

# **KickStart Instrument Control Software**

Release Notes

Keithley Instruments 28775 Aurora Road Cleveland, Ohio 44139 1-800-935-5595 www.tek.com/keithley

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## **GENERAL INFORMATION**

#### **SUPPORTED MODELS**

This software is intended for use with the following Keithley Instruments and Tektronix product models:

## **Product category**

DAQ					
2700	2701	2750	3706A	3706A-NFP	DAQ6510*
*Includes DAQ65	510-US				
DMM					
2000	2010	2100	2110	DMM6500*	DMM7510*

<sup>\*</sup>Includes DMM6500-US, DMM-7510-US, DMM-7510-NFP, DMM7510-NFP-US, DMM7510-RACK, DMM7510-RACK-US, DMM7510-NFP-RACK, DMM7510-RACK-US



## **Product category**

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SMU					
2400	2400-C	2401	2410	2410-C	2420
2420-C	2425	2425-C	2430	2430-C	2440
2440-C	2450	2460	2461	2470	2601A
2601B	2602A	2602B	2604B	2606B	2611A
2611B	2612A	2612B	2614B	2634B	2635B
2636A	2636B	2657A	2651A	2601B-PULSE	
Sensitive					
6430	6485	6487	6514		
Power Supply					
2280S-32-6	2280S-60-3	2281S-20-6			
Oscilloscope					
DPO3012	DPO3014	DPO3032	DPO3034	DPO3052	DPO3054
DPO4032	DPO4034	DPO4054	DPO4104	DPO4014B	DPO4034B
DPO4054B	DPO4102B	DPO4102B-L	DPO4104B	DPO4104B-L	MDO4024C
MDO4034C	MDO4104C	MDO4054C	MDO4014-3	MDO4034-3	MDO4054-3
MDO4054-6	MDO4104-3	MDO4104-6	MDO3012	MDO3014	MDO3022
MDO3024	MDO3032	MDO3034	MDO3052	MDO3054	MDO3102
MDO3104	MDO32	MDO34	MDO4014B-3	MDO4034B-3	MDO4054B-3
MDO4054B-6	MDO4104B-3	MDO4104B-6	MSO3012	MSO3014	MSO3032
MSO3034	MSO3052	MSO3054	MSO4032	MSO4034	MSO4054
MSO4104	MSO4034B	MSO4054B	MSO4012B	MSO4012B-L	MSO4104B
MSO4104B-L	TBS1022	TBS1042	TBS1062	TBS1064	TBS1022
TBS1042	TBS1062	TBS1064	TBS1022	TBS1042	TBS1062
TBS1064	TBS1032B	TBS1032B-EDU	TBS1052B	TBS1052B-EDU	TBS1072B
TBS1072B-EDU	TBS1152B	TBS1202B	TBS1202B-EDU	TBS1032B	TBS1032B-EDU

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## **Product category**

Oscilloscope					
TBS1052B	TBS1052B-EDU	TBS1072B	TBS1072B-EDU	TBS1152B	TBS1202B
TBS1202B-EDU	TBS1032B	TBS1032B-EDU	TBS1052B	TBS1052B-EDU	TBS1072B
TBS1072B-EDU	TBS1152B	TBS1202B	TBS1202B-EDU	TBS1102	TBS1104
TBS1152	TBS1154	TBS1102	TBS1104	TBS1152	TBS1154
TBS1102	TBS1104	TBS1152	TBS1154	TBS2072	TBS2074
TBS2102	TBS2104	TBS2202	TBS2204	TDS1002	TDS1012
TDS2002	TDS2012	TDS2014	TDS2022	TDS1001	TDS2004
TDS2024	TDS1001B	TDS1002B	TDS1012B	TDS2002B	TDS2004B
TDS2012B	TDS2014B	TDS2022B	TDS2024B	TDS1001C-SC	TDS1002C-SC
TDS1012C-SC	TDS2001C	TDS2002C	TDS2004C	TDS2012C	TDS2014C
TDS2022C	TDS2024C	TDS210	TDS220	TDS224	

#### SUPPORTED OPERATING SYSTEMS

KickStart is supported on the following operating systems:

Windows® 10, 64-bit (Creator's update)

Windows® 8, 64-bit Windows® 7, 64-bit

## **PC REQUIREMENTS**

Processor: Dual-core processor 2 GHz or better

RAM: 8GB

Display resolution: Minimum 1920 × 1080 recommended

Disk drive space required: 8 GB of free space

#### **SOFTWARE PREREQUISITES:**

NI VISA 17.5 Runtime or newer (installation package included in KickStart installer)

Microsoft® Visual Studio C++ 2013 x64 Redistributable Package

Microsoft® Visual Studio C++ 2017 x64 Redistributable Package

.NET Framework 4.7

When installing KickStart without an internet connection, make sure that the last three software prerequisites are installed on your PC before installing. The NI VISA 17.5 Runtime is packaged with the KickStart installer.

#### **INSTALLATION INSTRUCTIONS**

Download the KickStart 2.3.0 installer from  $\underline{\text{www.tek.com/keithley-kickstart}}$ . Unzip the file and run  $\underline{\text{KickStartSetup.exe}}$ .

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Follow the installation instructions and accept all default settings.

The installer will install the required files into the following default location: C:\Program Files\Keithley Instruments\KickStart

KickStart version 2.3.0 requires a software license. The software installs with a one-time 60-day free trial. For more information on licenses available for KickStart version 2.3.0, please visit <a href="www.tek.com/keithley-kickstart">www.tek.com/keithley-kickstart</a>. For more information on KickStart, see the KickStart Quick Start Guide (document number: KKS-903-01). This Quick Start Guide is available online at <a href="www.tek.com/keithley-kickstart">www.tek.com/keithley-kickstart</a>.

#### KICKSTART INSTRUMENT CONTROL SOFTWARE HISTORY

Version	Release date
2.0.0	April 2018
2.0.1	July 2018
2.0.2	July 2018
2.0.3	August 2018
2.0.4	October 2018
2.0.5	November 2018
2.0.6	February 2019
2.1.0	June 2019
2.1.1	September 2019
2.2.0	November 2019
2.2.1	February 2020
2.3.0	April 2020

## **VERSION 2.3.0 RELEASE NOTES**

## **VERSION 2.3.0 KNOWN ISSUES**

Issue number:	KS-3651
Description:	If a graph is zoomed in or out excessively while in Logarithmic scale, it may cause the graph to jitter or possibly cause KickStart to terminate.
Issue number:	KS-3667
Description:	In the I-V Characterizer App, if the graph is visible while running a pulsed I-V test, the graph may stop updating.
Workaround:	To correct this issue, press the autoscale button.

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Issue number: KS-3730; KS-3778; NS-1951 **Description:** Periodically, while using the latest 2462 firmware, the first pulse is missing from the sheet and graph in the I-V Characterizer Pulse test. This occurs for the Complete Pulse measurements and not Top of Pulse measurements. Workaround: Configure one additional pulse than is necessary. Issue number: KS-3751, NS-1952 **Description:** Current pulse list sweep tests in the I-V Characterizer do not produce the correct results. Issue number: KS-3783 **Description:** In a Pulse test with the I-V Characterizer and the model 2461, the sample rate can automatically change when switching from Complete Pulse to Top of Pulse and vice

The number of pulses \* (pulse delay + pulse width + pulse off time) \* Sample Rate can:

- 1. Produce too much data for the five million instrument reading buffer.
- 2. Increase test time due to the enormous amount of data.

Due to these issues, the App will change the sample rate attempting to alleviate the issues. Consequently, reducing the sample rate means some pulses may not show the measurement level accurately since the reading is taken during the rising or falling edge of the pulse.

#### **VERSION 2.3.0 ENHANCEMENTS**

Issue number:	KS-588
Improvement:	Added pulse support for model 2657A in I-V Characterizer.
Issue number:	KS-2966
Improvement:	Added support in I-V Characterizer for model 2651A.
Issue number:	KS-3358
Improvement:	Added support in I-V Characterizer for 2601B-PULSE.
Issue number:	KS-3469
Improvement:	Added static pulse preview to I-V Characterizer.
Issue number:	KS-3567
Improvement:	In the I-V Tracer App, added the ability to save and recall saved settings, and the ability to designate defaults when the App is started.

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#### **VERSION 2.3.0 USAGE NOTES**

Issue number: KS-1899

**Symptom:** In version 1.9.x, KickStart allowed you to control multiple TSP-linked instruments in the

I-V Characterizer App by connecting only one instrument to the computer. The software

will no longer allow this functionality.

Workaround: KickStart no longer uses TSP-Link as a communication interface. You can connect each

individual instrument to the computer using a supported VISA interface (USB, GPIB, or LAN). You can still use multiple instruments in the I-V Characterizer App and add

instruments to the App using the instrument manager on the App toolbar.

Issue number: Scope App Firewall

**Symptom:** The Scope App requires that permissions are configured in any firewall on the PC

running KickStart. This is to enable the Service Request (SRQ) feature of the VISA I/O

software library. This is only required if the scope is on the LAN.

Workaround: The KickStart installer will configure the Windows Defender Firewall when you install the

software. However, in case this step fails, or you are using a different firewall software,

you will need to do the following:

Configure an inbound and outbound rule that "KickStart.exe" in the "C:\Program

Files\Keithley Instruments\KickStart" folder, for all domains, is allowed.

This failure will show if you select an instrument and then select the Scope App. An error

message will indicate there is either a connection error or a firewall issue.

The error message reads, "Enabling the SRQ Failed. Check the connection to the Instrument. This could be a firewall issue. Check the KickStart release notes in the Installation Instructions section for more information about configuring the firewall."

#### **VERSION 2.3.0 RESOLVED ISSUES**

Issue number: KS-998

**Resolution:** It was possible for some source functions to have a source range that was higher than

the instrument was capable of. This has been resolved.

Issue number: KS-2287

**Resolution:** In I-V Characterizer, you are now able to perform a pulse train test of a single pulse.

Issue number: KS-2552

**Resolution:** If two or more I-V Characterizer Apps were open in a project, changing the DC/Pulse

radio button on one App affected the others. This has been resolved and each App is

now independent.

Issue number: KS-2837

**Resolution:** When attempting to hide a large number of rows in the Table, the user interface would

lockup and KickStart would sometimes crash. This has been resolved.

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Issue number: KS-2939
In I-V Characterizer, when viewing complete pulse measurements in the table, the mini-graphs would grow larger while scrolling. This has been resolved.

Issue number: KS-3565
When using a 6487 simulator in the DMM App, the test never completed after running. This has been resolved.

Issue number: KS-3727
Resolution: KS-3727
The repeat feature was removed from all pulse source settings. Previously saved I-V Characterizer tests that utilized the Repeat field will now run once.

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