

5 Series MSO
Option SUP5-WIN SSD with Microsoft Windows 10
Upgrade Kit Installation Instructions

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

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# **Service safety summary**

Only qualified personnel should perform service procedures. Read this *Service* safety summary and the *General safety summary* in the service manual for your product 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.

## Kit description

This document supports installing option SUP5-WIN on all Tektronix 5 Series MSO oscilloscopes except those instruments installed with option 5-SEC (Enhanced Security) at the factory. This kit is a collection of parts that, once installed, configure the instrument with a solid state disk drive with the Microsoft Windows 10 operating system.

The SUP5-WIN SSD is not exclusive to any particular 5 Series MSO instrument. You can remove the Windows SSD drive from one instrument and install it on another.

### **Supported products**

Item	Description
5 Series MSO oscilloscopes	All MSO54, MSO56, MSO58 models that do not have option 5-SEC (enhanced security) installed at the factory.
	The 5 Series MSO Low Profile (MSO58LP) does not support option SUP5-WIN.

## Minimum tool and equipment list

Required tools and equipment	Part number
No tools are required to install the 5-WIN SSD drive	NA

## Kit parts list

The following table lists the parts for the kit.

Kit	Quantity	Part number	Description
5-WIN	1 each	SUP5-WIN	SSD drive installed in bracket
	1 each	071-3542-xx	5 Series MSO Option SUP5-WIN SSD with Microsoft Windows 10 Upgrade Kit Installation Instructions (this document)

## Installation instructions

Contact your nearest Tektronix, Inc., Service Center or Tektronix Factory Service if you need any installation assistance.

### Install the SUP5-WIN SSD drive

The option SUP5-WIN SSD assembly installs in the bottom of the 5 Series MSO instruments.

Prerequisite: Wear an anti-static wrist strap connected to the instrument chassis while installing this drive.

- 1. Remove all cables from the front and rear of the instrument, including the power cable.
- 2. Position the instrument on its back, with the bottom facing you.
- **3.** Remove the SSD drive cover from the bottom of the oscilloscope as shown.



**4.** Slide the connector end of the SSD into the drive connector bracket. Push firmly to seat the drive in the connector.



- **5.** Push down on and tighten the thumb screw to attach the SSD drive to the chassis.
- **6.** Reinstall the SSD drive cover on the bottom of the instrument.
- 7. Restore the instrument to its normal operating position.
- **8.** Go to the *Windows OS power on* procedure.

### Powering on Windows for the first time

The instrument goes through a series of configuration bootups that require manual intervention when first powering up a new (never-installed) SUP5-WIN drive in an instrument. Once the SUP5-WIN drive is configured, the instrument boots into Windows and starts the oscilloscope application from then on.

- 1. Power on the instrument. The oscilloscope powers up to initialize some settings, then shuts down.
- 2. Power on the instrument again. The instrument powers up into the application startup screen, then displays a message at the bottom of the screen:

**Updating System Files... This will take a few minutes.** 

The oscilloscope will shut down when the update is complete.

After a few minutes, the instrument powers down.

**3.** Power on the instrument again. The instrument boots up into Windows and starts the oscilloscope application.

The instrument attempts to activate the Windows license as part of the initial power-on process (See *Activating Windows* on page 5).

### **Activating Windows**

#### **Activating Windows**

The Windows operating system shipped from Tektronix is in a "deferred activation" state. The first time you power on an instrument with a newly installed SUP5-WIN drive, the operating system may attempt to activate itself, depending on whether the instrument is connected to a network.

- The instrument is connected to a network with access to the Microsoft web site:
  - The Windows activation occurs silently in the background, and does not display any messages. No other action is required.
  - See Verifying Windows activation on page 6 to check the activation status of the instrument.
- The instrument is connected to a network without access to the Microsoft web site:
  - The instrument may attempt to activate and fail. You may see a screen message saying that Windows is not activated and the Windows user settings may be disabled.
  - See *Verifying Windows activation* on page 6 to check the activation status of the instrument.

- You can activate Windows by either connecting the instrument to a network with access to Microsoft or by contacting Microsoft to obtain activation instructions:
  - Go to https://support.microsoft.com/en-us and select Windows.
  - Go to https://support.microsoft.com/en-us/contactus/ and follow the instructions to select your preferred contact method.

**NOTE.** Please contact Microsoft to resolve Windows activation issues.

- The instrument is not connected to any network:
  - The instrument stays in the "deferred activation" state. No error message appears. Windows, and the oscilloscope application, can operate indefinitely in the deferred activation state without error messages.
  - See *Verifying Windows activation* on page 6 to check the activation status of the instrument.
  - Once you connect the instrument to a network with access to Microsoft, Windows will activate automatically (no interaction required).
- Moving an activated SUP5-WIN SSD from one instrument to another:
  - Windows should remain activated. To verify activation, see *Verifying Windows activation* on page 6. If Windows lost activation when installed on the current instrument, follow the above instructions to reactivate.

# Verifying Windows activation

To check that Windows is activated:

- **1.** Tap **Start** on the Windows taskbar.
- 2. Scroll down and tap Settings.
- 3. Tap Update & Security.
- **4.** Tap **Activation** (left side list) to display the activation status.

#### Windows update

Automatic Windows update is disabled by default.

### Differences between Windows and base instrument user interfaces

The Windows-based oscilloscope application interface appearance and behavior is exactly the same as the base 5 Series MSO instruments, with some exceptions:

- You can change the size of the Windows-based oscilloscope application, or minimize it, just like any other Windows application.
- The File Utilities choice in the File menu opens a standard Windows Explorer instance instead of the custom dialog found in the base instrument.
- You can use the standard Windows network tools to mount and access network drives
- You can use the standard Windows tools to create a login password to access the instrument, if required by your organization.

### **Updating the Windows TekScope application software**

The 5 Series MSO Windows TekScope application does not automatically update when newer versions are released. You will need to manually download and install the newer software.

To update the Windows version of the 5 series MSO oscilloscope application software:

#### Instrument is connected to a network:

- 1. Display the Windows desktop and open a browser.
- 2. Go to www.tek.com/product-support.
- 3. Enter your model number in the Enter Product or Product Series Name: field and click Go.
- 4. Click the **Software** tab (left side of table).
- **5.** Click the link in the description that pertains to your instrument model or series, and select the software that applies for Windows instruments.
- **6.** Check that the listed software is newer than your current installed software before downloading and installing.
- 7. Follow instructions to download the application file.
- **8.** Click on the install instructions link to open the installation instructions.

#### Instrument is not connected to a network:

Follow the above instructions on a network-connected PC,

- 1. Open a browser on a network-connected PC or laptop.
- **2.** Do steps 2 through 7 above.
- **3.** Download the installation file to a USB memory device and insert the USB memory device in any USB Host port on the instrument.
- **4.** Open the USB drive location and copy the executable file to the desktop.
- **5.** Double-tap on the installation file to update the application software; follow any on-screen instructions.