

SD Piano Option Information

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Disk Contents

Your SD Piano option kit comes with four floppy disks, from which you'll install operating system software, base ROM object files (for the standard factory programs), and SD Piano ROM object files. Depending on the other ROM options you have (if any), you may also need to install other ROM object files—one for each option that you have.

All of these object files are included with this kit, for your convenience. There are also two files that contain customized programs and demo songs using the SD Piano. If you like, you can load these files into RAM, using Disk mode (the other files are to be installed in ROM using the boot loader, as described in the installation instructions that came with your SD Piano option kit).

The following table lists the four disks that come with the SD Piano option, and describes the contents of each disk.

Disk Name	Files	Descriptions
Operating System Disk1	K26V301A.KOS	Version 3 operating system, part A; install this file in ROM
Operating System Disk 2	K26V301B.KOS	Version 3 operating system, part B; install this file in ROM
Factory Objects Disk	OBJKB300.K26	Program and setup information for the standard factory programs (IDs 1–199); install this file in ROM
Accessory Disk	OBJKL101.K26	Program and setup information for Live-mode programs; install this file in ROM if you have the sampling feature
	OBJKO101.K26	Program and setup information for the Orchestral ROM option; install this file in ROM if you have the Orchestral ROM option
	OBJKC101.K26	Program and setup information for the Contemporary ROM option; install this file in ROM if you have the Contemporary ROM option
	OBJSD101.K26	Program and setup information for the SD Piano ROM option; install this file in ROM
	PNODEMOS.K26	Demo songs using SD Piano programs; load this file into RAM if desired
	SDFARM.K26	Custom programs using SD Piano sounds; load this file into RAM if desired.

Sympathetic Vibrations

When you play a chord on an acoustic piano and hold down the keys while the notes decay, the dampers on the corresponding strings remain up, and you hear a particular set of harmonics that evolve from the undamped strings. You don't hear any significant harmonics from the other strings.

If you play the same chord and hold it with the sustain pedal, you'll hear a much different, richer set of harmonics as the notes decay. That's because *all* the strings are undamped, and each string gradually begins to vibrate at its resonant frequency, in response to the vibrations of the strings struck by the hammers.

This phenomenon is called sympathetic vibration, and is an important component of the sound of an acoustic piano. The most noticeable of these sympathetic vibrations come from the strings whose fundamental pitches match the harmonics of the strings that were struck by the hammers.

To create a more realistic acoustic piano sound for the SD Piano option, Kurzweil sound engineers have developed special effects settings that imitate sympathetic vibrations. When you're playing one of the SD Piano programs with ID 700–713, and you're not using the sustain pedal, the K2600's audio signal passes through FXBus 1, then to the AuxBus, which applies a typical room or hall reverb.

When you use the sustain pedal, the signal passes FXBus 1 *and* FXBus 2 before going to the AuxBus. FXBus 2 applies a chain of reverbs programmed to resemble an acoustic piano's sympathetic vibrations.

You can use the Data slider (or any physical controller sending MIDI 6) to adjust the level the sympathetic vibration effect.

Modifying SD Piano Programs

If you want to change the room ambiance on an SD Piano program without losing the sympathetic vibration effect, use the Studio Editor to assign a different effect on the AuxBus of the studio used by that program. If you want to remove the sympathetic vibrations, remove the effect from FXBus 2.

Changes in This Revision

This is Revision B, which includes two changes relative to the previous revision (Revision A).

Page 1 In the table listing the contents of the disks that come with the SD Piano option, the name of the file containing SD Piano program and setup information is now **OBJSD101.K26**, reflecting an update to the contents of the file. The previous name of this file was **OBJSD100.K26**.

Page 1 The description of the file **OBJSD101.K26** now instructs you to install the file *in ROM*. In the previous revision, it instructed you merely to install the file.

Controller Assignments for SD Piano Programs

The tables in this section list the controller assignments for the SD Piano factory programs. The table titles show program IDs and names.

700 New Classical 1

MIDI 6	Disables sympathetic vibrations
MIDI 25	Adds distance
MIDI 67	Soft pedal

The most realistic sound for classical pieces

701 New Classical 2

MIDI 6	Disables sympathetic vibrations
MIDI 25	Adds distance
MIDI 67	Soft pedal

For “big” classical playing

702 Classical Grand3

MIDI 25	Wetter
MIDI 67	Soft pedal

703 DynGrand ClosMic

MIDI 25	Wetter
MIDI 67	Soft pedal

Close-mic dynamic grand; exaggerated filter on softest strikes, for extended dynamic range

704 Jazz Grand

MIDI 6	Disables sympathetic vibrations
MIDI 25	Bigger hall
MIDI 67	Soft pedal

Sounds nice in a jazz combo setting

705 Bright Grand

MIDI 6	Disables sympathetic vibrations
MIDI 22	Treble EQ boost
MIDI 25	Adds distance
MIDI 67	Soft pedal

Sounds like a relatively brightly-voiced piano

706 Songwriter’s Pno

MIDI 6	Disables sympathetic vibrations
MIDI 25	Wetter
MIDI 67	Soft pedal

Play simple block chords to accompany a pop or rock song

707 Soft Grand

MIDI 6	Disables sympathetic vibrations
MIDI 25	Wetter

708 Ballad Grand

Mod Wheel	Pitch modulation
MIDI 6	Disables sympathetic vibrations
MIDI 25	Adds chorusing in the reverb

For long sustaining chords in a rock band setting

709 FM & Grand

Mod Wheel	Tremolo
MIDI 6	Disables synth layer
MIDI 22	Timbre Control
MIDI 23	Octave in bass
MIDI 24	Fades frequency-modulation layers
MIDI 25	Wetter
MIDI 26	Chorus wet
MIDI 27	Chorus feedback

710 Hardhammer Piano

MIDI 6	More highs
MIDI 25	Wetter

711 Stage Grand St

MIDI 6	Disables sympathetic vibrations
MIDI 25	Wetter
MIDI 67	Soft pedal

Compressor in studio 749 controls dynamics in live settings

712 Jazz Grand Mono

MIDI 6	Disables sympathetic vibrations
MIDI 25	Reverb time

For use with a mono PA system

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713 Rock Grand Mono

MIDI 6	Disables sympathetic vibrations
MIDI 25	Reverb time

For use with a mono PA system

714 GrPno & Strings

Mod Wheel	Lowpass filter on strings
MIDI 6	Strings forward
MIDI 25	Piano delays
MIDI 26	Feedback control (tails longer)

715 GrPno & Pad

Mod Wheel	Fades pad
MIDI 6	Envelope control on pad
MIDI 25	Wetter

716 Grand & Rich Pad

MIDI 26	Feedback control (tails longer)
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Velocity controls each note's effects send; accents sound nice sustained

717 Dyn Pno&Pad

MIDI 22	Disables String 1
MIDI 26	Feedback control (tails longer)
MIDI 29	Enables String 2

Velocity controls each note's send to the feedback flangers

718 In Canyon w/Str

MIDI 6	Fades String layer
MIDI 25	Flange wet
MIDI 26	Increases reverb time

719 Mello w/Voxpad

Mod Wheel	Pitch modulation
MIDI 6	Fades string layer
MIDI 25	Flange wet
MIDI 26	Increases reverb time

720 String Chaser

Mod Wheel	Pitch modulation
MIDI 6	Filter
MIDI 25	Adds distance
MIDI 26	Decreases reverb time

721 Bowed Piano

MIDI 6	Fades to bowed layer only
MIDI 25	Controls send to flanger

722 GPno & Puff

MIDI 25	Wetter
MIDI 67	Soft pedal

For percussive playing

723 SynGrand & EPno

Mod Wheel	Manual wah-wah
MIDI 25	Wetter

724 Twang Grand

Mod Wheel	Detune
MIDI 6	Layer balance

725 AlternativePiano

Mod Wheel	Pitch modulation
MIDI 6	Timbre control

726 Affected Grand

Mod Wheel	Filter modulation
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727 Robot Grand

MIDI 6	Disables the per-note sample & hold
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For staccato repetitive playing (with the arpeggiator, for example)

728 Distorted Grand

MIDI 6	Hipass filter, program-wide
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729 Way in the Grand

Mod Wheel	Pitch modulation on layers
MIDI 6	Enables third layer
MIDI 25	Pitch modulation on the reverb
MIDI 26	Drier

Play sparsely!