

INSTALLATION MANUAL GMDSS Radio Station RC-1800F2

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ECF

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The paper used in this manual
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SAFETY INSTRUCTIONS


 **WARNING**


 **ELECTRICAL SHOCK HAZARD**
Do not open the equipment unless totally familiar with electrical circuits and service manual.

Only qualified personnel should work inside the equipment.

Turn off the power at the switchboard before beginning the installation.

Fire or electrical shock can result if the power is left on.

 **CAUTION**

 **Ground the equipment to prevent electrical shock and mutual interference.**

Observe the following safe compass distances to prevent deviation of a magnetic compass:

	Standard compass	Steering compass
RC-1800F2	3.7 m	2.5 m

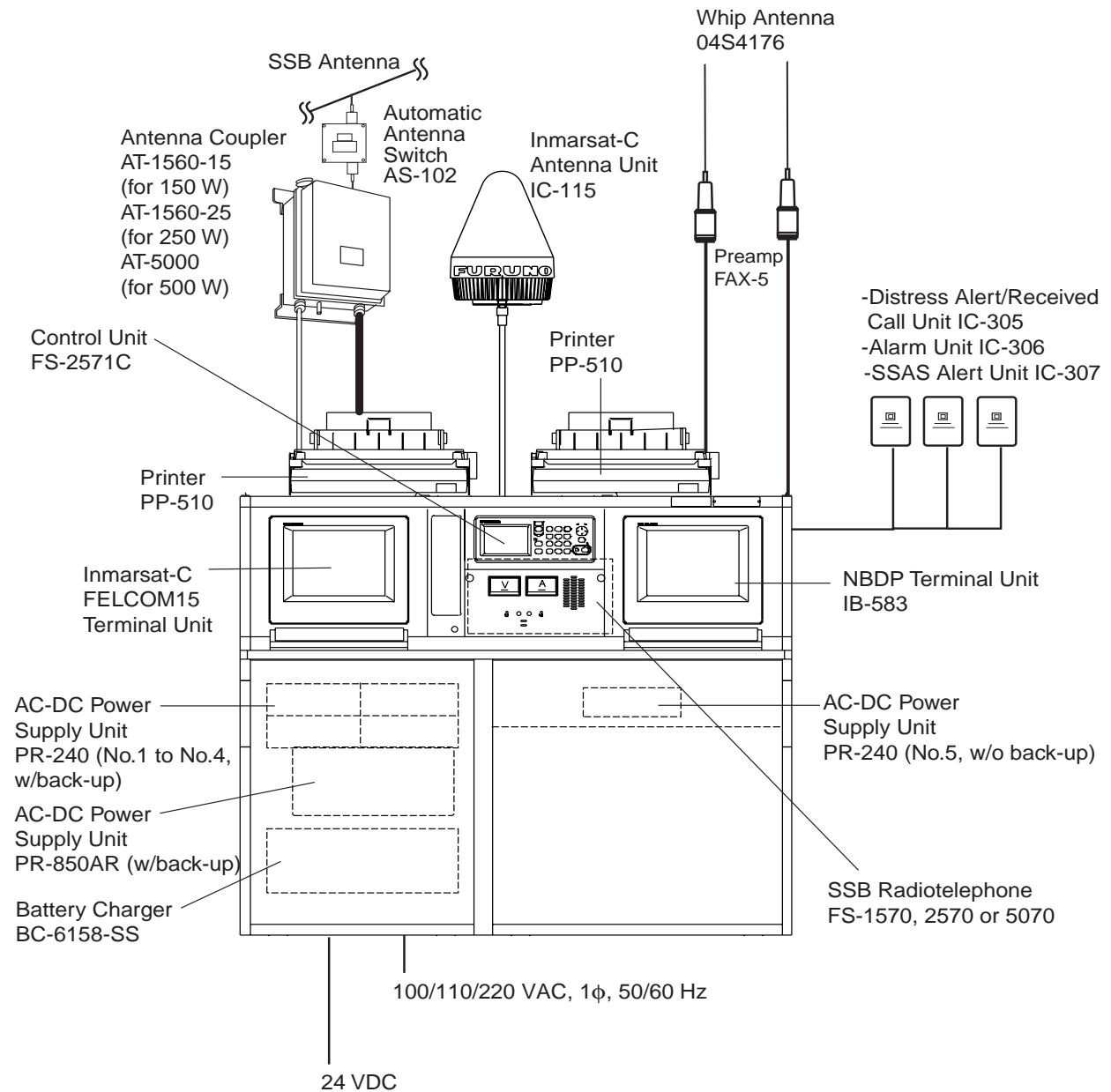
SYSTEM CONFIGURATIONS

RC-1800F2-1S/2S/5S

RC-1800F2-1S: FS-1570, one FELCOM 15

RC-1800F2-2S: FS-2570, one FELCOM 15

RC-1800F2-5S: FS-5070, one FELCOM 15

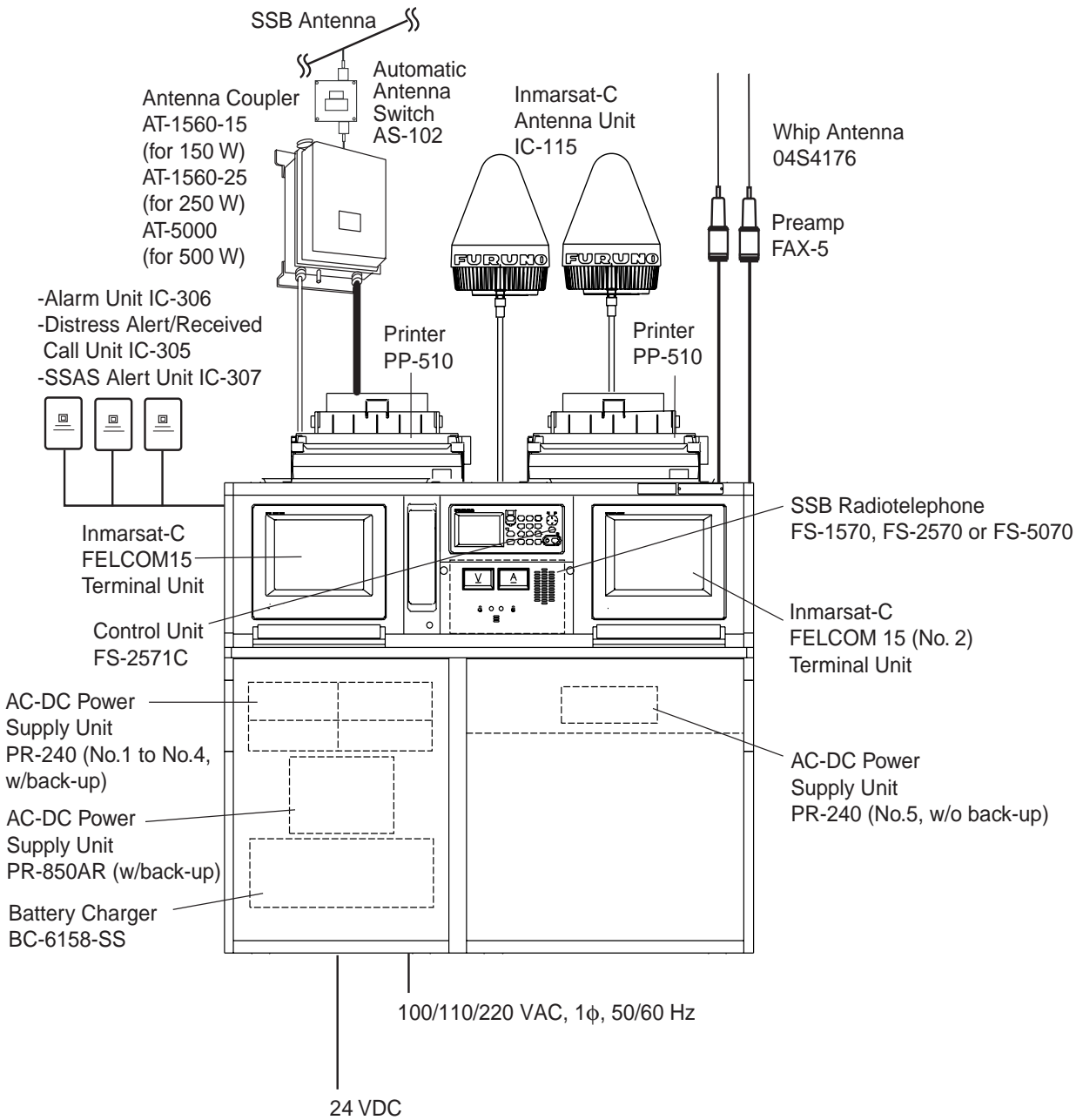


RC-1800F2-1D/2D/5D

RC-1800F2-1D: FS-1570, two FELCOM 15

RC-1800F2-2D: FS-2570, two FELCOM 15

RC-1800F2-5D: FS-5070, two FELCOM 15



EQUIPMENT LISTS

Standard Supply

Name	Type	Code No.	Qty	Remarks
Rack Console	RC-1800F2	-	1	See table below.
Antenna Unit	IC-115	-	1	For 2D type, two units are supplied.
Antenna Coupler	AT-1560-15	-	1	For FS-1570
	AT-1560-25	-		For FS-2570
	AT-5000	-		For FS-5070
Printer	PP-510	-	2	
Distress Alert/ Received Call Unit	IC-305	-	1 or 2	FELCOM 15, two units are supplied for 2D.
Alarm Unit	IC-306	-	1 or 2	FELCOM 15, two units are supplied for 2D.
SSAS Alert Unit	IC-307	-	1 or 2	FELCOM 15, two units are supplied for 2D.
Installation Materials	CP05-11600	000-012-611	1 set	CP16-02302, CP05-09301
Spare Parts	SP05-05901	001-037-750	1 set	
Accessories	FP05-06200	000-012-612	1 set	Mini keyboard, Floppy disk, paper
	FP05-06300	000-013-175	1 set	FP05-06301, 06302, 06304, 06305
	FP05-06310	000-013-176		FP05-06301, 06312, 06314, 06315

Components of rack console

Name	Type	Code No.	Qty	Remarks
Main Frame	MA-1800F2	-	1	
Terminal Unit	IB-583	-	1 or 0	For NBDP
	IC-215	-	1 or 2	For FELCOM 15
Transceiver Unit for SSB Radiotelephone	FS-1570T	-	1	150 W
	FS-2570T	-		250 W
	FS-5070T	-		500 W
AC-DC Power Supply Unit	PR-240	-	5	
	PR-850AR	-	1	
Battery Charger	BC-6153A	-	1	For 100 VAC
	BC-6153B	-		For 220VAC
	BC-6158-SS	-		For 100/220 VAC
Printer Interface	IF-8500	-	1	
Control Unit	FS-2571C	-	1	w/Handset HS-2003

Option

Name	Type	Code No.	Qty	Remarks
Preamp Unit	FAX-5	-	1	
Distress Alert Unit	IC-302-DSC		1	
Incoming indicator	IC-303-DSC		1	
BK Interface	BK-300		1	
Antenna Unit	IC-115	-	1	
Distress Alert/Received Call Unit	IC-305	-	1	
Alarm Unit	IC-306	-	1	
SSAS Alert Unit	IC-307	-	1	
EGC Printer	PP-505	-	1	
Control Unit	FS-2571C	-	1	
Antenna BK Relay	OP05-35-H	000-056-878	1	
GPS Board Kit	OP16-47	001-017-110	1	
Watch Receiver Kit	OP05-104	001-004-450	1	
Signal Splitter	OP05-103	005-965-780	1	
Terminal Software	16-5-0164	004-438-920	1	
PC Terminal Software	OP16-45	004-449-600	1	
SSAS Modification Kit	OP16-33	000-043-492	1	
Flush Mount Kit	OP05-98	005-951-830	1	For No.2 FS-2571C
	OP16-27	004-448-000	1	For IC-305/306
	OP16-28	004-448-010	1	For IC-307
Russian Kit	OP16-43	004-449-590	1	For FELCOM15
Key Template	OP05-101	004-447-450	1	For FS-5070
Antenna Installation Kit	CP16-03701	004-555-000	1	For FELCOM15
Antenna Mounting Pipe	CP16-03703	001-014-510	1	For FELCOM15
Antenna Mounting Metal	CP16-03702	001-016-260	1	For FELCOM15
Matching Box	ARD-1	005-502-230	1	For FS-5070

Name	Type	Code No.	Qty	Remarks
Installation Materials	CP24-00151	005-931-190	1	For PR-240
	CP16-03620	000-043-648	1	50 m, w/pipe, for FEL-COM15
	CP05-09010	005-954-180	1	10 m cable set
	CP05-09020	005-964-410	1	25 m cable set
	CP05-09030	001-079-290	1	10 m cable set
	CP05-09040	001-079-320	1	25 m cable set
	CP16-03610	000-043-647	1	30 m, w/pipe, for FELCOM15
	CP16-03630	000-043-649	1	100 m, w/pipe, for FELCOM15
	CP16-03650	000-043-650	1	30 m, for FELCOM 15
	CP16-03660	000-043-651	1	50 m, for FELCOM 15
	CP16-03670	000-043-652	1	100 m, for FELCOM 15
	E-22	000-050-632	1	For FS-5070
	E-24	000-050-634	1	For FS-5070
	E-25	000-050-635	1	For FS-5070
	E-26	000-050-636	1	For FS-5070
	E-27	000-050-637	1	For FS-5070
Instrument	4-0555	005-547-130	1	
Tool	4-0554	005-547-140	1	
	UR-72	000-058-878	1	
External Loudspeaker	SEM-21Q	000-144-917	1	
Antenna Junction Box	AJB1-1A	000-870-284	1	w/CP16-01200, FP16-00100
Emergency Light	EMG-1T	000-138-378	1	
Lamp Assembly	L3/12-YLP2	000-169-005-10	1	
Electric Torch	BN121F	000-808-415	1	
Recording Paper	A2 1PLYW	000-167-226-10	1 roll	
Ribbon Cassette	SP-16051NB	000-133-029	1	
Freestanding Antenna	AS-9	000-105-818	1	
Antenna	AT130	000-137-233	1	
	AT101D/S2	000-139-314	1	
Antenna Elevating Unit	MT-100	000-137-231	1	
	T-AS-9	000-105-819	1	

Name	Type	Code No.	Qty	Remarks
Strain Insulator	YT-180 #18	000-166-342-10	1	
5P Cable	05S0309	000-106-043-10	1	10 m
		000-106-044-10	1	20 m
		000-106-046-10	1	30 m
		000-106-047-10	1	40 m
		000-106-048-10	1	50 m
	05S0793	000-125-984-10	1	10 m
		000-125-986-10	1	20 m
		000-125-987-10	1	30 m
		000-125-988-10	1	40 m
		000-125-989-10	1	50 m
	COSPEVVSBC 5PX0.2LF	000-560-452-10	1	10m, for FELOCOM 15
		000-103-868-10	1	20 m, for FELOCOM 15
		000-103-869-10	1	30 m, for FELOCOM 15
		000-132-829-10	1	40 m, for FELOCOM 15
		000-132-828-10	1	50 m, for FELOCOM 15
Coaxial Cable	RG-10/U-Y	000-159-411-10	1	10 m
		000-159-412-10	1	20 m
		000-159-413-10	1	30 m
		000-159-414-10	1	40 m
		000-159-415-10	1	50 m
	RG-8A/U	000-167-213-10	1	10 m
		000-167-214-10	1	20 m
		000-106-054	1	30 m
		000-106-055	1	40 m
		000-106-056	1	50 m
Cable Assy.	17JE23150-02 (D8C)	000-146-015	1	5 m
		000-146-016	1	10 m
		000-146-017	1	20 m
		000-146-018	1	30 m
		000-146-019	1	40 m
		000-146-020	1	50 m
Clock	KS474M	000-166-300-10	1	

Name	Type	Code No.	Qty	Remarks
Cable Assy.	17JE23150-02 (D8C)	000-146-015	1	5 m
		000-146-016	1	10 m
		000-146-017	1	20 m
		000-146-018	1	30 m
		000-146-019	1	40 m
		000-146-020	1	50 m
Clock	KS474M	000-166-300-10	1	
Multimeter	CX-506A	000-150-468	1	
	SP-21	000-165-303	1	
Aerometer	No. 4	000-440-516	1	
Thermometer	-20C.-100C	000-440-517	1	
Lamp	NL-54 AC110V E-26	000-542-672	1	
Tool Set	S-10	000-830-251	1	
Lead-in Insulator	YA-218	000-166-558-10	1	
	YA-256	000-571-433	1	
	YA-347	000-571-434	1	
Automatic Antenna Switch	AS-102	-	1	

1. MOUNTING

1.1 Mounting Considerations

1.1.1 Mounting considerations for RC-1800F2

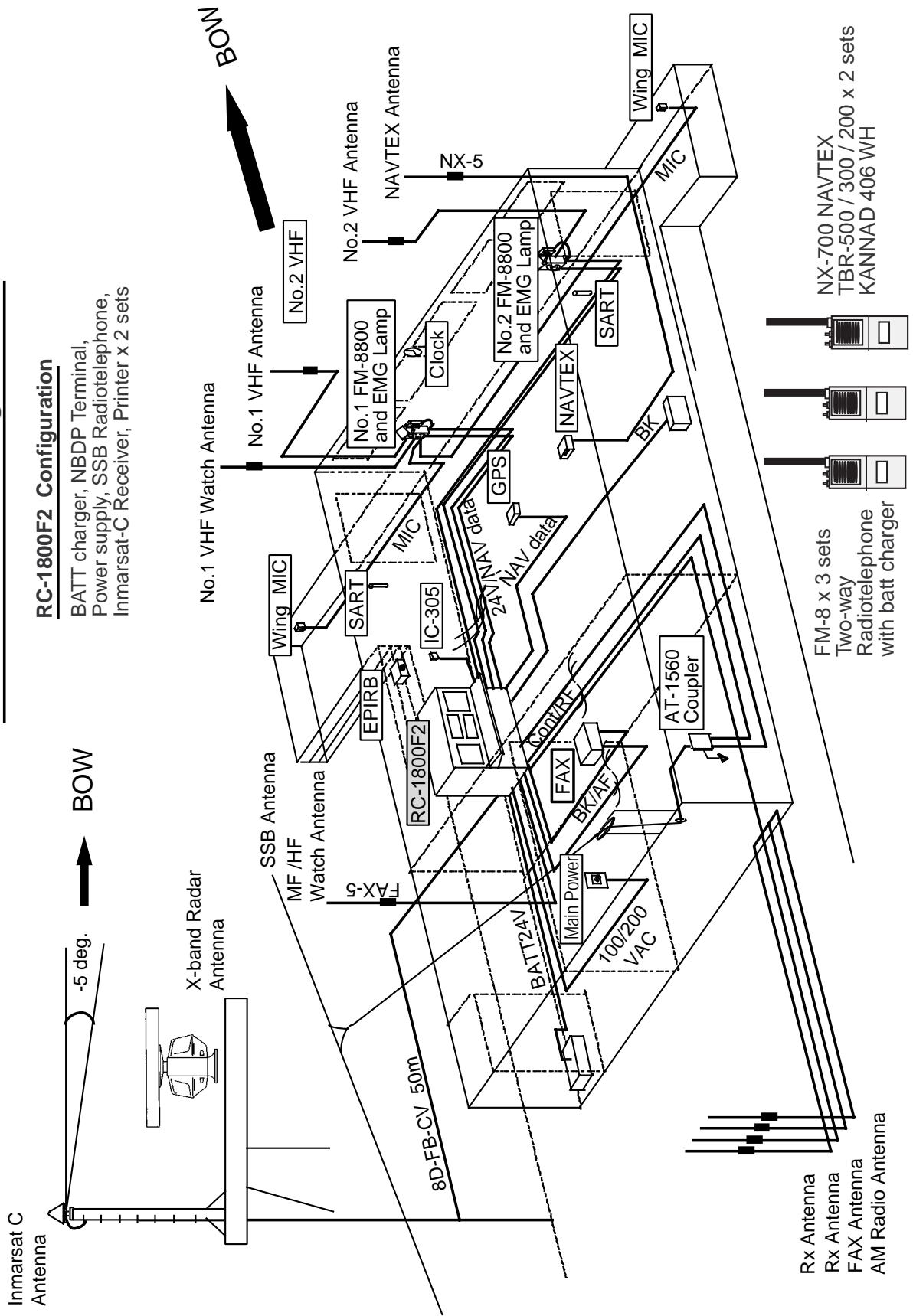
As shown on the next page, the rack console is normally installed on the bridge.

Install the rack console where the equipment can be easily operated, checked and serviced. Consult with shipyard personnel and ship's officer-in-charge to determine best location. The location must satisfy the following points:

- Consider relation to other equipment near mounting site and mounting direction.
- Select a location where controls can be easily operated.
- Ample space should be left at the sides of the equipment to enable servicing and to provide ventilation.
- Select a location where shock and vibration are minimal.
- Locate the console away from water splash and rain.
- The temperature and humidity of the location should be both stable and moderate.
- If the rack console is to be installed in the radio room, Distress Alert/Received Call Unit IC-305, Alarm Unit IC-306, SSAS Alert Unit IC-307 and EGC Printer PP-505 must be installed on the bridge.
- The performance of a magnetic compass will be affected if placed too close to the rack console. Separate the rack console from a compass by the distances shown on page i to prevent compass error.

As for mounting the antenna coupler and antenna units, refer to the respective Installation Manuals.

GMDSS General Wiring Scheme



RC-1800F2 Configuration



BATT charger, NBDP Terminal, Power supply, SSB Radiotelephone, Inmarsat-C Receiver, Printer x 2 sets

Rx Antenna
Rx Antenna
FAX Antenna
AM Radio Antenna

FM-8 x 3 sets
Two-way Radiotelephone with batt charger

NX-700 NAVTEX
TBR-500 / 300 / 200 x 2 sets
KANNAD 406 WH

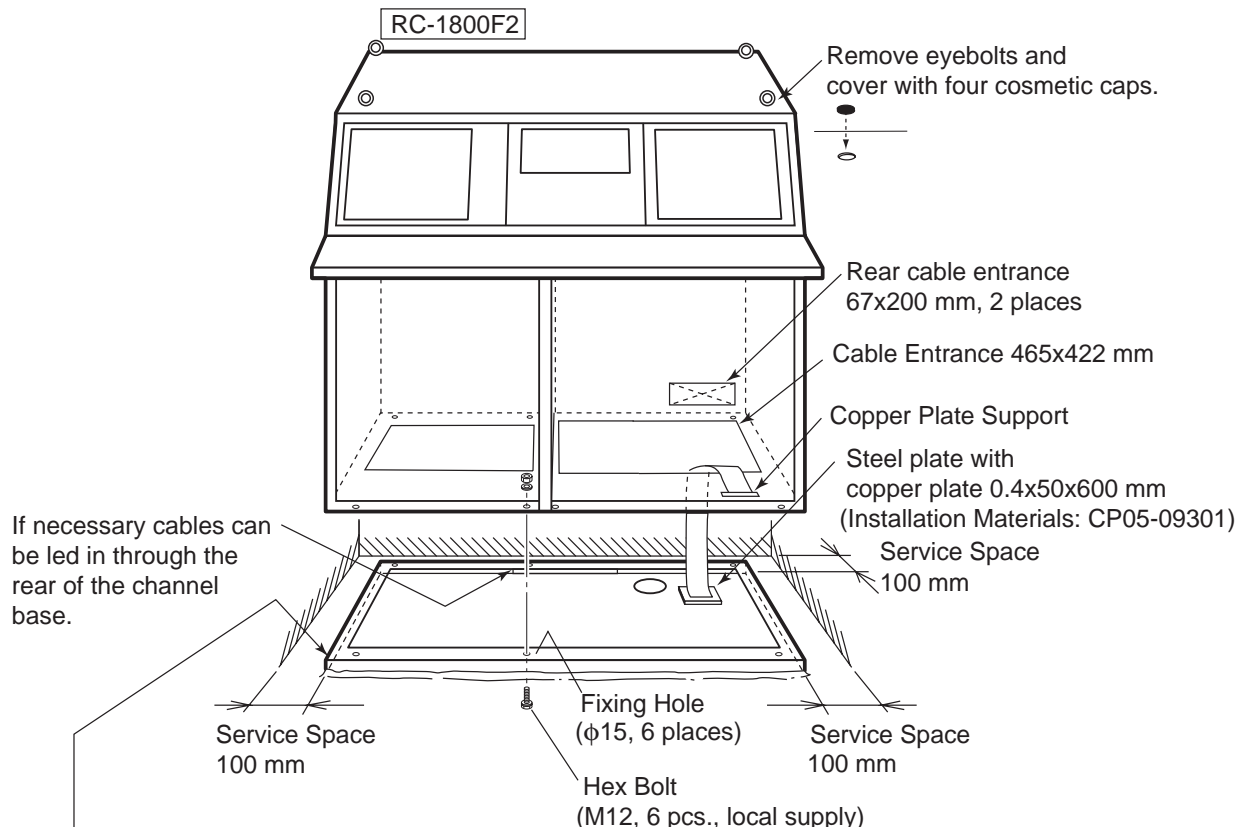
1.2 Mounting the Channel Base and Rack Console

⚠ CAUTION	
	Ground the equipment to prevent electrical shock and mutual interference.
	Handle copper plate carefully. An edge of it may harm your hand.

Leave at least 100 mm of service space on the sides and at the rear of the console. Determine cable coming position and size and ground location by referring to the figure below. Determine size of the cable coming considering both cable size and cable bends.

Weld all sides of the channel base to the deck. Fasten the rack console to the channel base with six M12 bolts.

After leading in cables through the rear of the rack console, cover cable entrances with putty or silicone sealant to close any gaps.



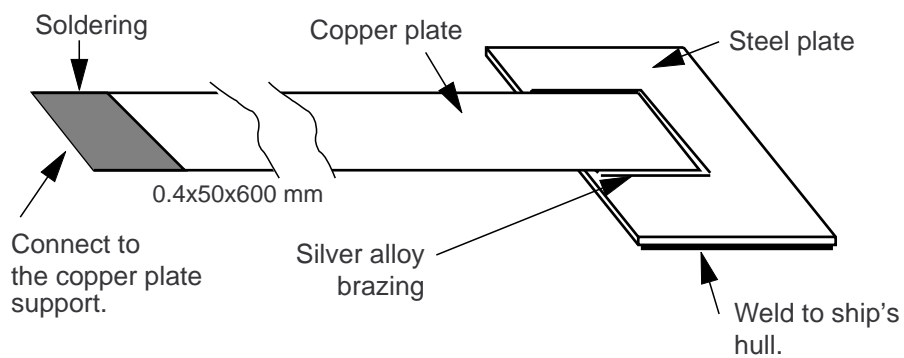
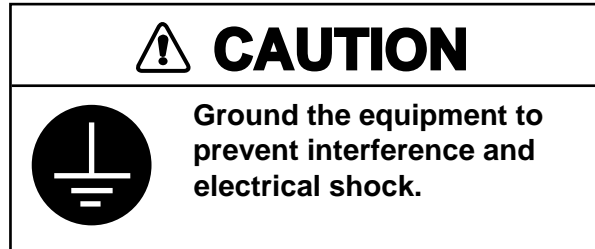
Note: After welding and painting with rust inhibiting paint, paint same color as console (Munsell 7.5BG7/2).

Note: Cable entrance at bottom of console. Determine the cable coming location considering frame position, cable layout and total sectional area of cabling.

Note: After removing four hoisting eyebolts from the rack console, cover the four holes for the eyebolts with the cosmetic caps (installation materials: CP05-09301).

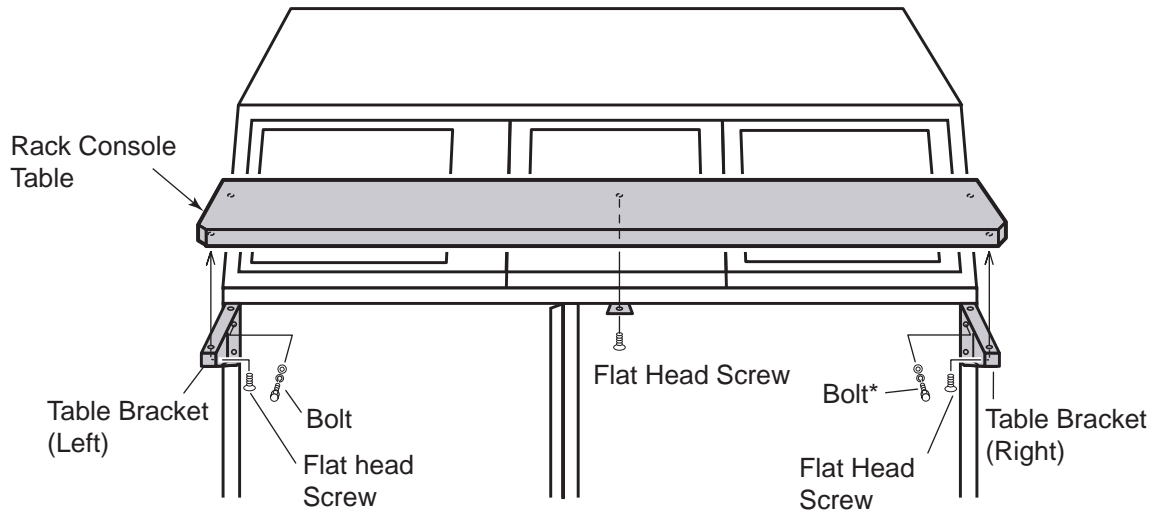
Grounding the copper plate

Weld a steel plate with copper strap, and connect it to the rack console. Solder the point where the copper plate connects to the copper platge support, to prevent corrosion and to ensure tight connection.



1.3 Mounting the Rack Console Table, Keyboard

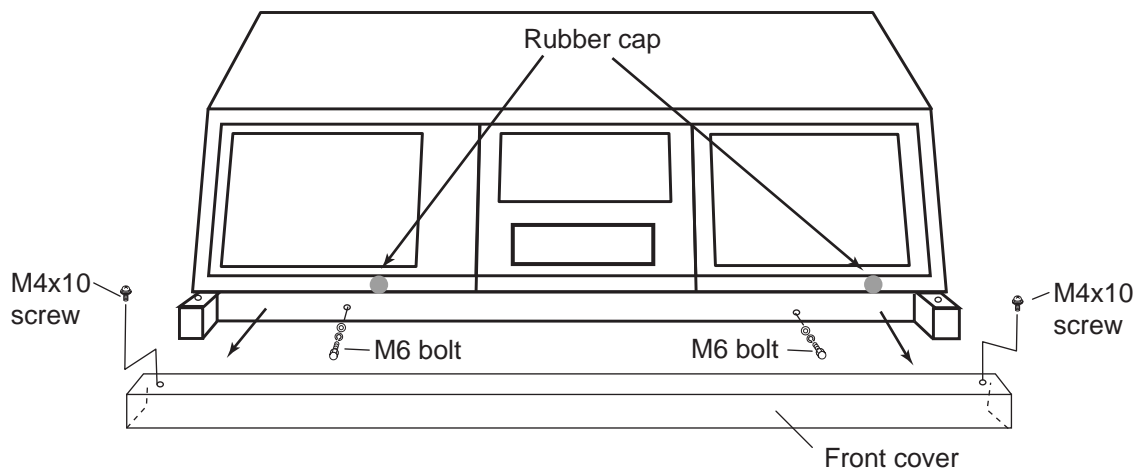
1. Fasten right and left side table brackets to the console frame with six M5x20 bolts supplied as accessories.
2. Lay the rack console table on the top of the table brackets.
3. Fasten the rack console table with five M6x15 flat head screws.



*=M5x20 bolt (w/spring washer and flat washer)

The keyboard for the terminal unit can be fastened to the tabletop.

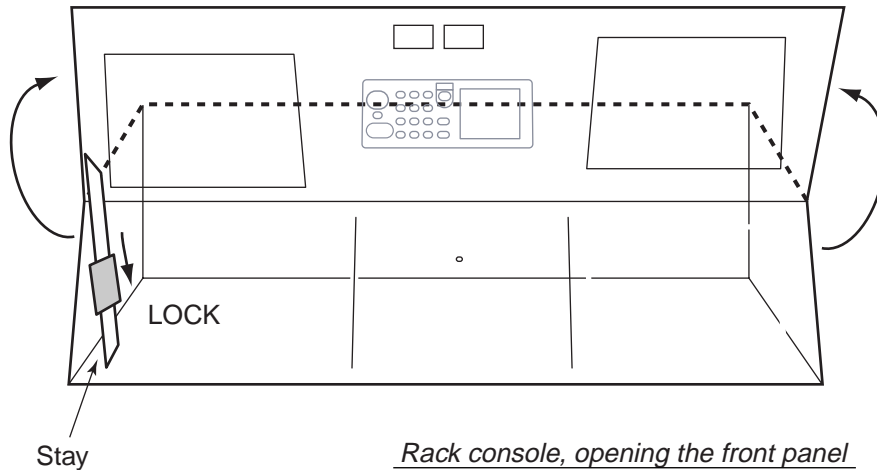
1. Cut the rubber cap at the front of the console beneath the No.1/No.2 IC-215 or IB-583, and pass the printer cable through it.



2. Unfasten two screws (M4x10) to detach the front cover.

- Unfasten two hex. bolts (M6) to open the front panel of the rack console.

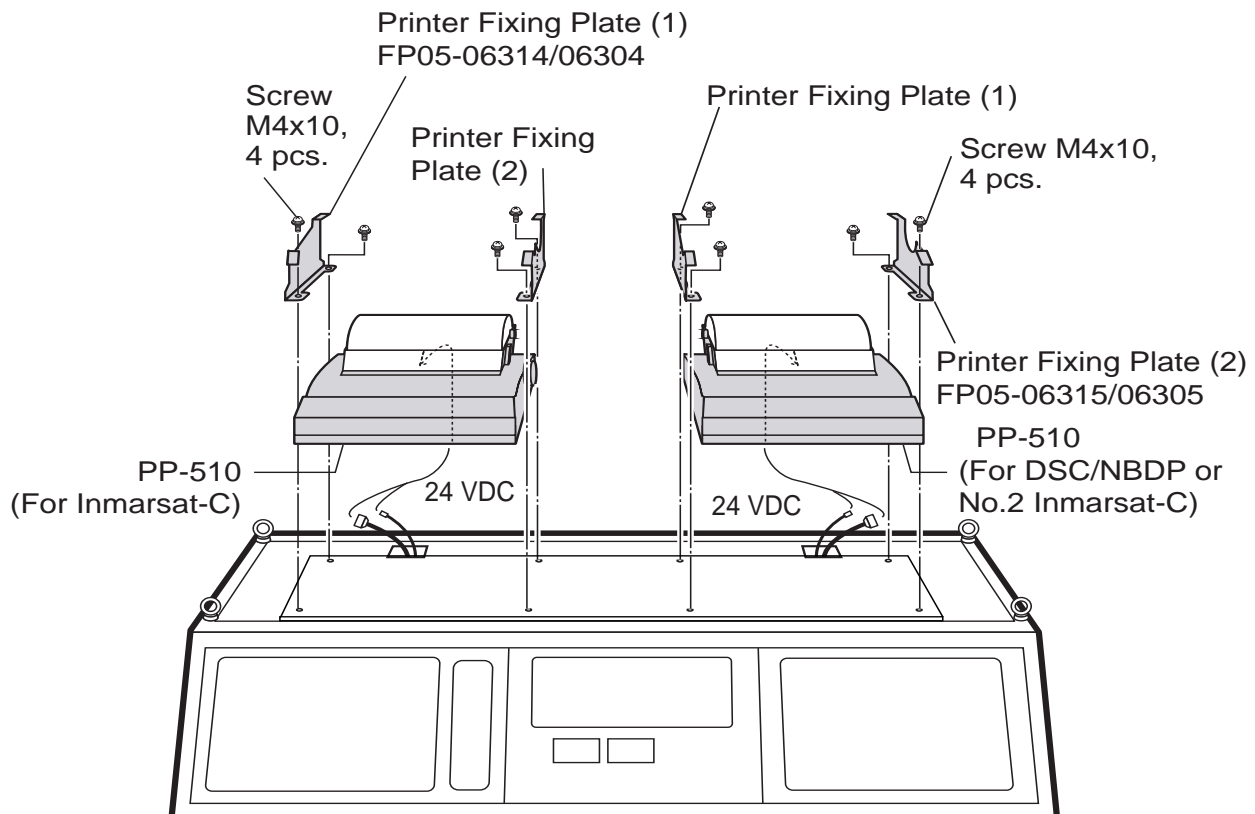
Note: Lock the stay at the left-hand side inside the rack console.



- Connect the keyboard connector to the rear of the IC-215/IB-583.
- Remount the front panel and the front cover.
- Fix the keyboard to the tabletop with fastener (3) and fastener (4), supplied with the installation materials CP16-02302.

1.4 Mounting the Printer PP-510

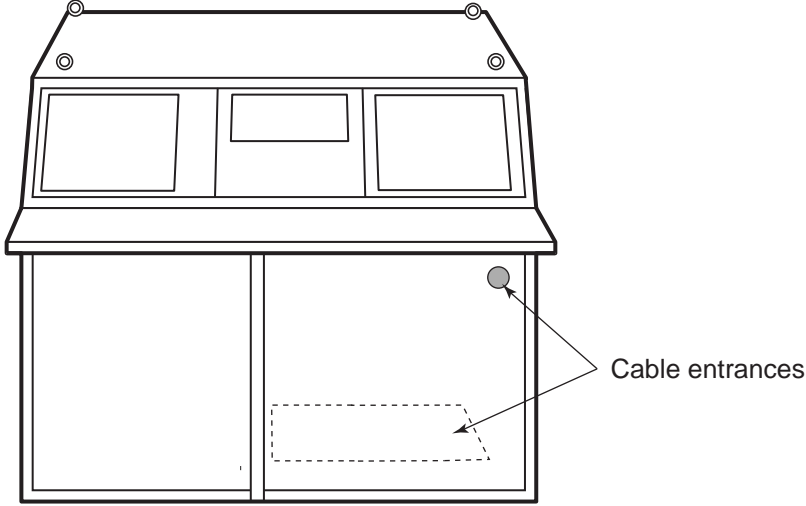
- Place the printers on the top of the rack console. Connect printer connector and printer power cord to printers.
- Set printer fixing plates (one each for left and right sides of printer) to printer and fix them to the rack console with M4x10 screws.



1.5 Mounting the SSAS Alert Unit IC-307

Select the mounting location where the button on the unit can be operated easily in an emergency. See the back of this manual for mounting dimensions and recommended clearance space.

For cabling, use a cable entrance at the front or bottom of the rack console depending on the mounting location. For the cable entrance at the front of the rack console, cut the rubber cap to use it.



1.6 Connection of Antenna Cable for DSC Function

1.6.1 Installation of antenna FAX-5

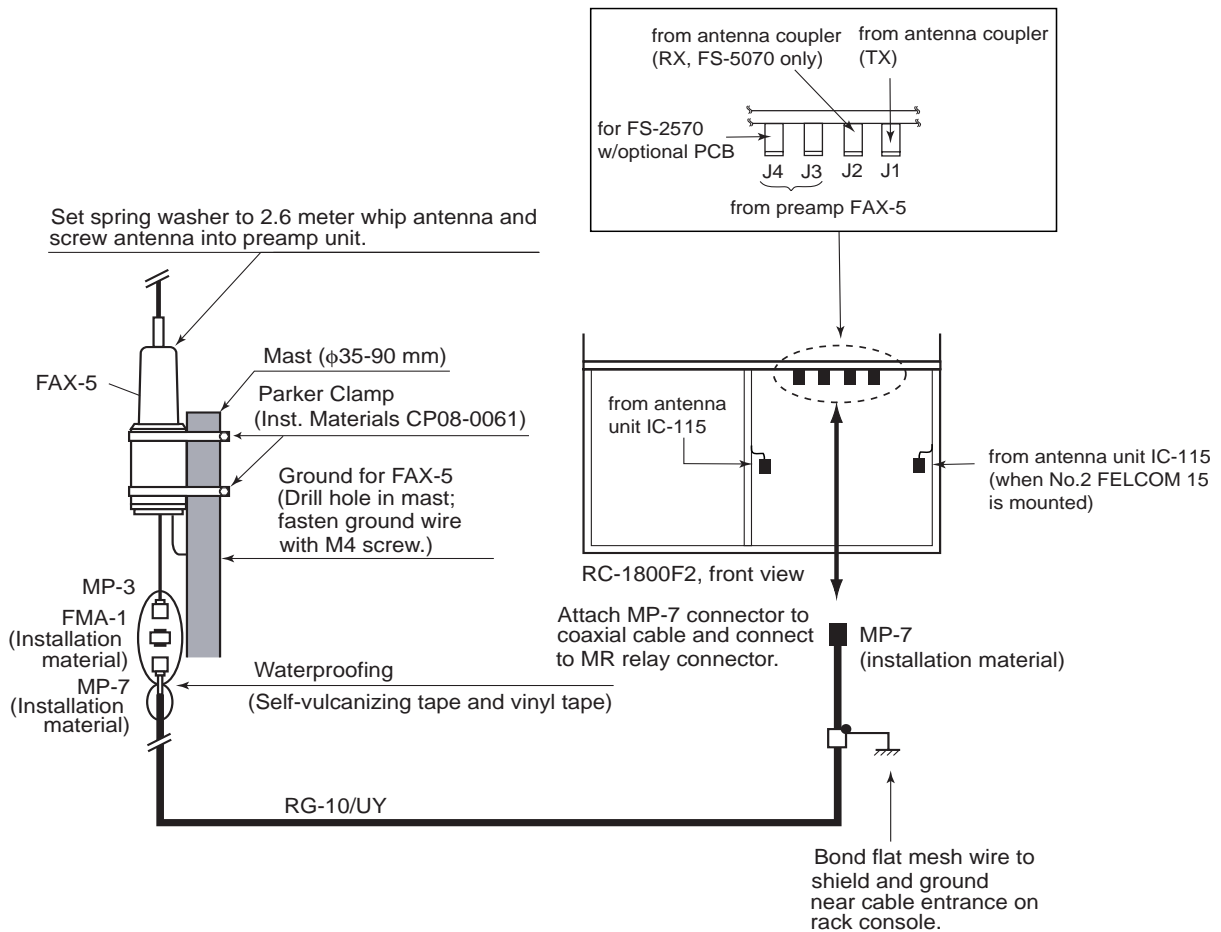
Fix the FAX-5 (preamp unit) to the mounting mast (diameter 35 to 90 mm) with hose clamps (Installation material CP05-09301). Screw the whip antenna (04S4176) into the FAX-5. Coat connection point with putty for waterproofing.

Switching to coaxial cable with armor

To switch to the coaxial cable with armor (RG-10/UY);

1. Remove 15 to 25 cm of the sheath of the cable RG-10/UY and attach connector MP-7 (Installation material CP05-09301) to the cable.
2. Attach the connector FMA-1 between connectors MP-3 and MP-7.
3. Cover connectors with self-vulcanizing tape followed by vinyl tape to waterproof.

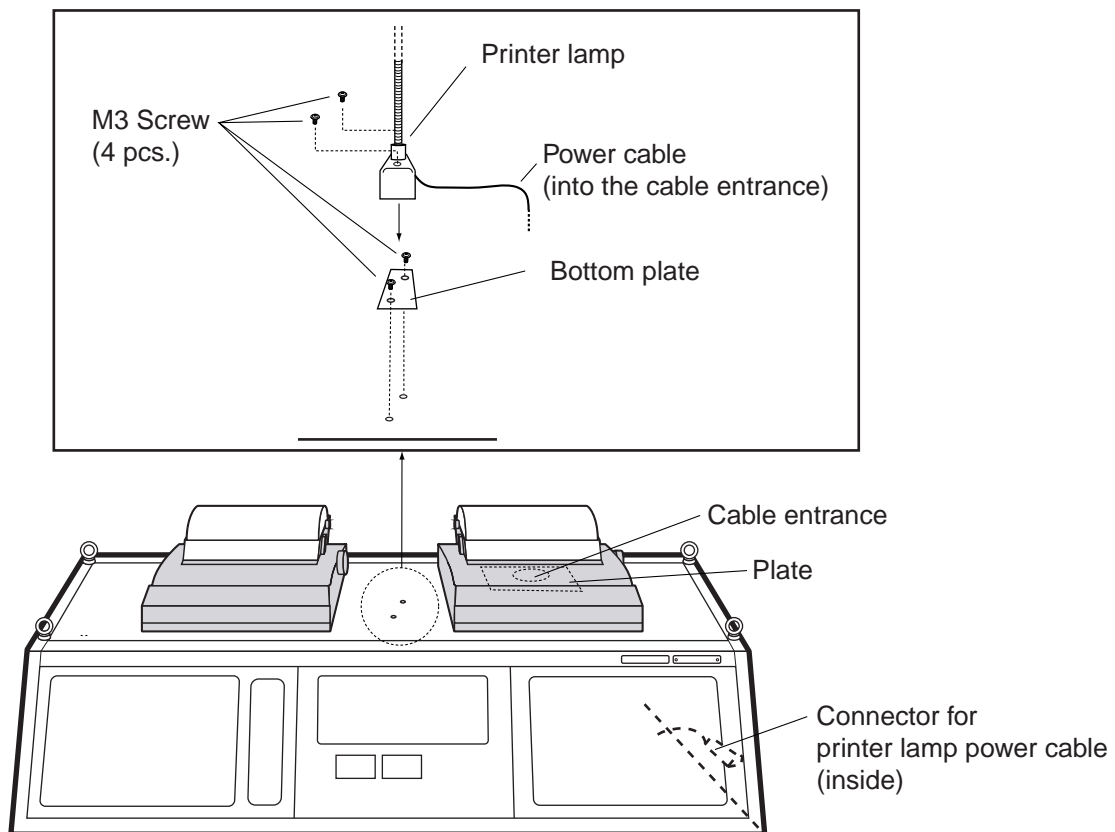
The coaxial cables RG-10/UY from the preamp unit and the antenna coupler are connected to the MP-7 connectors inside the rack console.



1.7 Lamp Assembly (Option)

The lamp assembly (type: L3/12-YLP2, code no.: 000-169-005-10) is optionally available. Mount it as follows.

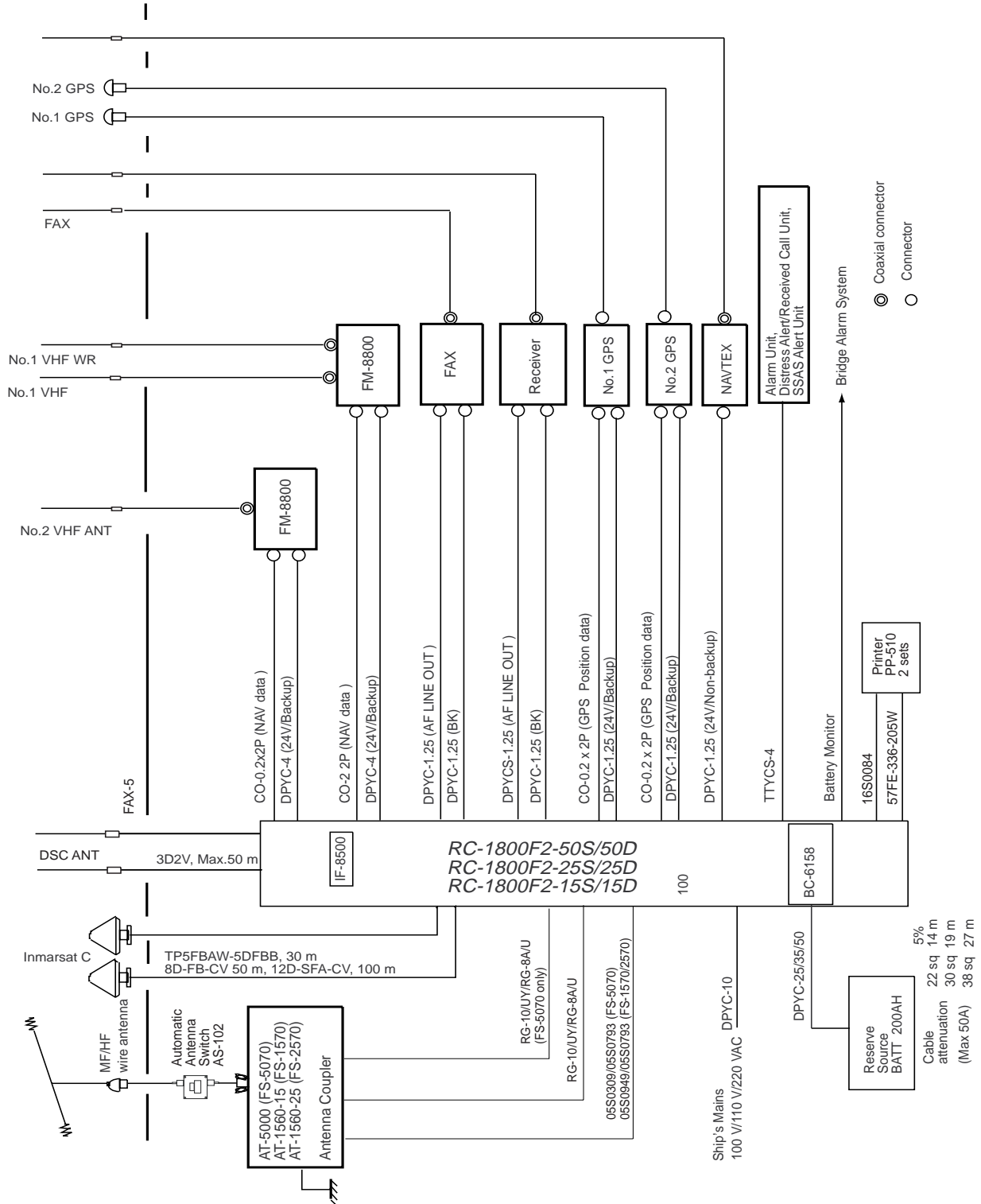
1. Unfasten two M3 screws from the top of the rack console.
2. Unscrew two M3 screws to remove the bottom plate from the lamp assembly.
3. Use two screws unfastened at step 1 to fasten the bottom plate for the lamp assembly to the top of the rack console.
4. Reattach the lamp assembly to the bottom plate.
5. Unfasten two pan head screws to detach the plate that partially covers the cable entrance behind the printer on the right-side.
6. Pass the power cable from the lamp assembly through the cable entrance.
7. Re-attach the plate to the cable entrance.
8. Open the front panel, and connect the power cable from the printer lamp and the connector located at right-hand side in the rack console.
9. Close the front panel.



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2. WIRING

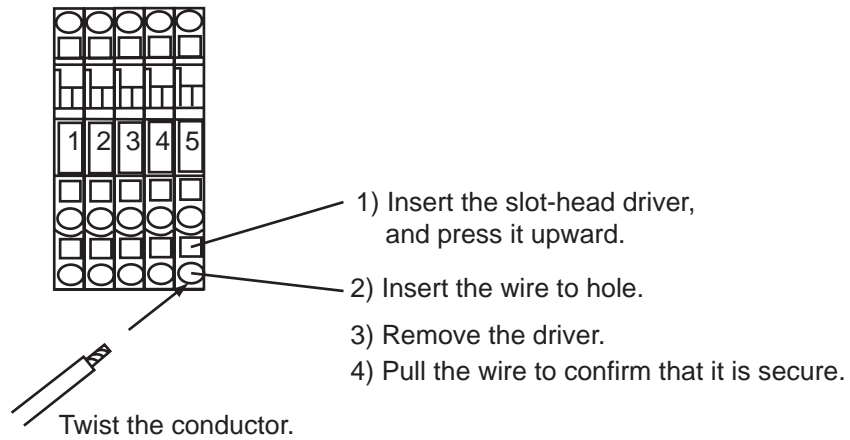
2.1 Wiring Diagram



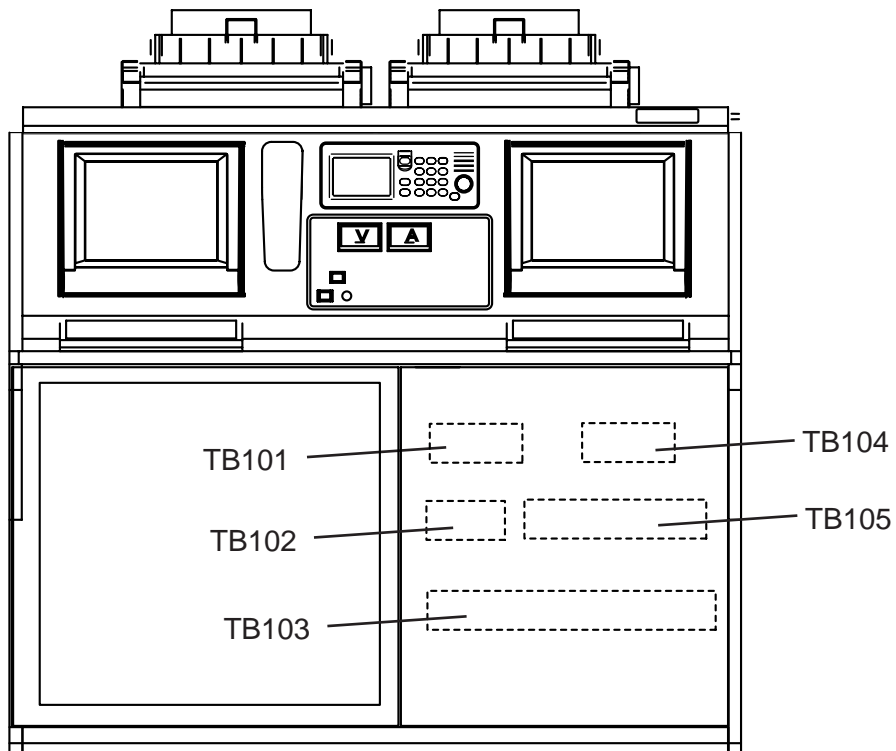
2.2 Terminal Wiring

WAGO connectors have three cable holes respectively. You can use any hole to connect the cable. To use the WAGO connector, see the figure shown below.

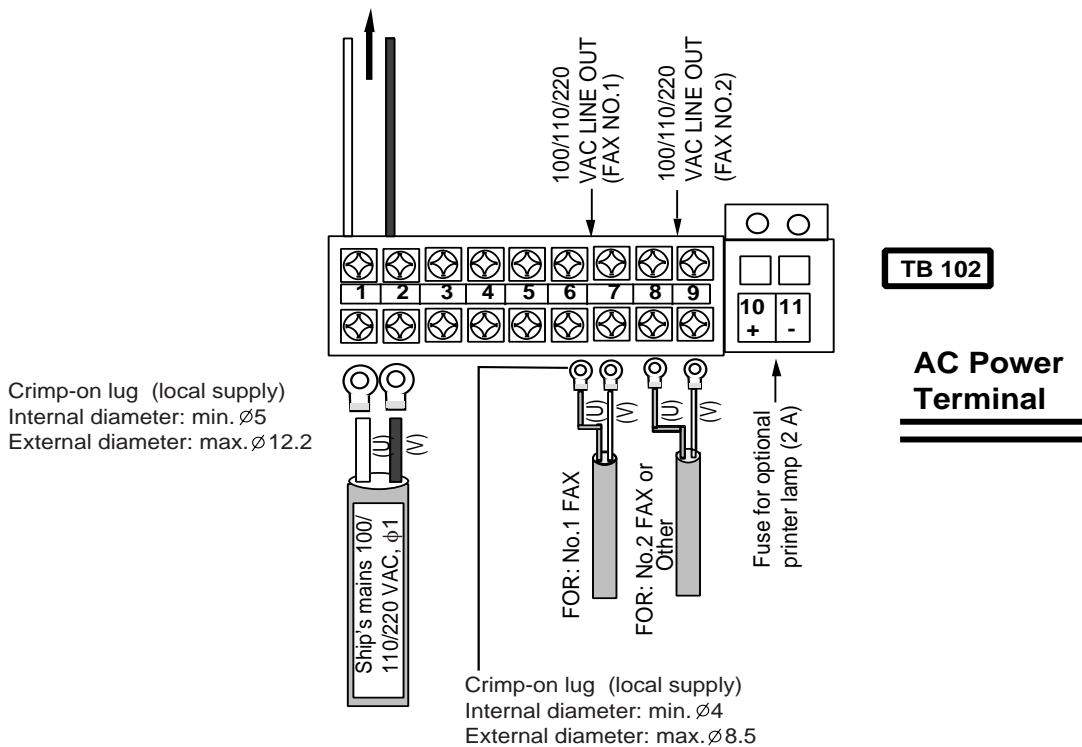
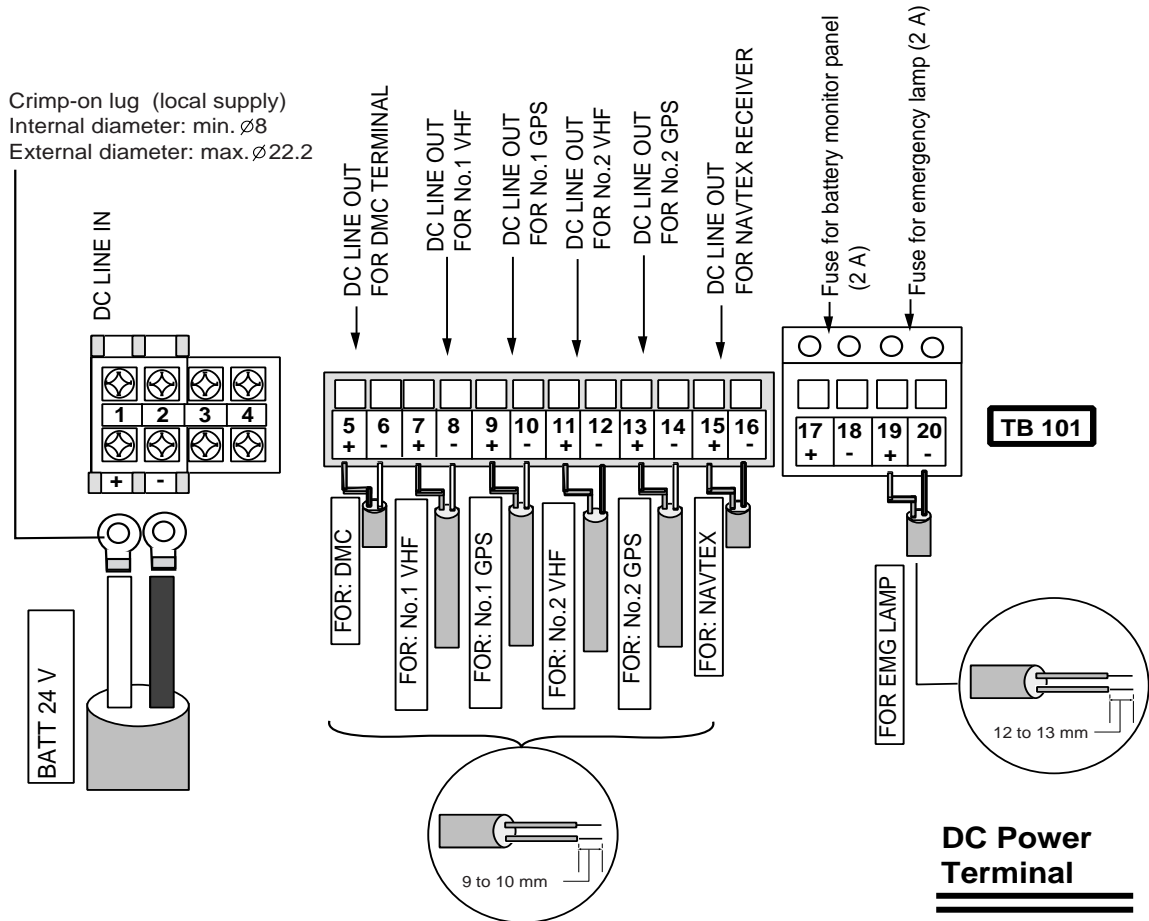
WAGO connector



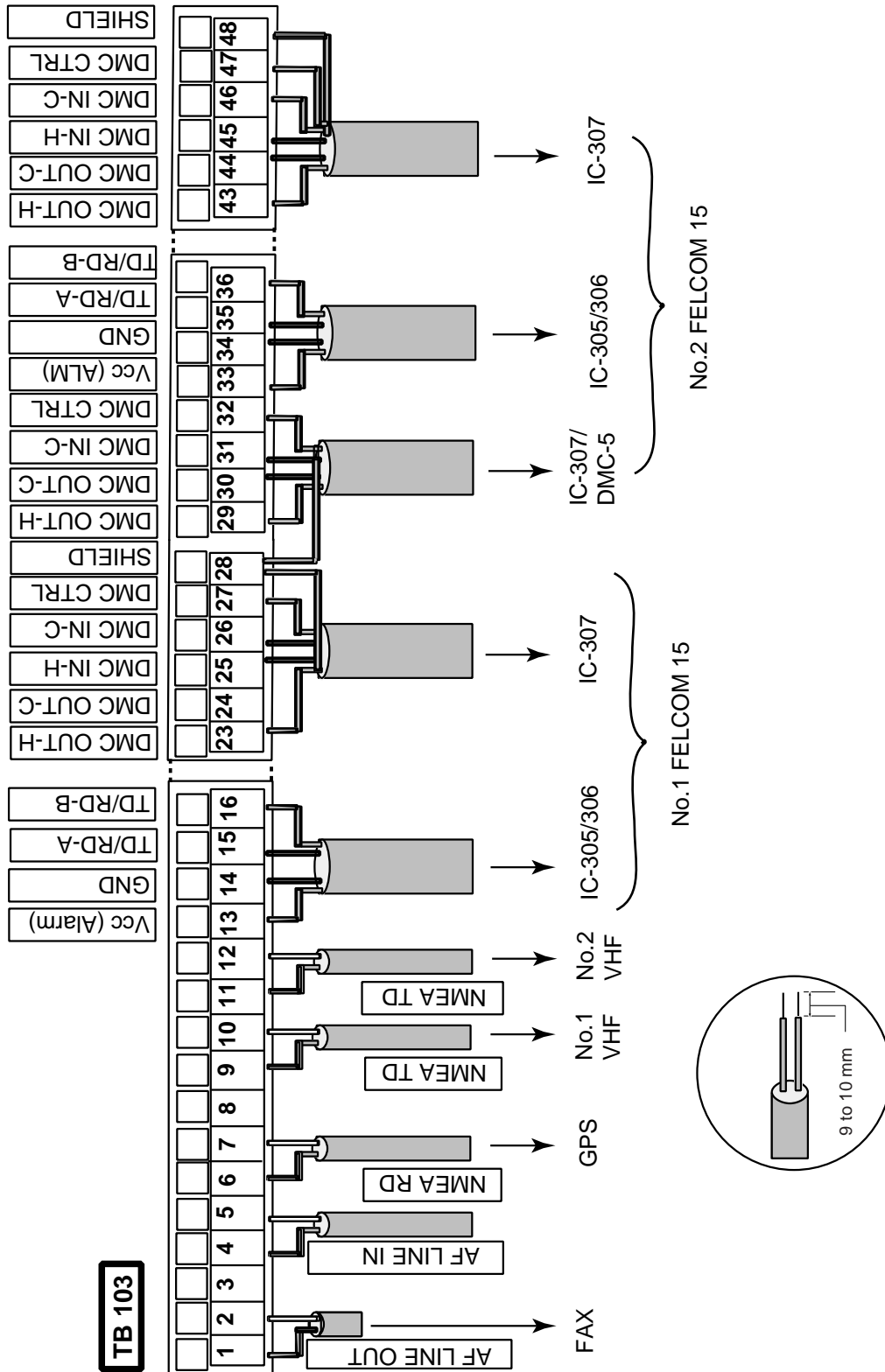
Locations of terminals



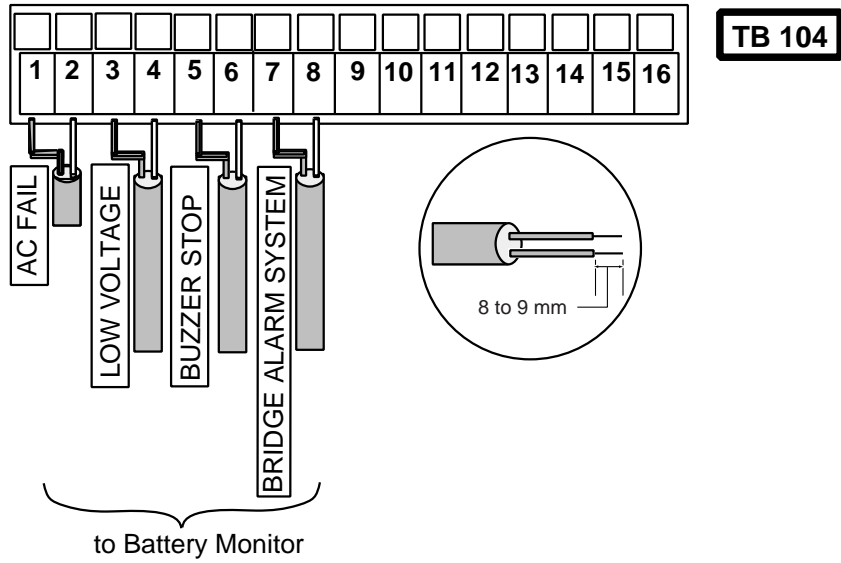
Terminal wiring for power system (TB101, 102)



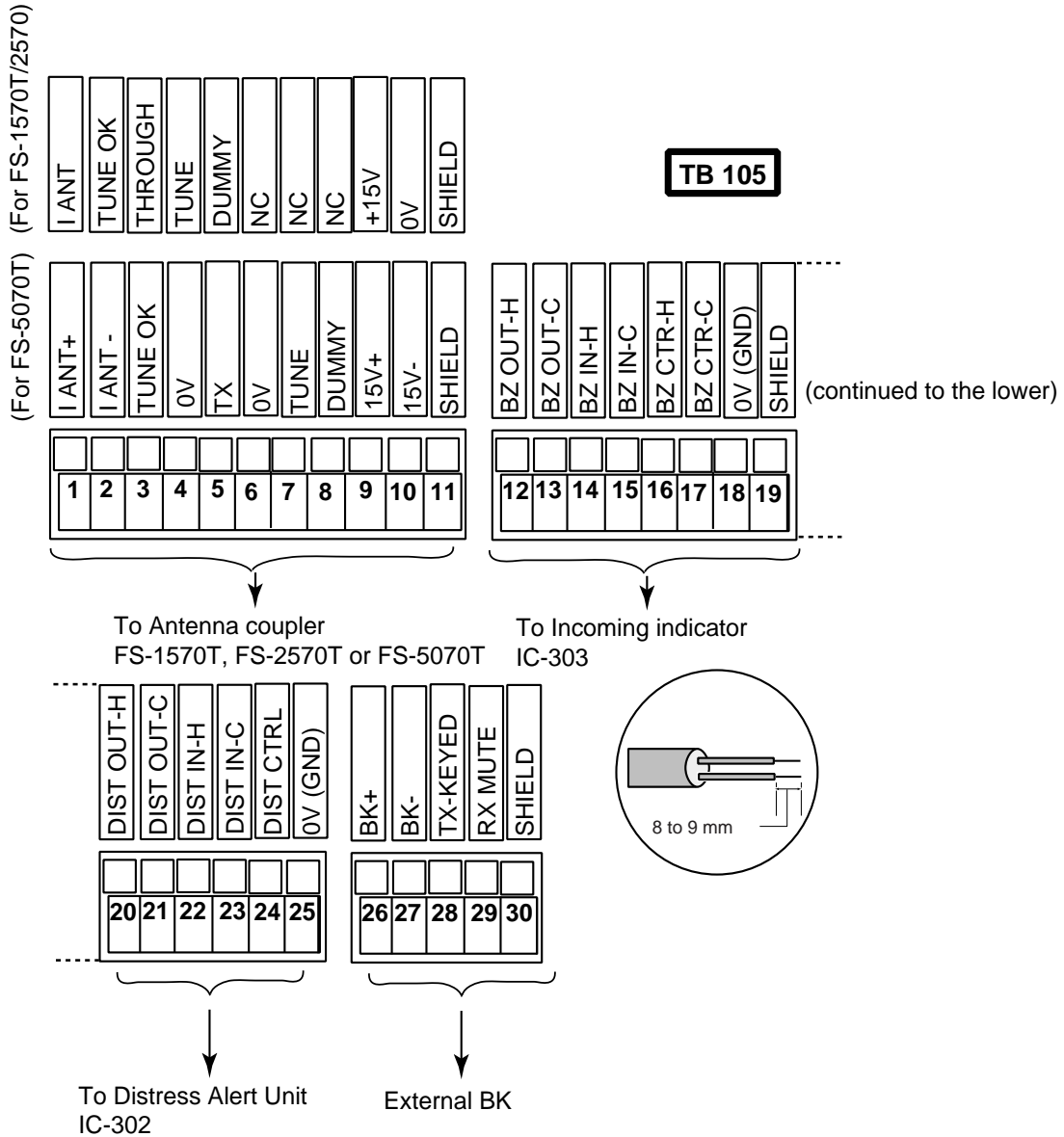
Terminal wiring for Inmarsat-C (TB103)



Terminal wiring for battery system (TB104)

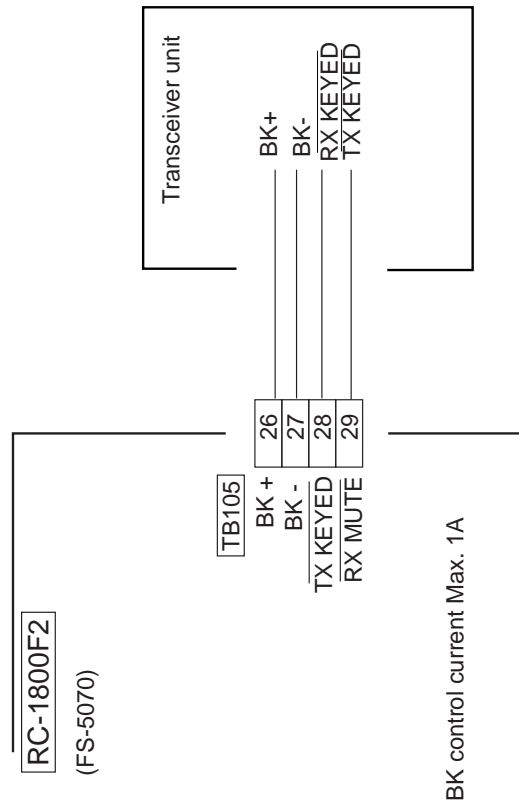
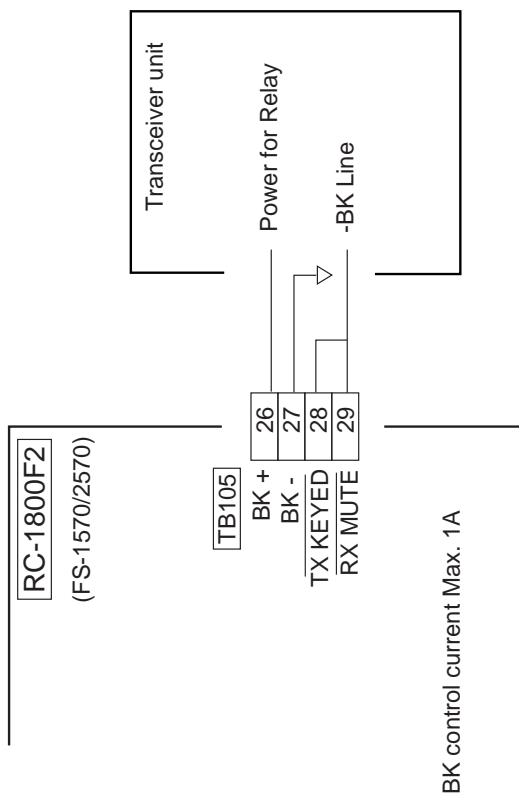
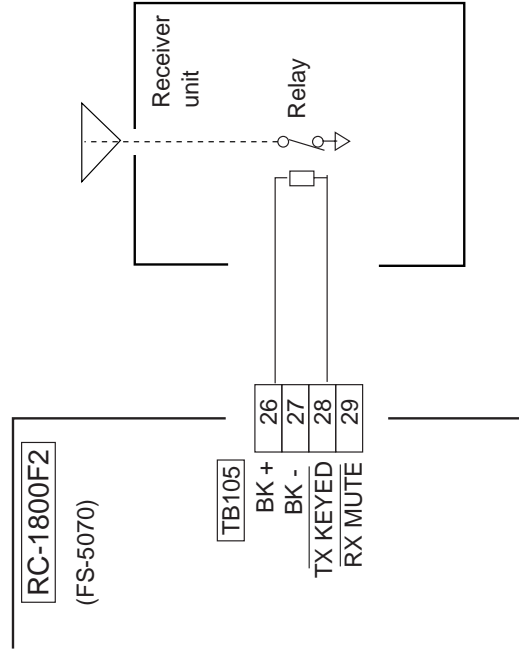
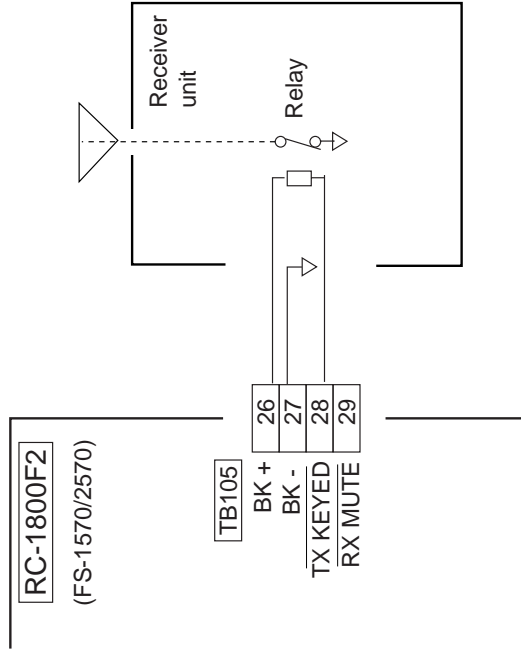


Terminal wiring for SSB (TB105)



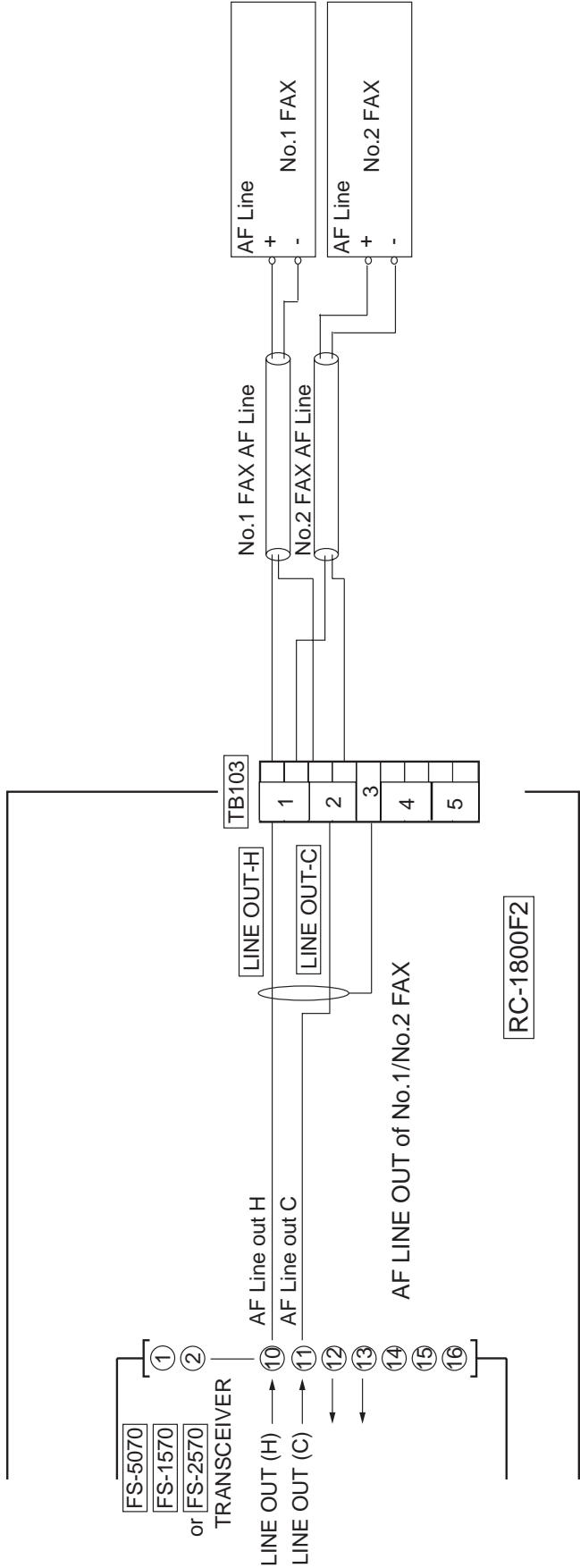
2.3 Connection of External Equipment

2.3.1 BK connection



2.3.2 AF LINE OUT connection

Standard AF LINE OUT Connection



2.4 JIS (Japanese Industrial Standards) Cable Data

- 0.6/1 kV Two core EP rubber insulator vinyl sheath cable (0.6/1 kV DPY)
- 0.6/1 kV Two core EP rubber insulator vinyl sheath w armor cable (0.6 1 kV DPYC)
- 0.6/1 kV Two core EP rubber insulator vinyl sheath w armor vinyl anticorrosive cable (0.6 1/kV DPYCY)
- 0.6/1 kV Two core EP rubber insulator vinyl sheath cable (0.6/1 kV FA-DPY)
- 0.6/1 kV Two core EP rubber insulator vinyl sheath (0.6/1 kV FA-DPYC)
- 0.6/1 kV Two core EP rubber insulator vinyl sheath w armor vinyl anticorrosive cable (0.6 1/kV FA-DPYCY)

Cores	Conductor		Insulator Thickness mm	Sheath Thickness mm	DPY, FA-DPY		Armor Wire Dia. mm	DPYC, FA-DPYC		DPYCY, FA-DPYCY		Conductor Resistance (20°C)		Test Voltage V	Insulator Resistance (20°C) Mohm.km	Remarks			Std. Length m
	Sectional Area mm ²	Wires Dia. mm			Outer Dia. mm	Outer Dia. mm		Outer Dia. mm	Outer Dia. mm	Outer Dia. mm	Outer Dia. mm	Outer Dia. mm	Outer Dia. mm			Outer Dia. mm	Outer Dia. mm	No Gliding diam.km	
2	1.5	7/0.52	1.56	1.0	1.1	10.4	0.5	11.7	0.5	0.9	13.7	0.5	12.1	12.2	1 300	DPY	DPYCY	260	500
	2.5	7/0.67	2.01	1.2	11.5		12.8	14.8	0.6		14.8	0.6	7.41	7.56	1 100	FA-DPYC	FA-DPYCY	250	
	4	7/0.85	2.55		12.6	0.6	13.9	0.6			15.9		4.61	4.70	900	DPY	DPYCY	300	
	6	7/1.04	3.12		1.3	13.9		15.2		1.0	17.4	0.7	3.08	3.11	800	FA-DPYC	FA-DPYCY	370	
	10	7/1.35	4.05			15.8	0.7	17.1	0.7		19.3	0.8	1.83	1.84	700	DPY	DPYCY	490	
	16	7/1.70	5.10		1.4	18.1	0.8	19.4	0.8	1.1	21.8	0.9	1.15	1.16	600	FA-DPYC	FA-DPYCY	660	
	25	7/2.14	6.42	1.2	1.5	21.7	0.9	23.0	0.9	1.2	25.6	1.0	0.727	0.734	500	DPY	DPYCY	945	250
	35	7/2.52	7.56		1.6	24.2	1.0	25.5	1.0		28.1	1.1	0.524	0.529	450	FA-DPYC	FA-DPYCY	1 200	
	50	19/1.78	8.90	1.4	1.8	28.1	1.2	29.4	1.2	1.3	32.2	1.3	0.387	0.391		DPY	DPYCY	1 580	100
	70	19/2.14	10.7	1.6	2.0	33.3	1.4	35.1	1.4	1.5	38.5	1.5	0.268	0.270	400	FA-DPYC	FA-DPYCY	2 300	
	95	19/2.52	12.6		2.1	37.3	1.6	39.1	1.6	1.6	42.7	1.6	0.193	0.195		DPY	DPYCY	2 960	
	120	37/2.03	14.2		2.3	40.9		42.7		1.7	46.5	1.7	0.153	0.154	350	FA-DPYC	FA-DPYCY	3 600	
	150	37/2.25	15.8	1.8	2.4	45.0	1.7	46.8	1.7	1.8	50.8	1.8	0.124	0.126		DPY	DPYCY	4 330	
	185	37/2.52	17.6	2.0	2.6	50.0	1.9	51.8	1.9	1.9	56.0	1.9	0.099	0.100		FA-DPYC	FA-DPYCY	5 330	

- 0.6/ 1 kV Three core EP rubber insulator vinyl sheath cable (0.6/1 kV TPY)
- 0.6/ 1 kV Three core EP rubber insulator vinyl sheath w/armor cable (0.6/1 kV TPYC)
- 0.6/ 1 kV Three core EP rubber insulator vinyl sheath w/ armor vinyl anticorrosive cable (0.6/1 kV TPYCY)
- 0.6/ 1 kV Three core EP rubber insulator vinyl sheath cable (0.6/1 kV FA-TPY)
- 0.6/ 1 kV Three core EP rubber insulator vinyl sheath (0.6/1 kV FA-TPYC)
- 0.6/ 1 kV Three core EP rubber insulator vinyl sheath w/armor vinyl anticorrosive cable (0.6/1 kV FA-TPYCY)

Cores	Conductor		Insulator Thickness mm	Sheath Thickness mm	TPY, FA-TPY		Armor Wire Dia. mm	TPYC, FA-TPYC		TPYCY, FA-TPYCY		Conductor Resistance (20°C)		Test Voltage V	Insulator Resistance (20°C) MΩ/km	Remarks			Std Length m				
	Sectional Area mm ²	Wires/ Dia. mm			Outer Dia. mm	Outer Dia. mm		Outer Dia. mm	Anti-corrosive Sheath mm	Outer Dia. mm	Outer Dia. mm	Outer Dia. Tolerance ±mm	No Gliding ohm/km			With Gliding ohm/km	TPY FA-TPY kg/km	TPYC FA-TPYC kg/km		TPYCY FA-TPYCY kg/km	Approximate Mass		
																					kg/km	kg/km	kg/km
3	1.5	7/0.52	1.56	1.2	11.2	0.5	0.3	0.5	0.9	14.5	0.6	12.1	12.2	3 500	1 300	150	245	300	500				
					12.2	13.5														7.41	7.56		
	4	7/0.85	2.55	1.3	13.4	0.6	1.0	0.6	1.0	16.9	0.7	4.61	4.70	900	255	365	440	535	725				
					14.8	16.4														3.08	3.11		
	10	7/1.35	4.05	1.4	17.0	0.7	1.1	0.7	1.1	20.7	0.8	1.83	1.84	700	485	625	700	855	970				
					19.5	20.8														1.15	1.16		
	25	7/2.14	6.42	1.6	23.4	1.0	1.2	1.0	1.2	27.3	1.1	0.727	0.734	500	1 060	1 240	1 390	1 770	2 420				
					26.1	27.4														0.524	0.529		
	50	19/1.78	8.90	1.7	30.2	1.3	1.4	1.3	1.4	35.0	1.4	0.387	0.391	450	1 390	1 600	1 600	2 200	2 420				
					32.0	32.0														0.387	0.391		
	70	19/2.14	10.7	2.1	35.8	1.5	1.5	1.5	1.5	41.0	1.6	0.268	0.270	400	2 660	3 060	3 350	3 350	3 350				
					40.1	41.9														0.193	0.195		
120	37/2.03	14.2	2.4	44.0	1.7	1.7	1.7	1.7	49.6	1.8	0.153	0.154	350	3 530	3 980	4 320	4 320	4 320					
				45.8	45.8														0.153	0.154			
150	37/2.25	15.8	2.5	48.4	1.8	1.8	1.8	1.8	54.2	1.9	0.124	0.126	350	5 340	5 870	6 340	6 340	6 340					
				50.2	50.2														0.124	0.126			
185	37/2.52	17.6	2.7	53.7	1.9	1.9	1.9	2.0	59.7	2.0	0.099	0.100	350	6 640	7 230	7 780	7 780	7 780					
				55.5	55.5														0.099	0.100			

- 0.6/ 1 kV Two core EP rubber insulator vinyl sheath w/armor cable (0.6/1 kV DPYCS)
- 0.6/ 1 kV Three core EP rubber insulator vinyl sheath w/armor cable (0.6/1 kV TPYCS)
- 0.6/ 1 kV Two core EP rubber insulator vinyl sheath w/ armor vinyl anticorrosive cable (0.6/1 kV DPYCYCS)
- 0.6/ 1 kV Three core EP rubber insulator vinyl sheath w/ armor vinyl anticorrosive cable (0.6/1 kV FA-TPYCYCS)
- 0.6/ 1 kV Two core EP rubber insulator vinyl sheath w/armor cable (0.6/1 kV FA-DPYCS)
- 0.6/ 1 kV Three core EP rubber insulator vinyl sheath w/armor cable (0.6/1 kV FA-TPYCS)
- 0.6/ 1 kV Two core EP rubber insulator vinyl sheath w/armor vinyl anticorrosive cable (0.6/1 kV FA-DPYCYCS)
- 0.6/ 1 kV Three core EP rubber insulator vinyl sheath w/armor vinyl anticorrosive cable (0.6/1 kV FA-TPYCYCS)

Cores	Conductor		Insulator Thickness	Braided Shield Wire Dia.	Sheath Thickness	Sheath Outer Dia.	Armor Wire Dia.	DPYCS, FA-DPYCS TPYCS, FA-TPYCS		DPYCYCS, FA-DPYCYCS TPYCYCS, FA-TPYCYCS		Conductor Resistance (20°C)		Test Voltage	Insulator Resistance (20°C)	Remarks				
	Sectional Area	Wires/ Dia.						Outer Dia.	Outer Dia.	Anti-corrosive Sheath	Outer Dia.	Outer Dia. Tolerance	Outer Dia.			Outer Dia. Tolerance	No Gliding	With Gliding	Approximate Mass	Sid. Length
	mm ²	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	ohm/km	ohm/km	V	Mohm/km	kg/km	kg/km	m		
2	1.5	7/0.52	1.56	1.0	1.2	11.3	0.3	0.5	0.9	14.6	0.6	12.1	12.2	3 500	1 300	265	DPYCS	500		
												13.5	7.41						7.56	TPYCS
												14.7	4.61						4.70	FA-DPYCS
3	1.5	7/0.52	1.56	1.0	1.3	14.4	0.16	0.5	1.0	15.2	0.6	12.1	12.2	900	305	455	FA-DPYCYCS	500		
												14.2	7.41						7.56	TPYCYCS
												15.7	4.61						4.70	FA-TPYCYCS
4	2.5	7/0.67	2.01	1.0	1.2	12.2	0.3	0.5	0.9	17.9	0.7	7.41	7.56	1 100	310	375	TPYCS	500		
												13.4	4.61						4.70	FA-DPYCS
												14.7	4.61						4.70	FA-TPYCS
4	2.5	7/0.67	2.01	1.0	1.3	14.4	0.16	0.6	1.0	16.4	0.7	4.61	4.70	900	455	535	FA-DPYCYCS	500		
												14.2	7.41						7.56	TPYCYCS
												15.7	4.61						4.70	FA-TPYCYCS

All cable shields are banded.

3. CHECKING OPERATION

3.1 Checking Operation of Equipment

This section covers checking of the equipment for proper operation. Refer to the respective Installation Manuals shown below. A password is required to do the initial setting. Under no circumstances shall the operator do the initial setting.

- Installation Manual for FELCOM 15: IME-53350
- Installation Manual for FS-5070: IME-56560
- Installation Manual for FS-1570/2570: IME-56360

3.2 General Check

Check equipment referring to the following lists for proper operation. **If the distress alert is accidentally transmitted, immediately cancel the distress alert and contact appropriate authority.** For the procedure for cancelling distress alert, see section 3.3.

Check point	Procedure	Pass/Fail
FS-1570/2570/5070		
Confirm that all bands can be tuned	1) Set channel or frequency. 2) Press the 0/LOG/TUNE key more than two seconds, and confirm that "TUNE" appears on the display.	
Confirm TX power	1) Set channel or frequency. 2) Press the PTT switch, and speak anything for MIC test. 3) Confirm that the meter on the display swings. 4) Release the PTT switch. 5) Repeat step 1 through 4 on all bands.	
Receive signal sensitivity	1) Turn the RF GAIN control fully clockwise. 2) Receive a signal and confirm that the S-meter on display swings with receive signal.	
Ship's position is correctly input	1) Press the #/SETUP key. 2) Rotate the ENTER knob to choose "POSITION", and push the ENTER knob. 3) Confirm that position is correct.	
General DSC frequencies can be scanned.	Press the 6/SCAN key, and confirm that the scanning starts.	
Test	Press the 3/TEST key, and confirm that test results are printed out.	

Check point	Procedure	Pass/Fail
FS-1570/2570/5070		
Make group call and confirm that the equipment transmits DSC message	<ol style="list-style-type: none"> 1) Arrange the group message as below. Message type: GROUP MESSAGE Group ID: 011111111 Priority: ROUTINE COMM MODE: TELEPHONE COMM FREQ: Any setting is available. DSC FREQ: Tx: 2177.0 kHz, Rx: 2177.0 kHz 2) Press the CALL key to show the message "Group message in progressed!". 3) Confirm that DSC message is transmitted over 2177.0 kHz. 	

Check point	Procedure	Pass/Fail
FS-1570/2570/5070 (NBDP)		
Remote function works properly	<ol style="list-style-type: none"> 1) Press F3, 9 and enter TX and RX frequencies. 2) Press the Enter. 3) Confirm that frequencies on the FS-2571C change (mode also changes to Telex). 	
Initialize floppy disk	Insert disk in drive, and press F1, 0, Up arrow and Enter (twice) to initialize disk.	
Test	<ol style="list-style-type: none"> 1) Press the F6 key. 2) Choose "Change" at the Setup field. 3) Choose "Self Test", and press the Enter key. 4) Confirm test results: <ul style="list-style-type: none"> • Terminal Unit Test • Main Unit Test • Modem Unit Test • Radio Unit Test • DSC Unit Test • Printer Unit test 	

Check point	Procedure	Pass/Fail
FELCOM 15		
NCS common channel is synchronized	1) Turn on the power. 2) Confirm that "SYNC" appears at the bottom of the screen.	
Position is correctly input	Confirm that position data appears at the lower right corner and is correct.	
Equipment state	Confirm the equipment state on the System Status Monitor	
Initialize floppy disk	Insert disk in drive, and press F1, 8 and Enter (twice) to initialize disk.	
Prepare a message, save it to a floppy disk as file and open the file	1) Press F1, 1 . Prepare message. 2) Press F1, 4 , and key in file name and press the Enter to save the file. 3) Press F1, 2 , and select file. 4) Press the Enter to open the file.	
Test	Press the F7, 6 and 3 .	
Check Distress Alert Unit IC-305 for proper operation.	1. Press the F7, 6, 4 and Enter in order. The distress Alert Button Test mode screen appears. 2. Open the cover on DISTRESS button. 3. Press the DISTRESS button. 4. Confirm that the IC-305 sounds the audible alarm. 5. Close the cover on the DISTRESS button. 6. Press any key to escape. Note: FELCOM 15 cannot receive distress alert during test mode.	

Test for printer PP-510

While pressing and holding down the LINE FEED switch to turn on the power. All characters are printed as below.

```
!"#$%&'()*+,-./0123456789:;<=>?@ABCDEFGHIJKLMNPOQRSTUVWXYZ[#]^_`abcdefghijkl  
!"#$%&'()*+,-./0123456789:;<=>?@ABCDEFGHIJKLMNPOQRSTUVWXYZ[#]^_`abcdefghijkl  
!"#$%&'()*+,-./0123456789:;<=>?@ABCDEFGHIJKLMNPOQRSTUVWXYZ[#]^_`abcdefghijkl  
!"#$%&'()*+,-./0123456789:;<=>?@ABCDEFGHIJKLMNPOQRSTUVWXYZ[#]^_`abcdefghijkl  
!"#$%&'()*+,-./0123456789:;<=>?@ABCDEFGHIJKLMNPOQRSTUVWXYZ[#]^_`abcdefghijklm  
!"#$%&'()*+,-./0123456789:;<=>?@ABCDEFGHIJKLMNPOQRSTUVWXYZ[#]^_`abcdefghijklmno  
!"#$%&'()*+,-./0123456789:;<=>?@ABCDEFGHIJKLMNPOQRSTUVWXYZ[#]^_`abcdefghijklmnopq
```

BK check

1. Press the **PTT** switch of the SSB radiotelephone.
2. Check that the BK relay on BK line-connected equipment (facsimile, receiver, etc.) operates.

AF LINE OUT

When the receiver of the SSB radiotelephone functions as a facsimile receiver, check AF line output as follows:

1. Set the mode on the SSB radiotelephone to FAX and set a facsimile Rx frequency.
2. Receive fax broadcast and confirm quality of recording.

3.3 Instructions for Cancelling Distress Alert

Procedure	Sample message
VHF DSC	
<ol style="list-style-type: none"> 1) Switch off transmitter immediately. 2) Switch equipment on and set to Channel 16. 3) Make broadcast to "ALL Stations" giving your vessel's name, callsign and DSC number, and cancel the false distress alert. 	<p>All Stations, All Stations, All Stations This is NAME, CALLSIGN, DSC NUMBER, POSITION.</p> <p>Cancel my distress alert of DATE, TIME, UTC, = Master NAME, CALLSIGN, DSC NUMBER, DATE, TIME UTC.</p>
DSC MF	
<ol style="list-style-type: none"> 1) Switch off equipment immediately. 2) Switch equipment on and tune for radiotelephone transmission on 2182 kHz. 3) Make broadcast to "All stations" giving the vessel's name, callsign and DSC number, and cancel the false distress alert. 	<p>All Stations, All Stations, All Stations. This is NAME, CALLSIGN, DSC NUMBER, POSITION.</p> <p>Cancel my distress alert of DATE, TIME, UTC, = Master NAME, CALLSIGN, DSC NUMBER, DATE, TIME UTC.</p>
DSC HF	
<p>Same as for MF but the alert must be cancelled on all the frequency bands on which it was transmitted. Hence, the transmitter should be tuned consecutively to the radiotelephone distress frequencies in the 4, 6, 8, 12 and 16 MHz bands, as necessary.</p>	
Inmarsat C	
<p>Notify the appropriate RCC to cancel the alert by sending a distress priority message via the same CES through which the false distress alert was sent.</p>	<p>NMEA, CALLSIGN, IDENTITY NUMBER, POSITION. Cancel my IMMARSAT C distress alert of DATE, TIME, UTC, =Master NAME, CALLSIGN, DSC NUMBER, DATE, TIME UTC.</p>
EPIRB	
<p>If for any reason, an EPIRB is activated accidentally, the ship should contact the nearest coast station or an appropriate coast earth station or RCC and cancel the distress alert.</p>	
Notes	
<ul style="list-style-type: none"> • Notwithstanding the above, a ship may use any means available to inform the appropriate authorities that a false distress alert has been transmitted and should be cancelled. • No action will normally be taken against any ship or mariner for reporting and cancelling a false distress alert. However, in view of the serious consequences of false alert, and the strict ban on their transmission. Governments may prosecute in cases of repeated violations. 	

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PACKING LIST (FS-1570/2570)

05EH-X-9851-4

1/2

NAME	OUTLINE	DESCRIPTION/CODE No.	Q'TY
ユニット			
ラック, 無線通信		RC-1800F2-2*	1
GMDSS RADIO STATION		000-012-666-00 **	
付属品 ACCESSORIES FP05-06301			
テーブル		05-100-2503-2	1
TABLE		100-345-522-10	
付属品 ACCESSORIES FP05-06302/12			
テーブルサヤE-R組品		FP05-06302	1
TABLE STAY ASSY.		001-045-910-00 **	
付属品 ACCESSORIES FP05-06303/13			
テーブルサヤ(L)		05-100-2502-1	1
TABLE STAY (LEFT)		100-345-601-10 **	
付属品 ACCESSORIES FP05-06304/14			
プリンタサヤE1B組品		FP05-06314	2
PRINTER FIXING PLATE 1		001-041-890-00 **	
付属品 ACCESSORIES FP05-06305/15			
プリンタサヤE2B組品		FP05-06315	2
PRINTER FIXING PLATE 2		001-041-900-00 **	

1.コード番号末尾の[**]は、選択品の代表コードを表します。
CODE NUMBER ENDING WITH "**" INDICATES THE CODE NUMBER OF REPRESENTATIVE MATERIAL.

2.(*)は、FELCOM15 1式の場合1、2式の場合2になります。

*1 ONE DOCUMENT IS INCLUDED WITH EACH FELCOM15.

(略図の寸法は、参考値です。DIMENSIONS IN DRAWING FOR REFERENCE ONLY.)

NAME	OUTLINE	DESCRIPTION/CODE No.	Q'TY
付属品			
付属品		FP05-06306	1
ACCESSORIES		001-045-690-00	
図書 DOCUMENT FP05-06306			
7° リケーゾンフォーム		J5-950010-* 7/11	(*1)
REGISTRATION FOR SERVICE ACTIVATION		000-807-330-1*	
機器引渡し前の注意		C52-00201-* 7/11	1
BEFORE DELIVERING TO OWNER		000-809-353-1*	
取扱説明書		OM*-56350-*	1
OPERATOR'S MANUAL		000-809-348-1*	**
取扱説明書		OM*-56351-*	1
OPERATOR'S MANUAL		000-150-358-1*	**
取扱説明書		OM*-56560-*	1
OPERATOR'S MANUAL		000-160-500-1*	**
取扱説明書		OM*-56640-*	1
OPERATOR'S MANUAL		000-169-025-1*	**
操作要領書		OS*-56560-*	1
OPERATOR'S GUIDE		000-160-504-1*	**

型式/コード番号が2段の場合、下段より上段に代わる過渡期品であり、どちらかが入っています。なお、品質は変わりません。

TWO TYPES AND CODES MAY BE LISTED FOR AN ITEM. THE LOWER PRODUCT MAY BE SHIPPED IN PLACE OF THE UPPER PRODUCT. QUALITY IS THE SAME.

PACKING LIST

05EH-X-9851-4

2/2

RC-1800F2-*2*

(FS-1570/2570)

NAME	OUTLINE	DESCRIPTION/CODE No.	Q'TY
装備要領書		IM*-56350-*	1
INSTALLATION MANUAL		000-809-350-1*	**
装備要領書		IM*-56360-*	1
INSTALLATION MANUAL		000-809-341-1*	**
装備要領書		IM*-56640-*	1
INSTALLATION MANUAL		000-169-032-1*	**
遭難警報70-(HF)		*52-00102-*	1
HF DISTRESS ALERT FLOW		000-809-271-1*	**
遭難警報70-(VHF/MF)		*52-00101-*	1
VHF/MF DISTRESS ALERT FLOW		000-809-269-1*	**
遭難通信注意		J59-20070-* 7/I1	1
CAUTION FOR DISTRESS ALERT		000-807-779-1*	
遭難通信要領		TIC-56350-* 7/I1	1
DISTRESS COMMUNICATION		000-809-352-1*	

NAME	OUTLINE	DESCRIPTION/CODE No.	Q'TY
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(略図の寸法は、参考値です。DIMENSIONS IN DRAWING FOR REFERENCE ONLY.)

型式/コード番号が2段の場合、下段より上段に代わる過渡期品であり、どちらが入っています。なお、品質は変わりません。

TWO TYPES AND CODES MAY BE LISTED FOR AN ITEM. THE LOWER PRODUCT MAY BE SHIPPED IN PLACE OF THE UPPER PRODUCT. QUALITY IS THE SAME.

PACKING LIST RC-1800F2-*5* (FS-5070)

05EH-X-9852-4

1/2

NAME	OUTLINE	DESCRIPTION/CODE No.	Q'TY
ユニット			
ラック、無線通信		RC-1800F2-5*	1
GMDSS RADIO STATION		000-012-663-00 **	
付属品 ACCESSORIES FP05-06301			
テーブル		05-100-2503-2	1
TABLE		100-345-522-10	
付属品 ACCESSORIES FP05-06302/12			
テーブルサヤI-R組品		FP05-06302	1
TABLE STAY ASSY.		001-045-910-00 **	
付属品 ACCESSORIES FP05-06303/13			
テーブルサヤ (L)		05-100-2502-1	1
TABLE STAY (LEFT)		100-345-601-10 **	
付属品 ACCESSORIES FP05-06304/14			
プリンタサヤI1B組品		FP05-06314	2
PRINTER FIXING PLATE 1		001-041-890-00 **	
付属品 ACCESSORIES FP05-06305/15			
プリンタサヤI2B組品		FP05-06315	2
PRINTER FIXING PLATE 2		001-041-900-00 **	

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NAME	OUTLINE	DESCRIPTION/CODE No.	Q'TY
付属品			
付属品		FP05-06306	1
ACCESSORIES		001-045-690-00	
図書 DOCUMENT			
7° リケーゾンフォーム		J5-950010-* 7/11	(*1)
REGISTRATION FOR SERVICE ACTIVATION		000-807-330-1*	
機器引渡し前の注意		C52-00201-* 7/11	1
BEFORE DELIVERING TO OWNER		000-809-353-1*	
取扱説明書		OM*-56350-*	1
OPERATOR'S MANUAL		000-809-348-1*	**
取扱説明書		OM*-56351-*	1
OPERATOR'S MANUAL		000-150-358-1*	**
取扱説明書		OM*-56560-*	1
OPERATOR'S MANUAL		000-160-500-1*	**
取扱説明書		OM*-56640-*	1
OPERATOR'S MANUAL		000-169-025-1*	**
操作要領書		OS*-56560-*	1
OPERATOR'S GUIDE		000-160-504-1*	**

A-3

型式/コード番号が2段の場合、下段より上段に代わる過渡期品であり、どちらかが入っています。なお、品質は変わりません。

TWO TYPES AND CODES MAY BE LISTED FOR AN ITEM. THE LOWER PRODUCT MAY BE SHIPPED IN PLACE OF THE UPPER PRODUCT. QUALITY IS THE SAME.

PACKING LIST

05EH-X-9852-4

2/2

RC-1800F2-*5* (FS-5070)

NAME	OUTLINE	DESCRIPTION/CODE No.	Q'TY
装備要領書		IM*-56350-*	1
INSTALLATION MANUAL		000-809-350-1*	**
装備要領書		IM*-56560-*	1
INSTALLATION MANUAL		000-160-502-1*	**
装備要領書		IM*-56640-*	1
INSTALLATION MANUAL		000-169-032-1*	**
遭難警報70-(HF)		*52-00102-*	1
HF DISTRESS ALERT FLOW		000-809-271-1*	**
遭難警報70-(VHF/MF)		*52-00101-*	1
VHF/MF DISTRESS ALERT FLOW		000-809-269-1*	**
遭難通信注意		J59-20070-* 7/I1	1
CAUTION FOR DISTRESS ALERT		000-807-779-1*	
遭難通信要領		TIC-56350-* 7/I1	1
DISTRESS COMMUNICATION		000-809-352-1*	

NAME	OUTLINE	DESCRIPTION/CODE No.	Q'TY
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1.コード番号末尾の[**]は、選択品の代表コードを表します。
CODE NUMBER ENDING WITH "**" INDICATES THE CODE NUMBER OF REPRESENTATIVE MATERIAL.

2.(*)は、FELCOM15 1式の場合1、2式の場合2になります。

*1 ONE DOCUMENT IS INCLUDED WITH EACH FELCOM15.

(略図の寸法は、参考値です。DIMENSIONS IN DRAWING FOR REFERENCE ONLY.)

型式/コード番号が2段の場合、下段より上段に代わる過渡期品であり、どちらが入っています。なお、品質は変わりません。

TWO TYPES AND CODES MAY BE LISTED FOR AN ITEM. THE LOWER PRODUCT MAY BE SHIPPED IN PLACE OF THE UPPER PRODUCT. QUALITY IS THE SAME.

CODE NO.		16AK-X-9415-5		1/1	
TYPE		CP16-02302			
MINI KEYBOARD BTC-5100C PS/2 /684-4100PPAUS					
番号 NO.	名称 NAME	略図 OUTLINE	型名/規格 DESCRIPTIONS	数量 Q'TY	用途/備考 REMARKS
1	フックループ HOOK LOOP FASTENER		16-007-6814-0 ROHS CODE NO. 100-237-670-10	4	
2	フックループ HOOK LOOP FASTENER		16-007-6815-0 ROHS CODE NO. 100-237-680-10	4	
3	ラベル LABEL		16-011-5813-0 CODE NO. 100-354-210-10	1	684-4100PPAUS用
4	ラベル LABEL		16-011-5803-1 ROHS CODE NO. 100-248-051-10	1	BTC-5100C PS/2用
5	ラベル (G.S.D) LABEL (G.S.D)		16-011-5804-0 ROHS CODE NO. 100-248-060-10	1	BTC-5100C PS/2用

型式/コード番号が2段の場合、下段より上段に代わる通線部品であり、どちらが入っています。なお、品質は変わりません。
 TWO TYPES AND CODES MAY BE LISTED FOR AN ITEM. THE LOWER PRODUCT MAY BE SHIPPED IN PLACE OF THE UPPER PRODUCT.
 QUALITY IS THE SAME. DIMENSIONS IN DRAWING FOR REFERENCE ONLY.)

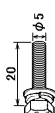

CODE NO.		05DY-X-9421-4		1/1	
TYPE		CP05-09301			
INSTALLATION MATERIALS					
番号 NO.	名称 NAME	略図 OUTLINE	型名/規格 DESCRIPTIONS	数量 Q'TY	用途/備考 REMARKS
1	7×5銅板 *鉄付* EARTH PLATE		0.4X50X600MM CODE NO. 000-170-971-10	1	
2	ボルト *鉄付* BOLT CAP		CP-30-BC-12 CODE NO. 000-165-466-10	4	
3	コネクタ (M) CONNECTOR		FMA-1+ CODE NO. 000-152-964-11	1	
4	コネクタ (M) COAXIAL CONNECTOR M TYPE		FM-SPN5C-3+ CODE NO. 000-153-781-11	1	
5	コネクタ (M) COAXIAL CONNECTOR *M TYPE*		GSC-100/MP-7 CODE NO. 000-166-977-10	2	
6	ホースクランプ HOSE CLAMP		SS7200N CODE NO. 000-570-299-00	2	

型式/コード番号が2段の場合、下段より上段に代わる通線部品であり、どちらが入っています。なお、品質は変わりません。
 TWO TYPES AND CODES MAY BE LISTED FOR AN ITEM. THE LOWER PRODUCT MAY BE SHIPPED IN PLACE OF THE UPPER PRODUCT.
 QUALITY IS THE SAME. DIMENSIONS IN DRAWING FOR REFERENCE ONLY.)

FURUNO

付属品表

ACCESSORIES

番号 NO.	名称 NAME	略図 OUTLINE	型名/規格 DESCRIPTIONS	数量 Q'TY	用途/備考 REMARKS
1	+77 セツメネジ UP SET UI SCREW		M6X20 SUS304 CODE NO. 000-160-442-10	6	
2	+75 平ネジ FLAT HEAD SCREW		M6X15 SUS304 CODE NO. 000-162-597-10	5	

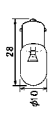
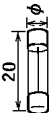
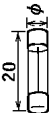
型式/コード番号が2段の場合、下段より上段に代わる通称部品であり、どちらかが入っています。なお、品質は変わりません。
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 QUALITY IS THE SAME.
 (略図の寸法は、参考値です。 DIMENSIONS IN DRAWING FOR REFERENCE ONLY.)

FURUNO ELECTRIC CO. . . LTD.

05EH-X-9503

FURUNO

CODE NO.	001-037-750-00	05EH-X-9301 -0	1/1
TYPE	SP05-05901	BOX NO. P	

SHIP NO.	SPARE PARTS LIST FOR		U S E				REMARKS/CODE NO.
			NAME OF PART	OUTLINE	DWG. NO. OR TYPE NO.	QUANTITY	
ITEM NO.	WORKING PER SET	SPARE				PER VESSEL	
	577	LAMP		T10849S 24V 0.11A	5	000-167-023-10	
	57	FUSE GLASS TUBE TYPE		EGMR 250V 2A	4	000-157-497-10	
	57	FUSE GLASS TUBE TYPE		EGMR 125V 2A	4	000-157-479-10	

MFR'S NAME	FURUNO ELECTRIC CO. . . LTD.	DWG NO.	05EH-X-9301	1/1
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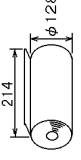
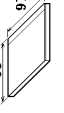
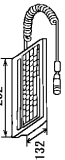
(略図の寸法は、参考値です。 DIMENSIONS IN DRAWING FOR REFERENCE ONLY.)
 型式/コード番号が2段の場合、下段より上段に代わる通称部品であり、どちらかが入っています。なお、品質は変わりません。
 TWO TYPES AND CODES MAY BE LISTED FOR AN ITEM. THE LOWER PRODUCT MAY BE SHIPPED IN PLACE OF THE UPPER PRODUCT. QUALITY IS THE SAME.

FURUNO

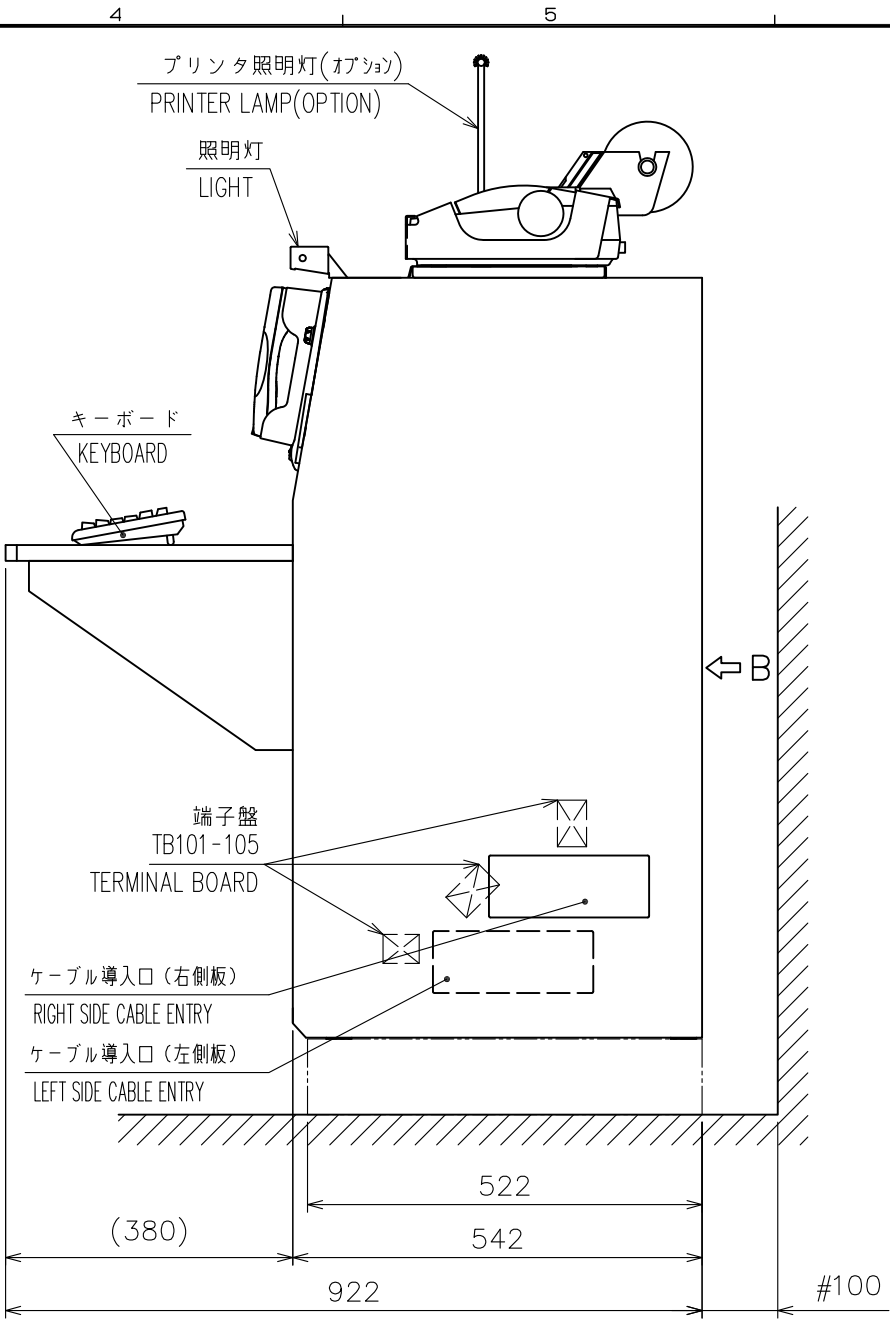
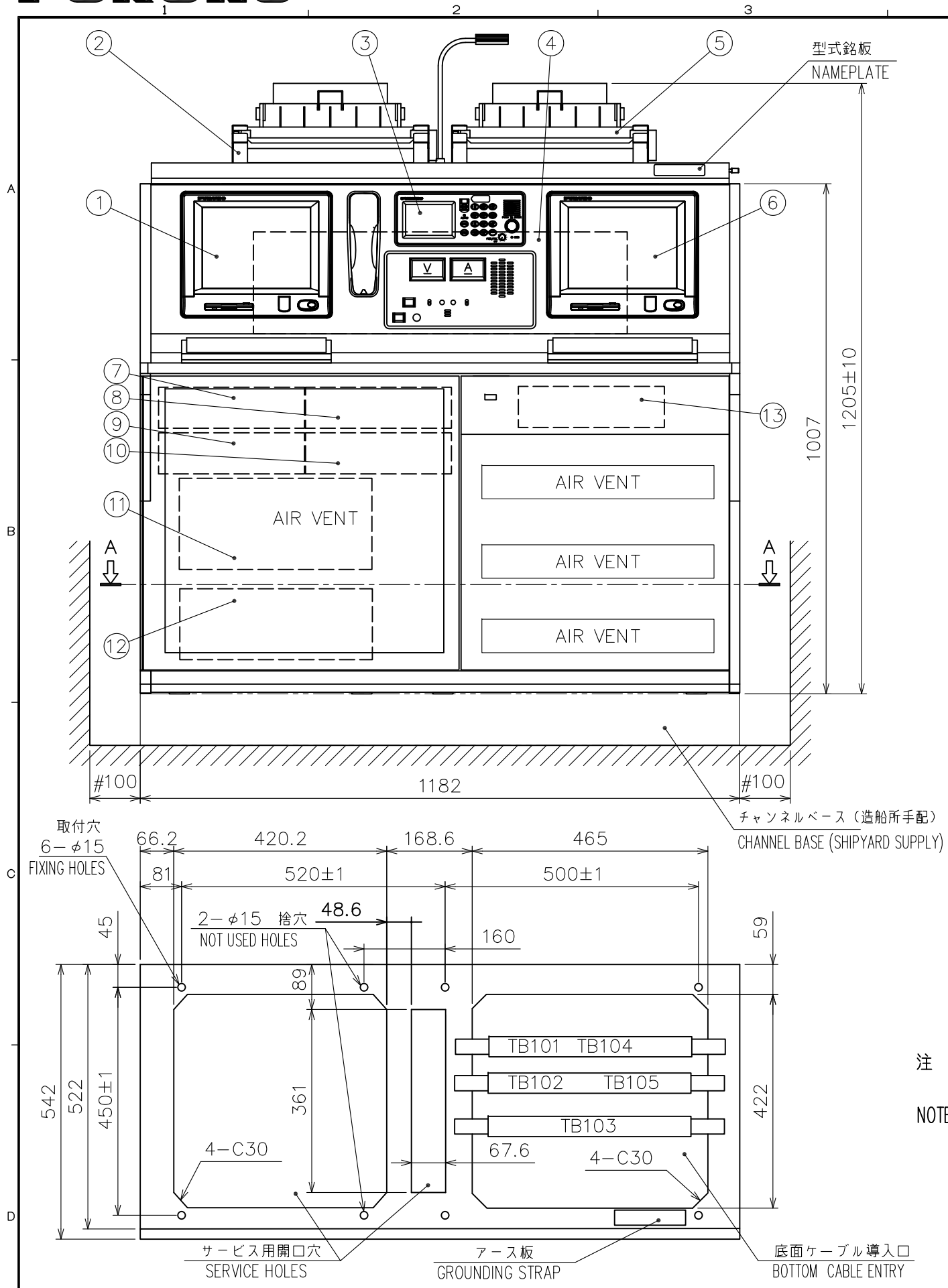
CODE NO.	000-012-612-00	05EH-X-9501 -1
TYPE	FP05-06200	1/1

付属品表

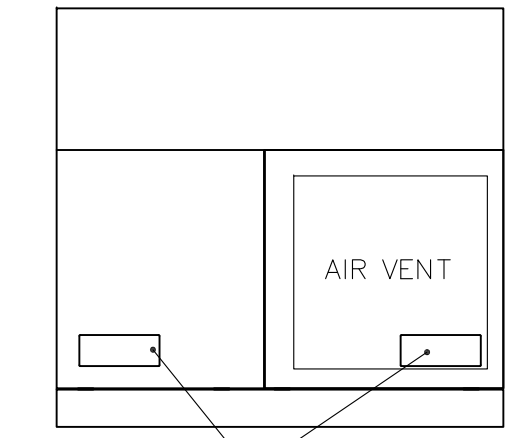
ACCESSORIES

番号 NO.	名称 NAME	略図 OUTLINE	型名/規格 DESCRIPTIONS	数量 Q'TY	用途/備考 REMARKS
1	フリンカー用紙 RECORDING PAPER		A2 1PLYW CODE NO. 000-167-226-10	2	
2	70ピット字組品 FLOPPY DISK		FPI6-00601 CODE NO. 000-439-400-00	2	
3	ミニキーボード KEYBOARD		684-4100PPAUS CODE NO. 000-172-018-10	2	

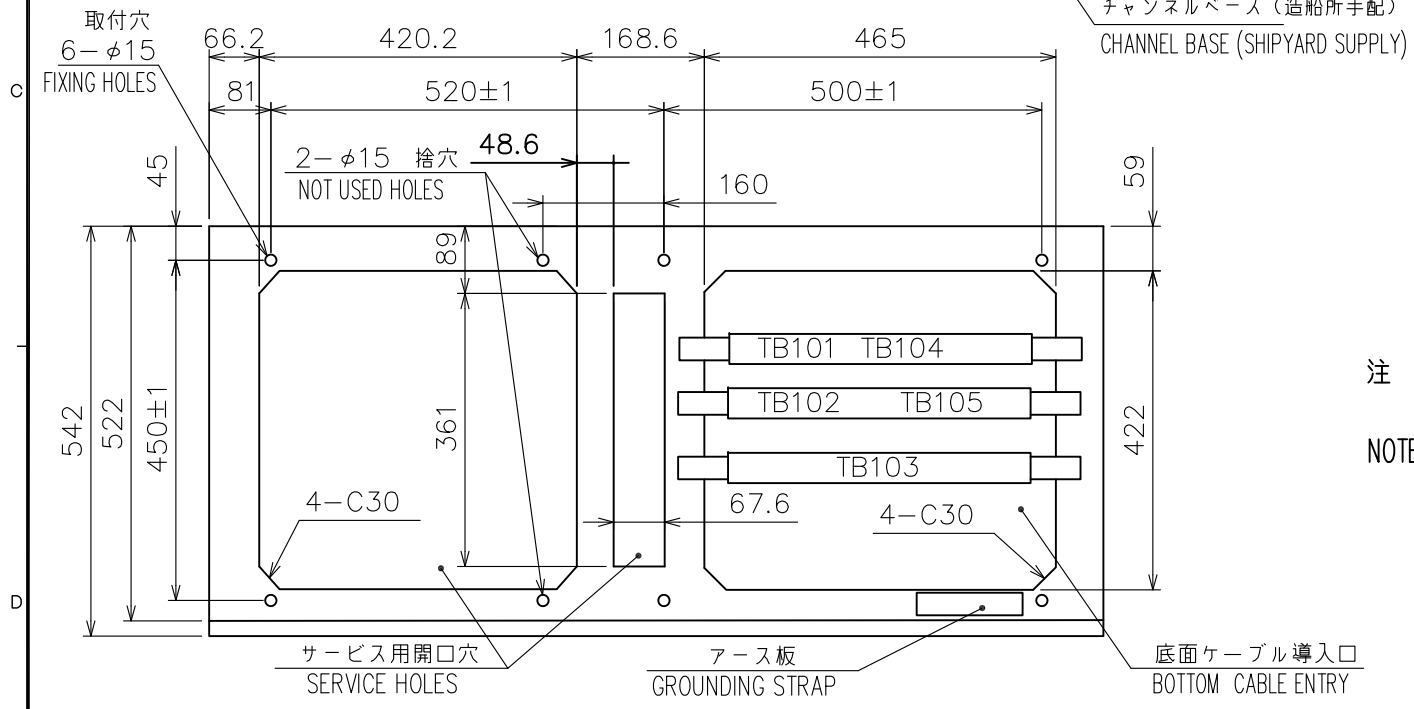
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TWO TYPES AND CODES MAY BE LISTED FOR AN ITEM. THE LOWER PRODUCT MAY BE SHIPPED IN PLACE OF THE UPPER PRODUCT.
QUALITY IS THE SAME.
(略図の寸法は、参考値です。 DIMENSIONS IN DRAWING FOR REFERENCE ONLY.)



13	AC/DC POWER SUPPLY	No.5 PR-240	
12	BATTERY CHARGER	BC-6158	
11	AC/DC POWER SUPPLY	PR-850AR	
10	AC/DC POWER SUPPLY	No.4 PR-240	
9	AC/DC POWER SUPPLY	No.3 PR-240	
8	AC/DC POWER SUPPLY	No.2 PR-240	
7	AC/DC POWER SUPPLY	No.1 PR-240	
6	INMARSAT-C TERMINAL UNIT	IC-215	FELCOM 15
5	DSC/INMARSAT-C	PP-510	DSC-60/FELCOM 15
4	TRANCEIVER UNIT	FS-5070T/2570T/1570T	FS-5070/2570/1570
3	CONTROL UNIT	FS-2571C	FS-5070/2570/1570
2	INMARSAT-C PRINTER	PP-510	FELCOM 15
1	INMARSAT-C TERMINAL UNIT	IC-215	FELCOM 15
No.	NAME	UNIT TYPE	SYSTEM MODEL



ケーブル導入口 (背面)
REAR CABLE ENTRY
矢視 B (尺度 1/20)
B VIEW (SCALE 1/20)



本体取付寸法図 (断面 A-A)
MOUNTING DIMENSIONS (A-A SECTIONAL VIEW)

注記 1) #印寸法は最小サービス空間寸法とする。
2) 指定外の寸法公差は表1による。
NOTE 1. # MINIMUM SERVICE CLEARANCE.
2. TABLE 1 INDICATES TOLERANCE OF DIMENSIONS WHICH IS NOT SPECIFIED.

表1 TABLE 1

寸法区分 (mm) DIMENSION	公差 (mm) TOLERANCE
L ≤ 50	±1.5
50 < L ≤ 100	±2.5
100 < L ≤ 500	±3
500 < L ≤ 1000	±4
1000 < L ≤ 2000	±5

DRAWN	9/Jun/08 T.YAMASAKI	TITLE	RC-1800F2 (FELCOM15 x 2)
CHECKED	9/Jun/08 T.TAKENO	名称	ラックタイプ無線通信装置
APPROVED	10/Jun/08 R.Esumi		外寸図
SCALE	1/10 MASS 270 ±10% kg	NAME	GMDSS RADIO STATION
DWG No.	C5664-G01-B	REF.No.	05-100-100G-1
			OUTLINE DRAWING

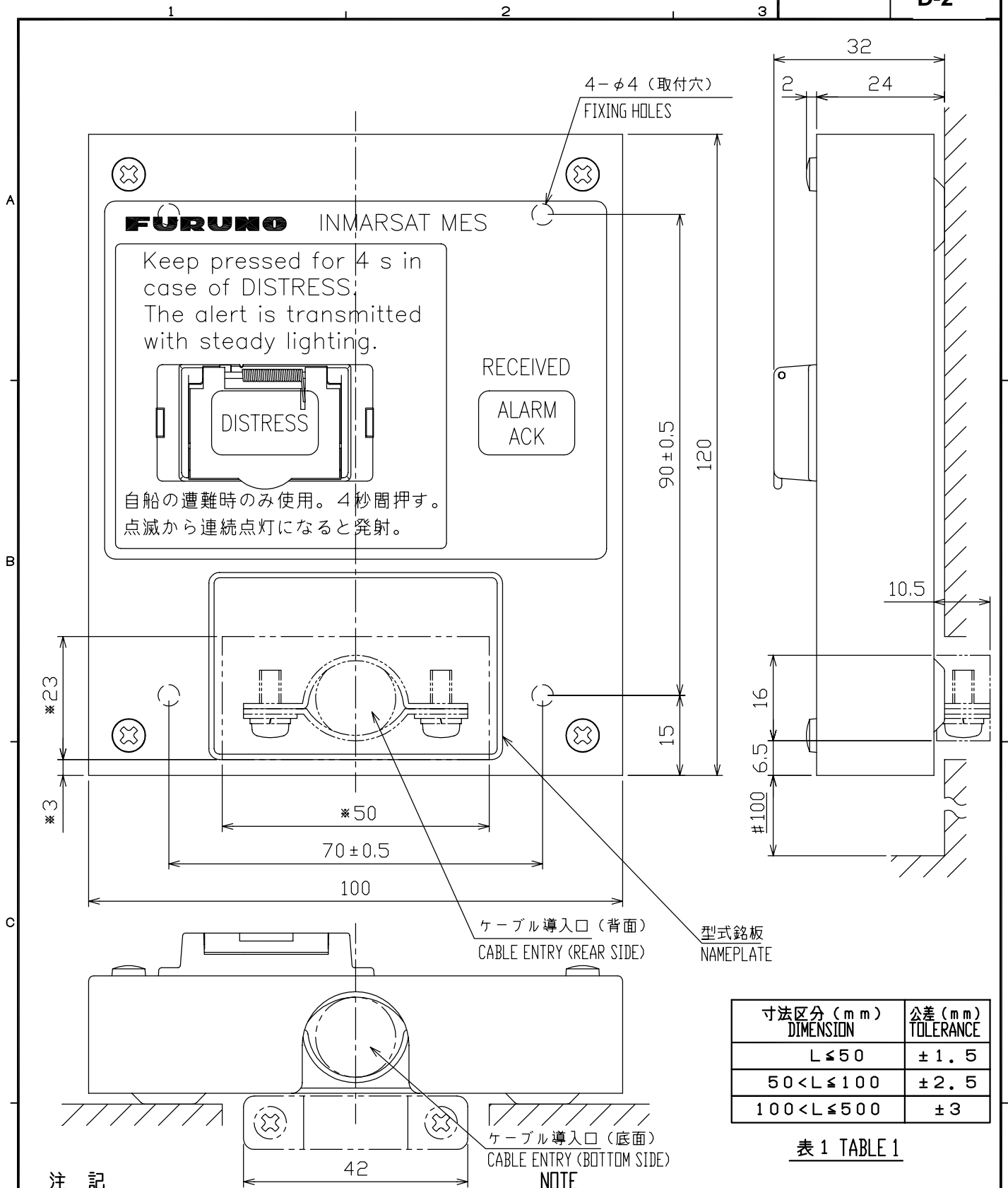


表 1 TABLE 1

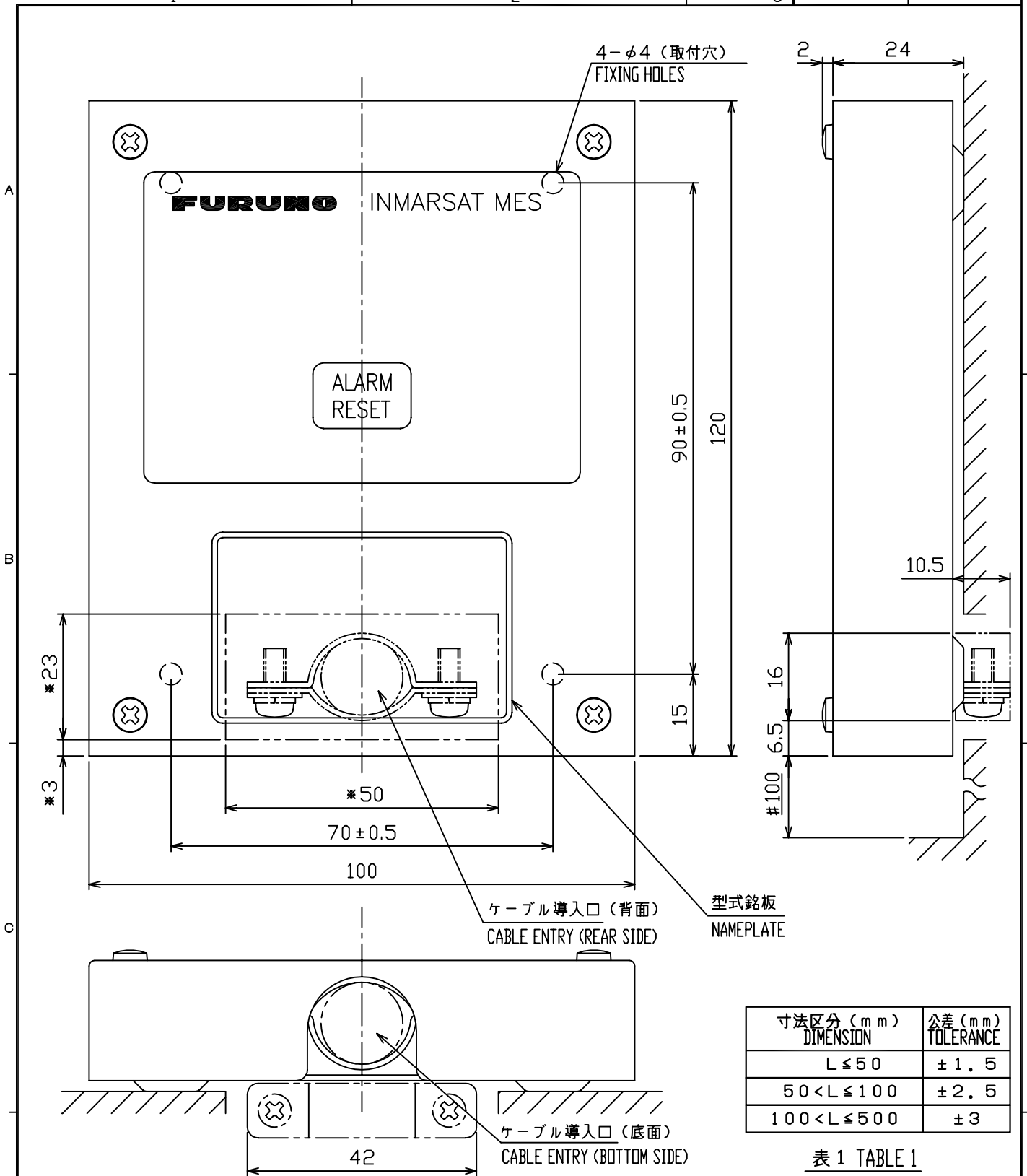
注 記

- 1) #印寸法は最小サービス空間寸法とする。
- 2) 指定外の寸法公差は表 1 による。
- 3) 取付には + タップンネジ 3 × 10 を使用のこと。
- 4) *印寸法は、背面からのケーブル導入穴寸法。

NOTE

1. #: RECOMMENDED SERVICE CLEARANCE.
2. TABLE 1 INDICATES TOLERANCE OF DIMENSIONS.
3. USE TAPPING SCREWS 3x10 FOR FIXING THE UNIT.
4. *: CUTOUT DIMENSIONS FOR REAR SIDE CABLE ENTRY.

DRAWN July 11 '03 T.YAMASAKI	TITLE IC-305
CHECKED July 14 '03 T.Matsuguchi	名称 遭難警報器
APPROVED July 14 '03 <i>Matsuguchi</i>	FELCOM 15/16 外寸図
SCALE 1/1	MASS 0.34 ^{+10%} kg
DWG No. C5635-G04-B	16-018-400G-1 DISTRESS ALERT/RECEIVED CALL UNIT OUTLINE DRAWING



注 記

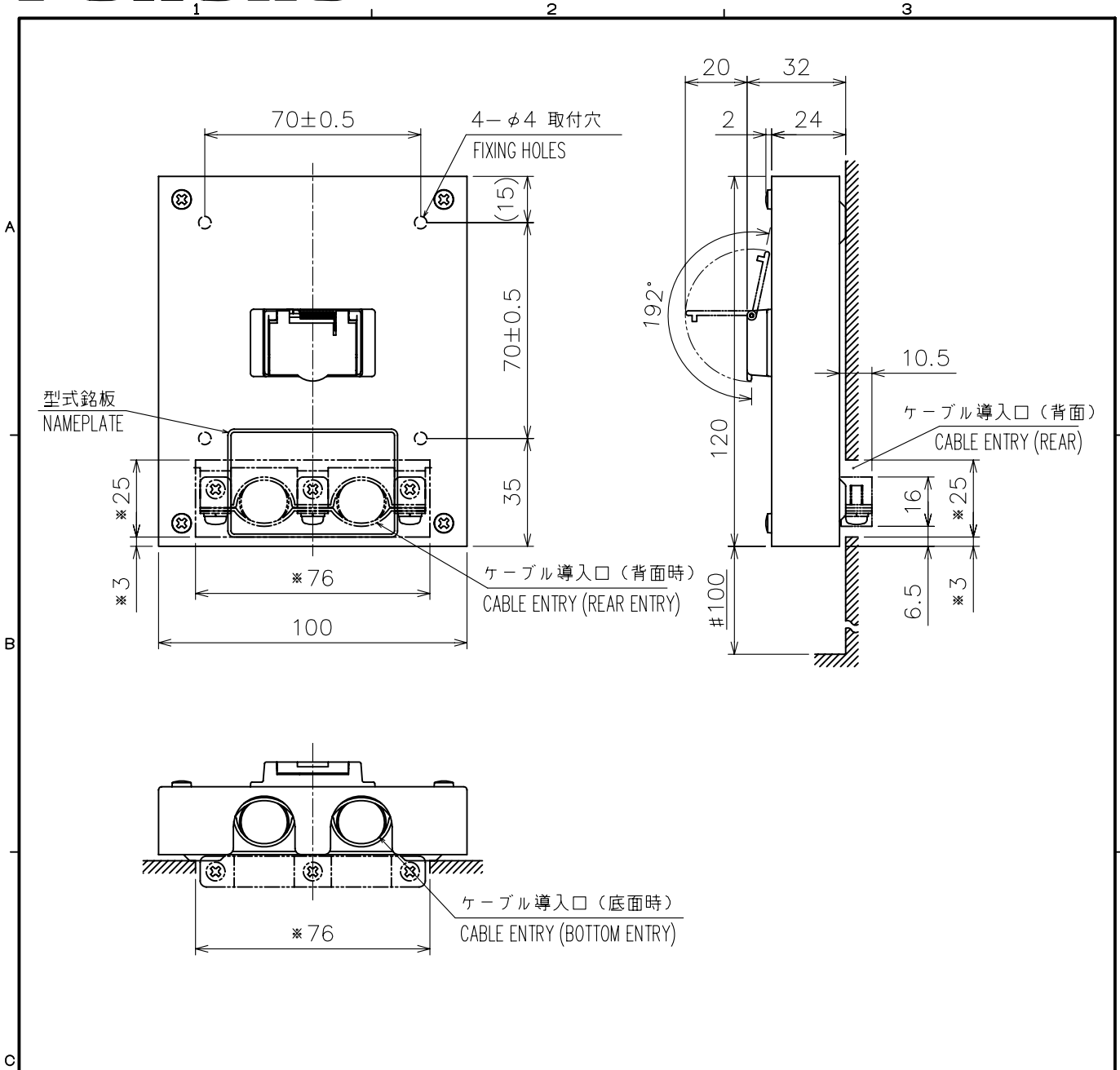
- 1) #印寸法は最小サービス空間寸法とする。
- 2) 指定外の寸法公差は表1による。
- 3) 取付には+タッピンネジ3×10を使用のこと。
- 4) *印寸法は、背面からのケーブル導入穴寸法。

NOTE

1. #: RECOMMENDED SERVICE CLEARANCE.
2. TABLE 1 INDICATES TOLERANCE OF DIMENSIONS.
3. USE TAPPING SCREWS 3x10 FOR FIXING THE UNIT.
4. *: CUTOUT DIMENSIONS FOR REAR SIDE CABLE ENTRY.

表 1 TABLE 1

DRAWN	Dec. 19 '02 T.YAMASAKI	TITLE	IC-306
CHECKED	Dec. 19 '02 Y.KIMURA	名称	アラームユニット
APPROVED	Dec. 20, '02 <i>Y. Kimura</i>		外寸図
SCALE	1/1	MASS	0.33 ^{+10%} kg
DWG No.	C5635-G05-B		ALARM UNIT
	16-018-500G-1		OUTLINE DRAWING



注 記

- 1) #印寸法は最小サービス空間寸法とする。
- 2) 指定外の寸法公差は表1による。
- 3) 取付用ネジはタッピンネジ呼び径3×10を使用のこと。
- 4) *印寸法は、ケーブルを背面から導入時に設ける穴の寸法

NOTE

1. #: MINIMUM SERVICE CLEARANCE.
2. TABLE 1 INDICATES TOLERANCE OF DIMENSIONS WHICH IS NOT SPECIFIED.
3. USE TAPPING SCREWS $\phi 3 \times 10$ FOR FIXING THE UNIT.
4. *: CUTOUT DIMENSIONS FOR REAR CABLE ENTRY.

表1 TABLE 1

寸法区分 (mm) DIMENSION	公差 (mm) TOLERANCE
$L \leq 50$	± 1.5
$50 < L \leq 100$	± 2.5
$100 < L \leq 500$	± 3

DRAWN Apr. 13 '07 T.YAMASAKI		TITLE IC-307
CHECKED Apr. 13 '07 T.TAKENO		名称 保安警報発呼器
APPROVED Apr. 17 '07 R.Esumi	FELCOM 12/15/16	外寸図
SCALE 1/2	MASS 0.35 $\pm 10\%$ kg	NAME SSAS ALERT UNIT
DWG.No. C5635-G10-B	16-018-700G-2	OUTLINE DRAWING

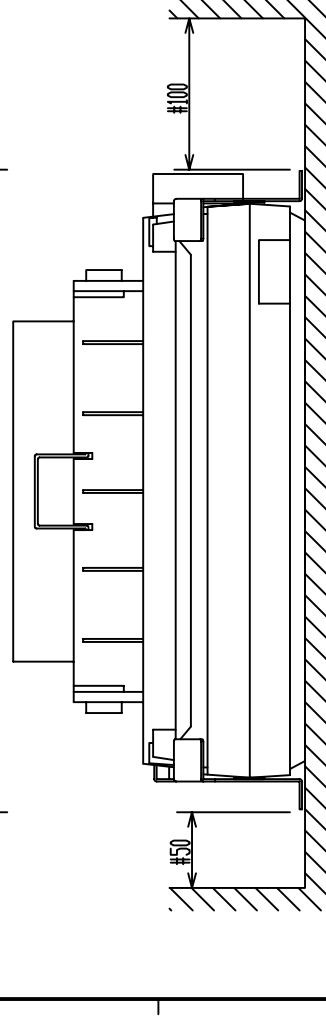
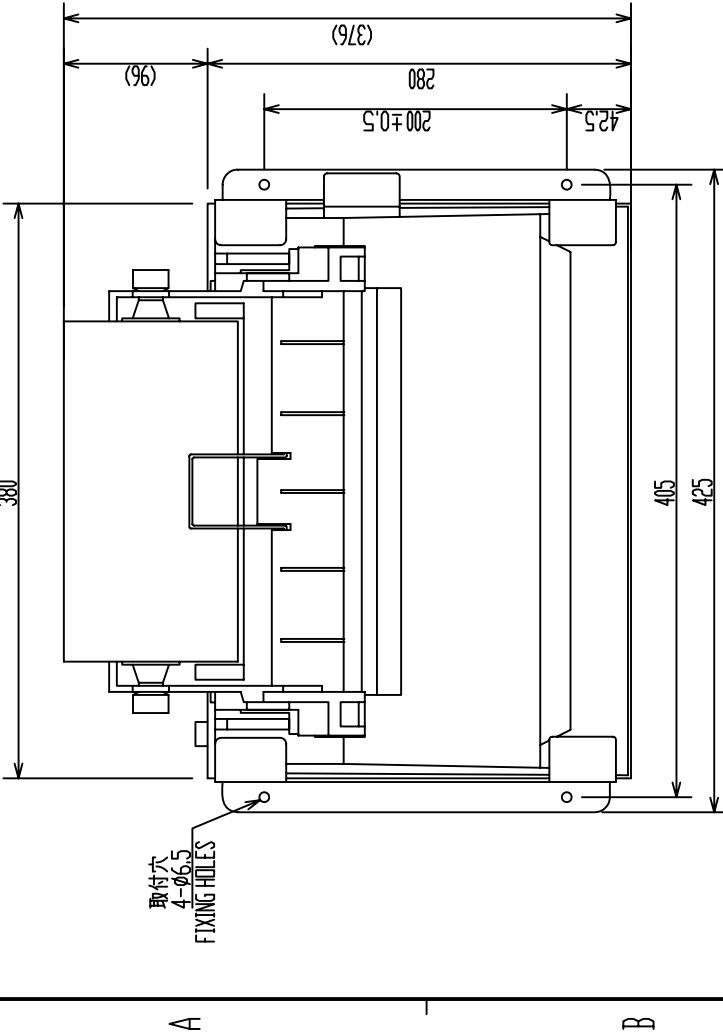
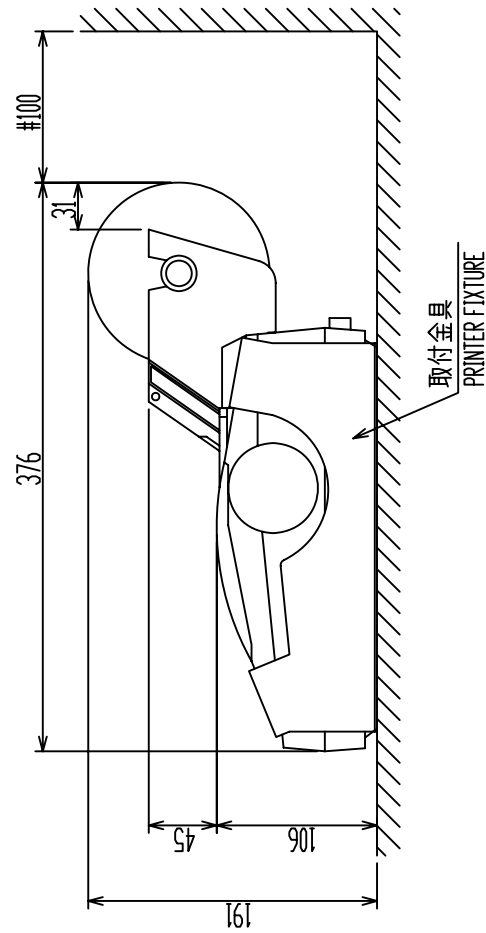


表 1 TABLE 1

寸法区分 (mm) DIMENSIONS	公差 (mm) TOLERANCE
0 < L ≤ 50	± 1.5
50 < L ≤ 100	± 2.5
100 < L ≤ 500	± 3



注 記 1) #印寸法は最小サービス空間寸法とする。
 2) 指定外の寸法公差は表1による。
 3) 取付用ネジはM6ボルトまたはコーチボルト呼び径φを使用のこと。

NOTE 1. # MINIMUM SERVICE CLEARANCE.
 2. TABLE 1 INDICATES TOLERANCE OF DIMENSIONS WHICH IS NOT SPECIFIED.
 3. USE M6 BOLTS OR COACH SCREWS φ6 FOR FIXING THE UNIT.

DRAWN Nov. 27, '96	E. MIYOSHI	TITLE PP-510
CHECKED	TAKAHASHI, I.	名称 プリンタ
APPROVED	Y. Hatai	外寸図
SCALE 1/5	MASS ±10% 3.8 kg	NAME PRINTER
DWG.No.	C5589-G08-K	REF.No.
	16-007-660G-2	OUTLINE DRAWING

A

B

C

D

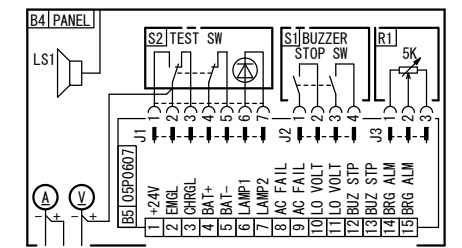
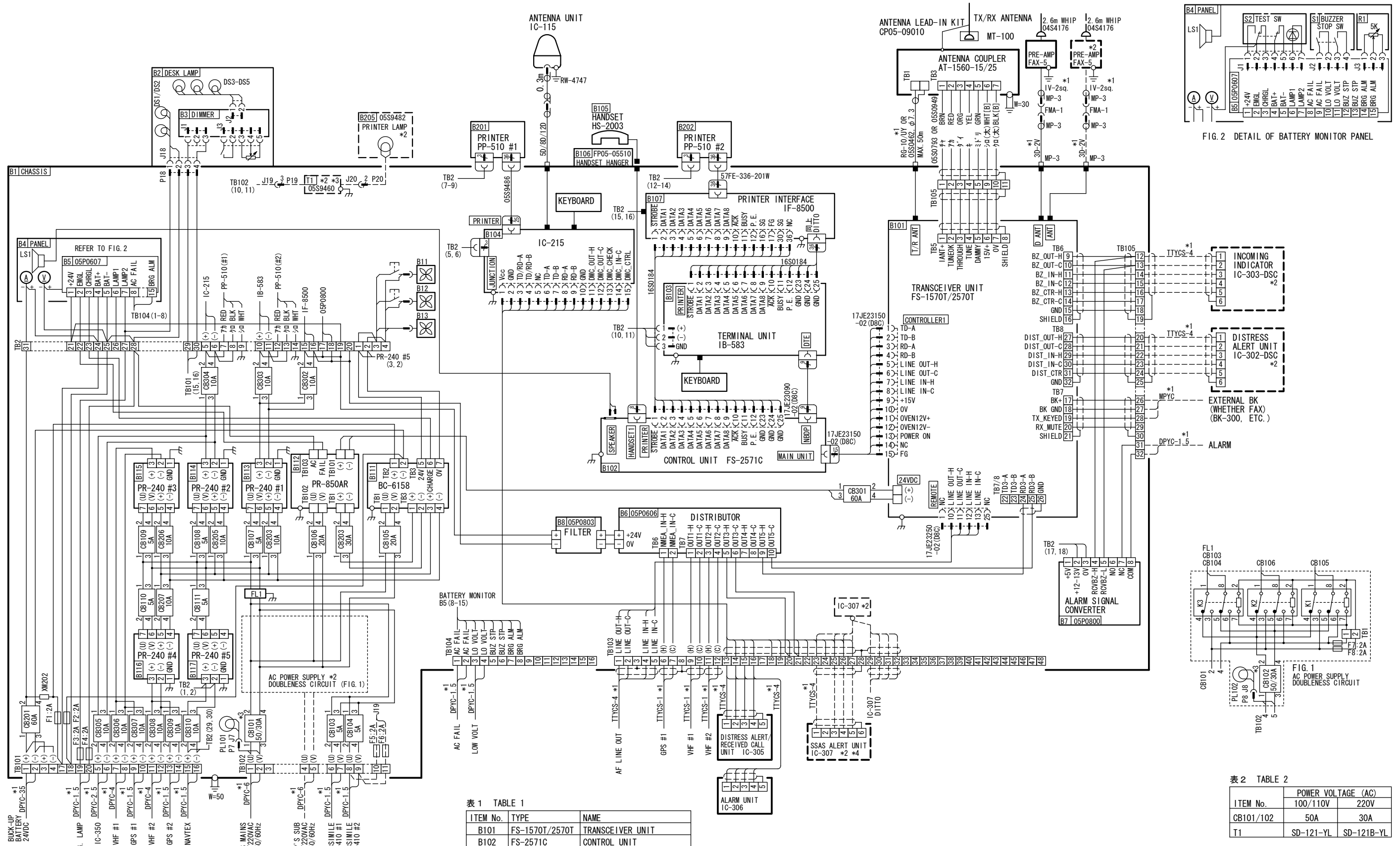


FIG. 2 DETAIL OF BATTERY MONITOR PANEL

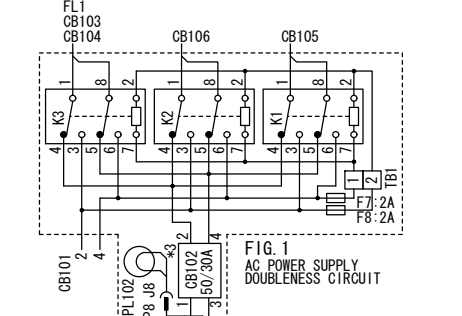


FIG. 1 AC POWER SUPPLY DOUBLESSNESS CIRCUIT

表 1 TABLE 1

ITEM No.	TYPE	NAME
B101	FS-1570T/2570T	TRANSCEIVER UNIT
B102	FS-2571C	CONTROL UNIT
B103	IB-583	TERMINAL UNIT
B104	IC-215	TERMINAL UNIT
B105	HS-2003	HANDSET
B106	FPO5-05510	HANDSET HANGER
B107	IF-8500	PRINTER INTERFACE
B111	BC-6158	BATTERY CHARGER
B112	PR-850AR	AC/DC POWER SUPPLY UNIT
B113-117	PR-240 No. 1-5	AC/DC POWER SUPPLY UNIT
B201/202	PP-510 No. 1/2	PRINTER

表 2 TABLE 2

ITEM No.	POWER VOLTAGE (AC)	
	100/110V	220V
CB101/102	50A	30A
T1	SD-121-YL	SD-121B-YL

- * 1) 造船所手配。
 - * 2) オプション。
 - * 3) 電源電圧による使い分けは表 2 参照。
 - * 4) ラック内に IC-307 を内蔵するときは、端子番号 29-32 を使用のこと。
- NOTE
- *1: SHIPYARD SUPPLY.
 - *2: OPTION.
 - *3: SEE TABLE 2 FOR SELECTING TYPE BY POWER VOLTAGE.
 - *4: USE PIN No. 29-32 FOR INNER CONNECTION OF IC-307.

DRAWN	15/Jul/09 T. YAMASAKI	TITLE	RC-1800F2-1S/2S (FS-1570/2570+FELCOM15)
CHECKED	15/Jul/09 T. TAKENO	名称	ラックタイプ無線通信装置
APPROVED	15/Sep/09 R. Esumi		相互結線図
SCALE	MASS kg	NAME	GMDSS RADIO STATION
DWG No.	C5664-C04- F	REF No.	05-001-3979-2
			INTERCONNECTION DIAGRAM

A

B

C

D

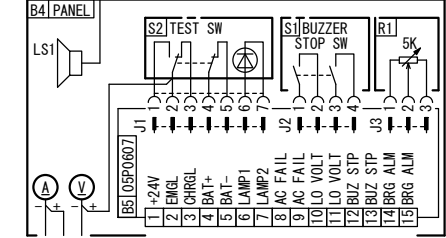
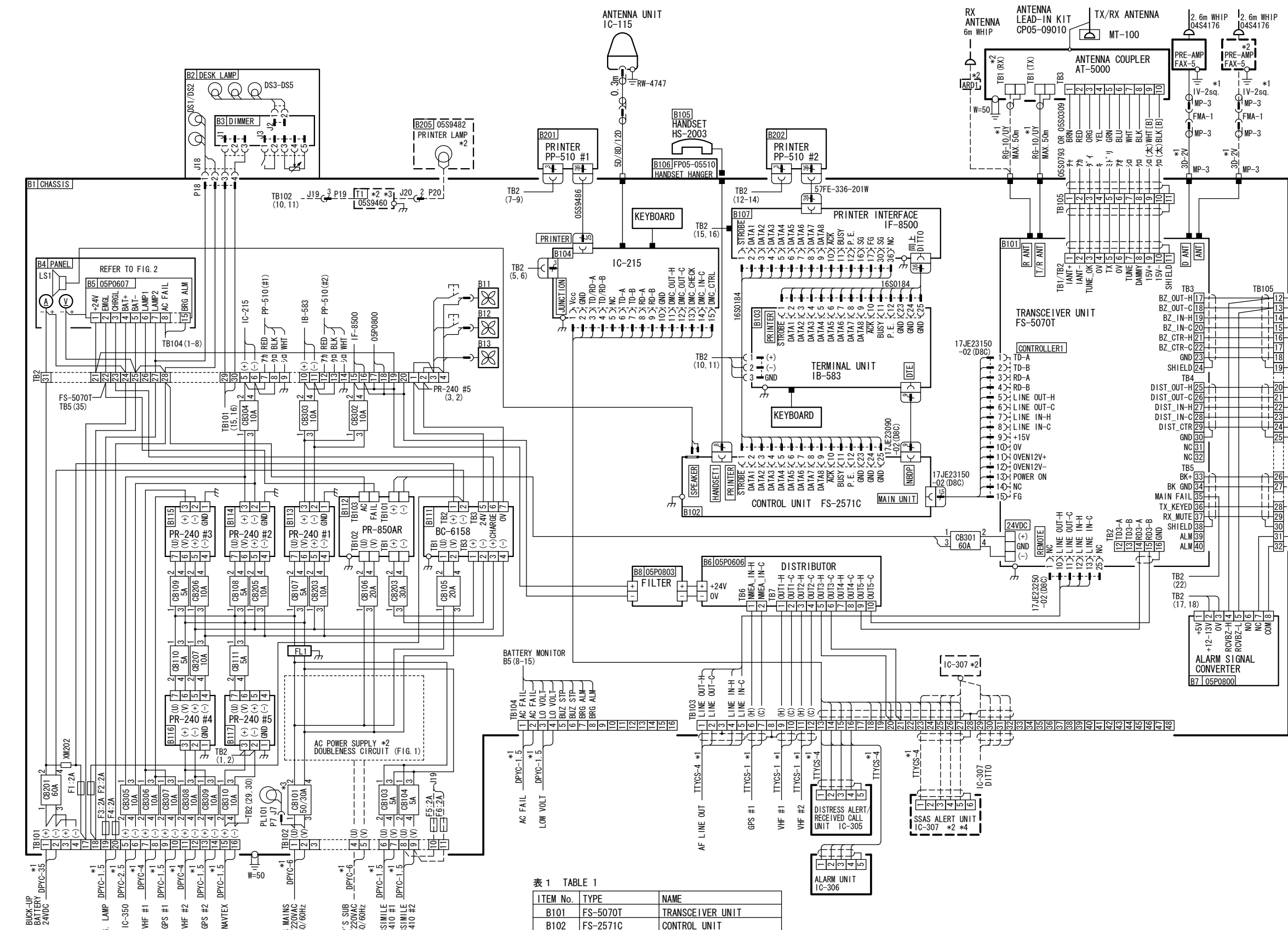


FIG. 2 DETAIL OF BATTERY MONITOR PANEL

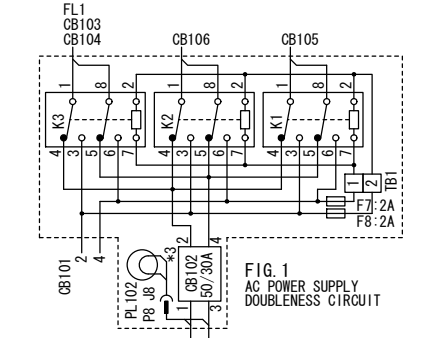


FIG. 1 AC POWER SUPPLY DOUBLENESS CIRCUIT

表 1 TABLE 1

ITEM No.	TYPE	NAME
B101	FS-5070T	TRANSCEIVER UNIT
B102	FS-2571C	CONTROL UNIT
B103	IB-583	TERMINAL UNIT
B104	IC-215	TERMINAL UNIT
B105	HS-2003	HANDSET
B106	FPO5-05510	HANDSET HANGER
B107	IF-8500	PRINTER INTERFACE
B111	BC-6158	BATTERY CHARGER
B112	PR-850AR	AC/DC POWER SUPPLY UNIT
B113-117	PR-240 No. 1-5	AC/DC POWER SUPPLY UNIT
B201/202	PP-510 No. 1/2	PRINTER

表 2 TABLE 2

ITEM No.	POWER VOLTAGE (AC)	
	100/110V	220V
CB101/102	50A	30A
T1	SD-121-YL	SD-121B-YL

注記
 * 1) 造船所手配。
 * 2) オプション。
 * 3) 電源電圧による使い分けは表 2 参照。
 * 4) ラック内に IC-307 を内蔵するときは、端子番号 29-32 を使用のこと。

NOTE
 *1: SHIPYARD SUPPLY.
 *2: OPTION.
 *3: SEE TABLE 2 FOR SELECTING TYPE BY POWER VOLTAGE.
 *4: USE PIN No. 29-32 FOR INNER CONNECTION OF IC-307.

DRAWN	15/Jul/09 T. YAMASAKI	TITLE	RC-1800F2-5S (FS-5070+FELCOM15)
CHECKED	15/Jul/09 T. TAKENO	名称	ラックタイプ無線通信装置
APPROVED	15/Sep/09 R. Esumi		相互結線図
SCALE	MASS kg	NAME	GMDSS RADIO STATION
DWG No.	C5664-C03- F	REF No.	05-001-3979-2
		INTERCONNECTION DIAGRAM	

A

B

C

D

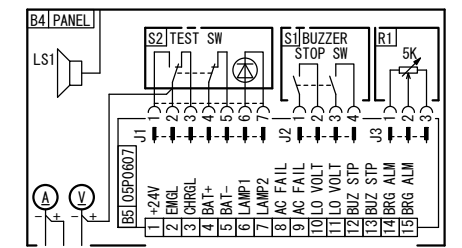
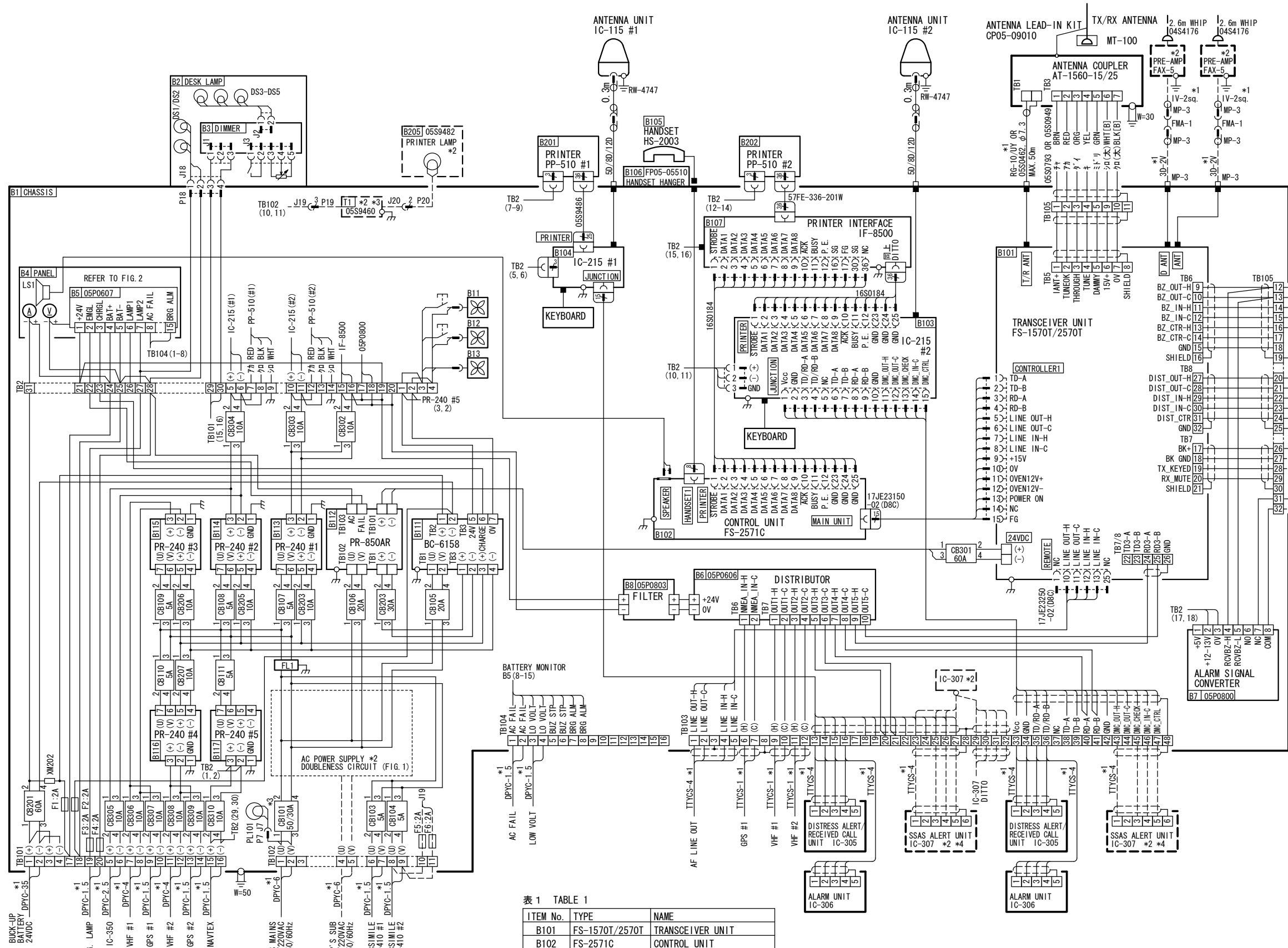


FIG. 2 DETAIL OF BATTERY MONITOR PANEL

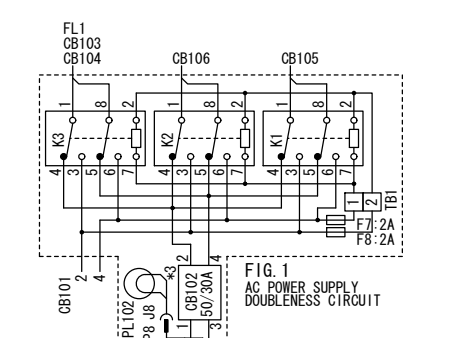


FIG. 1 AC POWER SUPPLY DOUBLESSNESS CIRCUIT

表 1 TABLE 1

ITEM No.	TYPE	NAME
B101	FS-1570T/2570T	TRANSCEIVER UNIT
B102	FS-2571C	CONTROL UNIT
B103	IC-215 No. 2	TERMINAL UNIT
B104	IC-215 No. 1	TERMINAL UNIT
B105	HS-2003	HANDSET
B106	FPO5-05510	HANDSET HANGER
B107	IF-8500	PRINTER INTERFACE
B111	BC-6158	BATTERY CHARGER
B112	PR-850AR	AC/DC POWER SUPPLY UNIT
B113-117	PR-240 No. 1-5	AC/DC POWER SUPPLY UNIT
B201/202	PP-510 No. 1/2	PRINTER

DRAWN	15/Jul/09 T. YAMASAKI	TITLE	RC-1800F2-1D/2D (FS-1570/2570+FELCOM15x2)
CHECKED	15/Jul/09 T. TAKENO	名称	ラックタイプ無線通信装置
APPROVED	15/Sep/09 R. Esumi		相互結線図
SCALE	MASS kg	NAME	GMDSS RADIO STATION
DWG No.	C5664-C02-E	REF No.	05-001-3980-2
			INTERCONNECTION DIAGRAM

注記
 * 1) 造船所手配。
 * 2) オプション。
 * 3) 電源電圧による使い分けは表 2 参照。
 * 4) ラック内に IC-307 を内蔵するときは、端子番号 29-32 を使用のこと。

NOTE
 *1: SHIPYARD SUPPLY.
 *2: OPTION.
 *3: SEE TABLE 2 FOR SELECTING TYPE BY POWER VOLTAGE.
 *4: USE PIN No. 29-32 FOR INNER CONNECTION OF IC-307.

表 2 TABLE 2

ITEM No.	POWER VOLTAGE (AC)
	100/110V 220V
CB101/102	50A 30A
T1	SD-121-YL SD-121B-YL

A

B

C

D

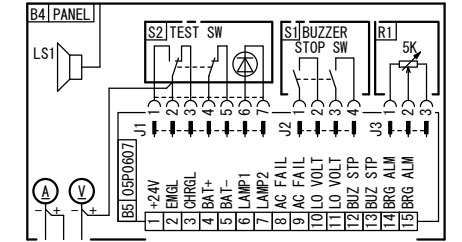
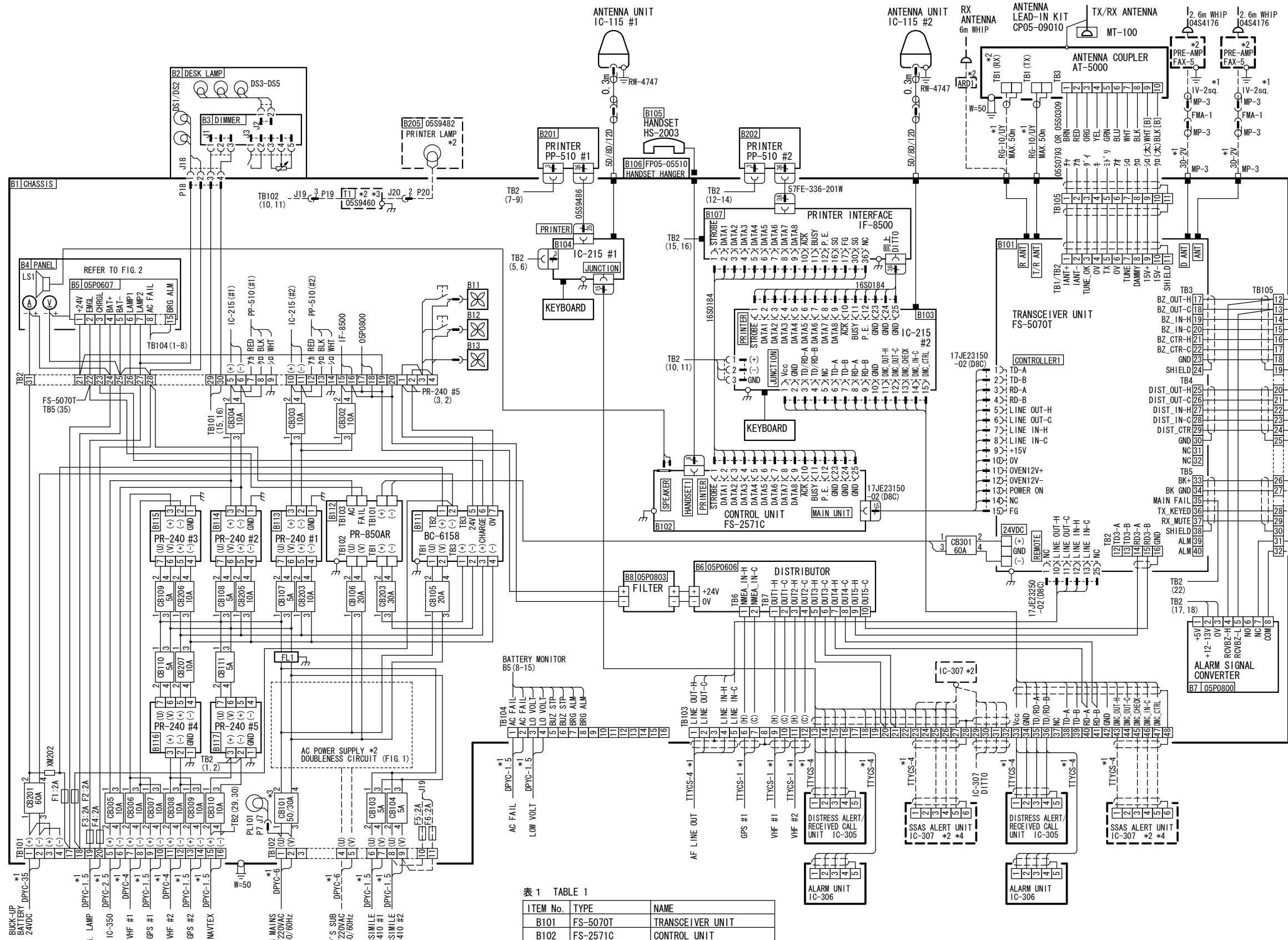


FIG. 2 DETAIL OF BATTERY MONITOR PANEL

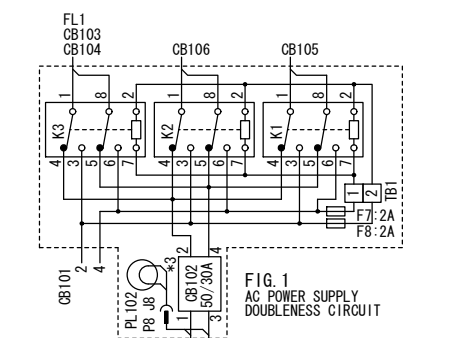


FIG. 1 AC POWER SUPPLY DOUBLENESS CIRCUIT

表 1 TABLE 1

ITEM No.	TYPE	NAME
B101	FS-5070T	TRANSCEIVER UNIT
B102	FS-2571C	CONTROL UNIT
B103	IC-215 No. 2	TERMINAL UNIT
B104	IC-215 No. 1	TERMINAL UNIT
B105	HS-2003	HANDSET
B106	FPO5-05510	HANDSET HANGER
B107	IF-8500	PRINTER INTERFACE
B111	BC-6158	BATTERY CHARGER
B112	PR-850AR	AC/DC POWER SUPPLY UNIT
B113-117	PR-240 No. 1-5	AC/DC POWER SUPPLY UNIT
B201/202	PP-510 No. 1/2	PRINTER

表 2 TABLE 2

ITEM No.	POWER VOLTAGE (AC)	
	100/110V	220V
CB101/102	50A	30A
T1	SD-121-YL	SD-121B-YL

注記
 *1) 造船所手配。
 *2) オプション。
 *3) 電源電圧による使い分けは表2参照。
 *4) ラック内にIC-307を内蔵するときは、端子番号29-32を使用のこと。

NOTE
 *1: SHIPYARD SUPPLY.
 *2: OPTION.
 *3: SEE TABLE 2 FOR SELECTING TYPE BY POWER VOLTAGE.
 *4: USE PIN No. 29-32 FOR INNER CONNECTION OF IC-307.

DRAWN	15/Jul/09 T. YAMASAKI	TITLE	RC-1800F2-5D (FS-5070+FELCOM15x2)
CHECKED	15/Jul/09 T. TAKENO	名称	ラックタイプ無線通信装置
APPROVED	15/Sep/09 R. Esumi		相互結線図
SCALE	MASS kg	NAME	GMDSS RADIO STATION
DWG No.	C5664-C01-E	REF No.	05-001-3980-2
		INTERCONNECTION DIAGRAM	