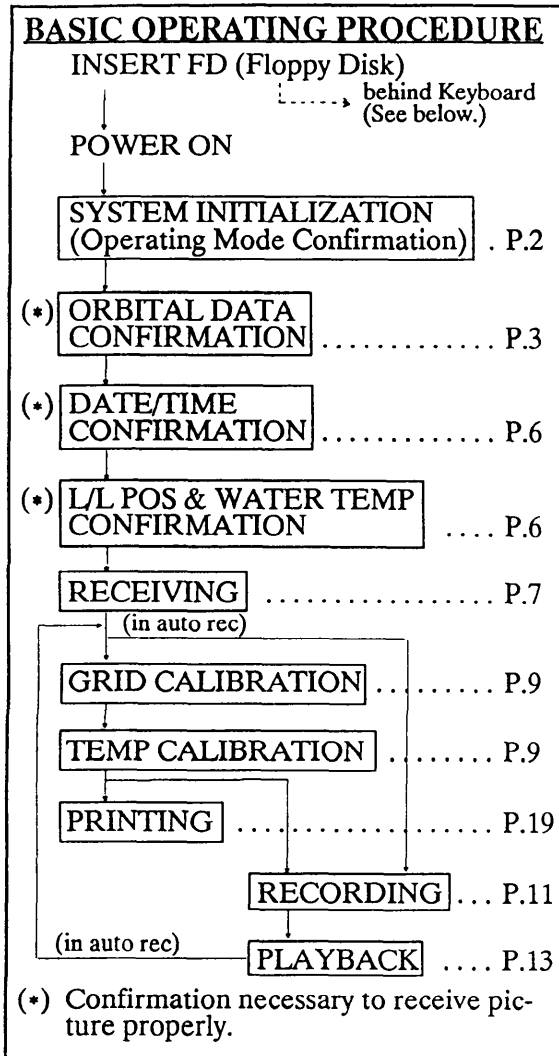


OPERATOR'S GUIDE



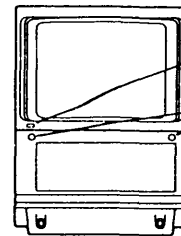
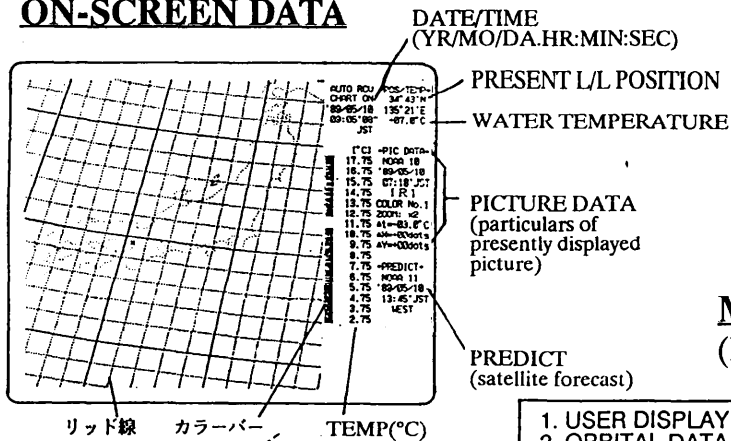
DATA ANALYSIS

- PICTURE SELECTION P.13
- PICTURE DISPOSAL P.14
- SETTING TEMPERATURE RANGE P.14
- COLOR BAR SELECTION P.15
- PICTURE PROCESSING (INT. REJ/TEMP. CONTOUR) P.17
- AUTO PRINT MODE SETTING P.17
- CHANGING PICTURE DISPLAY MODE P.19

OTHER FUNCTIONS

- PLOTTING CHART/EVENT DATA P.20
- SAVING/LOADING CHART DATA P.21
- READING WATER TEMP & L/L DATA OF CURSOR POS. P.21
- ERASING ALL CMT DATA (FORMATTING CMT) P.22
- FORMATTING FLOPPY DISK (FD) P.22
- ENTERING NEW SATELLITE DATA/SYSTEM SAVE, ETC. P.23

ON-SCREEN DATA



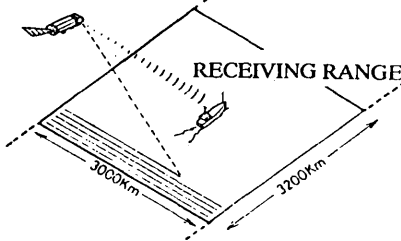
POWER SWITCH

Loosen screws and flip down Keyboard to access FD drive and CMT drive.

MENU

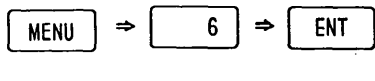
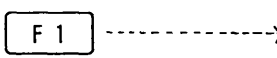
(Press **MENU** key to display menu.)

- | | |
|-------------------------|-------------------------------------|
| 1. USER DISPLAY | 11. RECEIVE PREDICT |
| 2. ORBITAL DATA | 12. |
| 3. DATE/TIME | 13. FD SAVE/LOAD |
| 4. POSITION/TEMPERATURE | 14. TEMPERATURE CALIBRATION SETTING |
| 5. CMT RECORD | 15. |
| 6. CMT PLAYBACK | 16. |
| 7. CHART DATA | 17. |
| 8. EVENT DATA | 18. RTTY RECEIVE CHECK |
| 9. USER COLOR | 19. |
| 10. PICTURE PROCESSING | 20. SYSTEM INITIALIZATION |

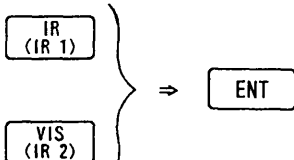


PICTURE PLAYBACK

(Avoid playback when the receiving time is approaching, provided you wish to receive the data.)

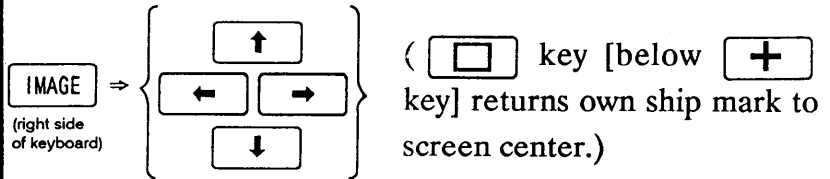
PREPARATION	Insert cassette or FD containing the picture to be played back.																						
CALL UP CMT PLAYBACK MENU	<p>(1) <u>Cassette Tape</u></p> <p>MENU ⇒ 6 ⇒ ENT</p>  <p>FILE LIST FILE No. □</p>																						
TO CONDUCT FILE SEARCH	<p>F 1</p>  <table border="1" data-bbox="893 759 1412 873"> <thead> <tr> <th colspan="4">FILE LIST</th> </tr> </thead> <tbody> <tr> <td>1)</td> <td>' 88/12/03 13:33'</td> <td>IR</td> <td>2)</td> <td>' 88/12/03 13:33'</td> <td>VIS</td> </tr> <tr> <td>4)</td> <td>' 88/12/03 18:16'</td> <td>VIS</td> <td>5)</td> <td>' / / / / / / / /</td> <td>' / / / / / / / /</td> </tr> <tr> <td>7)</td> <td>' / / / / / / / /</td> <td>' / / / / / / / /</td> <td>8)</td> <td>' / / / / / / / /</td> <td>' / / / / / / / /</td> </tr> </tbody> </table> <p>FILE LIST FILE No. □</p>	FILE LIST				1)	' 88/12/03 13:33'	IR	2)	' 88/12/03 13:33'	VIS	4)	' 88/12/03 18:16'	VIS	5)	' / / / / / / / /	' / / / / / / / /	7)	' / / / / / / / /	' / / / / / / / /	8)	' / / / / / / / /	' / / / / / / / /
FILE LIST																							
1)	' 88/12/03 13:33'	IR	2)	' 88/12/03 13:33'	VIS																		
4)	' 88/12/03 18:16'	VIS	5)	' / / / / / / / /	' / / / / / / / /																		
7)	' / / / / / / / /	' / / / / / / / /	8)	' / / / / / / / /	' / / / / / / / /																		
SPECIFY FILE NUMBER	<p>Specify File No. ⇒ ENT (VIS: Visible-light, IR: Infrared)</p> <p>[FILE PLAYBACK] ⇒ [PICTURE PROCESSING] ⇒ [GRID CALCULATION]</p>																						
TO LOAD FD	<p>(2) <u>FD</u></p> <p>MENU ⇒ 1 ⇒ 3 ⇒ ENT ⇒ F 2</p>																						
<p>(Messages displayed during play back process)</p> <p>If, for example, file no.4 ('88/12/03 18:16', visible-light picture) is selected, it is transferred to the memory bank which is displayed at the right-hand side of the screen. At that time, existing chart/event data in the memory is replaced with those of picture to be played back.</p>																							

PICTURE SELECTION

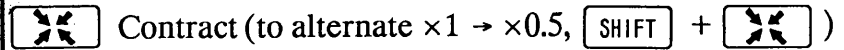
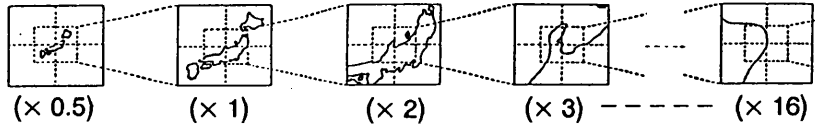
INFRARED	
VISIBLE-LIGHT	

PICTURE DISPOSAL

SHIFTING



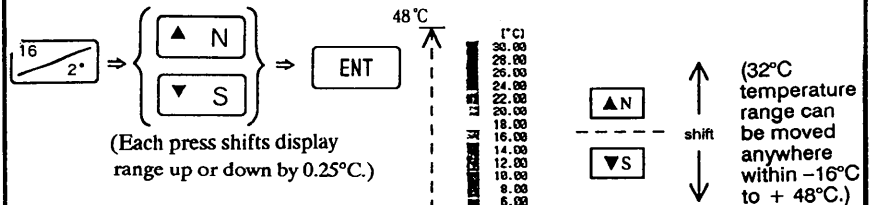
**ENLARGING/
CONTRACTING**



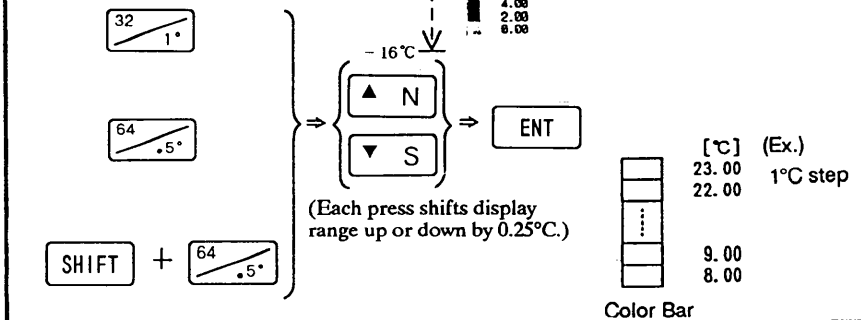
NOTE: To enlarge a specific area, place the cross cursor on the area desired, then press . (Cross cursor not operative in $\times 0.5$ zoom.)
To turn cross cursor off, press key (right side of keyboard).

SETTING TEMPERATURE RANGE (Infrared picture)

SPECIFY BASIC RANGE
(2°C step: 32°C width)



SPECIFY ENHANCEMENT RANGE
1°C step (16°C width)



0.5°C step (8°C width)

0.25°C step (4°C width)

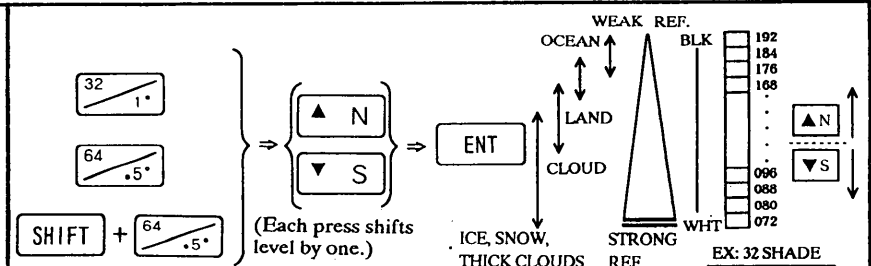
VISIBLE-LIGHT PICTURE SHADE RANGE

ENHANCEMENT SHADE RANGE

32 SHADES

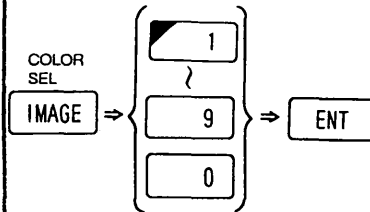
64 SHADES

128 SHADES



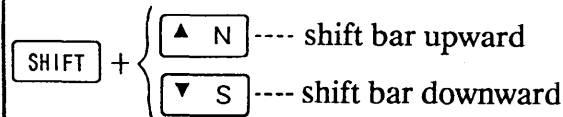
COLOR BAR SELECTION

PICTURE



1. Cool-to-warm color (1)
 2. Complementary color (1)
 3. Complementary color (2)
 4. Cool-to-warm color (2)
 5. White-to-yellow (one shade only)-to-gray shade
 6. White-to-gray shade
 7. White-to-gray-to-blue color
 8. Blue-to-yellow (one shade only)-to-reddish brown color
 9. Blue-to-light blue, green, yellow, brown, and red-to-reddish brown color
 0. User color
- (For user color, see below.)

Shifting color bar



GRID

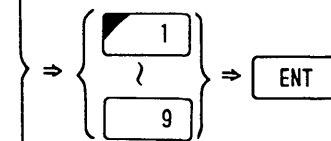
GRID

CHART/EVENT/
OWN SHIP (× mark)

CHART
EVENT

CURSOR (+)

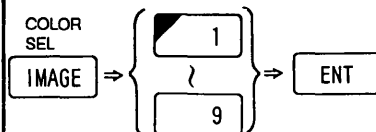
(left side
of keyboard)



- | | | |
|--------|--------|--------|
| 1: RED | 2: GRN | 3: BLU |
| 4: WHT | 5: YEL | 6: PPL |
| 7: CYN | 8: BLK | 9: GRY |

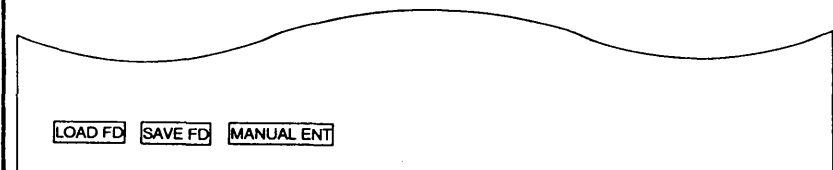
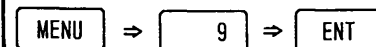
USER COLOR BAR SETTING

COLOR SELECTION

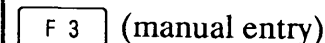


(Select color which best approximates picture color arrangement.)

CALL UP USER
COLOR MENU



TO GO TO USER
COLOR SETTING
SCREEN



MIXING PRIMARY COLORS (R/G/B)

① This arrow points to the color whose primary colors presently can be mixed.

These keys shift the arrow. { UP- -- DOWN-

② Numeral keys 1~6 are used to select the degree of mixing of primary colors (R,G,B).

→ R (changes degree of mixing of red color)

→ G (changes degree of mixing of green color)

→ B (changes degree of mixing of blue color)

Arrow points to primary color which presently can be mixed by operating corresponding numeral keys (1~6). (EX.) Pressing of key moves the arrow on the "G" mark, then strength of green color can be varied with and keys.

If R, G, B levels are 0, 0, 0 (or 15, 15, 15), the color becomes black (or white).

TO SAVE COLOR BAR

(Color bar is registered under the number "0".)

TO DISPLAY SAVED COLOR BAR

COLOR SEL

⇒ ⇒

TO SAVE TO FD

⇒ ⇒ ⇒

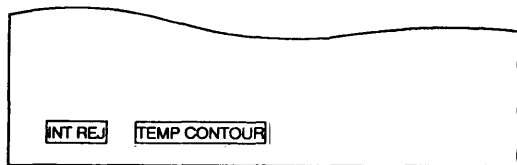
TO LOAD FD

⇒ ⇒ ⇒

PICTURE PROCESSING (INT. REJ/TEMP. CONTOUR)

CALL UP PICTURE PROCESSING MENU

MENU ⇒ 1 ⇒ 0 ⇒ ENT

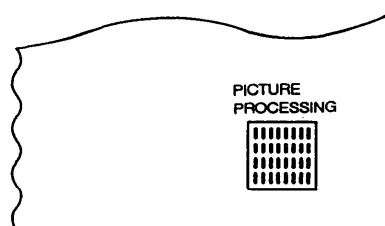


TO REDUCE INTERFERENCE

F 1 -----> On-screen interference is reduced.
(× 0.5 zoom Approx. 10 min.)
(others 2 to 3 min.)

TO PAINT TEMPERATURE CONTOUR

F 2 -----> Temperature contour is painted using presently selected temperature interval.



AUTO PRINT MODE SETTING

(After receiving is completed, the picture is printed out automatically [in 10 different types at max.] if auto print mode is turned on.)

CALL UP SYSTEM INITIALIZATION MENU

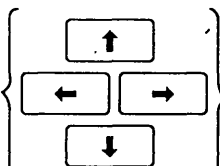
MENU ⇒ 2 ⇒ 0 ⇒ ENT

TO SET AUTO PRINT MODE
(maximum 10 pages;
1/10~10/10)

F 2

1/10 PAGE	
PRINT	ON <input checked="" type="checkbox"/> OFF
NO. OF PRINTS	1
PICTURE	<u>IR</u> VIS
	STEP 2.0 1.0 0.5 0.25 °C
	CTR TEMP +16.0 °C (1.0~33.0 °C)
CTR OF PIC	<u>OWN SHIP</u> LAT/LON
	LAT 00° 00' N
	LON 000° 00' E
ZOOM	x0.5 1 2 3 4 5 -----16
COLOR BAR	No.6
PIC PROC	ON <u>OFF</u>
	INT REJ TEMP CONTOUR
	<input type="checkbox"/> <input checked="" type="checkbox"/>
	PRCDNG PAGE NEXT PAGE SAVE FD LOAD FD

SET EACH MODE



Locate the cursor intersection on the mode desired, by operating the arrow keys.

Selected items are underlined.

NOTE: 1. Enter no. of prints, center temperature and latitude and longitude data by using numeral keys.

2. When "VIS" is selected.

Time range

Visible-light pictures received within this time range (daylight hours, ex. 09:00~16:00) are printed.

Range of center value (shade setting-dependent)

PICTURE IR VIS (00:00~00:00)
 SHADE 16 32 64 128
 CENTER 136 (136)

3. When "picture processing" is selected.

Press ;

PIC PRCC ON OFF
 INT REJ TEMP CONTOUR
 PRCDNG PAGE NEXT PAGE SAVE FD LOAD FD ON/OFF

Function key (ON/OFF) turns the presently selected picture processing function (Int. Rej or Temp. contour) on and off. (Interference rejection and temperature contour can be turned on concurrently.)

Once the picture processing is turned on, the picture processed can not be restored to its original conditions.

(EX.)	Page	Setting	Picture on the screen
	1/10	INT REJ: ON	→ INT REJ: ON
	2/10	INT REJ: OFF	→ INT REJ: ON

If interference rejection is set to "ON" on page 2/10 as well, interference rejection is executed doubly on that page.

4. When several pages are set for "PRINT ON", the finally displayed picture is set up according to the conditions set for the highest page number.

(Ex.) 1/10, 2/10, 4/10 ----- "PRINT" : ON

↓
 The finally displayed picture is set up in accordance with the conditions set for page 4/10.

TO GO TO NEXT PAGE

-----> Setting procedure is the same as that for the page 1/10.

TO GO TO PRECEDING PAGE

TO SAVE TO FD

(pages 1/10 to 10/10)

TO LOAD FD

TO RETURN CONTROL TO LAST USED DISPLAY SCREEN

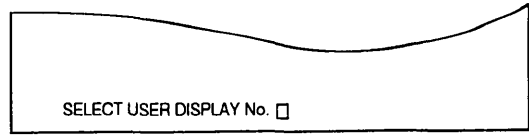
⇒ ⇒

CHANGING PICTURE DISPLAY MODE

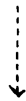
CALL UP USER
DISPLAY MENU

MENU ⇒ ⇒ ENT

SELECT DISPLAY
MODE



Specify number (1~10) ⇒ ENT



Page number of Auto Print Mode

The presently displayed picture is immediately set up according to the conditions of the page number selected.

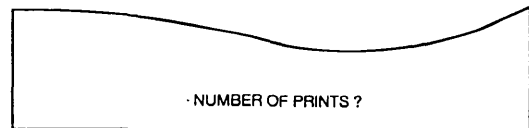
PRINTING

CONFIRMATION

- (1) Printing paper and ink sheet are correctly set.
- (2) Printer and printer I/F are turned on.
- (3) No printer error messages are displayed.

STARTING PRINTING

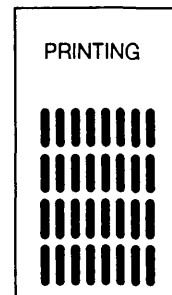
PRINT ----->



Specify no. of prints (~)

⇒ ENT ----->

(For one (1) print,
simply hit ENT .)



Transmission time of 32 bit data is counted down on-screen, and takes approx. 4 min to complete. To cancel printing, press [F6].

- NOTE: 1. All keys except for (cancels printing) are inoperative during transmission.
2. After transmission is completed, printing is completed in;

SU - 182
2.5 min.

SU - 806
4.5 min.

PLOTTING CHART/EVENT DATA

- 1) CHART DATA: Save chart data (max. 1024 pts.) onto FD.
- 2) EVENT DATA: Such as current rip, typhoon, etc. (max. 200pts.)

BEFORE PLOTTING CHART DATA, ERASE CHART DATA STORED IN THE MEMORY.

MENU ⇒ 7 ⇒ ENT

LOAD FD SAVE FD MANUAL ENT ERASE CHART

F 4 (Erase chart)

(1) Input by L/L Position

Prior to entering L/L data, record it in a log.

MENU ⇒ 7 ⇒ ENT ⇒ F 3

[CHART PLOT]
 34° 40' N ___' ___' ___'
 135° 20' E ___' ___' ___'

Entry of data must begin within 15 sec., otherwise the screen will be erased.

MENU ⇒ 8 ⇒ ENT

[EVENT PLOT]
 34° 40' N ___' ___' ___'
 135° 20' E ___' ___' ___'

Entry of data must begin within 15 sec., otherwise the screen will be erased.

PREPARATION

CHART DATA

EVENT DATA

ENTER CO-ORDINATES

Latitude data → ENT

Longitude data → ENT

Buzzer is released every input.

TO EXIT

ESC ⇒ ESC (For chart data plotting, hit ESC three times.)

PREPARATION

CALL UP CROSS CURSOR

CHART (Memory)

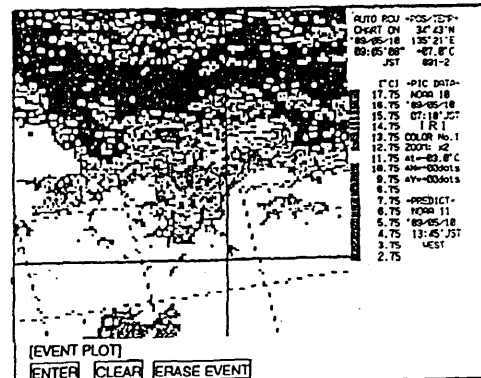
EVENT (Memory)

↓

TO ERASE ALL EVENT DATA

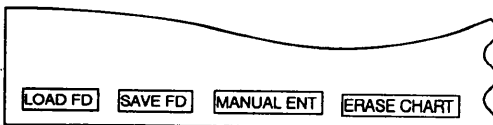
F 3 (Erase event)

(2) Input by Cross Cursor/Partial Correction (erasure) (Cross cursor not operative in × 0.5 zoom.) Enlarge desired area. (See page 14.)

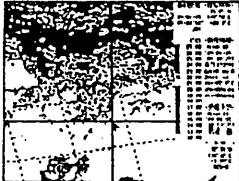


TO EXIT	INPUT	Locate the cross cursor on the desired L/L pos. -----> <input type="button" value="F 1"/>
	ERASE	Locate the cross cursor on the desired L/L pos. -----> <input type="button" value="F 2"/>
		<input type="button" value="ESC"/>

SAVING/LOADING CHART DATA

PREPARATION	Insert FD onto which chart data is to be saved.
CALL UP CHART DATA MENU	<p><input type="button" value="MENU"/> ⇒ <input type="text" value="7"/> ⇒ <input type="button" value="ENT"/> -----></p> 
SAVE TO FD	<p><input type="button" value="F 2"/> (Plotted chart data is saved.)</p> <p>NOTE: To load data from a FD, insert FD containing chart data to be loaded, then press <input type="button" value="MENU"/> ⇒ <input type="text" value="7"/> ⇒ <input type="button" value="ENT"/> ⇒ <input type="button" value="F 1"/>.</p>

READING WATER TEMP. & L/L DATA OF CROSS CURSOR POSITION (inoperative in × 0.5 zoom)

LOCATE CURSOR ON L/L POSITION DESIRED	<p><input type="button" value="+"/> ⇒ { <input type="button" value="↑"/> <input type="button" value="←"/> <input type="button" value="→"/> <input type="button" value="↓"/> }</p> <p>To erase the cross cursor, press <input type="button" value="IMAGE"/> (above <input type="button" value="+"/> key).</p> 
	<p>The L/L position of the cross cursor intersection and water temperature there are displayed at the lower right-hand corner of the screen.</p> <p>NOTE: To return the cross cursor to the screen center, press <input type="button" value="+"/> key again.</p>

ERASING ALL CMT DATA (FORMATTING CMT)

PREPARATION

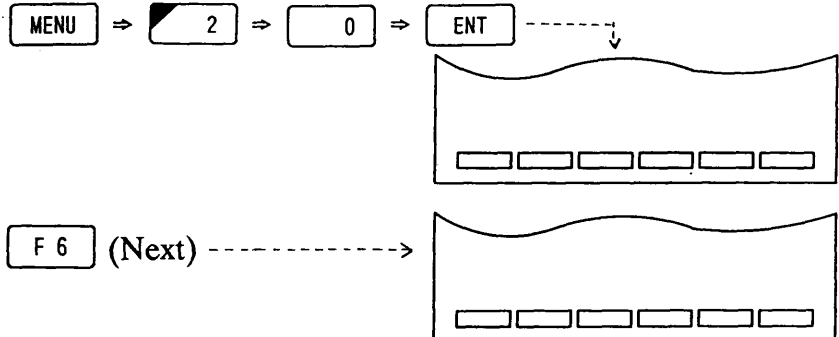
CALL UP SYSTEM
INITIALIZATION
MENU

GO TO NEXT PAGE

TO FORMAT/ERASE
CMT

TO RETURN
CONTROL TO LAST
USED DISPLAY
SCREEN

Insert CMT to be erased/formatted. (CMTs equipped with the unit are pre-formatted.)



F 2 ⇒ ENT

(Data stored on the tape, if any,
will be erased.)

ESC ⇒ ESC

FORMATTING FLOPPY DISK (FD)

PREPARATION

Insert FD to be formatted. (FDs equipped with the unit are pre-formatted.)

There are three ways to format a floppy disk:

1. "System save" function (Ref to page 23)
2. "Copy from FD to FD" function (Ref to page 24)
3. "Floppy disk drive test" in self diagnosis test

MENU ⇒ 2 ⇒ 0 ⇒ ENT ⇒ F 6 ⇒ F 5

```
SU - 18   TEST PROGRAM           0850 - 0122 - x x x
< 1 > MEMORY
< 2 > ACRTC
< 3 > DTY
< 4 > RFC
< 5 >
< 6 > CMT
  . . .
  . . .

No. 
```

5 ⇒ ENT ⇒ ENT

ENTERING NEW SATELLITE DATA

CALL UP ORBITAL
DATA MENU

SATELLITE UPDATE

TO RETURN
CONTROL TO LAST
USED DISPLAY
SCREEN

(1) With all-wave receiver

MENU ⇒ 2 ⇒ ENT

F 5 ⇒ ENT

(Spare satellite data is
entered into system A
or B.)

ESC ⇒ ESC

ORBITAL DATA				
SYSTEM A	SYSTEM B	SPARE SAT	FD A	FD B
• 0044 10	0044 11	0044 12	0044 10	0044 11
F 137.50 MHz	F 137.42 MHz	F 137.50 MHz	F 137.50 MHz	F 137.42 MHz
T *10/17/93	T *10/17/93	T *11/23/94	T *10/17/93	T *10/17/93
0103*5L 016	0103*5L 016	0103*5L 016	0103*5L 016	0103*5L 016
C 017L 00	C 017L 00	C 017L 00	C 017L 00	C 017L 00

COMMENT DSPL SAVE FD -LOAD FD MANUAL ENT SAT UPDATE

(2) Without all-wave receiver

Enter new data, as directed on page 4, making sure to register the number of the new satellite.

SYSTEM SAVE

CALL UP SYSTEM
INITIALIZATION
MENU

CALL UP SYSTEM
SAVE MENU

TO SAVE SYSTEM
DATA TO FD

TO RETURN
CONTROL TO LAST
USED DISPLAY
SCREEN

If you mistakenly initialize a floppy disk containing system program, orbital data, etc., those data in the memory of the unit can be saved to FD by using this function, keeping the power on. Note that once the power is turned off, system program data can not be retrieved to the FD.

MENU ⇒ 2 ⇒ 0 ⇒ ENT

F 6 ⇒ F 3

ERASE IR BUFFER DATA ? YES : ENT
ERASE FD. NO : ESC

ENT (Data in IR memory is erased.)

ESC ⇒ ESC

COPY FROM FLOPPY DISK(FD) TO FD

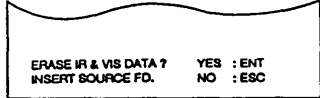
PREPARATION

Insert a source FD containing system data (system program, orbital data, etc.).

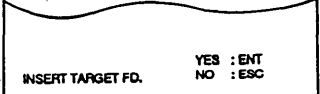
CALL UP SYSTEM INITIALIZATION MENU

MENU ⇒ ⇒ ⇒ ENT

CALL UP COPY MENU


F 6 ⇒ F 4


LOAD FD DATA TO MEMORIES

ENT (Data in IR/VIS memories are erased.)
 ↓
 "LOADING FD" displayed


Insert a target FD.

SAVE DATA TO A TARGET FD

ENT
 ↓
 "SAVING FD" displayed


RECOPY TO ANOTHER FD

Insert another target FD. ENT

TO FINISH COPY

ESC (To return control to last used display screen, press
 ESC three times.)

TEMPERATURE DISPLAY (Infrared picture)

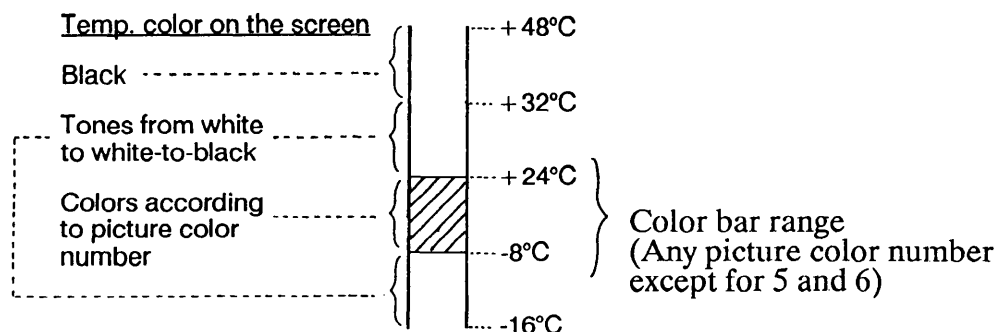
This unit displays temperature colors from -16°C to +48°C. Temperature display within above range is as follows.

-16°C to +32°C : Tones from white to white-to-black
 +32°C to +48°C : Black

NOTE: Temperatures lower than -16°C and higher than +48°C are displayed in white and black, respectively.

However, when a color bar range (16 colored gradation) is selected, the selected range is displayed in colors according to the picture color number and the other ranges (outside the range of the color bar) are shown in tones and black as mentioned above.

(EX.) In case that color bar range is -8°C to +24°C.



NOTE: Only when picture color number 5 or 6 is selected, temperatures outside the range of the color bar are shown in black and white (not tones).

ENTERING DATA (orbital data, date & time, L/L position, etc.)

Press **ENT** after each line of data entered.

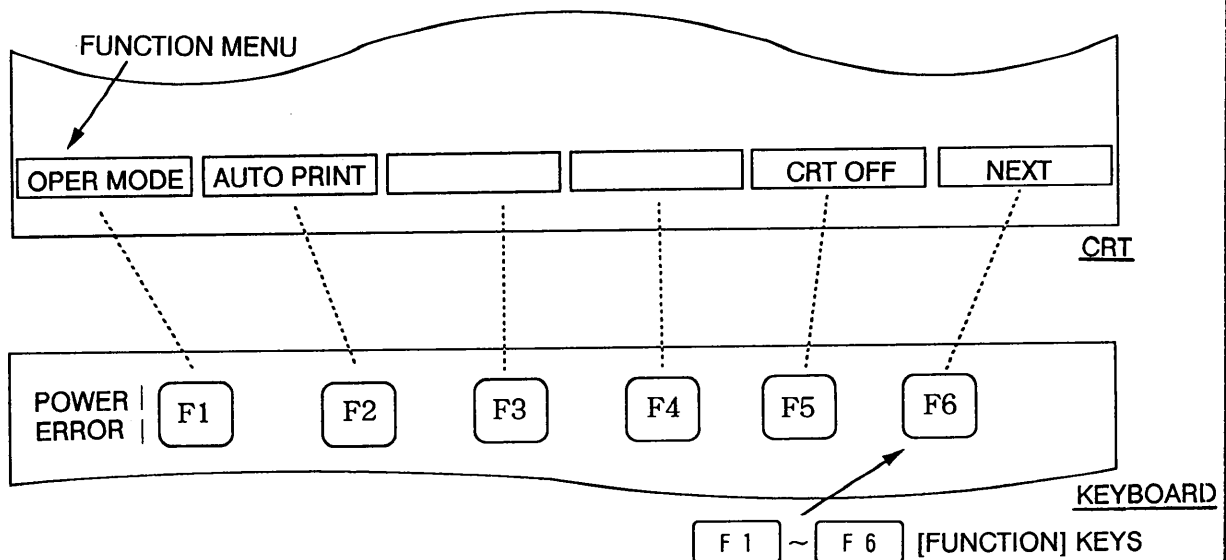
Press **ENT** to retain presently used data.

To clear incorrect data, press **C** -----> Entire line of data is erased.
 (Note however that if the cursor is at the head of a line of data when this key pressed the preceding line is erased.)

FUNCTION KEYS

The function keys, labeled F1~F6 at the top of the keyboard, are used to select a function menu, which is displayed across the bottom of the screen.

(Ex.) The menu below (SYSTEM INITIALIZATION) is displayed following the key strokes of **MENU** => **2** => **0** => **ENT**



To select the OPER(ating) Mode menu, for example, press **F 1**.

SYSTEM (Operating Mode) INITIALIZATION

**CALL UP
SYSTEM
INITIALIZATION
MENU**

**TO SELECT
OPERATING MODES**

MENU => **2** => **0** => **ENT**



F 1 -----> The OPER Mode menu is displayed, as shown at the top of the next page. OPER Mode data is retained in the memory whenever the power is turned off.

(To read OPER mode data stored on a FD, press **F 2** . To escape from this mode, press **ENT** .)

SET EACH MODE
(from "date/time" to "auto chart display")

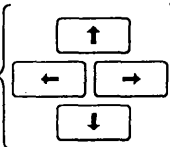
TO SAVE DATA TO FD

TO REGISTER SELECTIONS

TO RETURN CONTROL TO LAST USED DISPLAY SCREEN

DATE/TIME	<u>JST</u>	UTC	...	(time standard)
DATE/TIME READ	<u>AUTO</u>	MAN	...	(AUTO: SATNAV/GPS required)
TEMPERATURE READ	<u>AUTO</u>	MAN	...	(AUTO: temp. indicator required)
L/L POSITION READ	<u>AUTO</u>	MAN	...	(AUTO: Navigation aid required)
NAVIGATION	LORAN A	LORAN C	DECCA	DR OMEGA <u>SATNAV</u> GPS
RECEIVING MODE	<u>AUTO</u>	MAN	...	(after power is applied satellite forecast calculation is initiated)
AUTO TEMP CALIB	<u>ON</u>	OFF	...	(automatic temperature calibration for each satellite. Compensation value is set on MENU "14".)
AUTO CMT REC	<u>IR</u>	VIS	<u>ON</u>	OFF } ... (automatic recording after picture is completely received)
			(00:00-00:00)	.. (time range for automatic visible-light picture recording)
RTTY SHIFT WIDTH	<u>850</u>	425	} ... (receiving mode of internal teletype)	
SHIFT MODE	<u>NOR</u>	REV		
BAUD RATE	<u>50</u>	75		
AUTO CHART DISPLAY	<u>ON</u>	OFF	...	(chart is automatically displayed after picture is completely received)

SAVE FD **LOAD FD** (Saving data to FD/loading data from FD for all modes above)


 Locate the cursor on the mode desired, by operating the arrow keys.
 The selected mode is underlined.

F 1 (takes approx. 10 sec.)

ENT (Press to register selections and escape from OPER mode.)

(After **ENT** is pressed, satellite forecast, which takes several seconds to complete, commences if the automatic receiving mode is selected.)

ESC ⇒ **ESC** (TWICE)

CONFIRMING ORBITAL DATA

CALL UP ORBITAL DATA MENU

CONFIRMATION

TO EXIT

MENU ⇒ **2** ⇒ **ENT**

ORBITAL DATA				
SYSTEM A	SYSTEM B	SPARE SAT	FD A	FD B
NOAA 10	NOAA 11	NOAA 00	NOAA 10	NOAA 11
F 137.50 MHz	F 137.62 MHz	F 000.00 MHz	F 137.50 MHz	F 137.62 MHz
T '88/12/03 00:43'01.614	T '88/12/03 01:03'27.381	T '00/00/00 00:00'00.000	T '88/11/27 01:14'45.525	T '88/11/27 00:22'02.729
C 5121.62	C 5078.33	C 0000.00	C 5121.59	C 5078.34

YR/MO/DA →

COMMENT DSP **SAVE FD** **LOAD FD** **MANUAL ENT** **SAT UPDATE**

If DATE/TIME data 10 days before is displayed or when all zeroes are displayed, orbital data should be updated.

ESC ⇒ **ESC** (TWICE) → Control is returned to last used display screen.

UPDATING ORBITAL DATA

(Performed automatically when SU-18 is interfaced with an all-wave receiver. Manual updating should be done weekly.)

PREPARATION

CONFIRM RTTY RECEIVING CONDITION

TO RETURN CONTROL TO LAST USED DISPLAY SCREEN

PREPARATION

CALL UP ORBITAL DATA MENU

MANUAL ENTRY

SPECIFY SATELLITE

ENTER ORBITAL DATA

UPDATING ANOTHER SATELLITE

TO EXIT

(1) AUTOMATIC ENTRY

The all-wave receiver is properly tuned when the two LED's of the DTY tuning indicator light alternately.

MENU ⇒ 1 ⇒ 8 ⇒ ENT

SU-18 RTTY CHECK

0 1 2 3 4 5 6 7 8 9 0 1 2 3 ----- 7 8 9

NOTE: If the data contains errors (for example, randomly placed question marks [?] or exclamation marks [!]), change to another freq.

ESC ⇒ ESC

(2) MANUAL ENTRY

Orbital Data

MENU ⇒ 2 ⇒ ENT

F 4 →

M -2. 80984	M -2. 64624	M -
R 0. 98284	R 0. 99206	R -
C 5121. 62	C 5078. 33	C -

SYSTEM A SYSTEM B

F 1 ⇒ 1 ⇒ 0 ⇒ ENT

(To select 137.50MHz.)

SYSTEM A	SYSTEM B	SYSTEM A	
NOAA 10	NOAA 11	NOAA10	SELECT A OR B WITH FUNCTION KEY. 1 3 7 . 5 0 M H z A 1 3 7 . 6 2 M H z B
F 137. 50 M H z	F 137. 62 M H z	F 137. 50 M H z	
T '88/12/03 00:43'01. 614	T '88/12/03 01:02'02. 614	T ' / /	

T : 8 ⇒ 9 ⇒ 0 ⇒ 1 ⇒ 0 ⇒ 7 ⇒ ENT

(other data) YR (last 2 digits) MO DAY

F 2 ⇒ 1 ⇒ 1 ⇒ ENT → Enter data as above.

(To select 137.62MHz)

ESC ⇒ ESC ⇒ ESC -----> Returns control to last used display screen.

Takes several seconds to change screen.

SAVING/LOADING ORBITAL DATA ON FD

PREPARATION

CALL UP ORBITAL DATA MENU

SELECT FD SAVE

SAVE TO FD

TO RETURN CONTROL TO LAST USED DISPLAY SCREEN

Insert FD containing data to be saved/loaded.

MENU ⇒ 2 ⇒ ENT →

(Before loading data, confirm that orbital data stored on the FD is not older than system data. Then,

F 3 ⇒ ENT .)

ORBITAL DATA				
SYSTEM A	SYSTEM B	SPARE SAT	FD A	FD B
NOAA 10	NOAA 11	NOAA 00	NOAA 10	NOAA 11
F 137.50 MHz	F 137.62 MHz	F 000.00 MHz	F 137.50 MHz	F 137.62
T '88/12/03 00:43'01.614	T '88/12/03 01:03'27.381	T '00/00/00 00:00'00.000	T '88/11/27 01:14'45.525	T '88/11/ 00:22'02
C 5121.62	C 5078.33	C 0000.00	C 5121.50	C 5078.34

COMMENT DEL SAVE FD LOAD FD MANUAL ENT SAT UPDATE

F 2 →

ORBITAL DATA				ORBITAL DATA SAVE ? Yes ENT No ESC
SYSTEM A	SYSTEM B	FD A	FD B	
NOAA 10	NOAA 11	NOAA 10	NOAA 11	
F 137.50 MHz	F 137.62 MHz	F 137.50 MHz	F 137.62 MHz	
T '88/12/03 00:43'01.614	T '88/12/03 01:03'27.381	T '88/11/27 01:14'45.525	T '88/11/27 00:22'02.72986	
G 082.8258	G 087.9472	G 084.8666	G 071.6522	
E 0.00142788	E 0.00142788	E 0.00143352	E 0.00126808	

NOTE: Confirm that orbital data stored on the FD is older than system data.

ENT

ESC ⇒ ESC

CONFIRMING CIF DATA

CONFIRMATION

CIF connector is securely plugged in.

CALL UP SYSTEM INITIALIZATION MENU

CALL UP SELF TEST

CALL UP CIF DATA CHECK DISPLAY

TO RETURN CONTROL TO LAST USED DISPLAY SCREEN

MENU ⇒ 2 ⇒ 0 ⇒ ENT

F 6 ⇒ F 5

1 ⇒ 1 ⇒ ENT

SU-18 CIF/NMEA RCV CHECK																		
0	1	2	3	4	5	6	7	8	9	0	1	2	3	-----	7	8	9	

NOTE: Check time, L/L position and water temperature data for correctness.

ESC ⇒ ESC ⇒ ESC

CONFIRMING/ENTERING DATE & TIME

(Automatically executed if SATNAV or GPS is interfaced.
Information is retained by a keep-alive battery whenever the power is removed.)

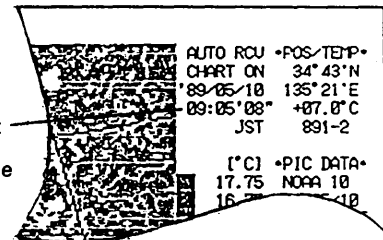
CONFIRMATION

Check date and time data for correctness.

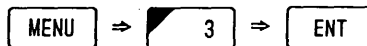


If incorrect, disconnect CIF line and proceed to next step.

present date and time

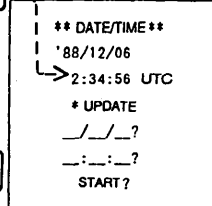
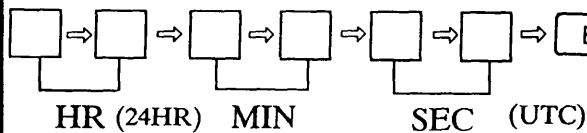
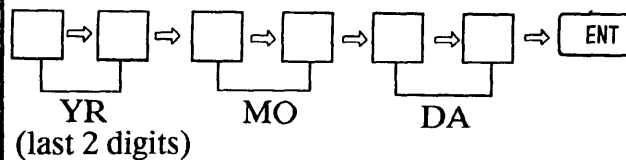


CALL UP DATE/TIME MENU



The time at the moment ENT key is pressed is displayed.

ENTER DATE AND TIME

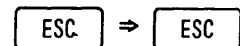


Press ENT in synchronization with time signal.



Returns control to last used display screen.

If update is not required;



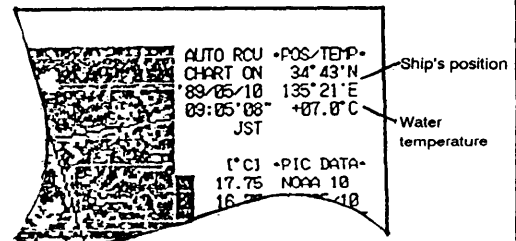
CONFIRMING/ENTERING L/L POSITION & WATER TEMPERATURE (at own ship)

CONFIRMATION

Check "POS/TEMP" data for correctness.



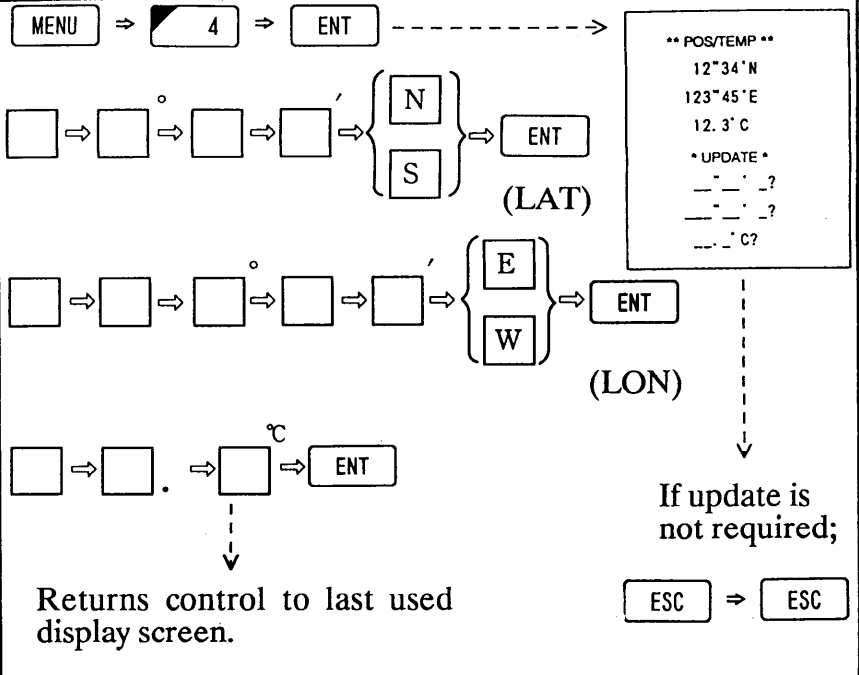
If incorrect, disconnect CIF line and proceed to next page.



**CALL UP POSITION/
TEMPERATURE
MENU**

ENTER L/L POSITION

**ENTER
TEMPERATURE**



RECEIVING

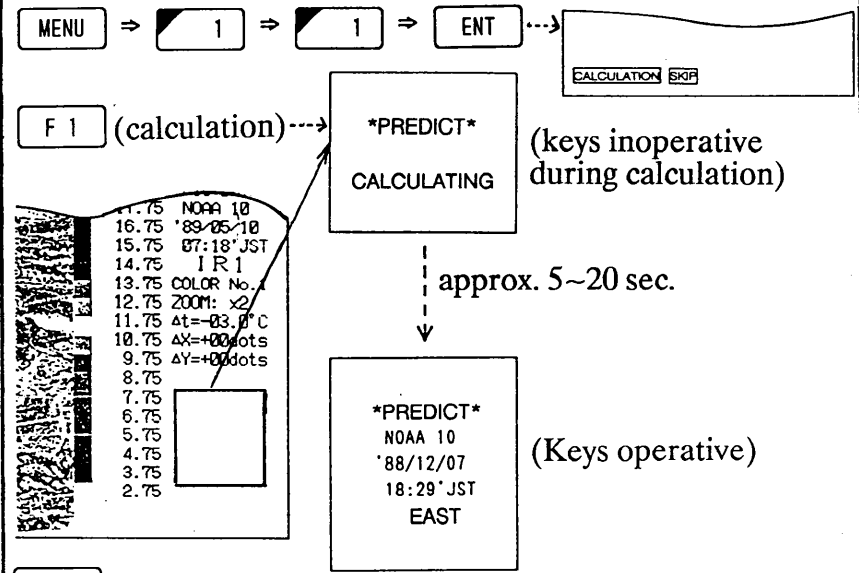
(If the automatic receiving mode is selected, satellite forecast is conducted automatically. Do not transmit on 27MHz during receiving.)

CONFIRMATION

- (1) Check orbital data, date and time and L/L position for correctness. (Refer to pages 3~7.)
- (2) If "AUTO CMT REC" is selected, insert CMT. Recording commences after picture is completely received.

**CALL UP RECEIVE
PREDICT MENU**

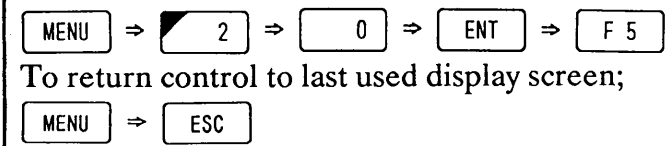
PREDICT
(Receiving times which are 10 minutes or later of present time can be calculated.)



**TO CANCEL
RECEIVING (MAN
mode), TO CALCU-
LATE NEXT
RECEIVING TIME
(AUTO mode)**

F 2 (skip)

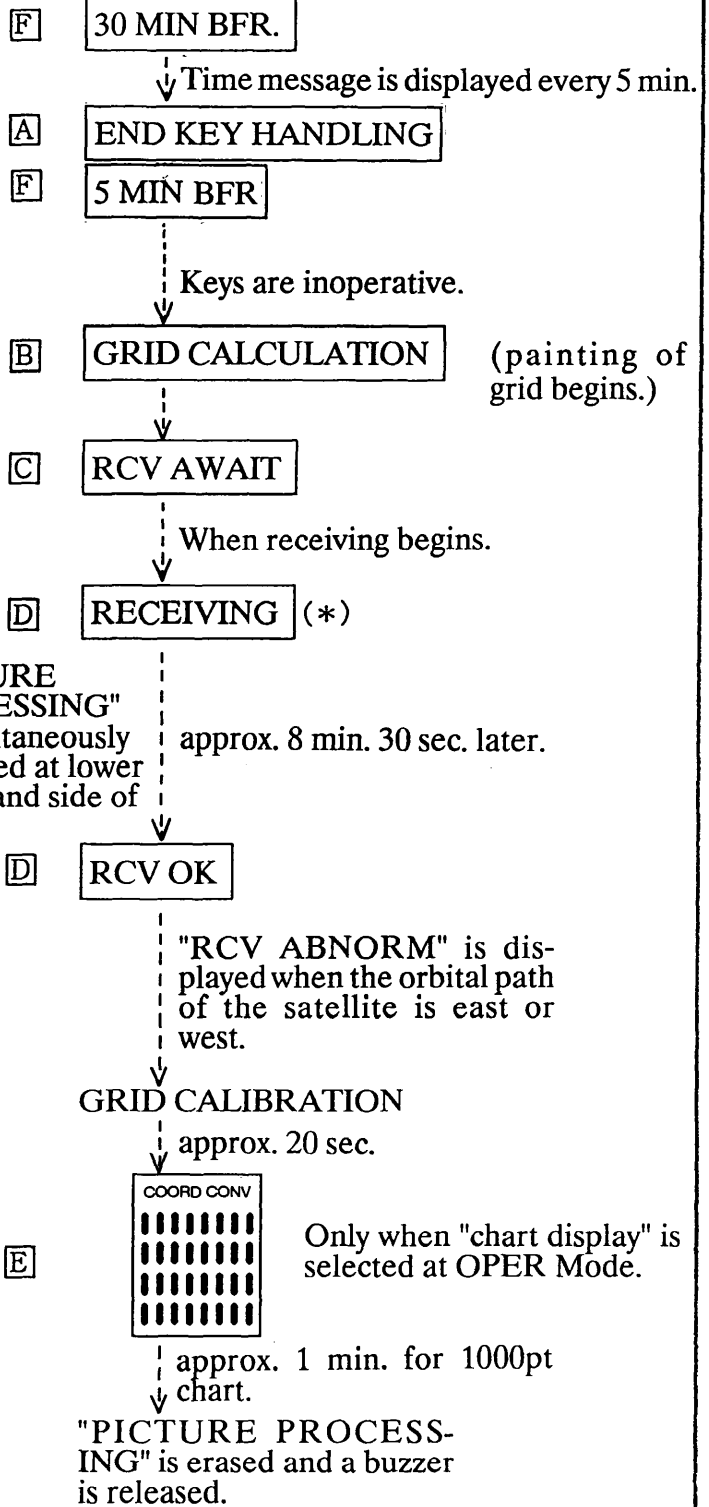
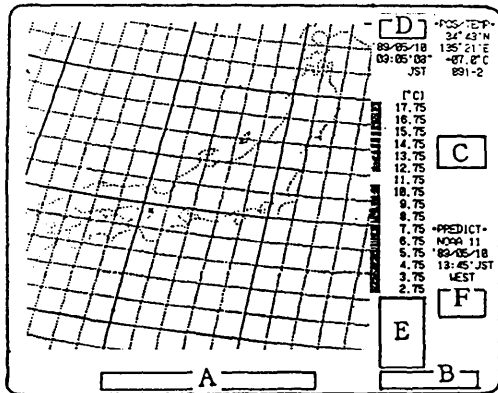
**TO TURN OFF ONLY
CRT POWER (RECEIV-
ING/AUTO REC ARE
EXECUTED.)**



RECEIVING

The sequence of receiving is as follows.

LOCATION OF MESSAGE



Automatic recording and printing are executed if Auto. CMT REC and Auto Print Mode (page 17) are selected. If automatic receiving is selected, satellite forecast is automatically executed.

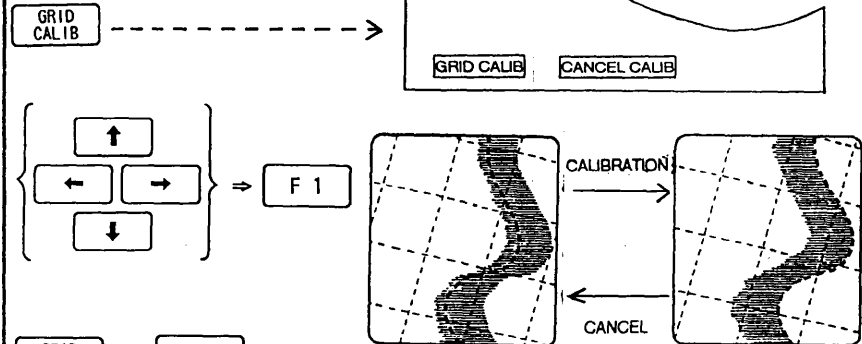
GRID CALIBRATION

(For aligning chart with picture. Not operative in $\times 0.5$ zoom.)

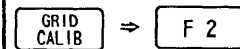
PREPARATION

- (1) Perform calibration on area which you use often.
- (2) For ease of calibration, enlarge a nearby island, coastline, etc. Refer to page 14.
- (3) If necessary, perform shade range enhancement. Refer to page 14.

CALIBRATION



TO CANCEL CALIBRATION



TEMPERATURE CALIBRATION

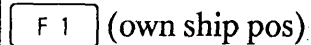
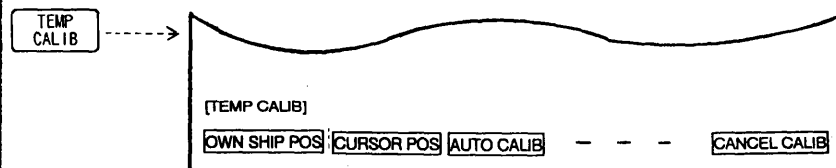
(Calibration by own ship pos. [no clouds or fog overhead of own ship] or by cursor pos. [where no clouds or fog overhead of cursor pos.]

CONFIRMATION

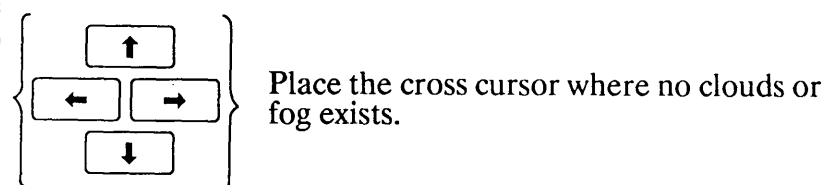
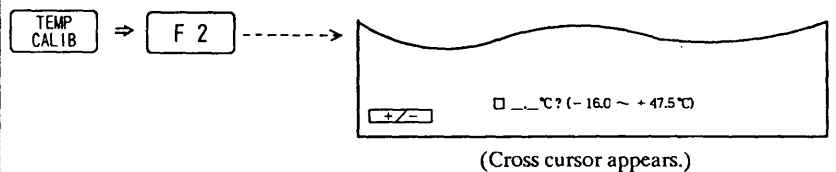
Check water temperature data for correctness.



CALIBRATION BY OWN SHIP'S L/L POSITION



CALIBRATION BY CURSOR POSITION



<p>ENTER TEMP. DATA</p>	<p>F 1 (“+” or “-” indication is presented alternately every pressing of this key.)</p> <p> <input type="text"/> ⇒ <input type="text"/> . ⇒ <input type="text"/> °C ⇒ ENT (Temp. data) </p> <p>Returns control to last used display screen.</p> <p>NOTE 1. Input temp. value may be different from value displayed at the lower right-hand side of the screen, since inputted value is rounded off to nearest 0.25°C.</p> <p>(EX.) <u>Input value</u> <u>Displayed value</u></p> <table style="margin-left: 40px;"> <tr><td>12.3</td><td></td><td>12.25</td></tr> <tr><td>12.8</td><td>⇒</td><td>12.75</td></tr> <tr><td>12.9</td><td></td><td>13.0</td></tr> </table> <p>NOTE 2. Δt value is used as a temperature calibration value for a satellite.</p>	12.3		12.25	12.8	⇒	12.75	12.9		13.0
12.3		12.25								
12.8	⇒	12.75								
12.9		13.0								
<p>TO CALIBRATE DISPLAYED PICTURE</p>	<p>TEMP CALIB ⇒ F 3</p> <p>(Compensation value, which is set on MENU “14”, becomes effective for presently displayed picture.)</p> <p>NOTE: This function is inoperative for pictures recorded using program version number-12 and earlier.</p>									
<p>TO CANCEL CALIBRATION</p>	<p>TEMP CALIB ⇒ F 6</p>									

<p align="center">AUTOMATIC TEMPERATURE CALIBRATION (Temperature errors generated by a satellite itself can be automatically compensated each time a satellite signal is received.)</p>	
<p>PREPARATION</p> <p>CALL UP TEMP. CALIB DATA INPUT MENU</p>	<p>Turn the automatic temperature calibration function on in the OPER Mode.</p> <p>MENU ⇒ <input type="text"/> 1 ⇒ <input type="text"/> 4 ⇒ ENT</p> <div style="border: 1px solid black; padding: 5px; margin: 10px 0;"> <p align="center">** TEMP CALIB DATA **</p> <p>SYSTEM A NOAA 10 00.0°C</p> <p>SYSTEM B NOAA 11 00.0°C</p> <p align="center">** UPDATE **</p> <p>SYSTEM [] ?</p> <p align="center"> <input type="text"/> SYSTEM A <input type="text"/> SYSTEM B </p> </div>

SPECIFY SATELLITE

(F 1) -----> SYSTEM A (137.50 MHz → NOAA 10)

(F 2) -----> SYSTEM B (137.62 MHz → NOAA 11)

** UPDATE **
SYSTEM A 00.0°C?

(+) (-)

ENTER TEMP. CALIBRATION DATA

(F 1) -----> “+”

(F 2) -----> “-”

⇒ ⇒ ⇒ (ENT)

(calib value = Δt value)

↓

Returns control to last used display screen.

NOTE 1. Input calibration value may be different from value displayed as “TEMP CALIB DATA” at the top of the screen.

(EX.)	Tenth's digit of input data		Tenth's digit of displayed data
	0, 1, 9		0
	2 ~ 3		2
	4 ~ 6	⇒	5
	7 ~ 8		7

RECORDING

(Received picture is automatically recorded when automatic recording mode is selected. However it is uncompensated raw data.)

PREPARATION

- (1) Insert a cassette tape. (storage capacity: 41 pictures, or 40 pictures in the case of simultaneous recording of IR/VIS pictures.
- (2) Insert a floppy disk (FD) for recording. When picture is recorded on a FD, all data (system program, etc.) stored in the FD will be erased.
(Storage capacity: 1 picture/FD. Recording time to FD is much faster than that to CMT.)

CALL UP CMT RECORD MENU

(1) Cassette Tape

(MENU) ⇒ (5) ⇒ (ENT)

IR PIC REC VIS PIC REC SIMUL REC FILE LIST

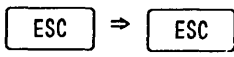
SELECT MEMORY BANK TO BE RECORDED

- (Infrared picture memory --- MEMO 1)
- (Visible-light picture memory --- MEMO 2)
- (Both IR/VIS memory)
- (File search)

NOTE: This unit has two picture memory banks to which data can be stored. The memory bank where the presently displayed picture is saved is shown at the right-hand side of the screen. See table below. For example, if "1•VIS" is displayed, the presently displayed picture (visible-light picture) is saved in the infrared picture memory. Then, to record the picture saved in the infrared picture memory, you would press . At this time, file number where the picture is recorded is displayed at the bottom of the screen.

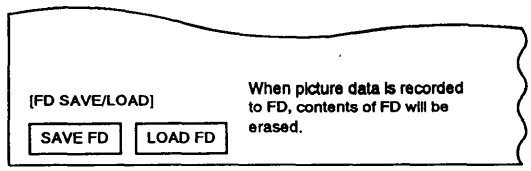
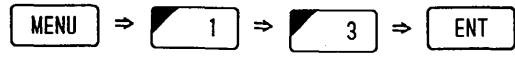
Memory bank in use	Type of picture	Indication at right-hand side of the screen
Infrared (MEMO 1)	Infrared	IR
	Picture after processing	IR1
	Visible-light	1•VIS
Visible-light (MEMO 2)	Visible-light	VIS
	Picture after processing	IR2
	Infrared	2•IR

TO RETURN CONTROL TO LAST USED DISPLAY SCREEN

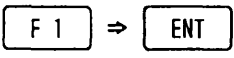


CALL UP FD SAVE/LOAD MENU

(2) Floppy Disk



SAVE TO FD



Free Manuals Download Website

<http://myh66.com>

<http://usermanuals.us>

<http://www.somanuals.com>

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

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

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

<http://www.luxmanual.com>

<http://aubethermostatmanual.com>

Golf course search by state

<http://golfingnear.com>

Email search by domain

<http://emailbydomain.com>

Auto manuals search

<http://auto.somanuals.com>

TV manuals search

<http://tv.somanuals.com>