

Application Note

Using SBIG Parallel Port Cameras
on Laptops without Built in Parallel Ports
November 4, 2009

Introduction

Many new PC/Windows based laptop designs have excluded the legacy Parallel Ports that users have relied upon to connect to their older SBIG Parallel Port based cameras. This leaves SBIG users with the following options ranked in order of increasing cost:

- ***Buy a compatible Parallel Port adapter for the new laptop.***
- Try to find a used SBIG E2P adapter.¹
- Buy an older laptop, perhaps used, that contains a legacy Parallel Port.
- Have SBIG upgrade your camera from Parallel Port to USB based.
- Sell your camera and buy a new or used USB based camera.

We'll address the first option in this Application Note.

Our Parallel Port based cameras and more specifically the Windows drivers they depend on do direct access to the Parallel Port registers. This means USB to Parallel Port adapters that are commonly found will not work with our cameras and thus you must find a plug-in card that emulates a legacy Parallel Port.

We have found and tested two compatible cards for laptop use depending on whether your laptop supports the full size **PCMCIA** cards or the narrower **Express Card**. If you're in the market for a new laptop make sure it supports one of these two standards **and has 32 Bit Windows** installed on it as our Parallel Port drivers are not compatible with and will not run under 64 bit versions of Windows.

Full Size PCMCIA Slot

For the full size PCMCIA slots we recommend the **Quatech SPP-100** LPT port card. It can be ordered online from the Quatech web site www.quatech.com and costs \$129.

Express Card Slot

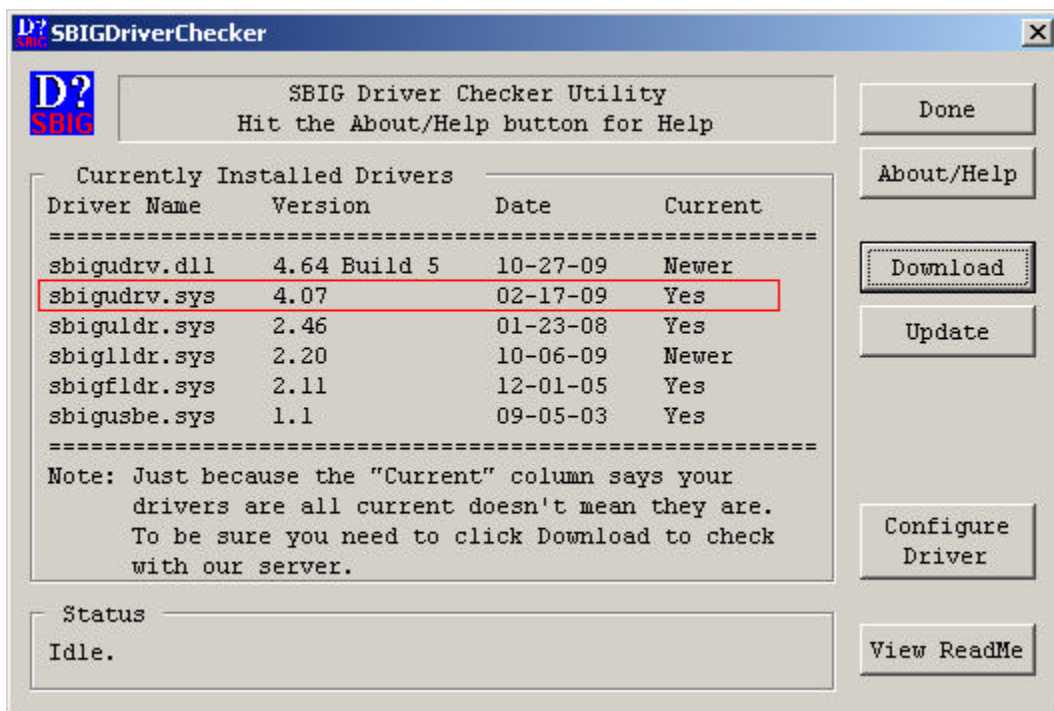
For the Express Card slots we recommend the **Best Connectivity SD-EXP50021** card which can be purchased from Newegg (www.newegg.com) for \$30. Strangely enough one of our customers bought the Quatech Express version of the PCMCIA card (model SPPXP-100) and reported it did not work so stick with the Best Connectivity card. It's cheaper anyway so you win on that account.

Installation

Follow these instructions to install the Parallel Port card and link it to your SBIG camera:

¹ SBIG no longer manufactures the E2P adapter that allowed you to connect your Parallel Port based camera to Ethernet.

1. Follow the manufacture's recommended software and hardware installation procedures to install the card and the basic Windows LPT drivers for the card. ***This is a crucial step that without proper installation the camera will not be recognized.***
2. Reboot the camera, making sure the Parallel Port card is installed in the computer. At this point you should use the **Device Manager** to see that the newly installed LPT port is present and the tell the Parallel Port card to emulate LPT1 via the **Port Settings** tab of the **LPT Port Properties** dialog.
3. Download the latest 32 bit Driver Checker Installer from the Software Downloads page of the SBIG website (www.sbig.com). Make sure you get the 32 bit Driver Checker, not the 64-bit Driver Checker.
4. Install the Driver Checker and run it.
5. Answer the question as to whether your computer has an Internet Connection or not.
6. Click the Update button to update the SBIG drivers onto your system.
7. Reboot the computer one more time. Run the Driver Checker again, clicking **Cancel** at the Internet Connectivity question and verify that the SBIG LPT driver (sbigudrv.sys) is functioning properly as shown below. If there's a *2 next to the sbigudrv.sys in the Current column then the SBIG Parallel Port driver did not start and your camera won't be recognized:



8. Run CCDOps then use the **Graphics/Comm Setup** command in the **Misc** menu to select the **LPT** port as the Interface and **LPT1** as the Parallel Port.
9. Establish a link to the camera with the **Establish Link** command in the **Camera** menu.
10. Finally, on subsequent nights where you plan on using the camera, make sure the Parallel Port card is installed in the computer before you power up the computer or else the SBIG Parallel Port Driver won't automatically start and your camera won't be recognized.