

Version 2.0 Release Upgrade Considerations

The Model 2910 Vector Signal Generator version 2.0 firmware has the following differences from version 1.0 that require you to consider particular tasks before upgrading the firmware.

Differences	Tasks
The instrument interface and help files are available in English only or a combination of English and Chinese.	If you choose to upgrade to the firmware that includes the Chinese languages, you must ensure that there is approximately 25 MB of available user memory in the instrument.
The analog modulation capability is available only with an instrument option license.	You must obtain a 2910-ALG license from Keithley Instruments at no charge to reinstate the analog modulation capability that existed with version 1.0.

Move user files to an external storage drive

The instrument interface and help files are available in the following languages for version 2.0:

- English only
- English, Simplified Chinese, and Traditional Chinese

If you choose to upgrade to the firmware that includes the Chinese languages, you must ensure that there is approximately 25 MB available in the 256MB user memory of the instrument. The user memory is the storage for various user files, such as waveform and setup files. You may need to move some of your user files to an external storage drive to ensure that there is enough available memory to accommodate the upgrade that includes Chinese languages.

Contact Keithley Instruments for a 2910-ALG license at no charge

The 2910 Vector Signal Generator firmware 2.0 requires an instrument option license for the analog modulation capability. Follow the "License request instructions" in the next section to obtain a 2910-ALG (analog modulation signal generation personality) license at no charge to reinstate the analog modulation capability in the Model 2910 after upgrading to version 2.0.

License request instructions

You must provide the unique instrument license identifier to Keithley Instruments to receive the 2910-ALG license. This procedure shows you how to create a file that includes the necessary information. You can locate the instrument license identifier information using either of the following methods:

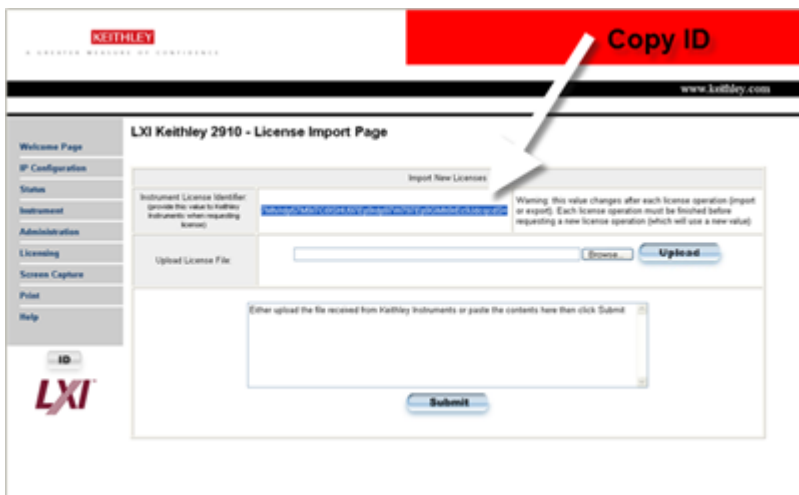
- With the Model 2910 front panel interface
- With the remote web interface

With the Model 2910 front panel interface:

1. Locate the License Certificate that was part of the instrument shipment. Fill out the necessary information to request the 2910-ALG license at no charge. If you misplaced this document, contact Keithley Instruments for a replacement.
2. To find the instrument license ID, select **Menu > Utilities > Licensing**.
3. Select **Save ID** to save the instrument license ID to a *.txt file.
4. In the **Save License ID** window, navigate to a location that you can access from your computer. A USB memory stick is convenient for this purpose.
5. Name the file:
 - If you want to overwrite an existing file, select the file in the directory structure.
 - If you want to save the file as new, select the keyboard button and enter the filename.txt, then select **Enter**.
6. Select **Save**.
7. Contact your Keithley Instruments sales representative to request the 2910-ALG (analog modulation signal generation personality) license. You will be asked for the file that you just created and then you will receive an e-mail message that includes the option license. After you receive the license, proceed with the "Firmware installation instructions" that appear later in this document.

With the remote web interface:

1. Locate the License Certificate that is part of the instrument shipment. Fill out the necessary information to request the 2910-ALG license at no charge. If you misplaced this document, contact Keithley Instruments for a replacement.
2. Connect the instrument to a web network that includes a computer.
3. On the computer, launch a web browser and use the instrument IP address as the URL, for example <http://192.40.128.183>.
 - If you do not know the instrument IP address, you can find it from the front panel interface by selecting **Menu > Utilities > Ethernet Settings**.
4. Click **Licensing > Import** from the instrument web page.
5. Find the **Instrument License Identifier** row of the displayed table, highlight the instrument ID, copy (Ctrl+C) it, and then paste it (Ctrl+V) into a new file. Save the file.



- Contact your Keithley Instruments Representative to receive the 2910-ALG (analog modulation signal generation personality) license. You will be asked for the file that you just created and then you will receive an e-mail message that includes the option license. After you receive the license, proceed with the "Firmware installation instructions" that appear next in this document.

Firmware installation instructions

After you have received an e-mail message with the 2910-ALG license from Keithley Instruments, you can install the firmware using the following methods:

- With the Model 2910 front panel interface
- With the remote web interface (English only)

Note: If you choose to upgrade the Model 2910 to the firmware that includes Chinese languages, use the front panel interface method. The upgrade file that includes the Chinese languages is too large for the remote web interface method.

With the Model 2910 front panel interface:

- On a computer, launch a web browser and download the latest software upgrade file (*.cab) from the Keithley.com Website.
- Save the file to a location that you can access from the instrument. A USB memory stick is convenient for this purpose.
- On the Model 2910 front panel, select **Menu > Utilities > Upgrade Software**.
- Navigate to the location of the upgrade file (*.cab) that you just downloaded and saved.
- Select the file and then select **Open**.

Note: The upgrade takes approximately 15 minutes. If the upgrade process stops, there is not enough user memory available to accommodate the upgrade file. You need to move some of your user files to an external storage drive to provide enough available memory to accommodate the upgrade that includes Chinese languages. Cycle the instrument power, move user files to an external storage drive, then repeat steps 3, 4, 5.

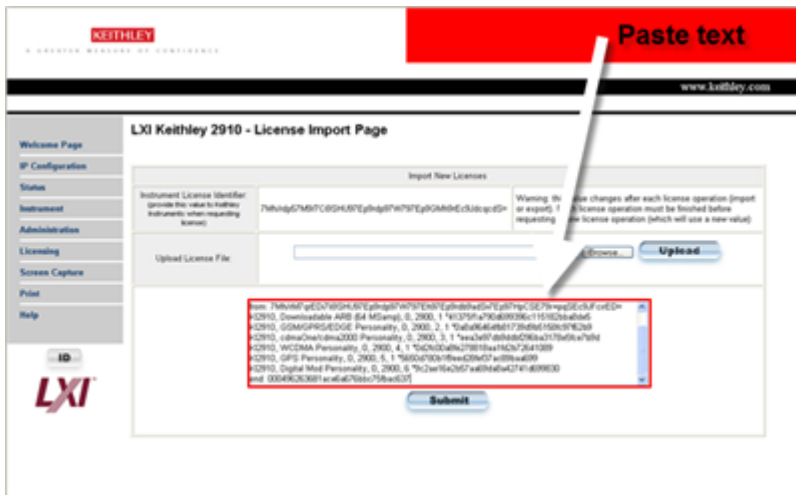
- When you receive an e-mail message from Keithley Instruments regarding the 2910-ALG license, copy (Ctrl+C) the text of the message and paste (Ctrl+V) it in a newly created *.txt file.

7. Save the file to a location that you can access from the instrument. A USB memory stick is convenient for this purpose.
8. On the Model 2910 front panel, select **Menu > Utilities > Licensing > Import**.
9. Navigate to the location of the *.txt file that you just created and saved.
10. Select the *.txt file and then select **Open**. The current license status of the instrument is displayed.

With the remote web interface:

Note: Although you can upgrade the instrument firmware (for English only) from the web interface, you will not be able to detect the progress of the upgrade from the remote interface. You may want to upload the upgrade file to the instrument, and then run the upgrade process locally.

1. Connect the instrument to a web network that includes your computer.
2. On the computer, launch a web browser and download the latest software upgrade file (*.cab) from the Keithley.com Website. Save the file to a directory on the computer.
3. In the web browser, use the instrument IP address as the URL, for example http://192.40.128.183.
 - If you do not know the instrument IP address, select **Menu > Utilities > Ethernet Settings** from the instrument front panel.
4. Click **Instrument** on the web page. The virtual front panel is shown.
5. Click **Menu > Utilities > Upgrade Software**.
6. You may need to type the username / password (default is admin / admin) to proceed.
7. Click **Browse** and navigate to the location of the *.cab file that you just downloaded from the Keithley website.
8. Click **Upload**. This copies the file to the instrument firmware upgrade directory.
9. Click **Start Upgrade** and then click the *.cab file that you uploaded to the instrument.
10. Click **Load**.
11. When you receive a return e-mail message from Keithley Instruments regarding the 2910-ALG license, submit the license information through the web page:
 - If you want to keep a copy of the license information, highlight the text of the received e-mail message, copy it (Ctrl+C), and then paste it (Ctrl+V) it in a newly created *.txt file. Save the file to a location that you can access from the instrument. In the instrument web page, click **Licensing > Import > Browse**. Navigate to the location of the license *.txt file that you just created and saved and click **Open**.
 - If you do not want to save a copy of the license information, highlight the text of the received e-mail message and copy it (Ctrl+C). On the instrument web page click **Licensing > Import** and then paste it (Ctrl+V) it in the appropriate field.



12. Click **Submit**. The current license status of the instrument is displayed.