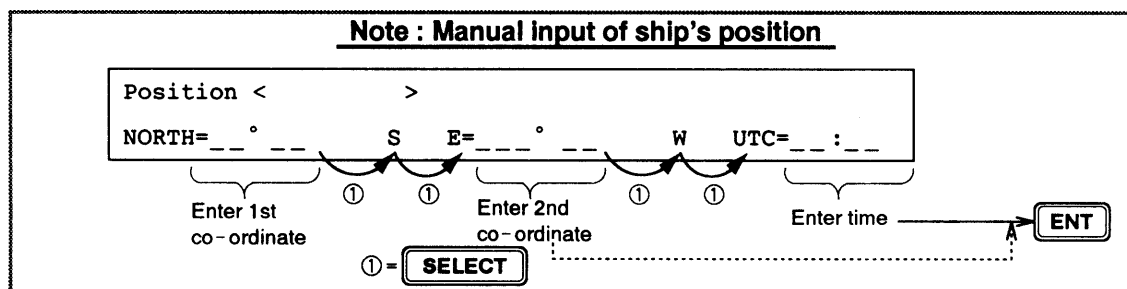
1. Distress Call

Operation	Contents of Transmit Message
Press DISTRESS switch.	<p>Own ship ID, time data and the following are transmitted.</p> <p style="text-align: right;">Factory Setting</p> <div style="border: 1px solid black; padding: 5px; display: inline-block;"> <p>1. Nature of Distress UNDESIGNATED</p> <p>2. Telecommand 1 J3E</p> <p>3. Ship's Position (when combined with navigation equipment)</p> </div> <p>DSC Frequency 2187.5kHz</p> <p>If you want to transmit the alert after designating "nature of distress", press DISTRESS switch and within 5 seconds, enter nature of distress with numeric keys 1-8. See table below.</p> <div style="border: 1px solid black; padding: 5px; display: inline-block; vertical-align: top;"> <p>As shown in the procedure below, telecommand and DSC frequency can be prepared beforehand, since there is a memory for distress alert.</p> </div>

If you are not pressed for time, prepare a distress message and transmit it by pressing the **DISTRESS** switch.

Procedure:

(Default display) ⇒ **ENT** ⇒ (Format selection : DISTRESS) ⇒ (Selection of nature of distress) ⇒ (Ship's position/time input) ⇒ (Telecommand selection, SIMPLEX for VHF) ⇒ (Selection of DSC frequency, CH70 for VHF)



When the **CANCEL** key is pressed, the screen returns to default display. Since the distress message prepared here is stored in the memory, just press the **DISTRESS** switch to transmit it, in case of distress.

Key	Nature of Distress
[1]:	Fire, explosion
[2]:	Flooding
[3]:	Collision
[4]:	Grounding
[5]:	Listing, capsizing
[6]:	Sinking
[7]:	Disabled & adrift
[8]:	Abandoning
[0]:	Undesignated

Ready for calling

Press **DISTRESS** switch to transmit a message.

To cancel the distress call, press **CANCEL** key within five seconds.

Wait for dist ack

3.0 min

Counts down. If distress call is not acknowledged it is automatically retransmitted, until acknowledged. To cancel distress call, press **CANCEL** key. After receiving distress acknowledge (ref. to page 4) you can begin distress communication.

2. Distress Relay Call and General Receiving

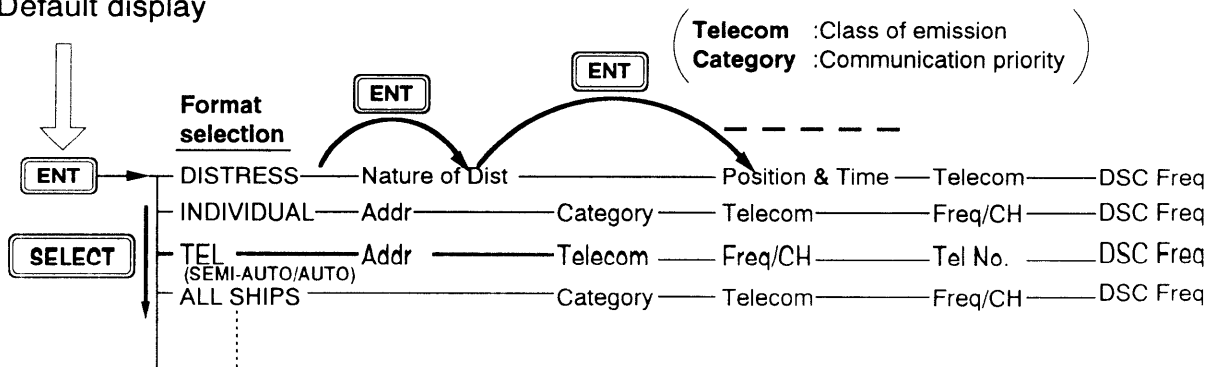
Item	Key Operation
Distress Relay Call	<p>Blinking when receiving the distress alert:</p> <p>*Received* DISTRESS CALL ID:</p> <p>To silence the alarm, press 3 key.</p> <p>ID of Ship in Distress</p> <p>To view the contents of distress alert, press ENT key successively.</p> <p>Acknowledge call<ACK> ACK RELAY END</p> <p>Select RELAY.</p> <p>SELECT → ENT (For individual call, enter other station ID then press ENT key.)</p> <p>ENT</p> <p>*Ready for calling* DIST RELAY ALL(SEL)</p> <p>Press CALL switch.</p> <p>Timer counts down. If the distress call is not acknowledged by coast station the distress message is automatically transmitted (relayed) to the coast station.</p> <p>You can relay (transmit) distress alert immediately in behalf of ship in distress which is not able to transmit by itself (MF/HF/VHF). In this case, select [SPC] (special) in the Format and then select either [RELAY-A] (All Ships) or [RELAY-S] (Individual). Refer to page 1-19a in the Operator's manual.</p>
Receiving Distress Acknowledge (DIST ACK) Signal (by ship in distress)	<p>*Received* DISTRESS ACK ID:</p> <p>To silence the alarm, press 3 key.</p> <p>ID of station transmitting "DIST ACK".</p> <p>To view the contents of distress alert, press ENT key successively.</p>
General Receiving	
After Transmitting Individual Call, Receiving Acknowledge Back (ACK BQ) Signal from Other Station	<p>*Received* ACK BQ ID:</p> <p>To silence the alarm, press 3 key. (You can begin voice communication.)</p> <p>Other Station ID</p> <p>Press the ENT key successively to view the contents of the receive message.</p>
Receiving Individual Call (ACK RQ) and Transmitting ACK BQ	<p>*Received* ACK RQ ID:</p> <p>To silence the alarm, press 3 key.</p> <p>Other Station ID</p> <p>Press the ENT key successively to verify the proposal from other station, then press the CALL switch to transmit ACK BQ signal.</p> <p>If AUTO ACK function is on, ACK BQ signal is automatically transmitted.</p>

3.Preparing and Transmitting a Message ①

Format	Key Operation
Individual Call (Routine) ↓ To ship or coast station	<p>Refer to the tree in the next section.</p> <p>(Default display) ⇒ ENT ⇒ (Format selection) ⇒ (Other station ID input) ⇒ (Category selection) ⇒ (Telecommand selection) ⇒ (Working frequency (ITU ch or Ship's position) or channel input) ⇒ (DSC frequency or channel input)</p> <div style="border: 1px solid black; padding: 5px; margin: 10px auto; width: fit-content;"> <p>*Ready for calling*</p> <p>INDIVIDUAL CALL</p> </div> <p style="text-align: center;">↓</p> <p style="text-align: center;">Press CALL switch to transmit message.</p> <div style="border: 1px solid black; padding: 5px; margin: 10px auto; width: fit-content;"> <p>*Wait for ack BQ*</p> <p style="text-align: right;">5.0 min</p> </div> <p>(Regulations prohibit calling to same station for five minutes. If acknowledge back (ACK BQ) signal is not received, you can retransmit by pressing the CALL switch.)</p>

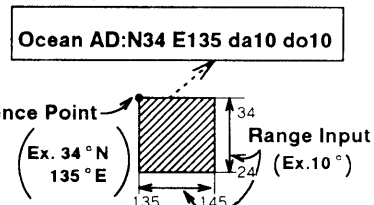
Sequence (Tree in CALL menu)

Default display



Similar to the procedure for preparing an INDIVIDUAL call you can prepare a message for **TELEPHONE, ALL SHIPS, GROUP or GEOGRAPHIC AREA** (select 「SPC」 and then [AREA] in order) call, by operating the **SELECT**, **BACK** and **ENT** keys and numerical keys.

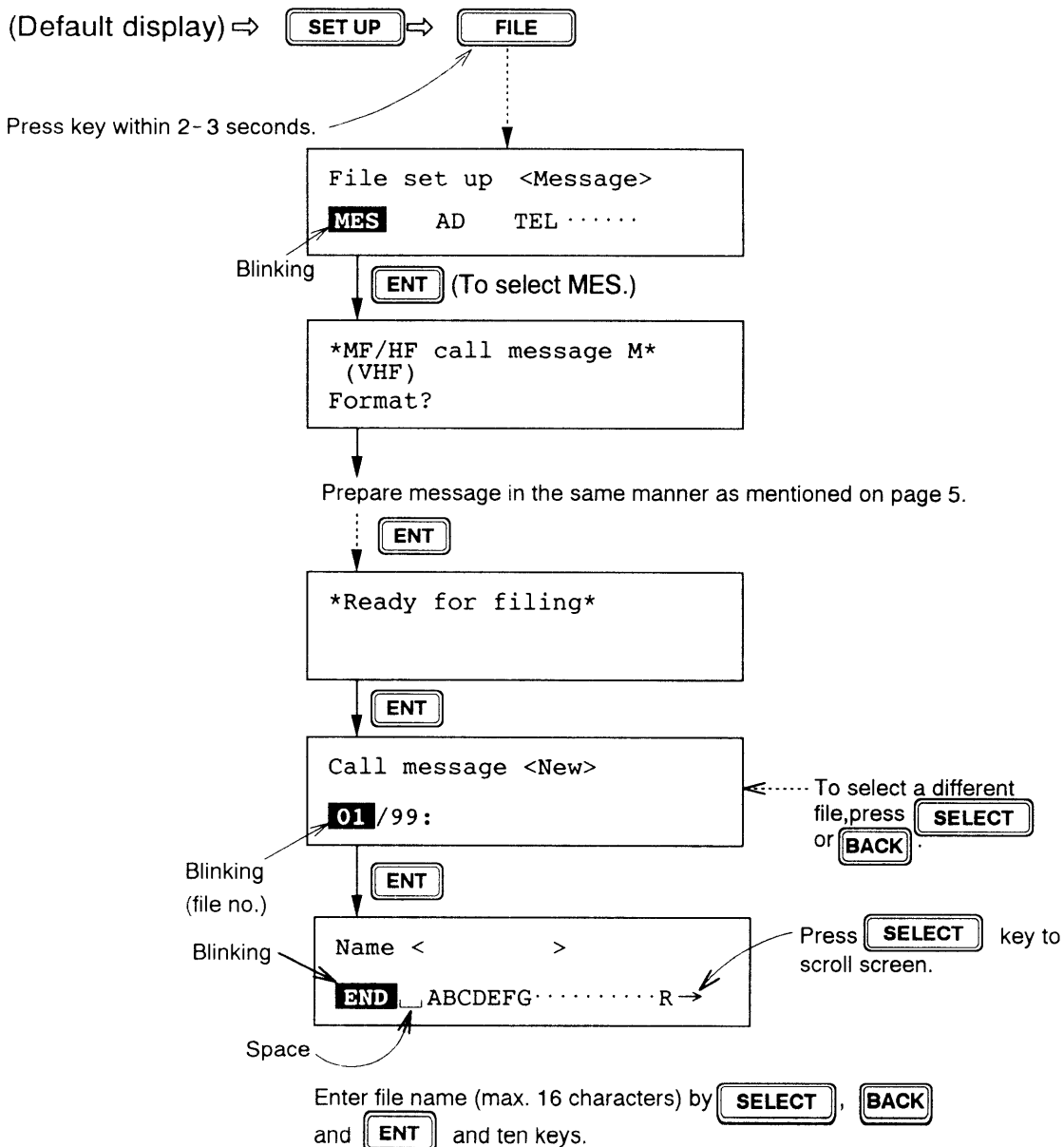
Note : For geographic area call, enter the reference point and range data in "Ocean AD" screen as shown in the right hand figure.



4. Preparing and Transmitting a Message ··· ②

·····Transmitting memory-stored message (except distress call)

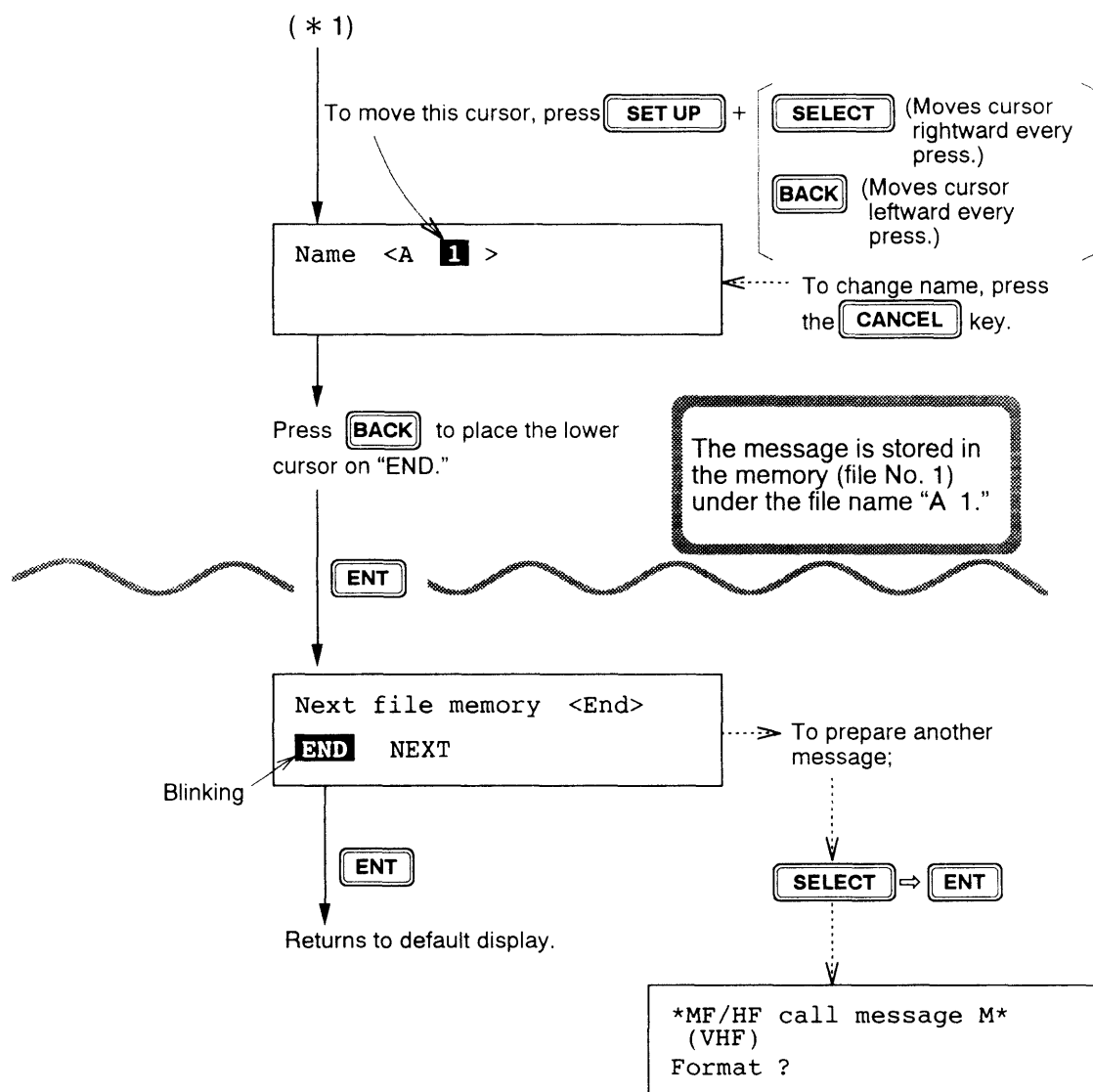
Saving a Message (Max.99 files)



Example File Name: A 1 space

- ① Press **SELECT** key twice to place the cursor on "A" and then press the **ENT** key.
- ② Press the **BACK** key once to place the cursor on "SPACE" and then press the **ENT** key.
- ③ Press the **1** key.

(* 1) continued on next page.



Transmitting a Message Registered

(Default display) ⇒ **FILE** ⇒ (File No.: 1~99)

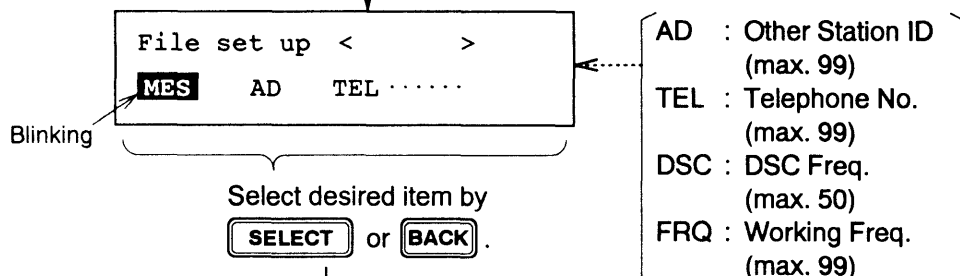
Press **CALL** switch.

5. Programming Other Station ID's, Telephone Nos., DSC Frequencies(MF/HF) and Working Frequencies(MF/HF)

Saving a File

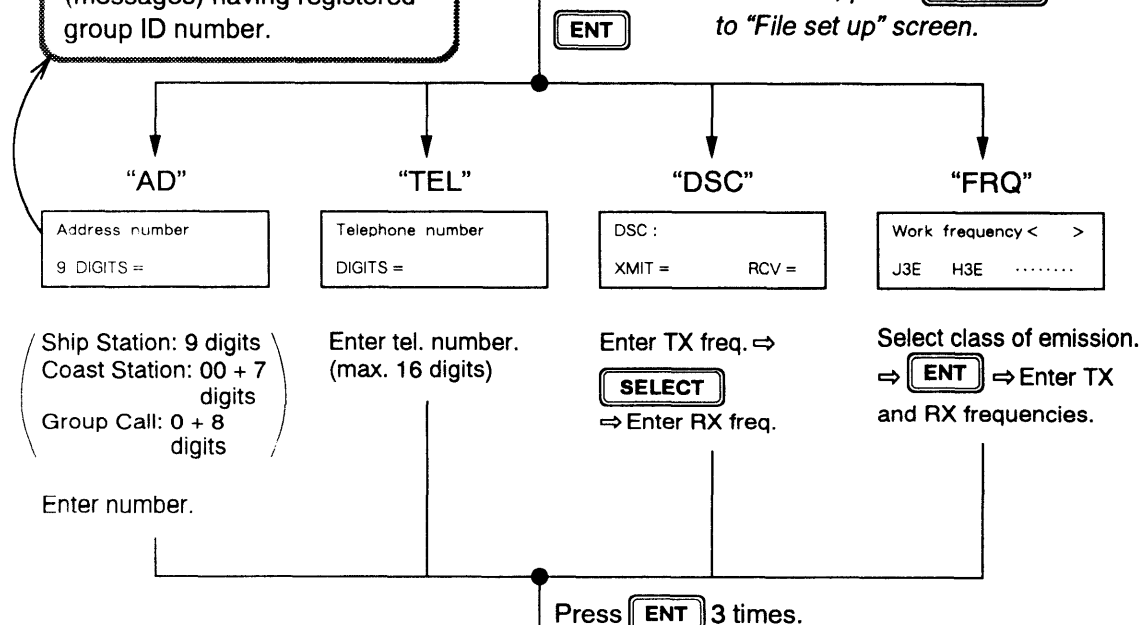
(Default display) ⇒ **SET UP** ⇒ **FILE**

Press key within 2-3 seconds.



By programming group ID number, you can also receive from other stations calls (messages) having registered group ID number.

NOTE: Items marked "DIS" (DISTRESS) and "I" (Own Ship ID) cannot be changed. If selected, press **CANCEL** to return to "File set up" screen.



Name < >

END _ ABCDEFG

Assign file name by **SELECT**, **BACK** and **ENT** and numeric keys. (Refer to page 6.)

After assigning file name, place cursor on "END" then press the **ENT** key.

Retrieving a File

To retrieve a file, press the **FILE** key on a display where the blinking question mark appears.

(Example)

1. Retrieving Other Station ID

Individual Call

Address ? Blinking

FILE

Address file < >
Coast AD Ship AD

Select one. (Example: Coast AD)

ENT

Coast AD < > ①
01/99:

File no. Press **SELECT** or **BACK** to select ID number.

ENT

(ID number selected is input.)

2. Retrieving Working Frequency

Individual Call

Freq ? Blinking

FILE

Work T/R < > ①
01/99:

Press **SELECT** or **BACK** to select TX and RX frequencies.

ENT

(Working frequencies selected are input.)

Note: (Display ①) ⇒

FILE

A1/ZZ: (alphabetical order)

File No.

FILE

(numeric order)

(Each press of the **FILE** key alternates numeric and alphabet prefixed file number.)

6.Setting Up

(Default display) ⇒ **SET UP** ⇒

Press desired key within 2-3 seconds.

Key Operation		Function
SET UP ⇒ ("SET UP" appears on the LCD.)	POSITION 1	For manual entry of ship's position and time.
	XMITR 4	Selects VHF receiver (CH70 or VHF).
	SCAN 5	Sets scan frequency. (Up to six frequencies can be programmed.)
	AUTO ACK 6	Selects "ABLE" (able to comply) or "UNABLE" (unable to comply), for reply to other station's proposal.
	PRINT 0	Automatic or manual printing. (Auto:Automatic printing of transmitted and received messages, Man:Press 0 key to print out.)
	VOLUME 7	Turns key response beep and receive alarm on or off and selects distress and urgency alarm tone.
	FILE	Registers transmit messages, other station IDs, working/DSC frequencies, etc. It also displays distress frequencies and own ship's ID. (Refer to pages 6, 8 and 13.)

LCD display

→ POSITION (manual input of ship's position and time)

→ VHF RECEIVER

- 1. CH70 (with CH70 pcb)
- 2. VHF

→ SCAN SET UP

- 1. F1(DSC T/R setting)
- 2. F2(DSC T/R setting)
- 3. F3(DSC T/R setting)
- 4. F4(DSC T/R setting)
- 5. F5(DSC T/R setting)
- 6. F6(DSC T/R setting)
- 7. END

To ①

→ PRINT OUT

- 1. AUTO
- 2. MANU

→ SOUND SET UP

- 1. TYPE ——— 0 - 9
(distress and urgency alarm tone)
- 2. KEY ——— 1. ON
 2. OFF
- 3. ALARM ——— 1. ON
 2. OFF

①: COMPLY STATUS

- 1. UNABLE ——— Reason
 NR to
 (unable to comply) MOD
- 2. ABLE
 (able to comply)

Select item desired by

SELECT , **BACK** and **ENT**.

7. Receive Message Memory

(Distress:50
others:50)

All received messages are automatically saved to the memory and filed according to category, DISTRESS or ORDINARY. When you want to view the contents;

(Default display) ⇒ **SELECT** (Press twice to select RCV menu.) ⇒ **ENT**

Received call < >
DISTRESS **ORDINARY**

For "ORDINARY" log;

ENT
Ordinary log No. 1 50>

Log no. (page no.)

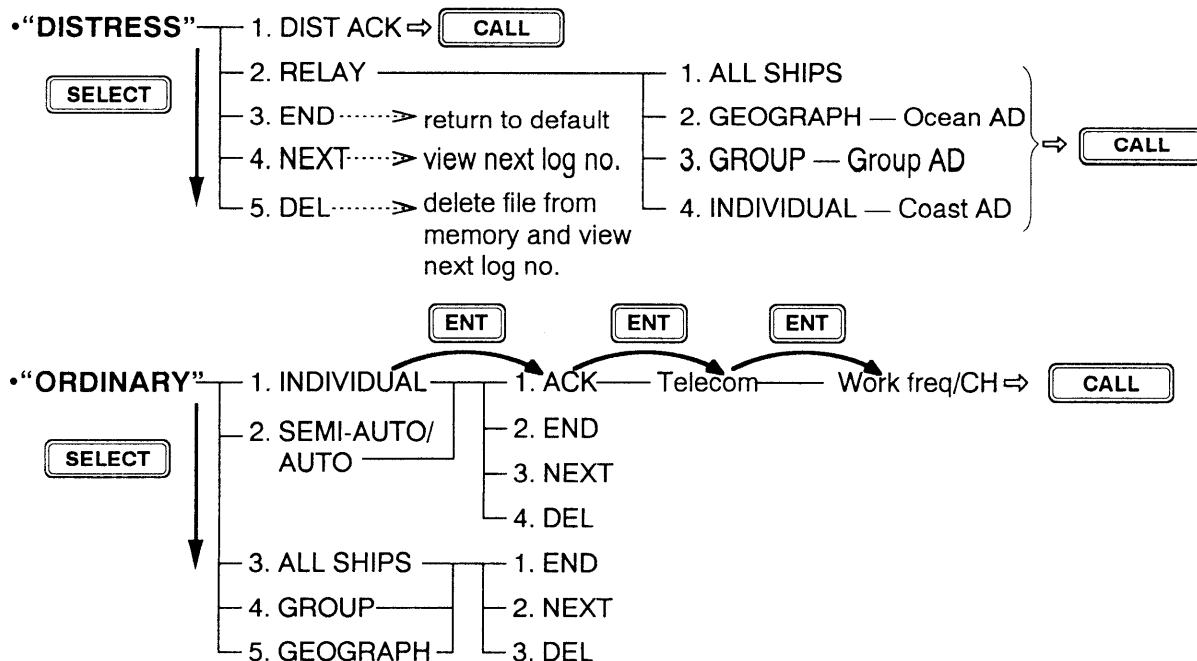
Format (*)
Date received

SELECT : Selects next log no.
BACK : Selects previous log no.

(*) If own ship did not transmit "ACK BQ" signal a blinking sharp sign (#) appears.

To view contents of message, press the **ENT** key successively.

Note that acknowledge call and distress relay call can be done while in the RCV menu. The "DISTRESS" and "ORDINARY" menu trees are shown below. Calls can be made in either menu by pressing the **CALL** switch.

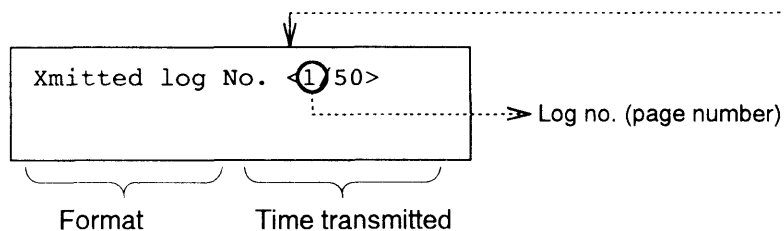


8. Transmit Message Memory

(Max.50)

All transmitted messages are automatically saved to the memory. When you want to view the contents of a transmitted message;

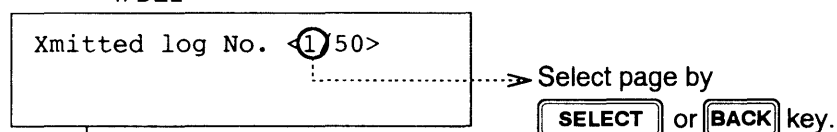
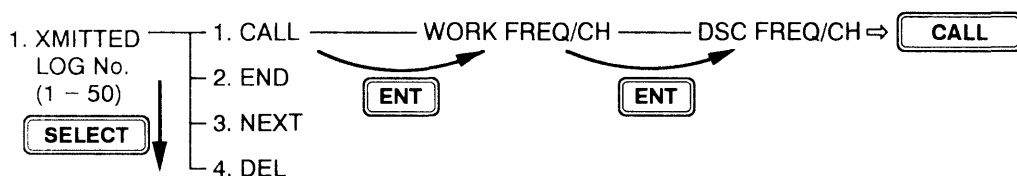
(Default display) ⇒ **SELECT** (Press three times to select XMT menu.) ⇒ **ENT**



(**SELECT** : Selects next log no.
BACK : Selects previous log no.)

To view contents of message press the **ENT** key successively.

You can make calls except distress while in the XMT menu.



ENT

(Example: INDIVIDUAL)

AD:	Routine
J3E TP	No infor

ENT

(To change working and DSC frequencies, press the **SELECT** key.)

ENT

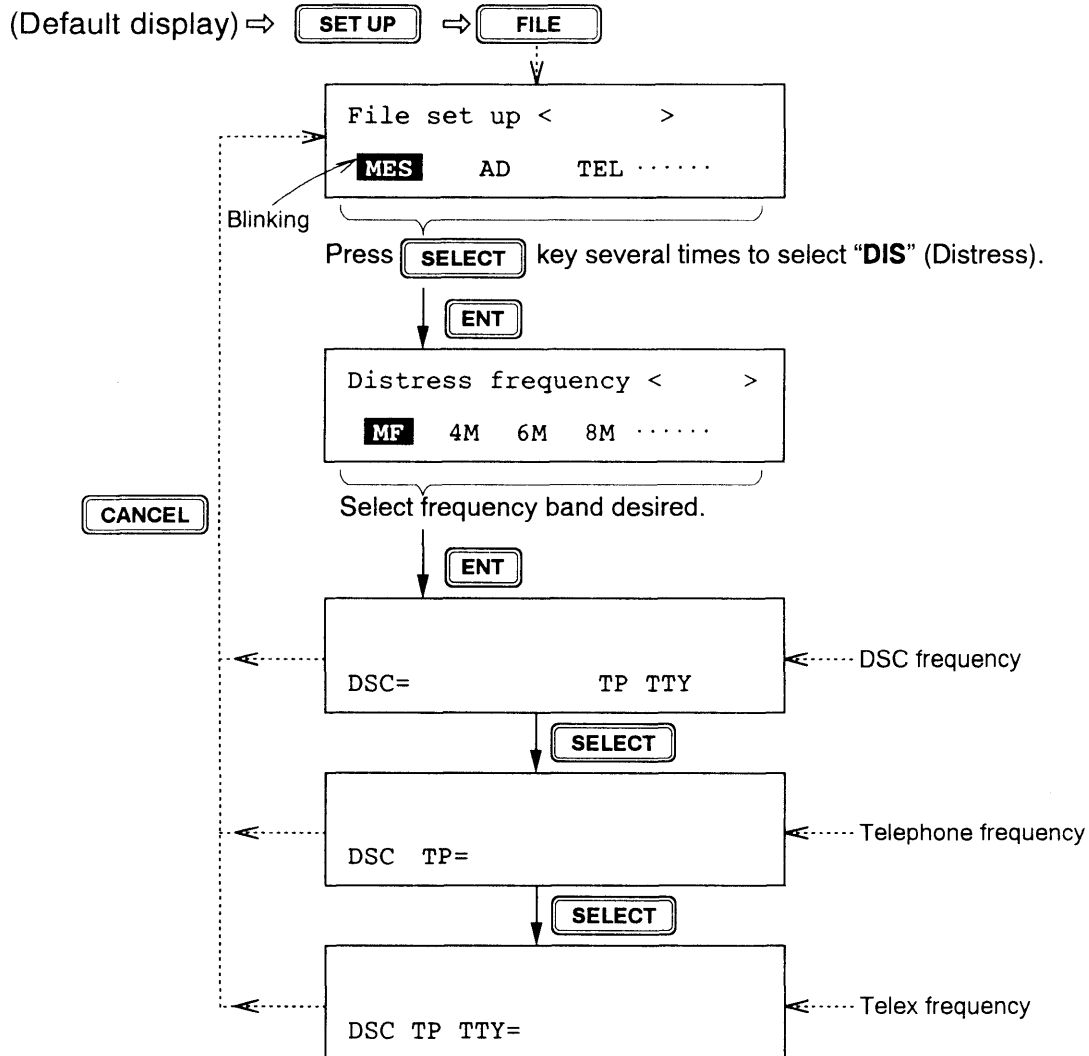
Ready for calling

INDIVIDUAL CALL

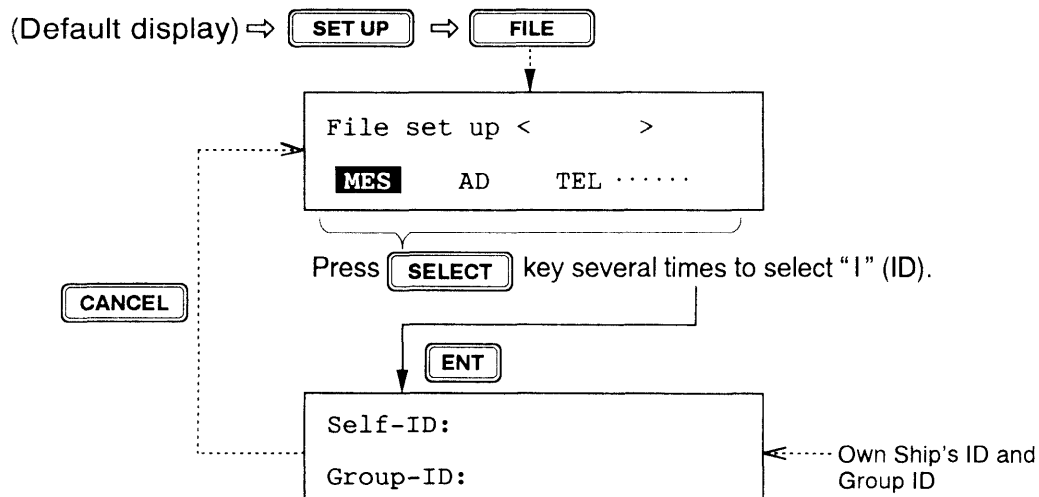
Press **CALL** switch.

9. Displaying Distress Frequencies and Own Ship's ID.

Distress Frequencies (DSC, Telephone and Telex)

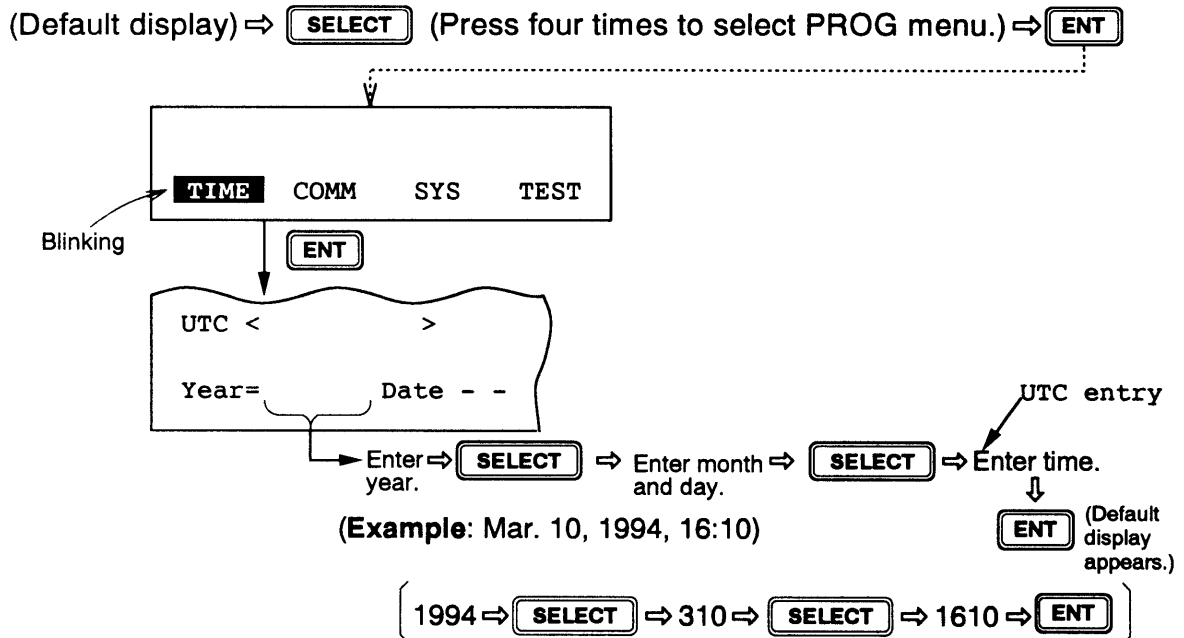


Own Ship's ID

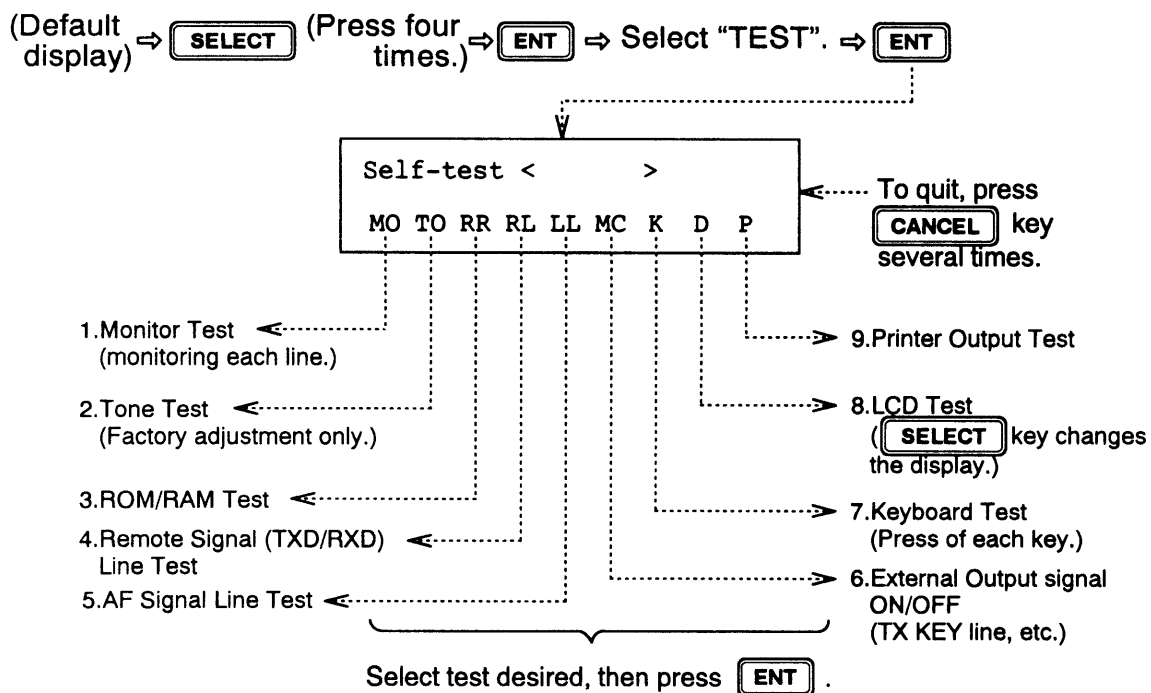


10. Other Functions

Setting the Internal Clock (Time)



Self-test



Note : To execute the tests *except* for items 1, 7 and 8, press the **TEST** switch. To stop, press the **TEST** switch again. (Tone Test is not selectable in normal operation.)

(Example) ROM/RAM Test

1. ROM
2. RAM
3. EE-ROM
- ⇒ Select desired test then press **TEST**.
(To quit, press **TEST**.)

950810K0 PUB.NO.0SE-55220-H
(9405,TOSA) DSC-5/5R (V.40)



* 0 0 0 8 0 2 1 6 0 0 0 *