

# Chapter 2 System Settings

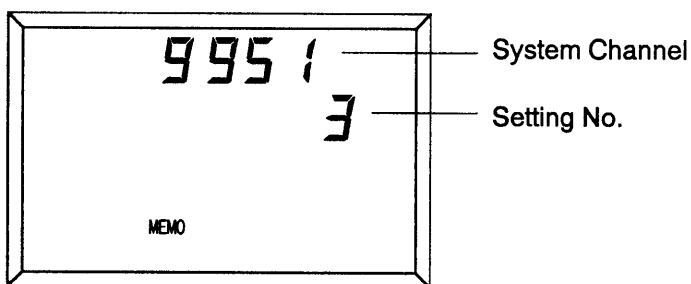
## General

The system channels list is shown on the next page. The system channels marked \* can only be set by a FURUNO service agent or dealer. (These channels can be recalled by entering the password “1562”.) The procedure for changing user settable system settings appears in the Operator’s Manual.

## 2.1 Changing System Settings

### Procedure

1. While pressing and holding down the **RCL** key, turn the power on.  
System channel “9951”, setting number “3” and “MEMO” appear on the LCD as shown below.



2. Select the system channel “9999” by rotating the **FREQ/CH** encoder.
3. Press the **RCL**, **1**, **5**, **6**, **2** and **ENT** keys in this order. (1562 is the password.)
4. Select channel to change by operating the **FREQ/CH** encoder.
5. Press the **RCL** key, enter setting no., and press the **ENT** key.
6. To change another channel, repeat steps 4 and 5.
7. To restore normal operation, turn the power off, and on.

# FS-1562

## Amendment of System Channel Lists

Please use the following new system channel lists in behalf of those mentioned on pages 2-2 thru 2-4 in the Service Manual.

### System Channels List

\* : These channels can be recalled by entering the password "1562" on system channel 9999.

Functions of the system channels 9951 to 9959 are described on the Operator's Manual.

System channel	Function	Setting					Default			
		0	1	2	3	4	Std	Italy	Holland	
* 9900	Country of Delivery	Standard	Italy	Holland			0	1	2	
* 9901	User Channel Clear	Press RCL, 1, ENT keys to clear. (Note 11)								
* 9902	TX Frequency Selection (Note 1)	Free	Marine	ROM	Marine Free		3	2	3	
* 9903	RX Frequency Selection (Note 1)	Free	Marine	ROM	Marine Free		0	0	0	
* 9904	TLX (Telex) Usage	TX/RX	RX	Disable			0	0	0	
* 9905	TLX RX Bandwidth	Wide	Narrow				1	1	1	
* 9906	TX Delay Time (Note 2)	5 to 50 ms						10	10	10
* 9907	Power Reduction on 2182kHz	Enable	Disable				0	0	1	
* 9908	H3E Usage (Note 3)	TX/RX	RX	Disable	2182 (TX/RX)	RX +2182 (TX/RX)	4	4	4	
* 9909	LSB Usage	TX/RX	RX	Disable			2	2	2	
* 9910	FAX Usage		RX	Disable			1	1	1	
* 9911	Emission Mode by [2182] key	H3E	J3E				0	0	0	
* 9912	Alarm TX Time	45 sec.	No limit				0	0	0	
* 9913	Test Alarm Transmission (Note 4)	Disable	Enable				1	1	1	
* 9914	Test Alarm Frequency	1605.00 to 29999.99 kHz						2191.0	2191.0	2191.0
* 9915	TX TUNE (Note 5)	Enable	Disable	Auto			0	0	0	

(continued to next page)

System channel	Function	Setting					Default			
		0	1	2	3	4	Std	Italy	Holland	
* 9916	Remote Control Format (Note 6)	MIF	TBUS				0	0	0	
* 9917	Emission Mode with TX KEY on from external equipment (Note 7)	Auto	SSB	AM	TLX		0	0	0	
* 9918	Key Response Beep	OFF	ON				1	1	1	
* 9919	Noise Blanker	OFF	ON				1	1	1	
* 9920	AGC	OFF	ON	Changeable			2	2	2	
* 9921	Clarifier Change Width	±150Hz	±100Hz				0	0	0	
* 9922	IA/RF Meter	IA	RF				0	0	0	
* 9923	ITU Channel	Std	USA	Std+MF			2	2	2	
* 9924	Channel/Frequency Display	Channel	Frequency				0	0	1	
* 9925	Default setting of Power Data	Press RCL, 1, ENT keys to restore to default setting. (Note 11)								
* 9926	Tuning Circuit for RX (Note 8)	Enable	Disable				1	1	1	
* 9927	(for factory use)	This setting should always be "0".						0	0	0
9951	Scan Stop Signal Level	SQ level	1 to 10				3	3	3	
9952	Scan Stop Time	While receiving	1~99 seconds				2	2	2	
9953	Sweep Width	0.01 to 30000.00 kHz						100.0	100.0	100.0
9954	Sweep Step Frequency	0.01 to 30000.00 kHz						1.00	1.00	1.00
9955	Squelch Operation	Voice	Level	Voice + Level	Voice or Level		3	3	3	
9956	Squelch Level	0 to 10						5	5	5
9957	Squelch Delay Time (Note 9)	500 to 4000 ms						1000	1000	1000
9958	Squelch Activating Frequency	500 to 2000 Hz						1000	1000	1000
9959	Squelch activating frequency when 2-tone alarm on 2182 kHz is received	Default (No change)	1300 Hz				1	1	1	
* 9997	Selection of output power (Note 10)	150W	250W AT-5000	250W AT-1560-25			0	0	0	
* 9998	User Channel Memory & Power Adj.	Enable	Disable				1	1	1	
* 9999	Enter 1562 to access asterisk-marked channels.									

(Note 1) Free: Frequencies can be selected in the range of 1.6065MHz~29.9999MHz.

ITU and User channels are also available.

Marine: ITU and User channels are available.

ROM: User channel only

Marine Free: Frequencies can be selected in the following range. ITU and User channels are also available.

1606.5~4438	12230~13200	19680~19800	26100~26175
6200~6525	16360~17410	22000~22855	
8100~8815	18780~18900	25070~25210	kHz

- (Note 2) Transmission start time after the TX KEY line goes low level (is activated).
- (Note 3) Set to "0"(TX/RX) when the selcall unit is connected.
- (Note 4) 1 (Enable): The dummy load is connected automatically and the text signal of 2191 kHz, modulated by two-tone alarm, is sent to the dummy load.
- (Note 5) Enable: Tuning by PTT switch or TX TUNE key.  
Auto: Automatic tuning when frequency is changed.
- (Note 6) MIF: FURUNO Radio Interface. Select MIF when FURUNO DSC terminal or NBDP terminal is connected.  
TBUS: For equipment made by "Thrane & Thrane A/S" of Denmark.  
If TBUS data is used, it is not necessary to connect TXD/RXD lines.
- (Note 7) Auto: FURUNO make DSC terminal and/or NBDP terminal is connected.  
SSB: Other make of controller is connected. (J3E is selected when TX KEY level goes low.)  
AM: Selcall unit is connected. (H3E is selected when TX KEY level goes low.)  
TLX: Other make of NBDP terminal is connected. (TLX is selected when the TX KEY level goes low.)
- (Note 8) 0: RX signal passes through tuning circuit. (This setting is useful when TX/RX frequencies are in the same band on HF or are the same on MF.)  
If RX frequency is changed to other band, tune on the same band as the RX frequency.
- RX signal does not pass through tuning circuit when the following situations occur.
1. Scan/sweep reception
  2. Frequencies between TX and RX are separated more than 1.2 MHz on 4MHz band or higher band
  3. TX/RX frequencies are not the same on 4MHz band or lower band
  4. RX frequency is set to 1.6MHz or less
- (Note 9) Ex. Delay time: 1000 ms  
Squelch is opened 1000 ms after the signal goes away.
- (Note 10) When 250 W Booster is connected, select 1 or 2.  
1: Antenna coupler AT-5000 (For FS-5000/8000)  
2: Antenna coupler AT-1560-25
- (Note 11) Wait until the display changes from "1" to "0". (It takes 10 to 30 seconds to change.) Then turn the power off.

# Information

Issued by: FURUNO ELECTRIC CO., LTD  
SERVICE MANAGEMENT & COMMANDING DEPARTMENT

APPROVED BY *[Signature]*  
WRITTEN BY *[Signature]*

Addenda No.10 to FS-1562 Service Manual SM-E55722

FS-1562

## H3E Transmission Inhibited

**New Software, -09**

Due to the full implementation of GMDSS from February 1, 1999, the class of emission to be used for radiotelephony on the frequency 2182 kHz shall be J3E, not H3E.

According to this change, the software for the FS-1562 has been changed as follows.

- 1) System channel 9908 (AM usage): Factory-default is changed from RX+2182 to RX.
- 2) System channel 9911 (Emission mode on 2182 kHz):  
J3E FIX is added. Factory-default is changed from H3E to J3E FIX.
- 3) System channel 9912 (Alarm TX time):  
"Disable" is added. Factory-default is 45 sec.
- 4) Transmitter test with dummy antenna  
Using [ALARM] and [0] keys, the test is carried out in the class of emission selected on 9911. The output power is LOW in J3E, and HIGH in H3E.

To emit 2182-kHz, two-tone alarm in H3E, setting must be;  
9908: 4 (RX+2182), 9911: 0 (H3E). When J3E is selected on 9911: 1 (USB), select H3E by MODE key.

⑤  
SSB

### New program ROM

Parts Name	Type	Code No.
Program ROM	PROM0550157109	005-958-650-01

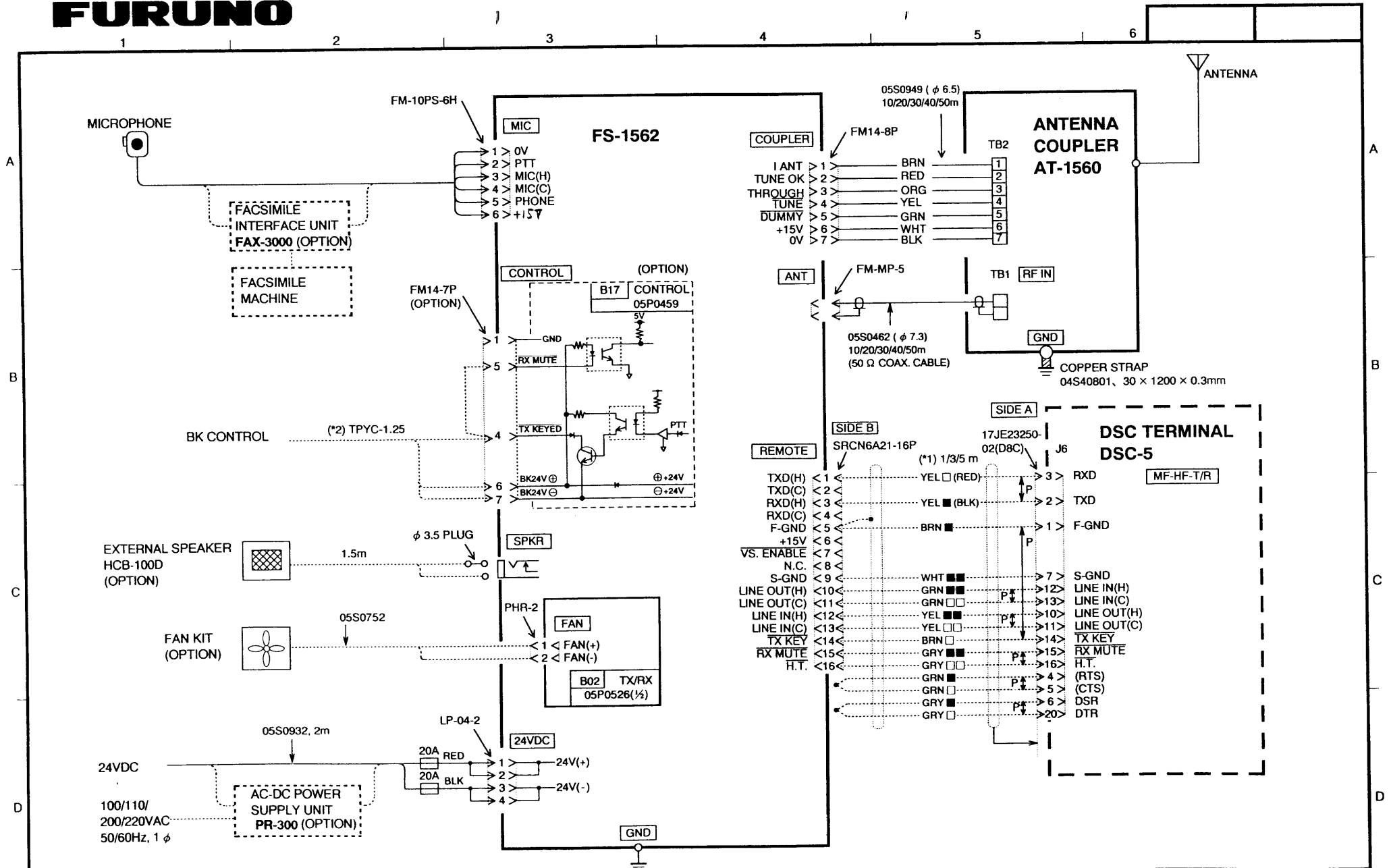
### Factory-modified sets

From the production in June 1999 (serial No. 2560-7473 and after)

# FS-1562-15/25 System Channels List

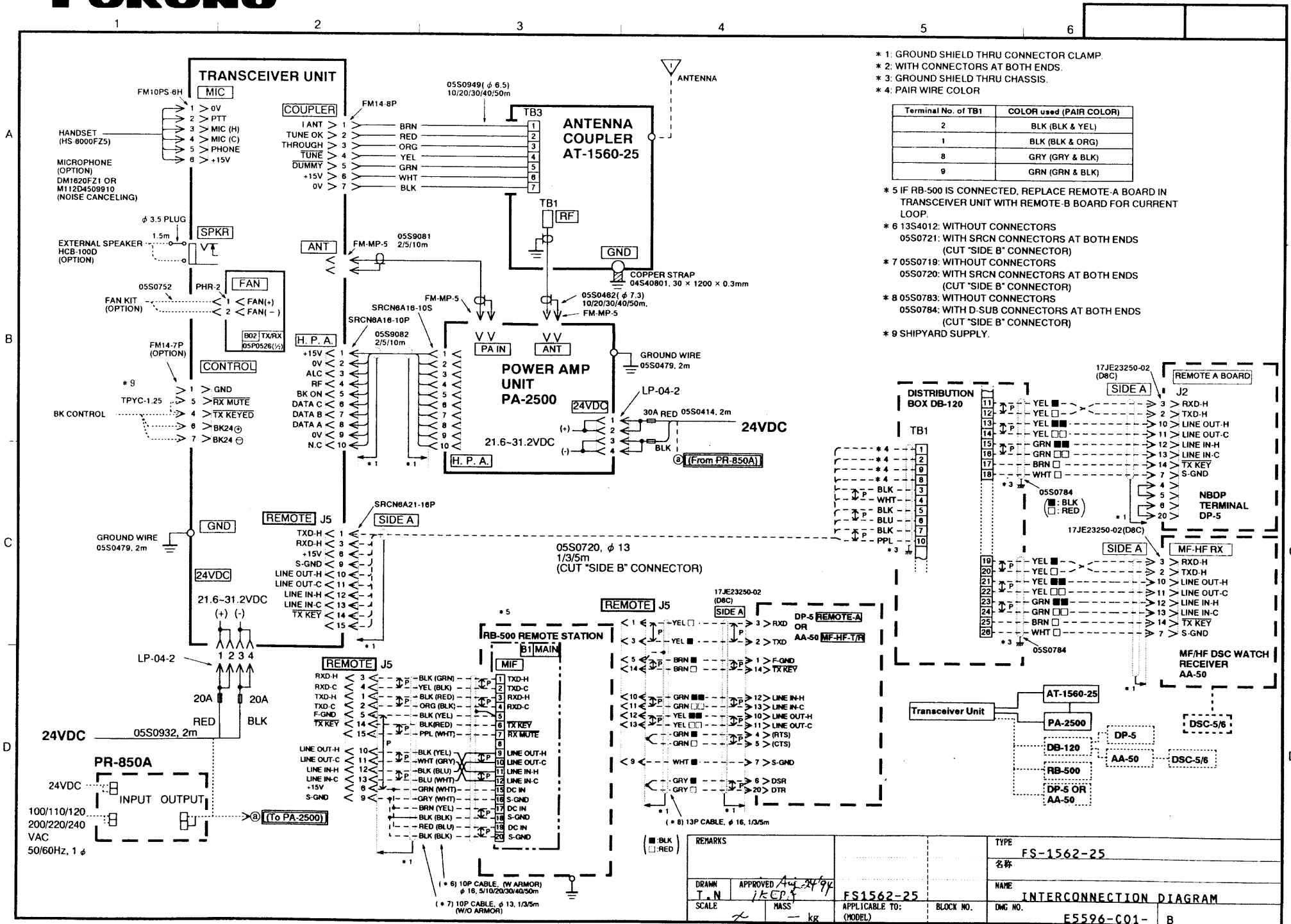
ROM Ver.: 109

System Channel	Function	Setting					Default			
		0	1	2	3	4	Std	Italy	Holland	Other
9900	★ Country of Delivery	Std	Italy	Holland	Other		0	1	2	3
9901	★ User Channel Clear	Press [RCL] [1] [ENT] key to clear								
9902	★ TX Frequency Selection	Free	Marine	ROM	Marine Free		1	2	3	0
9903	★ RX Frequency Selection	Free	Marine	ROM	Marine Free		0	0	0	0
9904	★ TLX Usage	TX/RX	RX	Disable			0	0	0	0
9905	★ TLX RX Bandwidth	Wide	Narrow				1	1	1	1
9906	★ TX Delay Time	5 to 50m sec					10m sec			
9907	★ Power Reduction on 2182kHz	Enable	Disable				0	0	1	0
9908	★ AM Usage	TX/RX	RX	Disable	2182 (TX/RX)	RX+2182	1	1	1	1
9909	★ LSB Usage	TX/RX	RX	Disable			2	2	2	2
9910	★ FAX Usage		RX	Disable			1	1	1	1
9911	★ Emission Mode on 2182kHz	H3E	USB	H3E FIX	J3E FIX		3	3	3	3
9912	★ Alarm TX Time	45 sec	No limit	Disable			0	0	0	0
9913	★ Test Alarm Transmission	Disable	Enable				1	1	1	1
9914	★ Test Alarm Frequency	1605 – 29999.99kHz					2191kHz	2191kHz	2191kHz	2191kHz
9915	★ TX TUNE	Enable	Disable	Auto			0	0	0	0
9916	★ Remote Control Format	MIF	TBUS				0	0	0	0
9917	★ EM Mode with TX Key ON from external equipment	No change	SSB	H3E	TLX		0	0	0	0
9918	Key Response Beep	OFF	ON				1	1	1	1
9919	Noise Blanker	OFF	ON				1	1	1	1
9920	AGC	OFF	ON	MODE			2	2	2	2
9921	★ Clarifier Change Width	± 150Hz	± 100Hz				0	0	0	0
9922	★ IA/RF Meter	IA	RF				0	0	0	0
9923	★ ITU Channel	Std	USA	Std+MF			2	2	2	2
9924	★ Channel/Frequency Display	Channel	Frequency				1	1	1	1
9925	★ Default setting of Power Data	Press [RCL] [1] [ENT] key to restore to default setting								
9926	★ Tuning Circuit for RX	Enable	Disable				1	1	1	1
9928	★ Priority setting on 2182kHz	FS-1562	RB-500				0	0	0	0
9951	Scan Stop Signal Level	SQ Level	S : 1 to 10				S=3	S=3	S=3	S=3
9952	Scan Stop Time	While receiving	1 – 99 sec				2sec	2sec	2sec	2sec
9953	Sweep Width	0.01 to 29999.99kHz					100k	100k	100k	100k
9954	Sweep Step Frequency	0.01 to 29999.99kHz					1.00k	1.00k	1.00k	1.00k
9955	Squelch Operation	Voice	S-Level	Voice + S-Level	Voice or S-Level		3	3	3	3
9956	Squelch Level	S : 0 to 10					S=5	S=5	S=5	S=5
9957	Squelch Delay Time	500 to 4000m sec					1000 ms	1000 ms	1000 ms	1000 ms
9958	Squelch Activating Frequency	500 to 2000Hz					1000 Hz	1000 Hz	1000 Hz	1000 Hz
9959	Squelch activation frequency when 2-tone alarm 2182kHz is received	No change	1300Hz (Open)				1	1	1	1
9997	★ Selection of output power	150W AT-1560-15	250W AT-5000	250W AT-1560-25			0	0	0	0
9998	★ User CH Memory & Power ADJ	Enable	Disable				1	1	1	1
9999	★ Password	Enter Password to access channels marked by★.								



(\*1) 05S0783: WITHOUT CONNECTORS  
 05S0784: WITH D-SUB CONNECTORS AT BOTH ENDS  
 (\*2) SHIPYARD SUPPLY

承認 APPROVED	0ct. 26. '93 IKEDA	名稱 TITLE	INTERCONNECTION DIAGRAM (1/2)
検閲 CHECKED	0ct. 22. '93 T. SAITO	製図 DRAWN	E5572-C01-C
製図 DRAWN	0ct. 22. '93 M. OSAKO	國番 DWG.NO	



- \* 1: GROUND SHIELD THRU CONNECTOR CLAMP.
- \* 2: WITH CONNECTORS AT BOTH ENDS.
- \* 3: GROUND SHIELD THRU CHASSIS.
- \* 4: PAIR WIRE COLOR

Terminal No. of TB1	COLOR used (PAIR COLOR)
2	BLK (BLK & YEL)
1	BLK (BLK & ORG)
8	GRY (GRY & BLK)
9	GRN (GRN & BLK)

- \* 5 IF RB-500 IS CONNECTED, REPLACE REMOTE-A BOARD IN TRANSCEIVER UNIT WITH REMOTE-B BOARD FOR CURRENT LOOP.
- \* 6 13S4012: WITHOUT CONNECTORS  
05S0721: WITH SRCN CONNECTORS AT BOTH ENDS (CUT "SIDE B" CONNECTOR)
- \* 7 05S0719: WITHOUT CONNECTORS  
05S0720: WITH SRCN CONNECTORS AT BOTH ENDS (CUT "SIDE B" CONNECTOR)
- \* 8 05S0783: WITHOUT CONNECTORS  
05S0784: WITH D-SUB CONNECTORS AT BOTH ENDS (CUT "SIDE B" CONNECTOR)
- \* 9 SHIPYARD SUPPLY.

REMARKS		TYPE	
		FS-1562-25	
DRAWN		NAME	
T. N		INTERCONNECTION DIAGRAM	
SCALE	MASS	APPLICABLE TO:	BLOCK NO.
	kg	FS1562-25	
		DMG NO.	
		E5596-C01-B	