

Updating the DSC-60 Software

Refer to: "How to update system program"

- 1) Remove the Top Cover and verify the switches on S3 are correct.
- 2) Refer to the instructions for an IB581 or PC, depending on which unit will be used, to update the DSC-60.
- 3) Update both the Main and Modem software.
- 4) After programming cycle power and press the [3/Test] key.
- 5) When the Test is done the alarm will sound.
- 6) Press and hold the [1/RT] key, while pressing the [*/File] key 5 times.
- 7) The software versions should now be:
Main CPU 02.12
Modem 01.04

Refer to: "Resetting Memory-All Clear"

- 1) Follow the "Resetting Memory-All Clear" procedure.

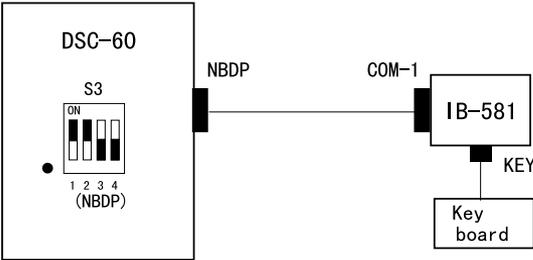
Note: Refer to the photos of the Control/Modem PCB and Back panel during these Procedures.

3. How to update system program

The program disk supplied includes two programs: main program and modem program. To update the system program, DIP switch #1 and #2 of S3 on the CONTROL/MODEM board must be set to ON position. Either of an IB-581 or a PC PC/AT compatible is connected as follows.

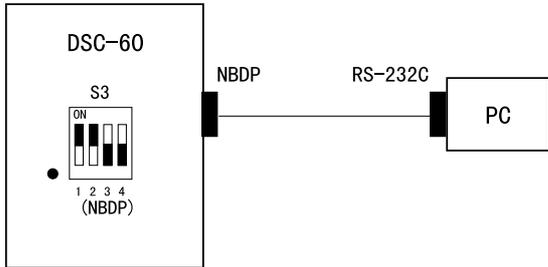
Using IB-581

Any IB-581 using for DP-6, Inmarsat-B and -C can be used.



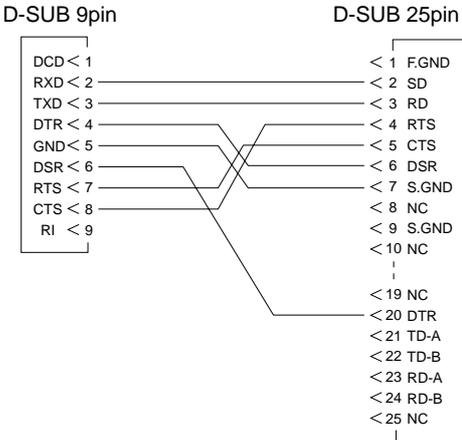
Using PC

The PC is connected to the DSC-60 as below.



Connection between DSC-60 and PC/IB-581

The connection is made with the following interconnection cable. The connector to the DSC-60 is a 25-pin D-SUB male, and to the IBN-581 or PC a 9-pin D-SUB female.



Reference)

The file size differs depending on the program revision level. The sizes listed here are reference only.

File name		Size
DSC60	BIN	689,056
LOAD	BIN	15,304
MODEM	BIN	29,129
PROG	TXT	9
UPDSC	BATY	38
UPMODEM	BAT	39
UPPG	EXE	74,960

3.1 Updating MAIN program with IB-581

1. Connect the IB-581 to the DSC-60.
2. Turn on the IB-581, but do not turn on the DSC-60.
3. Terminate the terminal program.
When using IB-581 for DP-6, FELCOM 12/81, while press and holding down [Alt] and [Fn], press [F2]. For example, A:\DP10\TERMINAL appears on the DP-6 terminal.
When using IB-581 for FELCOM 11, press [F1] and [8] in order.
4. Insert the program floppy disk in the slot.
5. Type B: and press [Enter]. The prompt B:\> appears.
6. Type "UPDSC" and press [Enter]. The following message appears.

```
Program upload utility Version 6.21
Copyright(c) FURUNO ELECTRIC CO., LTD.1997,1998,1999 (T.K)
uppg infile 1 infile 2 p1 p2 p4 p5
p1:Deletion waiting time.
p2:Waiting time to write.
p3:Password output interval.
p4:ID number.(1,2...)
p5:Poer number.(1,2...)
Erase Wait:osec
Wait:o
Wait counter=100
Port no.=1
TARGET POWER ON.
```
7. Turn on the DSC-60.
The indication on the DSC screen changes as below. The picture on the IB-581 runs.
8. Wait for about 5 minutes.
9. The DOS prompt appears after the message "Finish version up."
10. Turn off the DSC-60, disconnect the IB-581 and turn on the DSC-60 again.
11. Press [3/TEST/DEF] to perform the selftest and confirm the program has been updated.

3.2 Updating MODEM program with IB-581

1. Connect the IB-581 to the DSC-60.
2. Turn on the IB-581, but do not turn on the DSC-60.
3. Terminate the terminal program.
When using IB-581 for DP-6, FELCOM 12/81, while press and holding down [Alt] and [Fn], press [F2]. For example, A:\DP10\TERMINAL appears on the DP-6 terminal.
When using IB-581 for FELCOM 11, press [F1] and [8] in order.
4. Insert the program floppy disk in the slot.
5. Type B: and press [Enter]. The prompt B:\> appears.
6. Type "UPMODEM" and press [Enter]. The following message appears.

```
Program upload utility Version 6.21
Copyright(c) FURUNO ELECTRIC CO., LTD.1997,1998,1999 (T.K)
uppg infile 1 infile 2 p1 p2 p4 p5
p1:Deletion waiting time.
p2:Waiting time to write.
p3>Password output interval.
p4:ID number.(1,2...)
p5:Poer number.(1,2...)
Erase Wait:osec
Wait:o
Wait counter=100
Port no.=1
TARGET POWER ON.
```

7. Turn on the DSC-60.
The message "Now Loading" appears on the DSC screen. The picture on the IB-581 runs.
8. Wait for about 5 minutes.
9. The DOS prompt appears after the message "Finish version up."
10. Turn off the DSC-60, disconnect the IB-581 and turn on the DSC-60 again.
11. Press [3/TEST/DEF] to perform the selftest and confirm the program has been updated.

3.3 Updating MAIN program with PC

1. Connect the PC to the DSC-60.
2. Turn on the PC, but do not turn on the DSC-60.
3. Insert the program floppy disk in the slot.
4. Type a: and press [Enter] to select drive A
5. Type "UPDSC" and press [Enter]. The following message appears.

```
Program upload utility Version 6.21
Copyright(c) FURUNO ELECTRIC CO., LTD.1997,1998,1999 (T.K)
uppg infile 1 infile 2 p1 p2 p4 p5
p1:Deletion waiting time.
p2:Waiting time to write.
p3:Password output interval.
p4:ID number.(1,2...)
p5:Poer number.(1,2...)
Erase Wait:osec
Wait:o
Wait counter=100
Port no.=1
TARGET POWER ON.
```

6. Turn on the DSC-60.
The indication on the DSC screen changes as below.

```
Execute STEP1
Execute STEP2
xxxxxByte transfer
Now Erasing
xxx percent completed
```

7. Wait for about 5 minutes until the xxx percent reaches to 100.
8. The DOS prompt appears after the message "Finish version up."
9. Turn off the DSC-60, disconnect the IB-581 and turn on the DSC-60 again.
10. Press [3/TEST/DEF] to perform the selftest and confirm the program has been updated.

3.4 Updating MODEM program with PC

1. Connect the PC to the DSC-60.
2. Turn on the PC, but do not turn on the DSC-60.
3. Insert the program floppy disk in the slot.
4. Type a: and press [Enter] to select drive A.
5. Type "UPMODEM" and press [Enter]. The following message appears.

```
Program upload utility Version 6.21
Copyright(c) FURUNO ELECTRIC CO., LTD.1997,1998,1999 (T.K)
uppg infile 1 infile 2 p1 p2 p4 p5
p1:Deletion waiting time.
p2:Waiting time to write.
p3>Password output interval.
p4:ID number.(1,2...)
p5:Poer number.(1,2...)
Erase Wait:osec
Wait:o
Wait counter=100
Port no.=1
TARGET POWER ON.
```

6. Turn on the DSC-60.
The indication on the DSC screen changes as below.

```
Execute STEP1
Execute STEP2
xxxxxByte transfer
Now Erasing
xxx percent completed
```

7. Wait for about 5 minutes until the xxx percent reaches to 100.
8. The DOS prompt appears after the message "Finish version up."
9. Turn off the DSC-60, disconnect the IB-581 and turn on the DSC-60 again.
10. Press [3/TEST/DEF] to perform the selftest and confirm the program has been updated.

DSC-60

Resetting Memory-All Clear

1. Remove the top cover by removing the 4 side screws, and 1 screw from the rear panel of the DSC-60.
2. Connect power to the DSC-60.
3. Turn on the unit and wait for the **WATCH KEEPING** screen to appear.
4. Press the **SETUP** key. Use the arrow keys to select **SYSTEM**. Press the **ENT** key.
5. Record the system settings, these will need to be reentered later.
6. Press the **CANCEL** key to return to the **WATCH KEEPING** screen.
7. Press the NMI switch located on the front right of the Control/Modem PCB (05P0702). Refer to the attached Control/Modem page.
8. The unit will now display:

EEROM clear
NO CLEAR
MMSI CLEAR
ALL CLEAR

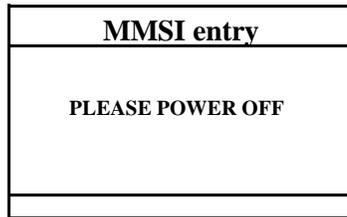
9. Enter the password, **652111**. As you enter the password, the unit will emit error tones. Ignore the error tones as you enter the password.
10. Use the down arrow key to select **ALL Clear**. Press the **ENT** key.
11. Enter the 9 digit MMSI number. Press the **ENT** key.

MMSI entry
123456789

DSC-60

Resetting Memory-All Clear (Cont.)

12. The display will now show **PLEASE POWER OFF**.
Turn off the DSC-60 power.



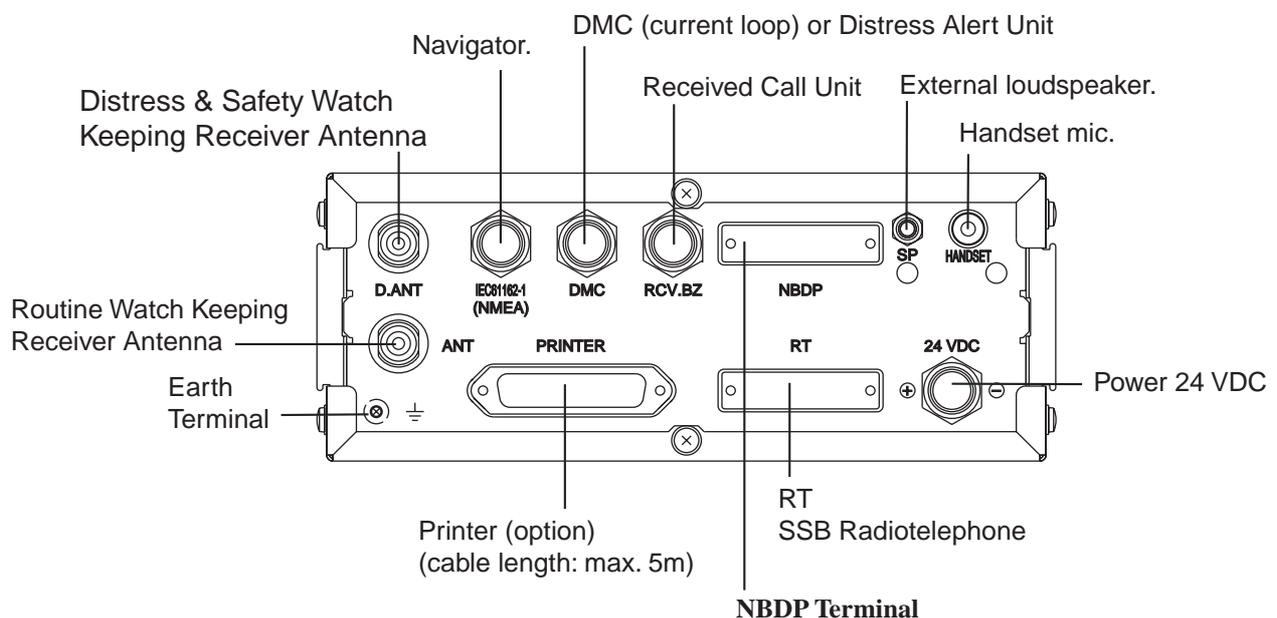
13. Turn the DSC-60 power back on.
14. Now verify the System Settings and MMSI.
15. Press the **SETUP** key. Use the arrow keys to select **SYSTEM**.
Press the **ENT** key.
16. Enter the password, **652111**. As you enter the password, the unit will emit error tones.
Ignore the error tones as you enter the password
17. Reenter the system settings recorded earlier.
18. Turn the power off, put the top cover back on and reinstall the unit.

2. WIRING

2.1 Wiring

2.1.1 Standard wiring

All external equipment are connected to appropriate connectors on the rear panel of the DSC-60. The figure below shows the location of these connectors. Note that all interconnection cables are optionally supplied. For further details, refer to the interconnection diagram at the end of this manual.



Power (24 VDC)

Attach the connector (supplied) to the power cable and plug it into the 24 VDC connector at the rear of the main unit. When connecting to the optional AC-DC power supply unit PR-300, supply AC power and DC power to the PR-300. See paragraph “2.2 Connection of AC-DC Power Supply Unit PR-300” for detail.

Ground (⏏)

Connect either a copper strap or 1.25 sq vinyl wire (local supply) between ship’s superstructure and ground terminal on the DSC-60.

Note: Ground the equipment to prevent mutual interference.