

***Radikal Technologies, Inc***  
***SAC 2.2/SAC 2K***

Public Beta Driver Installation Manual

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## **Driver Update Preparation**

This Document describes the procedure for installing the SAC-2K/2.2 Windows 2000/XP Driver. The installing procedure differs depending whether you've already used a previous Radikal USB driver or whether you are installing the USB Driver for the first time. If you already have the USB Driver installed on your system, the Installation is done automatically by the Updater. If not you will use Windows' Installation Wizard to do the installation. Proceed according to the following instructions:

- 1) If you are already using USB, read the chapter, "Updating an Existing Installation".
- 2) If you are not already using USB, read the chapter, "Performing a New Installation".

## **Important Note**

- 1) The included drivers are "Public Beta" versions. Although the drivers have been tested extensively by our Beta testers and should prove to function reliably, Radikal cannot guarantee the full functionality of the Drivers. In case you do encounter problems with these Drivers, it is always possible to revert to the previous Driver version.
- 2) At the moment, these Drivers can only be used with Windows 2000 and Windows XP. Windows 98, 98SE and ME Users are not advised to install the Drivers, as they have not tested reliably with these operating systems.
- 3) This Public Beta driver requires a SAC-2K/2.2 firmware version of at least 2.27. Without version 2.27 or newer, the latest Driver functions of this Public Beta Version may not be available. If the Driver detects a firmware older than 2.27, you will be prompted to update the SAC firmware first. You can find this firmware Update or the latest version of the firmware in the Public Beta section on the Radikal website.

## **What are the Advantages of this new Driver?**

Operationally, the user interface of this driver is similar to previous versions, but 'under the hood' it is a totally different animal! This version of the driver now features Radikal's new Multi-Application support. Settings for the SAC, such as the operating mode and other parameters can now be dynamically controlled by the driver, not statically stored onboard the SAC, as in previous versions. In Multi-Application mode, the SAC operates in "Slave" mode, and is always controlled by the software. The benefit of this approach is that the SAC acts as "virtual" hardware, providing multiple versions of the SAC to the computer, allowing you to operate up to 10 programs simultaneously, all being controlled by one SAC.

You can switch between programs directly from the surface of the SAC, and the SAC will update itself automatically, setting its faders, encoders, buttons and system parameters to the selected program.

For example, say you are working with Cubase, SoundDiver and Ableton Live. You can switch between these programs quickly and easily with a simple button sequence. Since the driver stores the fader position, display information, encoder settings and System data of all three programs, the "operation elements" are automatically updated while changing from one application to another. And, because the SAC operates on the USB bus, it happens very quickly!

## Functionality and Operation

The practical implementation is very straightforward. You can continue using your SAC as usual, and there won't be multiple Control Ports appearing in your software. However, multiple programs will be able to use the Control Port concurrently. The Driver can differentiate between programs based on the "application instances" addressing this port and can assign the programs to one of the up to 10 virtual SACs. Not only can the Driver simulate 10 simultaneous SACs, but it can also simulate all of the SAC's different Operation Modes. Incoming MIDI data from the programs is "translated" into the SAC's Slave Mode. Therefore, when using the Multi Application functionality, the SAC operates only in Slave Mode, regardless of which program is currently selected. This enables very fast switching between the various programs, as there is no change of mode necessary.

Pressing and holding\* the SAC's [System] button displays all programs that are currently using the Driver in the third display. The "Program Position" in the new Driver is referred to as a "Slot". The upper row of the display shows Slots 1 - 5 and the lower row of the display shows Slots 6 - 10.

You can select an Application in one of the ten Slots by pressing and holding the [System] button and using the numeric buttons [1 - 5] and [6 - 0]. This can be done at any time.

After changing the selected application, the name of the active program will be shown in the third display.

Every time you start a new program, the next Slot location will be activated automatically. When the new program opens, it takes control of the port. Of course, you can select the program you want to use at any time by pressing [System] + [1 - 5] or [6 - 0].

The main thing to remember is you can easily switch between different Programs, and the selected Application will be displayed by the SAC!

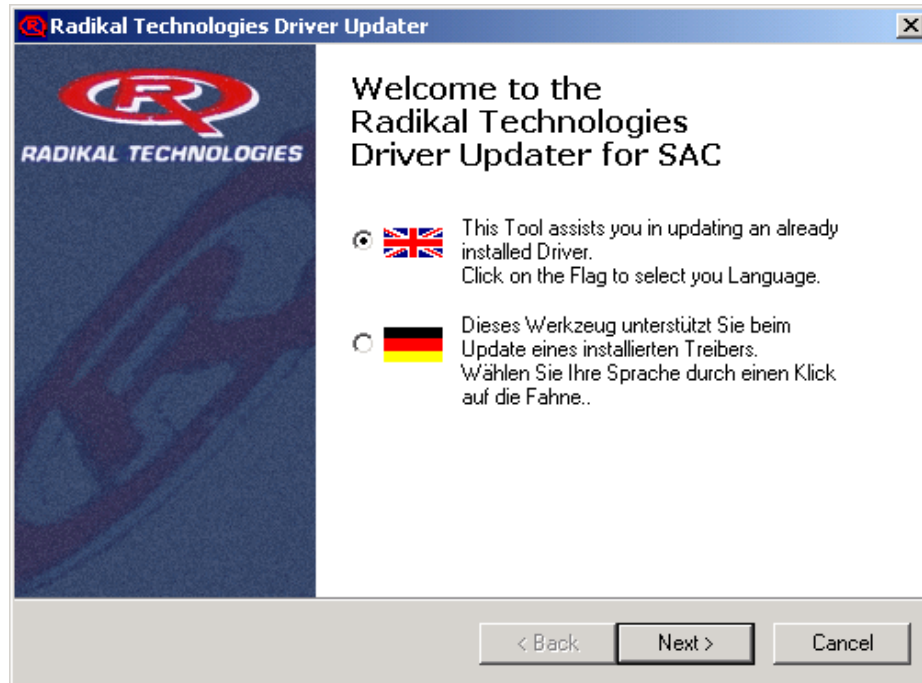
When starting a program for the first time it is possible that the selected Application will not automatically select the correct operating mode. In this case, it might be necessary to select the operation mode for the assigned Slot manually in the System menu the first time. The Driver will then recall the assignment automatically the next time you use the program,

And finally, you can deactivate the Multi Application mode at any time! This is done by disabling Multi Application support in the USB SAC Driver in Device Manager.

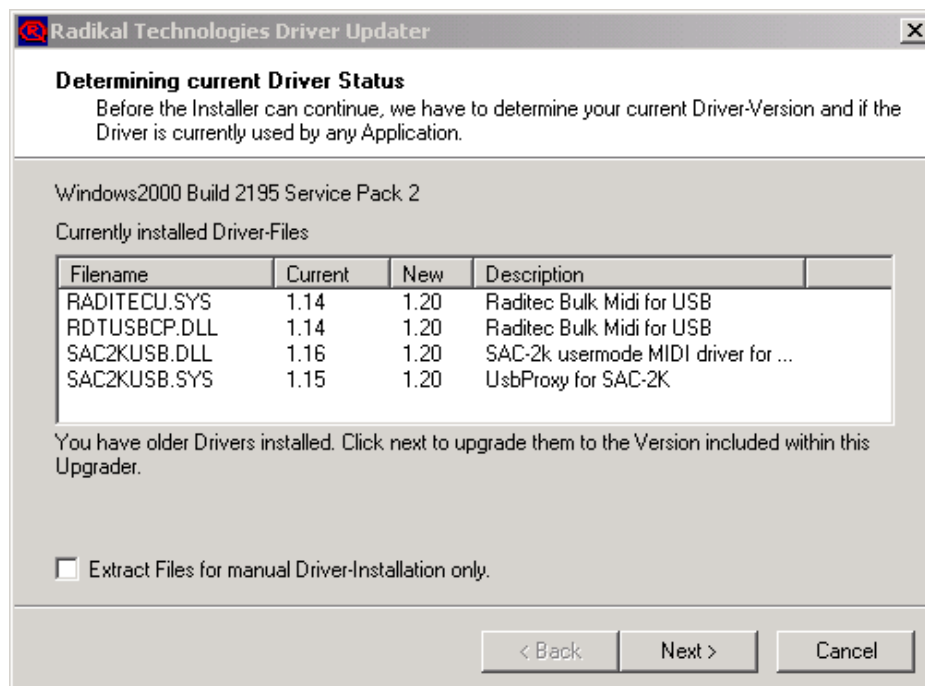
*\* Pressing and quickly releasing the System button enters the System menu, as usual.*

## Updating an Existing Installation

Start the Installation program. In the “window” select your language preference.

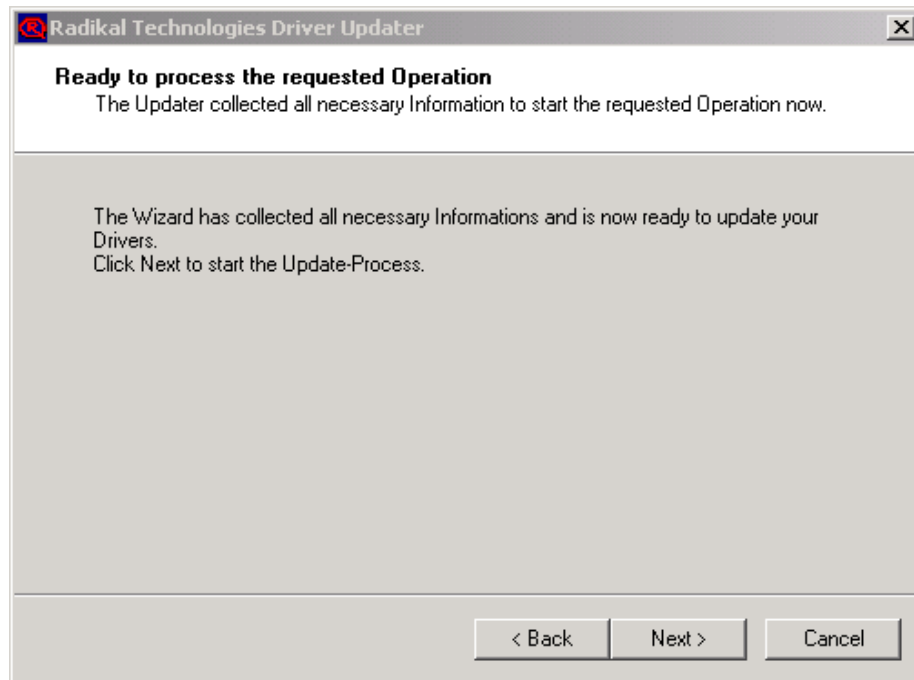


Clicking “Next” will prompt a Window which displays the previously installed Drivers and Version Numbers. You will also see the New Versions and a short description of the according functions contained in the Update files.

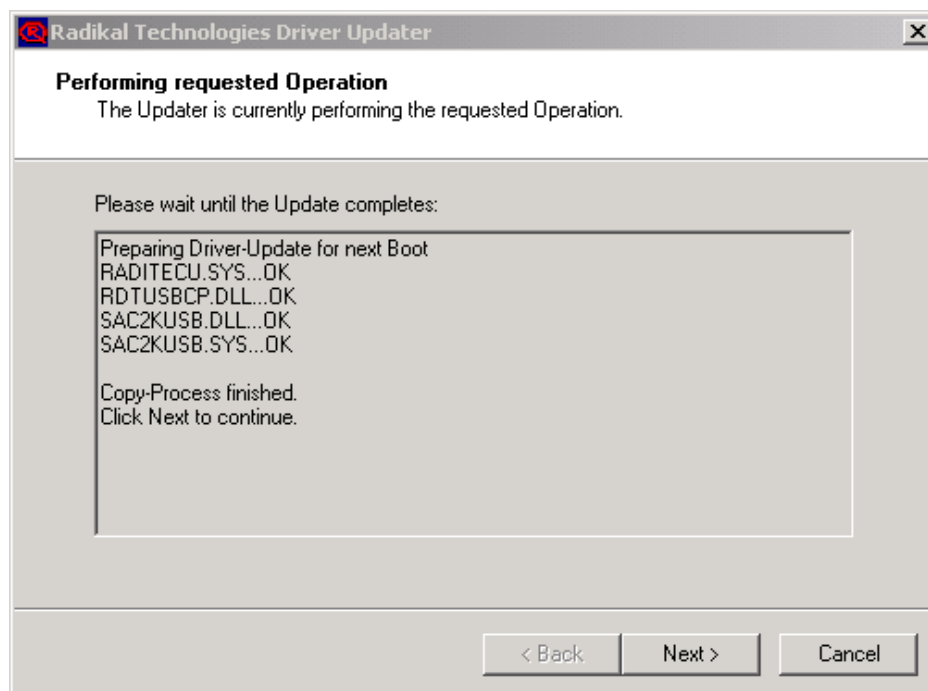


If the Updater Versions are more recent than the previously installed files click the “Next” button.

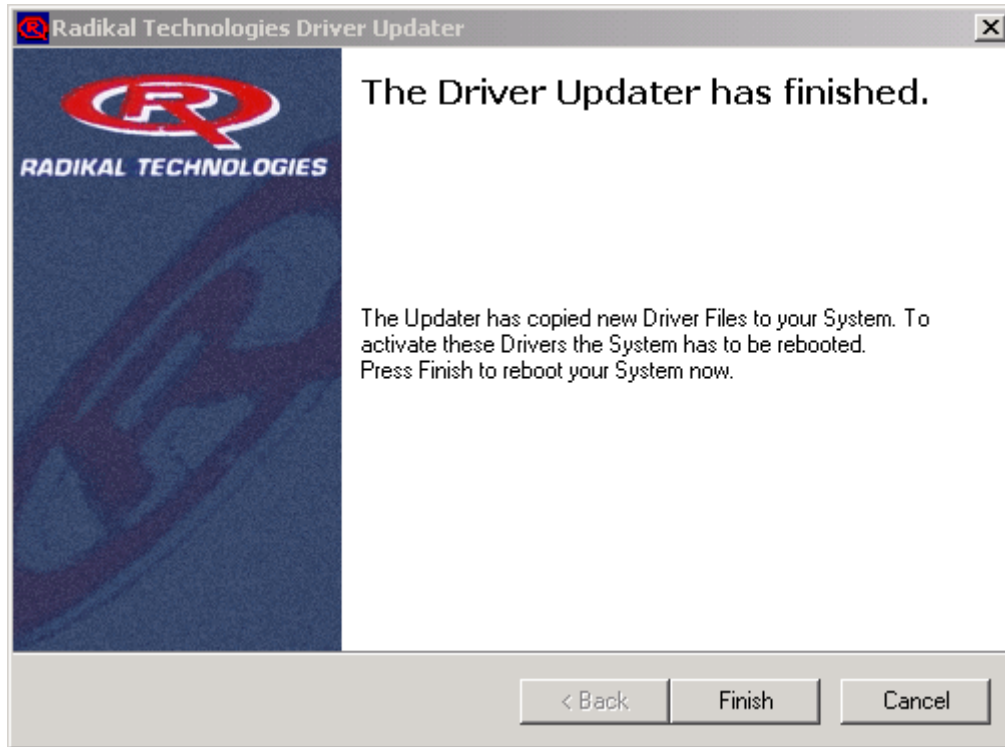
The installation program will inform you that all necessary information about your system has been reviewed and the Update Process is ready to commence.



The next window shows the Update progress. Press the “Next” button to conclude the updating process.



By pushing “Finish” in the final window, your computer will be restarted.



Under Windows XP it will be necessary to unplug the USB cable for a moment after the restart and then to plug it in again, for the SAC to be recognized and the new Drivers to be activated. Without this step the Multi Application mode will only be activated after the next Restart of your system.

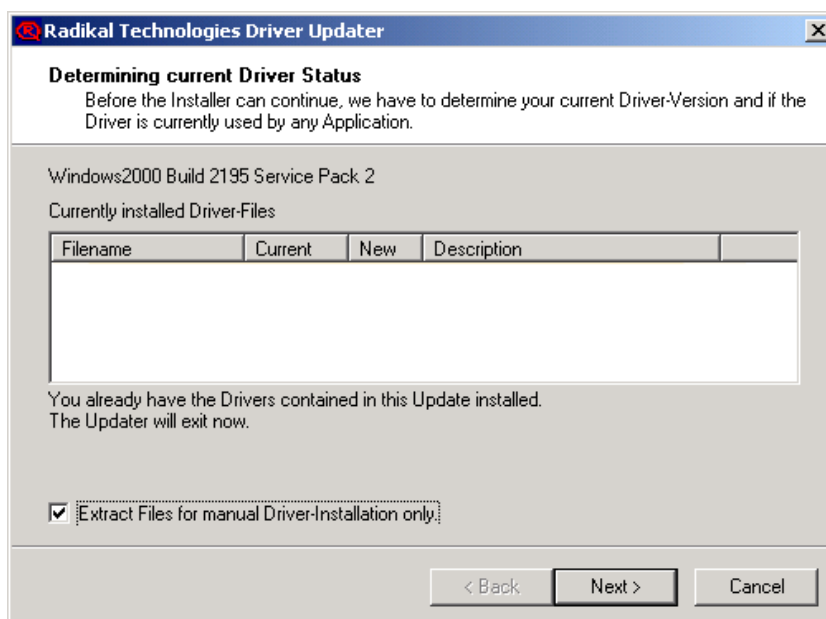


## Doing a New Installation

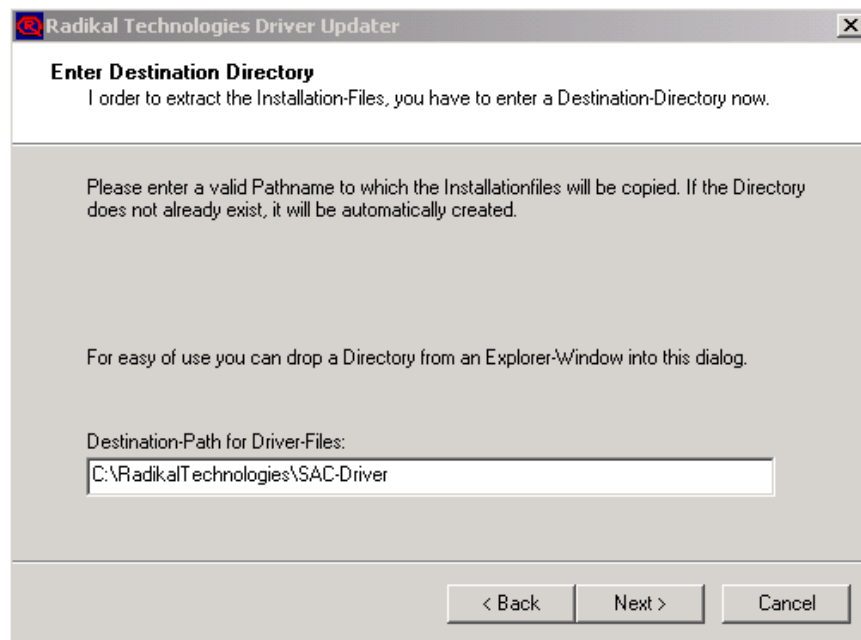
The installation program is also capable of generating the installation files, if you wish to use this Public Beta version to do a new USB installation. You should not connect the SAC to your computer before creating a driver disk or before copying the driver files to a folder on your hard-disk, since the Windows Installation Wizard will automatically start up. Attempting to install without copying the drivers first won't work! Accordingly first start the Updater and select the desired language for the installations instructions.



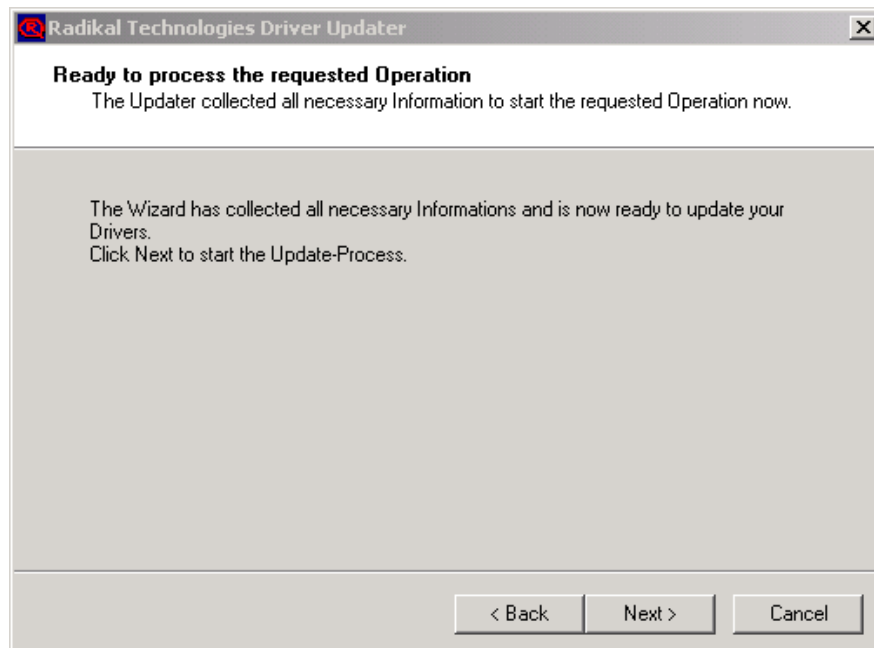
Push "Next" to start the process. If the Updater was unable to find Driver Files on your system, it will suggest for you to extract the files for manual installation.



In this case, make sure that the “Extract Files” option has been selected and press Next. You will see a window asking you to input the destination where you want the files copied to.



Please make a note of the selected destination/path, as you will have to provide it to the installation assistant later. Push “Next” after the destination/path has been selected.

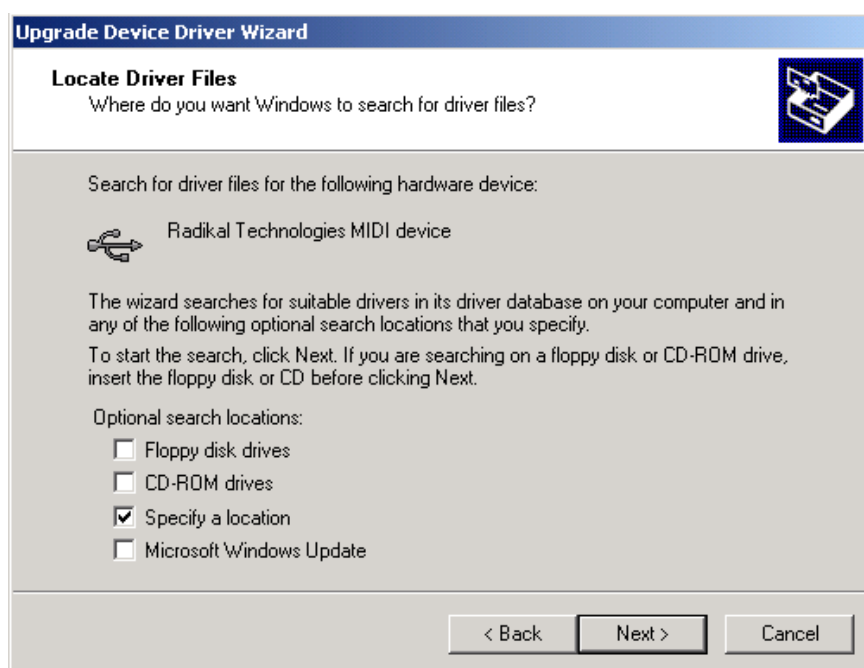


By pushing “Next” the files are copied into the selected directory.



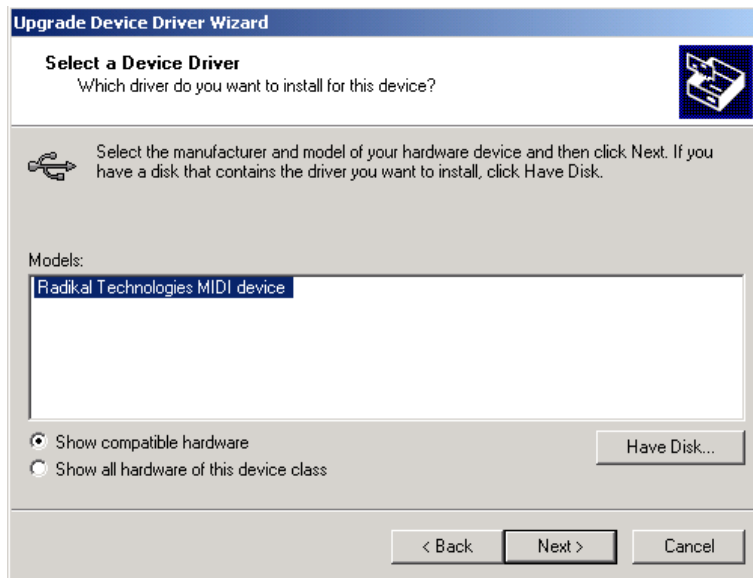


In this window select the second option, “Display a list of the known drivers...”. Then push “Next”.

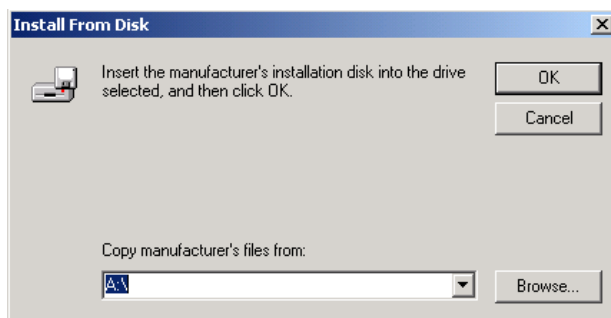


Select the option “Specify a location”. Push Next.

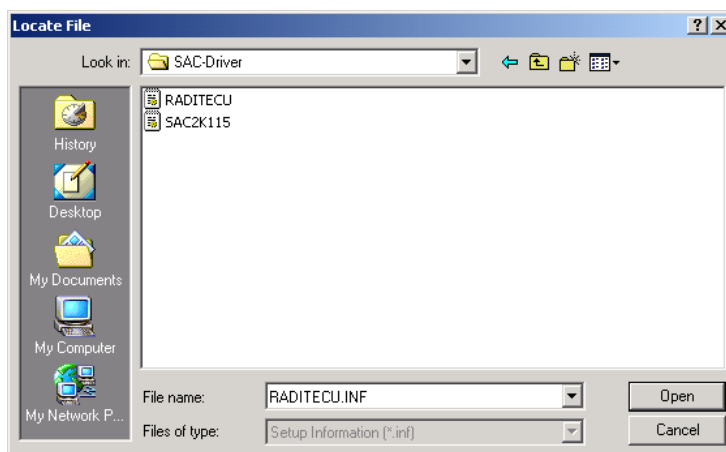
Select, “Have Disk...”



Navigate to the folder where you saved the driver files by clicking “Browse” to locate the path/location for the Installation files.

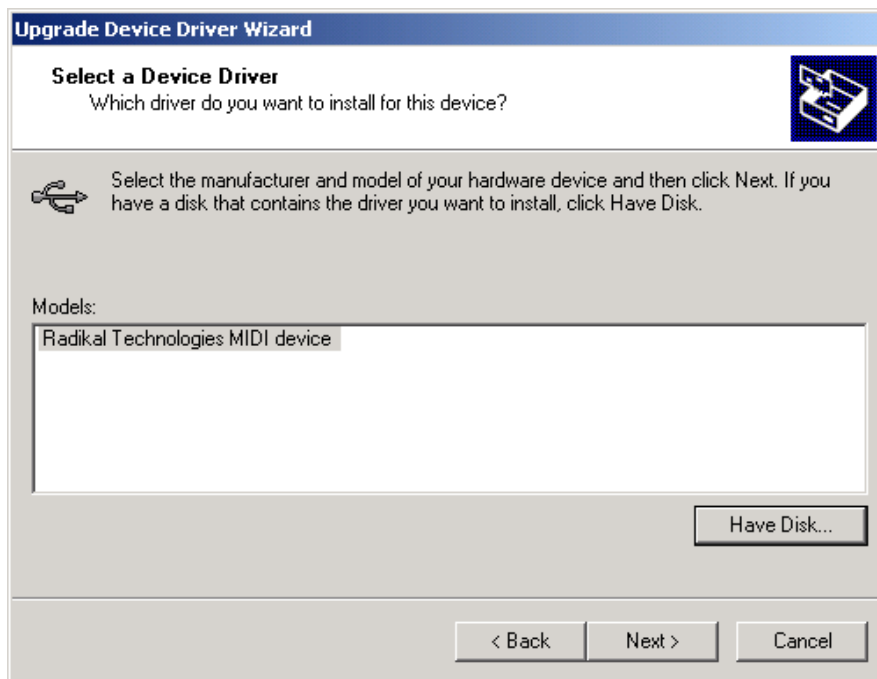


Once you have selected the correct folder, the Driver Info file “Raditecu.Inf” will be displayed. Confirm the selection with the Open button.



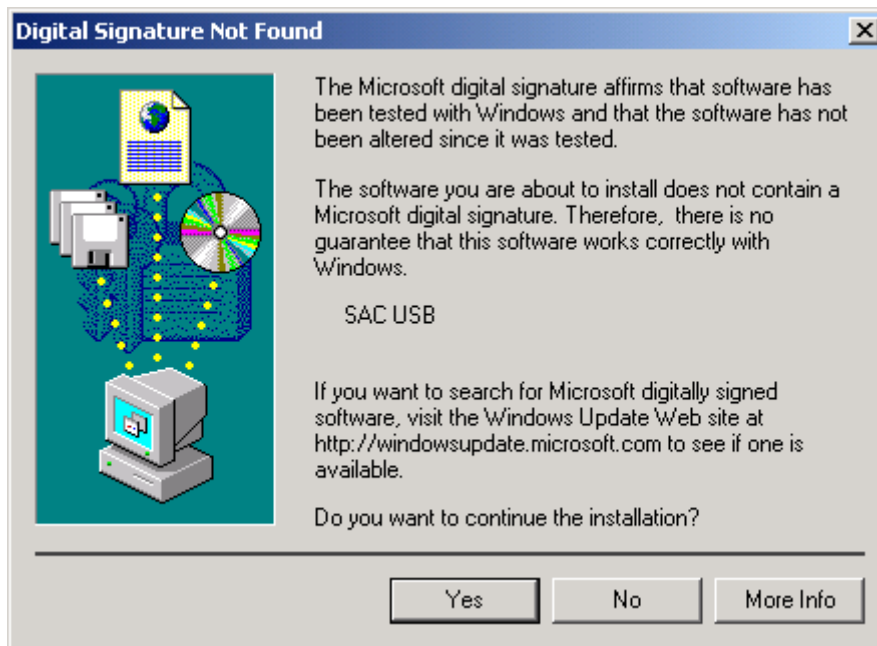


Windows is now ready to copy the files. Press “OK”



As an additional step, the Installation Wizard will once again will show the list of compatible hardware, which can be installed with this Driver. Click “Next”.

Windows will show a warning, that the Driver has not passed the Windows Digital Signature Test. This is normal, as the Driver has not been submitted to Microsoft for certification.



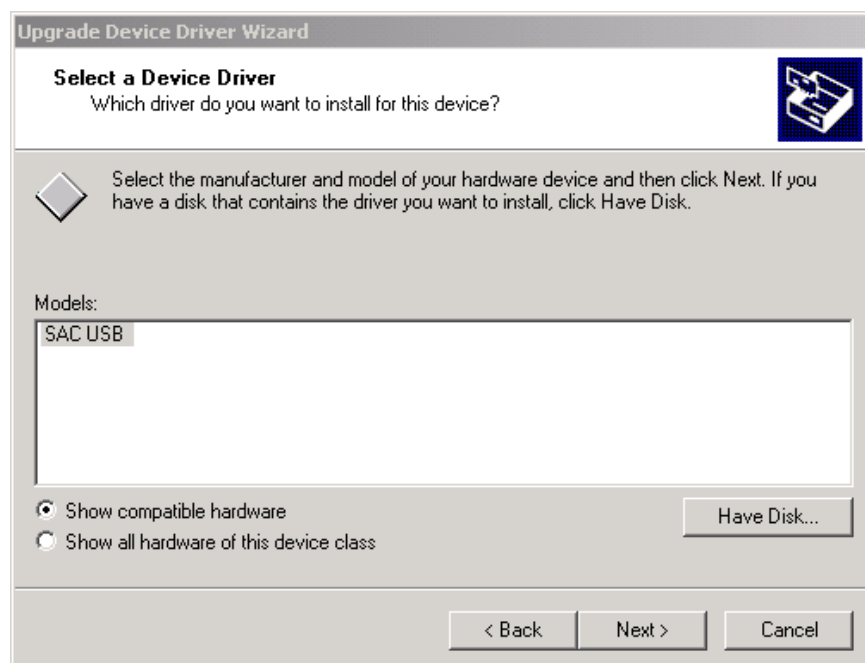
There is a good reason for that. We would like to provide you with new Driver Versions frequently, in order to provide you with the best, most up-to-date functionality for your SAC in the future. This would normally require a certification process for each version, generating a) unnecessary cost and b) a delay in issuing such new drivers and functions. The certification process would stand in the way of our ability to provide you with more improvements and expansions on a regular basis. We can however assure you, that our Drivers have been tested extensively in many environments, before we post them. Accordingly, skipping the certification process is to our Users advantage. There is no need for any concern whatsoever and you can comfortably click "Yes" to continue the installation.

The Wizard should now report that the Driver has been successfully installed. Confirm by clicking "Finish" to complete the installation.

This completes the first part of the Installation. As the SAC has multiple Driver levels, Windows will report later that a new Hardware has been detected:

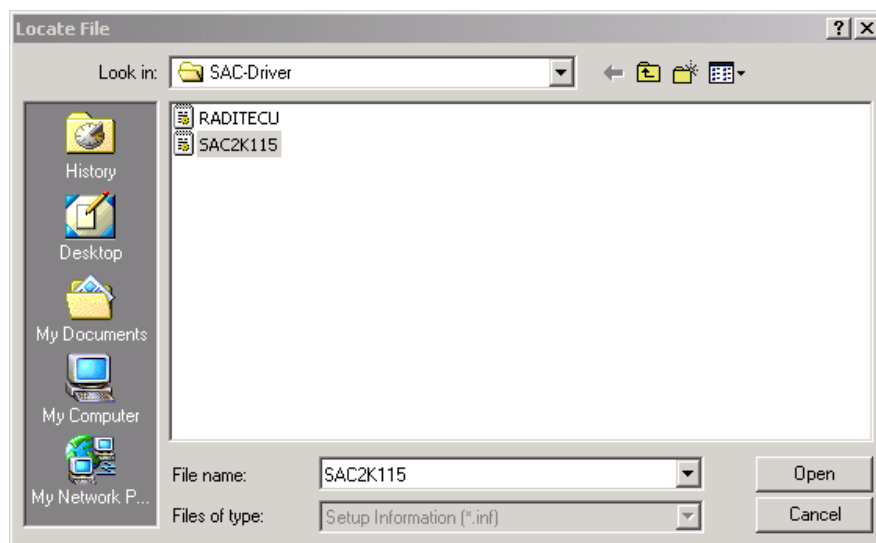


You can now proceed following the steps described in the first Driver Installation. Select, “Display a list of the known drivers...”

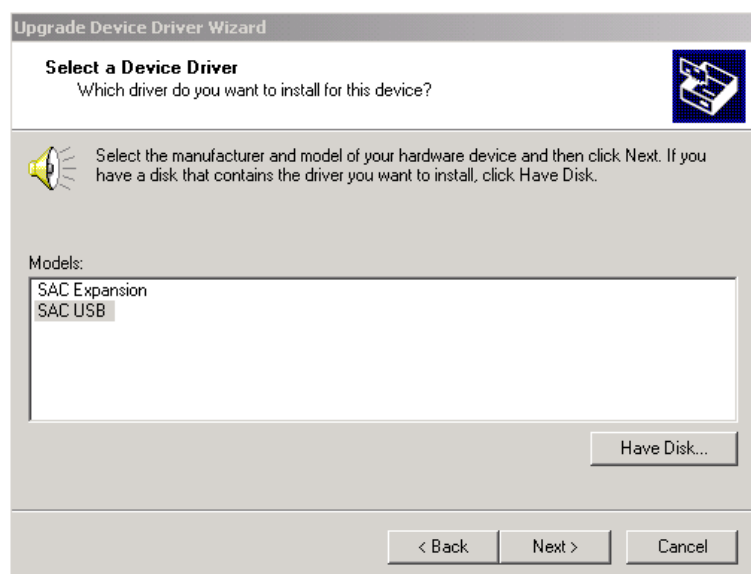




Once again locate the folder with the installation files in it and this time select the file, “SAC2K115”.

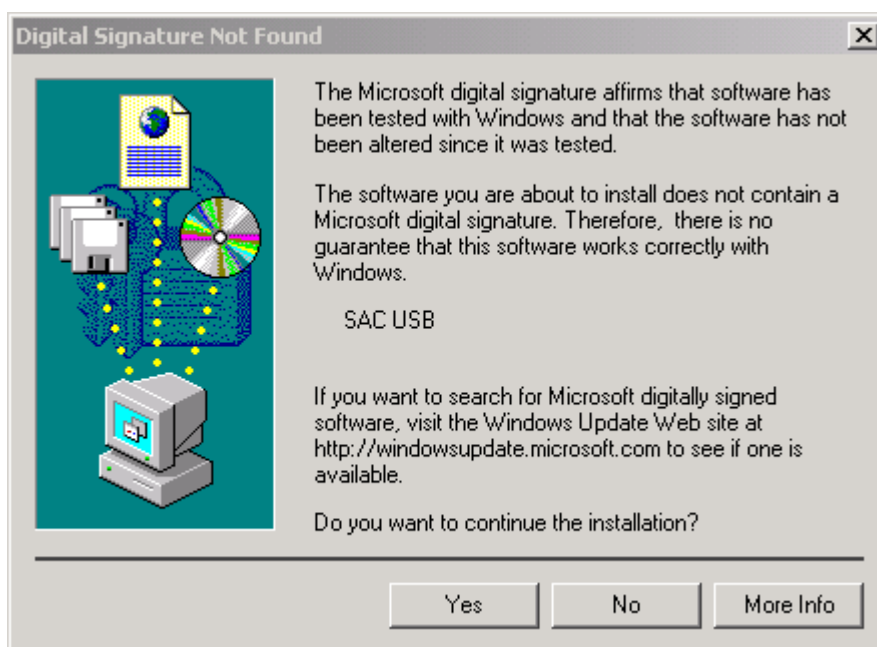


Click “OK”.

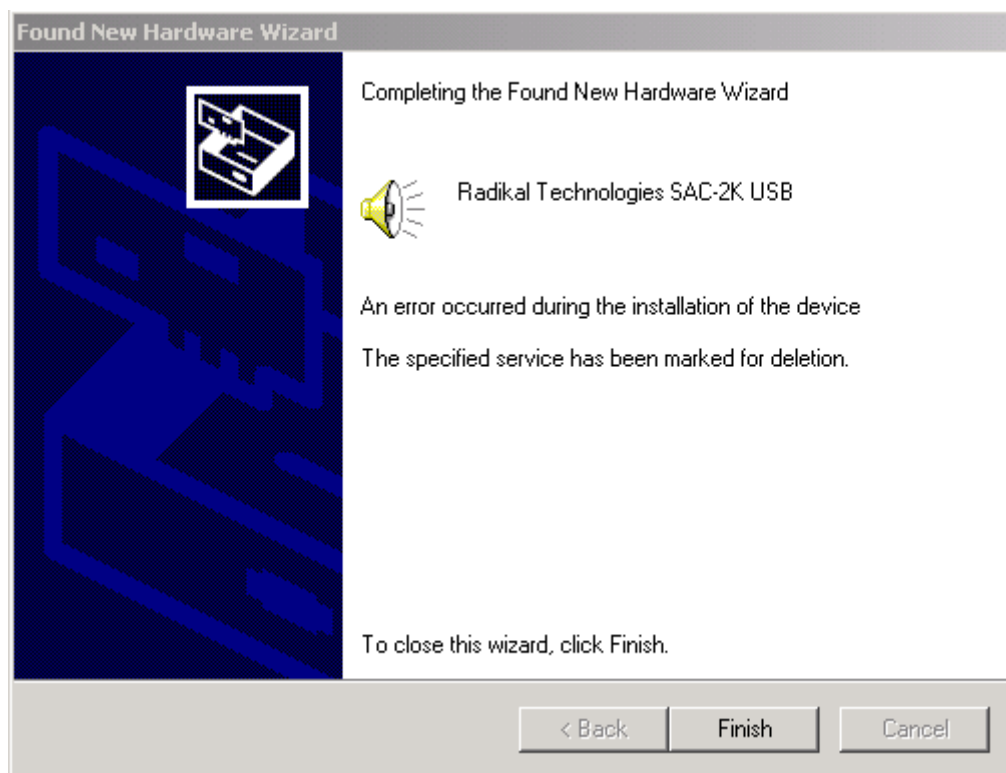




Click, “Next”. You will now see the following warning again:



Again, ignore the warning and click directly on “Yes” to continue the installation.



Click “Finish”. That’s it. You’re done!