The Fantom-G Possibilities
About the Workshop Booklets

Roland’s Fantom G6, G7, and G8—the Fantom-G family—set a new standard for excellence in workstation keyboards, with spectacular sounds and incredible built-in effect-processing muscle. A beautiful full-color LCD display and innovative performance features make getting around a pleasure and make the G6, G7, and G8 a dream to play. For recording, the Fantom-G contains a powerful 152 MIDI/audio track sequencer. Each Fantom-G can also host two Roland ARX SuperNATURAL™ cards whose breakthrough modeling technology provides sounds with amazing sonic detail, expressive possibilities, and sound-design opportunities.

Each Fantom-G Workshop Series booklet focuses on one Fantom-G topic, and is intended as a companion to the Fantom G6/G7/G8 Owner's Manual.

This booklet requires Fantom-G Operating System v1.30 or higher. You can download the latest Fantom-G O.S. for free from www.RolandUS.com.

About This Booklet

The best thing about the Fantom-G is the way in which it seamlessly brings together all of the tools you need to create modern music.

This booklet provides a hands-on introduction to the Fantom-G. We'll take you briefly through its different sections to give you an idea what's in store for you on the Fantom-G.

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.

Meet Us At The Starting Line

Since the Workshop booklets attempt to accurately describe to you, and show you, what you're experiencing on your Fantom-G as you go through a booklet, we need to start in the same place.

In this booklet, we'll assume you’re working with a factory-fresh Fantom-G. If you’ve already been writing patches, live sets, sample, songs, or anything else, you should save your data—see the Owner’s Manual to learn how for now—and then perform a factory reset, like so:

1. Press the Fantom-G's MENU button to display the MENU screen.
2. Press the ▶ button twice to select the Factory Reset box.
3. Press the F8 button underneath the right-hand corner of the display, and read the warning that appears.
4. If you’re ready to proceed, press the F7 button—a progress bar appears onscreen.
5. When the Fantom-G is reset, press F7 again to continue.
Hold It
To add a sustain pedal to the Fantom-G, connect a damper pedal such as a Roland DP-2 or DP-10 to the rear-panel HOLD jack.

Now Hear This
For this booklet, you can listen to your G through headphones connected to the PHONES jack, or by connecting its 1/L/MONO and 2/R OUTPUT jacks to an mixer, interface, or amplifier attached to speakers.

Control Issues
While the second and third Fantom-G Workshop booklets, Power User Control and Power User Control 2: The Pads go into detail regarding the operation of the Fantom-G’s front-panel buttons, knobs, switches, pads, and such, we need to tell you just a few things to get started. For now, we'll discuss front-panel operations without a mouse for simplicity's sake, and because not everyone has a mouse. (The Power User Control booklet discusses mouse use on the Fantom-G.) We do recommend using a mouse, of course.

The Fantom-G Display and F Buttons

The Display

Have you noticed the Fantom-G’s display? (Just joking.) At the heart of the Fantom-G’s operation is its display that provides helpful information, whatever you’re doing. We’ll discuss what you see there as we go along.

Button Up

Beneath the display is a row of 10 buttons.

All the way to the left you’ll find the MENU button. (You’ve already used it if you performed a factory reset on Page 2.) Pressing this button displays a menu of important Fantom-G operations.

At the right is the Display button that reveals a Shortcut Menu window whose items take you immediately to some commonly used screens.

In-between these two buttons are the eight F buttons that play a crucial role in operating the Fantom-G. The F8 buttons are “soft buttons” whose behavior depends on what you’re doing, or, more specifically, what’s currently on the display above the buttons. Each button has a “soft” label shown onscreen.

In screens that contain more items than can be displayed at once, F6 will have a pages icon as shown in the illustration above—you can press F6 to view the screen’s second page or to scroll down.

In the instructions throughout the Fantom-G Workshop booklets, when we want to you to press an F button, we’ll name the button and show its soft label in parentheses. For example, we’d refer to F5 in the illustration above as “F5 (LiveSet List).”
The Value Dial and Cursor Buttons

In the Workshop booklets, we refer to the up, down, left, and right cursor buttons that surround the Value dial as the ▲, ▼, ◀, and ► buttons.

To navigate the Fantom-G's display from the front-panel—which is to say, not using a mouse—you work with the cursor buttons and the Value dial:

1. You select something on the display using the ▲, ▼, ◀, and ► buttons. This lets the Fantom-G know what it is you want to change.
2. You make the change you want using the Value dial.

Selecting

There are a few different kinds of things you can select with the cursor buttons. The two most common ones are:

- settings, or “parameters”
- phrases—chunks of MIDI or audio data in the Fantom-G sequencer.

When you select a parameter onscreen, it becomes highlighted.

Once a parameter's been selected, you can turn the Value dial to change its setting, or “value.”

As you'll see in the next booklet, you can also easily select parameters and set values using a mouse.

ENTER, EXIT, SHIFT, INC, and DEC

The five buttons below the Value dial are also important in the operation of the Fantom-G. Press the

- **ENTER button**—to display a window or menu of choices regarding what you’ve selected onscreen, or to execute operations. Pressing the ENTER button sometimes provides a “yes” answer to questions the Fantom-G displays.
- **EXIT button**—to close a menu or return to the previous screen during a variety of Fantom-G operations. You can also cancel some operations using the EXIT button. Pressing the button sometimes provides a “no” answer to questions displayed onscreen.
- **SHIFT button**—to change the behavior of certain other controls, as detailed in the Workshop booklets and Owner’s Manual. It can also reveal hidden screens, as we’ll see.
- **INC (for “increment”) button**—to raise the value of the currently selected parameter, or to move up through a list or menu displayed onscreen.
- **DEC (for “decrement”) button**—to lower the value of the currently selected parameter, or to move down through a list or menu displayed onscreen.

Pressing the SHIFT button while turning the Value dial or using the INC or DEC buttons causes values to change in larger increments.

About Patches, Rhythm Sets, and Sample Sets

There are three basic types of sounds on the Fantom-G:

- a **patch**—plays a single sound at different pitches, depending on the keys or pads you play.
- a **rhythm set**—plays a different percussion sound from each key or pad.
- a **sample set**—is a collection of 16 samples you want use together.
Exploring the Fantom-G Sounds

Live Mode and Live Sets

The Fantom-G is more than anything else about Live mode, where you can select “live sets.” A live set is a combination of

- Eight patches, rhythm sets, or sample sets, along with their patch effects, or “PFX”—from the Fantom-G’s internal memory.
- Up to two ARX patches—from installed optional ARX expansion boards, purchased separately.
- Chorus and reverb effects—associated with the live set itself.
- Up to 16 external sounds—you play via MIDI from the Fantom-G.

You can combine a live set’s sounds in a variety of ways. We’ll show you what we mean in the following introduction to Live mode. (We’ll discuss Live mode in greater detail in the Live Mode in the Fantom-G Workshop booklet.)

In this booklet, we’ll be exploring live sets that use internal Fantom-G sounds only, just to keep things simple. We’ll discuss your other options in the Live Mode in the Fantom-G booklet.

The Party of the First Part

Each of a live set’s sounds is played by a “part” that has its own settings which determine how its sound plays. Every live set has eight parts. You create individual patches in Single mode, but you put them together in Live mode by assigning each one to its own part.

Selecting Live Sets

We’ll be selecting live sets in the following sections of this booklet. Here’s the basic procedure:

1. Press the LIVE MODE button to enter Live mode.

The Live Play screen appears (You can see “Live Play” in the upper left-hand corner of the screen):

Live sets are stored in the Fantom-G in “banks.” The

- PRST bank—contains live sets that are permanently stored in the Fantom-G’s memory. (“PRST” is short for “Preset.”)
- USER bank—contains live sets you’ve edited or created.

2. Use \( \downarrow, \uparrow, \leftarrow, \) and/or \( \rightarrow \) to highlight the Bank parameter.

3. Turn the Value dial or press INC and/or DEC to select the desired live set bank. For now, select the PRST bank if it’s not already selected.

4. Highlight the Live Set Number parameter.

5. Turn the Value dial or press INC and/or DEC to select the desired live set. For now, we’re to leave the Live Set Number parameter alone, since we’ll be starting our listening with this live set.
PRST 001: System G

PRST 001: System G, the first preset live set, does more than just show off the great sound of the Fantom-G—it also shows you how you can split and layer patches in a live set. (If System G isn’t already selected, use the previous steps to select it now.)

Play some notes below Middle C with your left hand—you hear a throbbing, complex groove that plays at the pitch of the note whose key you press. Now play some notes above Middle C with your right hand to hear a classic brass-synth sound with an unusually interesting trail-off. As you play the keyboard, you can see the notes you play light up onscreen in pink.

Split Personalities

Each of the patches in System G is set to play only from a specific range of keys. Parts 1-6’s patches (in the blue square below) play only below Middle C as you can see onscreen when you play up and down the keyboard.

Layer Cake

You also see that the lower range of the keyboard plays six parts at once, and the upper range plays two. When sounds play together, they’re “layered.” Layering is a great way to create complex, interesting, sounds. System G demonstrates what we mean:

- **under your left hand**—you’ve got an extremely complicated rhythmic texture created by six patches layered on top of each other.
- **under your right hand**—you’ve got simple synth brass notes that slowly morph into a pretty burbly sample-and-hold sound that results from layering the 80s Brass 3 (the synth) and Cross Talk (the burble) patches.

You can see that all of these patches are turned on by looking at their lit KBD (for “keyboard”) switches.
PRST 003: Within You

Within You provides a group of instruments for playing Indian music. It shows the creative ways in which you can split your keyboard.

First of all, we've got something new here: Part 8 is playing a rhythm set, as shown in the Type column. This gives Within You tabla sounds that play from Middle C to the G# above it. You've also got

- a sitar gliss—in the octave just below Middle C.
- sitar notes with a drone—below the sitar gliss.
- clean sitar notes—above the tablas.
- a synth pad—behind all of the sitar notes, courtesy of Parts 4 and 8.

Sounds in a live set don't have to be split or layered—they can also be assembled in a live set for quick access. This can be particularly handy onstage or in a fast-paced studio session. Syn Bass Menu is a good example of this, as are all of the live sets with “Menu” in their names.

The key to this type of live set is the setting of the KBD switch we first noted on Page 6. Notice how they're all turned off in Syn Bass Menu.

Play the keyboard—you hear the sound of the first part's patch, Big Mini 2. If no KBD switches are turned on, when you haven't manually selected any other parts, the first part's sound plays.

Otherwise in the Fantom-G, when there are no KBD switches turned on, the part that's currently selected plays. Press ↓ until you've selected the second part and play the TickerBs patch.

Use the ↓ button to check out the other bass patches in this live set.

PRST 005: G-Grand

G-Grand is a great Fantom-G piano, divided up into eight optimally-tweaked key ranges. The reason we're here, though, is something else altogether.

Check out the Pad Mode parameter setting the arrow above's pointing to: It says “RHYTHM PTN,” for “rhythm pattern.” The Fantom-G's dynamic pads can do quite a few different things. They can be set so that they do different things depending on the live set you've got selected; this is their default behavior, and a very handy way to work onstage.
In G-Grand, the pads play rhythm patterns. Rhythm patterns can be great for playing along with on the keyboard when you’re improvising, or onstage. Press a pad to begin playback of its rhythm pattern—the pad flashes as the pattern plays. To change immediately to another rhythm pattern, press another pad. To stop playing a rhythm, press the currently flashing pad.

In the Fantom-G, rhythm patterns are phrases belonging to the current project. The phrases play the rhythm sounds of the current live set. The ones you’re hearing now belong to the Fantom-G’s factory default project, which is packed with stuff. (We’ll explain projects in the third Fantom-G Workshop booklet, Saving Your Work on the Fantom-G.)

We’ll discuss rhythm patterns in detail in the Rhythm Patterns, RPS, Arpeggios, and Chord Memory Workshop booklet.

PRST 010:RPS TEMP 98BPM

Check out the Pad Mode setting in this live set: RPS TEMP 98BPM shows off the Fantom-G’s Realtime Phrase Synthesis, or “RPS,” capabilities. With RPS, you can trigger sequenced phrases from the dynamic pads. This lets you use passages onstage or in recording that would otherwise be too hard to play. You can also use RPS to quickly construct entire songs by stringing RPS phrases together. An RPS phrase can contain a complete arrangement’s worth of sequenced instruments, or any set of sounds you want to use.

To play an RPS phrase, strike its lit pad—the RPS phrase uses the live set’s sounds. RPS TEMP 98BPM is set up so that striking a second RPS pad stops playback of any currently playing phrase and starts playback of the new one.

In the Fantom-G, RPS phrases and rhythm patterns are similar, though more playback options for RPS phrases are provided since they tend to be more complex. To stop playback of an RPS phrase, strike its flashing pad.

We’ll discuss RPS phrases in detail in the Playing Clips from the Fantom-G Pads Workshop booklet.

PRST 021: Bell Mystic

Bell Mystic is a textured, tinkling live set that uses the Fantom-G’s arpeggiator. Hold down a chord, and note how the glockenspiel part plays a repeating pattern using the notes you’re playing. You can watch the arpeggiator work. First, let go of the chord. Then, hold down the SHIFT button and press the ARPEGGIO button at the left of the Fantom-G’s sliders—the Arpeggio screen appears.

Play the chord again—or another chord if you like—and watch the onscreen keyboard to see your notes being arpeggiated.
Although in Bell Mystic, the pads trigger rhythm sounds, when they’re set to the ARPEGGIO pad mode, each pad can trigger a different arpeggio style. This is just another of the pads’ interesting capabilities we’ll be discussing in the Power User Control 2: The Pads booklet.

In this live set, the arpeggiator is adding texture. An arpeggio can also be useful as the basis for a dance groove. We’ll get into arpeggios in the Rhythm Patterns, RPS, Arpeggios, and Chord Memory Workshop booklet.

Go Exploring

Now’s a good time to check out the other amazing live sets in the Fantom-G. So far, we’ve been selecting live sets using the Live Set Number parameter, but there’s an easier way. Press the LIVE MODE button to return to the Live Play screen, and then press F5 (LiveSet List) to view all of your available live sets.

For each preset live set, you’ll find a brief Memo entry telling you of what it sounds like or does.

The small QWERTY keyboard in the Live Set List window allows you to find live sets fast by typing in their names when you’ve connected a mouse. We’ll explain this in detail in the next booklet.

Check Out the Fantom-G Realtime Controllers

As you try out patches, don’t forget to play around with the Fantom-G’s assortment of realtime controllers. They’re highly customizable, and you can see in the Live Play screen what they’ll do in any given situation.

We’ll get into the realtime controllers in detail in the Manipulating Sounds in Realtime booklet, but here’s what they are:

- **Modulation lever, and S1 and S2 switches**—The modulation lever at the left of the keyboard lets you add modulation, which typically produces vibrato, by pushing the lever forward, or bend notes up or down by moving the lever right and left.

- **S1 and S2 switches**—Press these buttons above the modulation lever to toggle changes to the live set’s sound on and off.

- **Control Sliders 1-8**—By default, the sliders control the levels of the live set parts, thought they can do all sorts of other things if you prefer.

- **Control Knobs 1-4**—The control knobs, circled in red above, do different things depending on the live set you’re using.

We haven’t yet mentioned the D Beam because it’s off by default in most live sets. It’s a powerful realtime controller, though, and can manipulate sounds, trigger pads, or act as a separate mono synth. We’ll discuss it in the Manipulating Sounds in Realtime booklet.
Patch Remain

One of the Fantom-G’s best features is its Patch Remain feature, which is available in both Live mode and Single mode (which we’ll discuss next). Patch Remain allows you to switch from one live set to another—or one patch to another in Single mode—without hearing any glitching. To understand how Patch Remain works, it’s a good idea to understand what it’s doing.

In Live mode, a live set has eight internal patches, each of which has its own effect. (With ARX cards installed, you’ve got even more.) As you switch from one live set to another, the Fantom-G holds onto all of the currently playing notes and effects as it loads the second live set’s sounds and effects in preparation for the next notes you’ll play. That’s a lot of stuff to juggle.

Of course, no device has infinite power. Patch Remain switches seamlessly from one live set (or patch) to another, but not to a third live set if the first one’s notes and effects are still playing. That’s just too much stuff to retain.

Therefore, to go from live set to live set to live set using Patch Remain, remember to wait until the first live set’s notes stop playing—or take your foot off of your hold pedal—before going to the third one.

Obviously, if you race through the live set list, Patch Remain won’t keep up, and you’ll hear glitching. Therefore, if Patch Remain is important to you, you’ll need a strategy—and to do a little setup work—to get directly from one live set to the next one you want without passing through others in-between. The Fantom-G offers multiple ways to do this, including:

- **Favorites**—The Favorites feature allows you to gather together all of your live sets, patches, and studio sets for quick selection. The mode you’re currently in doesn’t matter with the Favorites feature, which jumps effortlessly into whichever mode you need. In the Fantom-G, you can even use the pads to select Favorites, an extremely fast and easy way to work, especially onstage.

- **User Groups**—User Groups are similar to Favorites except that they operate in a single mode. In Live mode, you can set up User Groups of the live sets you want to use. In Single mode, your User Groups contain patches, rhythm sets and/or sample sets. You can also select User Group sounds from the pads.

- **Re-organizing your data**—You can, of course, also move your preferred live sets or patches around so that pairs you’ll want to switch between are stored next to each other.

We’ll talk more about all of these things later.

Single Mode

Single mode is the simplest of the Fantom-G’s modes. It’s a place where you play a single sound at a time from the keyboard—you can also play a variety of things from the pads if you like. Here’s a quick introduction.

1. Press the Single button to enter Single mode and display the Single Play screen.

2. On the Single Play screen, you have lots of ways to find and select sounds. We’ll discuss the Single Play screen’s many possibilities in the Single Mode in the Fantom-G booklet, but for now you can highlight:
   - **Bank**—to select preset (PRST) or user (USER) patches.
   - **Category**—to select the instrument type you’re looking for.
   - **Patch Number/Name**—to select the specific patch you want.
You can play patches, rhythm sets, or sample sets from the Fantom-G keyboard in Single mode, but for now we’re just discussing how to play patches. We’ll talk more about your options in the *Single Mode in the Fantom-G Workshop booklet.*

### The Patch List Screen

Probably the best way to find patches on the Fantom-G is on the Patch List screen. To get there:

1. Navigate to the Single Play screen by pressing the SINGLE button.
2. Press F1 (Patch List)—the Patch List window opens.

The Fantom-G’s patches are organized into instrument-type categories to make them easier for you to find.

Though we’re looking for a patch now, you can select patches, rhythm sets, or sample sets from this screen, telling the Fantom-G what you want by pressing the appropriate F3-F5 button.

3. Select the desired patch category using the F1 (Categ/Up) and/or F2 (Categ/Down) buttons.
4. Once you’re in the category you want, turn the Value dial or use the INC/DEC buttons to highlight each patch.

When a patch is highlighted, you can play it on the keyboard, or press F7 (Preview) to hear the patch play an appropriate musical snippet.

The Fantom-G’s Magic Controls offer another, quicker way to navigate the Patch List screen. And—even better—a mouse lets you find a sound by entering its name in a virtual QWERTY keyboard. We’ll talk about these features in the *Power User Control Workshop booklet.*

5. Once you’ve found the patch you want, press F8 (Select) to load it into Single mode and return to the Single Play screen.

We’ll talk more about the Patch List screen in the *Single Mode in the Fantom-G Workshop booklet.*

Now might be a good time to check out some of the Fantom-G’s patches using the steps above.

### Playing Drum Sounds from the Pads

Single mode has its own set of three parts, similar to those in Live mode. There’s the:

- **Keyboard part**—that typically plays a patch. (This part, Part 1, uses MIDI Channel 1 by default in Single mode.)
- **Sample Set part**—that’s designed for playing a sample set. (This part, Part 7, uses MIDI Channel 9 by default in Single mode.)
- **Dynamic Pad Part**—that usually plays a rhythm set. (This part, Part 8, uses MIDI Channel 10 in Single mode.)

Here’s how to play drum sounds on the pads in Single mode:

1. Press the PAD MODE button in the DYNAMIC PADS area of the front panel—this opens the Pad Mode window.

In this window you can see the 16 different things the pads can do, and select the desired mode by hitting the corresponding pad.
Since right now we want to select the second mode, RHYTHM, press the 2 pad. When you're returned to the Single Play screen, you can see the Pad Mode parameter’s set to RHYTHM.

To select the desired rhythm set, start by highlighting the Single Play screen’s Dynamic Pad Bank parameter, which can be set to

- **USER**—for your own rhythm sets.
- **PRST**—for built-in rhythm sets.
- **GM (for “General MIDI”)**—to select one of the standardized General MIDI rhythm sets.

To learn about General MIDI, see Roland’s *An Introduction to MIDI InFocus* booklet, which you can download from RolandUS.com.

Set the parameter to PRST for now.

Highlight the Number/Pad parameter.

Turn the Value dial or use the INC/DEC buttons to select the desired rhythm set.

Try out the selected rhythm set by playing the pads.

**The Fantom-G Recording Studio**

The Fantom-G features its own 152-track recording studio, with 128 MIDI tracks and 24 audio tracks. Let’s start exploring it by listening to the factory demo songs.

### Playing the Factory Demo Songs

1. Press the SONG button in the LIST/EDIT area to display the Song Play screen.

This screen shows your song's tracks—where a session starts.

You’re seeing the tracks of the demo song we’re about to listen to. However, since we’ve been doing other things since powering up, we’ll reload the song to make sure it plays correctly. The demo songs contain special data they send to the Fantom-G as they load, or at power-up. (Your own songs won’t require reloading to play correctly.)

The Fantom-G plays a single song at a time, though each project can hold up to 50 songs—we’ll explain projects in the *Saving Your Work on the Fantom-G Workshop* booklet.

2. Press F1 (Song List) to display this project’s songs.
Highlight the first song, “Be In My World,” press F8 (Load), and then F7 (OK) to confirm your intentions—the song loads.

After the song’s loaded, press PLAY to hear the song as you watch its MIDI and audio tracks go by onscreen.

You can adjust the overall level using the Fantom-G’s VOLUME knob.

Listen to the entire song, or press STOP at any time. (To play the song again from the top, press the I button, and then press PLAY.)

You can also load songs using the Fantom-G Favorites feature. See Page 7 of the Power User Control Workshop booklet to learn how.

About Studio Mode and Studio Sets

You can record ideas on the Fantom-G in both Live mode and Single mode, but full-on song production happens in Studio mode. That’s where you can work with the many sounds you need for a full song arrangement, where you can add the effects you need, and where you can mix a song.

To enter Studio mode, press the STUDIO MODE button to display the Studio Play screen.

A Studio Part Party

In Studio mode, a song’s sounds and effects are called a “studio set.” Like a live set, a studio set is made up of parts and effects, but it’s got more parts—shown here in blue—and effects—shown in gray.

Here’s what all of this means. Each studio set contains

- **16 Internal sound parts**—for the internal patches and/or rhythm sets you want to use in the song.
- **24 Audio Track parts**—for the 24 audio tracks you can have in a song.
- **1-16 EXP 1 parts**—that allow you to use the sounds from an ARX expansion board installed in the first ARX expansion slot.
- **1-16 EXP 2 parts**—for the sounds from an ARX expansion board installed in the second ARX expansion slot.
- **16 External Parts**—to play sounds from external MIDI devices. A song track can play external sounds using any of 16 MIDI channels, each of which has its own part.

The number of ARX parts—and therefore the number of EXP sounds you can use at once—depends on the ARX board.
To navigate between the different types of parts on the Studio Play screen, hold down SHIFT and use the ‹ and › cursor buttons.

A studio set offers quite a lot of effect-processing power:

- **PFX**—Each of the 16 Internal and EXP parts has its own PFX.
- **MFX (for “multi-effects”)**—Each studio set has a pair of MFX, a chorus, and a reverb that any of its Audio Track or Internal parts can use.
- **ARX effects**—Each ARX board provides its own effects for its EXP-part sounds. (The number and type of effects varies from board to board.)
- **Mastering effect**—Each studio set contains a mastering effect with which you can add the final overall processing to an entire mix.
- **Input FX**—A separate input effect is available for processing live audio as it comes into the Fantom-G for recording on one of your song’s tracks.

The Fantom-G contains helpful factory-built PRST studio sets. The *Studio Mode in the Fantom-G* Workshop booklet gets into Studio mode and studio sets in more detail.

**Recording Your Own Song**

**Starting a New Song**

1. Press SONG, and then F1 (Song List) to display the project’s song list.
2. Select any USER “INIT SONG” — these are blank, empty songs. (We’re already in the USER bank because the demo songs load from there.)

Here we’ve selected the 16th song location, which is currently empty.

Since the “INIT SONG” title is a good way to see if a song location is empty, we strongly recommend naming your songs as you save them so you can tell if a location is truly empty later on. We’ll explain how to do this in the *Saving Your Work on the Fantom-G* booklet.

3. Press F8 (Load), and then press F7 (OK) to confirm the operation—the new, empty song loads and the Song Play screen is displayed.
4. Let’s grab a bunch of sounds to work with by pressing the STUDIO button, and then selecting the PRST 001: Standard Set studio set.

**Recording MIDI Sequencer Tracks**

The capture of MIDI data—data that plays the Fantom-G’s sounds—is called “sequencing,” a term we’ll use consistently from here on. We’ll save the word “recording” for the process of capturing live audio onto tracks.

Each time you sequence in the Fantom-G, you create a chunk of MIDI data called a “phrase.” The phrase is assigned to a MIDI track in your song for playback. There are two big advantages to phrase-based recording:

1. Phrases make song construction and editing easier.
2. You can use a project’s phrases as many times as you like in one or more songs in the current project.

**Sequencing a Track**

1. If the Song Play screen isn’t visible, press SONG.
2. Press the PATCH button in the LIST/EDIT area to open the Part Select window.

We’ll start recording with Part 1. The Part parameter’s already set to Part 1, so we’re good to go. Likewise, since we want to use an Internal instrument for now, the Group parameter’s Internal setting is also just what we want.
With the Fantom-G’s Auto-Track feature turned on—as it is by default—recording automatically takes place on the same-numbered track as the part you’ve got selected.

3 If you’d like to select a different sound for this track—though we’re going to go with the already-selected G-Grand patch—you can press F6 (Patch List) and select the patch you want using the method we described on Page 11.

4 Press the REC (for “Record”) button.

The Realtime Rec Standby window opens and the Fantom-G metronome starts, to help you play in time with the song’s tempo.

Since you’re working with Part 1, MIDI Track 1 is automatically selected.

The parameters in the Realtime Rec Standby window allow you to customize your recording session in a variety of ways—or even switch to recording audio tracks—but for now we’ll leave them set as they are. You’ll find explanations of these parameters in the Sequencing and Recording Workshop booklet.

5 Before sequencing, let’s change the song’s speed by pressing the TEMPO button to open the Tempo window.

You can set the tempo by

- **playing it**—when you tap three or four beats on the F6 (Tap Tempo) button.

- **setting Tempo parameter**—using the Value dial. Tempo is measured in BPM (“Beats Per Minute”). To set the coarse tempo, turn the Value dial. To set the fine tempo, hold down SHIFT and turn the Value dial.

6 Press F8 (Close) when you’re done setting the song’s tempo.

The Fantom-G is waiting for you to begin sequencing. It won’t actually begin capturing your playing until you press PLAY. At that point, you’ll get four countoff beats and sequencing will begin.

7 Press F8 (Start)—the Realtime Recording window opens. The first “ding” signifies the start of the countoff. When four beats have gone by, start playing the Fantom-G keyboard for as long as you like. You’ll hear another ding at the start of each measure to help you know where you are without looking.

8 When you’re done playing, press STOP.

9 The Fantom-G asks “Assign New Phrase to Track?” If you

- **like what you played**—press F7 (OK) to assign the new phrase to its track. The phrase is also added to the phrase list for use elsewhere in the song or in another song in the current project.

- **didn’t like what you played**—press F8 (Cancel) to immediately delete the phrase from the Fantom-G’s memory. (You can then return to Step 2 to try again.)

If you pressed F7 (OK), you can now see your new phrase on the Song Play screen, as shown on the next page.
We’ve sequenced just four measures here—the dark gray background behind the phrase shows the song’s current length.

The new track is automatically named for the sound you used when you sequenced it.

10 The Fantom-G automatically takes you back to where your sequencing started, so to hear your new phrase, press PLAY.

11 Playback automatically ends after the track’s sequenced data plays, or you can press STOP whenever you want.

12 If you don’t like what you hear at all and want to remove the phrase from the track and from the Fantom-G’s memory, press the MENU button, and then F5 (Undo.) When the Fantom-G asks if you’re sure, press F7 (OK.)

We didn’t want to distract you earlier, but when the Realtime Recording window is open, you can rehearse without sequencing. You can also erase sequenced notes and other performance data in realtime. We’ll get into this window in greater detail in the Sequencing and Recording Workshop booklet.

13 Press the button to return to the top of the song. Let’s record another track.

14 Press the LIST/EDIT PATCH button again to re-open the Patch Select window.

15 This time, set the Part parameter to Part 2, since we want to record on Track 2.

16 Again, if you’d like to use another patch, hit F6 (Patch List) and select the sound you want.

17 Repeat Steps 2-13 to sequence your bass track, skipping Steps 5 and 6—you probably don’t need to change the tempo again.

18 Press STOP when you’re done listening to your two tracks. Let’s finish up by adding a beat to the song.

19 Press LIST/EDIT PATCH again, and select Part 10. Since Part and Track 10 are usually a song’s drum track—though you don’t have to follow this convention if you don’t want to—Part 10 is set to use a rhythm by default.

20 Select a different rhythm set using F6 (Patch List) if you want.

21 Repeat Steps 2-13 to sequence your drum track.

The Fantom-G offers lots of editing tools for refining your performance. They’re discussed in the Perfecting Songs, MIDI Tracks, and Audio Tracks Workshop booklet.

If you’d like to develop a song’s MIDI tracks even further in a computer-based digital audio workstation, or “DAW,” you can export them as an SMF (for “Standard MIDI File”) your DAW will likely be able to load.

You can save any set of sounds you’ve put together during recording as a studio set, as described in the Saving your Work on the Fantom-G Workshop booklet. Otherwise, they’ll be saved with your song when you save it—the same booklet describes how to do this.
Recording an Audio Track

Now that you've got three MIDI tracks sequenced, let's record an audio track to see how that's done. It's pretty much the same as sequencing a MIDI track.

Phrases, Meet Samples

When you sequence, you capture a phrase, and when you record audio, you record a “sample.” A sample is simply a digital audio recording. In songs, the Fantom-G plays back samples on audio tracks. (You can also play samples from the keyboard or pads, but we'll get to that later.)

Since samples occupy space in the Fantom-G’s memory, the amount of audio you can record depends on what else is currently sharing that space, and how large your Fantom-G’s user-expandable memory is. We’ll discuss how memory works in the Saving Your Work on the Fantom-G Workshop booklet.

The process of recording audio onto a Fantom-G song track has two stages:

1. Selecting an audio track you want to record on.
2. Recording the track.

While the Audio Track parts in a studio set allow you mix your audio tracks with your other tracks, you don’t need to visit the Studio Play screen for the recording process itself.

But First: Plug Something In

Audio comes into the Fantom-G through its rear-panel AUDIO IN jacks. You can connect

- a low impedance mic—to the MIC/GUITAR jack. The Fantom-G can provide phantom power for condenser mics that need it.
- an electric guitar or bass—to the MIC/GUITAR jack.
- a line level device such as a personal music player or CD player—to the LINE L/MONO and R jacks for stereo sound, or to the L/MONO jack only for mono sound.

For now, for simplicity’s sake, we’ll assume you’re plugging in a mic or a guitar or bass into the MIC/GUITAR jack.

If you’re connecting a

- mic—that requires phantom power, set the rear-panel GUITAR/PHANTOM switch to its ON position. If your mic doesn’t need phantom power, be sure to set this switch to OFF to avoid damaging your mic.
- guitar or bass—set the GUITAR/PHANTOM switch to Hi-Z so that the input is optimized for the instrument’s high-impedance output.

You can add effects to your audio as you record using the Fantom-G’s input effect, as you’ll see in the Sequencing and Recording booklet.

Selecting an Audio Track

1. Press the SONG button if the Song Play screen isn’t already visible.
2. Press the ▼ button to select an audio track—for now, select Audio Track 1, as shown here.
The Recording Process

1. Press the 1 button to return to the start of the song.
2. Press the REC button to open the Audio Rec Standby window and start the metronome.

Here we've selected the Input Select parameter and set it to MIC/GUITAR so the Fantom-G "listens" to that input.

3. Set the Input Select parameter to MIC/GUITAR, as we did in the screenshot above.
4. Make sure that Audio Rec Mode is set to SOLO, and set Audio Rec Channel to MONO since we'll be recording a monaural signal.
5. Watch your input level in the Audio Rec standby window's meters as you sing into your mic or play your instrument as loud as you intend to.
6. Reach around the back of the Fantom-G and turn the LEVEL knob—it's located just to the right of the MIC/GUITAR jack as viewed from the Fantom-G's playing position—to set your level as loud as possible without lighting the Audio Rec Standby window's CLIP indicator.

You hear a four-beat count-in before recording actually begins.

7. To begin recording, press F8 (Start)—the Audio Rec window opens.
8. Sing or play as you hear the previously-sequenced MIDI track playing.
9. When you're done, hit the STOP button to end recording—the Fantom-G asks if you want to assign your newly recorded sample to the currently selected track, or toss it out and try again.
10. To keep your recording, press F7 (OK). To toss it, press F8 (Cancel). If you keep the recording, it appears on its audio track in the Song Play screen, named for the sample you just recorded.

11. Press PLAY to hear your new audio recording—playback ends after your recording's played back.

Just as when you sequence, you can undo your recording by pressing MENU, F5 (Undo), and then F7 (OK).
Mixing Your Song

To balance the levels of your MIDI and audio tracks—or to add chorus and/or reverb to them—press the STUDIO button to go to the Studio Play screen. Press F7 (←) to view the Studio Play Audio Track screen that contains the controls for your audio tracks, and F8 (→) to return to your MIDI tracks.

Sampling

When you recorded your audio track, you scratched the surface of the Fantom-G’s sampling capabilities. The Fantom-G is actually a full-featured sampler that lets you use sampled beat loops or any other sound in your music. Here are some of the things you can do with the Fantom-G sampler:

- You can sample any audio—you send into the Fantom-G from mics, instruments, or line-level playback devices.
- You can import samples—in .WAV or AIFF format via USB from your computer.
- You can sync samples—to a song’s tempo, locking them together in time, even when the song’s tempo changes.
- You can “resample” the sound of the Fantom-G itself—to create unique new samples for use in your songs or to play onstage from the keys, pads, or D Beam.
- When you mix a Fantom-G song down to stereo, you sample the entire mix—as a stereo audio file you can send via USB to your computer, from where you can create an MP3 or AAC file or burn a new audio CD.

The Fantom-G also provides a rich collection of sample-editing tools that make working with samples easy and fun. You can learn more about Fantom-G sampling in the Fantom-G Owner’s Manual.

Skip Back Sampling

The Fantom-G—like the Fantom-X before it—also offers a unique type of sampling called “Skip Back Sampling” that can save your musical life.

Skip Back Sampling is always quietly sampling what you’re doing. This means you never have lose a sudden flash of musical genius again. When you’ve just played something unexpectedly great, the Fantom-G has your back.

1. Play anything you like on the keyboard, for about 10 seconds.
2. Press the blue SKIP BACK SAMPLING button—the Fantom-G grabs a sample of the 10 most recent seconds of your playing.

Skip Back Sampling can be pre-set to grab anywhere from the last 5 to 40 seconds of music. (10 seconds is the default setting.)

As with audio track recording, the amount of audio you can capture with Skip Back Sampling depends on the amount of sample memory you currently have available in your Fantom-G.

3. When the Fantom-G has captured your sample, it displays the Skip Back Preview screen, where you can see the newly captured sample.
4. Press and hold down F7 (Preview) to hear your new sample.
You can trim your Skip Back sample so that it’s got only the passage you want to keep, using the same editing tools you’d use for any other Fantom-G sample. We’ll explain how to edit and work with samples in the Fantom-G Sampling Workshop booklet.

Skip Back sampling captures not only the sound produced by keyboard, but your rhythms, arpeggios, live audio being sent through the Fantom-G, and any other sound the G produces.

To avoid losing a sample when you turn off the Fantom-G, you must save it. To learn how to save a sample, see the Saving Your Work on the Fantom-G Workshop booklet.

The End

We hope you’ve found this workshop helpful. Keep an eye out for other Fantom-G Workshop booklets available for downloading at www.RolandUS.com.