FURUNO

OPERATOR'S MANUAL

SHIP SECURITY ALERT SYSTEM (SSAS)

Model **IC-307**

(For FELCOM 15/16/18/19)

FURUNO ELECTRIC CO., LTD.

www.furuno.com

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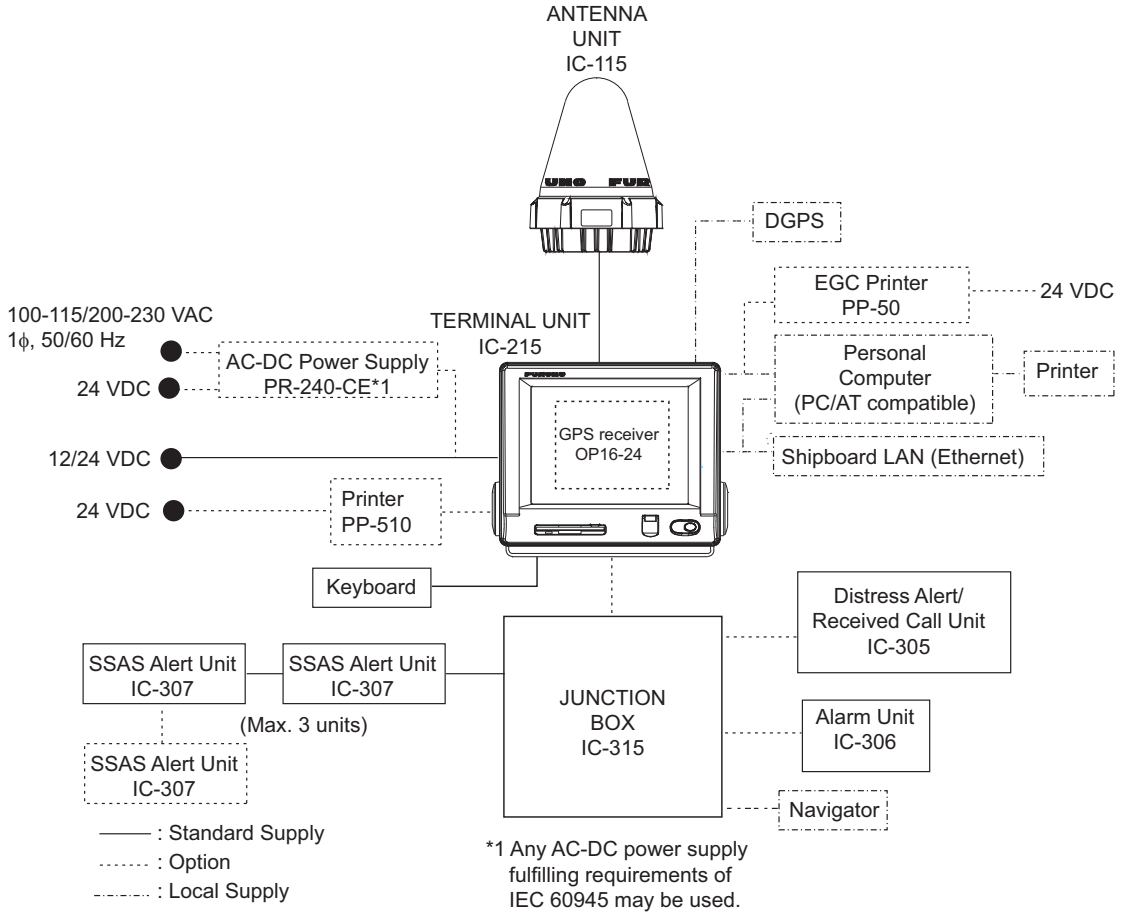
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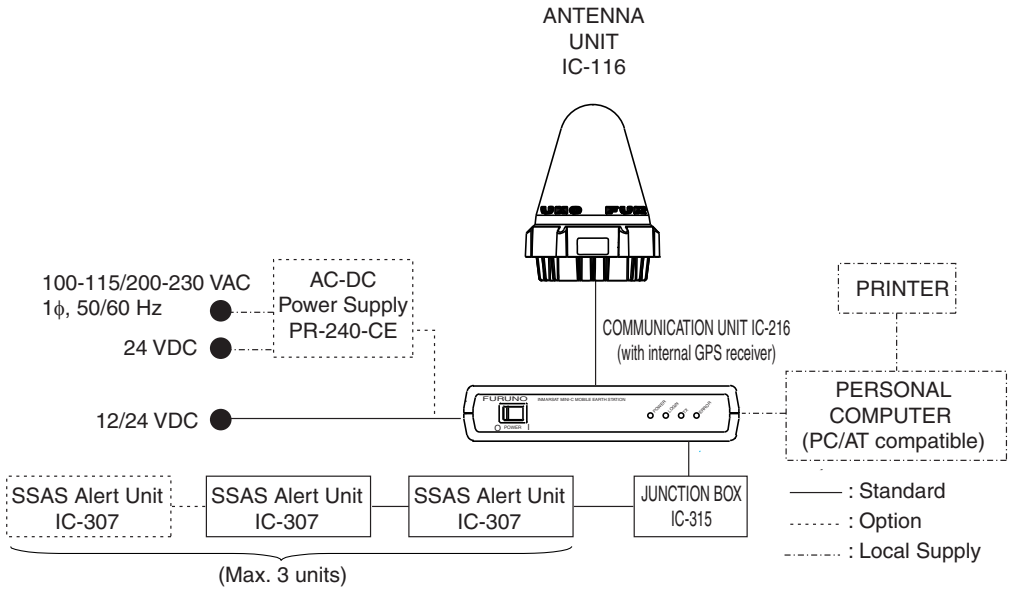
SYSTEM CONFIGURATION

Regulations require at least two SSAS alert units.

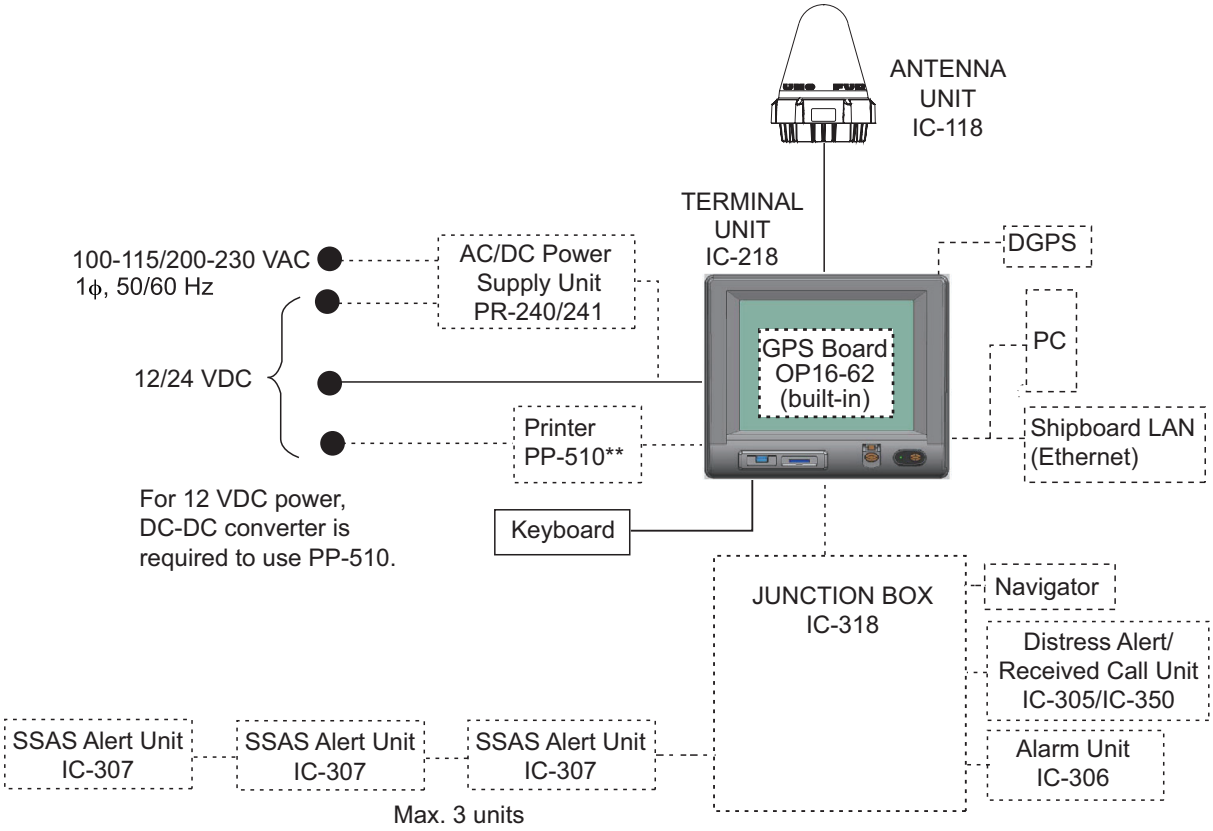
FELCOM 15



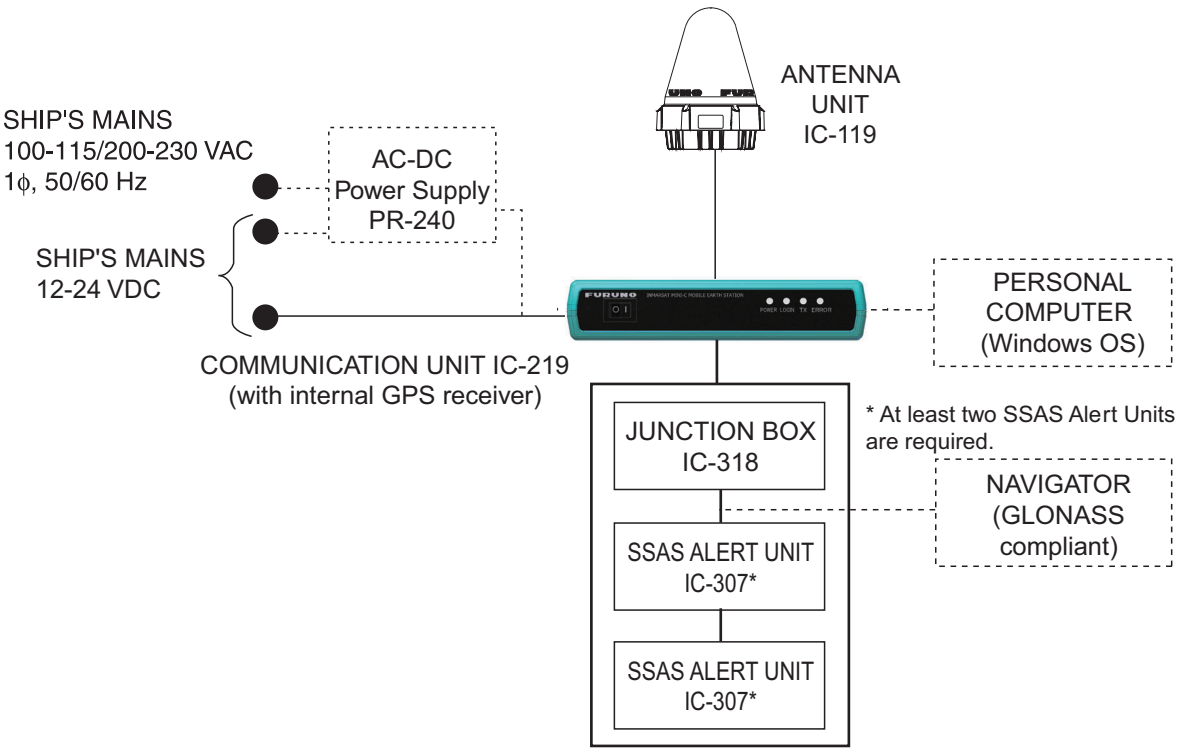
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FELCOM 18



FELCOM 19

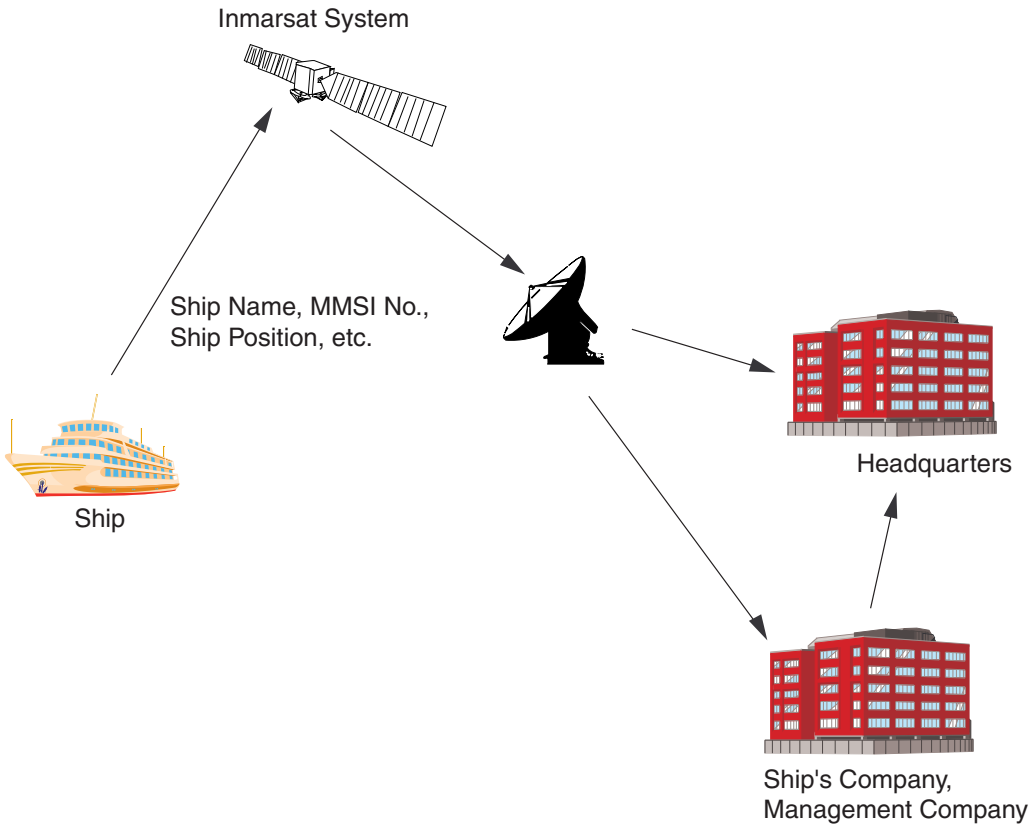


1. OVERVIEW OF SSAS

The IC-307 SSAS (Ship Security Alert System) Alert Unit connects to the Inmarsat-C MES FELCOM 15/FELCOM 18 or the Inmarsat Mini-C FELCOM 16/FELCOM 19 for the purpose of alerting specified addresses (for example, your ship's company) that your ship is under attack by intruders. The SOLAS Resolution XI-2/6 requires vessels of 500 GT or more constructed before 01 July 2004 to install an SSAS.

When your ship is under attack an SSAS report, which contains your ship's name, MMSI No., position, etc. is sent to the locations specified by the ship's captain or authorized personnel (Max. five addresses for FELCOM15/16; Max. 10 addresses for FELCOM18/19). No audible or visible alarm is generated while the SSAS report is being transmitted, to prevent discovery of the report by the intruders.

The SSAS is protected with a password to prevent unauthorized setting or testing of it by other than the ship's captain or authorized personnel.



SSAS operation flow

1. Open the cover of the button and then press the button.
   (This is a latch-type button; hit and release to activate the button.)

↓

2. If addresses have been preset, the SSAS report is sent to one address 30 seconds after the button is activated.
   Maximum number of presets are as follows:
   FELCOM15/16: five addresses;
   FELCOM18/19: 10 addresses.

↓

3. An LES sends acknowledgement to your ship.

↓

4. Steps 2-3 and are repeated in case of multiple addressees.

↓

5. Continuous transmission of the SSAS report begins.
   (The interval at which to transmit the SSAS report to each address can be specified. The SSAS report is continuously transmitted while the button is ON, at the interval selected.)

↓

6. To stop transmission, press the button again to deactivate it.
   (This is only possible in the SSAS manager mode. See paragraph 3.1.)

2. INSTALLATION

2.1 Mounting

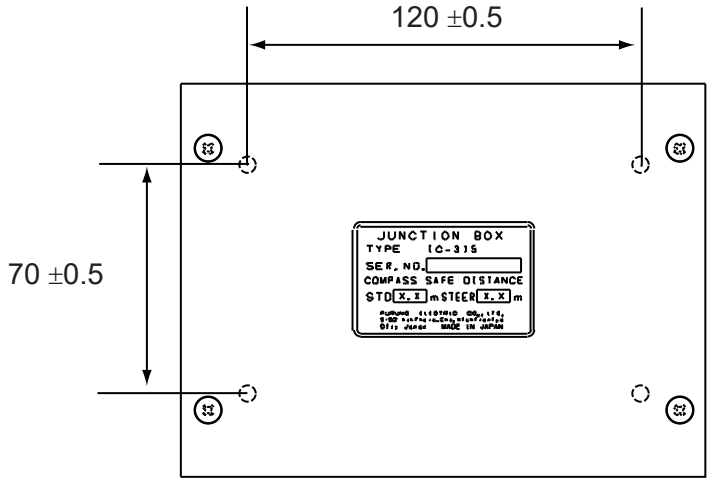
2.1.1 Junction box (for FELCOM 16/FELCOM 19)

The junction box IC-315 is required when installing the SSAS on the FELCOM 16/FELCOM 19; it is already installed on the FELCOM 15/FELCOM 18.

Separate the junction box from a magnetic compass by the distances shown below to prevent deviation to a magnetic compass.

IC-315	IC-318
Standard compass: 1.0 m	Standard compass: 0.90 m
Steering compass: 0.7 m	Steering compass: 0.60 m

1. Remove four screws from the unit to separate the cover from the unit.
2. Fix the unit to the mounting location with four self-tapping screws (4x16, supplied).
3. Connect the cables appropriately referring to paragraph 2.2.1.



Junction box IC-315/318

The junction box is connected to the communication unit with a 2 meter cable, with D-sub connector (at the communication unit). Therefore, locate the junction box within two meters of the communication unit.

2.1.2 SSAS alert unit

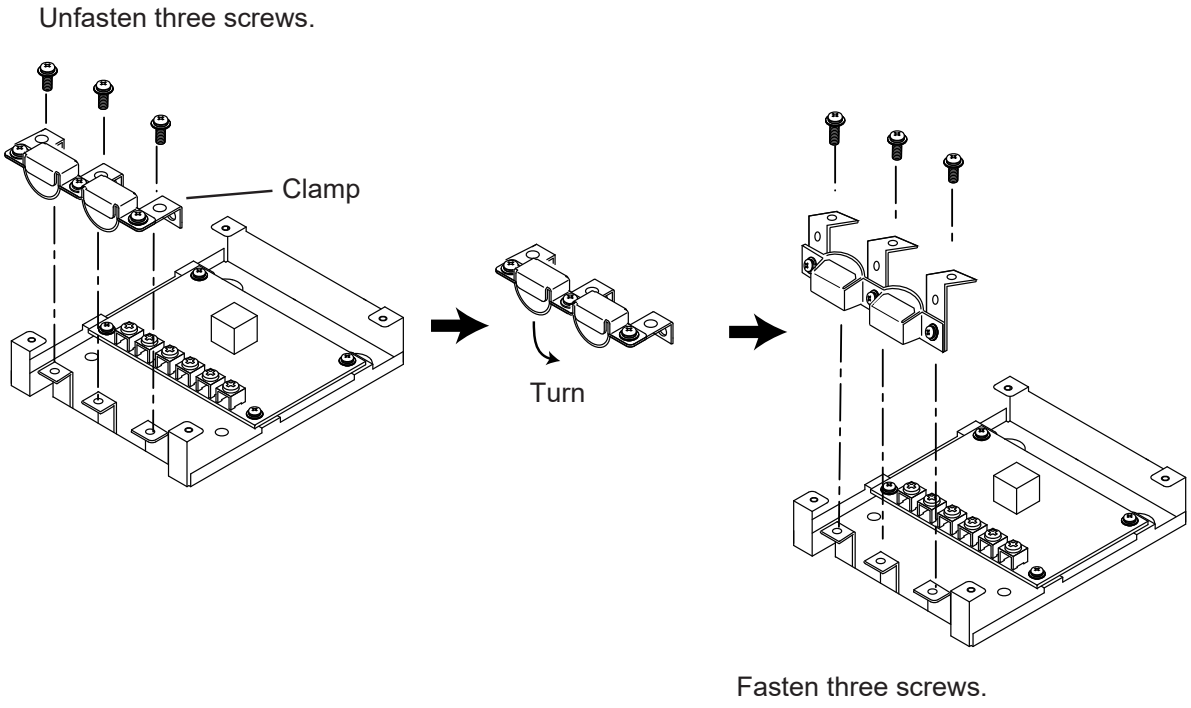
Separate the junction box from the SSAS alert unit by the distances shown below to prevent deviation to a magnetic compass.

Standard compass: 0.70 m
Steering compass: 0.45 m

Locate the SSAS alert unit where it cannot be found by intruders. The location should be known only by ship's captain and authorized personnel.

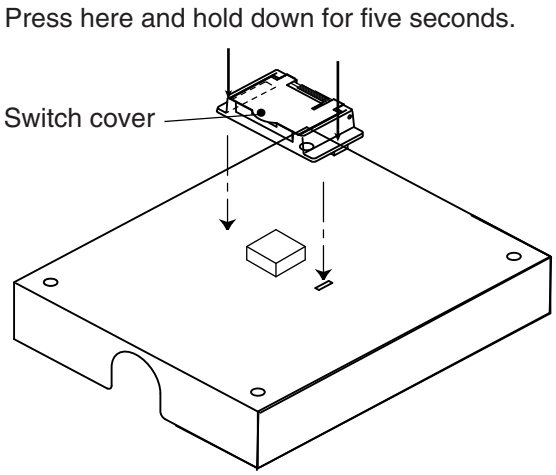
Bulkhead mounting

1. Remove four screws from the unit to separate the bottom chassis from the top cover.
2. Fix the unit to the mounting location with four self-tapping screws (supplied).
3. The cable can be lead in from the bottom or the rear panel. For rear panel entrance, change the clamp orientation as follows:
   a) Unfasten three screws to remove the cable clamp.
   b) Turn the clamp 90 degrees.
   c) Refasten the clamp with three screws unfastened at step a) to fix the clamp.



4. Run the cable thru one of the cable entrances and connect it to terminal board.

5. Attach the switch cover as shown below. Note that the cover may also be rotated 180 degrees.



Flush mounting

The optional flush mount kit OP16-28 (Code No. 004-448-010) is required.

Name	Type	Code No.	Qty	Remarks
Fixture	16-018-7201-1	100-317-931	1	
Pan head screw	M3x6	000-800-362	4	
Self-tapping screw	4x16	000-802-080	4	

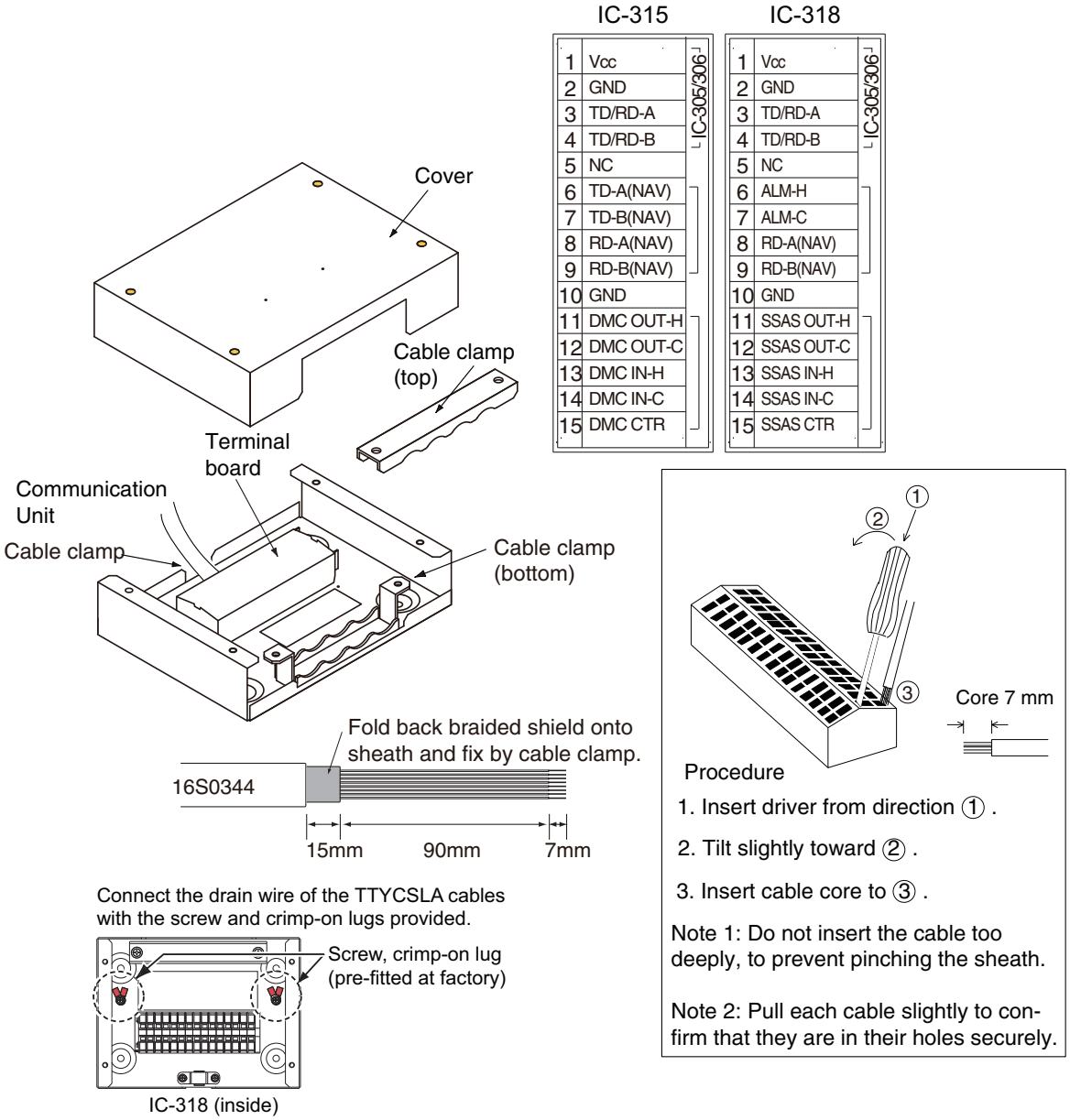
1. Cut out the mounting position referring to the outline drawings at the back of this manual.
2. Fix the unit to the fixture with four pan head screws (supplied).
3. Fasten the fixture with the unit to the mounting location with four self-tapping screws (supplied).
4. Attach switch cover as shown above.

2.2 Wiring

2.2.1 Junction box (for FELCOM 16/19)

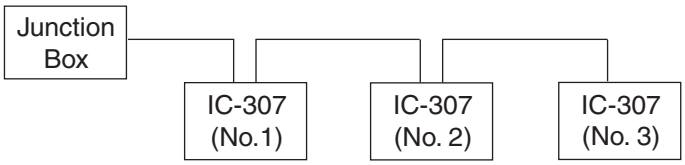
Use the junction box IC-315 to connect the SSAS alert unit to the FELCOM 16, or the junction box IC-318 to connect the SSAS alert unit to the FELCOM 19. Unfasten four screws to remove the cover to connect cables to terminal board. For detailed wiring information see the interconnection diagram.

For connecting the SSAS alert unit IC-307, use the JIS cable TTYCS-4 (or equivalent, see next page for sectional view of this cable) or the CO-SPEVV-SB-C 0.2x5P. When using the CO-SPEVV-SB-C 0.2x5P cable, replace the cable clamp with the cable clamp 16-018-6008-1, supplied with the junction box. For connecting the communication unit IC-216, use cable 16S0344.



2.2.2 SSAS alert unit

Three SSAS alert units can be connected. For wiring, see the illustrations below and the interconnection diagram at the back of this manual. For the terminal unit (FELCOM 15/18) and the communication unit (FELCOM 16/19), the wiring of the SSAS is monitored and if in error “TROUBLE: SSAS UNIT connection abnormality.” is displayed. Further the ERROR lamp (FELCOM 16/19) flashes.



Connect wiring to the terminal board 16P0229 inside the SSAS unit. To differentiate between units in case of multiple unit installation, change jumper block settings as shown below, in accordance with how many units are installed.

Jumper settings for two IC-307

Jumper \ Unit	No.1 unit*	No. 2 unit
JP1	No	Yes
JP2	Yes	No

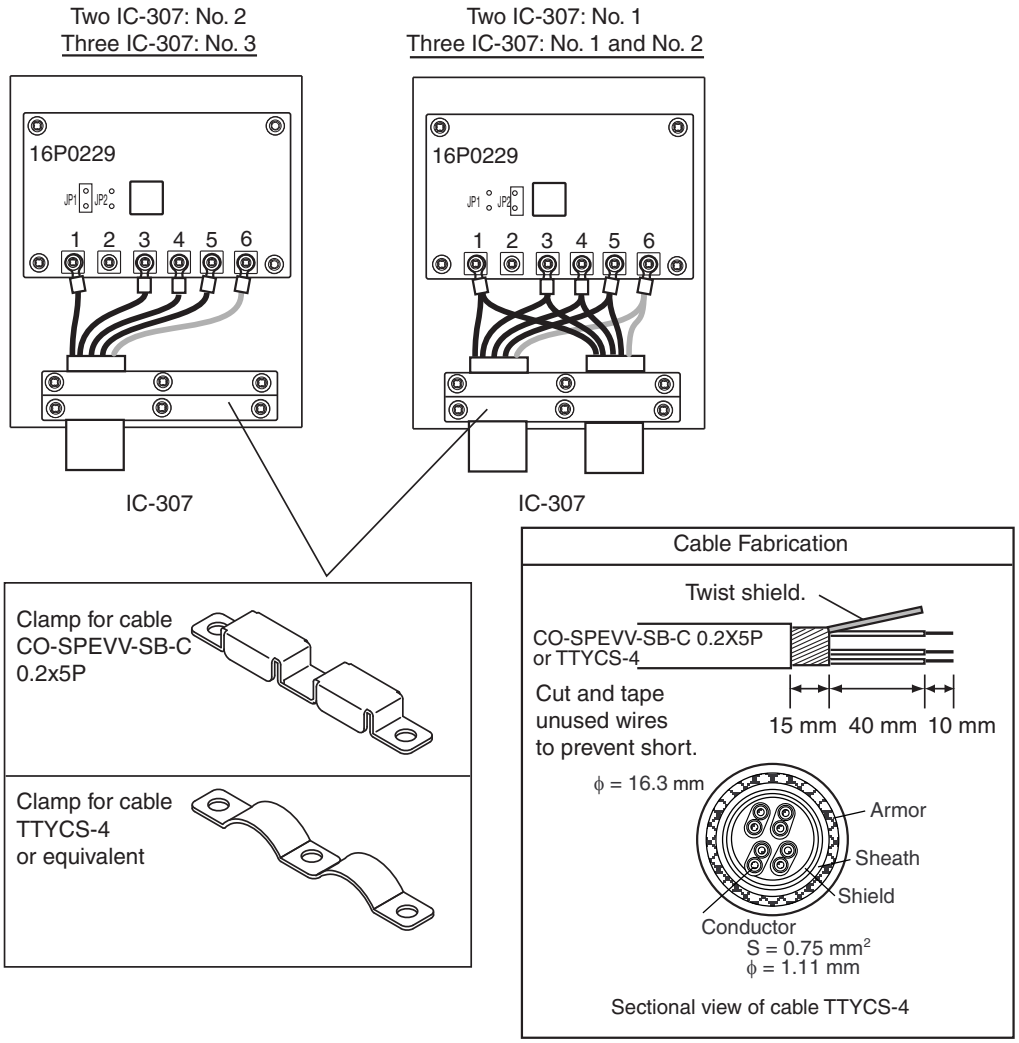
*: Default setting

No. 1 unit: Unit with two cables connnected to it.
No. 2 unit: Unit with one cable connnected to it.

Jumper settings for three IC-307

Jumper \ Unit	No.1 unit*	No. 2 unit*	No. 3 unit
JP1	No	No	Yes
JP2	Yes	Yes	No

No. 1 and No. 2 units: Units with two cables connnected to them.
No. 3 unit: Unit with one cable connnected to it.



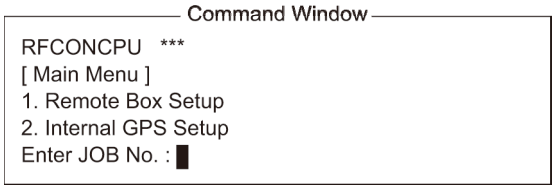
7Wiring inside the SSAS alert unit

2.3 Initial Settings

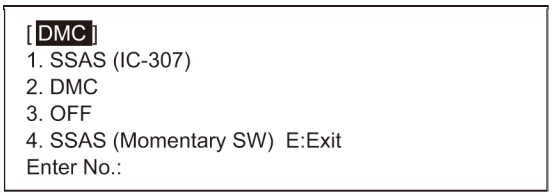
Set up the SSAS as follows:

For FELCOM 15/16

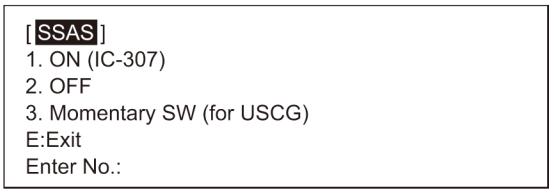
1. **FELCOM 15:** Press [F8], [2] to show the System Setup menu.
   FELCOM 16: Press [F8], [1] to show the System Setup menu.
2. Press [↓] to choose Command Window and then press the [Enter] key.
3. Type “furunoservice” (without quotation marks) in the Enter JOB No. field and then press the [Enter] key. The prompt PASSWORD appears.



4. Enter password (see FURUNO Information for SSAS) then press the [Enter] key. Then, the item Main Menu is displayed in reverse video.
5. Press [1], [Enter], [1], [Enter]. One of the following windows appears.



FELCOM15



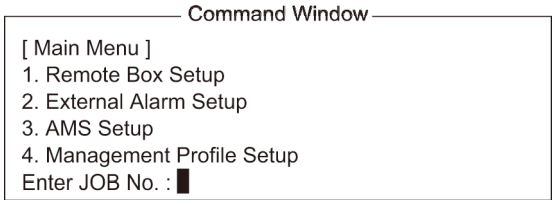
FELCOM16

6. Press [1], [Enter]. This enables the SSAS functions.
7. Press the [Esc] key several times to close the menu.

Note: Test the SSAS button and SSAS report for proper operation, referring to paragraphs 3.4 and 3.5, respectively.

For FELCOM 18/19

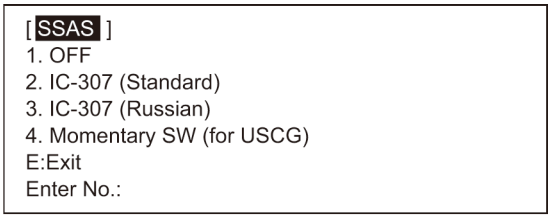
1. Press [F8], [1] to show the System Setup menu.
2. Press [↓] to choose Command Window and then press the [Enter] key.
3. Type “furunoservice” (without quotation marks) in the Enter JOB No. field and then press the [Enter] key. The challenge code appears on the screen.



4. Contact a FURUNO agent to obtain the response code.
5. Enter the response code after the Response code and then press the [Enter] key. Then, the item Main Menu is displayed in reverse video.
6. Press [1], [Enter], [1], [Enter]. One of the following windows appears.



FELCOM18



FELCOM19

7. Press [2], [Enter]. This enables the SSAS functions.
8. Press the [Esc] key several times to close the menu.

Note: Test the SSAS button and SSAS report for proper operation, referring to paragraphs 3.4 and 3.5, respectively.

3. OPERATION

3.1 Operation Mode

There are two menu operating modes:

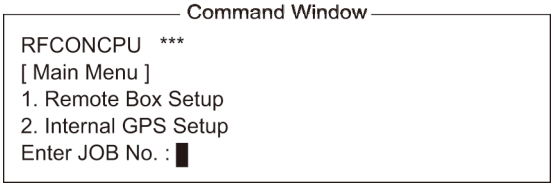
Normal mode: Menus other than SSAS-related menus are displayed.
SSAS manager mode: The mode is activated by the password entered by the ship's captain or authorized personnel. The indication "SSAS Manager Mode" is shown at the top of the screen when this mode is activated. All SSAS-related menus are available. Transmission of the SSAS report may be cancelled in this mode. The equipment starts up in the normal mode, regardless of the mode in use when the power is turned off.

3.1.1 Setting the password

For FELCOM 15/16

The default password is "ship security alert". The ship's captain or authorized personnel may change the password as follows:

1. **FELCOM 15:** Press [F8], [2] to show the System Setup menu.
   FELCOM 16: Press [F8], [1] to show the System Setup menu.
2. Press [↓] to choose Command Window and then press the [Enter] key.



3. On the Enter JOB No. field, type "ssas password" (without quotation marks) and then press the [Enter] key. The prompt OLD PASSWORD appears.
4. Type your current password and then press the [Enter] key. The prompt NEW PASSWORD appears.
5. Enter new password, using at least six characters, and then press the [Enter] key. The prompt RETYPE NEW PASSWORD appears.

   Note: If less than six characters are entered for the password, the message "Please use a longer password." appears. Enter a longer password.

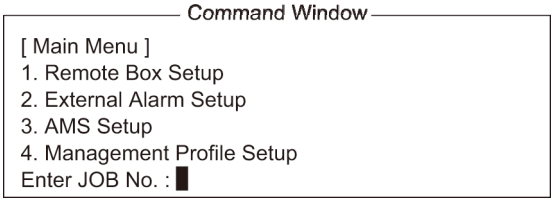
6. Enter new password again and then press the [Enter] key. The message "Password changed" appears.
7. Press the [Esc] key several times to close the menu.

Note: The SSAS manager mode cannot be unlocked without the correct password.

For FELCOM 18/19

No password is set at the default. For enhanced security, set the password by the ship's captain or authorized personnel as follows:

1. Press [F8], [1] to show the System Setup menu.
2. Press [↓] to choose Command Window and then press the [Enter] key.



3. On the Enter JOB No. field, type "ssas password" (without quotation marks) and then press the [Enter] key. The prompt NEW PASSWORD appears.
4. Enter the password to be set, using at least eight characters, and then press the [Enter] key. The prompt CONFIRM PASSWORD appears.

   Note: If less than eight characters are entered for the password, the message "Please use a longer password." appears. Enter a longer password.
5. Enter the same password again and then press the [Enter] key.
6. Press the [Esc] key several times to close the menu.

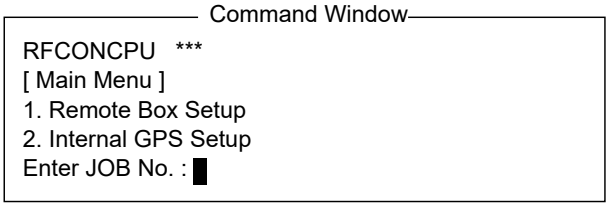
Note 1: The SSAS manager mode cannot be unlocked without the correct password.
Note 2: To change your password follow the procedure below.

1) On the Enter JOB No. field above, type "ssas password" (without quotation marks) and then press the [Enter] key. The prompt CURRENT PASSWORD appears.
2) Type your current password and then press the [Enter] key. The prompt NEW PASSWORD appears.
3) Enter new password, using at least eight characters, and then press the [Enter] key. The prompt CONFIRM PASSWORD appears.
4) Enter the same password as in step 3) again and then press the [Enter] key. The message "Password changed" appears.

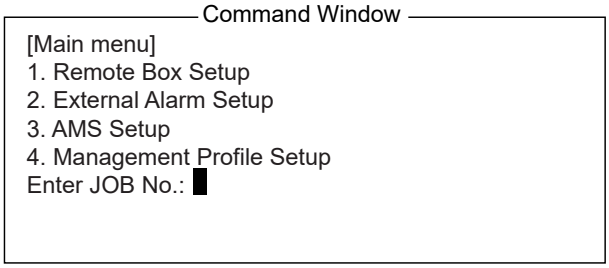
3.1.2 SSAS manager mode

All SSAS-related settings are set in the SSAS manager mode. Do the following to access this mode.

1. **FELCOM 15:** Press [F8], [2] to show the System Setup menu.
   FELCOM 16/18/19: Press [F8], [1] to show the System Setup menu.
2. Press [↓] to choose Command Window and then press the [Enter] key.

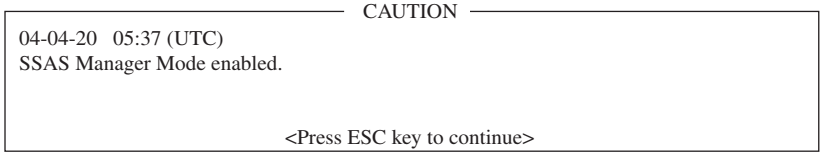


FELCOM 15/16



FELCOM 18/19

3. On the Enter JOB No. field, type “ssas manager” (without the quotation marks) and then press the [Enter] key.
   Note 1: If there is no SSAS equipment connected, the message "Command Ignored: No SSAS button is installed." appears.
   Note 2: If a password has not been set, the prompt NEW PASSWORD appears (FELCOM 18/19 only). Refer to the previous page to set the password.
   Note 3: If you forget your password, you can clear it using the ssas password clear command (FELCOM 18/19 only). For more information, contact a FURUNO service technician.
4. Type password and then press the [Enter] key to go into the “SSAS Manager Mode”. The indication “SSAS Manager Mode” is shown at the top of the screen when this mode is activated, and it is flashing.



5. Press the [Esc] key several times to close the menu. This enables the SSAS manager mode, which allows you to execute the procedure in paragraph 3.2.

Note: Turn the power off and on again whenever changing SSAS-related settings.

3.2 Setting SSAS Report Destination and Message Contents

When the SSAS is activated, the SSAS report is sent according to the preset addresses (set at [SSAS Report 1] to [SSAS Report 5] for FELCOM15/16, or [SSAS Report Destination] for FELCOM18/19), and the preset message content (set at [Message Contents]), on the SSAS Report menu.

Note 1: The destination and message content of an SSAS report varies according to Administration. Therefore, set them as requested by ship's authorities. For information other than ship's name, MMSI no. and IMN no., set it manually with "Other Inf."

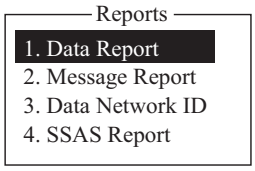
Note 2: SSAS reporting destinations may be preset (FELCOM15/16: max. five addresses; FELCOM18/19: max. 10 addresses). However, for Japanese vessels, the following two destinations must be included by law:

- newsat@jcgcomm.jp
- jcg-newsat@mlit.go.jp

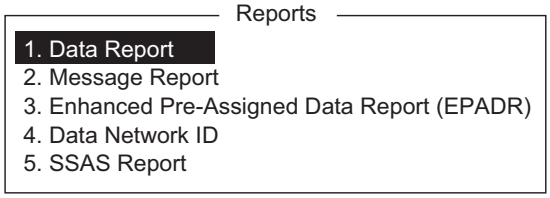
Therefore, Japanese vessels' maximum presets are three addresses for FELCOM15/16 or eight addresses for FELCOM18/19.

Note 3: The equipment must be in the SSAS manager mode to execute this procedure. See paragraph 3.1.2.

1. Press the [F5] to open the Reports menu.

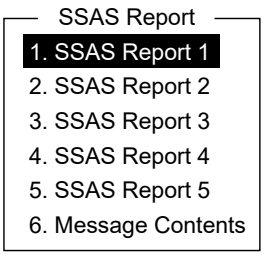


FELCOM 15/16

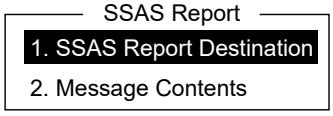


FELCOM 18/19

2. For FELCOM15/19, press the [4] key to show the SSAS Report menu.
   For FELCOM 18/19, press the [5] key.

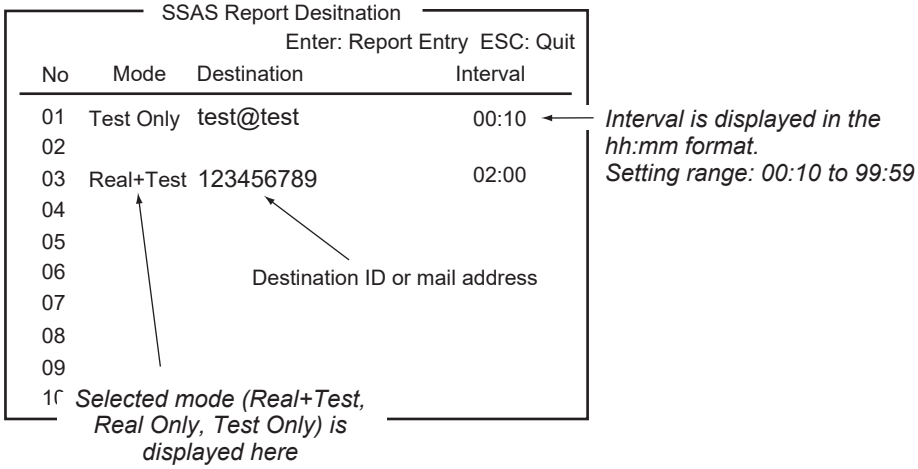


FELCOM 15/16



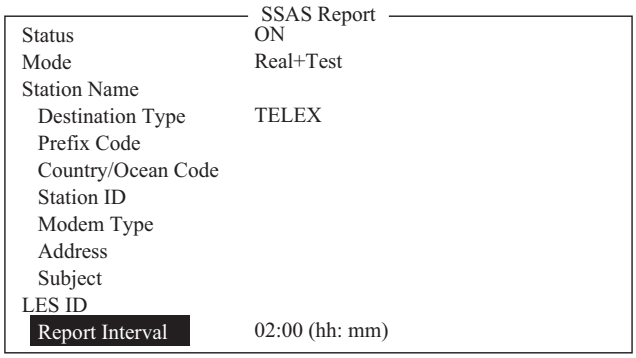
FELCOM 18/19

3. For FELCOM 15/16, press the appropriate report number ([1] through [5]) to show the SSAS Report Destination menu.
   For FELCOM 18/19, press the [1] key.

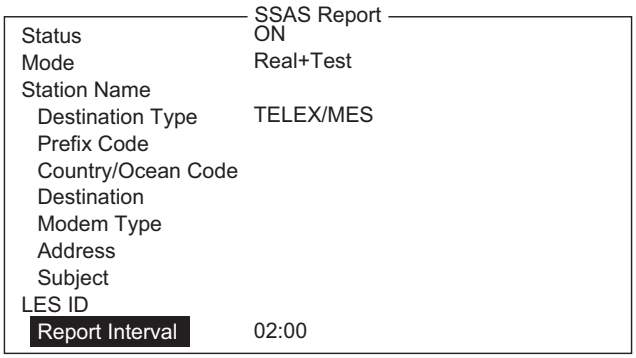


The SSAS Report Destination menu displays any current reports.

4. Press the [↑] or [↓] key to choose the report number desired and then press the [Enter] key to display the selected SSAS report's details.

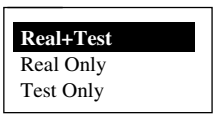


FELCOM 15/16



FELCOM 18/19

5. Press the [↓] key to choose Mode and then press the [Enter] key.



6. Press the [↑] or [↓] key to choose mode desired and then press the [Enter] key.

   "Mode" defines what SSAS report(s) a station is to receive:
   Real+Test: Actual SSAS report and test SSAS report.
   Real Only: Actual SSAS report only.
   Test Only: Test SSAS report only.

7. Press the [↓] key to choose Station Name and then press the [Enter] key.
8. Press the [↑] or [↓] key to choose appropriate station and then press the [Enter] key.
   You may sort the list by group name, station name or communication type as follows:

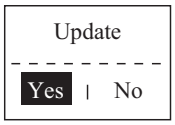
   Group name: Each press of [Ctrl] + [G] sorts the list by group name, ascending or descending order.
   Station name: Each press of [Ctrl] + [N] sorts the list by station name, in ascending or descending order.
   Comm. type: Each press of [Ctrl] + [T] sorts the list by communication type, in ascending or descending order.

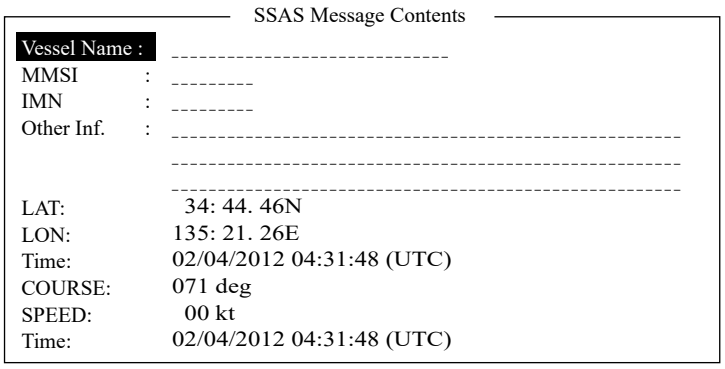
9. Press the [↓] key to choose LES ID and then press the [Enter] key.

10. Press the [↑] or [↓] key to choose LES and then press the [Enter] key.

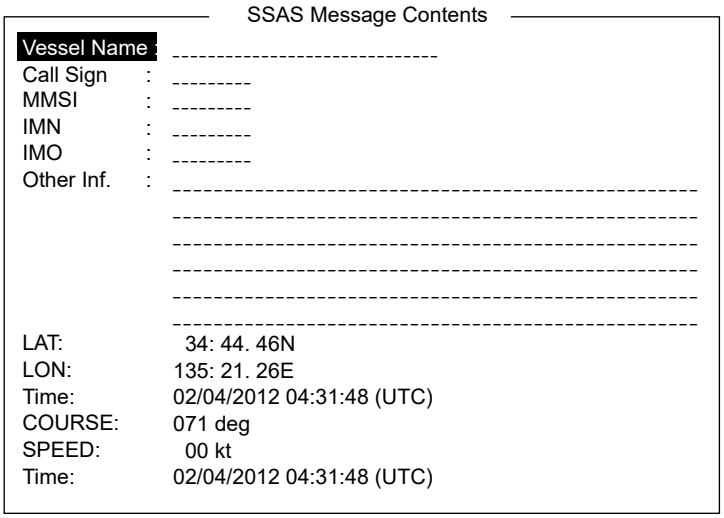
    Note: Change the LES whenever sea area has changed. However, the equipment automatically searches for an LES with which you can communicate and the SSAS report is transmitted to that LES.

11. Press the [↓] key to choose Report Interval and then press the [Enter] key.
12. Enter time interval (00:10-99:59) to transmit the SSAS report and then press the [Enter] key.
13. Press the [Esc] key to show the Update window.
14. Yes is selected; press the [Enter] key to close the SSAS report window.
15. Press the [2] key to display the SSAS Message Contents menu.





FELCOM 15/16



FELCOM 18/19

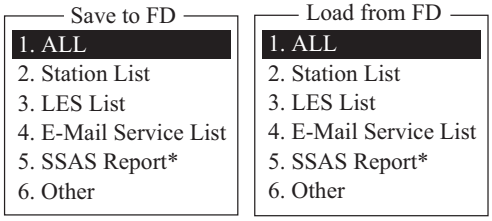
16. Press the [Enter] key to open the Vessel Name window.
17. Enter vessel's name and then press the [Enter] key.
18. Press the [↓] key to choose MMSI and then press the [Enter] key.
19. Enter MMSI number and then press the [Enter] key.
20. Press the [↓] key to choose IMN and then press the [Enter] key.
21. Enter IMN and then press the [Enter] key.
22. Press the [↓] key to choose Other Inf. and then press the [Enter] key
23. Enter appropriate message (for FELCOM15/16: three lines, for FELCOM18/19: six lines) and then press the [Enter] key.

Note: To shift between lines, use the [↑] or [↓] key.

24. Press the [Esc] key to show the Update window.
25. Yes is selected; press the [Enter] key to close the SSAS Message Contents menu.

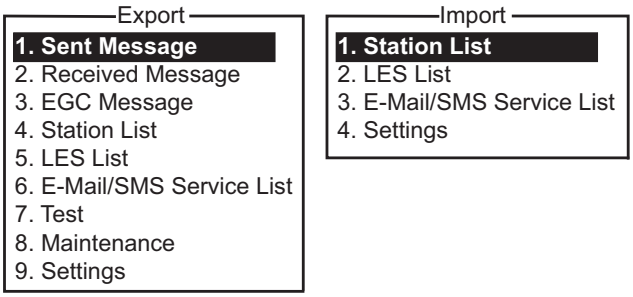
26. Press the [Esc] key twice to return to the standby display.

Note 1: To delete entered subscriber's data, choose "Remove" from "Status."
Note 2: SSAS report settings may be saved to a floppy disk for backup.
FELCOM 15: [F8], [9], [6] to show the Save/Load window.
FELCOM 16: [F8], [8], [6] to show the Save/Load window.
FELCOM 18/19: [F8], [8], [6] to show the Export/Import window.



*: Availlable only in SSAS manager mode ("5.SSAS Report" is added in the SSAS manager mode and item numbers are shifted.)

FELCOM15/16



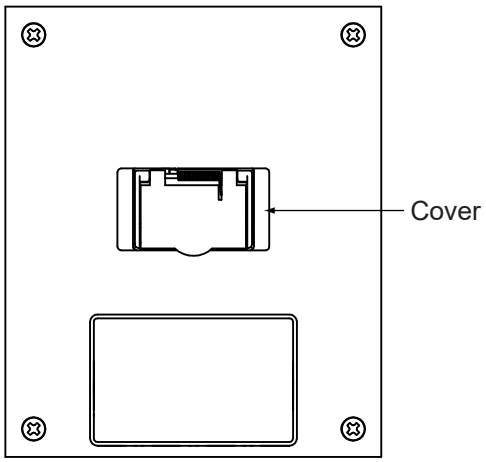
FELCOM 18/19

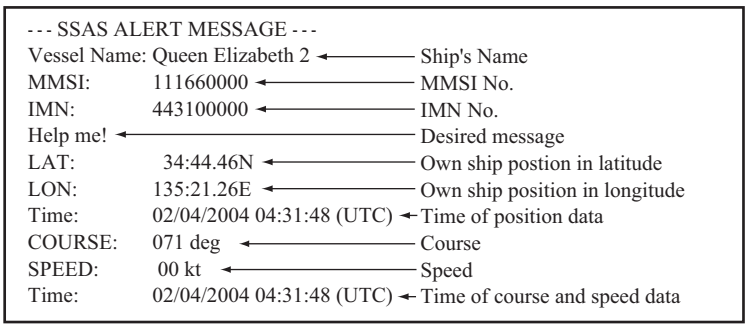
Note 3: To confirm the settings, follow paragraph 3.5.

3.3 Transmitting SSAS Report

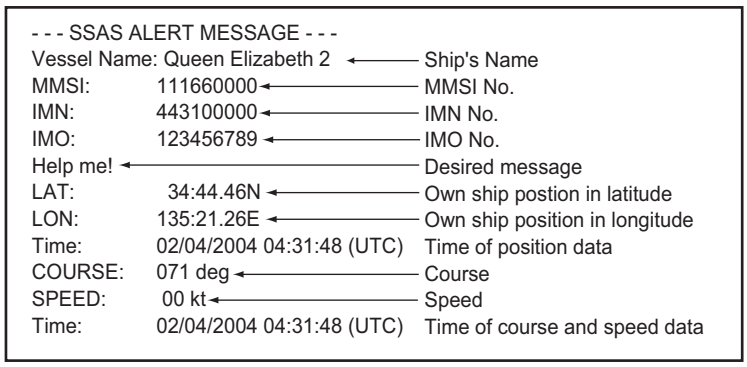
In the normal mode, the SSAS report is sent 30 seconds after the button on the SSAS is pressed. The SSAS repeatedly transmits the report even if the button is pushed off (▟). Repeated transmission can only be stopped from the SSAS manager mode.

1. Open the cover of the SSAS alert button.
2. Push the button. The button is a latch-type button; hit and release the button to activate (▁) the SSAS unit.
3. The SSAS report is transmitted 30 seconds after the button is pushed in (▁). Below are the contents of the SSAS report.





FELCOM 15/16



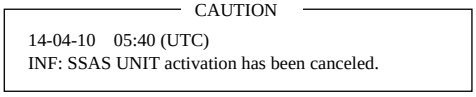
FELCOM 18/19

4. An LES sends acknowledgement to your ship.
5. For multiple destinations, steps 3 and 4 are repeated.
6. The SSAS report is transmitted repeatedly while the button remains pushed in (▬).
7. To stop transmission, push the button again to pop it out (▟). (SSAS manager mode only.)

Note: If transmission is not canceled with the button and the power is turned off, the equipment resumes repeated transmission when powered again.

How to cancel the transmission when the transmission is erroneously made (FELCOM15/16/18/19)

Note 1: The SSAS report is sent 30 seconds after the button on the SSAS is pressed.
Note 2: The message shown below appears when the cancellation is made.



Pop-up message

<Within 30 seconds after the button is pressed>
Press the button on the SSAS again to turn it off.

<More than 30 seconds after the button is pressed>
[Method 1]

Note : Do the following procedure on the terminal unit of FELCOM15/18 or PC of FELCOM16/19.

1. Switch to the SSAS manager mode, referring to paragraph 3.1.2.
2. In case of FELCOM16/18/19, press [F8], [1] to show the [System Setup] menu.

In case of FELCOM15, press [F8], [2] to show the [System Setup] menu.

3. Press [↓] to choose Command Window and then press the [Enter] key.
4. Type “terminate ssas alert” (without quotation marks) in the Enter JOB No. field and then press the [Enter] key.

[Method 2]

1. Turn the button of all SSAS IC-307s off.
2. Press the button ON→OFF→ON→OFF on one of the above-mentioned SSAS IC-307s

3.4 Testing the Button

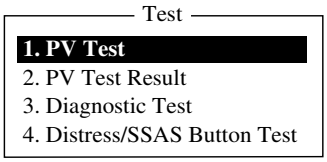
Note 1: An actual SSAS report cannot be transmitted during the testing.
Note 2: The equipment must be in the SSAS manager mode to conduct the test.

FELCOM 15/18

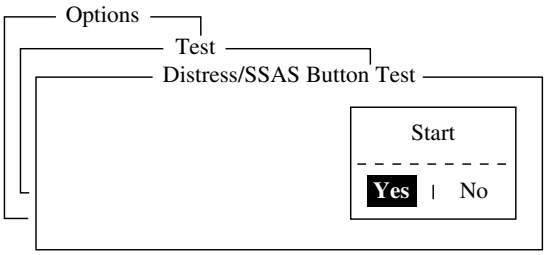
<In case of not sending the test report>

1. Press the [F7] key to display the Options menu.
2. Press one of the following keys to display the Test menu:

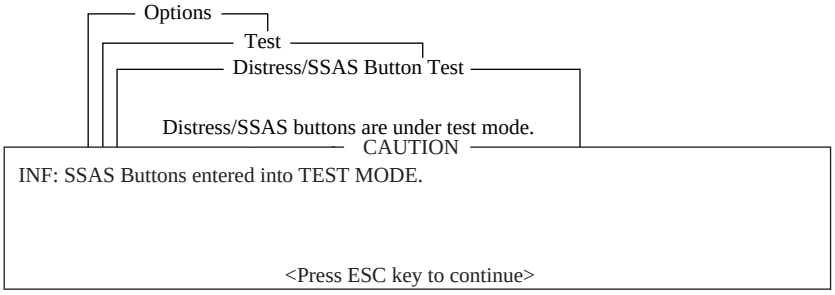
   Operating mode is Inmarsat-C: [7] key
   FELCOM 18: [8] key
   Operating mode is EGC receiver: [6] key



3. Press the [4] key.



4. Press the [Enter] key to start the test.



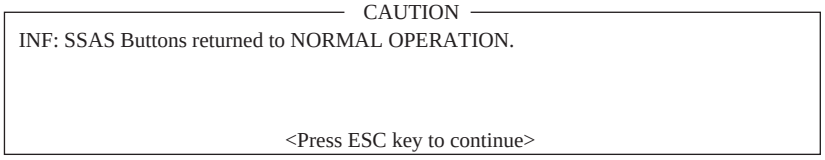
The display shows the message (in red) “Distress/SSAS buttons are under test. Cancel the test mode if a real distress/SSAS needs to sent.” appears.

5. Open the button cover on the No.1 SSAS.
6. Push the button in (▂). The CAUTION window displays the message “SSAS UNIT works correctly.” appears if the unit is functioning properly.

   Turn the button of the No. 1 SSAS off (▆) within 30 seconds.

   Note: Any message does not appear when turning the button off.

7. Close the button cover on the No.1 SSAS.
   Note: To test the No. 2 and No. 3 SSAS repeat steps 5 to 9.
8. To escape from the test, press the [Esc] key twice on the terminal unit. The test mode is stopped and the message shown below appears to notify you that normal operation has been restored.



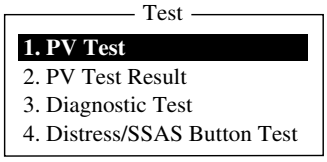
   If the button remains pushed in (▂), the message “Please return the SSAS button into OFF-STATE.” appears. Push the button to pop it out.
9. Press the [Esc] key three times to return to the standby display.

   Note: If the button is left pushed in (▂) when the terminal unit is turned on, the equipment displays “Please return the SSAS button into OFF-STATE.” Push the button again to turn off (▆) the button.

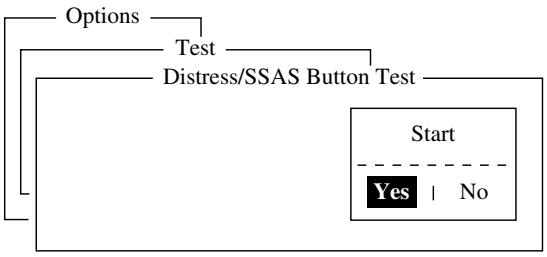
<In case of sending the test report>

1. Press the [F7] key to display the Options menu.
2. Press one of the following keys to display the Test menu:

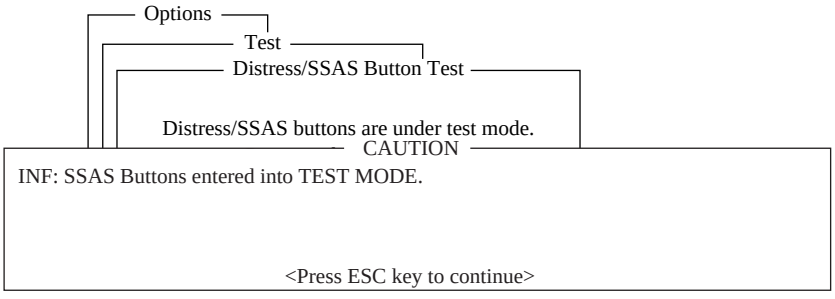
   Operating mode is Inmarsat-C: [7] key
   FELCOM 18: [8] key
   Operating mode is EGC receiver: [6] key



3. Press the [4] key.



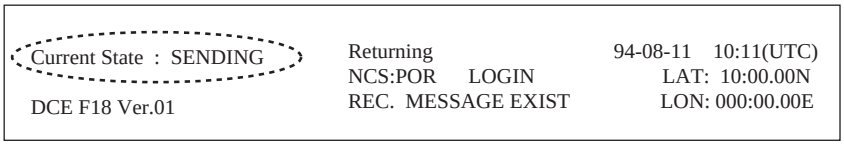
4. Press the [Enter] key to start the test.



The display shows the message (in red) “Distress/SSAS buttons are under test. Cancel the test mode if a real distress/SSAS needs to sent.” appears.

5. Open the button cover on the No.1 SSAS.
6. Push the button in (▬). The CAUTION window displays the message “SSAS UNIT works correctly.” appears if the unit is functioning properly.
7. 30 seconds after the button is pushed in the SSAS test report is automatically sent to the station(s) whose Mode set on the SSAS Report window is “Real+Test” or Test Only”.

   When starting the transmission, [Current State] indicates [SENDING] at the left bottom on the screen.

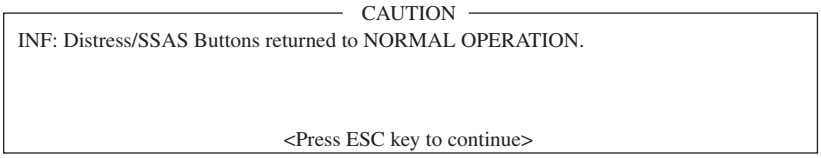


   Note: The SSAS test report is not sent to the station(s) whose Mode set on the SSAS Report window is “Real Only”..

8. Turn the button of the No. 1 SSAS off (▟)
9. Close the button cover on the No.1 SSAS.

   Note: To test the No. 2 and No. 3 SSAS repeat steps 5 to 9.

10. To escape from the test, press the [Esc] key twice on the terminal unit. The test mode is stopped and the message shown below appears to notify you that normal operation has been restored.

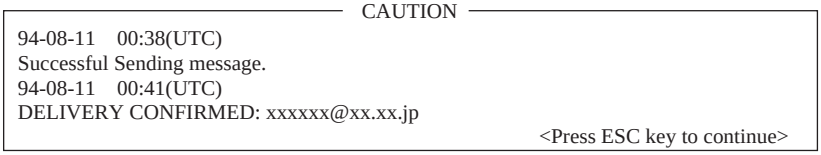


    If the button remains pushed in (▬), the message “Please return the SSAS button into OFF-STATE.” appears. Push the button to pop it out.

11. Press the [Esc] key three times to return to the standby display.

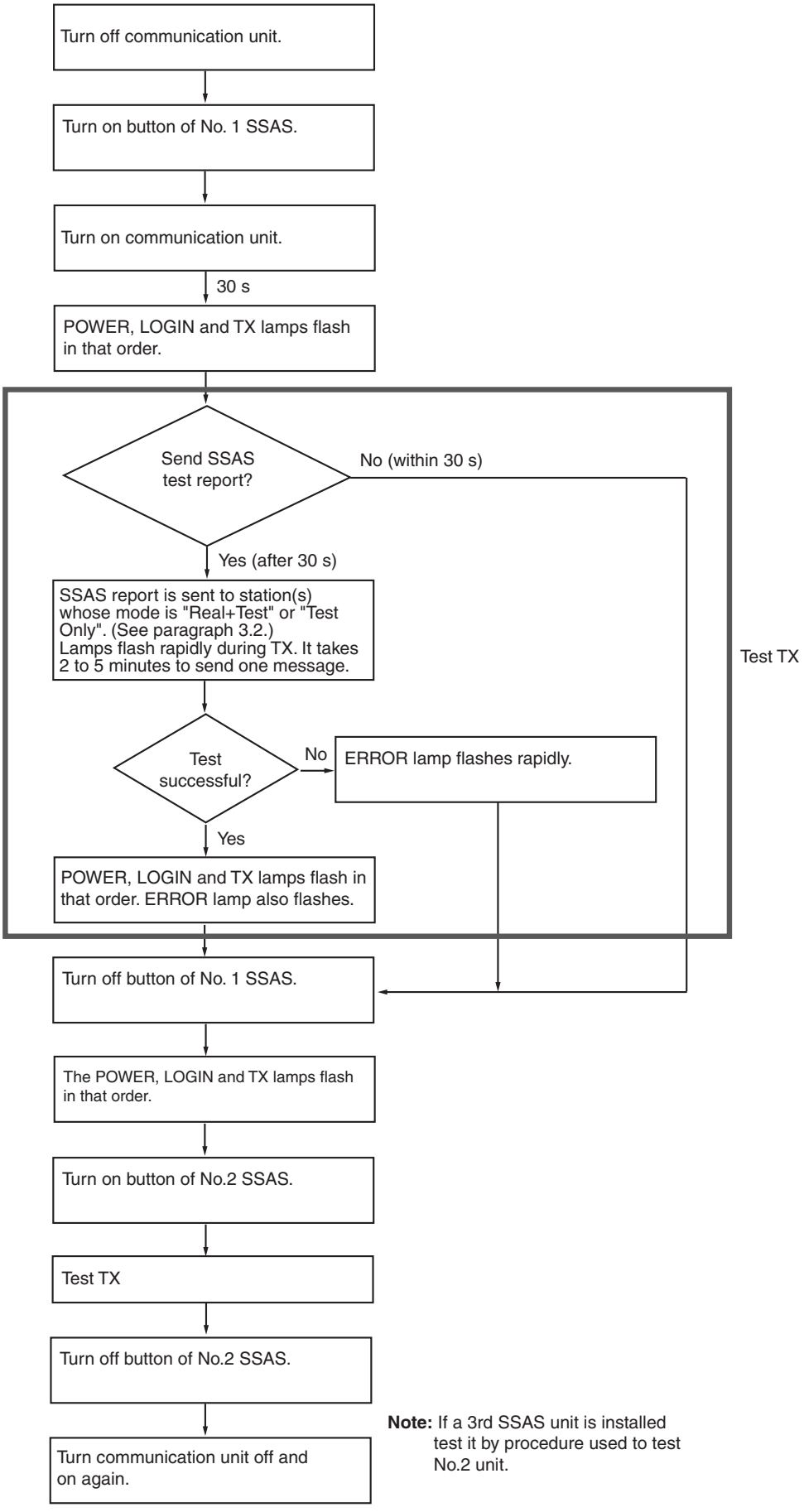
    Note: If the button is left pushed in (▬) when the terminal unit is turned on, the equipment displays “Please return the SSAS button into OFF-STATE.” Push the button again to turn off (▟) the button.

12. When the SSAS test report is successfully sent, “Successful Sending message” and “DELIVERY CONFIRMED:A specified email address” messages are shown below.



13. Confirm that the SSAS test report is sent to the station(s).

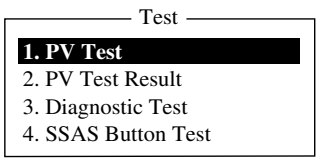
FELCOM 16/19 (no PC)



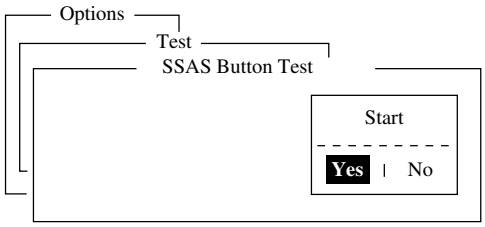
Note: If a 3rd SSAS unit is installed test it by procedure used to test No.2 unit.

FELCOM 16/19 (by PC)

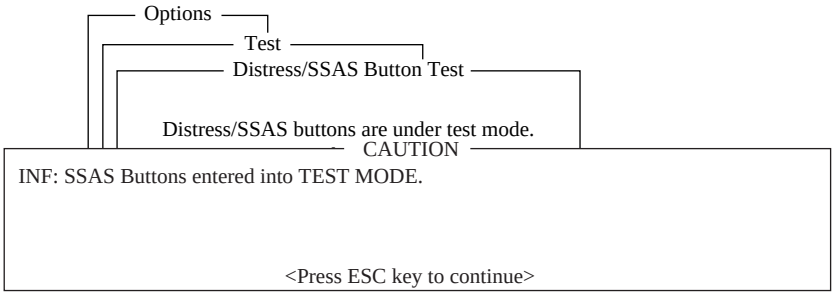
1. Press the [F7] key to display the Options menu.
2. Press the [7] key ([6] key when the FELCOM functions as an EGC receiver) to display the Test menu. For FELCOM 19, press the [8] key.



3. Press the [4] key.



4. Press the [Enter] key to start the test.



Test mode

The display shows the message (in red) “SSAS buttons are under test. Cancel the test mode if a real SSAS alert needs to sent.” appears.

5. Open the button cover on the No. 1 SSAS.
6. Push the button in (ON). The CAUTION window displays the message “SSAS UNIT works correctly.” appears if the unit is functioning properly.
7. 30 seconds after the button is pushed in the SSAS test report is automatically sent to the station(s) whose Mode set on the SSAS Report window is “Real+Test” or Test Only”.
8. Turn the button of the No. 1 SSAS off (▟).

Note: To test the No. 2 and No. 3 SSAS repeat steps 6-8.

9. To escape from the test, press the [Esc] key twice on the terminal unit. The test mode is stopped and the message shown below appears to notify you that normal operation has been restored.

CAUTION

INF: SSAS Buttons returned to NORMAL OPERATION.

<Press ESC key to continue>

Further, because the button remains pushed in (▂), the message “Please return the SSAS button into OFF-STATE.” appears.

10. Push the button again to pop it out (▟).
11. Close the button cover.
12. Press the [Esc] key three times to return to the standby display.

Note: If the button is left pushed in (▂) when the communication unit is turned on, the equipment will go into the test mode if the SSAS is not transmitting repeatedly. To return to the standby display, push the button again to pop it out (▟) and then turn the communication unit off and on again.

3.5 SSAS Report Test

You can test for successful transmission of the SSAS report to the address you specify, without using the button. The test report message states “!!! Test Call !!!” to alert the receiver of the message that it is a test call.

Note: This function is only available in the SSAS manager mode. Switch to this mode (see paragraph 3.1.2) and then follow this procedure.

1. Access the Report Destination Menu, referring to section 3.2.
2. Set destination where to transmit the test.
3. Press the [↑] key to choose Status and then press the [Enter] key.
4. Press the [↓] key to choose TEST and then press the [Enter] key.
5. Press the [Esc] key to open the Update window.
6. Yes is selected; press the [Enter] key. The test report is transmitted. After it is transmitted, “Status” is automatically set to ON.
7. Press the [Esc] key twice to return to the standby display.

4. WATERPROOFING KIT (OPTION)

To mount the IC-305 and IC-307 on a bulkhead, use the optional waterproofing kit to keep water splash out of the units.

Note: This kit cannot be used if the IC-305 or IC-307 is mounted face upward.

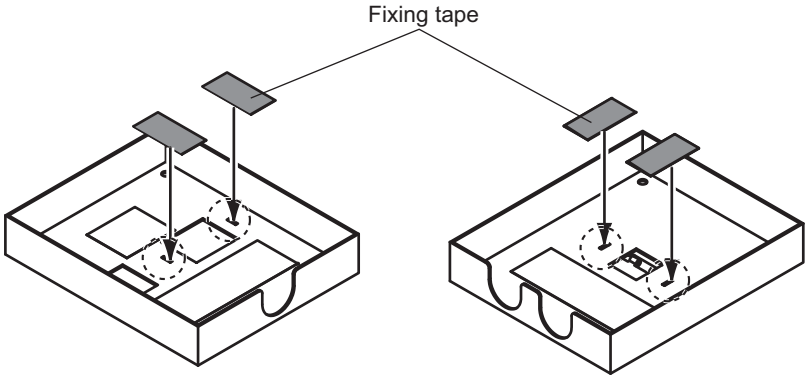
OP-xx (For IC-305)

Name	Type	Code No.	Qty
Fixing Tape	24-009-1225	100-366-200-10	2

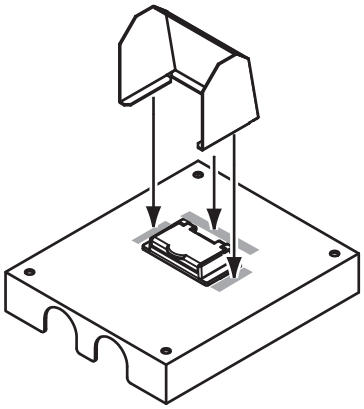
OP-xx (For IC-307)

Name	Type	Code No.	Qty
Waterproofing Cover	16-023-5501	100-374-950-10	1
Fixing Tape	24-009-1225	100-366-200-10	2

1. Unfasten four screws to remove cover of IC-305/IC-307.
2. Attach supplied fixing to the underside of the cover as shown in the illustration below.



3. Attach the cover.
4. For IC-307, remove the seal from the waterproofing cover and attach the cover as shown in the illustration below.

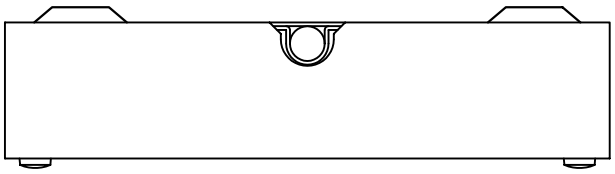


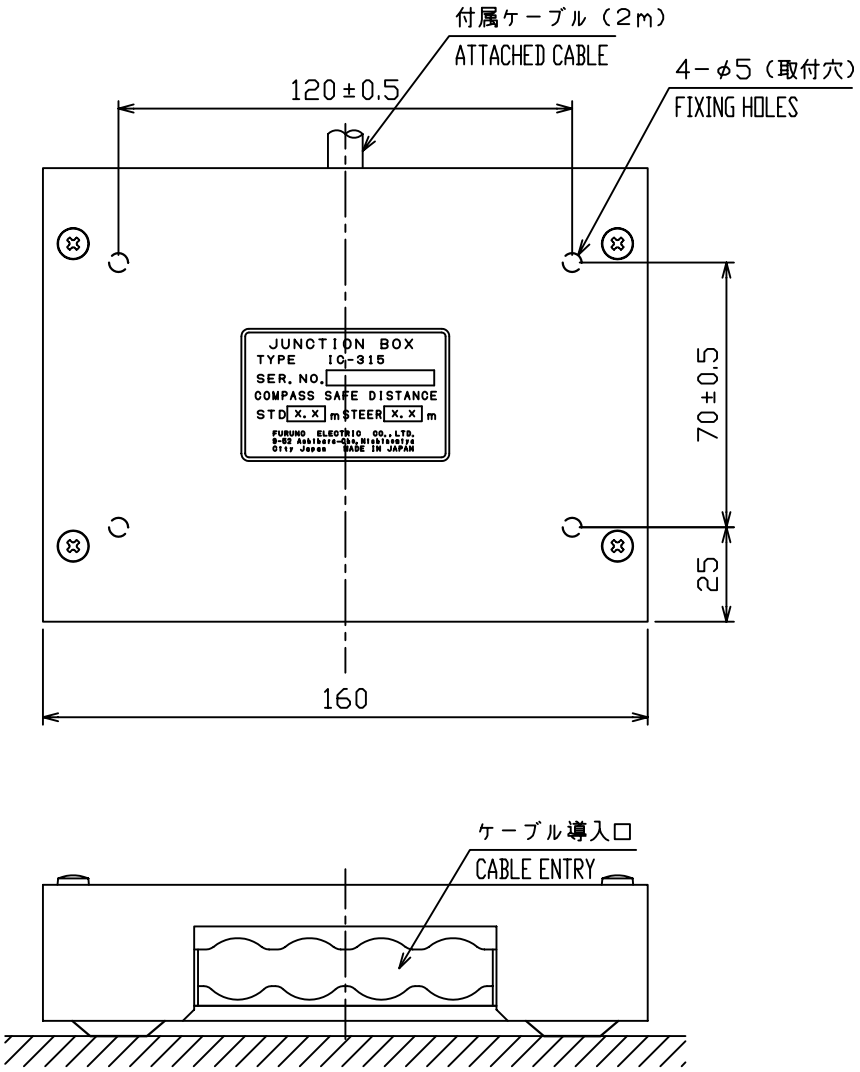
FURUNO

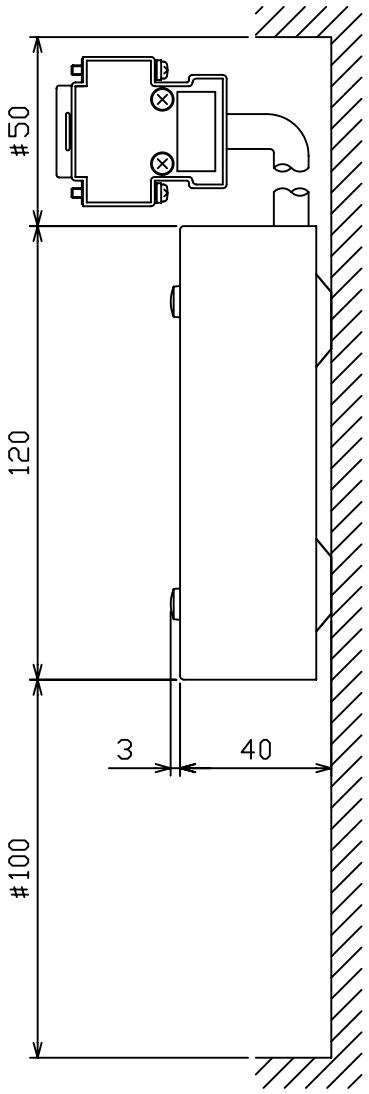
D-1

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＋タッピンネジ呼び径４×16を使用のこと。

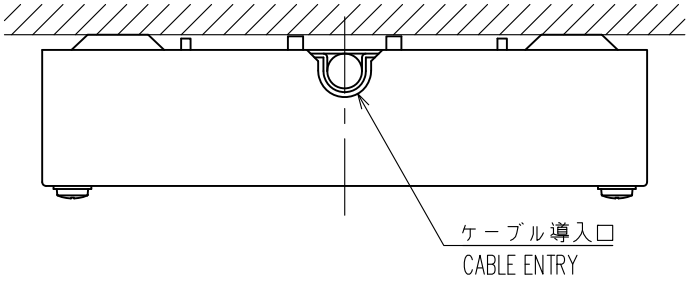
NOTE 1. #: MINIMUM SERVICE CLEARANCE.
2. TABLE 1 INDICATES TOLERANCE OF DIMENSIONS WHICH IS NOT SPECIFIED.
3. USE SELF-TAPPING SCREWS 4x16 FOR FIXING THE UNIT.

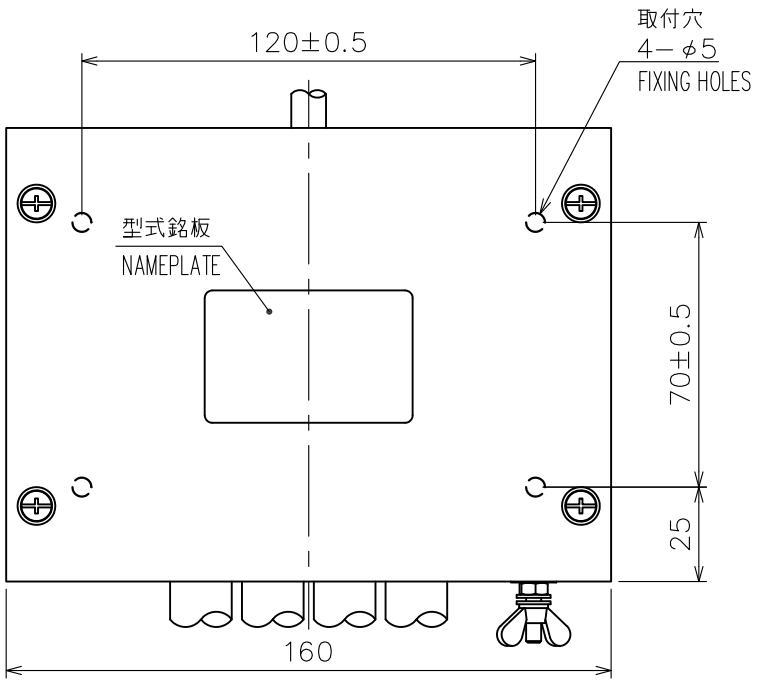
DRAWN Mar. 1 '05 T.YAMASAKI			TITLE IC-315
CHECKED Mar. 1 '05 T.MATSUGUCHI			名称 接続箱
APPROVED Mar.03'05 T.Matsuguchi	FELCOM 15/16		外寸図
SCALE 1/2	MASS 0.96 ±10% kg	質量はケーブルを含む。 MASS W/ CABLE.	NAME JUNCTION BOX
DWG No. C5635-G06- D	16-018-6006-2		OUTLINE DRAWING

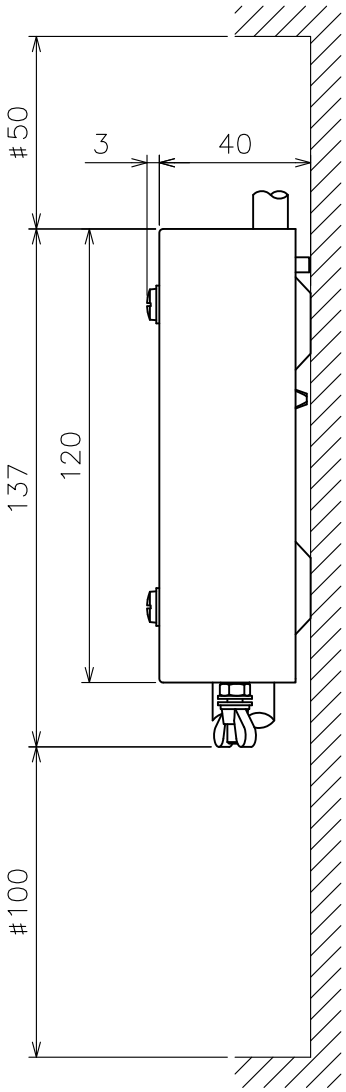
FURUNO ELECTRIC CO., LTD.

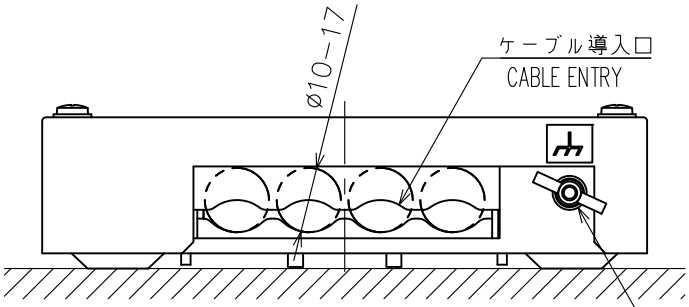
表1 TABLE 1

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





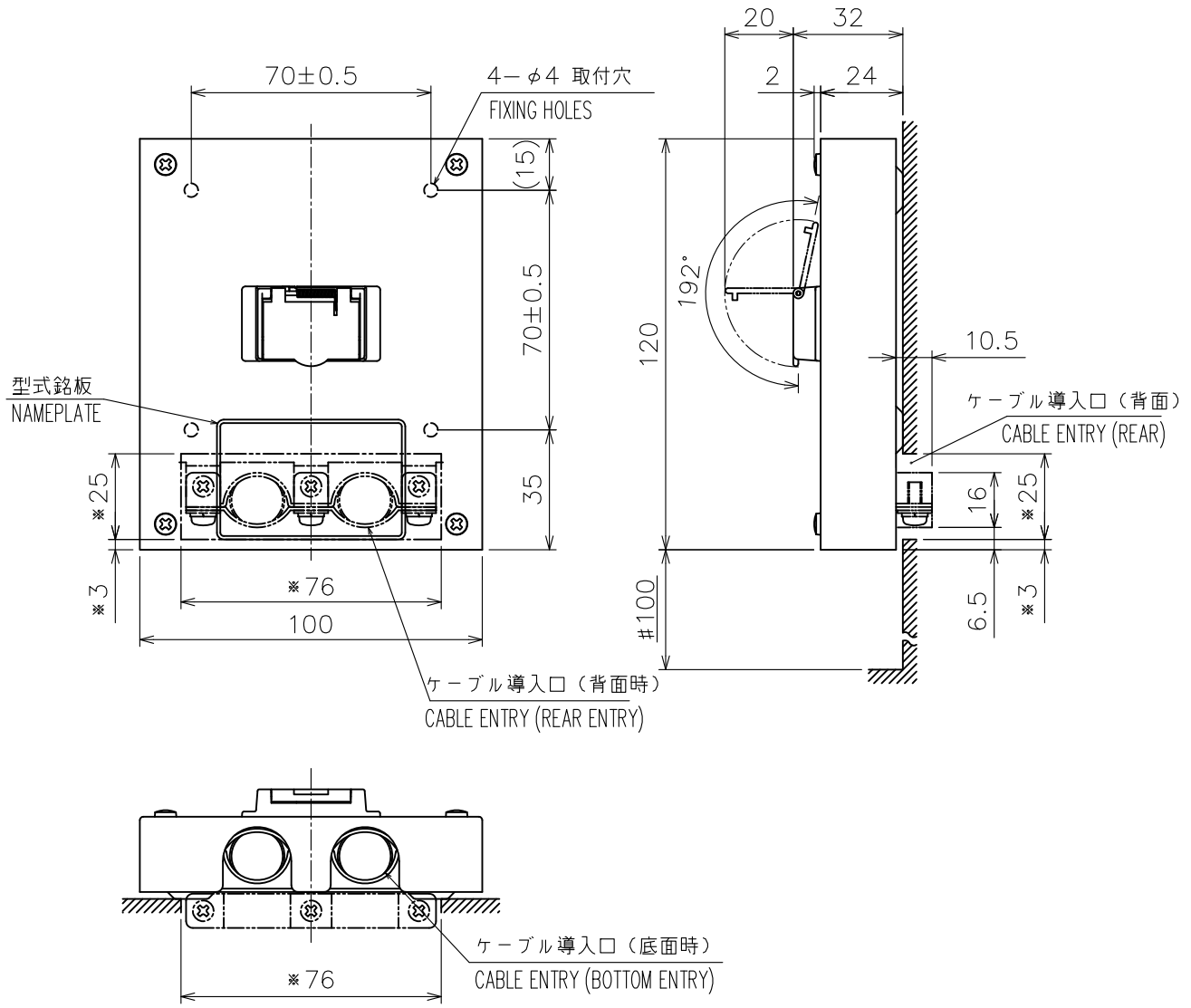




注記
1）指定なき寸法公差は表1による。
2）＃印寸法は、最小サービス空間寸法とする。
3）取付にはトラスタッピンネジ呼び径4×16を使用のこと。

NOTE
1. TABLE 1 INDICATES TOLERANCE OF DIMENSIONS WHICH IS NOT SPECIFIED.
2. #: MINIMUM SERVICE CLEARANCE.
3. USE TAPPING SCREWS ø4x16 FOR FIXING THE UNIT.

DRAWN 17/May/2012 T.YAMASAKI		TITLE	IC-318
CHECKED 17/May/2012 H.MAKI		名称	接続箱
APPROVED 17/May/2012 Y.NISHIYAMA	FELCOM 18/19		外寸図
SCALE 1/2 MASS 0.7 ±10% kg	質量はケーブルを含まず。 MASS DOES NOT INCLUDE CABLE.	NAME	JUNCTION BOX
DWG. No. C5674-G03- B	REF. No. 16-023-550G-1		OUTLINE DRAWING



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. TABLE 1 INDICATES TOLERANCE OF DIMESIONS WHICH IS NOT SPECIFIED.
2. #: MINIMUM SERVICE CLEARANCE.
3. USE TAPPING SCREWS ø3x10 FOR FIXING THE UNIT.
4. ※: CUTOUT DIMENSIONS FOR REAR CABLE ENTRY.

表１ TABLE 1

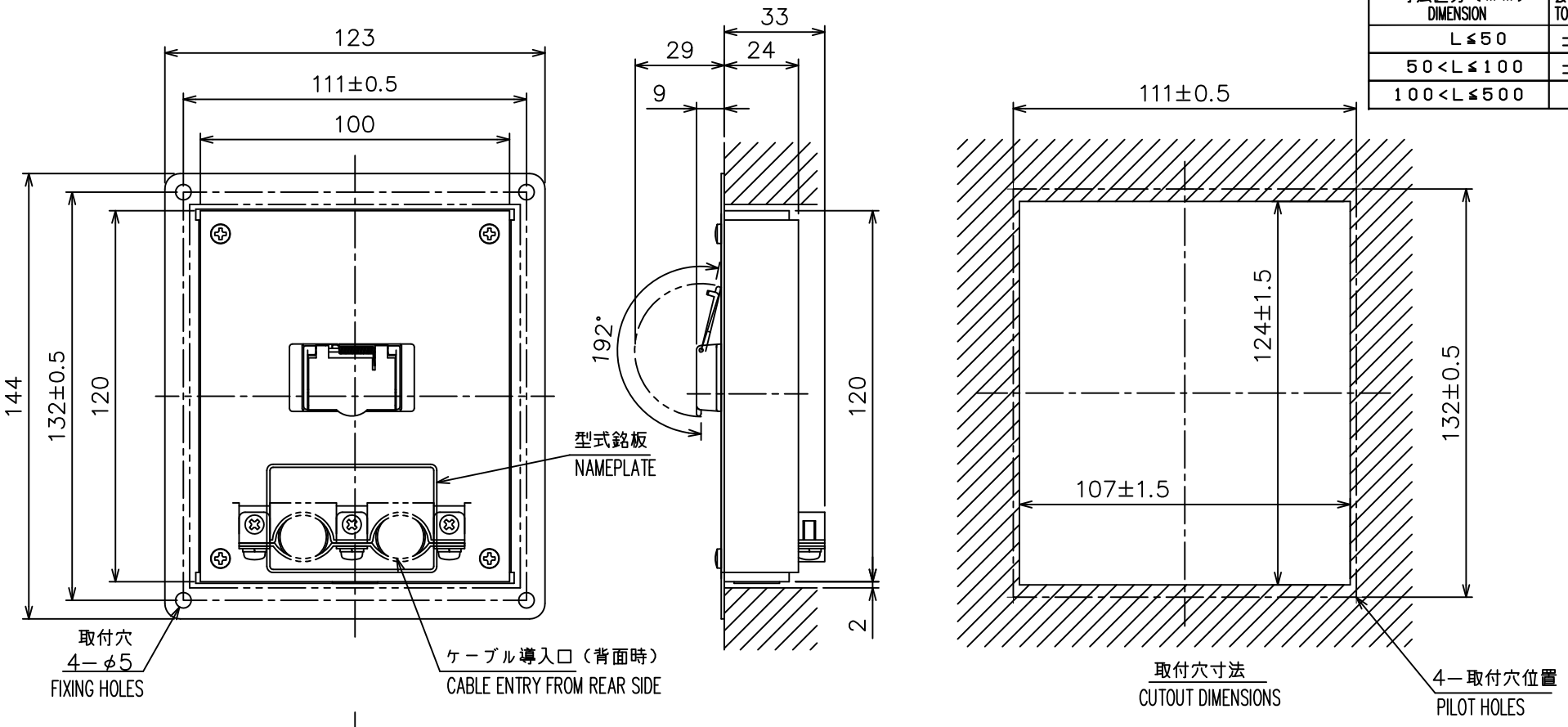
寸法区分（ｍｍ） DIMENSION	公差（ｍｍ） TOLERANCE
Ｌ≦５０	±１．５
５０<Ｌ≦１００	±２．５
１００<Ｌ≦５００	±３

DRAWN 5/Oct/2010 T.YAMASAKI		TITLE	IC-307
CHECKED 5/Oct/2010 T.TAKAHASHI		名称	保安警報発呼器（壁掛装備）
APPROVED 6/Oct/2010 Y. NISHIYAMA	FELCOM 12/15/16		外寸図
SCALE 1/2 MASS 0.35 ±10% kg		NAME	SSAS ALERT UNIT (BULKHEAD MOUNT)
DWG.No. C5635-G10- C	REF.No. 16-018-700G-3		OUTLINE DRAWING

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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



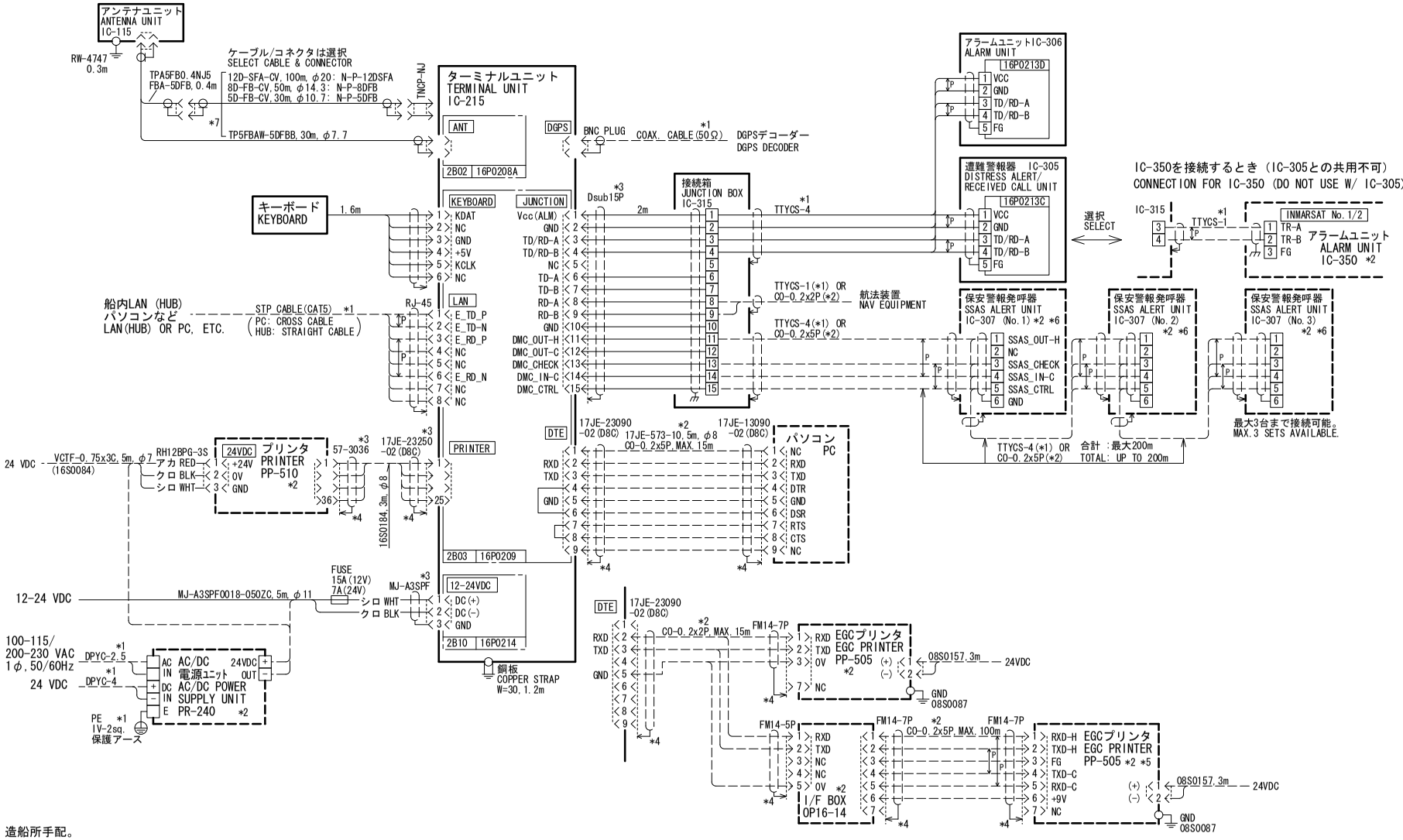
注　記　１）指定外の寸法公差は表１による。
　　２）取付用ネジは＋トラスタッピンネジ呼び径４×１６を使用のこと。

NOTE　1. TABLE 1 INDICATES TOLERANCE OF DIMENSIONS WHICH IS NOT SPECIFIED.
　　2. USE TAPPING SCREWS ø4x16 FOR FIXING THE UNIT.

DRAWN 13/Jun/2014 T.YAMASAKI		TITLE	IC-307
CHECKED 13/Jun/2014 H.MAKI		名称	保安警報発呼器（埋込装備）
APPROVED 16/Jun/2014 H.MAKI	FELCOM 12/15/16		外寸図
SCALE 1/2 MASS 0.5 ±10% kg		NAME	SSAS ALERT UNIT (FLUSH MOUNT)
DWG. No. C5635-G11- B	REF. No. 16-018-710G-1		OUTLINE DRAWING

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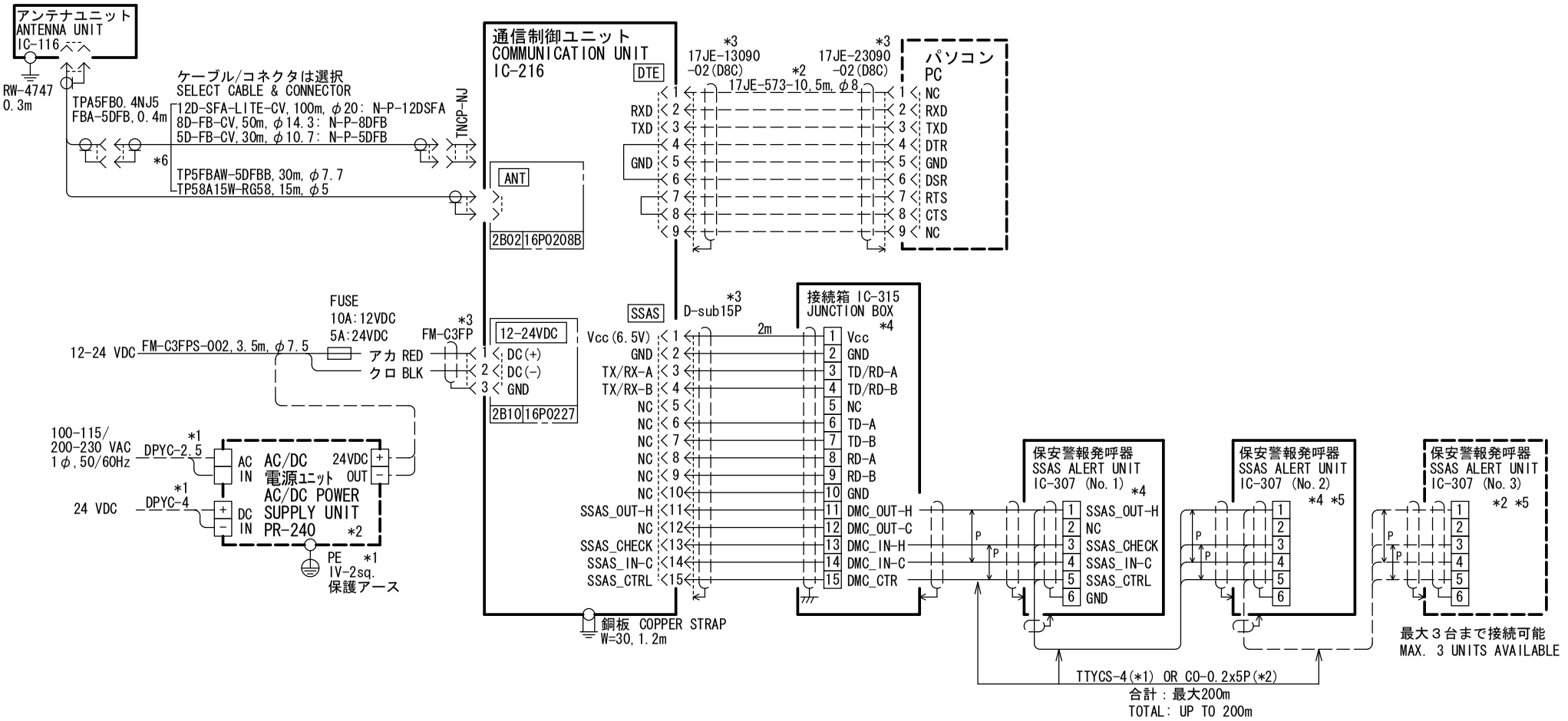
注記
＊1）造船所手配。
＊2）オプション。
＊3）工場にて取付済み。
＊4）コネクタクランプでアースに落とす。
＊5）TB基板（16P0116）が必要。
＊6）終端のIC-307はジャンパー設定を変更する。
＊7）アンテナケーブルは切断して使用しないこと。

NOTE
*1. SHIPYARD SUPPLY.
*2. OPTION.
*3. FITTED AT FACTORY.
*4. GROUND THRU CONNECTOR CLAMP.
*5. TB BOARD (16P0116) REQUIRED.
*6. CHANGE SETTING OF JUMPER IN IC-307 TO TERMINATE.
*7. DO NOT SHORTEN ANTENNA CABLE.

CO-0.2x2P: CO-SPEVV-SB-C 0.2x2P,φ10.5
CO-0.2x5P: CO-SPEVV-SB-C 0.2x5P,φ13.5

DRAWN 20/Nov/2012 T.YAMASAKI		TITLE	FELCOM 15
CHECKED 20/Nov/2012 T.TAKAHASHI		名称	インマルサットC船舶地球局
APPROVED 20/Nov/2012 Y.NISHIYAMA			相互結線図
SCALE	MASS kg	NAME	INMARSAT-C MES
DWG No. C5635-C01- T			INTERCONNECTION DIAGRAM

FURUNO



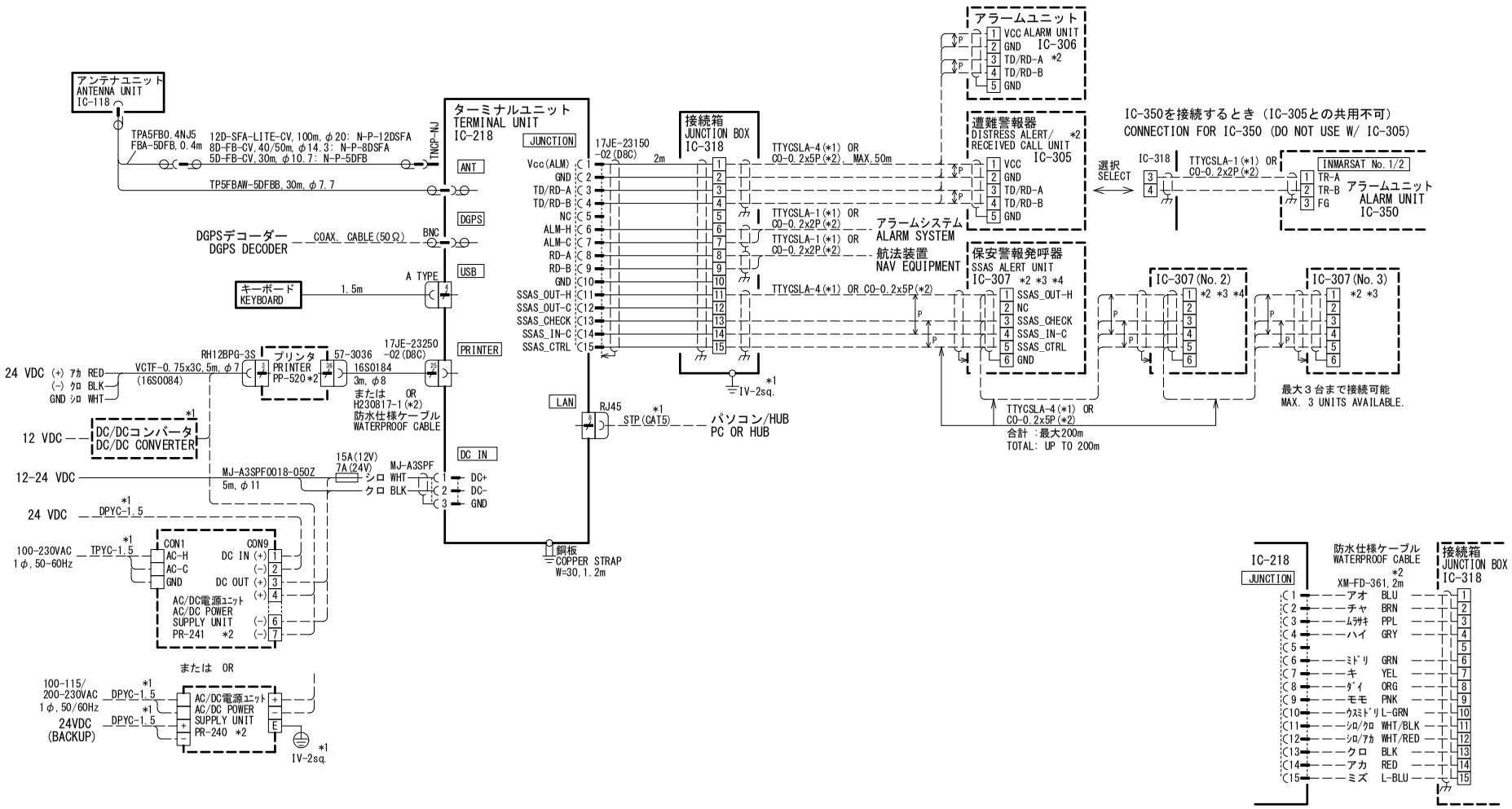
注記
＊１）造船所手配。
＊２）オプション。
＊３）工場にて取付済み。
＊４）SSAS仕様時標準支給。
＊５）終端のIC-307はジャンパー設定を変更する。
＊６）アンテナケーブルは切断して使用しないこと。

NOTE
*1. SHIPYARD SUPPLY.
*2. OPTION.
*3. FITTED AT FACTORY.
*4. STANDARD SUPPLY FOR SSAS SPEC.
*5. CHANGE SETTING OF JUMPER IN IC-307 TO TERMINATE.
*6. DO NOT SHORTEN ANTENNA CABLE.

CO-0.2x5P: CO-SPEVV-SB-C 0.2x5P, φ13.5

DRAWN 13/Feb/2013 T.YAMASAKI		TITLE	FELCOM 16
CHECKED 13/Feb/2013 H.MAKI		名称	インマルサットMINI-C携帯移動地球局
APPROVED 18/Feb/2013 Y.NISHIYAMA			相互結線図
SCALE / MASS kg		NAME	INMARSAT MINI-C MES
DWG No. C5638-C01- M			INTERCONNECTION DIAGRAM

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注記
＊１）造船所手配。
＊２）オプション。
＊３）終端のIC-307はジャンパー設定を変更する。
＊４）SSAS仕様のとき標準構成。

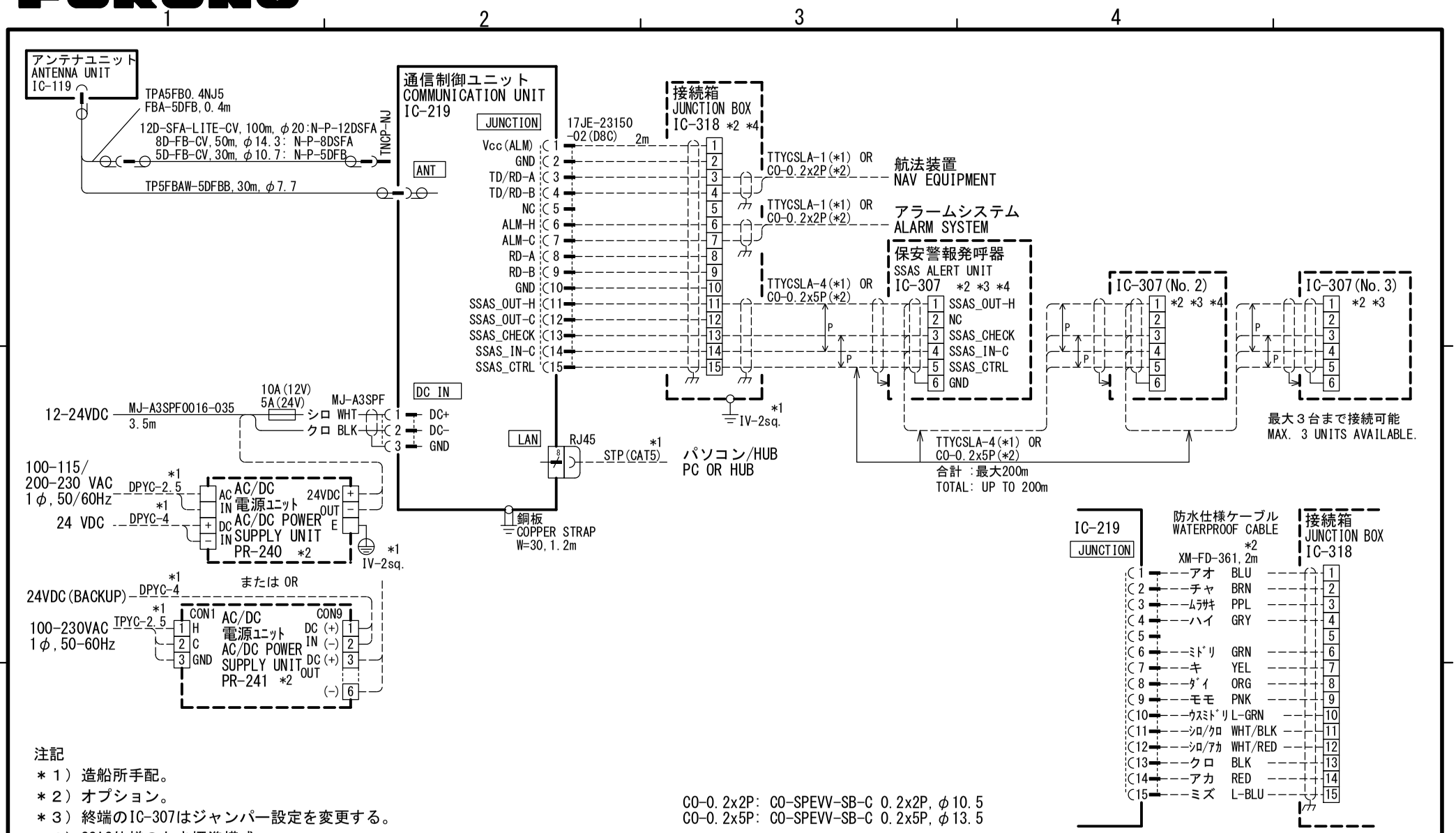
NOTE
*1: SHIPYARD SUPPLY.
*2: OPTION.
*3: CHANGE SETTING OF JUMPER IN IC-307 TO TERMINATE.
*4: STANDARD CONFIGURATION FOR SSAS.

CO-0.2x2P: CO-SPEVV-SB-C 0.2x2P, φ10.5
CO-0.2x5P: CO-SPEVV-SB-C 0.2x5P, φ13.5

DRAWN 24/Mar/2021 T. YAMASAKI		TITLE	FELCOM 18
CHECKED 24/Mar/2021 H. MAKI		名称	インマルサット-C 船舶地球局
APPROVED 25/Mar/2021 H.MAKI			相互結線図
SCALE	MASS kg	NAME	INMARSAT-C MES
DWG No. C5674-C01- K	REF. No. 16-023-3001-1		INTERCONNECTION DIAGRAM

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FURUNO



注記
＊１）造船所手配。
＊２）オプション。
＊３）終端のIC-307はジャンパー設定を変更する。
＊４）SSAS仕様のとき標準構成。

NOTE
*1: SHIPYARD SUPPLY.
*2: OPTION.
*3: CHANGE SETTING OF JUMPER IN IC-307 TO TERMINATE.
*4: STANDARD CONFIGURATION FOR SSAS.

CO-0.2x2P: CO-SPEVV-SB-C 0.2x2P,φ10.5
CO-0.2x5P: CO-SPEVV-SB-C 0.2x5P,φ13.5

DRAWN 7/Jun/2021 U. PODDAR		TITLE	FELCOM 19
CHECKED 7/Jun/2021 T. YAMASAKI		名 称	インマルサットMINI-C携帯移動地球局
APPROVED 6/Feb/2019 H.MAKI			相互結線図
SCALE / MASS kg		NAME	INMARSAT MINI-C MES
DWG. No. C5675-C01- G	REF. No. 16-023-4001-1		INTERCONNECTION DIAGRAM

FURUNO ELECTRIC CO., LTD.

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