

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.

Receiver Identification × * Attribute Description 🖻 (rxproduct 🚊 hwplatform SSRC2 name serialnr 3005553 product AsteRx2eH_OEM rxfullid SN13423005553 ⊡ mainboard GRB00121000AB0208 - type Ė∽ firmware version 2.5.1interface 1.0 mainp type 🗄 bootloader 2.5 version type ssn-u-boot-ssrc2 🖻 bootloader-trkp version 2.5 type ssn-u-boot-trkp 🖻 bootloader-trkp version 2.5 type ssn-u-boot-trkp 🚊 gnssfw version 2.5.1type mainp 🖯 upgrfw 1.0.4 version 🖻 fpgaconfiguration 00B21102 iedeccode Ė∽ files 🚊 permfile permid 03000561-3005553-1 ⊡ antinfo • OK

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PRECISION FARMING

Figure 1 Receiver Identification

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

Table 1 GPS receiver types

Performing perfection.



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:

- 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

📸 Upgrade Receiver		×			
Select Connection Please select the PC connection	1				
C Select Connection File	COM5_115k2.serial	•			
Select Serial Port	Communications Port (COM2)	•			
C Specify IP-address or Hostname					
	ack <u>N</u> ext > Cancel	Help			
Figure 3 RxUpgrade Select Connection					

Upgrade Receiver		
Select Upgrade File Please 'Browse' for a va	alid Upgrade File (SUF)	
SUF file: D:/Firmware Sept	entrio/AsteRx2eH/ssrc2-fw-3.3.0.suf	Browse
	<back next=""> Ca</back>	ncel <u>H</u> elp



Upgrade Receiver	×
Upgrading	
Opening connection port to receiver Connected to the receiver's USB1 port Rebooting receiver in Upgrade mode Uploading Programming (expected duration 140s)	
Programming (expected duration 140s)	50%
< Beck Einish Cancel	Help

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).

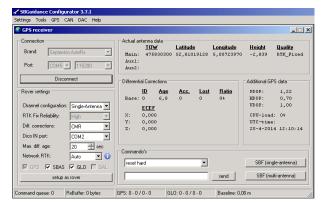
Set up the receiver as a rover by using SBGuidance Configurator 3.7.1 or newer. Go to GPS > GPS receiver (Figuur 6).

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