Roland™

Fantom-X Workshop

Recording Music on the Fantom-X

No. 5 in the Fantom-X Workshop Series

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About the Fantom-X Workshop Series

The Fantom-X Workshop Series is a collection of booklets describing how to get the most out of some of the exciting features of the Roland Fantom-X family of products. Much of what's discussed in the series also applies to the Fantom-S keyboard and, to a lesser degree, the original Fantom.

Each booklet covers a single topic, with easy-to-follow explanations, procedures and illustrations. Have fun learning to master the Fantom-X in convenient bite-sized pieces.

Other Booklets in the Fantom-X Workshop Series

- *The Fantom-X Experience*—A quick tour of how the major Fantom-X creative tools interact.
- *The Sounds of the Fantom-X*—A tour of the Fantom-X sounds and Patch mode.
- *The Rhythms of the Fantom-X*—Exploring the pads, drum sounds and rhythms of the Fantom-X.
- *The Fantom-X Effects*—This booklet helps you get the most out the powerful effects processing in the Fantom-X.
- *Sampling on the Fantom-X*—Capture loops, vocals, noises or any other sound with the Fantom-X's advanced sampling capabilities.
- *Smart Storage in the Fantom-X*—Learn all about the Fantom-X's storage options for samples and other data.
- *Performing with the Fantom-X*—Splits, layers, realtime controllers and more make the Fantom-X hot onstage.
- *Making a CD of Your Fantom-X Music*—Learn how to turn your Fantom-X music into a final audio CD.
- *Advanced Fantom-X Recording Techniques*—Learn how to use time-based effects, record arpeggios, work with mastering effects and record realtime patch tweaks.

About This Booklet

In the Fantom-X, you can easily record anything from the simplest melody or rhythm idea to a full-blown musical arrangement. Its feature-packed 16-track sequencer lets you work fast, and has all the tools you need for tending to the tiniest of musical details as you perfect your music. (If you're not familiar with the words "track" or "sequencer," don't worry, we'll explain them.)

When it's time to mix a song, the Fantom-X's onboard mixer and effects help you achieve the perfect, CD-ready final mix.

This booklet explains how to use the Fantom-X's sequencer. We'll provide basic recording instructions and get into some of the features that make the Fantom-X such a great recording workstation.

Understanding the Symbols in This Booklet

Throughout this booklet, you'll come across information that deserves special attention—that's the reason it's labeled with one of the following symbols.

A note is something that adds information about the topic at hand.

A tip offers suggestions for using the feature being discussed.

Warnings contain important information that can help you avoid possible damage to your equipment, your data or yourself.

Basic Things You Really Need to Know

We'll start by explaining some things about how the Fantom-X's recording system works. To fully understand its many options, you'll need to know the stuff in these sections. If you're eager to start recording, though, you can jump to:

- *"Clearing the Demo Song"*—on Page 8, and then to
- *"A Quickie Recording How-To"*—on Page 10.

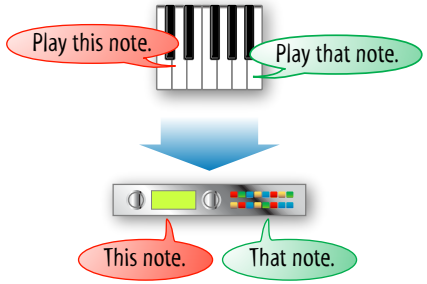
When you get the chance, do come back and read the following sections to get the most from this booklet and from the Fantom-X.

Some Key Concepts for Beginners

This section is intended for people who are new to MIDI sequencing. If that's not you, skip ahead to "Performance Mode: Parts and Performances."

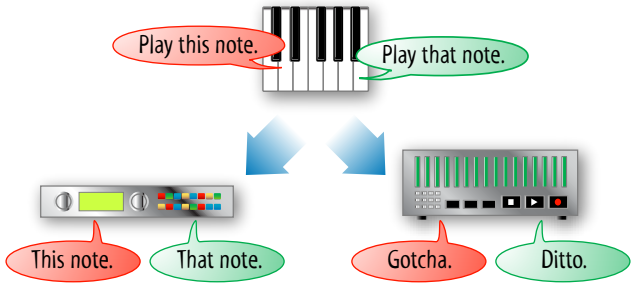
MIDI is the language in which the Fantom-X's various internal components communicate. (It's also how the Fantom-X talks to other instruments).

Every time you play something on the Fantom-X, its keyboard, pads or realtime controllers produce MIDI data that's sent to the Fantom-X's sound generator, resulting in the sounds you hear. There's a MIDI message for each of your physical actions.



Recorder=Sequencer

When you play the Fantom-X's keyboard and pads, manipulate its realtime controllers, or use rhythms or arpeggios during recording, the resulting MIDI messages are sent to the Fantom-X's "sequencer" in addition to being sent to the sound generator.



The Fantom-X sequencer captures all of this MIDI data and can play it back in its original order. The result is that when you press the sequencer's PLAY button, it sends the MIDI data to the Fantom-X's sound generator, and it sounds as if you're playing the keyboard, pads, and so on.

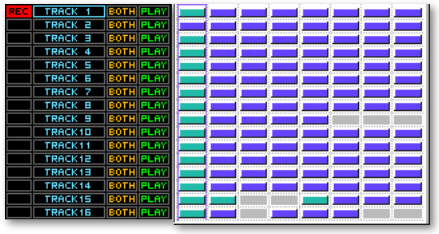
It's important to understand that though it seems like you've recorded the sound of your playing, that's not really what's happened. You've simply recorded MIDI instructions for reproducing what you played, not the sound itself.

A chunk of music you've recorded using a sequencer is called a "sequence."

Sequencing allows for incredible flexibility in refining your music, and offers some amazing advantages for arranging, re-voicing and editing your music, as we'll see.

Tracks

The Fantom-X sequencer stores each stream of MIDI data inside a container called a "track." The sequencer has 16 tracks on which you can record.



Each track runs horizontally from left to right across the Fantom-X display.

In the *Fantom-X Owner's Manual*, a track is called a "phrase track." We simply call it a "track" in this booklet.

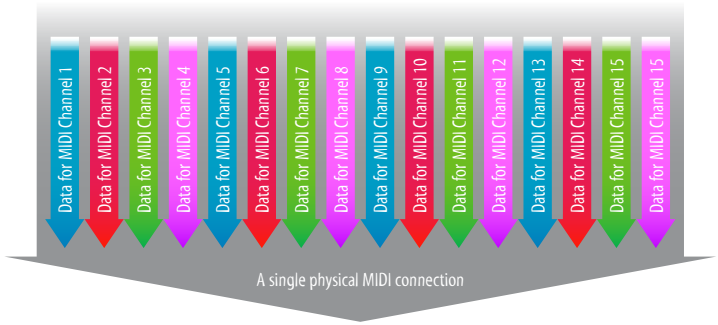
To record the individual elements that make up a musical arrangement, you record on one track, then another, and so on until the arrangement's completely recorded or you run out of tracks.

If you do run out of tracks, you can combine already-recorded tracks to make more room by "merging" them, as you'll read later on.

As you record new tracks, you play along with the tracks you've already recorded.

MIDI Channels

Every MIDI connection—such as the one between the Fantom-X's sequencer and sound generator—has 16 separate pathways called "MIDI channels." These pathways allow individual streams of MIDI data to flow to the same place without bumping into each other.



When the MIDI channels' destination is a "multitimbral" sound generator such as the one in the Fantom-X, each channel's data can play its own individual patch or rhythm set.

Performance Mode: Parts and Performances

Songs and Performance Mode

When the Fantom-X is in Patch mode, its sound generator is two-way multitimbral: It can play one sound assigned to the keyboard, and another assigned to the pads. You can record a new idea in Patch mode when inspiration strikes, as we'll see.

In Performance mode, the sound generator is 16-way multitimbral: It's as if the Fantom-X contains 16 separate instruments—one for each MIDI channel. Performance mode is where you construct and record a song's arrangement.

You can pack even more than 16 sounds into a song by inserting Program Change messages that automatically select new patches as a song plays. This is done using Microscope editing, which we'll describe later.

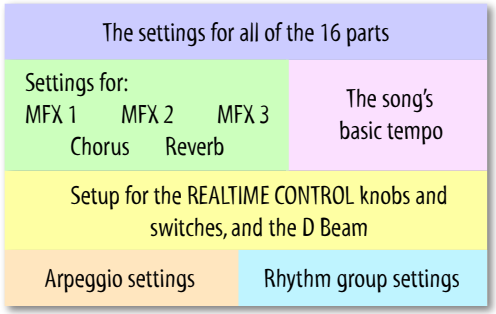
Playing a Part

Each of the sound generator's 16 instruments in Performance mode is called a "part." You can select any patch or rhythm set for any part. Each part's settings determine the behavior of its sound.

By default, each of the 16 parts plays the MIDI data on the same-numbered channel. Part 1 plays MIDI Channel 1's data, Part 2 plays MIDI Channel 2's, and so on.

You can change the MIDI channel to which a part is assigned. While we recommend you don't do this as you're learning the Fantom-X sequencer, it can be a handy thing to be able to do, as we'll see.

The Contents of a Performance



A complete set of 16 parts is contained in a framework called a "performance." A performance stores all of its parts' settings and other important song-related items, as shown above.

To learn about the Fantom-X effects, see the Workshop series booklet *The Fantom-X Effects*.

You can save a song's performance—the song's setup, really—along with the song in a Fantom-X song file, as we'll see.

Performances are also important when playing live, since they allow you to split the Fantom-X keyboard, and to layer sounds, as described in the Workshop series booklet *Performing with the Fantom-X*. That's also where you can learn how to save a performance all by itself.

Getting Into Performance Mode

Enter Performance mode in either of two ways. Press:

- *LAYER/SPLIT*—to display the Performance Layer screen on which you can select stored performances. The screen is optimized for the creation of splits and layers when you're playing the Fantom-X onstage. The Performance Layer screen is discussed in detail in the Workshop series' booklet *Performing with the Fantom-X*.
- *MIXER*—to display the currently selected performance's Performance Mixer1 screen. Once you've selected the performance you want to start with, this is where you'll customize it for use in your song.

Much of what you'll do when you set up and tweak a performance can be done from either the Performance Layer or Performance Mixer1 screen. The Performance Mixer1 screen is more studio-like—that's why we'll be primarily using this screen in this booklet about recording.

MIDI Channels and Fantom-X Tracks

Each track can contain data for all 16 MIDI channels. Though smooshed together on one track, each data stream remains separate, and the Fantom-X provides all you need for recording and editing each channel's data individually. The Track View screen—which we'll discuss later—lets you see multiple MIDI channels' data recorded in a track.

Each MIDI channel's data is played by the part assigned to that channel.

So, that's 16 possible recordings on each track. Hmm, 16 times 16...that's 256 separate recordings in one song! Do you need this much power? The answer depends on your music.

For most users, 16 recordings—one per track—is plenty. The only time these Fantom-X users will encounter more than one channel's data on a track is when they move an idea from Patch to Performance mode, as we'll see.

Power users may want to take advantage of the extra elbow room that multiple MIDI channels on a track can provide.

The Big Two Recording Methods

You can record on the Fantom-X using either of two methods:

Realtime recording Step recording

You can use either approach as your musical needs dictate—you can even use both within the same track.

Realtime Recording

The most typical way to record—and probably the most fun—is to simply play your music on the Fantom-X keyboard or pads and capture it all in realtime, as the metronome ticks or the song plays. We'll discuss realtime recording in this booklet.

Step Recording

Step recording is a process that allows you to enter the song's notes when the song isn't actually playing. It's a great way to record impossible-to-play phrases, or to enter notes from a written score. To learn about step recording, see Page 174 of the *Fantom-X Owner's Manual*.

The Elements of a Fantom-X Song

When you record a musical composition on the Fantom-X, you do so in a "song," which contains:

- *16 tracks*—for recording and playback. Each track runs from the beginning of the song to the end.
- a *tempo track*—that controls the song's tempo. If you want the song to speed up or slow down automatically, you can add tempo changes at the desired locations. You can do this in realtime or by inserting new tempo events in the Microscope editing screen described later on.
- *beat track*—that stores the song's time signature information. Since the beat track runs the length of the song, you can insert multiple time signatures for your song's sections using the Microscope editing screen.
- *100 patterns*—with a single track each. We'll properly introduce you to patterns on the next page.

You can save a song to user or card memory in a "song file"—a song file contains the song itself and some other related items. More on this later.

One Song at a Time

A single Fantom-X song can be loaded at a time. Only when a song is loaded can you record new material or edit the song. When you want to work on another song, you save the currently loaded song to user or card memory to preserve its contents before loading the next one.

Sizing Up a Song

A song's size is measured by the number of "MIDI events" it contains—every MIDI message captured by the sequencer counts as one MIDI event. When you play a note, that's a MIDI event. When you spin a REALTIME CONTROL knob, a stream of MIDI events are generated for the knob's in-between positions. As a result, a song's length in time is pretty much irrelevant as a measure of its size. A 24-hour song with a sparse arrangement might be dinkier than a super-busy explosion of notes that lasts only a few minutes.

A Fantom-X song can contain 400,000 MIDI events. A typical song contains roughly 120,000 or less. In any case, it's unlikely you'll ever run out of room when you're recording a song on the Fantom-X—400,000 events is a *lot* of events.

Patterns

The most straightforward way to record on the Fantom-X is to record each track from the start of the song to the end, perhaps copying some sections to multiple locations. This isn't necessarily the easiest way to work, though.

In many songs, there's lots of repetition, with some instruments playing the same thing at various song locations. You can record these repeating elements as "patterns," single-track mini-sequences you can re-use as often as you like.

A pattern is recorded and edited the same way as a track. Once you've created a pattern, a track can trigger it anywhere in the song, sparing you lots of repetitive sequencing. And every pattern edit you make automatically applies to each use of the pattern in the song, a real time-saver.

We'll explain how to program a pattern trigger—referred to as a "pattern call"—later on.

Though a pattern can hold data for all 16 MIDI channels, most people find it simpler to record each repeating element in its own pattern.

The Fantom-X's RPS feature also uses patterns, as described in the Workshop series booklet *Performing with the Fantom-X*.

Before You Record

When it's shipped from the factory, the Fantom-X is set up so that it automatically loads its demo song at startup. Clear this demo song before you begin recording your own music.

Clearing the Demo Song

1. Press SONG EDIT.
2. Press F3 (Song Clear)—the Fantom-X asks if you're sure.
3. Press F8 (Exec) to finish clearing the demo song.

To Turn Off Automatic Loading of the Demo Song

If you don't want to have to clear the demo song every time you record, you can turn off its automatic loading.

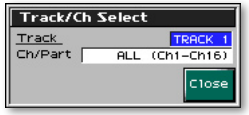
1. Press PATCH/RHYTHM, MIXER or LAYER/SPLIT.
2. Press MENU.
3. Turn the VALUE dial to select System, and then press ENTER.
4. Press F2 (↓) and/or F1 (↑) to select the Startup tab.
5. Set Load Demo Song at Startup to OFF.
6. Press F8 (System Write) to save the new setting.

Setting the Song's Time Signature

Most songs are recorded in 4/4 time, so by default, the Fantom-X sets the song time signature to 4/4 when you power-up without the demo song loaded, and when you clear a song from memory.

If, however, you'd like to record using another time signature:

1. Press SONG EDIT.
2. Press F8 (Micro Edit) to display the Microscope screen.
3. Press F7 (Trk/Ch Select)—the Track/CH Select window opens.



4. Highlight the Track value and turn the VALUE dial to select BEAT, and then press F8 (Close).
5. Highlight the first event in the event list, as shown here:

6. Press ▶ and ◀ as necessary and turn the VALUE dial to select and change the time signature numerator and denominator as desired.
7. Press EXIT when you're done.

You can also use this procedure to change a song's time signature in the middle of the song.

We'll discuss the sequencer's Microscope screen in detail later on.

Starting a New Song

Where Inspiration Strikes

You're likely to begin the process of creating a song in the Fantom-X in one of two ways. You'll start recording a song in:

- *Patch mode*—when you come up with a new song idea while playing the keyboard or the pads, or jamming along with a rhythm or arpeggio.
- *Performance mode*—when you're deliberately setting out to record a new song. You can set up the performance you'll be using before you start recording, including its:
  - patches and/or rhythm sets
  - effects
  - tempo

We'll explain how to set up a performance in "Configuring a Song's Performance."

In any case, whether you're:

- recording in Patch mode after getting a new idea, or
- recording in Performance mode after setting up the song's performance...

... the recording process is essentially the same.

How to Record

The Sequencer Buttons

You control the recording of a song, its playback and its navigation during editing using the SEQUENCER buttons located to the left of the Fantom-X's display. These buttons act in much the same way as the buttons on a CD or DVD recorder/player.

When you press:

- *RESET*—you return instantly to the beginning of the song.
- *BWD*—you jump to the first beat of the previous measure. Hold down BWD to move backward through the song.
- *FWD*—you jump to the first beat of the next measure. Hold down FWD to move forward through the song measure-by-measure.

For a fast rewind, hold down BWD, and then press FWD. To fast-forward, hold down FWD, and then press BWD.

- *STOP*—playback of the song stops.
- *PLAY*—playback of the song begins from your current location. The PLAY button's green indicator lights.
- *REC*—if you're not currently recording, the REC button's red indicator flashes, and the Realtime Rec Standby window opens to let you set up for recording. If you're already recording, the REC button's indicator flashes to signify Rehearsal mode, which we'll discuss later on. (During recording, the button's indicator lights solid red.)

A Quickie Recording How-To

If you're hot to start recording and don't yet care about the details, here's a built-for-speed tutorial to get you started. We'll explain what it all means afterward.

Our quickie tutorial presumes you'll be recording something you're simply playing on the keyboard or pads.

1. Whether you're in Patch or Performance mode, press REC—the Realtime Rec Standby window pops open, and, by default, you hear the Fantom-X's metronome. Since we're going quick-and-dirty, we'll use the window's settings as they are, and we'll use the current tempo for now.
2. Press PLAY or F8 (Start)—your choice—to display the Realtime Recording window and begin the one-bar countoff before recording actually starts. At the countoff's first beat, you hear the "ding" of a bell.

During recording, a bell sound plays at the first beat of each measure to help you know where you are in the measure.

3. At the end of the countoff's four beats, play the keyboard or pads as desired—the Fantom-X is now recording your playing.
4. When you're done playing, hit STOP to halt recording.
5. Press RESET to return to the beginning of your song, and press PLAY to hear what you've recorded.

If you don't like what you've recorded and would like to quickly get rid of it, use the Fantom-X's Undo feature. If you're in Patch mode, press PATCH/RHYTHM—if you're in Performance mode, press MIXER or LAYER/SPLIT—press MENU, select Undo/Redo, hit ENTER and then F8 (Exec).

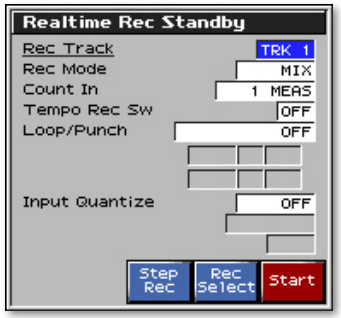
These are the basic steps for most any recording, whether you're putting down a song's first track, adding tracks to a song or recording a pattern. Of course, when you take the time to adjust the available parameters, you can do quite a few things using these five simple steps.

The procedure for recording with a rhythm or arpeggio is a little different than the one in our tutorial. We'll discuss this in "Recording a Rhythm." To learn about recording with an arpeggio, see the Workshop series booklet *Advanced Fantom-X Recording Techniques*.

These steps are a rough roadmap for the recording process—the following sections discuss your options in depth.

The Realtime Rec Standby Window

The recording process always starts with a press of the REC button that opens the Realtime Rec Standby window.



This illustration shows the Realtime Rec Standby window in Patch mode. The Rec Track value looks slightly different in Performance mode, as you'll learn.

By default, when the window opens, the metronome starts ticking.

You can configure the metronome so it doesn't automatically start by setting the Metronome Mode parameter's value to Off or PLAY-ONLY, as described in the *Fantom-X Owner's Manual*. You can also switch it off in the Tempo window, as we'll explain.

Setting Up for Recording

The Realtime Rec Standby window's parameters set up your recording session. Here's what each one does:

- *Rec Track*—This parameter selects the song track or pattern on which you'll be recording data for the currently selected part. Select the desired track or pattern for recording by turning the VALUE dial.

We'll discuss the various ways in which you can select a part later on.

While you can select any track or pattern for recording, the Rec Track value offered to you by default depends on your current operating mode. In:

- *Patch mode*—Rec Track is set to TRK 1 (for "Track 1").
- *Performance mode*—Rec Track is set to the track that matches the number of the currently selected part. "(AUTO)" appears after the track number to show that the Fantom-X's Rec Track Select feature is guessing that this is the track you want to use.

To learn how to disable the Rec Track Select feature, see Page 234 of the *Fantom-X Owner's Manual*. You might want to do this if you're packing multiple MIDI channels' data into a single track or pattern.

- *Rec Mode*—The Fantom-X offers two realtime recording modes. You can record in:
  - *Mix mode*—In Mix mode, anything new you record in a track or pattern is combined with anything already recorded there. This is the default recording mode. (Of course, when you first record a track or pattern, there's nothing there yet, so you're not combining your new recording with anything.)
  - *Replace mode*—When you record in a track or pattern, you replace already-recorded data.
- *Count In*—A count-in gives you a few beats to get ready before recording actually starts. You can set Count In to:
  - *Off*—for no count-in.
  - *1 MEAS or 2 MEAS*—for a one- or two-beat countoff, respectively.
  - *WAIT NOTE*—so that the Fantom-X doesn't begin recording until it hears a note. WAIT NOTE is great for recording with a rhythm or arpeggio.

- *Tempo Rec Sw*—When this parameter is turned on, the Fantom-X records any changes you make to the song's tempo as it plays when you:
  - *press the TEMPO button*—and turn the VALUE knob to change the song's tempo, or tap in the desired tempo using F6 (Tap.)
  - *turn the REALTIME CONTROL TEMPO knob*—to change the song's tempo.

You can record tempo changes as a separate operation in which you don't play the keyboard or pads. If the currently selected track contains data, be sure to record using Mix mode so you don't erase what's on the track.

Tempo track recording always operates in the same manner as Replace mode: New tempo changes replace any previously recorded tempo changes.

If your song is to have a single tempo throughout—as most pop and dance songs do—you can set the song's basic tempo and leave it. We'll get to this shortly.

- *Loop/Punch*—The Loop/Punch parameter configures the Fantom-X for:
  - *loop recording*—where you record over and over in a track or pattern during the same song section or for the entire song. We'll discuss loop recording in the next section.
  - *punching*—in which you re-record portions of an already-recorded track or pattern. We'll explain punching in a few pages, too.
- *Input Quantize*—The Fantom-X can correct any timing errors you make as you play. This process is called "quantizing." Set the Input Quantize parameters to Off, for no timing correction, or to the note value that matches the feel of what you'll be playing.

You can quantize a recording later on if you prefer. This allows you to try different quantization values at your leisure, a good idea if you're not sure of the Input Quantize note value to select.

About Loop Recording

You can record a selected section of your song—or the whole song—over and over in a "loop." This allows you to:

- *record multiple takes without stopping*—as you perfect your playing technique. By loop recording in Replace mode, each new take replaces the one before it.
- *build up a track, layer-by-layer*—in Mix mode, recording more material in the track or pattern each time it loops around. This approach is ideal for constructing interesting percussion patterns.

To set up loop recording, set the Loop/Punch parameter. You can loop record:

- *a pre-set number of measures*—beginning at your current location in the song by setting Loop/Punch to LOOP (1-16 MEAS) as desired.
- *the entire song*—by setting Loop/Punch to LOOP SONG ALL.
- *a specific portion of a song*—by setting Loop/Punch to LOOP (POINT), and then setting Start Point to the measure and beat at which you want looping to begin, and End Point to the measure and beat at which you want playback to jump back to the Start Point.

The Start Point and End Point parameters are available only when Loop/Punch is set to LOOP (POINT) or to AUTO PUNCH (described later).

Rec Select

You can press F7 (Rec Select) to open a window in which you're able to set the type of MIDI data the sequencer captures.

Normally, you'll leave all of the listed MIDI message types checkmarked. If there's a type of MIDI data you'd rather not record, though, un-check it here.

Step Rec

F6 (Step Rec) opens the Step Rec Standby window in which you can start step-recording notes, as described in the *Fantom-X Owner's Manual*, or program the current track to trigger patterns, as we'll discuss in "Using Patterns In a Song."

Setting the Song's Basic Tempo

If a song stays at the same tempo throughout, its basic tempo setting determines the song's tempo. If you'll be adding tempo changes throughout the song, the basic tempo value determines the tempo at which the song starts.

Until you save a song to user or card memory, its basic tempo setting is temporary—if you load another song or select a new performance, the current basic tempo setting is lost. We'll decribe saving a song later.

Setting a Tempo in the Tempo Window

Press TEMPO to display the Tempo window.

You can select the song's basic tempo by:

- *turning the VALUE dial*—to set the tempo numerically.
- *tapping out quarter notes*—on the F6 (Tap) button to set the tempo by feel. The Fantom-X requires at least three taps to recognize the tempo you want.

You can also turn off the metronome from the Tempo window by pressing F7 (Click) so it's not lit red. Press is again to light the Click button and turn the metronome back on.

Setting a Tempo with the TEMPO Knob

1. Press the button at the upper right corner of the REALTIME CONTROL area repeatedly until its middle indicator lights.

2. Turn the TEMPO knob—circled in red above—to set the song's basic tempo as desired.

To see the tempo you've set, look at the Fantom-X display. Many of its screens have a Tempo readout where you'll see "♩=[the current tempo]."

The Realtime Recording Window

When you start recording by pressing the Realtime Rec Standby window's F8 (Start) button or PLAY, your song starts playing and the Realtime Recording window appears.

After you've checked out the options in the Realtime Recording window, you can hit STOP and then return to the desired song location to actually begin recording.

In the Realtime Recording window, you'll find options that allow you to:

- *punch-in*—re-recording portions of a track or pattern. We'll discuss punching in a few pages.
- *erase*—already-recorded material in realtime.
- *rehearse*—what you'll be playing without recording it.

If none of these options interest you, press F8 (Close) to close the window and continue recording, or simply leave the window open as you record.

Rehearsing

You can rehearse your playing without actually recording it by entering Rehearsal mode. There are two ways to get there, and you can use the two methods interchangeably:

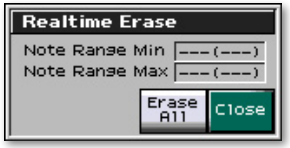
- *From the Realtime Recording window*—Press F7 (Rehearsal). Its onscreen button turns red to signify that you're now in Rehearsal mode. To exit Rehearsal mode, press F7 (Rehearsal) again.
- *Using the REC button*—When REC's red indicator is lit, and not blinking, recording is underway. To enter Rehearsal mode, press REC once so its indicator flashes. To exit Rehearsal mode, press REC again so its indicator stops flashing.

You can also enter Rehearsal mode by pressing REC during a count-in before recording starts.

If you rehearse your playing and press STOP without leaving Rehearsal mode, nothing is recorded.

Realtime Erasing

You can erase bits of stuff from the current track or pattern in realtime. Start by pressing the Realtime Recording window's F6 (Erase) button to display the Realtime Erase window.



When this window's visible, hold down:

- *F7 (Erase All)*—at the desired location to scoop out everything that's recorded there.
- *a key on the keyboard*—at the desired location to remove any occurrences of its note there.
- *a low key and high key on the keyboard*—at the desired location to erase all of the notes in-between them there.

The Note Range Min and Note Range Max readouts in the Realtime Erase window show the low and high key you've selected, respectively.

When you're done, press F8 (Close) to exit the Realtime Erase window.

Summary: The Recording Procedure for Real

1. If you want to record in:
   - *Patch mode*—press PATCH/RHYTHM. If you want to record from the keyboard, select the desired keyboard sound. To record from the pads, select the desired pad sound.
   - *Performance mode*—press MIXER and use ◀ or ▶ to select the part you'd like to record. A light gray box encircles the number of the currently selected part at the top of the Performance Mixer1 and 2 screens. Select the desired patch or rhythm set for the part.
2. Press REC to display the Realtime Rec Standby window—if the metronome is set to play during recording, it begins to click.
3. Set the parameters of the Realtime Rec Standby window as desired.
4. Set the song's tempo and/or turn the metronome click off or on.
5. Use the RESET, BWD or FWD buttons to move to the song location at which you want to start recording.
6. Press F8 (Start) or PLAY to display the Realtime Recording window.
7. Select from the available options or just start recording.
8. Play the desired notes on the keyboard or pads.
9. When you're done, press STOP.
10. Press RESET and PLAY to listen to what you've recorded.

If you're in Performance mode, you can record additional tracks by repeating this procedure, selecting a different part in Step 1. Setting up parts—and selecting their sounds—is discussed later in this booklet.

Recording a Rhythm

The sequencer can capture the Fantom-X's rhythms on a track or in a pattern, allowing you to record a rhythm pattern's notes into a song. Create a new rhythm from pieces of multiple rhythm patterns by striking their pads at the desired locations during recording.

You can record your keyboard playing along with the rhythm, and add additional drum notes by playing along on pads that aren't currently programmed to play rhythm patterns.

The patterns played by the Fantom-X's rhythm generator are called "rhythm patterns." We use this term to differentiate them from the patterns we've been discussing in this booklet.

To learn more about the Fantom-X's rhythm capabilities and sounds, see the Workshop series booklet *The Rhythms of the Fantom-X*.

To ensure that a rhythm you want to record is perfectly in time with the sequencer:

1. If the rhythm's currently playing, stop the rhythm by pressing its pad. If the rhythm isn't currently playing, press RHYTHM so its indicator is lit if it isn't already.
2. Press REC to display the Realtime Rec Standby window.
3. Select the track or pattern in which you want to record. The track or pattern you select will capture:
   - *the rhythm and any notes played on the pads*—on the designated pad part's MIDI channel.
   - *any notes played on the keyboard*—on the currently selected part's channel.

You can use the Extract editing tool to separate the keyboard and rhythm data to two separate tracks or patterns. We'll explain how to do this later.

We'll explain how to designate a performance part as the pad part in "Assigning the Pads to a Part."

4. Set Count In to WAIT NOTE.
5. Strike the desired rhythm's pad to begin recording. Play along with the rhythm on the keyboard or pads if you want to.

Recording rhythms at a consistent volume can be made easier by setting their pads' velocities to a fixed level. See the Workshop series booklet *The Rhythms of the Fantom-X* to learn more.

6. When you're done recording, press STOP.
7. Press the appropriate pad or RHYTHM to stop the rhythm before playing back your recording.

Punching

You can redo portions of a recording without having to re-record the whole thing. This means that if you like most of a recording you've done, you can go back and fix just the mistakes or make improvements as necessary without losing an otherwise successful attempt.

The process of re-recording bits and pieces is called "punching." When you start re-recording, you "punch in," and when you stop, you "punch out."

In the Fantom-X, you can:

- *pre-set the section you want to punch*—to leave your hands (or feet) free for playing. This is called an "auto punch."
- *punch in and out manually*—starting and stopping the punch on the fly.

Since punching is a form of recording, setting up for a punch takes place in the Realtime Rec Standby window.

Using Auto Punch

To set up and perform an auto punch:

1. Press REC to display the Realtime Rec Standby window.
2. Set the Loop/Punch parameter to AUTO PUNCH. When AUTO PUNCH is selected, the Start Point and End Point parameters become active.
3. Use ▼, ▶ and the VALUE dial to highlight the Start Point value and select the measure and beat at which you want to punch in.
4. Use ▼, ◀, ▶ and the VALUE dial to highlight the End Point value and select the measure and beat at which you want to punch out.
5. Move to a location in the song that provides you a few bars or beats to get mentally ready for the punch.
6. Press F8 (Start) or press the PLAY button—the REC button's indicator flashes.

   At the Start Point location, the REC indicator lights solidly and recording begins. At the End Point location, the Fantom-X punches out and the REC indicator starts flashing again.

Punching Manually

When you're punching manually, you don't *have* to use your hands to do so. You can connect a pedal to the Fantom-X PEDAL CONTROL jack and punch in and out with your foot while your hands work the keyboard or pads. For more details, see Page 171 of the *Fantom-X Owner's Manual*.

To punch manually:

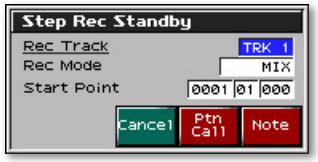
1. Press REC to display the Realtime Rec Standby screen.
2. Set the Loop/Punch parameter to MANUAL PUNCH.
3. Move to a location in the song that provides you a few bars or beats to get comfortable before for the punch.

4. Press F8 (Start) or press PLAY—the REC button's indicator flashes and the Realtime Recording window opens.
5. When you reach the song location at which you want to punch in, press F5 (Punch In). The REC indicator lights solid red and recording begins. The F5 button's onscreen label changes to "Punch Out."
6. When you reach the song location at which you want to punch out, press F5 (Punch Out)—recording stops, and the REC indicator begins to flash again.

Using Patterns in a Song

To program a track to play a pattern, you record a "pattern call" at the desired location. Here's how:

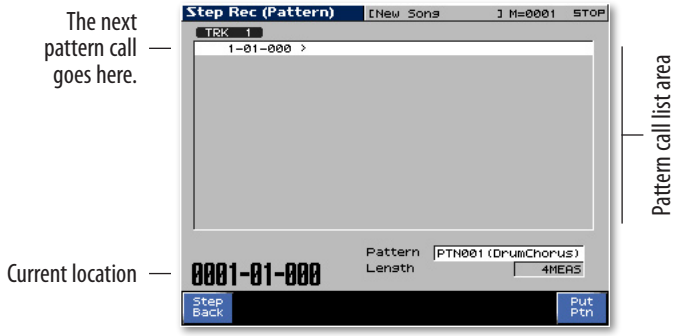
1. Record the desired pattern(s) as described earlier.
2. Press REC to display the Realtime Rec Standby screen.
3. Press F6 (Step Rec)—the Step Rec Standby screen appears.



4. Set Rec Track to the track you want to use for triggering your pattern(s).
5. Set Rec Mode as desired. If you select:
   - *MIX*—your pattern calls are combined with any other data recorded on the track.
   - *REPLACE*—your pattern calls replace any other data recorded on the track.
6. Set Start Point to the measure, beat and tick at which you want to place your first pattern.

A "tick" is 1/480th of a beat.

7. Press F7 (Ptn Call) to display the Step Rec (Pattern) screen.



8. Turn the VALUE dial to set the Pattern parameter to the desired pattern for this location.
9. Press F8 (Put Ptn) to place the pattern's call.

   The sequencer moves forward in time by the pattern's length, shown beneath the Pattern parameter. A new position in the list is created for your next pattern call.

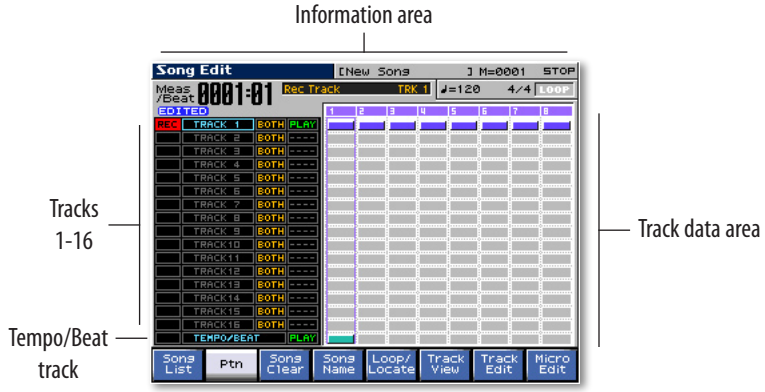
You can change a pattern call you've just placed. Press F1 (Step Back), select a different pattern, and then press F8 (Put Ptn) again.

10. To record more pattern calls:
    - *one after another*—select each desired pattern and press F8 (Put Ptn). When you're finished entering patterns, press STOP.
    - *in a different location*—press STOP, and then repeat the entire procedure, selecting MIX in Step 5.

You can use the Fantom-X's Undo feature if you'd like to discard the entire set of pattern calls you've just finished recording on a track.

The Song Edit Screen

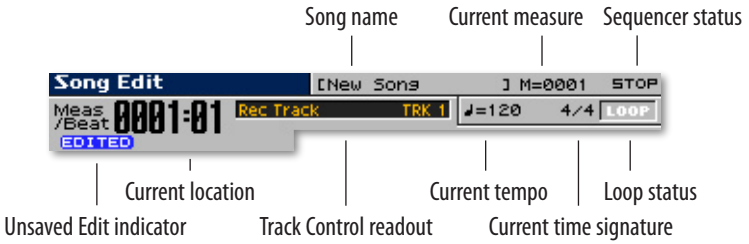
The Song Edit screen is the main place you work on a song once you've begun recording. To display the screen, press SONG EDIT.



A song you've just begun recording may look like this.

The Song Edit Information Area

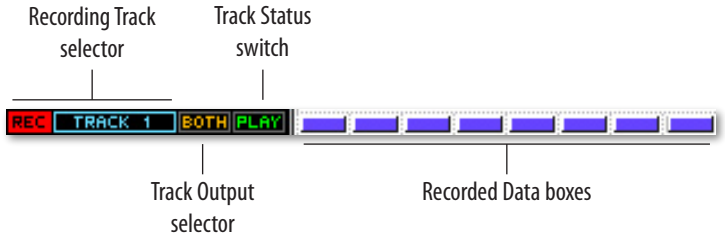
At the top of the Song Edit screen you see a collection of readouts that provide helpful information.



- *Current location*—shows your current location in the song, in measures and beats.
- *Song name*—shows the onboard name of the song.
- *Current measure*—shows your current location in the song by measure number.
- *Sequencer status*—shows the current state of the sequencer:
  - *STOP*—when the song is not playing.
  - *PLAY*—when the song is playing.
  - *STBY*—when the Realtime Rec Standby screen is displayed.
  - *WAIT*—when the sequencer is awaiting the end of a countoff to begin recording.
  - *REC*—when the sequencer is recording.
- *Unsaved Edit indicator*—appears when your song contains material or edits that have not yet been saved to user or card memory.
- *Track Control readout*—shows the status of the currently selected track control button, described in the next section.
- *Current tempo*—shows the song's tempo at the current location.
- *Current time signature*—shows the song's time signature at the current location.
- *Loop status*—shows when the song is set to loop. "Loop" appears in green letters when looping is turned on.

The Song Edit Track Controls and Data Area

Each track's controls and recorded data appear in a horizontal strip on the Song Edit screen.



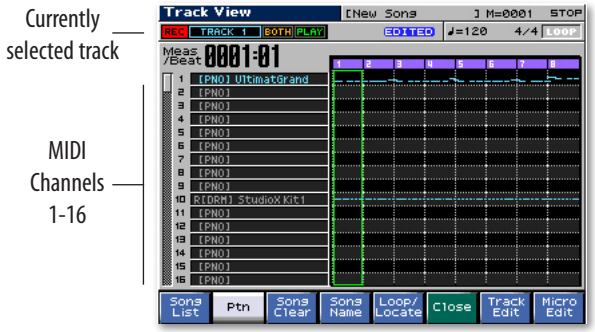
- *Recording Track selector*—shows the track currently selected for recording by outlining its name in blue. To select a track for recording on the Song Edit screen, press ◀ to highlight REC as shown above, and press ▼ or ▲ to select the desired track.
- *Track Output selector*—determines the destination of the track's recorded MIDI data. You can set the selector to:
  - *OFF*—to disable the sending of the track's MIDI data to the Fantom-X's internal sound generator and its MIDI OUT jack.
  - *INT*—to send the track's MIDI data only to the Fantom-X's internal sound generator.
  - *MIDI*—to send the track's MIDI data only to the Fantom-X's MIDI OUT jack so that it's sent to connected external MIDI devices, but produces no sound from the Fantom-X itself.
  - *BOTH*—to send the track's data to both the Fantom-X's internal sound generator and to its MIDI OUT jack. This is the default setting.
- *Track Status switch*—to set the status of the track to:
  - *PLAY*—so the track's data plays back.
  - *MUTE*—so the track's data is silenced.

When no data's been recorded on a track, the Track Status switch is replaced by "----"

- *Recorded Data boxes*—indicate the presence of data in the corresponding measure. When there's any recorded MIDI data in a measure, it's signified by the presence of a blue Recorded Data box.

Track View

While the Song Edit screen shows the presence or absence of recorded data in each of the song's measures, the Track View screen presents a single track's contents in detail. Data belonging to each of the selected track's 16 MIDI channels is presented in its own horizontal strip.



When data's been recorded for a MIDI channel, the name of the patch or rhythm set used by the corresponding part appears at the left of the MIDI data—this is the patch or rhythm set that plays the displayed data.

Typically, a track contains recorded data for only a single MIDI channel. The illustration above shows the MIDI data for a keyboard part on MIDI Channel 1 and a rhythm recorded on MIDI Channel 10 in Patch mode.

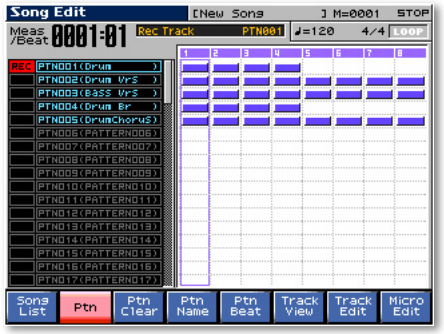
To use the Track View screen:

1. On the Song Edit screen, use ▼ or ▲ to select the desired track.

2. Press F6 (Track View) to display the track's recorded MIDI data in separate horizontal strips.
3. View the MIDI data for other tracks by turning the VALUE dial to select the desired track.
4. To exit the Track View screen, press F6 (Close).

The Pattern Screen

View your song's patterns—and select patterns for editing—from the Song Edit screen by pressing F2 (Ptn) so it lights red and the song's patterns are displayed in horizontal strips instead of tracks.



In this song, there are five patterns recorded.

Select a pattern for recording or editing using the ▲ and/or ▼ buttons. Once you've selected a pattern, press:

- *F3 (Ptn Clear)*—to erase the pattern.
- *F4 (Ptn Name)*—to display a screen on which you can name the pattern.
- *F5 (Ptn Beat)*—to change the pattern's time signature.

The remaining F buttons operate the same way for the selected pattern as they do for a track on the Song Edit screen.

To return to the Song Edit screen, press F2 (Ptn) again.

If you ever become confused as to whether you're viewing tracks or patterns, check out the F2 (Ptn) button onscreen—when it's red, you're looking a patterns, and when it's not, you're looking at tracks.

Naming a Song

The Fantom-X allows you to provide an onboard name for a song. You'll see this name when:

- *you display the Song List screen*—to load the song from user or card memory, or when you use the Quick Play or Chain Play features, described later in this booklet.
- *the song is loaded*—and you add new tracks, edit or otherwise work on the song in the Fantom-X.

When you save a song to user or card memory, it's stored as a file in the selected memory area. This file has a separate name that ends with ."svq" or ".mid," as we'll see. When you back up your song on a computer connected to the Fantom-X via USB, you'll identify the song by this file name. To learn about backing up your song, see the Workshop series booklet *Smart Storage in the Fantom-X*.

To name a song:

1. On the Song Edit screen, make sure F2 (Ptn) isn't lit and press F4 (Song Name)—the Song Name screen appears.

1. The first character position is underlined, so turn the VALUE dial to select the first character of the desired name.
2. Press ▶ to move the underline to the next character's position, and then turn the VALUE dial to select the name's second character.
3. Repeat Step 2 to enter the remaining characters of the song name.

As you name the song, you can press F1 (Change Type) repeatedly to jump between upper-case, lower-case and numeric characters. Press F2 (Delete) to remove the character at the underline's current location. Press F3 (Insert) to insert a blank space for selecting a new character at the underline's current location.

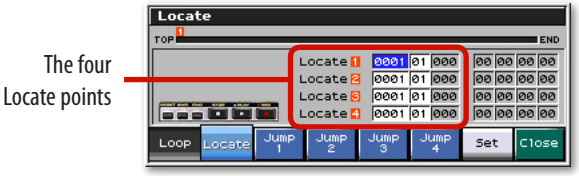
4. When you've finished assigning the song an onboard name, press F8 (Write).

Navigating a Song with Locate Positions

You can use the Fantom-X's Locate feature to bookmark four places in a song. Jump immediately to any of these four "locate positions" using sequencer button shortcuts or the Locate window's Jump buttons.

Setting Locate Positions

1. On the Song Edit screen, press F5 (Loop/Locate).
2. Press F2 (Locate) to display the Locate window.



The bar at the top of the Locate window graphically shows the placement of your locate positions once they've been set.

Setting Locate Positions Using the VALUE Dial

1. In the Locate window, use ◀ and/or ▶ to highlight the bar and beat value for each locate position you want to set, and turn the VALUE dial to select the desired bar and/or beat.
2. Press F8 (Close) when you're done.

Setting Locate Positions Using the Set 1-4 Buttons

You can set locate positions from the Locate window when the song is stopped, or when it's playing.

1. In the Locate window, press F7 (Set) so it lights red—the Jump 1-4 buttons change to Set 1-4 buttons.

2. Move to a location in the song at which you want to place a locate position using RESET, BWD or FWD, or by playing the song until you reach the desired location.
3. Press the Set 1-4 button you want to associate with this location—the locate position is placed. The Set 1-4 buttons change back into Jump 1-4 buttons.
4. To place another locate position, press F7 (Set) to display the Set buttons again.
5. Move to the next location, and then press the desired Set button.
6. To place additional locate positions, repeat Steps 4 and 5.

Jumping to Locate Positions

Locating with the SEQUENCER Buttons

Hold down SHIFT and press:

- *BWD*—to jump backward in the song to the previous locate position.
- *FWD*—to jump forward in the song to the next locate position.

Jumping to Locate Positions in the Locate Window

1. In the Locate window, make sure F7 (Set) isn't lit red. If it is, press F7 (Set).
2. Press the desired Jump 1-4 button to move immediately to Locate Positions 1-4, respectively.

Playback-Looping a Song Section

You can play a section of a song over and over as a loop. Looped playback provides a way to enjoy, or even study, a specific section of your song over and over again.

Setting Up a Playback Loop

On the Song Edit screen, press F5 (Loop/Locate)—the Loop window appears.

Set the Repeat Times parameter to determine the number of times the looped song section is to play back, from INF (for "Infinite"), or 0 times to 99 times.

We recommend setting Repeat Times to INF, since you can always halt playback by pressing the STOP button.

You can set the start and end of the looped section—called the "loop points"—by dialing them in, or by placing them at the desired song locations.

Dialing In Loop Points

1. In the Loop window, highlight the Start Point measure and beat values and turn the VALUE dial to select the measure and beat at which the song is to begin looping.
2. Highlight the End Point measure and beat values and turn the VALUE dial to select the measure and beat at which the song is to jump back to the Start Point location.

Placing Loop Points

1. While you're in the Loop window, use RESET, BWD or FWD—or simply play the song—to find the location in the song at which you want looping to begin.
2. Press F5 (Set Start) to place the Start Point at the current location.
3. Move to the song location at which you want playback to jump back to the Start Point.
4. Press F6 (Set End) to place the End Point.

Activating Looped Playback

1. Once you've set up your loop, press F7 (Loop) so the onscreen button turns red to activate the loop.
2. Move to a song location before the loop and press PLAY.
3. To end looping, press F7 (Loop) again so it's not lit.

You can turn playback looping on or off using a connected foot switch. This is great for live performance, since you can create a solo-section loop that lasts exactly as long as the soloist's inspiration does.

Clearing a Song

The Fantom-X can hold one song at a time in its work RAM, described in detail in the Workshop series booklet *Smart Storage in the Fantom-X*. Before you can record a new song, you'll need to clear the current song.

Be sure to save any recording you want to keep before clearing the current song—otherwise it's gone forever. We'll explain how to save a song later.

To clear a song:

1. On the Song Edit screen, press F3 (Song Clear).
2. When the Fantom-X asks if you're sure you want to proceed, press F8 (Exec) to finish clearing the song, or F7 (Cancel) to abort the operation.

Setting Up a Song's Performance

Whether you've quickly recorded an idea in Patch mode, or you're deliberately setting out to record a song, serious work on a song begins with the gathering together of its sounds, effects and more in a performance.

Its setup is merely your performance's starting point. You can tweak its settings as your song progresses.

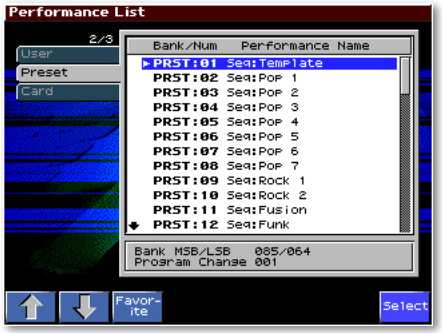
Selecting a Stored Performance

Select a stored performance to use as is, or as the basis for a new performance.

As shipped from the factory, the Fantom-X contains 33 preset performances designed as starting points for your songs. These performances contain basic setups in a variety of musical styles, and are configured for multi-track recording. A good general-use setup is PRST:01 Seq:Template.

To select a saved performance:

1. Press MIXER.
2. Press F5 (Perf List).



3. Press F2 (↓) and/or F1 (↑) to select the area of memory in which the desired performance is stored.

To select one of the built-in starting-point setups, select Preset.

4. Turn the VALUE dial to select the desired performance.

The starting-point setups are Preset Performances 1-33. Each performance's name begins with "Seq" for "sequencing," and ends with the name of the style of music for which it's designed.

All of the sequence starting-point performances share an important trait—their parts aren't checkmarked on the LAYER/SPLIT screen. This means that each part sound plays separately from the other parts', and that realtime controls only affect the currently selected part. Checkmarked parts are layered or act as "splits," as described in the Workshop series booklet *Performing with the Fantom-X*.

About Performance Favorites

As you work more and more with stored performances, you may find that you return frequently to some of them. You can register any performance as a favorite for quick access, as described in the Workshop series booklet *Performing with the Fantom-X*.

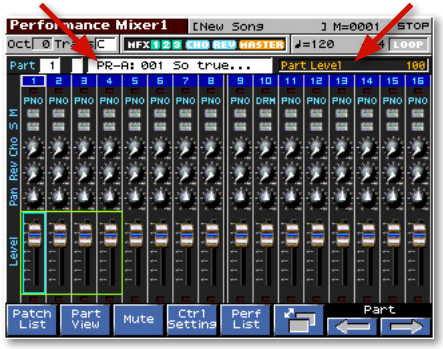
The Performance Mixer Screens

The Performance Mixer1 and 2 screens provide a studio-like environment in which to begin creating a song's performance.

- To display the Performance Mixer1 screen, press MIXER.

The currently selected part's sound

The currently selected parameter's name and value



- To toggle between the Performance Mixer1 and Performance Mixer2 screen, press F6.

Navigation and Selection on the Mixer Screens

Though they look like real-world mixing consoles, the Performance Mixer1 and 2 screens—just like so many other Fantom-X screens—contain parameters whose values you can adjust by turning the VALUE dial. Each part's parameters are arranged in a vertical part strip that looks like a channel strip on a mixing console. Each part's number appears at the top of its strip.

If you're unfamiliar with mixing consoles and these screens look scary, just remember that all you have to do is understand a single part strip and you'll understand them all, since all 16 are exactly the same.

To select a:

- *part*—press ◀ or ▶ until there's a light gray box surrounding the part's number. (In the screenshot of Performance Mixer 1, Part 1 is selected.)

If you prefer, you can also select a part by highlighting the Part parameter value at the upper left of the screen and turning the VALUE dial.

- *parameter*—press ▲ or ▼ until there's a light blue box around the desired parameter. (In the screenshot of Performance Mixer 1, Part 1's Level parameter is selected.)

Though there's no room onscreen for long parameter labels, you can always see the name of the currently selected parameter—along with its value at the top of the screen as shown in the screenshot of Performance Mixer1. (We'll also provide an illustration that shows the abbreviations' full parameter names in a few pages.)

Setting Values with the REALTIME CONTROL Knobs

On the Performance Mixer1 and 2 screens, each of the four REALTIME CONTROL knobs can adjust the value of a selected parameter for one of four consecutive parts. The parameter selected for knob control is shown inside a green outline box onscreen. (In the screenshot of Performance Mixer 1, the Level parameter for Parts 1-4 is under knob control.)

When you select a different parameter using ▲ or ▼, the green box moves along with your selection. To adjust the same parameter in other parts, press F7(←) and/or F8 (→) to move the green box as desired.

Playing Parts

As you work out your arrangement, you may want to play the different sounds in your song on the keyboard or the pads.

To play a part on the keyboard, select the part on a Performance Mixer or Part View screen, as described a bit later in this booklet.

Assigning the Pads to a Part

The Fantom-X pads are always assigned to one of the performance's parts—this part is referred to as the "pad part." The pads can always play the pad part's sound, whether the part is selected or not.

In fact, when the pad part is the currently selected part, its sound can be played by both the keyboard and pads simultaneously.

To assign the pads to a part, turn on the part's Pad Part switch on the Performance Mixer1 screen—we'll show you where the switch is in a few pages. You can assign the pads to any part, re-assigning them to another part whenever you need to.

Muting Parts

On the Performance Mixer1 and 2 screens, you can quickly silence any part's sound using the 16 pads, with each pad muting or un-muting its corresponding part. To turn on pad muting, press F3 (Mute) on either Performance Mixer screen—the Muting Parts with Dynamic Pads window pops open.

When this window's open, you can press any pad to mute or un-mute its corresponding part. You can also:

- *mute all of the parts at once*—by pressing F6 (All Mute).
- *un-mute all of the parts at once*—by pressing F7 (All Play).

To return to normal operation, press F8 (Close).

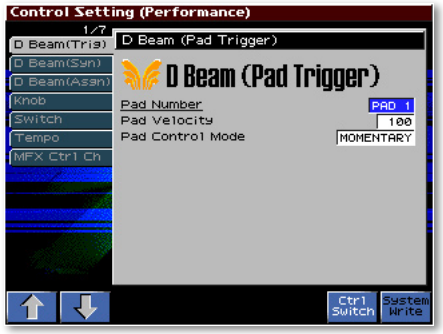
Configuring Realtime Control

The same realtime control of Fantom-X sounds that adds so much to their expressiveness in Patch mode is also available in Performance mode when you're working on a song.

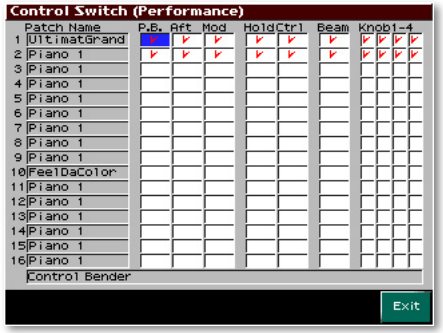
Each part's sound can respond to realtime control when the part's selected during recording and when its recorded data plays back.

When recording using realtime control, make sure that the keyboard switch for each of the performance's parts is turned off.

To set up a song's realtime control from the Performance Mixer1 and 2 screens, press F4 (Ctrl Setting)—the Control Setting (Performance) screen appears in which you can press F2 (↓) and/or F1 (↑) to select and set up each of the Fantom-X's realtime controllers.



You can enable each part's response to any realtime controller by pressing F7 (Ctrl Switch) and setting the checkboxes on the Control Switch (Performance) screen as desired.



You can set each part to respond to or ignore the following realtime controllers:

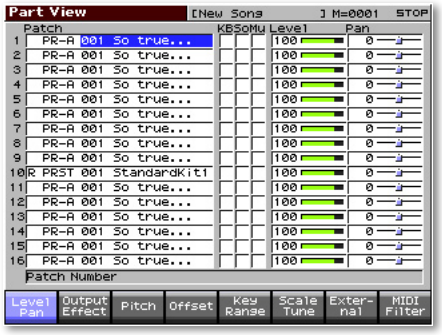
- P.B. (Pitch Bend)
- Mod (Modulation)
- Ctrl (Control pedal)
- Aft (Aftertouch)
- Hold (Hold pedal)
- Beam (D Beam)
- Knob 1-4 (the four REALTIME CONTROL knobs)

When a box is checked, its part responds to the corresponding controller.

The Part View Screens

The Part View screens present the performance's part parameters in an easy-to-read table layout.

From either Performance Mixer screen—or from the Performance Layer screen—you can display the Part View screens by pressing F2 (Part View) and then selecting the specific Part View screen you want.



This is the Part View Level Pan screen.

The Part View screens contain certain part parameters available nowhere else, as we'll see.

Navigation and Selection on the Part View Screens

To:

- *select a part*—use ▲ and/or ▼ to highlight one of the desired part's parameters.
- *select a Part View screen parameter*—use ◀, ▶, ▲ and/or ▼ to highlight it.

To display another Part View screen, press its F button.

Setting Up a Song's Parts

Selecting Patches

Any part in the song's performance can play any patch or rhythm set.

Patches often sound different in a performance than they do in Patch mode due to differences in your performance's effect setup. See "Moving from Patch to Performance Mode" later in this booklet, and the Workshop series booklet *The Fantom-X Effects* to learn more.

To help ensure that your sound is unlike anyone else's, incorporate patches and/or rhythm sets based on samples you've captured yourself. See the Workshop series booklet *Sampling on the Fantom-X* to learn more.

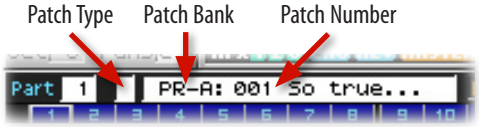
Selecting a Part's Sound on the Mixer Screens

You can select a patch or rhythm set for the currently selected part on the Performance Mixer1 and 2 screens:

- *from the patch list*—by pressing F1 (Patch List) to display the list and selecting the patch or rhythm set.

On the Patch List screen, press F3 (Favorite) to display your favorite patches as described in the Workshop series booklet *The Sounds of the Fantom-X*.

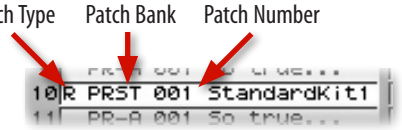
- *by dialing it in*—using the Patch Type, Patch Bank and Patch Number parameters at the top of the screen.



To select a rhythm set, set Patch Type to R.

Selecting a Patch on the Part View Level Pan Screen

Select a patch or rhythm set on a Part View screen by setting the Patch Type, Patch Bank and Patch Number parameters at the top left of the screen as desired.



To select a rhythm set, set Patch Type to R.

Setting Part Parameters

Though it may not seem like it at first, when you set the parameters available for each part, you're actually mixing your song. While some part parameters affect the behavior of their parts' patches and rhythm sets, many of them affect how they sound.

To set a parameter on the Performance Mixer1 and 2 or Part View screens, highlight the desired parameter and turn the VALUE dial.

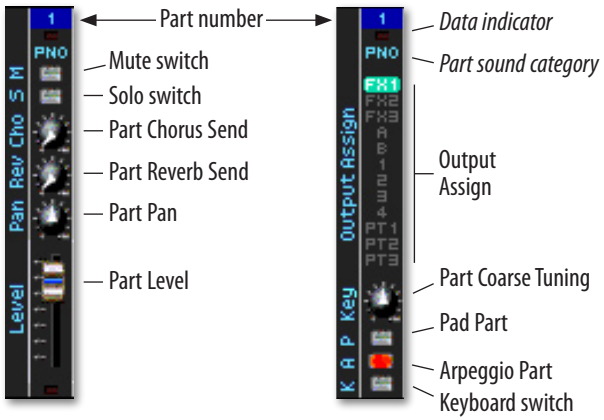
For a complete list of the part parameters, as well as a description of each parameter, see the chapter called "Creating a Performance" in the *Fantom-X Owner's Manual*.

What's Where

On both the Performance Mixer and Part View screens, parameter names often appear in abbreviated form to save onscreen space.

As befits an onscreen mixer, the Performance Mixer1 and 2 screens contain mixing-related parameters as well as some of the most important part parameters. Here's what you'll find in every part's strip.

On the Performance Mixer1 screen: On the Performance Mixer2 screen:



Two of the items in the illustration above aren't actually parameters. The data indicator lights when the part receives recorded data from the sequencer or live data from the keyboard or pads while the part's selected. Directly beneath the indicator, the category of the part's currently selected sound in displayed.

To learn about the Output Assign parameter, see the Workshop series booklet *The Fantom-X Effects*.

The following tables list the part parameters on the Part View screens, along with a key to their onscreen abbreviations.

Part View Level/Pan Screen	
Full Parameter Name:	*Shown As:*
Patch Type	*under "Patch"*
Patch Bank	*under "Patch"*
Patch Number	*under "Patch"*
Keyboard Switch	KB
Solo Switch	So
Mute Switch	Mu
Part Level	Level
Part Pan	Pan

Part View Output Effect Screen	
Full Parameter Name:	*Shown As:*
Part Output Assign	Out
Part Output MFX Select	*(unlabeled)*
Part Output Level	Output
Part Chorus Send Level	Chorus
Part Reverb Send Level	Reverb
MFX 1 Source	1
MFX 2 Source	2
MFX 3 Source	3
Chorus Source	C
Reverb Source	R

To learn about the Output Effect screen's parameters, see the Workshop series booklet *The Fantom-X Effects*.

Part View Pitch Screen	
Full Parameter Name:	*Shown As:*
Part Octave Shift	Oct
Part Coarse Tune	Crs
Part Fine Tune	Fine
Part Mono/Poly	M/P
Part Legato Switch	Legato
Part Pitch Bend Range	Bend
Part Portamento Switch	*under "Portamento"*
Part Portamento Time	*under "Portamento"*

Part View Offset Screen	
Full Parameter Name:	*Shown As:*
Part Cutoff Offset	Cutoff
Part Resonance Offset	Reso
Part Attack Time Offset	Attack
Part Release Time Offset	Release
Part Decay Time Offset	Decay

Part View Key Range Screen	
Full Parameter Name:	*Shown As:*
Keyboard Switch	KB
Part Keyboard Range Lower	*under "Range"*
Part Keyboard Range Upper	*under "Range"*
Part Velocity Sensitivity Offset	Velo
Part Vibrato Rate	*under "Vibrato"*
Part Vibrato Depth	*under "Vibrato"*
Part Vibrato Delay	*under "Vibrato"*
Voice Reserve	Voice

Part View Scale Tune Screen
In the Part View Scale Tune screen, you can set a part's sound to play using a tuning of your own choice or design by programming the tuning of each note in an octave.

Part View External Screen	
Full Parameter Name:	*Shown As:*
Receive Switch	RX
Receive Channel	Ch
External Bank Select MSB	*under "BankSel"*
External Bank Select LSB	*under "BankSel"*
External Program Change Number	Prog
External Level	ExtLevel
External Pan	ExtPan

The Part View External screen's Receive Channel parameter sets the MIDI channel for each part, whether MIDI data's coming from an external source or the Fantom-X keyboard or sequencer. By default Parts 1-16 are associated with MIDI Channel 1-16. This parameter is what establishes that association, so changing a parameter's Receive Channel changes the recorded MIDI channel data that the part plays.

Here's a tip for advanced users. If you've made two recordings on separate tracks—or at least on different MIDI channels—and you want to quickly swap the parts through which they play, you can do so by swapping their Receive Channel settings, found on the Part View External screen.

Part View MIDI Filter Screen	
Full Parameter Name:	*Shown As:*
Receive Program Change Switch	PC
Receive Bank Select Switch	BS
Receive Pitch Bend Switch	PB

Part View MIDI Filter Screen	
Full Parameter Name:	*Shown As:*
Receive Polyphonic Pressure Switch	PA
Receive Channel Pressure Switch	CA
Receive Modulation Switch	Md
Receive Volume Switch	Vo
Receive Pan Switch	Pn
Receive Expression Switch	Ex
Receive Hold 1 Switch	Hd
Phase Lock Switch	Phase
Velocity Curve	Curve

Soloing a Part

You can listen to a single part in isolation from the rest of your arrangement so you can more easily hear what it's playing. When you "solo" a part, all parts that aren't soloed are silenced. You can solo a part on the:

- *Performance Mixer1 screen*—highlight the Solo (S) switch and turn the VALUE dial clockwise so the button turns amber. To un-solo the part, solo another part or turn the VALUE dial counter-clockwise so the S button goes dark.
- *Part View Level/Pan screen*—highlight the So box and turn the VALUE dial clockwise to checkmark it. Turn it counter-clockwise to un-solo the part.

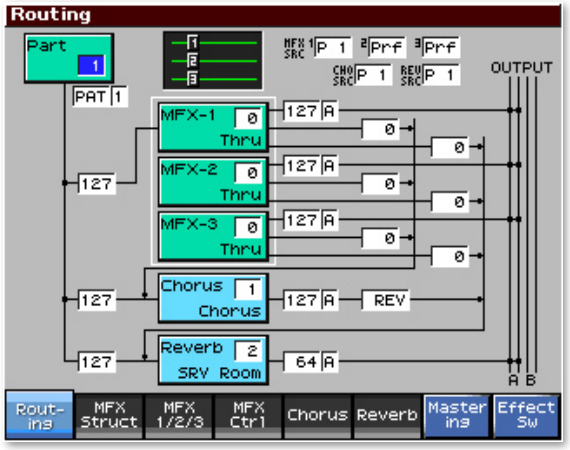
Setting Up a Song's Effects

Effects are a critical element in most modern songs' arrangements, and the Fantom-X is an effect-processing powerhouse. To learn about the Fantom-X effects, and how to set them up for a song's performance, see the Workshop series booklet *The Fantom-X Effects*.

Moving from Patch to Performance Mode

Songs often begin in Patch mode. To ensure that a recorded idea sounds the same in Performance mode as it did in Patch mode, your effects in the performance must match the ones you used in Patch mode. Here's how to do this:

1. Record your idea on the Patch Play screen in Patch mode.
2. Press F7 (Kbd) and note the memory location of the patch you're using. If you've recorded with a rhythm, press F8 (Pad) and make note of the current rhythm set's location.
3. Press LAYER/SPLIT.
4. Select the performance USER: 01 Seq:Template.
5. Press ▼ so the Part 1 box is selected, and press F1 (Patch List).
6. Press F5 (Patch), and then find and highlight your patch.
7. Press F8 (Select).
8. If you've recorded using a rhythm, select Part 10 and repeat Steps 5-7.
9. Press EFFECTS and set the Effect Routing screen so it looks the way it does here.



This procedure also appears in the Workshop series booklet *The Fantom-X Effects*.

On your Routing screen, the processor boxes should show the name of the algorithms your patch uses.

If you recorded with a rhythm, Part 10 should be selected in the upper-left-hand corner. Set MFX 2 SRC to P10.

If you manually changed the source of your chorus and reverb settings in Patch mode—as described earlier—set CHO SRC and REV SRC here to match.

10. Press RESET and then PLAY—your idea should now sound the same as it did in Patch mode.

Saving Your Song

As long as your song—and its performance—exist only in the Fantom-X's work RAM, they're temporary. To preserve your work, store it in user or card memory.

Fantom-X Song Files

The easiest, safest and most foolproof way to store a song is to save it as a Fantom-X song file. A Fantom-X song file contains:

- all of your recorded data
- the song's performance
- all of the patches and rhythm sets used in the song's performance.
- your current song-related System settings.

Since a song file contains the song's performance, there's no need to store the performance separately, though you can if you like, as described in the Workshop series booklet *Performing with the Fantom-X*.

For a list of the System settings stored in a song file, see Page 198 in the *Fantom-X Owner's Manual*.

The primary advantage of a song file is that the song's required materials are saved—and can then be re-loaded—in a single operation with virtually no bookkeeping required on your part.

If your song's patches and/or rhythm sets incorporate samples, there's a way to save both the song and all of your loaded samples in a single operation, and reload them the same way. See the Workshop series booklet *Sampling on the Fantom-X* for details.

Song File Tech Details

Each Fantom-X song file bears an ".svq" file extension that's automatically added to the end of its name during storage. When you load a song, use the Quick Play or Chain Play features, or view the file on a computer, the ".svq" extension is visible.

Saving a Song as a Fantom-X Song File

1. Press SAVE/LOAD—the Save/Load Menu appears.

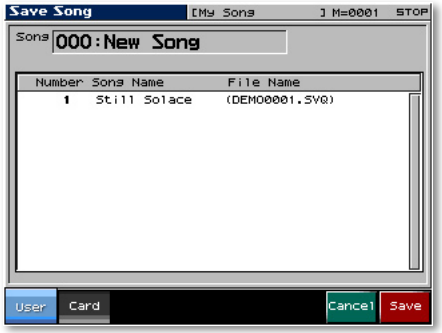
2. Either:
   - press F2 (Save Song), or
   - use ◀, ▶, ▲ and/or ▼ to highlight Save Song, and then press the ENTER button.

   The Song File name screen appears.

   Here's where you name the song file. It can be anything, since it has nothing to do with the song's name as it appears when the song's loaded into the Fantom-X.
3. The first character position is underlined, so turn the VALUE dial to select the first character of the desired name.
4. Press ▶ to move the underline to the next character's position, and then turn the VALUE dial to select the name's second character.
5. Repeat Step 4 to enter the characters of the song file's name.

As you name the song, you can press F1 (Change Type) repeatedly to jump between letters and numbers. Press F2 (Delete) to remove the character at the underline's current location. Press F3 (Insert) to create a space for selecting a new character at the underline's current location.

6. When you've finished naming the song file, press F8 (Write)—the Save Song window appears.



7. Press F1 (User) or F2 (Card) to select the memory area in which the song file is to be saved.
8. Press F8 (Save).
9. The Fantom-X asks if you're sure you want to proceed. Press F8 (Exec) to finish storing the song file.

Songs and Standard MIDI Files

Save a song as a Standard MIDI File, or "SMF," if you'd like to:

- *work on the song in a MIDI sequencing program*—installed on your computer. SMFs can be loaded into and played by most modern MIDI sequencing programs.
- *play the song in an external SMF player*.

Transfer SMF files to an external device via USB as described in the *Fantom-X Owner's Manual*, or from a Fantom-X memory card by inserting the card into a card reader attached to the external device.

When you save a song as an SMF, the SMF includes only the song's recorded MIDI data. It doesn't include the song's performance, patches or System settings. Therefore, saving a song as an SMF mostly makes sense when you want to work on or play the song in an external device. If you plan to use the song only in the Fantom-X, save it as a Fantom-X song file.

When you save a song as an SMF, you can save its performance separately, as described in the Workshop series booklet *Performing with the Fantom-X*. It's also a good idea to save the song again as a Fantom-X song file just for safekeeping.

SMF Flavors: Type 0 and Type 1

SMFs come in two styles:

- *Type 0 SMFs*—pack the data for all of the 16 MIDI channels onto a single track.
- *Type 1 SMFs*—place the data for each MIDI channel on its own track.

Saving a Song as an SMF

1. Press SAVE/LOAD—the Save/Load Menu appears.

2. Either:
   - press F4 (Save as SMF), or
   - use ◀, ▶, ▲ and/or ▼ to highlight Save as SMF, and then press the ENTER button.

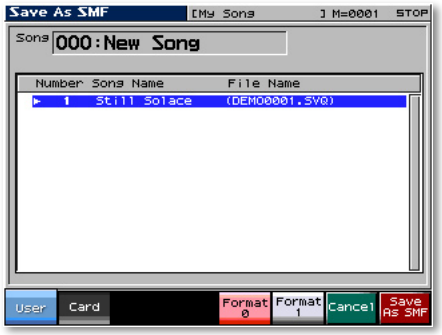
   The Save as SMF name screen appears on which you can assign a name to the SMF.

All SMFs sport a ."mid" file extension at the end of their names.

3. The first character position is underlined, so turn the VALUE dial to select the first character of the desired name.
4. Press ▶ to move the underline to the next character's position, and then turn the VALUE dial to select the name's second character.
5. Repeat Step 4 to enter the characters of the SMF's name.

As you name the song, you can press F1 (Change Type) repeatedly to jump between letters and numbers. Press F2 (Delete) to remove the character at the underline's current location. Press F3 (Insert) to create a blank space for selecting a new character at the underline's current location.

6. When you've finished naming the SMF, press F8 (Write)—the Save as SMF window appears:



7. Select the type of SMF you wish to create by lighting the appropriate onscreen button in red. Press:
   - *F5 (Format 0)*—to save a Type 0 SMF.
   - *F6 (Format 1)*—to save a Type 1 SMF.
8. Press F1 (User) or F2 (Card) to select the internal Fantom-X user or card memory as the location in which the SMF is to be saved.

9. Press F8 (Save As SMF).
10. The Fantom-X asks if you're sure you want to proceed. Press F8 (Exec) to finish storing the SMF.

Editing a Song

Re-Voicing a Recording

MIDI data doesn't care what sound it plays. This is one of the great advantages to MIDI sequencing since it means you can change the patch or rhythm set a recording uses at any time. Changing a part's sound after recording is called "re-voicing."

As your arrangement evolves, you may change your mind about sounds you want to use, or you may stumble across even better sounds you didn't know about.

To re-voice a part, go to the Performance Mixer1 or Part View Level/Pan screen and assign a new patches or rhythm set to the part.

Track and Pattern Editing

The Fantom-X offers a vast array of editing tools with which you can refine, twist or mutilate a song's recorded MIDI data until the song sounds just the way you want it to.

The process begins with the selection of the track or pattern that contains the recording you want to edit. From there, you can dig down into the separate MIDI channels of data the track or pattern may contain and edit their data as desired.

Here's a list of the Fantom-X's track- and pattern-editing tools, and what they do.

Editing Tool	This Tool:
Data Thin	removes unnecessary or redundant MIDI data in a track or pattern to preserve space in work RAM.
Exchange	swaps data between tracks and/or patterns.
Time Fit	changes the length of the entire song as desired.
Truncate	removes silent measures from the front of a track or pattern, moving the first note to top of the song.
Change Duration	changes the lengths of selected notes as desired.
Merge	combines one track's or pattern's data with another.
Extract*	extracts the selected MIDI data from one track or pattern and places it on another.
Shift Clock	shifts the location of the selected data in fine increments forward or back in time.
Insert	inserts one or more blank measures into the track or pattern at the current location.
Transpose*	shifts the pitch of the selected notes up or down.
Change Velocity	adjusts the velocity of selected notes, making them sound as if they've been played harder or softer.
Change Channel	changes the MIDI channel with which the selected recorded data is associated.
Quantize*	adjusts the timing of selected notes.
Erase	removes the selected MIDI data from the song.
Delete	removes measures from the track or pattern, moving the remaining data forward to fill the resulting gap.
Copy	copies the selected data to the desired song location or to another track or pattern.

* Tools with an asterisk are described in detail later in this booklet.

For a detailed description of all of the track editing tools and their parameters, see the chapter called "Editing Songs" in the *Fantom-X Owner's Manual*.

The Basic Track Editing Procedure

1. On the Song Edit screen, select the track or pattern that contains the recording you want to edit.

Step 1 isn't absolutely necessary since you can also select a track or pattern during editing—still, it's a good way to keep from getting confused.

2. Press F7 (Track Edit)—the Track Edit window opens.

Editing tools

Editing tools

Full name and explanation of currently selected tool.

When *you* display the Track Edit window, the currently selected tool is in color and the rest are gray—we just wanted to show you all of the tools.

3. Turn the VALUE dial or use ◀, ▶, ▲ and/or ▼ to highlight the desired tool.

Since the tools are numbered from 1 to 16, you can also select a tool by striking the corresponding pad.

4. Press F8 (Select) to display the tool's pop-up window.
5. Set the tool's parameters as desired and press F8 (Exec).
6. When the Fantom-X asks if you're sure you want to proceed, press F8 (Exec) to finish the editing operation.

You can use the Fantom-X Undo feature to reverse an edit immediately after you perform it.

Frequently Used Edit Settings

While each editing tool has parameters of its own, there's a handful of settings you'll see again and again:

- *Track/Pattern*—selects the track or pattern to be edited.
- *Ch/Part*—targets for editing the desired MIDI channel data in the selected track or pattern. You can target all MIDI channels' data, or a single, specific MIDI channel's data.
- *Measure*—targets the measures you want to edit within the track or pattern. The first box sets the measure at which the edit is to begin and the second box sets the number of measures to be included in the edit. To go from the first box's measure to the end of the song, select All for the second box.
- *Range Min, Range Max*—targets the range of notes to be edited in the selected track or pattern. Range Min sets the lowest note to be edited. Range Max sets the highest.

Here's an easy way to set Range Min and Max. Highlight the Range Min value and, on the Fantom-X keyboard, play the lowest key you want to edit. Highlight the Range Max value and play the highest key you want to edit. The Range Min and Max values change to the keys you've pressed.

- *Status*—targets the type of data you want to edit. Select All to edit all of the data in the targeted areas of the selected track or pattern. To edit only specific types of data within those areas, highlight the Status value and turn the VALUE dial to select the desired data type.

Status is a great parameter for power users since it allows you to zero in on any type of MIDI data for editing without affecting other data types recorded in the track or pattern.

When an edit tool's Status parameter is set to a value other than All, the Range Min and Range Max values can target the minimum and maximum values to be edited for the selected type of data.

Quantizing Notes

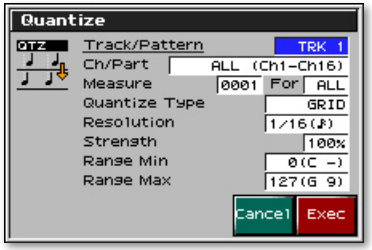
A sequencer can correct timing errors in recorded notes through a process called "quantizing." Fantom-X quantizing does more than merely fix problems, though—it can enhance the rhythmic "feel" of your notes by adding a shuffle to them or by shaping them into a pre-set groove.

One of the handiest features of the Fantom-X sequencer is that you can try out your quantizing settings before committing to them. Press PLAY while the Quantize window is visible to audition two measures of your track or pattern with the current Quantize settings applied.

Targeting Notes for Quantizing

Regardless of the type of quantizing you want to do, you'll begin by selecting the data to be quantized.

1. On the Song Edit screen, press F7 (Track Edit).
2. Press ◀, ▶, ▲ and/or ▼ to highlight "Quantize," and then press F8 (Select)—the Quantize window appears.

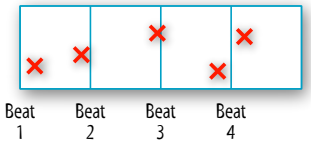


3. Set:
   - *Track/Pattern*—to the track or pattern you want to quantize.
   - *Ch/Part*—to the desired MIDI channel data in the selected track or pattern.
   - *Measure*—to the desired range of measures in the selected track or pattern.
   - *Range Min and Range Max*—to the lowest and highest notes, respectively, you want to quantize in the selected track or pattern.

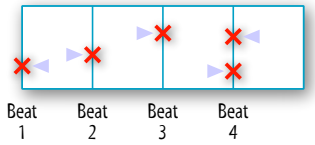
Correcting Notes' Timing

In the classic "grid" form of quantizing, each note is moved to the nearest occurrence of the selected note value, as if there's an invisible grid to which your recorded notes are pulled.

Notes before quantizing. (The vertical lines represent quarter note beats.)



Notes after they've been quantized to a quarter-note grid.



To perform grid quantizing:

1. Perform the steps in "Targeting Notes for Quantizing."
2. Set Quantize Type to GRID.
3. Set Resolution to the desired note value. You can choose:
   - 1/4 notes
   - 1/8th notes
   - 1/16th notes
   - 1/32nd notes
   - 1/6th notes (quarter-note triplets)
   - 1/12th notes (8th-note triplets)
   - 1/24th notes (16th-note triplets)

If you're unsure of the resolution you need, try out the available values—remember, you can audition your settings by pressing PLAY.

It's not uncommon to need different quantize settings for different recorded phrases. If a setting works for one section but not another, use the Measure parameter to quantize different sections separately.

4. Set Strength as desired. A value of 100% pulls notes completely into perfect time. Lesser values pull your notes toward perfect time, but leave some natural imperfections. A Strength value of 0% doesn't move the notes at all.

The best Strength setting depends on your style of music. Dance-oriented music generally sounds best with a 100% Strength setting, while gentler quantizing may be in order for more organic musical styles.

5. Press F8 (Exec) to perform the quantization, and F8 (Exec) again to confirm that you wish to proceed.

Adding a Shuffle Feel

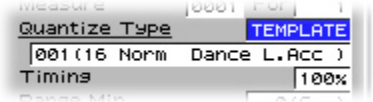
1. Perform the steps in "Targeting Notes for Quantizing."
2. Set Quantize Type to SHUFFLE—the Rate parameter appears.

3. Set Resolution to produce an 1/8th-note shuffle or a 16th-note shuffle.
4. Set the Rate parameter to set the shuffle's "swing" feel: the distance between each downbeat and the upbeat that follows it. Lower values bring them together, while higher values push them apart. A value of 50% sets the upbeat exactly halfway between the downbeat before it and the one after—no shuffle feel is therefore applied.
5. Press F8 (Exec) to perform the quantization, and F8 (Exec) again to confirm that you wish to proceed.

Applying a Groove Template

The Fantom-X contains 71 built-in groove templates that can nudge your recorded notes into style-based feels.

1. Perform the steps in "Targeting Notes for Quantizing."
2. Set Quantize Type to TEMPLATE—the Quantize Type and Timing parameters appear.



3. Select the Quantize Type value and turn the VALUE dial to select the desired template.

For a list of the available Quantize groove templates, see Page 182 of the *Fantom-X Owner's Manual*.

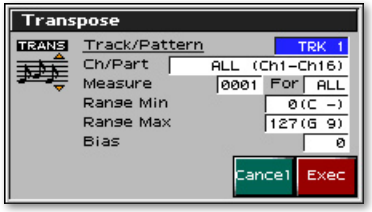
4. The Timing parameter sets the degree to which your recorded notes are forced into the template's groove, with 100% fully imposing the template's feel.
5. Press F8 (Exec) to perform the quantization, and F8 (Exec) again to confirm that you wish to proceed.

Transposing Recorded Notes

As you refine your song's arrangement, you may find you want to shift recorded notes up or down an octave or more, or you may decide to shift the entire song into a different key. The Transpose tool allows you to easily make such changes by raising or lowering the pitch of selected notes in semitone steps.

To transpose recorded notes:

1. On the Song Edit screen, press F7 (Track Edit).
2. Press ◀, ▶, ▲ and/or ▼ to highlight "Transpose," and then press F8 (Select)—the Transpose window appears.



3. Set:
   - *Track/Pattern*—to the track or pattern containing the notes you want to transpose.
   - *Ch/Part*—to the desired MIDI channel data in the selected track or pattern.
   - *Measure*—to the desired range of measures in the selected track or pattern.
   - *Range Min and Range Max*—to the lowest and highest notes, respectively, you want to transpose in the selected track or pattern.
4. Set the Bias value as desired. The Bias parameter determines the number of semitones by which each selected note's pitch is to be shifted. Negative (minus) values transpose the pitch downward, and positive values transpose the pitch upward.

Since each rhythm set note plays its own sound, you can re-voice recorded notes that play a rhythm set using Transpose. As you move a note's pitch up and down, it plays different rhythm set sounds.

5. Press F8 (Exec) to perform the transposition, and F8 (Exec) again to confirm that you wish to proceed.

Extracting MIDI Channel Data

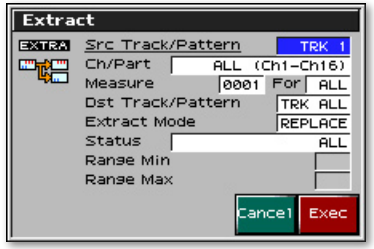
The Extract tool allows you to separate the data from multiple MIDI channels recorded in a single track or pattern by moving selected channels' data to other tracks or patterns.

When you record a keyboard and rhythm idea in Patch mode, the keyboard's data on MIDI Channel 1 and the rhythm's data on MIDI Channel 10 are both recorded on Track 1.

The Extract tool allows you to separate the keyboard and rhythm recordings right after you move the idea into Performance mode. You can quickly extract the keyboard recording to Track 1 and the rhythm to Track 10, so that their track numbers match their part numbers for simplicity's sake.

To use the Extract tool:

1. On the Song Edit screen, press F7 (Track Edit).
2. Press ◀, ▶, ▲ and/or ▼ to highlight "Extract," and then press F8 (Select)—the Extract window appears.



To separate keyboard and rhythm data recorded in Patch mode onto Tracks 1 and 10 as described above, set the Extract parameters as shown here.

3. Set:
   - *Track/Pattern*—to the track or pattern containing the merged MIDI data you want to separate.
   - *Measure*—to the desired range of measures in the selected track or pattern.

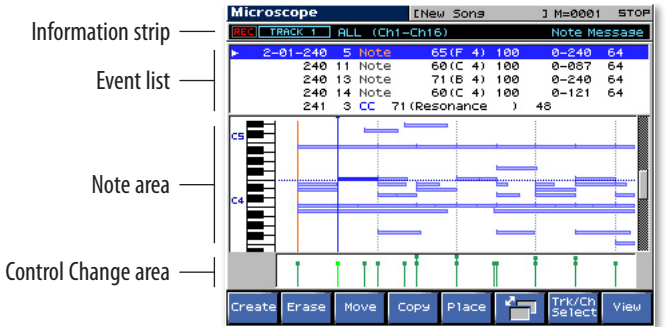
- *Status*—to the type of MIDI data you wish to extract.
- *Range Min and Range Max*—to the lowest and highest notes you want to extract, or, if Status is set to a value other than All, to the desired lowest and highest values for the type of data to be extracted.

4. The Ch/Part parameter targets the MIDI channel of the data you want to extract. If you want to separate all of the combined MIDI channels' data in the selected track or pattern, select All.
5. The Dst (for "Destination") Track/Pattern selects the location to which extracted data is moved. If you've set Ch/Part to All in order to extract multiple channels' data, set Dst Track/Pattern to All as well—each MIDI channel's data will automatically be placed on its same-numbered track or pattern.
6. Set Extract Mode as desired. Mix combines extracted data with anything already in the destination track or pattern, while Replace deletes the track's or pattern's data when the extracted data is placed there.
7. Press F8 (Exec) to perform the extraction, and F8 (Exec) again to confirm that you wish to proceed.

Microscope Editing

As its name suggests, the Fantom-X's Microscope editing takes you down to the finest level of detail, allowing you to work with individual MIDI events. Microscope editing is a tool of considerable power. Here's how it works.

1. On the Song Edit screen, select the desired track or pattern.
2. Press F8 (Micro Edit) to display the Microscope screen. On the Microscope screen, the selected track or pattern's data is presented in both list and graphic form.

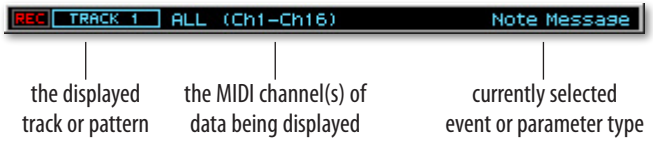


3. After you're finished editing, leave the Microscope screen by pressing EXIT.

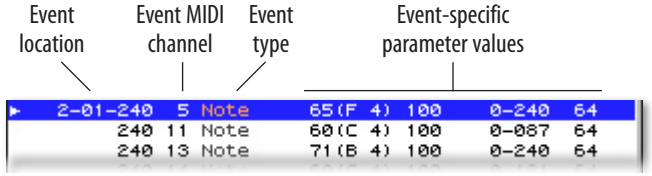
Understanding the Microscope Screen

The screen is divided into four areas, as shown above:

- *Information Strip*—The Information strip shows you:



- *Event list*—This list shows the selected track or pattern's recorded events in order, listed from top to bottom. Each event's details are presented in a horizontal strip:



The event-specific parameters vary depending on the type of event. When a parameter's value is highlighted, the Information strip displays the parameter's name, as shown in the Information Strip illustration above.

Each event is labeled as a "Note," a brown "Pitch Bend" or as a blue "CC," for MIDI "Control Change" event. MIDI Control Change events affect the behavior and sonic characteristics of patches and rhythm sets.

- *Note area*—The Note area graphically displays the notes just before and after the currently selected event, reading from top to bottom. The currently selected note is dark blue.
- *Control Change area*—The Control Change area shows a graphic representation of MIDI Control Change messages associated with the currently selected event. When a note is selected, velocity values that represent the force at which the note is struck are displayed.

Working in the Microscope Screen

Move through the track or pattern by selecting individual events with the ▼ and ▲ buttons, VALUE dial and the RESET, BWD and FWD buttons.

When an event is first selected, it's highlighted in blue. If it's a note event, and you've selected it using ▲, ▼ or the VALUE dial, you hear the note.

To edit an event:

1. Select the event you want to edit.
2. Press ◀ and/or ▶ to highlight the event value you want to change.
3. Turn the VALUE dial to set the selected value as desired.
4. Repeat Steps 2 and 3 to make any additional changes to the event.

The Microscope screen's F buttons offer additional editing tools. Press:

- *F1 (Create)*—to add a new event at the current song location. When you press F1 (Create), the Create Event window opens where you can select the desired type of event to be added to the song.
- *F2 (Erase)*—to delete the currently selected event.
- *F3 (Move)*—to move the currently highlighted event to the location you select in the Move Event window that appears when you press F3 (Move).
- *F4 (Copy)*—to copy the currently selected event into the Fantom-X's Microscope clipboard memory.
- *F5 (Place)*—to place the event currently held in the Microscope clipboard to the location you select in the Place Event window that appears when you press F5 (Place).
- *F6*—to spread the event list so it fills the entire display. Press F6 again to return to the default Microscope screen view.
- *F7 (Trk/Ch Select)*—to select the track, pattern and MIDI channels' data to be displayed in the Microscope screen.
- *F8 (View)*—to select the type of MIDI data to be displayed in the Microscope screen. When a type of data is checkmarked in the View Select window, it appears in the Microscope screen.

About Adding Beat Loops to a Song

When you sample beat loops or import them—as described in the Workshop series booklet *Sampling on the Fantom-X*—you assign the loops to pads in a rhythm set or to the keyboard keys in a patch.

The pads work especially well for triggering beat loops. Set the pads to use a fixed velocity for the best results. See the Workshop series booklet *The Rhythms of the Fantom-X* for details.

Once a beat loop is placed in a rhythm set or patch, play the pads or keyboard to trigger the beat loop at the desired song locations while recording your playing into a track or pattern.

Record your beat loop triggering into a pattern if the beat loop is to be used repeatedly in a song. This way, you can simply record pattern calls at the desired locations.

Once recorded, use the Quantize tool to position the loop perfectly in time.

Loading Songs

To edit a song, or add more material to a song, the song has to be loaded into the Fantom-X's temporary work RAM.

If you'd merely like to listen to a song in user or card memory, you don't actually have to load the song—you can use the Fantom-X's Quick Play feature, described on the next page.

You can load a song from:

- *a Fantom-X song file*—that contains a song's recorded data, its performance and the patches and rhythm sets the performance uses.

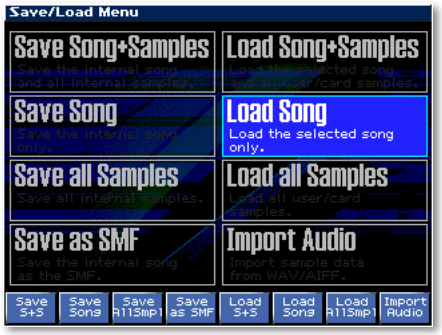
The patches and rhythm sets in a .svq file are loaded into the Fantom-X's temporary performance memory in work RAM. You can steal a patch or rhythm set from a song performance and save it permanently to user or card memory. Select the part that plays the patch or rhythm set, and then press WRITE to save the sound.

- *an SMF file*—that contains a song's recorded data. Commercially-produced SMFs may contain setup data.
- *an MRC file*—that contains a song recorded in Roland's legacy MRC file format.

You can load a song from the Song List screen, which you can display from the Save/Load menu or the Song Edit screen.

Displaying the Song List from the Save/Load Menu

1. Press SAVE/LOAD—the Save/Load Menu appears.



2. Either:
   - press F6 (Load Song), or
   - use ◀, ▶, ▲ and/or ▼ to highlight Load Song, and then press the ENTER button.

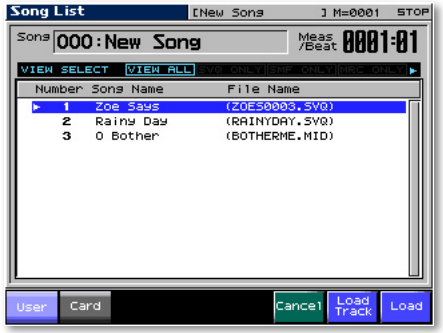
   The Song List screen appears.

If you've saved your song as a Fantom-X song file along with the samples it requires using the Save Song + Samples feature, select F5 (Load S+S) or cursor to Load Song + Samples, and then press ENTER to load your song and its samples.

Displaying the Song List from the Song Edit Screen

1. On the Song Edit screen, press F1 (Song List) to display the song list.

Loading Songs from the Song List Screen



On the Song List screen, display the songs stored in:

- *user memory*—by pressing F1 (User)
- *card memory*—by pressing F2 (Card).

By default, the list displays all Fantom-X .svq files, all SMF .mid files and all MRC .mrc files. You can press ▶ and/or ◀ to display a single file type, as shown at the top of the list.

To Load a Song, SMF or MRC File from the Song List

1. Select the desired file using the VALUE dial, ▼ or ▲.
2. Press F8 (Load) to load the song into the Fantom-X—the Fantom-X asks if you're sure you want to proceed.

When you load a song, it replaces the currently loaded song from the Fantom-X's work RAM. Be sure to save the current song before loading a different one if you wish to preserve it.

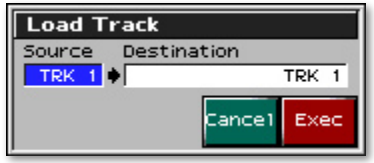
3. Press F8 (Exec) to finish loading the song.

When you load a commercially available Type 0 SMF, the data for all of its MIDI channels is combined on Track 1. See "Extracting MIDI Channel Data" earlier in this booklet to learn how to separate the data from MIDI Channels 1-16 onto Tracks 1-16, respectively. Set your Extract parameters as shown in that section's illustration.

Loading an Individual Track or Pattern

You can load an individual track or pattern from the song list, placing the track into the Fantom-X's currently loaded song.

1. On the Song List screen, highlight the song that contains the track or pattern you want to load.
2. Press F7 (Load Track)—the Load Track window appears.



3. Set the Source parameter to the track or pattern you wish to load.
4. Set the Destination parameter to the track or pattern into which you want to load the source track or pattern.
5. Press F8 (Exec)—the Fantom-X asks if you're sure you want to proceed.

The track or pattern you load replaces whatever's currently in the destination track or pattern.

6. Press F8 (Exec) to finish loading the track or pattern.

The Fantom-X's Quick Play feature is a great way to find a tracks you want to load into the current song since it allows you to preview songs stored in user or card memory without having to actually load them.

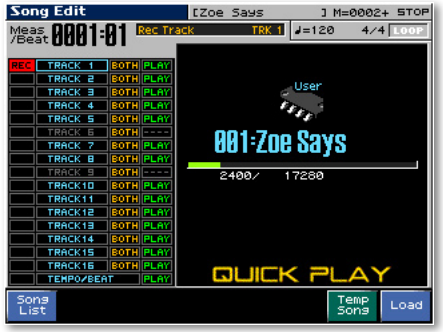
Quick Play

With the Fantom-X's Quick Play feature, you can quickly listen to a song in the song list without stopping to load it. The currently loaded song remains in place as you listen to your Quick Play selection—there's no need to save it before listening to a song using Quick Play.

To work on song you're listening to with Quick Play, you have to load the song into the Fantom-X using the normal loading procedure.

To listen to a song in the song list using Quick Play:

1. Highlight the desired song and press PLAY.
2. Press STOP when you're done listening.
3. Press SONG EDIT to display a Quick Play version of the Song Edit screen.



On this screen, you can:

- set the MIDI behavior and STATUS parameter for any track in the Quick Play song using ◀, ▶, ▲ and/or ▼ and the VALUE dial.
- press F8 (Load) to load the Quick Play song for recording or editing.

4. To return to the currently loaded song's Song Edit screen, press F7 (Temp Song).

The Fantom-X's Chain Play feature can play the song list's songs in order without loading them—see the *Fantom-X Owner's Manual* for details.

The End

We hope you've enjoyed this tour of the Fantom-X's built-in recording studio. Check out the other Workshop series booklets, as well your *Fantom-X Handbook* and *Owner's Manual*. We're confident you'll have a great time with the exciting, inspiring Fantom-X.

For the latest Fantom-X updates and support tools, visit the Roland U.S. Web site at www.RolandUS.com. If you need personal assistance, call our amazing Product Support team at 323-890-3745.