

**PQA6UP Option VID Upgrade
PQA600 Picture Quality Analyzer
Instructions**

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Service safety summary

Only qualified personnel should perform service procedures. Read this *Service Safety Summary* before performing any service procedures.

Do not service alone. Do not perform internal service or adjustments of this product unless another person capable of rendering first aid and resuscitation is present.

Disconnect power. To avoid electric shock, switch off the instrument power, then disconnect the power cord from the mains power.

Use care when servicing with power on. Dangerous voltages or currents may exist in this product. Disconnect power, remove battery (if applicable), and disconnect test leads before removing protective panels, soldering, or replacing components.

To avoid electric shock, do not touch exposed connections.

Kit description

This kit describes how to install Option VID into an existing PQA600 Picture Quality Analyzer. Option VID adds an SDI/HDMI video interface for capturing/generating SD/HD/3G SDI and HDCP-compliant HDMI video to the PQA600 analyzer.

Products

PQA600. All serial numbers.

Kit parts list

Quantity	Part number	Description
1 ea	020-3130-XX	SOFTWARE DISC; APPLICATION SOFTWARE, PQA600A
1 ea	119-8038-XX	AJA VIDEO CAPTURE CARD; HDMI, SDI INPUTS AND OUTPUTS, INCLUDES HDMI TO HDMI MINI CABLE (2M)
1 ea	071-2181-xx	MANUAL, TECH; ND-NC; TEKTRONIX SUPPLEMENTAL INFORMATION SHEET FOR THE PEOPLES REPUBLIC OF CHINA; CHINA ROHS
1 ea	071-3123-00	MANUAL, TECH; PQA6UP OPTION VID UPGRADE INSTALLATION INSTRUCTIONS

Installation instructions

Minimum tool and equipment list

The cabinet of the PQA600 analyzer does not require tools to install new cards in the instrument. However, the installation of the SDI/HDMI video interface card must be performed at a static-controlled workstation to protect the instrument from damage.

These instructions are for qualified service personnel who are familiar with servicing the product. If you need further details for disassembling or reassembling the product, please contact your closest Tektronix Service Center.

Install the SDI/HDMI video interface card



WARNING. To avoid electric shock, switch off the PC power, then disconnect the power cord from the mains power. Failure to do so can cause injury or death.



WARNING. To avoid personal injury, never lift or move the PQA600 analyzer by yourself. The size and weight of the instrument requires two people to lift or move it.

1. Disconnect the power cord and any attached peripheral cables from the instrument.



CAUTION. To avoid ESD damage to the PQA600 analyzer, perform all work on the instrument at a static-controlled workstation.

2. Place the instrument on a clean, static-free working area.

3. Remove the side cover from the instrument:
 - a. Locate the release lever near the top of the side cover of the instrument and push the lever forward as shown in the following figure.
 - b. Pull on the lever to rotate the top of the side cover away from the instrument chassis.
 - c. Lower the side cover until it is almost perpendicular to the case and pull it away from the chassis.

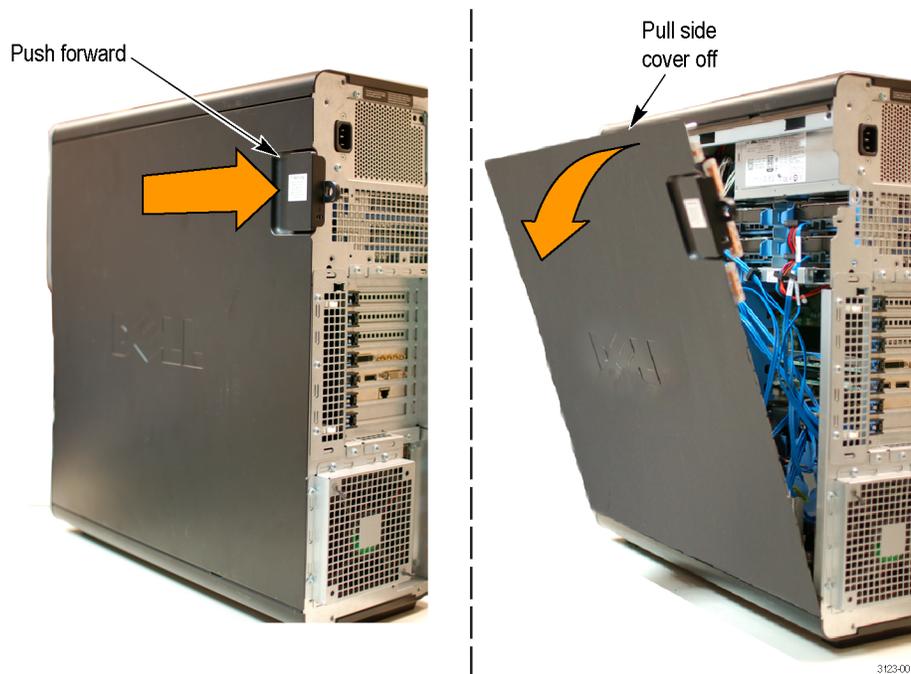


Figure 1: Removing the side cover from the instrument

4. Place the instrument on its side to access the internal components.
5. Locate Slot 6 on the computer board where you will install the interface card.
The slot numbers are labeled on the computer board; Slot 6 has a black circuit board connector.

6. Push down on the blue plastic retainer for Slot 6 and push it toward the rear of the instrument, rotating it out of the way of the slot bracket.

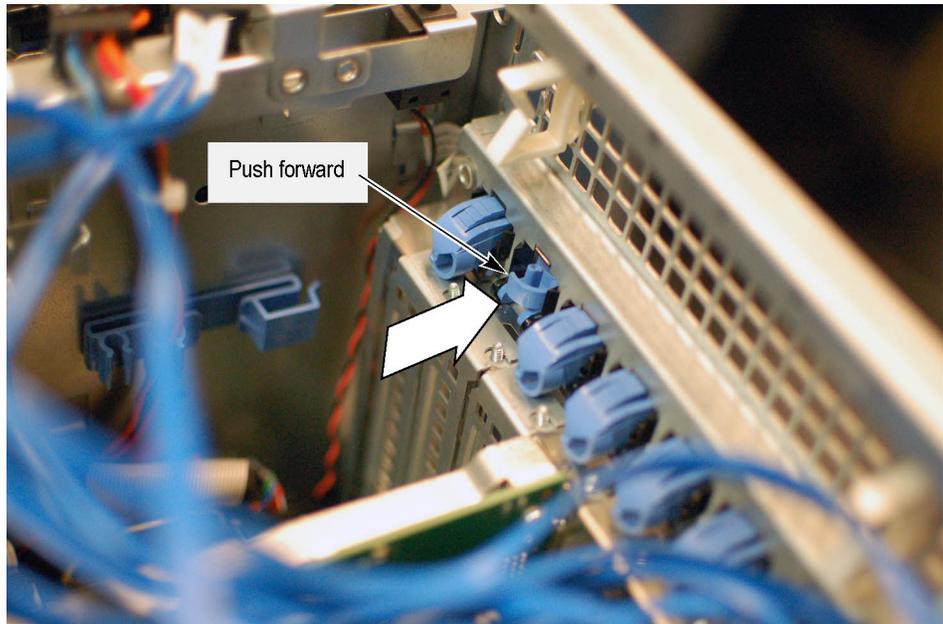


Figure 2: Pushing the Slot 6 retainer out of the way

7. Remove the slot bracket from Slot 6.

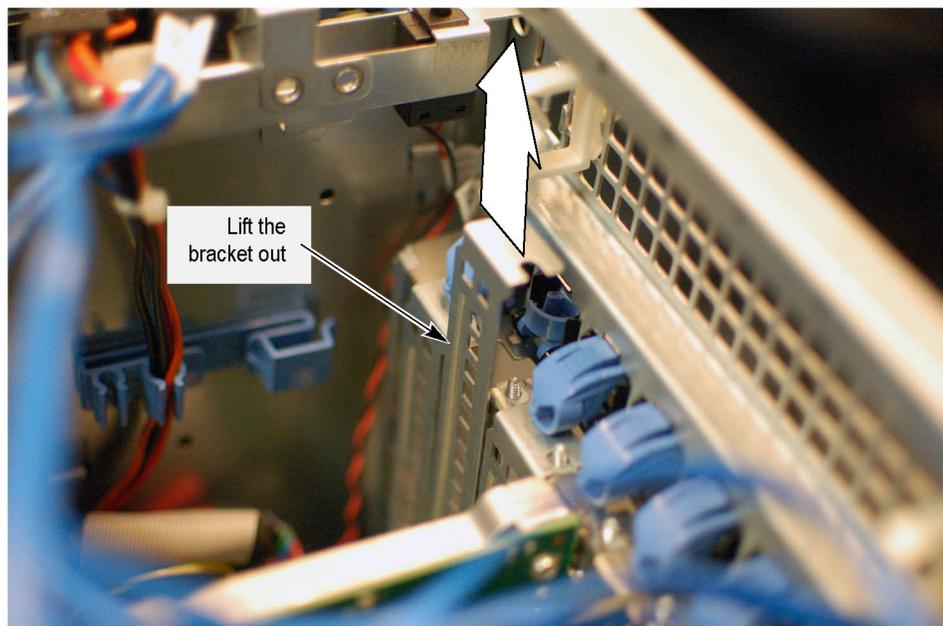


Figure 3: Removing the slot bracket from Slot 6

8. Carefully move any cables out of the way so that you can install the SDI/HDMI video interface card in Slot 6.
9. Align the SDI/HDMI video interface card with black circuit board connector for Slot 6, and then press the interface card in until it seats fully into the connector on the computer board.

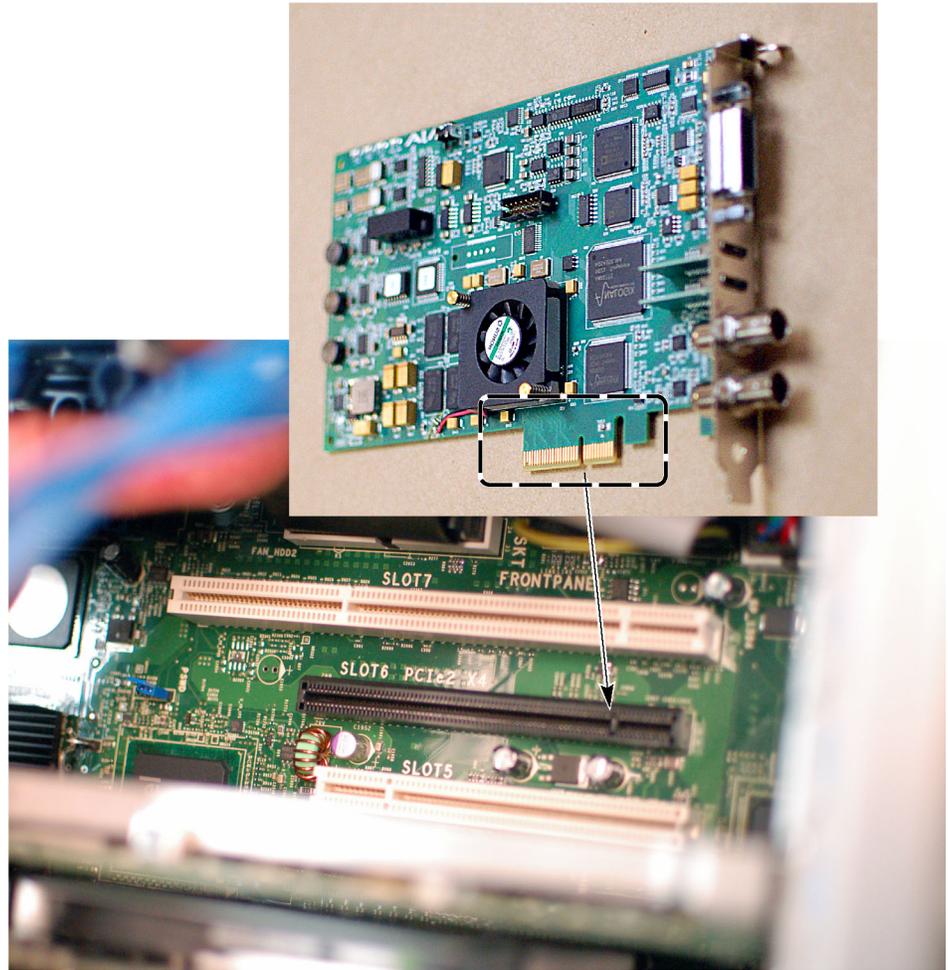


Figure 4: Installing the SDI/HDMI video interface card into the Slot 6 connector

10. Verify that the SDI/HDMI video interface card is fully seated in the connector on the computer board and that the card bracket sits flush on the instrument chassis (no gaps).

If there are any gaps, reposition the interface card, being careful not to damage the connectors.

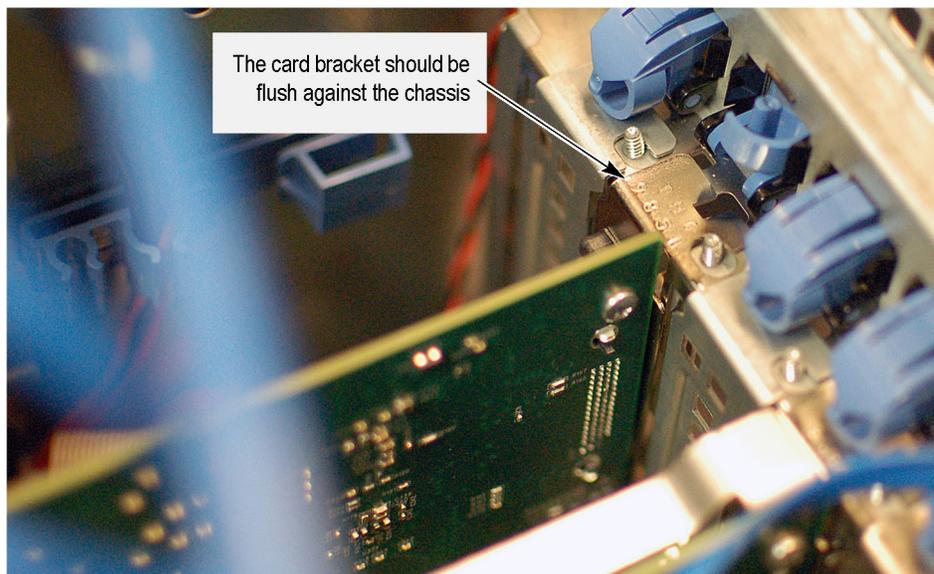
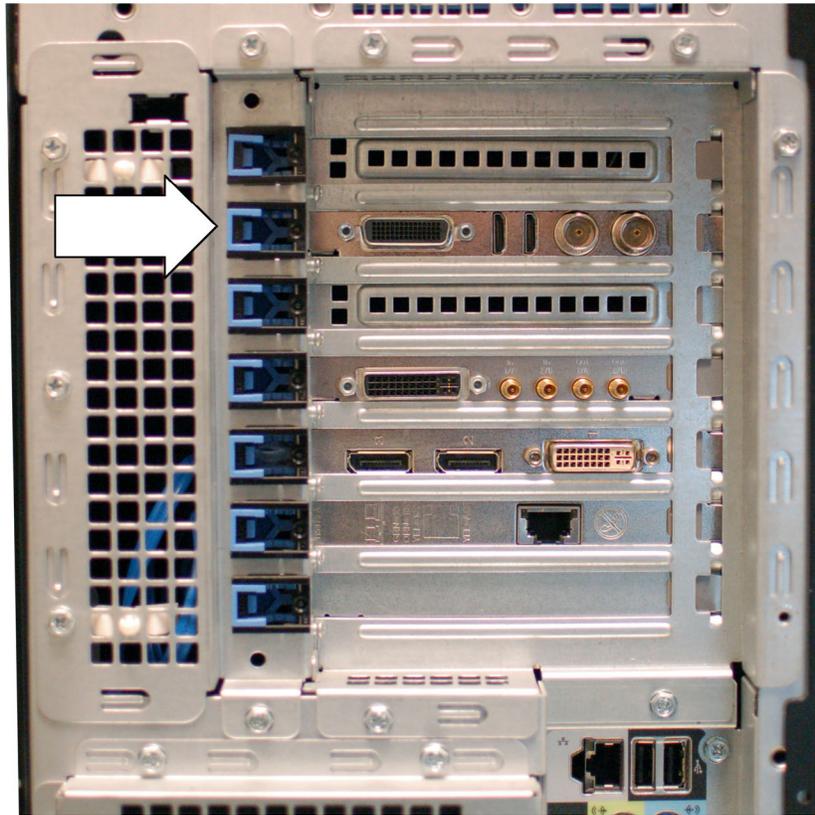


Figure 5: Verifying that the SDI/HDMI video interface card is firmly seated

11. From the rear of the instrument, push on the blue plastic retainer for Slot 6 so that it rotates over the SDI/HDMI video interface card latches into place against the chassis.

12. Place the instrument upright and verify that the interface board is installed in Slot 6 as shown in the following figure.



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Figure 6: Verifying that the SDI/HDMI video interface card is installed in Slot 6

13. Reinstall the side cover on the instrument:
 - a. Set the bottom of the side cover into the bottom of the instrument chassis and tilt it in toward the instrument.
 - b. Push on the top of the side cover until it latches in place on the instrument chassis.
14. Reconnect the monitor, mouse, and keyboard to the instrument.
15. Proceed to *Install the PQA600A software* to install the new software that was supplied with this upgrade kit. (See page 8.)

Install the PQA600A software

Perform the following steps to remove the old PQA600 software and then install the new PQA600A software:

1. Connect the power cord to the instrument.
2. Push the power button on the front of the instrument and wait for the power on process to complete.
3. From the Microsoft Windows desktop, use the **Start Menu** to open the **Control Panel**.
4. In the Control Panel, click **Programs and Features** to open the window for uninstalling or changing a program.
5. From the program list, right-click **PQA**, and then select **Uninstall** to remove the old PQA600 software.
6. Follow any on-screen instructions to uninstall the software.
7. Insert the *PQA600A and PQASW Application Install* disc that was supplied with this upgrade kit in the disk drive of the instrument.
8. Install the PQA600A software:
 - a. Use Windows Explorer to open the **64Bit** folder on the software disc.
 - b. Double-click **Setup** to start the installation process.
 - c. Read and accept the License Agreement when it appears on-screen.
 - d. Follow the on-screen instructions accepting the recommended default setups (click **Next** as needed to install the software).
 - e. Click **Finish** after the software installation is complete.
9. Install the drivers for the SDI/HDMI video interface card:
 - a. Use Windows Explorer to open the **AjaDrivers** folder on the software disc.
 - b. Double-click **KonaDrivers** to install the drivers for the SDI/HDMI video interface card.
 - c. Follow the on-screen instructions accepting the recommended default setups (click **Next** as needed to install the software).
 - d. Click **Finish** after the driver installation is complete.
10. Proceed to *Verify the upgrade* to verify that the upgrade has been properly installed. (See page 9.)

Verify the upgrade

Complete the following steps to verify that the upgrade kit has been properly installed:

1. Start the PQA application.
2. After the application starts, go to the Help menu and select **About PQA**.
3. Verify that the PQA version number in the Help window is version **4.0** or higher.
4. Click **OK** to close the Help window.

How to configure the SDI/HDMI video interface card

After the upgrade, your PQA600 analyzer will potentially have two interface cards installed for video capture and generation:

- A two-channel SD/HD SDI video interface (PQA600 Option SDI)
- An SD/HD/3G SDI/HDMI video interface (PQA6UP Option VID)

Both interface cards are operational after the upgrade. Perform the following steps to select which interface card to configure:

1. Start the PQA application.
2. After the application starts, go to the Configure menu and select **Board Type**.
3. Select **SDI/HDMI** to configure the new SDI/HDMI interface card you just installed or select **SDI** to configure the two-channel SDI interface card that was already installed in your instrument.

Product documentation

After the upgrade, you will need to use the original PQA600 documentation for hardware installation information and for instructions on how to configure the Option SDI video interface (if installed).

For information about operating the new PQA600A software and configuring the new SDI/HDMI video interface, you will need to refer to the PQA600A documents listed in the following table. These documents can be found on the Tektronix Web site (www.tektronix.com/manuals).

To read about	Use this document (Tektronix part number)
In-depth operating and reference information	<i>PQA600A and PQASW User Technical Reference (077-0812-XX)</i> . This PDF manual contains detailed information about operating the instrument, including how measurements are calculated and displayed. Also included are instructions for reconfiguring the PQA600A system to recover from a system failure.
Known issues with the product	<i>PQA600A and PQASW Release Notes (077-0787-XX)</i> . This PDF manual contains information about new features and known issues with the PQA software.

This completes the upgrade kit installation procedure.