Appendix 4 Satellite Compass (SC-30)

4.1 How to Update SC-30 with PC

Following describes how to update SC-30 with a Windows XP PC.

Connection

(1) Without Interface Unit (IF-NMEASC)

Connect the COM port on the PC to the RS232C port on the SC-30 with the cable, MJ-A10SPF0015 or MJ-A10SPF0017.

Necessary parts

1 x MJ-A10SPF0015 (00016689111) or MJ-A10SPF0017 (00016688912)

1 x 9-pin D-SUB female connector
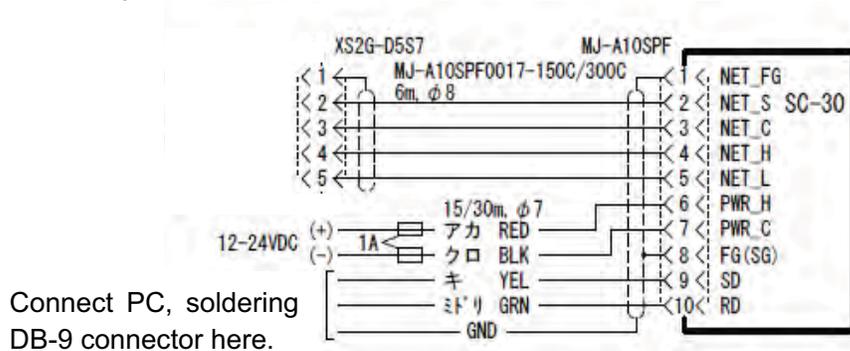
Fig.1 Connection of PC to SC-30 with MJ-A10SPF0017

(2) With Interface Unit (IF-NMEASC)

Connect a USB cable between the PC and the IF-NMEASC.

Necessary parts: 1 x USB cable

Step 1. Editing BAT file

When the COM port to be used on the PC is other than COM1, the BAT file is edited as below.

1. Open "up301.bat" file in notepad to read the COM port number assigned for SC-30. The following line should appear. The COM1 is assigned for SC-30 as a default value.

    Increase this number when the batch file fails to execute. **(100 to 200)**

    |

    uppg.exe loadsiog.bin sc301g.bin 0 0 10 0 1:57600 0 LD1/3 ES23-38

    |

    COM port number for SC-30

2. Change the COM port number.

   When the PC is connected to SC-30 with a USB cable via the IF-NMEASC, check the COM port number in use by following steps below and edit the BAT file, if necessary.

   1. Right-click My Computer, and select Properties > Hardware > Device Manager.

   2. Click the plus (+) next to "Ports (COM & LPT)" to see COM port assignments.   In the example of Fig.2, SC-30 is assigned to "COM4."
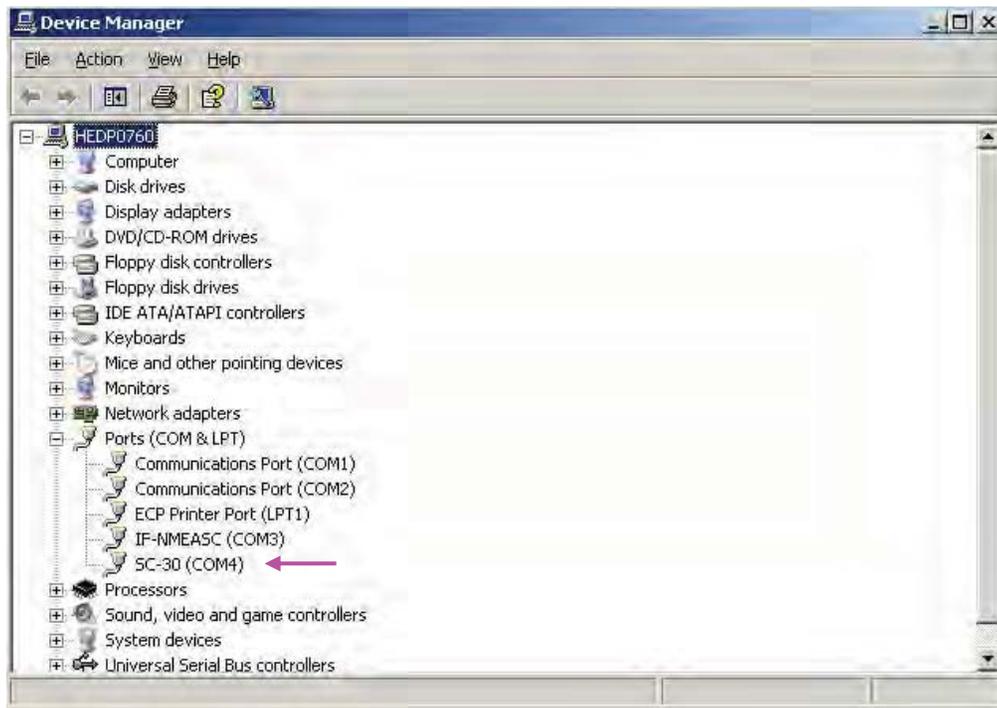
Fig.2 Device Manager

Step 2. SC-30 software update

3. Turn on the SC-30 and then, execute "up301.bat" file. If the batch file fails to execute, edit the BAT file: change the number underlined in the text one at a time as described in step 1.

   Updating proceeds automatically. At the end of the process, "100% completed" message appears. Figs.3 to 5 show the PC screens during updating.

Fig.3 Preparing to Erase Program

Fig.4 Erasing Program

```
C:¥WINDOWS¥system32¥cmd.exe                                            _ □ ×

p3: Password output interval.
p4: ID number.
p5: Port number.(1,2...)[:Baudrate.]
p6: New wait time to write.
p7: Other options.
    LD[t]/[r]: t/r:Loader sending wait Time[ms]/Records.
    ES[s]    : s  :ROM erase sectors.
Erase Wait time:0sec
Write Wait time:0msec
Password output interval:40msec
Port no. = 3
Baudrate:57600bps
New wait time:0msec
 - ROM erase sectors:23-38
 - Loader sending wait time:1msec/3records
TARGET POWER ON.
Execute STEP1
Execute STEP2
624663Byte transfer
>>IF-NMEASC BOOT ver.1.04 (build:2007/12/03 15:15:00)
bps=57600
setting time(bps,..)=0msec
>>Now Erasing[23-38]
>>Erasing Complete!
-003 % completed.
```

Fig.5 Writing New Program

Step 3. Verification of program number

After updating is complete, read the software version by using "SC30Tool."

1. Execute Maintenance tool, "SC30Tool" (See 4.3 How to use SC30Tool in this appendix).
2. Click **Search**.
3. Ensure that software version of SC-30 is 2051522-xx.xx.
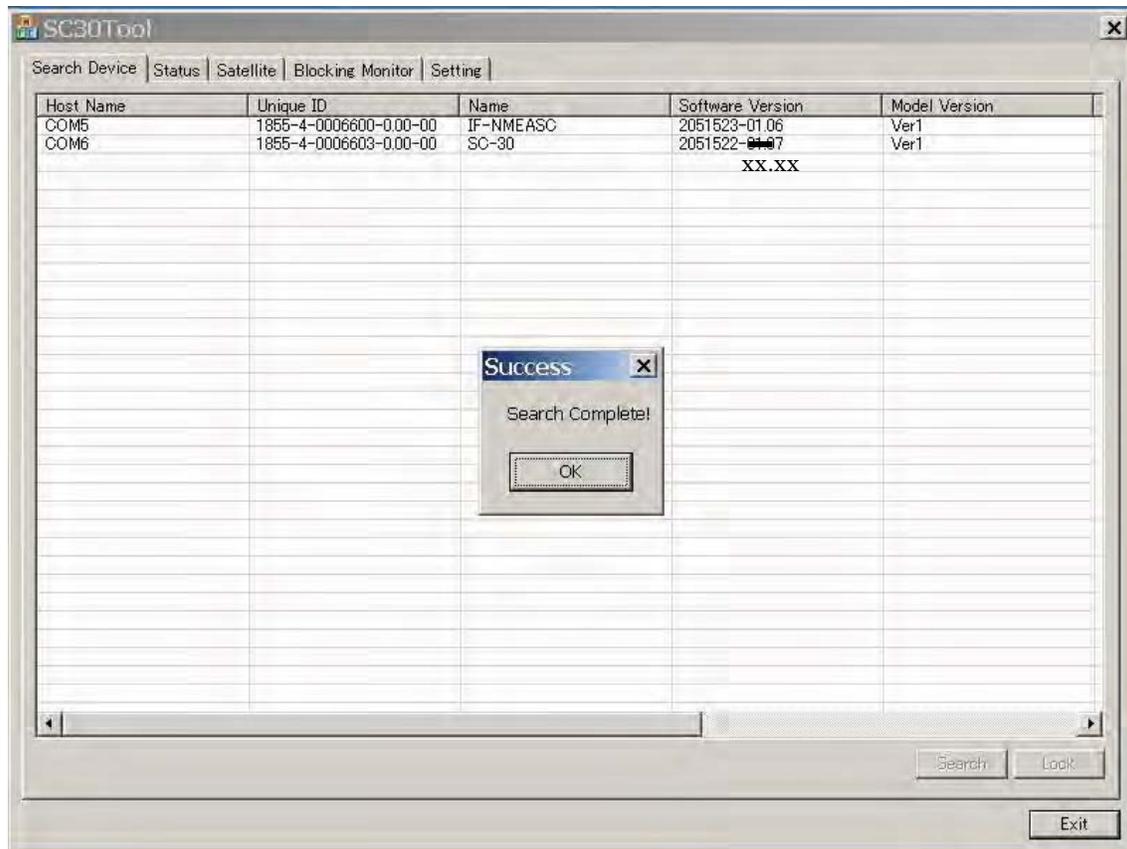
Fig.6 Reading Program Number