UPDATE MANUAL

AsteRx2e(H/L) GPS receiver

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1. Check current AsteRx2e(H/L) firmware

First, check the receiver type in the terminal and the current firmware version installed.

Open RxControl by pressing: `START >> Programs >> Septentrio RxTools >> RxControl`

For checking the receiver type, the bootloader version and firmware version, go to `Help >> Receiver Identification` (Figure 1). In the section *hwplatform* is the receiver type shown. In the section *firmware* is the firmware version and the bootloader version shown. In Table 1 the different GPS receiver types with its platforms and firmware versions are shown.

The AsteRx2 firmware can be downloaded from www.sbg.nl under Downloads > Installation & Service. Download the required firmware and put the firmware on a USB stick and then plug it into the terminal.
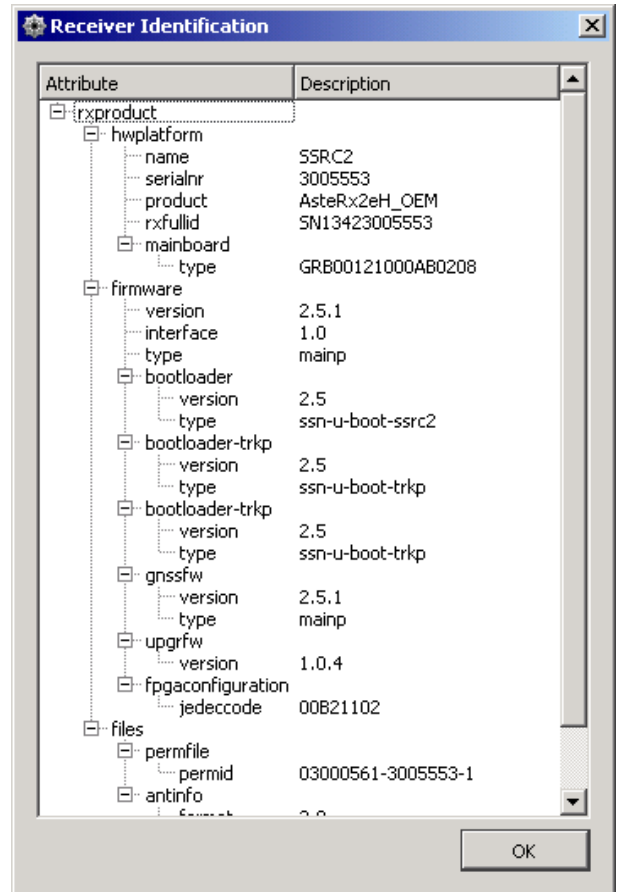
Figure 1 Receiver Identification

Table 1 GPS receiver types

Type GPS receiver	Platform	Upgrade _all version	Firmware version
AsteRx2e	ssrc1	ssrc1-1.0.3_upgrade_all.suf	ssrc1-fw-3.3.0.suf
AsteRx2eH	ssrc2	ssrc2-1.0.4_upgrade_all.suf	ssrc2-fw-3.3.0.suf
AsteRx2eL	ssrc3	ssrc3-1.0.4_upgrade_all.suf	ssrc3-fw-3.3.0.suf

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2. Updating GPS receiver

To update the receiver, go to `Tools >> RxUpgrade`. The Upgrade wizard is displayed (Figure 2). Click next to proceed.

Choose the type of connection (Figure 3). There are two options to connect:

1. **COM2.** Use a serial connection to update the receiver by choosing Select Serial Port.
2. **USB (COM5).** Use the current connection to update the receive by choosing Select Connection File. This connection option can only be used if firmware 2.5.1 or newer is currently installed.

Click next to proceed and choose the appropriate firmware file (Figure 4). First upload the upgrade_all file. This file contains the bootloader firmware. In Table 1 the upgrade_all version is shown which is different for each receiver type. Choose Next and Upgrade to start uploading the file. After the uploading process is done, choose Finish.

The next step is uploading the actual firmware file. Follow the same procedure for the firmware as for the upgrade_all firmware. In Table 1 the firmware version is shown which is different for each receiver type.
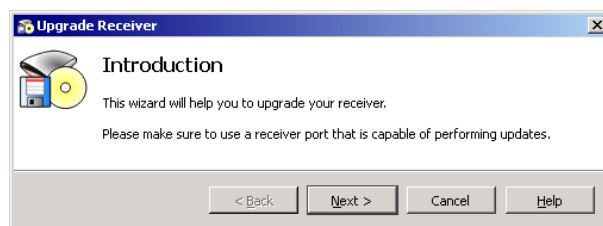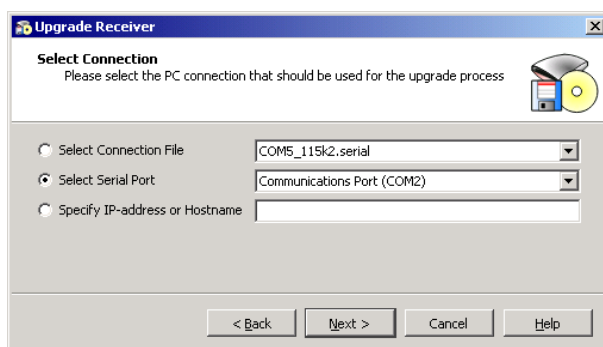

Figure 2 RxUpgrade

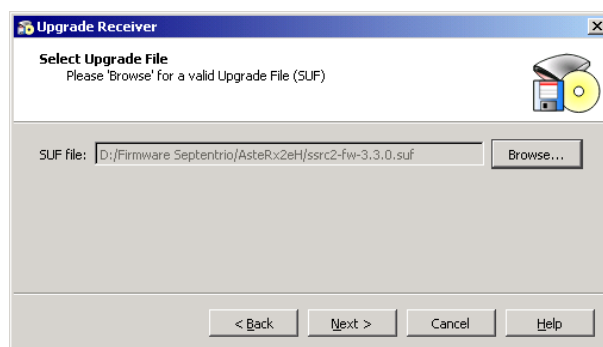
Figure 3 RxUpgrade Select Connection

Figure 4 RxUpgrade Select Upgrade File
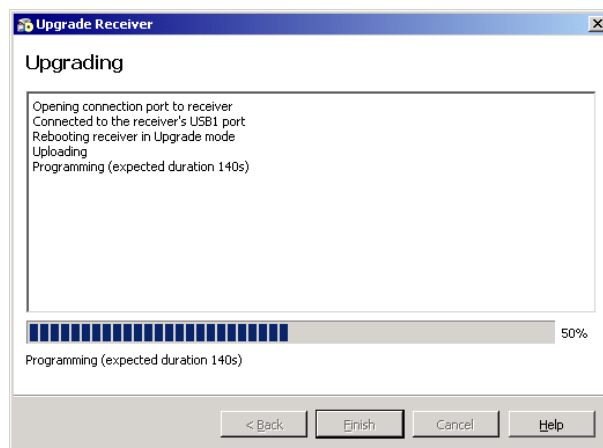
Figuur 5 RxUpgrade Programming

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3. Checking Update

The new receiver firmware is now installed. Check the firmware version in RxControl. Go to `Help >> Receiver Identification` (Figure 1).

Set up the receiver as a rover by using SBGuidance Configurator 3.7.1 or newer. Go to `GPS > GPS receiver` (Figuur 6).

Select *Septentrio AsteRx* en choose *Connect*.

Select in the section *Rover settings* for Channel Configuration *Single-Antenna* when the receiver is activated for using 1 antenna and *Multi-Antenna* when the receiver is activated for using 2 antennas. Enable GLONASS when the receiver is activated for GLONASS. You can check the activation of the number of antennas and GLONASS in RxControl. Go to `Help >> Receiver Identification` (Figure 1). An AsteRx2eH can be activated for 1 or 2 antenna(s). An AsteRx2e and an AsteRx2eL got only 1 antenna connection. The Channel Configuration for these receivers is always *Single-Antenna*.
Choose Setup as rover to setup the receiver. Wait until the Command queue is counted down to 0. Finally click on *SBF (single-antenna)* for 1 GPS antenna and on *SBF (multi-antenna)* for 2 GPS antennas.

The GPS receiver should get into RTK-fixed now.
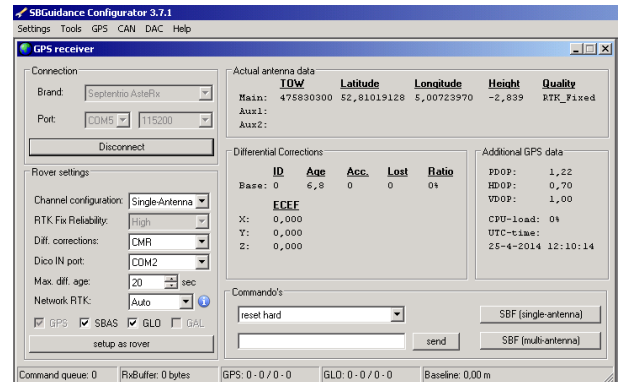
Figuur 6 SBGuidance Configurator Setup as rover

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