

**DSA83UP**  
**Instrument Upgrades for the**  
**DSA8300 Digital Serial Analyzer**  
**Instructions**

[www.tektronix.com](http://www.tektronix.com)



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## **Contacting Tektronix**

Tektronix, Inc.  
14150 SW Karl Braun Drive  
P.O. Box 500  
Beaverton, OR 97077  
USA

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.

# DSA83UP kit instructions

This kit describes how to install and activate available upgrades for the DSA8300 Digital Serial Analyzer instrument. Included with the kit is the latest version of the instrument product software and documentation.

Available upgrades:

- Option ADDJNB01 (Upgrade 80SJNB Essentials to 80SJNB01)
- Option ADVTRIG (Advanced Trigger)
- Option JARB (Jitter Analysis on Arbitrary Data)
- Option JNB (Jitter, Noise and BER Analysis)
- Option JNB01 (Jitter, Noise and BER Analysis as well as Serial Data Link Analysis)
- Option HDD8 (replacement hard disk drive)

## Kit parts list

Quantity	Description	Part number
1	DS83UP Kit Instructions (this document)	075-1037-XX
1	DSA8300 Product Documentation kit	020-3082-XX
1	DSA8300 Product Software installation kit <sup>1</sup>	020-3088-XX
1	DSA8300 Jitter Analysis software CD	063-4393-XX
1	HDD8 hard disk drive (Opt HDD8 order only)	HDD8

<sup>1</sup> See the instructions with the application software installation kit to check if you have the latest version of software, and to update the instrument to the latest TekScope application version if necessary.

## Upgrade options

### Option ADDJNB01

Option ADDJNB01 consists of a keycode to enable the 80SJNB Advanced software applications.

Option ADDJNB01 upgrades oscilloscopes currently running the 80SJNB Essentials (Option JNB) Application software to 80SJNB Advanced.

### Option ADVTRIG

Option ADVTRIG consists of a keycode to enable the Advanced Trigger software functions.

Option ADVTRIG enables advanced triggering for synchronous acquisition of repetitive patterns with lengths from 2 to 2<sup>23</sup> (8,388,608) bits, without the need to provide a pattern trigger. The instrument requires this option to use the clock/pattern trigger source/mode and to run the 80SJNB (Jitter, Noise and BER Analysis) software applications.

- Option JARB** Option JARB consists of a keycode to enable the 80SJARB application software.
- Option JARB enables the 80SJARB Basic Jitter Analysis on Arbitrary Data software application. This application is a basic jitter measurement tool capable of measuring jitter on any random or repetitive waveform. The acquisition method uses simple decomposition, which limits analysis. Repeatability is pattern dependent.
- Option JNB** Option JNB consists of a keycode to enable the 80SJNB Essentials application software.
- Option JNB enables the 80SJNB Essentials software application for DSA8300 instruments. This application software offers a complete analysis of jitter, noise, and BER, with decomposition of components for a clear understanding of a signal's problems and margins. The acquisition methodology requires a repetitive pattern and the presence of option ADVTRIG in the DSA8300. Both accuracy and repeatability are improved relative to the 80SJARB application because the tool has access to the complete signal pattern. Installing this option on a DSA8300 also enables the 80SJARB application.
- Option JNB01** Option JNB01 consists of a keycode to enable the 80SJNB01 Advanced application software.
- Option JNB01 enables the 80SJNB Advanced software application for DSA8300 instruments. This application software offers a complete analysis of jitter, noise, and BER, with decomposition of components for a clear understanding of a signal's problems and margins. In addition, the 80SJNB Advanced option adds features to the 80SJNB Essentials software for serial data link analysis, including fixture de-embedding, channel emulation, FFE/DFE equalization, and pre-emphasis/de-emphasis. Installing this option on a DSA8300 also enables the 80SJARB application.
- Option HDD8** Option HDD8 is a hard drive assembly to replace the existing DSA8300 hard drive. The drive includes the latest in-production instrument operating system and application software. The hard drive capacity will be equal to or greater than the drive that shipped with the product.

## Installing jitter application software

1. Power on the instrument and wait until the DSA8300 TekScope application is running.
2. Click **Help > About**.
3. Compare the TekScope application software version number listed in the dialog box with the TekScope software version number listed on the included DSA8300 Product Software CD:
  - If the installed TekScope software version number is less than the TekScope software version number on the CD, use the CD to install a newer version of the TekScope application software. Then go to step 4.
  - If the installed TekScope software version number is equal to or greater than the TekScope software version number on the CD, go to step 4.
4. Insert the *DSA8300 Digital Serial Analyzer Jitter Analysis Software* CD into the instrument media drive. The instrument opens the installation tool.
5. Click on the software to install (**80SJNB** or **80SJARB**). Follow on-screen instructions to complete the installation.
6. Enable the option functionality (for purchased options). (See page 3, *Enabling a software option*.)

## Enabling a software option

1. Power on the instrument and wait until the DSA8300 TekScope application is running.
2. Click **Utilities > Option Installation**.
3. Click **Continue**.
4. Enter the option installation key and click **Continue**.
5. Click **Restart Now** to restart the instrument. The instrument must be restarted to enable the option.
6. Click **Utilities > Option Installation** and check that the option is listed in the Enabled Options pane.

## Installing option HDD8

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**NOTE.** *Save any user-generated files, that you want to copy to the new drive, onto a network drive or memory device (USB memory device) before removing the drive from the instrument*

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1. Power off the instrument.
2. Connect the instrument grounding strap to the front panel, and wear the grounding strap on your wrist.
3. Loosen the two thumbscrews holding the hard disk drive (HDD) assembly (located at the upper-left corner of the back of the instrument).
4. Pull the HDD assembly from the instrument. Refer to your company or organization requirements for moving, storing, or disposing of the old drive.
5. Insert the new HDD8 drive in the instrument. Make sure that the assembly is fully seated in the instrument.
6. Tighten the thumbscrews.
7. Power on the instrument. Verify that instrument passes power-up diagnostics.

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