Songwriter Series
Getting Into FreeStyle Video Included
Mark of the Unicorn

FUTURE MUSIC PLATINUM AWARD

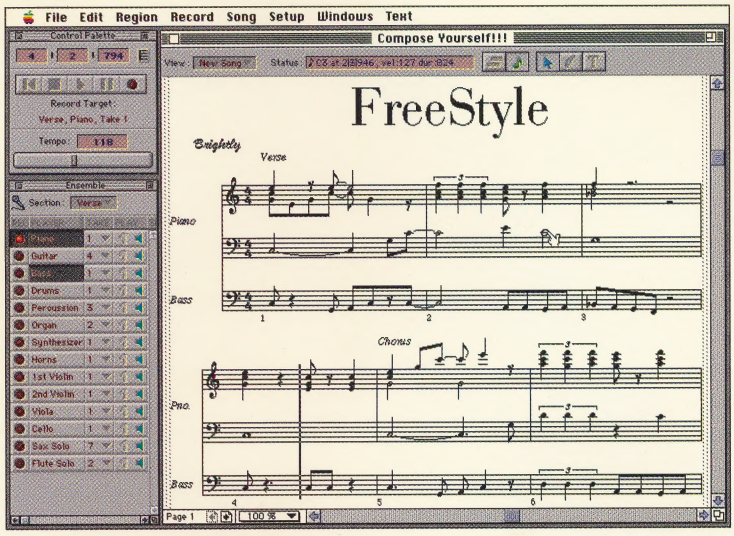
FreeStyle

Compose, Record & Print Your Music with MIDI Sequencing and Notation Software

FreeStyle

Compose, Record & Print Your Music with MIDI Sequencing and Notation Software

FreeStyle™ As Musical As Your Macintosh Can Get



A typical FreeStyle recording session.

Tracks , Channels, Events, Data. Remember when music was players, ensembles and arrangements? How can you take advantage of computer technology without selling your musical soul?

Consider the choices. A "lite" program that still brings pro-level complexity to your home studio. Or a "starter kit" that you'll quickly outgrow. There has to be a better way.

Enter FreeStyle, perhaps the most *musical* music software you can own.

In FreeStyle you work with players in an ensemble. Record as many takes as you want for each player to perfect their part—FreeStyle remembers them all.

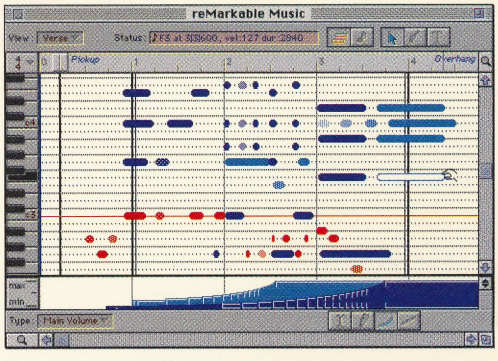
FreeStyle integrates this trackless approach with instant notation display and printing. And unlike those "EZ" programs, FreeStyle's notation looks great. It's automatic and intelligent, with hand-splitting, multiple voices, engraver spacing, measure numbers, transposing parts and free placement of text anywhere on the page.

FreeStyle is designed to keep MIDI complications out of your face, so it provides built-in support for General MIDI sound modules and other popular devices. And true to FreeStyle's musical approach, it shows you musical instrument categories instead of cryptic patch numbers.

So if you've been waiting for software that makes musical sense out of MIDI, your time has come. From songwriting to music education to pre-production, FreeStyle is a powerful tool that puts your music first.

Compose, Record & Print Your Music with MIDI Sequencing and Notation Software

- Records using takes, players & ensembles instead of tracks
- Sets loop points automatically—play as long as you wish
- Built-in support for many popular MIDI devices to get started fast
- Records music played in pickup and overhang measures
- Instantly transcribes your music into notation as you play
- Provides intelligent transcription including hand & voice splitting
- Magnifies and reduces display of music with flexible zooming
- Automatic page formatting & instant part extraction
- Automatic transposition for transposing instruments
- Graphic Editing displays music for all players in full color
- Provides seamlessly integrated pattern & linear recording
- Song arrangement—use sections to create any song form
- Provides easy selection of sounds from instrument categories
- Intuitive MIDI Remote Controls
- Scrolling cursor shows playback location and allows scrubbing
- Riff Metronome provides instant DRUMTRAX™ drum patterns



FreeStyle also gives you intuitive Graphic Editing.

FreeStyle works with any MIDI interface such as FastLane™ or the MIDI Express™, Electronic Musician Magazine's 1994 Editors' Choice Award Winner.

SYSTEM REQUIREMENTS:

Apple Macintosh: 68020 based CPU or above, System 7.01 or above, color, grayscale or monochrome monitor and a hard drive.

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VOX: (617) 576-2760 • FAX: (617) 576-3609

FreeStyle

MAC V1.01


FreeStyle
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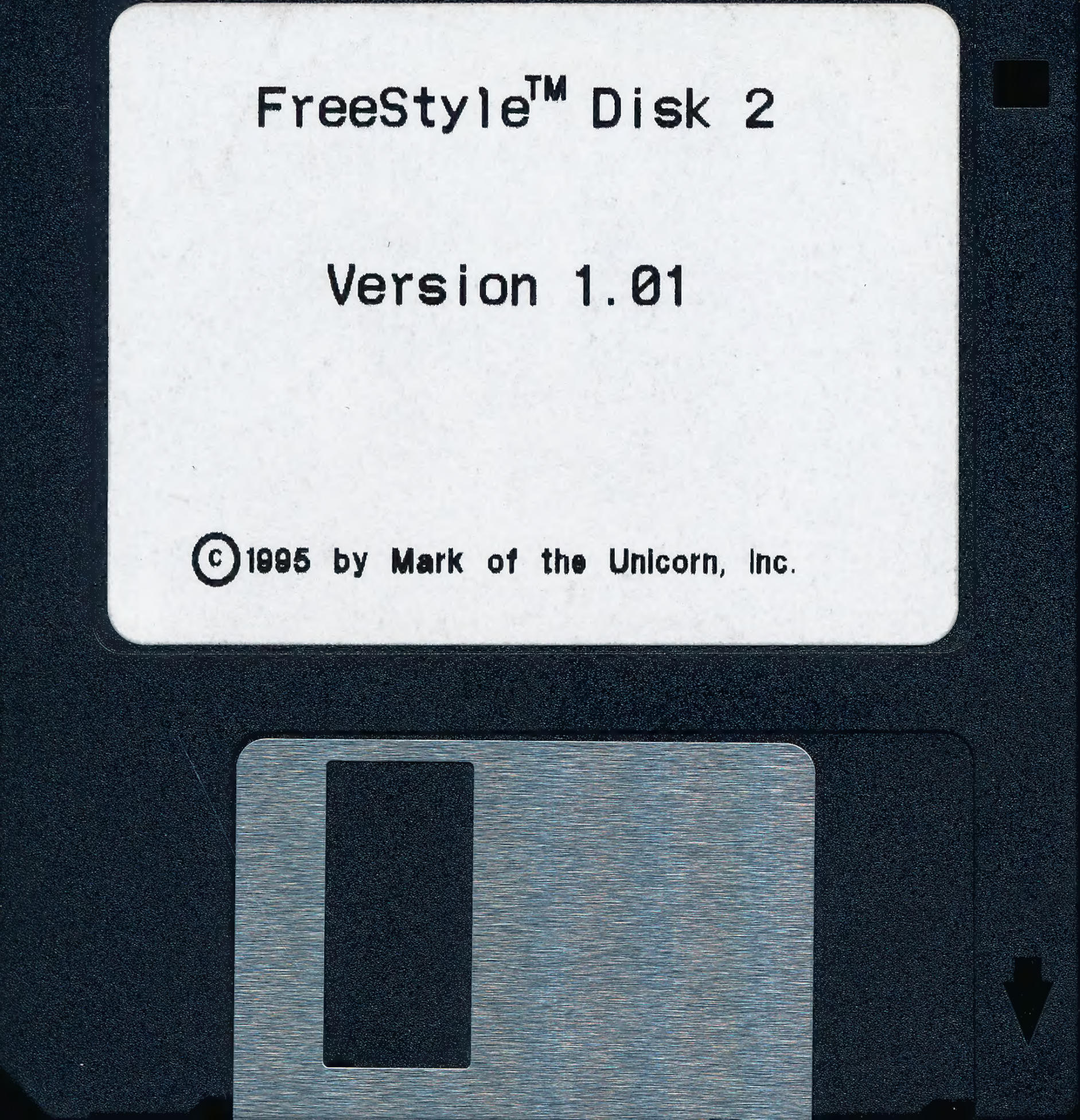
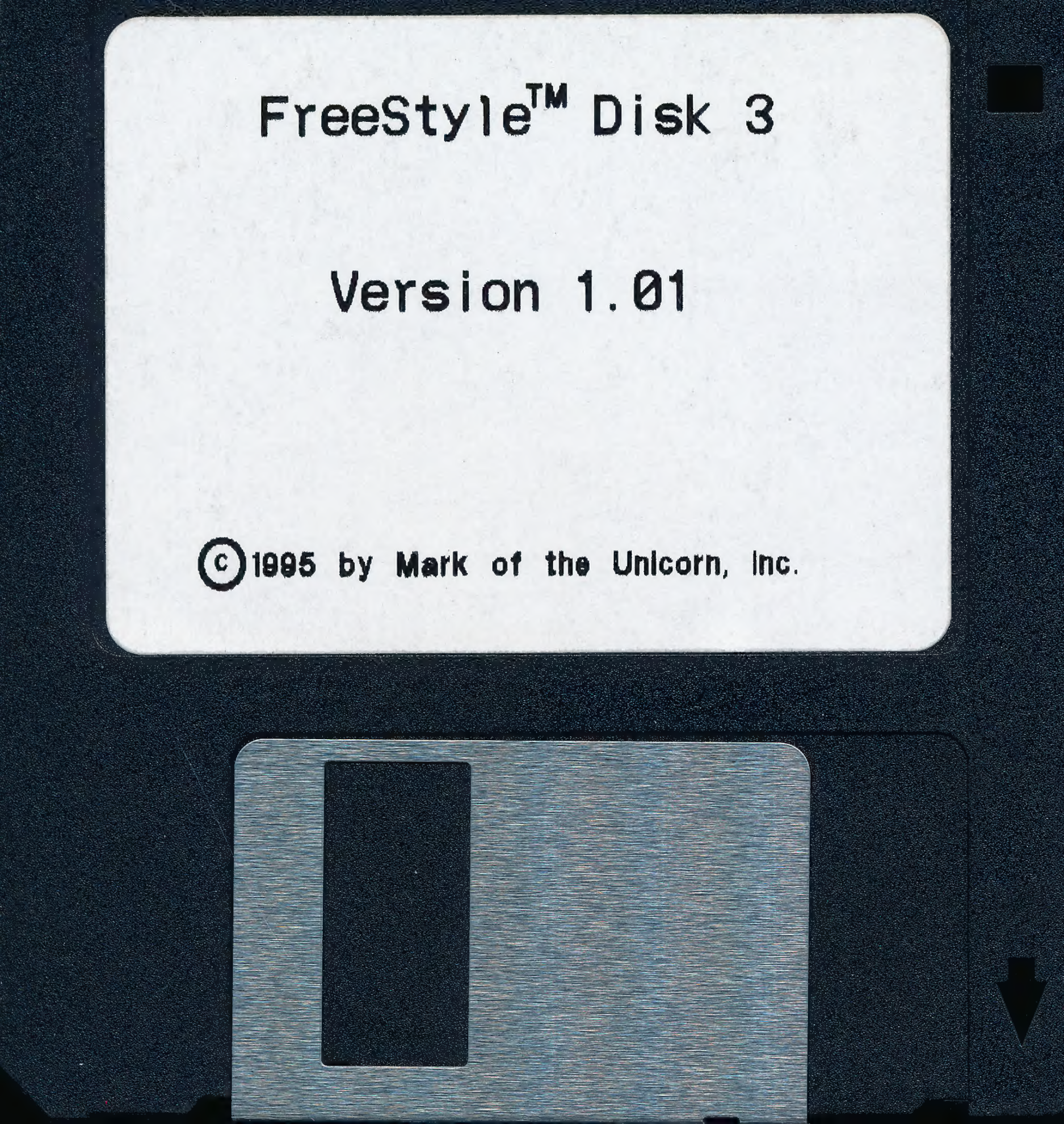
FreeStyle™ Disk 2

Version 1.01




FreeStyle™ Disk 3
Version 1.01
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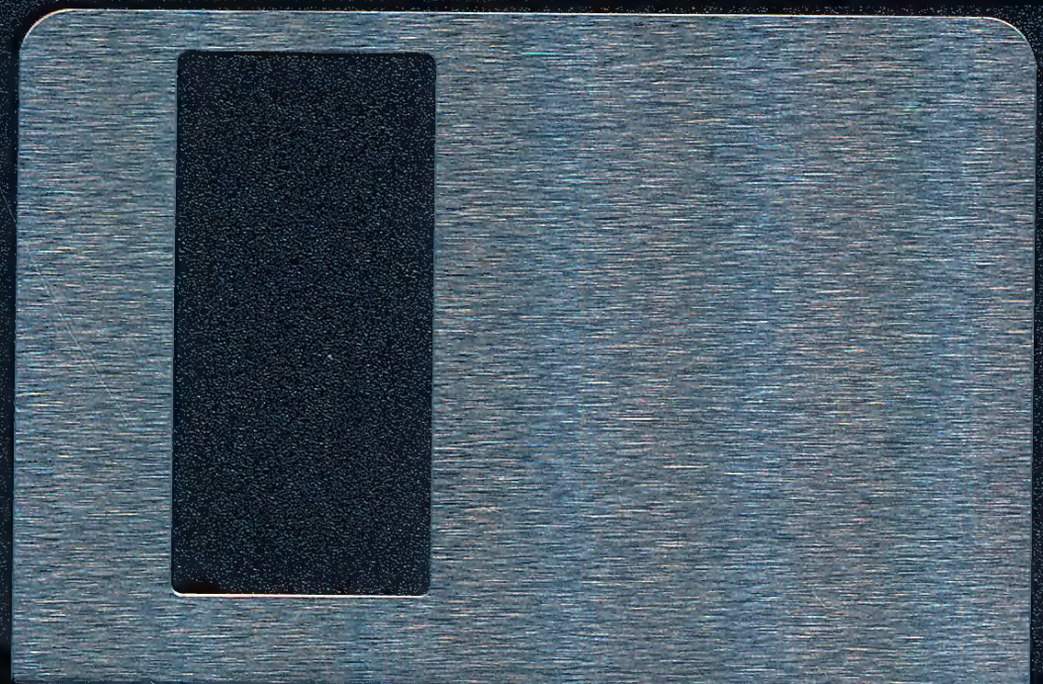
FreeStyle™ Disk 4

Version 1.01



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⌘	trigger key		wait for note		prev. sound		prev. section
	play		record loop		next sound		next section
	rewind		advance loop		prev. take		new section
	stop		prev. player		next take		keep take
	pause		next player		new take		undo
	record		new player		erase take	A	computer key
⌘	trigger key	⌘	trigger key		computer		computer


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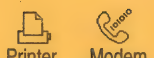
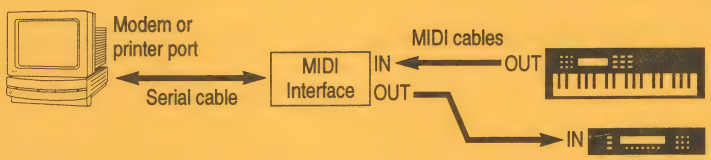
FreeStyle Quick Start Guide

1. Connect your MIDI gear to the Macintosh as shown below.

These two setups represent the minimum MIDI hardware setup necessary to use FreeStyle. You must have a controller keyboard (or other controller) and a multi-timbral sound generator, such as a General MIDI sound module or a multi-timbral MIDI keyboard. You can have more devices, if you want.



OR



2. Switch on the Macintosh and hold down the shift key while it starts up.

The shift key temporarily disables all system extensions, which can interfere with the installer. You'll turn them back on later.

3. Insert the FreeStyle master disk (with the glossy, colored label), double-click the installer icon, and follow the directions the installer gives you.

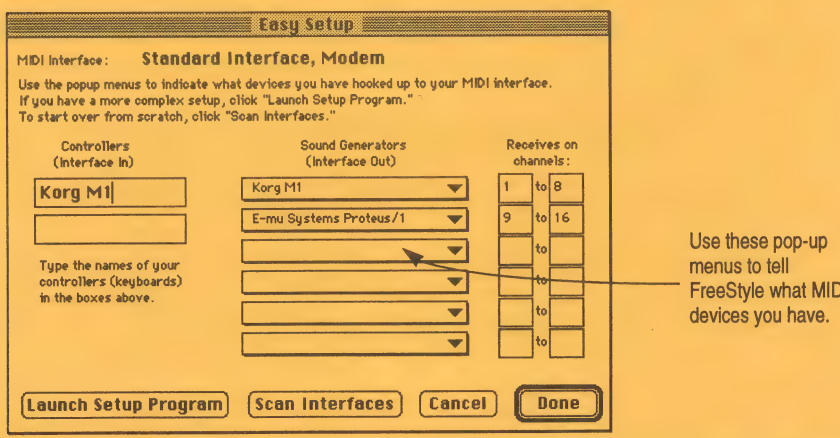
4. **After you complete the installation and the computer restarts, insert the FreeStyle master disk again, double-click the Authorizer, and follow the directions it gives you.**

5. **For important late-breaking news about FreeStyle, check the "Read Me" file in the FreeStyle Folder on your hard disk before you proceed to the next step.**

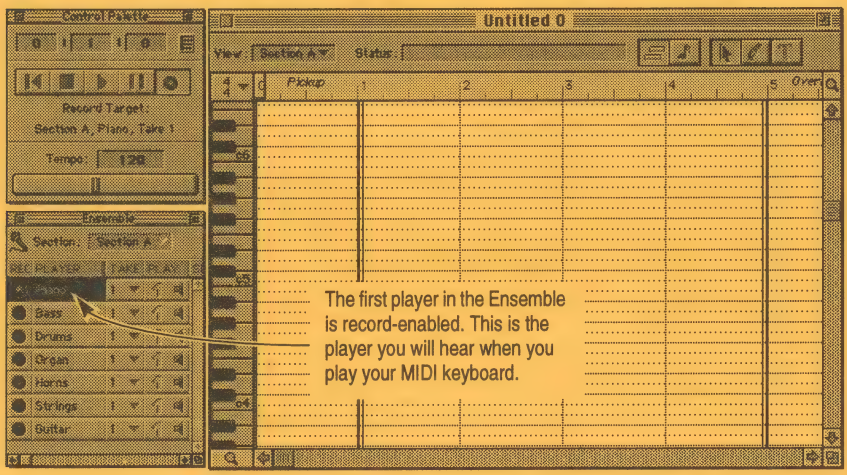
6. **Make sure all of your MIDI hardware is switched on, and double-click the FreeStyle icon in the FreeStyle Folder to launch the program for the first time.**

7. **Tell FreeStyle what MIDI device(s) you have in the Easy Setup window.**

The Easy Setup window shown below may look slightly different for you depending on the type of MIDI interface you have, but the basic process is the same. Choose the devices you have from the pop-up menus. If you have a more complex MIDI setup, you won't see this window at all. Instead, a more advanced setup program called *FreeMIDI Setup* will be launched automatically. If you already have FreeMIDI installed, none of this will happen. Instead, FreeStyle will open a new file.



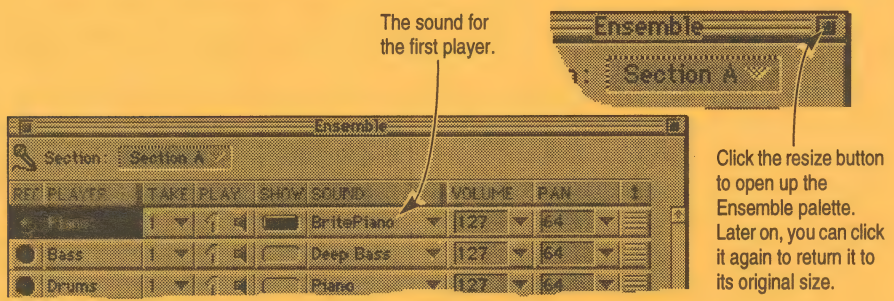
8. **After completing your MIDI device setup, a new FreeStyle document should appear as shown below. If not, choose New from the File menu.**



9. **Audition several players by clicking their names and playing a few notes on your MIDI keyboard.**

Does the sound you hear match the name of the player? For example, does the piano player sound like a piano? If you are using a General MIDI device, the answer is probably *Yes*. If so, you are ready to begin using FreeStyle!

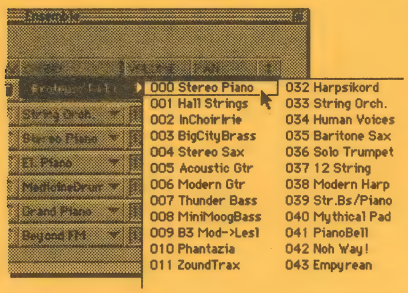
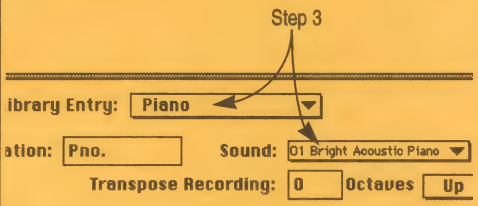
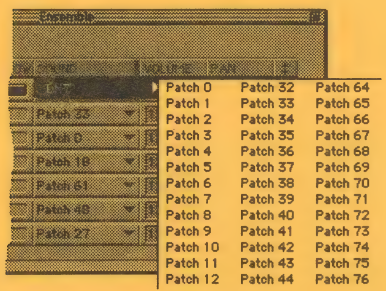
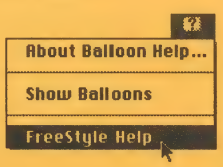
10. **If you don't hear the correct instrument sounds, open up the Ensemble palette to check the players' sound assignments.**



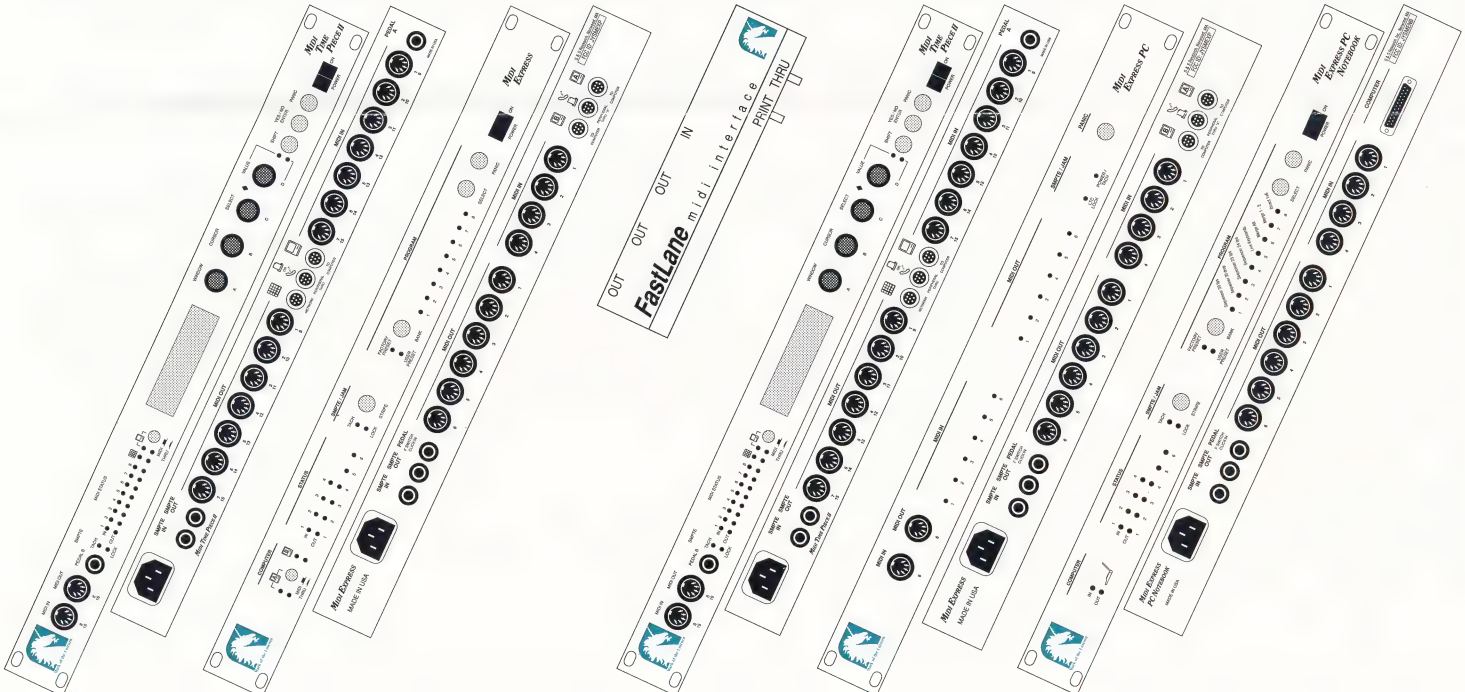
11. **Click each player's name, choose a sound from the sound menu that is appropriate for that player, and try playing a few notes again.**

If you now hear the correct sound, choose Edit Player Library from the Setup menu. Choose each player from the *Player* pop-up menu at the top of the dialog box and select a sound from the *Sound* pop-up menu below.

12. **If you still don't hear the correct sound for the first player (or no sound at all), check the table on the next page.**

Problem or situation	What to do
The Sound pop-up menu calls up the correct sound, but players don't have an appropriate sound assigned to them yet. 	**1. Close the current file (don't save changes).** **2. Choose Edit Player library from the Setup menu.** **3. Choose each player one at a time from the pop-up menu at the top of the window and select a sound from the sound pop-up menu.** 
The Sound pop-up menu calls up sounds, but it displays generic patch names. 	You have several choices. One is to just use the generic sound names. All you have to do is determine the MIDI program change number that matches the sound you want in your MIDI device. Then just choose that number from the sound pop-up list. The other choice is to create a sound list as shown above for the device. See the chapter called "PatchList Manager" starting on page 151 in the FreeStyle manual for further information.
You don't hear correct sounds.	Go to the help menu, choose FreeStyle Help, and go to the MIDI Device Help section. Read the "Read This First" section and then check to see if there is specific help for your device. 
You don't hear any sound at all.	Check cables and volume settings. Make sure the instrument is properly set for multi-timbral operation. Go to the help menu, choose FreeStyle Help, and go to the MIDI Device Help section. Read the "Read This First" section and then check to see if there is specific help for your device.

	MIDI Time Piece II Macintosh	MIDI Express Macintosh	FastLane Macintosh	MIDI Time Piece II PC / Windows	MIDI Express PC / Windows	Express Notebook PC / Windows
MIDI IN / OUT	8 / 8	4 / 6	1 / 3	8 / 8	6 / 6	4 / 6
Computer connection	modem / printer port	modem / printer port	modem / printer port	8-bit card	8-bit card	parallel port
MIDI channels	128	96	16	128	96	96
Maximum units / ports / channels in a network	4 / 32 / 512	No networking	No networking	2 / 16 / 256	No networking	No networking
Total merging, routing, muting, re-channelizing	All ports	All ports	1 MIDI IN to 2 MIDI OUTs	All ports	All ports	All ports
SMPTE tape sync	All frame rates	All frame rates	no	All frame rates	All frame rates	All frame rates
SMPTE conversion	MTC & DTLe	MTC & DTLe	no	MTC	MTC	MTC
SMPTE jam sync	continuous / one-time	continuous / one-time	no	continuous / one-time	continuous / one-time	continuous / one-time
Adjustable freewheeling	0-32 frames	0-32 frames	no	0-32 frames	0-32 frames	0-32 frames
Convert click to MIDI	yes	yes	no	yes	yes	yes
Foot pedal inputs	2 (1 rear, 1 front)	1 rear	none	2 (1 rear, 1 front)	1 rear	1 rear
Foot pedal types	continuous / switch	switch only	no	continuous / switch	switch only	switch only
Stripe SMPTE / front panel	yes	yes	no	yes	yes	yes
Panic button / front panel	yes	yes	no	yes	yes	yes
Modem/printer THRU port with front panel switch	yes	yes	yes	n / a	no	no
Internal power supply	yes	yes	no power required	yes	powered by computer	yes
Scene memory (battery backed)	8 base setups with 128 variations	16 (8 preset / 8 user)	no	8 base setups with 128 variations	16 (8 preset / 8 user)	16 (8 preset / 8 user)
Front panel programming	16x2 Backlit LCD	scene select buttons	THRU buttons	16x2 Backlit LCD	scene select buttons	scene select buttons
Accepts program changes	yes	yes	no	yes	no	yes
Front panel MIDI ports	1 IN / 1 OUT	no	n / a	1 IN / 1 OUT	1 IN / 1 OUT	no
Operates without computer	yes	yes	yes	yes	no	yes
Fast 1/X data transfer rate	yes	no	no	no	no	no



FreeStyle

Compose, Record & Print Your Music with MIDI Sequencing and Notation Software

User's Manual

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Mark of the Unicorn Backup and Update Programs

We hope that you'll take advantage of our ongoing research and development. To get started, send in this Purchaser Registration Card. As soon as we receive your card, we will mail you a second FreeStyle key disk at no charge. As a registered user, you will be eligible to receive technical support and announcements about product enhancements as soon as they become available. Only registered users receive these special update notices, so please, complete and mail this registration card!

Mark of the Unicorn Product Support

We would like to help you get the most from FreeStyle. If you have difficulty using this program, we recommend that you first consult the product manual and on-line help features. Then consult the dealer from whom you purchased this product. If you still cannot find an answer to your question after checking these resources, call our Customer Service department Mondays through Fridays, 9 AM - 8 PM Eastern Time, at (617) 576-3066. Before calling, please gather all information related to the problem; this will make it easier for our service representatives to help you.

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FreeStyle™

Compose, Record & Print Your Music with MIDI Sequencing and Notation Software

User's Manual

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Contents

Chapter 1 Welcome to FreeStyle

A new kind of sequencer

What Is FreeStyle?

Traditionally, sequencers have forced us to think like recording engineers. The recording engineer is comfortable with multi-track tape decks, signal routing, and the technical complexities of MIDI (Musical Instrument Digital Interface). (S)he also is intimately familiar with every piece of gear in his or her studio.

A totally musical approach

FreeStyle lets you think like a composer. In FreeStyle, you don't have to understand technology in order to use it. You work with an ensemble of players and tell each player what to play by writing or recording musical ideas. Each musical idea is recorded as a "take", which can be recalled for playback and editing at any time. Unlike most sequencers, all of your Piano ideas are collected in a popup menu next to the Piano player for easy access. In FreeStyle you select a sound for a player from a categorized list of the available sounds in your studio -- without regard to serial ports, cables, or MIDI channels. At the point of inspiration, you probably only care about what each player is playing and what it sounds like. FreeStyle gives you control over these things in a musical rather than a technical way.

Say good-bye to techno-details

FreeStyle lets you view your music in an intuitive piano-roll display or in legible standard music notation, which appears on the screen exactly as it will print out. Lots of technical details are taken care of for you so you can just concentrate on your music. When you cut and paste notes from one section of music to another, invisible MIDI data like sustain pedal will be copied along with the notes automatically. If you record notes before the downbeat of the first bar in a section, those notes will be kept in the "pickup" bar of the section and automatically overlap the end of the previous section in your song arrangement. If you want to compose for more players than your sound modules can handle, FreeStyle will dynamically steal MIDI channels from idle players to accommodate those that have something to play. Here's an example: suppose you have a sound module that can only play 8 different sounds at once, but your song needs 10 players. With a traditional sequencer, you'd be out of luck. But FreeStyle dynamically allocates notes to MIDI channels during playback. This means that if the sax player isn't playing at the moment, FreeStyle will steal its channel for whatever player currently needs to play. As a result, FreeStyle can play any piece with any number of players FreeStyle can't magically make your MIDI gear play more sounds than they possibly can, but it does the best job possible to juggle MIDI channels on the equipment you have. And it's an incredible feeling to sit back and watch your gear receive bank and patch changes on the fly to accommodate your music!

Creative liberation

Perhaps the most liberating feature in FreeStyle is the ability to record section after section of music without ever touching the computer. Keys on your MIDI keyboard double as buttons that control FreeStyle when you first hold down a key "clump" or controller trigger. You can add players, change sounds, record new takes -- do just about anything -- all from your MIDI keyboard. If you've ever felt that computers are a distraction when you're writing music, FreeStyle is for you.

Mail in the registration card

Take a moment now to fill in and mail the registration card found at the beginning of this manual. Doing so entitles you to:

- A free backup master disk
- Free, unlimited technical support
- Free newsletters and software updates
- Announcements about major software upgrades and new products

Leave the rest of the cardboard page in the manual for your future reference. Since Mark of the Unicorn can provide customer service only to registered users, please be sure to send the card in immediately after purchase.

How This Manual Is Organized

This manual has the following sections.

Installation: Everything you need to know to begin recording and playing music.

Picture-book Tour: An overview of FreeStyle's main features.

Tutorials: A brief, step-by-step tutorial that shows you how to record a song.

Quick Reference: Provides a item-by-item summary of all of FreeStyle's menu commands.

Appendices: The appendices provide special information, such as setup procedures for large MIDI studios. There is also a troubleshooting section at the end.

Two Ways To Get On-Line Help In FreeStyle

Using Balloon Help to get quick answers

FreeStyle supports the Macintosh's standard balloon help feature. Balloon help gives you helpful information about any feature in FreeStyle—every window, menu command, dialog box, button and just about anything else you can click on. Often, the on-line help gives you enough information to get you going with the feature without ever having to reach for this manual!

To use FreeStyle's on-line help feature, choose Show Balloons from the menu at the far right corner of the menu bar at the top of the screen. Then position the cursor on top of the item you'd like to get help on. For a menu command, choose it from the menu.

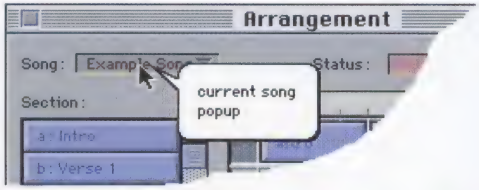


Figure 1-1: Balloon Help

Using FreeStyle Help: an on-line manual at your fingertips

If the balloon help mentioned above doesn't quite give you enough information, don't reach for the manual just yet! First, try FreeStyle's On-Line Manual by choosing FreeStyle Help from the menu. Then just click the topic you need to explore.

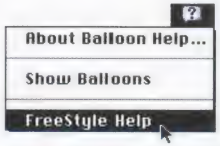


Figure 1-2: FreeStyle Help

Chapter 2 Installing FreeStyle

Everything you need to know to begin making music with FreeStyle

Macintosh Computer Requirements

FreeStyle requires a 68020-based Macintosh or faster running System 7. The chart below summarizes the Macintosh models that are supported and recommended for running FreeStyle:

Not supported	Supported	Recommended
Macintosh 512K	Macintosh Classic II, Color Classic	Centris 610, 650, 660AV
Macintosh 512KE	Macintosh LC, LC II, LC III, LC475, LC520	Quadra 605, 610, 650, 700, 800, 840AV, 900, 950
Macintosh Plus	Macintosh II, IIx, IIcx, IIci, IIsi, IIfx, IIvx, IIvi	Performa 600
Macintosh SE	Performa 200, 400	Duo 210, 230
Macintosh Classic	Macintosh SE/30	Power Macintosh (all models)
Macintosh Portable	PowerBook 140, 145, 145B, 160, 165, 165c, 170, 180, 180c	
PowerBook 100	PowerBook Duo 210, 230, 250, 270c, 280, 280c	

Faster computers provide better performance

The faster the Macintosh, the more responsive FreeStyle is. Scrolling during playback is smoother, the counter updates regularly, and actions that you take with the program are faster—especially during playback.

Macintosh system requirements

Below is a summary of the minimum Macintosh system requirements necessary to run FreeStyle:

System component	Minimum requirement
System software	System 7.0.1 or higher
Hard disk	6 megabytes (MB) of free hard disk space
RAM (Random Access Memory)	5 megabytes (MB)

To determine the System version and amount of RAM currently installed in your Macintosh, choose *About this Macintosh...* from the Apple menu just after you switch on the computer.

A color screen is recommended

FreeStyle is compatible with any Macintosh-compatible monitor, including black and white and grayscale monitors. FreeStyle employs color throughout the program to enhance your music making environment. To take full advantage of FreeStyle's color-related features, we strongly recommend that you use FreeStyle on a Macintosh with a standard 8-bit color monitor, which provides 256 colors. FreeStyle does not take advantage of the higher color resolution on 24-bit color monitors.

Accelerator Boards

FreeStyle's speed of operation is increased by accelerator boards that speed up all operations on the computer. We strongly recommend, however, that you purchase accelerator boards on a "try-before-you-buy" basis because any hardware that is not standard Apple Macintosh hardware can be incompatible with FreeStyle. Please contact Mark of the Unicorn Technical Support at (617) 576-3066 before you purchase an accelerator board to check for any incompatibilities with FreeStyle.

Math coprocessors

Math coprocessors do not have an effect on FreeStyle's speed of operation.

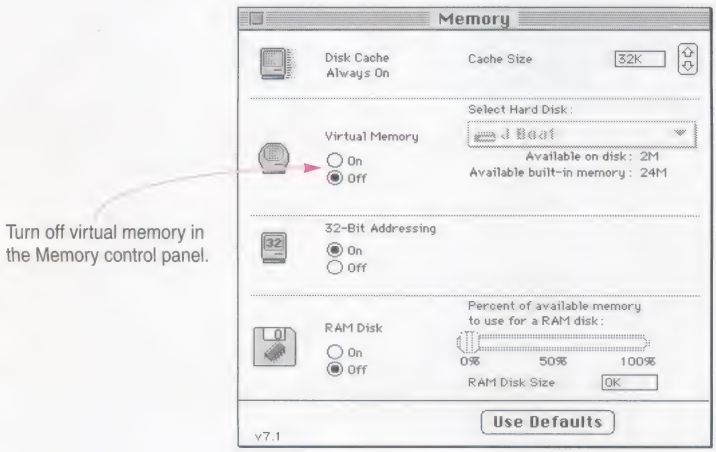
FreeMIDI is required

FreeMIDI, a Macintosh System Folder extension developed by Mark of the Unicorn, is automatically placed in the Extensions folder inside the System Folder on your hard disk when you install FreeStyle as described in this installation guide. FreeStyle requires FreeMIDI, so never remove FreeMIDI from the Extensions folder.

FreeMIDI greatly enhances the way in which FreeStyle interacts with your MIDI synthesizers and sound modules. It provides FreeStyle with the names of all of your MIDI gear, and it even provides FreeStyle with the names of the sounds currently available in each one of your MIDI synthesizers so that you can choose sounds by name from within FreeStyle.

Do not use virtual memory

Do not use Virtual Memory with FreeStyle. Virtual memory causes the computer to operate too slowly for FreeStyle to maintain real-time operations such as playback and recording. To turn off Virtual Memory, open the Memory Control Panel.



MIDI Hardware Requirements

To be able to record and play back music in FreeStyle, you need the following:

- A MIDI keyboard or other MIDI controller device (to record music into FreeStyle)
- A multi-timbral MIDI sound module or synthesizer that provides a good variety of instrument sounds (to play back the music you record)

> ☛ *Multi-timbral* means that the instrument can play more than one type of sound at a time (drums, bass, piano, etc. all at the same time). For further explanation, see below.

- A Macintosh MIDI interface (connects the MIDI devices to the computer)

> ☛ Some sound modules on the market have a built in MIDI interface and connect directly to the computer without the need for a separate MIDI interface.

Most MIDI keyboards on the market have a built-in, multi-timbral synthesizer, which allows you to use a single keyboard for both recording and playback as shown in Figure 2-1 on page 15.

Why having a multi-timbral sound module or synthesizer is important

FreeStyle depends on your MIDI hardware to produce sounds. For example, when you record a piano part in FreeStyle, your MIDI sound module produces the piano sound that you hear. FreeStyle itself produces no sound whatsoever. Instead, FreeStyle precisely records performance information: *when* notes were played, *what* notes were played, *how hard* they were struck, *how long* they were held down, and so on. On playback, FreeStyle sends this performance information to the MIDI sound module, triggering the music that you hear. This is one of the reasons why MIDI sequencing is so powerful. It gives you incredible flexibility in working with the performances you record and the instruments and sounds you choose to play them with.

FreeStyle supports General MIDI devices

General MIDI is a term that refers to an industry-accepted standard setup for a multi-timbral MIDI device. MIDI devices vary widely in their architecture, sounds, and capabilities. *General MIDI devices* adhere to a simple set of characteristics that make them similar to all other General MIDI devices. For example, every General MIDI device provides a standard set of musical instrument sounds, including piano, bass, guitar, strings, various drum kits, and others. If a MIDI device supports General MIDI, you can be sure that it has this standard set of GM sounds. Many GM devices provide additional sounds as well. General MIDI includes other standard musical characteristics such as reverb, chorusing, and so on.

Although many people find General MIDI devices easy to setup and use, FreeStyle also works great with any MIDI compatible synthesizer.

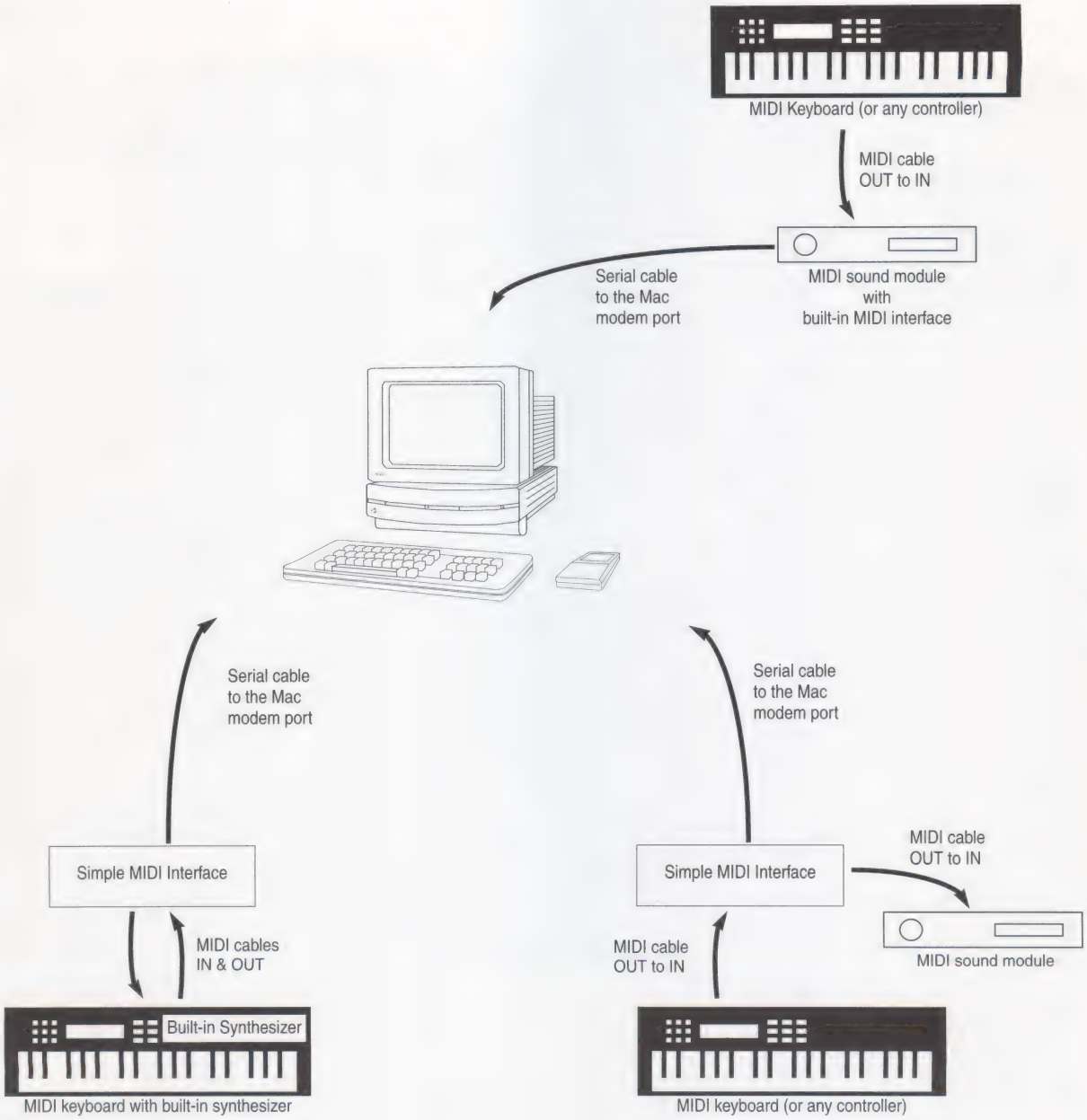


Figure 2-1: Three different examples of a minimum MIDI setup for FreeStyle

Setting Up Your MIDI Gear

To connect your MIDI gear to the Macintosh:

1. **Before you start, make sure the Macintosh is turned off.**

2. **Connect the MIDI interface to the Macintosh modem port, printer port, or both, depending on the interface you have.**

   Refer to the owner's manual of the interface for specific directions. If your interface connects to only one port, and the owner's manual does not specify which port to use, connect it to the modem port. If you have a MIDI Time Piece II or a MIDI Express interface, connect it to the modem port.

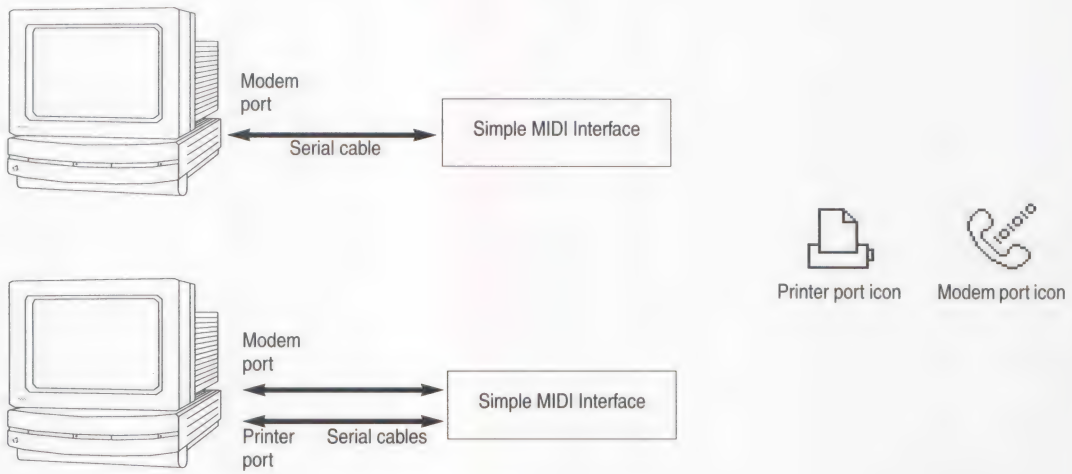


Figure 2-2: Connecting a standard MIDI interface to the Macintosh

3. **Connect your MIDI device(s) to the interface as shown in one of the following diagrams.**

> ☛ Only essential connections are shown in the following diagrams. In some cases, especially with MIDI keyboards acting as a controller, you can make both a MIDI IN and a MIDI OUT connection to the MIDI interface.

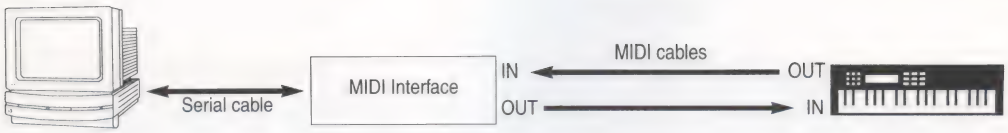


Figure 2-3: Connecting a single MIDI device. Connect the device's MIDI OUT and MIDI IN ports to the MIDI interface as shown here.

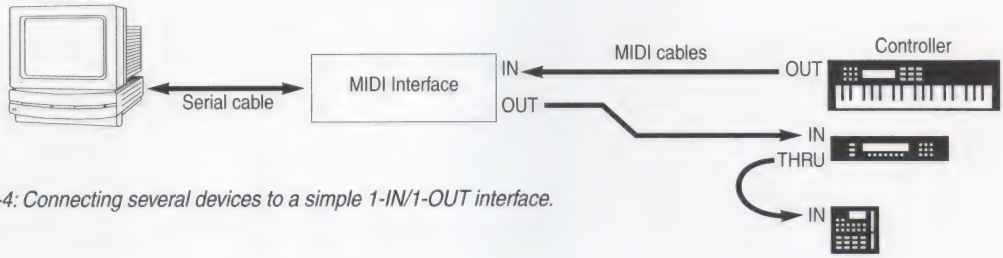


Figure 2-4: Connecting several devices to a simple 1-IN/1-OUT interface.

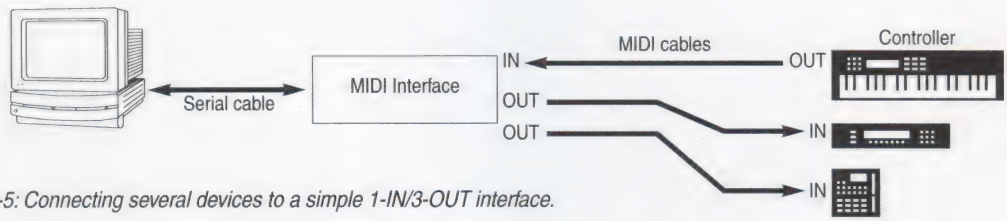


Figure 2-5: Connecting several devices to a simple 1-IN/3-OUT interface.

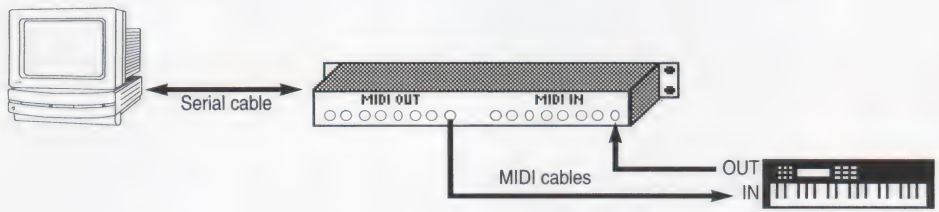


Figure 2-6: Connecting several MIDI devices to a multi-port interface such as the MIDI Express or MIDI Time Piece II. It is recommended that you use the same cable number for both the MIDI IN and MIDI OUT for each device.

Installing FreeStyle

FreeStyle is installed automatically for you by an installer utility on the FreeStyle master disk. The master disk is the disk with the glossy, colored label.

To install FreeStyle on your hard disk:

1. **Disable all Control Panel Devices and Extensions, including virus protection utilities such as SAM, Virex, Vaccine, Disinfectant, or GateKeeper during the installation process.**

   These files can sometimes interfere with installation. To disable them, restart or turn on your Macintosh with the shift key held down until you see the message, "Extensions Off", which appears right after "Welcome to Macintosh". Doing so turns off all extensions until the computer is restarted. It is especially important to do this right before you install the program and authorize the hard disk. Once the program has been installed and authorized, you can re-enable them.

2. **Insert the master disk and run the installer by double-clicking the icon called "Double-click to install".**

Figure 2-7: The FreeStyle master disk, with the installation and authorizing utilities.

3. **Follow the directions the installer gives you, inserting the appropriate disks as requested.**

4. **When you finish, the installer may ask you to restart.**

   ☛ If you have more than one hard disk, the installer only lets you install on hard disks that have a System Folder on them. If you want to install on a disk that doesn't, install on a hard disk that does and copy the resulting folder to the desired disk afterwards.

5. **If you have a Macintosh IIfx or a Quadra 900 or 950, open the Serial Switch control panel in the Control Panels folder (in the Apple menu) after the Macintosh restarts, set it to Compatible mode, and restart the Macintosh again.**

What does the installer do?

The installer checks the computer to make sure it meets the hardware and software requirements necessary to run FreeStyle. If so, the installer places the program in a folder on the top level of the hard disk, along with several additional files. The installer also adds other necessary files to your Macintosh System Folder such as fonts, system extensions, and other necessary items. The following table provides a summary.

Installed item	Explanation
FreeStyle	FreeStyle itself is placed in a folder with the same name on the top level of your hard disk.
FreeStyle Help	Leave this file in the FreeStyle folder. It contains all of the information provided by FreeStyle's on-line help feature.
Demo files	This folder contains demonstration files that you can open with the Open command in FreeStyle's File menu.
Libraries	This file contains the ensemble and player libraries available to you in FreeStyle.
Metronomes	This folder contains standard MIDI files containing drum riffs for FreeStyle's riff metronome. Any standard MIDI file placed into this folder will appear in FreeStyle's riff metronome pop-up menu.
MOTU Fonts	This suitcase contains a bit map music font called *QuickScribe* that is required by FreeStyle, and it is placed in your System by the installer.
QuickScribe	This TrueType printer font is automatically placed in your Fonts Folder by the installer. It produces the highest possible print quality on printers that take advantage of high-resolution printer fonts.
FreeMIDI	This system extension is placed in your System Folder and serves as an integrated MIDI operating system for all FreeMIDI-compatible software. It is required by all Mark of the Unicorn programs.
FreeMIDI Folder	This folder is placed in your System Folder and contains files that are required by FreeMIDI.
FreeMIDI Applications	This folder is placed on the top level of your hard disk. It contains several programs that help you set up your MIDI studio in FreeMIDI.
Serial Switch	If you have a Quadra 900, 950, or Macintosh IIfx, this system extension is placed in the Control Panels folder by the installer to allow MIDI communication on the modem and printer ports. Without it, none of your MIDI software would work. Once it is installed, it must be set to "Compatible" mode.
Unicorn Power	If you have a Macintosh PowerBook 140, 145, 160, 165c, 170, 180, or 180c, this system extension is placed in the Control Panels folder by the installer to provide error-free MIDI communication on the modem and printer ports. Without it, you might have trouble using MIDI software.

Authorizing Your Hard Disk

Authorizing your hard disk allows FreeStyle to run without asking you to insert the master floppy disk. Otherwise, the program will ask you to insert the master disk each time you run it, briefly scanning the disk before opening.

In some situations, you may not want to authorize. For example, you may be working at a temporary location. If you don't want to authorize, do not double-click the Authorizer. Instead, see "Running FreeStyle without authorizing" on page 21.

To authorize a hard disk:

1. **If the master disk is not currently in a disk drive, insert it now.**
2. **Double-click the Authorizer/Deauthorizer on the master disk as shown in Figure 2-7 on page 18.**
3. **Follow the directions that appear on the screen.**

☛ If you have more than one hard disk, be sure to authorize the disk from which you will be running the program.

About authorizing

Once you have authorized your hard disk, FreeStyle will run without asking for the master disk. Because the authorization is not specific to one copy of the program, you can even make several copies of the program on the hard disk, including updated versions.

Authorization is *not* lost by dragging the FreeStyle icon into the trash, so you can't lose it by mistake. (The hard disk remains authorized even when there is no copy of FreeStyle present.)

Authorization is generally not affected in any way by hard disk optimization utilities.

A FreeStyle master disk can authorize one hard disk. Mark of the Unicorn provides a second, identical back-up master disk free of charge when you mail in your signed registration card. This backup disk should be stored in a safe place and only used if the original master disk authorization somehow becomes damaged.

Deauthorizing a hard disk

If needed, you can deauthorize the hard disk for any reason, such as to reformat the disk, to move FreeStyle to a different hard disk, etc. To deauthorize a hard disk, insert the original master disk, open the disk, and double-click the Authorizer/Deauthorizer. From there, just follow the instructions provided on the screen and click the Deauthorize button when it is presented to you.

If the Deauthorize button is grayed out (can't be clicked), you are not using the master disk that you originally used to authorize. Quit and check your other master disk using this same procedure.

Deauthorize before reformatting a hard disk

If you reformat an authorized hard disk, it loses its authorization. Therefore, always deauthorize an authorized hard disk before you reformat it. After reformatting, you can authorize it again.

Handling hard disk emergencies

If your hard disk fails before you have an opportunity to deauthorize it, use your backup master disk to authorize a new, repaired, or reformatted hard disk. (Disk authorizations cannot be restored from hard disk backups.) Contact Mark of the Unicorn technical support for information about getting a replacement authorization. Telephone: (617) 576-3066. Fax: (617) 576-3609.

Running FreeStyle without authorizing

If you would like to install and run FreeStyle without authorizing the hard disk, do not run the Authorizer/Deauthorizer on the master disk. Instead, launch the copy of FreeStyle on your hard disk. Insert the master disk when it asks you to do so. At the first window you see, click Continue instead of Authorize. The master disk will be scanned briefly, and FreeStyle will run without authorizing the hard disk.

Taking care of your master disks

The FreeStyle master disk is crucial, as is the backup master disk that you receive in return for your registration card. Without one or the other, you cannot install and use the program. Treat them with care, and store them in a safe place when you are not using them.

☛ Rule of thumb: always keep your original disks locked. The only exception is that you need to unlock the master disk briefly during the process of authorizing and deauthorizing your hard disk. At all other times, we strongly recommend locking all original disks.

Telling FreeStyle What MIDI Gear You Have

Now you are ready to run FreeStyle for the first time!

Before you begin using FreeStyle, it will ask you which MIDI devices you have connected to the Macintosh. Identifying your MIDI instruments is very important to FreeStyle because:

- FreeStyle will properly communicate with your MIDI instruments.
- FreeStyle can provide you with easy access to the sounds in each instrument.

To identify your MIDI year:

1. **Switch on your Macintosh, the MIDI interface (if it has a power switch), and all of your MIDI gear.**
2. **Double-click the FreeStyle icon to start up the program.**

   After a brief moment, the FreeStyle start-up screen appears. Meanwhile, FreeStyle automatically scans the Macintosh's modem and printer ports in search of a MIDI interface.
3. **What happens next depends on the situation.**

What FreeStyle does next	Reason or Situation	What you should do
A new, untitled FreeStyle document appears on the screen	FreeStyle detects that FreeMIDI has already been configured on your Macintosh.	Proceed directly to "Choosing Sounds for Your Players" on page 27
The MIDI interface selection window appears as shown in Figure 2-8	FreeStyle fails to detect the presence of a MIDI interface on either serial port.	Refer to "What to do if FreeStyle does not detect a MIDI interface" on page 23
The Easy Setup window appears as shown in Figure 2-9	FreeStyle successfully detects a MIDI interface.	Proceed to "Using the Easy Setup window" on page 24
FreeStyle launches FreeMIDI Setup, a special configuration program that can better handle the setup demands of a large studio	FreeStyle detects the presence of a complex MIDI setup involving multi-port MIDI interfaces (such as two MIDI Time Pieces)	Proceed to Chapter 6, "FreeMIDI Setup" (page 131).

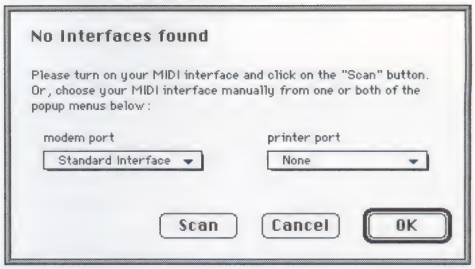


Figure 2-8: The MIDI Interface selection window

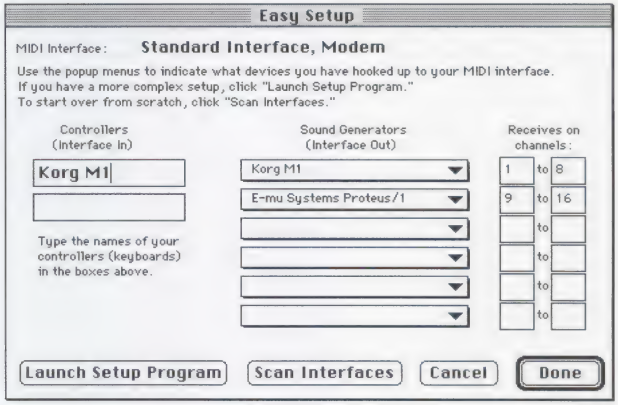


Figure 2-9: The Easy Setup window. This window may appear slightly differently than what is shown here depending on the type of MIDI interface FreeStyle detected.

What to do if FreeStyle does not detect a MIDI interface

If FreeStyle cannot detect a MIDI interface connected to your Macintosh, one of two situations is likely:

- No MIDI interface is connected to your Mac
- An interface is connected, but there is a problem

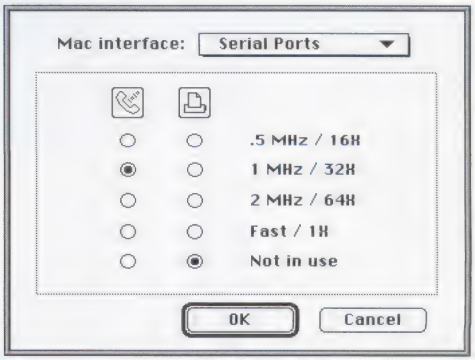
If you don't have a MIDI interface connected to your Mac:

1. **Choose the standard interface setting from the modem port pop-up menu anyway, and click OK.**

   You'll then see the dialog box shown on the right, which asks you for the interface speed. Most standard interfaces run at 1 MHz. If you have Apple networking software (AppleTalk) that uses the modem port, turn it off first.

2. **Click OK and proceed to "Using the Easy Setup window" on page 24.**

If you *do* have a MIDI interface connected, there is a problem with the connection. Check the interface power switch and cables and try again by clicking the Scan button.



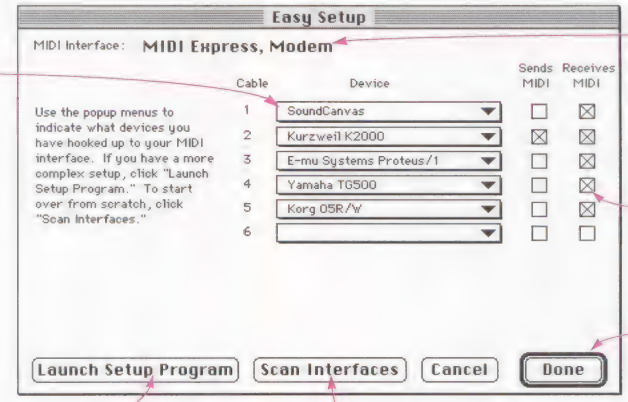
MIDI Interface speed setting

Using the Easy Setup window

The Easy Setup window lets you tell FreeStyle what MIDI devices you have. What you see in the Easy Setup window depends on what type of MIDI interface you have. If you have a multi-port interface such as a MIDI Time Piece, MIDI Time Piece II, or MIDI Express, refer to Figure 2-10 below. If you have a standard MIDI interface (such as 1 IN/1OUT or 1 IN/3 OUT), refer to Figure 2-11 on page 25.

When you are done, turn to the next section, "Opening A FreeStyle Document" on page 26.

Choose the devices that are connected to each cable from these pop-up menus. If you have a MIDI device that is not listed, see "What to do for devices that do not appear in the pop-up menus" on page 25 and "Using FreeMIDI Setup for complex MIDI studios" below.



Indicates what FreeStyle detected when it scanned the modem and printer ports.

Check these boxes to indicate whether the device has MIDI in and MIDI out connections.

When you are done, click Done and turn to "Opening A FreeStyle Document" on page 26.

This button opens **FreeMIDI Setup**, a separate program that provides more setup options and is better suited for more complex MIDI setups. See "Using FreeMIDI Setup for complex MIDI studios" below.

Scan Interfaces causes FreeStyle to discard the current setup in this window and re-examine the serial ports in search of a MIDI interface. Use it to start over from scratch.

Figure 2-10: The Easy Setup window for a multi-port MIDI interface such as the MIDI Express. If you have a MIDI Time Piece, you'll see eight cables instead of six.

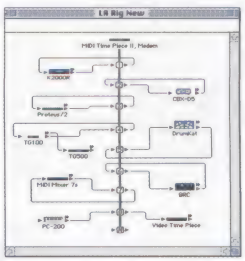
Using FreeMIDI Setup for complex MIDI studios

Easy Setup is convenient for small and medium sized MIDI studios. Use it to save time and get FreeStyle running quickly.

However, if you feel that the Easy Setup window does not provide you with enough choices to accurately describe your MIDI studio, click the *Launch Setup Program* button. Doing so opens FreeMIDI Setup, a separate program that provides a complete set of features for describing even the most advanced MIDI studio setups.

FreeMIDI setup supports over 250 MIDI devices, including effects processors, samplers, MIDI-controlled tape machines, digital audio recording devices, and more. FreeMIDI Setup can automatically scan your interface(s) to automatically detect what MIDI devices are connected, and it can even read OMS studio configuration files. It also provides a graphical representation of your studio.

If you decide to use FreeMIDI Setup, see Chapter 6, "FreeMIDI Setup" (page 131).

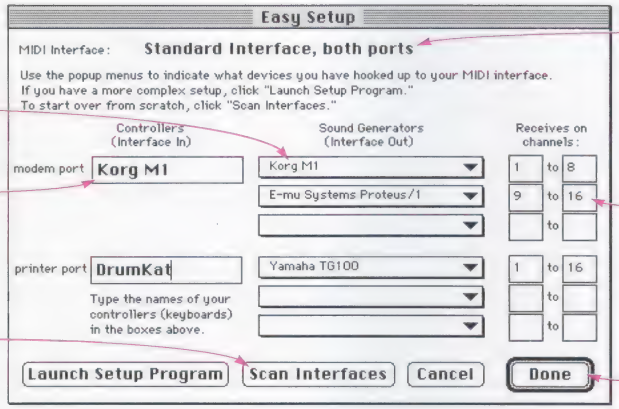


Example of a complex MIDI rig in FreeMIDI Setup

Choose your MIDI playback device from this first pop-up menu. If you have several devices, use the additional menus as needed. If your device is not listed, see "What to do for devices that do not appear in the pop-up menus" below.

Type in the name of your MIDI controller here.

Scan Interfaces causes FreeStyle to discard the current setup in this window and re-examine the serial ports in search of a MIDI interface. Use it to start over from scratch.



Indicates what FreeStyle found when it scanned the modem and printer ports.

Indicate which MIDI channels the device can receive on here. FreeStyle requires that no two devices share the same channel, so if you have several devices, be sure to give each one its own range of channels.

When you are done, click Done and turn to "Opening A FreeStyle Document" on page 26.

Figure 2-11: The Easy Setup window for a standard MIDI interface connected to both the modem and printer ports.

What to do for devices that do not appear in the pop-up menus

First of all, don't panic. You can use FreeStyle with any MIDI-equipped multi-timbral sound module, keyboard synthesizer, or other MIDI sound source.

If you have a MIDI device that doesn't appear in the Easy Setup pop-up menus, this only means that FreeStyle isn't yet customized to support that specific instrument. To you, this means a little bit of extra effort to set up the device. Once the device is set up, though, you will be able to easily choose sounds for your players in FreeStyle in the same way as you can for devices that do appear in the list.

To set up a device that does not appear in the pop-up menu:

1. **Choose the *Other* category in the pop-up menu.**

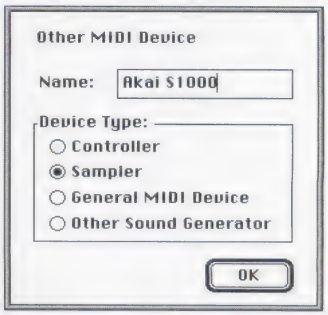
   The *Other MIDI Device* dialog box appears as shown to the right.

2. **If the device is a General MIDI device, be sure to indicate this by choosing the General MIDI device option.**

3. **Choose the Sampler option if any of the following are true:**

   - The device has no built-in sounds (such as a sampler).
   - You want to override FreeStyle's dynamic MIDI channel allocation features and prefer instead to be able to choose specific MIDI channels on the device rather than sounds.
   - You intend to change the internal sounds in the device frequently and therefore need to be able to set up sounds on a per-channel basis.

If you have many devices not listed, see "Using FreeMIDI Setup for complex MIDI studios" on page 24.



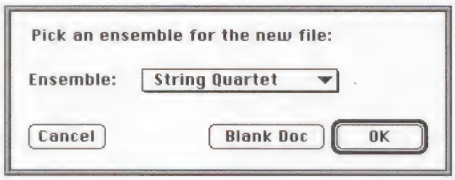
Opening A FreeStyle Document

By now, you should have just completed the process of describing your MIDI device (or devices) to FreeStyle using either the Easy Setup window or the FreeMIDI Setup program. You are now ready to open a FreeStyle document for the first time. Depending on your situation, FreeStyle may have already opened a new, untitled document for you.

If you don't see a new document yet:

1. **Choose New from the File menu.**

   A window appears asking you to choose an ensemble for the new file.



2. **Select any ensemble you wish from the pop-up menu and click OK.**

   A new document opens, looking similar to what is shown below.

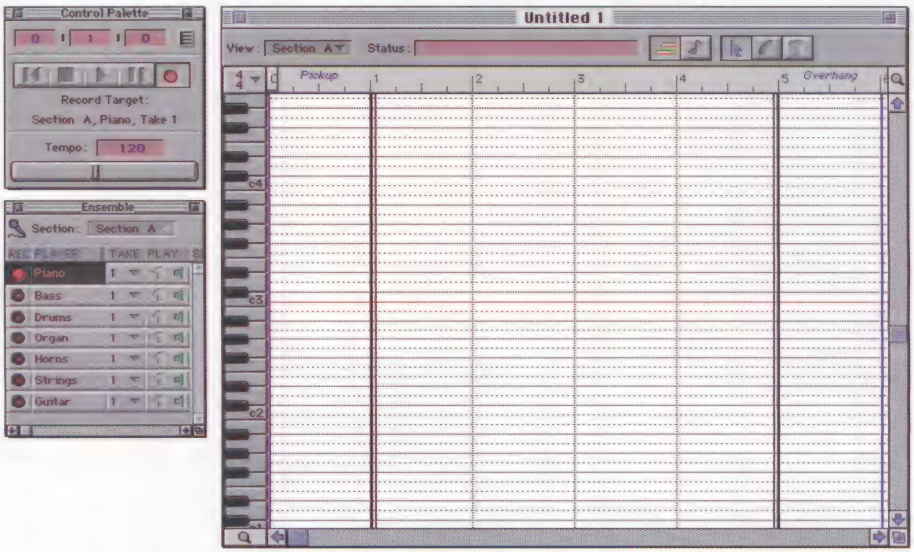


Figure 2-12: What you see when you open a new file in FreeStyle.

Choosing Sounds for Your Players

In FreeStyle, you work with players in an ensemble; each player represents a different instrument, such as guitar, bass, drums, piano, and so on. Players are explained later on in this manual, but for now, all you need to know is that each player must be assigned to an instrument sound on your MIDI playback device before you can begin using FreeStyle. Otherwise, the player may not play the correct sound. To choose sounds for your players, refer to the sections below that apply to you.

If you have a general MIDI device

If the MIDI device you are using for playback is a General MIDI device (and FreeStyle knows that it is a General MIDI device as described in the next section), two things happen:

- FreeStyle automatically assigns the correct instrument sounds to your players
- FreeStyle automatically organizes the sounds into convenient instrument categories as shown in Figure 2-13 below.

No further preparation is necessary, and you are ready to begin using FreeStyle. Proceed now to "What Next?" on page 32. If you have other MIDI instruments in addition to your General MIDI device, and you'd like to use their sounds too, see the following sections.

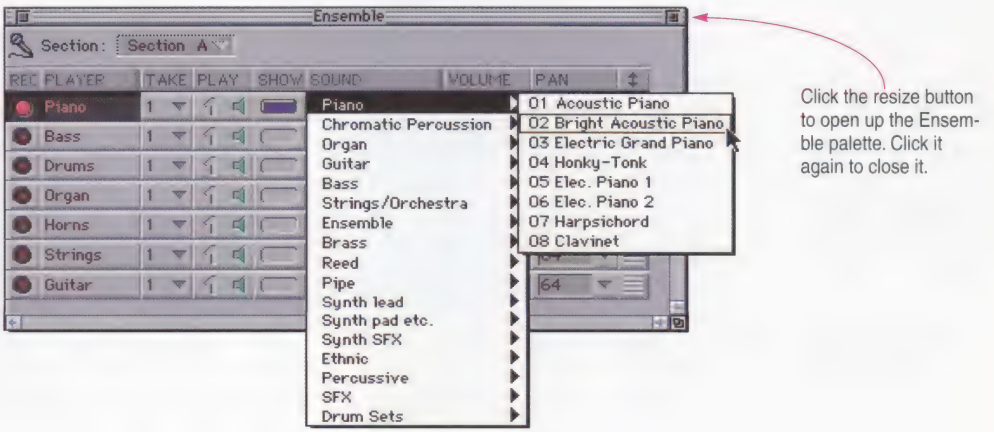


Figure 2-13: Sounds are automatically categorized like this for General MIDI sound modules. To choose a sound for a player, open up the Ensemble palette as shown and press on the current sound (in the Sound column) next to the player's name.

How does FreeStyle know if a device is a General MIDI device?

If your playback device appeared by name in the Easy Setup window pop-up menus earlier, FreeStyle is already familiar with it and knows that it is a General MIDI device. If your General MIDI device wasn't in the list and you used the *Other* category, FreeStyle knows it is a General MIDI device as long as you chose the *General MIDI* device category. If you didn't:

1. **Choose *Studio Setup* from the Setup menu to open the Easy Setup window.**
2. **Press on the device name to open its pop-up menu and choose the Other category.**
3. **Choose the General MIDI device type as shown in "What to do for devices that do not appear in the pop-up menus" on page 25.**

If you have a synthesizer or sound module that is not a General MIDI device

If the device you are using for playback is not a General MIDI device, you need to choose a sound for each player manually. Since you are just starting out with FreeStyle, the best way to do this is to edit the Player Templates in the Player Library so that FreeStyle will remember the sound you have chosen any time you create a new file.

To choose sounds for the player templates in the Player Library:

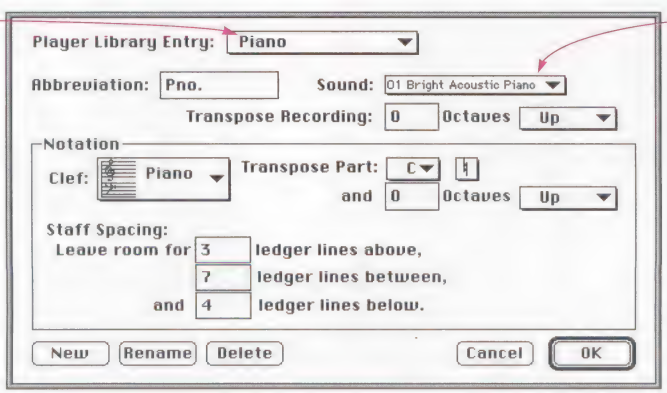
1. **Close the currently open FreeStyle document by choosing Close from the File menu.**

   If you have modified the file in any way, it will ask you if you would like to save changes. At this point, you probably haven't done anything that you want to keep yet, so click Don't Save.

2. **Go to the Setup menu, and choose *Edit Player Library* under the *Player Library* entry.**

   The Player library window appears as shown in Figure 2-14 below.

1. Choose each player template one at a time from this pop-up menu.



2. For each player, choose the desired sound from this pop-up menu.

Figure 2-14: Using the Edit Player Library window to assign synthesizer sounds to the player templates in your FreeStyle player library.

3. **Choose each player template one at a time from the pop-up menu at the top of the window, and for each one choose an appropriate sound from the Sound pop-up menu.**

   At this point, what you see in the sound pop-up menu for each MIDI instrument depends on whether or not FreeStyle is familiar with the device. If it is a familiar device, the sound pop-up list displays the device's factory default sounds as shown below on the left in Figure 2-15. If not, you'll see the generic sound list shown on the right in Figure 2-16.

4. **When you have finished assigning the desired sound to each player, click OK.**

5. **Proceed to "Checking the sounds you chose for your players" on page 30.**

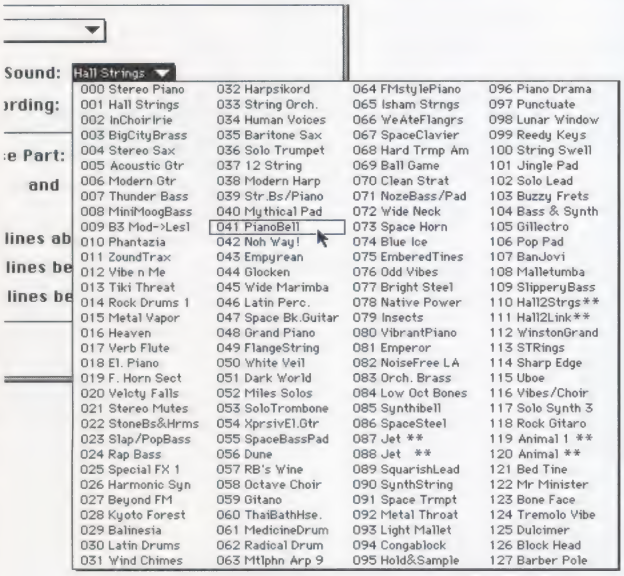


Figure 2-15: Devices that are familiar to FreeStyle (and are not General MIDI devices) display the device's factory default sounds like this. Some devices have several banks of sounds.

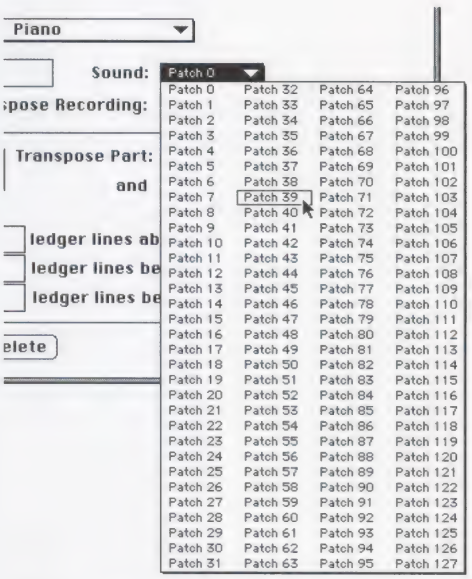


Figure 2-16: Devices that are not familiar to FreeStyle will initially have a generic patch list as shown here. See "What to do if you see a generic sound list" below.

What to do if you see a generic sound list

If you see a generic sound list as shown in Figure 2-16, you have several choices.

One choice is to just use the generic sound names. The patch numbers refer to the MIDI program change number for each sound in the MIDI instrument. All you have to do is find out what the MIDI program change number is for the sound you want to choose. For some devices, this is easy because of the way they work or because the program change numbers are easy to find in the user's manual.

Another choice is to create your own custom sound list like the one shown in Figure 2-15. Doing so involves running another program called PatchList Manager, which lets you type in the sound names by hand. It also provides ways to load entire banks of sound names all at once for certain devices using special features in PatchList Manager and Unisyn, Mark of the Unicorn's universal editor/librarian software. If you'd like to look into this further, see Chapter 7, "PatchList Manager" (page 151).

Checking the sounds you chose for your players

Once you have assigned a sound to each player, it is a good idea to "spot check" a few players to make sure that the sounds you chose in FreeStyle match the sounds in the MIDI instrument. To check the players:

1. **Open a new file by choosing New from the File menu.**
2. **Choose any ensemble. (It doesn't matter which one.)**
3. **Click the resize button in the Ensemble palette to open it up and allow you to see the current sound assignment for each player.**
4. **For each player in the Ensemble palette, click its record button as shown in Figure 2-17 and then play your MIDI controller.**
5. **Consult the table on the opposite page.**

If you have a sampler or other device that doesn't have built-in sounds

Earlier, in the Easy Setup window, you indicated that you have a sampler or other device with no built-in sounds, and you chose the *Sampler* device category for it as explained in "What to do for devices that do not appear in the pop-up menus" on page 25. You also specified a range of MIDI channels that the device can receive MIDI data on. In this case, the sound pop-up menu displays the list of MIDI channels as shown in Figure 2-17 below.

When you use MIDI channel assignments like this instead of sound names, FreeStyle does not employ dynamic channel allocation during playback for the player. Instead, it sticks with the same channel you've chosen for the player. This is ideal for situations where sounds cannot be called up on an instrument using MIDI program change events. It is also the only way to "override" FreeStyle's dynamic channel allocation, which you may want to avoid for other reasons. For an explanation of dynamic MIDI channel allocation, see the paragraph headed "Say goodbye to techno-details" on page 6.

To assign a sound in the sampler to a player in the Ensemble palette, a player template in the Player Library, or a riff in the Metronome dialog box, set up the sampler so that it will play the sound on a specific MIDI channel, and then assign the player to that same channel.

Figure 2-17: A list of MIDI channels. Devices that have been given the "Sampler" device category produce a list of their MIDI channels like this since they do not have built-in sounds. If you prefer this over sound lists, You can get it to happen for any device. (See "What to do for devices that do not appear in the pop-up menus" on page 25.) MIDI instruments that are set up with raw MIDI channels like this (instead of sound lists) do not take advantage of FreeStyle's dynamic MIDI channel allocation features.

Figure 2-18: Checking the sound assignment for players

Situation	Probable Causes	What You Should Do
The sound you hear for each player matches the sound you chose and everything seems to be fine.	Congratulations! You have successfully completed your FreeStyle installation.	You are now ready to begin using FreeStyle. Proceed to "What Next?" on page 32.
You don't hear any sound at all.	A cable is loose or there is a similar hardware problem of some kind.	Make sure your controller is turned on, your headphones are plugged in, cables are plugged in firmly, and so on.
You don't hear the correct sound.	The MIDI instrument may not be responding to FreeStyle's MIDI program change messages or bank select messages (if applicable) or it may not be in the correct mode for multi-timbral operation.	Try reselecting the sound from the Sound pop-up menu next to the player. If this doesn't work, try selecting a different sound. Does the sound change? If not, check the MIDI settings on the instrument to make sure it is set up to respond to MIDI program change and bank select messages. If the sound does change, does it sound wrong, too? If none of the sounds seem to match, check to see if the instrument is in the proper "mode" for multi-timbral operation.
You still don't hear the correct sound, even after trying the suggestions above.	FreeStyle's sound list may not match the sounds in the instrument for some reason.	See Chapter 7, "PatchList Manager" (page 151).

What Next?

Congratulations! You've completed your FreeStyle installation and are ready to begin making music. What you do next is up to you.

What to do	Where to go
To get a brief overview of FreeStyle's main features	Turn to Chapter 3, "Picture-book Tour" (page 33)
To get a step-by-step tutorial of FreeStyle	Turn to Chapter 4, "Tutorial" (page 75)
To set up sound lists for any MIDI devices that do not have them yet	Turn to Chapter 7, "PatchList Manager" (page 151)
To learn about a specific menu command	Turn to Chapter 5, "Quick Reference" (page 85)

Chapter 3 Picture-book Tour

An overview of FreeStyle's features

This chapter is for you, even if you don't like to read manuals

This chapter gives you a 1 or 2 page overview for each of FreeStyle's main features. You'll get a good idea of how to get around in the program just by scanning these pages. Once you have, you'll be ready to follow the step-by-step tutorial that follows or to begin recording music on your own. If you need further information about a feature, look it up in the Quick Reference section that begins on page 85.

Following along in FreeStyle

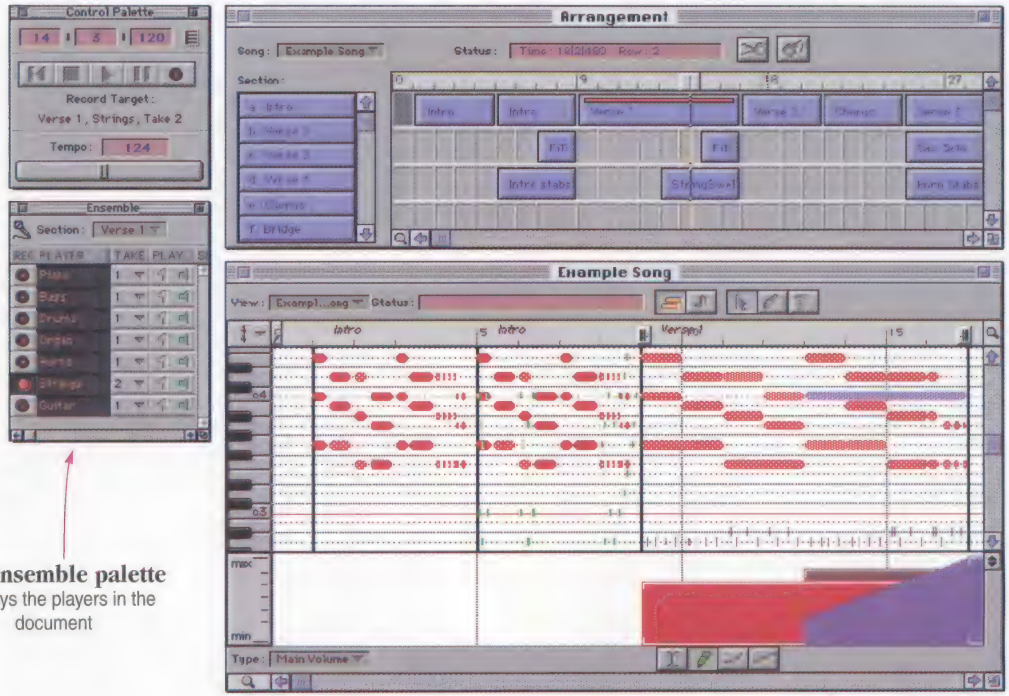
You can read this tour without actually being in front of your computer and without running FreeStyle. If you like, however, you can run FreeStyle so that you can try things in the software as you read. To do so, just double-click the FreeStyle program icon now to launch the program (if you haven't already done so). A new file appears on screen with the windows discussed in the next few pages.

FreeStyle's Main Palettes & Windows

A FreeStyle file provides the four windows shown below. The two windows on the right, the Arrangement window and the Document window, belong to a specific FreeStyle file. The two palettes on the left operate like standard Macintosh palettes: they remain on the screen even if there is no file open. When you open a file (or create a new one), the palettes reflect the document's tempo, ensemble, and other settings. If several files are open, the palettes show the settings for the front-most document.

The Control palette
Provides basic transport controls

The Arrangement window
Lets you arrange sections together into a song



The Ensemble palette
Displays the players in the document

The Document Window
Provides two views: Graphic Editing (with controller editing) & Notation

Figure 3-1: FreeStyle's four main windows.

The Control Palette

The Control Palette is one of the most important windows in FreeStyle. It provides buttons that look just like the controls on a CD Player or tape deck: play, stop, pause, rewind, and record. Use these buttons to get around in your music. They operate just like a standard tape deck, except that things happen instantly because you don't have to wait for tape to rewind.

The Control Palette also provides a tempo slider, which lets you change the tempo of your music at any time. Unlike a tape deck or CD player, however, changing the tempo of your music won't affect its pitch.

Finally, the Control Palette provides a counter that shows the current playback location in the music. The location is displayed in measures, beats, and ticks (there are 960 ticks per quarter note) or in minutes, seconds, and tenths of a second.

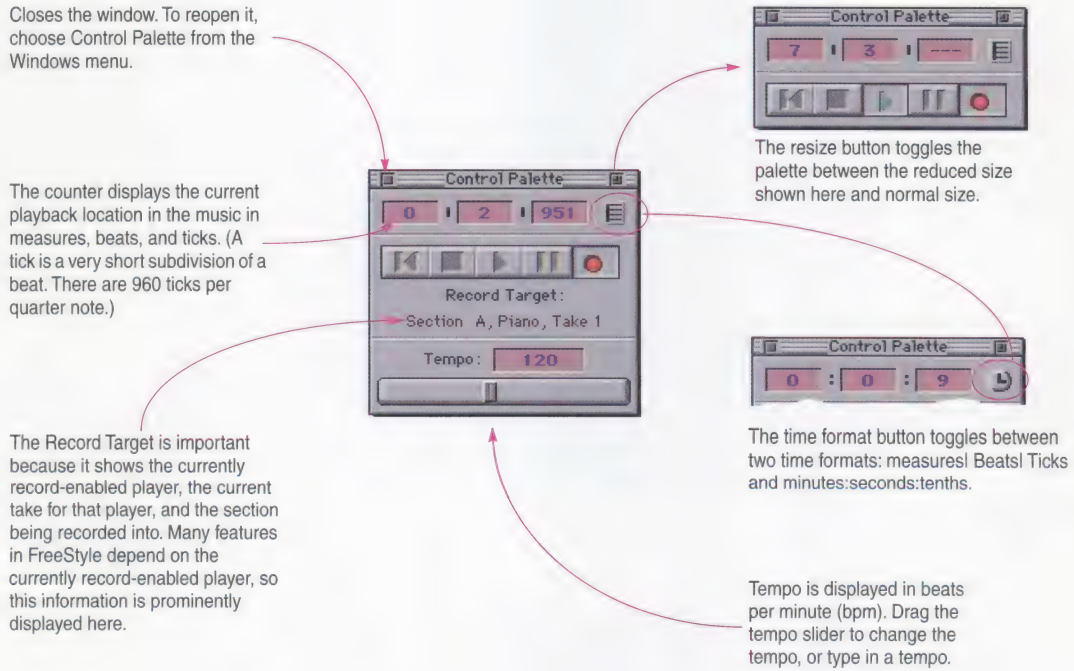


Figure 3-2: The Control Palette.

The Ensemble Palette

When you make music with FreeStyle, you do it with players in an ensemble. The *Ensemble Palette* shows you a list of all the players in a FreeStyle document. Each FreeStyle document has one ensemble. If several FreeStyle documents are open at that same time, the Ensemble palette shows the players for the document that is currently in front.

Players

Players in the Ensemble Palette act much like musicians: they play a certain instrument, and they can record multiple takes for each section of music. They only play one take at a time, but they remember every take you record, so you can play any take you want at any time. Just select it from the take pop-up menu. Each player has settings for volume, left/right panning, and more (see Figure 3-3 on page 37).

The currently record-enabled player

To record-enable a player, click the record button next to the player's name so that it lights up. Only one player can be record-enabled at a time. In addition to recording, many things you do in FreeStyle depend on the currently record-enabled player—anything, if fact, that has to do with a specific player or take. Here are some examples:

Activity	What the record-enabled player does
Playing your MIDI controller	Determines which player (instrument) you hear
Recording	Determines which player will record when you begin recording
Using the "Take" commands	Determines the player affected by New Take, Delete Take, etc.
Copying & pasting music	Determines which player "gets" the music when pasting
Using the Player Setup commands	Determines which player is affected by the commands
Using the Next/Previous commands	Determines which player is affected by Next/Previous Take, etc.
Inserting or editing controllers	Determines which player's controllers are affected

Working with takes

A *take* is a place to record a single player's part in a specific section of music. The current take for each player is displayed next to the player in the Ensemble window. Recording always takes place into the current take (for the currently record-enabled player), even if there is already music in the take. FreeStyle never erases existing music when recording new music. Each player can record an unlimited number of takes. Each player has a different set of takes for each section of music (Intro, Chorus, Verse, etc.) To view takes for a section, choose the section from the pop-up menu in the Graphic Editing/Notation window.

A take is a place to record music for a player. The number indicates the take. Create a new take or select existing takes from the pop-up menu. See "Working with takes" on page 36.

In FreeStyle, you can create as many sections as you want (Intro, Chorus, Verse, etc.) All sections share the same set of players, but each section has its own set of takes for each player. This box displays the current section. When you are viewing a song, it changes into a pop-up menu and you can use it to record-enable a section.

The resize button toggles the palette between two sizes: small and large. Use it to quickly view the entire window and then stash it off to the side again.

Click the record button next to a player to record-enable the player. Only one can be record-enabled at a time. See "The currently record-enabled player" on page 36 for more information.

Player names are important because you'll use them all the time to show and hide each player's music. When a player is hilighted, its notes are visible in the graphic editing and notation views. If it is not hilighted, its notes become invisible. Click a player name to hilight it. To hilight several players at once, shift-click each one. Double-click a name to change it.

Solos the player. Shift-click to solo several.

Mutes and unmutes the player.

Shows or hides the player in the notation or graphic editing view. Double-click it to change the player's color (or pattern on a black & white screen).

Drag column titles left or right to reorder the columns. Drag the right edge of the Sound or Player columns to resize them.

Drag the move handles to move players up or down in the list.

Press the pan control arrow to use this graphic pan control.

For both volume and pan, you can click the number to edit it directly. The number range is 0 to 127. For panning, zero is hard left.

Press the volume control arrow to use this graphic volume control.

The sounds you see in this pop-up menu are the sounds available in your MIDI synthesizer(s). See "Choosing Sounds for Your Players" on page 27 for more information.

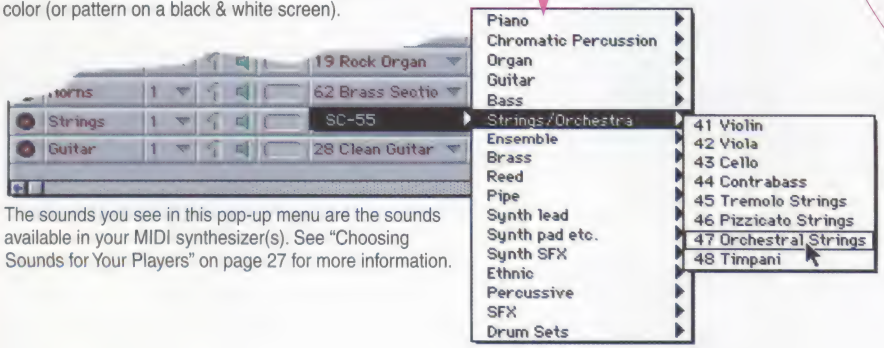


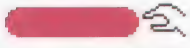
Figure 3-3: The Ensemble Palette.

The Graphic Editing View

FreeStyle provides two intuitive environments in which to view and edit your music: the graphic editing and notation views. These views are where you'll do the majority of your work in FreeStyle. Both views exist in the same window, and you toggle between them using the buttons at the top of the window shown in Figure 3-5 on page 39. Think of them as two windows through which you view the same music.

Both views can show any combination of players at any time. Just hilight the player names you want to see in the Ensemble palette. (See "Showing & Hiding Players" on page 47.) In the Graphic Editing view, each player is shown in a unique color or pattern (depending on the setting in the Preferences command). In the notation view, each player gets its own staff or grand staff.

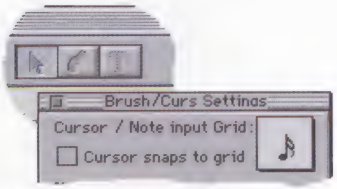
Both views can display any section or song in the document. Just choose the desired section or song from the pop-up menu at the top of the window. When you view a song, you see all of its sections together at once. In Figure 3-5, the window is displaying a song in which the *Intro* section plays twice, followed by the section *Verse 1*. The boundaries between sections are indicated by the heavy vertical lines in the note grid.



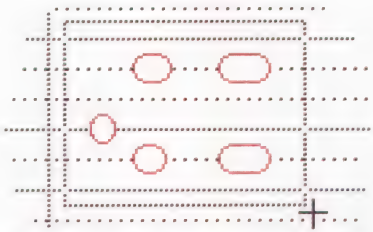
To change durations, hold the cursor near the end of a note (or one of several selected notes) until you see this hand. Then click and drag.

To change pitch, drag notes up or down. To change their time, drag them left or right. This works with a single note, as well as with a group of selected notes.

To duplicate notes, hold down the option key while dragging.

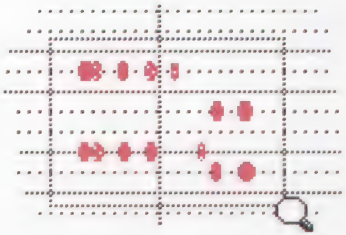


When dragging, you can make the cursor "snap" to a rhythmically even grid by double-clicking the arrow button to open the Brush/Cursor Settings. Check the **Cursor snaps to grid** option, and choose a resolution from the pop-up menu. If you only want to temporarily turn on grid snapping, hold down the shift key when you drag.



To select a group of notes, drag over them. Or shift-click each one.

To insert notes by hand, drag from left to right with the brush cursor. Drag up and down to set the pitch.



To magnify a portion of the note grid, hold down the option key and drag over it. This is great for detailed work. To return to the previous magnification, choose Zoom Back from the Windows menu.

Figure 3-4: Using the graphic editing view. All of these operations are done with the arrow tool, except where noted. Also, all of them can be done either on a single note or on a group of selected notes. When adjusting a group of notes, select them first and then do the operation shown here on one of the selected notes.

The **title bar** displays the name of the FreeStyle document that it belongs to.

Use the two **view buttons** to switch the window between the graphic view shown here and the notation view (shown on page 39).

View any **section** or **song** in the document by choosing it from this pop-up menu.

The **time line** shows measure and beat boundaries, as well as section names, playback loop markers, record loop markers, and more.

Notes appear as colored (or patterned) bars.

These three **cursor buttons** change the cursor. Use the **arrow** to drag and select notes. Use the **paintbrush** to draw in notes with the mouse. Use the **text** button (available in notation view only) to insert text of any kind.

Closes the FreeStyle document. To reopen it, choose Open from the File menu.

Choose a **time signature** from this pop-up menu.

Drag the **rewind marker** to choose where FreeStyle rewinds to.

When viewing a **song**, you see all of its sections here in the note grid, but you'll only see boundary lines like this for sections in the top row of the Arrangement window.

Adjust the **magnification** of the **pitch ruler** by pressing here.

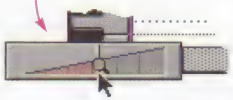
Drag the **record loop markers** to any measure you like.

The **scrolling wiper** indicates the current playback location. Click in the time line to move it. Drag it to "scrub" the music.

To **select** a note, click it. To select several, drag over them with the arrow tool, or shift-click each one. Double-click it to open the Note detail window below.

The **pitch ruler** shows you the pitch of the notes. (Middle C is C3.) Keys animate during playback, just like a player-piano. Click the keys to hear the pitch (using the instrument played by the currently record-enabled player). Option-drag to magnify a range of notes. Double-click a key to select all notes of that pitch. Command-drag to select all notes within a range.

Adjust the **magnification** of the **time line** by pressing here. This pop-up slider appears to let you dynamically zoom to any level.



The **controller grid** shows volume, pan, pitch bend, chorusing, reverb, and other effects. Choose the effect you would like to see from the **Type** pop-up menu. To hide the grid, uncheck the Controllers menu item in the Windows menu.

These four controller grid **cursor buttons** let you insert and edit controllers. Use the **I-beam** tool to select existing controllers for editing. Use the **pencil**, **curve**, and **line** tools to insert controllers by dragging.

Double-click a note to open the Note detail window.

Figure 3-5: The Graphic Editing View

The Notation View

The notation view displays your music in standard music notation. You can view any section or song at any time by choosing it from the View pop-up menu at the top of the window. Each player is transcribed on a single staff or "grand staff", depending on the instrument. Players can be shown or hidden at any time using the Ensemble window. (See "Showing & Hiding Players" on page 47.)

Dynamic transcription

The notation display is dynamic: you can fully edit the music using the same conventions as graphic editing. Changes in either view are immediately reflected in the other. When you record, the staves immediately fill up with the notes you play as you record. Unlike other simplistic music software programs, FreeStyle's notation transcription is a sophisticated interpretation of the raw MIDI data you record. For example, if you play swing, turn on the *Straighten Swing* feature in the Setup menu (under the *Notation* menu item) and FreeStyle writes it using straight rhythms instead of triplets.

What you see is what you get

FreeStyle's notation view is a WYSIWYG (*what you see is what you get*) page view: what you see on the screen is exactly what you will get when you print. Music is automatically placed on as many pages as are necessary. FreeStyle manages the note spacing, measures widths, and staff spacing so that musical symbols never collide. The section "Page Layout in the Notation View" on page 52 provides more information about page formatting.

Automatic instrument part transposition

When you display more than one player at a time in the Notation view, FreeStyle uses concert pitch for all players. When you display one player by itself, FreeStyle automatically transposes the part according to standard practice for the instrument. For example, alto sax players are transposed to Eb. The *Edit Player Info* command in the Setup menu lets you choose how an individual player is transposed, as well as the amount of space needed between its staff and neighboring staves.

Custom Formatting and Page Layout

FreeStyle has two independent groups of page layout settings. One group affects only single-player parts; the other is in effect when you view or print multiple players simultaneously. You can use these separate settings to create distinct formats for instrument parts and the full score. Almost any aspect of the page can be customized, from the staff size and margin settings to measure numbering and copyright notices.

Note insertion and editing works just like it does in Graphic Editing

Use the same conventions as graphic editing (Figure 3-4 on page 38) for editing notes, including selecting, dragging to change pitch or time, duplicating, selecting, magnifying, changing duration, and so on.


Drag to move or change pitch


Option-drag to duplicate


Click near the end of the note to change duration

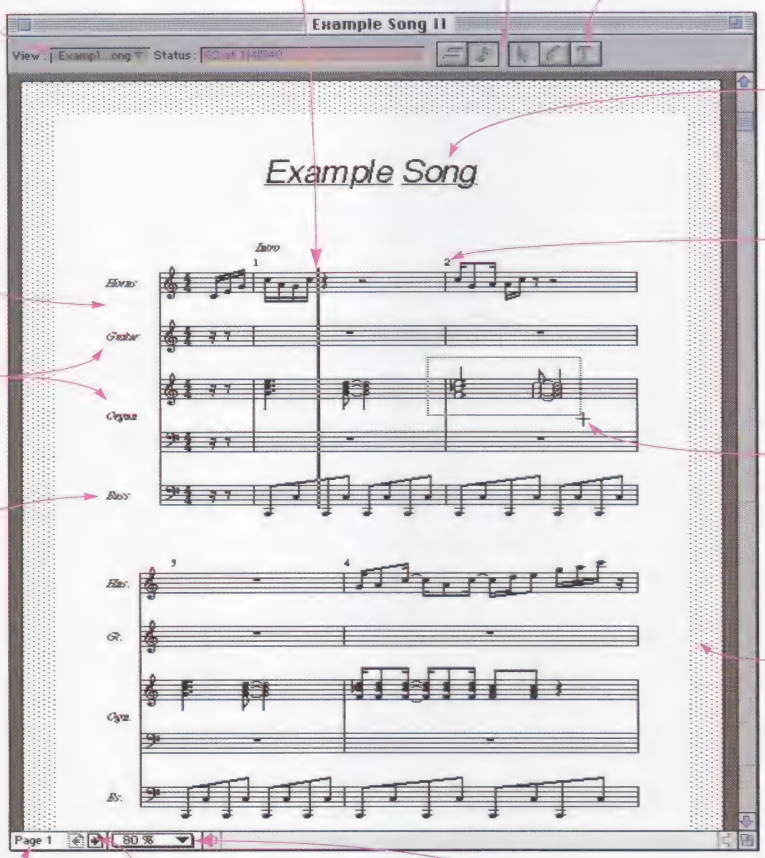

Insert notes with the brush tool

View any **section** or **song** in the document by choosing it from this pop-up menu.

The **scrolling wiper** shows you the current playback location. Drag it to "scrub" the music.

Use the two **view buttons** to switch the window between the notation view shown here and the graphic editing view (shown on page 39).

Use the **Text tool** to insert text anywhere on the page. Choose the font, style, and so on from the Text menu.



Text can be placed anywhere on the page. To learn more, see "Working With Text in the Notation View" on page 50.

To **reorder** the staves, change their order in the Ensemble palette by dragging their move handles.

To set the font and style for **measure numbers** and **section names**, click one and then use the Text menu settings. To change their distance from the staff, drag them.

As with graphic editing, you can choose to view any player or combination of players. Just show or hide them as desired. See Figure 3-3 on page 37 to learn how to show and hide players.

Select notes in the same manner as graphic editing. Notes remain selected when you switch between the two views.

FreeStyle **automatically formats** the page for you using the settings for each player. To adjust the space above or below a staff, use the Edit Player Info command in the Setup menu.

The **shaded border** reflects the print area of the page: anything inside the shaded area will not print. Its size is determined by the printer you are using (whatever is currently selected in the Chooser command in the Apple menu).

To **jump** to a particular page, double-click the page number and then type in the desired page number.

Use the page buttons to move to the next or previous page.

Choose a **magnification** from this pop-up menu to reduce or enlarge the display. You can also zoom in on a particular area by option-dragging over it. To get back to normal size, choose **Zoom Normal** from the Windows menu.

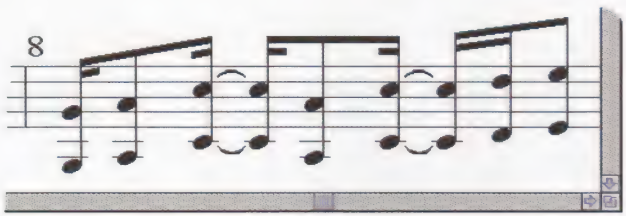


Figure 3-6: The Notation View

Sections

Sections are the basic building blocks of music in FreeStyle. A section is a place to store music. It can be anything, from a 2-bar drum loop to a 300-bar orchestral movement. It consists of a "pickup" measure, a start, an end, and an "overhang" measure. Most importantly, each section has its own set of takes for each player. For example, take 1 for the Piano player in the *Intro* section is different from the Piano player's take 1 in the *Verse*. Only one take is active for each player at any time in a section. But different players can play different takes. For example, the piano player might be playing take 3 in the Verse, while the bass player is playing take 6.

Creating a section

Creating a section is easy. Just choose New Section from the Song menu. FreeStyle asks you to name it. After you do so and click OK, the section appears at the bottom of the Section list in the Arrangement window. It also appears in the Graphic Editing/Notation window, empty and ready to be recorded into.

Changing the length of a section

Sections can be of any length. They are initially given a length of four bars, but if you record past the end of a section, it will grow to accommodate the notes you play in. If the section has been placed in a song and it butts up against another section, FreeStyle won't automatically grow the section any more.

To adjust the length of a section, drag the heavy, black double-lined vertical end bar displayed in the Graphic Editing window in the note grid. You can also adjust its length anywhere it appears in the Arrangement window grid: just grab the right edge of the section and drag it.

Letters of the alphabet are automatically assigned to sections

Each time you add a new section, it is automatically assigned a letter of the alphabet. This letter is displayed before its name in the Section list in the Arrangement window. When you type the Section's letter, the section is added to the end of the current song if the Arrangement window is active.

Recording into a section

Recorded notes and controller data always go into the currently record-enabled section (as well as the current take for the record-enabled player). To record-enable a section, either choose it from the pop-up menu in the Ensemble window, or click any instance of it in the layout grid of the Arrangement window. A red bar appears on the currently record-enabled section in the Arrangement grid.

When using sections in FreeStyle, you can think in terms of "patterns", but you don't have to. You can handle sections in a linear fashion as well. FreeStyle even lets you go back and forth between thinking linearly and thinking in terms of patterns. For more information, see "Recording Into a Song" on page 80.

Pickup and overhang measures

Each section has a pickup measure and an overhang measure. This makes it possible to record notes into a section even if they occur before the downbeat of bar 1, or after what would normally be considered the last bar of the section. The pickup and overhang measures are part of the section: they go with the section wherever the section goes. But the best part is that they don't get in the way. For example, when you work with sections in a song, a four bar section is still a four bar section, even if it has a few pickup notes.

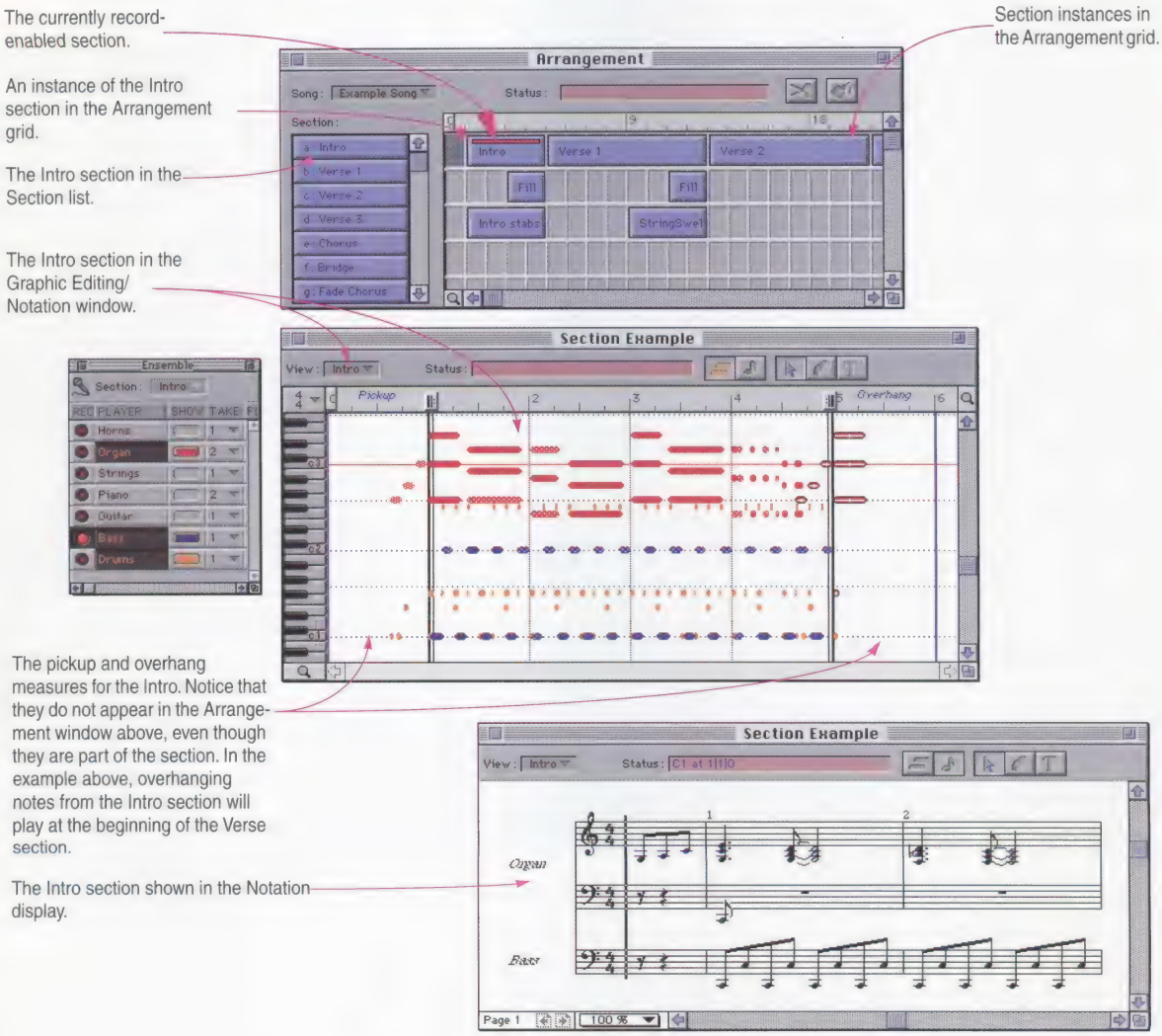


Figure 3-7: Sections

Songs & The Arrangement Window

A Song is created in the Arrangement window by placing sections along a time line. There is no limit to the number of songs you can create in a FreeStyle document, so you can try many different versions of the same song.

Creating a song

Creating a song is easy. Just choose New Song from the Song menu. FreeStyle asks you to name it. After you do so and click OK, the song appears in the Arrangement window, as well as the Graphic Editing/Notation window. It is ready for you to place sections into it.

Building a song in the Arrangement window

To add sections to the song, drag them from the Section list on left into the grid on the right. You can add the same section as many times as you want. For example, the chorus section may appear four times in your song. So just drag it from the Section list into the grid four times and place the four copies where they should go. The four copies are called *instances* of the original section. If you change the original, they all change, too. This doesn't have to be the case, though. If you want to make a copy that is different, use the Duplicate Section command to make a copy of the original, and then modify the duplicate section.

You can freely drag sections around in the Arrangement grid. Place sections in any row you wish; sections placed above or below one another play at the same time. If you place a section between two other back-to-back sections, FreeStyle automatically moves them to squeeze in the new section. Sections in the same row cannot overlap. To overlap them, place them in different rows.

The primary song structure row (top row)

The top row is the *Primary Song Structure* row. If you have sections named *verse*, *chorus*, etc. put them in the top row because doing so causes their names to appear in the Graphic Editing view time line. Sections containing fills, solos, or other material should go in the rows below.

Changing section lengths in the Arrangement grid

To lengthen and shorten sections in the Arrangement grid, drag their right edges.

Viewing a song in the Graphic editing and Notation views

The graphic editing and notation views can show an entire song as easily as a single section. Just choose the song from the pop-up menu in the upper left-hand corner of the window. The only difference is that in a song, you see all of its sections at once. Remember, sections in the top row of the Arrangement window grid appear by name in the time line, and their boundaries are indicated in the note grid by heavy vertical lines. In the Notation view, their names appear above each staff system. While viewing a song, you can rename it or get rid of it using the commands in the Song menu.

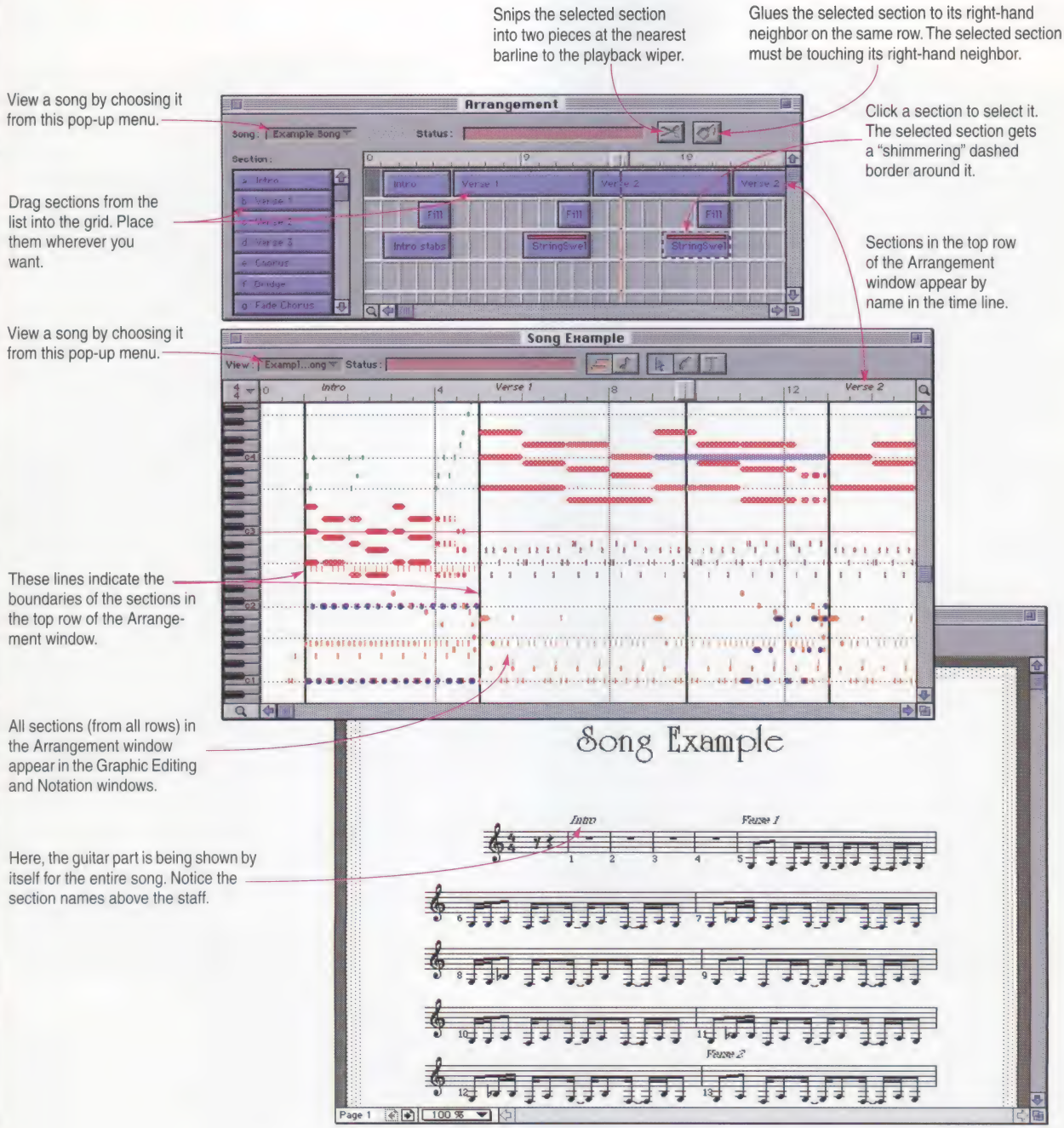


Figure 3-8: Songs & the Arrangement window

The Current Section or Song

The current section or song is the one you are listening to, viewing, and recording into in the Arrangement, Graphic Editing, and Notation windows. Most of the commands in the Song menu affect the current section or song. In FreeStyle, use these pop-up menus to always be aware of which section or song you are working on.

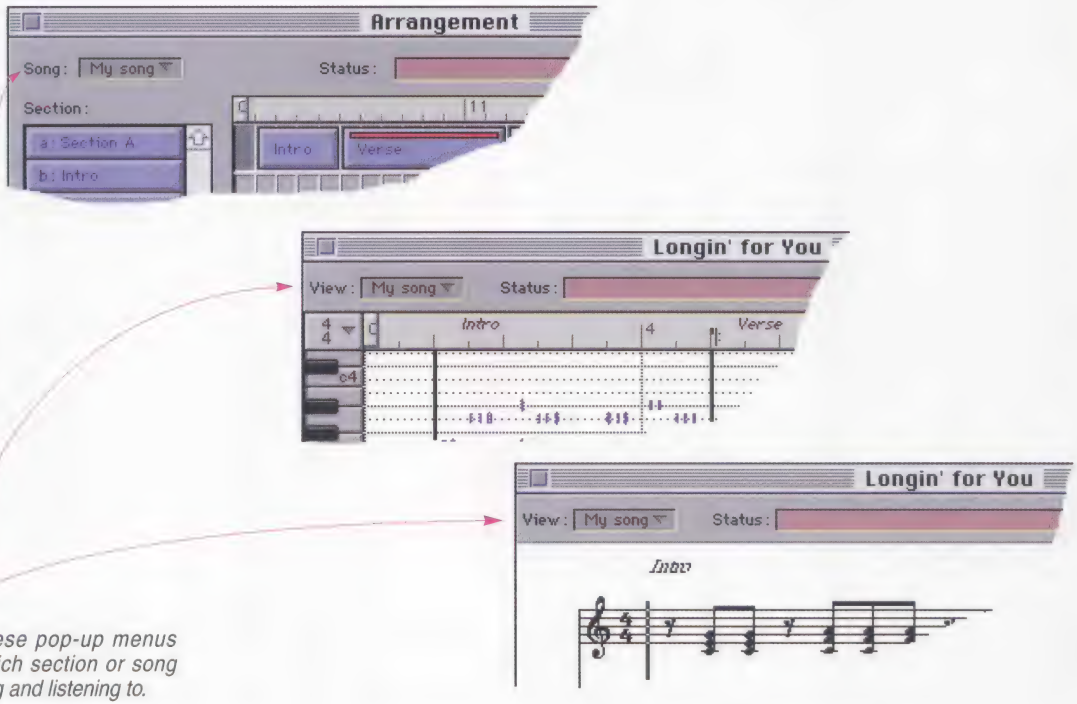


Figure 3-9: These pop-up menus determine which section or song you are viewing and listening to.

The currently record-enabled section is shown here. When viewing an individual section in the Graphic Editing/ Notation window, this only displays the name. When you are viewing a song, this box turns into an active pop-up menu from which you can choose any section to record-enable it.

Showing & Hiding Players

As you work with either the Notation or Graphic Editing views, you'll constantly be changing what players you are viewing at any given time. For example, you may want to view a single player by itself, without the clutter of other instruments getting in the way.

Use the Ensemble window to control whether players are visible or hidden using the techniques below:

To accomplish this:	Do this:
To view a single player alone (and hide all other players)	Click the player's name
To turn a single player on or off without changing the others	Shift-click the player's name or Click the colored tab in the "Show" column next to its name (or its record button)
To view a certain set of players	Click the name of the first player and then shift-click the others
To view all players	Shift-click the name of all players that are currently hidden

☛ When changing the status of more than one player (making three more players visible for example), it is faster to do so in the Graphic Editing view than the Notation view. Try switching to Graphic Editing first and switch back to notation when you are done.

Click a player's name to view it alone.

To turn a player on or off without changing the others, shift-click its name, or...

...click its color tab in the Show column.

Figure 3-10: Showing and hiding players in the Ensemble window.

Choosing What To Record Into

When recording, you always need to choose the section, player, and take you want to record into:

1. **Choose a section to record into.**

   Recording always takes place into a section. There are a number of ways to choose the section you want as shown below. If you are working in a new file, a new section is already selected and ready to go for you.

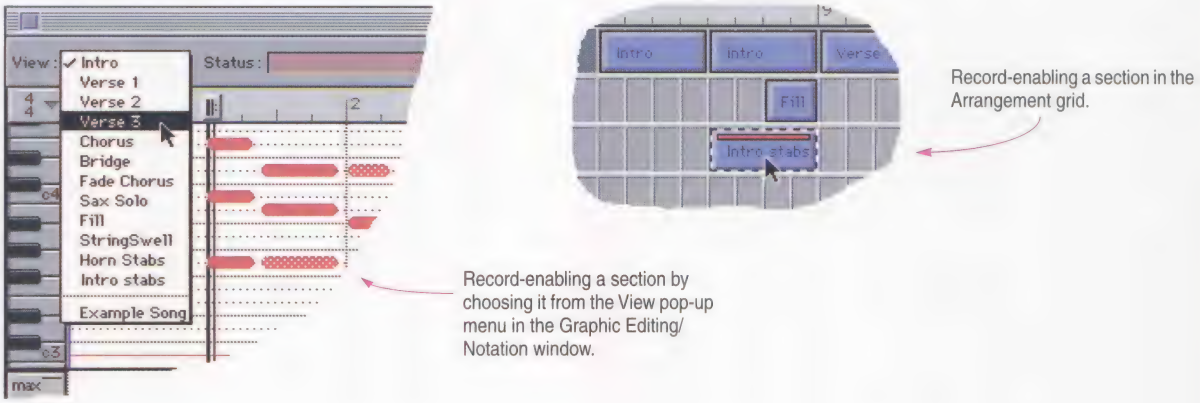


Figure 3-11: Choosing a section to record into

2. **Choose a player to record by clicking the red record button next to its name in the Ensemble palette.**

   Only one player can record at a time. Notice that you can record-enable a player without affecting what other players are showing.

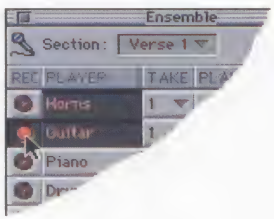


Figure 3-12: Record-enabling a player

3. **Choose a take for the player by selecting it from the Take pop-up menu next to the player's name.**

   You can record into a new take by choosing new from the take pop-up menu. You can also record into an existing take, even if it already has music in it. FreeStyle will just add the new music you record to what is already there.

Figure 3-13: Choosing a take to record into

4. **Notice that all of the above information is displayed in the Control palette for your convenience under the heading "Record Target".**

Figure 3-14: Record Target Status

☛ You now know enough about FreeStyle to skip to the Tutorial chapter on page 33, if you like. Once you've completed the tutorial, you can return here to continue the tour.

Working With Text in the Notation View

FreeStyle automatically provides measure numbers and section names for you. When viewing or printing more than a single player, FreeStyle will also automatically provide staff names for each player. But you needn't stop there: you can add any other text that you like using the Text Tool. You can add titles, subtitles, the composer, instrument part names, headers, footers, page numbers, copyright notices, and other text in standard Macintosh fashion as shown below.

To insert or edit text, begin by clicking the Text button to get the Text tool.

Click or drag anywhere on the page to create a text box and type the desired text. If you click on existing text, you begin editing it. To insert a **page number** or **instrument name** that automatically updates, use the Text menu commands.

To select individual words or letters, click and drag over them with the Text Tool. To select or move the whole text box, use the Arrow Tool.

You can change the font, size, and style of any selected text (including automatically generated measure numbers, staff names, and section names) using the settings in the Text menu.

Using the Text Menu

If you make selections in the text menu while text is selected, you will affect the selected text. You can also control the appearance and placement of text you are about to enter by changing the settings when no text is selected. The Font, Style, and Size menu items operate as standard Macintosh text menu commands. If you need further information about them, see "Text Menu" on page 126. The page menu item is unique because it allows you make text appear on multiple pages.

Use the Insert Page Number/Insert Part Name commands to insert special text that changes according to what you are viewing. Page numbers always show the number of the visible page. A part name shows the name of the currently visible player when you are viewing only a single player. When you are viewing multiple players, the part name is "Score". You must use the text tool to create a text box before you choose "Insert Page Number" or "Insert Part Name". These commands *insert* text into an existing text box. FreeStyle will not let you select just part of a page number or part name, but otherwise these bits of text act just like any other word in a text box. You can cut, copy, paste or delete them, and change their font, size, and style just as with any other text.

Adding a part name to all parts

To add a part name to all parts that automatically shows the correct instrument name:

1. **Make sure only a single player is currently visible.**
2. **Make a text box by selecting the Text Tool and clicking on the page where you want the text to appear.**
3. **Choose the *Insert Part Name* command from the Text menu.**

   You should see the name of that player appear in the text box.
4. **Select the part name by clicking to the left or right of it inside the text box and dragging across the name.**
5. **Make font, size, and style selections from the Text menu to set the appearance of the part name.**
6. **Finally, choose a setting other than This Page Only from the pages menu.**

   For example, if you want the text to appear on the first page of each part, choose First Pages. You may want to repeat this process a second time with a different Pages setting; it is common to show the part name in large letters on the first page of each part, and in smaller letters on subsequent pages.
7. **Press the enter key on your Macintosh keyboard to stop editing the text.**

Adding page numbers

To add page numbers:

1. **Make sure no text is selected by clicking on empty space with the arrow tool.**
2. **Select *Center* from the justify menu.**

   This will help to automatically align the text box you are about to insert.
3. **Select the text tool by clicking on the Text button at the top of the main window.**
4. **Click on the page at the height you want the text to appear.**

   FreeStyle will create a text box centered on the printable area of the page with a blinking cursor right in the middle.
5. **Choose a font, size, and style for the page numbers from the Text Menu.**
6. **Choose "Insert Page Number" from the Text menu.**
7. **Select "All Pages" from the Text menu.**
8. **Press the "Enter" key on your Macintosh keyboard to stop editing the text.**

Page Layout in the Notation View

FreeStyle gives you a considerable amount of control over the page layout in the notation view, while at the same time doing much of the work automatically for you.

Two separate page layouts: instrument parts and scores

FreeStyle provides two separate page layouts for a document: a single-player layout for instrument parts (used when any player is displayed by itself) and a score layout for scores (viewing multiple players together). For example, you might have different text, staff sizes, and margin settings for individual instrument parts than you do for the score. To view and work with the score layout, simply show two or more players. To view the single-player layout, show only one player (it doesn't matter which one).

The Page Layout dialog

Choose "Page Layout" from the "File" menu to get the Page Layout dialog below.

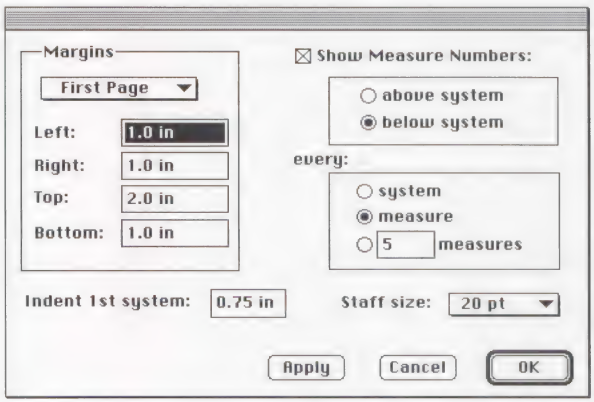


Figure 3-15: The Page Layout dialog

Setting margins

The margin settings control the boundaries of staff systems on the page. There are separate margin settings for the first page, left (even numbered) pages, and right (odd numbered) pages.

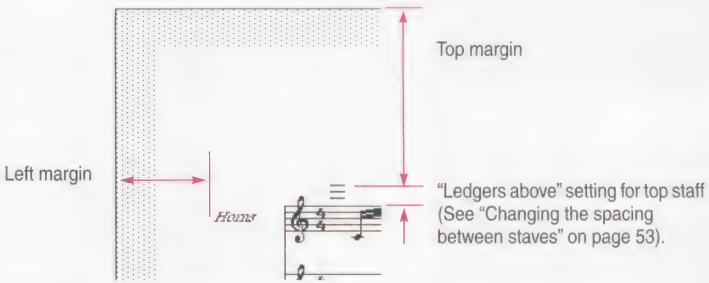


Figure 3-16: The margin settings

Indenting the first system

FreeStyle adds additional indentation for the first system on the first page of music. Use this setting to specify how far it will be indented.

Units

You can express your margin settings and indentation in inches (in), centimeters (cm), millimeters (mm), or points (pt). If you don't provide units, FreeStyle will assume you mean inches.

Changing the staff size

There are two ways to affect the size of the music that FreeStyle will print. If you use the staff size setting in the Page Layout dialog, FreeStyle will show you the page the way it would print. This method affects only the size of your music, leaving staff names and other text unchanged. Since your printer probably has higher resolution than your computer monitor, you may choose a staff size that is too small to view comfortably on your screen. If so, you can use the zoom setting in the lower left of the Notation View to zoom in on the staves.

The other way to change the size of the printed music is to choose a "Smart Scaling" setting from the Page Setup dialog. If you want *everything* to be 80% of normal size, type 80 into the Smart Scaling setting. Since the size of the paper in your printer doesn't change, FreeStyle changes the size of the white page area in the notation display so that *after scaling*, it will correspond to the actual page size. This method scales everything that FreeStyle prints, so all text, section names, measure numbers, etc. will come out at 80% of normal size. Also any text you've placed on the page in a specific relation to the margins will probably need to be repositioned.

Changing the spacing between staves

You can use the Edit Player Info command (Figure 3-32 on page 69) to change the way staves are spaced. This is the only aspect of your page layout that is the same for parts and scores. The *piano* setting in the clef pop-up menu gives the player two staves, with bass and treble clefs. All the other choices result in a single staff for the player. The ledger line settings in the window control how much space is needed around this player's staff or staves, expressed as a number of ledger lines (equal to the space between two staff lines). When working with a two-staff player ("Piano" clef), the setting called *ledger lines between* controls how much space appears between the player's two staves.

Paper size and orientation

Your choice of paper sizes and orientations is determined by the printer you are using. These settings are available when you choose Page Setup from the File menu. Aside from the "Smart Scaling", paper size, and orientation, the other settings in the Page Setup dialog are usually not needed when using FreeStyle. For more information on the LaserWriter Page Setup dialog, see "Page Setup" on page 89.

Saving text setups and page layouts using Stationery

Once you have chosen page sizes, margins and formatting options, entered and styled page numbers, part names, your song title, composer name, and copyright notices, you may not want to do it all again for your next song. Fortunately, if you save your file as "Stationery" (see "Stationery" on page 88) you will be able to create new, empty files with the same setup, just by opening the Stationery file.

Using Controller Effects to Enhance Your Music

What exactly is a controller?

The word *controller* is shorthand for the MIDI term continuous controller data, which is a type of MIDI information. Continuous controllers are used to add musical effects that change smoothly over time, such as volume changes (crescendos & decrescendos), amount of vibrato (which often increases in intensity over the duration of a note), and pitch bend to name a few. There are over a hundred types of controllers, although only about 30 are commonly used. In most cases, controllers affect whatever notes are playing at the time that they occur. In addition, they usually consist of a stream of individual data events that change their value over time. For example, a crescendo that occurs over the period of one bar might actually consist of 50 or 60 individual volume control MIDI events spaced only a few fractions of a second apart. In addition, each one has a value that is a little higher than the one before it (controllers have a value range from 0 to 127). To our ears, the net effect sounds like a smooth crescendo.

Since Controllers have this dual nature (individual events that constitute a smooth gesture) FreeStyle displays them in a way that lets you see where each event is, as well as the overall shape. Whenever you see a bracket in the controller view it indicates that there is a single event in effect for the entire duration of the bracket.

Note velocities (the "velocity" of a note determines how loud it is) are the one exception to the way that controllers are displayed. Since there is only one velocity setting for each note, they are drawn as vertical bars, rather than as a connected shape.

Drawing controllers in the controller grid

Controllers are inserted, displayed, and edited in the controller grid, which appears right below the note grid in the Graphic Editing view. To display the grid, display the Graphic Editing view and then choose *Controllers* from the Windows menu, or press command-= (equal sign) instead as a shortcut. In FreeStyle's controller grid, you can draw a single controller by clicking once with the pencil tool to achieve a sudden effect, or you can draw a smooth curve by dragging the pencil, line, and curve tools. When inserting controllers, you do so for one player at a time: the currently record-enabled player. So any time you draw controllers, first record-enable the player you want to edit.

Selecting controllers for editing

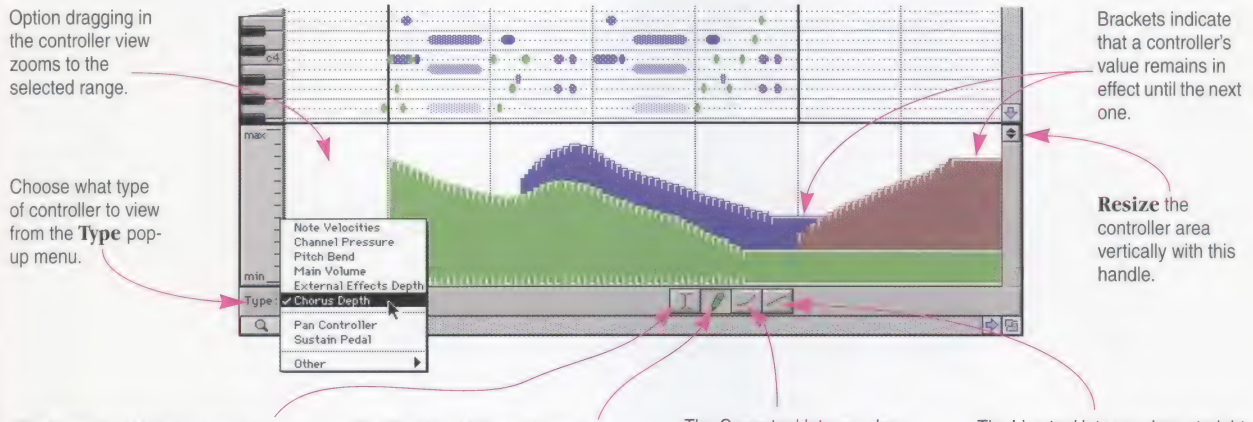
To select controllers for editing, use the I-beam tool and then drag over them. If several Players' controllers overlap in a section, show only the Players whose controllers you want to edit and hide the others. (See "Showing & Hiding Players" on page 47.)

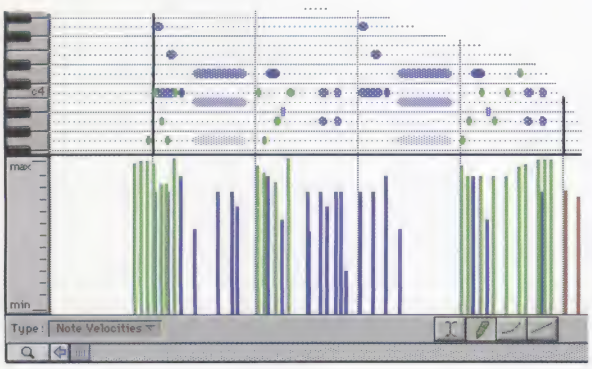
FreeStyle is intelligent about editing controllers with notes

Many sequencers treat notes and controllers completely separately, and they leave it up to you to remember to edit the controllers after you edit the notes they affect. For example, if you copy some notes that also have a crescendo, you'd need to remember to copy and paste the crescendo after doing so with the notes.

FreeStyle helps you out by automatically selecting controllers when you select notes by dragging a selection box over them. When you copy or modify the notes, the controller information will come along for the ride. FreeStyle decides whether or not to auto-select the controller information based on the amount of overlap that the selected notes have with the other notes around them. Since there are times when FreeStyle may not select controllers you want it to, or may select ones you don't, you should keep the controllers view open if you are not sure what is happening. Also, if you find that you do not like the decisions that FreeStyle makes about when to select controllers, there is a preference to turn auto selection off. See "Controller Preferences" on page 98.

FreeStyle also gives you a hand when it comes to pasting controllers. In other sequencers, when you paste controller information on top of other controller information, the events are simply merged together. This almost always yields horrible sounding results. FreeStyle takes a more intelligent approach. It looks at the controllers that are being merged together, and if there is a conflict it only keeps the controllers you are pasting. What you are pasting always takes precedence over the destination. In this way the notes that you paste will sound the same as when they were copied. (You can reverse this behavior by checking the "keep destination controllers" preference. See "Controller Preferences" on page 98 for more information.)





Note velocities (their initial volume when they are first played) appear as bars like this. You can shape them with the pencil, curve, and line tools. Also see "Note Detail dialog" on page 39.

Figure 3-17: Controllers

Playback Loops

There are two kinds of loops that you can use in FreeStyle. A Record Loop (see "Set up the record loop" on page 76) causes time to cycle between two points. Whenever the end of a record loop is reached, the time wiper jumps back to the beginning of the loop and all players start playing whatever notes they have recorded at that time. A record loop is merely a convenience for recording notes repeatedly over the same section of time.

A *playback loop*, on the other hand, does not affect the passage of time at all. It affects the performance of a single take by a single player in a single section of music. When you create a playback loop for a take, you are asking FreeStyle to repeat one or more bars of the take for some number of times. For example, you could record one bar of a drum groove and create a playback loop which would cause that one bar to repeat four times, or until the end of the section. But while the drum notes are repeating, the time wiper will continue to move forward normally so other players can play normally. If the piano player does not have a playback loop, then when the wiper is in bar 4 the piano will be playing the notes that it has in bar 4, but the drummer will be playing the third repeat of the notes that it has in bar 1.

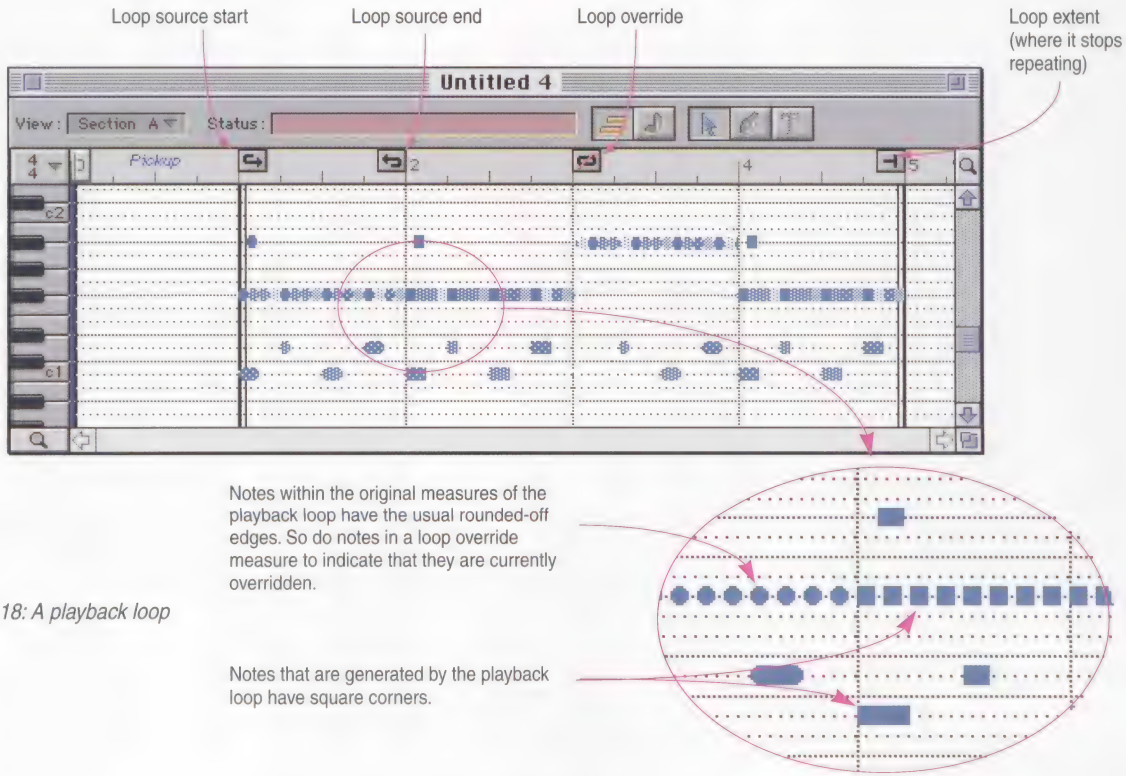


Figure 3-18: A playback loop

Advantages of playback loops

Using a playback loop has a few benefits. First, it saves time. You don't have to copy and paste your one bar of drum notes many times to get the effect you want. Secondly, it saves memory in the computer. It takes less space to store one bar of notes with the directions to repeat those notes ten times than it does to store ten identical copies of the notes. Thirdly, it's convenient to edit. When you change a note that is part of a playback loop, the note will change for all repeats of the note as well.

Playback loop overrides

FreeStyle has an extra feature for playback loops called *loop overrides*. Loop overrides make it possible for you to make changes to measures within a playback loop without affecting the other repeating measures in the loop. For example, suppose you have a 1-bar drum pattern that is looping throughout your entire chorus. If you want to add a couple of fills here and there but leave the rest of the loop intact, you can just override the loop for the bars you want to change. In fact, if you just want to overdub your changes on top of the existing loop, FreeStyle will automatically make loop overrides for the measures that you record on top of.

Using playback loops to build a drum part

Here is an excellent approach for developing a drum part. Start by using a Riff Metronome (see "FreeStyle's "Riff" Metronome" on page 60) so you have a drum beat to play to while you record your other parts. When the rest of your music is in place and you want to finalize your drum part, use the *Become Player* button in the Metronome dialog to convert your Riff Metronome into an editable drum player (see Figure 3-21 on page 60). For sections that are longer than the metronome riff, the Become Player button will create a playback loop for the new drum player's current take which will repeat the drum riff until the end of the section. Next, override just the drum measures you want to change using one of the methods described below. Change the notes in the overridden measures, and you're done!

Here are some other things to keep in mind when using playback loops: The markers that show playback loop definitions appear only in the graphic editing view's time line. They aren't visible in the notation view. In the graphic editing view, original notes appear with rounded edges and repeated notes appear with square edges. In the notation view, repeated notes are indistinguishable from original notes.

Creating a playback loop

To create a playback loop for a player, first record-enable the player that you want to loop and select the take which you want to affect. Then switch to the graphic editing view by clicking on the graphic editing button and use one of the following two methods:

- **Looping the selected notes**: with the arrow tool, drag a selection box around the notes that you want to repeat. They will turn white to indicate that they are selected. Choose Create Play Loop from the Region menu. Loop markers will appear in the time line to indicate the beginning of the loop source material, the end of the loop source material, and the end of the last repetition of the loop.

- **Looping the current measure**: If any notes are selected, deselect them by clicking on empty space in the graphic editing grid. Click in the time line to position the time wiper within a measure that you wish to contain the source material for the loop. Choose Create Play Loop from the Region menu. Loop markers will appear in the time line to indicate the beginning of the loop source material, the end of the loop source material, and the end of the last repetition of the loop (see Figure 3-18 on page 56).

☛ If loop markers do not appear in the time line, try zooming time in with the zoom slider (magnifying glass) in the lower left of the editing window. Loop markers do not appear in the time line when you are zoomed way out and measure lines are very close together. If zooming doesn't make them appear, then you have the wrong player selected or the wrong take selected.

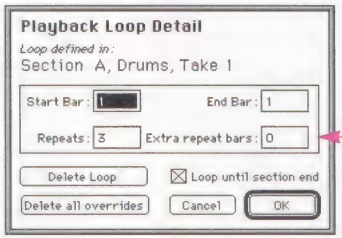
Deleting a playback loop

To delete a playback loop, select the take that contains the loop and show only that take's player in the graphic editing view. Playback loop markers will appear in the time line. Click any loop marker other than an override marker and hit the delete key to delete the loop. When the loop is removed, all repeating notes will go away. The original source notes for the loop and all notes entered into override measures will remain.

Modifying a playback loop

To change a playback loop, simply drag the loop markers in the graphic editing view's time line. Dragging the loop source start marker will move both the source start and the source end marker, thereby preserving the length of the source material. Dragging the loop source end marker will shorten or extend the loop source area without affecting the loop source start point. Dragging the loop extent marker will change the number of repeats in the loop. If the loop extent marker is dragged so it lines up with the section end double-lines in the graphic editing view, then the loop will automatically resize when the section size changes (it will always loop until the end of the section). Loop Override markers cannot be dragged -- they can only be selected and deleted.

An alternate way to change the settings of a playback loop is to double-click on a loop marker. This will bring up the playback loop Detail dialog where you can easily set the loop start bar, end bar, and number of repeats.



Extra repeat bars
If your loop source is more than 1 bar long and you want the last repeat of your loop to be incomplete, this is where you say how many bars the last repeat should include.

Figure 3-19: Playback loop notes

Creating a playback loop override

To create an override measure within an existing playback loop, first select the take that contains the loop and record-enable its player. Switch to the graphic editing view by clicking on the graphic editing button. Playback loop markers will appear in the time line. Then do one of the following:

- **Manual override**: Click in the time line to position the time wiper within the measure that you wish to override. You must choose one of the repeating measures within the loop, not one of the loop source measures. Choose "Override Play Loop" from the Region menu.

- **Automatic override**: With the record button on in the control palette, play new notes anywhere within the loop. If you play into the source measures of the loop, all repeats of the loop will receive the new notes and no override will be created. If you play into a repeat bar of the loop, the new material appears only in that measure.

In either case above, a loop override marker will appear in the time line to indicate that the measure is now editable independently from the rest of the loop. Also, you will notice that all notes in the override measure (including the new ones you just played in) now have rounded edges to indicate that they are no longer just repeating ghosts of previous notes.

These notes have rounded edges because they belong to a loop override measure and can be edited independently from the rest of the loop.

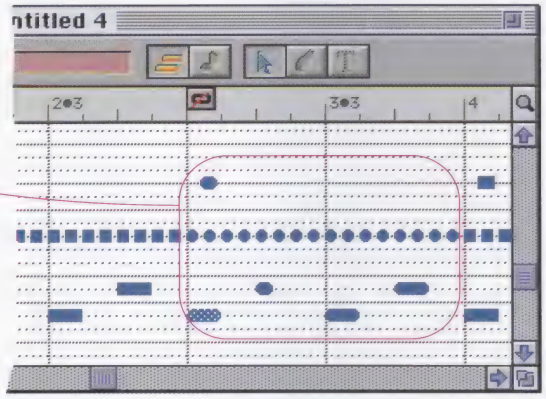


Figure 3-20: Playback loop override

Deleting a playback loop override

To delete a playback loop override within an existing playback loop, first select the take that contains the loop and show only that take's player in the graphic editing view. Playback loop markers will appear in the time line. Click on the override marker in the measure that you wish to revert and press the delete key to delete the override. When the override is removed, the take will revert to playing and showing ghosts of the original looping notes (with square edges). It is important to note that deleting an override does not delete whatever extra notes were recorded within the override. If you override the measure again, those notes will appear again. If you want the notes in your override to be deleted as well, select them and delete them before you delete the override marker.

☛ When you add a playback loop to a take which contains existing notes beyond the end of the loop source, the playback loop will act like an opaque layer on top of whatever notes were previously recorded. Repeating notes will temporarily obscure whatever used to be in the repeat bars until the playback loop is removed -- at which time the old notes will become visible again. When you override a playback loop in a given measure, it is like cutting a hole in the opaque layer and looking through to the raw take underneath. Hence, if you add a playback loop to a take which obscures a group of old notes, you may be surprised to find them popping up in your override measures. To avoid this, delete unwanted notes from a take before adding a playback loop.

The Metronome

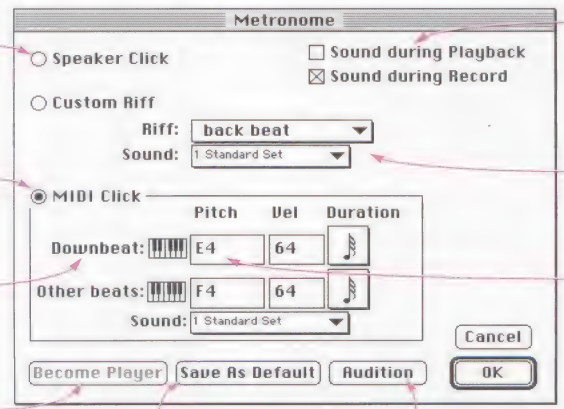
Recording with the metronome is essential

FreeStyle provides three ways to hear a metronome while you record. Recording with the metronome is important because it ensures that FreeStyle's measures and beats properly match what you play. You have three choices for a metronome sound: a standard click sound on the Macintosh speaker, a MIDI click produced by one of your MIDI instruments, such as a side stick sound on a drum machine or drum kit, or FreeStyle's "Riff Metronome".

FreeStyle's metronome riffs are set up for a General MIDI drum kit. If necessary, you can adjust them for a non-GM device. Just open them in FreeStyle (using the Open command in the File menu), edit the notes, and save again as a standard MIDI file in the Metronomes folder.

FreeStyle's "Riff" Metronome

FreeStyle's "riff" metronome is probably one of the most musical metronomes you've ever encountered. A riff can be any musical phrase you want. FreeStyle provides a list of stock drum loops as riffs, but you can make your own riffs out of anything, such as a bass part or keyboard lick. To use a riff, choose it from the pop-up menu as shown below. To add your own riff to the menu, either save it into FreeStyle's Metronomes folder as a standard MIDI file, (see "Save As" on page 87) or select anything you've recorded into FreeStyle and use the *Save As Metronome* command in the Region menu. Then start jamming. Once you've got some ideas down, you can convert the metronome riff into a player using the *Become Player* button below to fine-tune it.



Produces a generic metronome click sound from the Macintosh internal speaker. Use the Sound Control panel to control its volume.

The MIDI click option produces a generic click using sounds from a MIDI instrument, such as a rim shot from a drum machine.

The downbeat click occurs at the downbeat (beat 1) of each measure.

The *Become Player* button turns the currently selected custom riff into a player in the Ensemble window so that you can edit the riff and make it part of the section or song. This command is grayed out except when the custom riff option is selected.

Save As Default makes FreeStyle use the current metronome settings for new documents.

Hold down the Audition button to hear the metronome using the current settings.

These two options control when FreeStyle plays the metronome. To turn off the metronome completely, uncheck both boxes.

If you want a custom riff, choose the desired riff from the menu, and then choose a drum kit or other appropriate sound.

The easiest way to choose the pitch for the MIDI click is as follows:

- Pick a sound (usually a drum kit).
- Click the pitch setting.
- Play on your MIDI controller until you hear the sound you want.

The pitch setting automatically updates as you play your MIDI controller.

Figure 3-21: Setting the Metronome. FreeStyle gives you three choices: Speaker Click, Custom Riff, and MIDI click.

Remote Controls

Remote controls let you control all of FreeStyle's transport controls and recording features from your MIDI keyboard. They are designed so that you can record an entire song from start to finish without ever touching your Macintosh. You can assign a FreeStyle command to any key on your MIDI keyboard. In order to use the key as a remote control, you first hold down a command trigger so FreeStyle knows you are not just playing a note. The trigger can be a single controller, such as a foot pedal, or it can be a "clump" of keys that you would never want to play simultaneously while recording. You can smoothly switch between recording and "remote controlling" FreeStyle by pressing and releasing the trigger keys.

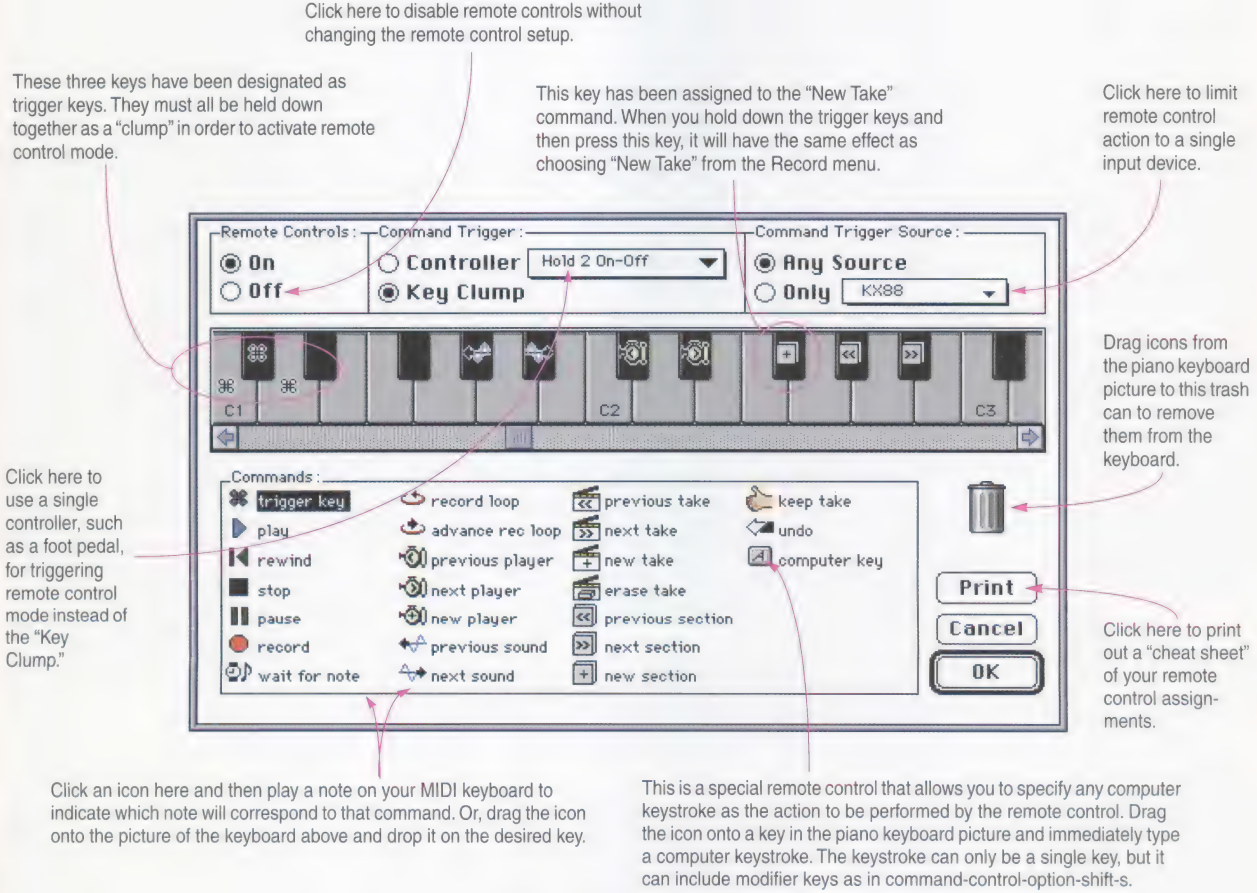


Figure 3-22: Remote Controls

Copy and Paste

FreeStyle has standard Macintosh cut, copy, and paste commands in the Edit menu. These simple features give you an amazing amount of control over your music. You can "slice and dice" your music in much the same way that you can rearrange text in a word processor. You can use copy and paste to move music around or make repeating variations on a figure. And since FreeStyle lets you work with multiple documents at the same time, you can even copy bits from one piece of music into another.

Cut and Copy

The copy command places a copy of everything selected onto the Macintosh clipboard. (Cut works the same, except that the selected events are then deleted.) It stays on the clipboard until you copy something else. You can copy any selection of notes and controllers, even if there is more than one Player involved. This lets you move entire stretches of music in a single operation.

> ☛ When you copy notes that are in a playback loop, only the source notes are copied to the clipboard; the notes generated by the playback loop (i.e. the notes in the playback loop with the squared-off edges) do not copy.

When you copy while viewing a song, a copy of the selection will be placed on the clipboard for each instance of its section in the current song. For example if I have put five copies of "Chorus" in my song, and I copy some music from "Chorus" I will wind up with five repetitions of the events on the clipboard. This may or may not be what you intended. In general it is less confusing and error prone to copy and paste when viewing a section.

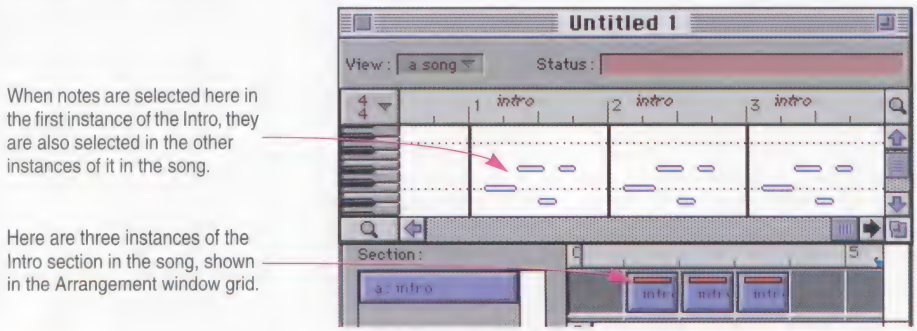


Figure 3-23: Copying in a song

Paste

Paste places the contents of the clipboard into the current document. There are two ways to determine where the music gets pasted. By default, FreeStyle places the music in the same measure that the wiper is in and maintains the relationship the music originally had with the bar line. In other words, if the music you copied started on beat three of the measure it was in, then it will be placed at beat three of whatever measure the wiper is in. This is called "measure-relative" pasting, and it makes copying and pasting quick and easy. It lets you quickly duplicate chunks of music without needing to precisely position the wiper.

In some situations, you may prefer to have more control over the exact location where the music is placed. If you un-check "Paste measure relative" in the General section of the Preferences dialog, FreeStyle will paste relative to the current brush/cursor grid setting, rather than the bar line. For example, if you copied a note that began on beat three plus a sixteenth note, then pasted with a grid setting of one quarter note with the wiper near beat two, the note would be placed at beat two plus a sixteenth note, thus maintaining its original relationship to a quarter note grid. For information about pasting controllers, see "FreeStyle is intelligent about editing controllers with notes" on page 54. For more information about snap to grid see "Brush/Curs settings" on page 38.

Determining which player to paste into

If you only copied music from one player then the answer is simple: the music will always be pasted into the record-enabled player, regardless of which player it was copied from.

Pasting music into multiple players

If you copied music from multiple players onto the clipboard, FreeStyle will try to place the music back into the players that it was originally copied from. If any of the players are no longer selected in the ensemble window, or if you are pasting into a different document that does not have players that match, you will be given the option of selecting destinations for the music as shown in Figure 3-34.

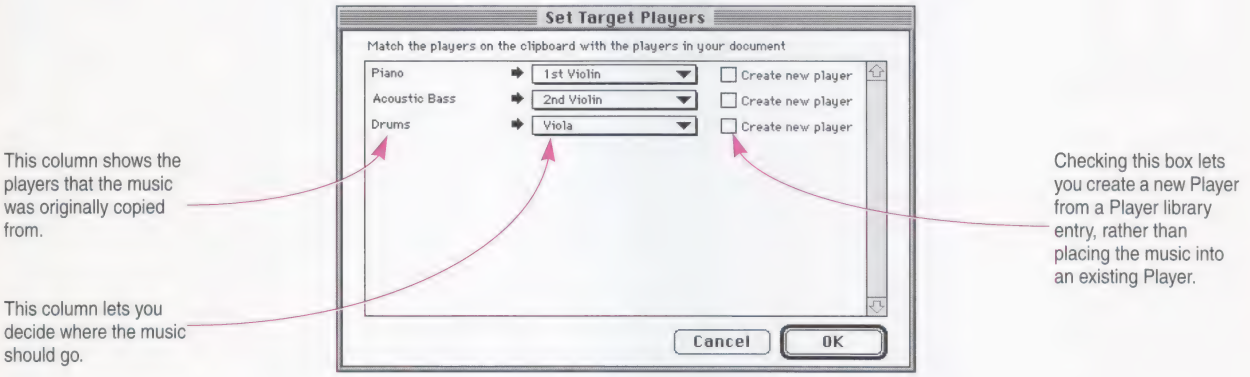


Figure 3-24: Pasting music that was copied from several players

FreeStyle will temporarily remember the relationships you set up in this dialog, and try to use them the next time you paste. This lets you perform multiple copy/paste operations without needing to reset all the relationships each time.

Pasting into a song

When viewing a song in the editing window, you may be looking at several sections that are playing simultaneously (see "Making a Song" on page 79). So if you paste into this view, which section gets your pasted notes? FreeStyle always picks the section in the top-most row in the arrangement window. Generally this will be row 1, the primary song structure row. If the music on the clipboard is longer than can fit into the section, FreeStyle will place the extra music into the next section in the same row. Sometimes this is exactly what you want, but other times it will yield results you did not intend. In general it is less confusing and error prone to copy and paste while viewing a single section.

Transposing

There are five ways to transpose notes in FreeStyle. They are explained by example in the following sections.

Transposing while recording

Suppose you want Bass notes to be recorded one octave lower than where you play them on your keyboard. Record-enable the Bass player in the ensemble window by clicking on the record button to the left of the name "Bass." Then choose "Edit Player Info" from the Setup menu. Set the "Transpose Recording" edit field and popup so they say "1 Octaves Down."

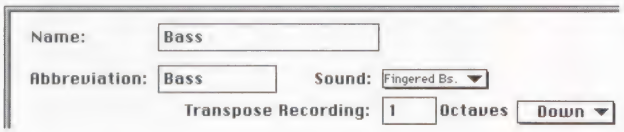


Figure 3-25: Transposing while recording in the Player Info window

Automatic instrument transposition

Many Player Library Entries are preset to do an automatic instrument transposition in the notation view whenever a player of that type is displayed by itself. For example, choose "Edit Player Library" from the "Player Library" sub-menu in the Setup menu. Choose "Clarinet" from the "Player Library Entry" popup menu at the top of the dialog. In the box within the dialog labelled "Notation", you will see that "Transpose Part" has been set to B flat. This is because a clarinet is a B flat instrument. A Clarinet part played in the concert key of C will be transposed up a full step to the key of D when the part is displayed or printed by itself. This type of transposition does not affect the pitch of a player at all, only the way that it is notated.

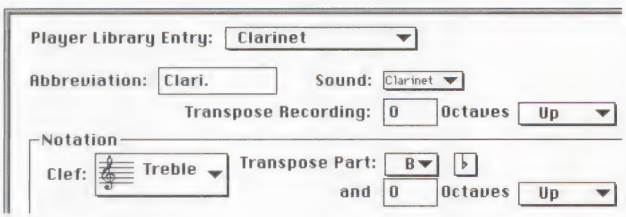


Figure 3-26: Automatic instrument transposition in the Player Library window

Transposing pitch without changing key

You can accomplish this task in FreeStyle in one of two ways. First, you can just select the notes you want to change and drag them up or down in the graphic editing or notation view to change pitches. Or, you can select some notes and use the Transpose palette. To make the Transpose palette appear, choose "Transpose" from the Region menu. Adjust the settings in the window and click the Transpose button to offset the pitches of all selected notes by the desired amount. If you don't have any notes selected, the Transpose button won't do anything.

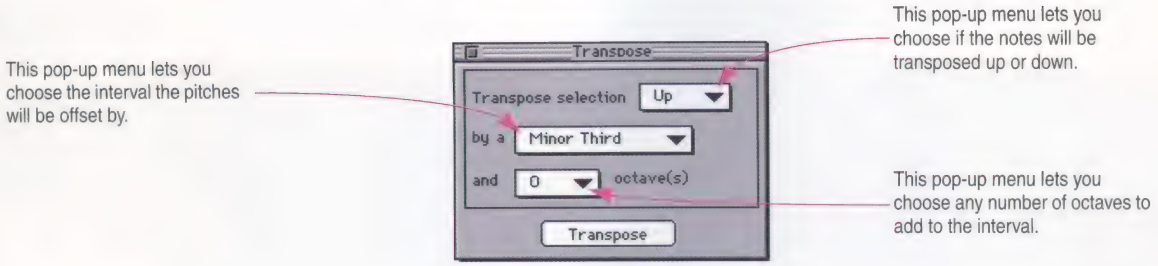


Figure 3-27: Transpose palette

Changing key without transposing pitch

Suppose you just recorded a piano part in the key of D, but when you look at the notation view you see that it was written in the key of C. The pitches are correct, but the notation view doesn't know what key you want. To fix this, click on the treble or bass clef symbol at the left edge of any staff (you'll know you're in the right place when the cursor changes to a "#/♭" symbol). A popup menu of all the possible key signatures will appear. Choose the appropriate key signature and the notation view will update its transcription of your recording.

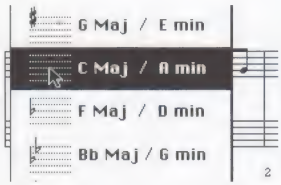


Figure 3-28: Changing Keys

Transposing pitch and changing key at the same time

Suppose you played a Piano part in the key of C and decide later that you would like to hear it in the key of D. In this case you want to change the key signature and also transpose the pitch of every note up by a full step. This is a two-step operation in FreeStyle: change the key and transpose the notes. See the two previous examples for how to do each step. Of course, if you are only working in the graphic editing view you don't have to bother changing the key signature until you want to display or print music notation.

☛ If you are transposing your entire song, be sure that you don't select any notes in drum parts, or your drum sounds may change in unexpected ways.

Quantizing

Quantize lets you tighten up the rhythmic feel of your music by aligning the notes to a "Time Grid". There are two main types of quantization available to you: *Notation based* and *custom.*

Notation based quantize uses the same process used to display your music in the Notation view. You can think of the Notation based quantize grid as being "flexible" in that it will bend and stretch to try to make musical sense of your selection. It can accommodate notes on even beat divisions as well as triplet divisions in one pass. In essence, what you see in the Notation view is exactly how the music will be quantized, except Notation based quantize does not change note durations.

Custom quantize, on the other hand, uses a fixed grid, but gives you complete control over it.

Notation based quantize is great when your playing is fairly exact, but you just want to tighten up the overall feel. Use custom quantize in situations where you want to alter or precisely control the rhythmic feel.

Time offset

The time offset slider lets you shift the whole grid forward or backward in time. This lets you give your music a "pushed" or "laid-back" feel. Moving the slider to the left makes each grid point fall a little early; moving to the right makes each grid point fall a little late.

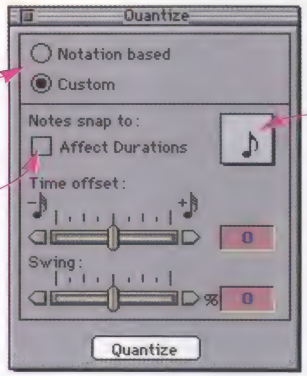
Swing

The swing setting affects every other grid-point, either pushing towards the next grid point, or pulling back towards the previous grid point. Swing is useful for creating jazz and hip hop feels.

Swing percentage	Effect on the music
0%	Leaves every other grid point unaffected (no swing).
100%	Pushes every other point all the way to the next grid point.
-100%	Pulls every other point back to the previous grid point.
33%	Pushes every other point one-third of the way to the next point. This is a common setting for jazz swing feels.

These radio buttons determine whether Notation based, or custom quantize will be used. If Notation based quantize is selected all the other controls in the palette will be grayed out, since they only apply to custom quantize.

Affect durations. When checked note durations, in addition to note placement, will be aligned to the grid.



Grid setting pop-up. This sets the basic grid to which your music will be aligned. The grid can be of any standard musical duration.

Figure 3-29: Quantize palette

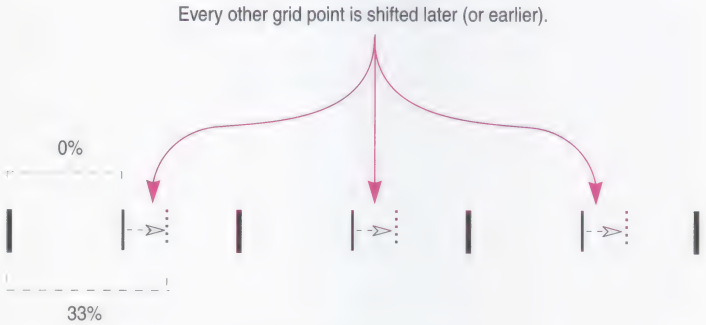
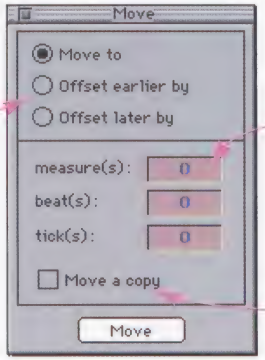


Figure 3-30: Swing quantize

The Move Palette

The move palette lets you shift events in time. You can choose to offset the events from their current location, or to have the music start at an absolute location. By checking "move a copy" you can quickly replicate a piece of music, shifted by any amount of time.

This group of radio buttons determines whether you will move the notes to a specific time (Move To), or offset them (either forward or backward) from their current location.



These time fields let you specify either an absolute time location (if "Move To" is selected) or an offset. Ticks are 960ths of a quarter note.

If this box is checked, a copy will be moved rather than the original music. Note that the copied notes will then become selected. Used in conjunction with "Offset later" this can be used like Copy and Paste. Pressing the "move" button multiple times will result in multiple copies of the notes, each copy offset from the last by the specified amount.

Figure 3-31: Move palette

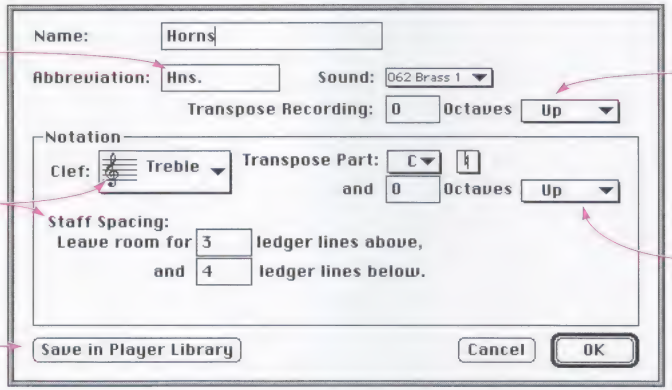
Player Info

Players in the Ensemble window represent much more than just a sound on your MIDI instrument. They also have many settings that control the way they are presented throughout the program. For example, the Player Info window has several options that control how the player is formatted when displayed in the Notation view.

The player abbreviation appears in the notation display to the left of each staff (except the first one) when more than two players are being displayed.

The clef and staff spacing options determine the clef and spacing between the staves when the player is displayed in the notation view.

Creates a new player library entry with the current settings.



This option transposes your controller keyboard when you are recording the player. It helps with players whose note range falls outside the range of keys on your controller, such as a bass player.

The transpose part option controls how the part is transposed when it is displayed by itself in the notation view.

Figure 3-32: Player Info

The Player and Ensemble Libraries

The Player Library

Players are one of FreeStyle's fundamental building blocks. A player has a lot of control over its music, from how it sounds to how it is displayed in the notation view. Since it would be tedious to set up all this information each time you create a new player FreeStyle gives you a powerful short-cut: The Player Library. The player library stores commonly used "Forms" or "Templates" that you can use to create Players from.

You can think of a Player Template as a "Rubber Stamp" for creating Players. Extending the metaphor, if you modify a rubber stamp, it does not affect "prints" that have already been made with it, only the ones it will make in the future. If you modify a print, it does not change the stamp, or any other prints. Player Templates work the same way. Changing a Player Template does not affect Players that have already been made, only ones that you make from that point forward. Similarly, modifying a Player, either in the Ensemble window, or in the "Edit Player Info" dialog does not affect the Player Template it was created from, or Players in other documents.

To summarize, a Player Template is a "stamp" that you can use to create a Player from. After the Player is created it is no longer tied to the Template that created it in any way.

Editing your player library

To edit your player library, choose Player Library from the Setup menu and choose Edit Player Library from the sub-menu. See Figure 3-33 on page 70 for details.

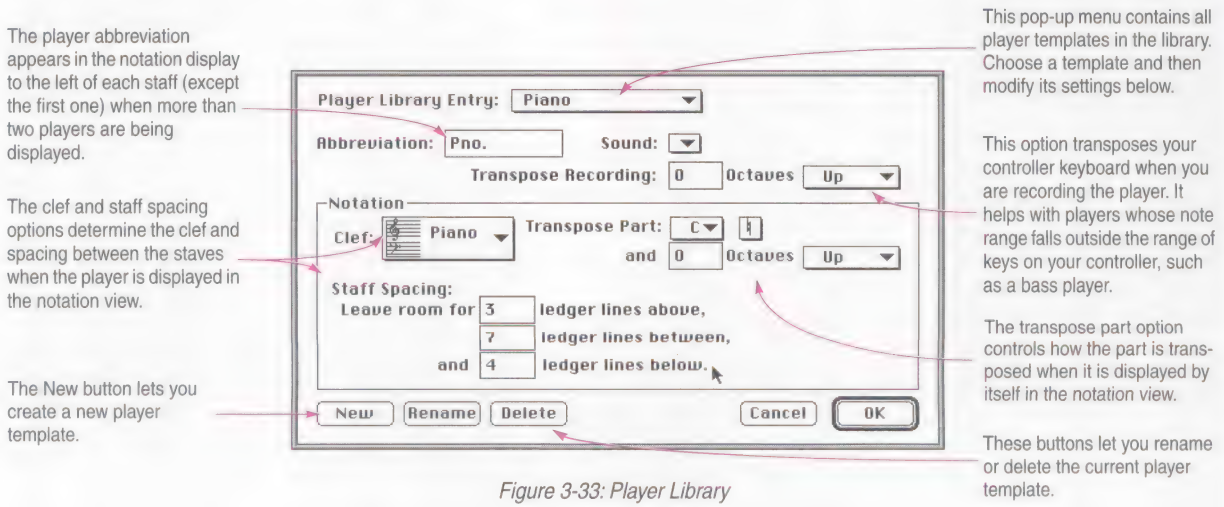


Figure 3-33: Player Library

A suggestion about designing your Player library

Resist the temptation to create one player template for each sound on your MIDI device. Instead, think of a player template as a *category* of instrument, such as *brass*, or even a more specific classification, such as *piano*. Player templates are useful for making players that are more or less what you're after. No doubt once a player is created you will want to refine it to suit your piece. For example you should probably only have one "Piano" player template that can be used to create players that will actually become grand piano, honky tonk piano, or harpsichord. On the other hand, if you are constantly using a Fender Rhodes keyboard sound, then it would, for convenience sake, make sense to add a Fender Rhodes player template. It's up to you to create a Player Library that fits the way you work.

Part Transposition

The part transposition settings affect how players created from this template will be notated when viewed on their own. It does not change the way the Players will sound. Enter the standard transposition for the instrument you are describing. For example, you would enter Bb for a Bb Clarinet. (The up/down pop-up menu has no affect if zero octaves is entered.) For Baritone Sax you would enter Eb and 1 octave up, since it is notated one octave and a major sixth above concert pitch. For more information about part transposing, see "Transposing" on page 64.

The Ensemble Library

In the same way that it would be tedious to re-enter all your player settings every time you created a player, it would be annoying to have to add your favorite players one at a time to each new document. FreeStyle has a short-cut: The Ensemble Library.

An Ensemble Library Entry is a collection of player templates that can be added to a document in one shot. Whenever you create a document, FreeStyle asks you to pick an ensemble library entry. It then creates players from each of the player templates in the ensemble.

The Edit Ensemble Library command in the Setup menu lets you setup and modify your own Ensembles.

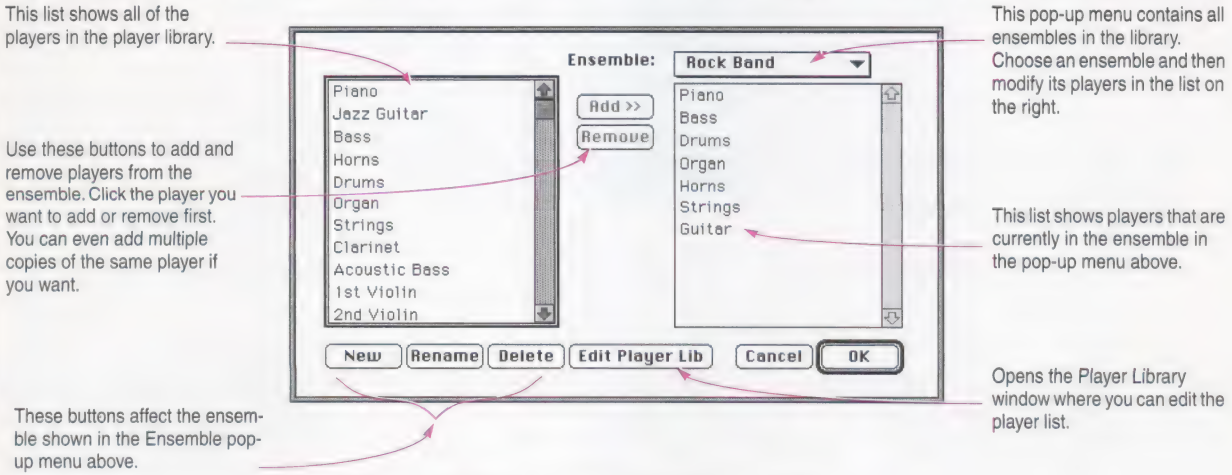


Figure 3-34: Editing an ensemble in the Ensemble library.

Synchronizing

What is synchronization?

Synchronization allows a drum machine or other sequencer to play along precisely with FreeStyle. You can also do it the other way around and make FreeStyle follow the drum machine. In either case, the two will remain tightly in sync. They will start, stop, rewind, and locate together, and their playback won't drift over time.

The Sync command

To get sync going, choose Sync from the Setup menu. Implementations of MIDI have evolved over the years. As a result, not all devices transmit and send MIDI clock signals in the same way. FreeStyle provides several options for maximum synchronization compatibility with your master device. The default settings reflect the most commonly used MIDI standards. It is best to leave them set this way unless you experience problems when synchronizing.

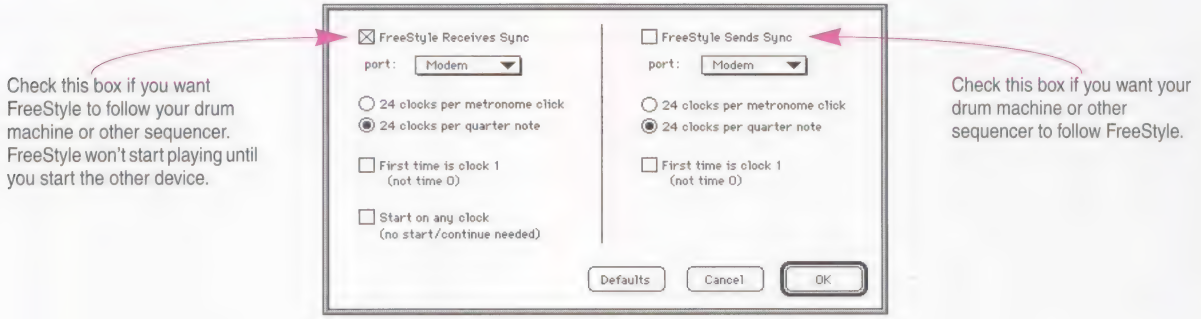


Figure 3-35: Sync command

24 clocks per metronome click/24 clocks per quarter note: Some manufacturers have begun to make devices which send 24 clock signals per beat (one click of the device's metronome) instead of the standard 24 clocks per quarter note. This new method is very useful when there are meters which do not use the quarter note as the beat unit: 3/8, 5/16, etc. In 6/8, for example, there might be a metronome click every three eighth notes; in 4/1, the metronome would click once every whole note. If you were using a less common meter such as 5/32 or 3/16 + 4/16, using the quarter note as the timing base would not be very useful. Instead, use the 24 clocks per metronome click option.

Start on any clock: When this option is checked, FreeStyle will automatically start if it receives a time clock even if no start or continue command was received. This option is necessary when using some early MIDI devices which don't send start or continue commands, only timing clocks.

First clock is time 1: When this option is checked, FreeStyle interprets the first MIDI clock signal it receives as the *second* timing clock of the sequence, 1/24th of a beat after the beginning. Devices manufactured recently send the first clock signal (time 0) after the start command for the sequence. Some earlier devices assume the start command to be the first clock signal. The first clock signal they send would be 1/24th of a beat after the beginning. If you are using one of these devices, you should check this option.

Since manufacturers rarely explain this aspect in their documentation, you may not know if your device behaves this way. The best way to find out is to experiment: set the metronome to the slowest possible tempo, play both devices (with FreeStyle as slave) and listen for discrepancies in attacks and beat alignment. The difference of 1/24th of a beat is very audible at a slow tempo. If FreeStyle seems slightly behind the master device, try checking this option.

About MIDI synchronization

MIDI Beat Clocks: consist of a continuous stream of real-time messages. They are produced by most MIDI compatible drum machines and sequencers, and by some synthesizers (particularly those with built-in sequencers). MIDI beat clocks are transmitted 24 times per beat. If the master device changes tempo, the MIDI beat clocks slow down or speed up accordingly; any slave device will follow this tempo change.

Start, Stop, and Continue: Most devices that generate MIDI beat clocks also send **Start**, **Stop**, and **Continue** messages; slave devices will start playback, pause, rewind, or play from the current location according to the combination of these messages received.

Song Position Pointer: In addition, many devices send **Song Position Pointer** data. These messages set the current location for playback, much like setting the Counter in FreeStyle.

Chapter 4 Tutorial

A step-by-step guide to recording a song

Recording Into a Section

> This tutorial shows how to control FreeStyle's recording features with the mouse. You can also use the Macintosh keyboard, and even the keys on your MIDI controller, for all of the essential steps in the recording process, from choosing a section to controlling FreeStyle's transport controls. See "Remote Controls" on page 61.

Start with a blank document

To begin, go to the File menu and choose New to open a new blank document. FreeStyle will ask you to choose an Ensemble. Choose Rock Band and click OK.

Name the Section

New documents open with a blank, four-bar section called *Section A*. Let's rename it. Choose "Rename Section" from the Song menu and type in the name "Verse".

Set up the record loop

The *Record Loop* consists of a small pair of draggable repeat sign markers in the time line as shown below in Figure 4-1. These markers cause playback to endlessly repeat a range of measures within a section. The area being cycled can be as short as one bar or as long as the entire section. When the record loop markers are visible, the record loop is on. To toggle it on and off, use the *Toggle Record Loop* command in the Record menu. To move the record loop markers, either drag them in the time line (they snap to measure boundaries so you don't have to be exact) or use the *Set Record Loop* command in the Record menu. If the Record Loop markers get in the way of other things in the time line (such as playback loop markers), you can hide them without turning them off with the Hide Loop Markers command in the Windows menu. They can also be automatically moved to the next section in a song with the Advance Record Loop command.

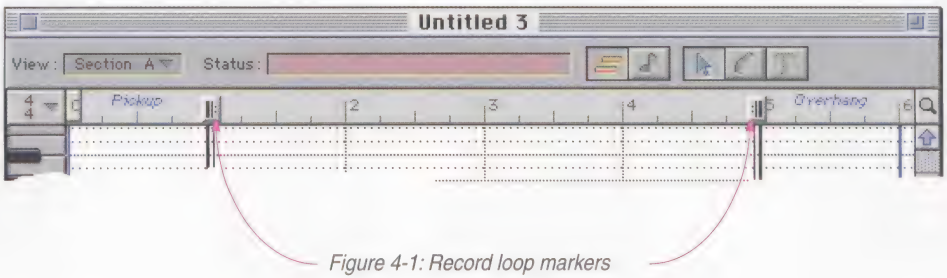


Figure 4-1: Record loop markers

Set up the record menu options

The Record menu has several handy features you can use while recording. Most of the time, you'll want to set them up before you begin recording. In each case shown below in Figure 4-1, check the menu item to turn on the feature. Uncheck it to turn it off.

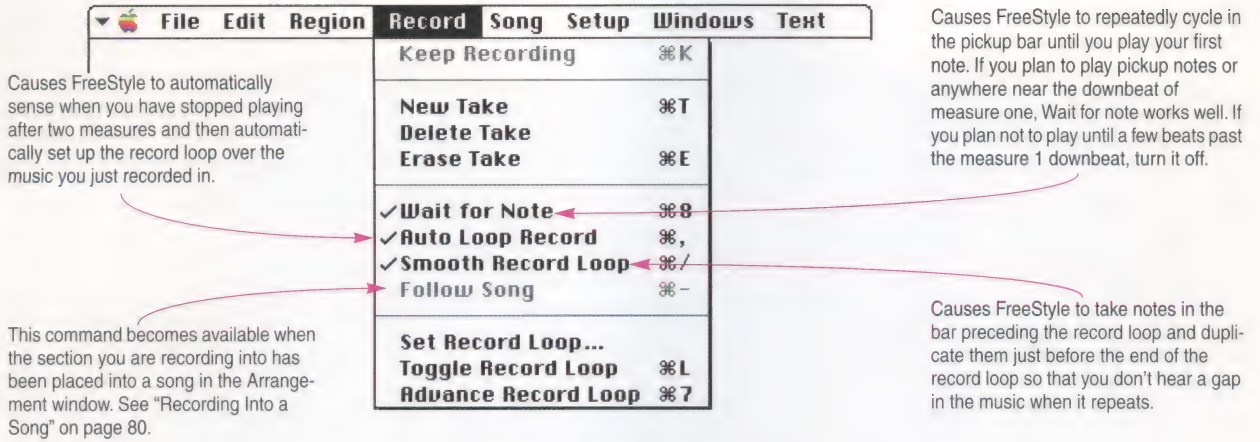


Figure 4-2: Record menu options

Set the tempo and metronome

It is important to play along with FreeStyle's metronome when you record. Otherwise, FreeStyle's beats and barlines won't match up with what you play. So before you record, drag the tempo slider in the Control palette (Figure 3-2 on page 35) to the desired tempo. You can raise or lower the tempo afterwards without affecting the pitch of the music. This is a great technique for playing in music accurately: record it slow and then play it back at normal speed. To set up a metronome, choose Metronome from the Setup menu. (See "The Metronome" on page 60.)

Record a take

You are now ready to record a take. To see which player you will be recording into, look at the record buttons to the left of the player names in the ensemble window. Get ready to play and then click the record button. If Wait For Note is checked, FreeStyle will endlessly cycle the first bar until you play your first note. If you don't want it to do so, uncheck the Wait for Note command in the Record menu.

Play music for as long as you like into the section. Notice the following things happen as you record:

- If you play past the end of the section, the section boundary moves as needed to automatically adjust the length of the section
- Notes appear on the screen in the notation and graphic editing views immediately as you play them
- If you have the Auto Loop Record feature turned on, FreeStyle automatically sets up the record loop over the region of music you just played

Keep the music going

Once you have recorded your first pass and the record loop has begun repeating the section, you can continue the recording process without ever stopping the music. Here are the things you can do while the section repeats:

- Record a new take for the same player (remember, every take is preserved) by choosing New Take from the Record menu.
- Discard everything you have recorded into a take since so far by choosing Undo Record from the Edit menu
- Record-enable a different player and record takes for it. Click the record button to the left of the player name in the ensemble window.
- Do A/B listening tests between takes to decide which one you like best. Use the up and down arrow keys, type single digit take numbers, or choose takes with the take pop-up in the ensemble window.
- Record again into the same take to add more material to the take (see the next section)

Use the Keep Recording command when recording drum parts

Drum parts are recorded using a slightly different approach. Most of the time, you'll record all the drum parts (e.g. kick, snare, hi hat) into a single take for a single player named *Drums* (or a similar name). But what should you do if you've recorded the kick and snare, and you like what you've got so far, but then you make a mistake when adding the hi hat? If you choose Undo Record, you'll loose the kick and snare also. If you choose New Take, the kick and snare will disappear.

This is where the Keep Recording command helps: it causes everything you've recorded into the take so far to be "kept" when you use Undo. So in our current example, if you recorded kick and snare, and you like what you have so far, you choose Keep Recording before you add anything else. If you make a mistake when adding the hi hat, you can freely use Undo Record to discard the hi hat without losing the kick and snare.

Transposing your MIDI controller for bass parts and other instruments

If you ever need to record a player whose note range falls outside the range of keys on your MIDI keyboard, you can get FreeStyle to automatically transpose your controller up or down an octave so that it plays the octave appropriate for the instrument. This feature is provided in the Edit Player Info command in the Setup Menu. See "Transposing while recording" on page 64 for details.

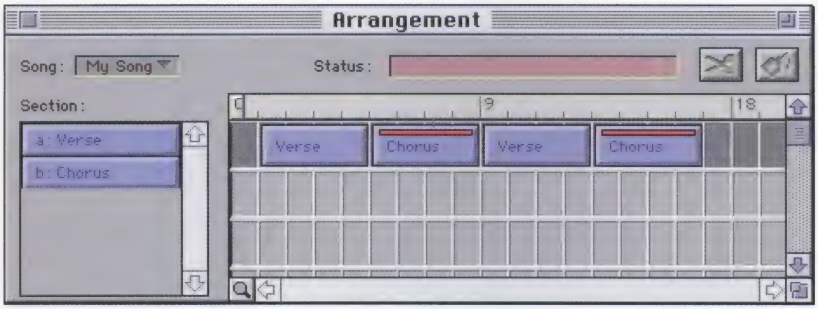
Recording into another new section

Now you are ready to record another section. Choose "New Section" from the song menu and type in the name "Chorus" for the new section. FreeStyle will present you with a new blank section for recording. Note that the "View:" popup menu in the graphic editing / notation window now shows the name "Chorus." Record some music for one or more players into this new section as described above.

Making a Song

After you have recorded several sections, you are ready to make a song.

Choose "New Song" from the song menu and enter the name "My Song." The FreeStyle Arrangement window will appear. On the left is a list of all of your sections -- if you have been following this tutorial, you'll only have two of them. Type the letters abab in succession to quickly place your first two sections onto the arrangement grid. Or, if you prefer you can drag each section from the list on the left to a position on the grid to the right. For now make sure you put sections in the top row of the grid, which is the "primary song structure row." First click on the rewind button and then on the play button in the control palette to hear your song. (If the wiper loops in bar zero, turn off "Wait For Note" in the Record menu or click on the record button in the control palette to turn off recording.) For more information about arranging a song , see "Songs & The Arrangement Window" on page 44.

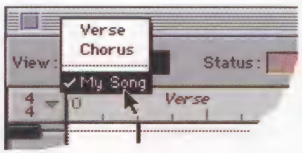


Recording Into a Song

In FreeStyle you can also record directly into a song arrangement. There are two different ways you can do this:

- Single section recording within the context of a song
- "Follow Song" recording into multiple sections

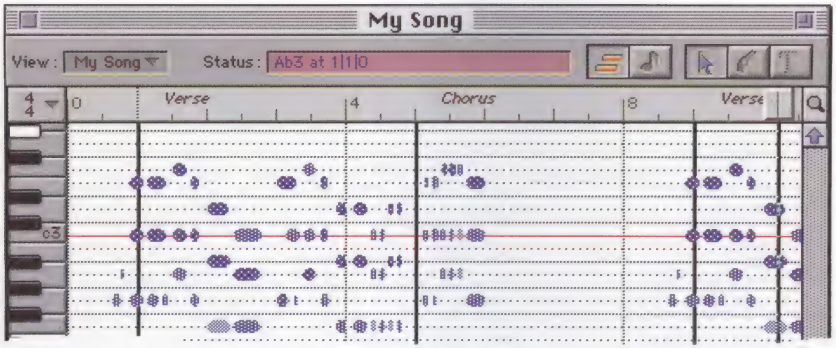
First make sure that the graphic editing/notation window is displaying the song "My Song." To do this, click on the "View:" popup menu in the upper left corner of the window and choose "My Song." Section names are listed first in this popup, followed by a divider line, then all of the song names.



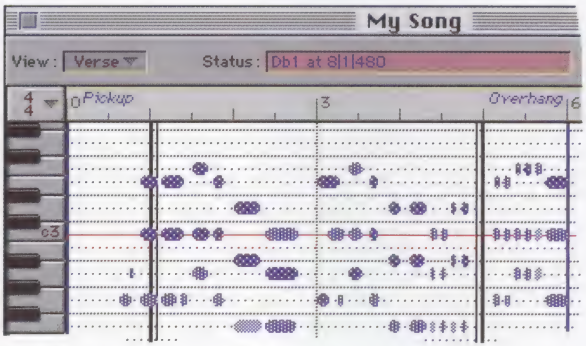
Another way to show your song in the graphic editing/notation window is to click on the arrangement window, or choose "Arrangement Window" from the Windows menu.

Single-section recording within the context of a song

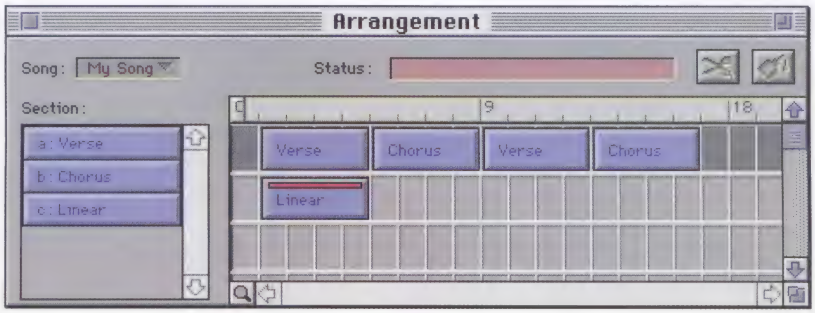
In the arrangement window, click on one of the "Verse" sections that you placed on the arrangement grid. A red bar will appear across the top of the section to indicate that the section is record-enabled. Recording can now happen only within the bounds of the "Verse" -- notes that you play while the wiper is over any other section will not be recorded. However, each section in FreeStyle has a pickup bar and an overhang bar that overlap neighboring sections in the arrangement. Therefore, notes can actually be recorded 1 bar before what you think of as the start of the "Verse", and up to 1 bar following what you think of as the end of the "Verse." Notes recorded in the pickup or overhang measures of a section nonetheless are part of that section, not part of neighboring sections in the arrangement. To see this in action, let's record something new. Choose "New Take" from the Record menu. Look in the Record menu and make sure that "Follow Song" is *not* checked. Next, make sure that the record button is on in the control palette, then click on the rewind and play buttons. Start playing something a beat or so before the wiper gets to bar 1, and continue playing past the end of the first "Verse." You will notice that notes appear on your monitor as you play until one bar past the end of the record-enabled section. Then the rest of your notes are ignored until the time wiper reaches the next instance of "Verse" in your arrangement. If you are looking at the graphic editing view, your monitor will look something like this:



You were able to record notes in bar 0 (the pickup bar for the verse), in bars 1 through 4 (the body of the verse) and in bar 5 (the overhang bar for the verse). Now choose "Verse" from the "View:" popup menu in the upper left corner of the window. You will clearly see that some of your notes fell in the pickup and overhang bars of the Verse section, but they are nonetheless part of the Verse. (You may need to use the zoom slider in the lower left hand corner of the window before you can see the Pickup and Overhang labels in the time line. To bring the labels into view, click on the slider, which looks like a magnifying glass, and hold the mouse down while you drag left or right.)



If you want to make a linear recording that plays back at the same time as your "Verse" and "Chorus" sections, you can do the following. First, Type command-H to bring the Arrangement window to the front again. Choose "New Section" from the Song menu. Name the section "Linear." The name "Linear" appears at the bottom of the sections list on the left side of the arrangement window. Drag the "Linear" section out onto the second row of the arrangement window starting at bar 1.



The "Linear" section now has a red bar over it, indicating that it has become the record-enabled section. Click the rewind and play buttons, and begin recording notes into this section. When you reach the end of the section, it will simply grow to the right as you keep playing. The graphic editing window will show the new notes that you have recorded, overlapping notes that are simultaneously playing in the Verse and Chorus sections. The linear section can grow to accommodate the notes you play because there are no other sections in the way to the right of it on row 2. In the previous example when we were recording into the "Verse" section it didn't grow because the "Chorus" section was immediately following it in row 1.

Using "Follow Song" to record into multiple sections

Suppose you have a bunch of sections lined up end to end in the top row of the arrangement grid, and you want to record Clarinet takes for each section while you play the entire song. To do this, select "Follow Song" in the Record menu. When this feature is turned on, the record-enabled section will move to the next section in the top row of the arrangement grid as each section is encountered, as you play. Note, however, that in this case you are not recording a single take like you did when you recorded into the separate "Linear" section. In this case your notes go into the current take selected in each section, in turn, as it is encountered.

Type command-H to bring the Arrangement window to the front again. The View popup menu in the graphic editing/notation window shows "My Song." Make sure that "Follow Song" is checked in the Record menu and that the record button is on in the control palette. Just to give us something new to record, let's add a player to the ensemble. Choose "Add Player" from the Setup menu and choose "Clarinet" from the Player Library Entry popup menu. You will see that a Clarinet player has been added in the ensemble palette, and that the Clarinet player is record-enabled. Now click the rewind and play buttons and play Clarinet notes while the first two "Verse" and "Chorus" sections play. This time, when the wiper is over the body of the first Verse section, the notes will go into the Verse and when the wiper is over the body of the first Chorus section, the notes will go into the Chorus. You may notice that as the wiper reaches the end of the Verse section and enters the Chorus section, the red bar in the arrangement window moves from the Verse to the Chorus, indicating that the record-enabled section has automatically changed for you. When the wiper reaches the beginning of the second Verse section, you will hear the Clarinet notes that you recorded in your pass over the first Verse section. Any new Clarinet notes that you play will be overdubbed on top of the existing notes in the Verse. This is because the section "Verse" plays back in exactly the same way wherever it appears in your arrangement.

If you want to make a Verse2 section that can be modified independently from the Verse section, do the following: Click on the second Verse section in the arrangement grid to select it and hit the delete key. Next, click once on the name "Verse" in the section list on the left side of the arrangement window (not on the first Verse section instance that is placed on the arrangement grid). Choose "Duplicate Section" from the Song menu. A section called "Verse Copy" appears at the bottom of the section list. Double-click on "Verse Copy" and type "Verse2" to rename it -- then hit the enter key. Drag out "Verse2" and position it in the hole on row 1 where the second instance of "Verse" used to be. Now you can make changes to Verse2 in your arrangement which will not affect the "Verse" section.

☛ Once you have created a song your are not limited to recording into the song as a whole. You can double click on any section instance in the arrangement grid to view that section in isolation. Then you can record into the section as described on page 76 and your changes will affect all songs that use the section.

Chapter 5 Quick Reference

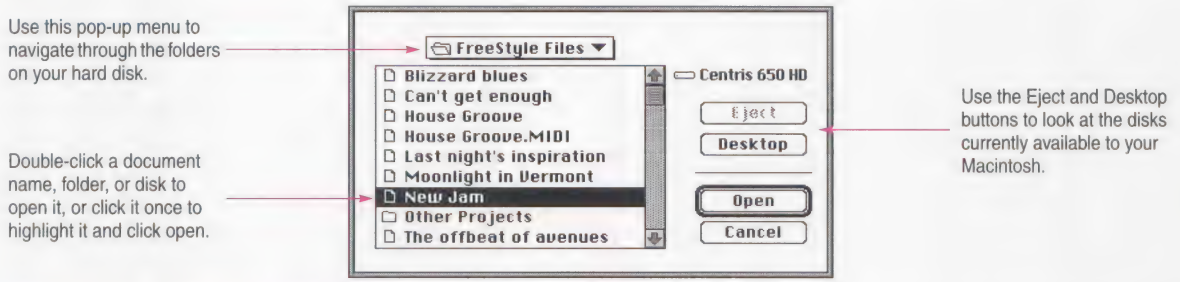
A brief explanation of FreeStyle's menu commands

This chapter lists all of the commands in FreeStyle's main menus and provides a brief explanation of each one. For your convenience, commands are organized in the chapter by their location in FreeStyle's main menus.

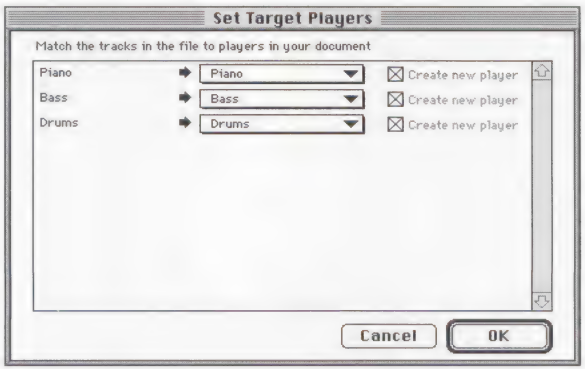
File Menu

New: The New command opens a new FreeStyle document. You can create a new document at any time, even if another document is already open. The new document is given the temporary name "Untitled". When you save the new document for the first time, you are given an opportunity to name it. You can have as many documents open at a time as you like.

Open: The Open command (File menu) loads existing FreeStyle files and standard MIDI files from disk.

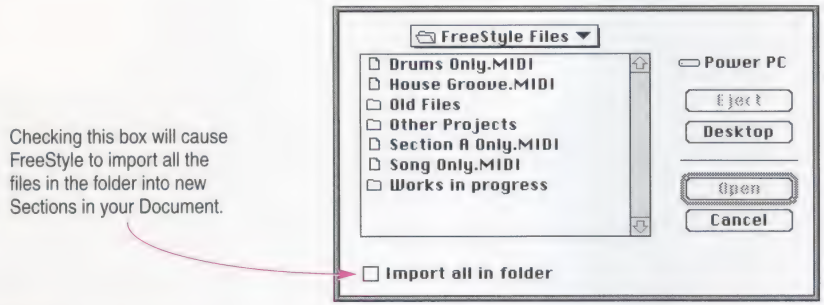


Opening a standard MIDI file: When opening a standard MIDI file, you are given a chance to map each track in the file to any player template in your Player Library as shown below. Choose a player template for each track from the pop-up menu. For more information see tips relating to standard MIDI files on page 182.



Import into Section: FreeStyle lets you import Standard MIDI files into Sections in a Document. This is especially useful for transferring sequences from other sequencers into FreeStyle. Selecting Import into section displays a standard open file dialog.

FreeStyle then lets you match the tracks in the Standard MIDI File with the Players in your Document. Unlike opening a Standard MIDI File from scratch, when you import into an existing document you have the option of either assigning a track to an existing player, or of creating a player from a player template. The standard MIID file will appear as a new section in the current document. For more information see tips relating to complex sequences and standard MIDI files on page 182.



Close: The Close command closes the currently open window. If several windows are open, it closes the window that is currently in front. Closing a document's main window (the window containing the graphic editing and notation views) also closes the document. If the document you want to close is not in front, click on its main window.

Save: When you first create a new FreeStyle document or open an existing one from disk, the document is stored into the computer's temporary Random Access Memory (RAM) as you work. Changes you make to the document occur in the temporary version in RAM. The Save command (File menu) writes the current state of your document to disk to store it permanently, even after you quit FreeStyle and switch off the computer. If you quit FreeStyle without saving, or if the computer is suddenly interrupted before you have a chance to save the document, all changes you have made to it since you last saved are lost forever. It is therefore important to save very often to avoid losing your work.

If you have previously saved a document, the current state replaces last saved version. If you are saving a document for the first time, a dialog box appears to ask you to name it. This dialog box is identical to the Save As dialog box explained in the next section.

☛ Save frequently—every time you make a change that you like. Doing so prevents you from losing work should FreeStyle or the computer be interrupted.

Save As: The Save As command is what you use the very first time you save a new document. Save As lets you name the document and choose where you want to store it on your hard disk. Save As also lets you save the currently open document on disk under a different name, preserving the last-saved version of the original document. Save As is useful when you would like to make changes to a document and save them, but you still want to preserve the original document. In this case, the Save command would not be the right command to use because it would replace the original document with the newly modified document, thus erasing the original document. Instead, Save As creates a new document on disk with the changes in it, and the original document remains unmodified under its original name.

The Save As command lets you save a file in several different formats:

Normal: Normal is the standard FreeStyle file format. Use this format to save your FreeStyle files.

Stationery: When the Stationery option is selected, the file is saved as a Macintosh Stationery file, which acts much like a stationery "pad". When you use a stationery pad, you "tear off" a blank sheet of paper to work with and leave behind the original pad. Stationery documents on the Macintosh work much the same way. Stationery files can be opened, but the Macintosh will prevent you from modifying the original stationery pad file by making you Save As when you attempt to save the file. This option is great for preserving files that you do not want to modify and that you use regularly as a "template" from which to build new files. When saving as Stationery, everything in the file gets saved except notes and controllers. Saved items include players, sections, and songs.

Song Structure Stationery: This option is identical to the *Stationery* option (see the previous paragraph) with the following exception. Only songs and sections are preserved in the file; players are not. When you first open a new file using a Song Structure Stationery file, FreeStyle asks you to choose an ensemble. This is a convenient way to create song structures that you frequently use, such as a pop song structure with Intro, Chorus, Verse, Bridge, etc. and choose any type of ensemble you want to fill the sections. This feature combines convenience with flexibility: you have quick access to a customized song structure and you get to choose any ensemble to work with.

Standard MIDI File: This option saves the section or song currently displayed in the Graphic Editing window (shown in the View pop-up menu) as a standard MIDI file on disk. Music saved in this file format can be opened with any music program that also reads and writes Standard MIDI Files—even programs that run on other types of computers. Each player is saved as a track, and only the current take for each player is included; other takes are not.

> ☛ Be sure to choose the desired section or song in the View pop-up menu in the Graphic Editing window as shown below before you choose Save As from the File menu. Also be sure that the current takes for each player are the ones you want to include. Basically, what you hear when you play is what will be included in the Standard MIDI File.

When saving as a Standard MIDI File, only the song or section displayed here is included in the file, so be sure to select the desired item before saving.

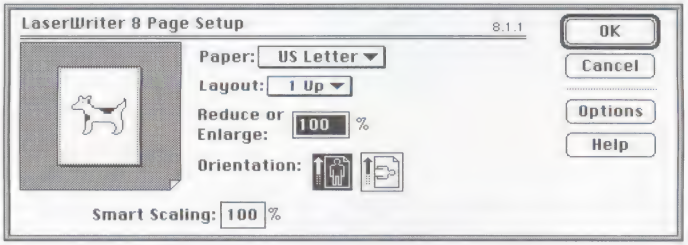
Save a Copy As: Save a Copy As does the same thing as Save As (see the previous section) with the following difference: after using Save As, the newly created document stays on the screen. After using Save a Copy As, the original document remains on the screen.

Revert to Saved: The Revert to Saved command closes the document without saving changes and reopens the last saved version of it from disk. This command does the same thing as choosing Close, answering "No" to save changes, and then re-opening the same file. Revert to Saved is useful for discarding all changes you have made to a document since you last saved it.

Page Setup: The Page Setup command defines the paper size, orientation, and special printer effects for the notation view in the document.

> ☛ The options you see in this dialog box may be different than what is displayed below because you may be using a different printer, or you may have a different version of the LaserWriter software.

The paper sizes and special printer options that are presented in this dialog depend on the type of printer you are using. The type of printer you are using is determined by what you have selected in the Chooser. If you have selected the LaserWriter, Page Setup offers the following options:



The options available in this dialog box depend on what printer you are using. Refer to your printer's reference guide for a complete description of your printing options.

Paper: Most printers support the paper sizes shown in the following table. The paper size that you choose here should match the size of the paper in your printer.

Paper size	Dimensions (in inches)
US Letter	8.5 by 11
US Legal	8.5 by 14
A4 Letter (European)	210 by 297 mm
B5 Letter	176 by 250 mm
Tabloid	11 by 17
Custom	any size

The custom paper size option can be used on some types of printers, such as phototypesetters, that provide for large page sizes.

Layout: Determines the number of pages to be printed on each piece of paper.

Reduce or Enlarge: Laser printers offer enlargement or reduction at any percentage. Non-Postscript printers, such as the StyleWriter, LaserWriter IISC, and other third-party laser printers offer a few sizes. We strongly suggest that you use Smart Scaling instead because it will usually produce the best results. See "Smart Scaling™" on page 90.

Orientation: Use the left-hand orientation (vertical) for pages that are taller than they are wide, such as a standard 8.5" by 11" page. Use the right-hand orientation (landscape) for pages that are wider than they are tall, such as a lengthwise score page at 11" by 14".

Smart Scaling™: The Smart Scaling option allows you to scale the document you are printing to any size. This option provides better results in most situations than the standard reduction/enlargement option provided in the Page Setup dialog box. Set the standard scaling option to 100% and use the Smart Scaling option by typing in the desired percentage either above or below 100%.

Options: When you click the options button, you get the follow options:

Page Setup Option	Explanation
Substitute Fonts	Causes the laser printer to replace outline (high-quality) fonts that it cannot find in the system with an outline font that is available. The result is that all output will be high-quality. If this option is unchecked, the missing font will appear bitmapped (jagged) in the printout.
Smooth Text	Causes bitmap text to be smoothed.

Smooth Graphics	Causes bitmap graphics to be smoothed. This option has no effect on printing in FreeStyle, since a FreeStyle file cannot contain bitmap graphics.
Precision bitmap alignment	For details about these options, refer to the printer manual and the Macintosh User's Guide.
Larger Print Area	
Unlimited Downloadable Fonts	

Print Quality: Dot-matrix and ink-jet printers usually offer at least two print qualities: *Faster* and *Best*. Faster mode produces a less crisp image and prints pages more quickly than Best mode, which produces the highest degree of resolution possible on the printer.

> ☛ Do not use Draft mode. Doing so causes your music document to be printed with alpha-numeric characters instead of music symbols.

Print: Prints the currently displayed players in standard music notation. Settings are provided for the number of copies to print, the page range, the paper source in the printer, and the destination (to the printer or to a file on disk).

> ☛ Use the Help button in these dialog boxes for more information on each option. Also refer to your Macintosh user's guide.

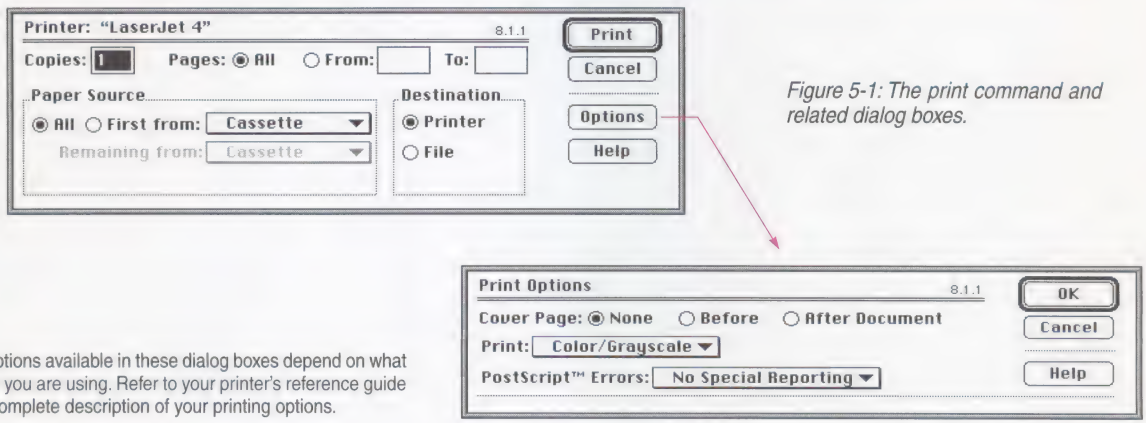


Figure 5-1: The print command and related dialog boxes.

The options available in these dialog boxes depend on what printer you are using. Refer to your printer's reference guide for a complete description of your printing options.

Page Layout: Controls the appearance of the pages in FreeStyle's music notation display. Settings in this window are saved on a per file basis. Units of measurement for the margins are inches (in), centimeters (cm), millimeters (mm), and points (pt). You can change the settings at any time. See "Page Layout in the Notation View" on page 52 for more information on each option.

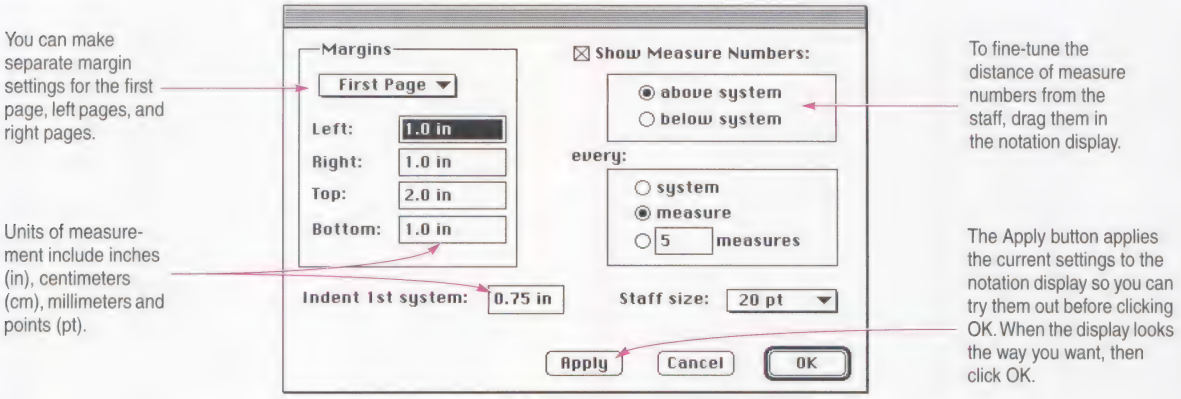


Figure 5-2: The Page Layout window.

Quit: Closes all open documents, exits FreeStyle, and returns to the Finder. If an open document has unsaved changes, FreeStyle asks if you wish to save them before closing the file.

Edit Menu

Undo: Takes back the last action you made in FreeStyle. Anything having to do with recording and editing the music can be undone. Undo does not apply to things like saving, opening or closing windows, adding players to the ensemble, or anything that does not involve changing the music itself.

Redo: Restores the last action that was reversed with Undo.

Cut: Removes the selected music or text and places it on the Clipboard, from which it can be pasted with the Paste command.

Copy: Makes a copy of the selected music or text and places the copy on the Clipboard, from which it can be pasted with the Paste command. For more information see "Cut and Copy" on page 62.

Paste: When pasting music, pastes the contents of the Clipboard into the measure that currently holds the scrolling playback wiper (the measure currently playing back or where playback will begin). Material is placed in the measure in the same location from which it was cut or copied. (There is a preference to make the material paste at the exact wiper location instead.) To move the playback wiper, click the desired location in any ruler, or double-click the staff in the notation display in the desired measure. For more information see "Paste" on page 62.

When pasting text, pastes the contents of the Clipboard at the current text insertion point.

Clear: Removes the selected items. Anything that can be selected can be cleared. As an alternative to choosing clear from the Edit menu, you can press the delete (backspace) key on the keyboard. Clear differs from Cut in that it does not place the cleared material on the Clipboard.

Select All: Selects all displayed material in the front-most window. If a part is hidden, it is not selected. In the notation window, notes from all parts currently showing are selected on all pages.

Preferences: The Preferences command lets you set up FreeStyle in ways that best suit the way you work. The preferences are organized by categories, which appear as icons on the left side of the dialog box. Click a category icon to view its settings and make changes as desired (see Figure 5-26 below). The options in each category are covered in the following sections.

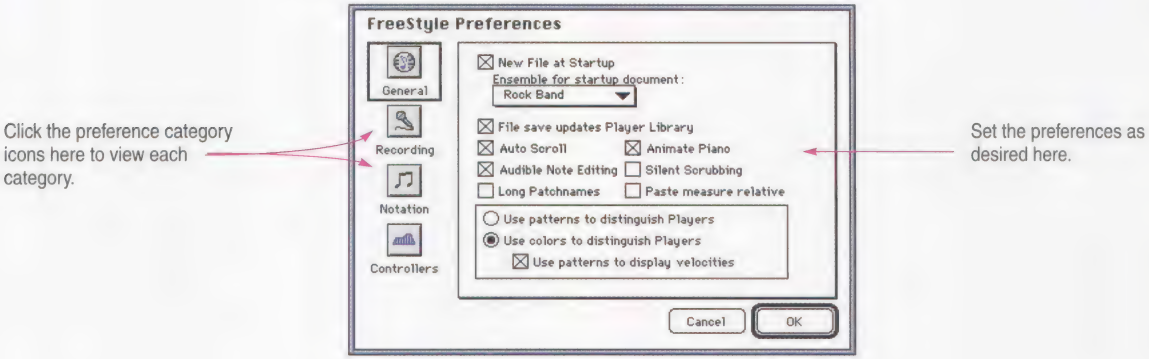


Figure 5-3: Preferences

General Preferences: See Figure 5-3 above.

New File at Startup: When this option is checked, FreeStyle automatically opens a new file when you first open the program. When it is unchecked, FreeStyle opens, but no file appears. Instead, you choose either New or Open from the File menu to open a file. This option also provides a pop-up menu from which you can choose a default ensemble for new files.

File save updates Player Library: Causes changes you make to the players in the Ensemble window to be automatically saved in the Player Library. If you don't want your library entries to be changed automatically, don't check this option.

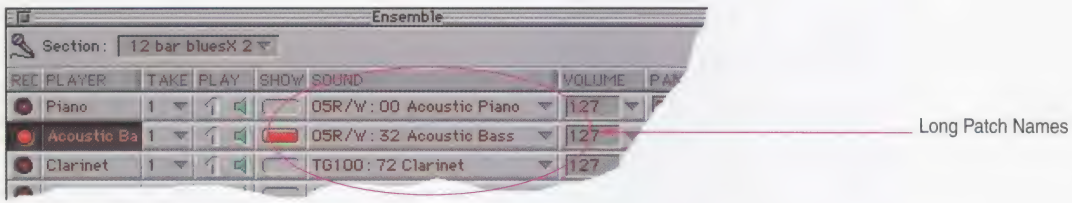
Auto Scroll: Causes windows to automatically scroll during recording and playback to follow the playback wiper. The playback wiper always moves, regardless of this option.

Animate Piano: Causes the keys on the pitch ruler in the Graphic Editing window to highlight when a note of that pitch is played or recorded.

Audible Note Editing: Causes notes to play when you click them and drag them.

Silent Scrubbing: Causes notes to not play when you grab the wiper and drag it left and right to scrub the music. When this option is unchecked, all unmuted players play when you drag the wiper. Using the command key while scrubbing inverts this setting. Silent scrubbing is useful when doing a lot of cutting and pasting, which requires constant wiper placement.

Long Patch Names: Causes patch names to be displayed along with their source MIDI device as shown below.



Paste Measure Relative: Causes pasted material to be placed with the same relationship to the bar-line as when it was copied. If this option is not checked then material will be placed relative to the current brush/cursor grid setting. For more information see "Paste" on page 62.

Use Patterns/Colors to distinguish players: When viewing multiple players in the Graphic Editing window, FreeStyle can differentiate the notes for each player by displaying each player with its own color or graphical pattern.

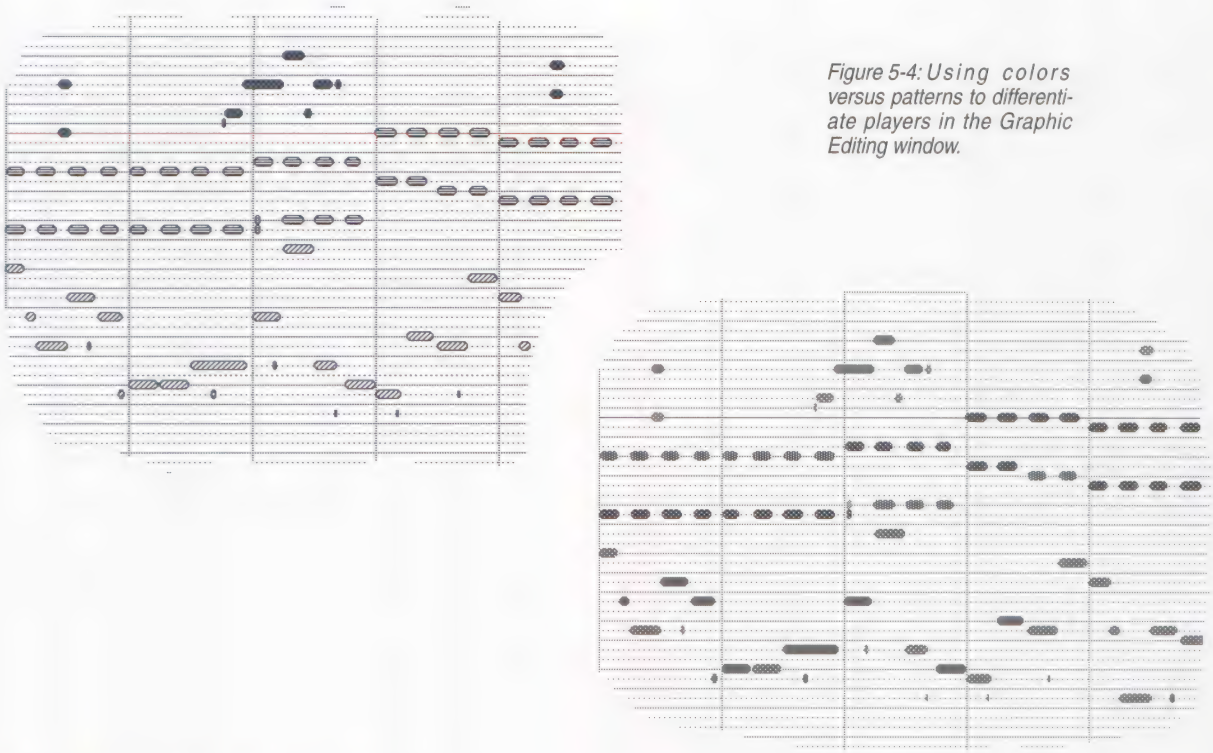
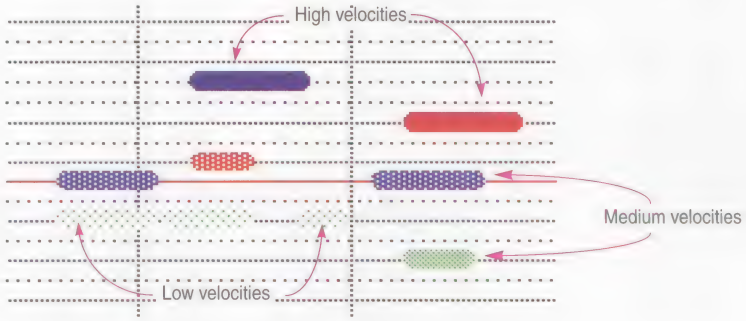
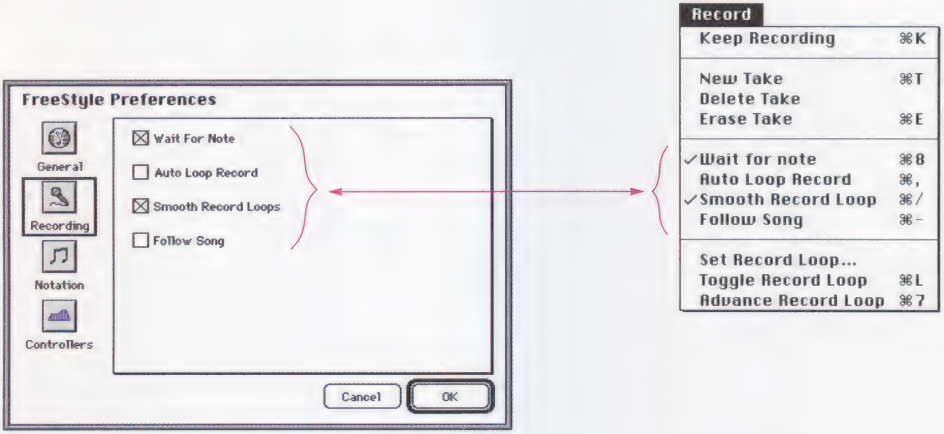


Figure 5-4: Using colors versus patterns to differentiate players in the Graphic Editing window.

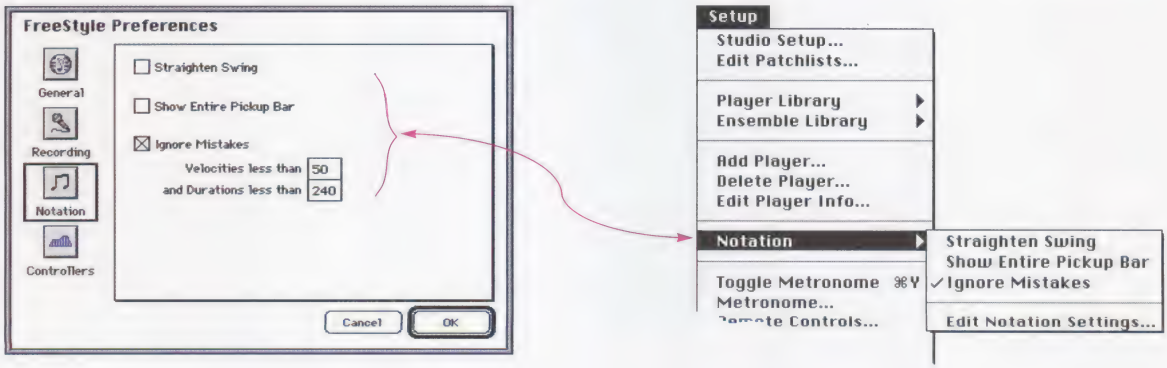
Use patterns to display velocities: If you choose to use color, you can have FreeStyle indicate the velocity of the notes by how densely filled the note is. The higher the density, the higher the velocity.



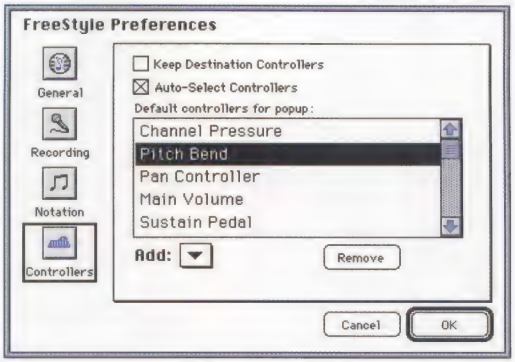
Recording Preferences: The four recording preferences are identical to the four commands in the Record menu with the same name. For a complete explanation of these features, see their respective sections starting with "Wait for Note" on page 104. The four record preferences determine their settings when you open a new FreeStyle document.



Notation Preferences: The Notation preferences are identical to the three commands in the Setup menu with the same name. For a complete explanation of these features, see "Notation" on page 119. The three notation preferences determine whether they are on or off when you open a new FreeStyle document.



Controller Preferences:



Keep Destination Controllers: This preference determines what happens when you paste notes into a region of time where controller events currently exist, and the notes you are pasting have controller events along with them. The easiest way to understand this is through an example. Let's say that you have copied a section of notes into the clipboard. FreeStyle has automatically included some volume controllers because they affect the notes you just copied. Now you go to paste the notes somewhere else, but there happens to be volume controllers at the location where you are pasting. When *Keep Destination Controllers* is unchecked, the volume controllers in the clipboard are pasted with the notes, and they replace the controllers at the paste destination. When *Keep Destination Controllers* is checked, the volume controllers in the clipboard are *not* pasted with the notes, and the controllers at the paste destination remain unaffected.

Auto-Select Controllers: The *Auto-Select Controllers* feature applies musical "intelligence" to MIDI data recorded into FreeStyle. When this option is checked, pitch bend, volume changes, and other aspects of the musical performance that consist of MIDI controller data in the controller pane are automatically "linked" to the notes that they affect. As a result, you can select move, cut, copy, paste and otherwise edit notes, and the controller data is automatically included with the notes. This means that you don't have to worry about pitch bend or similar data; FreeStyle takes care of it automatically for you when you edit the notes. The example below shows how the pitch bend in the controller pane is selected when the note is selected.

When the Auto Select Controllers option is turned off, notes and controller data must be selected and edited separately.

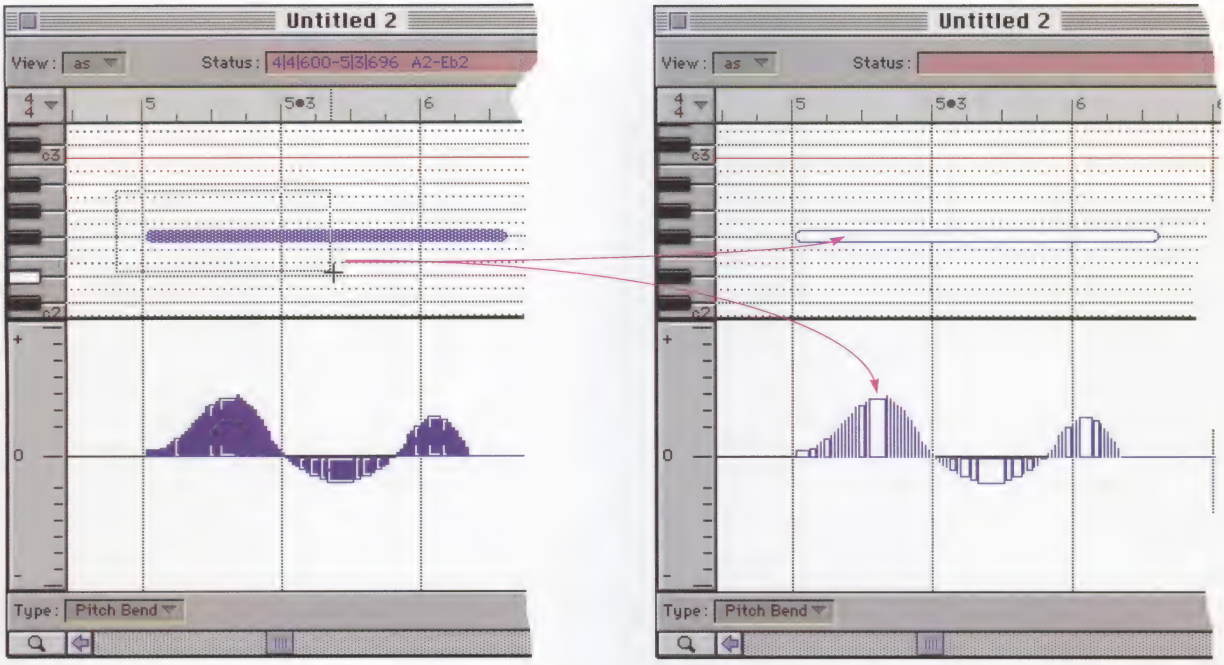
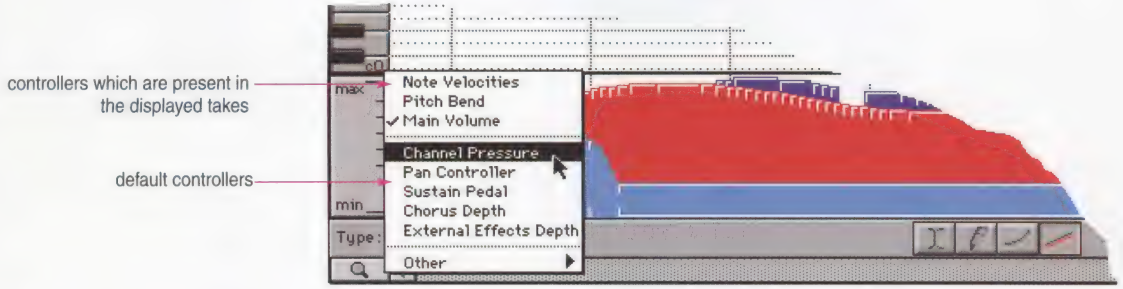


Figure 5-5: When Auto-Select Controllers is checked, selecting a note automatically includes any controller data that affects the note. In this example, the pitch bend data that bends the note is selected along with the note. Note the method of selection: you must select the note by dragging a selection box over it. If you just click the note, the pitch bend won't select.

Default controllers for pop-up: Lets you choose which controllers appear in the controller pop-up menu below the controller pane. Use the Add and Remove buttons to add or remove controllers from the pop-up list. All other controllers, unless they are present in the displayed takes, are accessed with the "other" item in the pop-up menu.



Turn All Notes Off: Silences any notes that are currently playing. This command is helpful when notes get "stuck" on.

Region Menu

Quantize: Changes the timing of the currently selected notes to make them rhythmically precise. Two types of quantization are provided: *Notation based* and *Custom*.

Notation based: This quantize option causes the notes to precisely match their rhythmic transcription in the notation display. Only the start locations are adjusted - not their durations. This type of quantization happens automatically according to FreeStyle's music transcription technology, so no quantize options are provided. In short, what you see is what you get.

Custom: This quantize option matches the timing of all currently selected notes to an evenly spaced quantize grid. You choose the grid's resolution from the note pop-up menu provided; most often, you'll want to choose the resolution that matches the shortest duration you are quantizing. You can choose whether or not to include durations when quantizing with the *Affect Durations* check box. The *Time offset* slider lets you shift all notes a little bit earlier or later than the grid locations themselves, which occur on exact beat divisions, creating either a pushed or laid back feel. The *Swing* slider lets you shift every other grid point to create jazz and hip-hop feels. For more information see "Quantizing" on page 66.

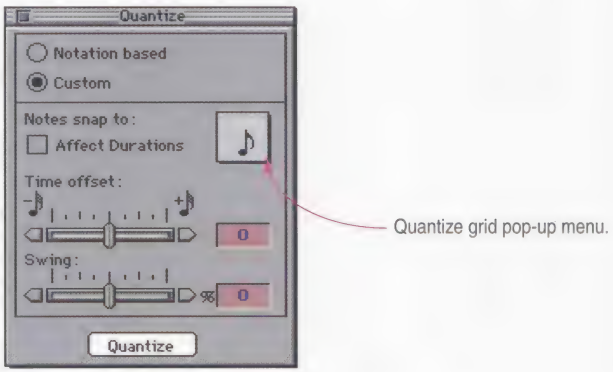
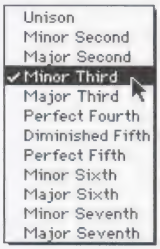
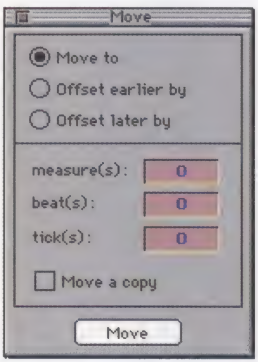


Figure 5-6: Notation based quantizing.

Transpose: Changes the pitch of all currently selected notes as specified by the settings in the Transpose window. Specify the interval by which you wish to transpose by selecting one of the twelve chromatic intervals provided. To Transpose by more than one octave at a time, choose an octave setting of 1 or higher. To transpose by an interval of less than an octave, set the octave option to zero. For information on other types of transposition see "Transposing" on page 64.



Move: Changes the location of all currently selected material. You can either shift the music earlier or later in time from its current position, or you can specify an absolute time for the material to be moved to. The *Move a copy* option leaves the original material unmodified and makes an exact copy at the new location.



Save as Metronome: Makes the currently selected material into a metronome riff, which appears in the Riffs pop-up menu in the Metronome command dialog box in the Setup menu. You then have quick access to it as a metronome for any future recording and playing. The riff can be of any length, and it doesn't even have to be drums. You can make riffs out of just about anything, such as a bass line or keyboard lick. The only restriction is that the riff can only use one sound. If you have music belonging to more than one player selected, it will be merged together into a single riff.

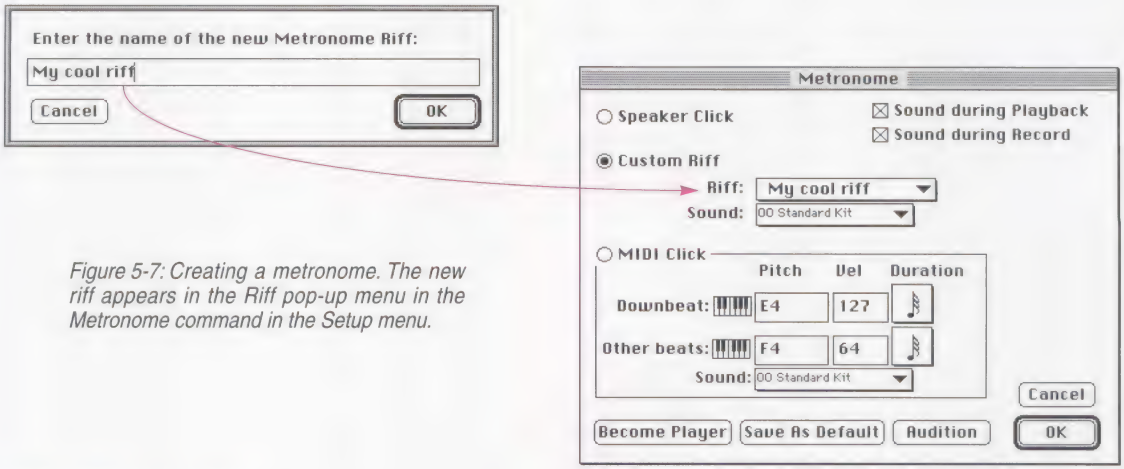


Figure 5-7: Creating a metronome. The new riff appears in the Riff pop-up menu in the Metronome command in the Setup menu.

Create Play Loop: A *play loop* is a region of material that repeats itself within the section for as many times as you specify. The Create Play Loop command creates a play loop out of the currently selected material. If nothing is selected, then the measure containing the playback wiper becomes the source measure for the loop. For your convenience, FreeStyle automatically figures out how many repeats are necessary to make the loop play for the entire length of the section.

The benefit of creating a play loop instead of just copying and pasting by hand is that if you make a change to the original material, the change is automatically reflected in all iterations of the loop. You can even make modifications to iterations within a play loop (called *overrides*) so that the loop doesn't sound exactly the same each time it repeats. For more information see "Playback Loops" on page 56.

Record Menu

Keep Recording: Makes any music you have just recorded permanent in the sense that it will no longer be susceptible to the Undo Record command. Use this command if you are happy with what you have recorded so far and you want to keep it. After using the Keep Recording command, you can record more overdubs into the same take and freely use Undo Record without losing the "kept" material.

New Take: A *take* is a place to store a performance by a single player in a specific section of music. You can record as many takes as you want for each player. Takes are numbered consecutively, and they can be instantly accessed from the take pop-up menu next to each player in the Ensemble window as shown below. You can also type single-digit numbers to select one of the first ten takes for a player, or use the up and down arrow keys to cycle through all the takes. The *New Take* command creates a new, empty take for the currently record-enabled player. It does the same thing as choosing New from the take pop-up menu in the Ensemble window (as shown below). Once you've created a new take, you are ready to record into it.

Figure 5-8: Working with takes in the Ensemble window.

Delete Take: Deletes the current take for the record-enabled player in the Ensemble window. (See above.) For example, if you select take 5 and then use Delete Take, take 5 completely disappears from the pop-up menu.

Erase Take: Removes all music from the current take of the currently record-enabled player in the Ensemble window.

> ☛ Erase Take and Delete Take differ in that Erase Take just removes the contents of the take, whereas Delete Take removes both the contents and the take itself.

Wait for Note: When you start recording, *Wait for Note* causes FreeStyle to repeat measure zero indefinitely until you play the first note. After the first note is received, FreeStyle continues on into measure 1 the next time it reaches the end of measure 0. You can play notes anywhere in measure 0 as pickup notes to the section. FreeStyle is also intelligent about notes played a little past the downbeat of measure 1 and will adjust these notes to their correct position instead of putting them at the very beginning of the pickup measure. Wait for Note is a checkable menu item. Check it to turn it on; uncheck it to turn it off.

Auto Loop Record: During recording, *Auto Loop Record* causes FreeStyle to automatically loop back to the beginning of your performance two bars after you stop recording. Just lift your hands off your MIDI keyboard and wait a couple bars. FreeStyle automatically returns to where you began recording and starts playing from there. It also turns on the Record Loop (if it isn't already on) so that the section will continue looping until you stop playback with the main transports. FreeStyle also stays in record so that you can continue recording into the section if you'd like. Auto Loop Record is a checkable menu item. Check it to turn it on; uncheck it to turn it off.

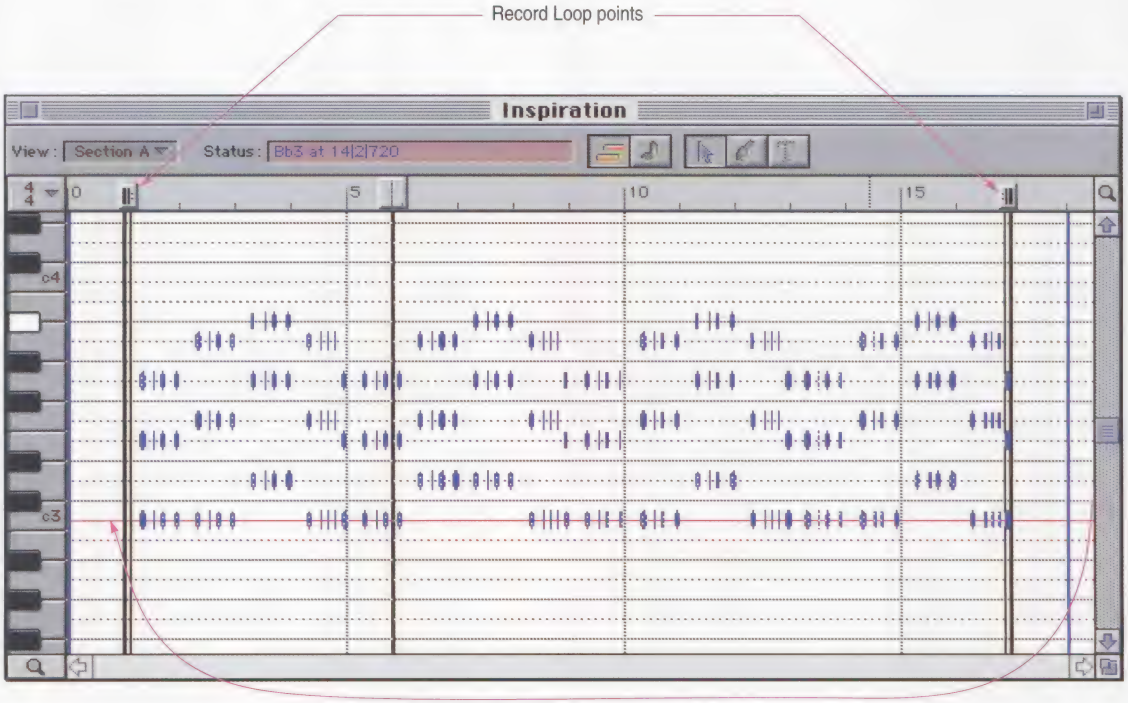


Figure 5-9: Auto Loop Record. When Auto Loop Record is turned on, FreeStyle automatically returns to the beginning of the section two bars after you stop recording. It also turns on the Record Loop to make the section repeat until you stop.

Smooth Record Loop: When Smooth Record Loop is turned on, notes that are recorded in the pickup bar are automatically played at the end of the record loop. Often when you record a loop, you play pickup notes into bar one, or you play notes on the down beat of bar one a little bit early. In either case, these notes are not actually in the loop because they occur before beat 1 of the first measure. As a result, they do not play when the section loops back to the first measure. Smooth Record Loop automatically places pickup bar notes at the end of the loop so that they seamlessly lead into the beginning of the loop when it repeats. If you hear a "gap" when the section repeats, try turning on Smooth Record Loop; most likely, the "gap" effect will go away. Smooth Record Loop is a checkable menu item. Check it to turn it on; uncheck it to turn it off.

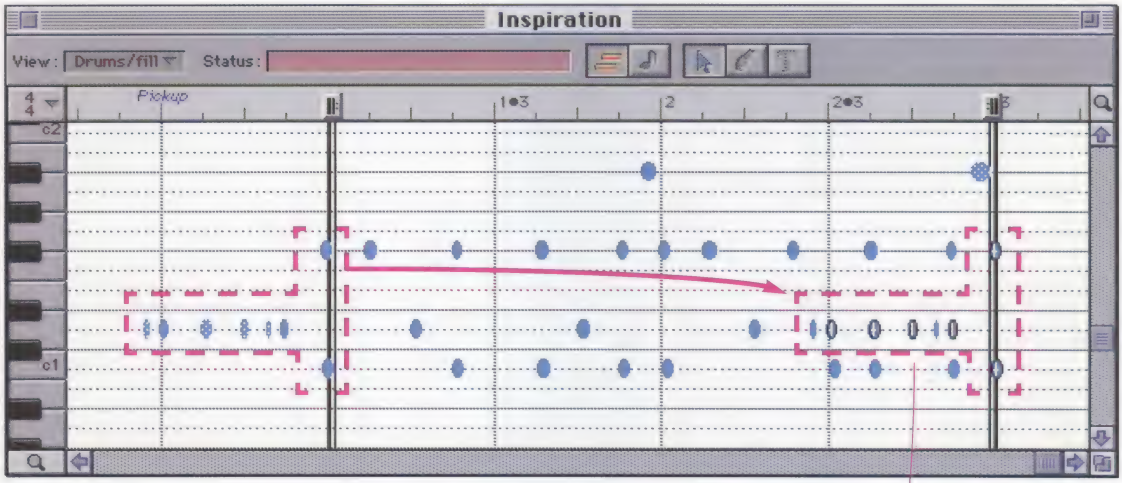
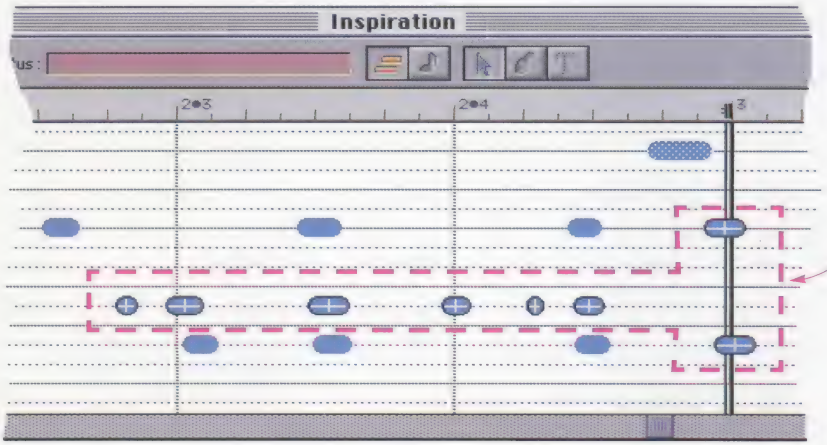


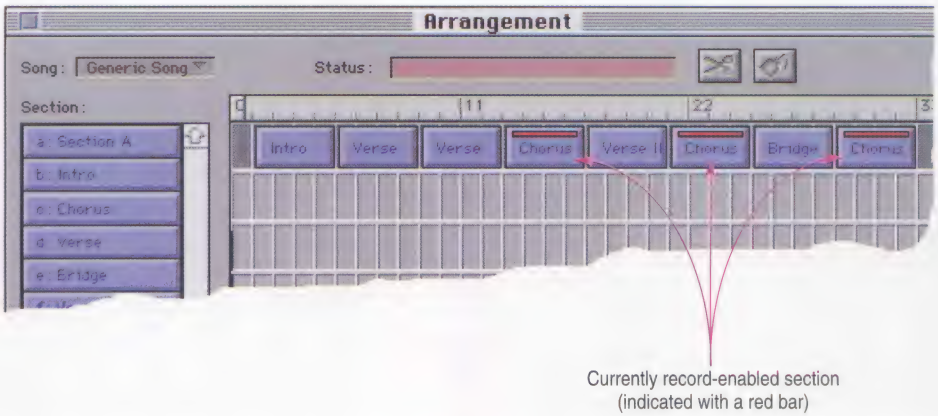
Figure 5-10: Smooth Record Loop. When Smooth Record Loop is turned on, notes in the pickup bar are automatically played at the end of the loop. This is especially useful when notes on the downbeat of the looped section are played a little early. If you notice a "gap" when the loop repeats, try turning on this feature.



Notes that are automatically played at the end of the section by the Smooth Record Loop command are indicated by a cross within the note. These notes will automatically change position if you move the record loop end marker, but they cannot be directly selected, dragged, or otherwise edited. To do so, you need to edit their original notes in the pickup measure of the section. To remove them (without removing the original notes), turn off Smooth Record Loop in the Record menu.

Follow Song: FreeStyle lets you record into sections and also into songs. The Follow Song command affects the process of recording into a song.

Turning Off Follow Song: When it is turned off (unchecked), FreeStyle only records into the currently record-enabled section in the Arrangement window (indicated by a red bar as shown below). To make a section record-enabled, just click it.



As playback proceeds through the song, FreeStyle only drops into record when it reaches the record-enabled section. If the section appears in the song more than once, FreeStyle drops into record each time it reaches the record-enabled section. In the example above, recording would occur only when the chorus plays at measures 12-17, 20-25, and 28-33. (Note that these ranges include the measure before and the measure after each instance of the section. That's because each section has a "pickup" and "overhang" measure -- see "Single-section recording within the context of a song" on page 80 for details.) FreeStyle drops out of recording during sections that are not record-enabled (no red bar).

Turning On Follow Song: When Follow Song is turned on (checked), FreeStyle records into each section in the top row of the Arrangement Window as it plays as shown in Figure 5-11 on page 107. The top row is called the *primary song structure* row. Notice that the *Verse* section in Figure 5-11 is record-enabled because it is currently playing (the scrolling playback wiper is in it). When the wiper reaches the next section, *Chorus*, it will become record-enabled.

As you can see, the Follow Song feature lets you set up sections in a song before recording and then record into them continuously from one to the next. FreeStyle automatically places what you play in each appropriate section. You can easily go back and forth between this style of "linear" recording within a song and loop-recording within a single section. The Follow Song feature gives you the best of both worlds. See "Single-section recording within the context of a song" on page 80 for another technique.

Using Follow Song with Stationery: The follow song command can be used any time you wish to record without being concerned about what section you are in. It is ideal when used with FreeStyle Stationery files, which are song templates with sections already set up in them, ready for you to record into when you start a new document. See "Stationery" on page 88 for more information.

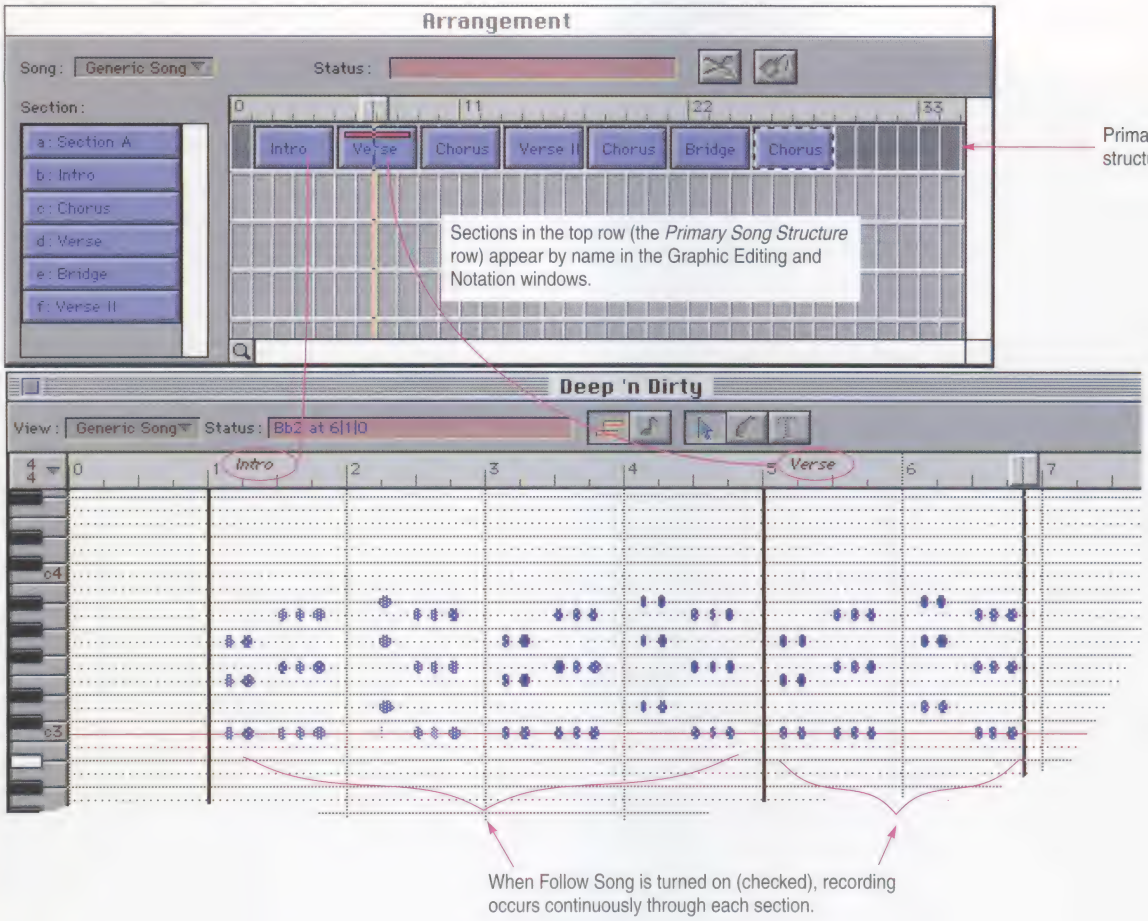
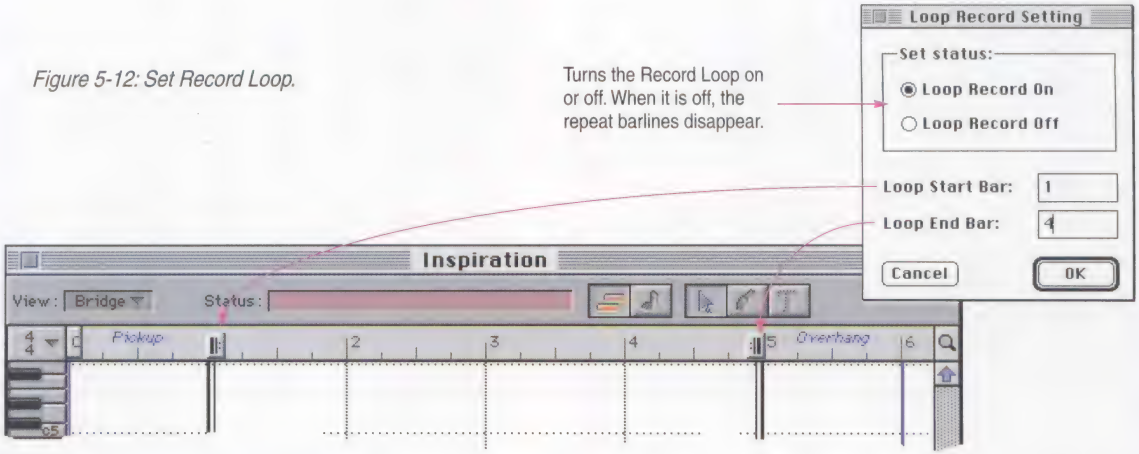


Figure 5-11: The Follow Song feature. When recording into a song, the Follow Song command causes FreeStyle to record into whatever section is currently playing in the top row of the arrangement window. This lets you record continuously without worrying about which section you are in. FreeStyle automatically places what you play in the appropriate section.

Set Record Loop: The Record Loop repeats any span of time that you specify. The Record Loop affects whatever is currently playing (either a section or a song).

Figure 5-12: Set Record Loop.



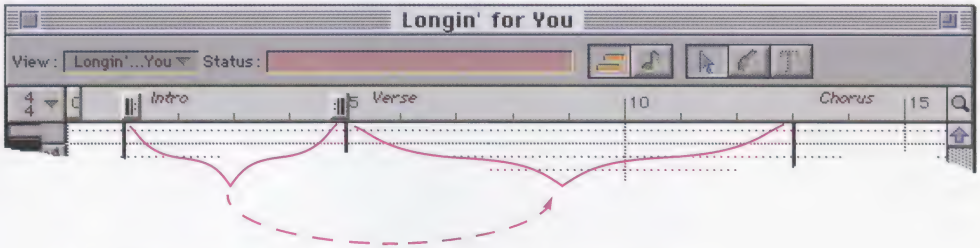
Shortcut for setting the Record Loop: Use command-L to make record loop markers appear in the time line and then drag them anywhere you want. Record loops are always on measure boundaries, however, so the markers will snap to the nearest barline.

Toggle Record Loop: Turns the *Record Loop* on and off. The *Record Loop* is any part of a section or song that you specify to repeat indefinitely with the Set Record Loop command. It appears as two repeat barlines in the rulers as shown in Figure 5-12. If the Record Loop is currently turned off, the repeat barlines are not visible; the Toggle Record Loop command makes them appear. If the Record Loop is on, Toggle Record Loop turns them off.

Advance Record Loop: Makes the Record Loop jump ahead to the next range of measures. For example, if the Record Loop is currently looping measures 1 through 4, advancing it will make it jump to the next four bars, measures 5 through 8. If you are currently viewing a song and the Record Loop matches the boundaries of a section, it will advance to the boundaries of the next section. See Figure 5-13 below for examples. The Advance Record Loop command is disabled when the Record Loop is turned off. To turn on the Record Loop, choose Toggle Record Loop from the Record menu, or press command-L.

Figure 5-13: Using the Advance Record Loop command.

In this example, since both loop points are not located at section boundaries, the Record Loop advances to the next 4bars.

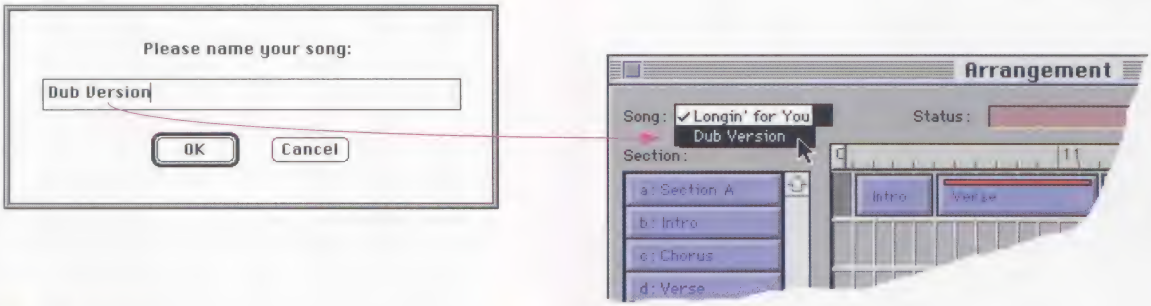


In this example, since both loop points are located at section boundaries for the 4-bar Intro section, the Record Loop advances to the next section, *Verse*, which is 8 bars long.

Song Menu

The commands in the Song menu deal with *sections* and *songs*. For a brief explanation of each, see "Sections" on page 42 and "Songs & The Arrangement Window" on page 44.

New Song: Creates a new song in the FreeStyle document. A *song* consists of sections, and it can be displayed in all three FreeStyle views (Arrangement, Graphic editing, and Notation). When you create a new song, its name appears in the *Song* or *View* pop-up menu in each window as shown below. When you choose it, the song is displayed in the window. There is no limit to the number of songs you can create in a FreeStyle document.



Delete Song: Gets rid of the song that is currently displayed in the Arrangement window, Graphic Editing window, or Notation display. If the window is currently showing a section instead of a song, the Delete Song command grays out to indicate that it is not available. To make it available, select a song from the pop-up menu. Deleting a song just removes the arrangement of sections, not the sections themselves.

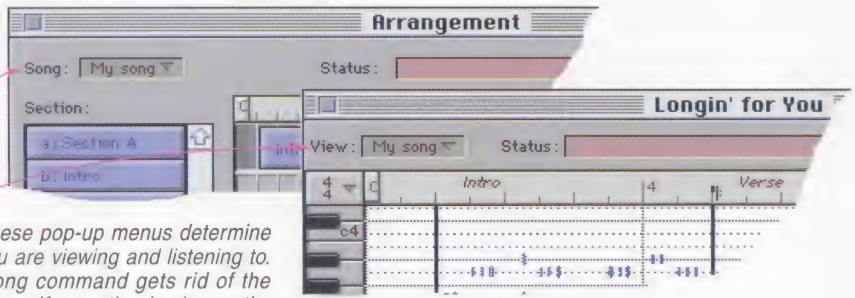


Figure 5-14: These pop-up menus determine which song you are viewing and listening to. The Delete Song command gets rid of the song shown here. If a section is shown, the command grays out.

Rename Song: Lets you change the name of the song that is currently displayed as shown in Figure 5-14 above. If the window is currently showing a section instead of a song, the Rename Song command grays out to indicate that it is not available. To make it available, select a song from the pop-up menu.

New Section: Creates a new, empty section, which appears in the Section list in the Arrangement window. In addition, the Graphic Editing view and Notation view display the new section.

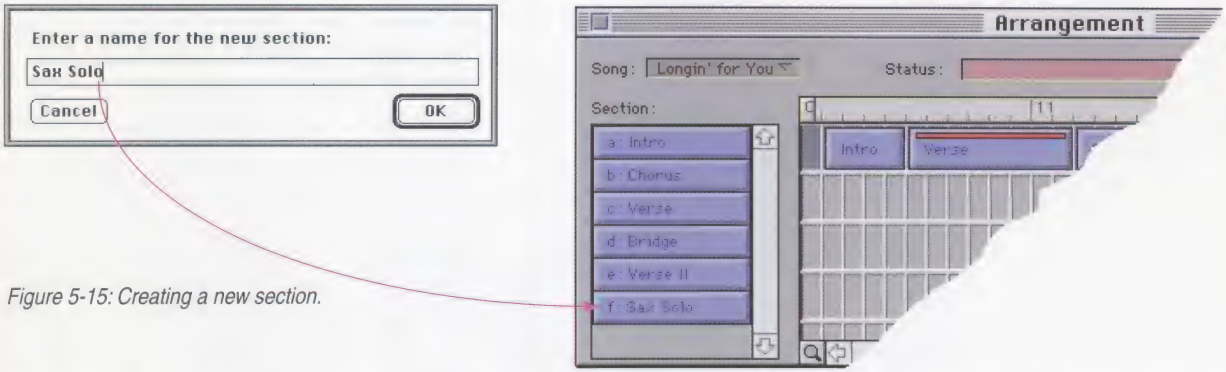


Figure 5-15: Creating a new section.

Delete Section: Gets rid of the section that you specify before choosing this command. To indicate which section you want deleted, either click it in the Section List in the Arrangement window to select it, or choose it from the View pop-up menu in the graphic editing or notation view to make it the current section. Deleting a section removes it from all songs in which it is used.

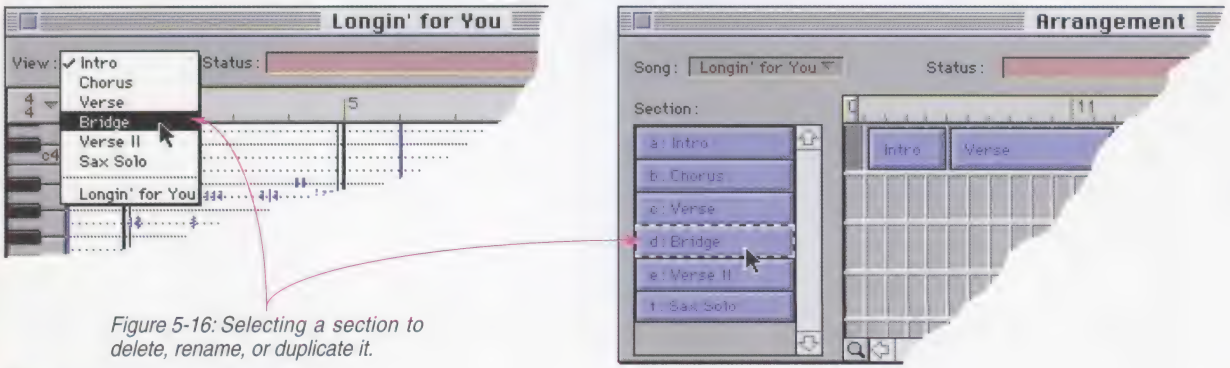


Figure 5-16: Selecting a section to delete, rename, or duplicate it.

Rename Section: After choosing a section as shown in Figure 5-14 above, you can use this command to change its name.

Duplicate Section: After choosing a section as shown in Figure 5-14 above, you can use this command to make an exact copy of the section. The copy appears at the bottom of the section list with the word *copy* appended to the original name as shown below in Figure 5-14. The copy is completely separate; it is not "linked" or otherwise related to the original in any way, so you can freely modify it without affecting the original section. Duplicating is useful when you want to use an existing section as a basis for new material.

> ☛ It is not necessary to duplicate sections before adding multiple copies of a section to a song in the arrangement grid. Just drag in as many copies of a section as you want. Unlike the sections made from the Duplicate command, copies dragged into the arrangement grid are references to the original; this means that if you change the original, all instances of it in the song will change, too. If you want to make one instance of a section different from the others, make a copy of it using the duplicate section command.

Figure 5-17: Duplicating a section.

Previous/Next: This menu item has a hierarchical sub-menu with four sets of commands corresponding to the four important elements in a FreeStyle song: sections, players, takes, and sounds. In each case, the next/previous command moves to the next or previous item in the list. If you are at the end of the list, the Next command cycles you back to the beginning of the list; likewise, if you are already at the beginning of the list, the Previous command brings you to the end. This lets you cycle indefinitely with either command.

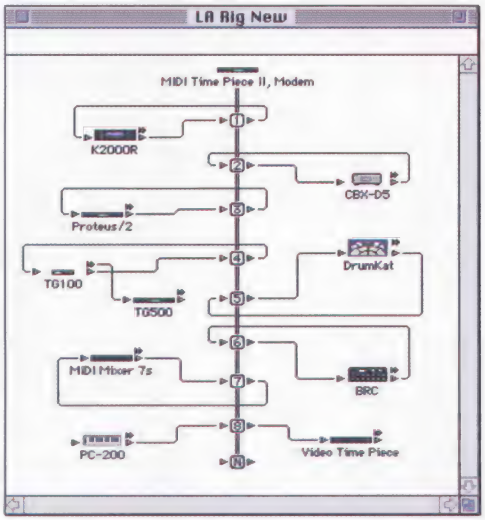
Commands	What they do
Next/Previous Section	If you are currently viewing a single section, these commands will cycle through all of the currently defined sections in the FreeStyle document. If you are currently viewing a song arrangement, they will cycle through only those sections which appear in the top row of the arrangement grid in the arrangement window.
Next/Previous Player	Cycle through the list of players in the Ensemble window.
Next/Previous Take	Cycle through the list of takes for the currently record-enabled player in the Ensemble window.
Next/Previous Sound	Cycle through the list of sounds available to the currently record-enabled player in the Ensemble window. For General MIDI devices, you will hear a beep before cycling into drum sounds. That's to alert you that you are about to change the drum sound on channel 10, which could cause your Riff Metronome to stop playing correctly if the Riff Metronome is using the same output device.

Setup Menu

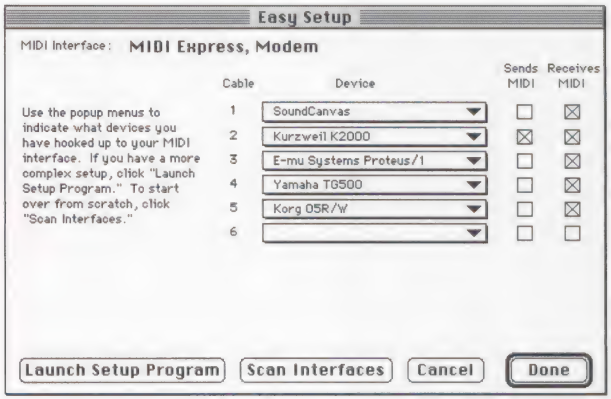
The setup menu provides ways to manage your music-making environment in FreeStyle.

Studio Setup: displays information about the MIDI hardware you are using with FreeStyle. What happens when you choose this commands depends on the nature of your MIDI studio and what you specified when you first ran FreeStyle. If you used the Easy Setup window (and you have not modified your studio using the separate program called FreeMIDI Setup), you'll see the Easy Setup window shown below.

Otherwise, FreeStyle will run a separate program called FreeMIDI Setup™, which provides you with a graphical representation of the MIDI equipment connected to your Macintosh. Use the features in FreeMIDI Setup to make changes to the setup. Normally, you want the FreeMIDI Setup window to identically match your MIDI equipment. For more information, see Chapter 6, "FreeMIDI Setup" (page 131).



If you have a complex MIDI studio, the Studio Setup command launches FreeMIDI Setup, a separate program that provides this graphical representation of your studio. For more information, see chapter Chapter 6, "FreeMIDI Setup"



If you have a small or medium sized MIDI studio, the Studio Setup command displays the Easy Setup window. For more information, see "Using the Easy Setup window" on page 24.

Figure 5-18: The Studio Setup provides information about your MIDI studio.

Edit Patchlists: Opens a separate program called PatchList Manager, which provides ways to control the lists of sounds that you assign to players in FreeStyle. Ideally, you want the list (or lists) of sounds for each MIDI instrument to accurately reflect the sounds that are currently available in the instrument. If they don't, use PatchList Manager to fix the existing patch lists for the device or create new ones, if necessary. Since each MIDI keyboard, sound module, sampler, etc. handles sounds differently, you'll find that the patch list setup for each instrument will vary. For more information see chapter Chapter 7, "PatchList Manager".

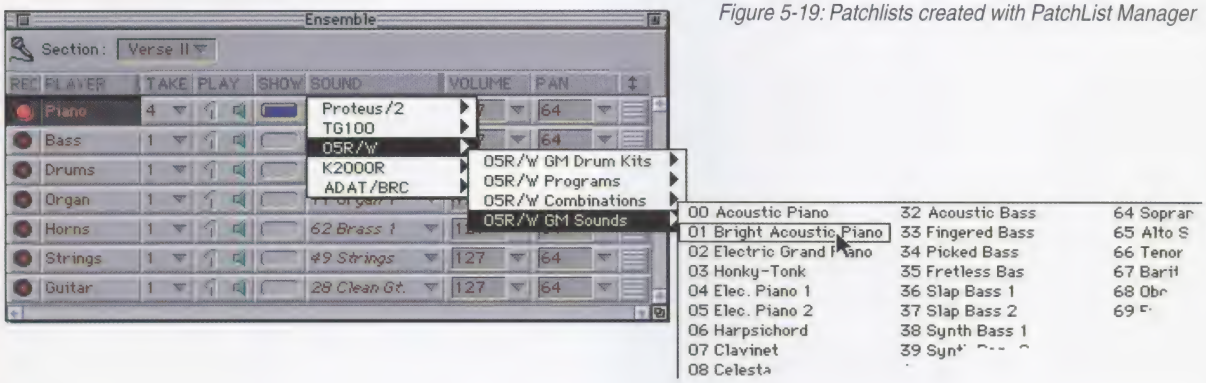


Figure 5-19: Patchlists created with PatchList Manager

Player Library: A *player* is a single instrument in the Ensemble, such as piano or bass. The *Player Library* is a list of all the currently defined Player Templates available to FreeStyle. Player library entries are templates for use when adding new players to an ensemble. FreeStyle ships with a fairly long list of player templates already set up for you in the library. You can add your own templates, rename templates, and modify player characteristics, such as the default synth sound. The commands in the Player Library sub-menu let you manage your player library.

Edit Player Library: Produces a dialog that lets you view the player library and make changes to it.

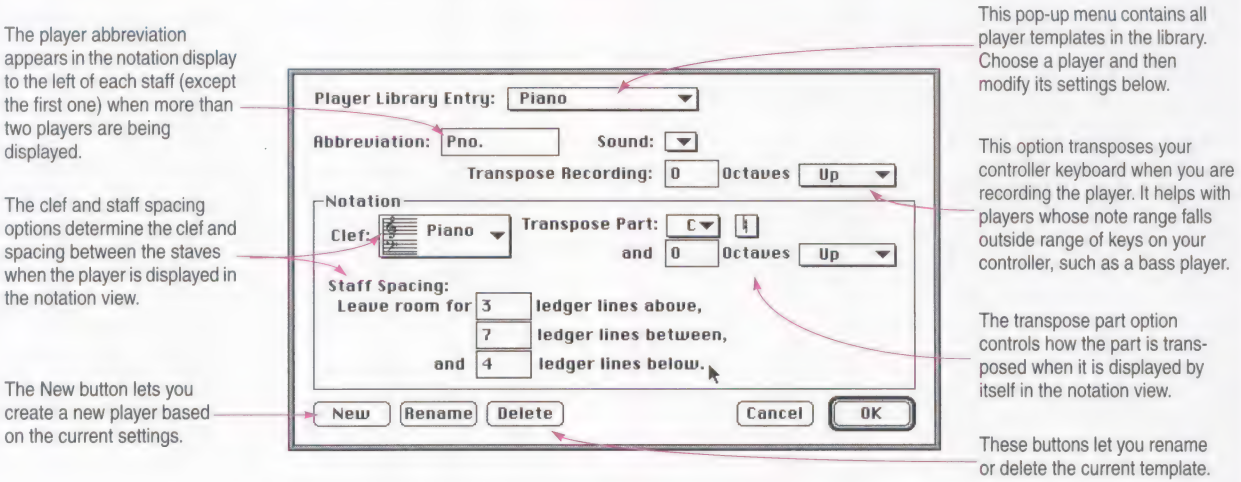


Figure 5-20: Player Library

Save "Player": Takes the settings for the currently selected player in the Ensemble window (or just the record-enabled player if several players are selected) and saves them in the player library. If a template with the same name already exists in the library, FreeStyle asks you if you want to replace it.

Apply to "Player": Applies a Player Library Entry's settings to the currently selected player in the Ensemble window (or the record-enabled player if several players are selected). Just choose the desired replacement from the pop-up menu in the dialog box as shown below.

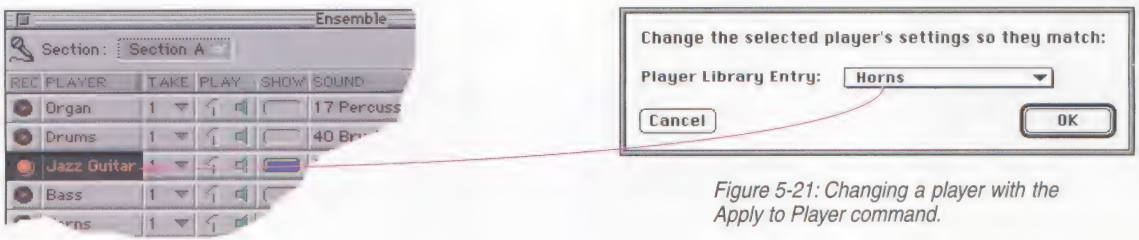


Figure 5-21: Changing a player with the Apply to Player command.

Ensemble Library: An *ensemble* is a group of player templates. The *Ensemble library* contains preset ensembles that you can use when creating a new document. The Ensemble Library menu commands let you create your own new ensembles, change existing ones, and add an ensemble to an existing document.

Edit Ensemble Library: Produces a dialog that lets you view the Ensemble library and make changes to ensembles.

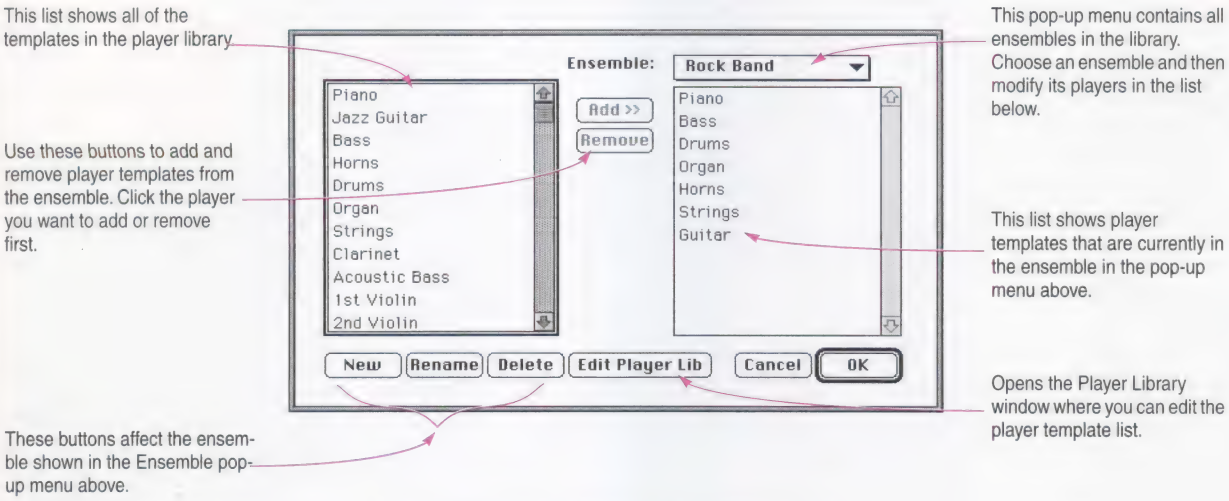
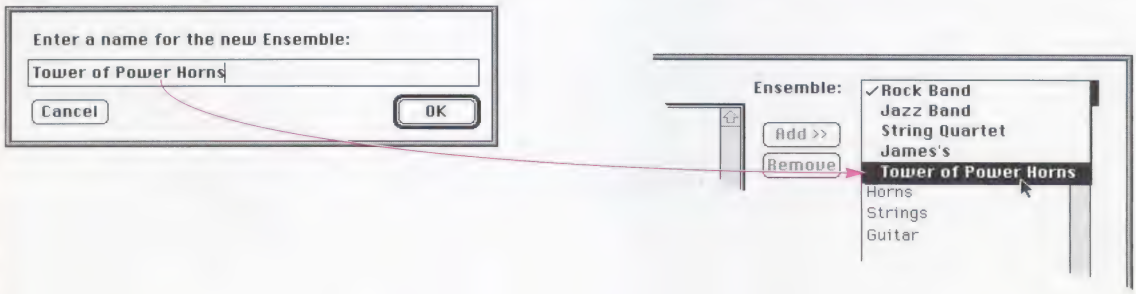
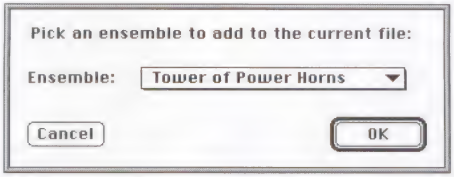


Figure 5-22: Editing an ensemble in the Ensemble library.

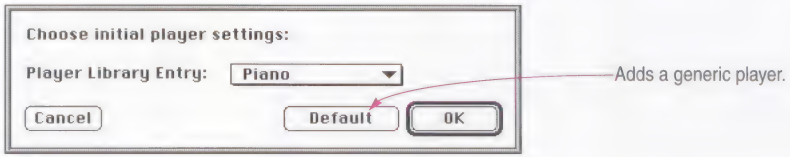
Save Current Ensemble: Asks you to name the current ensemble in the Ensemble window and then saves it in the Ensemble Library. It also automatically adds the players in the ensemble to your player library.



Add Ensemble to this file: Adds the players from the ensemble of your choice to the Ensemble window. This command does not *replace* the current ensemble; it *adds* to it.



Add Player: Adds a single player of your choice to your document. You can choose any player template from the Player library. If the library doesn't have exactly the type of player you want, just pick one that's close and change it after it's created.



Delete Player: Removes the currently selected player (or the record-enabled player if several players are selected) from your document. The player is removed from all sections, and all of its takes are discarded as well. This command doesn't permanently get rid of the player from the Player library; it only removes the player from the current document. To remove a player from the library, use the Edit Player Library command (described on page 116).

Edit Player Info: Lets you view and modify various settings for the currently selected player in the Ensemble window (or the record-enabled player if several players are selected). Although this dialog looks a lot like the Edit Player Library dialog, this one allows you to change a player's settings only in the current document without changing the settings of any Player Library entry.

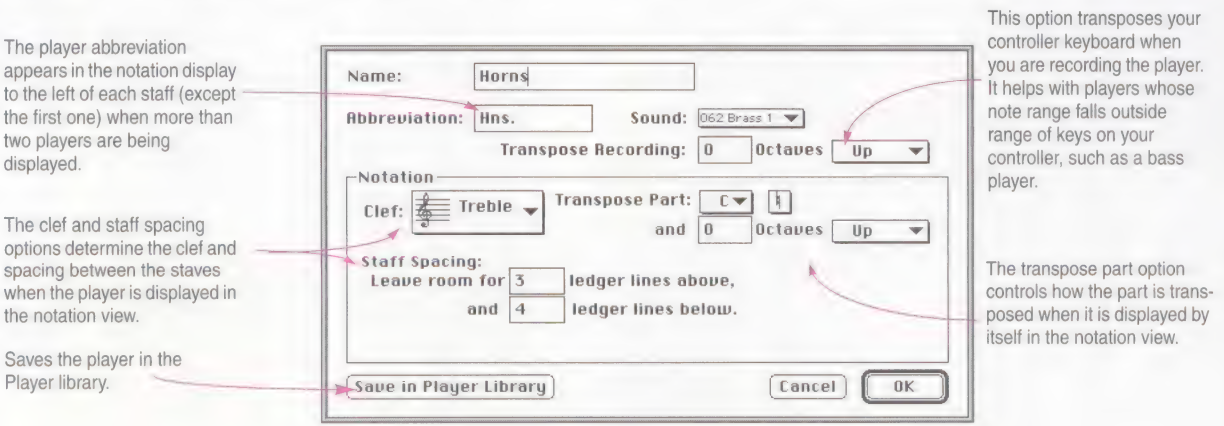


Figure 5-23: Changing a player's settings with Edit Player Info.

Notation: The notation settings affect how music is written in the notation editing view.

Straighten Swing: When the *Straighten Swing* command is checked, FreeStyle notates swung rhythms in straight time instead of writing them as triplets. For example, swung eighth notes are customarily written as straight eighth-notes. If you are playing jazz, swing, hip-hop, be-bop, or any type of music that involves a swung feel, check this menu item to avoid seeing triplet markings in the notation.

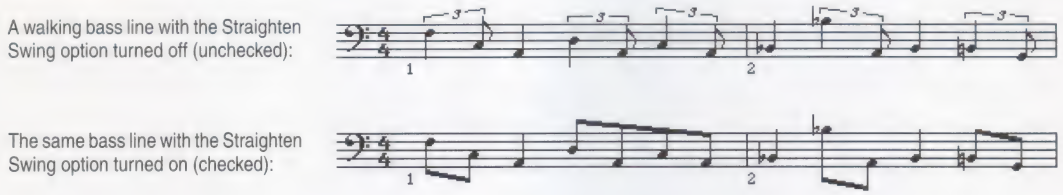


Figure 5-24: The Straighten Swing command.

Show Entire Pickup Bar: When this command is checked, FreeStyle shows the entire pickup bar (measure zero) in the currently displayed section or song—even if the pickup bar is empty. Below are some examples.

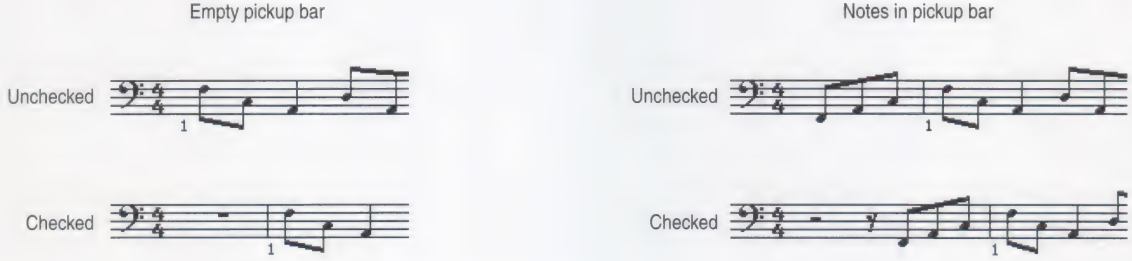


Figure 5-25: The Show Entire Pickup Bar command.

Ignore mistakes: Causes the notation view to not display notes that are both very short and relatively quiet. Notes like these are often mistakes and cause the notation transcription to be inaccurate. To change the definition of "short" and "quiet" choose "Edit Notation Settings".

Edit Notation Settings: Causes a window to appear where you can adjust all of the notation settings in the current document. To adjust these settings for all new documents, use the preferences window described on page 97.

Metronome: This command opens the Metronome window, which lets you adjust the metronome settings. FreeStyle's metronome can play a Macintosh speaker click or a click that consists of any sound (such as a side stick or rim shot) produced by a MIDI drum machine or other MIDI instrument. It can also play a *custom riff*. A *riff* is a musical phrase played by a single player, usually a drummer. FreeStyle provides a wide selection of stock riffs; most are in the form of two-bar drum loops. You can create your own riffs by using the *Save As Metronome* command in the Region menu (see "Save as Metronome" on page 102 for details) or by dragging a standard MIDI file into the Metronomes folder on your Macintosh desktop. Note that a riff doesn't *have* to be a drum loop; it can be any single instrument that you want, such as a bass loop or a keyboard riff.

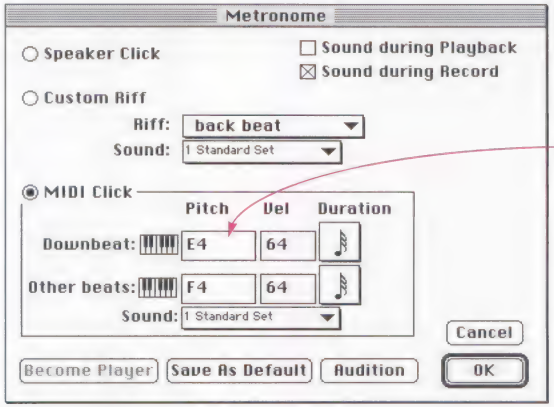


Figure 5-26: Setting the Metronome. FreeStyle gives you three choices for a metronome: Speaker Click, Custom Riff, and MIDI click.

Sound during Playback/Recording: These two options control when FreeStyle plays the metronome. To turn off the metronome completely, uncheck both boxes.

Speaker Click: Produces a generic metronome click sound from the Macintosh internal speaker. Use the Sound Control panel to control its volume.

Custom Riff: If you want a custom riff, choose the desired riff from the menu, and then choose a drum kit or other appropriate sound.

MIDI Click: The MIDI click option produces a generic click using sounds from a MIDI instrument, such as a rim shot sound from a drum machine. The *downbeat* click occurs at the downbeat (beat 1) of each measure. Choose the desired pitch, velocity, and duration for the two click sounds. See Figure 5-26 above for information about how to choose the pitch from your MIDI keyboard.

Become Player: The *Become Player* button turns the currently selected custom riff into a player in the Ensemble window so that you can edit the riff and develop it further as part of each section or song. If the custom riff is not long enough to fill up a section, the player will be installed with a playback loop. For more about playback loops see "Playback Loops" on page 56. This command is grayed out except when the custom riff option is selected.

Save As Default: Save As Default makes FreeStyle remember the metronome settings for new documents.

Audition: Hold down the Audition button to listen to the metronome using the current settings.

Remote Controls: The Remote Controls feature lets you assign commands in FreeStyle to the keys on your MIDI keyboard. Just drag an icon onto the piano keyboard for each command that you want to control with a MIDI key. After you leave the dialog you will be able to hold down the trigger key (or keys) and then press that MIDI key to perform the command assigned to it. To remove a command from a key, drag it to the trash.

FreeStyle makes it easy for you to use Remote Controls and at the same time avoid triggering commands unintentionally. Commands only trigger when you hold down the trigger *key clump*. A *key clump* is a set of keys that activate the Remote Controls when they are held down together. The Remote Controls are *only active while the key clump is being held down.* This makes it next to impossible to accidentally enable the Remotes. Best of all, you can choose any combination of keys you want. FreeStyle's factory default key clump is C1-Db1-D1 as shown below in Figure 5-26. You can, however, choose any combination of keys you want––anything that you are sure you will never play—by dragging the trigger key onto the desired keyboard keys. If you don't want to use the key clump technique, you can use a MIDI controller instead.

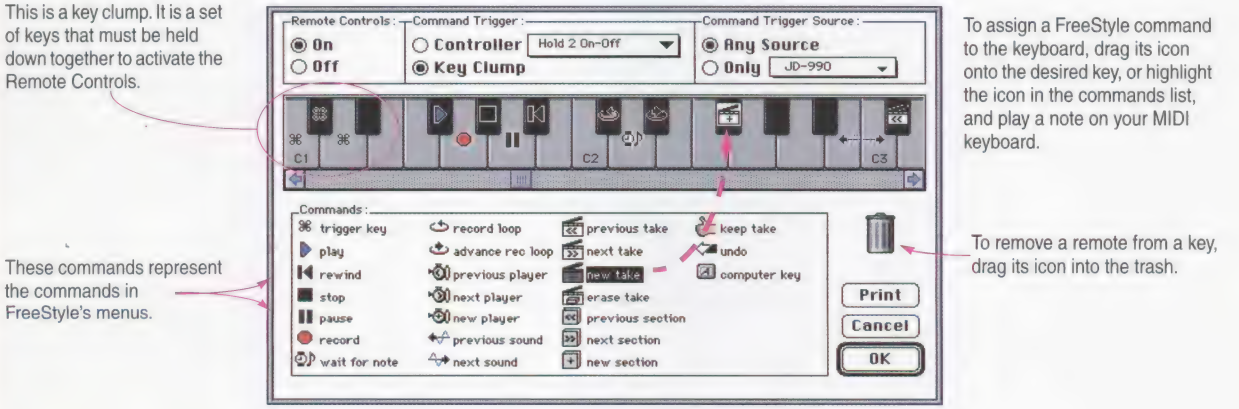


Figure 5-27: FreeStyle's Remote Controls feature.

Remote Controls: Turns Remote Controls on and off completely. When they are turned off, none of the remotes will trigger FreeStyle.

Command Trigger: Lets you choose how you want to activate the Remote Controls.

Controller: This option lets you choose a MIDI controller event to activate all of the remotes.

Key Clump: A *key clump* is a set of keys that activate the Remote Controls when they are held down together. The Remote Controls are *only active while the key clump is being held down.*

Command Trigger Source: Lets you specify the MIDI device in your MIDI setup that you will be using for Remote Controls. FreeStyle can pay attention to input from any device or from a single device that you specify. If the device you want to use does not appear in the menu, use the Studio Setup command in the Setup menu to add the device.

The "computer key" remote: The computer key remote lets you trigger any single keystroke you want on your Macintosh keyboard. This remote is powerful when combined with macro programs like QuicKeys™ or Tempo™. To choose a computer key, drag the computer key icon onto the piano keyboard. While it is still highlighted, press the key or key combination (command-E, for example) you would like to assign it to.

Print: Prints a diagram of the remote controls for your convenience.

☛ When printing the Remote Controls, turn off the smoothing options in the page Setup dialog box (if your printer has them). The results are more readable.

Windows Menu

The Controls Palette: When this menu item is checked, the Controls palette appears as a floating window.

The Ensemble Palette: When this menu item is checked, the Ensemble palette appears as a floating window.

The Arrangement Window: When this menu item is checked, the Arrangement window comes to the front.

Controllers: When this menu item is checked, the MIDI controller strip appears at the bottom of the Graphic Editing window. The Controller strip lets you view, insert, and edit MIDI controller data, which produces musical effects such as pitch bending, continuous volume changes, panning, chorus and effects depth, sustain pedal, pitch modulation, and more. The strip can display any type of controller data for any player, and it can show data for multiple players at a time (i.e. volume for all players at once), although it only shows one *type* of data at a time (i.e. volume or pitch bend, but not both).

Hide/Show Loop Markers: *Hide Loop Markers* makes the playback loop icons in the time line invisible. *Show Loop Markers* makes them visible. For more information about playback loops, see "Playback Loops" on page 56.

Hide/Show Section Names: *Hide Section Names* makes section names in the time line invisible. *Show Section Names* makes them visible. For more information about sections, see "New Section" on page 111. This command will also hide and show section names in the notation view.

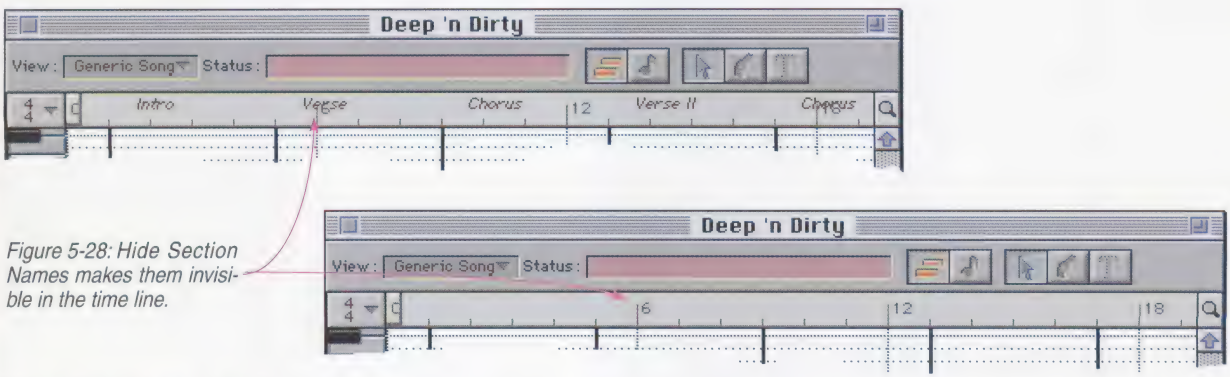


Figure 5-28: Hide Section Names makes them invisible in the time line.

Tile Palettes Left: Arranges the windows on the screen with the Controls and Ensemble palettes along the left edge of the screen and the Graphic Editing/notation window on the right. (See Figure 5-29 on page 125.)

Tile Palettes Top: Arranges the windows on the screen with the Controls and Ensemble palettes along the top of the screen and the Graphic Editing/notation window below them. (See Figure 5-29 on page 125.)

Zoom: These commands control the magnification level of the note grid and notation display. FreeStyle has a wide range of zoom levels, from a bird's-eye view to a very enlarged display. Use the following commands to quickly change the zoom level. FreeStyle has many levels of magnification. When zooming around, you can jump directly to a particular setting, or gradually zoom in or out one setting at a time. The zoom commands in the menu affect time and pitch zoom levels simultaneously. You can zoom just time or just pitch in the graphic editing view by using the zoom sliders (see Figure 3-5 on page 39).

In: Zooming in enlarges the note grid and notation display to make notes larger. Zooming in gives you a high degree of resolution and makes it easier to see the music. Use this command repeatedly to zoom in one magnification level at a time.

Out: Zooming out reduces the display to make notes smaller and to give you more of an overview of the music. When you zoom out, you can see more at a time. Use this command repeatedly to zoom out one magnification level at a time.

Back: Zooming back brings the magnification back to the previous level you were using just before the current zoom level. This command lets you easily switch between any two zoom levels. Just zoom to one level, zoom to another level, and then use the *Zoom Back* command repeatedly to switch between the two. It's also a convenient command to use right after zooming in to do a fine edit, to get you back to where you were. Zoom back restores the scroll position as well as the zoom level.

Normal: Returns the display to the standard magnification level (the level you see when you first open a new document). In the Notation view, this command returns the display to 100% magnification.

To Fit: Fills the window with the currently selected region of notes. If nothing is selected when you choose this command, FreeStyle zooms out to show as much section or song as possible.

Zooming shortcuts: FreeStyle has the following shortcuts for zooming:

Zooming shortcut	What it does:
Option-drag in the time line or controller strip	Fills the display horizontally with the region of time you select.
Option-drag in the pitch ruler	Fills the display vertically with the range of the keyboard you select.
Shift-option click anywhere in graphic editing or notation display	Zooms back to the previous zoom setting (just like Zoom Back).
Option-drag a selection box over any portion of the graphic editing or notation view	Fills the window with the region you select.

Save Window Layout: Remembers the current positions of all the windows on the screen and uses them when opening a new document.

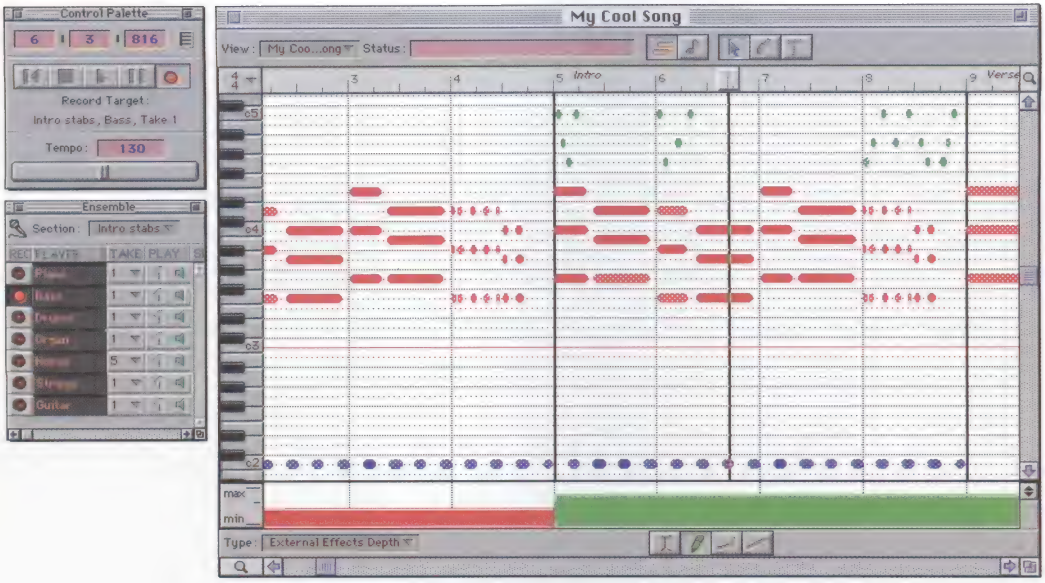
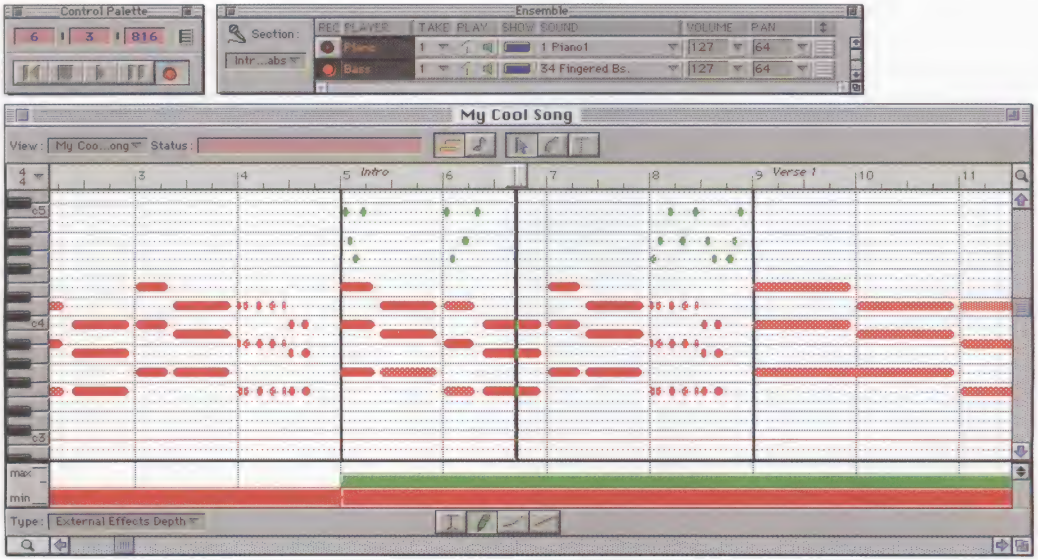


Figure 5-29: Tilling palettes on the left of the screen and at the top of the screen.



Text Menu

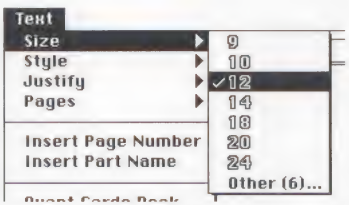
The text menu commands operate in standard Macintosh fashion on text entered in the notation view. They work with all text, including measure numbers, section names, page numbers, titles, headers, footers, and so on. Each command is briefly explained below.

Text Settings: If you make selections in the text menu while text is selected, you will affect the selected text. You can also control the appearance and placement of text you are about to enter by changing the settings when no text is selected.

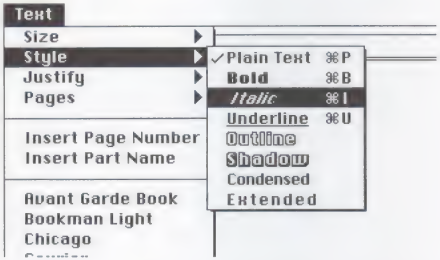
Figure 5-30: Selecting text to apply a text setting or font. With the I-beam cursor shown on the left, you can drag over as much text as you want to select it. To select a single word, double-click it. To select an entire block of text, click it with the arrow cursor as shown on the right.

Size: This menu item lets you set a point size for the text. Point sizes in the menu that are displayed in outline are sizes for which there is a screen font. These point sizes provide the best possible display quality on the screen (at 100%).

Point sizes not displayed in outline may look jagged on the screen, unless the font is a TrueType font. If so, it will look good on the screen at pretty much any point size. Text will also look good at any size if it is a PostScript font and you have the Adobe Type Manager™ (ATM) installed in your Macintosh System Folder.



Style: This menu item provides the standard Macintosh text styles (bold, italic, underline, etc.) The items in the Style menu are displayed in the style they represent.



Justify: Aligns text along the left edge, center, or right edge of its text box.

Justification	Example
Left	*Piano Part*
Center	House of Glory
Right	*Arranged by Rex Rilland*

Pages: This text setting determines what pages the text appears on. You can apply it to a text box in the same manner as point size, text style, and justification. For example, the title might be given the First Pages setting, but a page number might be given the Body Pages setting. If an item is grayed out, it is because it does not apply to the situation; for example, if the notation window is currently displaying a left-hand page, the Right Pages command is grayed out. See the following table for a summary. Also see Figure 5-31 on page 128 for an explanation of left-hand and right-hand pages.

> ☛ When choosing which pages to display text on, keep in mind that FreeStyle has two separate text layouts in the notation view: one for instrument parts (used when any player is displayed by itself) and another for scores (viewing multiple players together). When you display a single player by itself, FreeStyle displays the single-player text regardless of what player is being shown (except for the player's name, which changes to show the correct instrument name. See "Insert Part Name" below.) For more information about this, see "Working With Text in the Notation View" on page 50.

Page setting:	Where text appears:	Examples:
This Page Only	Text appears on the page you insert it; FreeStyle even makes note of the player(s) currently showing when you choose this setting and will only display the text when that combination of players is present.	Special instructions for an individual player or section
First Pages	Text appears on the first page only. Grays out when you are viewing any page other than the first page.	Title, composer, copyright notice
Body Pages	*Body page* are all the pages after the first page. Therefore, text appears on all pages except the first page. Grays out when you are viewing the first page.	Headers, footers, page numbers, instrument part names
Left Pages	Text appears on left-hand pages only, starting with page 2. Grays out when you are viewing the first page or a right-hand page.	Headers, footers, page numbers, instrument part names
Right Pages	Text appears on right-hand pages only, not including the first page. The first right-hand page (excluding page 1) is page 3. Grays out when you are viewing the first page or a left-hand page.	Headers, footers, page numbers, instrument part names
All Pages	Text appears on every page, including the first page.	Headers, footers, page numbers, instrument part names, copyright notices

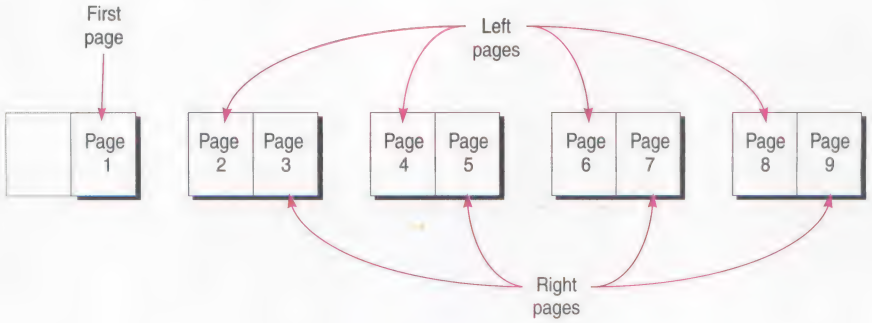


Figure 5-31: How FreeStyle handles left-hand and right-hand pages.

Insert Page Number: A *page number* is a special text item that automatically displays the number of the current page. To insert a page number, click the Text tool to get the text cursor. Then create a new text box by clicking anywhere on the page, or edit an existing text box by clicking on it. Choose Insert Page Number from the Text menu. The page number appears at the location of the text cursor. The page number can be selected, cut, copied, pasted or formatted with any font and text setting (e.g. bold, italic, etc.) To make the page number appear on all pages, click it with the arrow cursor to select it and choose *Pages/All Pages* from the Text menu. To display it on all pages except the title page (page 1), choose *Pages/Body Pages* from the Text menu.

Insert Part Name: A *part name* is a special text item that shows the name of the player currently being displayed in the notation view. It automatically changes when you display a different player. If more than one player is showing, the word *Score* is used. To insert a part name, click the Text tool to get the text cursor. Then create a new text box by clicking anywhere on the page, or edit an existing text box by clicking on it. Choose Insert Part Name from the Text menu. The part name appears at the location of the text cursor. The part name can be selected, cut, copied, pasted and formatted with any font and text setting (e.g. bold, italic, etc.) The only thing you can't do to a part name is edit the specific letters in the name. FreeStyle won't even let you position the text cursor in the middle of a part name. To change the part name itself, change the name of the player in the Ensemble window. To make the part name appear in all parts, give it the *All Pages* text setting. To make it appear on the first page of all parts, give it the First pages text setting.

To insert a part name, click on the text tool...

...click anywhere on the page or on existing text to get a text cursor inside a text box...

...and then choose Insert Part Name from the Text menu.

☛ Remember, you must use the text tool to create a text box before you choose "Insert Page Number" or "Insert Part Name". These commands INSERT text into an existing text box.

Font List: The list of fonts at the bottom of the Text menu are the fonts currently installed in your Macintosh system. To choose a font for some text, select the text and choose the desired font from the menu. For information about selecting text, see Figure 5-30 on page 126.

Chapter 6 FreeMIDI Setup

Configuring FreeStyle for a complex MIDI studio

Before you begin using FreeStyle, you need to tell it what MIDI devices you have connected to the Macintosh so that it can properly communicate with them. FreeStyle has an Easy Setup feature for simple MIDI studios. However, if your studio has several MIDI interfaces with lots of gear connected to them, FreeMIDI Setup is much better equipped to configure FreeStyle for your studio.

FreeMIDI Setup is located in the FreeMIDI Applications folder on the top level of your hard disk (unless you have moved it since installation).

Overview

To configure FreeStyle for your MIDI studio, you will create a *FreeMIDI Configuration file*, a file that you create and save on your hard disk using *FreeMIDI Setup*. The file contains a graphical representation of the MIDI hardware devices in your studio, and it shares this list of devices with FreeStyle (and all FreeMIDI-compatible applications). To create your FreeMIDI configuration, you will:

1. Run FreeMIDI Setup and set the FreeMIDI System Preferences to tell FreeMIDI Setup which serial ports to search for MIDI interfaces.

2. Create your FreeMIDI Configuration by defining each device one at a time or, if possible, by defining them automatically using one of several shortcuts.

3. Save the FreeMIDI Configuration to disk.

4. Use a feature called *Check Connections* to make sure that FreeMIDI is successfully sending and receiving MIDI data to and from your MIDI devices.

You can skip this chapter if...

You can skip this section if you already have another FreeMIDI-compatible program for which you have already created a FreeMIDI configuration. If so, proceed to "Opening A FreeStyle Document" on page 26 to complete your FreeStyle installation.

OMS compatibility

If you currently use the Opcode MIDI System (OMS) and it is required for OMS applications that are not yet FreeMIDI-compatible, you can use FreeMIDI to emulate OMS. We recommend that you proceed now to Appendix Appendix C, "Using FreeMIDI with OMS" in this booklet for information on enabling FreeMIDI's OMS emulation. After enabling OMS Emulation, please return to this page to continue your FreeMIDI configuration session. FreeMIDI Setup can read OMS configuration files created by OMS 1.2 and 1.21 and translate them into FreeMIDI configurations. Please read on for more information on this feature.

What is FreeMIDI?

FreeMIDI is a Macintosh system extension that is automatically placed in your Macintosh System Folder when you install any Mark of the Unicorn software product. FreeMIDI provides many advantages for all FreeMIDI-compatible software. Here are a few of the most important features FreeMIDI provides:

- A "virtual" studio on your Macintosh that graphically mirrors your entire MIDI hardware setup
- A simple, intuitive pop-up list of your MIDI devices whenever you need it in any FreeMIDI program
- A simple, intuitive pop-up patch list for each one of your MIDI devices, which make it easy for you to choose patches by name
- The ability to use several FreeMIDI-compatible programs simultaneously (for example, you can play back MIDI from Performer while editing patches in Unisyn at the same time)
- The ability to start playback, stop playback, rewind and cue all FreeMIDI-compatible programs at once

For MIDI Experts: Setup overview and quick-start guide

If you already have experience with the Macintosh, MIDI, or Mark of the Unicorn software, and you are in a hurry, this overview should give you a pretty good idea of what you need to do to make the transition to FreeMIDI. A page number is included next to each step so you can get more detailed information about that step.

To install FreeMIDI:

1. **Set up your MIDI gear.**

   Make sure that your MIDI gear is connected and turned on, including your MIDI interface.

2. **If you use OMS, decide if you want to use FreeMIDI instead, and, if so, install the OMS emulator as described in "Emulating OMS" on page 211.**

   FreeMIDI can emulate the Opcode MIDI System™ (OMS), allowing you to completely remove OMS from your system if you like. If you use software that requires OMS, you have two choices:

   - you can remove OMS (by dragging the OMS system extension out of the System Folder) and install the FreeMIDI emulator. (See page 211 for details.)
   - You can use both OMS and FreeMIDI independently.

   If you aren't sure what you want to do, see "OMS Compatibility" on page 210 for more information about making this decision.

3. **If you use any program that requires MIDI Manager, install the FreeMIDI MIDI Manager driver from the FreeStyle installer disk.**

   MIDI Manager adds much complexity. Only use it if you have a program that absolutely *requires* it. Remember, if you have applications that need to run simultaneously (such as Digidesign's Sample Cell™ software), and they support FreeMIDI or OMS, you don't need MIDI Manager.

4. **Run FreeMIDI Setup. (page 134)**

   This application is located in the FreeMIDI Applications folder.

5. **Set the FreeMIDI System Preferences to tell FreeMIDI Setup which serial ports to search for MIDI interfaces. (page 140)**

   The preferences dialog should appear automatically. If it doesn't, choose FreeMIDI Preferences from the File menu.

6. **Create your FreeMIDI Configuration by defining each device one at a time or, if possible, by defining them automatically using one of several shortcuts.**

   In a nutshell, here are the three shortcuts. Choose the one that best suits your situation:

   - Use the Auto Config button option in the Quick Setup dialog box to have FreeMIDI search for all the devices in your studio automatically. This only works for devices that are connected with both their MIDI IN and MIDI OUT.
   - Use the Continue button in the Quick Setup dialog box to define each device by hand using pop-up menus to indicate manufacturer, model, and device ID. (page 142)
   - Use the Open command in the File menu to open an existing Performer (version 4.2 or earlier), Digital Performer (version 1.4 or earlier), or OMS (version 1.2.1 or earlier) configuration file. The Performer configuration can be loaded from any source, either a regular Performer file or a separate configuration file. (page 141)

7. **Use the Save command in the File menu to save the FreeMIDI Configuration to any location on your hard disk.**

8. **Use the *Check Connections* command in the MIDI menu to make sure that FreeMIDI is successfully sending and receiving MIDI data to and from your MIDI devices. (page 149)**

9. **Quit FreeMIDI Setup.**

You are now ready to complete the FreeStyle installation process. You do not need to keep FreeMIDI Setup open.

To complete your FreeStyle installation, proceed now to "Opening A FreeStyle Document" on page 26.

Launching FreeMIDI Setup

Locate the FreeMIDI Setup program. If you have not moved it since FreeStyle was first installed, it is located in the FreeMIDI Applications folder on the top level of your hard disk.

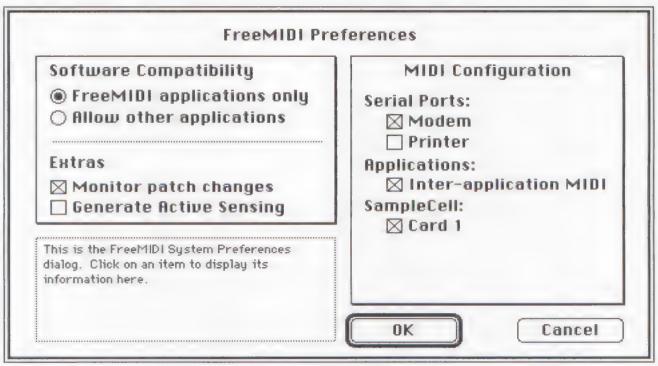
1. **Before you launch FreeMIDI Setup, switch on your MIDI interface and MIDI gear.**
2. **Double-click the FreeMIDI Setup application icon to launch the program.**

   After the initial splash screen, the *Welcome to FreeMIDI!* dialog box appears:

FreeMIDI Setup™

3. **Click Continue.**

   The FreeMIDI Preferences dialog box appears. In this dialog box, you tell FreeMIDI how you want it to handle certain aspects of its operation.



4. **Set the FreeMIDI Preferences as described below.**

Preference	How you should set it
Software compatibility	Choose the *FreeMIDI Applications only* option, unless you want to run other non-FreeMIDI software at the same time as FreeStyle. If so, use the *Allow other applications* option. This option may also be necessary if you have FAX/ modem, networking, or other communication software that requires access to the modem or printer port while FreeMIDI applications are running.
MIDI Configuration	Click the check box for each serial port (modem and printer) to which you have a MIDI interface connected. Be sure your MIDI gear is turned on.
Inter-application MIDI	Leave this option unchecked, unless you have another FreeMIDI program that requires that it be checked.
Sample Cell	If you have a Digidesign Sample Cell or Sample Cell II card installed in your Macintosh, check its box.
Monitor patch changes	Make sure this option is checked.
Generate active sensing	Leave this option unchecked, unless you have a MIDI device in your studio that does not function correctly unless it receives Active Sensing data at all times. In our experience, the only MIDI devices that are in this category are some Yamaha Clavinova-series electric pianos.

5. **Before you click OK, check to be sure that all of your MIDI gear is connected and turned on.**

6. **Click OK to confirm your preference settings.**

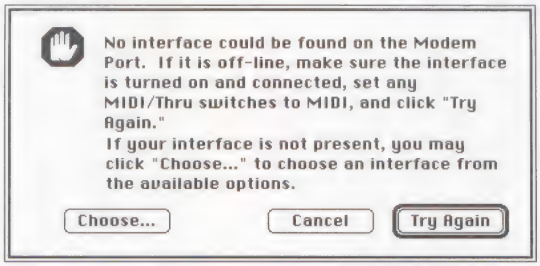
   When you click OK, FreeMIDI Setup scans the serial port(s) that you have selected for MIDI interfaces. If you selected the printer port option under MIDI Configuration, and AppleTalk is enabled on the printer port, a warning alert box appears to ask if you would like to claim the printer port for MIDI.

7. **If you are using AppleTalk for network communications or an AppleTalk printer, you should click *Leave it alone* and re-think your MIDI studio setup.**

   Otherwise, click *Claim the port* and FreeMIDI will be able to use the printer port for MIDI. If you do so, remember to disable AppleTalk in the Chooser when you are through configuring FreeMIDI in order to avoid seeing this warning alert again.

8. **If there are interfaces in your setup that are not powered on or connected properly, FreeMIDI Setup cannot find them.**

   If FreeMIDI cannot find any interfaces, the No Interface Found dialog appears.



9. **Check the connections and power switches and any MIDI/Thru switches on your interfaces and click Try Again.**

   If your interfaces are not currently connected or not powered on, you can still create a FreeMIDI configuration at this time, but you will need to use the Update Interfaces feature later on. If FreeMIDI Setup cannot find some or all of your interfaces and you believe that they are connected properly and are powered on, proceed to Appendix Chapter 8, "Tips and Troubleshooting".

Deciding Which Setup Method To Use

After finding all of the MIDI interfaces connected to your Macintosh, the About Quick Setup dialog box appears:

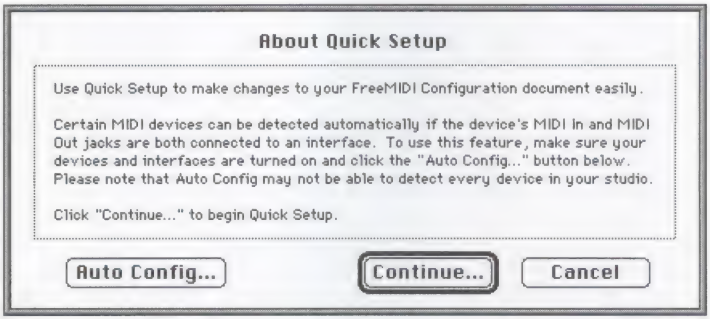


Figure 6-1: About Quick Setup Dialog Box

At this point, the step you take next depends on the method for configuring FreeMIDI that you wish to use. There are three methods for configuring your MIDI studio:

Configuration method	What happens	What you should do next
Automatic configuration	FreeMIDI automatically scans the MIDI devices connected to your interface and includes them in your FreeMIDI configuration file.	Click the Auto Config button and proceed to "Configuring Your Studio Automatically" on page 138.
Manual Configuration	You indicate each MIDI device that you have from a pop-up menu and make a few settings for each device.	Click the Continue button and proceed to "Adding Devices Manually with Quick Setup" on page 142 in this chapter.
Translating an existing configuration file	You open an existing configuration file from Performer, Digital Performer, or OMS, and your FreeMIDI configuration is set up to match it as closely as possible.	Click Cancel and proceed to "Arranging the FreeMIDI Configuration Window" on page 144 in this chapter. This method can save you time if you have such an existing file and you have a large MIDI studio.

Configuring Your Studio Automatically

If you clicked *Auto Config...*in the About Quick Setup dialog box, the Auto Config dialog box appears:

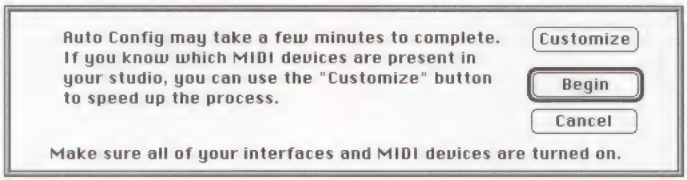


Figure 6-2: Auto Config Dialog Box

Deciding whether to customize before you begin

It takes time for Auto Config to scan for each of the hundreds of possible MIDI instruments that FreeMIDI knows about. Auto Config will take several minutes—more if you have one or more multi-port interfaces with lots of MIDI ports on them.

If you want, you can customize Auto Config to search only for the instruments you have in your studio. This makes the whole process much faster. If you are not sure which MIDI devices are in your studio, or if you do not wish to spend time customizing Auto Config, click *Begin* and FreeMIDI will start searching your studio for MIDI devices. If you do know what devices you have in your studio, proceed now to "Customizing Auto Config" on page 140.

Initiating the Auto Config process

After you click Begin, FreeMIDI checks every cable on all of your MIDI interfaces for MIDI devices. The piano keyboard progress bar gradually fills up as FreeMIDI searches your studio for MIDI devices as shown in Figure 6-3 on page 139.

How Auto Config works

Auto Config scans your MIDI interface(s) and tries to detect each MIDI device automatically. (For those of you who know a little bit about MIDI, this is accomplished with system exclusive messages that are unique to each instrument.) Auto Config can detect most MIDI keyboards, sound modules, and similar devices, although it can't detect *every* MIDI device ever created. As a result, it will find most—and hopefully all—of your devices, depending on which ones you have. Later, you can add the ones it misses.

As you can see, FreeMIDI needs to be able to send MIDI data to the device, and it needs to be able to receive data back. As a result, before you proceed, be sure that all your MIDI gear is turned on and connected to your MIDI interface(s) properly. For Auto Config to find your MIDI devices, they need to have both their MIDI inputs and outputs connected to your interfaces. If you know how to do so, enable system exclusive transmit and receive on any MIDI devices that have such a setting. If you do not know how to do this, don't worry. Many devices do not even have a setting for this function.

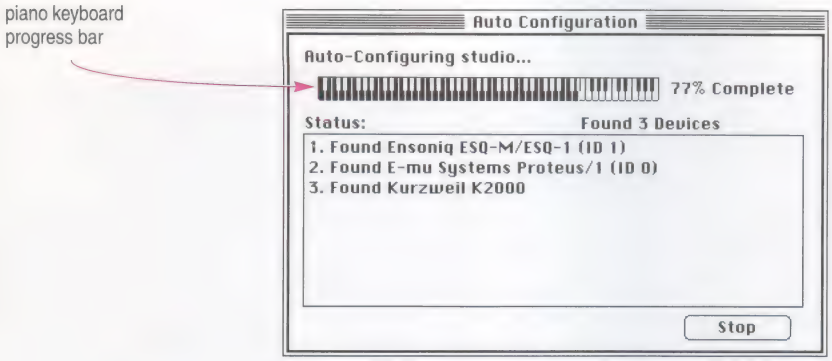


Figure 6-3: Auto Config Progress Window

As FreeMIDI finds MIDI devices, it lists them in the status box below the piano keyboard. If you have the *FreeMIDI Applications only* option set in the FreeMIDI preferences, you can even switch out of FreeMIDI Setup to another application and FreeMIDI will continue searching your studio for MIDI devices while you do other work on your Macintosh! If you have the *Allow other applications* option set in the FreeMIDI Preferences, you can still switch to another application during the Auto Config procedure, but FreeMIDI will stop searching for MIDI devices until you switch back into the FreeMIDI Setup application.

This search can take several minutes depending on the number of MIDI devices and the type and number of MIDI interfaces in your studio. Click *Stop* if you want to interrupt the search process at any time and Auto Config will stop searching for MIDI devices. The Quick Setup dialog box opens and displays all the devices found up to that point.

Keep in mind that Auto Config may not be able to find *all* the MIDI devices in your studio. It is also possible that one MIDI device from a manufacturer could not be distinguished from another, closely related MIDI device from the same manufacturer. An example of this is the Korg M1 family, which consists of the M1, M1R, M1EX, and M1REX. Auto Config will probably find all of these units and identify them all as Korg M1s.

To fine-tune and finalize your configuration, proceed to "Adding Devices Manually with Quick Setup" on page 142.

A few things you should know before you use Auto Config

If you have a MIDI device that echoes (merges) incoming MIDI data to its MIDI out, this may cause errors during the Auto Config process. For best results, we recommend disabling this feature. Unfortunately, in some MIDI devices, echoing cannot be disabled. If this is the case, we recommend powering off these units until Auto Config is complete. You can then power them back up and add them to your FreeMIDI configuration manually. Some examples of such devices are the Yamaha KX-88 and Roland SBX-80.

Due to their MIDI implementation, some MIDI devices may display "MIDI Buffer Full", "MIDI Overflow error" or "device ID number mismatch" error messages in their front-panel display during Auto Config. This is due to the large number of sysex messages that are sent to each device. Don't worry. This is harmless. (Hopefully, more and more manufacturers will support the universal MIDI device inquiry message, which will prevent messages like these.)

Some MIDI devices may be found more than once because they are able to respond to more than once device ID at a time. If possible, try to set these devices to a single ID before using Auto Config.

Customizing Auto Config

If you know which MIDI devices are in your studio, click *Customize...* so that you can tell FreeMIDI what devices to search for. This can greatly reduce the amount of time it takes for Auto Config to find your MIDI devices.

1. **After clicking *Customize*, the Customize dialog box appears as shown in Figure 6-4.**

   If you change your mind and no longer want to customize Auto Config, but you still want FreeMIDI to search for MIDI devices and configure your studio automatically, click *Simplify* to return to the Auto Config dialog box and proceed to "Initiating the Auto Config process" on page 138.

2. **Select a device or devices from the list on the left and click *Add*.**

   To select more than one device, command-click each device that you wish to add. Shift-drag to select multiple devices that are together in the list. To select all the devices from the list at once, click *Add All*.

3. **If you accidentally add a device or some devices for which you do not want FreeMIDI to search, select the device or devices from the list on the right and click *Remove*.**

4. **Keep adding devices until you have told FreeMIDI about all the devices in your studio that are in the list.**

5. **When you are done, click *Begin*.**

   FreeMIDI proceeds to check every cable of all of your MIDI interfaces for all the MIDI devices you have defined. You'll see the progress dialog box shown Figure 6-3 on page 139.

6. **Proceed to "Initiating the Auto Config process" on page 138.**

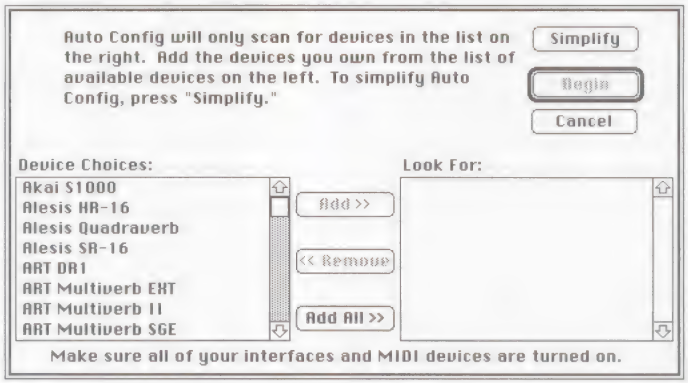


Figure 6-4: Auto Config Customize Dialog Box

Loading Other Configuration Files

FreeMIDI Setup can open configuration files created by Performer 4.2, Digital Performer 1.4, or OMS Setup 1.2 or 1.21 and create a FreeMIDI configuration that closely matches this configuration. This can save a considerable amount of setup time. When translating Performer and Digital Performer configurations, you can open either a regular Performer/Digital Performer file or the configuration file, which may be saved separately.

To translate any of these files:

1. **Choose Open from the File menu. Alternately, you can type command-O on your Mac keyboard.**

   A standard Macintosh File Open dialog box opens.

2. **Select the Performer, Digital Performer, or OMS Setup file that you wish to translate and click Open.**

   Use the directory pop-up menu to navigate to the disk and folder that contains the configuration you wish to translate. See your Macintosh owner's manual for more information on opening files and navigating to disks and folders.

   The selected file is translated as closely as possible into a FreeMIDI configuration.

If, after the translation process, all of your MIDI devices now appear in the FreeMIDI Configuration window and are connected to the proper MIDI interface input and outputs, proceed to "Arranging the FreeMIDI Configuration Window" on page 144 in this chapter for the next steps in the configuration process.

You may find, however, that some devices are misnamed, missing, incorrectly duplicated, or improperly defined. If so, you will need to edit the configuration using Quick Setup:

1. **Choose *Quick Setup...* from the Configuration menu**

   The About Quick Setup dialog box appears.

2. **Click *Continue...***

   The Quick Setup dialog box appears.

3. **Proceed to "Adding Devices Manually with Quick Setup" on page 142.**

Adding Devices Manually with Quick Setup

To get to this point, you should have just completed one of the following procedures:

- You have just completed the Auto Config process (the search is 100% complete).
- You have just translated a Performer, Digital Performer, or OMS file and have skipped to this step.
- You have just clicked the Quick Setup button to configure your studio manually.

In any case, you now see the Quick Setup dialog box on-screen as shown below in Figure 6-5.

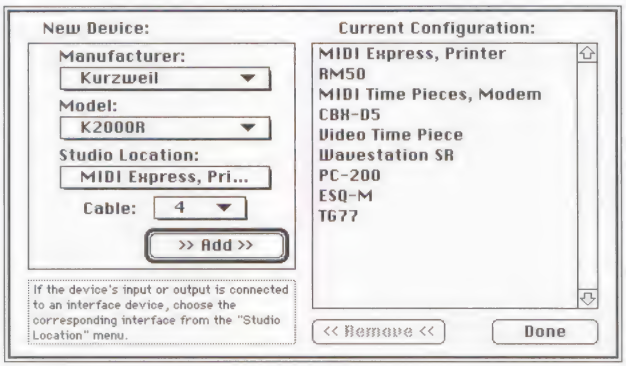


Figure 6-5: Quick Setup Dialog Box

If all the MIDI devices in your studio already appear in the list, you are done! Click *Done* and the FreeMIDI Configuration window will appear containing all your MIDI devices and their connections.

If there are no devices listed, or the list is incomplete, you will now need to tell FreeMIDI about these devices manually.

To add devices in the Quick Setup dialog:

1. **Select the correct manufacturer, model, studio location and cable (if applicable) from the pop-up menus on the left and then click *Add Device*.**

   If the pop-up menus do not contain a description of a particular device, choose *Other* and click *Add Device*. The first generic device you add is given the name *Device-1*. You will learn how to re-name and re-define these devices later in this tutorial.

2. **If you accidentally add a device to the list that you do not want to appear in your studio configuration, select its name from the list on the right and click *Remove*.**

3. **If Auto Config found devices that are not the exact model installed in your studio, such as a Korg M1 instead of a Korg M1R, you can easily edit these devices.**

   Select the device on the right and click Remove. Now choose a new model from the pop-up menu on the right and click add. A new device is added with the same manufacturer and studio location.

4. **When you have added all the devices to the list that are in your studio, click *Done*.**

   The FreeMIDI Configuration window appears, displaying all of your MIDI devices and their connections.

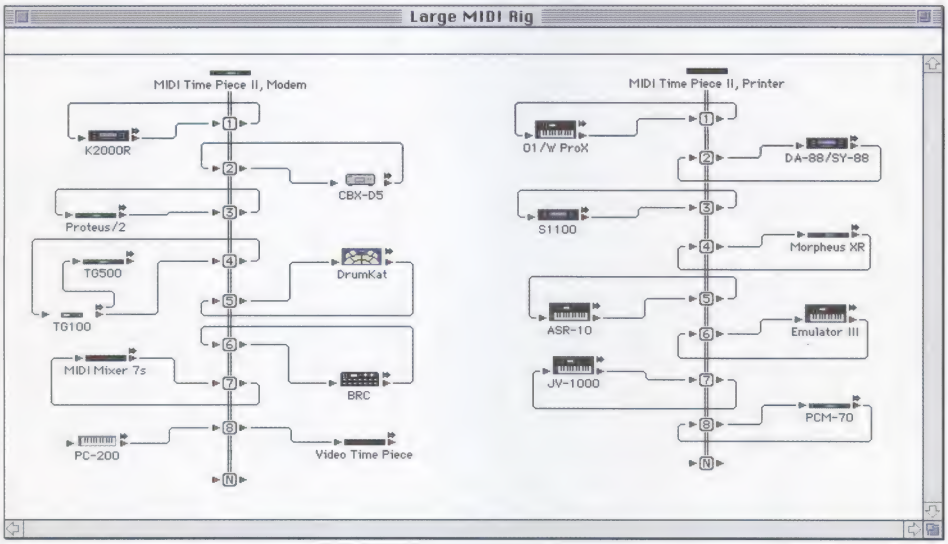


Figure 6-6: FreeMIDI Configuration Window

Arranging the FreeMIDI Configuration Window

You can arrange the FreeMIDI Configuration window any way you like. We suggest that you drag device icons so that they appear as they do in your studio. For instance, you can arrange all the modules, which are in a rack to the left of your Mac, to the left side of the window and all the modules, which are in a rack to the right of your Mac, to the right side of the window. You can drag the patch cords, which connect the devices to the interfaces, up or down so that you can view the connections clearly. You can drag MIDI ports in a multi-cable interface, such as the MTP, MTP II or MIDI Express, up or down to create more or less space between them. You can delete input or output cables, which are not part of your studio setup, by clicking the patch cord to select it and typing the backspace or delete key on your Mac keyboard. You can also make and break connections by just dragging the ends of the patch cords. You can use the different options in the Views menu to change the size of the icons and to view input and outputs separately, together, or only when the device to which they are connected is selected.

The Clean Up Window Command

You can use the Clean Up Window command in the Views menu to quickly arrange all the devices in the window into uniform columns.

Making MIDI thru connections

When more than one MIDI device shares a single output port from a MIDI interface, you need to connect the MIDI Thru port of the device to the input of the other device. This mirrors the physical connection that you should have between the devices.

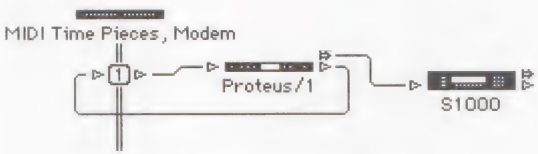


Figure 6-8: MIDI Thru Connection

Making multiple MIDI input connections

FreeMIDI Setup allows you to connect more than one MIDI output from a device to a single MIDI input on an interface. When you make such a connection, you are telling FreeMIDI that both devices' MIDI outputs are connected to a single MIDI input on an interface. Without some type of MIDI merger, this type of connection is not possible.

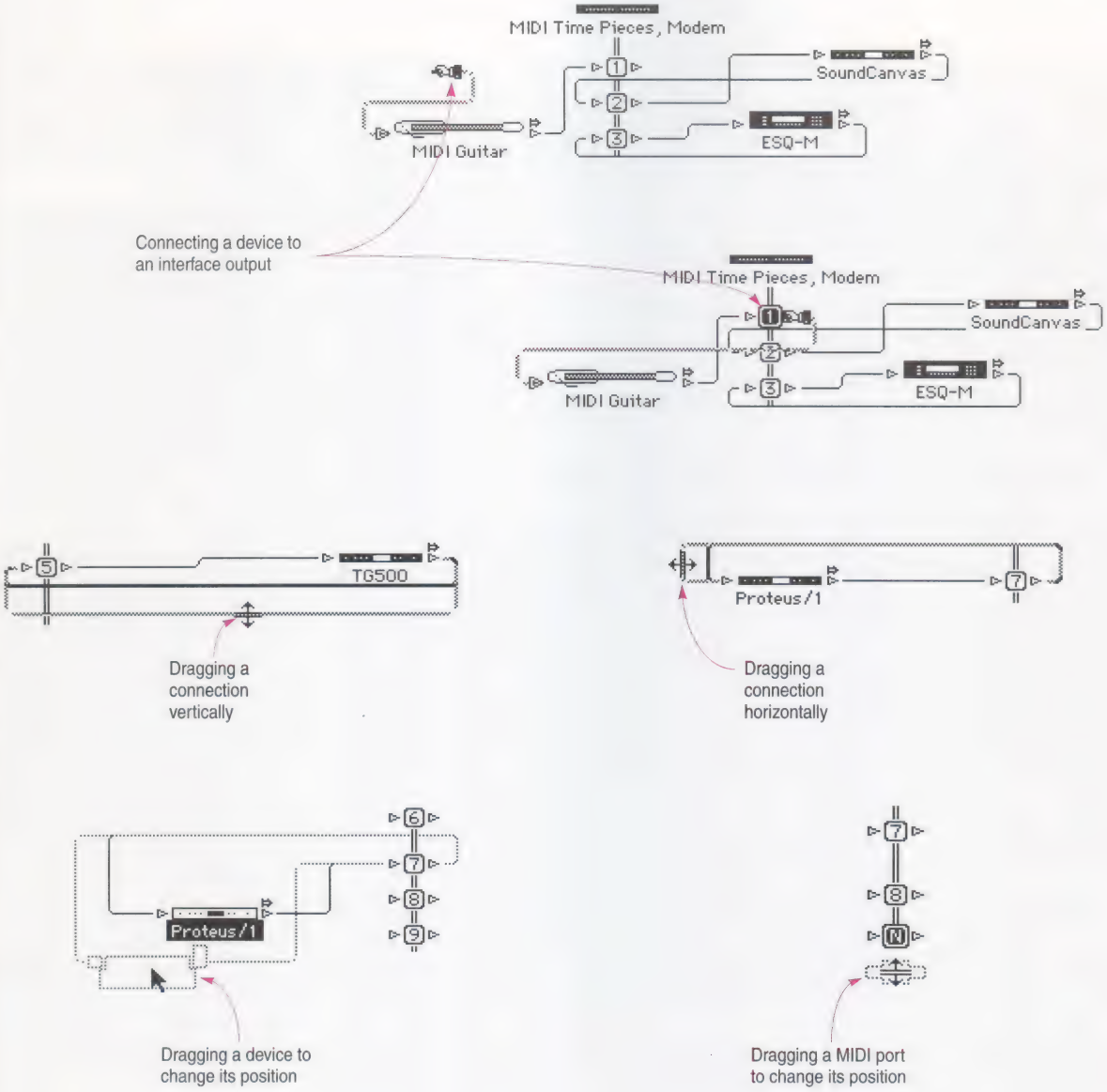


Figure 6-7: Arranging FreeMIDI devices and connections

Connecting devices to other devices

FreeMIDI Setup allows one connection per port (input output, or thru) on each device. You cannot connect devices to each other except from MIDI Thru to MIDI In of a separate device. If you would like to make such connections, use the Cable Routing (on MIDI Time Piece and MIDI Express interfaces) or similar features in your MIDI interface or MIDI patch bay/merger gear.

Using MidiLocate to make connections

MidiLocate is a unique feature designed to make adding devices to your FreeMIDI configuration easier. In this mode, FreeMIDI automatically determines the input cable to which a device is physically attached and then displays this connection in the FreeMIDI Configuration window.

MidiLocate is a checkable menu item. This means that its state (on or off) is toggled each time you choose it from the menu. When there is a check next to the MidiLocate menu item in the MIDI menu, MidiLocate is enabled.

To use MidiLocate:

1. **Select a FreeMIDI device in the FreeMIDI Configuration window.**

2. **Check to be sure that MidiLocate menu item in the MIDI menu is enabled.**

   The MidiLocate command should have a check next to its name. If it does not, choose it to select it. You can also use the Mac keyboard shortcut to toggle the state of MidiLocate by typing command-L.

3. **Play some MIDI data from the MIDI device.**

   FreeMIDI will determine from where the MIDI data is coming and redraw the FreeMIDI Configuration window to indicate the appropriate connection.

Here is an example of MidiLocate in action. Let's say you have a Kurzweil K2000 that is connected to some MIDI input on your MTP II, but you are not sure which input:

1. **Add a K2000 FreeMIDI device your configuration using *Quick Setup* or *Create Device*.**

2. **Enable MidiLocate.**

3. **Select the K2000 device by clicking its icon.**

4. **Play some notes on its keyboard or send some other MIDI data from it and the K2000 device automatically is connected to the correct MIDI input port on your MTP II in the FreeMIDI Configuration window.**

Checking the Device Properties

Each device in your FreeMIDI configuration can be assigned any number of *device properties*. A device property is a descriptive comment about the device. For example, a keyboard could be given the *controller* property. There are three device properties that are important to FreeStyle. The are listed below. Make sure that any devices that should have them do.

Device Property	Explanation
General MIDI	See "If you have a general MIDI device" on page 27.
Sampler	Use this property for any sampler or other device that does not have built-in sounds. Or use it if you don't want FreeStyle's dynamic MIDI channel allocation features to be used with the device.
"Not a synth"	This property causes FreeStyle to display the device at the end of the list of devices in the Sound pop-up menu.

To assign a device property to a device:

1. **Double-click the device icon.**

   Alternately, you can highlight the icon and choose Edit Device from the Configuration menu. The Device specification window appears as shown below in .

Make sure that the properties listed above are checked in this pop-up menu, if appropriate for the device.

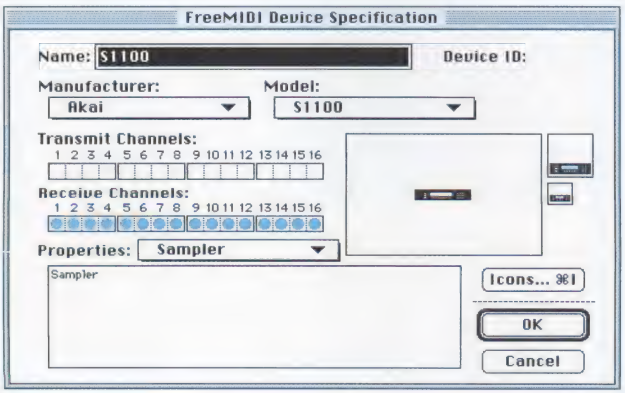


Figure 6-9: MIDI Thru Connection

2. **Make sure the properties listed above are checked in the Properties pop-up menu, if appropriate for the device.**

Saving Your FreeMIDI Configuration

Once you have a FreeMIDI configuration, it is a good idea to save it to disk so that you will not have to configure FreeMIDI for your studio again.

To save your configuration:

1. **Choose Save from the File menu. Alternately, you can type command-S on your Mac keyboard.**

   A standard Macintosh File Save dialog box opens.

2. **Use the suggested name "FreeMIDI Configuration" or enter another name for your configuration, if you like, and click *Save* or click *Cancel* to cancel the operation.**

   Use the directory pop-up menu to navigate to a disk and folder in which you wish to save this configuration.

> ☛ If you are using System 7, you can use the New Folder button to create a new folder in which to save this configuration and others that you might create in the future. See your Macintosh owner's manual for more information on saving files and navigating to disk and folders.

The current FreeMIDI Configuration

There is no need to make this configuration "current". Whichever configuration is visible in the FreeMIDI Configuration window is the current configuration that all FreeMIDI applications will use. Whenever you launch FreeMIDI Setup to view or edit your FreeMIDI configuration, the configuration document with which you were last working is opened automatically.

Testing for MIDI input and output

You are almost done setting up your FreeMIDI configuration. The last thing you need to do is test the MIDI connections between your MIDI devices and FreeMIDI. To test for MIDI input and output:

1. **Choose *Check Connections* from the MIDI menu.**

   This command puts FreeMIDI Setup in a special studio testing mode which allows you to easily test MIDI inputs and outputs. When the menu item is checked, Check Connections mode is enabled and the mouse cursor will change to the Check Connections cursor as shown in below.

Figure 6-10: Check Connections mouse cursor

2. **Check MIDI input by playing notes on your MIDI controllers or sending other MIDI data such as patch changes, controller data or system exclusive data from your other MIDI modules.**

   When FreeMIDI is receiving MIDI correctly in Check Connections mode, the MIDI port to which the MIDI device sending the MIDI data is connected will flash the eighth note symbol as shown in below. If no activity is indicated, check to be sure that the MIDI device that is sending the data has its MIDI output connected to the proper MIDI input on your MIDI interface.

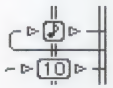


Figure 6-11: Incoming MIDI Data indicator

3. **Check MIDI output by clicking devices.**

   In Check Connections mode, FreeMIDI Setup generates a C major chord on the default play channel and sends it to the MIDI output to which the device you click is connected. If all is well, this device should play the C major chord. If the MIDI device does not play notes, check to be sure that the MIDI device has its MIDI input connected to a MIDI output on your MIDI interface.

If your connections check out OK, you are finished! Choose Quit from the File menu. If you made any changes since you last saved, you'll be asked if you'd like to save them. Click Yes.

Quitting FreeMIDI Setup

You are now ready to complete your FreeStyle installation. Choose Quit from the File menu and proceed now to "Opening A FreeStyle Document" on page 26.

You do not need to keep FreeMIDI Setup open. The only time you need to open FreeMIDI Setup is when you would like to make changes to your FreeMIDI studio configuration. Conversely, you can open FreeMIDI Setup at any time.

Chapter 7 PatchList Manager

How to create & maintain accurate sound lists for your MIDI instruments

What is PatchList Manager?

This chapter explains how to use PatchList Manager, a FreeMIDI application included with FreeStyle. You can find it in the FreeMIDI Applications folder on the top level of your hard disk. It helps you create and maintain accurate sound lists for your MIDI instruments, so that the sound names in FreeStyle match the sounds in the instrument. In fact, the word *patch* refers to a specific sound in your MIDI instrument.

Situations that call for PatchList Manager

Here are the most common situations in which you would need to use PatchList Manager:

- FreeStyle is displaying generic sound names for one of your devices as shown in Figure 2-16 on page 29 (i.e. "Patch 1, Patch 2, Patch 3" etc.) and you want to see actual sound names instead.
- The current sound names in FreeStyle don't match the sounds you hear in the instrument.
- You want to make minor changes to a sound list, such as changing the order of the sounds in the list.
- You have loaded a new bank of sounds into the instrument (or have otherwise changed the internal state of the instrument) and you want to access them by name in FreeStyle.
- You want to set up, reorganize, add, or remove multiple sound lists for an instrument that has multiple banks of sounds.

If the sound list (or lists) for your MIDI device is accurate and complete, you don't need to use PatchList Manager.

A Brief Overview of PatchList Manager

PatchList Manager has the three main windows shown in Figure 7-1. The FreeMIDI Devices window shows the MIDI device or devices that you want to work with. The Patch List window shows lists of sounds you can assign to devices. The Sound Names window displays the list of sound names contained in the patch list.

All of the information shown in these three windows is saved in a single PatchList Manager document, which you'll create when you have finished working with PatchList Manager.

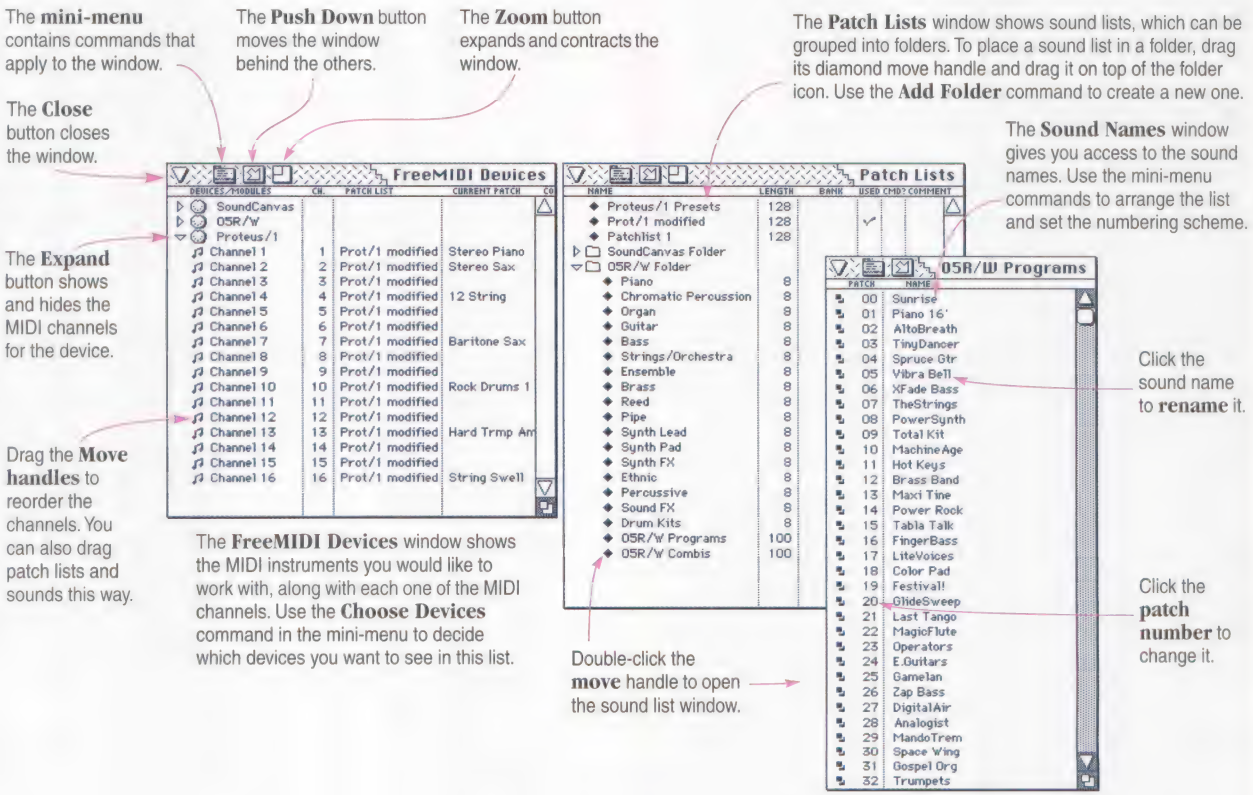


Figure 7-1: PatchList Manager's main windows

Getting Started

Opening PatchList Manager

To open PatchList Manager, choose *Edit PatchLists* from the Setup menu in FreeStyle. If FreeStyle isn't running at the moment, double-click the PatchList Manager icon on your hard disk. It is located in the FreeMIDI Applications folder on the top level of your hard disk (unless you have moved it since installation). You'll see the FreeMIDI Devices and Patch Lists windows as shown in Figure 7-1, and they will be empty. If the windows do not appear for some reason, you can open them from the Windows menu.

Choosing which devices you want to work with

The first thing you need to do is choose the device or devices you need to work with. Only choose the devices whose patchlists you need to edit. If their patch lists are already fine, you don't need to do anything with them in PatchList Manager.

1. **Select Choose Devices from the mini-menu in the FreeMIDI Devices window.**

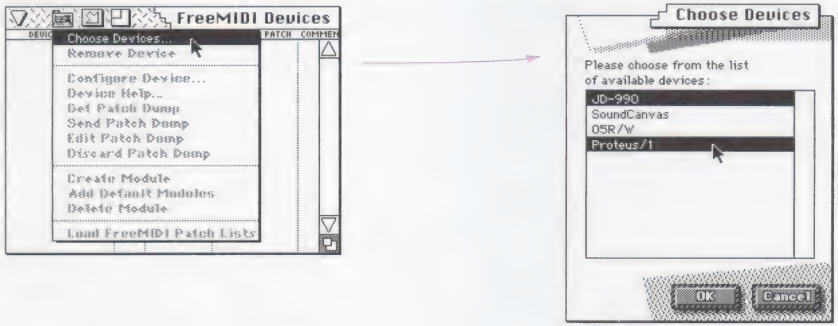


Figure 7-2: Choosing what devices to work with

Under the hood: what happens when you choose a sound by name?

The sounds in a patch list are the sounds that are evoked when a MIDI program change message (sometimes called a patch change) is sent to the device. MIDI patch change events are numbered from 0 to 127 (or 1 to 128), so sound lists will commonly have 128 sounds in them, although you'll frequently encounter other sizes.

Some MIDI devices have more than 128 sounds. In this case, the instrument either organizes them into multiple banks of sounds (usually ranging in size from 50 to 128 each), or it allows you to "map" sounds higher than 128 to a program change number below 128, replacing the original sound that used that number.

If an instrument has multiple banks, a separate patch list is set up for each bank. In this case, the term *patch list* is pretty much synonymous with the word *bank*.

If a device has multiple banks, it often requires an additional message, called a *bank select* message. To call up a sound from the bank in this case, FreeStyle sends several MIDI messages: a bank select message (usually controller #0 and/or controller #32) followed by a patch change message. Some devices use a different type of MIDI message for bank select, such as a short system exclusive message. FreeMIDI can handle any type of bank select message. To learn more, see "Using Multiple Patch Lists & Bank Select Messages" on page 173.

2. **Click the device or devices you need to work with and click OK.**

   The devices appear in the FreeMIDI Devices window with their MIDI channels shown below them.

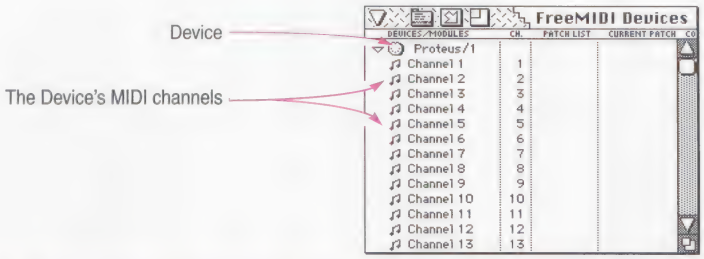


Figure 7-3: A device in the FreeMIDI Devices window

Getting the current sound lists to appear in the Patch Lists window

If this is the first time you have run PatchList Manager, the next thing you want to do is to get the current patch list (or lists) for each device to appear in the Patch Lists window:

1. **Click the expand button next to each device to hide its MIDI channels.**

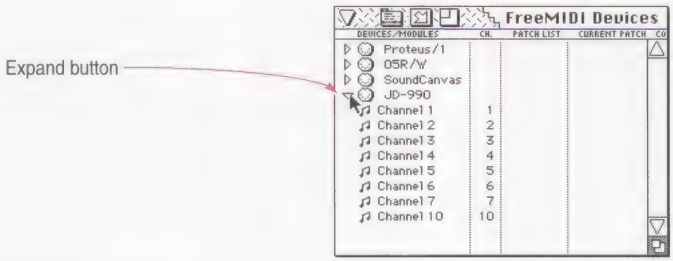


Figure 7-4: Hiding the MIDI channels below each device by clicking the expand button

2. **Select the devices.**

   If you only have one device in the list, click its name to highlight it. If there are several, shift-click each one to select them all.

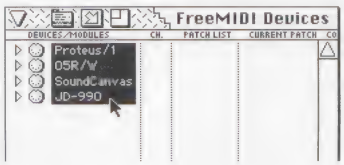


Figure 7-5: Selecting devices

3. **Choose Load FreeMIDI Patch Lists from the FreeMIDI Devices window mini-menu.**

   The patch lists for each device appear in the Patch Lists window as shown in Figure 7-5. If a device has multiple banks, they are grouped into a folder.

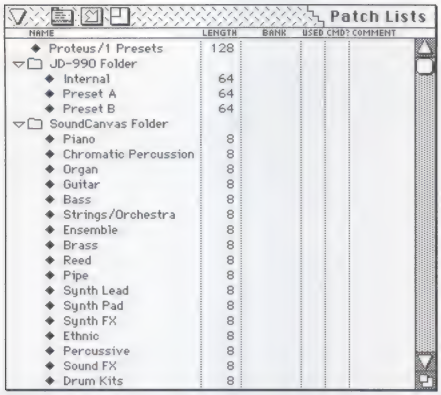


Figure 7-6: Patch lists

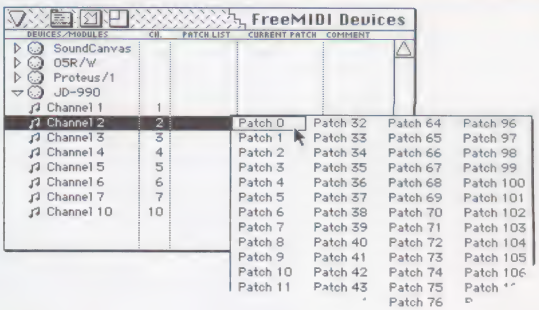
☛ If the Patch Lists window remains empty after you choose Load FreeMIDI Patch Lists, the devices you are working with have no current list. See "Creating A New Patch List" on page 157.

Using the Current Patch column to check a patch list

If you are reading this chapter, you have already determined that something is wrong with the patch lists. Either your device doesn't have one yet, or you want to make some sort of change to it. If, however, you want to check the current patch list for some reason, click in the Current Patch column next to one of the MIDI channels for the device as shown to the right.

If you see generic patch names as shown here, or if you see incorrect sound names (i.e. none of them match what you hear on the instrument), you need to create a new patch list from scratch. See "Creating A New Patch List" on page 157.

You can also check individual sounds by choosing them from the pop-up menu. When you do, the sound you chose should get called up on that channel on the instrument. If not, see "Deciding What to do Next" on page 156.



Deciding What to do Next

What you do next depends on what the situation is with the device. Here is a summary:

Situation	What to do
You want to make minor changes to a sound list, such as changing the order of the sounds in the list or renaming a few sounds.	See "Creating a Patch List By Hand" on page 165
FreeStyle is displaying generic sound names for one of your devices as shown in Figure 2-16 on page 29 (i.e. "Patch 1, Patch 2, Patch 3" etc.) and you want to see actual sound names instead.	See "Creating A New Patch List" on page 157.
Most or all of the current sound names in FreeStyle don't match the sounds you hear in the instrument.	See "Creating A New Patch List" on page 157.
You have loaded a new bank of sounds into the instrument (or have otherwise changed the internal state of the instrument) and you want to access them by name in FreeStyle.	See "Creating A New Patch List" on page 157.
You want to set up, reorganize, add, or remove multiple sound lists for an instrument that has multiple banks of sounds.	"Using Multiple Patch Lists & Bank Select Messages" on page 173.

Creating A New Patch List

If your MIDI instrument doesn't have a patch list yet, or if the current patch list is inaccurate for some reason (i.e. more than just a few sound names are incorrect), your next step is to create a new patch list for the device. There are several ways to do so. They are summarized below in the order in which you should try them.

Ways to create a patch list	Explanation	Where to go
Configure the device and use the *Get Patch Dump* command	PatchList Manager gets a MIDI system exclusive bulk dump from the instrument and automatically extracts the patch names	"Using PatchList Manager To Load Patch Names" on page 158
Load patch lists from old Performer or Digital Performer files	You can load patch lists from Performer 4.2 (or earlier) or Digital Performer 1.4 (or earlier) files. Complete files *or* configuration files can be read by PatchList Manager.	"Importing Patch Lists" on page 163
Get bank names using Unisyn, Mark of the Unicorn's universal editor/librarian software	Get banks using Unisyn and then import the Unisyn-generated patch list for the bank into PatchList Manager.	"Loading Patch Lists Generated by Unisyn" on page 164
Type in the patch names by hand	You add a new, generic patch list and type the names in by hand.	"Creating a Patch List By Hand" on page 165

Using PatchList Manager To Load Patch Names

PatchList Manager is familiar with a handful of MIDI instruments. If a device is familiar, PatchList Manager can get a MIDI system exclusive bulk dump from the instrument to extract an accurate patch list. (See the sidebar below for an explanation of this term.) In some cases, you can even make changes to the patch names in PatchList Manager and send the bulk dump back to the instrument to update the names in the instrument.

For example, if you have an E-mu Proteus, and you have changed the patch map in order to access sounds above 128, you can use PatchList Manager to get a new patch list with names that match the current patch map. As another example, you may have loaded a new bank of sounds into your Korg M1 and you would like the new bank to appear as a patch list in FreeStyle.

Determining whether or not you can use this method

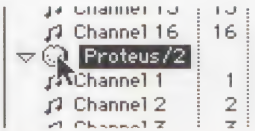
This method of getting patch lists only works with devices that PatchList Manager is familiar with. So the first thing you need to do is find out if your device is supported. To do so, you need to try to "configure" the device as described in the next section.

Configuring a Device

PatchList Manager can't configure every MIDI device, but it does support several popular devices. New devices that appear on the market will be supported with periodic updates, either from Mark of the Unicorn or from other developers.

To configure a device:

1. **Click the device icon to select it.**



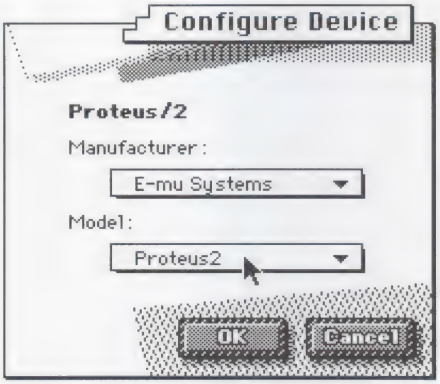
What is a "system exclusive bulk dump"?

The phrase *system exclusive* refers to a certain kind of MIDI message. Without getting too technical, system exclusive messages are used to communicate information that is unique to a specific MIDI instrument or device. System exclusive messages have a special format that allows them to hold a varying amount of information. They can be so small that they are transmitted in a fraction of a second; they can be so large that they take minutes to transmit.

The term *bulk dump* is used to refer to system exclusive messages containing large amounts of information. Often, a bulk dump represents the complete internal state of a MIDI device. In other words, the bulk dump serves as a "snapshot" of the current state of the instrument. PatchList Manager usually deals with bulk dumps that consist of one bank of sounds. For some devices, it gets the entire internal state. Either way, you'll probably wait at least a few seconds for the transmission to be completed.

2. **Choose *Configure Device* from the FreeMIDI Devices window mini-menu.**

   The Configure Device dialog box appears.



3. **Choose the appropriate manufacturer and model from the pop-up menus provided and click OK.**

   If the appropriate manufacturer or model does not appear in the menu, the device is not currently supported and you cannot configure the device. If so, click Cancel. If you have Unisyn™, Mark of the Unicorn's universal editor/librarian software, chances are good that you can use Unisyn instead. See "Loading Patch Lists Generated by Unisyn" on page 164.

   ☛ For MIDI devices that use RAM or ROM sound cards, there may be two options in the model menu where one of the options will be the model name plus "w/card". If you choose this option, you must have the sound card inserted when you are using the getting and sending patch dumps.

4. **Notice that the device icon changes to indicate that it is configured.**

Working with devices that use program maps

Some MIDI devices, such as the E-mu Proteus family, use program maps. A program map allows MIDI program change messages, which have a range of values from 0-127, to call up sounds on a MIDI device beyond the 0-127 range. For example, you can create a program map that causes the device to call up sound number 345 when it receives MIDI program change 10.

If a configured device uses program maps, the patch lists created by PatchList Manager using the Get Patch Dump command will automatically reflect this map. For example, if in your synth, patch 10 is named "ConeyIsland", patch 345 is named "Thumper", and MIDI program change 10 is mapped to patch 345, the name you see in the 11th slot (since program changes start at 0) in the patch list is "Thumper" instead of "ConeyIsland".

For devices that store multiple program maps, such as the E-Mu MPS keyboard, PatchList Manager only uses one of the program maps. Usually, this is the lowest *numbered program* maps, in the case of the MPS and MPS+, it is program map #1.

Check the device's Device Help for specific information about that device's program map implementation. See "Getting Device Help for important information about the device" on page 160.

Getting Device Help for important information about the device

After configuring a device, check its Device Help window for helpful hints that may exist for that device. This window often contains information about settings that you need to enable/disable in the MIDI device to make it possible to get its sysex data dump. It may also contain information about the device's program map features, if any.

To check Device Help:

1. **Select a configured device in the FreeMIDI Devices window.**
2. **Choose *Device Help* from the FreeMIDI Devices window mini-menu.**

The Device Help window appears. This is the Device Help window for the Ensoniq ESQ-M:

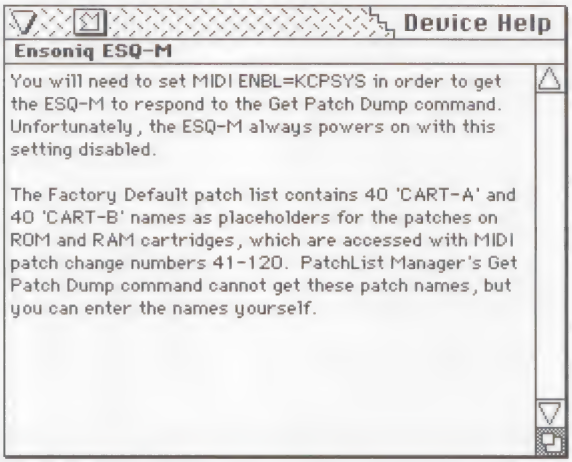


Figure 7-7: Device Help windows

Make sure the device has both its MIDI IN and MIDI OUT connected

Before you go further, make sure that the device has both its MIDI IN and MIDI OUT connected to your MIDI interface. Otherwise, PatchList Manager won't be able to get the bulk dump successfully. If you add a connection at this time, use the Edit FreeMIDI Configuration command in the MIDI menu to make sure both connections are present in your FreeMIDI configuration.

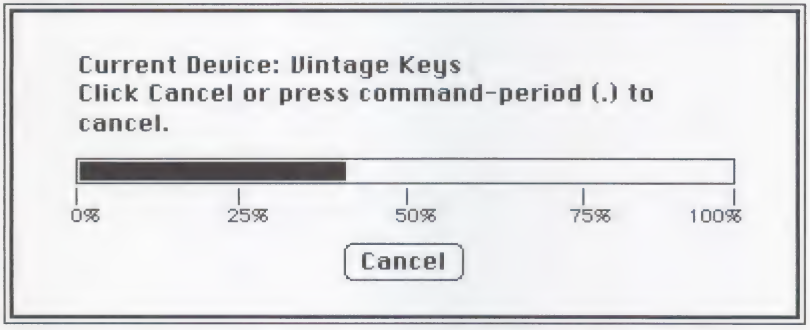
Getting an updated patch list from the device

Once you have configured a device and checked the MIDI cables, you are ready to get a patch list using the Get Patch Dump feature.

To use the Get Patch Dump feature:

1. **In the FreeMIDI Devices window, select a configured device and choose *Get Patch Dump* from the mini-menu.**

2. **The Patch Dump progress dialog appears while PatchList Manager receives the patch dump.**



Depending on the format of the MIDI device's sysex data dump, this progress bar may fill up slowly or all at once when the dump is complete.

Two things happen when the patch dump is complete:

- The factory default patch list is updated.
- The device's move handle icon changes slightly to indicate that it contains a sysex data dump.

3. **Repeat step 1 for each configured device.**

   You can do all devices at once by selecting them all in step 1.

Importing Patch Lists

You can import patch lists from Performer 4.2 (or earlier) or Digital Performer 1.4 (or earlier) files. You can import the patch lists from either complete sequence files *or* configuration files. You can also import them from other PatchList Manager files you may have saved on disk. (See "Saving Your Patch Lists" on page 177.)

To import patch lists from a Performer or Digital Performer file:

1. **Choose Import Patch Lists from the File menu.**

   A standard Mac open file dialog appears.

2. **Select the Performer or Digital Performer file that contains the patch list you wish to import and click Open.**

   Use the directory menu as needed to navigate on your hard disk in order to find the file. You can select either configuration or complete sequence files.

   All the patch lists from the Performer/Digital Performer file appear in the Patch Lists window and the Windows menu.

See "Assigning a Patch List or folder to the device's MIDI channels" on page 166 in this chapter for information on assigning the imported patch lists to MIDI channels.

PatchList Manager's command set also includes the standard FreeMIDI commands: Interface Settings, Edit FreeMIDI Configuration, Panic, Patch Thru, and Transport Controls.

Loading Patch Lists Generated by Unisyn

If you have a synthesizer or sound MIDI channel that is not supported by PatchList Manager, Unisyn can save you the trouble of typing in the patch lists by hand. Unisyn is Mark of the Unicorn's Universal Editor/Librarian software. Unisyn supports over 175 MIDI devices with complete library and editing functions. If PatchList Manager doesn't support one of your MIDI devices, chances are that Unisyn does.

Unisyn specializes in getting banks from synths. When it gets a bank, it automatically publishes the patch list for the bank to all FreeMIDI-compatible programs. If you want to work further with it in PatchList Manager, you can load this Unisyn-generated patch list into PatchList Manager as follows:

1. **Get the bank from the device using Unisyn's Get Bank command.**

   Consult the Unisyn manual if you need help with this step. As soon as Unisyn gets (or sends) a bank, it "publishes" a patch list for the current bank to all FreeMIDI programs.

   ☛ In some cases, you may need to transfer the bank into RAM before getting it. Consult Unisyn's profile help for the device.

2. **Back in PatchList Manager, select the device by clicking its name in the FreeMIDI Devices window.**

3. **Choose Load FreeMIDI Patch Lists from the mini-menu.**

   The Unisyn-generated patch list is added to the Patch Lists window, and it is also automatically assigned to each MIDI channel of the device.

4. **(Optional) Rename the newly loaded patch list by clicking its name in the Patch Lists window.**

   This step is especially recommended if you are loading multiple lists for a single device because it helps you better identify each bank.

When doing the above procedure, you can do more than one device at a time. For example, Unisyn can get banks from all of your devices at once. And you can load them into PatchList Manager all at once by selecting multiple devices before choosing Load FreeMIDI Patch Lists from the mini-menu.

Loading multiple banks from a device

Unisyn publishes only one bank of sounds at a time to FreeMIDI for a device: it publishes the last bank it has sent or received only. For a device that has several banks, you'll have to get each bank into PatchList Manager one at a time: get the bank in Unisyn and then load it into PatchList Manager. Don't worry, though. Most devices have only a few banks. And besides, it certainly beats typing in the patch names by hand!

Creating a Patch List By Hand

If none of the methods discussed in the previous sections for creating a patch list apply to you, you can create a new patch list manually and type in the patch names by hand.

To create a new patch list:

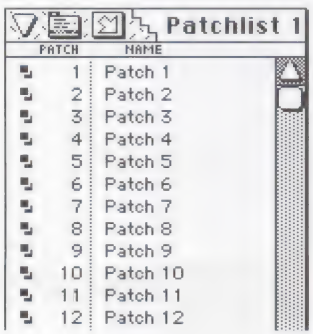
1. **Choose Add Patch List from the Patch Lists window mini-menu.**

   A new patch list appears in the list. It is named "PatchList 1".

2. **Click its name and enter an appropriately descriptive name for the patch list.**

3. **Double-click the new patch list's move handle icon to open its patch list window.**

   The sound names window appears. Alternately, you can choose the patch list's name from the Windows menu to open its window.



4. **Choose *Set Numbering Format* from the patch list window mini-menu to set the numbering of the patch list.**

   See "Setting the numbering format for a patch list" on page 169 for more information.

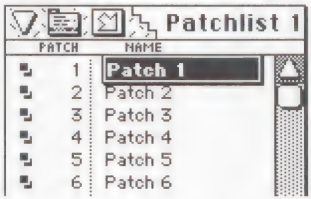
5. **Assign the list to the MIDI device in the FreeMIDI Devices window.**

   See "Assigning a Patch List or folder to the device's MIDI channels" on page 166.

6. **Click the first patch name in the list, "Patch 1" and type in a new name.**

7. **Press the Return key on your Mac keyboard to confirm the edit, or press the Enter key to move to the next name in the list.**

   Similarly, you can move up and down between patch names with the up and down arrow keys. If the synth is hooked up and turned on, each sound will be called up on the device as you scroll down the list.



8. **If the patch list corresponds to a bank of sounds for a MIDI device that has several banks and supports bank select messages, set the bank select message for patch list.**

   For more information, see "Using Multiple Patch Lists & Bank Select Messages" on page 173.

9. **If you'd like to list the names alphabetically, choose Sort by name from the mini-menu.**

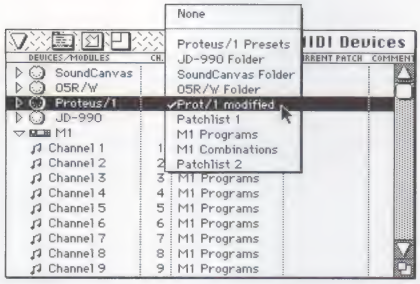
Assigning a Patch List or folder to the device's MIDI channels

When you create a patch lists by hand, you need to assign it to the MIDI channels of the device. You can assign the patch list to all channels, or you can assign it to individual channels.

To assign the patch list quickly to all MIDI channels:

1. **In the FreeMIDI Devices window, press in the Patch List column to the right of the device name.**

   A pop-up menu of patch lists appears.



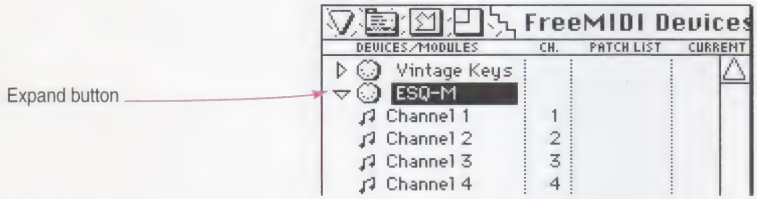
2. **Choose the desired patch list.**

   The patch list is assigned to all channels automatically.

To assign a patch list to an individual MID channel:

1. **Make sure that the channel to which you wish to assign the patch list is displaying in the FreeMIDI Devices window.**

   If the MIDI channels for a device are hidden, click the Expand button to display them.



2. **Press in the Patch List column next to the MIDI channel and choose the desired list from the pop-up menu.**

These procedures apply to a patch list folder as well.

Making Changes to a Patch List

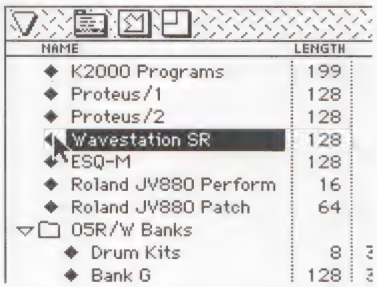
In a patch list, you can:

- Edit the names of the sounds
- Change their order in the list by dragging them up and down
- Sort them by numerically or alphabetically
- Change the numbering scheme
- Change the patch change number for any sound

Opening up a patch list

To open a patch list:

1. **Double-click the patch list's name or move handle icon to open its patch list window**



The sound names window appears. Alternately, you can choose the patch list's name from the Windows menu to open its window.

Editing a patch list

Here is a summary of what you can do in the patch list:

To do this	Do this
Change the name of a sound	Click the patch name in the list that you wish to edit, enter a new name and press the Return key on your Mac keyboard to confirm the edit. The new name appears. If you press the Enter key instead of Return, the edit is confirmed and the next patch name is ready for editing. Similarly, you can move up and down between patch names with the up and down arrow keys. 
To move a sound up or down in the list	Drag its handle
To sort the sounds alphabetically	Choose Sort by name from the mini-menu
To sort the sounds numerically	Choose Sort by number from the mini-menu
To change the numbering scheme	Choose Set Numbering format from the mini-menu. For more information, see "Setting the numbering format for a patch list" on page 169.
To change the overall number of sounds	Same as above
To make the numbering start at 0 instead of 1 or vice versa	Same as above
To set up a bank select message for the list	See "Using Multiple Patch Lists & Bank Select Messages" on page 173
To change a sound's patch number	Click its current patch number

Setting the numbering format for a patch list

Most MIDI devices number the sounds in a bank using one of several common conventions. For your convenience, PatchList Manager lets you choose the numbering scheme that most closely matches the instrument. To set the numbering format, choose Set Numbering format from the sound names window mini-menu or click in the *Length* column. Choose the appropriate options and click OK.

☛ You can always change the format, but you can't change the number of patches in the list after it has been assigned to a device MIDI channel. If you need to do so, you have to temporarily deassigned it, make the change, and then reassign it.

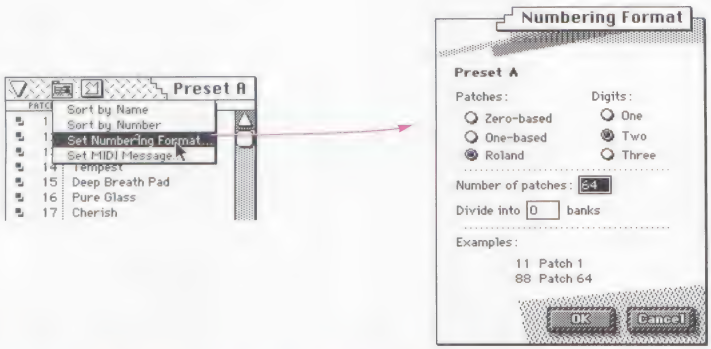


Figure 7-8: Setting the numbering format

Sending a patch list back to a configured device after editing it

If the patch list you are editing is one that you loaded from a configured device using the Get Patch Dump command, making changes in the patch list may also change the patch dump, depending on the device. Check the device's Device Help (see "Getting Device Help for important information about the device" on page 160) to see what the patch dump actually contains (it varies by instrument). If the patch dump only contains the patch names , then you can only change the names of the sounds when you send it back to the instrument. If the patch dump is a complete bulk dump of the whole instrument, you may be able to control other aspects of the bank. Device Help will give you specific advice for your instrument.

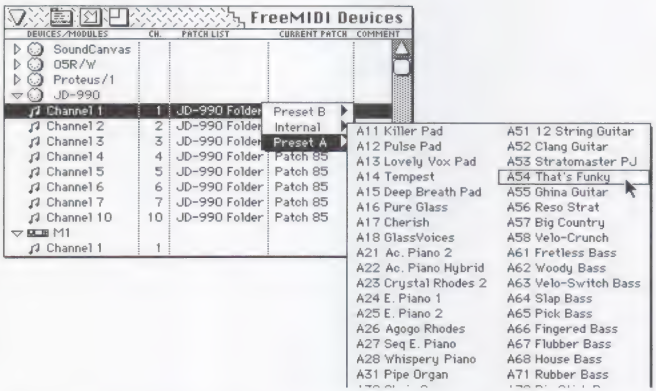
Duplicating a patch list

At times, you may need to duplicate a patch list to make a separate copy of it. For example, you may want to place the list in more than one folder. To duplicate a patch list:

1. **Click the patch list move handle to select it.**
2. **Choose Duplicate from the Patch Lists window mini-menu.**

Grouping patch lists in a folder

A patch list folder allows you to group several patch lists together. You can then assign the folder to a MIDI channel, which makes all of the lists available to it. The resulting pop-up patch list for the MIDI channel is hierarchical and shows each patch list as shown below.



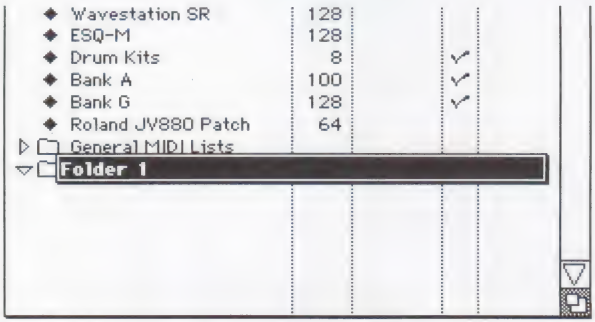
Folders are ideal for handling devices that have multiple banks, and therefore multiple patch lists. For more information about multiple banks, see "Using Multiple Patch Lists & Bank Select Messages" on page 173.

To group patch lists in a folder:

1. **Choose Add Folder from the Patch Lists window mini-menu.**

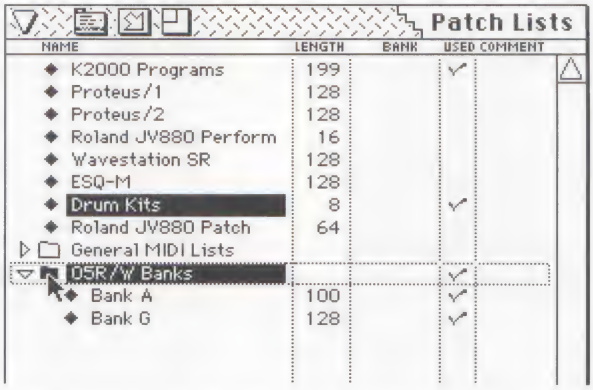
   The folder appears at the bottom of the list.

2. **Click its name to rename it.**



3. **Drag each list on top of the new folder by dragging the diamond list icon.**

Once inside the folder, the lists are indented to the right to indicate that they are inside the folder, just like the System 7 Finder. Use the show triangle to show or hide the patch lists in the folder.



You can put as many patch lists as you like in the folder. You can use this feature to help organize patches.

Assigning a Folder to a MIDI channel

This procedure is the same as described in "Assigning a Patch List or folder to the device's MIDI channels" on page 166.

Using Multiple Patch Lists & Bank Select Messages

For devices that support MIDI bank select messages, set up a folder containing one patch list for each bank. (See the earlier sections of this chapter to learn how to create the patch lists for each bank.)

Once you've arranged all the banks into a folder and assigned the folder to the MIDI channels for the device, all that is left to do is assign the appropriate bank select number to each patch list.

Determining Your Device's Bank Select Implementation

Once you've set up a device in FreeMIDI for bank select, you need to find out is how your MIDI device handles bank selection. This can get a little tricky. All MIDI devices that support bank select do so a little differently. And often you'll have to wade through the MIDI implementation charts in the back of the manual.

The following sections tell you what you should find out about your synth.

How many banks does it have, and which ones can be accessed via bank select?

The most important thing to know about a bank is: can it be called up with a bank select message and can items within the bank be called up with a MIDI program change event?

Try to get a feel for what the banks are. Some banks are not actually sounds. Instead, they consist of internal configurations for the synth, such as multi-timbral setups (like Yamaha and Korg *multis*) or multiple layers of sounds (such as *combis*). Some banks represent a card slot and are therefore only available when a card is present. Banks can be designated as General MIDI, which means that they contain a standard set of sounds or drum kits. Some banks are drum kits only and may only be available on certain MIDI channels (usually channel 10).

Does the device use one MIDI controller or two for the bank select message?

Some devices use a single MIDI controller, either #0 or #32. Others use both.

What is the controller value for each bank?

MIDI controllers have a number that identifies them (such as #32), but they also have a *value* between 0 and 127. The controller *number* identifies the controller as a bank select message, and its *value* calls up a specific bank. Here's an example:

Bank:	Controller used to call it up:
Bank A	Controller #32, value 0
Bank B	Controller #32, value 1
Bank C	Controller #32, value 2

If your device uses both controller #0 and #32, be sure to obtain the value for both for each bank.

The fun part about this is that often the device's manual gives you this information in *hexadecimal* form. Don't worry. PatchList Manager lets you use the hexadecimal numbers without even knowing what they are.

Once you are armed with the information above, you are ready to proceed.

Setting up bank select devices in FreeMIDI

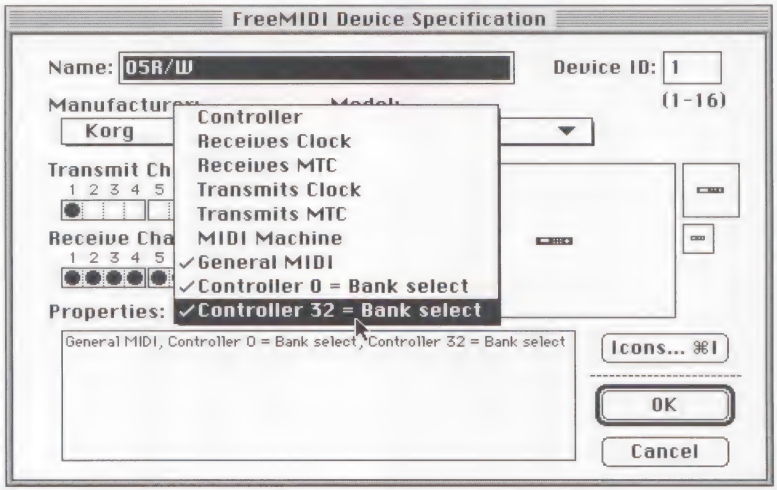
To use bank select messages with a MIDI device, you first need to tell FreeMIDI which MIDI controller the device uses for bank select:

1. **Open FreeMIDI Setup.**

   If you are running FreeStyle or PatchList Manager, choose Edit FreeMIDI Configuration from the Basics menu or MIDI menu, respectively. If are running neither, double-click the FreeMIDI Setup program in the FreeMIDI applications folder on your hard disk.

2. **Double-click the icon for a MIDI device that supports bank select.**

   The Device Specification window appears.



3. **Choose the appropriate bank select device properties from the Properties pop-up menu.**

   If the synth uses both controllers for bank select, choose both bank select properties. See "Determining Your Device's Bank Select Implementation" on page 173 if you need help with this step.

4. **Click OK to confirm your choice.**

5. **Repeat this procedure for each device in your FreeMIDI setup that uses bank select.**

Assigning a bank select number to a patch list

Now you are ready to assign the bank select controllers to each patch list:

1. **Places all of the patch lists together in a folder.**

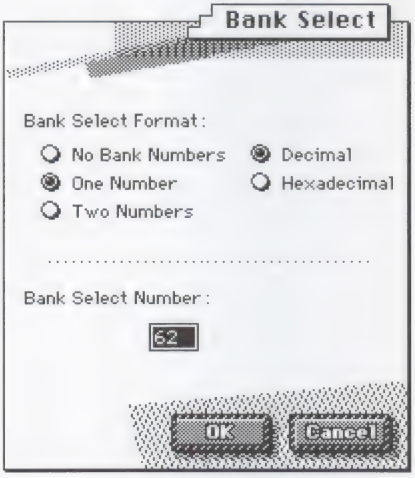
   See "Grouping patch lists in a folder" on page 171.

2. **Click in the Bank column to the right of the Patch List name.**

   The Bank Select dialog box appears.

3. **Choose the necessary number format, and type in the correct bank select number or numbers.**

   If the bank number information you got from the device's manual is in hexadecimal format, you'll need to choose the Hexadecimal option. Otherwise, use decimal format.



4. **Click OK when you are done.**
5. **Repeat this procedure for each bank.**
6. **Assign the folder to the MIDI channels for the device.**

   See "Assigning a Patch List or folder to the device's MIDI channels" on page 166.

What to do if bank Select doesn't work

Once bank select messages are assigned as described in the previous section, you can choose any patch from the pop-up patch lists in FreeStyle, PatchList Manager, and FreeMIDI setup, and doing so should call up the correct sound from the correct bank.

If it doesn't, check to make sure that the device has been given the proper Bank Select device property in your FreeMIDI setup. To do so, choose Edit *FreeMIDI Configuration* from the MIDI menu and proceed to the next section, "Saving Your Patch Lists".

Next, check the synth. Sometimes they have a mode that makes them ignore bank select or program changes. Still no response? Then the controller information you have is probably incorrect, or perhaps the instrument still isn't in the correct mode. Or the actual MIDI connections between FreeMIDI and the synth are somehow not working correctly.

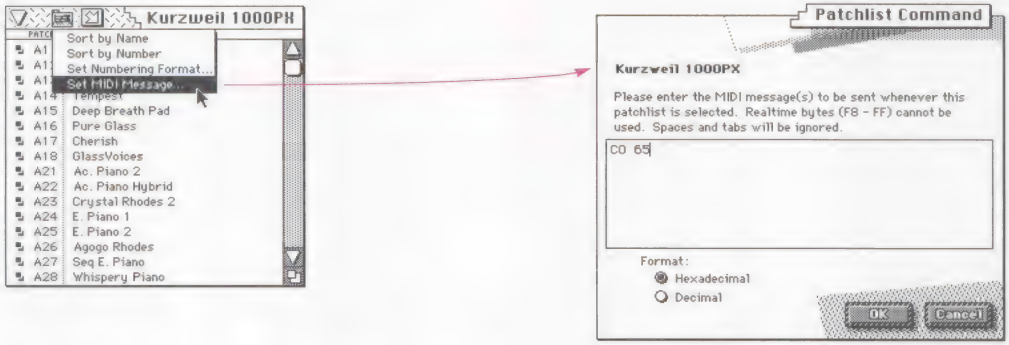
Assigning additional MIDI messages to a bank

Some devices don't use controller #0 or #32 for bank select and use another type of MIDI message instead. For these devices, you can type in any MIDI message the device calls for. This includes system exclusive data, a MIDI program change event with certain value, or any other type of event.

To assign a MIDI message to a patch list:

1. **Open the patch list by double-clicking its icon in the Patch Lists window.**

2. **Choose Set MIDI Message from the mini-menu, or click in the "CM?" column in the Patch Lists window next to the patch list.**



3. **Choose the desired number format (either decimal or hexadecimal) and type in the MIDI message.**

4. **Click OK when you are done.**

Now, the MIDI message you entered will be automatically sent whenever necessary to call up the bank (such as at the beginning of a session or when you change banks).

Saving Your Patch Lists

When you are done setting up your patch lists, you need to save your work:

1. **Choose Save from the File menu.**
2. **Type in a name for the patch list file.**
3. **Click Save.**

PatchList Manager then saves the entire contents of the FreeMIDI Devices and Patch Lists windows in a file on your hard disk. In addition, PatchList Manager tries its best to stay in sync with the FreeMIDI devices in your current FreeMIDI Configuration. Each PatchList Manager document is associated with a specific FreeMIDI Configuration. If you change FreeMIDI Configurations, PatchList Manager will close the current file and open the file associated with the new, current FreeMIDI Configuration. If you change back to a FreeMIDI Configuration, PatchList Manager will automatically use the corresponding PatchList Manager file.

PatchList Manager Hot Tips

Splitting up a patch list into instrument categories

PatchList Manager allows you to organize the sounds in an device into instrument categories as shown below in Figure 7-9.

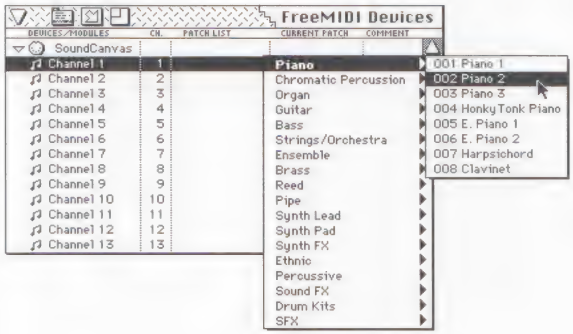


Figure 7-9: Patch lists that have been organized into instrument categories

To split up a patch list into instrument categories:

1. **Duplicate the original patch list.**

   For information on duplicating a patch list, see "Duplicating a patch list" on page 170.

2. **Rename the duplicate list with the category name, such as *Pianos* or *Basses*.**

   Click the name of the patch list in the Patch Lists window to pop-edit the name.

3. **Double-click the move handle of the list to open it.**

4. **Drag the sounds that belong to that category to the top of the list.**

   A short cut for this is to type in a space at the beginning of the name of each sound and then choose Sort by name from the mini-menu. When you are done, you can remove the spaces.

5. **Count the number of patches that are now at the top of the list that you want to include in the category.**

6. **Choose Set Numbering Format from the sound list mini-menu and type in the number of patches you just counted.**

   The list now displays only the patches you chose for the category.

7. **Repeat this procedure, starting at step 1, for each category you would like to create.**

Duplicating MIDI channels in a Device

In PatchList Manager, the MIDI channels listed below a device are called *modules*. Modules are added to Devices automatically by PatchList Manager. The number of modules added and their MIDI channel assignments are based on the number of MIDI receive channels specified for the device in FreeMIDI Setup.

There is rarely a need to do so, but you can add, edit, and delete modules for a device.

To add modules:

1. **In the FreeMIDI Devices window, select a device to which you wish to add a module.**
2. **Choose *Create Module* from the mini-menu.**

   The new module appears at the bottom of the selected devices module list.

3. **[Optional] Assign a MIDI channel for the module by selecting it from the pop-up menu in the CH column.**
4. **[Optional] Enter a name for the module by clicking its name and then typing.**

To delete a single module:

1. **In the FreeMIDI Devices window, select the module you wish to delete.**

   Shift-click modules to select more than one.

2. **Choose Delete Module from the mini-menu.**

To delete all modules for a device:

1. **Select the device itself (not one of its modules).**
2. **Choose Delete Module from the mini-menu.**

Chapter 8 Tips and Troubleshooting

Answers to frequently asked questions

Questions and Answers

If FreeStyle's screen display is erratic or seems to stall and skip: You may be running into the limits of your Mac's processing power. FreeStyle gives priority to sending and receiving MIDI data over most screen redisplays. However, with enough of an overload you may hear delays or erratic timing in your music.

Usually the overload is caused by vast reams of aftertouch (mono or poly key pressure), controller, or pitch bend events in one or more synthesizer tracks.

To solve the problem, you must reduce the amount of MIDI information being passed through the modem and/or printer port in one of the following ways:

Slow down the tempo of the sequence during the problem passages.

Delete unneeded aftertouch or other controller data in the controller view. (See "Using Controller Effects to Enhance Your Music" on page 54.)

Delete a track or tracks from the sequence.

If you are having trouble importing Standard MIDI files:

FreeStyle only reads "Format 1" Standard MIDI files.

FreeStyle maps each track inside the SMF into a Player. Because of this do not use tracks that contain events for different channels. If you have tracks like this, pull them apart so that each track only has events for a single channel.

FreeStyle does not support program changes in the middle of a track. FreeStyle will use the first program change it sees in a track as the player's sound, but will ignore subsequent program changes.

Since FreeStyle currently only supports one global tempo, it will use the first tempo event it sees as the global tempo, and ignore subsequent tempo changes. This also applies to time signature changes.

If you are having trouble importing complex sequences: Many sequencers let you work with "sections", "chunks" or "sub-sequences". The Standard MIDI File format has no provision for storing multiple sections within a single file. The answer is to save multiple files, one for each section in your sequence. FreeStyle lets you import all of these SMFs at once using the "Import into section" feature.

Here's an example describing exporting a group of files from Performer, and importing them into FreeStyle.

In Performer, pick one section to be the "master section". The master section should have the basic track layout of the entire document, should have program changes at the start of each track, and should define a tempo and meter. Export this section by making it the play enabled section, and using "Save As" to save it as a type 1 Standard MIDI file.

Now in the finder create a folder named "My sequence chunks". Save each of the other sections as a Standard MIDI file in this folder.

In FreeStyle using the "open" command in the file menu, open up the "master" file. Choose appropriate player templates for each of the tracks in the master file. This will create a document with the same layout, tempo and time signature as the master file. Next, import all the other sections using the "Import into section" command in the file menu. To import all the SMFs at once, check the "Import all in folder" check box in the open dialog.

If FreeStyle starts correctly, but you are unable to record (or play) anything: double-check your cable connections and synthesizer settings. Use the Check connections command in the FreeMIDI Setup program to find out where the break in the data flow has happened. Often you will find that FreeMIDI may think that a certain device is connected to an incorrect MIDI port.

If you cannot open a particular FreeMIDI configuration file: First try opening other existing configuration files, or a new configuration file, to be sure FreeMIDI is working at all. If a file is opened and seems damaged, will not let you save changes, etc., you still may be able to save some or all of its information by using the Clipboard to copy the devices and paste them into another configuration file.

If FreeMIDI Setup will not start up at all, or always brings up an irregular or damaged file when the FreeMIDI Setup icon is opened from the Finder, your working copy may be damaged. Re-install FreeMIDI from one of your Master disks. Restart the Macintosh and try opening another (new or existing) file with your new working copy to see if you have the same problem. Check also to see if other applications (Performer, MacWrite, MacPaint, etc.) are working properly.

Troubleshooting

Troubleshooting is always simplest and most effective when the exact problem can be specified clearly and concisely. If you are surprised by an error message or by seemingly erratic behavior in the program, take a moment to jot down the relevant details: exactly what the error message said (including any error ID numbers), what actions were done on-screen just before the problem occurred, what kind of file you were working with, how you recovered from the problem, and any unusual conditions applying during the occurrence of the problem. This may not enable you to solve the problem at once, but will greatly aid in isolating the problem should it reoccur.

If the problem you are encountering seems inconsistent, try to determine what the necessary pattern of actions are that will cause it to occur. Genuine bugs in application software like FreeMIDI are almost always consistent in their manifestation: the same set of actions under the same conditions invariably brings about the same results. Determining the exact cause of a bug often requires experiments which replicate the problem situation with one factor changed: starting the program from a different disk drive, restarting the Macintosh with a system folder containing different versions of the System File and the Finder, working with a new configuration instead of an existing one, etc.

If the problem is truly inconsistent, then it is likely to be a hardware problem: improper disk drive alignment, a loose connection, over long cables, signal 'aliasing', etc.

The most important tools for tracking down problems are the Check Connections and PatchThru commands in the FreeMIDI Setup program. Using these commands can isolate problems that stop the flow of MIDI data from your MIDI gear to the Macintosh and back again.

Technical Support

Send in that registration card!

We are happy to provide technical support to our registered users. If you haven't already done so, please take a moment to complete the registration card in the front of the manual and send it in to us. When we receive your card, you'll be placed on our mailing list and sent a free backup key disk.

Disk Repairs

We are glad to replace damaged disks belonging to registered users. Please contact Mark of the Unicorn Technical support by phone, fax, or letter, if your disk needs to be repaired or replaced. Our Technical support phone number is: (617) 576-3066. Our Fax number is: (617) 576-3609. We also provide technical support on-line with CompuServe. You can talk to a MOTU technical support representative in the Section 12 of the MIDI Vendor C Forum.

Technical support

Registered users who are unable, with their dealer's help, to solve problems they are encountering with FreeStyle or FreeMIDI may call our technical support line. The number is (617) 576-3066, and is staffed Monday through Friday 9 AM to 8 PM, Eastern Time. If you decide to call, please have this manual at hand, and be prepared to provide the following information to help us solve your problem as quickly as possible:

- **The serial number of the program.** This is printed on the cardboard page (at the front of the manual) which holds the registration card. Be sure to retain this page in the manual for your reference. You **must** be able to supply this number to receive technical support.
- **The version of FreeMIDI you are working with.** This is displayed briefly in the start-up screen when FreeMIDI Setup is started; it is also available through the *About FreeMIDI* command on the Apple menu from within FreeMIDI Setup.
- **A brief explanation of the problem,** including the exact sequence of actions which cause it, and the contents of any error messages which appear on the screen. It is often very helpful to have brief written notes to refer to.
- **The pages in the manual** which refer to the parts of the program which you are having trouble with.
- **The version or creation date of the system software you are using to run the Macintosh.** See the Installation Guide for help in finding version numbers for the system software.

We're not able to solve every problem immediately, but a quick call to us may yield a suggestion for a problem which you might otherwise spend hours trying to track down.

Our technical support telephone line is dedicated to helping registered users solve their problems quickly. In the past, many people have also taken the time to write to us with their comments, criticism and suggestions for improved versions of our software. We thank them; many of those ideas have been addressed in this version of FreeStyle. If you have features or ideas you would like to see implemented in our music software, we'd like to hear from you. Please write to the FreeStyle Development Team, Mark of the Unicorn Inc., 1280 Massachusetts Avenue, Cambridge, MA 02138.

Although we do not announce release dates and features of new versions of our software in advance, we will notify all registered users immediately by mail as soon as new releases become available. If you move from the address indicated on your registration card, please send us a note with your change of address so that we can keep you informed of future upgrades and releases.

Chapter 9 FreeMIDI Quick Reference

A guide to FreeMIDI Setup

This chapter contains brief descriptions of all the commands and dialog boxes contained in the FreeMIDI Setup application. Use this chapter as a reference guide for finding out how a certain feature is used. Read the chapters that are cross-referenced for more detailed information on these features.

The File Menu

New
Use the New command to close the current configuration and open a new empty configuration. You will be asked if you are sure that you want to close the current configuration, since this will affect all FreeMIDI applications that are currently being used. Before the new configuration is created, the FreeMIDI Preferences dialog appears so that you can tell FreeMIDI which serial ports you want to configure for MIDI.

Open
Use the Open to close the current configuration and open a previously defined configuration.

Close
Use the Close command to Quit FreeMIDI Setup.

Save
Use the Save command to save changes you have made to the current configuration file on disk.

Save As
Use the Save As command to save the current configuration file with a new name.

Revert
Use the Revert command to discard any changes you have made to the current configuration file and restore it to the state it was in when you last saved it.

Page Setup
Use the Page Setup command to control the way your configuration is printed when using the Print command. See your Macintosh user's manual for more information on Page Setup.

Print
Use the Print command to print a picture of your FreeMIDI configuration. See your Macintosh and printer user's manual for more information on printing.

FreeMIDI Preferences
Use the FreeMIDI Preferences command to open the FreeMIDI Preferences dialog box. This dialog is where you control some of the global settings of FreeMIDI such as which serial ports FreeMIDI will use, whether Inter-application MIDI is enabled, whether non-FreeMIDI applications will have access to the serial ports and whether patch change monitoring is enabled.

Quit
Use the Quit command to exit the FreeMIDI Setup application.

The Edit Menu

The Edit menu contains commands for copying and pasting FreeMIDI devices in the FreeMIDI Configuration window. These commands also work in the standard Mac way anywhere in FreeMIDI Setup where you edit text.

Undo

Use the Undo command to undo the last edit or change that you made to your FreeMIDI Configuration. Generally, this command displays the command that it will Undo, such as Undo Drag or Undo MidiLocate. As a shortcut, type command-Z on your Mac keyboard to invoke this command.

Cut

Use the Cut command to place a copy of the current selection on the Clipboard and then remove the current selection. As a shortcut, type command-X on your Mac keyboard to invoke this command.

Copy

Use the Copy command to place a copy of the current selection on the Clipboard. As a shortcut, type command-C on your Mac keyboard to invoke this command.

Paste

Use the Paste command to insert whatever data is currently on the Clipboard. As a shortcut, type command-V on your Mac keyboard to invoke this command.

Delete Device

Use the Delete Device command to remove the current selection. No copies are placed on the Clipboard. As a shortcut, type command-B on your Mac keyboard to invoke this command.

Duplicate

Use the Duplicate command to make copies of the currently selected FreeMIDI devices. This command only works on selected FreeMIDI devices, so it is grayed-out(disabled) unless at least one FreeMIDI device is selected. As a shortcut, type command-D on your Mac keyboard to invoke this command.

Select All

Use the Select All command to quickly select all of the current type of data. For instance, if there is no selection in the FreeMIDI Configuration window, Select All selects all the FreeMIDI devices, interfaces, and connections in the window. If a text entry box is active, such as the name field for a FreeMIDI device, Select All will select all the text in the name field. As a shortcut, type command-A on your Mac keyboard to invoke this command.

The Configuration Menu

The Configuration menu provides access to various commands for setting up and changing your FreeMIDI configuration.

Quick Setup

Use *Quick Setup* to open the Quick Setup dialog box, which allows you to quickly add and remove devices to and from your current FreeMIDI configuration.

Update Interfaces

Use *Update Interfaces...* to inform FreeMIDI of changes you have made to the MIDI interface(s) that you have connected to the serial port(s) on the Macintosh.

Create Device

Use *Create Device* to open the FreeMIDI Device Specification dialog box and add a new FreeMIDI device to your current FreeMIDI configuration.

Edit Device

Use *Edit Device* to open the FreeMIDI Device Specification dialog box and edit an existing FreeMIDI device in your current FreeMIDI configuration. You must select a device before this command becomes enabled. With no devices selected, it remains grayed-out (disabled).

The MIDI Menu

The MIDI Menu contains commands which provide control over FreeMIDI Setup's various MIDI settings.

Interface Settings

Use the Interface Settings command to open the Interface Settings dialog box. This dialog box allows you to enable and disable the two serial ports for MIDI. If, for instance, you have a printer attached to the Thru port of your MTP II and the MTP II is connected to the Printer serial port, you will need to disable MIDI on the printer port in order to do any printing.

Return

Use the Return command to return to the FreeMIDI application that was last active before switching to FreeMIDI Setup. This command will only have an effect if you switch to FreeMIDI Setup with the Edit FreeMIDI Configuration command from any other FreeMIDI application. As a shortcut, type command-R on your Mac keyboard to invoke this command.

Transport Controls

Use the *Transport Controls* command to open the Transport Controls window. The Transport Controls window contains buttons that can control the transport functions (Play, Stop, Rewind, Locate) of other FreeMIDI applications from within FreeMIDI Setup.

Check Connections

This command, when checked, causes the arrow cursor to change to a small keyboard cursor.

When you click a device in the FreeMIDI configuration window with the keyboard cursor, FreeMIDI sends a C-major chord to the device via MIDI. If all is well, the device plays the chord. If there is a communication problem between FreeMIDI and the device (such as a lose cable or something), the device does not play the chord.

Conversely, when this command is checked, and you send MIDI from one of your MIDI devices to FreeMIDI, the port to which the device is connected flashes a note symbol to indicate that FreeMIDI is successfully receiving data from the device.

This command serves as a diagnostic tool for you to determine if MIDI communication is OK.

MidiLocate

Use the MidiLocate command to toggle the state of MidiLocate. When the menu item is checked, MidiLocate is enabled. When it is unchecked, MidiLocate is disabled.

PatchThru

Use the PatchThru command to toggle the state of PatchThru. When the menu item is checked, PatchThru is enabled. When it is unchecked, PatchThru is disabled.

Popup Patchlists

This command, when checked, causes the arrow cursor to change to a MIDI patch change icon cursor.

When you then press on a device in the MIDI configuration window with the patch change cursor, a popup patch list appears containing a list of the patches for the device.

Audition Channels

The *Audition Channels* command allows you to choose how PatchThru and Check Connections will function.

Panic

Use the *Panic* command to send an "All Notes Off" MIDI message and then a "note off" MIDI message for every MIDI note on every possible MIDI channel on every MIDI output cable on both serial ports. This command will also reset all MIDI buffers in all FreeMIDI software. This command can take quite a while. If you wish to stop the operation, type command-period, on your Mac keyboard.

The View Menu

The View menu controls the display of the FreeMIDI Configuration window. The three options at the top of the menu, *by Small Icon*, *by Icon* and *by Large Icon*, are mutually exclusive. Choosing one option disables the other two. When an option is chosen from the menu, it gets a check mark next to its menu item.

The next four options, *Show Inputs only*, *Show Outputs only*, *Show Inputs and Outputs*, and *Show On Select*, are also mutually exclusive.

Use the *Clean Up Window* command to quickly arrange all the FreeMIDI devices in the window in a neat column.

Appendix A Glossary

This chapter provides brief explanations of the terms you'll encounter in this manual.

> ☛ This glossary does not cover specific features such as menu commands and windows. To look up a menu command or other feature, see Chapter 5, "Quick Reference" (page 85).

Glossary of Terms

Abbreviation: A player's abbreviation is the name used to denote the player's staff or staves in notation when multiple players are visible.

Accidental: A sharp (♯) or flat (♭) symbol that alters the pitch of notes that it precedes for the duration of one measure. The sharp symbol raises the note's pitch by one half-step, while the flat lowers the note's pitch by one half step

Advance Record Loop: Advances the placement of the record loop to its next position.

Aftertouch: Also known as Channel Pressure. A continuous controller MIDI event produced by some MIDI keyboards in response to the pressure applied to the keyboard after the keys are struck. Only one pressure value is sent for any number of keys that are depressed.

Apply: Make the changes specified in the current dialog take effect immediately, without dismissing the dialog. Also, to make a player's settings match those of a player template.

Arrangement: The way the basic elements of a composition are combined to form a finished piece of music. In FreeStyle, an arrangement consists of a number of section instances , lined up in the Arrangement Window.

Arrow: The standard Macintosh mouse pointer, used for selecting and dragging all kinds of items.

Audible note editing: Plays notes as you change their time or pitch, giving you audible feedback about the effect you are having on your work.

Audition: Try out, sample. In FreeStyle, you can Audition different riff metronome patterns before you choose one.

Auto Loop Record: Automatically creates a record loop for you when it detects that you have stopped playing.

Auto Select Controllers: A feature that selects corresponding continuous controller data when notes are selected, allowing you to treat notes and the effects used on them as tidy packages.

Auto-Scroll: Automatically scrolls editing windows so you are always looking at the current playback time.

Bar: A Measure. The coarsest basic unit of time.

Beat: The basic pulse of a measure of music. A subdivision of time finer than Measures, but coarser than Ticks.

Brush: A tool used in FreeStyle to "paint" notes onto the page.

Button: An area of the Macintosh screen that responds to simple mouse clicks, just like an actual push-button would respond to being pressed with your finger.

Cancel: An option in many dialog boxes. Choosing Cancel makes FreeStyle give up on whatever operation it was going to perform.

Channel Pressure: See Aftertouch.

Characters: See Text.

Chorus Depth: A continuous controller MIDI event that can be used to control the depth of chorusing on some synthesizers.

Clef: A symbol that defines the pitch context for notes on a staff. For example the Treble Clef (𝄞) locates middle 'C' one ledger line below the staff, and the Bass Clef (𝄢) locates middle 'C' one ledger line above the staff.

Click: A sound that the Macintosh can produce using its internal speaker to provide a metronome.

Clocks: See MIDI Beat Clocks.

Command Trigger: A MIDI controller event or a cluster of MIDI keys that enables the remote control features of your MIDI keyboard.

Command Trigger Source: Lets you set which MIDI input device will be used as your remote control command trigger.

Computer Key: A remote control event that simulates typing a key on your computer keyboard.

Control-Click, Control-Drag: To hold down the control key while you click or drag the mouse.

Controller, Continuous Controller: A MIDI event used to control some aspect of the sound being produced.

Counter: A read-out of the current time position. May be either in minutes-seconds-10ths of seconds, or in measures-beats-ticks.

Current Take: For each section, a player can only play one take at a time. The current take is the take that is currently being played. Its number appears in the Ensemble Window.

Cursor: The arrow or tool controlled by moving your mouse.

Default: The word Default is used in two ways. It is often used to indicate that a setting has been saved, and will be in affect the next time you create a new document or run FreeStyle. It is also used to indicate the most common settings in a dialog.

Dialog Box: A Dialog Box is a window that appears momentarily to give you information, or to allow you to enter information that will affect how FreeStyle runs.

Document: A single FreeStyle file. A Document can contain multiple sections and multiple songs.

Document Window: The main window of a FreeStyle document. The Document Window can either display graphic editing or notation views.

Drag: To move the mouse while holding down the mouse button.

Duration: The amount of time that a note sounds.

Ensemble: A group of players or player templates.

Ensemble Library: The collection of Ensembles available to be added to a document. You can add, delete and modify the entries in the Ensemble Library.

Ensemble Library Entry: An Ensemble in the ensemble library consisting of player templates.

External Effects Depth: A MIDI Controller, generally used to affect a setting such as reverb or flange.

Follow Song: A recording mode in which the record enabled section is automatically switched according to the current time location.

Graphic Editing: A "piano-roll" view on your music, where time runs left to right and pitch runs top to bottom.

Grid: An evenly spaced series of points in time. Also, the area in the Arrangement Window used for placing section instances.

Hand Splitting: In order to display the notes in the correct clef in the Notation view, FreeStyle must determine which notes were played by each hand. Hand Splitting is the process that FreeStyle uses to determine which hand played each note.

Half-Step: Is the difference in pitch between two adjacent notes. A half-step is the smallest interval that can be described in standard music notation.

Icon: A small graphic object, often used to represent a document, or an application.

Ignore Mistakes: The Ignore Mistakes feature lets you hide notes that are both short and quiet in the Notation view. This can often improve the quality of FreeStyle's notation.

Import into Section: To read a Standard MIDI file into a new section in the current document.

Interval: The number of half-steps between two notes.

Keep Destination Controllers: When checked, this preference tells FreeStyle to never overwrite controller information in your music when pasted music contains conflicting controller information.

Keep Recording: Protects music that you have recorded from being "undone". After you have recorded something you like, choose Keep Recording so that if you later make a mistake you will be able to undo just the mistake.

Key Clump: A group of notes that when played together will act as your remote control command trigger.

Key Signature: A Key Signature determines what accidentals are used when displaying notes in the notation view.

Ledger Line: A line above or below a staff used to display a note that is beyond the range of the staff.

Legato: A style of playing where notes are held for longer than their duration.

Loop Markers: Markers in the time line that display information about your playback loops.

Loop Source End Measure: In a playback loop, the Loop Source End Measure is the last measure that contains notes which are to be repeated. So if you are repeating bars 1 through 4 for some number of times, the loop source end measure is measure 4.

Loop Source Start Measure: In a playback loop, the Loop Source Start Measure is the first measure that contains notes which are to be repeated. So if you are repeating bars 1 through 4 for some number of times, the loop source start measure is measure 1.

Marker: An icon appearing in the time line

Measure: A span of time consisting of the number of beats specified in the current time signature.

Measure Relative: When pasting Measure Relative, notes maintain their original relationship to the measure.

Menu: A list that appears momentarily to allow you to select an item.

Meter: See Time Signature.

Metronome: A click or repeating pattern that lets you play in time with FreeStyle.

Metronome Riff: A Metronome that is a short musical phrase, such as a drum beat, rather than a simple click.

MIDI: MIDI is the "language" used by FreeStyle to talk to your synthesizers. It stands for Musical Instrument Digital Interface.

MIDI Beat Clocks: MIDI messages used to share a common notion of time between two or more devices. See Synchronization.

Mute: Muting a player temporarily disables its playback.

Notation: Notation is to music what text is to speech. It is music's traditional graphic representation.

Note Velocity: The Velocity of a note determines how loud it is.

Octave: A musical interval of twelve half-steps.

Offset: To shift relative to the current position, rather than setting to an absolute location.

Option-Click, Option-Drag: To hold down the Option key while you click or drag the mouse.

Overhang Bar: A measure extending beyond the actual end of a section. Music played in the Overhang Bar will play as soon as the next section in a song has begun playing.

Page Number : A number appearing in the notation view indicating the page you are currently viewing.

Palette: A window that "floats" above normal windows.

Pan: The placement of a sound in the stereo field. Pan controls the amount of sound coming from each speaker.

Part: A Part is a single player, viewed as notation. The music in a part is transposed appropriately for the player's instrument.

Part Name: Special text that always changes to reflect the name of the currently visible player in the Notation view.

Patch: A sound on a synthesizer.

Patchlist: A list of patchnames. You need to have a Patchlist for your synthesizer in order to select sounds by name.

Patchname: The name of a patch.

Piano Roll: Player pianos used rolls of paper to record and playback music. Holes in the paper were used to describe the music. As the paper was fed into the piano the holes would cause notes to be played, each at the correct time. The Graphic Editing view in FreeStyle is very reminiscent of a Piano Roll.

Pickup Bar: The measure that comes before the actual start of a Section. When the section is played as part of a song, music in the Pickup Bar will play before the end of the previous Section.

Pitch: How low or high a note is.

Pitch Bend: A MIDI Controller that alters the pitch of the currently sounding notes.

Playback Loop: A Playback Loop causes a section of music to repeat or "echo".

Playback Loop Override: A measure inside a playback loop that does not play exactly the same looped material.

Player: A Player in FreeStyle is like a musician in the real world: it plays music. Players also control many aspects of their music, such as how it sounds, and how it is displayed.

Player Info: Short for Player Information, Player Info controls how the player sounds, and how it is displayed in the Notation view.

Player Library: The Player Library is a collection of player templates.

Player Template: A player template is a "rubber stamp" you can use to create a player.

Point Size: A page layout term referring to the size of a font. One point is one 72nd of an inch.

Pop-Up Menu: An area in a window that when clicked on displays a menu.

Port: A connection on the back of your computer that can be used to connect it to external devices, such as printers, modems and MIDI interfaces.

Preferences: Settings that tailor FreeStyle to the way you prefer to work.

Primary Song Structure Row: In the Arrangement window the first row is known as the "Primary Song Structure Row" because placing sections in the first row determines the overall structure of the song.

Quantize: Quantization aligns affected notes to a precise grid. Use it to tighten up the rhythmic feel of sloppy performances.

Quarter Note: One quarter of a measure in a 4/4 time signature.

Record Enabled: When the Record button is depressed, FreeStyle is ready to record any music you play. In this state FreeStyle is Record Enabled.

Record Enabled Player: The Record Enabled Player is the player that will receive any music you record into FreeStyle. Also, many of settings in FreeStyle operate on the player that is record-enabled (e.g. Edit Player Info). The Record Enabled Player has a glowing read record button to the left of its name in the Ensemble Window.

Record Enabled Section: The Record-Enabled Section is the section that is currently receiving music you record into FreeStyle.

Record Loop: A loop that, when enabled, causes playback to loop continuously between two points in your song. You can use this feature to build up a part of your song in layers. Record looping can be turned on or off using the Toggle Record Loop command in the Record menu.

Remote Controls: FreeStyle's remote controls let you control the entire sequencer from your MIDI keyboard by assigning actions to certain combinations of MIDI keys and/or controllers.

Rewind Marker: An small triangular icon appearing in the time line indicating where playback will resume if you press the rewind button in the Control Palette.

Score: The music notation for a group of players, viewed together. A score is usually in the appropriate form for a conductor, bandleader or composer to read the music. The music for players in a score is unaffected by the players' Transpose Part setting. Also see Part.

Scrollbar: A control along the edge of an area which is too large to be viewed all at once. A scrollbar controls which part of that area is visible within its window.

Scrubbing: The process of moving the wiper forwards and backwards across time and listening to notes as the wiper passes over them. Use scrubbing to get a precise idea of where you will resume playback. You can also use scrubbing in the notation view to get an idea of a note's "feel" or "actual time" relative to the time at which it was notated.

Section: A section is a set of takes for each player. Sections can be used by themselves, or you can organize sections into songs using the Arrangement Window. You can even have multiple copies of the same section in your song. For example, you can use sections for a song's Verse, Chorus, and Bridge. Then you can arrange a song with the structure: verse, chorus, verse, chorus, bridge, verse, chorus.

Shift-Click, Shift -Drag: To hold down the Shift key while you click or drag the mouse.

Show Entire Pickup Bar: Displays the full time duration of the pickup measure at the beginning of the song or section you are viewing. Relevant only in the notation view.

Slider: A control that allows you to make a selection from a range of values.

Smart Scaling: Enlarges or reduces the printed image of what you see on your page. Available through the Page Setup command.

Smooth Record Loops: Temporarily copies "pickup" notes from just before a record loop to the end of the loop so you hear these notes leading into each iteration of the loop.

Solo: "Soloing" a player temporarily silences all other players so you can hear just what that player is playing.

Song : An Arrangement. A song is a collection of section instances as shown in the Arrange Window. You can create any number of songs out of the sections in your file.

Sound: The combination of a MIDI Device, such as a synthesizer, and a patch that can be played on that device.

Staccato: A style of playing where notes are held for a small fraction of their full duration. A run of staccato eighth notes might appear as sixteenth notes spaced an eighth note apart.

Staff: A cluster of five horizontal lines that provide a reference against which the pitch of notes may be read.

Staff Spacing: A setting available through the Edit Player Info command. The space between staves on the page is expressed in terms of Ledger Lines, equal to the distance between staff lines.

Standard MIDI File: A standard way of saving and retrieving MIDI performance data. Most music software can read and write standard MIDI files, so saving as a standard MIDI file is a good way to transfer music between them. However, a standard MIDI file cannot store everything that a FreeStyle file can, including takes, sections, songs, and notation information.

Status Bar: Areas at the top of the Graphic Editing/Notation and Arrangement Windows that continuously show vital information about whatever your mouse cursor is pointing at or clicking on.

Sustain Pedal: A piece of hardware you can connect to your MIDI keyboard to control whether notes stop sounding when you release the keys. Also refers to a continuous controller MIDI event that controls whether notes stop sounding when you release the keys.

Swing: A rhythmic "feel" common to Jazz and other styles. When swung, the second eighth note of each pair is delayed a bit. For example  would be played as  .

Swing Straightening: Changes the representation of swing rhythms, so you see simple eighth notes instead of triplet quarter/eighth note figures. The feel does not change - only their representation in the notation view changes.

Sync, Synchronization: A way of keeping FreeStyle in step with drum machines and both hardware and software MIDI sequencers. For more information, see MIDI Beat Clocks.

System: A system is the stack of staves that belong to the currently visible players, joined by a continuous barline at the left edge. If you are only viewing a single player, you may see a single-staff system or systems.

Take: A player's performance for a particular section. Each player will remember an unlimited number of alternate takes for each section, so you never have to lose a performance.

Tempo: The relationship between the basic pulse of the meter, and "real time", normally expressed as a number of duration values per minute. For example, in 4/4 time, ♩ = 120 denotes that 120 quarter notes will occur per minute. You can control the tempo using the slider in the Control Palette.

Text: Letters, numbers and symbols that you can type with your Macintosh keyboard.

Text Box: A rectangular frame within which you can type and edit text.

Tick: FreeStyle's finest unit of time measurement. There are always 960 ticks per quarter note. How much actual time is taken up by ticks, quarter notes, and measures can be controlled by varying the tempo using the slider in the Control Palette.

Tiling: A way of arranging FreeStyle's windows on the screen to maximize the amount of usable space. Windows are placed and sized so that their edges come close to each other but do not touch.

Time Line: The "ruler" at the top of the Graphic Editing and Arrangement views. In addition to hash marks to show important subdivisions of time, a time line can display section names, loop markers, and rewind markers.

Time Signature: Also known as Meter. A description of the basic pulse and rhythmic subdivision of a measure, represented as a fraction. For example, 3/4 means that there are three beats per measure, and each beat is a quarter note long.

Toggle Record Loop: Changes the state of the record loop by enabling or disabling it.

Tool: An item that affects the behavior and appearance of the mouse cursor. Tools are selected by clicking one of several buttons at the top of the document window. For example, when the Brush Tool is selected, the mouse cursor looks like a brush to indicate that notes can be "painted in".

Transcription: The process of interpreting a musical performance and translating it into music notation. Also, the resulting sheet music.

Transpose Command: The Transpose command lets you shift the selected notes by a chosen interval. To transpose your song into a different key, you'll need to select all notes in the song (except those in drum players) and either use the Transpose command or drag them vertically to change their pitch. You'll also want to change the key signature in the notation view.

Transpose Part: Available through the Edit Player Info dialog box, this setting controls the player's instrument transposition. For example, clarinet players use Bb transposition: their parts are written up a whole-step (see "Part" for more information).

Transpose Recording: Available through the Edit Player Info dialog box, this setting lets you choose an interval by which the notes you record will be transposed (especially useful when playing a low bass part on a short keyboard).

Transposition: See Transpose Command, Transpose Part, and Transpose Recording.

Triplet: A group of three notes played in the time that two would ordinarily occupy. For example, each note in an eighth note triplet is two-thirds as long as an ordinary eighth note. Also see Swing.

Undo: Reverses the effect of whatever operation was last performed. Available in the Edit menu.

Velocity: An aspect of a MIDI note describing the force with which the key was struck. The effect of the velocity on the timbre of the note can depend on the Sound you are using, but it nearly always affects the note's loudness. Also see Volume.

View Popup Menu: The View Menu at the upper left of the Document Window controls which section or song is currently visible and playable in the window.

Voice: An independent melodic line within a single player's notes. FreeStyle automatically separates the notes you play into up to four distinct voices. When two separate voices appear in the same staff and measure, they are notated in a style called divisi, where the upper voice has upward-pointing stems and the lower voice has downward-pointing stems.

Volume: A continuous controller MIDI message that controls the overall loudness of a player's notes. While the a note's velocity controls and reflects how hard the key is pressed, you can think of volume as being identical to a fader on a mixing board. You can control the overall volume for each player using the volume sliders in the Ensemble Window.

Wait For Note: Continuously replays the pickup bar until FreeStyle detects that you have started to play something, giving you time to collect your thoughts or think of an idea. You can turn Wait For Note on or off from the Record menu.

Whole-step: Two half-steps. The difference in pitch between 'C' and 'D' on the piano keyboard.

Window: A rectangular frame that encloses groups of controls and information. See your Macintosh User's Guide for more information about windows.

Window Layout: A default way to arrange your windows. You can save a window layout for later use by choosing Save Window Layout from the Windows menu.

Wiper: A vertical line that appears at the current playback position in the Notation, Graphic Editing, and Arrangement views. The wiper gives you continuous visual feedback about the relationship of the current time to your performance. Also see Scrubbing.

Zoom: Magnification or de-magnification of the information you are viewing to see it in more detail, or see more of it.

Appendix B Keyboard Shortcuts

This appendix provides a list of keyboard shortcuts that you can use to control FreeStyle.

Keyboard Shortcuts

In general these keyboard shortcuts can be used in combination with each other. For example, you can simultaneously hold down the Command Key to select a different tool, and the Shift Key to toggle the setting of *Cursor Snaps to Grid.*

Keyboard shortcut	What it does
Space Bar	Toggles Pause. (Begins playback if not paused)
ESC	Stop
‘ or ~	Toggle Record
Return	Rewind
Enter	Rewind and begin playing
Delete	Same as choosing “Clear” from the edit menu
Up-Arrow	Previous Take
Down-Arrow	Next Take
Left-Arrow	Previous Player
Right-Arrow	Next Player
Numbers 1-9 and 0	Selects the current Player’s Takes 1-10
Shift	Toggles “Cursor snaps to grid” for dragging operations. (Stretch notes, move notes, paint notes, box select etc.). Extends selection for box-selection, or when selecting in lists.
Control	Scrub to location
Option	Zooms to selection.
Command	Toggles selection/brush tool.
Option-Shift-Click	Zoom Back to last zoom level
Option-drag notes	Duplicates the selection.
Command-Scrub	Toggles “Silent scrubbing”.

Appendix C Using FreeMIDI with OMS

OMS Compatibility

FreeMIDI is compatible with the Opcode MIDI System™ (OMS). If you currently use OMS and it is required for OMS applications that are not yet FreeMIDI-compatible, you have two options:

Option:	Explanation:	Pros and cons:
Option 1: Keep both FreeMIDI and OMS in your System, and set each to "Allow other applications".	In this scenario, FreeMIDI and OMS peacefully coexist with no interaction whatsoever. You maintain two studio configuration files, one for OMS and one for FreeMIDI. You'll continue to use OMS normally, and FreeMIDI operates as if OMS wasn't even there.	Cons: you have to maintain two separate studio configuration files: one for OMS and one for FreeMIDI. OMS and FreeMIDI applications can't send and receive MIDI at the same time. Pros: this method maintains the MIDI processing features available with the Studio 4 and Studio 5.
Option 2: Remove OMS, install the FreeMIDI OMS Emulator, and have FreeMIDI emulate OMS.	You completely remove OMS from your System by dragging the System extension out of the System folder. You then install a replacement for it, the *FreeMIDI OMS emulator*. FreeMIDI then looks like OMS to OMS applications: they share the FreeMIDI studio configuration, and they function just like they do with OMS. For example, all of your FreeMIDI devices appear in each OMS application in the same places that OMS devices would.	Pros: all applications share the FreeMIDI studio configuration file, and all applications can send and receive MIDI at the same time. Cons: the MIDI processing features in the Studio 4 and Studio 5 become unavailable. Note: As of this writing, Galaxy, Opcode's universal editor/librarian software, does not share patch lists with FreeMIDI, so Galaxy patches will not show up in FreeMIDI applications like FreeStyle and Performer. Galaxy patch lists, can, however, still be shared with Vision when using this option.

Emulating OMS

FreeMIDI emulates Opcode MIDI System (OMS) in the following way. You install a system extension called OMS Emulator, along with the FreeMIDI System Extension and other FreeMIDI System files and restart your Macintosh and FreeMIDI will then appear to be OMS to your OMS applications. Before proceeding with OMS Emulation, you should remove OMS by dragging the OMS Extension out of your System folder and restarting your Mac.

To install the OMS Emulator extension:

1. **Disable all CDEV's (Control Panel Devices) and Extensions, including virus protection utilities such as SAM, Virex, Vaccine, Disinfectant, or GateKeeper during the installation process.**

   These utilities can interfere with installation. If you are running System 7, you can temporarily disable them by restarting the computer and holding down the shift key until you see the message "Extensions off", which appears right after "Welcome to Macintosh". They will turn back on the next time you restart the computer. If you are running System 6, the most reliable way to disable them is to drag their icon outside of the System Folder and restart the computer.

2. **Insert the FreeStyle master disk and run the installer.**

   The installer is the icon called "Double-click to install".

3. **Click OK when the installer logo screen appears.**

4. **Click Customize.**

   This produces the Custom install window where you can select individual files to be installed.

5. **Click the Drive as necessary in order for the current drive selected to be the disk which contains your System Folder.**

6. **Select the OMS Emulator file from the scrolling list on the left side of the window.**

7. **Click Install.**

8. **When the Install is complete, you will be asked to Restart your Macintosh. Click Restart.**

   OMS Emulator installation is completed.

Once OMS Emulator is installed, all your OMS applications should work as if OMS were present only they will use your FreeMIDI Configuration to communicate with your MIDI gear.

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