

Updating Sounding Processing Subsystem SPS311 Software to solve GPS reception problem

CAUTION Power must be on all the time while the update is in progress. Switching the unit off before the update is finished may cause serious malfunction.

Updating SPS311 software means updating the software in MRP111 Receiver Processor.

SPS311 MRP111 Software Update

This instruction is applicable only to the MW31 and AUTOSONDE systems, where SPS311 Sounding Processing Subsystem includes MRG113 GPS board.

Copy the *GPS_FIX_FOR_MW31.zip* file to the Sounding Workstation, which is connected to SPS311 Sounding Processing Subsystem through Ethernet cable.

Unzip the file *GPS_FIX_FOR_MW31.zip*.

The unzipped folder *GPS_FIX_FOR_MW31/MW31_MRP111_SW_FIX* contains the latest version of the unit software for MRP111.

1. Switch on the sounding workstation and SPS311 and wait until the system is ready for operation.
2. Switch Windows firewall off, if it is not yet switched off.
3. Locate the **GPS_FIX_FOR_MW31/MW31_MRP111_SW_FIX** folder and click the **update.exe** file.
4. A command line window opens and the text "Enter the hostname or the IP address of the updated Embedded PC" is displayed. Type the IP address of MRP111 and press **ENTER**. The default IP address for MRP111 is 192.168.0.10.
5. For the question "Verify previous update?" press **n** and **ENTER**.
6. When the update is completed, the text "Vaisala Embedded Software Update complete" is displayed. Press any key and the window will close.
7. **Switch the SPS311 power off and on** again to complete the update.
8. Switch firewall back on.

It is recommended that the update is verified. See section Verifying the SPS311 MRP111 Software Update.

Verifying the SPS311 MRP111 Software Update

After the MRP111 software is updated, the update can be verified as follows:

1. Switch on the sounding workstation and SPS311 and wait until the system is ready for operation.
2. Locate the **GPS_FIX_FOR_MW31/ MW31_MRP111_SW_FIX** folder and click the **update.exe** file.
3. A window opens. The question "Enter the hostname or the IP-address of the updated Embedded PC?" is displayed. Write the IP-address of the MRP111 and press **ENTER**. The default IP address for the unit is 192.168.0.10.
4. The text "Verify previous update" is displayed. Press **y** and **ENTER**.
5. The system checks that all files are correctly updated. When this is done you will see the text "Vaisala Embedded Software Update complete" and "Press any key to continue". Press any key and the window will close.

If the update was not successful, the text "Embedded PC update was incomplete" is displayed. Run the update again. See section SPS311 MRP111 Software Update.

Checking the Software Version of MRP111

To check the software version installed on the MRP111 card, do the following:

1. Switch on the sounding workstation and SPS311 and wait until the system is ready for operation.
2. Locate the **GPS_FIX_FOR_MW31/ MW31_MRP111_SW_FIX** folder and click the **verinfo.exe** file.
3. A command line window opens. Write the IP address of the unit and press **ENTER**. The default IP address for the unit is 192.168.0.10.
4. The program checks the version of embedded software. When it is done, version information of hardware, embedded NT image and application is displayed. After that, the text "Press any key to continue" is displayed. Press any key and the window will close.