Getting Started with NI-IMAQ™ for IEEE 1394 Cameras

Version 1.5

NI-IMAQ for IEEE 1394 Cameras provides driver support for Windows 2000/XP/Me/98 as well as LabVIEW Real-Time targets. The following sections describe how to start using NI-IMAQ for IEEE 1394 Cameras.

Windows 2000/XP/Me/98

If you are using Windows 2000/XP/Me/98, complete the following steps to get started using NI-IMAQ for IEEE 1394 Cameras:

1. Disconnect all IEEE 1394 cameras.
2. Install the NI-IMAQ for IEEE 1394 Cameras software.
3. Connect your camera.
4. Run Measurement & Automation Explorer (MAX).

   a. Double-click the MAX icon on your desktop. You can use MAX to modify camera properties. Once you have saved these properties, they become your default settings for all NI-IMAQ for IEEE 1394 Cameras or IMAQ Vision applications.

   b. Click the plus sign next to Devices and Interfaces to display a list of your installed IEEE 1394 IMAQ devices.

   c. If your camera does not show up as a NI-IMAQ IEEE 1394 digital camera, switch the driver by right-clicking the camera and selecting **Driver»NI-IMAQ IEEE 1394 Digital Camera**, as shown in Figure 1.

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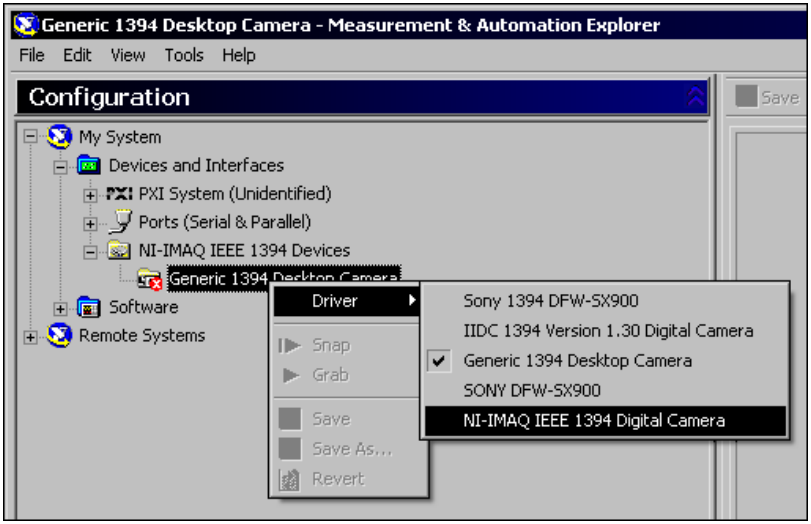

Figure 1. Switching the Camera Driver

d. Select the camera and view or modify the camera features from the **Properties Panel** below the image viewer, as shown in Figure 2.

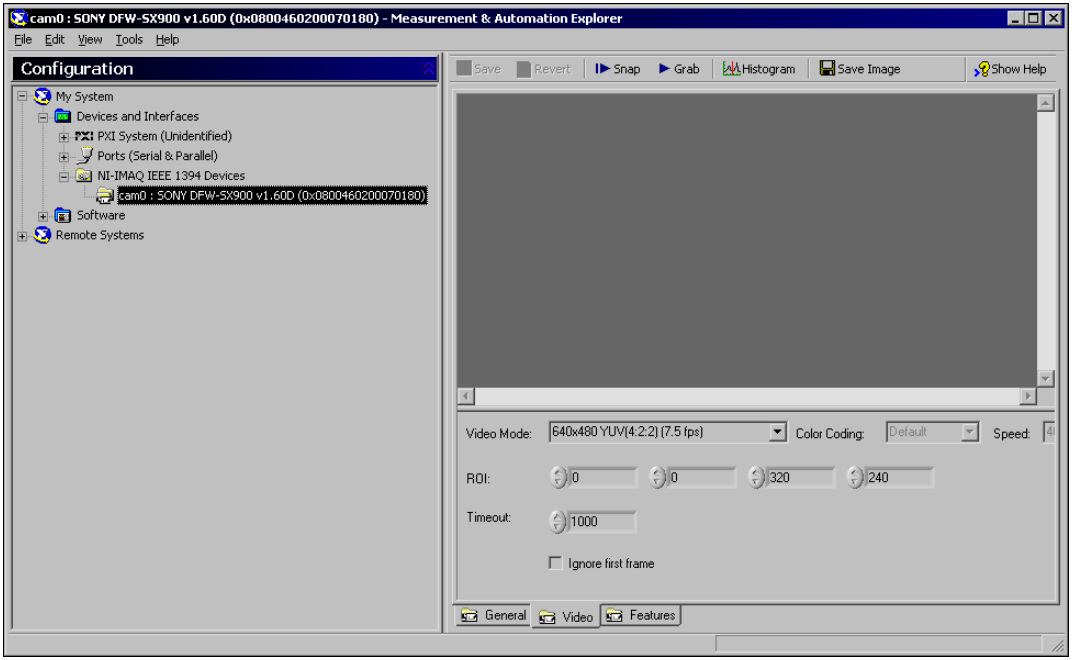

Figure 2. Setting the Camera Properties

Tip Click **Show Help** to display the help window to the right side of the image viewer. Move your mouse over the properties to view context-sensitive help in the bottom half of the help window.

LabVIEW Real-Time

If you are using a Windows development machine and a LabVIEW Real-Time (RT) target, complete the following steps to get started using NI-IMAQ for IEEE 1394 Cameras:

1. Install the NI-IMAQ for IEEE 1394 Cameras software on your Windows development machine.
2. Run Measurement & Automation Explorer (MAX).

   a. Double-click the MAX icon on your desktop. You can use MAX to modify camera properties. Once you have saved these properties, they become your default settings for all NI-IMAQ for IEEE 1394 Cameras or IMAQ Vision applications.

   b. Click the plus sign next to Remote Systems. Your LabVIEW RT target should appear in the list if the target is connected to the same subnet as your host machine. Configure your network settings by selecting **Help»Remote Systems** and following the instructions found in the *MAX Remote Systems Help*.

   c. From the Software tab, click **Install Software**. Select NI-IMAQ for IEEE 1394 RT and any other software you would like to install on the target machine, as shown in Figure 3. Click **OK**.

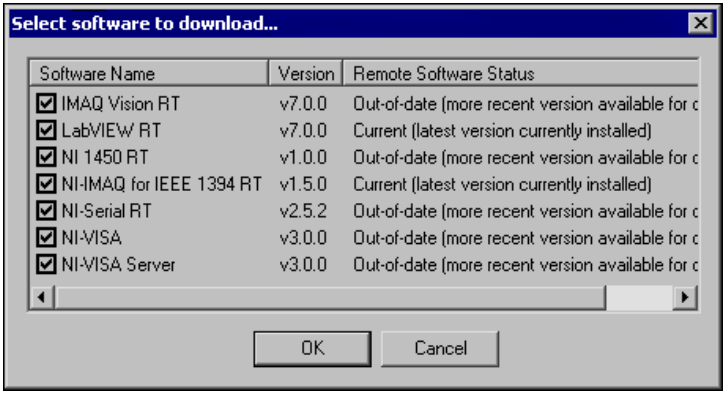

Figure 3. Selecting Software for the Target Machine

   d. MAX downloads the software to the target machine and prompts you to restart the remote device. Click **OK**.

   e. Connect your camera to your remote system.

f. Restart your remote system and wait for the system to reconnect.

g. Press **F5** to refresh the MAX configuration tree. Your IEEE 1394 camera should be listed in the Remote Systems tree, as shown in Figure 4.

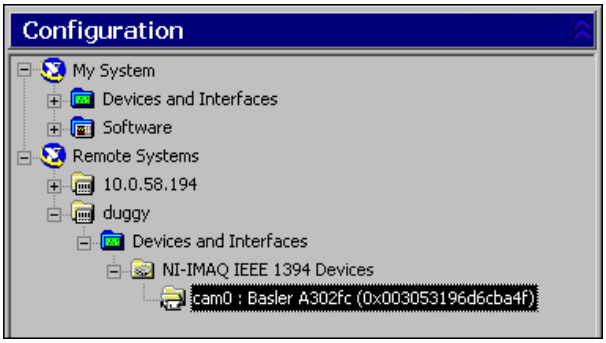

Figure 4. Viewing the Camera on the Remote System

Acquire an Image

1. Click **Snap** on the toolbar to acquire your first image.

2. Click **Grab** on the toolbar to acquire images continuously. This type of acquisition allows you to focus your camera.

3. Click **Save Image** on the toolbar to save the image.

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