SP6

GETTING STARTED GUIDE

This Getting Started Guide will give you a quick overview of the SP6. A full manual with additional information is available from www.kurzweil.com.

Features of the SP6

- FlashPlay technology utilizing 2GB of instrument samples including:
    - Optimized German D and Japanese C7 Pianos, Triple Strike Piano, 73 Electric Piano, Clavinets, Harpsichords, Celeste, Bowed and Hit Crotales, Vector Synthesis Waveforms
    - Rock, Synth and Orchestral sounds from Kurzweil's Forte SE, PC3, and KORE64
    - 10 Categories of Programs (Piano, E. Piano, Clav, Organ, Strings/Pads, Brass/Winds, Voices/Misc, Leads/Synths, Guitar/Bass, Drums/Perc)
- Space for 1024 Factory and 1024 User Programs and Multis
- KSR: Kurzweil String Resonance (Piano String Resonance Simulation)
- Support for optional Half-Damper pedal
- KB3 Organ simulations with control of 9 drawbars
- Arpeggiator with dedicated On/Off and Tap Tempo buttons (up to 4 simultaneous in Multi Mode)
- High quality audio effects with dedicated knob assignments
- 4 knobs with Shift button (3 shift rows for 12 assignments per Program)
- Support for up to 4 switch pedals
- 128 voices of polyphony
- 16 MIDI Channels for multitimbral applications
- 4 Zone MIDI Controller

KURZWEIL®
It's the sound.®

Quick Start

Be sure to check the Kurzweil website at www.kurzweil.com for new sounds, documentation and software updates.

Setting Up the SP6

1. If your SP6 keyboard has been out in the cold during shipping, give it time to warm up to room temperature before powering it on, since condensation may have formed inside.

2. Place the SP6 on a keyboard stand or on a hard, flat, level surface.

3. Connect the DC power adaptor to the SP6 DC Power jack.

4. Make sure your power outlet is compatible with the included power adaptor, then plug the power cable into the power outlet.

5. Plug the included Switch Pedal into the SW1 (SUSTAIN) jack on the SP6 rear panel.

6. If you have an additional switch pedal, plug it into the SW2 jack for sostenuto control.

7. If you have a MIDI CC pedal (also known as a MIDI expression or volume pedal), plug it into the CC (VOLUME) jack for volume control.

8. If you are using speakers, turn the master volume all the way down on your amplifier or mixer. Using standard (1/4-inch) audio cables, first plug into the input jacks of your amplifier or mixer, then plug the other end of the cables into the SP6 AUDIO OUT jacks. (Connecting in this order minimizes the possibility of static discharge damage.) For a mono signal, only use the LEFT (MONO) jack, and leave the RIGHT jack unplugged. Balanced ("TRS" or "Stereo") cables are recommended if your mixer or amp supports balanced inputs.

9. If you are using headphones, connect stereo headphones to the headphone jack on the rear panel.

10. Turn the SP6 VOLUME knob (on the far left side of the front panel) to MIN.

Powering On the SP6

1. Power on the SP6 by pressing the POWER button on the right rear panel.

2. If you are using speakers, turn up the volume on your amplifier or mixer.

3. Slowly turn up the SP6 VOLUME knob and play some notes to check the volume level. (If you have a CC pedal plugged into the CC (VOLUME) jack, make sure it is set to the maximum volume position).

4. If you are using speakers and the SP6 is not loud enough, turn up the volume on your amplifier or mixer.

5. If you are using a mixer and hear distortion, reduce the gain level on the mixer, or use the mixer's Pad button if it has one (a button that typically decreases the audio input level by 20dB).

6. After using the SP6, if you are using speakers, turn the master volume all the way down on your amplifier or mixer before powering off the SP6.

Auditioning SP6 Sounds

1. The SP6 starts up in Program Mode. Use the PREVIOUS and NEXT buttons, ALPHA WHEEL, or CATEGORY buttons to select a different Program. See for more details on selecting Programs or Multis.

1. To hear a Program Demo song for the current Program, press the KEYPAD and ENTER buttons simultaneously.

2. To hear the capabilities of the SP6, you can play the multi-channel demo songs. Press the KEYPAD and DRUMS/PERC buttons simultaneously to listen to a multi-channel demo song.

3. To switch between auditioning Programs or Multis, press the PROGRAM or MULTI Mode button under the MODE label to the right of the LCD display.
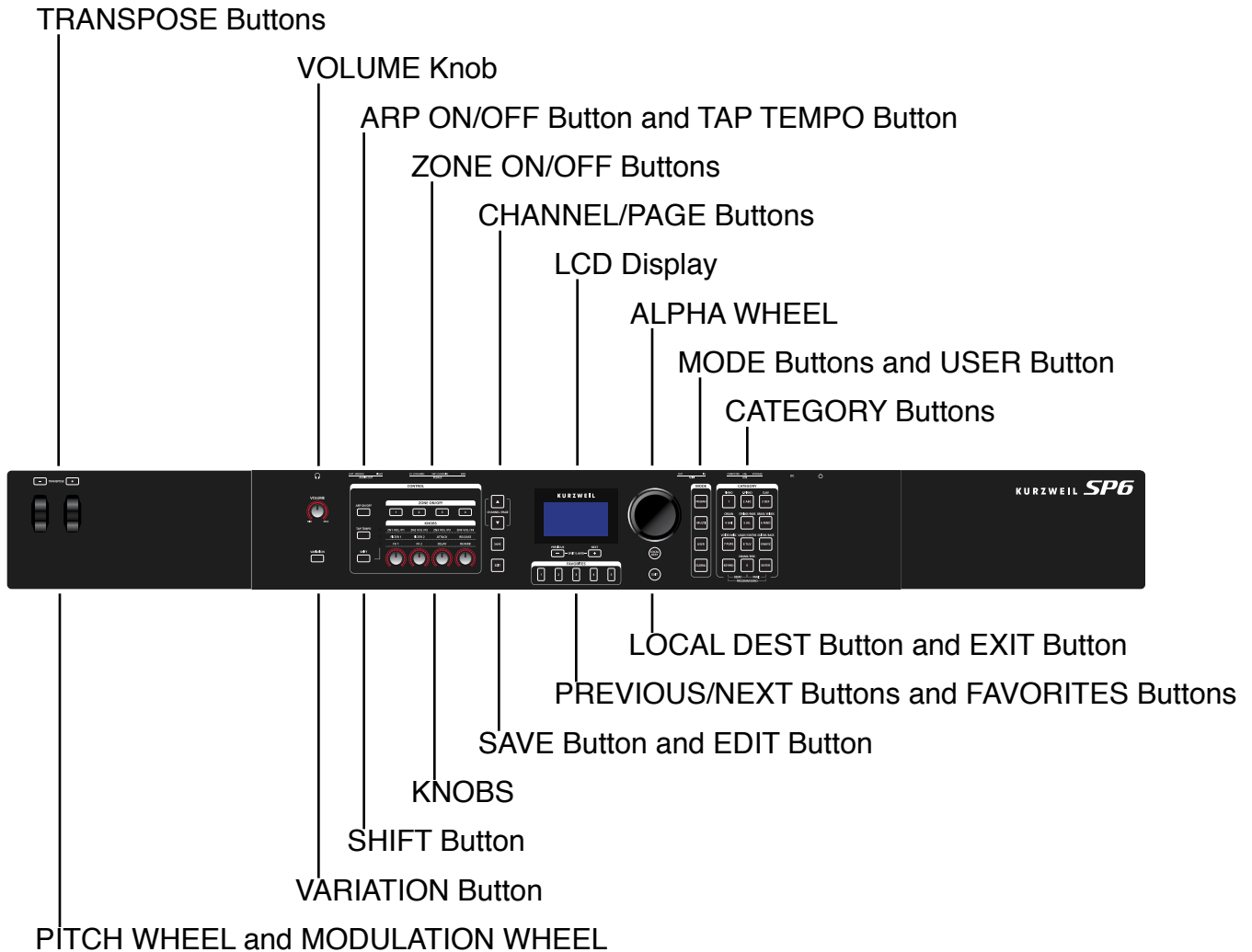
Automatic Power Saving

The SP6 has an automatic power saving feature (Auto Power Off) that can automatically power off the SP6 after a period of inactivity, in order to conserve electricity. The Auto Power Off feature is enabled by default. The default Power Off Time is 8 hours, which will cause the SP6 to power off after 8 hours of inactivity.

A count down timer warning will be shown in the LCD display a few minutes before the SP6 is powered off. At any time, touching any SP6 control or playing a note will cause the SP6 to remain powered on, until the SP6 has been inactive for the set Power Off Time.

Auto Power Off can be disabled in Global Mode. The Power Off Time can also be adjusted in Global Mode.

The Front Panel

TRANSPOSE Buttons

VOLUME Knob

ARP ON/OFF Button and TAP TEMPO Button

ZONE ON/OFF Buttons

CHANNEL/PAGE Buttons

LCD Display

ALPHA WHEEL

MODE Buttons and USER Button

CATEGORY Buttons

LOCAL DEST Button and EXIT Button

PREVIOUS/NEXT Buttons and FAVORITES Buttons

SAVE Button and EDIT Button

KNOBS

SHIFT Button

VARIATION Button

PITCH WHEEL and MODULATION WHEEL

VOLUME Knob

The VOLUME knob controls the volume level of the AUDIO OUT and HEADPHONE jacks.

LCD Display

The LCD display is the main user interface for the SP6. Use the LCD display to view Program and Multi names, controller assignments, and editing functions.

ALPHA WHEEL

In Program and Multi Mode, use the ALPHA WHEEL to navigate through the Program or Multi list.

In Program Edit or Multi Edit Mode, use the ALPHA WHEEL to scroll through the list of values for the currently selected parameter. Turn the ALPHA WHEEL counter-clockwise or clockwise to select the previous or next value. Turn the ALPHA WHEEL slowly to change the value by one increment, or turn it quickly to jump several increments.

PREVIOUS and NEXT Buttons

In Program and Multi Mode, use the PREVIOUS and NEXT buttons to navigate through the Program or Multi list.

In Program and Multi Mode, press the PREVIOUS and NEXT buttons simultaneously to access the Split/Layer function.

In Program Edit or Multi Edit Mode, use the PREVIOUS and NEXT buttons to navigate to each parameter on the current page.

MODE Buttons

Press the MODE buttons to access PROGRAM, MULTI or GLOBAL Mode. See for a description of each Mode.

CATEGORY Buttons

In Program Mode, the CATEGORY buttons allow you to select and browse Programs in 10 categories of instruments. Engaging the KEYPAD button allows you to use the CATEGORY buttons as an alphanumeric keypad. The KEYPAD button is always on in Multi Mode, and where needed for editing parameter values.

FAVORITES Buttons

The FAVORITES buttons can be used to instantly recall your favorite Programs and Multis. To assign the currently selected Program or Multi to a FAVORITES button, press and hold the desired FAVORITES button for a few seconds until the LCD display indicates that the favorite has been saved. Press a FAVORITES button to instantly select the stored Program or Multi.

TRANSPOSE Buttons

The TRANSPOSE buttons can be used to change the tuning of notes played on the SP6 keyboard in semitones (also known as half steps). The current transpose amount is shown in the LCD display (for example, the default is "Xp:0st"). Press both TRANSPOSE buttons simultaneously to reset the transposition to 0.

PITCH WHEEL and MODULATION WHEEL

Use each wheel to respectively perform pitch bends or vary the modulation amount. The MODULATION WHEEL will perform a pre-assigned modulation for each Program or Multi. The name of the current assignment is shown in the LCD display when the wheel is moved.

VARIATION Button

Pressing the VARIATION button will perform a pre-assigned variation for each Program or Multi. The name of the current assignment is shown in the LCD display when the button is pressed.

The VARIATION button has two states, off (not lit) and on (lit). The VARIATION button will typically modify the sound by adding an orchestral string section or synth pad layer, or enabling an effect.

For KB3 Organ Programs, the VARIATION button controls the Rotary Speaker speed, changing between fast and slow. The LCD display shows "KB3" when a KB3 Program is selected.

KNOBS

The KNOBS are used to control various Program and Multi parameters. Press the SHIFT button to shift between 3 rows of 4 knob assignments.

In Program Mode: The top row of knob assignments control user-assignable parameters, and the bottom two rows of knob assignments perform the functions labeled on the front panel. The top row of user-assignable parameters can be adjusted in Program Edit Mode.

In Multi Mode: The top row of knob assignments control Multi Zone volumes, and the bottom two rows of knob assignments perform the functions labeled on the front panel. For the bottom two rows of KNOBS, value scaling and offset can be adjusted per Zone for each knob in Multi Edit Mode. This allows each knob range to be adjusted or disabled per Zone.

In Program and Multi Mode: When a KB3 Organ Program is selected, some of the knobs may perform Organ drawbar functions instead of the functions labeled on the front panel. The LCD display shows "KB3" when a KB3 Program is selected.

SHIFT Button

The SHIFT button allows you to shift between 3 groups of knob assignments. The available knob assignments are labeled in 3 rows below the knobs. Press the SHIFT button to shift to the next assignment group, indicated by a lit LED to the left of each row.

ARP ON/OFF Button

Use the ARP ON/OFF button to turn on and off the SP6's Arpeggiator.

TAP TEMPO Button

Use the TAP TEMPO button to set the rate of the Arpeggiator or tempo synced FX (such as Delay). Press the TAP TEMPO button a few times at the desired rate to set the tempo.

ZONE ON/OFF Buttons

In Multi Mode, these buttons allow you to turn each of the 4 Zones on or off. When a Zone is on, the corresponding button is lit. When a Zone is off, the corresponding button is not lit. Press each Zone button to turn each Zone on or off.

SAVE and EDIT Buttons

These buttons are used when editing Programs or Multis to create User sounds. In Program Mode, press the SAVE button to save a User Program with the current controller settings.

EXIT Button

In Program Edit Mode, Multi Mode, or Global Mode, press the EXIT button to return to Program Mode. In Multi Edit Mode, press the EXIT button to return to Multi Mode.

USER Button

Press and enable the USER button to access previously saved User Programs and Multis. Press and disable the USER button to access all Programs and Multis (Factory and User).

CHANNEL/PAGE Buttons

Use the CHANNEL/PAGE buttons to change the current MIDI Channel in Program Mode, or the current page in Program Edit or Multi Edit Mode.

LOCAL DEST Button

The LOCAL DEST button controls the destination of MIDI notes produced by playing the SP6 keyboard. Pressing the LOCAL DEST button will step through the options, **LOCAL**, **MIDI**, or **LOCAL + MIDI**. When the LOCAL DEST button is pressed, the current setting is briefly shown in the LCD display. The color of the LOCAL DEST button changes depending on the current setting.

LOCAL + MIDI: MIDI notes will be sent to the local SP6 sound engine, as well as the MIDI OUT and USB Computer ports.

LOCAL: MIDI notes will only be sent to the local SP6 sound engine.

MIDI: MIDI notes will only be sent to the MIDI OUT and USB Computer ports.

The Rear Panel

POWER Button

Press the POWER button to power the SP6 on or off.

DC Power Jack

Plug the included power adaptor into the DC Power jack.

USB Ports

Use the USB ports to connect the SP6 to a computer/tablet or USB hard drive in order to do the following:

- Use the SP6 as a MIDI controller to play software instruments on a computer/tablet.
- Use a computer/tablet to sequence multi-channel songs on the SP6.
- Backup and restore User Programs and Multis on a computer/USB hard drive.
- Update the software and sounds of the SP6.

MIDI IN and OUT Ports

Use the MIDI ports to communicate with other MIDI modules and controllers. The OUT port is the MIDI transmitting port, and the IN port is the MIDI receiving port.

To use the SP6 as a MIDI controller for another sound module, use a MIDI cable to connect the SP6's MIDI OUT port to the MIDI input port of the module that you want to control.

To control the SP6 using another MIDI controller, use a MIDI cable to connect the SP6's MIDI IN port to the MIDI output port of the controller that you will be using.

SW1 (SUSTAIN) and SW2 Jacks

Use the SW1 (SUSTAIN) and SW2 jacks to connect switch pedals. One switch pedal is included with the SP6.

In Program Mode, SW1 (SUSTAIN) defaults to controlling sustain, and SW2 defaults to controlling sostenuto. (For KB3 Organ Programs, SW1 (SUSTAIN) defaults to controlling the Rotary Speaker speed, changing between fast and slow. This assignment can be changed in Global Mode. The LCD display shows "KB3" when a KB3 Program is selected.)

In Multi Mode, pedal assignments can vary per Multi. Pedal assignments can be adjusted for each Zone by using Multi Edit Mode.

Global Mode can be used to set pedal overrides, which can change the pedal assignments for all Programs and Multis.

> **NOTE : <u>Do not to step on the switch pedals when powering on the SP6,</u> <u>as the state of the pedals is detected as part of the start up sequence.</u>**

Dual Switch Pedals
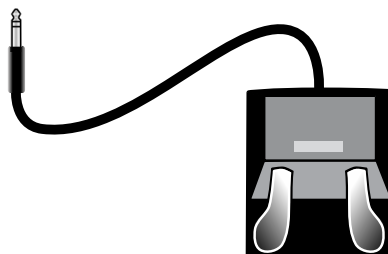
The SW1 (SUSTAIN) and SW2 jacks can be connected to dual switch pedals (2 pedals per jack), allowing up to four switch pedals to be used. Compatible pedals should use a single 1/4 inch tip-ring-sleeve plug.

Pedals plugged into the SW1 (SUSTAIN) jack are referred to as SW1a and SW1b, and pedals plugged into the SW2 jack are referred to as SW2a and SW2b. In Program Mode the default assignments are:

SW1a	Sustain
SW1b	Sostenuto
SW2a	Sostenuto
SW2b	Soft Pedal

To emulate the 3 pedals of an acoustic piano, plug a single switch pedal into the SW1 (SUSTAIN) jack, and a dual switch pedal into the SW2 jack.

Continuous Switch Pedals (Half-Damper)

The SW1 (SUSTAIN) jack is also compatible with continuous switch pedals (Half-Damper) that use a 1/4 inch tip-ring-sleeve plug (such as the Korg DS-1H). When connected to the SW1 (SUSTAIN) jack, a Half Damper pedal enables finer control of sustain than a standard switch pedal. Half Damper control is enabled for Programs in the Piano category. Programs outside of the Piano category will respond to a Half Damper pedal as if it is a standard switch pedal.

CC (VOLUME) Jack

Use the CC (VOLUME) jack to connect a MIDI CC pedal (also known as a MIDI expression or volume pedal). By default this pedal is assigned to control Program and Multi volume (pre-FX).

For KB3 Organ Programs, the CC (VOLUME) pedal controls organ swell. Organ swell is similar to Program volume, except volume can not be turned all the way down to silence. The LCD display shows "KB3" when a KB3 Program is selected.

For User Multis, the CC pedal can be assigned to a different function for each Zone by using Multi Edit Mode.

The optional Kurzweil CC-1 continuous control pedal will work best with the SP6, but it is also possible to use third-party continuous control pedals designed for keyboards. Compatible pedals should use a 10 kΩ linear-taper potentiometer, with a 1/4 inch tip-ring-sleeve (stereo) plug with the wiper connected to the tip.

AUDIO OUT LEFT (MONO) and RIGHT Jacks

Use the AUDIO OUT jacks to connect to an amplifier or mixer. See for details.

HEADPHONE Jack

Use the HEADPHONE jack located on the left rear panel of the instrument to listen to the SP6 on stereo headphones. You will need a 1/4-inch-to-1/8-inch adapter in order to use headphones that have a smaller mini plug connector.

When headphones are plugged in, audio is still transmitted from the AUDIO OUT jacks.

SP6 Sounds

The SP6 contains Programs and Multis. A Program is typically a single instrument sound such as a Piano, Organ, or Synth. Programs are organized by instrument type in 10 categories.

A Multi is a combination of Programs arranged as layers and/or splits across the keyboard. Multis are not categorized by instrument type, so the KEYPAD button is always on when in Multi Mode.

Selecting Programs

In Program Mode, use any of the methods below to select a Program.

Browse All Programs:

Make sure the USER button is off, then use the ALPHA WHEEL or PREVIOUS and NEXT buttons to select a Program from all of the available Programs.

Select a Program by Category:

Make sure the KEYPAD button is off, then press one of the CATEGORY buttons to select the first Program of a category. The selected CATEGORY button will turn on. Use the ALPHA WHEEL or PREVIOUS and NEXT buttons to select Programs from the selected category.

Select a Previously Saved User Program:

Press and turn on the USER button, then use the ALPHA WHEEL or PREVIOUS and NEXT buttons to browse only User Programs. To return to browsing Factory and User Programs, press and turn off the USER button.

Select a Program by ID Number:

Press and turn on the KEYPAD button. The keypad button allows you to use the numbers labeled on the CATEGORY buttons to select Programs or Multis by ID number. Type an ID number followed by pressing the ENTER button to select the associated Program.

Select a Category Default Program:

Each category has a Category Default Program (the Program which is selected when each CATEGORY button is pressed). By default the Category Default Program is set to the first Program of each category. To set a different Category Default Program, select a Program, make sure the KEYPAD button is off, then press and hold the currently lit CATEGORY button.

Selecting Multis

In Multi Mode, use any of the methods below to select a Multi.

Browse All Multis:

Make sure the USER button is off, then use the ALPHA WHEEL or PREVIOUS and NEXT buttons to select a Multi from all of the available Multis.

Select a Multi by ID Number:

The KEYPAD button allows you to use the numbers labeled on the CATEGORY buttons to select Multis by ID number. Use the CATEGORY buttons to type an ID number followed by pressing the ENTER button. Multis are not organized by category, so the KEYPAD button is always on in Multi Mode.

Select a Previously Saved User Multi:

Press and turn on the USER button, then use the ALPHA WHEEL or PREVIOUS and NEXT buttons to browse only user Multis. To return to browsing Factory and User Multis, press and turn off the USER button.

Controllers

The Knobs, Wheels, Pedals and Buttons can control each of the Factory Programs and Multis, to produce variations to the sound. Don't forget to try these out as you explore the Factory sounds on the SP6.

Generally, each control will perform the assignment labeled on the front panel, although some controls may have different assignments per Program or Multi. When a controller is moved, the name of the current assignment is shown in the LCD display. Controller assignments can be adjusted in Program and Multi Edit Mode.

Favorites

Use the FAVORITES buttons to quickly store and recall a set of 5 favorite Programs and/or Multis while in Program or Multi Mode.

To recall a favorite Program or Multi, simply press one of the FAVORITES buttons. The FAVORITES buttons work from both Program or Multi Mode, and pressing a FAVORITES button will automatically bring you to Program Mode or Multi Mode if required.

To assign the currently selected Program or Multi to a FAVORITES button, press and hold the desired FAVORITES button for a few seconds until the LCD display indicates that the favorite has been saved.

Splits and Layers

The Split and Layer function can be used to Split or Layer the current Program or Multi. Different keyboard regions can play different Programs, or multiple Programs can be played from the same region. To Split or Layer a Multi, it must contain at least one Zone which is unused (Off).

In Program or Multi Mode, press the PREVIOUS and NEXT buttons simultaneously to view the Split/Layer page. You will then be able to configure up to three additional Programs to create a Split or Layered Multi containing up to four Programs.

Press the SAVE button once to view the Save Dialog. The Save Dialog allows you to choose an ID number and name for the Split/Layer Multi you are saving. Use the CHANNEL/PAGE buttons to switch between ID selection and naming pages. On the Multi Save page, press the SAVE button again to save the Split/Layer Multi.

After saving the Split or Layer as a Multi, additional Multi Controller and FX settings can be edited in Multi Edit Mode.

Modes

Program Mode

The SP6 always powers up in Program Mode, where single instrument sounds can be played directly from the keyboard, or multitimbrally via MIDI.

Saving Programs

If you make changes to the current Program using any of the controllers (Knobs, Wheels or Buttons), the SAVE button turns on to indicate that a change has been made to that Program.

To save a copy of the Program with the changes you've made, press the SAVE button once to view the Save Dialog. The Save Dialog allows you to choose an ID number and name for the Program you are saving. Use the CHANNEL/PAGE buttons to switch between ID selection and naming pages. On the Program Save page, press the SAVE button again to save the Program as a User Program.

Program Edit Mode

Program Edit Mode allows you adjust the current Program's Arpeggiator settings, select parameters for the 4 assignable knobs, and adjust other Program parameters. See above for details on saving an edited Program as a User Program.

Multi Mode

Multi Mode allows you to play Multis, which are arrangements of up to 4 Programs split and/or layered in Zones across selected ranges of the keyboard. The volume of the Program in each Zone can be easily adjusted while playing by using the top row of knobs assignments, and each Zone can be turned on or off by using the ZONE ON/OFF buttons above these knobs.

The bottom two rows of knob assignments control the Program parameters. Controller settings can be adjusted in Multi Edit Mode.

Multi Edit Mode

Multi Edit Mode is used to modify the many parameters that make up Multis, including Program Selection, Key Range, Volume, Pan, and Controller assignments. Use Multi Edit Mode to create custom sound combinations.

To save a copy of the Multi with the changes you've made, press the SAVE button once to view the Save Dialog. The Save Dialog allows you to choose an ID number and name for the Multi you are saving. Use the CHANNEL/PAGE buttons to switch between ID selection and naming pages. On the Multi Save page, press the SAVE button again to save the Multi as a User Multi.

Global Mode

Use Global Mode to adjust common settings that are shared between all Modes, such as velocity sensitivity and power saving options. Global Mode is also used for storing or loading user backup files, and restoring Factory default settings. Some of the more common settings are summarized below.

Info

The Info page shows the currently installed operating system and sound object versions. Use this page to check if your SP6 is up to date with the most recent software and sounds posted at www.kurzweil.com.

Reset

You can return the SP6 to the Factory default state by doing a System Reset.

> ⚠ **NOTE : System Reset will erase ALL User Programs and Multis, so it is important to back up your User sounds before doing a System Reset. Factory Program/Multis are not affected.**

Saving to External Storage

Programs and Multis that you have created can be saved to a USB Flash Drive or a computer.

Loading from External Storage

Programs and Multis can be loaded onto the SP6 from USB Flash Drives or a computer. This allows you to load new sounds from Kurzweil or other developers, or to load sounds that you have previously saved.

KURZWEIL®

It's the **sound**.®