# Forte<sup>®</sup> SE

# **GETTING STARTED GUIDE**

This guide will help you hook up the Forte SE to your sound system and MIDI system, give you a quick overview, and show you how to start playing music with the Forte SE. A full manual for the Forte SE can be obtained in electronic format from www.kurzweil.com.

# **Specifications**

Forte SE is Kurzweil's latest entry in the Forte line of stage pianos. Some of the key specifications include:

- FlashPlay technology with support for 2GB of Sound ROM
- High Definition Japanese Grand Piano and High Definition Electric Piano
- ROM sounds included from Kurzweil's acclaimed PC3 series, KORE64 expansion, and German D Grand EXP Grand Piano expansion
- New Piano String Resonance Simulation
- Full KB3 organ simulations with 9 sliders as drawbars
- 8 Zone MIDI Controller
- Space for 1024 Factory and 1024 User Programs and Multis (16 Categories of Programs)
- Arpeggiator with dedicated On/Off button (1 per Program, up to 8 in Multi Mode)
- MP3 player audio input jack
- Full 128 voices of polyphony
- Hundreds of Effects Chains

# KURZWEIL®

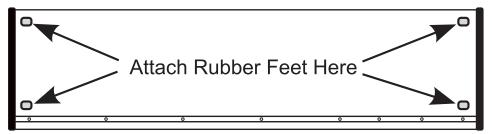
It's the **sound**."

# Before You Start...

Don't connect anything until you make sure the Forte SE is properly and safely situated. If your Forte SE keyboard has been out in the cold, give it time to warm up to room temperature before starting it, since condensation may have formed inside.

# Setting up the Forte SE

- 1. Set the keyboard on a hard, flat, level surface.
- 2. Four adhesive-backed rubber feet are provided with Forte SE. Carefully turn the keyboard over onto a soft surface, remove the paper backing from the rubber feet and attach them.





NOTE: Unless the instrument will always be used with a keyboard stand, attachment of the rubber feet is strongly advised. Otherwise protruding screws will scratch the tabletop.

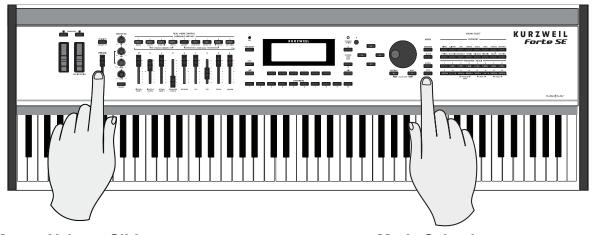
- 3. Connect the AC power cord to the Forte SE. Before plugging the cable into the power outlet, check that the power is compatible with the Forte SE. The Forte SE runs on AC power and works with voltages from 80-265 volts 50-60 Hz. The voltage level is detected and set automatically by the Forte SE. If your power source does not have the standard three hole outlet, you should take the time to install a proper grounding system. This will reduce the risk of a shock. If your power outlet is not within these ranges it is recommended you use an appropriate adaptor.
- 4. Plug the power cable into the wall.
- 5. Plug the Switch Pedal into the marked SW1 (Sustain) Pedal jack on the Forte SE rear panel.
- 6. Connect stereo headphones to the headphone jack on the rear panel or connect the audio outputs to your mixer or amplifier inputs using standard (1/4-inch) audio cables (use the Left out for mono). Balanced ("TRS" or "Stereo") cables are recommended if your mixer or amp supports balanced inputs.

Using the Forte SE

7. Make sure your sound system is at a safe volume level. Also make sure that the Forte SE Master Volume slider (on the far left side of the front panel) is all the way down.

# **Using the Forte SE**

1. Power up the Forte SE using the power switch on the rear left side of the instrument, and then raise the Master Volume slider, and mixer/amp volume. Your Forte SE keyboard starts up in Program Mode by default. Press one of the buttons under the "Mode" label to the right of the display to switch Modes.



Master Volume Slider

- **Mode Selection**
- 2. If you are connected to a mixing board and hear distortion, reduce the gain level on your mixing board, or use the pad (a switch that decreases the input audio signal level, typically by 20dB) if it has one.
- 3. To hear the capabilities of the Forte SE, you can play the demo songs. Press the 13 & 14 Program/Multi buttons simultaneously to listen to a demo song.
- 4. In Program Mode, scroll through the Programs using the Alpha Wheel, the Previous and Next buttons, or press a Category button to audition the sounds in the Forte SE. The Forte SE has short demos for each of the factory Programs. To hear a Program Demo for the current Program, press the 11 & 12 Program/Multi buttons simultaneously.

# The Rear Panel

The power switch and most of the Forte SE connections are located on the rear panel.



The AC Power Jack

#### The AC Power Jack

Please refer to "Setting up the Forte SE" on page 2.

#### The USB Ports

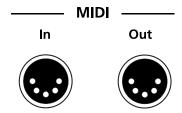
Use the USB ports to connect the Forte SE to a computer/tablet in order to do the following:

- Use the Forte SE as a MIDI controller to play software instruments on a computer.
- Use a computer program to sequence multitrack songs on the Forte SE.
- Use a computer/tablet to manage the user data contents of the Forte SE.
- Update the software and sounds of the Forte SE.
- Store custom Programs and Multis on a USB flash drive.

Be sure to check the Kurzweil Music Systems website at <u>www.kurzweil.com</u> for new documentation and software updates before using your new instrument.

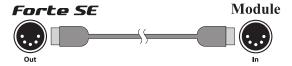
# The MIDI (IN and OUT) Ports

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.



# **Basic MIDI Hookup**

To use the Forte SE as a MIDI controller for another sound module, use a MIDI cable to connect the MIDI port marked "Out" to the MIDI input port of the module that you want to control.



To control the Forte SE using another MIDI controller, use a MIDI cable to connect the MIDI port marked "In" to the MIDI output port of the controller that you will be using.

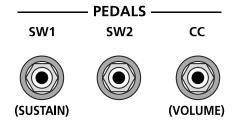


The Pedal Jacks

For other MIDI connection scenarios, please refer to the Forte SE Musicians Guide.

## **The Pedal Jacks**

Use the three pedal jacks to connect controller pedals to the Forte SE.



Switch Pedals	1/4 inch tip-sleeve (mono) plug or, 1/4 inch tip-ring-sleeve plug configured as dual switches (TS and RS) or 2 terminal continuous pedal (half-damper).
Continuous Control (CC) Pedals	10 $k\Omega$ linear-taper potentiometer, 1/4 inch tip-ring-sleeve (stereo) plug with the wiper connected to the tip.

The default function of each pedal can be changed for all Programs and Multis by setting a pedal override on the Global Control Overrides page in Global Mode. Pedals are also independently assignable within each Program or each Zone of every Multi.

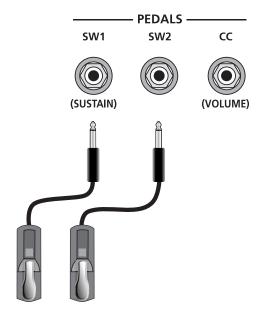
Here are the default control settings for the five pedals used by Forte SE:

SW 1a Pedal	Sustain (MIDI 64)
SW 1b Pedal	Sostenuto (MIDI 66)
SW 2a Pedal	Sostenuto (MIDI 66)
SW 2b Pedal	Soft (MIDI 67)
CC Pedal	Expression (MIDI 11)

The Pedal Jacks

## The SW1 (Sustain) and SW2 Jacks

Use the pedal jacks to connect switch pedals. A switch pedal is a physical controller typically used to control two-state (i.e., "on / off") parameters, such as sustain, sostenuto, soft and Mute Zone.





NOTE: Do not to step on the switch pedals when powering up the Forte SE, as the state of the pedal is detected as part of the power up sequence.

The Forte SE SW1 and SW2 jacks can support a single or dual switch pedal on each jack, or a single half-damper pedal on each jack.



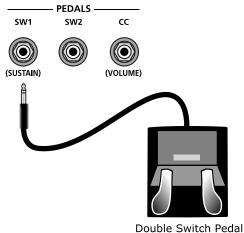
NOTE: It is not recommended to plug CC pedals into the SW inputs. Due to the flexible switch pedal support, CC pedals may not operate as expected in these inputs.

If you are not using a Kurzweil switch pedal, make sure it's connected before you turn on the Forte SE. This ensures that the pedal will work properly (it might function in reverse—off when it's down and on when it's up—if you turn on your Forte SE before plugging in the pedal). Similarly, don't press any of your switch pedals while powering up, as the Forte SE verifies each pedal's orientation during power-up. If you're pressing a pedal, you might cause it to work in reverse.

The Pedal Jacks

## **Connecting a Dual Switch Pedal**

You can connect a dual switch pedal with a single stereo plug, such as the Kurzweil KFP-2S, into the SW1 Pedal and SW2 Pedal jacks. Both SW1 and SW2 can support a dual pedal each allowing up to 4 pedals to be utilized by the Forte SE. These are enumerated as SW1a, SW1b, SW2a and SW2b. The Forte SE will recognize dual pedals that are wired as TS and RS, such as the KFP-2S.

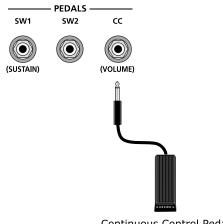


If you're not familiar with traditional piano technique, the sostenuto (center) pedal on a grand piano allows one to hold chords in the bass while continuing to play the melody without the latter notes sustaining. Any keys that are down when you depress the pedal will sustain when you let go of the keys, but new notes played afterward will not be sustained. Releasing the pedal puts things back to normal. Of course it can be programmed to do other functions as well

## The CC (Volume) Jack

A continuous control pedal can be very useful for controlling volume, wah, or other effects by foot.

The Kurzweil CC-1 continuous control pedal will work best with the Forte SE, but it is also possible to use third-party continuous control pedals designed for synthesizers.



Continuous Control Pedal

The Audio (LEFT/MONO and RIGHT) Jacks

# The Audio (LEFT/MONO and RIGHT) Jacks

Please refer to "Connecting to Your Audio System" below.

# The Headphones Jack

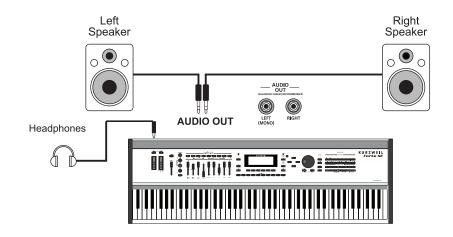
Use the Headphones jack located on the left rear panel of the instrument to listen to the Forte SE on stereo headphones. You will need a 1/4-inch-to-1/8-inch adapter in order to use headphones that have a smaller mini plug connector.

# **Connecting to Your Audio System**

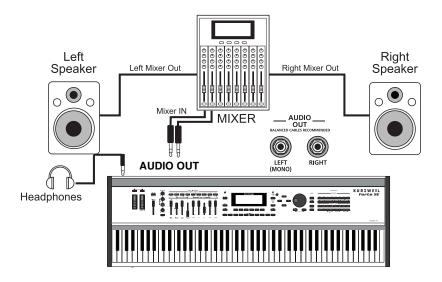
After you've turned down the level on your sound system, connect the Forte SE analog audio outputs to your sound system using a pair of balanced (TRS or "stereo") or unbalanced (TS or "mono") audio cables. Unbalanced cables will always work, but if you're going into balanced inputs, use balanced cables for a better signal-to-noise ratio and a bit more volume. The Forte SE analog outputs are balanced.

You'll find two 1/4-inch balanced audio output jacks on the rear panel. Connect one end of each audio cable to your mixing board or PA system inputs, and connect the other end to the jacks marked Left (Mono) and Right on the rear panel of the Forte SE. If you have only one input available, use the Forte SE's Left (Mono) output to get the full signal in mono. Use the jack marked Headphones to listen to Forte SE on headphones. When headphones are plugged in, sound still comes through the Left and Right audio jacks.

Forte SE connected to powered speakers and headphones

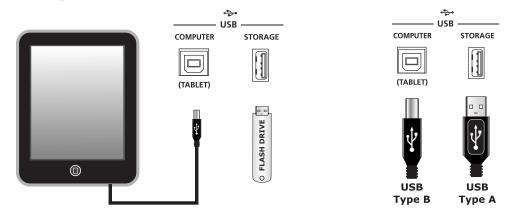


#### Forte SE connected to a mixer, powered speakers and headphones



# **Connecting to a Computer**

To connect the Forte SE to a computer/tablet, simply connect the Forte SE using the provided or compatible cable.



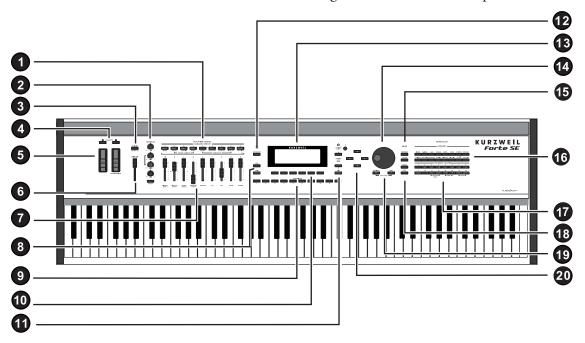
If you wish to use your own cable, make sure that it is a Type-A-to-Type-B USB cable (the USB port of Forte SE being Type B). By default, the Forte SE will act as a MIDI controller (rather than a hard drive) when connected to a computer.



NOTE: Some devices like the iPad® will require you to purchase adaptors to connect a USB cable.

# **Front Panel Overview**

All the controls for Forte SE, both musical and navigational, are on its front panel



- 1 Multi-Function Switches
- 2 Master EQ
- 3 Variation button
- 4 Transpose buttons
- 5 Pitch and Modulation wheels
- 6 Volume slider
- 7 Nine programmable sliders
- 8 Save and Edit buttons
- 9 Favorites buttons
- 10 Soft buttons

- 1 Channel/Layer/Zone select buttons
- 12 Arpeggiator On/Off button
- 13 LCD display
- 14 Alpha Wheel
- 15 Mode select buttons
- 16 Category buttons
- 17 Program/Multi buttons
- 18 User button
- 19 Previous/Next buttons
- 20 Navigation buttons

#### **Multi-function switches**

These nine buttons perform various functions in real time, depending upon the current performance mode and assignment. In Multi Mode, they allow you to selectively mute Zones. In Program Mode the last four buttons are typically used for controlling effects. In KB3 organ mode, the buttons perform the functions labeled in blue.

#### **Master EQ**

The Master EQ knobs and on/off switch control the master effects that are applied to the Audio Outputs.

#### **Variation Button**

The Variation Button is a MIDI controller (default MIDI CC#29) that is programmed in most Programs to modify the sound, such as adding a pad sound, changing the effects or some other variation suited to changing with a switch.

For KB3 programs, the Variation Button controls the Rotary Speaker speed, switching between fast and slow.

## **Transpose Buttons**

The Transpose buttons can be used to change the tuning of notes played on the Forte SE keyboard in semitones (ST), also known as half steps.

#### **Pitch and Modulation Wheels**

These can be used to vary overall pitch and selected effects in real time.

#### **Volume Slider**

This controls the audio output level to external speakers and headphones.

## **Programmable Sliders**

In Program Mode, the sliders are used to control various Program parameters (the last four sliders and buttons are typically used for controlling effects). When KB3 Programs are being played, the sliders control organ functions labeled in blue. In Multi Mode, the first four sliders and buttons control Multi Zone volumes.

#### Save and Edit buttons

These buttons are used when editing Programs or Multis to create User-defined sounds.

#### **Favorites Buttons**

The Favorites buttons can be programmed to immediately take you to 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 display indicates that the favorite has been saved.

#### **Soft Buttons**

These buttons immediately below the display change their functions depending upon which screen is being displayed. The functions of the soft buttons on each screen are described in the bottom row of the display.

## Channel/Layer/Zone buttons

Use the Channel/Layer/Zone buttons to change the current MIDI Channel in Program mode, the current Layer in Program Edit mode, or the current Zone in Multi Edit mode.

## **Arp On/Off Button**

The Arp On/Off button is set by default to turn on and off the Forte SE's Arpeggiator. It can also be assigned to control other parameters.

## **LCD Display**

The 240 x 64 monochrome LCD display provides the main user interface for the Forte SE.

## Alpha Wheel

Use the Alpha Wheel to scroll through the list of values for the currently selected parameter—turning the Alpha Wheel counter-clockwise will select the previous value and turning the Alpha Wheel clockwise will select the next value. You can turn the Alpha Wheel slowly to change the value by one increment or turn it quickly to jump several increments.

#### Mode select buttons

With these you can instantly access the Program, Multi or Global Modes.

#### **Category buttons**

In Program Mode, the Category buttons allow you to Select and browse Programs in 16 categories of instruments. In Multi Mode, the Category buttons allow you to navigate through this list of Multis in groups of 16 Multis at a time (Multis are not categorized by instrument type).

#### Program/Multi buttons

In Program and Multi mode, the Program/Multi buttons allow you to select 1 of 16 Programs in the current category, or 1 Multi in the current group of 16. In other modes these buttons can also be used for typing numbers or letters.

Selecting Programs and Multis

#### **User button**

Enabling the User button allows you to access saved User-defined sounds with the Program/Multi buttons.

#### **Previous/Next buttons**

Use the Previous and Next buttons to scroll through the list of values for the currently selected parameter. Pressing both the Previous and Next buttons simultaneously is referred to as the Value Jump double button press. Depending on the selected parameter, Value Jump can select the next Category default Program/Multi, jump to commonly used values, and reset parameters to default values.

## **Navigation buttons**

The Navigation buttons move the cursor in the LCD display and allow you to select the current parameter to be edited.

# Forte SE Sounds

The Forte SE supports two types of sounds. The first type is a Program, and these are normally a single instrument, such as a piano, or an organ. A Program is similar to a "preset" or "patch" on other synthesizers. Both factory and User Programs are arranged into 16 categories of 16 sounds each.

The other type of sound is the more complex Multi. A Multi is a combination of Programs arranged as layers and splits across the keyboard. They are similar to setups, from the Kurzweil PC series, SP series and K2 series, and are similar to Combis or Multis from other synthesizers. Similar to selecting Programs, the Category buttons allow you to navigate through this list of Multis in groups of 16 Multis at a time, although Multis are not categorized by instrument type.

The Forte SE has been designed so that it is quick and easy to select Programs and Multis from the front panel. Use the following guide to audition the factory sounds on the Forte SE.

# Selecting Programs and Multis

The Forte SE always powers up in Program Mode. If you wish to play a Multi, simply press the Multi Button. The Multi Button will light up to show that Multi Mode is selected. To return to Program Mode, from a different mode, simply press the Program button. If the User button is illuminated, then you are in the User Bank. Press the User Button to return to the Factory Bank, and the light will go out. In the Factory Bank, press one of the Category Buttons to change Category, and that Category Button will light up. Once you are in your desired Category, press one of the Program/Multi buttons to select the program you want.

#### Controllers

To select another Program or Multi within the same Category, just press a Program/Multi Button, or use the Alpha Wheel, or Next/Previous Buttons.

To select a Program or Multi in another Category but not in the other Bank (Factory/User), press the desired Category Button, followed by the desired Program/Multi Button. The Alpha Wheel and Next/Previous Buttons will select the next Category once you get to the end of the current Category. Pressing the Category Button will select the Default Program for that Category. The Default Category Program can be set by the user for each Category. By default the Forte SE has the Default Program for each Category set to the first Program of each Category. To change the Default Category Program please refer to the User Manual.

#### **Controllers**

The Sliders, 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 Forte SE.

#### **Favorites**

The Forte SE also features Favorites Buttons to quickly recall your favorite sounds. The Favorites buttons store a set of 10 Programs and/or 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 display indicates that the favorite has been saved. To recall a favorite Program or Multi, simply press the one of the Favorites buttons. The Favorites buttons will work from whichever mode you are currently in, changing to Program Mode or Multi Mode automatically if required.

Program Mode

# **Modes**

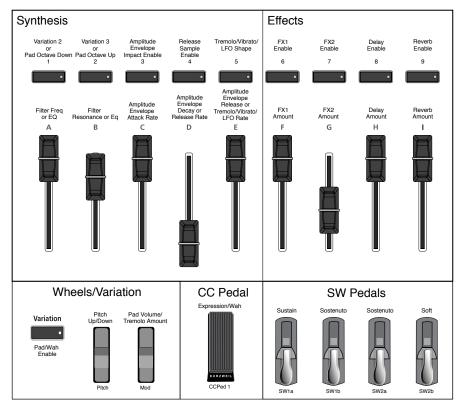
The Forte SE has six main modes; Program Mode, Program Edit, Multi Mode, Multi Edit, Global Mode and Storage Mode.

# **Program Mode**

The Forte SE always powers up in Program Mode, and this is where single sounds can be played straight from the keyboard, or multitimbrally via MIDI.

#### **Controller Conventions**

Generally the factory Programs have the following controllers assigned. (Controller assignments for Programs in the Organ category are printed on the front panel in blue.)



Forte® SE Controller Conventions

#### **Saving Programs**

If you make changes to the current Program using any of the controllers (Sliders, Wheels or Switches), the Save button's LED lights to indicate that a change has been made to that Program. The Save button is located left of the display. To save a copy of the Program with the changes you've made, press the Save button once. The Save button's LED begins to blink and it calls up the Save Dialog. The Save Dialog allows you to choose an ID number to that will be associated with the program you are saving.

Program Edit Mode

## **Splits and Layers**

Programs can be Split into Multis, so that keys in one region of the keyboard play a different program than another region. Programs can also be Layered into Multis, so that more than one Program can be played by striking one key. Press the Split or Layer soft button to create a Split or Layer Multi containing the current Program. You will then be able to add up to three additional programs to create a Split or Layered Multi containing up to four Programs.

In Multi Edit Mode a total of 8 Zones can be used if the Global Mode User Type parameter is set to Advanced.

# **Program Edit Mode**

Program Edit mode allows you to modify the Forte SE's factory sounds, and to build your own sounds around sample keymaps or KVA oscillators. You can create Programs with up to 32 layers of samples and/or oscillators, and you can also apply various DSP functions and modulation sources, as well as complex Insert and Auxiliary audio effects. There's virtually no limit to the sounds you can create using the tools in the Program Editor.

#### Multi Mode

Multi mode allows you to play Multis, which are arrangements of up to 8 Programs split and/or layered in Zones across selected ranges of the keyboard. By default the volume of the Program in each of the first four Zones can be easily adjusted while playing by using sliders A through D, and each Zone can be muted and enabled by using the Zone Mute buttons above these sliders. You can create custom assignments for the remaining sliders, buttons and foot controllers to control effects and synthesis parameters of each Program.

#### **Multi Edit Mode**

Multi Edit Mode is used to modify the many parameters that make up Multis, including Program Selection, Volume, Pan, Controller assignments, effects and the layering and split options. Multi Edit Mode allows for powerful customizations of the many built in sounds available on Forte SE and allows you to make new and unique sound combinations for your own performances and compositions.

#### **Global Mode**

Global Mode gives you access to the global parameters of the Forte SE. It allows you to edit the master settings of the unit. It also allows you to restore factory defaults on the unit by performing a Hard Reset. Some of the more common settings are summarized below.

#### **MIDI Settings**

MIDI channels, modes and other parameters related to transmitting and receiving MIDI are set within the MIDI pages.

Storage Mode

#### Info

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

## **System Reset**

In the unlikely event that something goes wrong with the settings or software of your Forte SE, or if you just want to start fresh, you can return the Forte SE to the factory default state by doing a System Reset.



NOTE: System Reset will erase ALL of the USER Programs and Multis, so it is important to back up your sounds before attempting to reset Forte SE. Factory Program/Multis are not affected.

# **Storage Mode**

Storage Mode facilitates loading and saving objects for the Forte SE.

## Saving to External Storage

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

#### **Loading from External Storage**

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

## **Updating the Forte SE**

Please check online at <a href="www.kurzweil.com">www.kurzweil.com</a> for Forte SE updates. Detailed instructions on updating the Forte SE are available with the update package. It is important that these instructions are followed closely for trouble free updating of the Forte SE.

# KURZWEIL®

It's the **sound**."

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