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.

C:#WINDOWS¥system32¥cmd.exe	- 🗆 🗙
c302g.bin 0 0 40 0 3:57600 0 LD1/3 ES23-38	
Program upload utility Version 8.00	
Copyright(c) FURUNO ELECTRIC CO.,LTD. 1997-2006 (T.K)	
ZUU0-ZUU7 (A.N)	
uppg infile infilez pi pz p3 p4 p3 p6 p7	
pj: Deletion walting time. -2. Whiting time to white	
p2: Walting time to write.	
ps; rassword output interval.	
p4. ID number. p5: Part number (1.2)[:Paudrata]	
ps. Fort number.(1,2)[.baudrate.] p6: Now woit time to write	
po, New wart time to write. p7: Other options	
pr. other options. LD[t]/[r]: t/r:Loader cending wait Time[ms]/Becords	
ESECTIVE CONCERNMENTS WATCHINGENSIGNEEDTOS.	
Frace Wait time:Acec	
Write Wait time:Omsec	
Password output interval:40msec	
Port no. = 3	
Baudrate:57600bps	
New wait time:Omsec	
- ROM erase sectors:23-38	
- Loader sending wait time:1msec/3records	
TARGET POWER ON.	
Execute STEP1	
1067 % completed.	-



G:¥WINDOWS¥system32¥cmd.exe _	
p2: Waiting time to write.	
p3: Password output interval.	
p4: ID number.	
p5: Port number.(1,2)L:Baudrate.]	
p6: New wait time to write.	
p/: Other options.	
LD[t]/[r]: t/r:Loader sending wait lime[ms]/Records.	
ESESJ : S :KUM erase sectors.	
Erase Wait time:Usec	
Write Wait time:Umsec	
Password output Interval:40msec	
Port no. = 3	
Baudrate:070000ps New weit time:0meet	
New Walt time:Umsec	
- Looder conding weit time:1moos/2records	
TARGET POWER ON	
Evente STEP1	
Execute STEP	
624663Byte transfer	
>>IE-NMEASC BOOT ver 1 04 (build:2007/12/03 15:15:00)	
hps=57600	
setting time(bps)=Omsec	
>>Now Erasing[23-38]	
	-

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.	
LDLtJ/LrJ: t/r:Loader sending wait limeLmsJ/Records.	
ESLSJ : S :RUM erase sectors.	
Erase Wait time:Usec	
Write Wait time:Umsec	
Password output interval:40msec	
Port no. = 3	
Baudrate: 576006ps	
New wait time:Umsec	
F KUM erase sectors:23-38	
- Loader sending wait time;imsec/brecords	
TARGET PUTTER UN.	
Execute STEP1	
EXecute STEFZ	
NSTE-NMEASE ROOT ver 1 04 (build:2007/12/03 15:15:00)	
bpg=57600	
pps-vrouv setting time(bps)=Omsec	
Sections thickps,/-onsec	
>>Frasing Complete	
-003 % completed.	-
>>IF-NMEASC BOOT ver.1.04 (build:2007/12/03 15:15:00) bps=57600 setting time(bps,)=Omsec >>Now Erasing[23-38] >>Erasing Complete! -003 % completed.	-



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.

Host Name	Unique ID	Name	Software Version	Model Version
COM5 COM6	1855-4-0006600-0.00-00 1855-4-0006603-0.00-00	IF-NMEASC SC-30	2051523-01.06	Ver1
20110	1000 4 000000 0.00 00	00 00	XX.XX	Voli
		Success X		
		Search Complete!		
		OK		
		innonninnonni		
		-		
1				
-				

Fig.6 Reading Program Number