# VG-99 V-Guitar System



# Using the Built-in Tuner

**VG99WS04**

## About the Workshop Booklets

Roland's VG-99 V-Guitar System is, simply put, the most powerful guitar processor ever made. It's the third and latest generation V-Guitar system from Roland, and it offers an astounding set of creative sound-making tools for the guitarist. Featuring dual COSM guitar and amp modeling paths, two independent multi-effects processors, massive realtime control options, pitch-to-MIDI conversion, and USB, the VG-99 is a guitarist's dream machine, capable of producing sounds that are limited only by your imagination.

Each VG-99 Workshop booklet focuses on one VG-99 topic, and is intended as a companion to the *VG-99 Owner's Manual*.

## About This Booklet

The VG-99 has a built-in chromatic tuner for tuning your instrument. The tuner is extremely easy to use, and it can be easily accessed whenever you need it, either by pressing its dedicated front-panel button or assigning it to an external switch.

### 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.

## Using the Tuner

### Turning the Tuner On and Off

To turn on the built-in tuner, press the TUNER button on the VG-99's front panel. To turn the tuner off, press TUNER again.

You can access the tuner from any of the VG-99's screens. Each press of the TUNER button toggles between the TUNER screen and the previous screen.

### Tuner Modes

When the TUNER screen is displayed, you can use the PAGE buttons to choose between two different tuner display modes. The main difference in the modes is the way in which pitches are displayed. Use whichever mode works best for you.

The tuner behaves in slightly different ways depending on the "GK Connect" setting, which you adjust when setting up the VG-99 to use a divided pickup or normal guitar pickups. To learn more about GK Connect and using different pickups, see the VG-99 Workshop booklet *Pickup Settings*.

#### Multi Mode

On Page 1, the tuner display is in Multi mode. In this mode, each individual string that's sensed by a divided pickup installed on your guitar is shown on its own individual line in the display. This allows you to see and tune the pitches of multiple strings that are played simultaneously.



Here, the pitches of Strings 2, 3, and 5 are displayed simultaneously.

A divided pickup is required for the VG-99's tuner to simultaneously respond to the separate pitches of the guitar's six strings. If you're using just your guitar's regular pickups with the VG-99, the tuner can only respond to one string at a time, and playing more than one pitch will confuse the tuner. Additionally, in the Multi mode display, the pitch of any string played is shown only on the top line.

### Single Mode

On Page 2, the tuner display is in Single mode. In this mode, the tuner can respond to only one pitch at a time, which is shown in the center of the display. When you're using a divided pickup, the number of the currently played string is highlighted in the upper left-hand corner of the display.
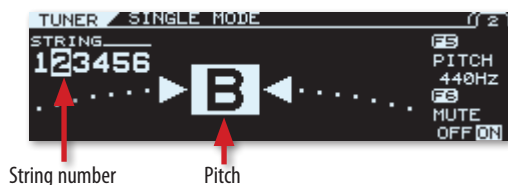


String number          Pitch

If you're using just your guitar's regular pickups with the VG-99, the STRING display in the upper left-hand corner is not shown.

## Tuning Your Instrument

In either tuner mode, when you play a string, its current pitch is displayed. Tune the string so that the desired pitch is shown.

When the desired pitch is displayed, fine tune the string until it's in tune. The arrows on either side of the displayed pitch show if the pitch is sharp or flat (if the right arrows light, the pitch is sharp; if the left arrows light, the pitch is flat.) The string is in tune when both large arrows light steadily and the pitch is highlighted.

Even when using a divided pickup in Multi mode, you'll usually achieve the best results by playing and tuning one string at a time. Play the desired string in open position or at its 12th-fret harmonic.

## Calibrating the Tuner

As shipped from the factory, the VG-99's tuner is calibrated to the standard 440 Hz reference. Most of the time, you'll want to keep it there. However, there may be occasions when you need to calibrate the tuner to a slightly different pitch.

From either TUNER screen, you can calibrate the tuner by using the F5 button or knob to set the reference pitch anywhere from 435-445 Hz. The current reference is shown under PITCH on the right-hand side of the tuner display.

440 Hz—or "A-440"—is the tone that serves as the international standard reference pitch for tuning musical instruments. This pitch is the musical note "A" in the fourth octave on the standard piano. On the piano keyboard, it's the A note above middle C. Most tuning forks produce the 440 Hz reference pitch.

## Muting the VG-99's Output While Tuning

It's handy to mute the sound while tuning, so that your audience is spared from hearing this necessary but utilitarian chore.

From either TUNER screen, use the F6 knob or button to toggle the tuner's mute function on and off. The current setting is shown under MUTE on the right-hand side of the tuner display.

- *When MUTE is ON*—the VG-99's outputs are silenced when the tuner is on.
- *When MUTE is OFF*— the sound is output as normal when the tuner is on.

Muting the VG-99's output by turning on the tuner is useful for other things besides tuning, such as silencing your rig when you're on a set break at a gig, or avoiding a "pop" when switching a cable to a different guitar.

## Accessing the Tuner Remotely

The tuner is likely to be one of the features you use most on the VG-99. Besides accessing it with the front-panel TUNER button, you can also assign the tuner to one or more external control sources for easy access.

### Using the S1/S2 Switches

Roland's GK-3, GK-KIT-GT3, GK-2A, and GK-2 pickups—as well as most Roland-ready guitars and third-party divided pickup systems—have two onboard switches that allow you to control various VG-99 functions directly from your guitar. These are called "S1" and "S2" switches. One of the functions you can control is turning the tuner on and off.
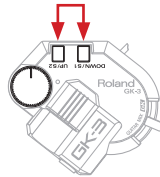
Here's how to assign the S1 switch to turn the tuner on and off:

1  Press SYSTEM.

2  Use the PAGE buttons to select Page 1 in the display (the current page number is shown in the upper right-hand corner of the display), and then press F4 (CTL).

3  Use the PAGE buttons to select Page 1 in the display.

4  Use the F2 and F3 knobs/buttons to highlight GK S1,S2 in the left column.



5  Use the F5 knob/button to select S1:TUNER/S2:BPM TAP in the right column.



6  Press EXIT twice to return to the Play screen.

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The Play screen is the VG-99's "home" screen. It's the screen that's displayed after the VG-99 finishes its power-up sequence. You'll usually want to return to the Play screen when you're done editing any VG-99 functions.

With the above assignment, the S2 switch is automatically set for tap tempo input of the VG-99's master BPM (beats per minute) setting.

You can also make the above assignment from Page 1 of the GK Setting screens. Additionally, the control orientation of the S1/S2 switches can be reversed in a GK Setting. To learn more about GK Settings, see the *VG-99 Owner's Manual* or the VG-99 Workshop booklet *Pickup Settings*.

### Using a Footswitch Connected to the CTL 3/4 Jack

The CTL 3/4 jack on the rear panel of the VG-99 allows you to connect a footswitch (or footswitches) to control various functions. One available function is TUNER ON/OFF. When making assignments to these footswitches in the VG-99, they're called "CTL3" and "CTL4."



We recommend using the optional BOSS FS-5U or FS-6 footswitches with the VG-99.

The FS-5U is a single-button footswitch that you connect to the CTL 3/4 jack with a standard guitar cable. You can connect two FS-5Us to the CTL 3/4 jack with a special "Y" cable (such as the Roland PCS-10IC).

The FS-6 is a dual-button footswitch that you connect to the CTL 3/4 jack with a single 1/4-inch TRS cable.

## Assigning TUNER ON/OFF to CTL 3 or CTL 4

This procedure is similar to the S1/S2 assignment we discussed previously.

1   Press SYSTEM.

2   Use the PAGE buttons to select Page 1 in the display, and then press F4 (CTL).

3   Use the PAGE buttons to select Page 1 in the display.

4   Use the F2 and F3 knobs/buttons or button to highlight CTL3 or CTL4 in the left column. If you have a single FS-5U footswitch connected, highlight CTL3. If you have two FS-5Us or an FS-6 connected, highlight either CTL3 or CTL4.

5   Use the F5 knob/button to select TUNER ON/OFF in the right column.
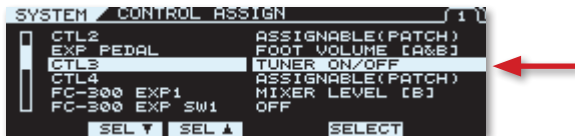


6   Press EXIT twice to return to the Play screen.

If you have two FS-5Us or an FS-6 connected, you can use Steps 4 and 5 above to assign a different VG-99 function to the second footswitch (CTL 3 or CTL 4).

## Using the FC-300

The optional FC-300 MIDI Foot Controller is the perfected integrated foot controller for the VG-99. You can select patches with the number and bank buttons, and control various VG-99 functions with the CTL 1 and CTL 2 pedals and the two expression pedals.



If the onboard pedals aren't enough, the FC-300 has rear-panel jacks for connecting up to six optional footswitches or up to three optional expression pedals for additional realtime control. (Various combinations of both switches and pedals can also be configured).

Normally, the FC-300's onboard display shows the VG-99's currently selected patch. However, when the tuner is turned on, the display switches to show the tuner.

The string is in tune when the center indicator lights steadily



Pitch
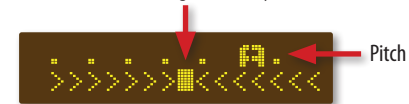
The FC-300 tuner display.

You can use the FC-300 to turn the VG-99's tuner on and off in a variety of ways, as we discuss next.
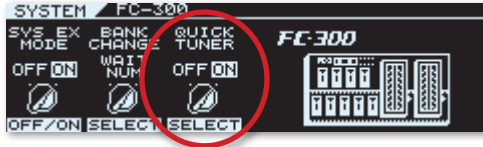
## Quick Tuner

The Quick Tuner function allows you to toggle the VG-99's tuner on and off from the FC-300 by pressing the number pedal for the currently selected patch. This is an easy and intuitive way to turn the tuner on and off with the FC-300, and saves your control pedal assignments for other VG-99 functions.



The FC-300's number pedals.

To enable the Quick Tuner function:

1 Press SYSTEM.

2 Use the PAGE buttons to select Page 1 in the display, and then press F5 (FC-300).



3 Use the F3 knob or button to select ON.

4 Press EXIT twice to return to the Play screen.

The Quick Tuner function is only available when the VG-99's Play screen is displayed.

## FC-300 CTL and EXP Pedal Switches

You can assign TUNER ON/OFF to the FC-300's onboard CTL pedals and/ or expression pedal switches. (An expression pedal switch is activated by pressing down on the toe of one of the FC-300's built-in expression pedals.)

Additionally, you can assign TUNER ON/OFF to an FS-5U or FS-6 connected to the FC-300's rear-panel CTL jacks (3,4/5,6/7,8).

The procedure for making these assignments is similar to that described previously in "Assigning TUNER ON/OFF to CTL3 or CTL4." To make an assignment, simply choose the desired FC-300 target controller instead of CTL3 or CTL4.

- *FC-300 EXP SW1 and FC-300 EXP SW2*—These represent the FC-300's expression pedal switches.

- *FC-300 CTL1 and FC-300 CTL2*—These represent the FC-300's onboard CTL pedals.

- *FC-300 EXP3/CTL3 and FC-300 CTL4*—These represent footswitches connected to the CTL 3,4 jack.

- *FC-300 EXP4/CTL5 and FC-300 CTL6*—These represent footswitches connected to the CTL 5,6 jack.

- *FC-300 EXP5/CTL7 and FC-300 CTL8*—These represent footswitches connected to the CTL 7,8 jack.

Each of the FC-300's rear-panel jacks CTL jacks is a dual-function jack that allows for the connection of either one or two footswitches or an expression pedal (such as the Roland EV-5). The functionality of each jack is set in the FC-300's system parameters. To learn more about using external footswitches and expression pedals with the FC-300, see the *FC-300 Owner's Manual*.

## The End

We hope you've found this workshop helpful. Keep an eye out for other VG-99 Workshop booklets available for downloading at *www.RolandUS. com*.