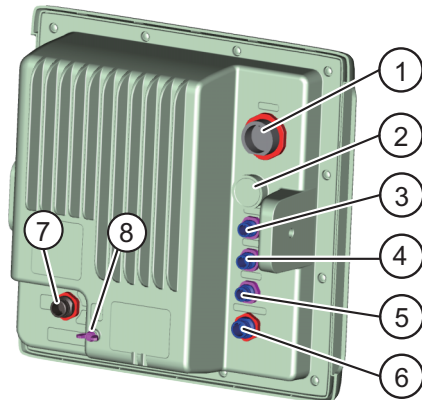


## 2. CABLE CONNECTION AND WIRING

### 2.1 Standard Connection

Connect all necessary cables, using the figure and table below for reference.

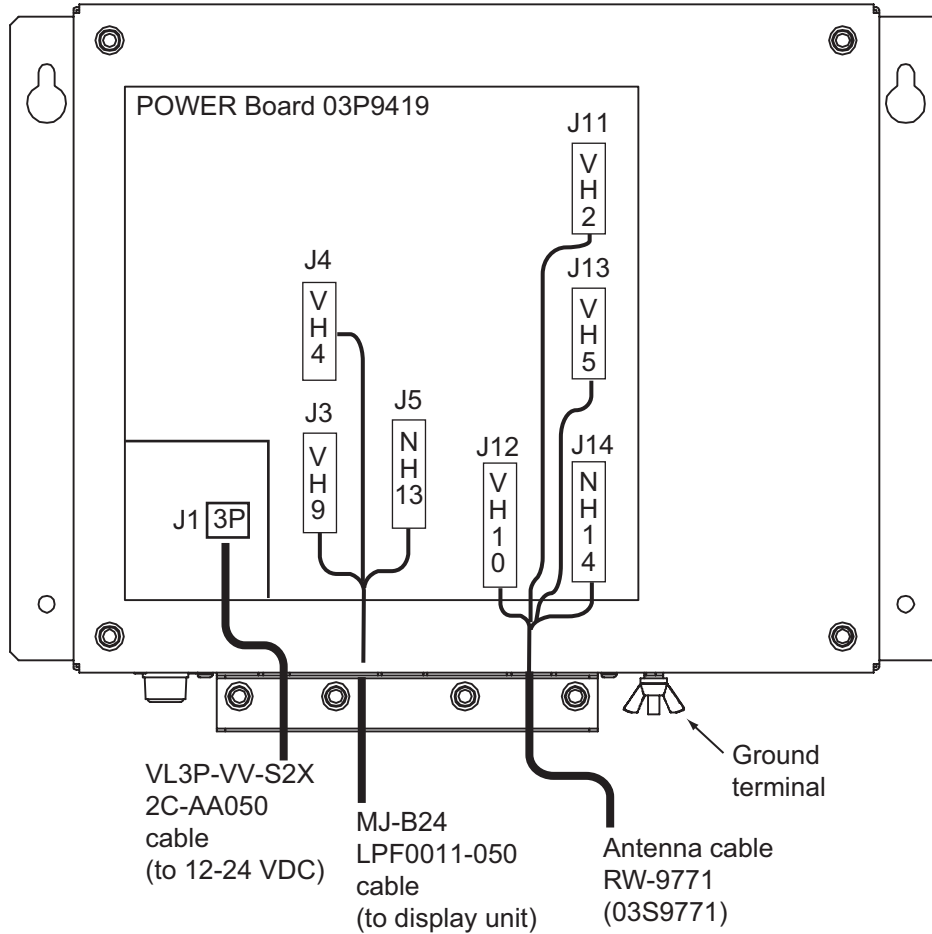


No.	Description	Cable Required
1	Antenna cable to antenna unit (FR-8045)	MJ-B24LPF0005- <sup>*</sup> +R <sup>*</sup> : 50/100/150/200/300
	Antenna cable to antenna unit. (FR-8065/8125)	MJ-B24LPF0012- <sup>*</sup> +R <sup>*</sup> : 100/150/200/300
	Antenna cable to antenna unit. (FR-8255)	<ul style="list-style-type: none"> <li>• MJ-B24LPF0011-050+R</li> <li>• RW-9771 (10m, 15m, 20m, 30m)</li> <li>• VL3P-VV-S2X2C-AA050</li> </ul>
2	USB (Used by service man only).	
3	Heading Sensor. (AD-10 format)	(MJ-A6SPF0007-100C)
4	NMEA1 input/output. (Navigational equipment)	(MJ-A7SPF0007-050C)
5	NMEA2 input/output. (Navigational equipment)	(MJ-A7SPF0007-050C)
6	Option. (External buzzer, Remote display)	(See section 4.2 for cabling.)
7	Power in. To ship's power (pos = white, neg = black)	(MJ-A3SPF0017-050ZC)
8	Grounding. Connect from here to ship's terminal.	IV-2sq.

## 2.2 Wiring the Power Supply Unit (FR-8255 only)

### 2.2.1 Cabling

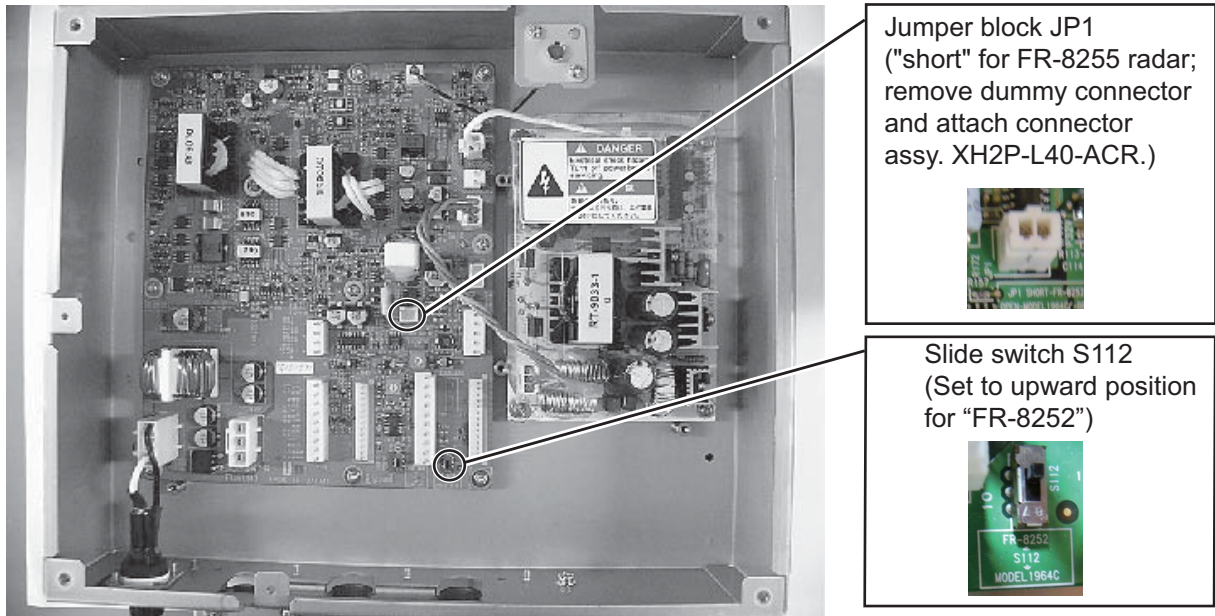
1. Unfasten four screws to remove the cable clamp.
2. Unfasten four screws to remove the cover.
3. Attach the connectors of three cables as shown in the figure below.



4. Lay three cables in respective slots referring to the figure above.
5. Reattach the cover and the cable clamp.
6. Connect a ground wire (local supply, IV-2sq) between the ground terminal and ship's ground.

### 2.2.2 Jumper block, slide switch setting

The jumper block JP1 and slide switch S112 on the PWR board (03P9419) must be set according to radar model. Open the unit, locate JP1 and S112 and set them as below.



Jumperblock, slide switch	Function	Setting
JP1	Enables/disables motor slow start circuit.	Short (disable)
S112	TUNE voltage selector (0-12 V, 0-32 V)	Upward position (0-12 V)

### 2.2.3 Power requirement, replacement of fuses

#### Power requirement

The power for the power supply unit and display unit must be drawn from the same power switch on the power terminal board.

#### Replacement of fuses

The power supply unit is shipped with a 15 A fuse(for connection to 12 VDC battery). Replace the fuse with a 7 A (supplied) when the ship's battery is 24 VDC.

## 2.3 Data Signals

Position	GNS>GGA>RMC> GLL
Course true	VTG>RMC
Course magnetic	VTG>RMC (true)
Speed over the ground	VTG>RMC
Water speed and heading	VHW
Distance to waypoint	BWR>BWC>RMB
Destination waypoint, true	BWR>BWC>RMB
Destination waypoint, magnetic	BWR>BWC
Heading (true)	THS>HDT>VHW (true)>HDG>HDM>VHW (magnetic)
Heading (magnetic)	HDG> HDM>VHW (magnetic)THS>HDT>VHW (true)
Magnetic variation	HDG>RMC
Cross-track error	XTE>RMB
Depth	DPT>DBT
Temperature	MTW
Wind (true)	MWV>VWT
Wind (relative)	MWV>VWR
Time	ZDA

## 2.4 Input/Output Ports

### 2.4.1 HDG port

This port is for AD-10 format.

Parameter	Rating	Remarks	Circuit Diagram
Forward Current	50mA	Absolute Maximum	<p>The diagram shows a circuit for the HDG port. It features a 490Ω resistor in series with a diode. The input terminal is labeled GYRO_DATA_H and the output terminal is GYRO_DATA_C. Both terminals are connected to ground. The diode is oriented with its cathode towards the input and its anode towards the output. The output of the diode is connected to a Photocoupler.</p>
Reverse Voltage	6V	Absolute Maximum	
Forward Voltage	1.1V (TYP) 1.4V (MAX)	$I_F=4mA$	
Parameter	Rating	Remarks	Circuit Diagram
Forward Current	50mA	Absolute Maximum	<p>The diagram shows a circuit for the HDG port. It features a 490Ω resistor in series with a diode. The input terminal is labeled GYRO_CLK_H and the output terminal is GYRO_CLK_C. Both terminals are connected to ground. The diode is oriented with its cathode towards the input and its anode towards the output. The output of the diode is connected to a Photocoupler.</p>
Reverse Voltage	6V	Absolute Maximum	
Forward Voltage	1.1V (TYP) 1.4V (MAX)	$I_F=4mA$	

## 2.4.2 NMEA1 ports

### Transmitter

This port complies with “IEC 61162-1 Ed4”.

Parameter	Rating	Remarks	Circuit Diagram
“H” level output current	-60mA	Absolute Maximum	
“L” level output current	60mA	Absolute Maximum	
Differential output voltage	1.5V (MIN) 5V (MAX)	Load 54Ω	

### Receiver

This port complies with “IEC 61162-1 Ed4”.

Parameter	Rating	Remarks	Circuit Diagram
Forward Current	50mA	Absolute Maximum	
Reverse Voltage	6V	Absolute Maximum	
Forward Voltage	1.1V (TYP) 1.4V (MAX)	$I_F=4mA$	

## 2.4.3 NMEA2 ports

This port complies with “IEC 61162-1 Ed4”.

Circuit specification is the same as NMEA1 port.

# 3. EQUIPMENT SETTINGS

## 3.1 Setting the Language

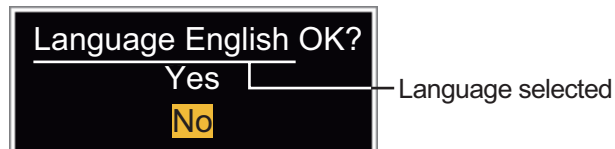
After installation, on first power-up, select a language as follows:

1. Press the  /**BRILL** key to turn on the power.

"Now Initializing" appears and after a short time the window below appears.

Language	English
Langue	Français
Idioma	Español
Sprache	Deutsch
Lingua	Italiano
Idioma	Português
Sprog	Dansk
Språk	Svenska
Språk	Norsk
Kieli	Suomi
Γλώσσα	Ελληνικά
语言	中文
言語	日本語
ភាសា	ភាសា ខ្មែរ
언어	한국어
Язык	Русский

2. Use the **CursorPad** to select a language required and press the **ENTER** key. The window shown below appears.

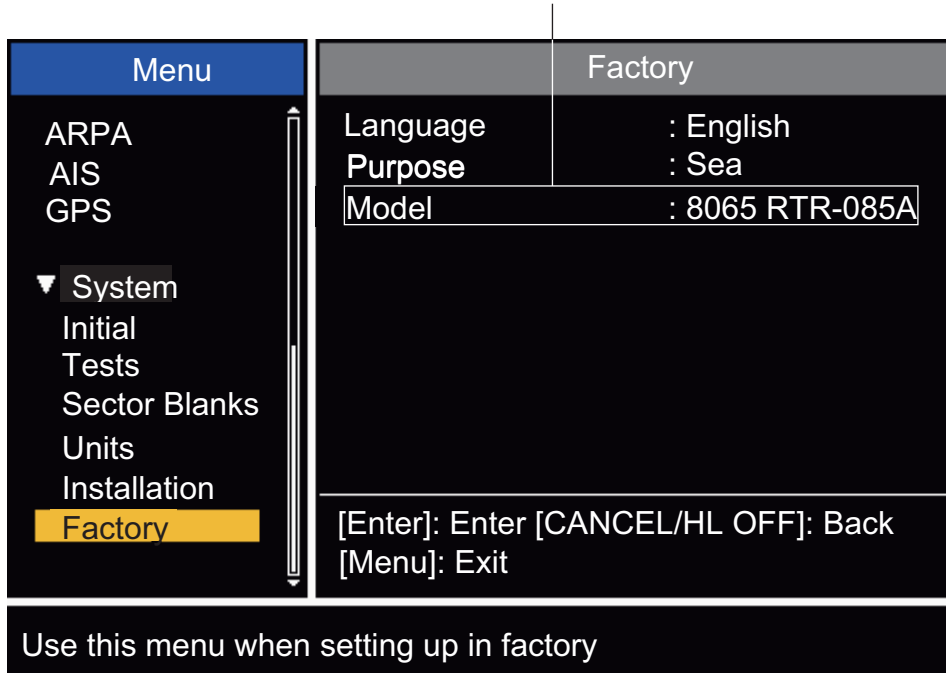


3. Select [Yes] and press the **ENTER** key.

## 3.2 How to Set the Purpose

1. Press the **MENU** key. The main menu will appear on the screen.
2. Press the **▲** or **▼** button to select [Factory]. The factory menu title bar will appear in gray color right side of the screen.
3. Hold down the **CANCEL/HL OFF** key and press the **MENU** key five times to activate the [Factory] menu.

The model name depends on your radar model.  
Do not change the model name.



4. Press the **ENTER** key. The [Factory] menu becomes active and the cursor moves to the right-hand column.
5. Press **▲** or **▼** to select [Purpose].
6. Press the **ENTER** key to show the setting window.

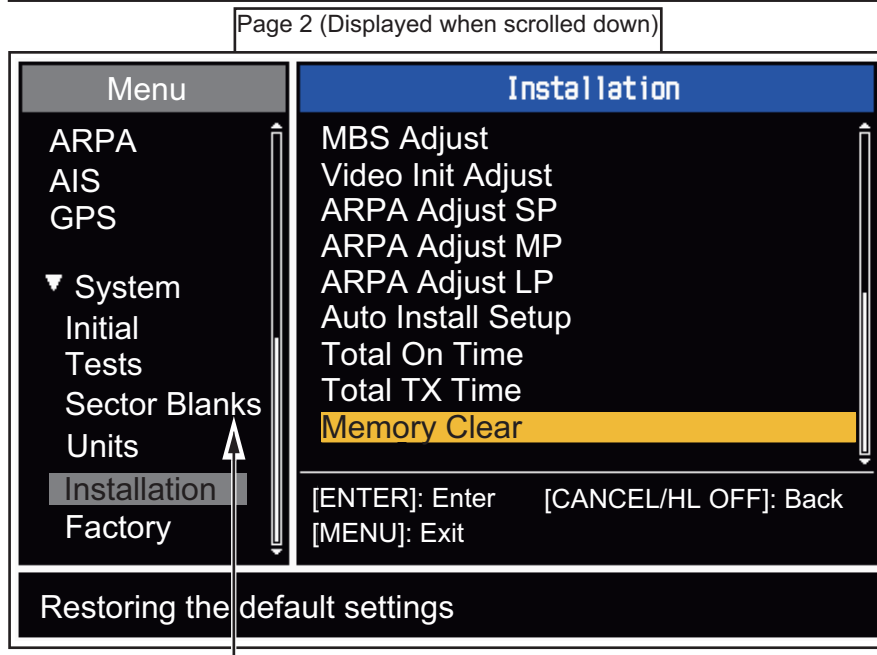
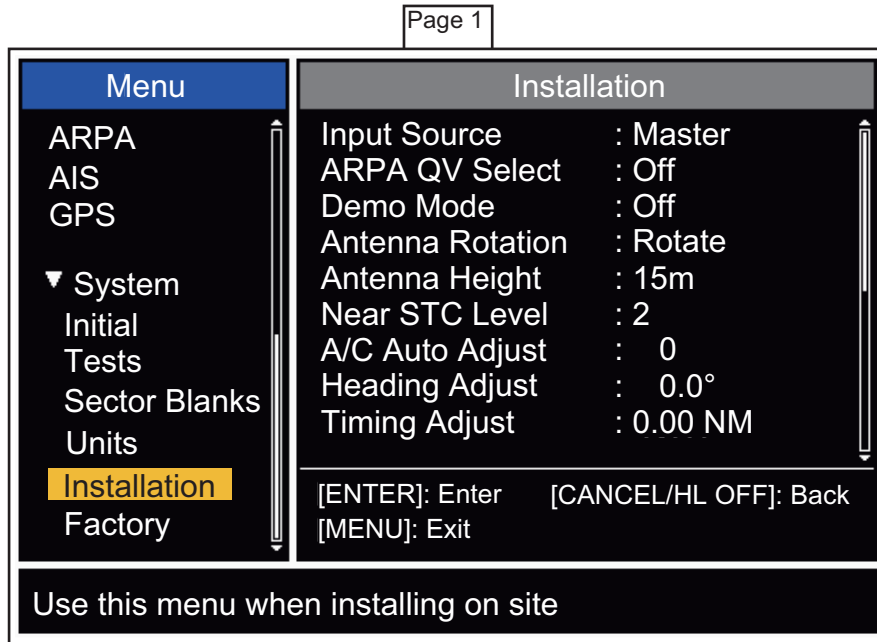


7. Press **▲** or **▼** to select the purpose required.
8. Press the **ENTER** key to set the purpose.
9. Press the **CANCEL/HL OFF** key to return to the main menu.

### 3.3 How to Enter Initial Settings

After you complete setting the radar purpose, enter the Initial Settings as follows:

1. On the main menu, press ▲ or ▼ to select [Installation].



Set the [Sector Blank] to [Off] in order to execute [Auto Installation Setup] in the [Installation] menu.

2. Press the **ENTER** key. The [Installation] menu becomes active and the cursor moves to the right-hand column.
3. Press ▲ or ▼ to select an item from the [Installation] menu.
4. Press the **ENTER** key to show the settings window.
5. Press ▲ or ▼ to select an option.
6. Press the **ENTER** key to set the option.
7. Press the **MENU** key to close the main menu.



**Basic settings**

**[Input source]:** Select the input source from [Master] and [Slave]. The default setting is [Master].

**Master** The display unit operates as the main radar.

**Slave** The display unit operates as a remote display. For remote displays, adjust the [Video Init Adjust] and [Timing Adjust].  
(See page 30 and page 29, respectively.)

**[ARPA QV Select]:** Set to [On] to display quantized video on the screen. Set to [Off] for normal use.

**[Demo Mode]:** Set to [On] to active demo mode. Set to [Off] for normal use.

**[Antenna Rotation]:** [Rotate] (default setting) transmits the radar pulses by rotating the antenna. [Stop] transmits the radar pulses without rotating the antenna.

**[Antenna Height]:** Set the height of the antenna above the water surface. The options are 5, 10, 15, 20, 30, 40 and 50m. The default setting is 15m.

**[Near STC level]:** Set the STC curve to a near distance. The options are 1, 2, 3 and 4. "4" has the strongest effect.

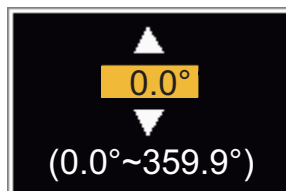
**[A/C Auto Adjust]:** Adjust the performance of the automatic A/C.

**[Memory Clear]:** Restore the default settings. [Purpose], [Type] and [Source] are not changed. When turning on the power after a memory clear, the language selection window appears. (See page 25.)

**Heading adjustment**

Ensure you have installed the antenna unit correctly, so that the unit faces towards the bow of the ship. A target at the front of the ship, aligned with the bow, must appear on the heading line (zero degrees). If the target does not appear on the heading line, follow the procedure below to adjust the heading.

1. Set the ship toward an acceptable target (for example, a ship at anchor or a buoy) at a range between 0.125 and 0.25 nautical miles.
2. Transmit the radar at a range setting of 0.25 nautical miles and measure the bearing of that target relative to the ship using an EBL.
3. Open the [Installation] menu and select [Heading Adjust].
4. Press the **ENTER** key to show the setting window for [Heading Adjust]. (See figure below)



5. Press **▲** or **▼** to set the value measured in step 2. Check that the target appears on the heading line. If necessary repeat steps 1 to 5.
6. Press **ENTER** to complete the adjustment.

### 3. EQUIPMENT SETTINGS

#### **How to automatically set the equipment**

The equipment can automatically adjust the tuning, timing and video.

**Note:** Before you proceed, transmit the radar for more than 10 minutes on a long range and ensure [Sector Blank] is set to [OFF].

1. Transmit on the maximum range.
2. Select [Auto Install Setup] from the [Installation] menu and press **ENTER**.

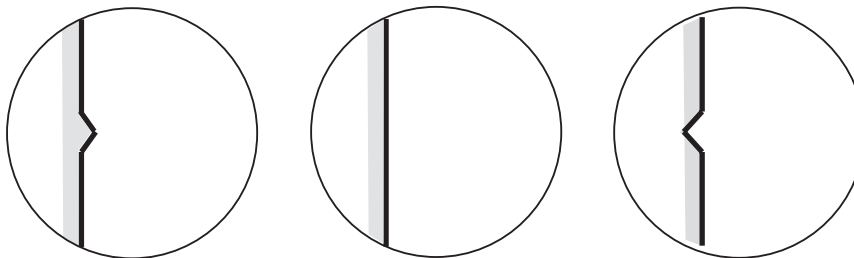
The tuning adjustment begins automatically and the message "Tuning adjusting" appears during the tuning adjustment stage. After the tuning adjustment is complete, the timing and video are adjusted, in that order. The messages "Timing adjusting" and "Video adjusting" will appear during those stages of the [Auto Install Setup]. After all the adjustments are completed, the window disappears.

**Note:** If any of the results require adjustment for your conditions, use the manual adjustment procedures below to manually adjust them.

#### **Manual timing adjustment**

This adjustment gives correct radar performance on short ranges. The radar measures the time required for a transmitted echo to go to the target and return to the source. The received echo appears on the display according to the measured time. The sweep must start from the center of the display.

A trigger pulse created in the display unit goes to the antenna unit through the signal cable to activate the transmitter (magnetron). The time taken by the signal to move to the antenna unit changes, according to the length of the signal cable. During this period, the display unit must wait before the radar starts the sweep. When the display unit is not adjusted correctly, the echoes from a straight object will not appear as a straight line. The target appears "pushed" or "pulled" near the picture center. The ranges to objects are also shown at wrong distances. Below are examples of wrong and correct sweep timings.



(1) Target pulled                      (2) Correct                      (3) Target pushed outward

1. Transmit on the shortest range, then adjust the gain and the A/C SEA.
2. Visibly select a target that creates a straight single line, such as harbor walls or straight piers.
3. Open the [Installation] menu and select [Timing Adjust].
4. Press **ENTER** to show the setting window.
5. Press **▲** or **▼** to until the target selected in step 2 is shown as a straight line.
6. Press **ENTER** to complete the adjustments.

**Manual MBS adjustment**

Reduce the main bang (black hole), which appears at the display on short ranges, as follows:

1. Transmit the radar on the shortest range.
2. Open the [Installation] menu and select [MBS Adjust].
3. Press **ENTER** to show the setting window.
4. Use the **▲** or **▼** to adjust the main bang (between 0 and 25).
5. Press **ENTER** to finish.

**Manual video adjustment**

Use the following procedure to manually adjust the video settings if necessary:

1. Transmit the radar and adjust the following settings:
 

Gain	85 to 90
A/C Sea	zero
A/C Rain	zero
Echo Average	OFF
Noise Rejector	OFF
Interference Rejector	2
2. Open the [Installation] menu and select [Video Init Adjust].
3. Press **ENTER** to show the setting window.
4. Press **▲** or **▼** to adjust the white noise on the display. The setting range is 0 to 31. A larger value increases the gain.
5. Press **ENTER** to finish.

**Note:** If the display is used as a remote display, set [Input Source] to [Slave]. follow the above procedure to adjust the video and take care to ensure the remote display output is similar to the master display output.

**ARPA adjustment**

During the sea trial, adjust the threshold level of the ARPA for short pulse, middle pulse and long pulse.

- Default setting is 2.
- If the ship echoes are difficult to acquire at setting level 2, adjust to level 1.
- If the ARPA symbol moves to a different echo at setting level 2, adjust to level 3.

# 4. OPTIONAL EQUIPMENT

## 4.1 ARP Kit ARP-11

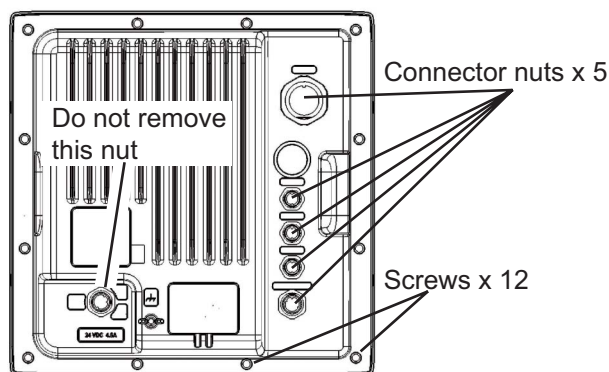
The ARP kit provides automatic radar plotter functions to this radar.

### Necessary parts

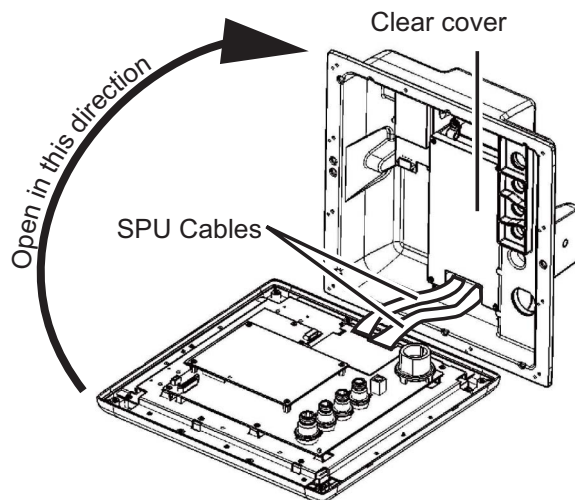
Name	ARP kit
Type	ARP-11
Code No.	008-523-050

For the contents of the kit, see the packing list attached to the kit.

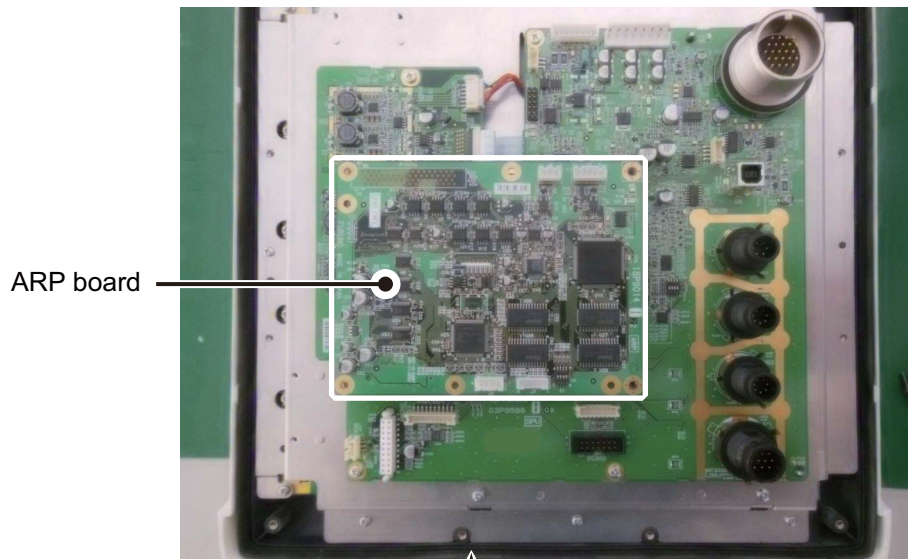
1. Unscrew 12 screws and five connector nuts at the rear of the display unit. (See the figure below.)



2. Lift the cover slowly and open it as shown below, taking care not to damage the SPU cables.

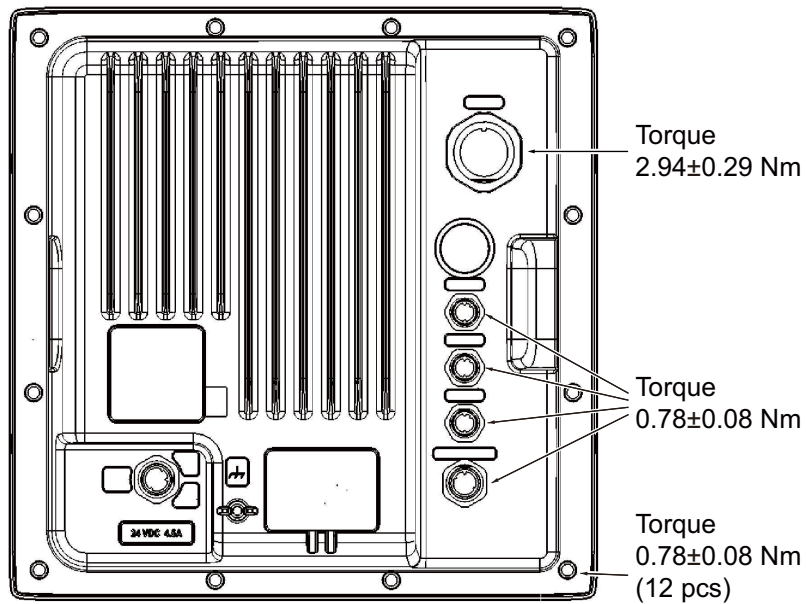


- Mate P107 on the ARP Circuit-board with J214 on the 03P9586 Board and fasten with four screws.



Confirm that the rubber gasket is set securely in the groove around the panel.

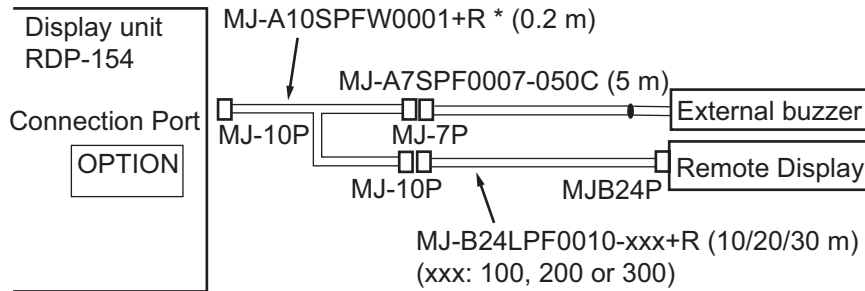
- Reassemble the display unit, taking care not to exceed the torque requirements for each connector nut. (See the figure below for nut torque.)



## 4.2 Connection of Buzzer and/or Remote Display

You will need the cables shown below to connect the optional external buzzer and remote display.

- Two-way cable MJ-A10SPFW0001 +R
- MJ-A7SPF0007-050C
- MJ-B24LPF0010-xxx+R (000: 100, 200, or 300)



\*: This cable is not required to connect the remote display only.

### External buzzer

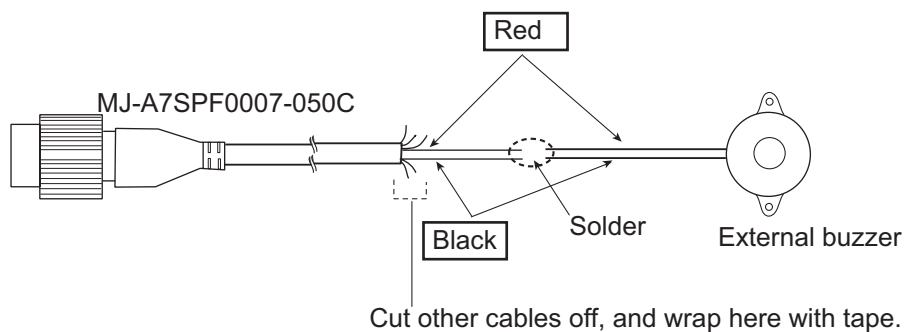
When a target enters, or exits, in the target zone, the optional external buzzer gives a loud alarm.

Type                   OP03-21  
Code No.               000-030-097

Name	Type	Code No.	Qty	Comment
Buzzer	PKB42SWH2940	000-153-221-10	1	One NH connector attached
Cable tie	CV-70N	000-162-185-10	4	
Heat-shrink-tube	3x0.25 BLK	000-165-283-10	1	40 mm
Double-sided tape	9760	000-800-851-00	1	25 mm × 25 mm

Attach the two-way cable and MJ-A7SPF0007-050C cable to the OPTION port at the rear of the display unit. See the above figure.

1. Cut the NH connector at the end of the external buzzer cable to an acceptable length.
2. Solder the external buzzer cable to the MJ-A7SPF0007-050C cable as shown below. Before you solder the cores, cut the heat-shrink-tube in half and set the tubes to the cores of the cable. Solder the cores, then set the tubes on the soldered point.

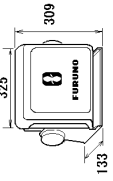


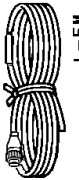

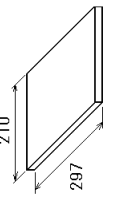
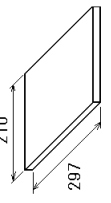


3. Fasten the buzzer with the double-sided tape or two self-tapping screws (3x15 or 3x20, local supply).

# PACKING LIST RDP-154

03HM-X-9851-0

1/1

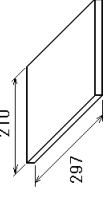
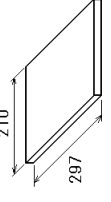
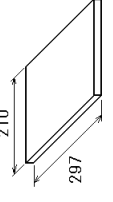
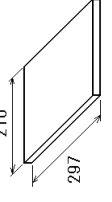
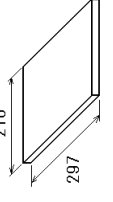
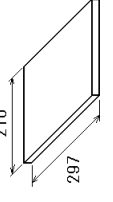
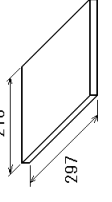
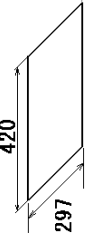
NAME	OUTLINE	DESCRIPTION/CODE No.	Q'TY
<b>ユニット</b>			
指示部 DISPLAY UNIT		RDP-154-*	1
		000-024-819-00	**
<b>予備品</b>			
予備品 SPARE PARTS		SP03-17701	1
		001-258-000-00	
<b>付属品</b>			
付属品 ACCESSORIES		FP03-12301	1
		001-258-020-00	
<b>工事材料</b>			
ケーブル組品MJ CABLE ASSY.		MJ-A3PF0017-050ZC	1
		000-157-995-10	
工事材料 INSTALLATION MATERIALS		CP03-35601	1
		001-258-010-00	
<b>図書</b>			
取扱説明書(和) OPERATOR'S MANUAL (JP)		OMJ-36320-*	1
		000-178-501-1*	(*1)
取扱説明書(英) OPERATOR'S MANUAL (EN)		OME-36320-*	1
		000-178-502-1*	(*2)

1.コード番号末尾の「\*\*」は、選択品の代表コードを表します。

1.CODE NUMBER ENDING WITH "\*\*" INDICATES THE CODE NUMBER OF REPRESENTATIVE MATERIAL.

2.(\*1)の書類は、和文仕様専用

2.(\*1) MARKED DOCUMENTS ARE FOR JAPANESE SET ONLY.

NAME	OUTLINE	DESCRIPTION/CODE No.	Q'TY
取扱説明書(中) OPERATOR'S MANUAL (CN)		OZS-36320-*	1
		000-178-511-1*	(*3)
操作要領書(和) OPERATOR'S GUIDE (JP)		OSJ-36320-*	1
		000-178-503-1*	(*1)
操作要領書(多言語) OPERATOR'S GUIDE (MLG)		MLG-36320-*	1
		000-178-505-1*	(*2)
操作要領書(中) OPERATOR'S GUIDE (CN)		NZS-36320-*	1
		000-178-504-1*	(*3)
装備要領書(和) INSTALLATION MANUAL (JP)		IMJ-36320-*	1
		000-178-506-1*	(*1)
装備要領書(英) INSTALLATION MANUAL (EN)		IME-36320-*	1
		000-178-507-1*	(*2)
装備要領書(中) INSTALLATION MANUAL (CN)		IZS-36320-*	1
		000-178-512-1*	(*3)
フラッシュマウント型紙 FLUSH MOUNTING TEMPLATE		G32-01308-*	1
		000-178-509-1*	

3.(\*2)の書類は、英文仕様専用

3.(\*2) MARKED DOCUMENTS ARE FOR ENGLISH SET ONLY.

4.(\*3)の書類は、中文仕様専用

4.(\*3) MARKED DOCUMENTS ARE FOR CHINESE SET 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、どちらかが入っています。なお、品質は変わりません。

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

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.

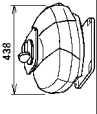

C3632-Z01-A

# PACKING LIST

RSB-0070-085A/RSB-0073-085A/RSB-0073-086A/RSB-0073-087A

A-2

030T-X-9854 -0 1/1

NAME	OUTLINE	DESCRIPTION/CODE No.	Q'TY
<b>UNIT</b>			
ユニット 空中線本体部 ANTENNA UNIT		RSB-0070-085A/-0073-08*A 001-125-220-00 **	1
<b>ANTENNA UNIT INSTALLATION MATERIALS</b>			
空中線部工材 INSTALLATION MATERIALS		OP03-33801 001-141-670-00	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.

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



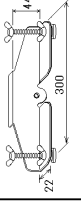
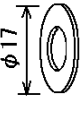
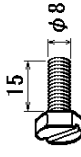
C3539-Z04-A

# PACKING LIST

OP03-228

A-3

03HM-X-9852 -0 1/1

NAME	OUTLINE	DESCRIPTION/CODE No.	Q'TY
<b>FLUSH MOUNTING PARTS</b>			
Fフラッシュ部品 Fフラッシュ部品 FLUSH MOUNT SPONGE H		03-185-1603-1 100-381-961-10	2
Fフラッシュ部品 FLUSH MOUNT SPONGE V		03-185-1602-1 100-381-951-10	2
Fフラッシュ部品 FLUSH MOUNT FIXTUREY		OP03-228-1 001-258-040-00	2
ミカキ丸平座金 FLAT WASHER		M8 SUS304 000-167-464-10	2
六角入りワシボルト HEXAGONAL HEAD BOLT		M8X15 SUS304 000-162-916-10	2

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

C3632-Z02-A

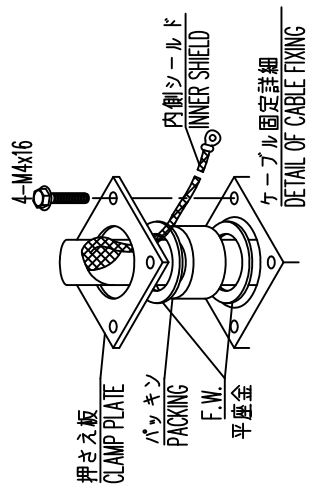
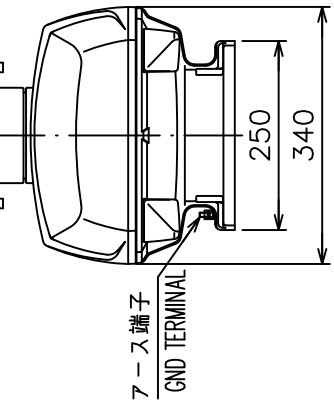
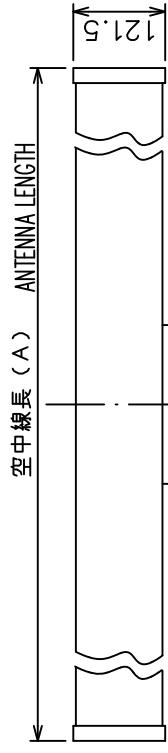
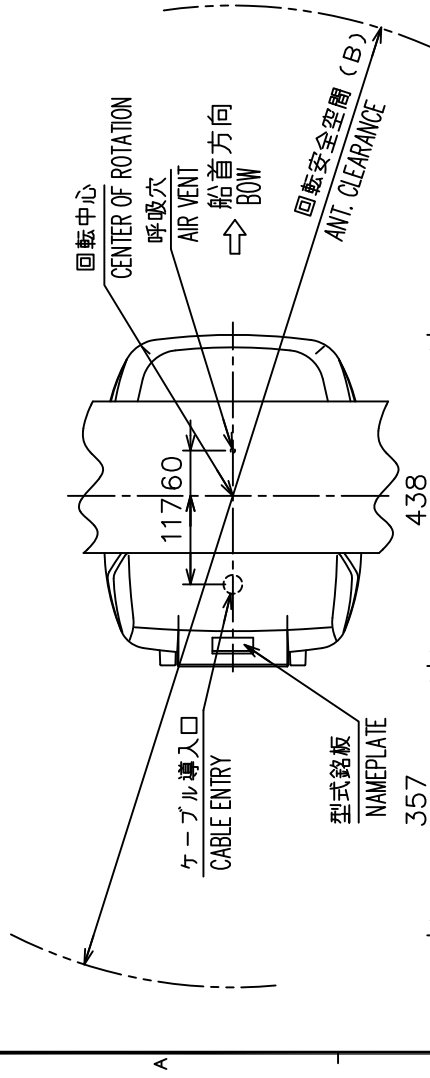


表 1 TABLE 1

寸法区分 (mm) DIMENSION	公差 (mm) TOLERANCE
$L \leq 50$	$\pm 1.5$
$50 < L \leq 100$	$\pm 2.5$
$100 < L \leq 500$	$\pm 3$
$500 < L \leq 1000$	$\pm 4$
$1000 < L \leq 2000$	$\pm 5$

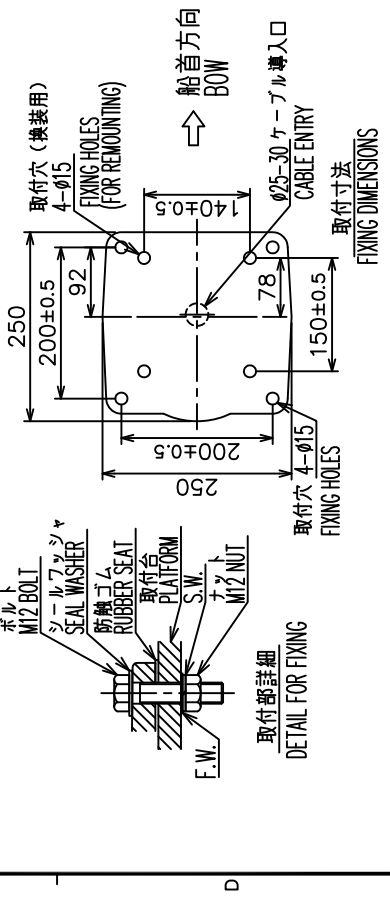
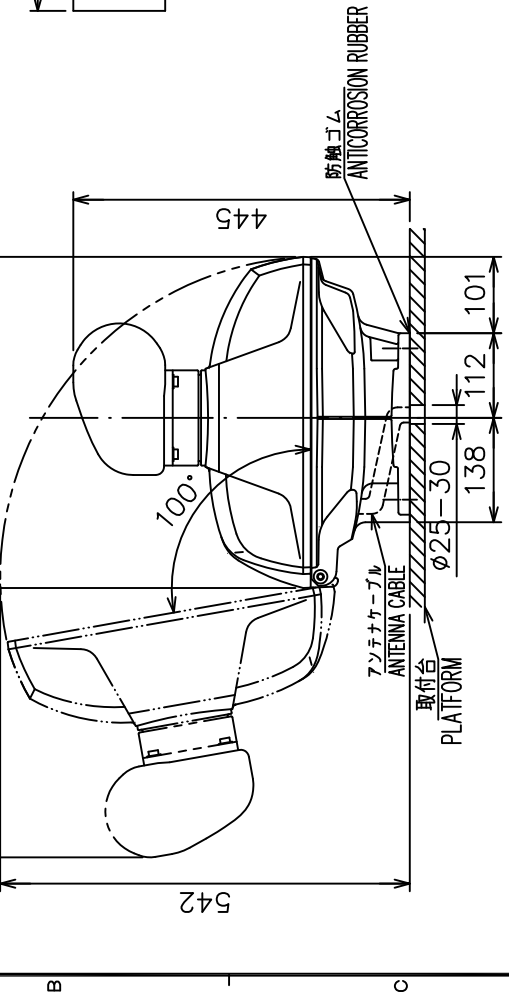
表 2 TABLE 2

種類 TYPE	XN10A	XN12A	XN13A
空中線長 (A) ANT. LENGTH (mm)	1036 $\pm$ 10	1255 $\pm$ 10	1795 $\pm$ 10
回転安全空間 (B) ANT. CLEARANCE (mm)	1200	1400	1940
質量 (kg $\pm$ 10%) MASS	22	25	27



注記 1) 指定なき寸法公差は表 1 による。  
 2) 取付には M12 ボルトを使用のこと。  
 3) 空中線部の取付台に  $\phi 25-30$  のケーブル導入口を開ける。

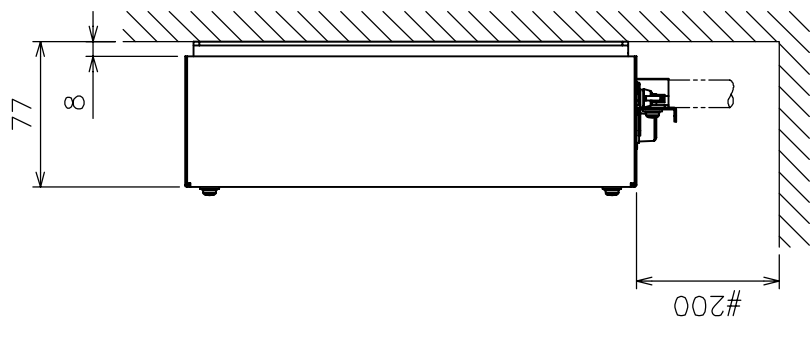
NOTE 1. TABLE 1 INDICATES TOLERANCE OF DIMENSIONS WHICH IS NOT SPECIFIED.  
 2. USE M12 BOLTS FOR FIXING THE UNIT.  
 3. MAKE A CABLE ENTRY HOLE  $\phi 25-30$  ON PLATFORM.



DRAWN	28/Oct/2013	T. YAMASAKI	TITLE	RSB-0070/0072/0073	
CHECKED	30/Oct/2013	H. MAKI	名称	空中線部	
APPROVED	30/Oct/2013	H. MAKI	OTHERS	MODEL 06422 MODEL 1854C Ver.	
SCALE	1/10	質量 表示 参照 SEE TABLE 2	外寸図		
DWG. No.	C3539-G03-C	REF. No.	03-142-300G-6	NAME	ANTENNA UNIT
				OUTLINE DRAWING	

表 1 TABLE 1

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

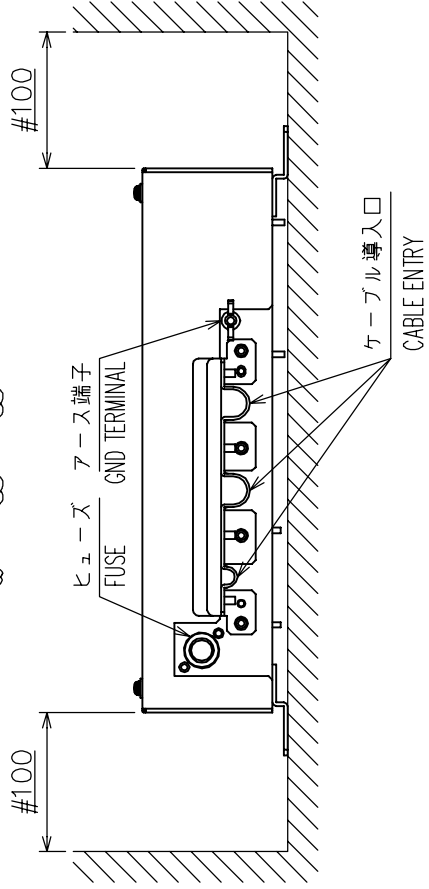
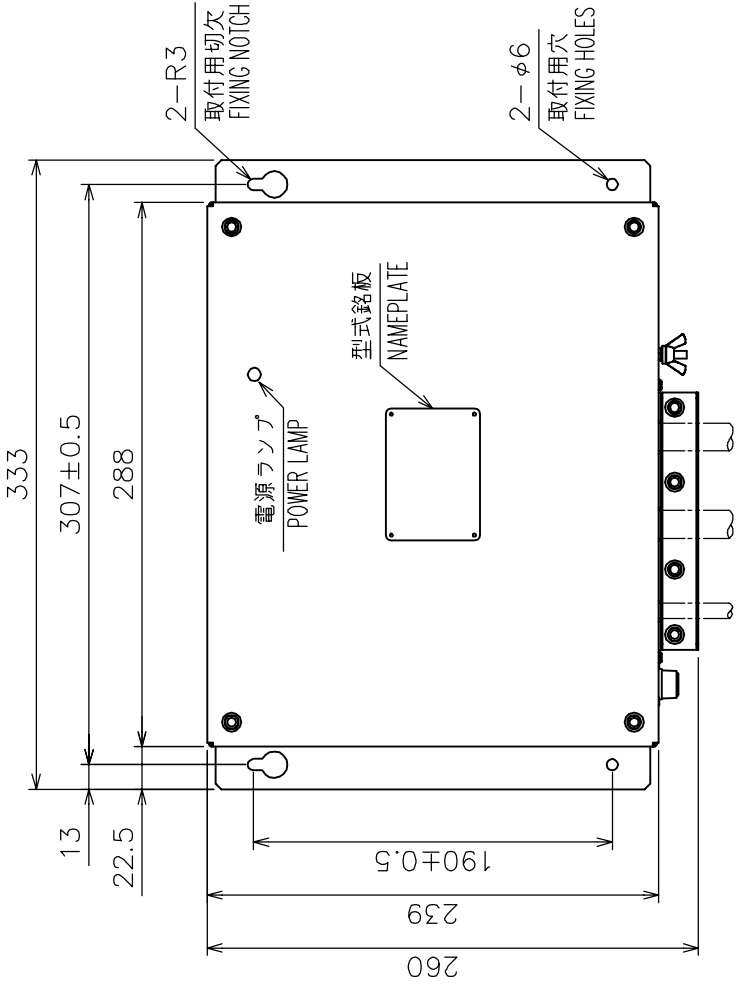


注 記

- 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) 取付用ネジはトラスタップピングネジ呼び径5×20を使用のこと。

NOTE

1. # MINIMUM SERVICE CLEARANCE.
2. TABLE 1 INDICATES TOLERANCE OF DIMENSIONS WHICH IS NOT SPECIFIED.
3. USE SELF-TAPPING SCREWS 5x20 FOR FIXING THE UNIT.



DRAWN	Apr. 8, '05	E. MIYOSHI	TITLE	PSU-008
CHECKED		TAKAHASHI, T	名称	空中線電源部
APPROVED		Y. Hatai	外寸図	
SCALE	1/4	MASS 2.7 kg	NAME	POWER SUPPLY UNIT
DWG.No.	C3548-601-A			OUTLINE DRAWING
				19-025-400G-0

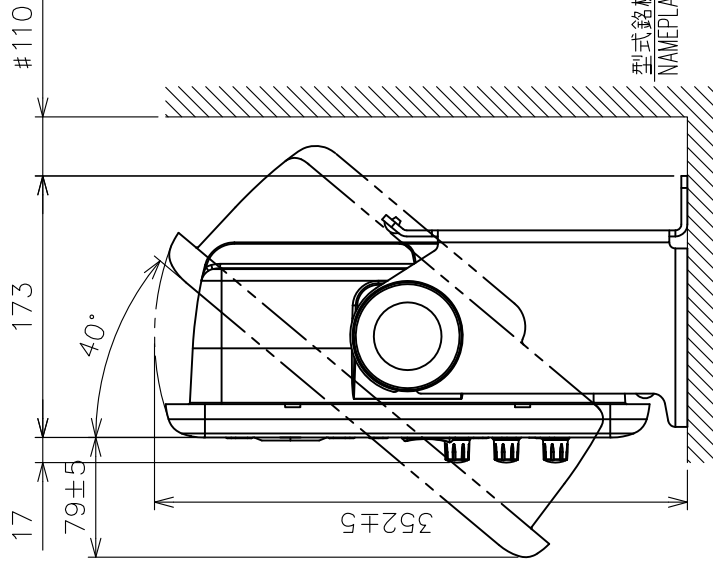
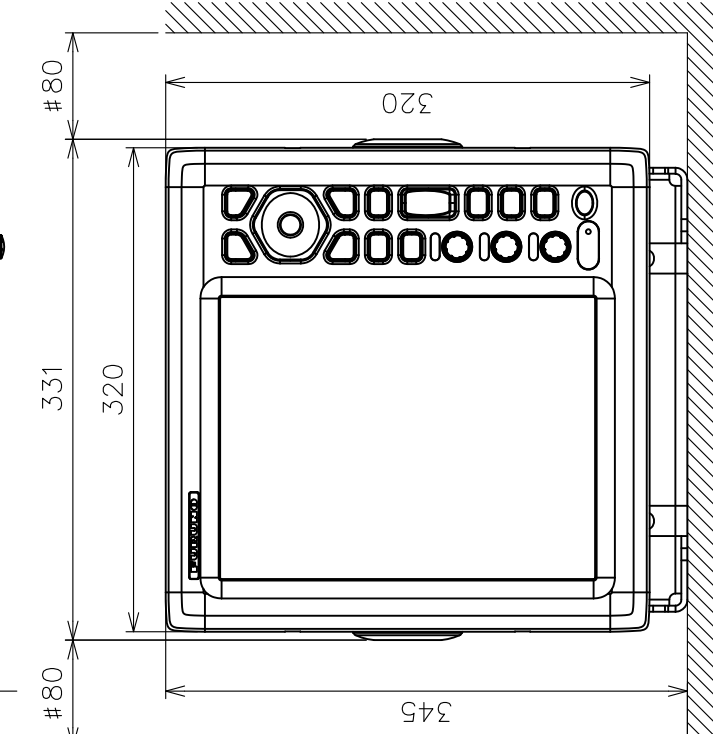
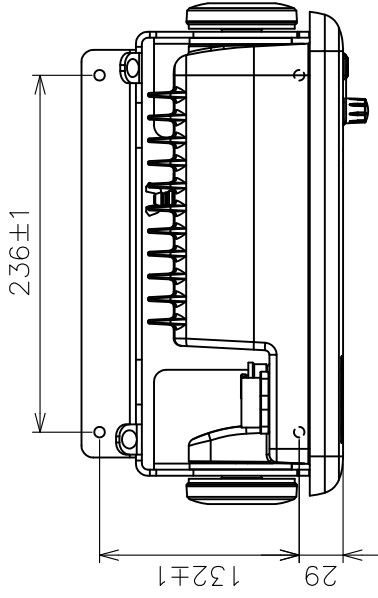
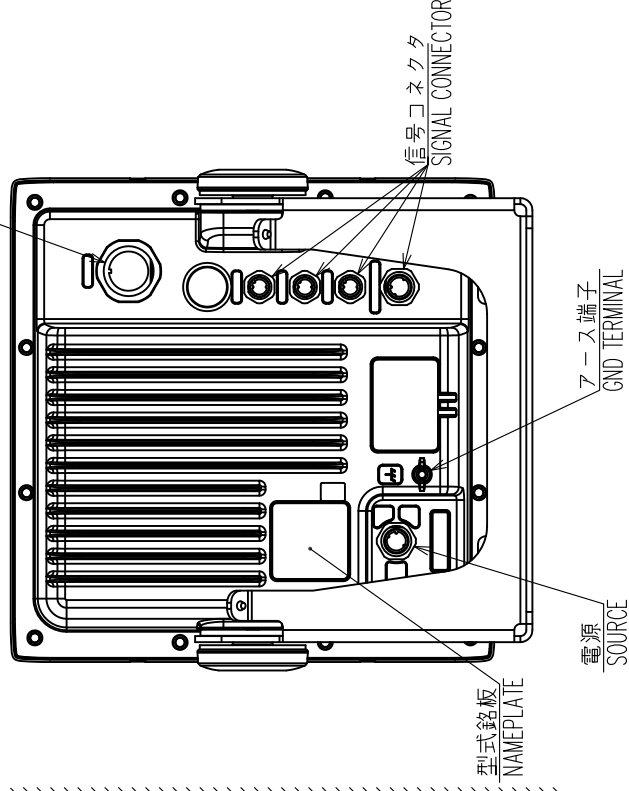


表1 TABLE 1

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

空中線コネクタ  
ANTENNA CONNECTOR



注記 1) 指定外の寸法公差は表1による。

2) #印寸法は最小サービス空間寸法とする。

3) 取付用ネジは+トラスタッピンネジ呼び径5×20を使用のこと。

NOTE 1. TABLE 1 INDICATES TOLERANCE OF DIMENSIONS WHICH IS NOT SPECIFIED.

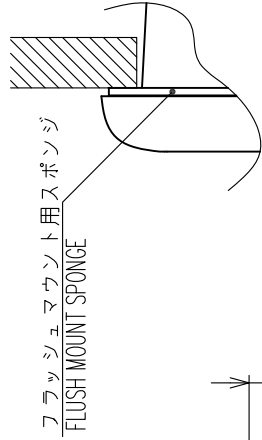
2. #: MINIMUM SERVICE CLEARANCE.

3. USE TAPPING SCREWS φ5x20 FOR FIXING THE UNIT.

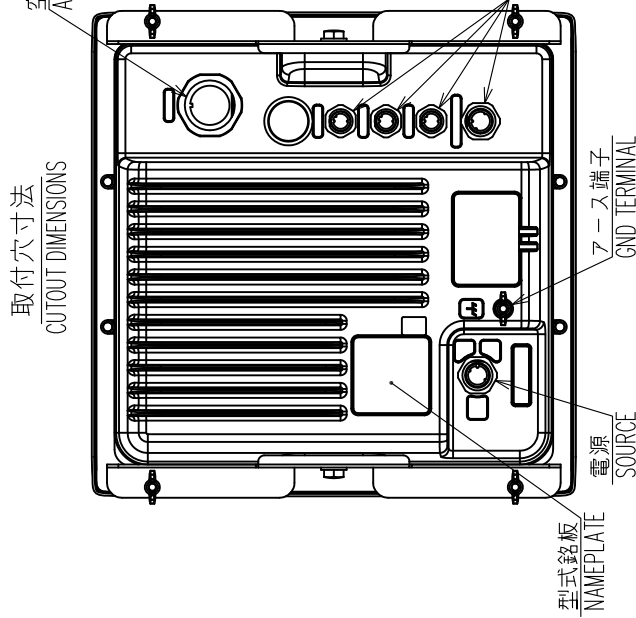
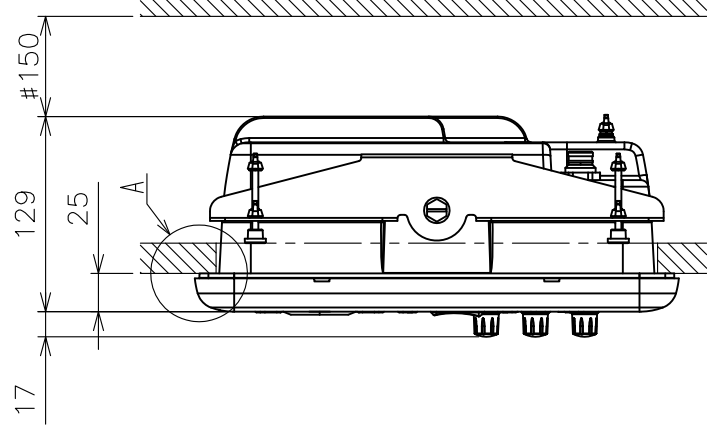
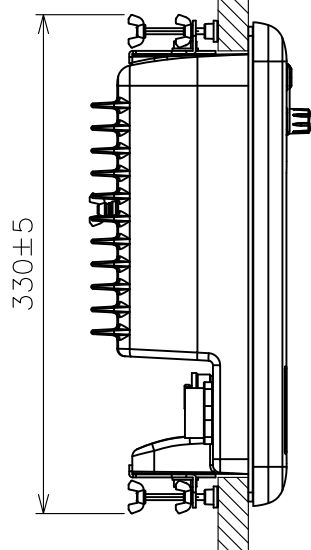
DRAWN	25/Nov/2013	T.YAMASAKI	TITLE	RDP-154
CHECKED	25/Nov/2013	H.MAKI	名称	指示部 (卓上装備)
APPROVED	27/Nov/2013	H.MAKI	外寸図	
SCALE	1/5	WASS 5.8	NAME	DISPLAY UNIT (TABLETOP MOUNT)
DMC No.	C3637-G01-B	REF.No.	03-185-100G-1	OUTLINE DRAWING

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



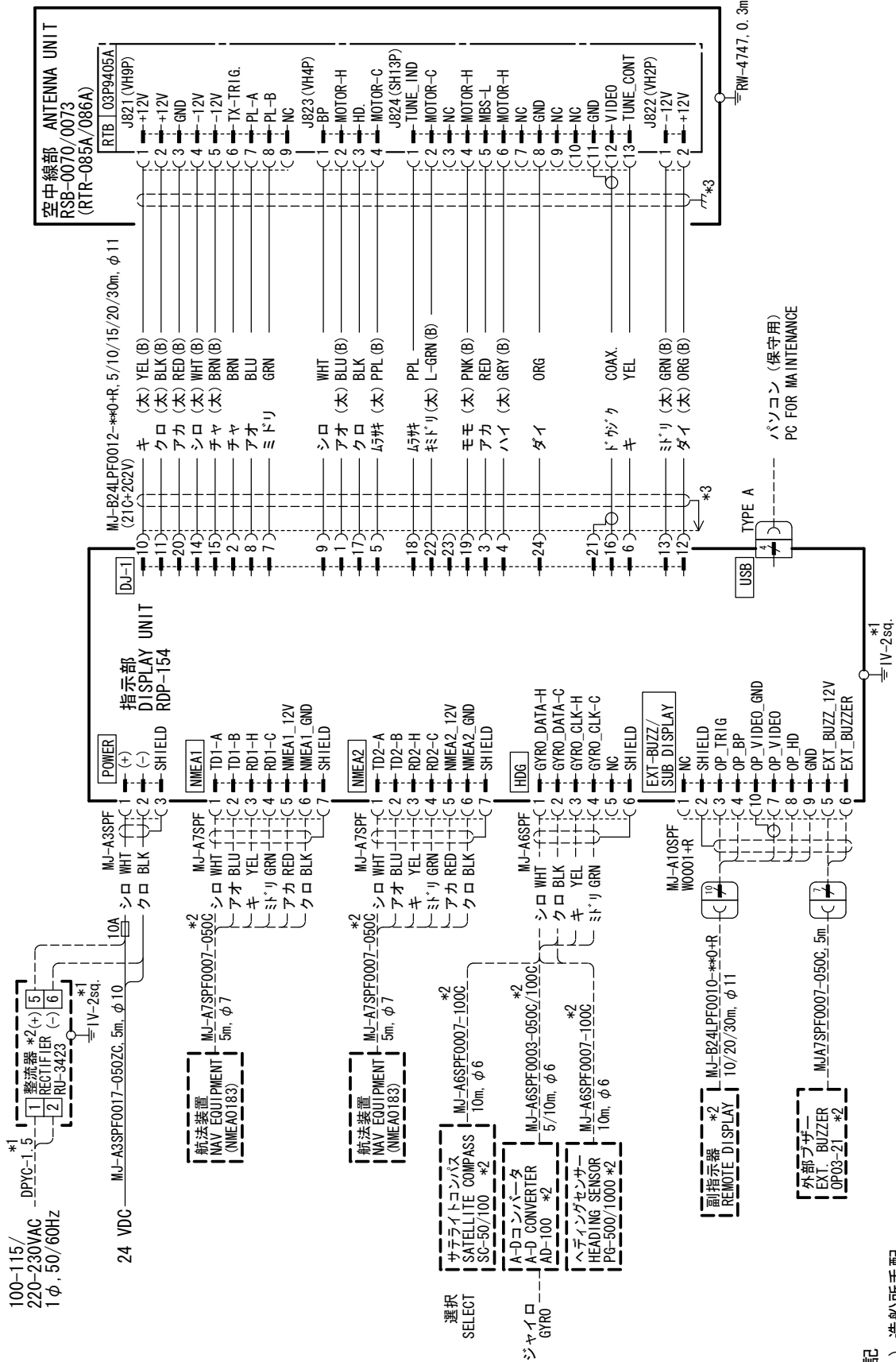
A部 詳細 (尺度: 1/3)  
DETAIL FOR A (SCALE: 1/3)



- 注記 1) 指定外の寸法公差は表1による。  
 2) #印寸法は最小サービス空間寸法とする。  
 3) 壁の厚さ (t) は最小10mm、最大20mmとする。
- NOTE 1. TABLE 1 INDICATES TOLERANCE OF DIMENSIONS WHICH IS NOT SPECIFIED.  
 2. # : MINIMUM SERVICE CLEARANCE.  
 3. BULKHEAD THICKNESS (t): 10 ≤ t ≤ 20.

DRAWN	25/Nov/2013	T.YAMASAKI	TITLE	RDP-154
CHECKED	25/Nov/2013	H.MAKI	名称	指示部 (埋込装備)
APPROVED	27/Nov/2013	H.MAKI	NAME	外寸図
SCALE	1/5	WASS 5.3 t	REF.No.	03-185-110G-1
DMC.No.	C3632-G02-B			

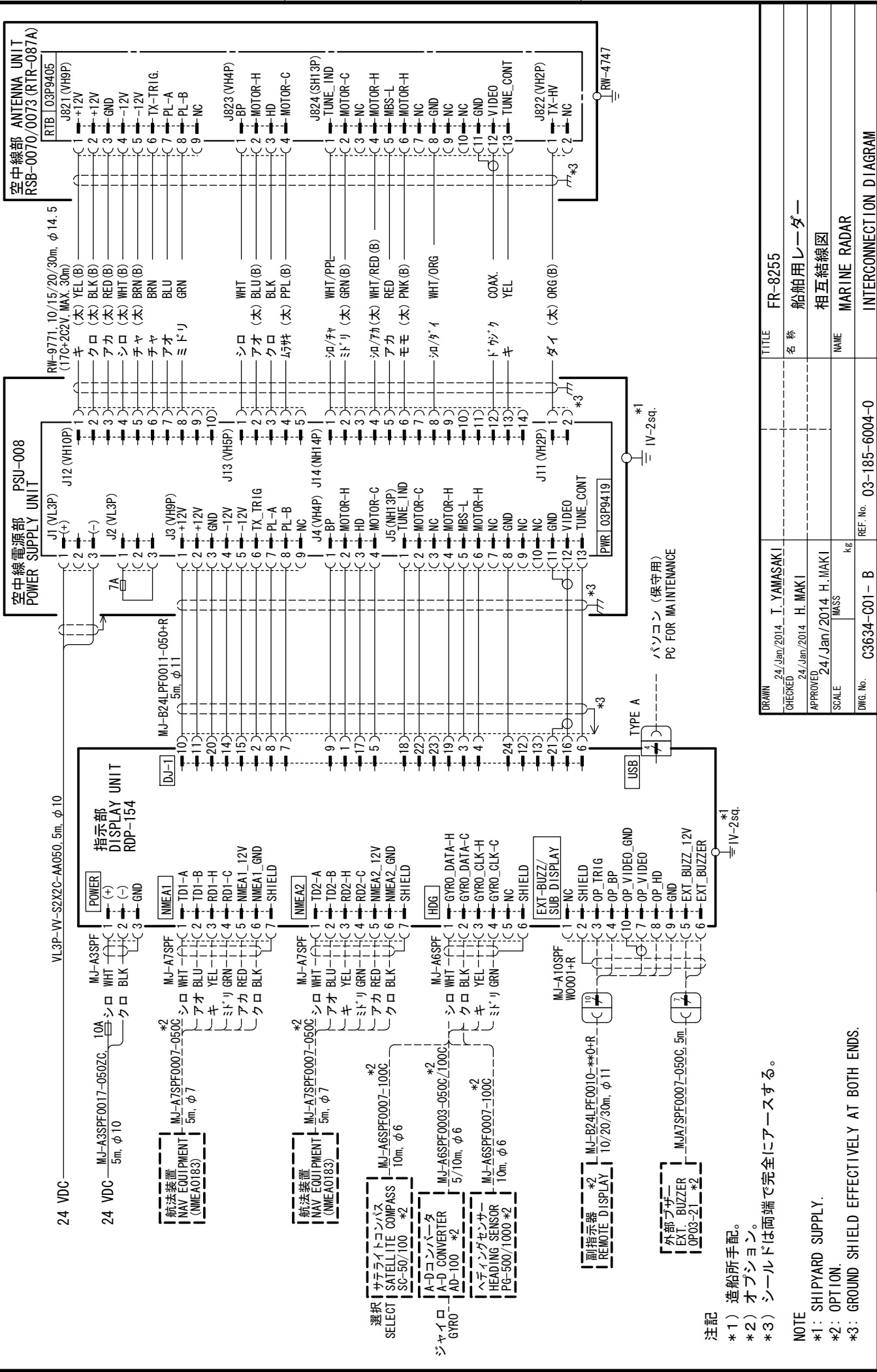




DRAWN	24/Jan/2014	T. YAMASAKI	TITLE	FR-8065/8125
CHECKED	24/Jan/2014	H. MAKI	名称	船舶用レーダー
APPROVED	24/Jan/2014	H. MAKI		相互結線図
SCALE	1/25	kg	NAME	MARINE RADAR
DWG. No.	C3632-001-B	REF. No.	03-185-6003-0	INTERCONNECTION DIAGRAM

注記  
 \*1) 造船所手配。  
 \*2) オプション。  
 \*3) シールドは両端で完全にアースする。

NOTE  
 \*1: SHIPYARD SUPPLY.  
 \*2: OPTION.  
 \*3: GROUND SHIELD EFFECTIVELY AT BOTH ENDS.



A

B

C

**注記**  
 \*1) 造船所手配。  
 \*2) オプション。  
 \*3) シールドは両端で完全にアースする。

**NOTE**  
 \*1: SHIPYARD SUPPLY.  
 \*2: OPTION.  
 \*3: GROUND SHIELD EFFECTIVELY AT BOTH ENDS.

DRAWN	24/Jan/2014	T. YAMASAKI	TITLE	FR-8255
CHECKED	24/Jan/2014	H. MAKI	名称	船舶用レーダー
APPROVED	24/Jan/2014	H. MAKI	相互結線図	
SCALE		1/25	NAME	MARINE RADAR
DWG. No.	C3634-001-B	kg	REF. No.	03-185-6004-0
			INTERCONNECTION DIAGRAM	

**ECF**

(Elemental Chlorine Free)

The paper used in this manual  
is elemental chlorine free.

**FURUNO ELECTRIC CO., LTD.**

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