Instructions

Tektronix

WVR61UP, WVR70UP,

and WVR7UP Upgrades

WVR6100, WVR7000, and WVR7100 Series Waveform Rasterizers

075-0887-05

Warning
The servicing instructions are for use by qualified personnel only. To avoid personal injury, do not perform any servicing unless you are qualified to do so. Refer to all safety summaries prior to performing service.

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For product information, sales, service, and technical support:

- In North America, call 1-800-833-9200.
- Worldwide, visit www.tektronix.com to find contacts in your area.

Service Safety Summary

Only qualified personnel should perform service procedures. Read this *Service Safety Summary* and the *General Safety Summary* in the product service manual or the instruction manual.

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

These instructions support field installation of all options currently available for field installation in the WVR6100, WVR7000, and WVR7100 Waveform Rasterizers. Find your kit in the table of kits supported that follows.

CAUTION. *To prevent monitoring problems, after installing any audio option in this kit, do not use the optional accessory, Analog/Audio Breakout Cable Assembly, Tektronix part number 012-1658-01. This optional accessory is for rasterizers that shipped with early versions of audio option hardware and will not work properly with your new audio option. You can order part number* ***012-1688-00****, which is an Analog/Audio Breakout Cable Assembly that will work with your new audio option.*

Kit	Description
WVR70UP-SD WVR7UP-SD	Field installs Option SD, which adds support for standard-definition video signal monitoring to the WVR7000 or WVR7100.
WVR70UP-DS WVR6UP-DS WVR7UP-DS	Field installs Option DS, which adds support for Digital audio monitoring of embedded audio and audio signals in the AES/EBU inputs.
WVR70UP-AD WVR6UP-AD WVR7UP-AD	Field installs Option AD, which adds support for Analog audio and Digital audio monitoring of embedded audio and audio signals in the AES/EBU inputs.
WVR7UP-ADL	Field installs Option ADL, which adds Analog audio monitoring (2 sets of 6 channel analog audio inputs and 8 channels analog audio outputs); AES/EBU discrete Digital audio (8 channels at a time) or 16 channels of embedded audio support, including Loudness monitoring.
WVR6UP-DD WVR7UP-DD	Field installs Option DD, which adds support for Dolby Digital (AC-3) decode and Analog and Digital audio monitoring of embedded audio and audio signals in the AES/EBU inputs.
WVR6UP-DDE WVR7UP-DDE	Field installs Option DDE, which adds support for Dolby E decode, Dolby Digital (AC-3) decode, and Analog and Digital audio monitoring of embedded audio and audio signals in the AES/EBU inputs.
WVR7UP-DPEL	Field installs Option DPEL, which includes all Option ADL capabilities and support for decoding and monitoring Dolby E, Dolby Digital Plus, and Dolby D Audio.
WVR6UP-EYE WVR7UP-EYE	Field installs Option EYE, which adds support for eye pattern monitoring of the physical layer of video signals. WVR6100 instruments display eye patterns for SD signals; WVR7100 for HD signals. WVR7100 instruments also display eye patterns for SD signals if equipped with Option SD. (See entry for WVR7UP-SD in this table.)

Kit	Description
WVR6UP-PHY WVR7UP-PHY	Field installs Option PHY, which adds all of the capabilities of Option EYE plus support for automated eye parameters measurement and jitter waveform display. WVR6100 instruments display jitter waveforms for SD signals; WVR7100 for HD signals. WVR7100 instruments also display jitter waveforms for SD signals when equipped with Option SD. (See entry for WVR7UP-SD in this table)

Products

WVR6100 Waveform Rasterizer	All instruments
WVR7000 Waveform Rasterizer	All instruments
WVR7100 Waveform Rasterizer	All instruments

Minimum Tool and Equipment List

Required tools and equipment	Part number
Screwdriver handle. Accepts TORX-driver bits. General tool. Used for audio and EYE display options.	NA
T-10 TORX drive bit. Used for removing the rasterizer top cover. Used for audio and EYE display options.	NA
T-15 TORX drive bit. Used for removing most of the screws on the rasterizer. Used for audio and EYE display options.	NA
3/16 Nutdriver. Used for removing and installing audio option boards for audio options only that have analog audio I/O connector.	NA
5/16 Nutdriver. Used for loosening and tightening the nuts that secure the fan bracket when installing a new Power Supply cable.	NA
1/4 Nutdriver. Used for removing or installing internal audio board mounting posts. Used for audio and EYE display options.	NA
A standard PC running Windows 98, Windows NT 4.0, Windows ME, Windows 2000, or Windows XP. Used for installing all options.	NA
Winsock 2.0, an Ethernet interface, and 10 MB of free disk space must be present on the PC system. Used for installing all options.	NA

Kit Parts Lists

WVR7UP-SD
WVR70UP-SD

Quantity	Part number	Description
1 each	020-2612-XX	Documents CD
1 each	075-0887-XX	Kit instructions

WVR6UP-DS
WVR70UP-DS
WVR7UP-DS

Quantity	Part number	Description
1 each	020-2612-XX	Documents CD
1 each	075-0887-XX	Kit instructions
3 each	129-1570-XX	Post, spacer; 1.385 X 0.250 X 0.375 deep
1 each	174-4973-XX	Cable assembly 80 POS. Cable with two 2X40 connectors
8 each	210-1039-XX	Washer, lock; 0.521 ID; 0.025 thick
3 each	211-0722-XX	Screw; 6-32 X 0.250, panhead T-15 TORX drive
8 each	220-0497-XX	Nut; hex; 0.5-28 X 0.562
1 each	671-6072-XX	Circuit-board assembly; Digital Audio

WVR6UP-AD
WVR70UP-AD
WVR7UP-AD
WVR7UP-ADL

Quantity	Part number	Description
1 each	020-2612-XX	Documents CD
1 each	075-0887-XX	Kit instructions
3 each	129-1570-XX	Post, spacer; 1.385 X 0.250 X 0.375 deep
1 each	131-7430-XX	Connector, DSUB; male, 62 pins, 0.100 center, 30 gold
1 each	174-4973-XX	Cable assembly 80 POS. Cable with two 2X40 connectors
8 each	210-1039-XX	Washer, lock; 0.521 ID; 0.025 thick
3 each	211-0722-XX	Screw; 6-32 X 0.250, panhead T-15 TORX drive
2 each	214-3903-XX	Screw; 4-40 X 0.312 long, 0.188 H hex head stand off
8 each	220-0497-XX	Nut; hex; 0.5-28 X 0.562
1 each	671-9938-XX	Circuit-board assembly; Digital Analog Audio

WVR6UP-DD
WVR7UP-DD

Quantity	Part number	Description
1 each	020-2612-XX	Documents CD
1 each	075-0887-XX	Kit instructions
3 each	129-1570-XX	Post, spacer; 1.385 X 0.250 X 0.375 deep
1 each	131-7430-XX	Connector, DSUB; male, 62 pins, 0.100 center, 30 gold
1 each	174-4973-XX	Cable assembly 80 POS. Cable with two 2X40 connectors
8 each	210-1039-XX	Washer, lock; 0.521 ID; 0.025 thick
3 each	211-0722-XX	Screw; 6-32 X 0.250, panhead T-15 TORX drive
2 each	214-3903-XX	Screw; 4-40 X 0.312 long, 0.188 H hex head stand off
8 each	220-0497-XX	Nut; hex; 0.5-28 X 0.562
1 each	671-9938-XX	Circuit-board assembly; Digital Analog Audio

WVR6UP-DDE
WVR7UP-DDE
WVR7UP-DPEL

Quantity	Part number	Description
1 each	020-2612-XX	Documents CD
1 each	075-0887-XX	Kit instructions
1 each	119-7167-XX	Circuit-board assembly; Dolby E/Digital Decoder Module; 72 PIN SIMM
3 each	129-1570-XX	Post, spacer; 1.385 X 0.250 X 0.375 deep
1 each	131-7430-XX	Connector, DSUB; male, 62 pins, 0.100 center, 30 gold
1 each	174-4973-XX	Cable assembly 80 POS. Cable with two 2X40 connectors
8 each	210-1039-XX	Washer, lock; 0.521 ID; 0.025 thick
3 each	211-0722-XX	Screw; 6-32 X 0.250, panhead T-15 TORX drive
2 each	214-3903-XX	Screw; 4-40 X 0.312 long, 0.188 H hex head stand off
8 each	220-0497-XX	Nut; hex; 0.5-28 X 0.562
1 each	671-9938-XX	Circuit-board assembly; Digital Analog Audio

WVR6UP-EYE

Quantity	Part number	Description
1 each	020-2612-XX	Documents CD
1 each	075-0887-XX	Kit instructions
5 each	129-1604-XX	Hardware; spacer post, .309 L, 6-32 male, 4-40 female
1 each	174-5224-XX	Cable assembly, Power Supply to Main and Eye boards
1 each	174-5301-00	Coaxial cable, SMA
1 each	671-6099-XX	Circuit board subassembly; SD, Eye board

WVR7UP-EYE

Quantity	Part number	Description
1 each	020-2612-XX	Documents CD
1 each	075-0887-XX	Kit instructions
5 each	129-1604-XX	Hardware; spacer post, .309 L, 6-32 male, 4-40 female
1 each	174-5224-XX	Cable assembly, Power Supply to Main and Eye boards
2 each	174-5301-00	Coaxial cable, SMA
1 each	679-9935-XX	Circuit board subassembly; Loop-through board
1 each	671-6324-XX	Circuit board subassembly; HD/SD, Eye board

WVR6UP-PHY

Quantity	Part number	Description
1 each	020-2612-XX	Documents CD
1 each	075-0887-XX	Kit instructions
5 each	129-1604-XX	Hardware; spacer post, .309 L, 6-32 male, 4-40 female
1 each	174-5224-XX	Cable assembly, Power Supply to Main and Eye boards
1 each	174-5301-00	Coaxial cable, SMA
1 each	671-6099-XX	Circuit board subassembly; SD, Eye board

WVR7UP-PHY

Quantity	Part number	Description
1 each	020-2612-XX	Documents CD
1 each	075-0887-XX	Kit instructions
5 each	129-1604-XX	Hardware; spacer post, .309 L, 6-32 male, 4-40 female
1 each	174-5224-XX	Cable assembly, Power Supply to Main and Eye boards
2 each	174-5301-00	Coaxial cable, SMA
1 each	679-9935-XX	Circuit board subassembly; Loop-through board
1 each	671-6324-XX	Circuit board subassembly; HD/SD, Eye board

Installation Instructions

These instructions are for qualified personnel who are familiar with servicing the waveform rasterizer. If you need further details for disassembling or reassembling the product, refer to the appropriate product manual. Contact your nearest Tektronix Service Center or Tektronix Factory Service for installation assistance.

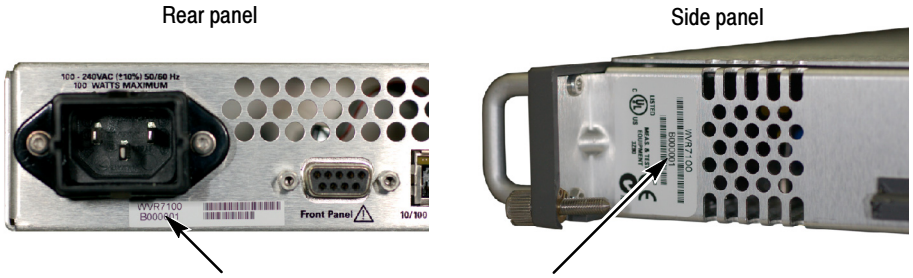
CAUTION. *To prevent static discharge damage, service the product only in a static-free environment. Observe standard handling precautions for static-sensitive devices while installing this kit. Always wear a grounded wrist strap, grounded foot strap, and static resistant apparel while installing this kit.*

Serial Numbers

Some kits require specialized installation procedures that depend on the serial number of the instrument. You can determine your instrument's serial number by looking at two locations on the outside of the chassis as shown below:

- Under the external power connection on the rear panel
- On the right side of the chassis behind the front panel

Additionally, the serial number appears on a label that is visible after the cabinet top cover is removed, as shown in the picture on page 25.



WVR6100, WVR7000, and WVR7100 serial number locations

System Upgrade

All kits require that you upgrade the system software. You can locate the latest available upgrade at the Tektronix Web site (www.tektronix.com). At the Web site, click on **Software and Drivers** and type **WVR** in the Find by model number or keyword entry box.

This kit includes the installation files for the latest version of system upgrade that was available at the time these instructions were released. Perform the following steps to upgrade to the software version supplied by the kit:

1. Find the Documents CD included in the kit.
2. Insert the Documents CD in the CD drive of a PC running Windows that is networked to the instrument to be upgraded. The Documents Browser starts automatically; if it does not, click on the file WVRDOCS.exe on the CD.
3. Click on the title **Software Install** from the browser main menu.
4. Follow the instructions to upgrade the system software of your rasterizer.
5. When you complete the software upgrade, perform the appropriate procedures on the following pages to install any hardware associated with your upgrade.

WVR70UP-SD and WVR7UP-SD Option Only

This option kit does not include or require the installation of hardware. After installing the System Upgrade, skip to page 29 and perform the steps in the *Option Activation* section.

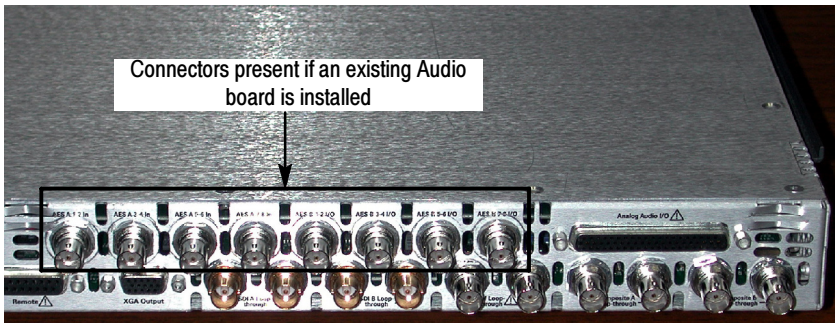
Audio Board Installation (Audio Options Only)

NOTE. *The procedures in the section relate to the WVR6UP-DS, WVR70UP-DS, WVR7UP-DS, WVR6UP-AD, WVR70UP-AD, WVR7UP-AD, WVR7UP–ADL, WVR6UP-DD, WVR7UP-DD, WVR6UP-DDE, WVR7UP-DDE and WVR7UP–DPEL audio options only.*

All audio options kits include, and require installation of, a new audio board:

1. Arrange access to the top of the rasterizer (remove from rack as needed).
2. Remove the 18 T-10 screws that secure the cabinet top cover to its chassis and lift it off.

3. Inspect your instrument for an installed Audio board. If an Audio board is installed, the AES BNC connectors are visible at the rear panel; instruments without an Audio board have plug covers in place of the audio connectors.



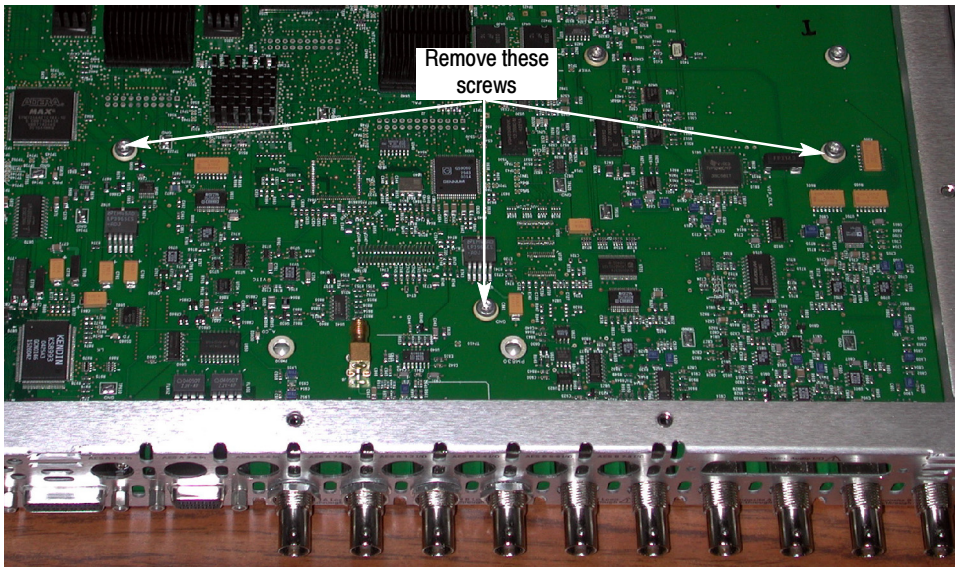
4. If an Audio board is installed, perform the steps in the section titled *Remove Old Audio Board*, on page 12 and then continue with *Install Upgrade Audio Board* on page 13.

5. If your instrument does not have an Audio board installed, perform the following steps:

   a. Remove the eight plugs from the AES input holes on the rear panel. Pinch and compress each plug from the inside while prying the plug out from the outside of the rear panel. A flat-blade screwdriver may help pry out the plug.

   b. Remove the three Main board mounting screws as shown below.

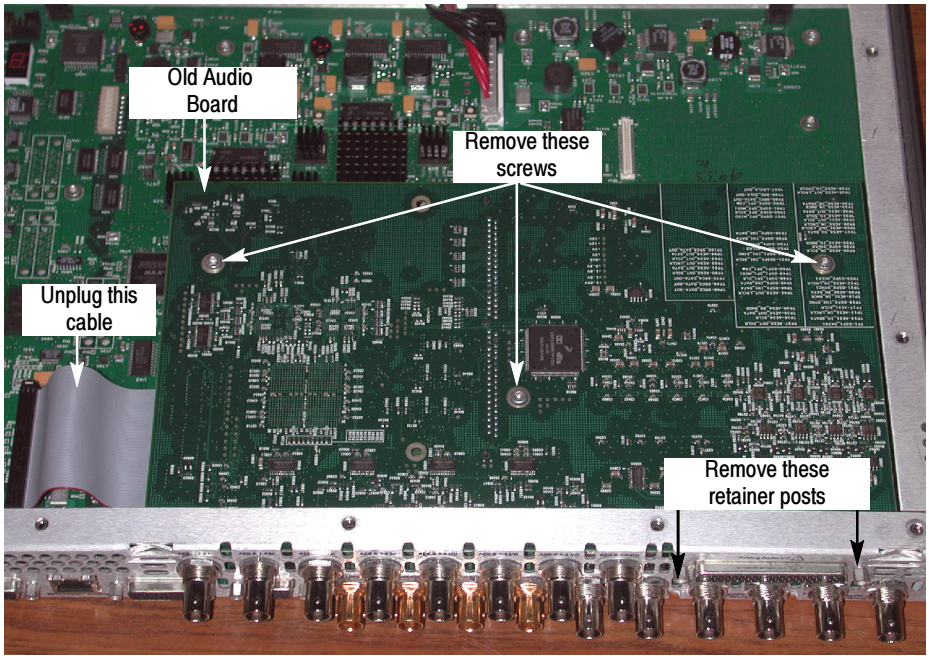
   c. Continue with *Install Upgrade Audio Board* on page 13.



Remove Old Audio Board

Perform the following steps to remove the existing Audio board in preparation for installing the new Audio board.

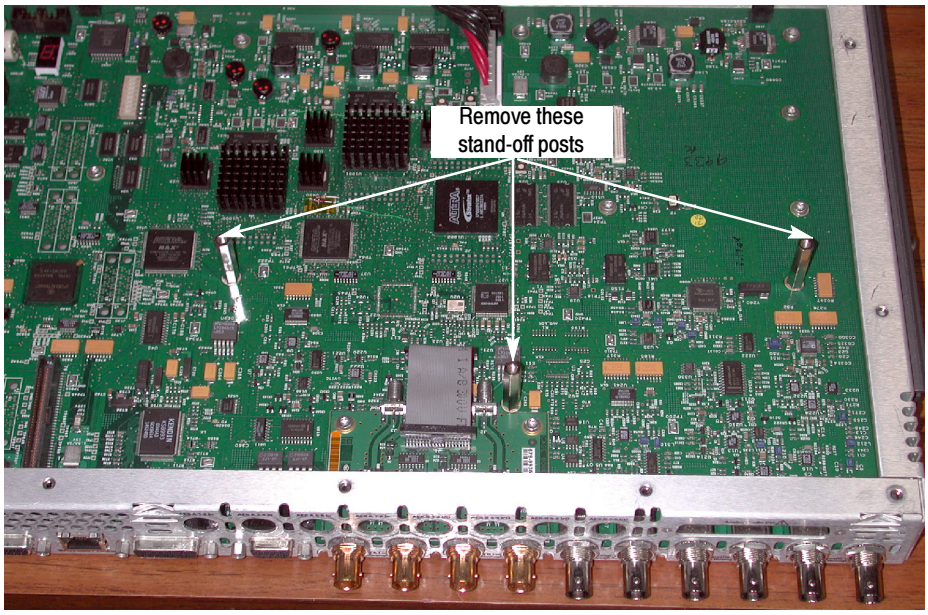
1. Unplug the cable from the Audio board at J750 on the Main board.
2. Remove the three screws (T-15) that secure the old Audio board to the three mounting posts. Screw locations are shown below.



3. Remove the nut and washers that secure the eight audio BNC connectors to the rear panel.
4. If an analog audio connector is present, use a 3/16 in. nut driver to remove the two retainer posts that secure it to the rear panel.

5. Move the old Audio board toward the front of the instrument until the connectors clear the rear panel, and then lift the board out of the chassis.

6. Using a 1/4 in. nut driver, remove the three mounting posts from which you removed the screws in step 2.



Install Upgrade Audio Board

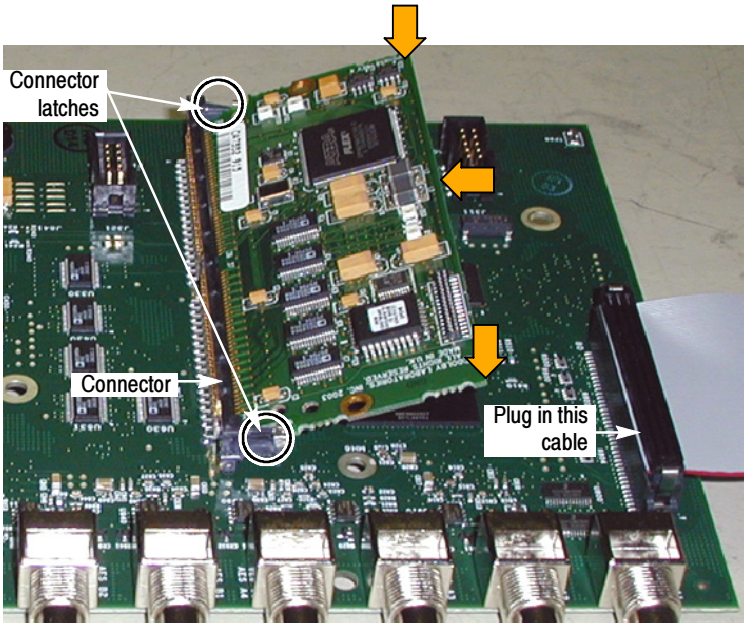
Perform the following steps to install the new Audio board and to put it into service. If installing option WVR6UP-DS, WVR70UP-DS, or WVR7UP-DS, start with step 2; otherwise, start with step 1:

1. If a panel covers the analog audio input/connector hole at the rear panel, remove the two screws that secure the panel Remove the panel by pulling it away from the inside.

2. If you are installing Option DDE or DPEL, perform the following sub-steps; otherwise, skip to step 3.

   a. Find the Dolby Module in your kit. In a static safe workstation only, remove it from the static protective container.

   b. As shown in the following figure, push the module into the SIMM connector to seat it, and then push downward to rotate the module until it is parallel to the Main board surface and the two connector latches are locked.

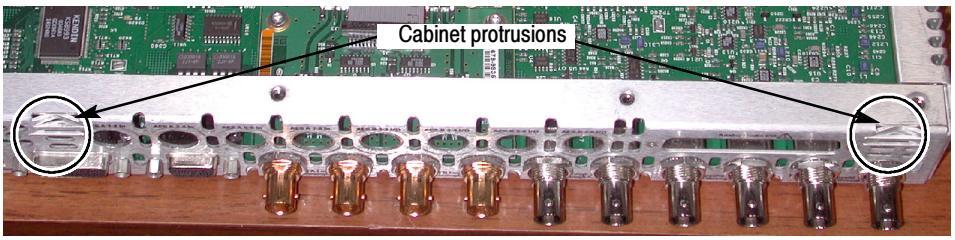


3. Plug the 80-pin cable from the new audio board into its jack on the underside of the Main board.

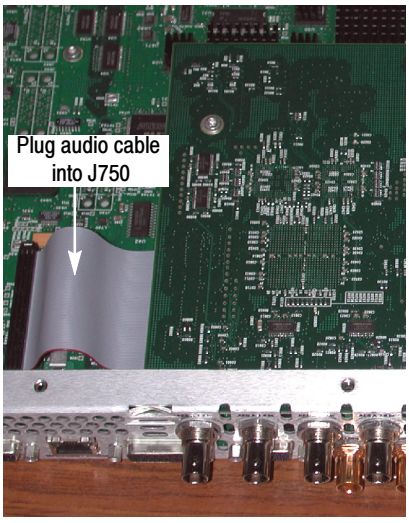
4. Install the three mounting posts from the kit in the locations from which you removed the mounting screws or the mounting posts earlier. The figure associated with step 6 on page 13 indicates the post locations. Tighten firmly, but not excessively.

5. Insert the Audio board supplied with this kit into position, aligning the mounting holes with the mounting posts and guiding the board connectors into their holes in the rear panel:

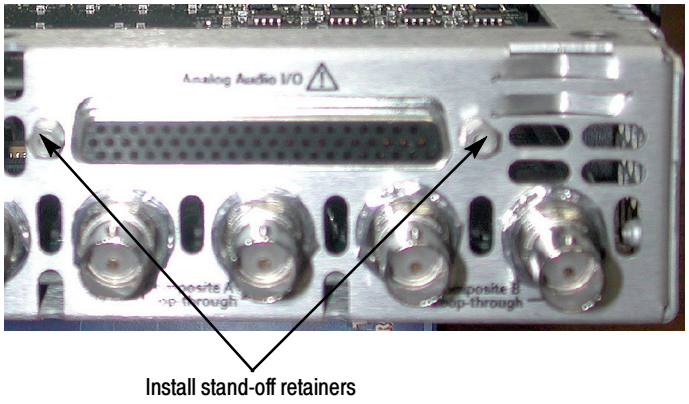
   - The mounting holes in the audio board should align with the screw holes in the mounting posts.
   - When sliding the board into place, its rear edge should be captured between a pair of small alignment features that protrude from the rear panel into the chassis. The board right corner should be captured between an identical pair of alignment features at the chassis rear corner.



6. Secure the board to the three mounting posts with the three T-15 screws from the kit. Tighten firmly, but not excessively.
7. From the kit, install a washer, and then a nut, to each of the BNC connectors of the new board.
8. Plug the cable from the new Audio board into J750 on the Main board.



9. For all Audio boards except options WVR6UP-DS, WVR70UP-DS, and WVR7UP-DS, install the two standoff retainers that secure the audio analog connector to the rear panel. These screws install from the outside of the rear panel. Tighten firmly, but not excessively.



10. Reinstall the top cover on the instrument.

Audio Connector

For all audio options except WVR6UP-DS, WVR70UP-DS, and WVR7UP-DS, use the supplied 62-pin DSUB connector to attach analog-audio signals to the instrument. Solder wires to the connector as needed to accommodate the desired audio inputs and outputs. Refer to the *WVR6100, WVR7000, and WVR7100 Waveform Rasterizers Quick Start User Manual* for the connector pin assignments.

Audio signals can be connected as either balanced or unbalanced. Be sure to use a suitable cable when you are wiring balanced audio. An example of a suitable cable is Belden 8451, which is a shielded twisted-pair cable.

Alternatively, you can purchase an audio breakout cable (Tektronix part number 012-1688-00), which provides a two-meter cable with XLR connectors for all twelve inputs and eight outputs.

EYE Board Installation (EYE and PHY Options Only)

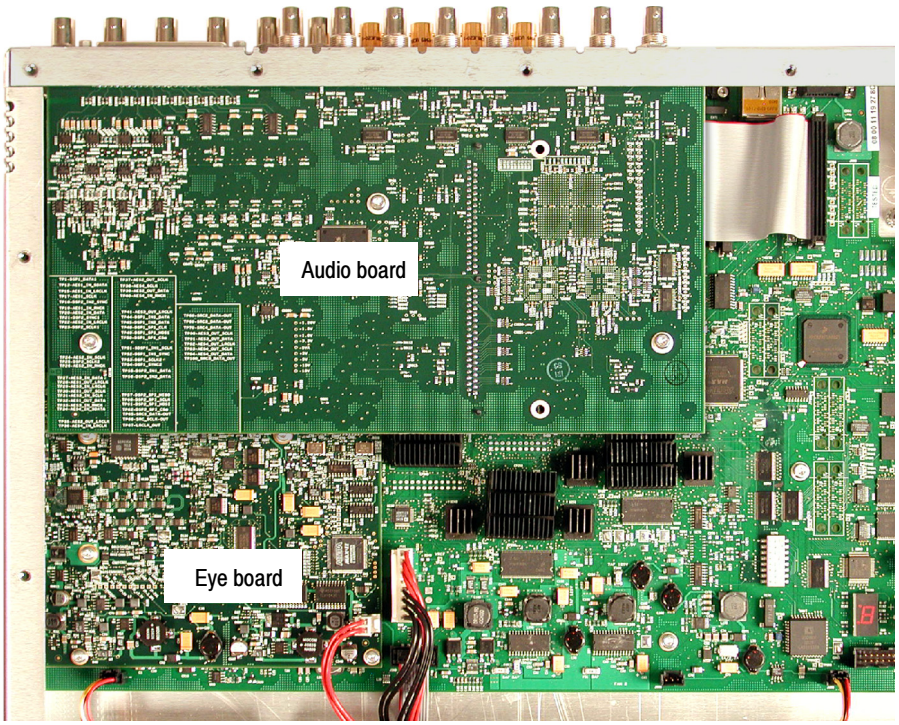
This section describes how to install Option EYE and Option PHY only. These options can only be installed on WVR6100 and WVR7100 instruments.

***NOTE**. When you install Option EYE or PHY on a WVR7100 with a serial number of B029999 or below, you must install the new Loop-through board and Power Supply cable which are supplied in this kit. To determine the serial number of your instrument, refer to* Serial Numbers *on page 9.*

When you install Option PHY on instruments that already have Option EYE installed, you must replace the Eye board with the new board supplied in this kit.

WVR6100 and WVR7100

1. Arrange access to the top of the WVR6100 or WVR7100 (remove from rack as needed).
2. Remove the 18 T-10 screws that secure the cabinet top cover to its chassis and lift the cover off.
3. Use the illustration below to inspect the instrument for the presence of an existing Audio board.
4. If an Audio board is installed, perform the *Remove Old Audio Board* procedure starting on page 12.

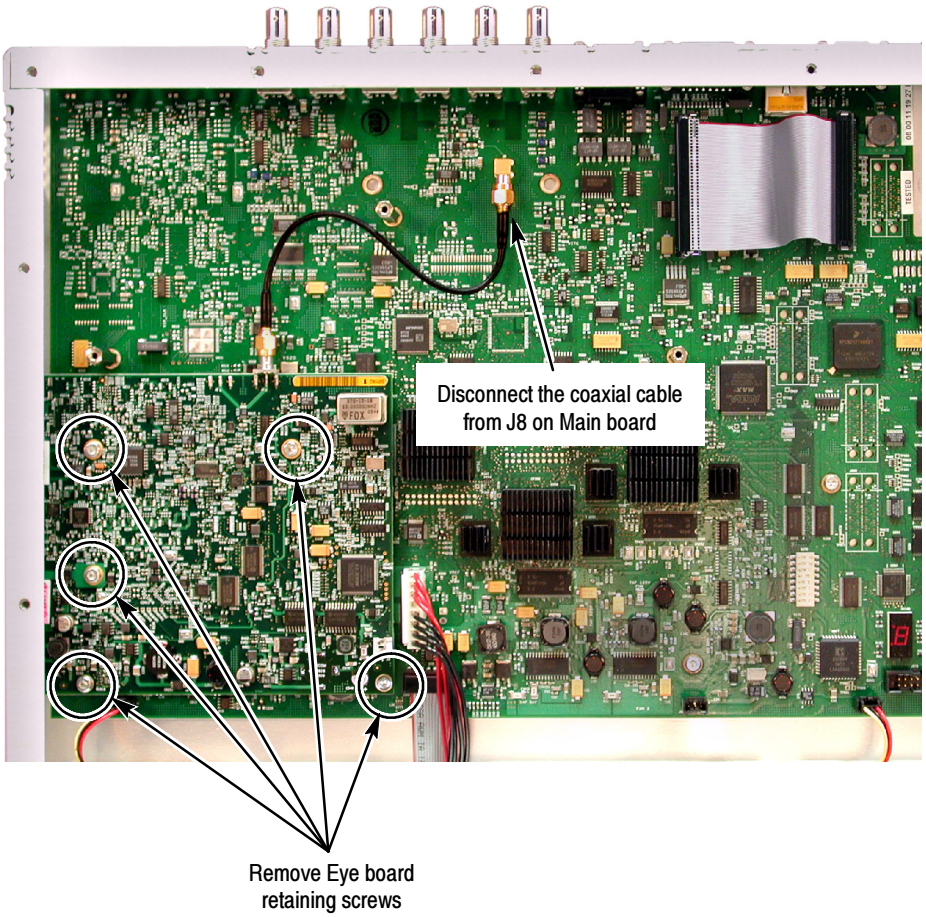


WVR6100 Option PHY Only

5. Use the previous illustration to inspect the instrument for the presence of an installed Eye board.
6. If an Eye board is installed, perform the following steps to remove the board:
   a. As shown below, disconnect the coaxial cable from J8 on the Main board.
   b. Remove the five retaining screws from the Eye board, and then lift the board out of the instrument.

***NOTE**. You can save the old Option Eye board for use in another instrument.*

   c. Proceed to step 13 on page 22.



WVR7100 Option PHY Only

7. Use the illustration on page 17 to inspect the instrument for the presence of an installed Eye board.

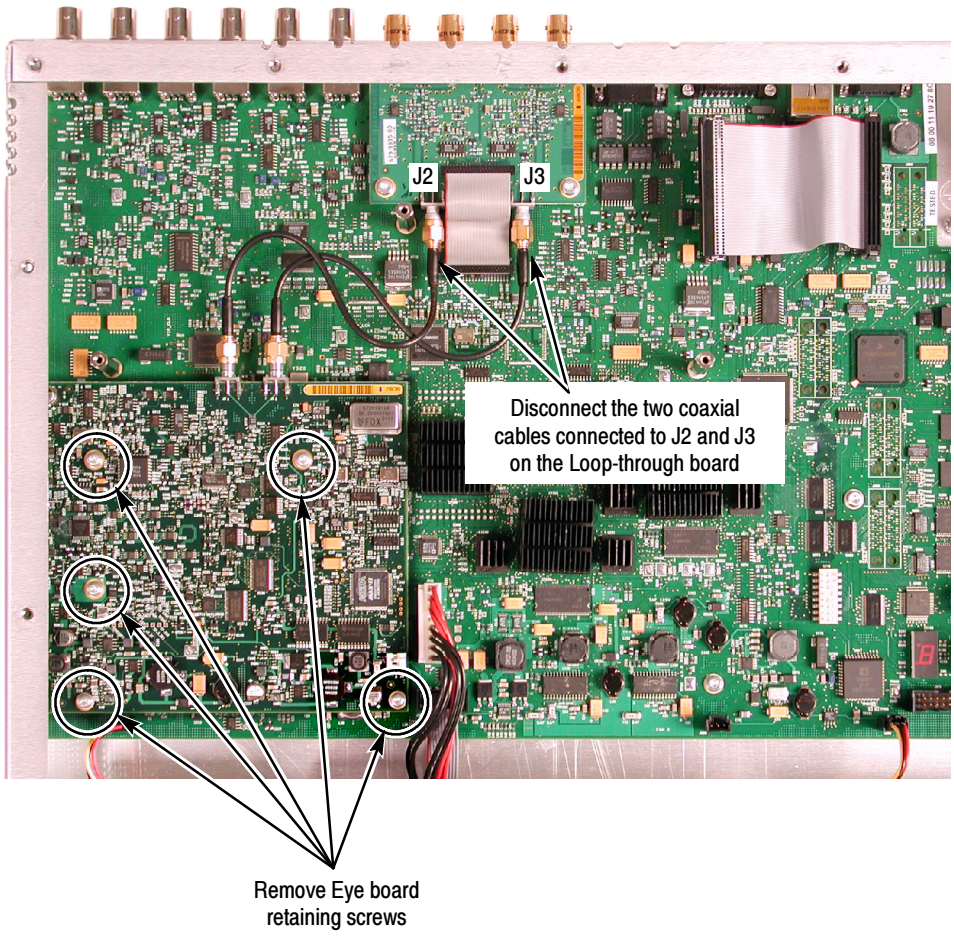
8. If an Eye board is installed, perform the following steps to remove the board:

   a. As shown below, disconnect the coaxial cable from J2 and J3 on the Loop-through board.

   b. Remove the five retaining screws from the Eye board, and then lift the board out of the instrument.

***NOTE**. You can save the old Option Eye board for use in another instrument.*

   c. Proceed to step 13 on page 22.



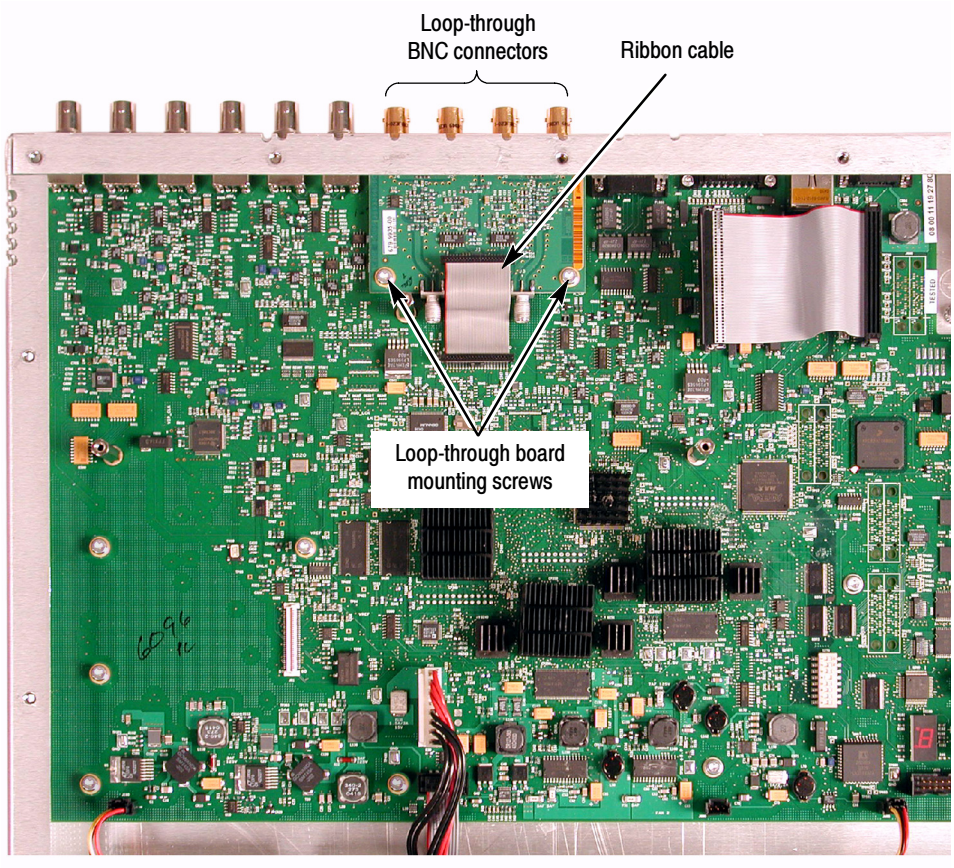
WVR7100 SN B029999 and Below Only

Perform the following steps to install the new Loop-through board.

9. To remove the old Loop-through board, perform the following steps:

a. Unplug the ribbon cable from the Loop-through board and Main board.

b. Remove the two Loop-through board mounting screws in the locations shown below.



c. Remove the four nuts and washers that secure the four Loop-through BNC connectors to the rear panel.

d. Back out the old Loop-through board until the connectors clear the rear panel and lift the board out of the chassis.

10. Perform the following steps to install the new Loop-through board:

a. Insert the new Loop-through board (part number 679-9935-XX) from this kit into position, aligning the mounting holes with the mounting posts and guiding the four Loop-through board connectors into their holes in the rear panel. Align the mounting holes in the new Loop-through board with the screw holes in the two mounting posts.

b. Secure the board to the two mounting posts with the two T-15 screws from the old Loop-through board. Tighten firmly, but not excessively.

c. From the parts retained from step 9, install a washer, and then a nut, to each of the BNC connectors of the new board. Tighten firmly, but not excessively.

d. Remove and discard the protective plastic plug from the connector pins on the new Loop–through board.

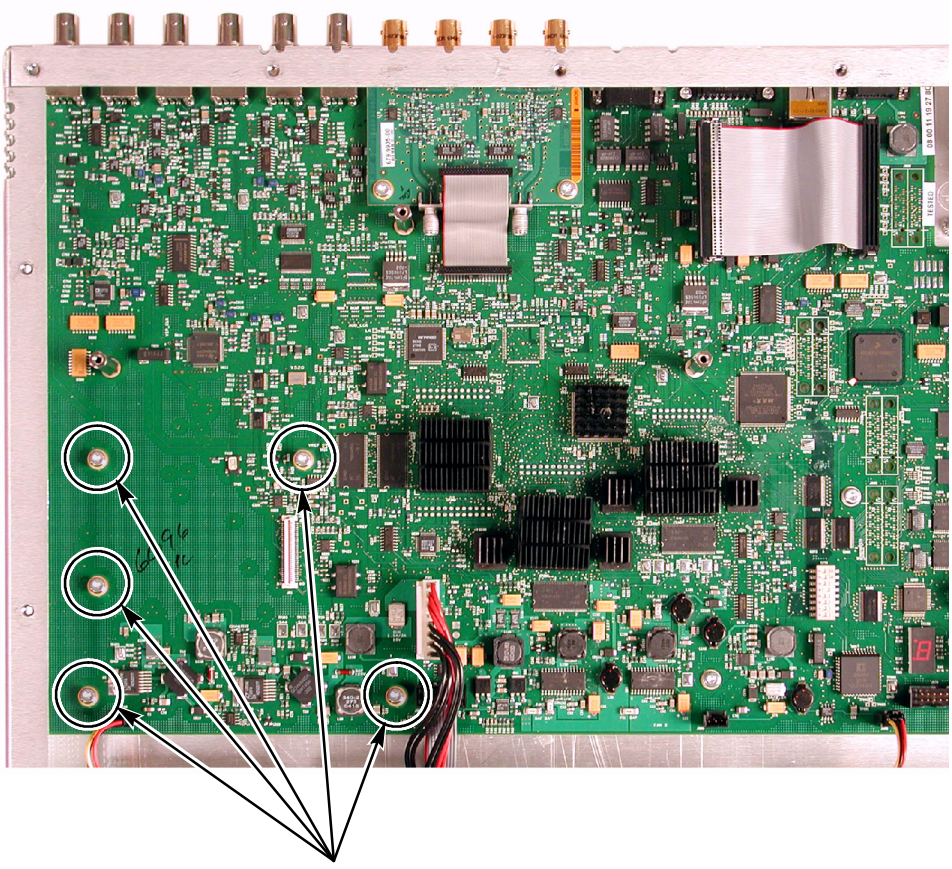
e. Plug the ribbon cable from the old Loop-through board into the cable connector pins on the new Loop-through board and to the adjacent cable connector pins on the Main board.

WVR6100 and WVR7100

Perform the following steps to install the Eye board:

11. Remove the five Main board 4-40 mounting screws in the locations shown below.

12. Install the five spacer posts (Tektronix part number 129-1604-XX) from the kit in the locations from which you removed the mounting screws. Tighten firmly, but not excessively.



13. Insert the Eye board (Tektronix part number 664-609-XX for the WVR6100; 671-6324-XX for the WVR7100) from the kit into position, taking care to align the Eye board mounting holes over the spacer posts. Make sure that the connectors between the boards mate correctly. Gently press the Eye board to seat the connectors.

14. Secure the Eye board to the five mounting posts with the five 4-40 screws from the kit. Tighten firmly, but not excessively.

WVR6100 and WVR7100 SN B029999 and Below Only

Perform the following steps to replace the Power Supply cable:

15. To gain adequate clearance to remove the old Power Supply cable and install the new Power Supply cable, perform the following:

a. If present, disengage the clear plastic Power Supply shield from the retaining slot in the fan bracket.

b. Use a 5/16-inch nut driver to loosen the two nuts that secure the fan bracket to the base of the chassis. Loosen the nuts enough so that you can slide the Power Supply connector under the bracket.

16. To remove the old Power Supply cable, disconnect the old cable from the Power Supply by firmly, but carefully, pulling the cable from the Power Supply pins on the Power Supply, and from the Power Supply pins on the Main board.

17. Perform the following steps to install the new Power Supply cable:

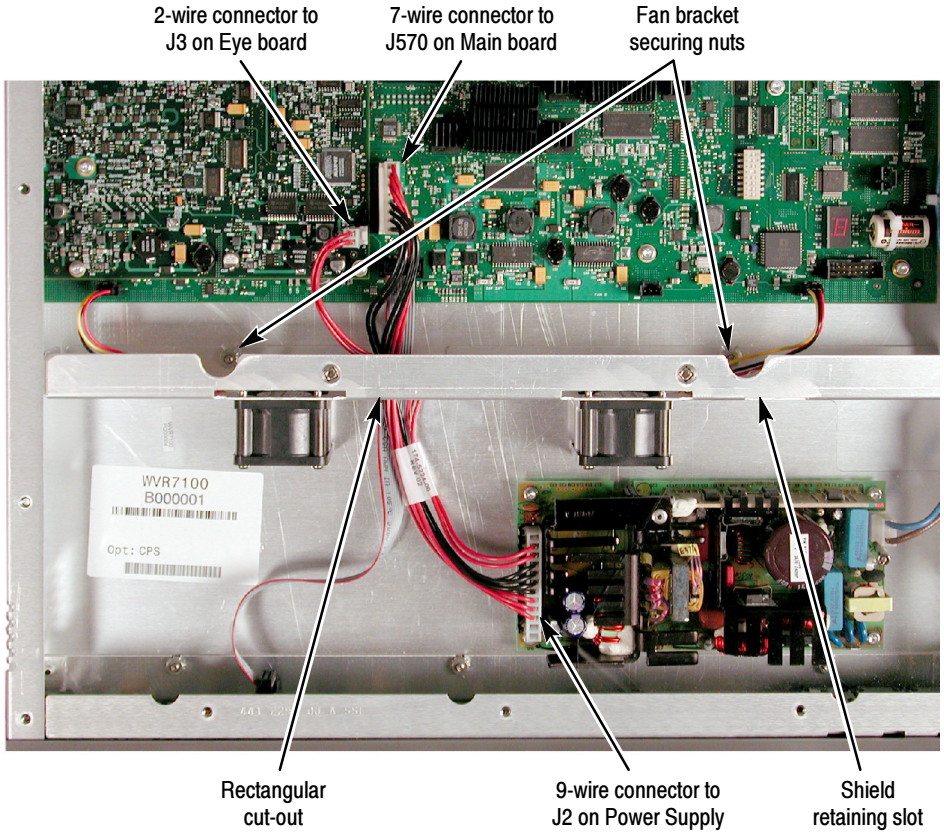
a. Lift the fan bracket (loosened in step 15) and route the new Power Supply cable (Tektronix part number 174-5224-XX) under the bracket and position the cable in the rectangular cut-out in the fan bracket. Make sure that:

- The cable end with two connectors (one seven-wire connector and one two-wire connector) is close to the Main board.
- The cable end with one nine-wire connector is close to the Power Supply as shown below.

b. Align the seven-wire Power Supply cable to J570 on the Main board. Insert the cable on the board connector until the locking tab is fully engaged (locked).

c. Align the nine-wire Power Supply cable to J2 on the Power Supply board. Insert the cable on the board connector until the locking tab is fully engaged (locked).

d. Connect the two-wire Power Supply cable to J3 on the Eye board. Insert the cable on the board connector until the locking tab is fully engaged (locked).



e. Tighten the two 5/16-inch nuts that secure the fan bracket to the base of the chassis.

f. If present, reengage the clear plastic Power Supply shield in the retaining slot in the fan bracket.

WVR7100 Only

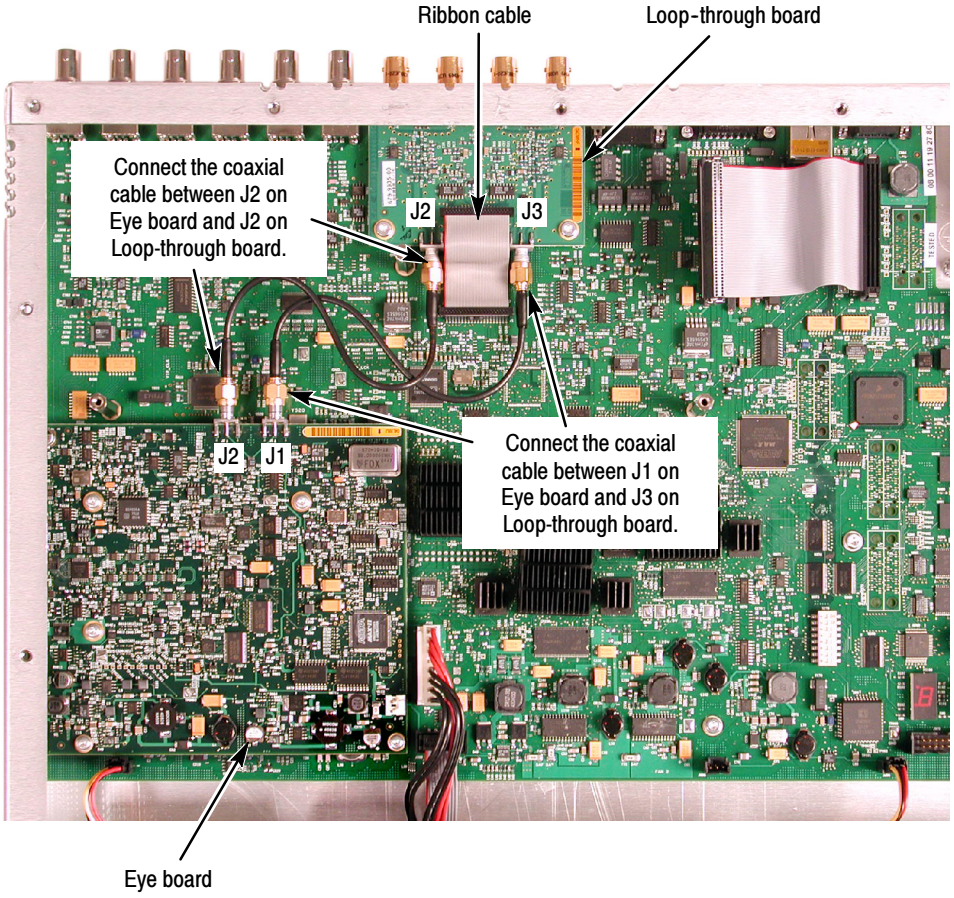
Perform the following steps to install the coaxial cables:

***NOTE**. To gain easier access to the connections on the Loop-through board, you can disconnect the ribbon cable from the board. If you disconnect the ribbon cable, be sure to reconnect it when you finish connecting the coaxial cables.*

18. Connect one coaxial cable from the J3 connection of the Loop-through board to the J1 connection of the Eye board.

19. Connect the remaining coaxial cable from the J2 connection of the Loop-through board to the J2 connection of the Eye board.

20. Verify that the installed Eye board appears as shown below.

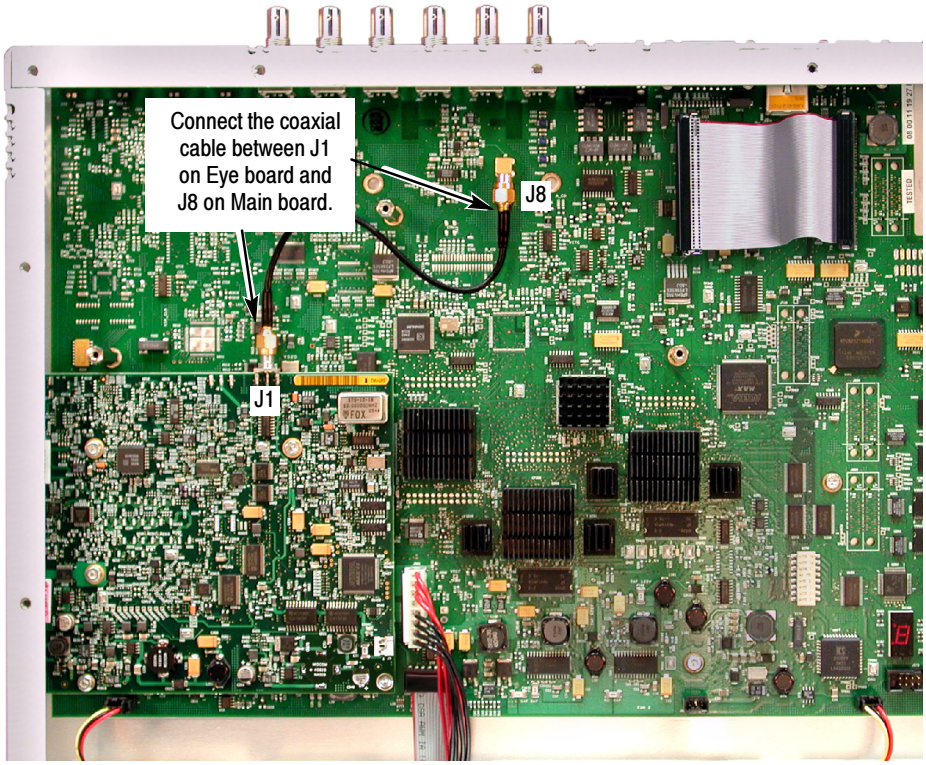

Ribbon cable
Loop-through board
Connect the coaxial cable between J2 on Eye board and J2 on Loop-through board.
J2
J3
J2
J1
Connect the coaxial cable between J1 on Eye board and J3 on Loop-through board.
Eye board

WVR6100 Only

Perform the following steps to install the coaxial cable.

21. Connect the coaxial cable from the J1 connector on the Eye board to the J8 connector on the Main board.

22. Verify that the installed Eye board appears as shown below.



WVR6100 and WVR7100

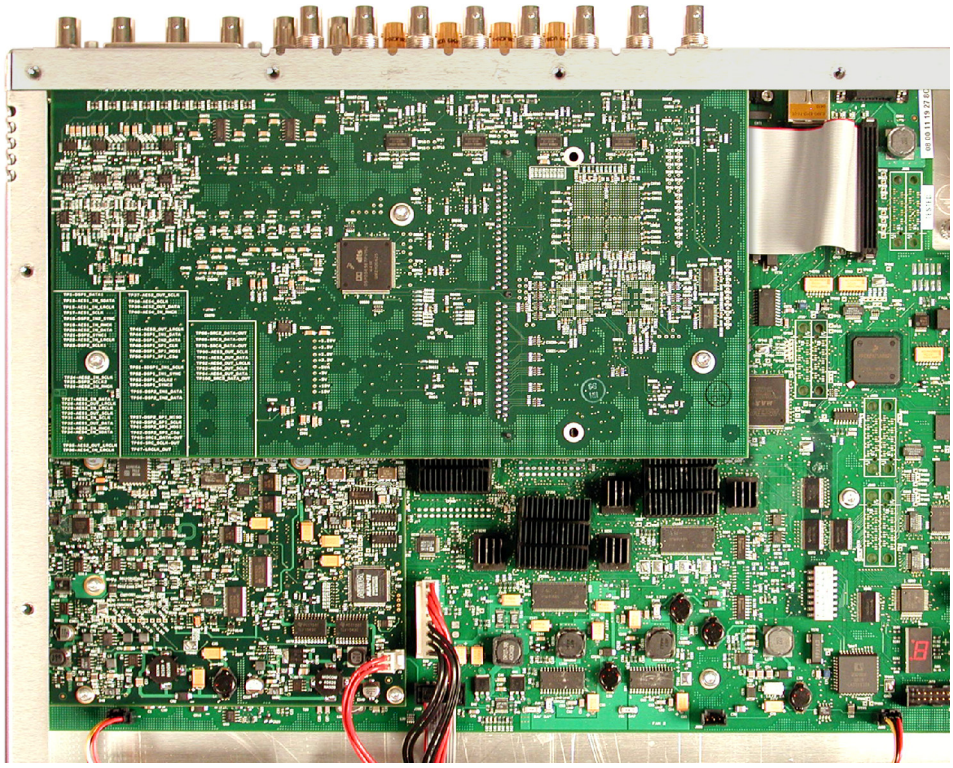
Perform the following steps to complete the hardware installation:

23. Use a 5/16” open-end wrench to tighten the coaxial cable connectors firmly, but not excessively.

24. If your instrument had an Audio board installed, perform the *Install Upgrade Audio Board* procedure starting on page 13 to reinstall the board.

25. If you installed an Audio board, before replacing the top cover, check that your instrument appears as shown below.

26. Replace the top cover.



WVR6100 and WVR7100 Option PHY Only

27. After installing the Eye board, go to to page 29 and perform the steps in the *Option Activation* section.

Option Activation

Option-SD
Option-DD
Option-DDE
Option-DPEL
Option-PHY

For these options only, you must activate the option before you can use it. Perform the following steps to activate the option:

NOTE*. This kit provides an option key based on the instrument serial number that you provided to Tektronix when you ordered this kit. The kit option key enables your new option(s) only on the rasterizer having the serial number that you provided.*

1. Make sure that the product to be activated is networked to a computer. See your *User Technical Reference* if you need help in doing so. (You can access this manual on the Documents CD that shipped with this kit.)
2. Start the Web browser, and set its address to that of the rasterizer to navigate to the Remote Interface page. See *Remote Communications* in your *User Technical Reference* if you need help in doing so. (You can access this manual on the Documents CD that shipped with this kit.)
3. Click on the **Instrument Options** to navigate to the **Active Options** page, and enter the key supplied with your kit.
4. Click the **Submit** button.

   A pop-up message follows a successful upgrade, and the Active Options page reflects the newly installed option along with those already present. Refresh the page if the installed option is not displayed.
5. Refer to *Usage* on the following page for information on using your upgrade.

Option-DS
Option-AD
Option-ADL
Option-EYE

For these options only, no activation is required and your WVR upgrade is complete. Your instrument automatically detects the upgrade and you can use the new features that it provides.

Refer to *Usage* on the following page for information on using your upgrade.

Usage

To use your upgraded instrument, note that the following support is available:

- The System Upgrade that you just performed installed the current online help, which supports all current product options and features.
- The Documents CD provides a PDF copy of the updated *Quick Start User Manual*, the *User Technical Reference*, and other documents that support all currently available options. You can access these documents using the Documents Browser on the CD or you can navigate to the PDFs and print them.
- The latest versions of both the product software and the documentation are available at www.tektronix.com.

End of document