



**AWG701AUP
AWG702AUP
Options 01, 03, and SSD-0x
AWG70000A Series Upgrades
Instructions**

www.tek.com



075-1049-03

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

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

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.

Upgrade kit overview

This document provides instructions for performing hardware and/or software and option key upgrades on the following Tektronix products:

- AWG70001A Arbitrary Waveform Generators
- AWG70002A Arbitrary Waveform Generators

Upgrade kits covered by these instructions

The following table lists the available product upgrades supported by this document. Some upgrades only require an option key to enable the new features.

AWG70001A Upgrades	Description	Upgrade type
AWG701AUP 01	Increases the waveform record length from 2 GSamples to 16 GSamples	Option key only
AWG701AUP 03	Adds sequencing	Option key only
AWG701AUP SSD-01 (Serial numbers B019999 and below)	Provides an additional (or replacement) preprogrammed Solid State Drive with the Microsoft Windows 7 operating system for instruments with serial numbers B019999 and below. This drive can be used to: <ul style="list-style-type: none"> ■ provide an additional (or replacement) SSD with the Windows 7 OS. ■ revert an instrument with the Windows 10 OS to the Windows 7 OS. 	Hardware included
AWG701AUP SSD-02 (Serial numbers B020000 and above)	Provides an additional (or replacement) preprogrammed Solid State Drive with the Microsoft Windows 10 operating system for instruments with serial numbers B020000 and above. This drive can be used to: <ul style="list-style-type: none"> ■ provide an additional (or replacement) SSD with the Windows 10 OS. ■ convert an instrument with the Windows 7 OS to the Windows 10 OS. 	Hardware included
AWG701AUP SSD-03 (Serial numbers B019999 and below)	Provides an additional (or replacement) preprogrammed Solid State Drive with the Microsoft Windows 10 operating system for instruments with serial numbers B019999 and below. This drive can be used to: <ul style="list-style-type: none"> ■ provide an additional (or replacement) SSD with the Windows 10 OS. ■ convert an instrument with the Windows 7 OS to the Windows 7 OS. 	Hardware included
AWG70002A Upgrades	Description	Upgrade type
AWG702AUP 01	Increases the waveform record length from 2 GSamples to 8 GSamples on both channels	Option key only
AWG702AUP 03	Adds sequencing	Option key only
AWG702AUP 0816	Increases the sampling rate from 8 GS/s to 16 GS/s	Option key only
AWG702AUP 0825	Increases the sampling rate from 8 GS/s to 25 GS/s	Option key only
AWG702AUP 1625	Increases the sampling rate from 16 GS/s to 25 GS/s	Option key only

AWG70002A Upgrades	Description	Upgrade type
AWG701AUP SSD-01 (Serial numbers B019999 and below)	Provides an additional (or replacement) preprogrammed Solid State Drive with the Microsoft Windows 7 operating system for instruments with serial numbers B019999 and below. This drive can be used to: <ul style="list-style-type: none"> ■ provide an additional (or replacement) SSD with the Windows 7 OS. ■ revert an instrument with the Windows 10 OS to the Windows 7 OS. 	Hardware included
AWG701AUP SSD-02 (Serial numbers B020000 and above)	Provides an additional (or replacement) preprogrammed Solid State Drive with the Microsoft Windows 10 operating system for instruments with serial numbers B020000 and above. This drive can be used to: <ul style="list-style-type: none"> ■ provide an additional (or replacement) SSD with the Windows 10 OS. ■ convert an instrument with the Windows 7 OS to the Windows 10 OS. 	Hardware included
AWG701AUP SSD-03 (Serial numbers B019999 and below)	Provides an additional (or replacement) preprogrammed Solid State Drive with the Microsoft Windows 10 operating system for instruments with serial numbers B019999 and below. This drive can be used to: <ul style="list-style-type: none"> ■ provide an additional (or replacement) SSD with the Windows 10 OS. ■ convert an instrument with the Windows 7 OS to the Windows 7 OS. 	Hardware included

For a list of available options, see the Tektronix website (www.tektronix.com) or your Tektronix representative.

Kit parts lists

Option key only upgrades

Some upgrades only require a new option key to enable the new features or enhancements. These types of kits contains the following items:

Tektronix part number	Qty.	Description
N/A	1	LABEL, OPTION KEY INFORMATION Apply label to rear panel
N/A	1	LABEL, ECCN (RED) Only supplied with: <ul style="list-style-type: none"> ■ AWG701AUP 03 ■ AWG702AUP 03 Apply label to rear panel
075-1049-XX	1	MANUAL, KIT INSTRUCTIONS

AWG701AUP SSD-0x and AWG702AUP SSD-0x

These upgrades provide a preprogrammed solid state drive to use as either a secondary hard drive, a replacement for a failed hard drive, and to change operating systems. The kit contains the following items:

Tektronix part number	Qty.	Description
211-1081-XX ¹	4	SCREW, MACHINE; M3 X 0.5 X 3.5MM, FLAT WAFER HD W/SERRATIONS STRESS RELIEVED, PHL, ZINC PLATED STEEL
335-2612-XX ¹	1	MARKER, IDENT; HD ADAPTER (SLED); SAFETY CONTROLLED
One of the following: 650-5585-XX ^{1,2} 850-0385-XX ^{1,2} 850-0390-XX ^{1,2}	1	HARD DRIVE, PROGRAMMED; SOLID STATE DRIVE PROGRAMMED W/ OS & APP SW The Operating System installed is dependent on the SSD option. The Application software is the most current version available.
407-5641-XX ¹	1	ASSEMBLY, SLED, HARD DRIVE MOUNT (REMOVABLE)
075-1049-XX	1	MANUAL, KIT INSTRUCTIONS

¹ The hard drive and the mechanical sled components are pre-assembled.

² The hard drive delivered with the upgrade kit is based on the hard drive upgrade purchased.

Upgrade kit installation

Refer to the one (or more) of the following installation sections pertaining to the upgrade(s) you are installing.

Minimum tool and equipment list

No special tools are required to install any of the upgrade kits covered by these installation instructions.

Option key only upgrades

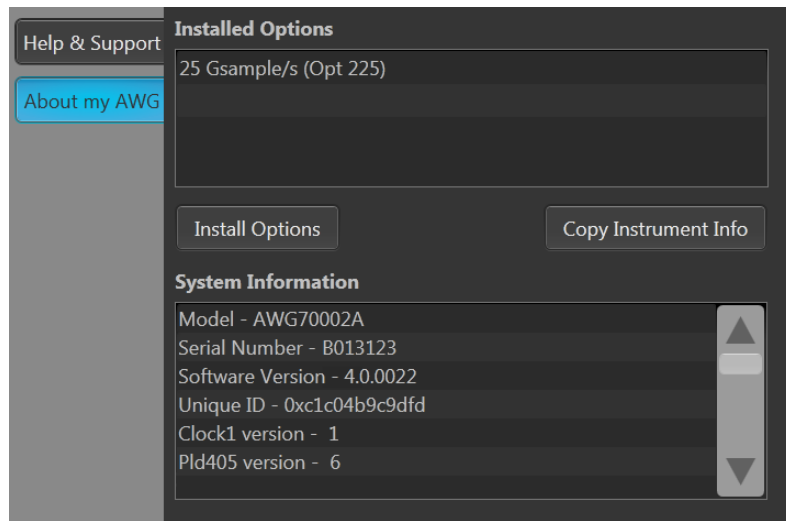
To install these types of options, you need the key number that is provided with this kit. This unique key number is valid only for the specific model number and serial number of your instrument; it will not work on any other instrument. This single key number enables all valid options for your instrument, those that were factory installed and any others that you may have already purchased. In other words, this new key number supersedes any previous key numbers that you may already have.



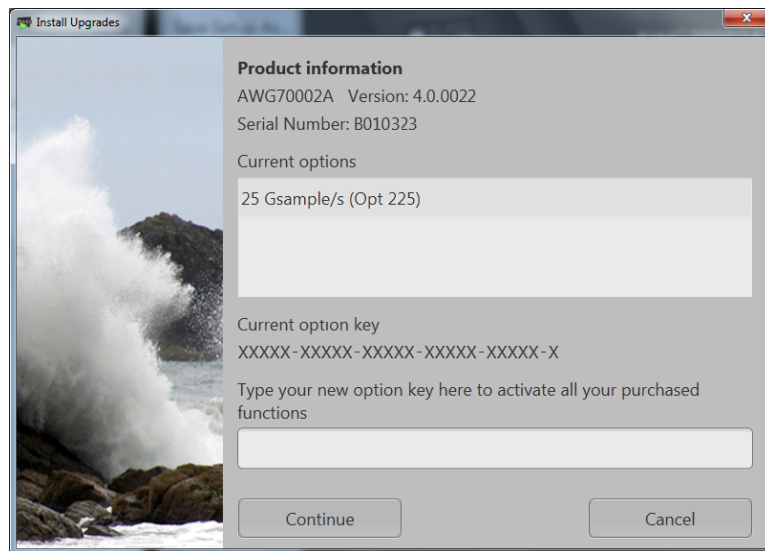
CAUTION. *To avoid losing your options, do not misplace the label that is included with this kit. This label contains the option installation key number and should be installed on the rear panel of the instrument for future reference. Apply the new label over the existing option key label.*

As a backup, you may want to copy the key number and save it with the other important papers for your instrument. If you ever need to re-enable the option, you will need to re-enter this key number.

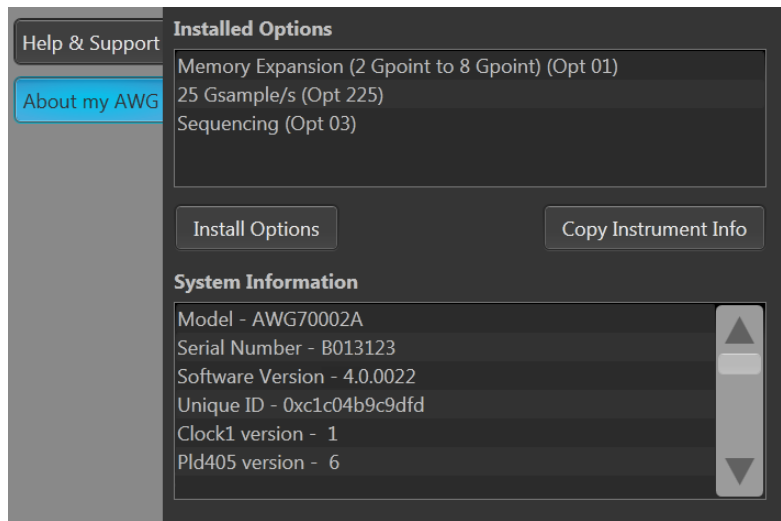
1. Power on the instrument.
2. Select **Utilities** from the workspace tabs.
3. Select **About my AWG** to display the current option information and system information.



4. Click Install Options to start the upgrade installation process.
5. Click Continue from the Install Upgrades introduction screen.



6. Enter the option key provided by Tektronix, and follow the on-screen instructions to install the option.
7. Power off the instrument, then power back on.
8. Select Utilities from the workspace tabs.
9. Select About my AWG to display the current option information and system information.
10. Verify the new option is listed.



- 11.** Apply the new option key label over the existing key label on the rear panel of the instrument.
- 12. Option 03 upgrades (adding sequencing):** You must apply the red ECCN label to the rear panel of the instrument.

AWG701AUP SSD-0x and AWG702AUP SSD-0x installation

NOTE. Before installing the new hard drive, use an external backup device to back up any files on your instrument for use on the new hard drive.

Install the hard drive using the following procedure:

1. Power off the instrument.
2. Loosen the thumb screws and remove the existing hard drive.

NOTE. The hard drive and hard drive sled components are pre-assembled.

3. Install the new hard drive, and then tighten the thumb screws to secure the drive in the instrument.
4. Power on the instrument to verify operation.

NOTE. If the hard drive contains Microsoft Windows 10, activation is required.



Windows 10 activation

The version of Microsoft Windows 10 included on the hard drive is shipped in Deferred Activation mode. Microsoft has a default activation method that requires a connection to the Internet. If you do not have a connection, you can activate Windows by phone or you can continue to operate in Deferred Activation mode.

First time activation. You can activate Windows 10 two ways.

1. Connect to the Internet. Windows will automatically activate. You can also go to System Properties to connect and activate.
2. Call Microsoft and speak with a representative to activate Windows 10. Contact information and a unique activation code (installation ID) will appear in a pop up window.

Activation with removable drives. If the SSD is removed from one instrument and inserted into another instrument, the activation process needs to be run again. If instrument 2 is not connected to the Internet, the activation fails and an Activate Windows watermark is displayed on the screen. To activate Windows and remove the watermark, you must connect to the Internet or call Microsoft.

Verify instrument software version

Tektronix recommends to update to the latest available application software for your instrument.

1. Select **Utilities > About my AWG**. Under System Information, note the Software Version number.
2. Use your Web browser to go to: www.tektronix.com/software.
3. Search for your instrument's model number and follow the link to the software.
4. If the installed software is older than that available, download the software.
5. Follow the instructions on the Web page to install the software.

NOTE. *Updating the instrument software does not impact installed option keys.*
