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# Read This First

## 80A00 and 82A00 Series Modules

### Supported instruments

The 80A00 and 82A00 Series Modules are for use with the Tektronix DSA8300 Digital Serial Analyzer, as well as the legacy TDS/CSA8000, TDS/CSA8000B, and TDS/CSA/DSA8200 series instruments.

### Handle modules to prevent electrostatic damage



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**CAUTION.** *Electrostatic discharge (ESD) can damage sampling module electrical inputs and outputs.*

*Always use a grounded wrist strap (provided with your instrument) when installing or removing modules from the mainframe and when connecting cables.*

*Wear anti-static clothing and work in a static-free workstation when using sampling modules.*

*Discharge cables to ground before connecting them to modules.*

*Do not create an ESD antenna by leaving cables attached to the sampling-module input with the other end of the cable open.*

*Use a Tektronix 80A02 EOS/ESD Protection Module when taking TDR measurements.*

*Do not drop the module since damage and misalignment of the photodiode optical assembly can result.*

*Always store and transport modules in a static-free container, with all supplied terminations installed.*

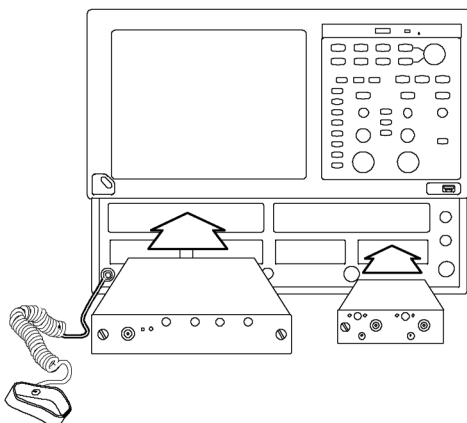
*To prevent loss of optical power or damage to the optical connectors, keep the connectors clean at all times. Check that all connectors, jumpers, and protective caps are clean before connecting them to the module.*

*Do not transport or ship the instrument with the modules installed in the module compartments.*

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## Install a module



**Figure 1: Module insertion**

1. Connect an antistatic wrist strap to the instrument front-panel ground connection. Place the strap on your wrist.
2. For optical modules, turn the module lock screws counterclockwise to rotate the retaining tabs to a vertical position before inserting the module.
3. Use the power cycle that is appropriate for your instrument:
  - DSA8300 instruments with TekScope application version **6.1.X** and greater: Click **Tools > View/Change Module Config** and follow the on-screen instructions.
  - Legacy instruments and DSA8300 with TekScope application version **6.0.X**: Power off the instrument using the front-panel **On/Standby** switch.
4. Push the module into a compartment, using firm pressure. When the module is seated, turn the lock screw(s) clockwise to tighten the module in the slot.
5. Power on the instrument (legacy instruments or DSA8300 with TekScope 6.0.X software) or complete the View/Change Module Config process (TekScope version 6.1.X and later). Let the instrument warm up for 20 minutes.

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**NOTE.** *The warm-up cycle is not required if you installed the module using the View/Change Module Config function (TekScope version 6.1.X and later).*

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6. In the TekScope application, click **Utilities > Compensate** and run a compensation on the newly-installed module. You must also run a compensation if a module is moved from one slot to another, or an extender is installed, changed, or removed from a module.

7. Use the Differential Channel Alignment application (**Applications > DiffChAlign**) to align both channels (and TDR steps when applicable) of supported two-channel electrical modules, to the module input connectors. This application steps through the connection setup to align both the acquisition and the TDR steps. For more information, see the help file for the application.

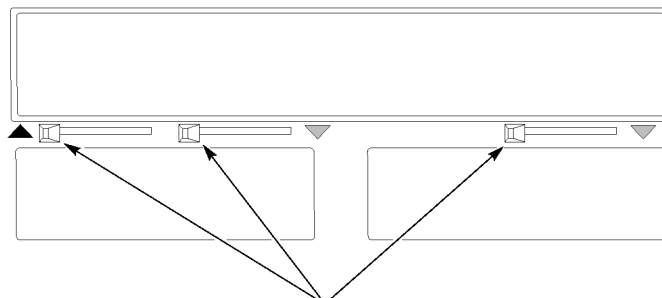
The Differential Channel Alignment application is available for DSA8300 instruments running TekScope version 6.2.X and later, and legacy instruments running TekScope version 5.2.x and later.

## Remove a module



**CAUTION.** Always use the module ejectors to eject a module from a compartment. Do not pull the module by the connectors; you can damage the connectors if you use them to pull out a module.

1. Connect an antistatic wrist strap to the instrument front-panel ground connection. Place the strap on your wrist.
2. Use the power cycle that is appropriate for your instrument:
  - DSA8300 instruments with TekScope application version **6.1.X** and greater: Click **Tools > View/Change Module Config** and follow the on-screen instructions.
  - Legacy instruments and DSA8300 with TekScope application version **6.0.X**: Power off the instrument using the front-panel **On/Standby** switch.
3. Remove all cables or probes from the module connectors.
4. Turn the module lock screws counterclockwise until loose or they stop turning.
5. Push the module ejector lever to unseat the module. The arrow near an ejector lever shows which compartment that ejector controls.



Use the appropriate ejector lever after loosening the module lock screws

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6. Use the module lock screws to pull the module partly out of the compartment. Then hold the module chassis and pull the module from the instrument.

## Moving modules while powered on

The TekScope **View/Change Module Config** function lets you remove, install, or move modules in the instrument without powering down the mainframe. See the *DSA8300 Digital Serial Analyzer Quick Start User Manual* for information on how to use this function.



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**CAUTION.** *Installing or changing modules while the instrument is powered on requires DSA8300 TekScope software version 6.1.X or greater. For DSA8300 TekScope software versions earlier than 6.1.X, or all legacy instruments (TDS/CSA/DSA8200, TDS/CSA8000B, and TDS/CSA8000B), **always power off the mainframe to remove, install, or move modules.** Failure to do so may result in damage to the module or mainframe.*

*You can download and install the latest DSA8300 software from [www.tek.com/software](http://www.tek.com/software).*

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## User documentation for modules

To download the most recent versions of manuals from the Tektronix Web site:

1. Go to **www.tek.com**.
2. Enter the module nomenclature, or the manual part number, in the Downloads **Enter Model Number** field.
3. Select **Manuals** from the Select Download Type list and click **GO**.
4. Click **Sort by DATE** to place the newest files at the top of the list.
5. Click the document link to download the file.

Contact Tektronix Customer Support to purchase printed copies of manuals.

## Get latest software

To determine if you need a newer TekScope application software for your sampling module, do the following:

1. Click **Help > About** in the TekScope application to show the current software version.
2. Use the *Module software compatibility tables* to find the TekScope application software version required for your module and instrument. (See page 6.)
3. To download a newer version of the application software:
  - a. Go to **www.tek.com**.
  - b. Enter the model number for your instrument in the Downloads **Enter Model Number** field.
  - c. Select **Software** from the Select Download Type list and click **GO**.
  - d. Select the appropriate software and follow the on-screen instructions to download and install the software.

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**NOTE.** *Newer software versions support all previously-released modules.*

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## Module software compatibility tables

Use the following tables to verify that your TekScope application software version supports a specific sampling module or is appropriate for the version of Microsoft Windows loaded on your mainframe.

### DSA8300 instrument software and module compatibility.

Supported modules <sup>1, 2, 3</sup>	Required operating system
<b>TekScope software version 6.0.3.X:</b> 80A01, 80A02, 80A03, 80A05, 80C01, 80C01, 80C02, 80C03, 80C04, 80C05, 80C06, 80C07/B, 80C08/B/C/D, 80C09, 80C10/B/C, 80C11/B, 80C12/B, 80C14, 80C25GBE, 80E01, 80E02, 80E03, 80E04, 80E06, 80E07, 80E08, 80E09, 80E10, 82A04	Microsoft Windows 7 Ultimate (32 bit) v0.9
<b>TekScope software version 6.2.X:</b> 80E07B, 80E08B, 80E09B, 80E10B, 80E11, 80E11X1, 82A04B	Microsoft Windows 7 Ultimate (32 bit) v0.9

<sup>1</sup> Listed version number or greater. Newer versions of the TekScope application software and the DSA8300 operating system support all previously-released modules.

<sup>2</sup> Listed modules include all available options unless noted otherwise.

<sup>3</sup> The DSA8300 does not support the 80A06 module.

**Legacy instruments software and module compatibility (TDS/CSA8000, TDS/CSA8000B and TDS/CSA/DSA8200).**

<b>TekScope software version <sup>1</sup></b>	<b>Supported modules</b>	<b>Required operating system</b>
1.0	80C01, 80C01-CR, 80C02/-CR, 80C03/-CR, 80E01, 80E02, 80E03, 80E04, 80A01, 80A02	Microsoft Windows 98
1.1	80C04-CR1	
1.2	80C04-CR2, 80C05, 80C06	
1.3	80C07/-CR1, 80C08/-CR1, 80C09/-CR1, 80A03	
1.4	80C08B/-CR1-CR2, 80C10, 80E06	
1.5	80C07B/-CR1, 80C08C/-CR1/-CR2/-CR4, 80C11/-CR1/-CR2/-CR3/-CR4	
2.0.1.3 <sup>2</sup>	80C12 (limited), 80A05 (limited)	Microsoft Windows 2000
2.0.1.5	80C12, 80A05	
2.1	82A04 (Must be installed in a DSA8200, CSA8200, or TDS8200 mainframe)	
2.4	80A06	
2.5	80E07, 80E08, 80E09, 80E10 <sup>3</sup>	
5.0	80C02 Option 01, 80C08C Option 01, 80C10B, 80C11 Option 01, 80C12 Option 01, 80C25GBE	Microsoft Windows XP
5.1.2	80C08D, 80C10C, 80C11B, 80C12B, 80C14	
5.2.X	80E07B, 80E08B, 80E09B, 80E10B, 80E11, 80E11X1, 82A04B	

<sup>1</sup> Newer versions of the TekScope application software and instrument operating system software support all previously-released modules.

<sup>2</sup> Replace product application software version 2.0.1.3 with the latest available version from the Tektronix Web.

<sup>3</sup> Using the 80E07, 80E08, 80E09, or 80E10 modules in mainframes with older versions of software may prevent the application from starting.