KEITHLEY
A Tektronix Company

KickStart Instrument Control Software

Version 2.10.1 Software Release Notes

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NEW AND IMPROVED

In this new release of KickStart version 2.10.1, we are excited to announce the new Battery Simulator App (Specialty App). This new application will provide an effortless way for you to assess and reduce power consumption of wireless devices.

The battery simulator application allows a battery model to be generated by running a discharge test with the Model 2380 electronic load instrument. The application uses the battery simulator mode of the Model 2281S battery simulator instrument to simulate the battery model. All of this is accomplished from the convenience of a personal computer (PC).

NEW FEATURES

Battery Simulator App:
The battery app provides a visual representation of a battery with open-circuit voltage (V_{OC}), terminal voltage (Vt), state of charge (SOC), and equivalent series resistance (ESR), including current and capacity. The app also offers the following features:

- Ability to generate, edit, and simulate custom battery models
- Ability to change to a simulated state of charge in real time with the responsive interface
- Ability to visualize tables and graphs during the data collection in real time
- Ability to browse multiple battery models saved on the PC hard drive
- Ability to import and export models to and from the KickStart software
- Ability to choose from dynamic and static battery models

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.

BATTERY SIMULATOR APP

USAGE NOTES

Issue number:	KS-6330
Description:	When loading a Battery Simulation project saved in Model Browse mode, the model graph may not be visible. Subsequent model selections will display the model graph correctly.
Issue number:	KS-6278
Description:	When generating a discharge model with a 2380 series instrument, it is possible to set the model generation settings where the cutoff voltage is reached before enough model points have been generated. During model generation, an error will be shown, however, the test will continue. In this case, stop the test and adjust the model generation settings, then try the test again. To avoid this error, always verify your model generation settings before running the test.

FIXED ISSUES

Issue number:	KS-6383, KS-6384, KS-6385, KS-6404
Description:	KickStart encountered software errors and crashes when using the battery simulator app on a computer with specific localization settings. This issue has been resolved.
Issue number:	KS-6361
Description:	There was an issue with an incorrectly-spelled factory model name. This issue has been resolved.

KNOWN ISSUES

Issue number:	KS-6476
Description:	During Battery Simulation with 2281S instruments, it is possible that incorrect timestamps will be produced for measurements. A slower sample rate can mitigate this issue. The default sample rate has been adjusted to 300 ms.

IV CHARACTERIZER APP

FIXED ISSUES

Issue number:	KS-5893
Description:	KickStart would not allow output for the voltage limit in normal output off mode. This issue has been resolved.

SCOPE APP

USAGE NOTES

Issue number:	KS-5888
Description:	KickStart does not automatically discover 2 Series MSO Mixed Signal 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-5779
Description:	The 6 Series MSO Mixed Signal Oscilloscopes uses the Windows or Linux operating systems (OS). If you are using the Windows OS, the scope is currently only supported using a LAN connection.

FIXED ISSUES

Issue number:	KS-6424
Description:	In specific circumstances, there is a possibility that measurement readings may have been received out of order. This issue has been resolved.
Issue number:	KS-6423
Description:	There is an issue with viewing previous run data after running a test. This issue has been resolved.
Issue number:	KS-6317
Description:	There is an issue where the KickStart software will sometimes show duplicate measurement readings from an attached oscilloscope. This issue has been resolved.
Issue number:	KS-5967
Description:	Make sure all scopes are connected correctly to your personal computer and turned on before you open a saved Scope App project. This will prevent KickStart from crashing. This issue has been resolved.
Issue number:	KS-3018
Description:	While checking your instrument firmware, you may experience a warning notification to upgrade your firmware. This issue has been resolved.

KNOWN ISSUES

Issue number:	KS-5911
Description:	When attempting to capture a screenshot and Stop Capture is set to After Duration, the screenshot may not appear.

PULSING APP

FIXED ISSUES

Issue number:	KS-6394
Description:	Test failures occurred while using complete pulsing with a 2461 instrument on computers with specific localization settings. This issue has been resolved.

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	
DC ELECTRONIC LOAD					
2380-120-60	2380J-120-60	2380-500-15	2380J-500-15	2380-500-30	2380J-500-30

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: 16 GB 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 2.10.1 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 2.10.1 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 2.10.1, 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
2.10.1	February 2023
2.10.0	December 2022
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