

PVCAM® Version 2.7.5.7 Beta Release Notes

Release Date: October 3, 2005

Introduction

PVCAM® 2.7.5.7 from Photometrics® is the newest release of its camera control libraries and drivers. This release builds on the performance of PVCAM 2.7.x where control of our 1394-based cameras was introduced along side our long line of PCI-based cameras. This particular release also resolves an existing issue with RSConfig. **No API changes have been made since the last released version of PVCAM.**

Enhanced Performance

This newest release of PVCAM has built on previous versions to further optimize the performance with respect to camera control and image acquisition. Specifically, PVCAM has been modified to shorten the frame-to-frame setup/start times of both 1394 and PCI cameras. PVCAM will now examine setup commands and only send commands to the camera if they have changed from the previous configuration.

New RSConfig

The installer contains an improved RSConfig (v3.1.1.7), which corrects an issue encountered where all cameras after the first were configured using Port = 0 in the *pvcam.ini* file. This prevented end users from using multiple cameras. For more information on this specific problem, please see http://www.photomet.com/support/downloads/win_rsconfig.php

The new RSConfig will also allow 1394 camera names to be persistent even if the camera has been removed.

Requirements and Usage Notes

- **OS Versions Supported** – You must be running Windows® XP SP2 or Windows 2000 SP4 or greater.
- **Installation Requirement** – You must uninstall all previous versions of PVCAM.
- **Download** - Please see the instructions at http://www.photomet.com/rn_pvcam.html where you can download PVCAM 2.7.5.7.
- **PAE Flag** – Must not be turned on in BOOT.INI. Some computers come with this setting turned on by default, so user must check for this. Any 64-bit capable computer will be affected (Opteron, AMD64, Intel EMT64).
- **NoExecute Flag** – Must be set to “AlwaysOff” or “OptIn”.
- **Speed Table** – When working with 1394 cameras, the program must either build a speed table or at least query the current speed. See the speedtable.cpp example in the PVCAM SDK for more information.

- **1394 Bus Restrictions** – Photometrics IEEE-1394 enabled cameras have an extremely high transfer rate. To support this high transfer rate, the maximum amount of throughput possible must be available on the 1394 bus. This condition limits the user to one open camera on the bus. However, if you have two 1394 host adapters, you can put one camera on each card. Also, if you are planning on using other 1394 peripherals, such as external hard drives and/or optical drives, you must put them on a separate 1394 host adapter.
- **1394 Bus Resets** – You must avoid plugging anything into or unplugging anything from the bus while talking to the camera, specifically when acquiring.