KickStart Instrument Control Software
Version 2.9.0 Software Release Notes

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Contents

NEW AND IMPROVED

KickStart version 2.9.0 supports the new 2 Series MSO oscilloscopes (scopes), the 4, 5, and 6 Series MSO scopes, and the Low-Profile design scopes. This support for these scopes establishes KickStart as the full "bench companion" for multiple applications in education and advanced research, development, and validation workflows.

NEW FEATURES

- Added support for the 2, 4, 5, and 6 Series MSO scopes, and the 5 Series MSO Low Profile including:

  o Three modes of operation that enable data capture and datalogging of waveforms and measurements, including capturing screen shots

  o Data retrieval from analog channels, reference channels, and math channels

  o Ability to capture current data or wait for a trigger to capture data, and then re-arm for the next trigger

KICKSTART SOFTWARE

USAGE NOTES

Issue number:	KS-4891
Description:	Instruments that are powered off and connected to a serial adapter may show up in the instruments list. However, they cannot be used until powered on.

FIXED ISSUES

Issue number:	KS-5819
Description:	When floating an app tile in KickStart software, then navigating to Run History, and redocking the floating app tile, and next, selecting Run History again causes KickStart to crash.
	This issue has been resolved.

DC POWER SUPPLY APP

IMPROVEMENTS

Issue number:	KS-2172
Description:	The list sweep table theme from the IV Characterizer has been migrated to the DC Power Supply app.

HIGH RESISTIVITY APP

FIXED ISSUES

Issue number:	KS-5786
Description:	Exporting data as .xls format does not work correctly.
	This issue has been resolved.

I-V CHARACTERIZER APP

USAGE NOTES

Issue number:	KS-4679
Description:	All instruments in a TSP-Link network must be powered on for the entire network to function correctly.

SCOPE APP

USAGE NOTES

Issue number:	KS-5924
Description:	For MSO 4, 5, and 6 series oscilloscopes using a LAN cable connection to work properly with KickStart requires firmware version 1.40.4.344 or greater.
	Contact your local Tektronix or Keithley applications person to obtain a copy of this firmware version. After 01 October 2022 it should be available for download from the Tektronix website (tek.com).
Issue number:	KS-5888
Description:	KickStart does not automatically discover MSO 2 series oscilloscopes that are connected to the LAN. If you need to use a LAN connection with an MSO 2 series oscilloscope, and not USB, you will need to enter the IP address for the instrument in the Advanced Discovery section of the KickStart software.
Issue number:	KS-5820, KS-5812
Description:	KickStart limits the number of Math and Reference channels shown with MSO 2, 4, 5 and 6 oscilloscopes to eight.

Issue number:	KS-5780
Description:	The following measurement calculation types are supported in the Scope app with the MSO 2, 4, 5 and 6 oscilloscopes:
	Amplitude, Peak-to-Peak, Mean, Top, Maximum, Positive Overshoot, RMS, Base, Minimum, Negative Overshoot, AC RMS, Area, Period, Data Rate, Skew, Fall Time, Falling Slew Rate, Negative Duty Cycle, Hold Time, Frequency, Positive Pulse Width, Delay, Phase, Burst Width, Time Outside Level, Duration N-Periods, Unit Interval, Negative Pulse Width, Rise Time, Rising Slew Rate, Positive Duty Cycle, Setup Time, High Time.
Issue number:	KS-5779
Description:	The MSO oscilloscope 6 series uses the Windows or Linux operating systems (OS). If you are using the Windows OS, the scope is only supported using a LAN connection. See Scope app issue KS-5924 for more information.
Issue number:	KS-5770, KS-5769
Description:	Auto Sync may cause communications errors with the instrument.
	It is recommended that the "Auto Sync" setting is off in KickStart, and you use the "Sync Once" button when adding and deleting channels, math channels, and Ref Channels using the front panel of the scope.

KNOWN ISSUES

Description:	KS-5967
	If you have multiple scopes, or one scope, make sure each is connected correctly to your personal computer, and turned on, before you open a saved Scope App project. This will prevent KickStart from crashing.
Description:	KS-5914
	When Trigger Type is set to Sequence in the scope app, KickStart only shows the Trigger A settings in Acquisition Settings. It does not include the Trigger B settings.
Description:	KS-5911
	When attempting to capture a screen shot and Stop Capture is set to After Duration, the screen shot may not appear.

PULSING FOR INSTRUMENTS

Issue number:	KS-4240
Description:	The following table indicates the bias level and limit values allowed in KickStart during pulsing for each instrument series:

Series 260x				
Region	**Source voltage**	**Max current limit**	**KickStart max bias level**	**KickStart max bias limit**
1	40 V	1 A	40 V	1 A
1	6 V	3 A	40 V*	1 A
2	40 V	1.5 A	40 V	1 A
3	35 V	5 A	40 V	1 A
4	20 V	10 A	40 V	1 A
5	6 V	5 A	Not supported	Not supported
Region	**Source current**	**Max voltage limit**	**KickStart max bias level**	**KickStart max bias limit**
1	1 A	40 V	3 A*	6 V
1	3 A	6 V	3 A	6 V
2	1.5 A	40 V	3 A	6 V
3	5 A	35 V	3 A	6 V
4	10 A	20 V	3 A	6 V
5	5 A	6 V	Not supported	Not supported
Series 261x/263x				
Region	**Source current**	**Max voltage limit**	**KickStart max bias level**	**KickStart max bias limit**
1	100 mA	200 V	1 A*	20 V
1	1.5 A	20 V	1 A	20 V
2	1 A	180 V	1 A	20 V
3**	1 A	200 V	1 A	20 V
4	10 A	5 V	1 A	20 V
Region	**Source voltage**	**Max current limit**	**KickStart max bias level**	**KickStart max bias limit**
1	200 V	100 mA	200 V	100 mA
1	20 V	1.5 A	200 V*	100 mA
2	180 V	1 A	200 V	100 mA
3	200 V	1 A	200 V	100 mA
4	5 V	10 A	200 V*	100 mA

*In some cases, KickStart will allow higher bias levels that are not supported by the instrument.

**KickStart allows 1 A @ 200 V pulsing that may yield unexpected pulse characteristics; this will be corrected in a future release.

GENERAL INFORMATION

SUPPORTED MODELS

This software is intended for use with the following Keithley Instruments and Tektronix product models using USB, LAN (ethernet), or GPIB interfaces. The use of RS-232 (serial) is not supported. You can find the supported operating systems here: Supported operating systems.

Product category

AFG					
31021	31022	31051	31052	31101	31102
31151	31152	31251	31252		

DAQ					
2700	2701	2750	3706A	3706A-NFP	DAQ6510*

*Includes DAQ6510-US

SWITCH CARD					
2000-SCAN	2001-TCSCAN	3720	3721	3722	3723
3724	7700	7701	7702	7703	7706
7707	7708	7710			

DMM					
2000	2010	2100	2110	DMM6500*	DMM7510*

*Includes DMM6500-US, DMM-7510-US, DMM-7510-NFP, DMM7510-NFP-US, DMM7510-RACK, DMM7510-RACK-US, DMM7510-NFP-RACK, DMM7510-RACK-US

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	2651A	2657A	2601B-PULSE	

SENSITIVE					
6430	6485	6487	6514	6517A	6517B

POWER SUPPLY

222x	223x	2280S-32-6	2280S-60-3	2281S-20-6	2200-20-5
2200-30-5	2200-32-3	2200-72-1	2200-60-2	2260B-30-36	2260B-80-13
2260B-250-4	2260B-800-1	2260B-30-72	2260B-80-27	2260B-30-108	2260B-250-9
2260B-800-2	2260B-250-13	2260B-800-4	2231A-30-3	2306-LAN	

OSCILLOSCOPE

DPO3012	DPO3014	DPO3032	DPO3034	DPO3052	DPO3054
DPO4014B	DPO4032	DPO4034	DPO4034B	DPO4054	DPO4054B
DPO4102B	DPO4102B-L	DPO4104	DPO4104B	DPO4104B-L	MDO3012
MDO3014	MDO3022	MDO3024	MDO3032	MDO3034	MDO3052
MDO3054	MDO3102	MDO3104	MDO32	MDO34	MDO4014-3
MDO4014B-3	MDO4024C	MDO4034-3	MDO4034B-3	MDO4034C	MDO4054-3
MDO4054-6	MDO4054B-3	MDO4054B-6	MDO4054C	MDO4104-3	MDO4104-6
MDO4104B-3	MDO4104B-6	MDO4104C	MSO22	MSO24	MSO44
MS046	MSO54	MSO54B	MSO56	MSO56B	MSO58
MSO58B	MSO58LP	MSO64	MSO66	MS068	MSO64B
MSO66B	MS068B	MSO3012	MSO3014	MSO3032	MSO3034
MSO3052	MSO3054	MSO4012B	MSO4012B-L	MSO4032	MSO4034
MSO4034B	MSO4054	MSO4054B	MSO4104	MSO4104B	TBS1000C
TBS1022	TBS1032B	TBS1032B-EDU	TBS1042	TBS1052B	TBS1052B-EDU
TBS1052C	TBS1062	TBS1064	TBS1072B	TBS1072B-EDU	TBS1072C
TBS1102	TBS1102C	TBS1104	TBS1152	TBS1152B	TBS1154
TBS1202B	TBS1202C	TBS2072B	TBS2074B	TBS2102B	TBS2104B
TBS2202B	TBS2204B	TBS1202B-EDU	TBS2000B	TBS2072	TBS2074
TBS2102	TBS2104	TBS2202	TBS2204	TDS210	TDS220
TDS224	TDS1001	TDS1001B	TDS1001C-SC	TDS1002	TDS1002B
TDS1002C-SC	TDS1012	TDS1012B	TDS1012C-SC	TDS2001C	TDS2002
TDS2002B	TDS2002C	TDS2004	TDS2004B	TDS2004C	TDS2012

OSCILLOSCOPE (CONTINUED)					
TDS2012B	TDS2012C	TDS2014	TDS2014B	TDS2014C	TDS2022
TDS2022B	TDS2022C	TDS2024	TDS2024B	TDS2024C	

SUPPORTED OPERATING SYSTEMS

KickStart is supported on the following operating systems:
Windows® 11 and Windows® 10, 64-bit; KickStart version 2.0.0 and newer
Windows® 7 and Windows® 8; however, KickStart is no longer evaluated or updated to support these obsolete operating systems

SUPPORTED COMMUNICATION INTERFACES

USB
LAN
GPIB

MINIMUM PC REQUIREMENTS

Processor: Dual-core processor @ 2 GHz or better
NTFS file system
RAM: 8 GB
Display resolution: Minimum 1920 × 1080 recommended
Disk drive space required: 8 GB of free space

RECOMMENDED PC REQUIREMENTS

Processor: 4-core processor @ 2 GHz or better
NTFS file system
RAM: 16GB or more
Display resolution: Minimum 1920 × 1080 recommended
Disk drive space recommended: 100 GB or more free space for data storage

SOFTWARE PREREQUISITES

NI VISA™ 17.5 Runtime Engine or later (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.

NOTE

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

INSTALLATION INSTRUCTIONS

To install KickStart software:

1. Download the KickStart 2.9.0 installer from tek.com/keithley-kickstart.
2. Unzip the file and run `KickStartSetup.exe.`
3. Follow the installation instructions and accept all default settings.

The required files are installed in the following default location: `C:\Program Files\Keithley Instruments\KickStart.`

KickStart version 2.9.0 requires a software license. You can activate a one-time 30-day free trial with all KickStart apps. For more information on licenses available for KickStart version 2.9.0, please visit tek.com/keithley-kickstart.

For more information on KickStart, see the *KickStart Quick Start Guide* (document number: KKS-903-01), available online at tek.com/keithley-kickstart.

KICKSTART INSTRUMENT CONTROL SOFTWARE HISTORY

Version	Release date
2.9.0	July 2022
2.8.0	April 2022
2.7.0	November 2021
2.6.0	September 2021
2.5.0	April 2021
2.4.0	November 2020
2.3.0	April 2020
2.2.1	February 2020
2.2.0	November 2019
2.1.1	September 2019
2.1.0	June 2019
2.0.6	February 2019
2.0.5	November 2018
2.0.4	October 2018
2.0.3	August 2018
2.0.2	July 2018
2.0.1	July 2018
2.0.0	April 2018