

LaserLinc, Inc. 777 Zapata Dr. Fairborn, OH 45324 Phone: 937-318-2440 Toll-Free: 888-707-4852 Fax: 937-318-2445

## Quick Start Guide Sheet 15 (Sep-2013) Installing a **PCIe** I/O Card & **PTRBe** Box in a Total Vu System

Before proceeding with this quick start sheet, you should already have completed all previous (lower numbered) quick start sheets. This Quick Start Guide presents the installation of a PCIe DIO24s-CTR12 I/O card in a Total Vu measurement system.

Step 1: Complete Quick Start Guide Sheet 1,"Installing Total Vu Software" or install PCIe drivers separately. If adding a card to an existing system determine if you have a 32 or 64 bit operating system. Download the setup file from URL below and execute the appropriate "PCIeDriverSetupxx.exe". (xx = 32 or 64). If the Total Vu version 5.13.8.13 or greater was installed, the drivers are already loaded.

http://public.laserlinc.com/PCIeDriverSetup.zip

Step 2: Power down the computer, unplug it from the wall and remove the side panel to access the motherboard.

Step 3: Choose any open PCIe slot. Remove the slot cover on the back panel of the computer for the slot chosen.

Step 4: Feed ribbon cables from PTRBe Box one-at-a-time thru PC back panel cover. 'Nest' cables as shown. Nesting of cables is required prior to connecting to PCIe card.



## Step 5: Remove strain-relief from PCIe card



Step 6: Prior to inserting PCIe card into slot, plug ribbon cable(s) P2, P3, P4 into same connectors on PCIe card (P3 & P4 are optional depending on your configuration).





LaserLinc, Inc. 777 Zapata Dr. Fairborn, OH 45324 Phone: 937-318-2440 Toll-Free: 888-707-4852 Fax: 937-318-2445 Step 7: Install Strain-relief as shown with foam piece on bottom



Step 8: Install the Add-on Card in the slot, seating it fully in the slot on the motherboard and securing it to the back panel with a screw (See Figure 1). Some gentle force may be required, but if there is significant resistance, remove the card and look for obstructions. The card should gently snap into place. In most cases, you should use the screw that previously held the back panel slot cover to secure the card in place. In some PC chassis, there is no screw - another mechanism (e.g. a snap down bar securing all cards) will secure the card.



Figure 1. Final Installation



LaserLinc, Inc. 777 Zapata Dr. Fairborn, OH 45324 Phone: 937-318-2440 Toll-Free: 888-707-4852 Fax: 937-318-2445 Step 9: Reinstall the side cover on the computer and plug into the power source. Boot the PC.

Step 10: Installation of PCIe card is Plug-N-Play, no further action should be required. Check *Device Manager* entry if unsure.

Step 11: If not already present, you may need to enable additional Total Vu options such as DIO or Control. Please contact LaserLinc tech support.

Step 12: Execute Total Vu. Enter *Full Config* and ensure the PCIe-CTR12-0 icon is present.



Total Vu Full Config

Windows Device Manager Entry

Step 13: You may now configure Total Vu for alarms, digital inputs, encoder inputs or control loops. The Total Vu configuration wizard will show the hardware connections



Relay Interface



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