Series 2260B DC Power Supply
Version 1.82 firmware release notes

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Contents

General information

Supported models

This firmware, 2260B-FRP-V1.82, is used on the following Keithley Instruments product models:

- 2260B-30-36, 2260B-30-72, 2260B-30-108, 2260B-80-13, 2260B-80-27, 2260B-80-40

- 2260B-250-4, 2260B-250-9, 2260B-250-13, 2260B-800-1, 2260B-800-2, 2260B-800-4

Upgrade considerations

The following table outlines the considerations that should be made when deciding whether or not to upgrade your 2260B firmware to version 1.82.

Consideration for upgrade	From any previous version
Recalibration Required	No
Re-qualification Suggested	No
Should you upgrade?	Review[1]

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[1] Review the list of changes made in this version and all versions in between your current version and this version. Upgrade if any of the fixes or enhancements are needed.
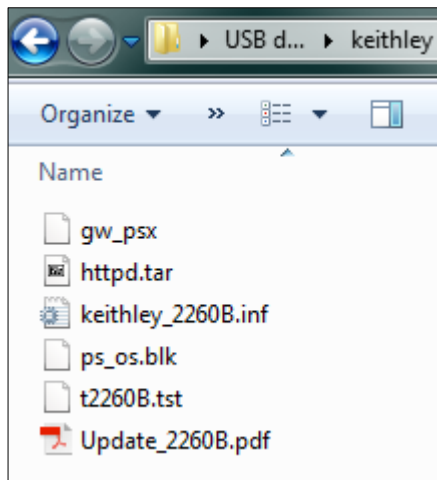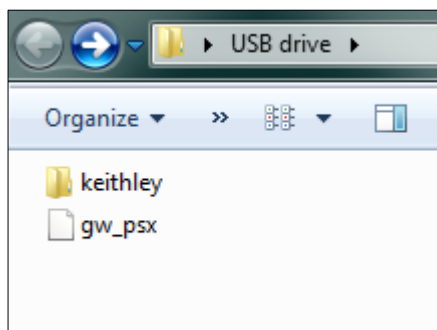
Firmware upgrade instructions

NOTES:

- Do not disturb or shut off the power on the power supply during this update.
- Do not remove the USB flash drive until the upgrade process is complete.
- If F-10 is set to `1`, the power supply's speaker will sound during the update. It is usually preferred to go to F-10 and change it to `0`.
- Ensure the load is not connected.
- Ensure the output is off.
- The firmware should be upgraded twice; as the procedure below will walk through.

To upgrade the firmware:

1. Unzip the firmware image archive to the root directory of a USB flash drive. The archive is a `*.zip` file; usually with the firmware version in the name.
2. Verify the folder structure:
   - A folder named `keithley` should now exist in the root directory of the USB and its contents should be as shown below:

   - The `gw_psx` file in the `keithley` directory should be **copied** up to the root directory as shown below:

3. Disconnect any input and output terminals that are attached to the instrument.
4. Turn on instrument power.
5. Insert the flash drive into the USB port on the front panel of the instrument.

6. Press the **Function** key. The function key will light up. The display will show `F-01` on the top and the configuration setting for `F-01` on the bottom.
7. Rotate the **Voltage** knob to change the F setting to `F-00`. The display will show `F-00` on the top and `0000` as the password for F-00.
8. Rotate the **Current** knob to set the Password to `5004` for the F-00 setting. Press in the **Current** knob to set each digit after properly rotated.
9. Press the **Voltage** knob to enter the Special Mode. SF-1 will be displayed when successful. (Ignore the number on the bottom.)
10. Rotate the **Voltage** knob to change the SF setting until the display shows `SF-2` on the top.
11. Use the **Current** knob to set the value for SF-2 to `1`.
12. Press the **Voltage** knob to start upgrading. On progressing, `COPY` will show on the bottom display.

    After the SF-2 value displays `ok-5` or `ok-7`, the system will reboot automatically.
13. Wait until the reboot is complete.

Continue to upgrade the kernel (second upgrade):

1. Press the **Function** key. The function key lights up. The display shows `F-01` on the top and the configuration setting for `F-01` on the bottom.
2. Rotate the **Voltage** knob to change the F setting to `F-00`. The display will show `F-00` on the top and `0000` as the password for F-00.
3. Rotate the **Current** knob to set the Password to `5004` for the F-00 setting. Press in the **Current** knob to set each digit after properly rotated.
4. Press the **Voltage** knob to enter the `Special` mode. SF-1 will be displayed when successful.
5. Rotate the **Voltage** knob to change the SF setting until the display shows `SF-6` on the top.
6. Use the **Current** knob to set the value for SF-6 to `2`.
7. Press the **Voltage** knob to copy the new kernel to the 2260B. On progressing, `COPY` will show on the bottom display.
8. After the update has finished, `SF-6   "ok"` will be displayed briefly before switching back to the regular SF-6 display.
9. Turn off power and then remove the USB Flash drive.

The upgrade process is complete.

Version 1.82 release

Version 1.82 is a maintenance and function enhancement release of the Series 2260B firmware. This release addresses one critical issue, Ethernet socket not resetting without power cycle.

Critical fixes

Models affected	2260B-30-36, 2260B-30-72, 2260B-30-108, 2260B-80-13, 2260B-80-27, 2260B-80-40, 2260B-250-4, 2260B-250-9, 2260B-250-13, 2260B-800-1, 2260B-800-2, 2260B-800-4
Symptom	Ethernet socket monitoring feature, which allows LAN recovery without having to re-cycle power.
Workaround	None
Resolution	This issue has been corrected.

Enhancements

None

Resolved issues

Models affected	2260B-30-36, 2260B-30-72, 2260B-30-108, 2260B-80-13, 2260B-80-27, 2260B-80-40, 2260B-250-4, 2260B-250-9, 2260B-250-13, 2260B-800-1, 2260B-800-2, 2260B-800-4
Symptom	Wrong word in Web Page.
Workaround	None
Resolution	This issue has been corrected.

Version 1.68 release

Version 1.68 is a maintenance and function enhancement release of the Series 2260B firmware.

This release addresses one critical issue, which was introduced in version 1.55, as well as correcting some noncritical issues and providing a few enhancements.

Critical fixes

> None

Compatibility concerns

Models affected	2260B-30-36, 2260B-30-72, 2260B-30-108, 2260B-80-13, 2260B-80-27, 2260B-80-40, 2260B-250-4, 2260B-250-9, 2260B-250-13, 2260B-800-1, 2260B-800-2, 2260B-800-4

Changes	Compared with version 1.55, version 1.68 has these changes:
	
	1. Increase the features - Menu [F-17], [F-19].
	    a. Menu [F-17] – Measurement average setting
	    b. Menu [F-19] – Lock mode
	2. Increase the feature - Menu [F-22].
	    a. Menu [F-22] – Rear panel USB mode, add "3" (Full Speed only)
	3. Increase eight new models: 2260B-30-108, 2260B-80-40, 2260B-250-4, 2260B-250-9, 2260B-250-13, 2260B-800-1, 2260B-800-2, and 2260B-800-4.
	4. Add related SCPI command.

Enhancements

Models affected	2260B-30-36, 2260B-30-72, 2260B-30-108, 2260B-80-13, 2260B-80-27, 2260B-80-40, 2260B-250-4, 2260B-250-9, 2260B-250-13, 2260B-800-1, 2260B-800-2, 2260B-800-4
Enhancement	Add the measurement average setting. (Menu [F-17]) Add the command : SENSe:AVERage:COUNt {<0,1,2> | LOW | MIDDle | HIGH}. Add the query command : SENSe:AVERage:COUNt?.
Enhancement	Add the lock mode. (Menu [F-19]) Add the command : SYSTem:KEYLock:MODE {0 | 1}. Add the query command : SYSTem:KEYLock:MODE?.
Enhancement	Increase the mode 3 (Full Speed only) in rear panel USB mode. (Menu [F-22])

Resolved issues

Models affected	2260B-30-36, 2260B-30-72, 2260B-30-108, 2260B-80-13, 2260B-80-27, 2260B-80-40, 2260B-250-4, 2260B-250-9, 2260B-250-13, 2260B-800-1, 2260B-800-2, 2260B-800-4
Symptom	Modified the icon for Web Page and descriptions.
Workaround	None
Resolution	This issue has been corrected.

Version 1.55 Release

Overview

Version 1.55 is a maintenance and function enhancement release of the Series 2260B firmware.

This release addresses one critical issue, which was introduced in version 1.53, and corrects a noncritical issue.

Critical fixes

Models affected	2260B-30-36, 2260B-30-72, 2260B-80-13, 2260B-80-27
Symptom	When you delete a test sequence from the internal memory, it does not update the screen immediately.
Workaround	None
Resolution	This issue has been corrected.

Enhancements

None

Resolved issues

Models affected	2260B-30-36, 2260B-30-72, 2260B-80-13, 2260B-80-27
Symptom	Wrong word in Web Page.
Workaround	None
Resolution	This issue has been corrected.