

Software – Update of headend stations CSE2000G2 / CSE2000 / CSE1000 / CSE200

Version 1.12; 2006/08/28

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1 The Update Program

1.1 Supported components

Following control panels and reception modules are supported:

" CSE2000 – Basic Control Unit - LED"	Control panel for headend stations CSE2000 / CSE1000 / CSE200 (with 7-segment display)
" CHD2000S (1)"	Single DVB-S to PAL-B/G, Stereo converter
" CDT2000S (1)"	Single DVB-T to PAL-B/G, Stereo converter
" CSE2000G2 Control Unit"	Control panel CSE2000G2 with LCD display
" CHD2022Q"	Twin DVB-S to DVB-C converter
" CHD2022QN"	Twin DVB-S to DVB-C converter with NIT and Stuffing
" CHE2022QN"	Twin DVB-S2 to DVB-C converter with NIT and Stuffing
" CHD2022S"	Twin DVB-S to PAL-B/G, Stereo converter
" CHD2022SI"	Twin DVB-S to PAL-B/G, Stereo converter with CI
" CHD2022MI"	Twin DVB-S to multi standard converter with CI
" CHD2022S1"	Twin DVB-S to PAL-B/G, Stereo converter, HW2
" CHD2022SI1"	Twin DVB-S to PAL-B/G, Stereo converter with Multi-CI, HW2
" CHD2022MI1"	Twin DVB-S to multi standard with Multi-CI, HW2
" CHD2022U"	Twin DVB-S to UKW(FM) converter
" CHC2022S"	Twin DVB-T to PAL-B/G, Stereo converter
" CHC2022SI"	Twin DVB-T to PAL-B/G, Stereo converter with CI
" CHC2022MI"	Twin DVB-T to multi standard converter with CI
" CHC2022S1"	Twin DVB-T to PAL-B/G, Stereo converter, HW2
" CHC2022SI1"	Twin DVB-T to PAL-B/G, Stereo converter with Multi-CI, HW2
" CHC2022MI1"	Twin DVB-T to multi standard with Multi-CI, HW2
" CHC2022U"	Twin DVB-T to UKW(FM) converter
" CHC2022QN"	Twin DVB-T to DVB-C converter with NIT and Stuffing

1.2 Installation

Install the program **SwUpdateCenter.exe** on your PC as follows:

- a) close all programs which are running on your PC
- b) call **Setup.exe** and follow the instructions

1.3 Start

You can start **SwUpdateCenter.exe** by:

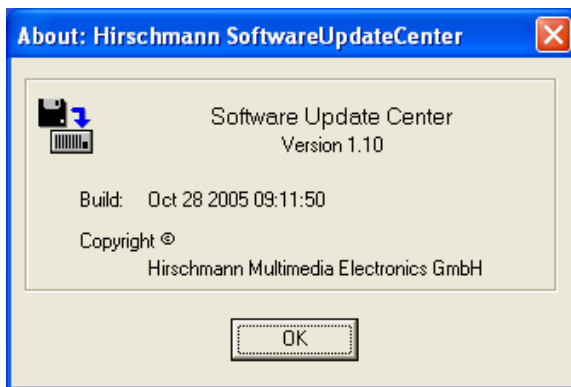
- a) calling the program via the icon in Windows start menu
 ‚Start \ Programme \ Hirschmann \ SwUpdateCenter‘
 - b) direct by calling c:\Programme\Hirschmann\SwUpdateCenter.exe
 - c) double click to any .hdf – file
- or
- d) calling with command line parameters for automatic processing of the update:
 SwUpdateCenter.exe -f"<source.hdf>" -i"<COMxx>" -b"<datarate>" -a
 -f .hdf-File with download data
 -i Name of serial interface (Com interface)
 -a do update automatically
 -b optional: date rate for update (only at DVB to PAL/multi standard converters)

Note: If parameter -a is not present, all other parameters are taken over into the input mask.

Example: C:\Programme\Hirschmann\SwUpdateCenter.exe -i"COM1" -f "C:\Projekte\CSE2000G2_Bedienteil_SW03_03.hdf" -a

1.4 Usage of program

You can retrieve the version number of the installed SoftwareUpdateCenter by clicking onto the company logo in the left upper area of the program window. A about dialog window occurs where you can find the version number:



To update the firmware of a component (control panel or reception module) there are only 3 steps necessary:

1. Selection of download file *.hdf
2. Selection of COM interface
3. Start download and wait until finished.

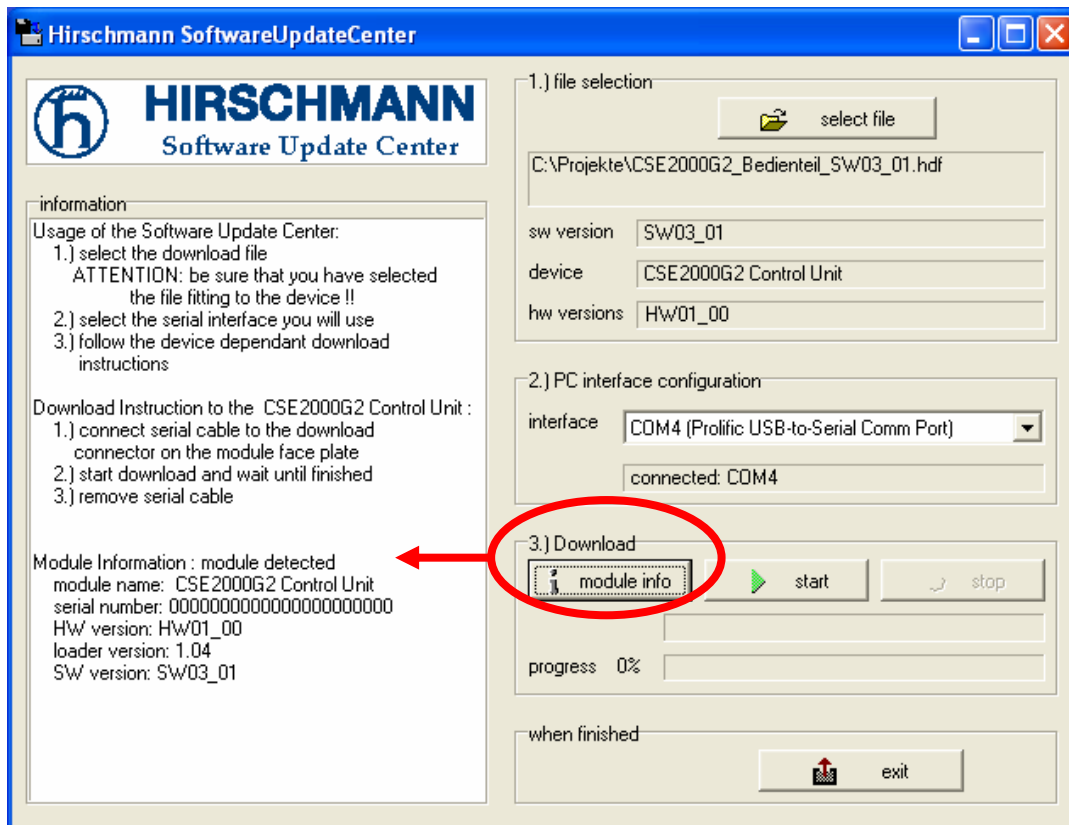
For easier use last selected file and COM-interface are stored and will be reloaded at next program start.

In the left area of the SoftwareUpdateCenter window is an information field where you will find the user manual in short form. If a valid download file *.hdf is selected, in the information field are shown additionally the required steps to update a component.

At some components it is possible to read back version information. It is only necessary to select any download file suitable to the component family and the COM interface (steps identical to update sequence up to step "start download"). Then you can start reading version information by pressing button "module info". The result is added to the information field.

Please note: On some components it is necessary to generate a reset internally to get version information. Therefore it may cause a short interruption of the output signal.

Example for a control panel with LCD display:



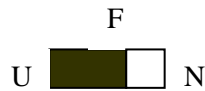
2 Updating the flash controller on the control unit with 7 segment display

In order to update micro controller program of CSE2000 / CSE1000 / CSE200 headend the following is important:

- Flash – Controller update is supported at CSE 2000 base units produced in 3rd quarter of 2001 and later, where the following is provided:
 - a) Control Unit Board has **2 jumpers** at the right side of micro controller
 - b) Flash Controller type **P89C51RD2...** is assembled
- Flash – Controller update is supported at CSE 1000 and CSE 200 base units from the beginning
- You need an adapter and cable to connect the headend's serial port (telecom connector) with your PC's COM port:
 - a) Use Hardware of CHZ 2000 S (order number 960-915-001), for newer CSE units with 8-pole connector (RJ45) a CHZ-adapter is also needed (order number 940-046-001)
 - or
 - b) Use Hardware of CHZ 2000 R (order number 940-011-001), connect only one CSE, for older CSE units with 4-pole connector (RJ12) a CHZ-adapter is also needed (order number 940-046-001)
- You need the update program ,SoftwareUpdateCenter' running on your PC.
- You need the software file ,*.hdf' (new version) to be programmed into headend's micro controller Flash-ROM

You should proceed as follows.

1. Plug off the base unit and open the case.
2. Put the lower jumper at Control Unit Board into left position



3. Connect the headend and PC by means of adapter CHZ 2000 S or CHZ 2000 R and associated cables (only one CSE unit)

Note: Usage of an RS232 to USB converter is possible.

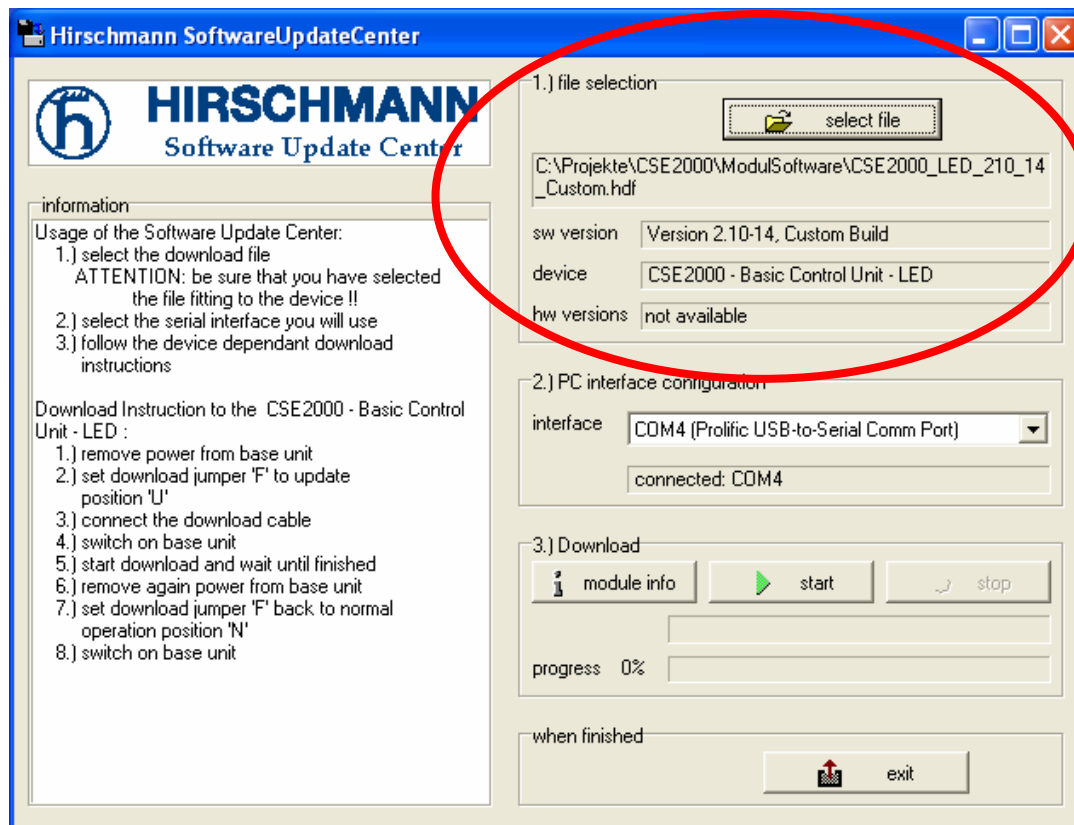
4. Power on the headend, and notice that the display keeps dark.
5. Start the program **SwUpdateCenter.exe** on your PC.

Note: On the left side you will find a short user manual.

6. Select file to download.

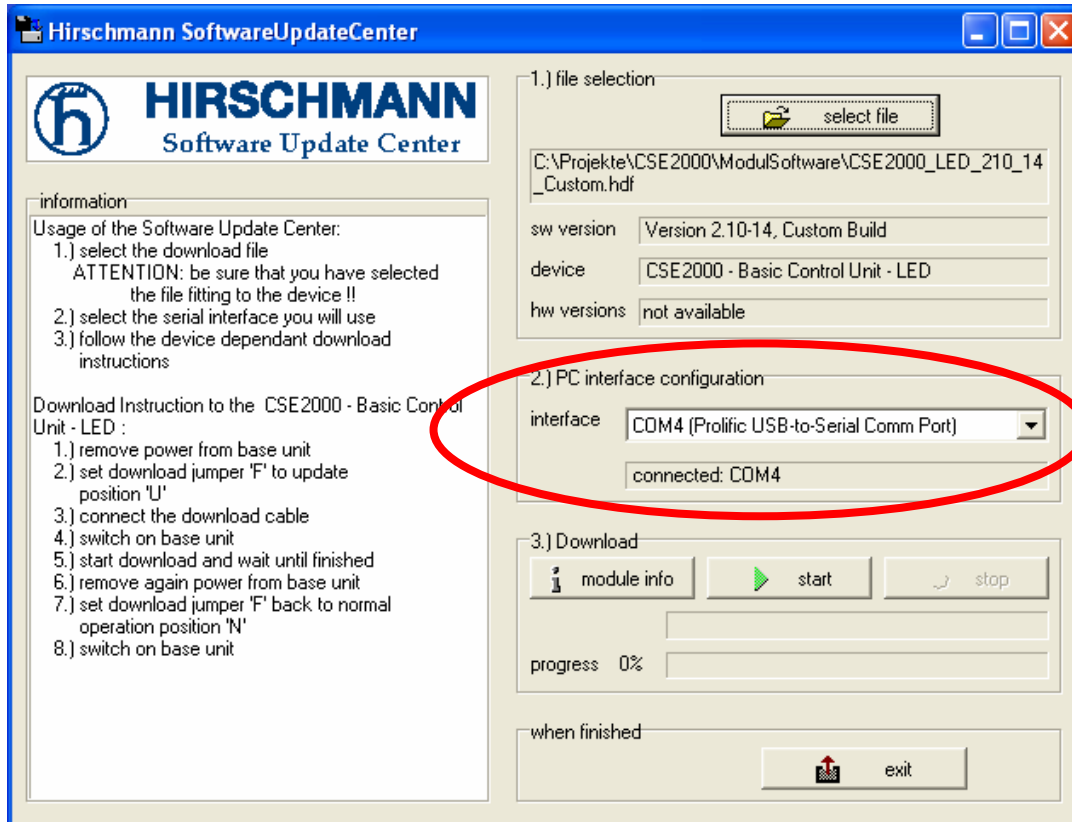
Note: Default is the selected or the last downloaded file.

Note: For cross checking you will get displayed the destination device and the software version number. To update the Flash-Controllers the device name „CSE2000 - Basic Control Unit - LED“ must be displayed.

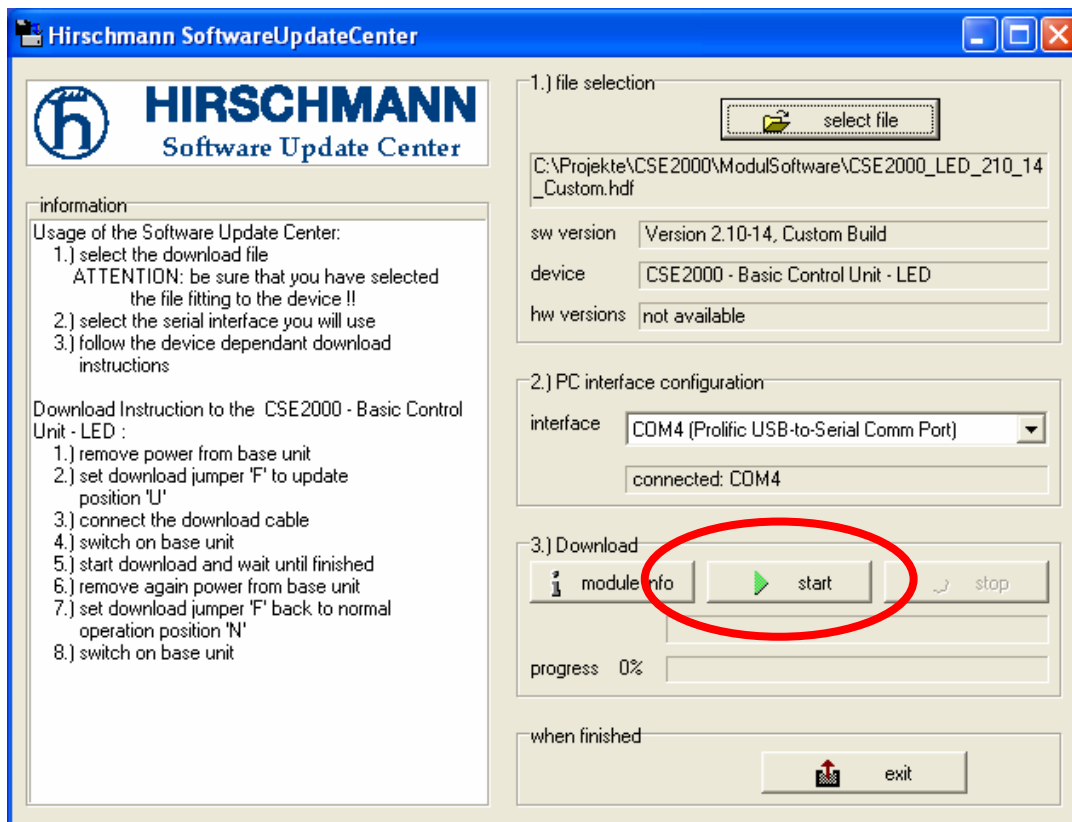


7. Select the interface on your PC or Laptop which you will use for connection

Note: Default is the last used interface.



8. Press Button **Start** to start the download



If it is impossible to start the download you will get a message:

a) No connection could be established:



* please check cables and repeat steps 1 to 8

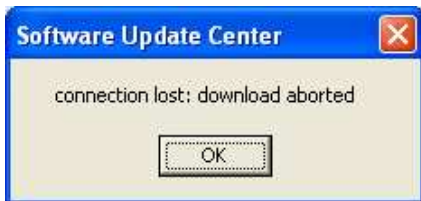
If you still have the problem,

* Put the upper jumper at Control Unit Board to left position for a short time and then into right position again. This is to reset the micro controller. Then try download again.



If there is still no success, then something is wrong with you installation (wrong processor type, defect cable etc.). There is no software update possible.

b) Connection is broken:



* Please check the power supply

* Please check the correct connection of the cables

And try again.

c) File to download is invalid:



* Please check that the file is still available

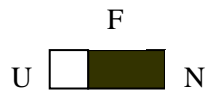
* Please check that the file is not corrupted

And try again.

9. Wait until the update is finished with message



10. Plug off the headend.
11. Put the lower jumper at Control Unit Board to right position.



12. Now you can start the headend with new software. During startup you should get the new version number on display.

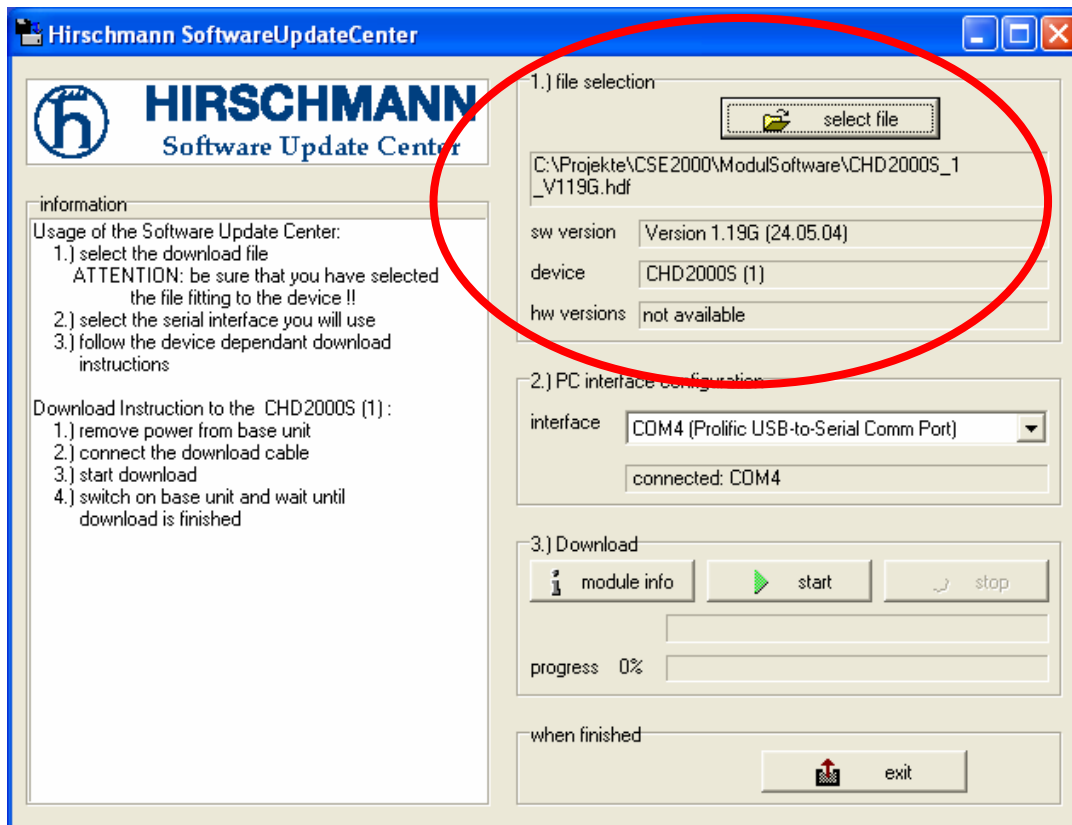
3 Update the modules CDT2000x and CHD2000x

In order to update the module software the following is important:

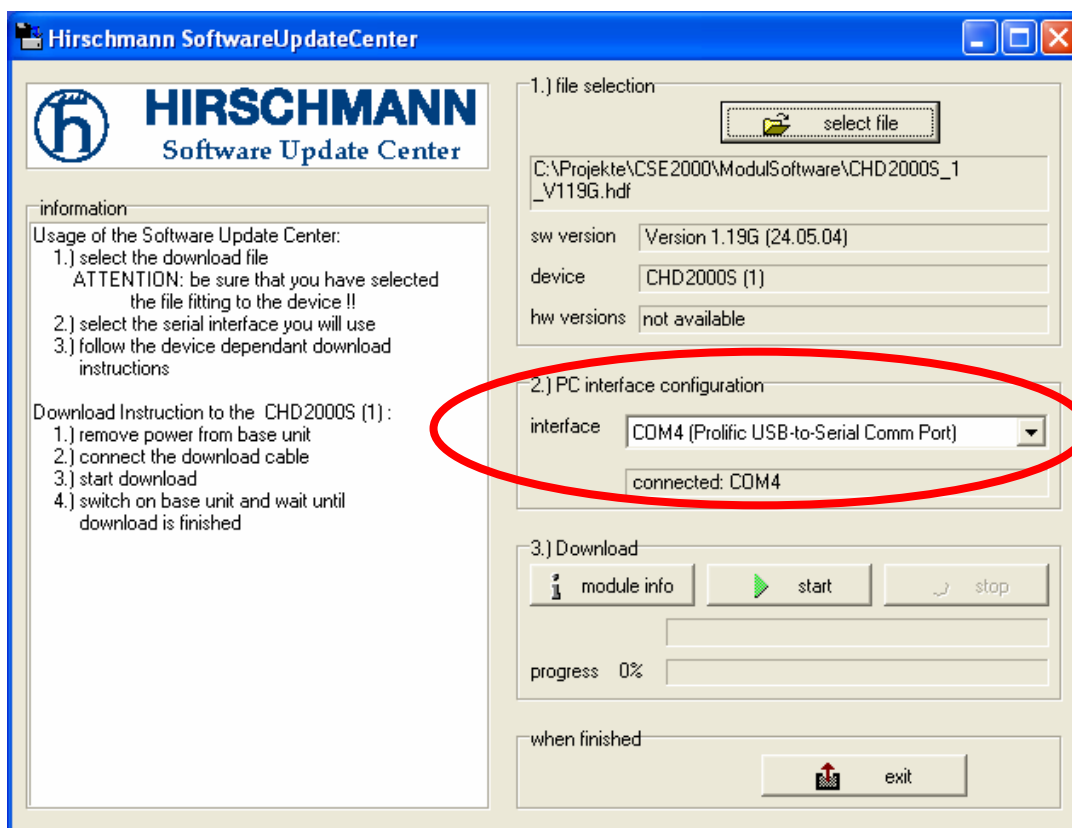
- You need a crossed serial cable
- You need the program ‚SoftwareUpdateCenter‘ installed on your PC or Laptop.
- You need the software file ‚*.hdf‘ (new version) to be programmed into module.

You should proceed as follows:

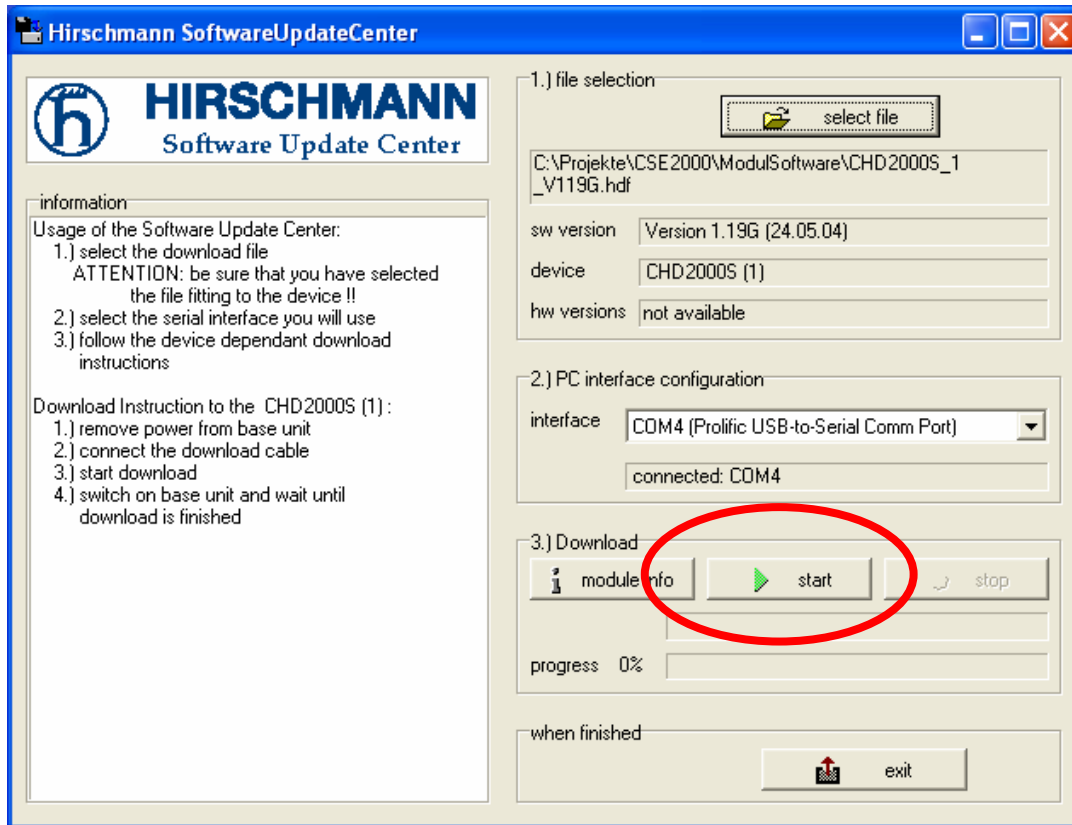
1. Plug off the base unit and open the case.
2. Connect module and PC with the serial cable.
Note: Usage of an RS232 to USB converter is possible.
3. Start the program **SwUpdateCenter.exe** on your PC.
Note: On the left side you will find a short user manual.
4. Select file to download.
Note: Default is the last downloaded file.
Note: For cross checking you will get displayed the destination device and the software version number. To update the module device name „CHD2000S (1)“ respectively „CDT2000S (1)“ must be displayed.



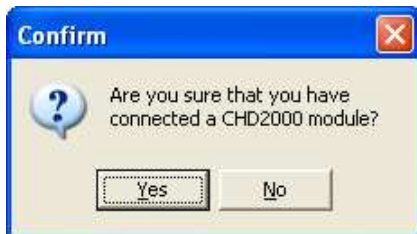
5. Select the interface on your PC or Laptop which you will use for download connection
Note: Default is the last used interface.



6. Press Button **Start** to start the download.



7. Please check that the selected Software is suitable to the connected the module.
- ➔ If you are sure that everything is correct, answer with „Yes“ and continue with step 8.
 - ➔ If not, answer with „No“.



8. Power on the headend, the download should start immediately.
- a) If download does not start (in this case there is no message), repeat steps 1 to 7.
- b) Connection is broken:



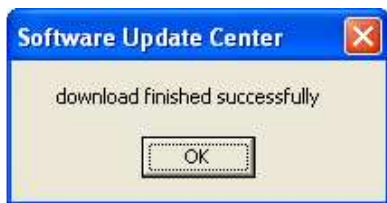
- * Please check the power supply
 - * Please check the correct connection of the cables
- And try again.

c) File to download is invalid:



- * Please check that the file is still available
 - * Please check that the file is not corrupted
- And try again.

9. Wait until the update is finished with message



10. Unplug the headend and remove the serial cable.
11. Now you can restart the headend with new software.

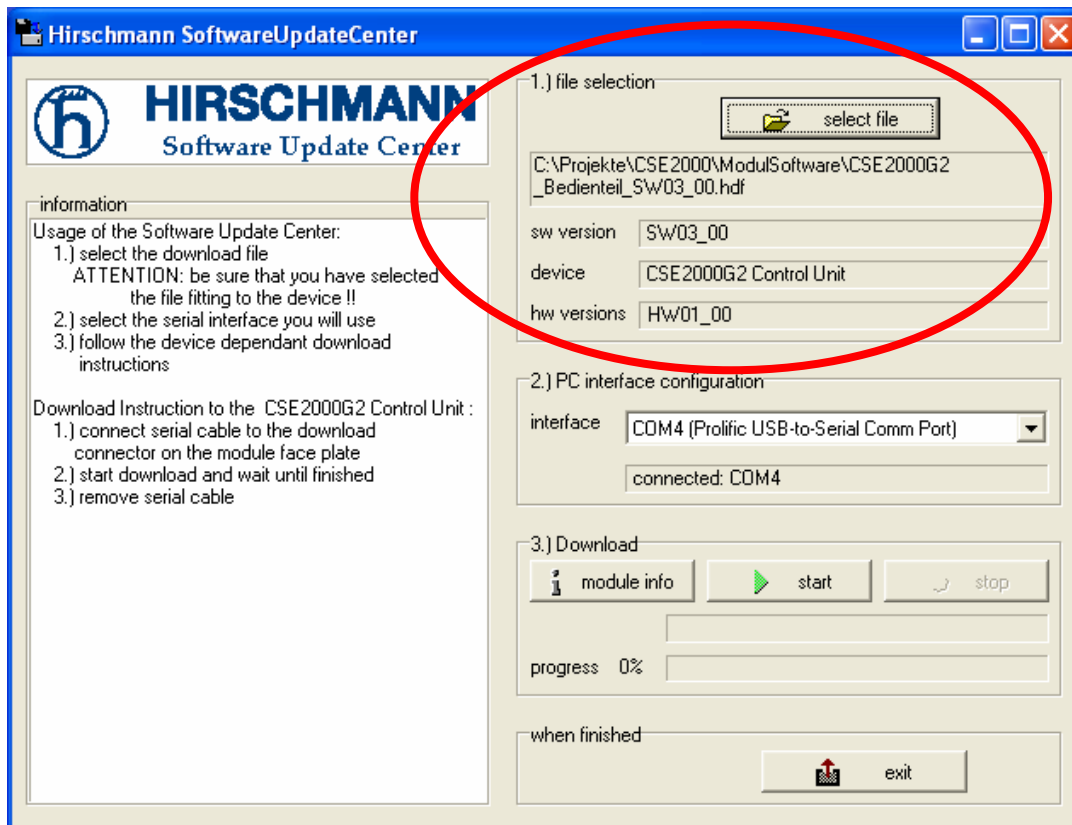
4 Updating the control unit CSE2000G2 and modules CHx2022xx

In order to update micro controller program of CSE2000G2 headend (with LCD display) or the modules CHx2022xx the following is important:

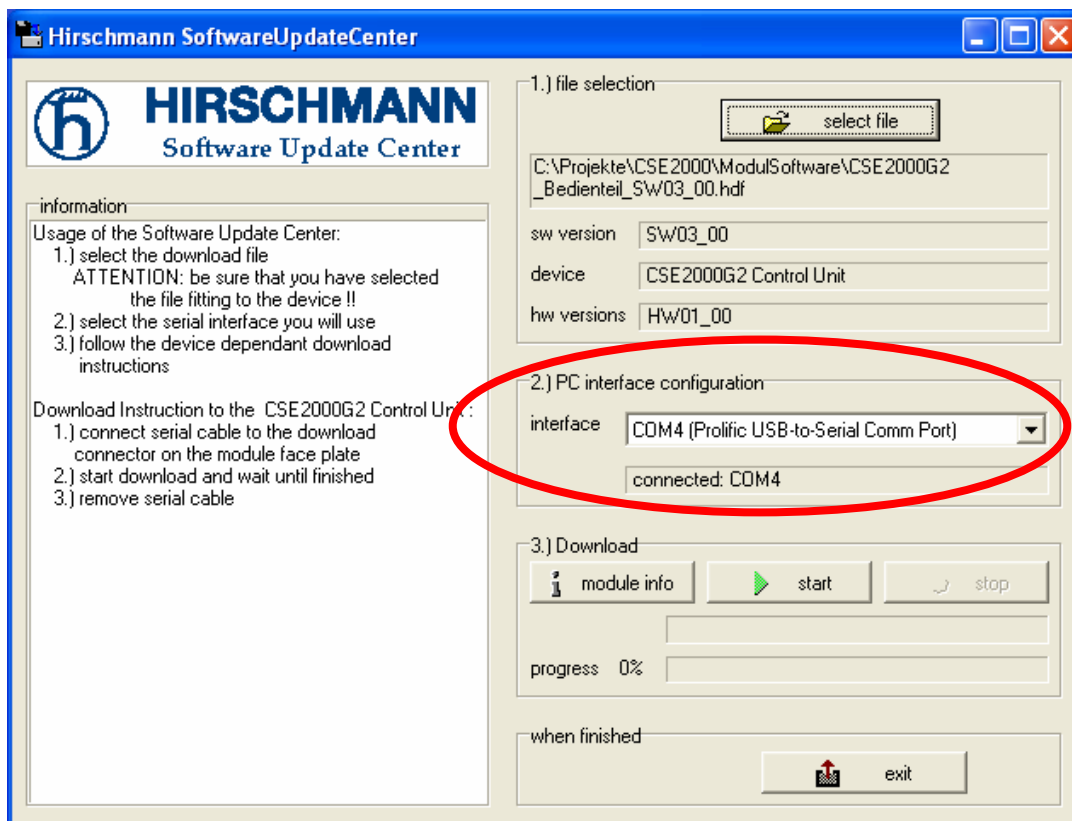
- You need an uncrossed serial cable, where the control lines RTS (Pin 7) and DTR (Pin 4) are connected too.
- You need the update program ,SoftwareUpdateCenter‘ running on your PC.
- You need the download file ,*.hdf‘ (new version) to be programmed into headend’s micro controller Flash-ROM

You should proceed as follows.

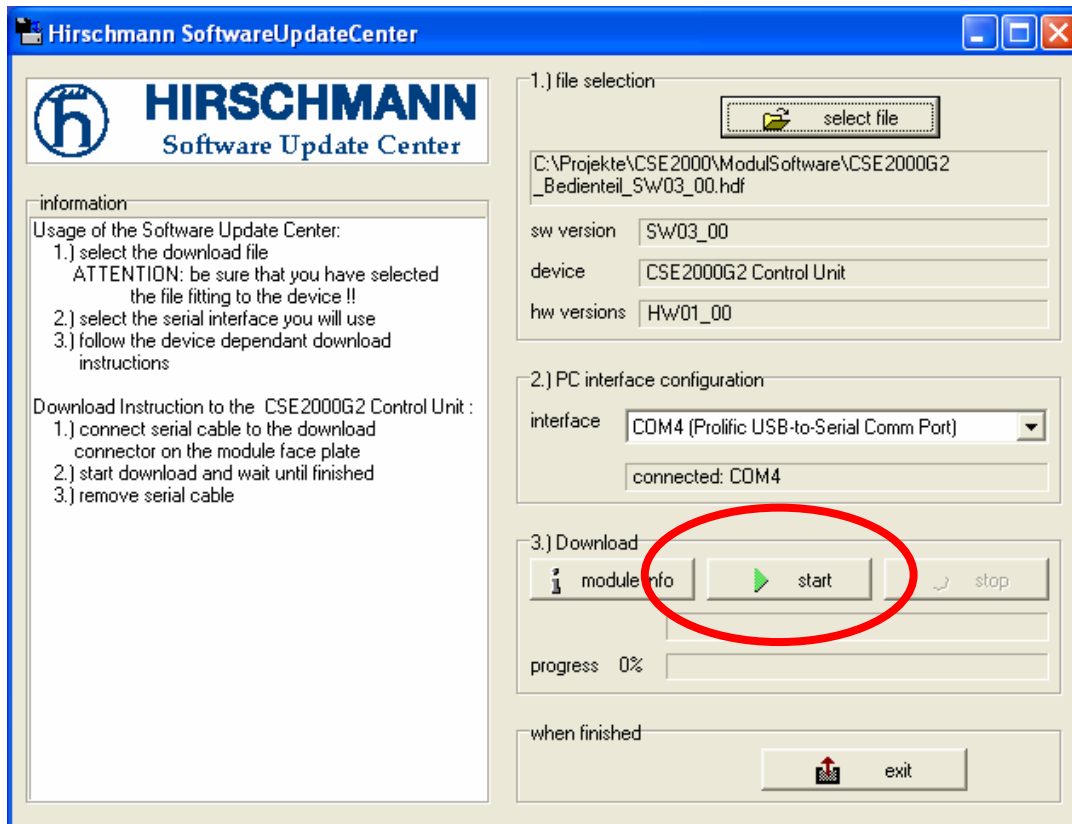
1. Connect the control panel or the module to update with your PC using the serial cable.
Note: Usage of an RS232 to USB converter is possible.
2. Start the program **SwUpdateCenter.exe** on your PC.
Note: On the left side you will find a short user manual.
3. Select file to download.
Note: Default is the selected or the last downloaded file.
Note: For cross checking you will get displayed the destination device, the software version number and the list of compatible HW versions. To update the Flash-Controllers the device name „CSE2000G2 Control Unit“ respectively the suitable module description must be displayed.



4. Select the interface on your PC or Laptop which you will use for connection
Note: Default is the last used interface.



5. Press Button **Start** to start the download



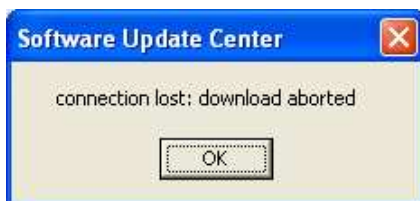
If it is impossible to start the download you will get a message:

a) No connection could be established:



* please check cables and repeat steps 1 to 5

b) Connection is broken:



* Please check the power supply
* Please check the correct connection of the cables
And try again.

c) File to download is invalid:



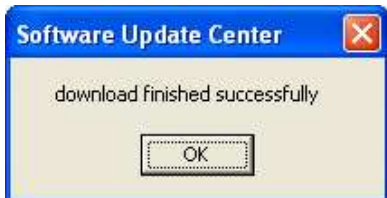
- * Please check that the file is still available
 - * Please check that the file is not corrupted
- And try again.

d) selected file and connected module (module type or HW version) does not match:



- * Please check the correct connection of the cables
- or
- * Please select a suitable file
- And try again.

6. Wait until the update is finished with message



The downloaded software will be started automatically.

Note: After the update of the „CSE2000G2 Control Unit“ it is recommended to break the main power supply for a while (3 sec.) if there are modules of type CDT2000xx or CHD2001xx used in the headend.