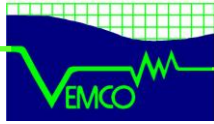


VR100 Firmware 3.1 Upgrade Procedure

FIRMWARE UPDATE CHECKLIST:

- Install the latest version of VR100 HS (V3.1 or greater) on all PCs, laptops and field laptops prior to updating the VR100 receiver firmware. VR100 HS V3.1 is compatible with all VR100 receivers running 2.x, 3.0 and 3.1 firmware.
- If you received your VR100 before March 2006 and it has not been upgraded, then you will not be able to update the firmware to version 3.1. An older version of the PC software must be used until the VR100 is sent to VEMCO for upgrade.
- Ensure you download all data from your VR100s before installing new firmware.
- Ensure that your VR100 receiver is powered using the supplied AC Adaptor during the firmware update process.



Overview

Firmware refers to the internal software that operates a VR100 receiver. It is not to be confused with VR100 HS, the PC software used to communicate with the receiver.

Version 3.1 of the VR100 Firmware adds support for our new V6 180kHz coded transmitters. Version 3.1 of the VR100 PC software (VR100 HS) adds support for Windows 7 and 64-bit versions of Windows XP, Windows Vista and Windows 7.

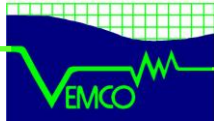
Connect to the VR100 Receiver using VR100 HS

Prior to connecting to your VR100 receiver, you must download and install the latest version of VR100HS V3.1 (or greater). The firmware upgrade is included with the VR100 HS installer package. The most recent version of the software and installation instructions can be found online at: http://www.vemco.com/support/vr100_support.php

Connect your VR100 to an external power source using the supplied AC Adaptor. Connect your VR100 to an available USB port on your PC using the supplied USB communications cable. Run the VR100HS software and power the VR100 receiver on. The receiver name will appear in the Receiver Management window once it has been detected by the software.

Backup Receiver Data

Prior to updating the VR100 firmware we strongly recommend that you retrieve and back-up any data stored on your receiver.



Update your VR100 Firmware

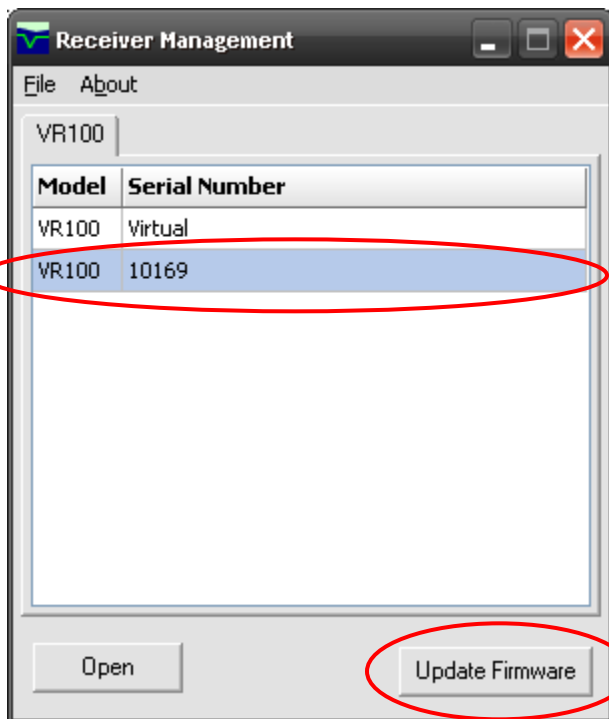
To begin the firmware update process select a receiver in the Receiver Management window and click the **Update Firmware** button. A series of windows described below will be presented to the user to complete the firmware update procedure. Note that the Virtual receiver cannot be updated.

NOTE: It is important to leave the USB communications cable connected to your receiver during the firmware installation.

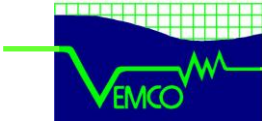
Do not disturb your PC or VR100 receiver during the firmware installation.

Do not power the receiver off during firmware installation.

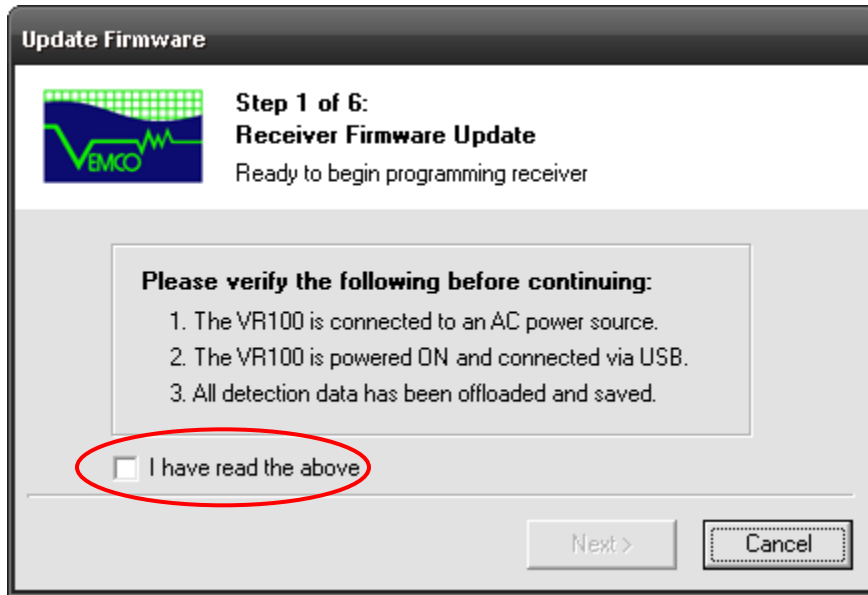
Only connect to one (1) receiver at a time for firmware updates.



Select the serial number of the unit you wish to update and then **Update Firmware**.



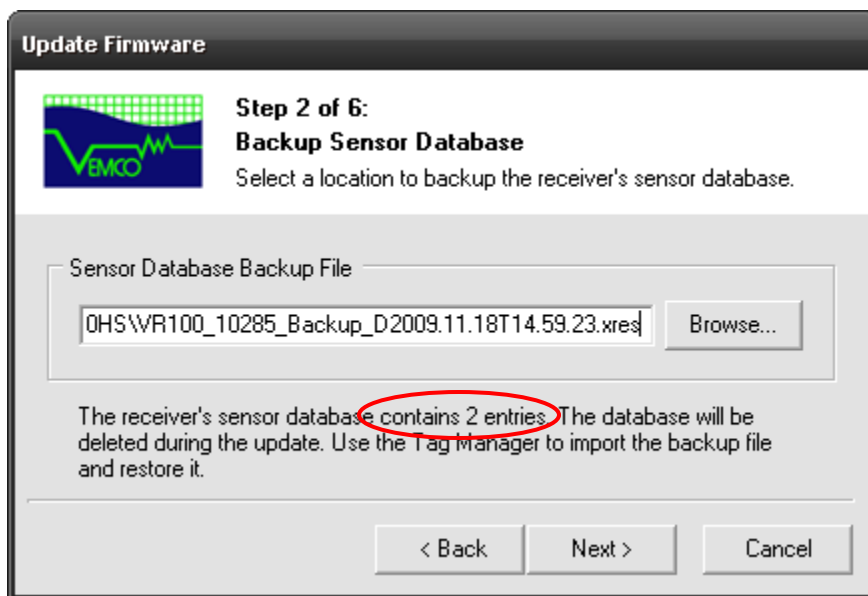
Step 1: Verify that the VR100 is ready for a firmware update. The wizard will not allow you to proceed until you check the box confirming that you have read the instructions.



CAUTION: Ensure you retrieve your data BEFORE you update your firmware.

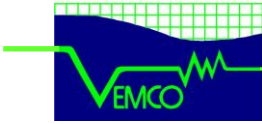
Please ensure that you have followed all of the instructions in the list and select **I have read the above**.

Step 2: Sensor Database Backup. The sensor tag database in the VR100 receiver may be erased during the firmware update (when upgrading from version 2.2.0 or earlier). Click the **Browse** button to select a location and filename for the sensor database backup file. By default the file is stored in the user data directory, normally **My Documents\Vemco\VR100HS**. If the sensor database is reported as empty, select **Next**. Once the firmware update is complete the sensor tag information can be restored to the receiver if necessary by following the steps in section 2.2.10 of the VR100 Software Manual.

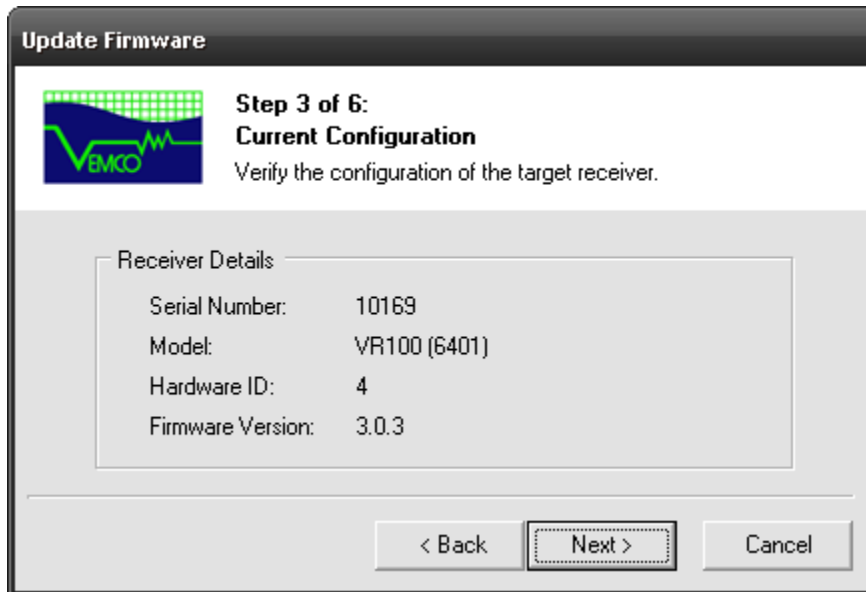


Click on **Browse** to choose a location to save the sensor database. A default directory and filename are automatically filled into the save dialog.

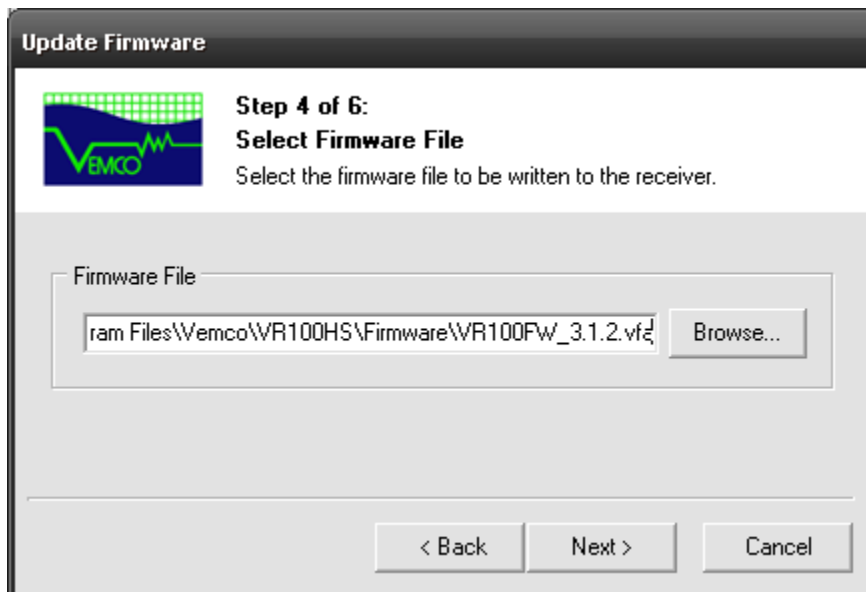
If the sensor database is empty select **Next**.

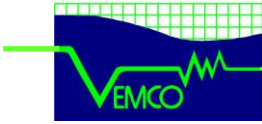


Step 3: Current configuration. The current firmware and hardware versions of the VR100 receiver are checked and displayed.

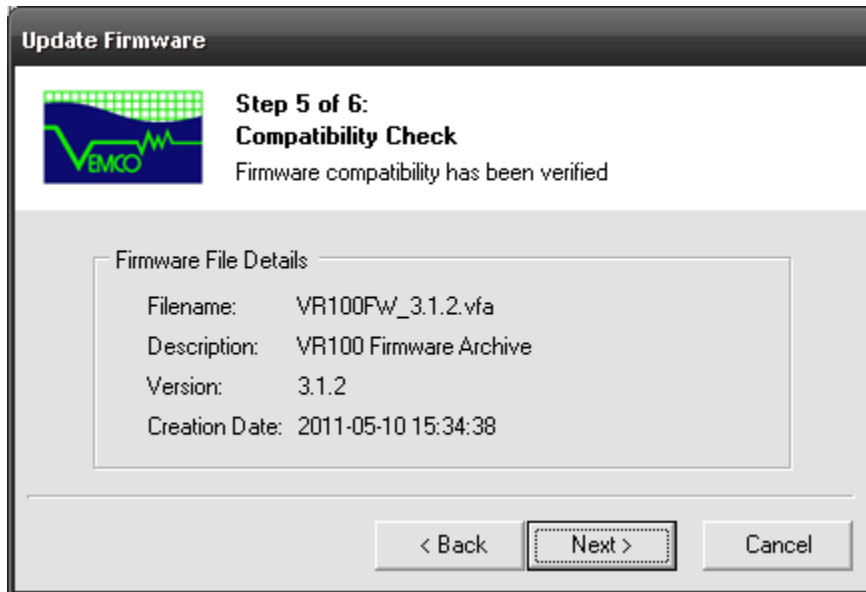


Step 4: Select Firmware Image file. Click the **Browse** button to choose the new firmware file on your computer. The window will automatically open the Firmware subdirectory under the VR100HS program install location where you will find the firmware image bundled with the VR100HS software. Only files with the correct extension will be shown.

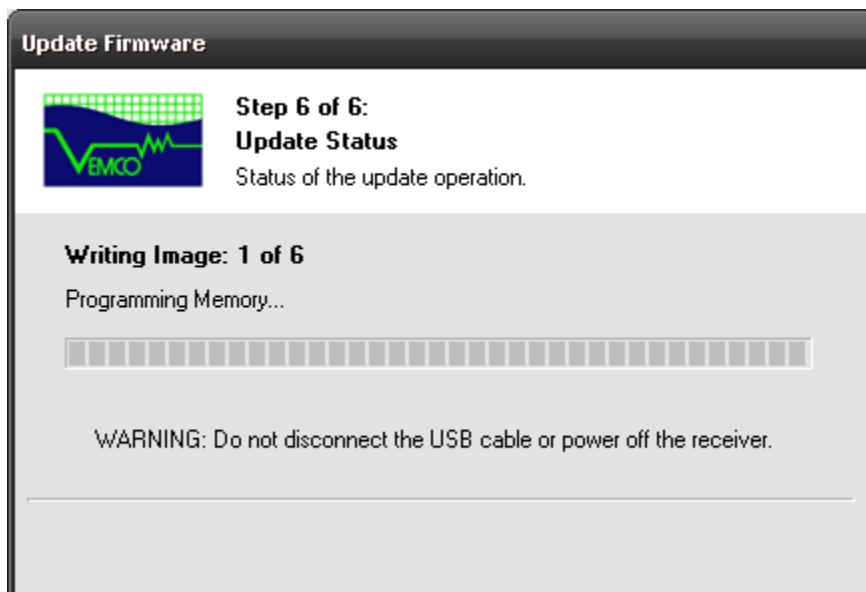


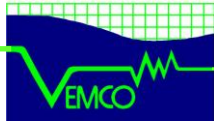


Step 5: Compatibility Check. The VR100 software tests the new firmware file before it is sent to the VR100 receiver.



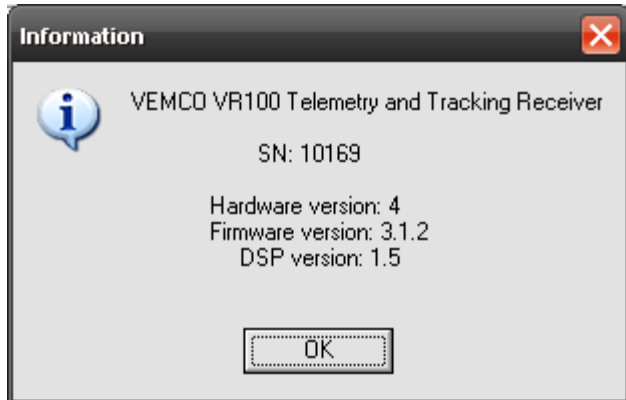
Step 6: Update Firmware. Do not turn off receiver, disconnect USB cable or close VR100 Software during the update process. The user will be notified when the firmware update has been completed successfully.





Verify Firmware Update

Check the firmware version by opening the receiver in the **Receiver Management** window, and selecting **Help/About VR100...** from the menu.



After updating the firmware, the versions should be reported as follows:

Firmware version: 3.1.2

DSP version: 1.5

Verify Channel Settings

If you are using non-standard coded tag maps or continuous tags, please verify channel configuration settings on the receiver after firmware update.