

## DP-AUX DisplayPort AUX Control

### Instructions



071-2609-00

### Overview

The DP-AUX DisplayPort AUX Control lets you control the DisplayPort AUX channel. Use the DP-AUX hardware and software along with Tektronix test equipment to perform debug and characterization tests on DisplayPort sink (Rx) and source (Tx) devices.

### Prerequisites

- Microsoft Windows XP 32-bit operating system (for the DP-AUX DisplayPort AUX Control software).
- Tektronix DPO/DSA70000 Series oscilloscope (for source testing).
- Tektronix AWG7000 Series Arbitrary Waveform Generator (for sink testing).
- Sink test board fixture (Tektronix part number ET-DP-TPA-S). This part number includes GPPO to SMA adapter cables for the AUX p and n channels.
- Source test board fixture (Tektronix part number ET-DP-TPA-STX). This part number includes a source test board fixture, the sink test board fixture ET-DP-TPA-S, and GPPO to SMA adapter cables for the AUX p and n channels.

- Phase-matched SMA cables to connect the test board fixture DisplayPort lane signals to the test instrument. Run the oscilloscope signal path compensation (SPC) and cable deskew utilities to compensate for skew between the SMA cables. See the oscilloscope user manual for information on running SPC and deskew programs.

### Install the DP-AUX Control Software and Hardware Drivers

**NOTE.** Do not connect the DP-AUX hardware to the PC or test equipment until directed to do so in these instructions.

1. Insert the DP-AUX DisplayPort AUX Control software CD disc into the CD drive of your PC, Tektronix DPO/DSA70000 Series oscilloscope, or Tektronix AWG7000 Series Arbitrary Waveform Generator. Follow the on-screen instructions. If the installation software does not run, double-click the **setup.exe** file on the CD drive.
2. The DP-AUX install program requires that Microsoft Windows Installer v3.1 (or greater) and Microsoft .NET Framework v3.5 (or greater) be installed on the target PC or test equipment. If Windows Installer and .NET Framework are installed on the target PC or test equipment, the installation process begins installing the DP-AUX software and drivers.

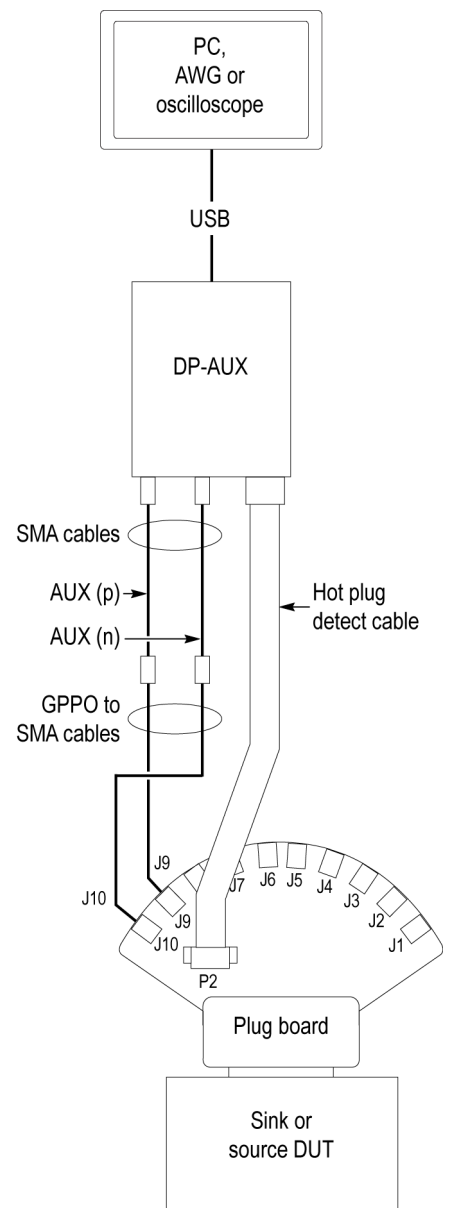
If either or both of the Microsoft applications are not installed, the DP-AUX installer will install them, one at a time (first Windows Installer, then .NET Framework). You will need to reboot your system if Windows Installer 3.1 was installed. The .NET Framework install does not require a reboot.

3. Click **Next** on each DP-AUX Installation screen to accept the default settings and begin installing the DP-AUX software.
4. Click **Continue Anyway** if you are prompted from a dialog box stating that the DP-AUX drivers are not certified by Microsoft.
5. The **Installation Complete** dialog box contains instructions for connecting the DP-AUX hardware to the PC or test equipment. Click **Print** to print the instructions (your PC or test equipment must be connected to a printer).
6. Click **Finish** to complete the DP-AUX software and driver install.
7. Connect a USB cable between the DP-AUX hardware and the PC or test equipment on which you just installed the DP-AUX software. The PC opens the **Found New Hardware** dialog box.
8. Follow the instructions printed from the **Installation Complete** dialog box in step 5.

### Using The DP-AUX Controller

**NOTE.** Install the DP-AUX software before connecting the DP-AUX hardware to the PC or test equipment.

1. Use the diagram to connect the DP-AUX hardware for Sink (Rx) or Source (Tx) testing.
2. On the PC or test instrument, click **Start > DisplayPort AUX Controller > DP-AUX Control App** to start the DP-AUX software.
3. Click **Help > DP-AUX Online Help** to open the DP-AUX online help for information on connecting the DUT lane channels to the test instrument and running sink and source tests.
4. Select **File > Exit** to close and exit the DP-AUX application.



## EMC Compliance

### EC Declaration of Conformity – EMC

Meets intent of Directive 2004/108/EC for Electromagnetic Compatibility. Compliance was demonstrated to the following specifications as listed in the Official Journal of the European Communities:

**EN 61326-1 2006.** EMC requirements for electrical equipment for measurement, control and laboratory use. <sup>1 2</sup>

- CISPR 11:2003. Radiated emissions, Group 1, Class A
- IEC 61000-4-2:2001. Electrostatic discharge immunity
- IEC 61000-4-3:2002. RF electromagnetic field immunity

<sup>1</sup> This product is intended for use in nonresidential areas only. Use in residential areas may cause electromagnetic interference.

<sup>2</sup> Emissions which exceed the levels required by this standard may occur when this equipment is connected to a test object.

### European Contact

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### Australia / New Zealand Declaration of Conformity – EMC

Complies with the EMC provision of the Radiocommunications Act per the following standard, in accordance with ACMA:

- CISPR 11:2003. Radiated emissions, Group 1, Class A, in accordance with EN 61326-1 2006

## Environmental Considerations

### Product End-of-Life Handling

Observe the following guidelines when recycling an instrument or component:

**Equipment Recycling.** Production of this equipment required the extraction and use of natural resources. The equipment may contain substances that could be harmful to the environment or human health if improperly handled at the product's end of life. In order to avoid release of such substances into the environment and to reduce the use of natural resources, we encourage you to recycle this product in an appropriate system that will ensure that most of the materials are reused or recycled appropriately.



This symbol indicates that this product complies with the applicable European Union requirements according to Directives 2002/96/EC and 2006/66/EC on waste electrical and electronic equipment (WEEE) and batteries. For information about recycling options, check the Support/Service section of the Tektronix Web site ([www.tektronix.com](http://www.tektronix.com)).

### Restriction of Hazardous Substances

This product has been classified as Monitoring and Control equipment, and is outside the scope of the 2002/95/EC RoHS Directive.

### Contacting Tektronix

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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](http://www.tektronix.com) to find contacts in your area.