Series 2600 System SourceMeter® Instruments
v1.3.4 Firmware Installation Considerations

KEITHLEY

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Supported Models

This firmware is intended for use on the following Keithley products:

2601, 2602, 2611, 2612, 2635, 2636

Overview

Version 1.3.4 is a maintenance release of the Series 2600 firmware. This firmware includes some non-critical fixes and support for new analog hardware.

Compatibility Concerns

Version 1.3.0 firmware introduced changes that may affect compatibility with automated calibration software used to calibrate a Series 2600 instrument. This firmware includes these changes and may be of concern when upgrading from a version of firmware earlier than v1.3.0. See v1.3.0 release section for more details.

Upgrade / Downgrade Considerations for Models 2601/2602

The following table outlines the considerations that should be made when deciding to upgrade or downgrade a Model 2601/2602 to v1.3.4.

Consideration	From v1.0.2	From v1.0.3 v1.0.4	From v1.0.5 v1.1.1 v1.1.2 v1.1.3 v1.1.4	From v1.3.3	From v1.4.2
Recalibration Required	No[1]	No[1]	No[1]	No	No
Re-qualification Suggested	Yes[2]	No	No	No	No
Backward Compatibility Concerns	Yes[3]	Yes[3]	Yes[3]	No	N/A
Should you upgrade?	Review[4]	Yes[5]	Review[4]	Review[4]	Review[6]

[1] Recalibration is not necessary when upgrading to v1.3.4. However, if the unit is recalibrated after performing the upgrade, a recalibration will be required if the firmware is later downgraded to any earlier version.

[2] Due to the comparatively faster test script execution of this release, production test suites should be re-qualified to assure there are no DUT settling issues.

[3] This version of firmware introduces some changes in behavior as compared to older firmware. See the Compatibility Concerns section for more details.

[4] Review the list of changes made in all versions in between your current version and this version. Upgrade if any of the fixes or enhancements are desired.

[5] These versions of firmware should be upgraded to v1.0.5, v1.1.3, or v1.3.4.

Upgrade / Downgrade Considerations for Models 2611/2612

The following table outlines the considerations that should be made when deciding to upgrade or downgrade a Model 2611/2612 to v1.3.4.

Consideration	From v1.2.0	From v1.3.3	From v1.4.2
Recalibration Required	No[1]	No	No
Backward Compatibility Concerns	Yes[3]	No	N/A
Should you upgrade?	Yes	Review[4]	Review[6]

Upgrade / Downgrade Considerations for Models 2635/2636

The following table outlines the considerations that should be made when deciding to upgrade or downgrade a Model 2635/2636 to v1.3.4.

Consideration	From v1.3.0	From v1.3.3	From v1.4.2
Recalibration Required	No	No	Partial[7]
Backward Compatibility Concerns	No	No	N/A
Should you upgrade?	Review[4]	Review[4]	Review[6]

When downgrading an instrument to this version of firmware from version 1.4, the instrument may exhibit a few-hundred fA shift in current measurements. The `KIOffsetAdjust` script should be run after upgrading the instrument to adjust the offset and remove the offset shift. A full calibration is not needed and the instrument does not need to be returned to the factory. The script will take approximately one hour to run. It only needs to be run once after upgrading from or downgrading to 1.3.4. See the complete Release Notes for more detail.

If the instrument's firmware is later upgraded to version 1.4 after the `KIOffsetAdjust` script has been run, the instrument will show a shift in the opposite direction. The script must be run on the instrument again after upgrading the firmware to remove the offset shift.

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[6] Review the Compatibility Concerns and list of changes in the version 1.4.2 release notes. Version 1.4.2 includes a number of important fixes and enhancements. Downgrade only if compatibility issues outweigh the improvements in v1.4.2.

[7] Differences between this version of firmware and version 1.4.2 firmware may cause a few-hundred fA shift in current measurements. A script included with the firmware should be run one time on the instrument after downgrading the unit. This will adjust the offset calibration to remove this shift. Once this script is run on an instrument, if the instrument is later upgraded to version 1.4 firmware, the script must be run on the instrument again after upgrading the firmware. A full recalibration is not necessary and the instrument does not need to be returned to the factory.