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# Grant Fidelity RITA-880S Tube Amplifier

Thank you for your purchase of the Grant Fidelity Reference Integrated Tube Amplifier (RITA-880). The product was originally sold as RITA-880 model without any upgrade tubes. Later on Rita was provided with upgraded tubes included in the price hence the model number is referred as RITA-880S.

From our new production run in mid 2012, we have upgraded the capacitors inside the amp to Beryllium Copper high end capacitors. The amplifier model remains as RITA-880S and upgrade tubes becomes optional to buyers. Please read our website product listing page for detailed information about tubes included with your purchase price.

As a high quality audiophile tube amplifier, the RITA-880S will bring you many years of enjoyment if the amplifier is used and maintained properly.

### First Time Use

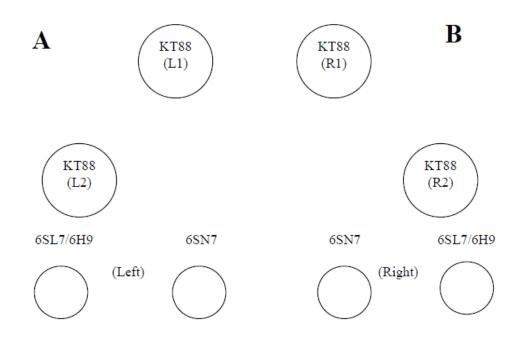
Please carefully unpack your RITA-880S and keep all packaging material for later use and storage. Your package includes the amplifier, the remote control and the high end power cord provided.

Your amp may have jumper resistors on the speaker terminals from the factory. These are visible from the outside of the amp. Please remove them when hooking up your speakers. They are there to avoid damage to amp if turned on without speakers hooked up.

Depending on shipping arrangement, you may find all tubes (8 in total) packed under the top cover (remove the top 6 screws to access the tubes), or packed in a separate shipping box.

## **Tube Installation:**

Install each tube into its correct socket as shown and described below:

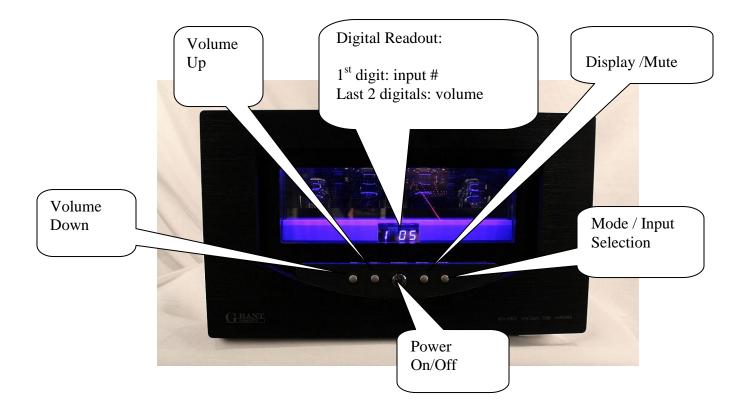


# Front of Rita

1. The amp uses 4 x KT88 power tubes, 2 x 6SN7 driver tubes and 2 x 6SL7 pre-amplifier tubes. All sockets look the same and can take any of the 8 tubes, so please make sure you have the right tube types in the right sockets, otherwise it can cause serious damage to your new amplifier and new tubes. Such damages are not covered by warranty.

- The amp is pre-biased by Grant Fidelity before shipping all tubes are marked for its socket position on either the individual tube box, or on a smaller sticker on each tube. Please follow such markings while you install your tubes for the first time.
- 3. Please remove the paper sticker on the tube once you identify the tube to the matching socket spot. Do not leave the paper sticker in the amplifier as this may be a fire hazard when the amp heats up during operation. Use common sense for safe operation.
- 4. This amplifier has fixed biasing from the end user point of view and does not have user assessable bias pots like some tube amps do. The tubes provided with the amplifier have been carefully matched for best performance before shipping so you can just plug in the tubes and you are ready to go.
- 5. When handling tubes, wear a cotton glove or use a cotton cloth – do not touch tubes with bare hands. The oil on your hand will leave a residual on the tubes and once tubes are turned on, such residual will be permanently burnt onto the glass and may reduce the life of the tubes.
- 6. When installing tubes, make sure to align the guide on the tube base to the socket then gently push the tube in for a secure contact. Do not press tube with excessive force at a single point. Tube glass enclosure is like egg shell hold it in your palm then press with forces from all directions gently. Do not pinch or crush the tubes! When removing tubes, use a gentle rocking force to remove it from the socket do not pull the glass enclosure with excessive force, otherwise you may break the glass seal with the tube base.





Left 1st and 2nd buttons: for volume adjustment

Middle button: Power on/off. Please note that tube amp should not be frequently turned on and off – it will cause tube damages as the tube filament being heated up and turned off frequently without cooling off. Please allow 5-10 minutes for tubes to cool off after power off then turn the amp back on again.

Right 1<sup>st</sup> button: Mode – this is for switching among the 5 inputs of the amplifier – first input is the XLR balanced input, 2-5 inputs are RCA unbalanced input. Press the button each time will change the input and you can cycle through all 5 of them. You may also use the remote control to select input.

Right 2<sup>nd</sup> button: Mute / Display – short press the button will mute the amp's output; press and hold the button will turn off the digital readout display.

Digital Read-out: The 3 digits readout display includes two types of information – 1<sup>st</sup> digit is the input the amp is playing, 2<sup>nd</sup> and 3<sup>rd</sup> digits together is the volume level the amp is playing at (ranging from 01 to 99). Although the volume display can go up to 99 (maximum two digits LED display), it does NOT mean the amp can be played at volume setting of 99 all the time. Depending on the speaker load connected to the amp, the volume control should be set at a level that you do NOT over drive the amplifier to distortion, if you hear distortion reduce the volume. Watch the power meters, if they are hitting to the far right all the time then you are overdriving the amp. Overdriving may permanently damage the amp and such damages are not covered by manufacturer's warranty.

### **Rear Panel Connections:**



The rear panel of this amplifier is very self explanatory.

Left side: 4 RCA inputs (numbered as 2 to 5)

1 XLR input (numbered as 1)

When connecting your source (such as CD player) to the amplifier, make sure to match Left and Right channel correctly. This is usually done by matching Red to Red, Black to Black.

When connecting XLR cable to the amplifier, please make sure the pins are aligned correctly then gently push in. When you hear a slight click sound, the cable has been connected properly. Do not use excessive force to push cable in with wrong pin alignment. When removing XLR cable from the input, you should press the metal clip on the connector to release the cable then pull it out. Do not pull the cable without pressing the clip – you will damage the cable and the amp connector.

Light Control switch:

This is the ON/Off switch for the front meters and lighting. If you prefer not having the meters on when using the amp, turn the switch to OFF position.

If you wish to turn off the digital readout display, use the front 'mute' button – press and hold to turn it off.

Power Supply Voltage:

We sell the amp worldwide with factory providing a matched power supply to your country's voltage. You cannot run a 115V amp in a country with 230V power supply or vice versa. A step up/down transformer is needed to convert your local power supply voltage to match the amp, but this will usually deteriorate the sound quality of the amp. We strongly suggest that you order an amp matching your local power supply from the factory and do not use a step up/down transformer. Main Power fuse holder:

The main power fuse is located above the power socket and hidden in a fuse holder. Use a flat knife to pry open the fuse holder to access the fuse. This amp uses a 5x20mm size 10 amp 250V fast blown glass fuse. Do not use a different size fuse or different type of fuse.

Speaker terminals:

This amp will work with nominal speaker loads of 4 to 16 ohms. Do not connect multiple pairs of speakers to both output terminals at the same time – you will permanently damage the amplifier and such damages will not be covered by warranty. Check your speaker's specification to decide which speaker terminal to use to match the impedance (measured in ohm).

For speakers rated at 6 to 16 ohms, use the 8 ohm positive connector (red), for speakers rated 4 to 6 ohms use the 4 ohm positive connector (red). The single negative connector (black) is used for either speaker load. With a 6 ohm speaker experiment between the 4 and 8 ohm connectors to see which suites your taste.

When connecting speakers to the amp for the first time, if you find a small resistor attached between the speaker terminals, remove the resistors. They are there for safety precaution in case you turn on the amp without any speakers connected. When you have speakers connected to the amp, you no longer need those resistors in place.

DO NOT EVER turn on an amplifier without speakers connected. It will permanently damage your amp and manufacturer warranty does NOT cover such damages. Turn off your amplifier when making speaker cable swaps, and prior to turning on your amp make sure your speaker connectors are tight at both the amp and speakers. The speaker terminals installed on this amp can be used with either banana or spade connectors on your speaker wires. Use the middle hole for banana connectors; turn the terminal to the left then tighten up to use with spade connectors. Do NOT overtight the terminals – you may damage the connections of the terminal inside the amp.

### **Operations:**

The RITA-880S is simple to use.

- Before turning the amplifier on, double check to make sure that your source component (such as CD player) is connected correctly to one of the 5 inputs at rear; then check the speaker connection to make sure the impedance is matched correctly to the amp's speaker terminals, and red to red, black to black.
- 2. Before turning on the amp, turn on your source equipment such as CD player but stop the signal first in case the amp volume is too high to damage your speakers or your hearing.
- 3. Press power button to turn on the amp. At this time you should see the tubes lighten up through the front window during the first 30 seconds. If you hear any strange constant loud noise, or hum from the speakers, turn off the amp immediately and check all connections again. If all connections are correct, contact your seller for trouble shooting of tubes (which may have been damaged in shipping and handling they are highly fragile and do not always survive shipping).
- 4. If the amp powers up normal, start playing your source signal (play a CD track), and gradually increase the volume with either the front panel button or with the remote control (check the remote has battery inside it before trying to make it work) until you hear music play through speakers at reasonable volume. Congratulations! Now your new amp is

working with your source and your speakers as a new combination to produce beautiful sound.

- 5. New electronics and new tubes need a break-in time to sound to its best. We suggest you not to play the amp too loud during this break-in process and do not leave the amp unattended during such process for extended time. If a vacuum tube has defects or has been damaged in shipping, it may fail or produce loud noise – you should be nearby to be able to quickly turn off the amplifier. Typical break-in process is 75-100 hours with music signal playing through as much as you can but not have to be all the time. Some high end tubes may require 300 hours to break-in to sound the best, so are some high end capacitors. Be prepared to hear subtle sound changes during the process and in general the changes are towards better, not worse, and eventually reaches its best at completion of break-in process.
- 6. When you turn off your audio system, always turn off the amp first, then turn off the sources. This will avoid sudden signal change to your amplifier and speakers which may cause damage at times.
- 7. During dry season, your body may carry static electricity from synthetic fabric clothing or household carpets, which could be transferred to electronics and causing damages. Please use proper humidity control at your household and touch a metal object first to discharge your body static electricity before touching your electronics.
- 8. Always unplug your electronics from the wall during thunder storms and when you experience brown outs, surges or power interruptions. Turn off your amplifier if you are not using it for over an hour to save electricity and tube life.
- 9. Use proper power conditioning device to protect your tube amp and tubes. Tube amps are typically a step up circuit to operate at much higher internal voltage than household main power supply voltage. A small change in main power supply

at your house could result in a much larger change in your tube amp, hence alter the condition that your vacuum tubes are working in, which may in turn damage your tubes permanently. We strongly suggest you to purchase a properly made for-audio power conditioning device to protect your amp and your tubes from power spike and surge damages. Such damages are not covered by either amp warranty or tube warranty. Home theatre power conditioner is not the best matching device for high fidelity amplifier because it tends to choke the current and reduce your amp's response speed to input signal and causes music sound less dynamic. Purchase a good quality designed for audio power conditioner that will not only protect your amp and tubes, but also maintain great sound for your amplifier investment.

- 10. Do not let children to play with the amp power button quick on/off switches will kill the tubes faster than you know and can cause serious damage to the amplifier which is not covered by warranty. Vacuum tubes also operate at extremely high temperature and a short time touch will result in skin burn. Use extreme caution when handling tubes – let them cool off before touching them!
- 11. Do not run your tube amp in an enclosure cabinet. Tubes produce substantial heat during operation and such heat should be ventilated quickly from the amp to keep the entire circuit at optimal temperature. Leave at least 4 inches above and around your amp open for air circulation. Do not use soft material under your amp the space under the amp should be kept clear for air flow freely. Do not put the amp close to another heat source. Leave the front and back of your amp open for easy access to connections and air circulation. Electronic parts will age much faster in an over-heated environment. Keep your amp COOL.
- 12. If this is your first time to own a tube amp or to handle tubes, be prepared for a learning curve. Tube amps are like high performance sports cars, you need Tender Loving Care to make them sound their best and there is maintenance involved. Communicate with your tube amp seller to acquire tube knowledge or read online to get correct information from

credible source (not all internet information is correct). Tube amp repair is much less complicated than transistor amps – there are many internet audio forums with information about good service providers' nation-wide. They are like mechanics and will keep your tube amp in top notch working condition for top sound performance.

13. Do not get discouraged by tube maintenance. Tubes are creatures of live electrons working at high temperature and sometimes they behave in strange ways affected by many uncontrollable factors. Always buy your tubes from reputable sources and do not use wrong type of tubes in your amp. If a tube failure happens in the first 90 days, contact your amp seller for tube warranty. If outside of warranty, we always carry replacement tubes at reasonable price for you to have your amp back up running soon.

### Maintenance/Warranty

There are no user serviceable parts inside your amp (except tubes) and the voltage inside the amp is potentially lethal. Only qualified service personel should go inside the unit. Attempting any repairs or modifications will void your warranty. Tube rolling with new production tubes provided by Grant Fidelity is fine. In the event a tube roll from a tube sourced from other supplier causes damage to your amp, the warranty will be void.

Other than that, we are always available to answer questions regarding how to optimize the performance of your components. Drop us a line through our Contact Us form on the website – we are just a few clicks away! Our service never stops for our valued customers.

Thank you again for your purchase. Happy Listening

Your Grant Fidelity Team