RIVERA


# VENUS 5 OWNERS MANUAL

Version 1.0
October, 2010

**Your Rivera Amp Is An Important Part Of Your Sound**

Your sound is your signature, your mark, your voice. An amp only deserves to have your guitar plugged into it if it can deliver the tone you want--and, of course, the dependability you need. It's as simple as that. And it's exactly why you bought your RIVERA amp. For that, we thank you, and we're confident that you'll enjoy your amp for years to come.

Many factors go into creating a great amp--experience, an understanding of what guitarists want, and a lot of hard work. You'll notice that tone isn't on any parts list. Roadworthiness

isn't, either. And there's no law saying that an amp must sound good or be well-made. But we dedicate ourselves to making the best-sounding, most reliable amplifiers anywhere. That's why we use only the highest-quality components, regardless of price. Such features as metal jacks, ultra-strong dadoed cabinet construction, and highest-quality electronic components are part of our uncompromising approach. They're chosen for their precision, strength, and ability to withstand the rigors of years of use--and occasional abuse--on the stage and in the studio. No compromises are made because cutting any corners--no matter how small--means settling for second best. This is the premise and promise by which we make amps.

This requires dedication to you, the guitarist, and a belief that an amp is more than a collection of parts. It's part of your sound.

Please fill in the following information for future reference:

**Model Name:**
**Model Number:**
**Serial Number:**
**Dealer's Name:**
**Dealer's Address:**
**Date of Purchase:**

**Packing Information**

**Unpacking**

Before you plug in, inspect your Venus 5 amp for any damage. Your amp was inspected and sound-tested before shipment, but transportation can sometimes be tough. Check that the FS-7R Footswitch and power cord have been shipped with the amp. If parts are missing, or if any damage has occurred, contact your dealer.

**Packing Materials**

We designed the original box and packing materials to protect your amp during shipment. Save them. If you ever need to send your amp to us or to anyone else, the original box and packing materials will ensure safe transit.

**Safety Precautions**

**Warning:** To avoid the risk of shock or fire, do not expose this amplifier to moisture. Do not remove the chassis from its cabinet, or remove metal covers from chassis parts. Removing the chassis from its cabinet exposes extremely dangerous high voltages. There are no user-serviceable parts inside. Hazardous voltages are present inside the chassis. Refer all servicing to qualified personnel.

**Caution:** To avoid a fire hazard, always replace the fuses with the same type and rating.

**Caution:** Always replace the line cord (mains supply) with the proper type.

**Caution:** Always turn off the amplifier before making or unplugging any speaker connections.

Always transport your amplifier securely, preferably in a suitable flight case or packing carton. Before operating your amplifier, be sure the speakers used are properly connected. For countries where 220 to 240 volts AC is encountered, make sure that you have the correct power cord. Our 230-volt export unit can be used with any of these voltages. For the United Kingdom, South Africa, Australia, and New Zealand, we build a special 250V version able to handle higher Mains voltages. For Japan 100 VAC models, all instructions for the 115 VAC models apply.

## *No Time To Read This Manual? At Least Read This Part Now!*

**Before you plug in:**

Take a quick look inside the back of your amp. Make sure of the following--

1. The tubes are securely seated in their sockets.

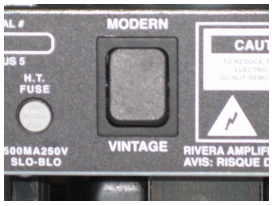
2. Venus 5 amp: A speaker cord is plugged into the Speaker 1 output (this jack must always be used first) from the internal speaker, or to a input jack on a speaker cabinet with a minimum impedance of 4 ohms.

3. The impedance selector is set to match the cabinet's internal impedance (8 Ohms for 1x12, 16ohms for 2x12 combo). Check external cabinet if it's a Venus 6 head.

4. The power cord is plugged in.

5. The FS-7R footswitch is plugged in (this is optional).

6. Check the back and see if the switch is on Vintage(25watts) or Modern(50watts). Start with it on Modern.




**Now look at the front to make sure:**

1. The Volume and Master controls are set at low levels (2 is a good starting point).

2. The Power switch is off (the lower half is pushed in).

3. The Standby switch is set to standby mode (the lower half is pushed in).

**Plug in!**

Now plug the amp into the wall, plug your guitar into either input jack, and set your controls to one of the Quick Start settings outlined here. Then turn on the Power switch. Wait for about a minute for the tubes to warm up. Turn on the Standby switch. Now it's time to rock.

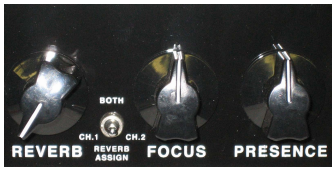
After you've played with your Venus 5 for a while, check out the rest of the manual for some good tips on getting the most out of your amp.

**Quick Start Settings**

If you're looking for a good starting point, try these settings. Remember that every guitar and speaker cabinet sounds different, so try both inputs, and adjust the Focus and Presence to suit your taste.

## Channel 1

**Low gain blues**

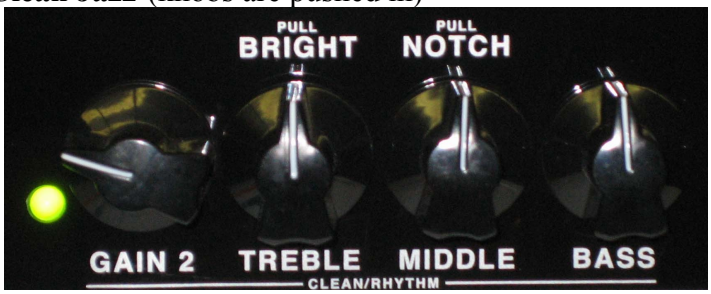

**Medium Gain Blues**-(Master not pulled)

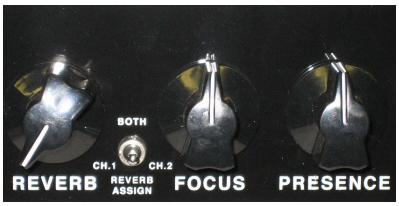

**Crunch**

**High gain shred**-(Master pulled for boost)

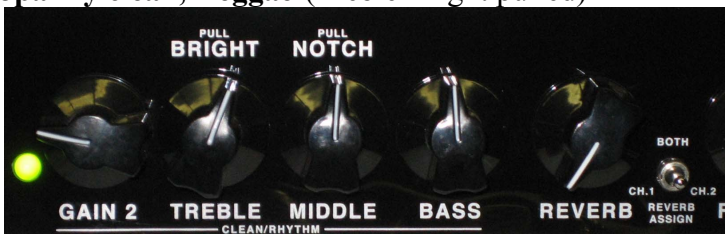

## Channel 2

**Clean Jazz**-(knobs are pushed in)

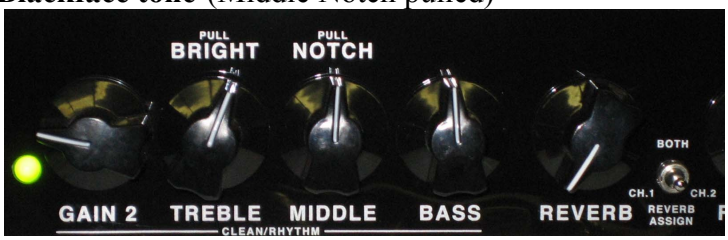


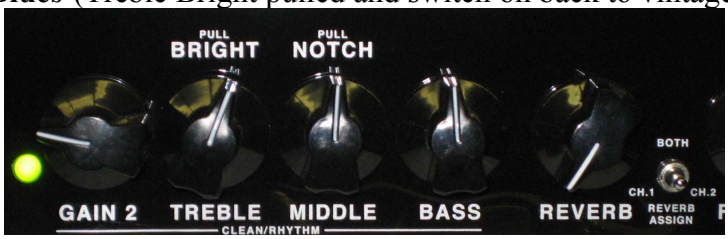

**Spanky clean, Reggae**-(Treble Bright pulled)

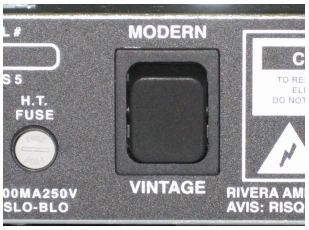



**Blackface tone**-(Middle Notch pulled)




**Blues**-(Treble Bright pulled and switch on back to vintage)




**Front Panel**

**High Gain input** This is a high-sensitivity input. If your guitar has hot pickups, then plugging into it makes it easy to overdrive the preamp section, creating harmonic distortion. Guitars equipped with low-output pickups seem hotter than usual when plugged into this input.

**Low Gain input** This is a low-sensitivity input. Guitars plugged into it have more headroom before distortion sets in (meaning that you can crank up a channel's volume a little louder before you experience Preamp distortion). This is a good choice for a clean overall sound, and is especially well-suited to active pickups or guitars equipped with Preamps.

**Channel 1** Both channels are voiced differently. Channel 1 has an added gain stage which gives it more gain than most of the other Rivera models. It's definitely geared toward creating impressive crunch and thick textured lead tones while retaining a vintage feel (think of as a great "British" tone). Grit, grunge, dirt, progressive--whatever you're looking for in the distortion department is here, from sweet and singing to hard-driving to maximum sustain. Note: Like the controls on all classic amps, the Treble, Middle, and Bass interact, creating smooth, musical tone changes. All three controls operate with even response throughout their ranges. This amp has so much potential gain and sustain, you should not assume that the Volume controls should be set on a typical "10" to start with. You might try 3-5 as a starting point.

**Volume (with channel-select Pull-Switch)** Although it's labeled "Volume," this control does a lot more than determine how loud Channel 1 is. It regulates the Preamp's volume and works with the Master to set the level and distortion amount. A simple rule of thumb is, the higher the Volume is set, the more distortion you get. The push switch selects which channel is active. Its circuitry is designed so that you don't hear a pop or click when the channel is changed (The FS-7R footswitch also selects channels; the Volume's pull switch can be activated with the FS-7R plugged in or not, but to control the amp from the footswitch, keep the switch pushed in. ). See info on the FS-7R and its functions.)

**Bass** The "chunk" and support that form the backbone of your tone come from this control. Its effect on your overall sound will be different at high and low volumes due to the speaker's characteristics and how much distortion you use. The bass EQ curve has been specially tailored to complement the maximum bass response of the RIVERA cabinet. Also, the internal speakers of the Rivera Amplifiers have been chosen to complement the circuitry and cabinet size.

**Middle** The midrange circuit provides the "meat" that fills out your sound. It has a slight notch in the frequency spectrum at about 550 Hz, and turning the knob alters the depth of that notch, letting you dramatically change the overall voicing of your tone.

**Treble** Whether you're looking for edge, slash, or just a little shimmer, this knob's for you. Like the Bass control, the apparent effect of the Treble changes with the loudness and distortion you dial in.

**Master (with Pull Boost switch)** Think of the Master as a sort of governor that sets the maximum loudness for the channel. Also, think of it as the second half of what the Volume knob does. With the Volume turned down and the Master up, there's less distortion than if you crank up the Volume and set the Master lower. The Master control comes after all distortion and tone-shaping on Channel 1, so its level doesn't have a bearing on your basic tone. When you pull the Boost switch on Channel 1, it adds a whole range of harmonics, and not just gain. This is easy to hear by playing a power chord and comparing its sound with the switch pushed in and pulled out. With the switch activated, the tone blooms, going from fat to ferocious.

**Channel 2** Channel 2 is extremely flexible, with a flavor that brings to mind the great classic American tones and textures. You can get some pretty impressive blues overdrive distortion out of Channel 2 too, and as a rhythm channel it brings out every subtlety of your playing. The range of tones can be anywhere from sparkling-clean to perfect for bluesy rhythm--the kind of sound that has an attitude and gets meaner as you pick harder.

**Volume** The Volume knob regulates the Preamp's volume and works with the Master to set the level and distortion amount. A simple rule of thumb is, the higher the Volume is set, the more distortion you get.

**Treble (with Pull Bright switch)** This treble control is similar in operation to the one on Channel 1. In addition, it has a built-in Pull Bright switch. When pulled out, it adds bright highlights to the tone. As the Volume control is increased past about "5", the bright switch's effectiveness will be decreased.

**Middle (with Pull Notch switch)** The midrange circuit has a slight notch in the frequency spectrum at about 550 Hz, and turning the knob alters the depth of that notch. Its Pull Notch switch shifts the frequency center of that notch down to about 250 Hz. (For reference, most 1950s tweed amps as well as many British amps have their notch centered at 550 Hz, while classic "blackface" American amps have theirs centered at 250 Hz.) Experiment with this, especially if you're looking for a uniquely expressive rhythm texture.Typically, a humbucking equipped guitar already has a lot o bass and midrange. If you are seeking clean comping or rhythm tones, having the notch pulled out (250Hz) will allow for more string definition and headroom. Conversely, a single coil equipped guitar has less mids and may need the fat sound of the notch switch pushed in (550Hz).

**Bass** The "chunk" and support that form the backbone of your tone come from this control. Also, when using a singled coil guitar for a jazz or bebop tone, this control will add the needed fatness to the lower strings.

**Reverb** This control allows for the excellent "Hammond 6 Spring Long Pan" Reverb to be enjoyed. This is a "Parallel" effect, and is adjustable for intensity up to 50%. Adjust to taste. The Reverb is assignable and footswitchable.

**Focus** This control is another RIVERA exclusive that actually lets you change the speaker's response characteristics, from tight to loose. The effect can give closed-back cabinets a sound more akin to an open one, and vice-versa, plus you can "custom blend" the amount of hardness your final sound has. The Focus and Presence controls will also be modified in their sweep, increasing their effectiveness.

**Presence** The Presence control is incorporated as a vital part of the power amp section. Think of it as a final brightness control after all the EQ, distortion and effects.

**Standby** By turning the Power on and the Standby off (the down position, labeled with a "0"), you can warm up the amplifier before applying full voltage to the Preamp and power output tubes. This prolongs tube life. Using the Standby switch when you're taking a break also helps to extend the tubes' life, plus it keeps the amp constantly at the ready. Just flip the Standby switch to the up ("I") position, and you're ready to play.

**Power** This is your main power switch. The on position is indicated by the light being illuminated. The off position is marked by the "0" on the switch. Before turning the amp on, always check that a speaker is connected and that the power cord is firmly plugged into the amp and the outlet.

**Rear Panel**

**Mains Input**

Your RIVERA amp has a detachable power cord that connects to the chassis AC connector labeled Mains Input. Always use this cord and, in the event that the power cord requires replacement, replace it with the same type of power cord. Consult your RIVERA dealer for further information. Be sure to use a grounded electrical mains power supply socket whenever possible. These outlets have a grounding pin in addition to the normal line and neutral pin. The power cord supplied with your RIVERA amp has a 3-pin plug. Do not cut off or damage the ground pin. If the available electrical outlet is of the older 2-pin type, use a suitable ground-lift adapter.

The U.S.A., Canada, and Japan share a common CSA/UL-style cord. Most of Europe and Scandinavia utilize a Euro plug and have a SEMKO/VDE-style cord. Australia uses a different type of plug, as does England, and South Africa as well.

Note: Avoid using long power extension cords. Long cords have sufficient resistance to electrical current that the voltage arriving at your amp can be significantly reduced. This can have a bad effect on your tone.

**Mains Fuse**

This AC line fuse protects your amplifier from damage due to shorts, momentary surges, and defective power tubes. In the event of a fuse failure, always replace it with the same type of fuse.

Note: Always turn the amp off and wait about five minutes before replacing a fuse. This allows the parts to cool and high voltages to dissipate.

For 100VAC versions, the Mains Fuse is: 3 Amp, 250 Volt Slo-Blo type (size 3AG, or MDL)

For 115VAC versions, the Mains Fuse is: 3 Amp, 250 Volt Slo-Blo type (size 3AG, or MDL)

For 230/250VAC versions, the Mains Fuse is: T 1.6A (time-delay, 5mm x 20mm size)

**HT Fuse**

The power amplifier circuit has its own fuse for protecting the output section from short circuits and transient current peaks that exceed the normal current draw. These conditions are usually caused by a bad tube. When a short circuit or transient peak causes the fuse to blow, the output tubes should be checked and replaced, if necessary.

For 100VAC and 115VAC versions, the HT Fuse is: 1/2 Amp, 250 Volt Slo-Blo type (3AG, or MDL)

For 230/250 VAC versions, the HT Fuse is: T 500ma (time-delay, 5mm x 20mm size)

Repeated blowing of this fuse is a clear indicator of a defective output tube. Always use the correct fuse value when replacing the HT Fuse.

If the Mains Fuse or the HT Fuse repeatedly blows, refer your amp to your local RIVERA dealer or contact us at (818) 833-7066 for further service assistance.

**Vintage-Modern switch**

Switching amongst the two settings will produce a change of output power (from 50watts in modern to 25watts in vintage) as well as harmonic balance. In Modern mode, the output power amplifier operates in "Pentode" and will sound the cleanest, have the most headroom, and sound bright, with odd harmonics (i.e.1,3,5,7, etc.) more noticeable. Vintage mode brings the output tubes to work in "Triode" mode, halving the power selected by the High-Low power switch, and lowering the odd harmonics while raising the even (2,4,6,8, etc.) resulting in a sweeter, darker tone. Do not switch while playing. Best way is to place the amp on standby first, then switch.

**Speaker outputs**

A speaker must always be connected to your Venus 5. The amp is designed to deliver at least 50 watts to a 4-16 ohm speaker load (with the Impedance selector appropriately set to match the given load). If it has to drive speaker loads lower than 2 ohms, its output transformer or other components could be damaged. You can use 8- or 16-ohm extension cabinets, either alone or in pairs (one into each speaker output). A 2-ohm speaker cabinet alone or a pair of 4-ohm extension speaker cabinets together can be used, however, it is not an optimum match, and the Impedance Selector Switch must be set at it's lowest setting, 4 ohms. The only time you may run the amp without a speaker connected is if you have a proper "dummy" impedance load box plugged into the speaker output. Using a dummy load protects the output transformer, but prolonged use shortens the life of the amp's output tubes when the amp is operated at high levels.. Just because you cannot hear the amp does not mean it is not working hard. Always use a heavy-gauge speaker cord. The larger the diameter of the wire, the lesser of power to be lost. A shielded guitar cord can't handle the power that your amp provides, and therefore won't sound right--plus it may actually harm your amp. Refer to the connection diagrams for further information.

Note: Never use a speaker output to connect directly to the input of a mixer, a tape recorder, a slave amp, or headphones. For further information, refer to the hook-up diagrams for proper connection with extension speaker cabinets.

**Line Output**

Your RIVERA Venus 5 amp can drive another RIVERA amp, power amp, or other guitar amplifier. The Line Out is post-power amp, so every bit of tone from your Preamp, effects (if used), and power-amp circuitry is sent from this jack. Use a shielded cord connected between the amp's Line Out and the input of a second amplifier (check that amp's manual--

it may recommend a specific input). The Line Out can also be used to feed a signal to a tape recorder or mixer. Although the recorder or mixer doesn't receive the tone that comes from the speaker, it does receive all of the signal from every other stage of the amp, and for live-performance recording it does an excellent job of isolating your guitar sound.

Note: Do not connect the Line Out to speakers or headphones. For further information, refer to the hook-up diagrams for proper connection.

**Impedance Selector**

Set the Impedance Selector to match the impedance load of your internal speakers (8 Ohms), or a different setting when used with external cabinets Here's how:

4-ohm setting = One 4-ohm cabinet or two 8-ohm cabinets (one plugged into each speaker output, like an internal 8 Ohm and an external 8 Ohm)). Use this setting if a 4 to 2 ohm load is needed to drive.

8-ohm setting = One 8-ohm cabinet or two 16-ohm cabinets (one plugged into each speaker output, or when using just the internal speakers, 8 Ohms).

16-ohm setting = One 16-ohm cabinet plugged into the Speaker 1 jack

Note:Loads that are not matched properly may harm your amp. If you aren't sure if your speaker load is correct, contact your RIVERA dealer, or call RIVERA Customer Service. If unequal speaker cabinets loads, i.e. a 4 ohm cabinet and an 8 ohm cabinet are used together, unequal amounts of power may be distributed to these cabinets due to a non symmetrical load.

**Footswitch jack**

This 8-pin DIN plug is designed to work specifically with the included FS-7R footswitch. Your Venus 5 amp will function perfectly without a footswitch. However, the footswitch provides a hands-free way to switch channels, select boost functions and effects loop on or off. Its four switches control the following:

- Channel Select Channel 1/2
- Gain Boost for Channel 1
- Reverb on or off

Note: If you are using the FS-7R footswitch, all of the Front Panel switching functions remain intact and can be selected by the respective controls pull-switch function. Also, the switches and their LEDs are driven by the amplifier's power; there is no battery to replace inside the FS-7R.

**Effects Loop**

Of course, you can use pedals and rack-mounted effects between your guitar and the amp. In fact, that's where most wah-wahs and other pedals sound exceptionally good. However, rack signal processors are often best suited to being placed after the Preamp's tone-shaping circuitry. Your Venus's Effects Loop is designed to give you the best match between the

amp and the processor by allowing you to set the level of the signal going to the effect, as well as the one coming back. Therefore, you can tailor your amp/effects levels for best signal-to-noise ratio and the amount of distortion you want. Note: The Effects Loop send can be used to route a signal to a guitar tuner, recording mixer, another guitar amplifiers effects loop return (for Bi-Mono amping), etc.

The Effects Loop comes after the Preamp section. In addition, its low-impedance circuitry lets you drive everything from the simplest stomp-box effect to the most sophisticated pro signal processor with excellent results. It's also fully buffered, meaning that it can drive long cords and line-level gear and mixing consoles. (Because the signal is electrically unbalanced, you can use an unbalanced-to-balanced output transformer to connect to equipment requiring a balanced input.)

You can also use the Effects Loop as a sort of power attenuator by plugging a patch cable from the send to return and lowering the send and return level controls. This is great if you like the cranked up master tone for thick power amp distortion leads, at lower volumes.

Before you connect a signal processor to your amp, either turn the amp off or to standby. Use high-quality shielded cords between the amp and processor. Never use a speaker cord.

**Setting Effects Loop levels**

1. After you connect the amp's Send and Return with the signal processor's input and output, set the amp's Send Level and Return Level between 5 and 6.

2. Plug in your guitar, turn the signal processor on, and then turn on the amp (or flip the standby switch).

3. Set the amp's Effects Loop Send Level and the signal processor's input level so that you don't overload the processor. Keep your ears open for unwanted distortion from the signal processor (you'll know it by its crackly, unmusical sound). Whack a few chords on your guitar to check that your settings are correct.

4. Now turn up the Effects Loop Return knob until the proper volume and overdrive are dialed in. You'll probably have to experiment with the signal processor's output level until you get the best sound and lowest amount of noise.

5. Make sure that you consider the straight/effects blend at the signal processor, since all of your Preamp's signal is passed through the Effects Loop. You may also use the "mix" output, if the unit has one, adjusting the mix on the effects processor to suit your taste. Note: If delay sounds such as slap echo, reverb, and repeat delay will be your primary choice of effects, usually a 50% wet mix from the effects should be used.

The Effects Loop Send is configured so that it is always active, so you can use it as a variable output. Note that if you use the Send to drive slave amps, etc., and have nothing plugged into the Return jack, the signal still passes from the Preamp to the power amp even when the Effects Loop is internally bypassed.

**Connecting the Venus 5 with other gear**

The following illustrations will help you to properly connect your Venus 5 to other amps, extension speaker cabinets, and recording and P.A. gear. Make sure the amp and all other gear are turned off whenever you make or change any connections.

**Driving one external speaker cabinet**

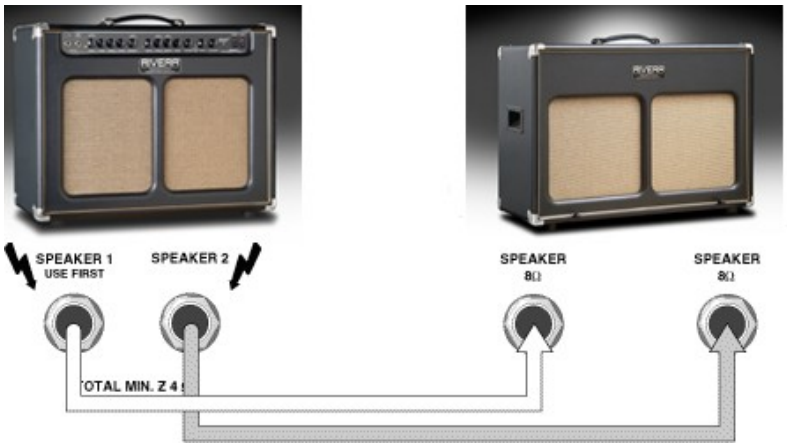
Using a heavy-gauge speaker cord, connect the output jack labeled Speaker 1 to the speaker input on an extension cabinet with a minimum of a 4-ohm impedance and power-handling capacity of at least 60 watts for the Venus 5. A single 8- or 16-ohm extension cabinet can be used, too. For the best tone and maximum output, we recommend using any of the RIVERA speaker cabinets loaded with either Celestion Vintage 30's, G12H-30's, or T75's.

Note: Regardless of the type or number of speaker cabinets you use, always make sure that the Venus 5's Impedance Selector is set to match the speaker cabinet's impedance.

**Driving internal and one external speaker cabinet**

In this configuration, the Venus 5 is driving the internal speaker load, with an identical impedance external load. Using heavy-gauge speaker cords, connect the output jack labeled Speaker 2 to the speaker inputs on extension cabinets with a minimum 8-ohm impedance and power-handling capacity of 60 watts. Set the Venus 5's Impedance Selector to 4 ohms.

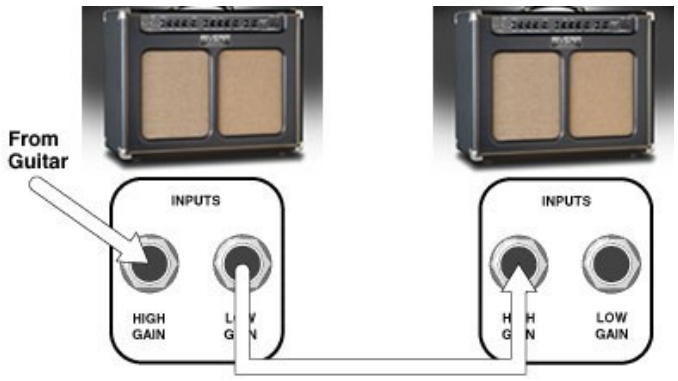
**Driving two speaker cabinets**




In this configuration, the Venus 5 is driving two speaker cabinets with identical impedance's. Using heavy-gauge speaker cords, connect the output jacks labeled Speaker 1 and Speaker 2 to the speaker inputs on extension cabinets with a minimum 8-ohm impedance and power-handling capacity of 60 watts. You can also hook up two 16-ohm cabinets, but avoid if possible the use of two 4-ohm cabinets, because the overall

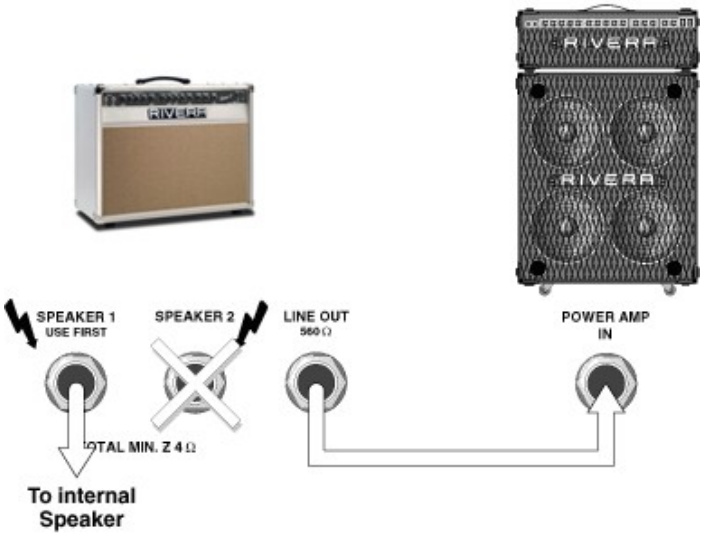
impedance load will be below what is optimum for the amplifier and sustained use could result in overheating damage. When using two 8-ohm cabinets, set the Venus's Impedance Selector to 4 ohms. When using two 16-ohm cabinets, set it to 8 ohms.

**Running two amps in parallel without a Y-cord**



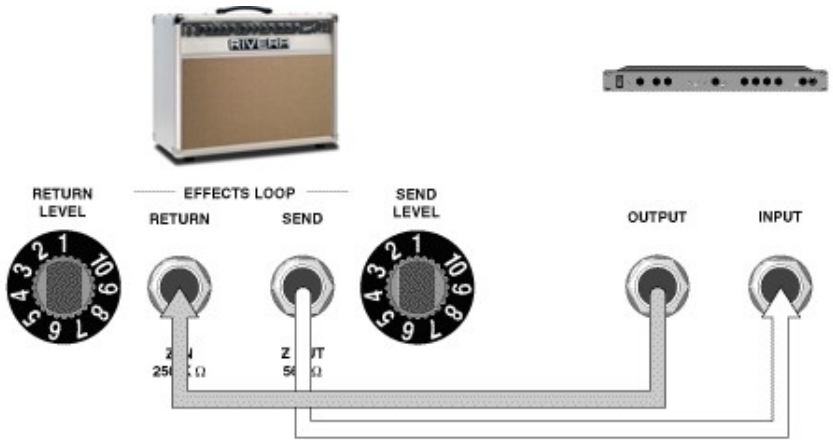

The Preamp and output amp sections, as well as all controls, function normally in this setup. Use a shielded cord. Note: Make sure speaker cabinets are connected to both RIVERA amps.

**Slaving a second amp**



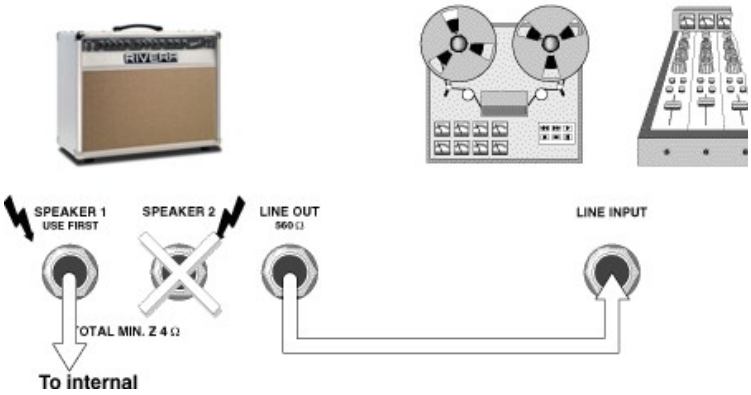

Connect a shielded cord from your Venus's Line Out to the Power Amp In or Effects Loop Return of a second amp. All volume and tone changes made on the Venus 5 will affect what comes out of the second amp. Caution: Never use the speaker outputs as line outputs. Their power level is extremely high and can cause tremendous damage to another amp's input. If you don't have any effects patched into the Venus's Effects Loop, you can use its Send jack instead of the Line Out. The Send Level knob then acts as a variable output level.

**Placing a signal processor in the effects loop**




Using shielded cords, connect the Effects Loop Send to the processor's input, and the processor's output to the Effects Loop Return. Adjust the mixture of effect/non-effect sounds at the signal processor, and set the levels at the amp and processor for lowest distortion. If you use multiple signal processors, connect them in series (processor 1's output to processor 2's input, etc.), and patch the Venus's Send to the first processor's input and the Venus's Return to the last processor's output. If the processor has stereo outputs, you can connect one to the Effects Loop Return of a second amp.

**Sending a direct signal to P.A. or recording gear**




Using a shielded cord, connect the Venus 5's Line Out to the line input or channel input of a mixer or recorder. (The signal comes from the amp's output stage, so all tone, distortion, and overdrive characteristics are included.) You can use the Effects Loop Send jack instead of the Line Out, too. Caution: Never use the speaker output. You will need to adjust the equalization of the mixer carefully, as this sound differs greatly from a sound heard by a microphone placed in front of a speaker cabinet. Using a "Cabinet Emulator" in the signal path may be a good idea to try. Speakers act as giant filters, and as the signal from the Line Out is full frequency, not affected by the mechanical-acoustic filter of a speaker, it will have a lot more high frequencies present.

**Care And Troubleshooting**

Chances are, you bought your RIVERA amp to make your guitar sound great, not to improve your skills with electronics. What we're saying is, "If something ever goes wrong

with your amp, don't try to fix it yourself." There are some potentially lethal high voltages inside the amp, plus if you do something that causes even more damage than when you started out, the person who does the real repair will probably tell you, "Hey, I know what's wrong. Somebody's been monkeying around in here." And, of course, your warranty will be void.

There are some things you can do to keep your amp running and to determine (and hopefully remedy) common difficulties.

**Keep the amp out of the elements.** A lot of this is common sense. Don't use your amp in a sauna or in the bathtub. Don't leave it out in the rain or in a damp basement. If you take it to a gig or to practice and it's cold out, give it 15 minutes or a half-hour to stand in the room where you'll be playing. That way, it can get acclimated and sound its best when you're ready to play.

**Be nice to it.** The jury is still out on whether talking to plants makes them happy, or whether Elvis lives on the moon, but the verdict on pampering amps is well-known. Don't drop, knock over, kick, or otherwise mistreat your amp. If you don't have a flight case for travel, use the box it came in, or wrap it in something thick, soft, and protective. RIVERA amps are built to take a lot, but why push it? If you treat your amp well, it will treat you (and your guitar's tone) well.

**Check for loose tubes.** Here's as close as you should get to being inside your amp. With the amp unplugged and cooled off, examine the tubes to make sure they're in tight and straight. Note: Unlike light bulbs, tubes push straight into their sockets. Never try to twist them! Also note that some of the tubes are inside of metal sleeves. These are easy to remove for checking the tubes. Grasp the sleeve with your fingers and depress it (it's spring-loaded) and turn to the left (counterclockwise). Now pull it off; this may require a little wiggling action. Remember to put the sleeve back on after you check the tube.

**Make sure the power cord is tightly plugged in.** This is critical at both ends of the cord. And don't use one of those 3-pin-to-2-pin adapters unless you connect the ground lug to the outlet. Leaving the ground disconnected isn't just cheating--it's dangerous to un-ground any electrical device that's supposed to be grounded.

**Let it idle before you play.** If you have a few minutes to spare before you play, turn the amp on and set it to standby so that all the parts can get warmed up and stable. Once the amp's nice and warm (5 or 10 minutes), flip the Standby switch and get busy on your guitar.

**Clean your amp once in a while.** You can use a damp but not wet cloth, or one moistened in a weak solution of dishwashing detergent and water to wipe off grime, dried Pepsi, Beer, and whatever else accumulates on the vinyl covering. If you use Gaffers or Duct Tape to hold Picks on the surface of the Venus 5 and you need to remove the adhesive, use a small amount of Rubbing Alcohol on a soft cloth, then wipe off the residual with a soap/water solution. Make sure the amp is unplugged first. Also make sure that no liquid is spilled into the top ventilation grille, or that the tubes have any liquid of any source dripped on them. Everything else can be vacuumed, as long as you're gentle and use a soft-bristled brush attachment on the vacuum hose.

Quick Troubleshooting Guide

**Amp won't turn on**

1. Make sure that the AC mains cord is securely connected at both ends.

2. Verify the power source with something that you know works (a radio, a light, etc.).

3. Check the Mains Fuse, and replace it if necessary (if it blows again, refer your amp to qualified service personnel).

**There's no sound**

1. Make sure that the guitar cord to the input is okay (wiggle it--check your guitar's volume setting, too).

2. Check the Volume controls.

3. Check the Standby switch.

4. If an effect or signal processor is plugged into the Effects Loop, make sure it's turned on and that the level controls on the amp and processor are set correctly.

5. Check the speaker cable or cables to see if they are disconnected or shorted.

6. Check for blown speakers.

7. If a fuse is blown, replace it (if it blows again, refer your amp to qualified service personnel).

**The amp shuts down unexpectedly**

1. Follow the seven steps in the "There's no sound" section.

2. Turn off the amp and wait 25 minutes before turning it on again. An internal thermal protection circuit can shut the amp down if it becomes overheated.

3. After 25 minutes, turn it on, and if it shuts down again, refer the amp to qualified service personnel.

Note: On SEMKO 230/250-volt models, there are two additional T 1.6A (250-volt Slo-Blo type, 5mm x 20mm) fuses and one T 10A (250-volt Slo-Blo type, 5mm x 20mm) fuse located internally. These protect the amp's output tube filaments and should only be replaced by qualified service personnel.

**There's unwanted distortion**

1. Check the speaker(s).

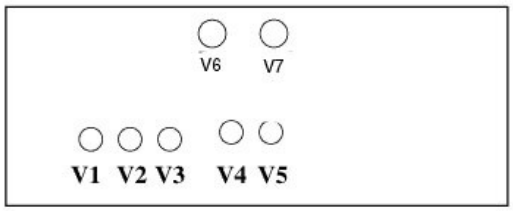
2. Check the cables.

3. Check the signal level at other devices in the signal path.

4. One or more tubes may be bad (refer to the tube information in this manual, or take your amp to qualified service personnel).

**Tube Care & Replacement**

Like a sports car, there's a certain amount of wear and tear to be expected in a high-performance tube amp. Over time, especially with hard use, tubes may need replacement. That's why it's a good idea to make note of when you purchased your amp and whenever you replace tubes. It's no accident that your amp has two common types of tubes: They're great-sounding and reliable, and it's easy to find replacements. Here's a tube chart to show you which tubes go where.




**Location Type**
V1 12AX7A
V2 12AX7A
V3 12AX7A
V4 12AX7A
V5 12AX7A
V6 6L6
V7 6L6

**Here's a brief description of what each tube does:**

**V1** Input buffer and tone control driver for Channel 2, and also the first Preamp stage of Channel 1.

**V2** Tone control follower for Channel 2 and an additional gain stage for Channel 1.

**V3** Third gain stage for Channel 2 and for Channel 1

**V4** Reverb follower gain stage, and mixer for both channels

**V5** Phase inverter driver tube for the power amp section

**V6-V7** Power amp tubes--for best operation, all power tubes should be changed at the same time. Use a matched pair if at all possible.

**Checking for microphonic tubes**

As tubes wear, some problems can come up. One of the most common symptoms is a ringing sound. This is usually due to the tube becoming microphonic (like its name suggests, it's picking up sound and amplifying it).

With the amp unplugged and cooled off, examine the tubes to make sure they're in tight and straight. Never twist them! Gently grasp the tube and wiggle it into place. Because some of the tubes are inside of metal sleeves, you will have to remove the sleeves to check them for microphonics. Grasp the sleeve with your fingers and depress it (it's spring-loaded) and turn to the left (counterclockwise). Now pull it off; this may require a little wiggling action.

**Preamp tube first aid**

If you hear ringing (a feedback-like high-pitched sound) in your amp, it's probably coming from a Preamp tube. Here's a procedure to find which tube is giving you trouble.

With nothing plugged into either the High Gain or Low Gain inputs, and the Master controls turned down to 5 or below, turn the amp on.

Turn up the Volume on Channel 1, or Channel 2. Now use the tip of a pencil to gently tap the end of each of the small tubes (V1 through V5) and listen for sustained ringing. Turn up the Volume and Master knobs and keep tapping until you find the tube that rings (or squeals).

Turn off the amp, and allow the tubes to cool. Now pull out the troublesome tube and replace it with one of the same value (that is, if you're pulling out a 12AX7, replace it with a 12AX7).

Make sure that the tube is oriented correctly when pulling it out or putting it back in. If you look at the end of the tube and the socket, you'll notice that the nine pins are arranged in an incomplete circle. Always make sure the pins are aligned correctly. Never force a tube into its socket.

Remember to put the sleeve back on after you check or replace a tube.

**Power amp tube first aid**

Like Preamp tubes, power amp tubes can go bad or wear out. Your Venus 6 has four power amp tubes, and if one goes bad, they should all be replaced. This assures optimum output and tone.

If a power tube shorts out, the HT Fuse will be blown. Remove power from the amp and replace the fuse before doing the following:

1. Let the power tubes cool. Remember the way the eight pins are arranged, and note that the center hole on the tube socket has a keyway that matches the center post on the tube.

2. Replace one tube. Turn the amp on. If the fuse blows (or the tube glows cherry red, indicating an internal short), you've found the bad tube. Turn off the amp immediately. If the fuse doesn't blow, replace another tube and turn the amp on again. Repeat this procedure until you've determined which tube is bad.

3. When the tubes have cooled, remove them. Replace all power tubes. (Don't throw away good tubes from the old set, though--save them as spares!).

General information about tube types. 6L6GC is the most common of all American high power tube types, used in Hi-Fi, P.A., and Musical Instrument amplifiers for over 50 years. RCA built great ones as well as the best coming from Sylvania. However, as we write this manual, there are only four factories in the world building this tube; Svetlana in St. Petersburg, Russia, Reflector (Sovtek) in Russia, JJ/Tesla in Slovenia, and a factory in China. NOS (New old stock) supplies from various other factories are still available, albeit in short supply. Unfortunately due to the conflict of NATO and Serbia, the Yugo 6L6 is no more, and it was a poor tube anyway. Out of all that are currently made, we have had the best success with the Svetlana, and some of the recent Chinese that are a copy of the Sylvania, sold by Ruby Tubes. We are very critical in our testing of our tubes, and throw away many that do not make our grade. All of our amps are built with matched tubes, that are graded as well. When you need to purchase replacement tubes, if you order the same grade number that are in your amp originally from the factory (provided that no one has changed the bias set at the factory), you can change out the tubes without needing the bias to be re-adjusted. If you use tubes not from us or of a different grade or value, you will need to have the amp rebiased. In terms of 12AX7A types, there are only 3 factories that we know of building this tube type; JJ/Tesla, Sovtek, and Ruby Tubes in China. Again, NOS stocks still exist of RCA, G.E., Mullard, Telefunken, Sylvania, Mazda, and Philips. Usually the Chinese sound the brightest and have the most gain. Recently the Sovtek 12AX7LP has been made available and it is improved from it's predecessors, yet has less gain and less high end than the Chinese. RCA, G.E. Philips, Mullard (NOS) are great tubes, but may need to be selected for microphonics. We are using mostly Chinese for the 12AX7A's, but we may use a Sovtek in position V1 only. If you use Sovtek, or JJ/Tesla in all of the positions (V1-V5), the amp will sound way too dark, and will lose gain and headroom. It will sound like a blanket was placed over the amp.

Venus 5 Specifications:

**High-gain input impedance:** 1 Megohm

**Low-gain input impedance:** 33k ohms

**Output impedance:** Selectable, 4 ohms, 8 ohms, or 16 ohms

**Line Output impedance:** 330 ohms minimum

**Effects Loop Send Output impedance:** 560 ohms minimum

**Effects Loop Return Input impedance:** 10k ohms minimum

**Total harmonic distortion:** 5% at rated power

**Bandwidth:** 50 Hz to 20kHz

**Preamp tubes:** Five 12AX7A

**Output tubes:** Two 6L6

**Tube voltage:** 430 volts DC

**Output power:** 50+ watts RMS into 8 ohms

**Operating voltage:** 115 volts AC, 230 or 250 volts AC (export model), or 100 volts AC (Japan only)

**FS-7R Footswitch functions:** Channel Select, Channel 1 Boost, Channel 2 Boost, Effects Loop

**VENUS 5 112 Dimensions and weight:** (Subject to change without warning. Owner is responsible for measuring when ordering cases)

**Height:** 18 1/2" with rubber feet

**Width:** 23 1/4"

**Depth:** 12"

**Weight:** 58 lbs. (estimate)

**Cabinet material:** 3/4" and 5/8"-thick Birch Plywood

**Cabinet thickness:** 3/4"

**Construction:** Dadoed joints

**Covering:** vinyl

**Cleaning of vinyl covering:** Moist cloth, dishwashing liquid

## Warranty

Subject to the Obligations and Exclusions found below, this RIVERA product is warranted against manufacturing defects in material and workmanship for the period of one (3) year from the date of purchase, with the exception of tubes, which carry no warranty, and loudspeaker drivers, which are covered for 90 days.

The warranty period commences on the date of purchase by the original user. Performance under this warranty must be obtained at one of the following: a RIVERA Authorized

Service Station, by returning the unit to the RIVERA factory with prior authorization, or *(in countries outside of the United States)* by a representative RIVERA distributor. A list of RIVERA Authorized Service Stations can be obtained from RIVERA, 508 S. Varney, Burbank, CA 91502, USA, ATTN.: Warranty Service. Telephone (818) 767-4600; Fax (818) 394-2097.

**Obligations**

1. This warranty will be honored only on the presentation of the original proof of purchase.
2. Transportation of the product to the service station or RIVERA factory is the responsibility of the user unless specifically stated otherwise in this warranty. RIVERA will pay for return shipping charges if the repairs are covered by the warranty.

**Exclusions**

1. This warranty shall not cover adjustment of customer-operated controls as explained in the appropriate model's instruction manual, or products that have been altered, replaced, or have missing serial numbers.
2. This warranty shall not apply to the appearance of accessory items including, but not limited to, cabinets, cabinet parts, or knobs.
3. This warranty does not apply to uncrating, setup, installation, or the removal and reinstallation of products for repair.
4. This warranty shall not apply to repairs or replacements necessitated by any cause beyond the control of RIVERA including, but not limited to, any malfunction, defects, or failure caused by or resulting from unauthorized service or parts, damage resulting from improper packaging when returning product, damaged or broken tubes, incorrect line voltage, improper maintenance, modification or repair for the user, abuse, misuse, neglect, accident, fire, flood, or other Acts of God.
5. This warranty shall not apply to any loudspeaker drivers that have been damaged due to thermal destruction, or physical destruction such as moisture, rips, tears, shock, or transport.
6. Responsibility for any repair of any RIVERA product sold outside of U.S. boundaries is borne by the RIVERA representative in that particular country or territory. Also, the warranty term and conditions may be different from those stated above. Please contact the RIVERA distributor or dealer in your country for more information.

for it any other obligation or liability. In no event shall RIVERA be liable for special or consequential damages arising from the use of this product, or for any delay in the performance or this warranty due to causes beyond our control. Some states do not allow limitations on how long an implied warranty lasts and/or do not allow the exclusion or limitation of consequential damages, so the above limitations on implied warranty and consequential damages may not apply to you. This warranty gives you specific legal rights. You may have other rights that vary from state to state.