

RMS KEYBOARDS

Documentation

v1.0

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Overview

Welcome, and thank you for selecting RMS Keyboards for your production! We at RMS have worked hard to create an effective, simple to use instrument that will provide you with the most accurate sounds as envisioned by the composer. Keyboards is designed so that you can set it up quickly and get started using it right away

Many musicals from the recent past have been arranged with specific synthesizer parts in mind. To the musical director interested in an authentic performance, this can pose a number of problems. First, many of these vintage keyboards are no longer made, and therefore are difficult if not impossible to find. Second, most of these musicals use sounds that were created specifically for that show, and the descriptions in the keyboard parts may be obscure at best. *(insert example names from various shows here)*.

Up until now, the musical director, in order to achieve authenticity, has been forced to listen to cast recordings and attempt to design keyboard sounds based on what they can glean from looking at the parts and deriving probable sounds. This is an arduous process even for a seasoned keyboard programmer, and will inevitably result in certain solutions that do not achieve an authentic response. Then, once these sounds have been created, they need to be ordered correctly so that the keyboard player does not have to spend time searching through the available sounds.

RMS Keys is designed to eliminate all this work. Each show in our large library has been meticulously researched, and the correct sounds have been arranged in order with an easy to use software application that supports as many keyboards as needed. Simply download the software, connect your controller keyboards to the ports on the computer, and follow the easy to use wizard installation guide.

For those who may wish to evaluate the product before making a purchase decision, all our shows come with a trial version. The trial version is fully functioning, and enables the first five songs. Thus you can be assured that what you purchase will work for your organization's production.

Features

- Provide authentic sounds for an arbitrary number of keyboard parts from a single computer
- Individually programmed files designed specifically for each show
- Setup names identical to the names in the parts book
- Able to modify names of setups and songs to reflect individual productions
- Advance to the next Instrument with programmable advance
 - (do we want to be able to have a feature that allows for a pedal?)
- Global volume control
- Separate volume controls for each Instrument in each setup in each song
- Built in reverb
- Split keyboard
- Multiple outputs
- Ability to mute keyboard parts
- Reference tone test on each output channel
- Rollover tool tips for each control or display
- Great Technical support from our friendly staff!

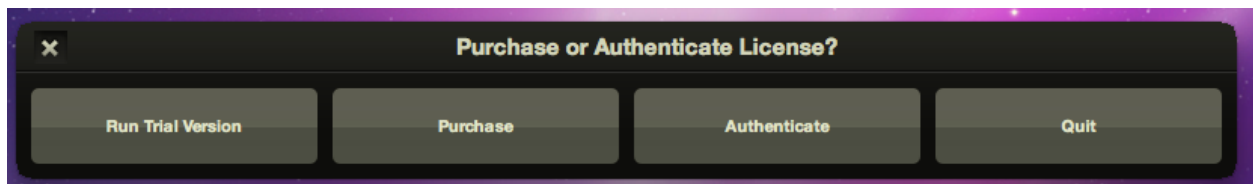
Download and Installation of Software

Running the Trial Version

The trial version is a fully featured application that allows you to experiment with how Keyboards works. This version gives you full access to the first five songs in the show. If you decide that this will work for you, then you will be able to purchase an unlock code and move to the full version without any additional downloads

Running the Full Version

In order to run the full version, you will need to purchase an unlock code. In order to purchase the code, you will need to license the production through the licensing organization (MTI, R&H, etc). The license will run for a particular length of time, depending upon the arrangement you have made with the licensing organization.



Purchasing the Full Version

When you click on the Purchase button, you will be taken to a screen where you will be asked to fill out the pertinent information. Enter your name, organization, desired show, email address, and location. Important: if you have not already licensed the show, you will not be able to purchase the full version.

×**USER INFORMATION**

Full name:

jfdskl

Organization name:

jfdskl

Title (i.e. show):

Seussical


Email address:

fds@gmail.com

Re-enter email address:

fds@gmail.com

Location:

 United States

City/Town:

NYC

State:

New York

Computer Nickname:

me

Enter a short name to make it easy to identify this computer.(e.g. Jeff's MacBook, Blue Laptop)

Does your organization already have a license for this program?

☐ Yes

☒ No

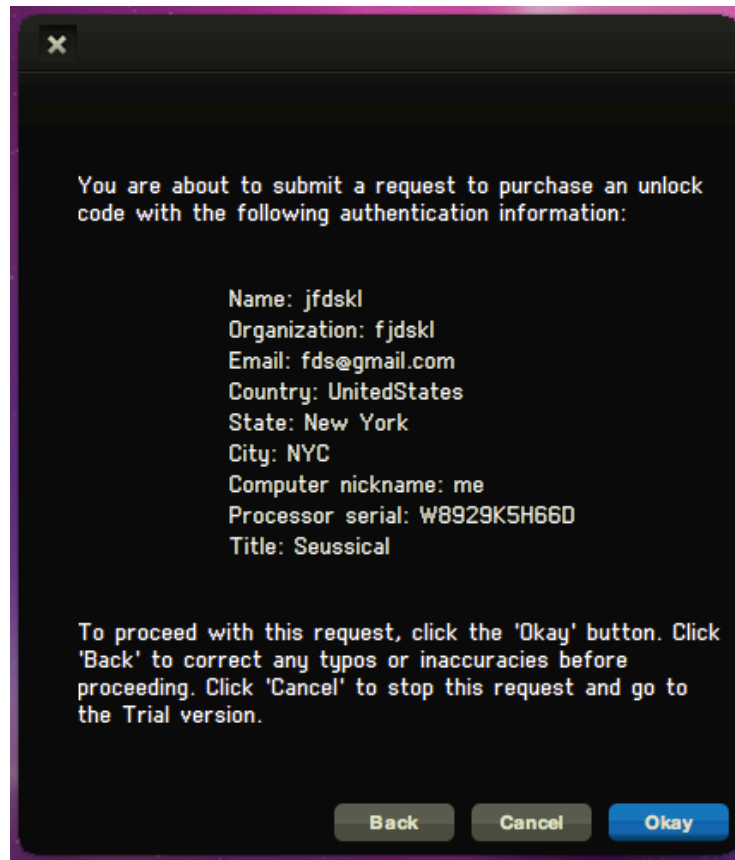
If Yes, please enter your license number.

RMSKB-

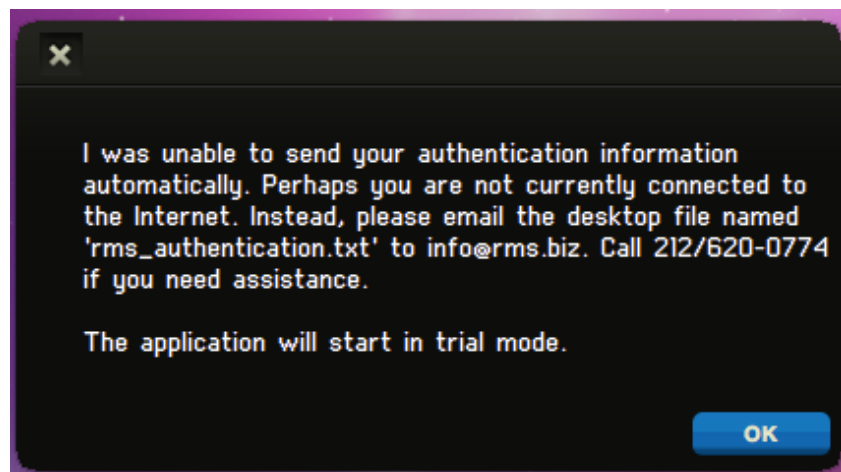
OK

CANCEL

Once you have entered the appropriate information, you may click the OK button. You will receive a dialog prompting you that your request is being submitted.



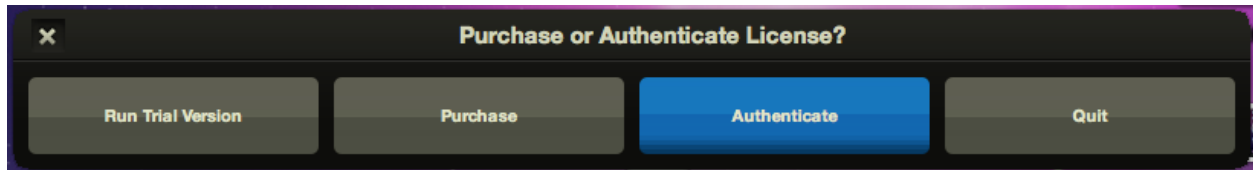
If there is an internet connection issue, then you may receive the following screen. If this is the case, you can still receive your unlock key by emailing the appropriate file to us directly. The file is called 'rms_authentication.txt', and will be on the desktop of your computer.



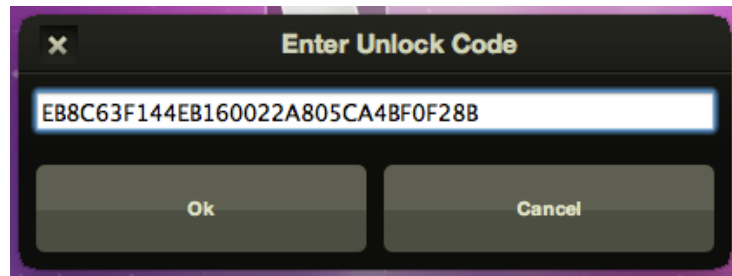
Once RMS receives your request, we will check to make sure you have licensed the show for production. If this is the case, we will then email you the unlock code.

Authenticate

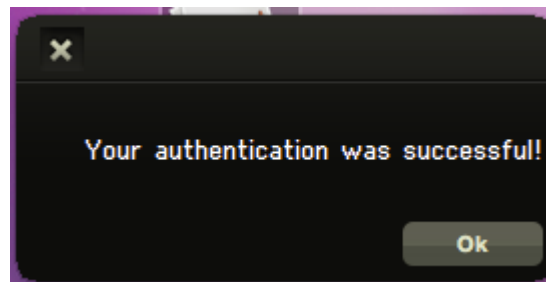
Once you have received your unlock code, you can authenticate the application. Press the Authenticate button on launch



You will then be prompted to enter the unlock code from the file you received from RMS. You may copy and paste this code into the text box. **WARNING:** Make sure that you keep your unlock code in a safe place: you will need this in case you wish to reload the application or reset it to original defaults. The unlock code is machine-specific: you will not be able to load this onto a different computer.

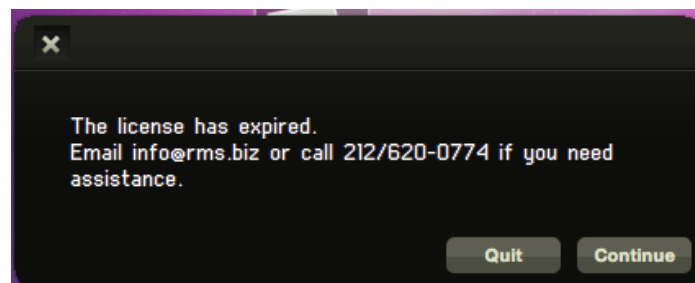


If you have entered the correct code, then you will receive a confirmation dialog box. Clicking on OK will launch the full version of Keyboards, and each launch from this point on bypass the original screen



License Expiration

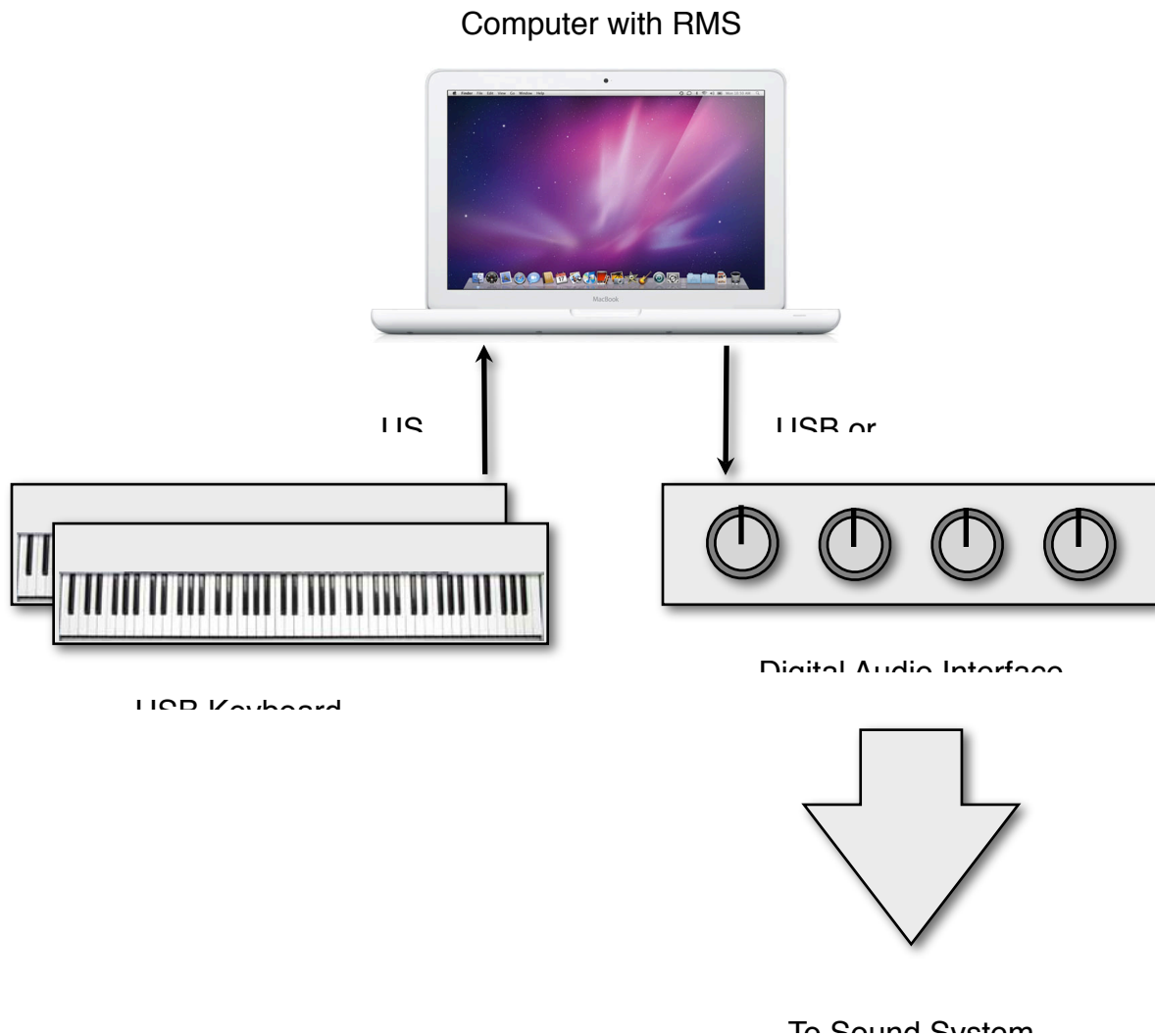
As mentioned above, the license for a particular show is time based. If you attempt to launch Keyboards after this period, you will be notified of this with the following dialog box:



If you wish to extend the length of the license, or feel that there is a mistake, then please call us and we will be happy to assist you.

Hardware Set Up

It is simple to set up Keyboards. You will either be connecting via a MIDI interface, or through a keyboard controller connected directly to the USB port of your computer. Multiple keyboard controllers can be plugged into separate USB ports. If you are using a Older keyboard controllers may only have MIDI outputs. If this is the case then you will need to use a MIDI interface. You may have to download drivers for the device from the manufacturer's web site. Make sure that these components are configured to be recognized by your operating system.



Configure Audio Output

Macintosh

Keyboards uses the Apple CoreAudio and CoreMIDI drivers, so configuration is done from the AudioMIDI Setup screen.

Windows

--Insert description here--

Configure Keyboard Input -

Using the Keyboard Wizard

You can run the Keyboard Wizard at any time. The wizard easily walks you through assigning the keyboard controllers to the appropriate keyboard part, and also allows you to set keyboard function commands. Be aware that when you do this, wizard will also restore original window locations.

In order to restore default settings, simply download the application again and use your same authorization code.

Using the MIDI assignment in the Keyboard Part Window

You can also program the keyboard assignment using the popup menu in the upper left hand corner of each keyboard part window. Selecting that menu will display all possible controller devices. This setting is global: once configured, the assignment will remain the same unless changed again.

Testing your System

It is important to make sure that your output signal is calibrated. Keyboards comes with a handy output test feature. It can be found on the output mixer. The headphone icon at the top of each Output mixer Strip can be clicked to generate a sine wave test tone at unity (maximum) level. This can be used to test the system to make sure that sound is coming out, and can also be used ensure that your sound system is set at a good level.

Architecture

RMS Keyboards has been designed to provide enough flexibility to anticipate any show configuration without overburdening the user with excessive complexity. Part of our design strategy is to duplicate the traditional organization of a show, and to use similar terminology whenever possible.

Show

For each license, there is one and only one show. All information is stored within a show file, and your license provides the ability to

Song

The Show is then arranged into a series of Songs. As the name implies,

Keyboard

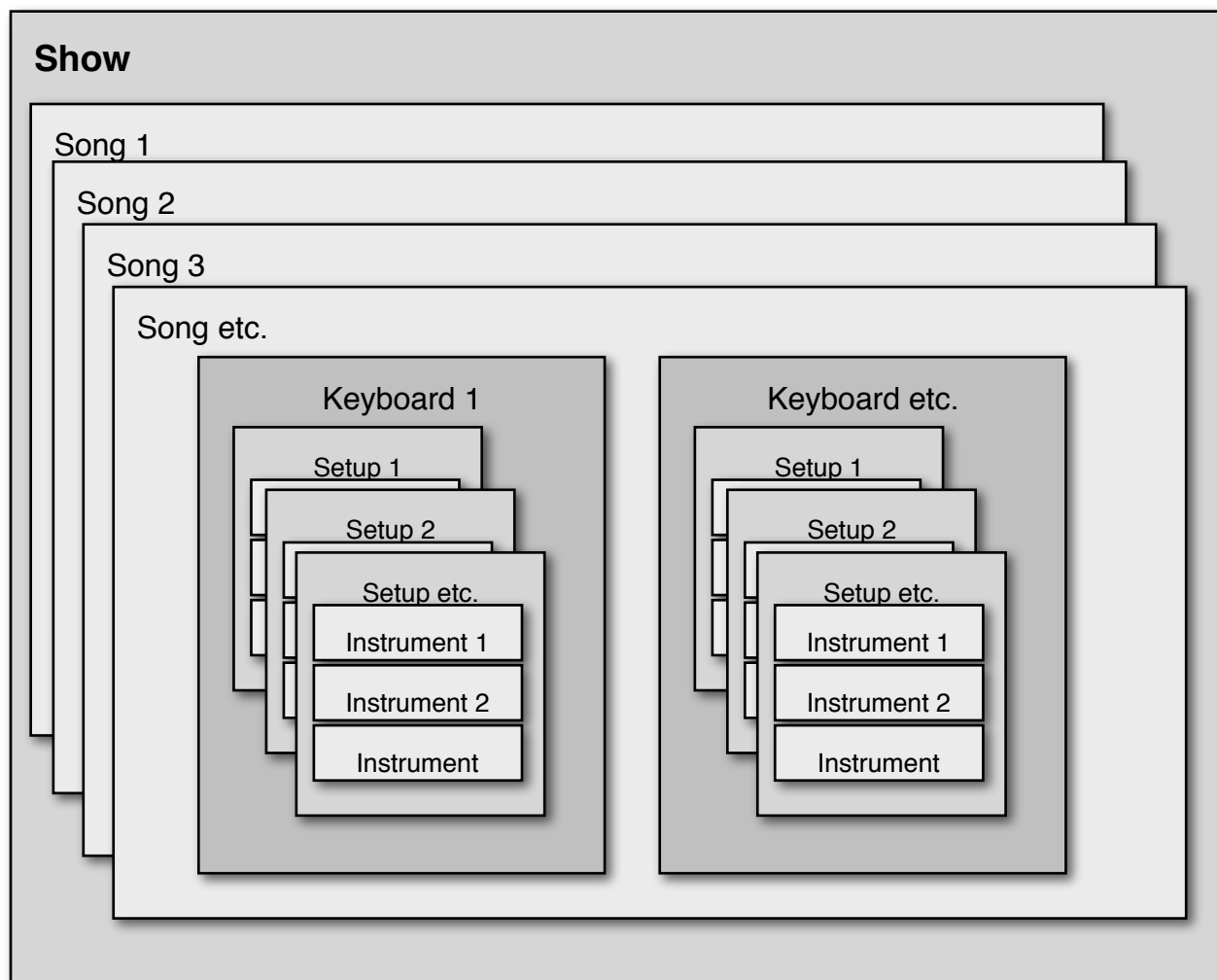
Each Show may have one or more keyboard parts, depending upon the orchestration. Each keyboard part is then programmed

Setup

Each Keyboard can have a different setup for each song. A setup corresponds to what would have been a patch change (change of sounds) in the original orchestration. Each song may have each keyboard perform multiple different sounds at different places in the music.

Instrument

An instrument is a specific sound, such as a piano or a flute. Each setup can be built of multiple instruments. For example, a setup may require a keyboard split, where the left hand plays a bass guitar sound and the right hand a flute. Or, there may be two different sounds that are superimposed on each other to create a more complex final product. An instrument will have a separate volume level (modifiable) and a separate keyboard range (preprogrammed and fixed).



RMS Keyboards Architecture: each show has a number of songs, and each song can have a number of different setups. Each setup in turn can have a number of different instruments. Each keyboard has individual control over how to move through their setups within a song

Operation

Performance

Once your RMS Keyboards system has been correctly configured, launching the program will automatically activate your system and playing is enabled. Simply use your connected keyboard or keyboards and the currently selected setup will play the correct sounds out of your computer. For many productions, you will find that there is no need to make any changes to the show: our default configuration has been meticulously mixed to provide you with an authoritative version. However, we have also provided you with the ability to make certain modifications to the mix and assignment.

Navigating through the show

As described in the architecture section above, each show is arranged into songs, and each song can have a number of different setups. Each keyboard part has its own list of setups, and can navigate individually through a song. Only one song can be accessed at a time, so if one performer advances to the next song, then will be true for the entire ensemble. There are several ways that the user can control the current song and / or setup

1) Use the arrow keys on the computer keyboard

Depending on the active window, the up and down arrow keys will move forward or backwards through the list. If the Song Window is active, then the arrow keys will change the current song. If a particular keyboard is selected, then the arrow keys will change the current setup.

2) Use the mouse to make a selection

By clicking on a setup or song, Keyboards will immediately move to that selection.

3) Use the assigned function keys on the controller keyboard

Each keyboard controller can be individually configured so that you can press a key to advance through each setup or song. These keys can be programmed using the Edit Drawer on the Keyboard window, or using the Set up Wizard.

Editing

RMS Keyboards allows you to personalize your show in a variety of different ways.

Setting Function Keys

It is easy to change the keys on your keyboard controller to personalize how you want to advance through songs and setups. The keyboard display window will show which key is programmed to do what. These are separately programmed for each keyboard controller. There is one configuration allowed per keyboard part per show. There are four different functions: 1) Next Song, 2) Previous Song, 3) Next Setup, and 4) Previous Setup.

There are a couple of different ways to program functions: using the wizard setup, or using the Edit Drawer in the keyboard window.

Using the Wizard setup to assign functions to keys

The Set-up Wizard can be found under the File menu item. The wizard will not only talk you through assigning keys, but also configuring which keyboard controller device will control which keyboard window. If you agree with your keyboard controller assignment, then simply advance past that page.

- Under File, select Run Set-up Wizard and follow the instructions.
- The function key assignment is on the third dialog box of the Set-up Wizard.
- Click in the text field of the function you wish to program: the field will be highlighted in blue.
- Press the desired key on your controller keyboard: the field will be updated to that note.
- Use Tab to advance to the next function assignment, or Shift-Tab to go back
- repeat for each note.
- When finished, click on the "Next" button.
- On the next window, click on the "Finished" button.

Using the Edit Drawer to assign functions to keys

You can also change the function assignments directly from the appropriate keyboard window and bypass the wizard. To do so, follow these steps:

- Click in the window of the keyboard you want to program
- Click on the Edit drawer icon in the upper right corner
 - The edit drawer should open, and show you the each function as well as the key to which it is assigned
- Click in the text field for the assignment you want to change
 - The text will highlight blue to show it is selected.
- Either type in the key value, or press the key to which you want to assign that function.
 - The highlight will go away
 - The new value will be displayed in that field
 - The Keyboard Display window will update the icon to reflect your change.
- Save your configuration (File:Save or Control-S (windows) or Command-S (Macintosh))

Changing Volume

Keyboards has a number of different places where you can adjust the volume. Each setup in each song can be individually adjusted for maximum flexibility. This makes it very simple to create sophisticated layerings of the different parts. The volume controls (called “gain stages” in professional parlance) are as follows:

- External Volume (Outside of the Keyboard application)
- Global Volume
 - Adjusts all levels
 - One setting for the entire show
 - Can be changed at any time to make large adjustments
- Audio Output Channel Volume
 - Adjusts levels of all sounds assigned to that output
 - One setting per song.
- Setup Volumes
 - Adjusts levels of that sound or sub-sound only

External Volume

Every audio output from Keyboards will by necessity go to some sort of sound system. The number of different places where this can be changed is too large to mention here, but you should make sure that you identify one place where you have control of the ENTIRE set of volumes for the show. If you are using an audio box, then perhaps there is a volume control on that. Otherwise, there is probably going to be a keyboard amp or other mixer where a separate control outside of the Keyboard system is placed. **IMPORTANT:** You should make sure before you start to make adjustments **WITHIN** keyboards that your desired level of sound is appropriate in the external sound system. To do this, it is suggested you follow the following steps:

- plug in and turn on the Keyboard application and external sound system
- Test to make sure you are hearing sounds
- Select a suitably loud sound from Keyboards, and **WITHOUT MAKING ANY VOLUME ADJUSTMENTS IN KEYBOARDS**, set the output volume on the external system to an appropriate level. If there are VU Meters, then you should see a nice reading without it clipping (hitting the peak value, or “going into the red”).
- Once you are certain you have a good **DEFAULT** level, then mark this level so you know where you set it.

Master Volume

The master volume control is found on the far right of the Output Mixer window. This adjusts the overall volume of ALL audio outputs, as well as each setup. This setting is universal to the entire show, so if you make an adjustment, it remains as you navigate through songs and setups

Audio Output Channel Volume

The Audio output channel volumes can be found on the left of the Output Mixer. The number that are active is device dependent: they can range from only one fader (A) for use with a direct output of the computer, or can go up to many many depending on the audio card configuration. Each Instrument of each setup can be configured to go to any audio output on your external sound device. The audio volume slider is SONG SPECIFIC: whatever level you set will be true for that song and all setups within the song. However, the next song may have an entirely different configuration.

Instrument Volume

The instrument volume slider can be found on the left side of each Keyboard window. Because each setup can have multiple Instruments, there will be a different number of these sliders. Each slider adjusts the volume level for that instrument AND ONLY that instrument. This also means that if the same instrument sound is used in a different setup, it can have a different volume.

Adjusting Output Assignment

Each Instrument of every setup can be assigned to a different output. The output assignment is set on the Keyboard Window in a small popup towards the bottom of each fader strip. In order to change the assignment, press and hold on the popup, and a list of allowable assignments will be presented to you. Select the one you wish and release the mouse. Note that the output assignment is specific to each Instrument.

Adjusting Pan

Each instrument in each setup can also have an individually controlled PAN. Panning is the placement of a sound across the stereo field. The Pan control is the knob and companion arrow buttons in the middle of the fader strip on the Keyboard window. You can either select the knob and drag it (the indicator will point at the location of the mouse), use the arrow keys to increment the pan up and down, or type directly into the text box that contains the PAN value. Note that 64 is considered Pan center, 0 is all the way right and 127 is all the way left.

Muting an Instrument

At times you may wish to turn off a particular Instrument in a setup. You can do this by clicking on the Speaker icon at the bottom of the fader strip on the Keyboard window. A line through the speaker icon indicates that this instrument is now muted.

Changing the Name of a Setup

Each Setup comes with a preset name based on the original score. However, there are times when you may wish to change the name in order to reflect a change in the production (i.e : "SKIP THIS!!!", or "PLAY LOUD" or "WHEN ACTOR ENTERS"). In order to do this, double click on the setup name and then type in the desired change. Upon hitting the enter key, the new name has replaced the original name. Remember to save your work after doing this.

Changing the Name of a Song

Each song comes with a preset name based on the original score. You may wish to change this. This can be done in the same way as changing the name of a setup (double click, type, then hit enter key).

Using Reverb

RMS Keyboards comes with a simple but attractive reverb. All reverb controls are found in the output mixer window. Each song can be programmed to have a completely different reverb configuration. Note that there is only one reverb engine, so all instruments and outputs will share the same reverb configuration, though the amount per output can be adjusted separately.

Channel Reverb Send

Each Output Channel fader can have a different amount of reverb. These are controlled on each Channel Output fader strip at the bottom

Master Reverb Return

The Master Reverb Return knob is on the Master Fader channel strip in the output mixer window. It sets the overall level of reverb.

Stereo/Mono Mix

This setting adjusts the reverb width. Depending upon the type of playback system, you may wish to create a wider image. Or, if you are playing out of a single keyboard amplifier, then you may wish to make it narrower.

Bright/Dull

This setting adds or removes a bright “edge” to the reverb.

Long/Short

This setting determines how long the reverberation tail is. This allows you to simulate different size halls and rooms

Window

Description of common elements

Certain features of each window are common to all windows that have that functionality. They are listed below.

Close window

The “X” in the upper left hand corner will close the window. You can reopen the window by selecting the appropriate name in the “Windows” Menu bar.

Edit Drawer

Certain windows have an additional icon in the upper right corner. This will open or close the edit drawer, where additional functions can be accessed.

Resize

The triangles in the lower right corner allow certain windows to be resized.

Active Window

The currently active keyboard window is highlighted with an orange border.

Keyboard Part Windows

RMS Keyboards offers simultaneous control from an arbitrary number of different keyboard parts. The number of keyboards is determined by the orchestration of the show. Each part is represented by its own window, and labeled as *Keyboard1*, *Keyboard2*, etc.

MIDI Select Button

This popup window can be used to select the keyboard controller device. It can also be used to turn off that part completely. This is manual and global: once set, the assignment will remain until set to a different device

Setup List

On the left side of the window is a list of all setups in the current song for that keyboard. The currently active setup is highlighted.

If the keyboard window is active (highlighted) then the up and down arrow keys will change the current setup.

Fader Strip

Each instrument will have its own fader strip.

Instrument Name

Instrument Volume

Instrument Pan

Output Assignment Select

Instrument Mute

Edit Drawer

Function Key Assignment

SONGS Window

The SONGS window displays each song in the show in order. The current song is highlighted. If the SONGS window is the currently active window, then the up and down arrow keys can be used to move through the list.

Songs List

OUTPUT MIXER

Output Channel Strip

Output Channel Volume

Output Channel Reverb Send

Master Volume Strip

Reverb Return (Master Reverb)

Edit Drawer

Reverb width

Reverb Brightness

Reverb length

KEYBOARD Display Window

The KEYBOARD display is a useful tool to use when you wish to see the function key arrangement for each keyboard controller. It also can be used as a virtual keyboard to test sounds, setups and songs. The display updates to whichever keyboard window is currently active.

Keys

The display is setup to resemble a keyboard. By clicking on each key, you are able to send the equivalent information to the active keyboard part.

Function Keys

There are four function key assignment possibilities. These are indicated by icons superimposed on the keyboard display. The four possible functions are : Previous setup, next setup, previous song, and next song.

Menu Commands

File

Save

Saves the current window configuration as well as any volume changes, reverb settings, hot key commands, and any other modifications to the default setup.

Run Setup Wizard

Helps set up the MIDI devices that are connected to the computer

Windows

Allows you to show or hide the various windows that are used in the application

Songs

Keyboard1

Keyboard Display

Output Mixer

Keyboard2

Tools

Panic

Turns off any notes that may have become “stuck on” for whatever reason.

Glossary

Setup

Volume

Song

Instrument

Fader Strip

MIDI

USB

Keyboard controller
Keyboard part
Keyboard display
Output Mixer
Audio Signal
Reverb
Reverb brightness
Reverb width
Reverb length
Master Volume
Output Channel Volume
Instrument Volume