

Oscilloscope Firmware Installation Instruction

for Oscilloscope Types HM1000, HM1008, HM1500 and HM1508

Together with this information you receive firmware updates for the HAMEG oscilloscopes mentioned above. For updating a PC with Microsoft Win 2000 or XP, and a free COM port is required.

1. Update selection

There are two update versions available for each oscilloscope type. The version to be used for update depends on the actual firmware version on the scope, which is displayed after switching on if "Quick Start" is off. The "Quick Start" function can be changed after pressing the SETTINGS pushbutton and calling "Misc".

The aim of the firmware update is that each oscilloscope reaches the firmware state (instrument type)_02.204-yy.yyy. An oscilloscope (e.g. HM1000) can only be updated by firmware with the same instrument type in its name (e.g. HM1000_xx.xxx-yy.yyy).

Oscilloscope with firmware below (instrument type)_02.200-yy.yyy, must be updated in two steps. Firstly the instrument

must be updated to [instrument type]_02.122-yy.yyy and thereafter (instrument type) 02.204-yy.yyy must be installed. This means two installation procedures must be made, one after the other.

In case of oscilloscopes with a firmware version (instrument type)_02.200-yy.yyy and (instrument type)_02.201-yy.yyy only the firmware (instrument type)_02.204-yy.yyy must be installed.

Where errors would occur by trying to update an older version, this action will be automatically prevented.

2. Hardware

PC and oscilloscope must be connected via a screened cable (e.g. HZ14) with a 9pole Sub-D male connector on one side and a 9pole Sub-D female connector on the other side. All pins must be connected 1:1 (pin1 with pin 1, pin 2 with pin 2 etc.). Connect the 9pole Sub-D female connector with a free COM port of the PC and the 9pole Sub-D male connector with the RS-232 connector at the rear side of the oscilloscope.

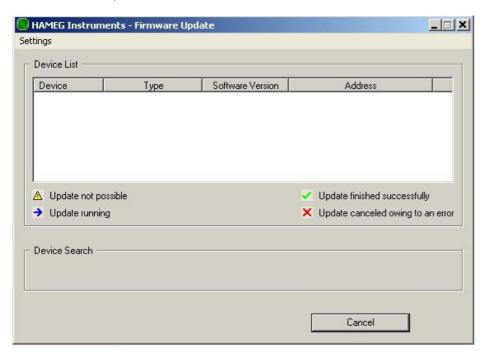
3. Firmware Installation

The update program is a simple executable program that must not be installed.

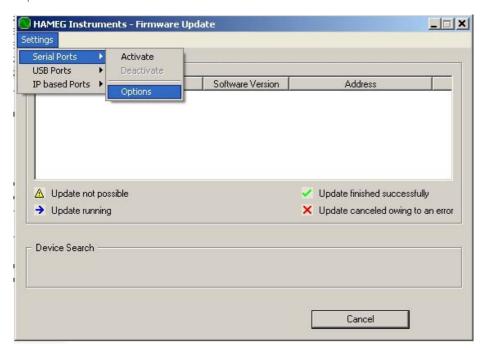
Attention!

It is possible that an automatical adjustment will be made during the update process. Thus the oscilloscope must have reached its normal operating temperature after 20 minutes warm up and no signal must be applied at the oscilloscope inputs.

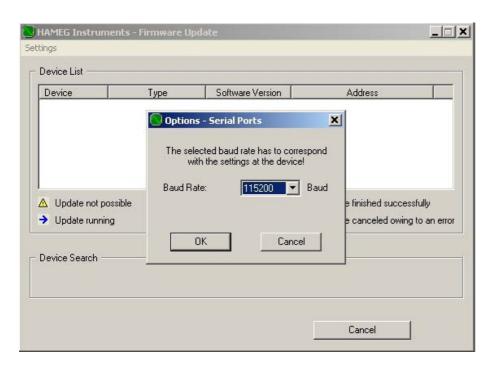
1. Start the update program for your oscilloscope under consideration of item 1 (update selection) by opening the directory Firmware and clicking the right instrument type and version. This opens a window.



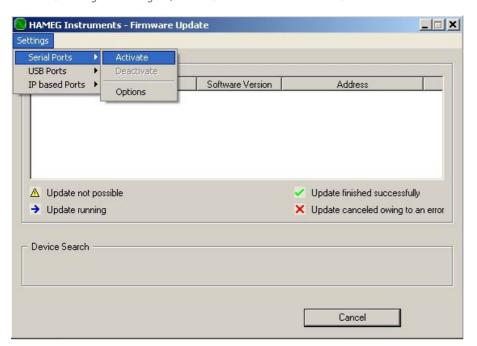
2. Check the interface settings by clicking "Settings", select "Serial Ports" and click "Options".



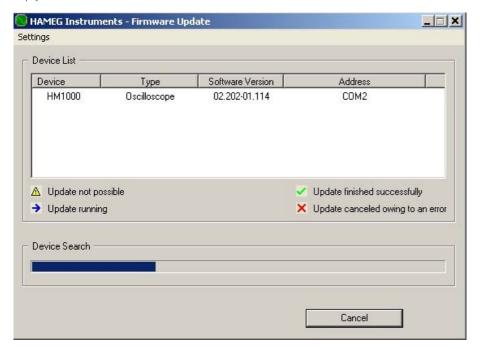
3. This opens a second window that shows the baud rate. If 115200 baud is displayed click "OK" to confirm and close that window.



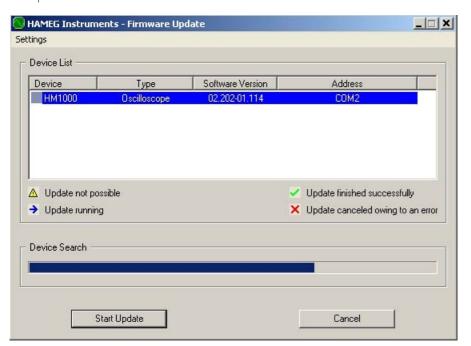
4. Click "Settings" once again, select "Serial Ports" and click "Activate".



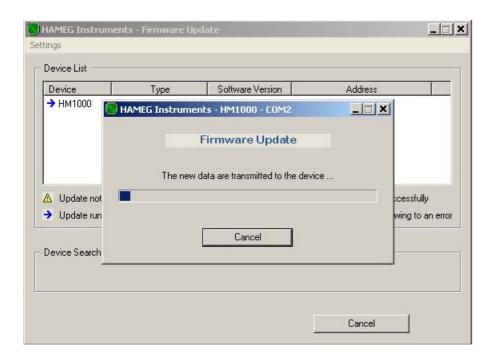
5. Thereafter the update software searches for HAMG oscilloscopes and displays the reply in the window.



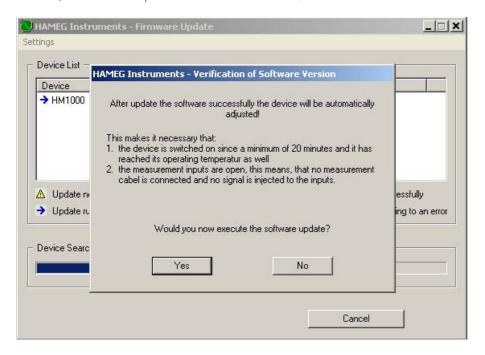
6. Click on the line in which the oscilloscope to be updated is displayed. That marks the line and additionally the button "Start Update" is displayed. Click that button to start the update.



7. This opens a second window that shows the update progress and thereafter other information. When flash memory update is displayed the oscilloscope must not be switched off.

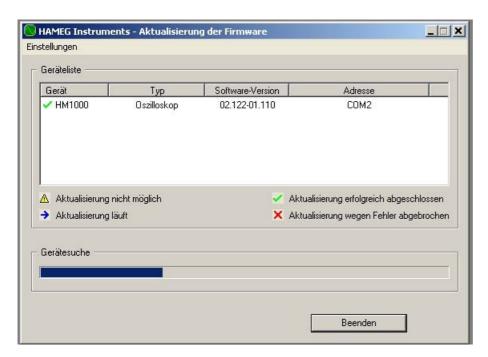


It is also possible that the following window will be displayed. If the required conditions are met, the firmware update can be continued with "Yes".



After the firmware has been updated an auto restart is made and the update is checked.

8. A green tick briefly displayed in front of the oscilloscope type indicates the end of the update procedure.



HAMEG Instruments GmbH Mainhausen, July, 25th 2005