

Installing Kurzweil K2661 ROM Options

Thank you for buying a ROM option for your K2661. This document shows you how to install either of the ROM options into your K2661.

Option Kits and Part Numbers

- RMB3-26 Stereo Dynamic (SD) Piano ROM Option Card
- RMB4-26 Vintage EPs ROM Option Card

System Requirements

Operating System Requirements

K2661 OS v1.x supports both ROM options.

Install ALL of your Object Files

After you install your option, you'll need to reinstall the base objects (program files and such) that correspond to your current OS, as well as the objects for all installed ROM options. You will find the base objects file is on the SmartMedia card and CD-ROM that came with your K2661. You can also get the appropriate object files from the www.kurzweilmusicsystems.com website.

Tools and Materials Required for Installation

- #2 Phillips screwdriver
- Two thick foam pads
- The SmartMedia card or CD-ROM that was provided with your K2661. You can also download the object files you need from the "downloads" area of our website:
<http://www.kurzweilmusicsystems.com/html/downloads.html>
- If you're not sure which files you need, don't worry. There is a table at the end of this document that lists the files you need for any installation. For tips about keeping track of the files you need, see *Organizing the Object Files* on page 5.

Important! Before You Install...

...you must back up any user-defined objects that you want to keep: programs, setups, samples, studios, FX presets, songs, intonation tables, velocity maps—in other words, anything stored in RAM. All of these user-defined objects will be deleted from your K2661 when you do the hard reset at the end of the installation procedure. The easiest way to do this is to make an “Everything” backup; this stores the entire contents of the K2661’s RAM to a single file. You can then reinstall everything in one operation, without having to keep track of individual objects.

Once you begin the installation, you can’t go back and do the backup. So if you want to save your RAM objects, do it *before* you begin the option installation.

Making an “Everything” Backup

1. Press **Disk** to enter Disk mode.
2. Use the Alpha Wheel to select a destination for the backup: either **SMedia** or the SCSI ID of a hard disk.
3. Press **Save**. The Save dialog appears, prompting you to select which range of object IDs to save.
4. Use the Alpha Wheel or **Down** cursor button to select **Everything**.
5. Press the **OK** soft button.
6. Name the file, using the **Left/Right** cursor buttons along with the Alpha Wheel or alphanumeric buttonpad.
7. Press **OK**.

Caution! Protection from Static Electricity



The K2661 and ROM options are sensitive to static electricity. You can seriously damage them if there’s a “spark” between you and any of the circuit boards or option cards. It’s important that you discharge all residual static electricity from your body before beginning the installation. You should also work on surfaces that won’t generate static electricity—for example, don’t stand (or put the K2661) on a rug or carpet.

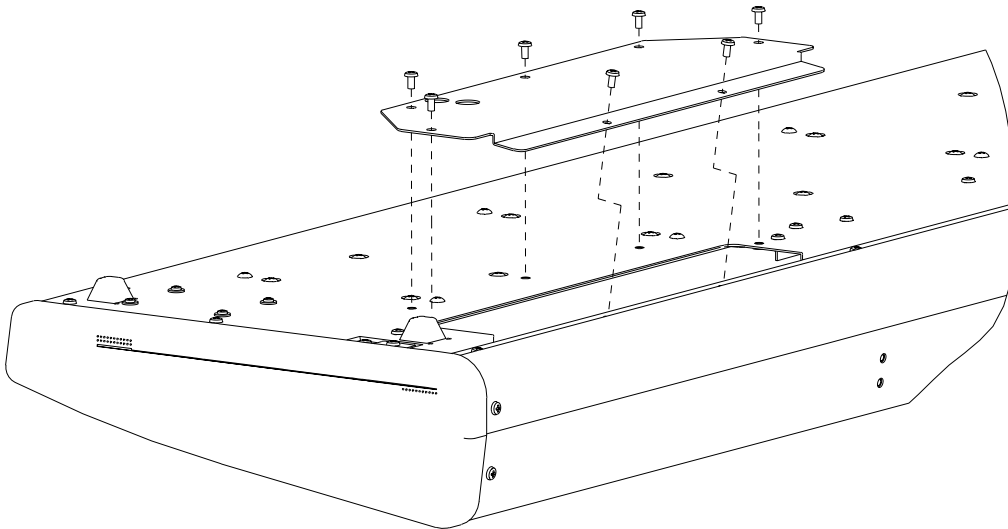
1. Before handling any of the components you’re going to install, touch the outer casing of the K2661 (or any conductive object). The casing of the K2661 is isolated from the circuitry, so a spark between you and the casing will not damage anything.
2. Remove the option from its static-protective bag. Hold the option in one hand and then firmly grasp the K2661 casing again with your other hand. Repeat this step for each option that you install.

Installing ROM Option Cards



Warning: The K2661 and ROM options are sensitive to static electricity. Before handling any option card, please follow the instructions on page 2 for protection from static electricity.

1. Make sure that the K2661 is disconnected from its power supply, and that you've discharged any residual static electricity by touching a conductive object (like the metal casing of the K2661 itself).
2. Position the foam pads on your work surface so that they'll support the ends of the keyboard.
3. Place the K2661 face-down on the foam pads, with the keyboard facing away from you. Make sure that the K2661 is not resting on the Alpha Wheel or sliders.
4. Using a #2 Phillips screwdriver, remove the seven screws that secure the access panel, as shown below.



5. Remove the access panel by lifting its far edge and pulling it up and away from you.
6. On the mother board, locate the pair of connectors for the ROM option card you are installing. The connectors are as follows:
 - Stereo Dynamic Piano: ROM 3 (J806 and J807)
 - Vintage Electric Pianos: ROM 4 (J808 and J809)
7. The option cards are “keyed” so that you can't insert an option card into the wrong pair of connectors. It is possible, however, to insert an option card with the wrong orientation, which could damage the card. To prevent this, the option cards are marked with arrows. Make sure that the arrow on each option card points in the same direction as the corresponding arrow on the mother board. After making sure the arrows point in the same direction, align the connectors on the option card with those on the mother board. Keeping the card as level as possible, press the card into the connectors. It should be relatively easy to press the card into place. If the card doesn't pop into place easily, check the connectors on the mother board to make sure there aren't any bent pins.

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Installing ROM Option Cards

8. Replace the access panel and loosely install the screws, starting with those closest to the hinge (back) of the access panel. When the screws are loosely in place, tighten them all, then turn the K2661 right side up. This completes the "hardware" portion of the installation.
9. Reconnect the power cable. The next part of the installation is to run the ROM diagnostic tests, then install the object files, as described in the following section.

Installing Object Files

Object files organize raw samples and other data into the programs that you use during normal operations. There's a file containing "base objects": all the standard factory program information. There's also a separate object file for each option that you've installed. You'll need to reinstall the base objects first, then install the object file for each of the options installed in your K2661. For all the factory programs (both the standard factory programs numbered from 1 to 199 and the factory programs for the options) to be available, you *must* reinstall the base objects, followed by the objects for *all* of your options.

How to Interpret the Filenames

If you look at the table at the end of this document, you'll see lists of filenames that look something like this: **OBJEP101.K26**

The name of each object file has four parts:

- **Prefix:** identifies the type of the file. In our example above, **OBJ** identifies the file as an object file for the **K2661**. Operating system files have the prefix **2661S**.
- **Category:** identifies what kind of object file it is. The example at the top of this section indicates a Vintage Electric Pianos objects file.
- **Version:** three digits that indicate the version of the object file. The version of the example is **1.01**.
- **Extension:** three characters following a dot, and identifying the file type to the K2661. Object files (including those containing programs, songs—all the objects you can save with the K2661) have the extension **K26**. Operating system files have the extension **KOS**.

Throughout this document, we use *placeholders* to represent the version numbers in filenames. Instead of using specific version numbers, we use *mmn* to represent any version of a file—as expressed in the description of filename prefixes, above.

Organizing the Object Files

The table beginning on page 8 lists all the possible combinations of options, and the corresponding object files to install for each combination of options. To determine which files you need to install, go to the table and look in the "Option name" (first) column. Find the entry that matches the options that you now have in your instrument (that is, after installing any new options). Then look in the second column to find the object files that you'll need to install.

For example, if you have the sampling option, the SD Piano option, and have just installed the Vintage EP option, you'll need to install the base-objects file, the SD Piano, Vintage EP, and Live mode object files (the Live mode object file is for the sampling option). The third column of the table gives the names of the object files as they appear in the K2661 display.



Note: If you are installing from a partitioned disk drive, all of the files need to be in the first partition (that's the only partition visible to the Boot Loader).

Refer to Table 1 while installing object files, checking off each file as you install it.

Using the Boot Loader to Run Diagnostic Tests and Install Files

The Boot Loader is the special utility that enables you to install ROM option objects into the K2661's flash ROM (unlike Disk mode, which loads objects into RAM). This is also where you'll run the diagnostic test(s) to confirm the physical installation of the ROM options.

1. Turn your K2661 off, if it isn't off already.
2. Turn it on again, and watch the display carefully. When you see **Please wait**, press and release the **Exit** button. This runs the Boot Loader. You'll see the main Boot Loader page:

```
Boot Block Main
K2661 Boot Block v1.00          Valid
K2661 Hardware Config v1.00    Valid
K2661 Engine v1.00            Valid
User Objects                   Valid

Install Run Reset DIAGS
```

3. Press the **DIAGS** soft button. The diagnostic test page will appear.
4. Use the cursor keys on the front panel of the K2661 to select either **ROM 3** (for the SD Piano option) or **ROM 4** (for the Vintage EPs option). If you have installed both ROM options, you should run each test individually.
5. Press the **Run** soft button to run the selected diagnostic test. When test has completed, the display will show whether or not the test has passed. (If the test fails, you should turn off the K2661, disconnect the power cord, and check to see if the ROM option is seated properly in its connector.)
6. Press the **Done** soft button to return to the diagnostic test page. At this point, you can either run the diagnostic test for the other ROM option (if installed), or press the **Main** soft button to return to the main Boot Loader page.
7. Press the **Install** soft button. The Drive Selection page appears:

```
Device to install from: SMedia
SCSI ID of this unit: N/A
```

Cancel OK

8. To install from a hard disk, select the SCSI ID of the disk from which you're going to install, then press **OK**; for SmartMedia, select SMedia then press **OK**. In either case, the File Selection page appears.

The K2661 will list all the files in the top level directory on the SmartMedia card or SCSI device. You can use the alpha wheel, or the up, down, increment (+), or decrement (-) keys to navigate to the file(s) you want to load. Use the **Root**, **Parent**, and **Open** soft buttons to move between directories:

Root takes you to the top level directory on the card.

Parent moves you up one directory level.

Open opens the currently selected directory.

The files you'll need are on the SmartMedia card in a top-level directory called "flash". On the CD-ROM, there is a directory called "smedia" that contains the entire contents of the factory-programmed SmartMedia card. So on the CD-ROM the directory for the files is /smedia/flash.

These are the files contained in the flash directory:

2661Smmn.KOS	K2661 Operating System
K61Vmmn.K26	"Base ROM" objects. Contains ROM1 (Orchestral), ROM2 (Contemporary), and GM objects as well.
OBJKLmmn.K26	"Live mode" objects. Install only if you have sampling option.
OBJEPmmn.K26	ROM4 (Vintage EPs) objects. Install only if you have ROM4.
OBJSDmmn.K26	ROM3 (SD Piano) objects. Install only if you have ROM3.

Highlight a filename, then press the **Select** button. Press **Select** a second time to deselect an item. You can select multiple files from the selection list. The status line at the top of the screen will show the current directory, how many files are in this directory, and how many files you have currently selected. An index counter shows you where in the list the cursor is currently located.

9. Select the base-objects file (**K61Vmmn.K26**). If you're installing from a hard disk, you may need to use the **Parent** or **Root** soft button to navigate to the directory where the file is stored. If you need to select a different drive, press the **NewDrv** soft button, which returns you to the Drive Selection page.

After you've selected the base-objects file, select the next object file(s) to install (if any). Use the file list in Table 1 to keep track of the files you've installed. Press **OK** to start the installation of the selected files.

When the installation is complete, the main Boot Loader page reappears.

10. A hard reset is necessary to reinitialize all objects. Remember that a hard reset will delete all user RAM (all of the objects that you've previously created).

Press the **Reset** soft button. Press **Yes**, then press **Yes** again after it moves to a different soft button. The operating system will reboot, briefly display "Initializing all memory.", then the Program Mode display will appear.

Congratulations! Your option installation is complete

Sound Check

Option name	Files to install	Filenames	Comments
SD Piano	Base objects	K61Vnnn.K26	Includes Orchestral, Contemporary, and GM objects.
	SD Piano objects	OBJSDnnn.K26	
	Live mode objects	OBJKLnnn.K26	Only needed if sampling option is installed.
Vintage EPs	Base objects	K61Vnnn.K26	Includes Orchestral, Contemporary, and GM objects.
	Vintage EPs objects	OBJEPnnn.K26	
	Live mode objects	OBJKLnnn.K26	Only needed if sampling option is installed.
SD Piano <i>and</i> Vintage EPs	Base objects	K61Vnnn.K26	Includes Orchestral, Contemporary, and GM objects.
	SD Piano objects	OBJSDnnn.K26	
	Vintage EPs objects	OBJEPnnn.K26	
	Live mode objects	OBJKLnnn.K26	Only needed if sampling option is installed.

Table 1 Operating System and Object Files for all ROM Option Configurations

Sound Check

Reconnect your K2661 to your audio system, or plug in a set of headphones. Check your audio levels. Scroll through the program banks to find the new programs. Play a few of the programs to make sure that everything is working properly. The programs are in the following locations:

Base ROM Sounds	001–199, 400–535, 800–999
SD Piano option	720–729
Live mode	740–749
Vintage EPs	600–699