JUNO-Di Mobile Synthesizer with Song Player

Getting to Know the JUNO-Di

JDiWS01

About the Workshop Booklets

Roland's JUNO synthesizers have been making history since the 1980s. They've always been affordable, easy to use, and sounded great. The JUNO-Di is designed for performing anywhere. It's super-lightweight, can run on batteries, and it puts everything you need on a gig right at your fingertips. Enjoy the best of the latest performance-oriented sounds from Roland with 128-note polyphony. Use dedicated buttons to quickly split the JUNO-Di keyboard or layer sounds. Shape JUNO-Di sounds as you play with its extensive realtime controls. Play along with audio files or SMFs stored on a USB flash drive, or connect a personal music player. Plug a mic into the JUNO-Di for singing along. With one button-press, configure the JUNO-Di as a controller of other MIDI devices or a computer-based DAW.

This Workshop booklet is intended as a companion to the *JUNO-Di Owner's Manual*. It requires JUNO-Di Operating System v1.02 or higher.

About This Booklet

The JUNO-Di's got a lot of tricks up its sleeve. Though it weighs less than 12 pounds, it's packed with sounds and tools you'll love having at your fingertips. This booklet takes you on a step-by step tour through its features.

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.

Hot Links

Each Workshop booklet is meant to be read in order from beginning to end. However, if we mention an upcoming section—and you see this arrow—you can click the arrow to jump there immediately.

Setting Up the JUNO-Di

Making the Power Connection

You can run your JUNO-Di on standard AC power, or on batteries. We'll leave it up to you to choose how you want to power your JUNO-Di for going through this booklet.

It's best not to power up until you've made your audio connections, which we'll discuss on the next page.

Using an AC Outlet

1   Assemble the JUNO-Di's two-piece power adaptor.

2   Plug the AC end into a grounded power outlet—the adaptor's indicator lights green.

3   Plug the other end into the JUNO-Di's rear-panel DC IN jack.

You can wrap the cable at the DC end of the power adaptor around the cord hook to the left of the DC IN jack to help avoid unintentionally yanking out the plug or damaging the adaptor.

Using Batteries

The JUNO-Di can run for about five hours using eight standard nickel-metal hydride AA-type batteries (purchased separately). With an active USB connection, you'll get around four hours of battery operation.

Its lightness, and ability to run on battery power make the JUNO-Di an excellent portable practice instrument for students, or go-anywhere songwriter's tool.

Before you run the JUNO-Di on batteries, disconnect the AC adaptor.

Installing Batteries

1   On a soft, static-free surface, turn the JUNO-Di onto its face so its bottom is facing you and the battery compartment door is visible.
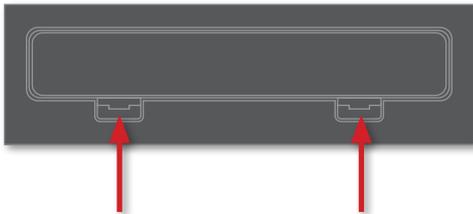
2   Gently press the door's tabs inward, and then lift out the door.

3   Insert eight fresh batteries according to the polarity symbols shown in the battery compartment. The JUNO-Di will successfully power up only when you've got the batteries in the correct way.
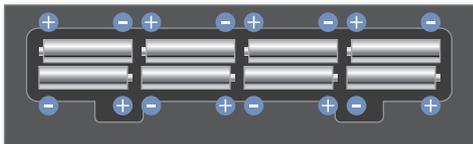
For optimal results, avoid mixing new and old batteries. Fresh batteries are always best, of course.

4   Re-attach the compartment door by inserting its far edge, and then gently pressing down the door so its tabs lock in place.

If you reconnect the adaptor while operating on batteries, the JUNO-Di momentarily shuts down to switch power sources.

Running On Batteries

You can lengthen the life of your batteries by turning off the JUNO-Di's display backlight when you don't need it. See Page 21 in the *JUNO-Di Owner's Manual* to learn how to turn off the backlight.

As you use the JUNO-Di on battery power, the front-panel BATTERY indicator to the left of the display remains unlit unless you to have an issue with your battery power. If the indicator:

- *lights*—you should replace your batteries as soon as possible. Your batteries are starting to run low.

- *flashes*—you should replace your batteries immediately, since you're just about out of battery power. You'll soon see "Battery Low!" on the display, and you won't be able to play your JUNO-Di.

You shouldn't rely on the behavior of the BATTERY indicator—whether it lights or flashes—to decide when to replace your batteries. If it lights at all, change them as soon as possible.

Setting Up For Listening

You can listen to the JUNO-Di through stereo headphones, a keyboard amp, a mixer, or powered speakers.
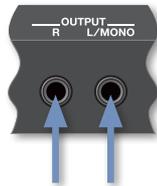
We don't recommend listening to the JUNO-Di directly through a home music system since the JUNO-Di's dynamic range may exceed your system's capabilities, and could damage your equipment.

To listen through

- *headphones*—connect your headphones' 1/4" plug to the JUNO-Di's rear-panel PHONES jack. If you're using earbuds or other headphones that have a stereo mini plug, you'll need a stereo-mini-to-stereo-1/4" adaptor.

- *keyboard/guitar amp*—connect the JUNO-Di to the amp in mono or stereo, depending on the amp. If you're using a

    - *mono amp*—connect the JUNO-Di's OUTPUT L (MONO) jack to an amp input.

    - *stereo amp*—connect the JUNO-Di's OUTPUT L (MONO) and R jacks to the amp's left and right inputs, respectively.

Match the battery-powered JUNO-Di with Roland's battery-powered CUBE Street or MOBILE CUBE, and you've got a rig you can take anywhere.

- *mixer or powered speakers*—connect the JUNO-Di's OUTPUT L (MONO) and R jacks to two of your mixer's or speakers' input channels.
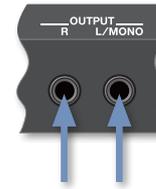
Powering Up and Setting Your Listening Level

1   Turn the JUNO-Di's main VOLUME knob all the way down to avoid blasting your ears or system.

2   Press in the JUNO-Di's rear-panel POWER switch to turn on the JUNO-Di.

    Once the JUNO-Di's finished starting up, you'll be on this screen.

    001:88StageGrand
      PIANO
      Pf001

3   If you're listening on headphones, skip to Step 4. Otherwise, raise the level of your amp, mixer, or speakers to a normal level.

4   As you play the JUNO-Di keyboard, slowly raise the JUNO-Di's VOLUME knob to set your listening level.

The JUNO-Di Controls

A setting on the JUNO-Di is called a "parameter." To change a parameter's value, you select it so it's underlined, as shown here.

001:88StageGrand
  PIANO
  Pf001

Here, the patch number is underlined and therefore selected.

To select a parameter and change its value:

1   Use the JUNO-Di's ◀, ▶, ▲, and/or ▼ buttons to underline the desired parameter.
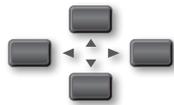
2   Turn the VALUE dial in the display area to set the selected parameter's value.

💡 Hold down the SHIFT button as you turn the Value dial to raise or lower values by greater amounts.

The Synth Side of the JUNO-Di

Listening to the JUNO-Di Demos

The JUNO-Di's sounds are probably the most important thing about it. Let's take a few moments to listen to the main JUNO-Di demo.

📌 If you've already installed a USB memory stick in your JUNO-Di, please remove it and turn the JUNO-Di off and back on before proceeding with demo playback.

1   Press the PLAY/STOP button in the SONG PLAYER area— the Demo screen appears and first demo starts to play.

PLAY/STOP

DEMO

```
DEMO Have you met?
          (C) 2009 Roland
```

2   If you want to stop the demo before it ends, press the PLAY/STOP button again.

When the demo ends—or you press PLAY/STOP—the display shows the titles of the other built-in demos.

```
<DEMO MENU>    [ENT]
▶All Songs
 Have you met?        ▼
```

3   To play another demo, press ▼ to display and select it, and then press the PLAY/STOP button to hear it.

The JUNO-Di's Sounds

The JUNO-Di contains a lot of sounds, configured in different ways so that you can always have just what you need at hand onstage.

Patches and Rhythm Sets

At the heart of all of the configurations are two types of basic sounds:

- *patches*—that play a single sound up and down the entire keyboard. (The *JUNO-Di Owner's Manual* calls patches "tones.") There are 1,338 factory Preset patches, including 256 GM2 patches). You can also save up to 128 of your own patches.

- *rhythm sets*—which have a different drum or percussion sound on every key. There are 29 Preset rhythm sets onboard (including nine GM2 kits), and you can save another eight of your own.

💡 "GM2" is short for General MIDI 2. To learn more about General MIDI, you can download Roland's *An Introduction to MIDI* InFocus booklet from here.

Combining Sounds

Performances

When you combine sounds in the JUNO-Di, you do so in a "performance." A performance can have up to 16 sounds at a time, playing on top of each other, in different areas of the keyboard, or both. Each sound is played by a "part," which has its own settings that determine how its sound plays.

The JUNO-Di contains 64 factory Preset performances, and you can save another 64 performances of your own.

Performances Built for Speed

In addition to standard 16-part performances, the JUNO-Di has a few special tools for constructing simple performances *fast*. When you press

- *SPLIT*—you can quickly divide the keyboard into Lower and Upper zones, with each having its own sound and part settings.
- *DUAL*—you can play two patches together, layered on top of each other across the entire keyboard. Their parts have their own settings here, too.
- *SUPER LAYER*—you can pile multiple copies of the same patch on top of itself for a single super-fat sound. You can also detune them from each other to make the overall sound even bigger.

We'll discuss the Split, Dual, and Super Layer features in detail later on. If you want to go there now, click the Jump button to the right.

Selecting Sounds

You select sounds on the JUNO-Di using the buttons beneath the display. To select a

- *patch*—press the PIANO, KEYBOARD/ORGAN, GUITAR/BASS, ORCHESTRA, WORLD, BRASS, VOCAL/PAD, or SYNTH button.
- *rhythm set*—press the RHYTHM button to display the available rhythm sets.
- *performance*—press the PERFORM button.

Once you've got the desired type of sound, turn the Value dial to select the specific sound you're looking for.

You can check out the currently selected sound by playing the keyboard, or by pressing the PREVIEW button in the MODE/MIC area so the JUNO-Di plays the sound for you.

You can set up sounds as Favorites that you can grab quickly. We'll discuss Favorites later. If you'd like to read this section now, click this jump button.

Realtime Control of Sounds

The JUNO-Di's sounds respond musically to how you play them, and you can also change them as you play using a variety of "realtime" controls.

For the next section, select a patch you like to play. We'll use it for trying out the things we'll discuss.

The Responsive JUNO-Di Keyboard

The JUNO-Di's keyboard detects the force, or "velocity," with which you play, and the currently selected sound changes accordingly.

Low velocity High velocity
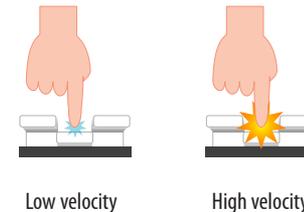
Getting louder and/or brighter as you play harder is one of the most common velocity responses, though, really, lots of things can change with your playing force.

Try playing the patch you've selected and see how it responds sonically to your touch.

If you find you have to play uncomfortably hard or unnaturally soft to make the sounds react, you can change the keyboard's touch sensitivity, as described on Page 75 of the *JUNO-Di Owner's Manual*.

The Pitch Bend/Modulation Lever

The next most basic way to control a patch's sound in realtime is by using the Pitch Bend/Modulation lever to the left of the keyboard. Flip the lever left or right to lower or raise the pitch of notes, or push it forward to add modulation to the notes. Modulation—which means "change"—is often vibrato, but can be most anything depending on how the patch is programmed.

Bend note pitches   Push to add modulation, release to remove it
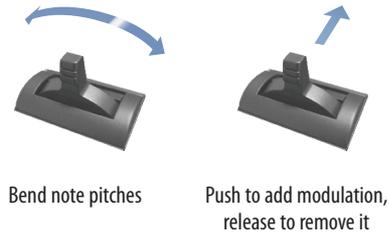
The SOUND MODIFY Knobs
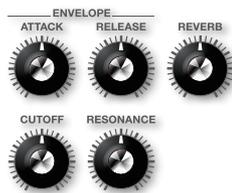
In the SOUND MODIFY area of the JUNO-Di front panel are knobs that let you quickly adjust some important parameters as you play.

- *The ENVELOPE ATTACK and RELEASE knobs*—The ATTACK knob adjusts the speed at which a note starts to play after you press its key. The RELEASE knob adjusts how long it takes a note to return to silence when you release its key.

- *The CUTOFF and RESONANCE knobs*—Change a patch's filter Cutoff and Resonance values to produce the moving "yowl" that's often part of dance and electronic synth music. The CUTOFF and RESONANCE knobs adjust those parameters in the current patch.

Press the SYNTH button to select 001: Porta Lead 1, and turn CUTOFF and RESONANCE as you play the keyboard. (Try turning RESONANCE up a bit first, and then turn CUTOFF for a more obvious effect.)

- *The REVERB knob*—Use this knob to increase or decrease the output level of the JUNO-Di's reverb processor.
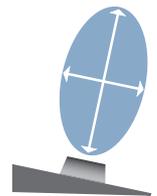
The SOUND MODIFY knobs affect the currently selected patch or rhythm set. If you're using the Dual or Super Layer features they affect the entire sound. When you're playing a standard performance, they affect the currently selected part. For more details on the SOUND MODIFY knobs, see Page 65 of the *Owner's Manual*.

The D Beam

The D Beam is an infrared sensor that tracks the position of your hand as it moves above the sensor. It can operate in any of three ways. Press the desired button beneath the D Beam so it lights to select :

- *SOLO SYNTH*—to play notes by moving your hand over the D Beam.

- *EXPRESSION*—to adjust the parameter designated at the Roland factory as the best for adding expression to the current patch.

- *ASSIGNABLE*—to control the value of a parameter in the current patch that's been set to respond to D Beam control.

As you move your hand down closer to the D Beam sensor, its effect increases. As you move up and away, it decreases. Press the currently lit button to turn off the D Beam.

Viewed from the side, this is the area above the D Beam in which you can move your hand.

Transposing the Keyboard

The JUNO-Di's Transpose features allow you to easily shift the notes the keyboard plays to any key or octave, allowing you to play in any key using the fingerings you find most comfortable.

To Transpose the Keyboard by Octaves

1   Press the OCTAVE DOWN or UP button to lower or raise the keyboard's pitch as desired. The JUNO-Di displays the amount of transposition.

Transposing the Keyboard by Semitone Steps

1   Hold down the TRANSPOSE button and then use the - or + button to lower or raise the pitch in semitone steps as desired. The JUNO-Di displays the selected amount of transposition.

Using the Split, Dual and Super Layer Features

When you use the JUNO-Di's Split or Dual features, you're using a special performance in which all the parts except Parts 1 and 2 are turned off. With the Super Layer feature, Parts 1-5 are available.

Quickly Creating a Two-Sound Split

When you create a simple split using the JUNO-Di's Dual feature, the keyboard is divided into Lower and Upper zones, each of which plays its own sound. Here's how to use the Split feature.

SPLIT

1   Select the patch or rhythm set you want to play with your right hand.

2   Press SPLIT to light it and display the Split temporary performance.

```
001:Temp Perform *
U Pf001:88StageGrand      ← Upper sound
L Gt058:Finger Bs 3       ← Lower sound
```

3   Select the desired Lower patch or rhythm set.

4   To turn off a split, press SPLIT again so it's unlit.

Changing the Split Point

You can change the lowest key—or "split point"—that plays the Upper sound. Here's how.

1   When SPLIT is lit, hold down SHIFT and press SPLIT to display the split-point screen.

SHIFT + SPLIT

```
<SPLIT POINT C 4 >
U Pf001:88StageGrand
L Gt058:Finger Bs 3
```

2   Turn the Value dial to select the desired split point.

3   Press SPLIT again to leave the split-point screen.

Quickly Creating a Two-Sound Layer

The Dual feature layers two patches or rhythm sets on top of each other so they both play when you strike any key on the keyboard. Here's how to use the JUNO-Di's Dual feature.

1 Select the first patch or rhythm set you want to use in your layered sound.

2 Press DUAL so it lights and Parts 1 and 2 are displayed.

```
001:Temp Perform *
  1 Pf009:Fairy Piano
  2 Oc002:JUNO Strings
```

3 Select the patch or rhythm set you want to layer with your first sound.

4 To turn off a Dual layer, press DUAL again so it's unlit.

💡 You can adjust the relative volume of your parts, as explained in "Adjusting Part Levels," at the right of this page.

Swapping Split and Layer Sounds

When you're dealing with a simple split or layer, you can easily swap your Upper and Lower sounds. Here's how:

1 Press SPLIT or LAYER so it's lit and its parts are displayed.

1 Cursor to the top sound, hold down SHIFT and press ▼, or cursor to the bottom sound, hold down SHIFT and press ▲.

Using Super Layer

With the JUNO-Di's Super Layer feature, you can stack up to five detuned copies of a single patch on top of each other for the ultimate thick, fat sound. Here's how to use it.

1 Select the patch you want to use.

2 Press SUPER LAYER so it lights to display the Super Layer's temporary performance.

```
001:Temp Perform *
  Sy001:Porta Lead 1
  Layer:3   Detune:10
```

3 Set the parameters on this screen as desired. You can set

• *Layer*—to the number of copies of the original sound you want to use.

• *Detune*—to the amount of detuning that's applied to the copies. More detuning makes the sound bigger though less precisely tuned.

Adjusting Part Levels

To adjust the volumes of your Upper and Lower sounds in a split or layer, or the parts in a performance:

1 Hold down SHIFT and press the PERFORM button to display the PART EDIT screen.


```
◄PART EDIT
  Upper Level      100
  Lower Level      100
```

We're adjusting a split's part levels in this screenshot.

2 Adjust any part as desired. To set the level of

• *a Split or or Dual layer part*—select and adjust the part's Level parameter.

• *Parts 1-16 of a performance*—select and adjust the part's Level parameter.

Quick Access to Favorite Sounds and Performances

The JUNO-Di's Favorite feature allows you to set up frequently used patches, rhythm sets, and performances for quick recall by registering them as Favorites. Any Favorite can be easily grabbed at any time.

To use a split, Dual layer, or Super Layer as a Favorite, you'll need to write its temporary performance into the JUNO-Di's memory first.

You can have up to 100 Favorites, organized into Favorite Banks 0-9. Each bank holds 10 Favorites, called "Favorites 0-9." Each Favorite in a bank is assigned, or "registered," to the corresponding 0-9 button beneath the display.

When you're onstage, you'll have a bank selected and ready to go so you can quickly recall the Favorites it holds. To make this happen, you'll group your Favorites ahead of time in the way you expect to need them onstage. For example, if there are 10 patches, rhythm sets, or performances you know you'll need in a set, register them all in the same Favorites bank so you can get to each one instantly as you play by pressing its 0-9 button.

The JUNO-Di remembers your Favorites even when you power down. Only a Factory Reset clears them.

Navigating Favorites Banks

To Figure Out the Favorites Bank That's Selected

1   Press the FAVORITE BANK button so it lights—the button for the currently selected Favorites bank flashes.

To Select a Favorites Bank

1   Press the FAVORITE BANK button so it lights.

2   Press the desired Favorite bank's 0-9 button—its name appears in the display, and the button flashes for a moment, at which point the bank's button and the BANK button turn off.

Registering a Sound or Performance as a Favorite

1   Select the patch, rhythm set, or performance you want to register as a Favorite.

2   If you're not already there, navigate to the desired bank as described in the previous section.

3   Hold down the FAVORITE ON/OFF button and press a 0-9 button to register the current patch, rhythm set, or performance there. The JUNO-Di confirms what you've done with an onscreen message.

To change the Favorite registered to a 0-9 button, just register the button's new Favorite there.

Selecting a Favorite Sound or Performance

1   If you're not already there, navigate to the desired Favorites bank as described in "To Select a Favorites Bank," above.

2   Press the FAVORITE ON/OFF button so it's lit if it's not already.

3   Press a Favorite's 0-9 button to select, or "recall," the Favorite you want.

You can also move through Favorites using a footswitch—see Page 47 of the *Owner's Manual* for details.

The FAVORITE UTILITY screen provides tools for managing your Favorites. To jump there, hold down SHIFT and press the FAVORITE ON/OFF button—see Page 69 in the *Owner's Manual* to learn more.

JUNO-Di Synth Performance Tools

Both the JUNO-Di's Arpeggiator and Chord Memory features automate the playing of phrases that might otherwise be difficult to pull off onstage. They can also act as inspiring creative tools.

The Arpeggiator

The arpeggiator takes notes you play on the keyboard and generates a pre-programmed phrase based on those notes. Each of these phrases is called a "style." The JUNO-Di contains 128 styles. Arpeggios can be great for creating repeating patterns such as those used in dance music, and can also produce automatic bass lines that begin with the note you play on the keyboard.

Let's explore how arpeggios work on the JUNO-Di.

1   Start by selecting a polyphonic patch—Synth Patch 017: Jump Poly.

2   To turn on the arpeggiator, press the ARPEGGIO button so it lights and the ARPEGGIO screen appears.

ARPEGGIO

```
<< ARPEGGIO >>
001:Basic 1 (a)
▼Arpeggio Hold    OFF
```

On the ARPEGGIO screen, you can customize the arpeggio to be played in a variety of ways, as explained on Page 67 of the *Owner's Manual*.

3   Hold down some notes on the keyboard and try out the available arpeggio styles.

4   As you listen, move your fingers around to different keys to hear how your notes interact with the current arpeggiator style.

💡 If you'd like to play some notes and then just let go as the arpeggiator takes over, turn the Arpeggio Hold parameter on.

5   Let go of the keys—or turn off Arpeggio Hold—when you're done experimenting.

6   Select the monophonic Synth Patch 023: Hot Coffee. It plays one note at a time, no matter how many keys you press. The arpeggiator does some very interesting things to mono patches.

7   Play around a bit more with the arpeggio styles as you play different notes with Hot Coffee.

8   To turn the arpeggiator off, press the ARPEGGIO button again to unlight it.

Chord Memory

The JUNO-Di's Chord Memory feature generates a chord based on a single key you play on the keyboard. The chord can be set up to play its notes in several ways. A "chord set" is an octave's worth of chord structures assigned to keys—the actual notes they play are based on the key you're in. There are 17 factory chord sets.

Let's try out this feature using the first GUITAR/BASS patch, 001 JUNO Nylon.

1   Turn on the Chord Memory feature, by pressing the CHORD MEMORY button so it lights—the CHORD MEMORY screen appears.

CHORD MEMORY

Chord Set parameter →
```
<< CHORD MEMORY >>
001:Pop 1
KEY:C  RollType:   UP
```

There are three parameters on this screen you can use for getting just the chord form you want. The first parameter allows you to select the "chord set" that the Chord Memory feature is to use.

📌 See Page 125 in the *Owner's Manual* lists the chords each key plays in the factory chord sets. (The chart shows the chords for the key of C.)

2   Adjust the Chord Set parameter to try out different sets as you play some keys on the keyboard and listen to the chords each one contains.

3   Set the KEY parameter to select the actual key of your song. Each set's chords are automatically transposed into the key you select.

4   The Roll Type parameter is what makes CHORD MEMORY so useful for playing guitar sounds. By default, it's set to UP, which means that the notes in the chord are played as a quick glissando from the lowest key to the highest, like a standard guitar strum. You can also select DOWN so they go in the opposite direction, ALT so the JUNO-Di alternates between upward and downward glisses, and OFF if you want the notes in a chord to be played at the same time, with no roll.

The JUNO-Di as a MIDI Controller

The JUNO-Di is a natural as a MIDI controller you can use for playing external MIDI sound modules, soft synths on a computer, or sequencing in a computer-based digital audio workstation ("DAW"). In fact, with its light weight, battery power, onboard sounds, and USB MIDI connectivity, the JUNO-Di makes an killer road or stage companion for a laptop, providing you with a totally portable performance/sequencing system.

You can connect the JUNO-Di's MIDI OUT jack to any device that has a MIDI IN jack using a MIDI cable, or exchange MIDI messages with a computer using a USB cable. To learn more, see the *Using the JUNO-Di with a Computer* Workshop booklet.

MIDI CONTROLLER

> Before connecting the JUNO-Di via USB to a computer for MIDI communication, you've got to install its USB driver on the computer. The *Using the JUNO-Di with a Computer* Workshop booklet describes the installation process in detail.

Page 81 in the *JUNO-Di Owner's Manual*. has additional information about using the JUNO-Di as a MIDI controller.

Using a Microphone with the JUNO-Di

The JUNO-Di has a MIC IN jack, a mini-mixer, and a vocoder that uses the mic for shaping notes played on the keyboard. There's a 1/4" phone-type jack on the back of the JUNO-Di for connecting your mic.

MIC INPUT

The MODE/MIC area of the JUNO-Di front panel contains MIC IN controls for your mic. You can:

* *Set your mic's level*—using the MIC IN VOLUME knob.

* *Add reverb to the mic*—by pressing and lighting the MIC IN REVERB button.

Hold down SHIFT and press the MIC IN area's REVERB button to display the MIC IN SETTINGS screen.

SHIFT + REVERB

> Make sure the REVERB button is lit to hear the effect, since pressing SHIFT and REVERB to get to this screen turns off the REVERB button.

> To display all of the MIC IN SETTINGS screen's parameters, use the ▼ and ▲ buttons.

On this screen, you can:

* *customize the mic's reverb level, reverb type, and reverb length*—by setting the Reverb Level, Type, and Time parameters.

* *set whether the mic is live or used only for the vocoder*—by setting Mic Mode to ALL or VOCODER ONLY, respectively.

Using the JUNO-Di Vocoder

The JUNO-Di's vocoder effect allows you to control the shape of notes you play on the keyboard by speaking or singing into your mic. Here's how to use it.

1   Select the VOCAL/PAD patch 036: VOCODER Ens.

> Though VOCODER Ens is a good place to start, you can also use VOCAL/PAD 034 VOCODER Robt or 035 VOCODER Chr, or PERFORM 60, 61, and 62, which are bass, organ, and pad vocoder sounds, respectively.

> What makes the JUNO-Di vocoder work is one of its multi-effects (or "MFX"). You can actually vocode any JUNO-Di sound by setting the MFX to 79:VOCODER, as explained on Page 61 of the *Owner's Manual*.

2   Hold down some keys on the keyboard and sing or speak into the mic—you're "singing" or "speaking" the JUNO-Di's notes.

3   Try tweaking the vocoder's settings to optimize the effect for your mic and voice, as described on Page 43 of the *Owner's Manual*.

The Song Player Side of the JUNO-Di

Now that we've discussed the JUNO-Di as a synthesizer, let's discuss its Song Player tools. The Song Player brings a few different things to the table:

- *You can play along with rhythm patterns played by the built-in drum machine.*

- *You can play songs in .WAV, AIFF, MP3, and/or SMF (Standard MIDI File) format stored on a USB memory stick.*

- *You can connect a personal music player or CD player and play along with its music.*

Playing Rhythm Patterns on the JUNO-Di

The JUNO-Di contains rhythm patterns—beats—that are perfect for playing along with onstage. It's got 24 Preset rhythm patterns, and you can adjust the tempo of any pattern.

Rhythm patterns are arranged in "rhythm groups," which are sets of six stylistically related rhythm patterns, along with a rhythm set that's pre-programmed to play them.

To use the Rhythm Pattern feature, press the SONG PLAYER RHYTHM PATTERN button so it lights and the RHYTHM PATTERN screen is displayed.

The JUNO-Di Rhythm Patterns

While the RHYTHM PATTERN screen is displayed, Category Buttons 1-6 directly beneath the display light to act as rhythm pads. Each one triggers playback of one of the rhythm patterns in the current rhythm group.

How To Play Rhythm Patterns

- *To start playing a rhythm pattern*—press its pad. The pad lights and the pattern begins playing.

- *To switch to another rhythm pattern*—press the desired rhythm pattern's pad. The JUNO-Di immediately switches to the new rhythm pattern.

- *To stop a rhythm pattern*—press its lit pad or press the SONG PLAYER PLAY/STOP button.
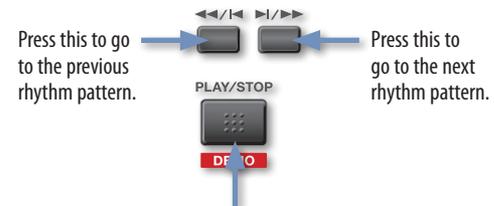
Setting the Rhythm Pattern Tempo

1 Press the TAP TEMPO button to open the Tempo window.

2 Set the tempo as desired by

- *tapping it out*—on the TAP TEMPO button.

- *setting the Tempo parameter*—using the VALUE dial.

The Rhythm Pattern Transport Buttons

While the RHYTHM PATTERN screen is displayed, the transport buttons in the SONG PLAYER area allow you to to navigate rhythm patterns. Here's what they do:

Press this to go to the previous rhythm pattern.

Press this to go to the next rhythm pattern.

Use this button to start playback of the last-selected rhythm pattern, or stop playback of the currently playing rhythm pattern.

Setting the Rhythm Pattern Level

As a rhythm pattern plays, you can adjust its volume by pressing the SONG PLAYER's LEVEL button, and then turning the Value dial to set its volume as desired.

Selecting Rhythm Sets

Though each rhythm group contains a preferred rhythm set, you can use any rhythm set you like with any rhythm. To change rhythm sets, highlight the name of the current rhythm set on the RHYTHM PATTERN screen, and turn the VALUE dial to select another set.

Playing Along with Songs on a USB Drive

If you've got a personal computer, you can load songs onto a JUNO-Di-formatted USB memory stick, and the JUNO-Di can play them. This makes it easy to perform along with pre-recorded tracks.

> To learn how to initialize, or format, a USB stick for the JUNO-Di, see Page 78 in the *Owner's Manual*. You can also use a USB stick for backing up your own data, as explained on Page 77 of the *Owner's Manual*.

> We recommend using the Roland M-UF1G USB memory stick. Any standard USB memory stick should work, though Roland obviously can't guarantee the quality of other manufacturers' products.

The JUNO-Di's Song Player lets you play along with a variety of audio and MIDI file types. You can play

- *MP3 files*—at a 44.1 kHz sample rate. The JUNO-Di stage plays MP3s with a range of bit rates, as listed on Page 71 of the *Owner's Manual*.

- *audio files*—in .WAV or AIFF format with a 44.1 kHz sample rate. The JUNO-Di can play 8-, 16-, and 24-bit audio files.

- *SMFs*—that are Type 0 (all tracks combined into one track) or Type 1 (multiple separate tracks) SMFs. SMF songs play the JUNO-Di's internal General MIDI sounds according to MIDI Bank-Select and Program-

Change messages embedded in the file. An SMF can be no larger than roughly 240 kb in size, and if an SMF contains System Exclusive ("SysEx") data, that data must have a packet size of 512 or less.

> To learn more about MIDI, SMFs, and SysEx data, see Roland's *An Introduction to MIDI* InFocus booklet, which you can download *here*.

Using the Playlist Editor on Your Computer

The included computer-based Playlist Editor software allows you to build playlists that place audio and MP3 songs in the order you want. The JUNO-Di can then play these playlists. The Playlist Editor comes with its own documentation, so we'll just take a quick look at it now.

> If you want to play individual songs without using a playlist, you can copy the song files to your USB stick on your computer without putting them into any folders on the USB stick.

Before Launching the Playlist Editor

You'll need to install the Playlist Editor on your computer according to its installer's instructions—the software's on the CD that came with your JUNO-Di.

Using the Playlist Editor

When the Playlist Editor launches, you'll see:

The pane at the right of the Playlist Editor screen shows you the contents of whatever it is you've selected in the Playlist list. Below, we've selected Playlist Library, so the pane on the right is showing us our entire playlist library. You can add songs to the library by dragging them into the pane or by using the Add Song... File menu command.
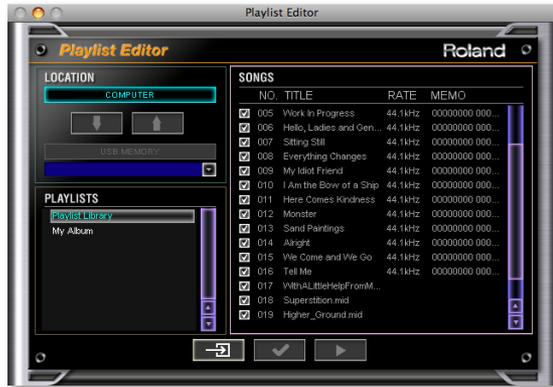
You can create a new playlist using the Edit menu's New Playlist command and then dragging the desired songs onto its name.


If you prefer, you can select the library songs you want to use, and then hit the checkmark button at the bottom of the screen to create a new playlist from those songs.

A playlist can contain up to 999 songs.

Once you've created the playlist(s) you want, and set its/their playback options, select the stick—called "JUNO-Di" in the Playlist Editor's Drive Selection popup menu—and then click the arrow pointing from your computer to the USB stick, as shown here.
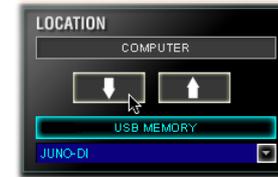
When the JUNO-Di asks if you're sure, click OK.

Working with Songs and Playlists in the Song Player

The PLAYLIST SELECT Screen

When you've got the playlists and songs on your USB stick, insert it into the JUNO-Di's front-panel USB jack and wait a few moments until you see "Loading..." momentarily appear.

Press the SONG PLAYER button, and you'll see the PLAYLIST SELECT screen:

In this screenshot, our first playlist is called "Sand Paintings."

This is the screen on which you select and play songs and playlists from your USB stick. To:

- *select something onscreen*—use the Value dial or the ▼ and/or ▲ buttons.

- *select a playlist and display its contents*—use the Value dial or the ▼ and/or ▲ buttons, and then press ENTER.

- *close a playlist*—press the ◄ button.

When you're in a playlist or folder, a left-pointing arrow shows the way out.
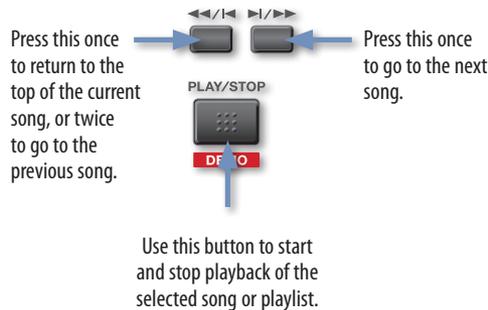
Playing Songs and Playlists

📌 Before playing back an SMF, press the PERFORM button to light it. If you want to play along on the JUNO-Di keyboard, turn the Value dial to select the PERFORM sound you want to play before starting playback.

To:

- *play a song that's not in a folder or playlist*—press ▲ to select USB Memory, and then press the ENTER button to display a list of songs. Select the song you want to play, and then press PLAY/STOP.

- *see all of the songs in your playlist library*—select Playlist Library and press ENTER. To play a song, select it and press the PLAY/STOP button.

- *select and play a playlist*—select it and press PLAY/STOP. (If you enabled Chain Play in the Playlist Editor, its songs play one after another.)

- *select and play an individual song in a playlist*—select the playlist and press ENTER. Select the desired song and press PLAY/STOP.

The SONG PLAYER Transport Buttons

◄◄/◄   ►/►►

Press this once to return to the top of the current song, or twice to go to the previous song.

Press this once to go to the next song.

PLAY/STOP

DEMO

Use this button to start and stop playback of the selected song or playlist.

Music Minus One

The JUNO-Di's Music Minus One feature allows you to quickly silence one of the tracks in an SMF song by simply pressing the C. CANCEL/MINUS ONE button to light it. Typically the track you remove from the arrangement is the one you want to play yourself, live. See Page 76 of the *Owner's Manual* to learn how to designate the track to be muted with Music Minus One.

C. CANCEL MINUS ONE

Adjusting the Playback Volume of a Song

To change the playback volume of a song, press the SONG PLAYER area's LEVEL button to display the AUDIO LEVEL screen when an audio or MP3 file is selected, or the SMF LEVEL screen when an SMF is selected. Turn the Value dial to set the playback level as desired.

LEVEL

Playing Along with a Personal Music Player or CD

You can also play along with music from a personal music player— the type that plays MP3 and AAC files—or a CD player. Using a 1/4" stereo mini cable, you can connect the player's headphone or line out to the rear-panel EXT INPUT jack. The audio from the player is heard along with the JUNO-Di's own sounds in the main outputs.

EXT INPUT

Removing a Lead Vocal or Instrument

You may also be able to use the JUNO-Di's Center Cancel feature to remove the lead vocal—or anything else in the center of player's stereo image. The success of this feature depends on each song's mix—press the C. CANCEL/MINUS ONE button so it lights to give it a try.

The End

We hope you've found this workshop helpful. Keep an eye out for new JUNO-Di updates and support documents you can download for free at *www.RolandUS.com*.