

Installation Instructions

PCI-Express HD Frame Grabber



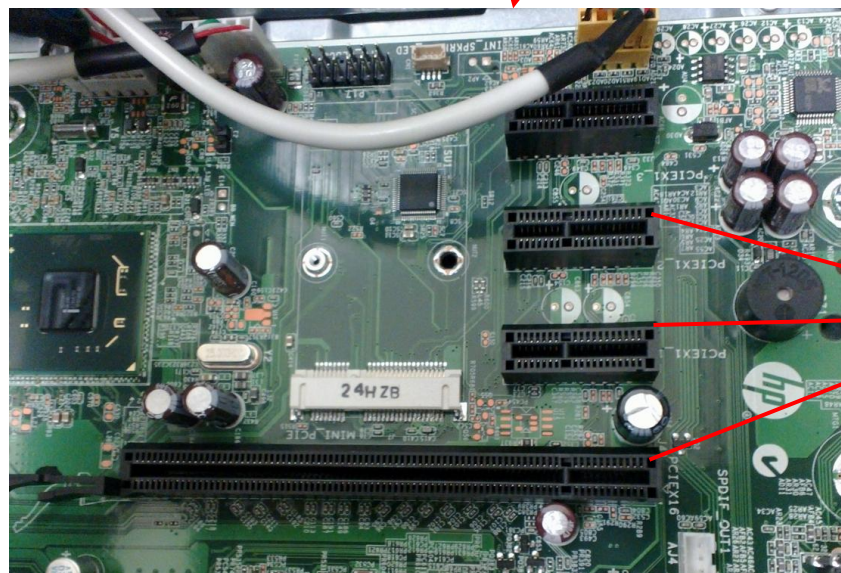
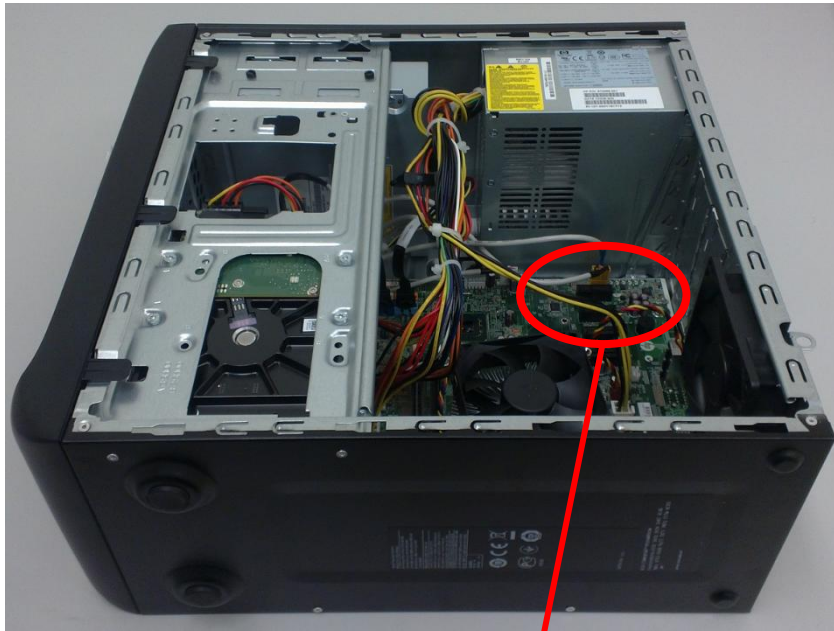
This manual describes how to install PCI Express HD Frame Grabber

Before you start

- Do not install any driver software before installing the frame grabber hardware to the PC.
- Make sure that your PC meets the frame grabber system requirements.
- “Administrator Account” or “Administrator privileges” are required to install the software.
- It is essential to run the latest OptiFix and Frame grabber drivers. Please check www.optilia.eu for latest stable software versions before installing.

Mounting PCI Frame Grabber to the PC

1. Remove the power and all other cables from back of the PC.
2. Remove the side cover of the PC and put on a table as it shown below to gain access to PCIe slot and locate the slots



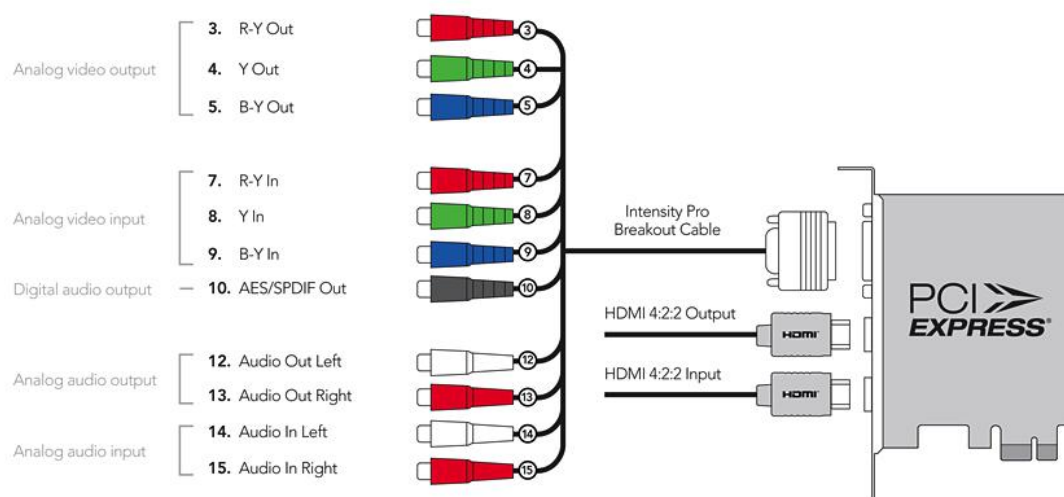
3. It is recommended to use PCIe-16x (long PCIe slot) slot for the best performance. If this slot is occupied use the available one closer to the bottom of the PC.
4. Remove the cover bracket for the slot and insert the PCI-Express frame grabber as shown below.



5. Put back the cover and cables to the PC.
6. Connect the HD Camera to your frame grabber as described in next section and start the PC.

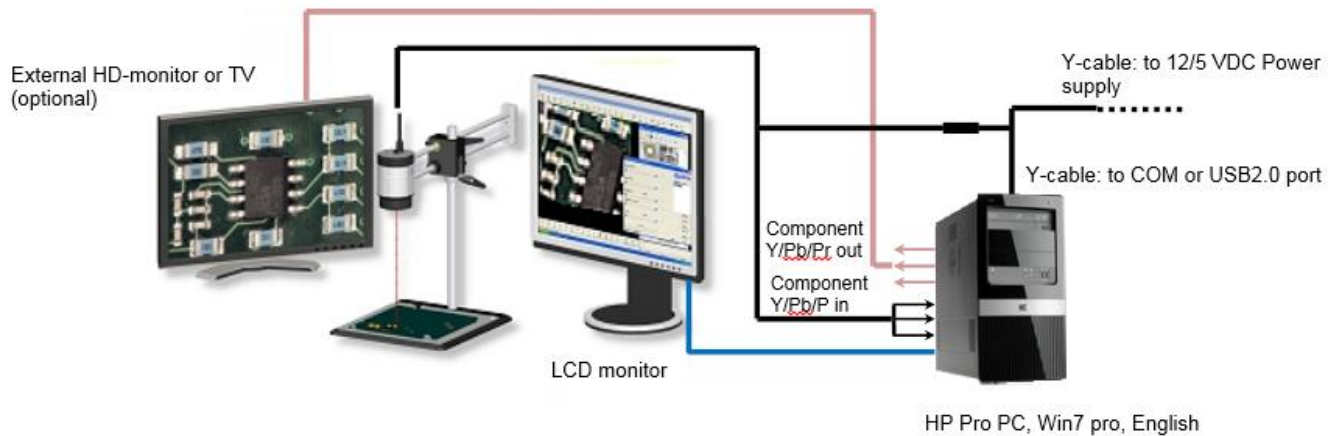
Connecting HD camera to frame grabber

7. Connect the supplied break-out cable to the frame grabber. The connection diagram of the break out cable is shown below.



8. Connect component Y/Pb/Pr video cables (green, blue, red) of the HD camera to the Y/Pb/Pr (8, 9, and 7) input of the frame grabber break-out cable respectively.
9. Make sure that HD camera is connected to the power and switched on.
10. If you want to send the live image to external monitor while working with OptiPx, connect HDMI output or Y/Pb/Pr output of the frame grabber to external monitor. Cables for direct monitoring are not provided with the frame grabber!
11. Detailed connection scheme is displayed on next page.

Connection scheme for HD Cameras with PC, PCI-e frame grabber and extra HD-monitor



Blue: VGA or DVI monitor cable (use to be provided together with LCD monitor)

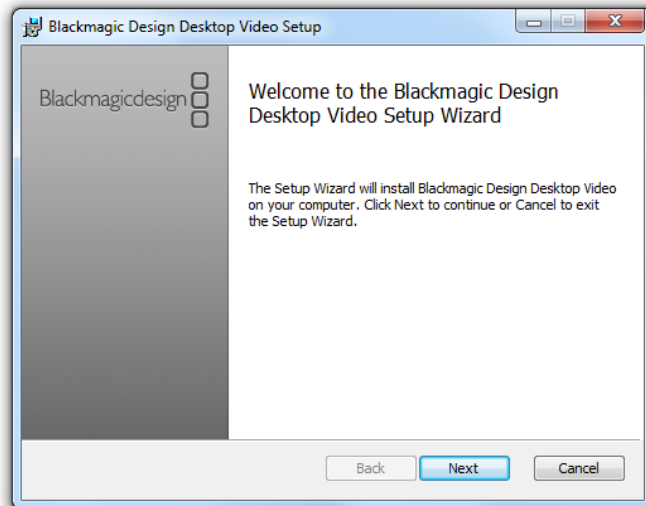
Black: W10x-HD or W20x-HD cable.

- Attach Y-cable and connect to Power Supply and one free USB port of computer.
- Attach RCA Component video connectors to Component inputs (Y/Pb/Pr) of the PCI-e Frame Grabber.

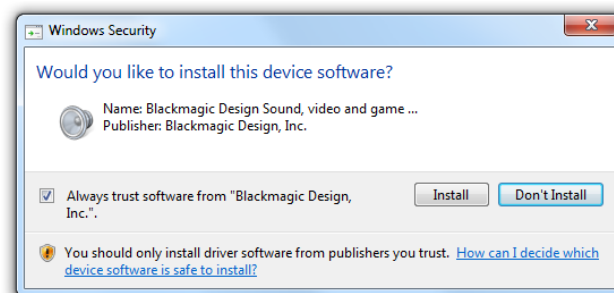
Red (optional): Component video cable. Connect Component video outputs of the PCI-e frame grabber to an external HD-monitor using a HDMI / RCA male-male (not included). This connection is useful when you wish to monitor an analogue live picture simultaneously with the digital PC picture.

Installing the software and drivers

12. Install **DesktopVideo_9.6.x.msi** under Intensity Pro folder from the supplied CD. Click **Next** and follow the on screen instructions.



13. The drivers will now be installed on your system. A number of alerts will appear: *“Do you want to allow the following program to install software on this computer?” “Would you like to install this device software?”* Click **Yes/Install** to continue



14. Restart your after installing the drivers have finalised

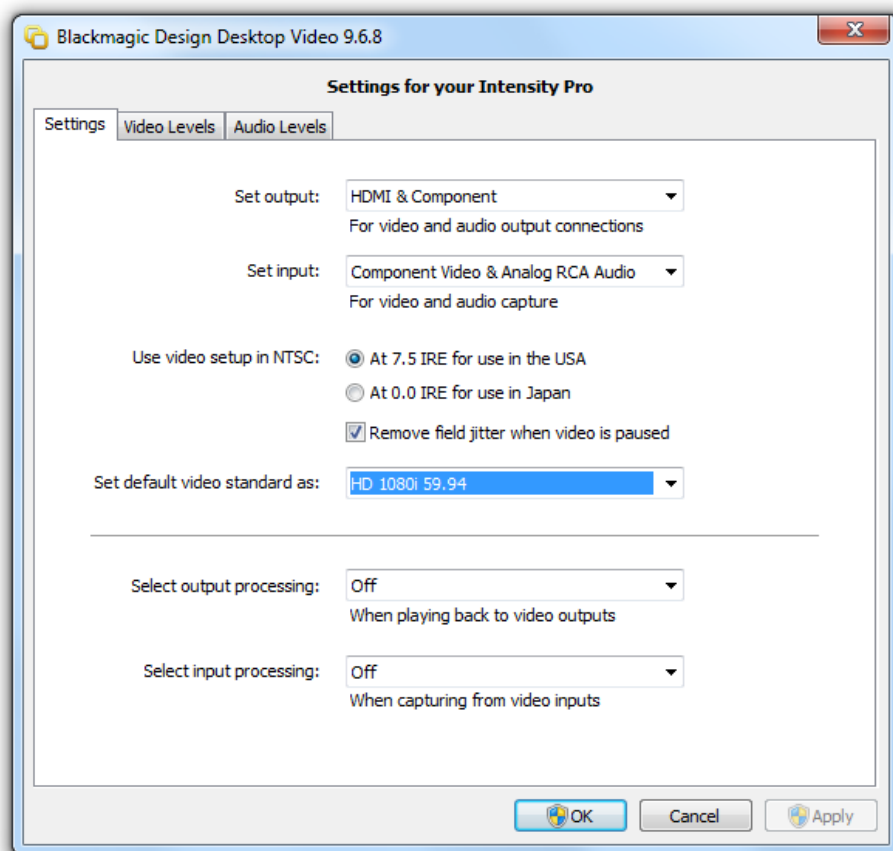
Configuring the frame grabber

9. Open “Black Magic Design Control Panel” from the Windows Control Panel.
10. To frame grabber to function properly, the input format of the frame grabber and output format of the HD camera must be the same. Default output format of Optilia HD Cameras:

- **HD 1080i 59.94 for W10x-HD**
- **HD 1080i 50 for W20x-HD (EU),**
- **HD 1080i 59.94 for W20x-HD (US),**
- **HD 720p 50 for M20x-HD (EU)**
- **HD 720p 60 for M20x-HD (US)**

To check the output format of the HD camera or changing the output format, please refer to the “*Optilia HD Camera Control Software Manual*”.


11. **Set Output:** HDMI & Component
12. **Set Input :** Component Video & Analog RCA Audio
13. **Set Default Video Standard as :** Same output format as the HD Camera

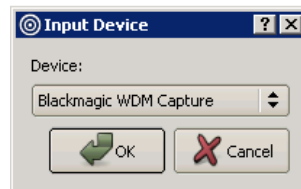


14. Click Apply and OK.


Selecting the frame grabber in OptiPix

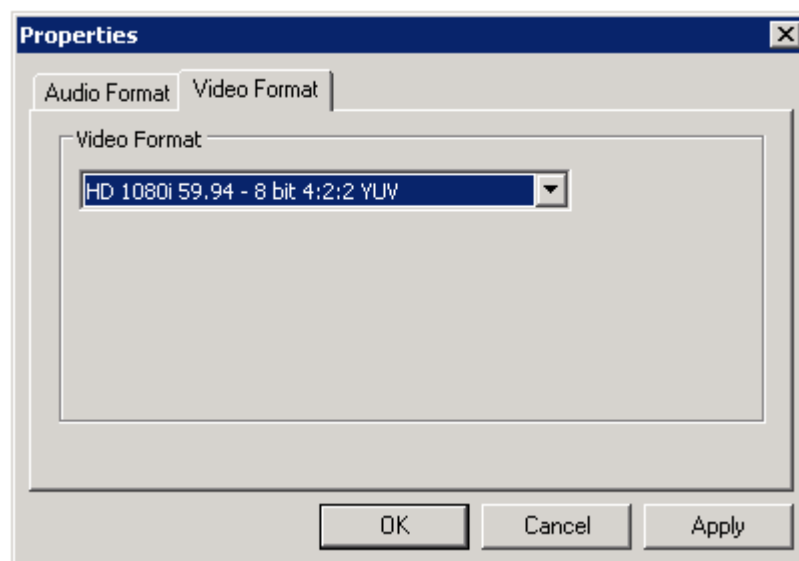
15. Run OptiPix

16. Click Device->Input Device or  icon and select **"Blackmagic WDM Capture"**. The live image should be visible in OptiPix.



The input format of the frame grabber can also be changed in OptiPix if necessary.

- Click Device->Device Properties or  icon.
- Click Video Format Tab
- Select the input format (Must be same output format of the HD Camera!)
- Click Apply and OK.



- Press F12 on your keyboard or select **"Blackmagic WDM Capture"** from the Device->Input Device again to restart the camera. The live image should be visible in OptiPix.

Common issues and solutions

Black Magic Control panel is greyed out and settings cannot be changed.

This indicates that, drivers couldn't install correctly. Uninstall the current drivers and re-install. After re-installing the driver if the problem continues, plug the PCI frame grabber to next available PCIe port. If Black Magic Control panel is still greyed out please contact your local Optilia representative.

The all settings are correct. However there is still no image in the OptiPix.

Try to install the PCI frame grabber to another PCIe slot. It is not recommend to use PCIe 1x slot. If any other PCI hardware or graphics card installed, please make sure that the PC has sufficient power supply to drive all required power to the all installed hardware.

Live images freezes frequently in the OptiPix.

Disable any power saving options and run the pc on full performance options.

Getting Help

Please check first F.A.Q and Support Documents pages in Optilia homepage. It is recommended to go through the following checklist before contacting your local Optilia representative.

- ✓ Latest OptiPix and HD Frame grabber drivers are installed (Available on www.optilia.eu)
- ✓ HD camera is switched on and cables are connected correctly
- ✓ Frame grabber input source is correct in Black Magic Control Panel
- ✓ Frame grabber input format is same with the HD Camera, in Black Magic Control Panel
- ✓ Black Magic WDM is selected as input in OptiPix

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