SP6
Musician's Guide

KURZWEIL®

It's the **sound**.®

Part Number 910584-002
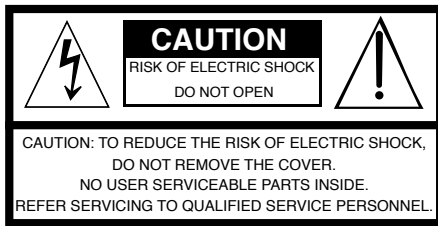
CAUTION		The lightning flash with the arrowhead symbol, within an equilateral triangle is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.
RISK OF ELECTRIC SHOCK		
DO NOT OPEN		

CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK,
DO NOT REMOVE THE COVER.
NO USER SERVICEABLE PARTS INSIDE.
REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.

The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the product.

IMPORTANT SAFETY & INSTALLATION INSTRUCTIONS

INSTRUCTIONS PERTAINING TO THE RISK OF FIRE ELECTRIC SHOCK , OR INJURY TO PERSONS

WARNING: When using electric products, basic precautions should always be followed, including the following:

1. Read all the Safety and Installation Instructions and Explanation of Graphic Symbols before using the product.

2. This product must be grounded. If it should malfunction or break down, grounding provides a path of least resistance for electric current to reduce the risk of electric shock. This product is equipped with a power supply cord having an equipment-grounding conductor and a grounding plug. The plug must be plugged into an appropriate outlet which is properly installed and grounded in accordance with all local codes and ordinances.

   DANGER: Improper connection of the equipment-grounding conductor can result in a risk of electric shock. Do not modify the plug provided with the product – if it will not fit the outlet, have a proper outlet installed by a qualified electrician. Do not use an adaptor which defeats the function of the equipment-grounding conductor. If you are in doubt as to whether the product is properly grounded, check with a qualified serviceman or electrician.

3. Do not use this product near water – for example, near a bathtub, washbowl, kitchen sink, in a wet basement, or near a swimming pool, or the like.

4. This product should only be used with a stand or cart that is recommended by the manufacturer.

5. This product, either alone or in combination with an amplifier and speakers or headphones, may be capable of producing sound levels that could cause permanent hearing loss. Do not operate for a long period of time at a high volume level or a level that is uncomfortable. If you experience any hearing loss or ringing in the ears, you should consult an audiologist.

6. This product should be located so that its location or position does not interfere with its proper ventilation.

7. The product should be located away from heat sources such as radiators, heat registers, or other products that produce heat.

8. The product should be connected to a power supply only of the type described in the operating instructions or as marked on the product.

9. This product may be equipped with a polarized line plug (one blade wider than the other). This is a safety feature. If you are unable to insert the plug into the outlet, contact an electrician to replace your obsolete outlet. Do not defeat the safety purpose of the plug.

10. The power supply cord of the product should be unplugged from the outlet when left unused for a long period of time. When unplugging the power supply cord, do not pull on the cord, but grasp it by the plug.

11. Care should be taken so that objects do not fall and liquids are not spilled into the enclosure through openings.

12. The product should be serviced by qualified service personnel when:
    A. The power supply, power cord or plug have been damaged;
    B. Objects have fallen, or liquid has been spilled into the product;
    C. The product has been exposed to rain;
    D. The product does not appear to be operating normally or exhibits a marked change in performance;
    E. The product has been dropped, or the enclosure damaged.

13. Do not attempt to service the product beyond that described in the user maintenance instructions. All other servicing should be referred to qualified service personnel.

14. **WARNING:** Do not place objects on the product's power supply cord, or place the product in a position where anyone could trip over, walk on, or roll anything over cords of any type. Do not allow the product to rest on or be installed over cords of any type. Improper installations of this type create the possibility of a fire hazard and/or personal injury.

RADIO AND TELEVISION INTERFERENCE

WARNING: Changes or modifications to the instrument not expressly approved by Young Chang could void your authority to operate the instrument.

IMPORTANT: When connecting this product to accessories and/or other equipment use only high quality shielded cables.

NOTE: This instrument has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This instrument generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this instrument does cause harmful interference to radio or television reception, which can be determined by turning the instrument off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

• Reorient or relocate the receiving antenna.

• Increase the separation between the instrument and the receiver.

• Connect the instrument into an outlet on a circuit other than the one to which the receiver is connected.

• If necessary consult your dealer or an experienced radio/television technician for additional suggestions.

The normal function of the product may be disturbed by strong electromagnetic interference. If so, simply reset the product to resume normal operation by following the instructions in the manual. If normal function does not resume, please use the product in another location.

NOTICE

This apparatus does not exceed the Class B limits for radio noise emissions from digital apparatus set out in the Radio Interference Regulations of the Canadian Department of Communications.

AVIS

Le present appareil numerique n'emet pas de bruits radioelectriques depassant les limites applicables aux appareils numeriques de la class B prescrites dans le Reglement sur le brouillage radioelectrique edicte par le ministere des Communications du Canada.

SAVE THESE INSTRUCTIONS

IMPORTANT SAFETY INSTRUCTIONS

1) Read these instructions.

2) Keep these instructions.

3) Heed all warnings.

4) Follow all instructions.

5) Do not use this apparatus near water.

6) Clean only with dry cloth.

7) Do not block any of the ventilation openings. Install in accordance with the manufacturer's instructions.

8) Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.

9) Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet

10) Protect the power cord and power supply adapter from being walked on or pinched, particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.

11) Only use power adapters and attachments/accessories specified by the manufacturer.

12) Use only with a cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.

13) Unplug this apparatus during lightning storms or when unused for long periods of time.

14) Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.

Warning: To reduce the risk of fire or electric shock, do not expose this apparatus to rain or moisture. Do not expose this equipment to dripping or splashing and ensure that no objects filled with liquids, such as vases, are placed on the equipment.

To completely disconnect this equipment from the AC Mains, disconnect the power supply cord plug from the AC receptacle.

Kurzweil International Contacts

Contact the Kurzweil office listed below to locate your local Kurzweil representative.

US Customers:

American Music & Sound
925 Broadbeck Dr #220
Newbury Park, CA 91320

Tel: 800-431-2609
Fax: 818-597-0411
Email: info@americanmusicandsound.com

Customers outside the US:

Young Chang Co., LTD.
178-55, Gajwa-Dong, Seo-Ku
Incheon, Korea
Post Code: 404-714

Tel: +82-32-570-1576
Fax: +82-32-576-2340

www.kurzweil.com

support@kurzweil.com

www.facebook.com/kurzweilmusicsystems/

www.twitter.com/KurzweilMusic

www.youtube.com/user/KurzweilTutorials

Table of Contents

Chapter 1
Getting Started

This chapter will give you a quick overview of the SP6. Be sure to keep this manual on hand as you familiarize yourself with the features and functions of the SP6.

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
    - Updated 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

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 SP6 Sounds on page 1-12 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
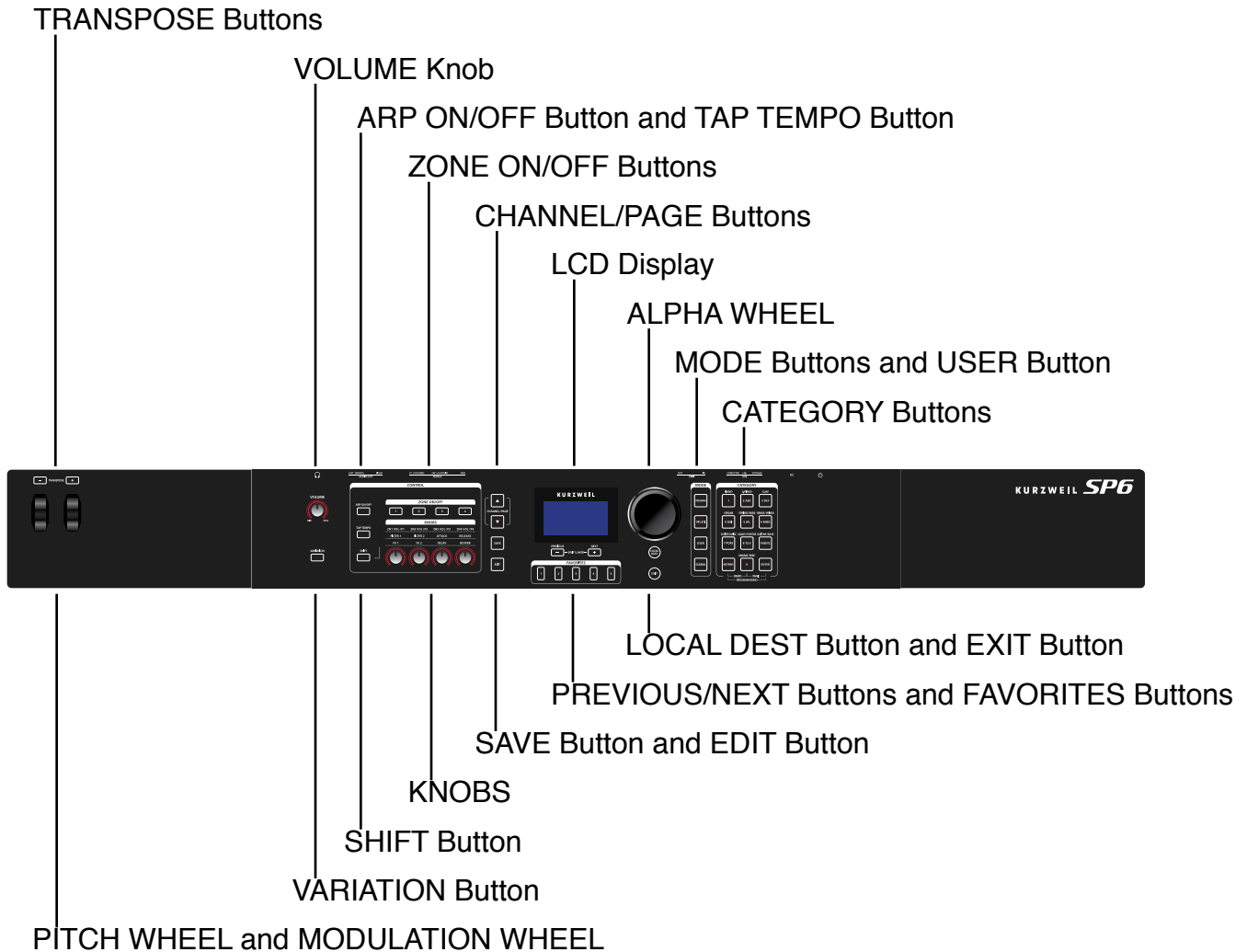
VOLUME Knob

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 or Multis. Press and disable the USER button to access all Programs or 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
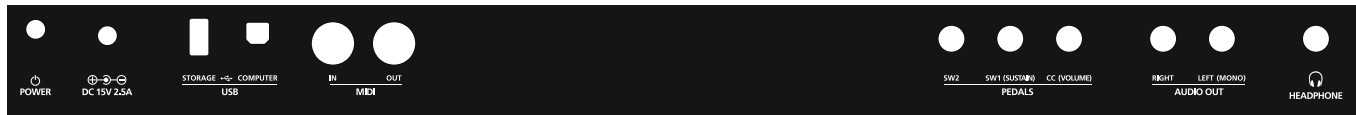
POWER Button

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>**, as the state of the pedals is detected as part of the start up sequence.

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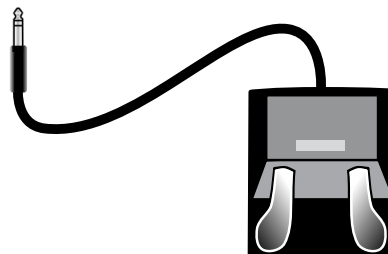
The SW1 (SUSTAIN) and SW2 jacks can be connected to dual switch pedals (2 pedals per jack), allowing up to four switch pedals to be used. Compatible pedals should use a single 1/4 inch tip-ring-sleeve plug.

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 (or the current Category Default Program). 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 Reset.

⚠ **NOTE : Reset will erase ALL User Programs and Multis, so it is important to back up your User sounds before doing a 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.

Chapter 2
Program Mode

Use Program Mode to play a Program directly from the keyboard, or to play up to 16 Programs multitimbrally via MIDI. Programs typically contain a single instrument sound, although some Programs may contain multiple instrument sounds.

The SP6 always powers on with Program Mode selected. To enter Program Mode from another Mode, press and turn on the PROGRAM Mode button, or press the EXIT button repeatedly until you reach Program Mode.

The SP6 powers on with Program 1 selected, or the Program that was selected the last time Global Mode was exited.

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 (or the current Category Default Program). 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.

Program Demo

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

The LCD

In Program Mode, the top line of the LCD shows the current Mode, MIDI transposition, and MIDI Channel.

The Program ID number and name are displayed in the center of the LCD.

When a controller is moved, the controller assignment and value is briefly displayed below the Program ID and name.

The values of the KNOBS currently selected by the SHIFT button are displayed at the bottom of the LCD.

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.

Controllers

In Program Mode, you can use the SP6 physical controllers (the Knobs, Buttons, Wheels, and Pedals) to modify an instrument sound during a performance to add variation or expression.

The basic function of each controller is labeled on the front panel. For some controllers (MODULATION WHEEL, Variation Button, P1 through P4, FX 1 and FX 2) the assigned parameter will vary for each Program. Move a controller to view the assigned parameter name and value in the LCD display.

If you make changes to the current Program using any of the controllers, the SAVE button lights up to indicate that a change has been made to that Program. For more information on the SAVE button, see Program Save Dialog on page 2-11.

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). This is a convenient way to change the key of a song without learning to play it in a different key.

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.

The TRANSPOSE buttons also transpose MIDI notes sent to the USB and MIDI Out ports.

PITCH WHEEL

Use the PITCH WHEEL to perform pitch bends. The Bend Up and Bend Down amount can be adjusted for each Program in Program Edit Mode.

MODULATION WHEEL

Use the MODULATION WHEEL to vary the modulation amount. The MODULATION WHEEL will perform an assigned modulation for each Program. 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 an assigned variation for each Program. 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.

ARP ON/OFF Button

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

The Arpeggiator takes note input from the keyboard and outputs a rhythmic and/or melodic pattern of MIDI notes. The Arpeggiator can affect both the internal Programs and external MIDI instruments.

The Arpeggiator settings can be adjusted in Program Edit Mode.

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.

KNOBS

Press the **SHIFT** button to shift between 3 rows of 4 knob assignments.

The top row of knob assignments control user-assignable parameters (**P1** through **P4**). Move a knob to see the assigned parameter and value in the LCD display. These assignments can be adjusted in Program Edit Mode.

The bottom two rows of knob assignments perform the functions labeled on the front panel:

The **FILTER 1** knob is usually assigned to filter frequency. The **FILTER 2** knob is usually assigned to filter resonance. These knobs may be assigned to different filter parameters for each Program. Move a knob to see the assigned parameter and value in the LCD display.

The **ATTACK** knob is assigned to amplitude attack time (the time it takes for each note to reach its full volume). When the ATTACK knob is set to a low value, the attack time will be fast, and each note will quickly reach its full volume. When the ATTACK knob is set to a high value, the attack time will be slow, and each note will slowly fade up to its full volume. This can be useful for making acoustic instrument Programs sound like synth "pad" sounds.

The **RELEASE** knob is assigned to amplitude release time (the time it takes for each note to fade to silence after a key is released). When the RELEASE knob is set to a low value, the release time will be fast, and each note will quickly fade to silence. When the RELEASE knob is set to a high value, the release time will be slow, and each note will slowly fade to silence.

The **FX 1** and **FX 2** knob assignments vary for each Program. The knobs are usually assigned to effects such as Chorus, Phaser, Flanger, Tremolo, or Distortion. Move a knob to see the assigned parameter and value in the LCD display. For most FX 1 and FX 2 knob assignments, setting the knob to a low value will disable the effect, and setting the knob to a high value will increase the amount of the effect that is heard.

The **DELAY** knob is assigned to Delay amount, which controls an echo effect. Setting the knob to a low value will disable the effect, and setting the knob to a high value will increase the amount of the effect that is heard. Tap the TAP TEMPO button at the desired rate to change the delay time of the effect. You may be able to control additional Delay parameters (such as feedback amount) by using Program Edit Mode to change the assignments of the user-assignable parameters.

The **REVERB** knob is assigned to Reverb amount, which controls a reverb effect. Reverb can give the impression of playing in a large room or concert hall. Setting the knob to a low value will disable the effect, and setting the knob to a high value will increase the amount of the effect that is heard. You may be able to control additional Reverb parameters (such as Reverb Time) by using Program Edit Mode to change the assignments of the user-assignable parameters.

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. Move a knob to see the assigned parameter and value in the LCD display.

SW1 (SUSTAIN) and SW2 Pedals

The **SW1 (SUSTAIN)** pedal defaults to controlling Sustain, which will sustain any note that is played while the pedal is pressed, for as long as the pedal is held.

The SW1 (SUSTAIN) jack is 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.

For KB3 Organ Programs, the SW1 (SUSTAIN) pedal controls the Rotary Speaker speed, changing between fast and slow. The LCD display shows "KB3" when a KB3 Program is selected.

The **SW2** pedal defaults to controlling Sostenuto, which will sustain notes from any keys that are being held when the pedal is pressed, for as long as the pedal is held.

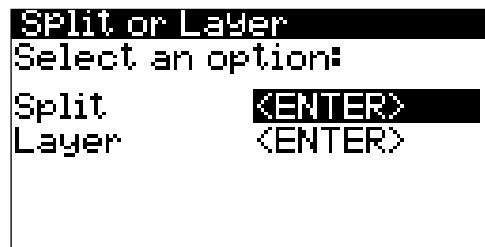Global Mode can be used to set pedal overrides, which can change the pedal assignments for all Programs.

CC (VOLUME) Pedal

The CC (VOLUME) pedal is assigned to control Program 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.

SPLIT/LAYER

```
┌──────────────────────────┐
│ Split or Layer           │
│ Select an option:        │
│                          │
│ Split         <ENTER>    │
│ Layer         <ENTER>    │
│                          │
│                          │
└──────────────────────────┘
```
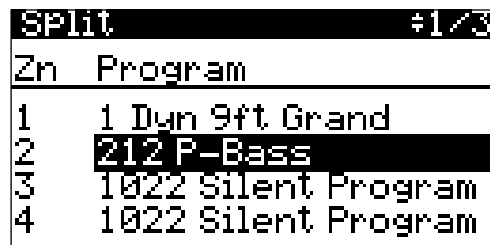
Press the PREVIOUS and NEXT buttons simultaneously to access the Split/Layer function. The Split and Layer functions have identical parameters, but produce different results.

The Split function allows you to quickly create a Multi such that keys in one range of the keyboard produce different sounds than another range.

The Layer function allows you to layer Programs and Multis such that more than one instrument sound can be produced by playing one key.

The Split and Layer functions allow you to quickly create Multis without using Multi Edit Mode to configure Zone key ranges, Programs, and volumes. After creating and saving a Split or Layer Multi, you can edit additional Multi parameters in Multi Edit mode.

SPLIT

```
┌──────────────────────────┐
│ Split            ÷1/3    │
│ Zn   Program             │
│ 1    1 Dyn 9ft Grand     │
│ 2    212 P-Bass          │
│ 3    1022 Silent Program │
│ 4    1022 Silent Program │
└──────────────────────────┘
```

When you create a Split in Program Mode, you are creating a Multi with two Zones set to On.

The Program you were using in Program Mode is used in the right hand of the Split as the Zone 1 Program. You can choose a Program that will be used in the left hand of the Split as the Zone 2 Program.

Follow these steps to create a Split:

1. In Program Mode, select a Program for the right hand of the Split.

2. Press the PREVIOUS and NEXT buttons simultaneously to access the "Split or Layer" Page.

3. On the "Split or Layer" Page, use the PREVIOUS or NEXT buttons to select "Split <ENTER>", then press the ENTER button.

4. On the "Split" Page, Zone 2 is selected with a default Bass Program selected for the left hand of the Split. Use the ALPHA WHEEL or CATEGORY buttons to select a different Program for the left hand of the Split.

5. Additional Split parameters are described in <u>Split/Layer Parameters on page 2-9</u>. Use the CHANNEL/PAGE buttons to navigate between each of the 3 Split function pages. Use the PREVIOUS or NEXT buttons to select each parameter, and the ALPHA WHEEL or CATEGORY buttons to change the value of each parameter.

6. Press the SAVE button to save your Split as a Multi (See below for details on saving). After saving your Split Multi, you can edit additional Multi parameters in Multi Edit mode.

LAYER

When you create a Layer in Program Mode, you are creating a Multi with two Zones set to On.

The Program you were using in Program Mode is used for the Zone 1 Program. You can choose a Program that will be used as the layered Zone 2 Program.

Follow these steps to create a Layer:

1. In Program Mode, select a Program that you wish to layer.

2. Press the PREVIOUS and NEXT buttons simultaneously to access the "Split or Layer" Page.

3. On the "Split or Layer" Page, use the PREVIOUS or NEXT buttons to select "Layer <ENTER>", then press the ENTER button.

4. On the "Layer" Page, Zone 2 is selected with a default layer Program selected for the layered Zone 2 Program. Use the ALPHA WHEEL or CATEGORY buttons to select a different Program for the layered Zone 2 Program.

5. Additional Layer parameters are described in Split/Layer Parameters on page 2-9. Use the CHANNEL/PAGE buttons to navigate between each of the 3 Layer function pages. Use the PREVIOUS or NEXT buttons to select each parameter, and the ALPHA WHEEL or CATEGORY buttons to change the value of each parameter.

6. Press the SAVE button to save your Layer as a Multi (See below for details on saving). After saving your Layer Multi, you can edit additional Multi parameters in Multi Edit mode.

Split/Layer Parameters

The following parameters are available for each of the 4 Zones. The ZONE ON/OFF parameters are controlled by using the front panel ZONE ON/OFF buttons.

The remaining parameters are accessed on each of the pages listed below. Use the CHANNEL/PAGE buttons to navigate between each of the 3 Layer or Split function pages. On these pages, the left hand **Zn** column indicates the Zone number associated with each of the 4 rows of parameters.

ZONE ON/OFF

While creating a Split or Layer, Zones 3 and 4 can be turned On by turning on the ZONE ON/OFF 3 and 4 buttons. By default the keyrange of Zones 3 and 4 cover the whole keyboard range, allowing these Zones to be used as additional layers.

Split Page / Layer Page

Program

The default Split or Layer Program will appear in Zone 2. Use the ALPHA WHEEL or CATEGORY buttons to select a different Program for Zone 2.

Split Mixer Page / Layer Mixer Page

```
┌─────────────────────────────────┐
│ Split Mixer            ÷2/3 │
│ Zn  Volume      Pan         │
│─────────────────────────────│
│ 1   127         64          │
│ 2   127         64          │
│ 3   110         64          │
│ 4   110         64          │
└─────────────────────────────────┘
```

Volume

The Volume parameter sets the volume of each Zone. To change the volume of a Zone:

1. Select a Volume parameter for the desired Zone by using the PREVIOUS and NEXT buttons.

2. Change the volume by using the ALPHA WHEEL, or use the keypad function of the CATEGORY buttons to type a volume value (0-127) followed by pressing the ENTER button.

A value of "None" can also be selected, which will use the last volume value used by the Zone's MIDI channel. (This volume values is often set by the expression pedal.) A value of "None" can be entered by using the ALPHA WHEEL to scroll below 0.

Pan

The Pan parameter sets the panning (left/right stereo placement) of each Zone. To change the panning of a Zone:

1. Select a Pan parameter for the desired Zone by using the PREVIOUS and NEXT buttons.

2. Change the panning by using the ALPHA WHEEL, or use the keypad function of the CATEGORY buttons to type a pan value (0-127) followed by pressing the ENTER button.

A value of 0 is full left, 64 is center, and 127 is full right. Other values will move the stereo placement in between these positions.

A value of "None" can also be selected, which will use the last pan value used by the Zone's MIDI channel. A value of "None" can be entered by using the ALPHA WHEEL to scroll below 0.

Split Key Range Page / Layer Key Range Page

```
Split Key Range    ÷3/3
          Key
Zn Low    High
1  F3     G 9
2  C -1   E 3
3  C -1   G 9
4  C -1   G 9
```

Key Low / Key High

The Key Low and Key High parameters set the keyboard ranges for each Zone. Using Split sets the boundary between Zone 1 and Zone 2 to E3. Using Layer sets the Zone 2 keyboard range to C1 - G9. Change these parameters for each Zone to create custom Split and Layer key ranges.

Values for the currently selected Key Low or Key High parameter can be selected by holding down the ENTER button and then playing the desired key on the keyboard. Values can also be selected by using the ALPHA WHEEL, or by using the keypad function of the CATEGORY buttons, followed by pressing the ENTER button.

Program Save Dialog

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.

Changing ID Numbers

```
Program Save       ÷1/2

Save Dyn 9ft Grand

As ID# 1025
```

The display shows the first available ID number and the current Program name. You can save Programs with ID numbers from 1025 to 2048.
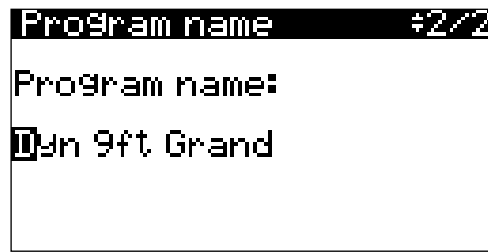
If you are saving a Program that has not been previously edited, the next available unused ID number will be selected.

If you are saving a previously edited User Program, the ID number that the Program was last saved with will be selected.

Press the PREVIOUS and NEXT buttons simultaneously to toggle between selecting the ID number that the Program was last saved with and the next available unused ID number.

To change the ID number, use the ALPHA WHEEL, or use the keypad function of the CATEGORY buttons to type an ID number (1025-2048) followed by pressing the ENTER button. If you select an ID number that is already used by another Program, the bottom of display will show a message to warn that you are going to replace a Program.

Naming a User Program

```
┌──────────────────────────────┐
│ Program name          ÷2/2   │
│                              │
│ Program name:                │
│                              │
│ ▊yn 9ft Grand                │
│                              │
│                              │
└──────────────────────────────┘
```

In the Save Dialog, you can name a Program by using the Program Name Page.

Use the CHANNEL/PAGE buttons to select the Program Name Page.

The display shows the current Program name. Program names can total 16 characters in length.

To name a Program:

1. Use the PREVIOUS and NEXT buttons to move the cursor to each character.

2. Change the current character by using the ALPHA WHEEL, or use the keypad function of the CATEGORY buttons to type a character.

To insert a space before the selected character, press and hold the NEXT button. The selected character and all characters to the right will move one space to the right.

To delete the selected character, press and hold the PREVIOUS button. All the characters to the right of the selected character will move one space to the left.

After naming the Program, press the SAVE button to return to the Program Save Page. On the Program Save Page, press the SAVE button again to save the Program as a User Program.

Saving a User Program

To save a User Program, select the Program Save Page and press the SAVE button, (or press the EXIT button to exit without saving). The display will show a brief message to confirm that the Program was saved.

After successfully saving, the Program will be selected in Program Mode in the User ID range (1025-2048). To find the Program again later, make sure to press the USER button.

Changing the MIDI Channel

The current MIDI channel is shown on the right side of the top line of the display. Use the CHANNEL/PAGE buttons to change the MIDI channel. Pressing both CHANNEL/PAGE buttons simultaneously will reset the current MIDI channel to 1.

A different Program can be selected for each MIDI Channel. All channels can be played simultaneously from an external MIDI sequencer or computer.

One Reverb effect is shared between Programs on all channels. The Reverb settings (such as Reverb Time) of the Program on the currently selected MIDI Channel is used for Programs on all Channels. Programs on each channel can adjust the amount of Reverb used by using the REVERB knob.

The MIDI OUT and USB ports will also transmit MIDI to the selected Channel when the keyboard is played. This is useful for playing external MIDI instruments or software on a computer/tablet.

PANIC

Pressing the 0 and ENTER buttons simultaneously performs the PANIC function. PANIC deactivates all sounding notes and resets controller values by sending an "All Notes Off" message and a "Reset All Controllers" message on all 16 MIDI channels.

Chapter 3
Program Edit Mode

Program Edit Mode allows you to edit and customize Programs. Any Program can be edited in Program Edit Mode and saved to one of the 1024 User IDs.

To enter Program Edit Mode, first press the PROGRAM Mode button to enter Program Mode, then press the EDIT button.

In Program Edit Mode, the top line of the display shows the current page name and number.

Navigate to each page by using the CHANNEL/PAGE buttons.

Navigate to each parameter on the current page by using the PREVIOUS and NEXT buttons.

Change the value of the selected parameter by using the ALPHA WHEEL, or use the keypad function of the CATEGORY buttons to type a numeric value followed by pressing the ENTER button.

Assignable Params Page

```
Assignable Params  ◆1/3
       Parameter      Value
P1: Pad Volume        110
P2: Pad Filter Freq 0
P3: Comp Amount       0
P4: Reverb Time      32
```

Use the Assignable Params Page to view and edit the 4 user assignable parameters of the knobs (P1 through P4). The left column shows the name of the parameter assigned to each of the 4 knobs. The right column shows the current value of each parameter.

Parameter Column

When the Parameter column is selected with the cursor, change the parameter assignment for the selected knob by using the ALPHA WHEEL.

For all Programs, the assignable parameters can be set to control EQ parameters, panning, Delay time and feedback parameters, and Reverb time. Each Program may also have additional parameters that are specific to the Program's FX or instrument category.

Value Column

The Value column shows the current value (0-127) of each parameter. The values that are shown when the Program is saved will be recalled each time the Program is selected.

To adjust the value of each parameter by using the knobs, use the SHIFT button to select the top row of knob assignments.

When the Value column is selected with the cursor, change the value of the selected parameter by using the ALPHA WHEEL, or use the keypad function of the CATEGORY buttons to type a numeric value followed by pressing the ENTER button.

A value of "None" can be selected by using the ALPHA WHEEL to scroll below 0. When a parameter is set to a value of "None", this allows the parameter to use whatever value it had in the previously selected Program (if the previously selected Program had the same parameter).

Arpeggiator Page

Use the Arpeggiator Page to edit the settings of the Program's Arpeggiator.

Latch

Use the Latch parameter to set how the Arpeggiator responds to played keys. Select from the following settings:

Standard: Press and hold a key to add it to the arpeggiation. Release a key to remove it from the arpeggiation.

Autohold: Autohold is useful for arpeggiating chords. When you play a chord, it continues arpeggiating after you release the chord. When you play another chord, the previous chord stops arpeggiating, and the new chord begins arpeggiating. You can use the ARP ON/OFF button to stop arpeggiation at any time.

Beats

The Beats parameter sets the rate of the arpeggiator, based on a measure of 4 beats. Select from the following settings:

1/1	1 note per measure (whole notes)
1/2	2 notes per measure (half notes)
1/4	4 notes per measure (quarter notes)
1/8	8 notes per measure (eighth notes)
1/12	12 notes per measure (eighth note triplets)
1/16	16 notes per measure (sixteenth notes)
1/24	24 notes per measure (sixteenth note triplets)
1/32	32 notes per measure (thirty-second notes)

Play Order

The Play Order parameter determines the order in which the arpeggiator plays notes of pressed keys. Select from the following settings:

Played: Notes play in the chronological order in which you played them.

Upwards: Notes play from lowest to highest pitch.

Downwards: Notes play from highest to lowest pitch.

UpDown: Notes play from lowest to highest pitch, then from highest to lowest pitch.

Shuffle: Notes play in random order.

Simul: Notes play simultaneously.

Velocity

The Velocity parameter determines how the arpeggiator processes the attack velocity of the played notes. Select from the following settings:

Constant: All notes play at the velocity of the first played note.

Played: Each note plays at the velocity which you played.

Human1 through **Human4:** These settings randomly change played note velocities within a range in order to make arpeggiation sound more human like, with each note varying slightly in velocity. The Human settings use the velocity received from the first note played as the center of the randomization range. Each note of the arpeggiator will randomly choose a velocity within a range, with Human1 having the smallest range, and Human4 having the largest range.

Chimp1 through **Chimp4:** These settings function in a similar fashion to the Human settings (see above). Like the Human settings, the Chimp settings randomly change played note velocities within a range, but the Chimp settings have larger randomization ranges. The Chimp settings use the velocity received from the first note played as the center of the randomization range. Each note of the arpeggiator will randomly choose a velocity within a range, with Chimp1 having the smallest range, and Chimp4 having the largest range.

MissNotes1 through **MissNotes9:** These settings make the arpeggiator randomly miss playing a percentage of inputted notes. With MissNotes1 missing the fewest notes, and MissNotes9 missing the most notes. Each of these settings also randomly changes some of the inputted velocities, with the purpose of simulating a more human played sound. The MissNotes settings use the velocity received from the first note played as the center of the velocity randomization range.

Duration

Duration determines how long each arpeggiated note plays, based on the current Beats value. For example, 100% means that a note sustains until the next one sounds. 50% means that the note fills half the space between itself and the next note. This parameter has no effect on percussion sounds or other sounds whose duration is fixed.

Shift

The Shift parameter sets how much transposition will occur for each cycle of notes. Setting Shift to 12 and ShiftLimit to 12 or 24 creates an arpeggio that repeats the same pattern of notes in different octaves.

Shift Limit

When the Shift parameter is set to a value other than 0, Shift Limit determines how far up or down the Arpeggiator can shift the arpeggiated notes.

Limit Option

The Limit Option parameter determines what the Arpeggiator does when it has shifted the currently arpeggiated notes up (or down) to the value set by the Shift Limit parameter. Select from the following settings:

Reset: When the Arpeggiator reaches the Shift Limit, the Arpeggiator returns to its original pitch.

Unipolar: When the Arpeggiator reaches the Shift Limit, the Arpeggiator begins shifting notes in the opposite direction, until it reaches the original pitch. When the Arpeggiator reaches the original pitch, it reverses direction again.

Bipolar: When the Arpeggiator reaches the Shift Limit, the Arpeggiator begins shifting notes in the opposite direction, until it reaches the shift limit in the opposite direction, where it reverses direction again.

Master Page

```
Master          ÷3/3
PBendUp    200ct
PBendDwn   -200ct
Mono       Off
OutGain    9dB
Category   Piano
```

Use the Master Page to control overall settings of the current Program.

PBendUp and PBendDwn

Use these parameters to set how much the pitch will change when you move the PITCH WHEEL up or down. For both Pitch Bend parameters, positive values will cause the pitch to bend up, while negative values will cause the pitch to bend down.

Pitch bend values are set in cents (ct), where 100 cents equals 1 semitone (also known as a half step).
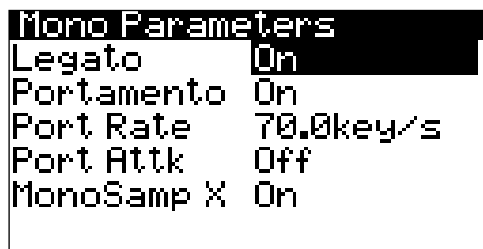
Large positive values can cause samples to bend to their maximum upward pitch before the PITCH WHEEL is fully up (or down). This will not happen when bending pitch down.

Mono

When the Mono parameter is set to Off, the Program is polyphonic—it can play multiple notes at a time. When the Mono parameter is set to On, the Program will play only one note at a time.

When the Mono parameter is selected and set to On, press the EDIT button to view the Mono Parameters Page. See below for details.

Mono Parameters Page

```
Mono Parameters
Legato      On
Portamento  On
Port Rate   70.0key/s
Port Attk   Off
MonoSamp X  On
```

Legato

When Legato is on, a note will play its attack amplitude envelope only if no other notes are being held.

Portamento

When the Portamento parameter is set to On, pitch will glide between played notes.

Port Rate

When the Portamento parameter is set to On, the Port Rate parameter determines how many seconds a note takes to glide one semitone to the next played note (in keys per second). For example, at a setting of 12 keys/second the pitch would glide an octave every second.

Port Attk

When the Portamento parameter is set to On and the Port Attk parameter is set to Off, pitch will only glide between notes when two keys are held at once.

When the Portamento parameter is set to On and the Port Attk parameter is set to On, pitch will always glide between notes.

MonoSamp X

When the Portamento parameter is set to On, setting the MonoSamp X parameter to On can create a smoother sound when using certain sample based Programs.

OutGain

Use the OutGain parameter to adjust the overall volume of a Program.

Category

This parameter sets the category that the Program will be grouped into when you press one of the CATEGORY buttons in Program Mode.

For example, if you were to edit a Program in the VOICES/MISC category that you want to use primarily as a Synth, you could make it appear in the LEADS/SYNTHS category by changing this parameter to Leads/Synths.

Save User Programs

For details on saving User Program, see Program Save Dialog on page 2-11.

Chapter 4
Multi Mode

Use Multi Mode to play up to 4 split or layered Programs directly from the keyboard. Each of the 4 Zones in a Multi can have a different Program, controller settings, and MIDI transmit channel. Zones can also control external sound modules or computer software through a MIDI or USB cable.

To enter Multi Mode from another Mode, press and turn on the MULTI Mode button.

The SP6 powers on with Multi 1 selected, or the Multi that was selected the last time Global Mode was exited.

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.

The LCD

In Multi Mode, the top line of the LCD shows the current Mode and MIDI transposition.

The Multi ID number and name are displayed in the center of the LCD.

When a controller is moved, the controller assignment and value for each Zone is briefly displayed below the Multi ID and name.

The values of the KNOBS currently selected by the SHIFT button are displayed at the bottom of the LCD.

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.

Controllers

In Multi Mode, you can use the SP6 physical controllers (the Knobs, Buttons, Wheels, and Pedals) to modify an instrument sound during a performance to add variation or expression.

The basic function of each controller is labeled on the front panel. For some controllers (MODULATION WHEEL, Variation Button, FX 1 and FX 2) the assigned parameter will vary for each Multi. Move a controller to view the assigned parameter name and value for each Zone in the LCD display.

Some controllers can also be disabled or reassigned for each Zone in Multi Edit Mode. Because of this, controllers may function differently for each Zone in each Multi.

ZONE ON/OFF Buttons

The ZONE ON/OFF buttons allow you to turn each of the 4 Zones on or off. When a Zone is on, the corresponding button is lit, and you can hear the Program in the Zone. When a Zone is off, the corresponding button is not lit, and the Program in the Zone is silent. Press each Zone button to turn each Zone on or off.

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). This is a convenient way to change the key of a song without learning to play it in a different key.

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.

The TRANSPOSE buttons also transpose MIDI notes sent to the USB and MIDI Out ports.

PITCH WHEEL

Use the PITCH WHEEL to perform pitch bends. The Bend Up and Bend Down amount can be adjusted for each Zone in Multi Edit Mode.

MODULATION WHEEL

Use the MODULATION WHEEL to vary the modulation amount. The MODULATION WHEEL will perform an assigned modulation for the Program in each Zone. The name and value of the current assignment for each Zone is shown in the LCD display when the wheel is moved. The modulation amount can be adjusted for each Zone in Multi Edit Mode.

VARIATION Button

Pressing the VARIATION button will perform an assigned variation for the Program in each Zone. The name of the current assignment for each Zone is shown in the LCD display when the button is pressed. The VARIATION button can be enabled or disabled for each Zone in Multi Edit Mode.

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.

ARP ON/OFF Button

Use the ARP ON/OFF button to turn on and off the Arpeggiator in each Zone. Each Zone in a Multi has an arpeggiator, allowing up to 4 simultaneous arpeggiations. The ARP ON/OFF button can be enabled or disabled for each Zone in Multi Edit Mode.

The Arpeggiator takes note input from the keyboard and outputs a rhythmic and/or melodic pattern of MIDI notes. The Arpeggiator can affect both the internal Programs and external MIDI instruments.

The Arpeggiator settings for the Program in each Zone can be adjusted in Program Edit Mode.

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.

KNOBS

Press the **SHIFT** button to shift between 3 rows of 4 knob assignments.

In Multi Mode, the top row of knob assignments (**ZN1 VOL** through **ZN4 VOL**) control the volume of each Zone. Move a knob to see the selected Zone volume value in the LCD display. The Zone volume value can be adjusted for each Zone in Multi Edit Mode.

The bottom two rows of knob assignments perform the functions labeled on the front panel (see below for details). The amount of each function applied can be adjusted for each Zone in Multi Edit Mode. Because of this, the bottom two rows of knob assignments may function differently for each Zone in each Multi.

The **FILTER 1** knob is usually assigned to filter frequency. The **FILTER 2** knob is usually assigned to filter resonance. These knobs may be assigned to different filter parameters for each Program. Move a knob to see the assigned parameter and value for each Zone in the LCD display.

The **ATTACK** knob is assigned to amplitude attack time (the time it takes for each note to reach its full volume). When the ATTACK knob is set to a low value, the attack time will be fast, and each note will quickly reach its full volume. When the ATTACK knob is set to a high value, the attack time will be slow, and each note will slowly fade up to its full volume. This can be useful for making acoustic instrument Programs sound like synth "pad" sounds.

The **RELEASE** knob is assigned to amplitude release time (the time it takes for each note to fade to silence after a key is released). When the RELEASE knob is set to a low value, the release time will be fast, and each note will quickly fade to silence. When the RELEASE knob is set to a high value, the release time will be slow, and each note will slowly fade to silence.

The **FX 1** and **FX 2** knob assignments vary for each Program. The knobs are usually assigned to effects such as Chorus, Phaser, Flanger, Tremolo, or Distortion. Move a knob to see the assigned parameter and value for each Zone in the LCD display. For most FX 1 and FX 2 knob assignments, setting the knob to a low value will disable the effect, and setting the knob to a high value will increase the amount of the effect that is heard.

The **DELAY** knob is assigned to Delay amount, which controls an echo effect. Setting the knob to a low value will disable the effect, and setting the knob to a high value will increase the amount of the effect that is heard. Tap the TAP TEMPO button at the desired rate to change the delay time of the effect. You may be able to control additional Delay parameters (such as feedback amount) by using Program Edit Mode to change the assignments of the user-assignable parameters.

The **REVERB** knob is assigned to Reverb amount, which controls a reverb effect. Reverb can give the impression of playing in a large room or concert hall. Setting the knob to a low value will disable the effect, and setting the knob to a high value will increase the amount of the effect that is heard. You may be able to control additional Reverb parameters (such as Reverb Time) by using Program Edit Mode to change the assignments of the user-assignable parameters.

When a KB3 Organ Program is selected in a Zone, some of the knobs may perform Organ drawbar functions instead of the functions labeled on the front panel. Move a knob to see the assigned parameter and value for each Zone in the LCD display.

SW1 (SUSTAIN) and SW2 Pedals

The **SW1 (SUSTAIN)** pedal defaults to controlling sustain, which will sustain any note that is played while the pedal is pressed, for as long as the pedal is held.

For KB3 Organ Programs, the SW1 (SUSTAIN) pedal controls the Rotary Speaker speed, changing between fast and slow. The LCD display shows "KB3" when a Multi containing a KB3 Program is selected.

The **SW2** pedal defaults to controlling Sostenuto, which will sustain notes from any keys that are being held when the pedal is pressed, for as long as the pedal is held.

The SW1 (SUSTAIN) and SW2 pedals can be enabled, disabled, or reassigned for each Zone in Multi Edit Mode. Because of this, the pedals may function differently for each Zone in each Multi.

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

CC (VOLUME) Pedal

The CC (VOLUME) pedal defaults to control Program 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 Multi containing a KB3 Program is selected.

The CC (VOLUME) pedal can be enabled, disabled, or reassigned for each Zone in Multi Edit Mode. Because of this, the pedals may function differently for each Zone in each Multi.

SPLIT/LAYER
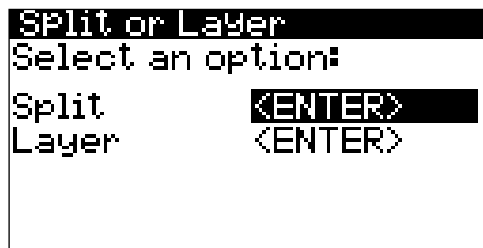
```
Split or Layer
Select an option:

Split        <ENTER>
Layer        <ENTER>
```
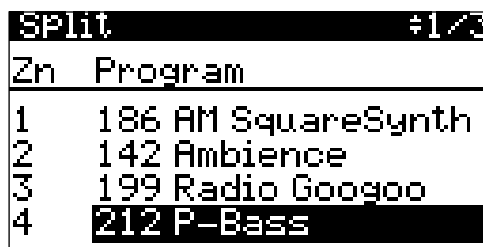
Press the PREVIOUS and NEXT buttons simultaneously to access the Split/Layer function. The Split and Layer functions have identical parameters, but produce different results.

The Split function allows you to quickly create a Multi such that keys in one range of the keyboard produce different sounds than keys in another range.

The Layer function allows you to layer Programs and Multis such that more than one instrument sound can be produced by playing one key.

The Split and Layer functions allow you to quickly create Multis without using Multi Edit Mode to configure Zone key ranges, Programs, and volumes. After creating and saving a Split or Layer Multi, you can edit additional Multi parameters in Multi Edit mode.

SPLIT

```
Split                ‡1/3
Zn  Program

1    186 AM SquareSynth
2    142 Ambience
3    199 Radio Googoo
4    212 P-Bass
```

When you create a Split in Multi Mode, you are creating a copy of the selected Multi with a new Zone which covers the left hand of the keyboard.

To create a Split in Multi Mode, the selected Multi must have at least one ZONE ON/OFF button set to off (an inactive Zone). When creating a Split in Multi Mode, the lowest numbered inactive Zone will be used for the new left hand Zone.

You can choose a Program that will be used in the new left hand Zone of the Split Multi.

Follow these steps to create a Split:

1.   In Multi Mode, select a Multi for the right hand of the Split. The selected Multi must have at least one ZONE ON/OFF button set to off (an inactive Zone).

2.   Press the PREVIOUS and NEXT buttons simultaneously to access the "Split or Layer" Page.

3.   On the "Split or Layer" Page, use the PREVIOUS or NEXT buttons to select "Split <ENTER>", then press the ENTER button.

4.   On the "Split" Page, the lowest numbered inactive Zone is selected with a default Bass Program selected for the left hand of the Split. Use the ALPHA WHEEL or CATEGORY buttons to select a different Program for the left hand of the Split.

5.   Additional Split parameters are described in . Use the CHANNEL/PAGE buttons to navigate between each of the 3 Split function pages. Use the PREVIOUS or NEXT buttons to select each parameter, and the ALPHA WHEEL or CATEGORY buttons to change the value of each parameter.

6.   Press the SAVE button to save your Split as a Multi (See below for details on saving). After saving your Split Multi, you can edit additional Multi parameters in Multi Edit mode.

LAYER

```
Layer              ↕1/3
Zn  Program

1     186 AM SquareSynth
2     142 Ambience
3     199 Radio Googoo
4     69 AdagioTutti 8ves
```

When you create a Layer in Multi Mode, you are creating a copy of the selected Multi with a new Zone which covers the entire keyboard.

To create a Layer in Multi Mode, the selected Multi must have at least one ZONE ON/OFF button set to off (an inactive Zone). When creating a Layer in Multi Mode, the lowest numbered inactive Zone will be used for the new Layer Zone.

You can choose a Program that will be used in the new Zone of the Layer Multi.

Follow these steps to create a Layer:

1. In Multi Mode, select a Multi that you wish to layer. The selected Multi must have at least one ZONE ON/OFF button set to off (an inactive Zone).

2. Press the PREVIOUS and NEXT buttons simultaneously to access the "Split or Layer" Page.

3. On the "Split or Layer" Page, use the PREVIOUS or NEXT buttons to select "Layer <ENTER>", then press the ENTER button.

4. On the "Layer" Page, the lowest numbered inactive Zone is selected with a default layer Program selected for the layered Zone 2 Program. Use the ALPHA WHEEL or CATEGORY buttons to select a different Program for the layered Zone 2 Program.

5. Additional Layer parameters are described in Split/Layer Parameters on page 4-8. Use the CHANNEL/PAGE buttons to navigate between each of the 3 Layer function pages. Use the PREVIOUS or NEXT buttons to select each parameter, and the ALPHA WHEEL or CATEGORY buttons to change the value of each parameter.

6. Press the SAVE button to save your Layer as a Multi (See below for details on saving). After saving your Layer Multi, you can edit additional Multi parameters in Multi Edit mode.

Split/Layer Parameters

The following parameters are available for each of the 4 Zones. The ZONE ON/OFF parameters are controlled by using the front panel ZONE ON/OFF buttons.

The remaining parameters are accessed on each of the pages listed below. Use the CHANNEL/PAGE buttons to navigate between each of the 3 Layer or Split function pages. On these pages, the left hand **Zn** column indicates the Zone number associated with each of the 4 rows of parameters.

ZONE ON/OFF

While creating a Split or Layer, inactive Zones can be turned On by turning on the ZONE ON/OFF buttons.

Split Page / Layer Page

```
Split              ⇕1/3
Zn  Program
1   186 AM SquareSynth
2   142 Ambience
3   199 Radio Googoo
4   212 P-Bass
```

Program

The default Split or Layer Program will appear in the lowest numbered inactive Zone. Use the ALPHA WHEEL or CATEGORY buttons to select a different Program for the selected Zone.

Split Mixer Page / Layer Mixer Page

```
Split Mixer        ⇕2/3
Zn  Volume      Pan
1   127         64
2   127         64
3   110         64
4   110         64
```

Volume

The Volume parameter sets the volume of each Zone. To change the volume of a Zone:

1. Select a Volume parameter for the desired Zone by using the PREVIOUS and NEXT buttons.

2. Change the volume by using the ALPHA WHEEL, or use the keypad function of the CATEGORY buttons to type a volume value (0-127) followed by pressing the ENTER button.

A value of "None" can also be selected, which will use the last volume value used by the Zone's MIDI channel. (This volume values is often set by the expression pedal.) A value of "None" can be entered by using the ALPHA WHEEL to scroll below 0.

Pan

The Pan parameter sets the panning (left/right stereo placement) of each Zone. To change the panning of a Zone:

1. Select a Pan parameter for the desired Zone by using the PREVIOUS and NEXT buttons.

2. Change the panning by using the ALPHA WHEEL, or use the keypad function of the CATEGORY buttons to type a pan value (0-127) followed by pressing the ENTER button.

A value of 0 is full left, 64 is center, and 127 is full right. Other values will move the stereo placement in between these positions.

A value of "None" can also be selected, which will use the last pan value used by the Zone's MIDI channel. A value of "None" can be entered by using the ALPHA WHEEL to scroll below 0.

Split Key Range Page / Layer Key Range Page

```
Split Key Range    +3/3
         Key
Zn Low   High

1  F 3   G 9
2  C -1  E 3
3  C -1  G 9
4  C -1  G 9
```

Key Low / Key High

The Key Low and Key High parameters set the playable key range of each Zone by setting the lowest and highest playable key of each Zone. Keys played within this range will trigger a note for the selected Zone.

Using Split sets the boundary between the left hand and right hand Zones to E3. Using Layer sets the new Layer Zone keyboard range to C1 - G9. Change these parameters for each Zone to create custom Split and Layer key ranges.

Values for the currently selected Key Low or Key High parameter can be selected by holding down the ENTER button and then playing the desired key on the keyboard. Values can also be selected by using the ALPHA WHEEL, or by using the keypad function of the CATEGORY buttons, followed by pressing the ENTER button.

Multi Save Dialog

Press the SAVE button to save a Split or Layer Multi as a User Multi, or to save a Multi with the current state of the ZONE ON/OFF buttons.

The current state of the VARIATION button and/or the ARP ON/OFF button is saved if any of the Arp and/or Variation parameters are set to Yes on the Multi Edit Buttons Page. To save changes made by using the MODULATION WHEEL or any of the Knobs, you must set the value of each controller on the Multi Edit Mode Controllers Page.

To save a copy of the Multi, 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.

Changing ID Numbers

```
Multi Save          ÷1/2

Save Arp & Pad

As ID# 1025
```
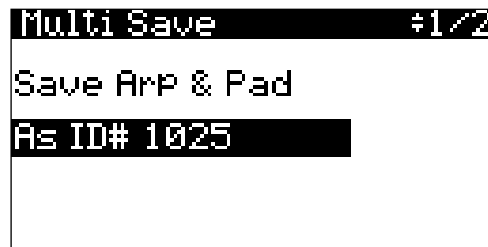
The display shows the first available ID number and the current Multi name. You can save Multi with ID numbers from 1025 to 2048.

If you are saving a Multi that has not been previously edited, the next available unused ID number will be selected.

If you are saving a previously edited User Multi, the ID number that the Multi was last saved with will be selected.

Press the PREVIOUS and NEXT buttons simultaneously to toggle between selecting the ID number that the Multi was last saved with and the next available unused ID number.

To change the ID number, use the ALPHA WHEEL, or use the keypad function of the CATEGORY buttons to type an ID number (1025-2048) followed by pressing the ENTER button. If you select an ID number that is already used by another Multi, the bottom of display will show a message to warn that you are going to replace a Multi.

Naming a User Multi

```
Multi Name          ÷2/2

Multi name:

Arp & Pad
```
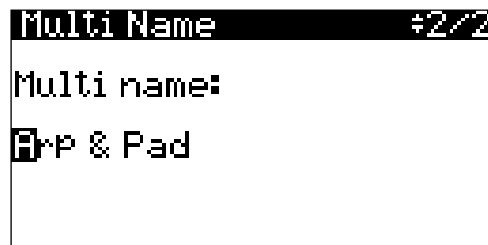
In the Save Dialog, you can name a Multi by using the Multi Name Page.

Use the CHANNEL/PAGE buttons to select the Multi Name Page.

The display shows the current Multi name. Multi names can total 16 characters in length.

To name a Multi:

1. Use the PREVIOUS and NEXT buttons to move the cursor to each character.

2. Change the current character by using the ALPHA WHEEL, or use the keypad function of the CATEGORY buttons to type a character.

To insert a space before the selected character, press and hold the NEXT button. The selected character and all characters to the right will move one space to the right.

To delete the selected character, press and hold the PREVIOUS button. All the characters to the right of the selected character will move one space to the left.

After naming the Multi, press the SAVE button to return to the Multi Save Page. On the Multi Save Page, press the SAVE button again to save the Multi as a User Multi.

Saving a User Multi

To save a User Multi, select the Multi Save Page and press the SAVE button, (or press the EXIT button to exit without saving). The display will show a brief message to confirm that the Multi was saved.

After successfully saving, the Multi will be selected in Multi Mode in the User ID range (1025-2048). To find the Multi again later, make sure to press the USER button.

PANIC

Pressing the 0 and ENTER buttons simultaneously performs the PANIC function. PANIC deactivates all sounding notes and resets controller values by sending an "All Notes Off" message and a "Reset All Controllers" message on all 16 MIDI channels.

Chapter 5
Multi Edit Mode

Multi Edit Mode allows you to edit and customize Multis. Any Multi can be edited in Multi Edit Mode and saved to one of the 1024 User IDs.

To enter Multi Edit Mode from another Mode, press and turn on the MULTI Mode button to enter Multi Mode, then press and turn on the EDIT button.

In Multi Edit Mode, the top line of the display shows the current page name and number.

Navigate to each page by using the CHANNEL/PAGE buttons.

Navigate to each parameter on the current page by using the PREVIOUS and NEXT buttons.

Change the value of the selected parameter by using the ALPHA WHEEL, or use the keypad function of the CATEGORY buttons to type a numeric value followed by pressing the ENTER button.

Many parameters apply only to one of the 4 Zones (Zone specific parameters). Pages with Zone specific parameters show "Zn" in the top left of the page and list Zone numbers 1-4 on the lines below. This indicates that the parameters in lines 1-4 each respectively apply only to Zones 1-4.

Main Page

```
Main              1/11
Zn  Program

1   186 AM SquareSynth
2   142 Ambience
3   199 Radio Googoo
4   1022 Silent Program
```

Use the Main Page to select a Program for each of the 4 Zones.

Only one KB3 Organ Program can be loaded at a time. The Main Page shows "KB3" to the left of the Program name when a KB3 Program is loaded in a Zone. See KB3 Chan on page 5-12 for details.

Use any of the methods below to select a Program for each Zone.

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 (or the current Category Default Program). 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.

Mixer Page

```
Mixer              2/11
Zn  Volume     Pan
1   100        64
2   113        64
3   115        64
4   110        64
```

Use the Mixer Page to set the Volume and panning for each Zone.

Volume

The Volume parameter sets the volume of each Zone. Change the volume of a Zone by using the ALPHA WHEEL, or use the keypad function of the CATEGORY buttons to type a volume value (0-127) followed by pressing the ENTER button.

A value of "None" can also be selected, which will use the last volume value used by the Zone's MIDI channel. (This volume values is often set by the expression pedal.) A value of "None" can be entered by using the ALPHA WHEEL to scroll below 0.

Pan

The Pan parameter sets the panning (left/right stereo placement) of each Zone. Change the panning of a Zone by using the ALPHA WHEEL, or use the keypad function of the CATEGORY buttons to type a pan value (0-127) followed by pressing the ENTER button.

A value of 0 is full left, 64 is center, and 127 is full right. Other values will move the stereo placement in between these positions.

A value of "None" can also be selected, which will use the last pan value used by the Zone's MIDI channel. A value of "None" can be entered by using the ALPHA WHEEL to scroll below 0.

Key/Velocity Page

```
Key/Velocity        3/11
         Key       Velocity
Zn Low   High   Low    High
1  C 4   G 9    1      127
2  C -1  B 3    1      127
3  C -1  G 9    1      127
4  C -1  G 9    1      127
```

Key Low / Key High

The Key Low and Key High parameters set the playable key range of each Zone by setting the lowest and highest playable key of each Zone. Keys played within this range will trigger a note for the selected Zone. (You can also set a range where playing keys will not trigger a note, by setting Key Low to a higher key than Key High).

A Value for the currently selected Key Low or Key High parameter can be selected by holding down the ENTER button and then playing the desired key on the keyboard. Values can also be selected by using the ALPHA WHEEL, or by using the keypad function of the CATEGORY buttons, followed by pressing the ENTER button.

Velocity Low / Velocity High

The Velocity Low and Velocity High parameters set the playable velocity range of each Zone by setting the lowest and highest playable velocity of each Zone. Velocities within this range will trigger a note for the selected Zone. (You can also set a range where playing velocities will not trigger a note, by setting Velocity Low to a higher velocity than Velocity High).

Transpose/Bend Page

```
TransPose/Bend   4/11
Zn Xpose   BendUp BendDn
1  -12ST   2ST    2ST
2  12ST    2ST    2ST
3  0ST     2ST    2ST
4  0ST     2ST    2ST
```

Xpose

The Xpose parameters set the transposition of each Zone. The Xpose parameters change the pitches generated by each Zone, without changing the Key Low and Key High range on the keyboard. This is done by changing the MIDI note numbers generated by the keys in the Zone.

If you transpose out of the range of the selected Program in the selected Zone, notes from that Zone's Program will not produce sound, though MIDI notes will still be transmitted from the Zone.

Bend Up / Bend Down

The Bend Up and Bend Down parameters set the pitch bend up and pitch bend down range of the PITCH WHEEL for each Zone. Use these parameters to set how much the pitch will change when you move the PITCH WHEEL up or down. Change the Bend Up or Bend Down values by using the ALPHA WHEEL, or use the keypad function of the CATEGORY buttons to type a value (0-88) followed by pressing the ENTER button.

A value of "Prog" can also be selected, which will use the respective PBendUp or PBendDwn value of the Program in the selected the Zone. A value of "Prog" can be entered by using the ALPHA WHEEL to scroll below 0.

Bend Up values greater than 12 can cause samples to bend to their maximum upward pitch before the PITCH WHEEL is fully up.

FX Page

```
FX                    5/11
Zn  FX
1   Y
2   Y
3   Y
4   Y
```

Use the FX Page to enable or disable the FX of the Program in each Zone. Each Zone can be set to Y to enable effects, or to N to disable effects. Some Zones set to Y may be displayed as (Y). This means that there are not enough effects resources available for that Zone, and that Zone's effects are not loaded. If you want to use the FX for a Zone displayed as (Y), try setting other Zones to N to make more FX resources available.

Buttons Page

```
Buttons              6/11
Zn Arp        Variation
1  Yes        Yes
2  No         No
3  No         Yes
4  No         No
```

Arp

The Arp parameters set whether the ARP ON/OFF button is functional for the Program in each Zone.

When a Zone's Arp parameter is set to Yes, the Arpeggiator for the Program in that Zone will be controlled by the ARP ON/OFF button. When a Zone's Arp parameter is set to No, the Arpeggiator for the Program in that Zone is set to Off.

Variation

The Variation parameters set whether the VARIATION button is functional for the Program in each Zone.

When a Zone's Variation parameter is set to Yes, the variation for the Program in that Zone will be controlled by the VARIATION button. When a Zone's Variation parameter is set to No, the variation for the Program in that Zone is set to Off.

Switch Pedals Page

```
Switch Pedals      7/11
Zn SW1a SW1b SW2a SW2b

1  Sust Sost Sost Soft
2  Sust Sost Sost OFF
3  Sust Sost Sost OFF
4  Sust Sost Sost OFF
```

Use the Switch Pedals Page to select an assignment for each switch pedal in each Zone.

When a switch pedal is plugged into the SW1 (SUSTAIN) and/or SW2 jacks, use the parameters in the SW1a and SW2a columns to select an assignment for the switch pedals in each Zone.

When a dual switch pedal is plugged into the SW1 (SUSTAIN) jack, use the parameters in the SW1a and SW1b columns to select an assignment for the dual switch pedals in each Zone.

When a dual switch pedal is plugged into the SW2 jack, use the parameters in the SW2a and SW2b columns to select an assignment for the switch pedals in each Zone.

Note: If a Switch Pedal Override has been selected in Global Mode, Multi Edit Mode will display overridden functions with an asterisk "*" to indicate that the selected function has been overridden. See Switch Pedal Overrides on page 6-6 for details on Switch Pedal Overrides.

Each switch pedal can be assigned to these functions:

OFF

When OFF is selected, the selected pedal is disabled in the selected Zone.

Sust / Rota

When Sust is selected, the selected pedal is assigned to the Sustain function in the selected Zone. Pedals assigned to Sust will sustain any note that is played in the selected Zone while the pedal is pressed, for as long as the pedal is held.

For Zones containing KB3 Organ Programs, the Rota function is available instead of Sust. The Rota assignment controls the Rotary Speaker speed, changing between fast and slow.

Sost

When Sost is selected, the selected pedal is assigned to the Sostenuto function in the selected Zone. Pedals assigned to Sost will sustain notes from any keys that are being held in the selected Zone when the pedal is pressed, for as long as the pedal is held.

Soft

When Soft is selected, the selected pedal is assigned to the Soft pedal function in the selected Zone. Pedals assigned to Soft will perform the Soft pedal function for Piano category Programs in the selected Zone. For Programs in the Piano category, the Soft pedal function simulates applying dampers to the piano strings. Soft will dampen any Piano note that is played in the selected Zone while the pedal is pressed.

CC Pedal Page

```
CC Pedal            8/11
Zn CC Pedal

1  Expression
2  Expression
3  Expression
4  Expression
```

Use the CC Pedal Page to select an assignment for the CC pedal in each Zone. The CC pedal can be assigned to these functions:

OFF

When OFF is selected, the CC pedal is disabled in the selected Zone.

Expression / Swell

Expression controls the pre-FX Program volume, scaling between silence and the current Zone volume. The Expression assignment can also be used to send MIDI CC 11 to external MIDI devices.

For Zones containing KB3 Organ Programs, the Swell function is available instead of Expression. Organ swell is similar to Program volume, except volume can not be turned all the way down to silence. The Multi Edit Main Page shows "KB3" to the left of the Program name when a KB3 Program is loaded in a Zone.
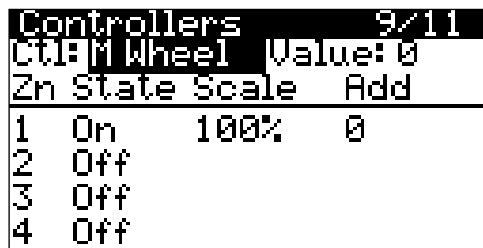
Foot

The Foot assignment controls a wah effect for some Programs. Usually the wah effect must be enabled with the VARIATION button. The Foot assignment can also be used to send MIDI CC 4 to external MIDI devices.

Pan

The Pan assignment controls panning (left/right stereo placement). The Pan assignment can also be used to send MIDI CC 10 to external MIDI devices.

Controllers Page

```
Controllers        9/11
Ctl:M Wheel  Value:0
Zn State Scale   Add

1  On      100%    0
2  Off
3  Off
4  Off
```

Use the Controllers Page to adjust controller settings for each Zone. Settings can be adjusted for the MODULATION WHEEL, as well as the KNOBS assignments.

Ctl

Use the Ctl parameter to select a controller. When the Ctl parameter is selected, you can select a controller by using the ALPHA WHEEL, or by holding the ENTER button and moving the MODULATION WHEEL or one the KNOBS.

Value

Use the Value parameter to set a value (0-127) for the selected controller.

When the Value parameter is selected, you can set a value by using the ALPHA WHEEL, or by using the keypad function of the CATEGORY buttons to type a value (0-127) followed by pressing the ENTER button.

When the Value parameter is selected, you can also set a value by holding the ENTER button and moving the MODULATION WHEEL or one the KNOBS.

State

Use the State parameter to enable or disable the selected controller in the selected Zone.

When a Zone's State parameter is set to Yes, the selected controller is active.

When a Zone's State parameter is set to No, the Program in that Zone will not be controlled by the selected controller. The Program in that Zone will use the controller setting that the Program was saved with in Program Mode.

Scale

Use the Scale parameter to scale the value of the selected controller for each Zone. The Scale parameter multiplies the current value of the controller by the selected Scale amount (-300% through 300%). Press the MULTI Mode button to quickly apply the selected value.

The Scale parameter effectively allows you to apply different values to each Zone, while maintaining a single value for each controller. For example, with the Ctl parameter set to Reverb, you could set the Zone 1 Scale parameter to 100%, and the Zone 2 Scale parameter to 50%. With the REVERB knob set to 127, Zone 1 would have a Reverb value of 127, and Zone 2 would have a Reverb value of 63. With the REVERB knob set to 64, Zone 1 would have a Reverb value of 64, and Zone 2 would have a Reverb value of 32.

Add

Use the Add parameter to offset the value of the selected controller for each Zone. The Add parameter offsets the current value of the controller by the selected Add amount (-128 through 127). Press the MULTI Mode button to quickly apply the selected value.

The Add parameter effectively allows you to apply different values to each Zone, while maintaining a single value for each controller. For example, with the Ctl parameter set to Reverb, you could set the Zone 1 Add parameter to 0, and the Zone 2 Add parameter to 10. With the REVERB knob set to 0, Zone 1 would have a Reverb value of 0, and Zone 2 would have a Reverb value of 10. With the REVERB knob set to 15, Zone 1 would have a Reverb value of 15, and Zone 2 would have a Reverb value of 25.

Channel Page

```
Channel          10/11
Zn  Chan Destination
1    1    USB+MID+LOCAL
2    2    USB+MID+LOCAL
3    3    USB+MID+LOCAL
4    4    USB+MID+LOCAL
```

Use the Channel Page to select a MIDI Channel and Destination for each Zone.

The Chan and Destination parameters are useful when using the SP6 to send MIDI to external equipment, or when receiving MIDI from external equipment. If you are not using external MIDI equipment, these parameters can be left at their default values.

Chan

The Chan parameters set the MIDI transmit and receive channel for each Zone.

For most uses, each Zone should be set to a different MIDI channel. If you set multiple Zones to the same MIDI channel, the same Program will be used for each of those Zones.

Destination

The Destination parameters determine where MIDI data generated from each Zone is sent when playing the SP6 keyboard and moving the SP6 controllers. MIDI data from each Zone can be sent to a SP6 Program (LOCAL), to the MIDI OUT port (MIDI), to the USB COMPUTER port (USB), or to any combination of these destinations.

The Destination parameters work in combination with the LOCAL DEST button on the front panel. The Destination parameters and the LOCAL DEST button each act like filters. For example, if the Zone 1 Destination parameter is set to LOCAL, and the LOCAL DEST button is set to LOCAL + MIDI, MIDI data from Zone 1 will be sent to LOCAL only.

Common Page

```
Common              11/11
Tempo       :120
Clock Src   :Internal
Revrb Chan: 1
KB3 Chan    : 1
```

Tempo

Use the Tempo parameter to set the rate of the Arpeggiator or tempo synced FX (such as Delay). You can set a value by using the ALPHA WHEEL, or by using the keypad function of the CATEGORY buttons to type a value followed by pressing the ENTER button.

The value of the Tempo parameter can also be set by tapping the TAP TEMPO button at the desired rate.

Clock Src

Use the Clock Src (Clock Source) parameter to set whether the selected Multi will use its own tempo, or whether it will sync with the tempo from an external MIDI device.

Set the Clock Src parameter to Internal to use the tempo set by the Tempo parameter.

Set the Clock Src parameter to External to use the tempo from an external MIDI device. When the Clock Src parameter is set to External, an external MIDI device must be sending MIDI clock data to the USB or MIDI in port.

Revrb Chan

Use the Revrb Chan (Reverb Channel) parameter to set the MIDI channel which will be used for Reverb. The Reverb effect of the Program loaded in the selected MIDI channel will be used for all Programs in the current Multi. To view the MIDI Channel of each Zone, see .

KB3 Chan

Use the KB3 Chan (KB3 Channel) parameter to set the MIDI channel which will be used for KB3 organ Programs. Only one KB3 Program can be loaded at a time. If KB3 Programs are selected for more than one Zone, this parameter specifies which MIDI channel has priority to load a KB3 Program. If you want a KB3 Program to play in a Zone, set KB3 Chan to the channel of the Zone. To view the MIDI Channel of each Zone, see Channel Page on page 5-10.

Save User Multis

For details on saving User Multis, see Multi Save Dialog on page 4-10.
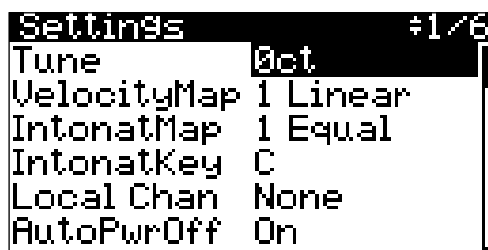
Chapter 6
Global Mode

Global Mode allows you to adjust performance settings which affect all Programs and Multis. Global Mode also allows you to Store, Load, and Delete Programs and Multis, or restore factory defaults by performing a Reset.

Navigate to each page by using the CHANNEL/PAGE buttons.

Navigate to each parameter on the current page by using the PREVIOUS and NEXT buttons.

Change the value of the selected parameter by using the ALPHA WHEEL, or use the keypad function of the CATEGORY buttons to type a numeric value followed by pressing the ENTER button.

Settings Page

```
Settings           ↕1/6
Tune         Oct
VelocityMap  1 Linear
IntonatMap   1 Equal
IntonatKey   C
Local Chan   None
AutoPwrOff   On
```

Tune

Use the Tune parameter to adjust the fine tuning of all Programs and Multis.

VelocityMap

The VelocityMap parameter determines the way the SP6 generates MIDI velocity information. Different maps generate different MIDI velocity values for the same physical key strike velocity.

The default map (Linear) provides the widest range of velocity expression, but you may want to choose a different map if the default does not suit your playing style. You can select from any of the following settings:

Light3 **Light2** **Light1**	Makes it increasingly easier to produce high MIDI velocity values for the same key strike velocity (with Light3 being the easiest). These maps work best for those with a light touch.
Linear	The default map. Linear, allows MIDI velocities to pass unchanged. It follows a linear response.
Hard1 **Hard2** **Hard3**	Makes it increasingly harder to produce high MIDI velocity values for the same key strike velocity (with Hard3 being the hardest). These maps work best for those with a heavy touch.
PianoTouch	Simulates the general velocity response of an acoustic piano, and is best suited for playing acoustic piano Programs.
EasyTouch	Similar to the Light1/Light2/Light3 settings. Makes higher velocities easier to play, but allows more sensitive control over playing high velocities by not boosting the MIDI velocity for fast strike velocities as much as it does for medium strike velocities.
GM Receive	Mimics the velocity response commonly used by keyboards that use the General MIDI (GM) sound set. The GM Receive map makes medium strike velocities produce higher MIDI velocities compared to the Linear map.

IntonatMap

Most modern western music uses what is known as equal temperament. This means that the interval between each semitone of the 12 tone octave is precisely the same as every other semitone.

However, many different intonation intervals have evolved over the centuries and across cultures and instruments, so equal temperament will not sound appropriate for certain styles of music. The SP6 supplies you with 18 different factory intonation maps which are useful for a range of different styles. Each of these maps defines different intervals between each of the semitones in a single octave (used for all octaves) by setting pitch offsets for each note in cents.

Like many instruments before the adaptation of equal temperament, most of these intonation maps were designed to sound best in one specific key. Though some may have historically been in a different key, all of the SP6's factory intonation maps are set to root note C by default. You can change the root key of the current intonation map by using the IntonatKey parameter (see the IntonatKey section below).

0 None	No intonation map is used, intonation is equal.
1 Equal	No detuning of any intervals. The standard for modern western music.
2 Just	Tunings are defined based on the ratios of the frequencies between intervals. The original tuning of Classical European music.
3 Just/b7th	Similar to Just, but with the Dominant 7th flatted an additional 15 cents.

4 Harmonic	The perfect 4th, Tritone, and Dominant 7th are heavily flatted.
5 JustHarm	Approximation of a historical intonation.
6 Werkmeiste	Named for its inventor, Andreas Werkmeister, it was developed to enable transposition with less dissonance than classic equal temperament.
7 1/5thCmma	Approximation of a historical intonation based on the comma system.
8 1/4thCmma	Approximation of a historical intonation based on the comma system.
9 IndianRaga	Based on the tunings for traditional Indian music.
10 Arabic	Oriented toward the tunings of Mid-Eastern music.
11 BaliJava1	Based on the pentatonic scale of Balinese and Javanese music.
12 BaliJava2	A variation on BaliJava1, slightly more subtle overall.
13 BaliJava3	A more extreme variation.
14 Tibetan	Based on the Chinese pentatonic scale.
15 Carlos A	Developed by Wendy Carlos, an innovator in microtonal tunings, this intonation map flats each interval increasingly, resulting in an octave with quarter-tone intervals.
16 Pyth/aug4	This is a Pythagorean tuning, based on the Greek pentatonic scale. The tritone is 12 cents sharp.
17 Pyth/dim5	This is a Pythagorean tuning, based on the Greek pentatonic scale. The tritone is 12 cents flat.
18 EastMed	Eastern Mediterranean. The Major 3rd and Major 7th are flat by 50 cents.

IntonatKey

Use the IntonatKey parameter to set the tonic (or base note) from which the currently selected intonation map calculates its intervals. If you select G as the intonation key, for example, and the intonation map you select tunes the minor 2nd down by 50 cents, then G# will be a quartertone flat relative to equal intonation. If you change the intonation key to D, then D# will be a quartertone flat. If you use nonstandard intonations, you'll want to set IntonatKey to the key you're playing in.

If the Intonation parameter is set to Equal, changing IntonatKey has no effect.

Local Chan

The Local Chan parameter enables an external MIDI keyboard to function as if it is the SP6's keyboard and physical controllers. This allows all Channels/Zones of a Multi to be played simultaneously from an external MIDI keyboard transmitting on a single MIDI channel (or a single MIDI channel of a sequencer), with split and layered Zones laid out across the external MIDI keyboard. To do this, set Local Chan to the same MIDI channel that your external MIDI keyboard or sequencer is transmitting.

If you are not using an external MIDI device to play Multis, you can ignore this parameter and leave it set to None. When Local Chan is set to None, an external MIDI device transmitting on one channel will only play one Channel/Zone of a Multi.

In Program Mode, an external MIDI keyboard or sequencer transmitting on the Local Chan will always play the Program on the currently selected Program Mode MIDI channel.

AutoPwrOff

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.

Use the AutoPwrOff parameter to enable or disable the automatic power saving feature. When the AutoPwrOff parameter is set to On, the SP6 will automatically power off after the Power Off Time has expired, from the last key press (physical or MIDI), button press, controller movement, or USB MIDI activity.

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.

APwrOffTime

Use the APwrOffTime parameter to set the Power Off Time. If the AutoPwrOff parameter is set to On, then the SP6 will automatically power off after the Power Off Time has expired, from the last key press (physical or MIDI), button press, controller movement, or USB MIDI activity.

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.

MultiChange

Use the MultiChange parameter to set the behavior of how Multis are loaded when selecting a Multi in Multi Mode.

When MultiChange is set to **Immediate**, a selected Multi will be loaded immediately.

When MultiChange is set to **AllKeysUp**, a selected Multi will be loaded when you've released all currently held notes.

SysEx ID

The SysEx ID parameter sets the ID number for the unit if you are using more than one device with the same MIDI manufacturer ID number. You can set this parameter to any number from 0 to 127.

Unless you have multiple SP6 keyboards receiving SysEx messages from a single source, you will not need to change the SysEx ID from the default setting of 0.

If you do have multiple SP6s receiving SysEx messages from a single source, make sure each SP6 has a different SysEx ID. This will allow you to direct SysEx messages to the appropriate SP6 by specifying which unit with the SysEx ID byte that's included with every SysEx message.

To have the unit respond to SysEx messages regardless of the SysEx ID, set SysEx ID to 127.

LCDContras

Use the LCDContras parameter to adjust the contrast of the LCD display.

BankMode

The BankMode parameter determines the MIDI controller number(s) that will be used to select MIDI Program Banks.

When using an external MIDI device to send MIDI bank change messages to the SP6, different manufacturers may use different MIDI controller numbers for sending bank change messages (usually 0, 32, or both 0 and 32). You can use the BankMode parameter to ensure that the SP6 responds to bank change messages from external MIDI devices. Set BankMode to any of the following settings:

Ctl 0	MIDI Bank change messages are received with controller number 0.
Ctl 32	MIDI Bank change messages are received with controller number 32.
Ctl 0/32	MIDI Bank change messages are received with both controller numbers 0 and 32.

FXMode

The FXMode parameter determines how effects resources are used in Program Mode.

Use the **Perform** setting when playing a single Program in Program Mode. With FXMode set to Perform, the SP6 minimizes disruption of effects when changing Programs or MIDI channels in Program Mode.

When controlling the SP6 from an external sequencer to play multiple channels in Program Mode, setting FXMode to **MultiTrk** allows effects to be loaded on more MIDI channels, although effects may be momentarily disrupted when changing Programs or MIDI channels.

Overrides Page

```
Overrides            ↕2/6
SW1a       None
SW1b       None
SW2a       None
SW2b       None
KB3 Rotary Button+Ped
```

Switch Pedal Overrides

The Switch Pedal Override parameters (SW1a through SW2b) allow the assignments for the Switch Pedals to be changed for all Programs and Multis. (KB3 organ Programs have a separate override for the SW1a pedal, see the KB3 Rotary section below for details). The alternative assignments available for the Switch Pedal Overrides include the standard piano pedal controls of **Sustain**, **Sostenuto** and **Soft** as well as DataInc, DataDec, FavoriteInc and FavoriteDec, which can be used to change Programs, Multis or Favorites by using a pedal. The Arp On/Off and Arp Latch assignments allow for easy control of arpeggiator functions.

Use the **DataInc** and **DataDec** assignments (data increment/decrement) to select the next or previous ID when you depress the pedal. If you are in Program mode, DataInc and DataDec will select the next or previous Program. If you are in Multi mode, DataInc and DataDec will select the next or previous Multi.

Use the **FavoriteInc** and **FavoriteDec** assignments (Favorite increment/decrement) to select the next or previous Favorite when you depress the pedal. If you are not playing any Favorites, FavoriteInc and FavoriteDec will select the first Favorite, or the last Favorite that was selected since turning on the SP6.

Use the **Arp On/Off** and **Arp Latch** assignments to easily control arpeggiator functions. The Arp On/Off assignment allows you to toggle the arpeggiator on and off by pressing a switch pedal. The Arp Latch assignment allows you to latch held notes to be played by the arpeggiator by holding down a switch pedal. When using the Arp Latch assignment, make sure the arpeggiator is turned on. Play the notes you wish to latch, press and hold the assigned pedal, then release the notes. The notes will continue to arpeggiate until the pedal is released.
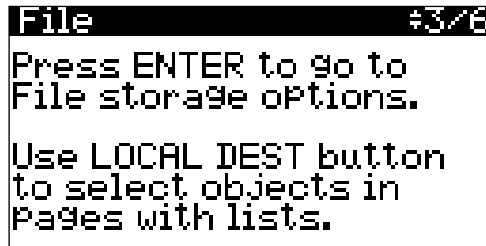
In Multi Edit Mode, if a pedal is selected which has a pedal override enabled in Global mode, Multi Edit Mode will display the original assignment with an asterisk (*) to remind you that the Global mode pedal override settings are being used instead of the Multi mode pedal settings.

In Multi Edit Mode, setting a Pedal assignment to "OFF" will disable the override for that Pedal in the selected Zone. It can be useful in Multi Mode to disable the Pedal Override for some Zones. For example, you may want to use a Pedal Override to control Sustain in all Zones of a Multi, but disable Sustain for one Zone.

KB3 Rotary

By default KB3 organ Programs have the Slow/Fast speed control for the Rotary speaker effect assigned to the VARIATION button and the SW1 (SUSTAIN) pedal (the "Button+Ped" setting). Setting the KB3 Rotary parameter to "Button" allows the Sustain pedal to function as sustain for all KB3 Programs, instead of Rotary Slow/Fast. The VARIATION button will always control the Rotary speed, regardless of this parameter's setting.

File Page

```
File            ‡3/6
Press ENTER to go to
File storage options.

Use LOCAL DEST button
to select objects in
pages with lists.
```

The File Page allows you use a USB Device (such as a thumb drive) or a computer to store and load backup files of User Objects (Programs and Multis), or to load new sounds. On the File Page, press the ENTER button to go to the File Options Page.

File Options

On the File Options Page, use the PREVIOUS and NEXT buttons to select Load or Store, then press the ENTER button to continue to the Load Device Page or Store Method Page.

While using the File Options Page, the playing of notes is disabled.

Load / Load Device

Use the Load Device Page to select the device you wish to load from.

Load a File from a Computer

1. Connect a USB cable from your computer to the USB COMPUTER port on the rear panel of the SP6.

2. On the Load Device Page, use the PREVIOUS and NEXT buttons to select PC Drive, then press the ENTER button.

3. Add a file to the SP6 drive on your computer, then eject the drive from your computer.

4. When the drive has been ejected from you computer, press the ENTER button on the Load Page.

5. On the Load File Page, use the PREVIOUS and NEXT buttons to select the file in the list, then press the ENTER button.

6. On the Load Method Page, use the PREVIOUS and NEXT buttons to select a load method. See the Load Method section below for details.

Load a File from a USB Device

1. Connect a USB Device (such as a thumb drive) containing your file to the USB STORAGE port on the rear panel of the SP6.

2. On the Load Device Page, use the PREVIOUS and NEXT buttons to select USB Device, then press the ENTER button.

3. On the Load File Page, use the PREVIOUS and NEXT buttons to select the file in the list, then press the ENTER button.

4. On the Load Method Page, use the PREVIOUS and NEXT buttons to select a load method. See the Load Method section below for details.

Load Method

On the Load Method Page, use the PREVIOUS and NEXT buttons to select a load method, then press the ENTER button. See below for details on each method.

All: Use All to load all of the objects from the selected file. Objects will be loaded into the lowest User ID numbers that are currently unused in your SP6. Used User IDs will not be overwritten.

Some: Use Some to load some of the objects from the selected file. You will be brought to the Load Some Page, where you can select objects from a list.

On the Load Some Page, use the PREVIOUS and NEXT buttons or ALPHA WHEEL to scroll through the list. Use the LOCAL DEST button to select or de-select objects in the list. Selected objects are marked with an asterisk (*).

Press the ENTER button to load the selected objects, or press the EXIT button to cancel. Objects will be loaded into the lowest User ID numbers that are currently unused in your SP6. Used User IDs will not be overwritten.

All-Ovrwrte: Use All-Ovrwrte to delete all of the User Objects in your SP6, then load all of the objects from the selected file using the ID numbers stored in the file.

All-Ovrwrte will delete all of the User Objects in your SP6 before loading the objects from the selected file. This cannot be undone. Before using All-Ovrwrte, you may wish to use the File Page to store your existing User Objects to a computer or USB Device. Deleted User Objects can not be recovered.

Store / Store Method

On the Store Method Page, use the PREVIOUS and NEXT buttons to select a store method, then press the ENTER button. See below for details on each method.

All: Use All to store all User Objects from the SP6.

Some: Use Some to store some of the objects from the SP6. You will be brought to the Store Some Page, where you can select objects from a list.

On the Store Some Page, use the PREVIOUS and NEXT buttons or ALPHA WHEEL to scroll through the list. Use the LOCAL DEST button to select or de-select objects in the list. Selected objects are marked with an asterisk (*).

Press the ENTER button to store the selected objects, or press the EXIT button to cancel.

Store Device

After selecting a store method, use the Store Device Page to select the device you wish to store to.
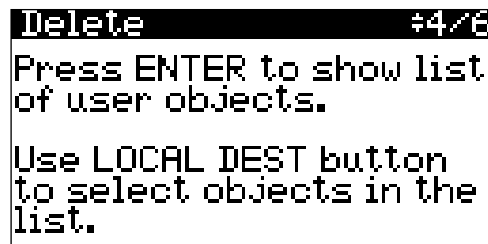
Store a File to a Computer

1. Connect a USB cable from your computer to the USB COMPUTER port on the rear panel of the SP6.

2. On the Store Device Page, use the PREVIOUS and NEXT buttons to select PC Drive, then press the ENTER button to go to the File Name Page.

3. On the File Name Page, use the PREVIOUS and NEXT buttons to move the cursor to each character. Change the current character by using the ALPHA WHEEL, or use the keypad function of the CATEGORY buttons to type a character. After naming the file, press the ENTER button to store the file to the PC Drive.

4. On your computer, copy the stored file from the SP6 drive to your computer, then eject the drive from your computer.

Store a File to a USB Device

1. Connect a USB Device (such as a thumb drive) to the USB STORAGE port on the rear panel of the SP6.

2. On the Store Device Page, use the PREVIOUS and NEXT buttons to select USB Device, then press the ENTER button.

3. On the File Name Page, use the PREVIOUS and NEXT buttons to move the cursor to each character. Change the current character by using the ALPHA WHEEL, or use the keypad function of the CATEGORY buttons to type a character. After naming the file, press the ENTER button to store the file to the USB Device.
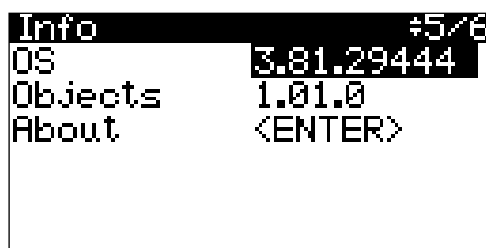
Delete Page


```
Delete            ≑4/6
Press ENTER to show list
of user objects.

Use LOCAL DEST button
to select objects in the
list.
```

Use the Delete Page to delete selected Programs and Multis from the SP6. On the Delete Page, press the ENTER button to view a list of User Objects.

While viewing the list of User Objects, use the PREVIOUS and NEXT buttons or ALPHA WHEEL to scroll through the list. Use the LOCAL DEST button to select or de-select objects in the list. Selected objects are marked with an asterisk (*).

Press the ENTER button to delete the selected objects, or press the EXIT button to cancel.

Info Page

```
Info                ‡5/6
OS         3.81.29444
Objects    1.01.0
About      <ENTER>
```

The Info Page shows currently installed Operating System version (OS) and Objects version. To make sure that you have the latest Operating System and sound Objects, go to the Kurzweil website at www.kurzweil.com.

Select the About parameter and press the ENTER button to see a list of credits and acknowledgments.

Reset Page

```
Reset               ‡6/6
Press ENTER to delete
all your user objects.
```

Use the Reset Page to reset the SP6 to its original factory settings. Press the ENTER button to restore all Global Mode settings to their factory defaults, and delete all User Programs and Multis.

All User Programs and Multis will be permanently erased. This cannot be undone. Before using the Reset Page, you may wish to use the File Page to store your existing User Objects to a computer or USB Device. Deleted User Objects can not be recovered.

Chapter 7
Troubleshooting

Use this chapter to learn how to maintain your SP6 and solve operational problems.

Maintenance

Clean the SP6 with a soft cloth dampened with water. Never use abrasives or solvents as they may damage the SP6.

Power On Problems

This is the normal power on sequence:

1. The LCD backlight turns on.

2. "Loading..." appears in the LCD for a few seconds.

3. The SP6 enters Program Mode with Program 1 or the default boot up Program selected.

If your SP6 does not follow the normal power on sequence, check the problems and solutions below:

Problem	The SP6 does not power on
Solutions	Plug the power cable securely into the wall outlet.
	Plug the power cable securely into the SP6 power jack.
	Use a different wall outlet, power strip, or extension cord.

Problem	The SP6 powers on but operation is abnormal
Solution	Try plugging the power cable into a different wall outlet on a different circuit.

Problem	The SP6 powers on but the LCD is difficult to read
Solution	Go to the Global Mode Settings page and adjust the LCDContras parameter.

Audio Problems

CAUTION: To protect your ears, do not troubleshoot audio problems while wearing headphones. Additionally, always set the SP6 and connected audio system or mixer to a low volume level when troubleshooting audio problems.

NOTE: When solving audio problems, playing the SP6 Demo Songs is an easy way to test if the audio is working properly. To play the SP6 Demo Songs, press the KEYPAD and 0 buttons simultaneously.

Problem	The SP6 functions normally but does not produce sound or has low volume
Solutions	If the VOLUME knob is turned down, slowly turn the VOLUME knob up.
	If an expression pedal is plugged into the CC1 jack, try to turn up the volume using the expression pedal.
	Use the MIDI Panic function by simultaneously pressing the 0 and ENTER buttons to reset the MIDI Volume and Expression values for all MIDI Channels.
	Press the LOCAL DEST button until the LCD shows "Destination LOCAL+MIDI".
	If the volume control on your audio system or mixer is turned down, slowly turn the volume control up.
	If your audio cables are not securely plugged into the SP6, audio system, or mixer, set the volume of the audio or mixer to the lowest level, securely plug in the audio cables on both ends, and then slowly turn up the volume.
	Try using different audio cables. Obtain and securely connect the correct type of audio cables. The SP6 accepts both balanced (TRS) and unbalanced (TS) 1/4-inch audio cables.
	If the signal source selection on your audio system or mixer is incorrect, set the volume of the audio or mixer to the lowest level, select the correct signal source, and then slowly turn up the volume.
	If the input to your audio system or mixer is set for low impedance, set the volume of the audio or mixer to the lowest level, change the impedance setting to high, and then slowly turn up the volume of the audio system or mixer.
	If the input trim to your audio system or mixer is set too low, slowly turn up the trim on your audio system or mixer.

MIDI Problems

Problem	Sending MIDI messages to a computer or external MIDI device is not working
Solutions	Make sure the MIDI channel being used by the SP6 matches the MIDI channel being used by the external device.
	Press the LOCAL DEST button until the LCD shows "Destination MIDI."
	If using a MIDI cable, make sure the MIDI cable is plugged into the SP6 MIDI OUT port and the external MIDI device MIDI IN port.
	Make sure the USB or MIDI cable being used is securely plugged in at both ends.
	Try using a different USB or MIDI cable.

| Problem	Receiving MIDI messages from a computer or external MIDI device is not working
Solutions	Make sure the MIDI channel being used by the SP6 matches the MIDI channel being used by the external device.
	If using a MIDI cable, make sure the MIDI cable is plugged into the SP6 MIDI IN port and the external MIDI device MIDI OUT port.
	Make sure the USB or MIDI cable being used is securely plugged in at both ends.
	Try using a different USB or MIDI cable.

Pedal Problems

Switch Pedal Problems

Problem	Sustain or Sostenuto pedals are stuck "on", or functioning backwards ("on" when up instead of down)
Solution	Always plug pedals in before powering on the SP6, and do not press the pedals before the SP6 has powered on. Turn power off, then on, if necessary.

Problem	A switch pedal is not doing the expected function
Solutions	Check the Global Mode Overrides page to see if you have applied any pedal overrides.
	If you have pedal problems in Multi Mode, use the Multi Edit Mode Switch Pedals page to check the pedal settings for each Zone in each Multi.

| Problem	A dual switch pedal is not working correctly
Solution	A dual switch pedal must be wired as shown below. Any other wiring pattern will not work correctly.
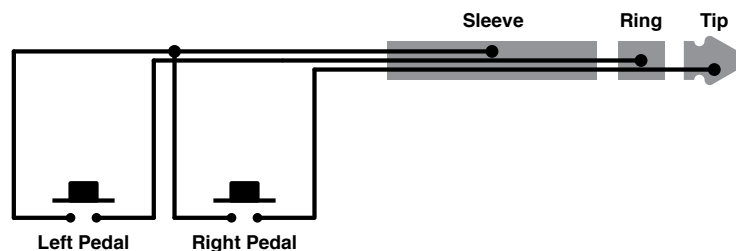
Continuous Control (Expression) and Half Damper Pedal Problems

Problem	A Continuous Control (Expression) or Half Damper pedal is not working correctly
Solution	For best results, use a Kurzweil CC-1 Continuous Control pedal, available from your dealer. See below for specifications when using Continuous Control pedals from other manufacturers.

A Continuous Control (Expression) or Half Damper pedal must be wired to a single stereo 1/4-inch plug as follows:

- Wiper to Tip
- Top end of resistance element to Ring
- Bottom end of resistance element to Sleeve

These connections are shown schematically below:
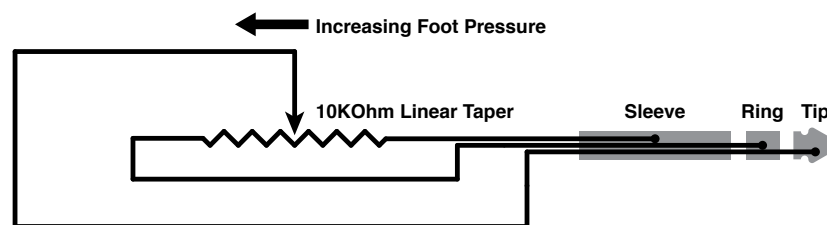
A continuous control pedal should have an impedance between 5,000 and 100,000 ohms. An impedance less than 5,000 may overload the reference voltage source in the SP6 and interfere with operation of other controls. An impedance more than 100,000 may result in electrically noisy operation, which may cause your SP6 to send unwanted MIDI controller messages.

The taper of the control should be linear for easy, predictable control. Pedals designed for volume control typically have an exponential (or anti log) taper, which results in most of their range being concentrated in the upper half of pedal's path of travel.

Pedals may have a control range that is less than 100%. Make sure that when the pedal is in the fully down position, its impedance is 0, and when it is in the fully up position, the impedance is at its maximum rating.

Kurzweil Support

For additional help, contact Kurzweil support at kurzweil.com/support. You may also find unofficial help at some of the internet communities listed at kurzweil.com/community.

Appendix A
MIDI Implementation

Function		Transmitted	Recognized	Remarks
Basic Channel	Default	1	1	Memorized
	Changed	1–16	1–16	
Mode	Default	Mode 3	Mode 3	For multi-timbral applications, set the Global Mode "FXMode" parameter to "MultiTrk" (see FXMode on page 6-5 for details)
	Messages			
	Altered			
Note Number			0–127	
	True Voice	0–127	0–127	
Velocity	Note ON	O	O	
	Note OFF	O	O	
Aftertouch	Keys	X	O	
	Channels	X	O	
Pitch Bender		O	O	
Control Change		O 0–31 32–63 (LSB) 64–127	O 0–31 32–63 (LSB) 64–127	
Program Change		0 to 2,097,151	0–511	Standard and custom formats
	True #	0–127	0–127	
System Exclusive		O	O	
System Common	Song Pos.	X	X	
	Song Sel.	X	X	
	Tune	X	X	
System Real Time	Clock	O	O	
	Messages	O	O	
Aux Messages	Local Control	O	O	
	All Notes Off	O	O	
	Active Sense	X	X	
	Reset	X	X	
Notes		Manufacturer's ID = 07 Device ID: default = 0; programmable 0–127		

Mode 1: Omni On, Poly	Mode 2: Omni On, Mono	O = Yes
Mode 3: Omni Off, Poly	Mode 4: Omni Off, Mono	X = No

MIDI Control

SP6 Physical Controllers

In Program and Multi Mode the SP6 physical controllers can send MIDI messages to an external MIDI device. The parameters assigned to each of these physical controllers can be controlled by an external MIDI device by sending the appropriate message on the appropriate channel. This is useful for controlling SP6 parameters when using the SP6 with an external sequencer or computer.

SP6 Physical Controller	Program Mode MIDI Message	Multi Mode MIDI Message
PITCH BEND WHEEL	Pitch Wheel	Pitch Wheel
MODULATION WHEEL	CC 1	CC 1
VARIATION Button	CC 29	CC 29
KNOBS: ZN1 VOL/P1	CC 71	CC 7
KNOBS: ZN2 VOL/P2	CC 72	CC 7
KNOBS: ZN3 VOL/P3	CC 73	CC 7
KNOBS: ZN4 VOL/P4	CC 79	CC 7
KNOBS: FILTER 1	CC 12	CC 12
KNOBS: FILTER 2	CC 13	CC 13
KNOBS: ATTACK	CC 22	CC 22
KNOBS: RELEASE	CC 23	CC 23
KNOBS: FX 1	CC 25	CC 25
KNOBS: FX 2	CC 26	CC 26
KNOBS: DELAY	CC 27	CC 27
KNOBS: REVERB	CC 28	CC 28
PEDALS: SW1a (SUSTAIN)	CC 64	CC 64
PEDALS: SW1b	CC 66	CC 66
PEDALS: SW2a	CC 66	CC 66
PEDALS: SW2b	CC 67	CC 67
PEDALS: CC (VOLUME)	CC 11	CC 11

SP6 MIDI Channel Functions

In Program and Multi Mode, certain SP6 MIDI channel functions can be controlled by an external MIDI device by sending the appropriate message on the appropriate channel. This is useful for controlling SP6 MIDI channel parameters when using the SP6 with an external sequencer or computer.

SP6 MIDI Channel Function	MIDI Message
MIDI Channel Volume	CC 7
MIDI Channel Pan	CC 10

Appendix B
Physical Specifications

Keyboard:	88 note fully-weighted hammer-action with velocity sensitive keys
Display:	128x64 pixel monochrome LCD with front-panel contrast adjust
Polyphony:	128 Voice Polyphony, dynamically allocated
Multitimbral:	16 parts (one per MIDI channel)
Quick Split / Layer:	Easy access with adjustable volume and panning
Programs:	Space for 1024 Factory and 1024 User Programs (in 10 instrument Categories)
Multis:	Space for 1024 Factory Multis, plus 1024 User Multi locations with up to 4 programmable Zones for splits and layers
Effects Resources:	32 DSP units
Controllers:	• Pitch wheel • Modulation wheel • Volume knob • 4 knobs with Shift button (3 shift rows for 12 assignments per Program) • 4 Zone On/Off buttons • Variation button • Arpeggiator On/Off button • Tap Tempo button • 2 switch pedal inputs, each supporting a dual switch pedal or single half damper pedal (for up to 4 switch pedals) • Continuous control pedal input • 2 Transpose buttons • 5 Favorites buttons
Analog Outputs:	Two 1/4" TRS Balanced Outputs (Stereo Pair) 24-bit D-to-A Converters Frequency Response 20Hz-20kHz +/- 0.1dB +21dBu Maximum Output Level -113dB Signal-to-Noise Ratio (A-weighted) 0.003% THD+N (1kHz @ -1 dBFS)
Headphones:	1/4" Rear-Mounted Stereo Headphone Output Frequency Response 20Hz-20kHz +/- 0.5dB Maximum Output Power 130mW into 32 Ohms -100dB Signal-to-Noise Ratio (A-weighted) 0.03% THD+N (1kHz @ 100mW Output into 32 Ohm Load) Output Impedance: < 1 Ohms Load Impedance: > 24 Ohms
MIDI:	IN, OUT
USB:	Complete MIDI functionality over USB User Program / Multi file transfer to/from PC / Mac / USB Flash Drives Operating System updates from PC / Mac / USB Flash Drive
Height:	(5.2") (14.6cm)
Depth:	(15") (38.1cm)
Length:	(52.5") (133.35cm)
Weight:	(27.25 lb.) (12.36 kg)
Power:	External Power Supply, 15VDC 2.5A

Specifications subject to change without notice

Appendix C Programs

Object Version 1.01.0

PIANO

1	Dyn 9ft Grand
2	Rich Grand 7ft
3	Bright Jazz 9ft
4	Intimate Pno 7ft
5	Punchy Edge
6	Studio Grand 7ft
7	Smooth Grand 9ft
8	Solo Grand 7ft
9	RubensteinComp
10	Stereo Pno K26
11	Upright Piano
12	Indie Piano 2
13	R&B Stack
14	Piano & Strings
15	Dark & Distant
16	Film Piano

E.PIANO

17	Suitcase EP
18	EZ Tube EP
19	Phase EP
20	Bright EP
21	Dyno EP
22	Broken EP
23	Mtron EP
24	Wurly EP
25	ACL Wurly
26	SlyBallad EP

27	Walrus Pianet
28	She'sNotThere
29	E-cousticGrand
30	VidKilledRadio
31	FM EP
32	Thick FM Digital

CLAV

33	Clavi AC
34	Clavi BC
35	Clavi Phaser
36	Clavi Auto Wah
37	BC Clav Tube
38	Slap Wah Clav
39	Flange Clav
40	SMS Clav
41	Deep Fuzz
42	Stevie Fuzz
43	PPG Comp
44	RMI & Harpsi
45	Classic Harpsi
46	HarpsiTar
47	HarpSeccoRd
48	HarpsiVibe

ORGAN

49	Big Leslie B3
50	Classic B3
51	SoulPercOrgan

52	Gimme Some
53	VAST-ly Organ
54	VAST Bars
55	OleTime Gospel
56	Funky Perc
57	Mr. Smith
58	D-Vox Organ
59	Far Draws
60	Pipe Stops
61	Pipes & Voices
62	Chapel Organ
63	AllStps AllVox
64	Cmbo Accordian

STRINGS/PADS

65	Arco Strings
66	Dulcet Strings
67	Punchy Strings
68	Bass & Violins
69	AdagioTutti 8ves
70	SloMuted Strings
71	Marmalade Stgs
72	Proper Pizzicato
73	WheelBow Fiddle
74	WheelBow Cello
75	Electric Bow
76	Space Oddity
77	ELOStringSection
78	BritishMT String

79	Adagio Magic
80	Gliss/Arp Harp
81	Pedal Pad
82	Square Pad
83	Evolving Pad
84	Water Buffalo
85	JunoWhatIMean
86	Warm Encounter
87	Prophet Pad
88	Arpeggi Pad
89	Ancient Calling
90	Omni Strings
91	Pan Strings
92	Film Score Pad
93	5th-Scape
94	OBX Pad
95	Slow Rhythm Pad
96	Pan Motion Pad

BRASS/WINDS

97	Lucid Brass
98	Epic Low Brass
99	Solo Trbn/Trpt
100	Almost Muted
101	Lead FrenchHorn
102	Dyn French Horns
103	Dyn Orch Tuba
104	Sax Section
105	SaxSplits+Flute
106	Clarinet/Flute
107	Bassoon&Oboe
108	Solo Eng Horn
109	AcidJazzFlute
110	Fruity Floot
111	Ocarina
112	Mellotron Flutes

VOICES/MISC

113	In A Good Place
114	Choir Redux
115	Aaahlicious
116	EnvelopingVoices
117	Haah Singers
118	Swept Voices
119	Swell Choir
120	Voice Waves
121	Bandpass Choir
122	Melotron Vox
123	NYC Voices
124	Ooh So G'oohD
125	Oody Oody
126	Strings & Winds
127	Slow Interlude
128	Vox & Strings
129	Full Fellowship
130	Gothic Climax
131	Pastoral DblRds
132	Pastoral Pizzi
133	H'Arps & Harp
134	Bartok Ensemble
135	Poltergeist Trem
136	Pizz & Perc
137	Matadores
138	Singapore Sling
139	Dream Session
140	3waySplit Mtron
141	Post Rock
142	Ambience
143	JetSet Martini
144	Sci-Fi Movie
145	Celeste Palette
146	After 3pm
147	Shokudo Enka
148	Warszawa

149	ArmonicaWurly
150	Whale Call
151	Fisher Cove
152	Upstream
153	Sense Delay
154	Polyphon
155	Kinderklavier
156	Space Agogos
157	The Peddler
158	Enigmatism
159	Throat Siren
160	VoxtronMachine
161	ArpHollow Bells
162	Crimson Jungle
163	80'sMovieMusic
164	Magic Mbira
165	Blues Harmonica
166	Insta - Spooky
167	Suspense Scene
168	Creepy Crawlies

LEADS/SYNTHS

169	Micromoog Plus
170	MW Lead
171	HipHop Lead
172	E-Bow Mono
173	80's Lead Synth
174	Brassy Lead
175	Fitty-Fitty
176	AK Wild Lead
177	ProphetV Lead
178	Liquid T Lead
179	Soy Incident
180	Chirp Lead
181	Square Lead
182	Seongdeok Lead
183	Mayhem Wheel

184	Robin's Lead
185	D'tuned Polysyn
186	AM SquareSynth
187	Prophesied Six
188	Vintage Woobler
189	Quadra Comp
190	Punch Synth
191	Super Saw Stabs
192	Clone Bandit
193	Square Bell
194	PolyVector Lead
195	PWM Synth
196	Cosmic Intervals
197	Last Challenge
198	Pattern Machine
199	Radio Googoo
200	Ion Drive

GUITAR/BASS

201	Real Nylon
202	Steel String
203	Dulciliere
204	Rob's Caster
205	Twin Peaks
206	Les Grit
207	Dist Comper
208	Chunky Vintage
209	Acoustic Bass
210	Washtub Bass
211	Finger Bass
212	P-Bass
213	Squire's Rick
214	Flea/Bootsy
215	Jaco Fretless
216	Eberhardt Frtls
217	The Way It Is
218	Smooth Mooger

219	MiniFunk Bass
220	Squeeze Mini
221	Skool Bass
222	Dolby Bass
223	Poppit SynBass
224	Classic Mini
225	KneeDeep Mini
226	Rave Bass
227	Instaprince
228	DistBass Solo
229	Alias Bass
230	Dub Wob
231	Rhythms
232	Uptown Bass

DRUMS/PERC

233	Los Angeles Kit
234	East Space Kit
235	Ring-tone Kit
236	Ziga Funk
237	Drum&Bass Kit
238	DoorKnocker Kit
239	Rhythmcon Kit
240	Marley Kit
241	Superfly Kit
242	ScratchMe Kit
243	ElectroBeat Kit
244	BrushStroke Kit
245	Essential Perc
246	Orchestral Perc
247	Celeste
248	Chimes Pad
249	Bowed Crotales
250	Real Vibes
251	Stereo Marimba
252	Xylophone
253	Steel Drum

254	Tabla Arp
255	Soft Bell Keys
256	Blue PVC Tubes

UTILITY

1021	Click Track
1022	Silent Program
1023	Editor Template
1024	Clear Program

Appendix D
Multis

Object Version 1.01.0

1	Arp & Pad	30	80s Power	59	Celestial Fears
2	Metallicscape	31	Synth & Lead	60	Pulsing Xenia
3	Wine GLASSical	32	Gleam Cake	61	African Wash
4	Triumphant!	33	Tranquil Moods	62	Sea Breeze
5	M'drnApparatus	34	Dream Segue	63	Noxlumos
6	Plucky Rhodes	35	Expansive Pad	64	Planet J
7	Pno Bass & Ride	36	Apollo	65	Breath of Aura
8	EP & E-Bass	37	Ugokukokoro	66	Silky Pad
9	Organ Bass Funk	38	Lakeside	67	Quadraphobia
10	Bass/Brass/EP	39	Synth & Strings	68	Liquid Sand
11	EP & SynthBass	40	Pads & Strings	69	ForgottenTeaPot
12	Organ Bass Soul	41	SunrizerSynth	70	Nile of Poodle
13	FunkyBass&Organ	42	Vintage Synths	71	Motion News
14	Funky Bass&Clav	43	AOR Pad	72	Timed Divination
15	EPClar&Marimba	44	Synthetic Pad	73	Storm Chaser
16	Organ & EP	45	Pad Organ	74	10 Past 10
17	Wurly & Organ	46	Org/Bass Wrap	75	Synth-Kestra
18	Jazz EP & Flute	47	LoFi Lead	76	GrainCloud3Bells
19	Pianet & MTron	48	Hollow Keys	77	MbiraPad Pattern
20	Clav & MTron	49	Alias Fuzz Grand	78	Marimba Traces
21	ClavPnoBassMW	50	Guitar Bass Pad	79	City Reich
22	Gospel B3 & Pno	51	Cinematic Sitar	80	Rhythmic Pad
23	Flutey Organ	52	Burning Dragster	81	Dream Catcher
24	Organ Bass Vox	53	Torched Tubes	82	Pink Panda
25	Pipes & Choir	54	Guitar Dream	83	Candy Synths
26	Pipes Flute Strs	55	Artful Intellect	84	Last Split 12
27	Pno Vox & Synth	56	Vangalic	85	Last Split 22
28	Synth/Bass Split	57	Effervescence	86	Old Timey Ens
29	Bass/Synth/Lead	58	Bells & Synth	87	Rock Jam 1

88	Rock Jam 2	**125**	AccOrgian Circus
89	No Cry	**126**	Calypso Ens
90	Jazz Quartet	**127**	Bwow Theme
91	Bluegrass Group	**128**	Magnetic Horns
92	Boingo Ens	**129**	Lo-volt Sax
93	New Music Ens	**130**	Helter Skelter
94	AnyNote Jam	**253**	Split Default
95	Hallelujah!	**254**	Layer Default
96	Netromantic	**256**	Clear Multi
97	Royal Splits		
98	Baroque Ens		
99	Wind Strgs Horn		
100	Harp & Strings		
101	HarpStrsCeleste		
102	Reedy Arp Pad		
103	Passive Ensemble		
104	Wind Pizz & Perc		
105	Chamber Orch		
106	Trem & Mute Str		
107	Strs Wind Harp		
108	AccentualStrings		
109	Strings & Voices		
110	Angelic Pad		
111	Rhythmic Choir		
112	Dummer Dudes		
113	FullBallad Piano		
114	Creamy Piano		
115	ElectroPop Piano		
116	Dyn Wurly Fall		
117	Ice & Mist Grand		
118	Buzzy FM		
119	Rubberband Clav		
120	Plastic Baroque		
121	Soft Landing		
122	Syrup Bellini		
123	Purple Concrete		
124	Child's Toys		

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