ProteomeWorks™ Spot Cutter Pre-Installation Guide for PC Computers

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How to Determine if a Microsoft Windows PC Can Be Used to Operate the ProteomeWorks Spot Cutter

The ProteomeWorks Spot Cutter is operated using PDQuest software. The first step in the procedure below determines if the computer is capable of running the PDQuest software. The remaining three steps in the procedure determine if the computer is capable of operating the Spot Cutter hardware. All four steps must be satisfied completely or the computer cannot be used.

1. A personal computer must have the following characteristics to operate the ProteomeWorks Spot Cutter:

Processor	300 MMX or greater
Storage	3 GB Hard Disk Drive or greater
	CD-ROM Drive
RAM	64 MB or greater
Screen Resolution	1024 x 768, 256 colors or greater
Expansion Slot	1 PCI Expansion Slot
Communications Port	1 RS232 Serial Port (COM Port)
Operating System	Microsoft Windows 98, 98SE, NT, or 2000

    Consult the instruction manual provided by the computer manufacturer to determine the computer characteristics. Compare the characteristics of the computer to the above list. Any computer that does not meet these characteristics cannot be used.

2. Determine if there is a Serial Port available for the Spot Cutter. The serial port must be either COM1 or COM2.

    2.1 Consult the instruction manual provided by the computer manufacturer to determine the location of the Serial Port connector(s)

    2.2 Locate the Serial Port connector(s) on the computer. Either COM1 or COM2 must not have any cables connected, *i.e.* one must be available for use. If this is not the case then the computer cannot be used unless a device is disconnected from one Serial Port to make it available.

    2.3 If a device was disconnected from a Serial Port to make it available, please consult the instruction manual for the disconnected device to determine how to remove any software drivers that may have been installed to operate the device.

3. Determine if there is an Interrupt request (IRQ) available for the PCI camera card. The available IRQ must be 9, 10, or 11 and cannot be shared with other devices installed in the computer. Follow the appropriate procedure below to determine if an IRQ is available.
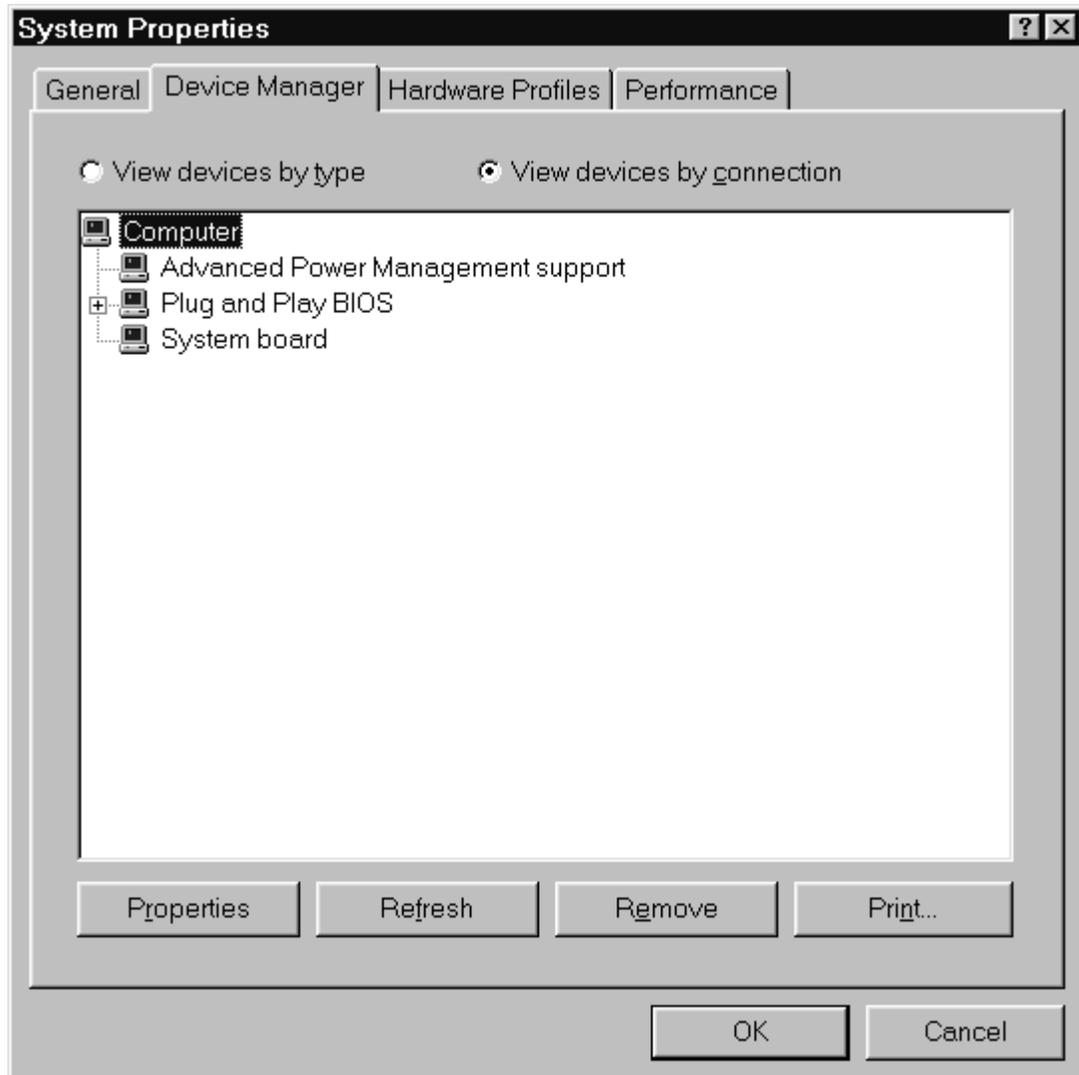
3.1 **Windows 98/98SE**

    3.1.1   Launch the "System" Control Panel Application from the "Start" menu using one of the following two methods:

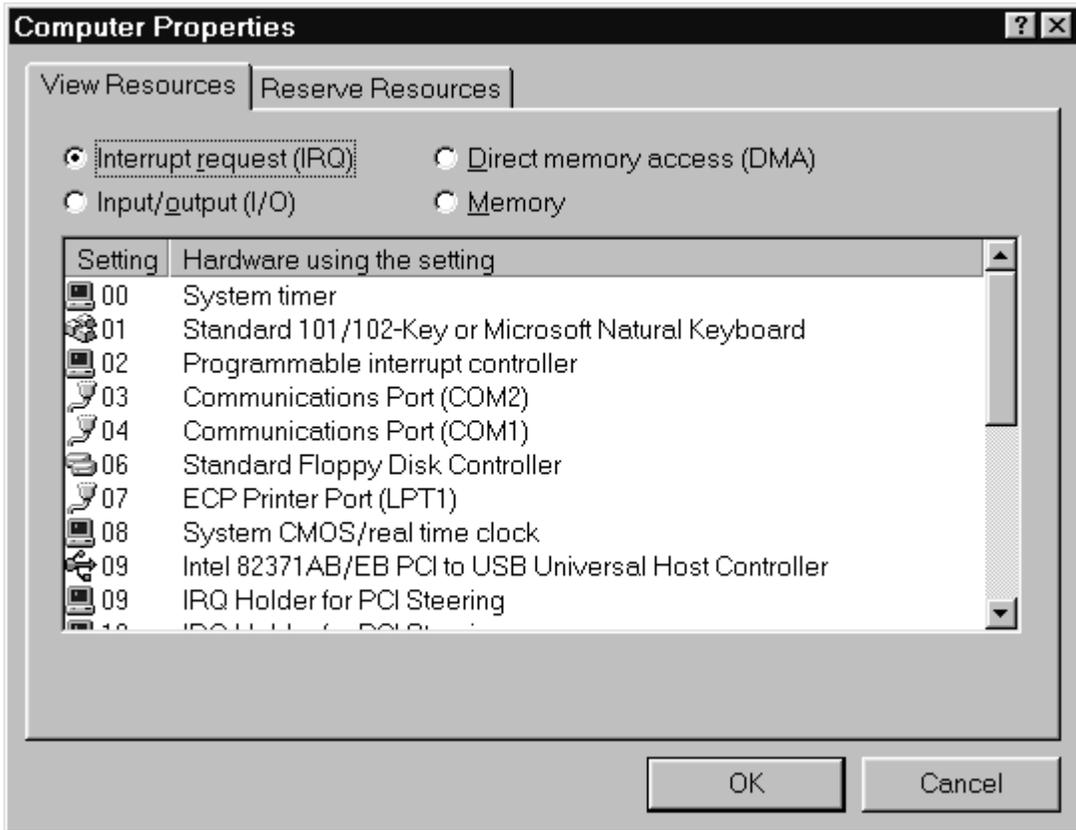   Start \Control Panel\System

    Start \Run = Sysdm.cpl

    3.1.2   Click on the "Device Manager" tab and select "Computer" at the top of the list.

3.1.3   Click on "Properties" button and select the "Interrupt request (IRQ)"
          option button.

3.1.4   Check the list for IRQ 09, IRQ 10, and IRQ 11. Please disregard any
          entries on the list with the description "IRQ Holder for PCI Steering. If
          all three of these interrupts are on the list with any other description
          then they are already in use and the computer cannot be used unless
          one or more devices are removed from the computer. **Please consult
          the instruction manual for any device that you wish to remove before
          attempting to remove the device.**

3.1.5   If a device was removed from the computer to make an IRQ available,
          please repeat the steps in sections 3.1.1 through 3.1.4 to verify that
          an IRQ was made available. Note that Windows 98/98SE is a "Plug
          and Play" operating system and the IRQ made available may not be
          the same one that the removed device had been using. As long as
          IRQ 9, 10, or 11 is made available the computer will be cap**able of
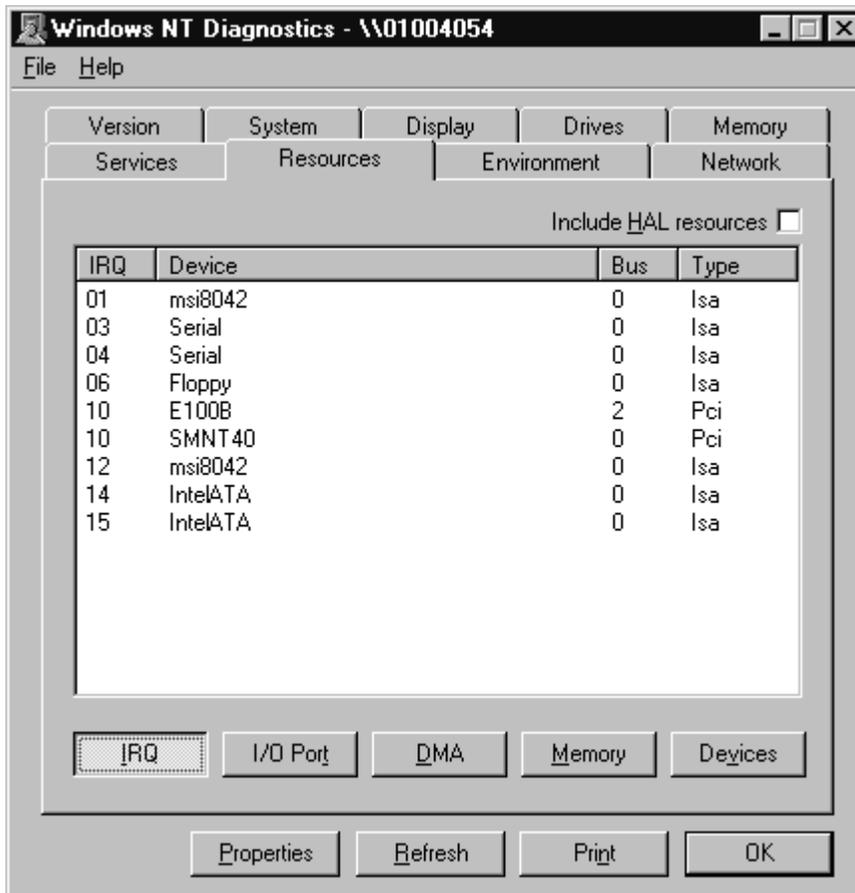   operating the ProteomeWorks Spot Cutter.**

3.2   **Windows NT 4.0**

3.2.1   Launch the Windows NT Diagnostics Utility using the "Start" menu using one of the following methods;

Start\Administrative Tools (Common)\Windows NT Diagnostics

Start\Run = Winmsd.exe

3.2.2   Click on the "Resources" tab and then click on the "IRQ" button.

3.2.3   Check the list for IRQ 09, IRQ 10, and IRQ 11. If all three of these interrupts are on the list then they are already in use and the computer cannot be used unless one or more devices are removed from the computer. Please consult the instruction manual for any device that you wish to remove before attempting to remove the device.

3.2.4   If a device was removed from the computer to make an IRQ available, consult the instruction manual for the disconnected device to remove any software drivers that may have been installed to operate the device. Windows NT is not a "Plug and Play" operating system and any software drivers that were installed with the device that was removed must be removed manually. After removing any software drivers, please repeat the steps in sections 3.2.1 through 3.2.3 to verify that an IRQ was actually made available.
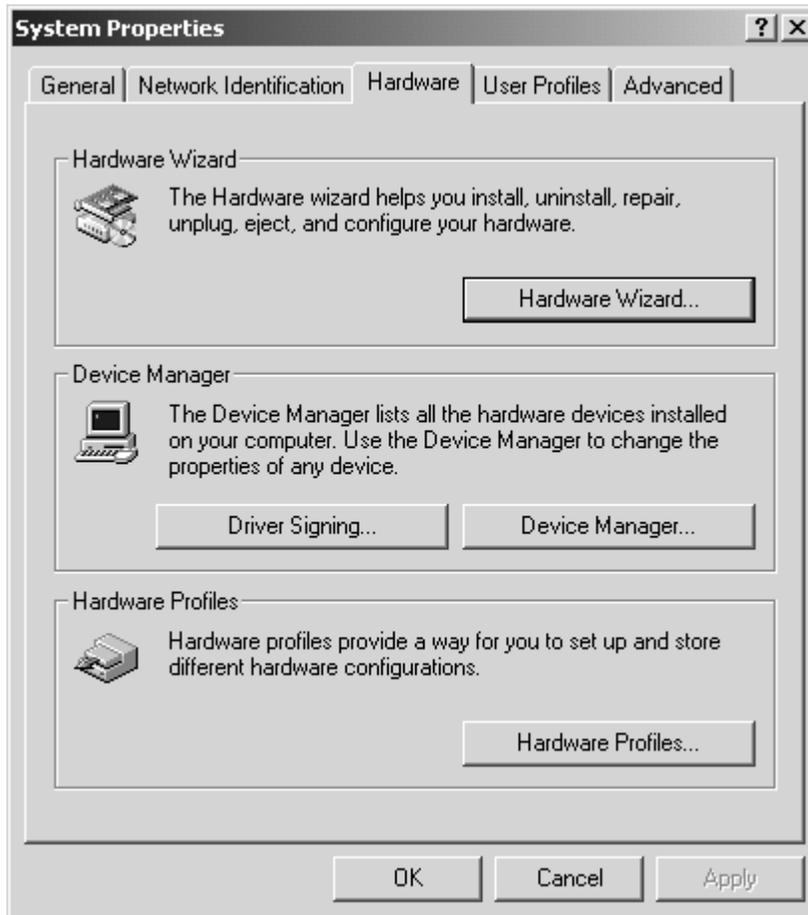
3.3   **Windows 2000**

3.3.1   Launch the "System" Control Panel Application from the "Start" menu using one of the following two methods:

Start \Control Panel\System

Start \Run = Sysdm.cpl

3.3.2   Click on the "Hardware" tab

3.3.3   Click on the "Device Manager" button, use the "View" menu, select "Resources by type", and click on the "+" box next to "Interrupt request (IRQ)" to expand this list.
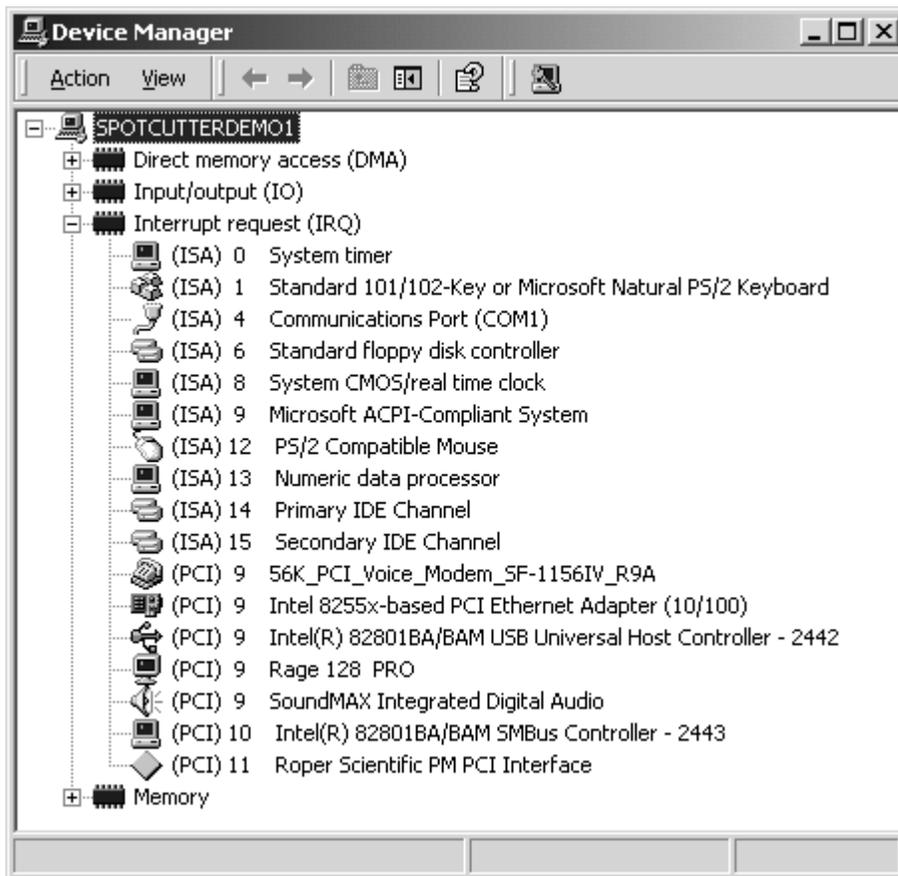
3.3.4   Check the list for IRQ 9, IRQ 10, and IRQ 11. If all three of these interrupts are on the list then they are already in use and the computer cannot be used unless one or more devices are removed from the computer. **Please consult the instruction manual for any device that you wish to remove before attempting to remove the device.** (Note in the example above that the entry for IRQ 11 is for the "Roper Scientific PM PCI Interface". This is the normal entry after the ProteomeWorks Spot Cutter has been successfully installed however the entry may appear in any of the three interrupts.)

3.3.5   If a device was removed from the computer to make an IRQ available, please repeat the steps in Sections 3.3.1 through 3.3.4 to verify that an IRQ was made available. Note that Windows 2000 is a "Plug and Play" operating system and the IRQ made available may not be the same one that the removed device had been using. As long as IRQ 9, 10, or 11 is made available the computer will be capable of operating the ProteomeWorks Spot Cutter.

4. Determine if there is an available PCI expansion slot available for the PCI camera card.

   4.1 Shut down the computer and turn off the power.

   4.2 Consult the instruction manual provided by the computer manufacturer to determine the location of the PCI expansion slots.

   4.3 Follow the computer manufacturer's instructions to open the case.

   4.4 Locate the PCI expansion slots within the computer. At least one PCI expansion must be empty, *i.e.* the slot is available. If this is not the case then the computer cannot be used unless one of the PCI expansion cards is removed from the computer to make a slot available. **Please consult the instruction manual for any device that you wish to remove before attempting to remove the device.**

   4.5 For Windows NT computers, if an PCI card was removed from the computer to make an expansion slot available, consult the instruction manual for the removed PCI card to remove any software drivers that may have been installed to operate the device. Windows NT is not a "Plug and Play" operating system and any software drivers that were installed with the device that was removed must be removed manually. Other versions of Windows are "Plug and Play" and software drivers for the card that was removed will be removed automatically.

If the computer successfully meets the criteria within all four sections above then it is capable of operating the ProteomeWorks Spot Cutter. Please refer to the Spot Cutter instruction manual for the installation procedure.

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