Red Pepper

INSTRUCTIONS

READ THIS. ALL OF IT!!!

These are not your normal warnings, READ THEM. Particularly the ones about FIRE.

CAUTION: to reduce the risk of electric shock, do **NOT** open the amplifier or remove the back cover.

HIGH VOLTAGES INSIDE. No user serviceable parts inside. Refer servicing to qualified service personnel.

WARNING: to reduce the risk of fire or electrical shock, do not expose the amplifier to rain or moisture.

WARNING: This amplifier runs ***VERY HOT***. It is ***MUCH*** hotter than the average tube amplifier and it ***WILL*** catch items in close proximity on ***FIRE***.

Do **NOT** operate near drapes, upholstery, clothes, beds, linens, or ANYTHING which can catch fire. Keep at LEAST two (2) feet clear on all sides of this amplifier.

Keeping the above in mind, do **NOT** leave this amplifier on unattended. ALWAYS turn the amplifier **OFF** before you go to sleep, leave, go to the bathroom, go in the other room to make a sandwich, check the reel to reel, mess with the console, etc.

Do **NOT** allow small children around this amplifier as touching the output tubes will most certainly result in an immediate 3rd degree burn or worse.

WARNING: **NEVER** leave this amplifier on unattended. **IT WILL CATCH THINGS ON FIRE!**

Are you scared yet? Good, because this amp will burn down your house and KILL you if you leave it on unattended!!! Consider this amp dangerous!!! You have been warned!!!!

Now then, you are probably wondering just why we would make an amp if it is so damn dangerous. Well, the simple answer is that some things in life are just not easy. After trying many bias points and setups on this amp it was decided that it sounded the best when it was, well, cooking. This amp is running at the outer envelope of extreme in terms of per tube dissipation of power at idle. What the hell does that mean? It means when this amp is sitting still it is running wide open. More than wide open in fact... if this amp were an engine, it would be about 745.6 rpm past redline. If it were a hairdryer it would blow your friggain head off. If it were hot sauce it would melt glass. What does this mean for you?

Well, it means a few things... first off, it sounds cool, but it is not so loud that everyone wants to kill you, or the amp. On the downside, you will be changing output tubes more often than you normally would on some sane amplifier. Personally, I would keep a spare set on me, and a tube glove, but we will get to that in a moment. The other downside is that you MUST be careful with this amp, as A) it can burn the crap out of you. Honestly, during the prototype phases I got a 3rd degree burn on the back of my hand while trying to adjust something (I hit the output tube, only for a moment). I still have the scar, and B) it can catch things on fire.

So, how do you operate this thing?

1. Plug a speaker cab into it FIRST. Never run this amp without a speaker cabinet plugged in with an appropriate sized speaker cable. You will break the amp having it on with no speaker plugged in. If you have a combo amp, skip this section.
    - The jack on the bottom RIGHT is for 4ohm cabinets
    - The jack on the bottom LEFT is for 8ohm cabinets
    - Make sure you are using 18ga or larger speaker cable.
2. Plug the amps power chord (ops, power cord) into the wall
    - Make sure you are using a properly wired GROUNDED outlet.
    - Make sure the outlet is wired correctly (neutral and live are not swapped). When in doubt, call an electrician.
3. Plug your favorite guitar into the amp via your favorite cable into the instruments jacks. The right one is “high” level, the left one is of a “lower” level. You may also notice some small high frequency roll off on the left jack.

4. Turn on the amplifier via the power switch. If it does not come on, it hates you. Check the power cord for damage, check the outlet, **unplug** the unit and check the fuse. If all of that fails, call a qualified service person.
5. Adjust volume and tone to taste.

AMP CARE:

This amp should need little care, other than the changing of output tubes. As mentioned previously, this amp is running crazy hot and the output tubes will have a shorter than normal life-span. Due to this, there are some important items to consider:

1. NEVER change tubes while the amp is on or plugged in. You will be going to the hospital for 3rd degree burns, you may get shocked or killed and you may damage the amp.
2. ALWAYS wait for the tubes to cool before touching them or removing them. For that matter, wait for the amp to cool before sticking the power cable in the back of it, as it will MELT it.
3. This amp uses two 6L6GCs and one 12AX7. If you can not tell which is which, you need to take your amp to a qualified service center to get the tubes changed out.
4. For the adventurous, you can use 6V6GTs in this amp, but there are certain conditions
    1. You MUST use JJ-Tesla 6V6GTs. I know of no other that will handle the high currents and voltages in this amp. Tung-Sol reissues will melt, and so will all other current production ones that I have tried.
    2. You MUST install them, and then WATCH them. At least for the first min. Then at 5mins, 10mins and 30mins, you MUST inspect them. If you see the plate (the big grey box inside the tube) glowing cherry red in the middle, they can not take it. You may need to do this in the dark. Not all JJ tubes can handle it so you will HAVE to check each set. Better to get 6L6s.
5. Again, due to the high voltages and currents in this amp, we do not recommend NOS 6L6s. You can NOT use NOS 6V6GTs, they will melt. Sovtek, JJ, TAD, WingedC are recommended. A JAN 5881 may take the punishment, use the procedure outlined in (4) before using it.

6. The preamp tube (the 12AX7 on the right) can be replaced by any 12AX7 you like, both new and vintage without harm to the tube or the amplifier.
7. If you would like to experiment, you can also use a 12AY7 in the first position or a 5751 without harming the tube or the amplifier. Do NOT use other variants as it will harm the amplifier.

A note on removing tubes, as we have seen this a thousand times before... When removing a power tube, push back on the little silver bear trap clamp that has the tube held in place with your thumb and first finger of one hand, then grab the BASE (NOT the GLASS) of the tube with the other hand and pull STRAIGHT down. It will take considerable force, particularly the first few times as the socket is new, but (and you need iron clad will power here) do NOT shake it from side to side or rock it or (ugh, the worst) twist it. You will end up breaking the pins or the alignment pin in the center of the power tubes.

If you break the alignment pin of a power tube, please, DO NOT try to be a well seasoned old expert hand and figure out how it goes and put it in. If you miss you WILL break the amp. Bite the bullet and purchase two more tubes.

FUSE: If this amp blows a fuse, guess what? Something is **WRONG.** It should not blow a fuse, even under continuos playing at full volume. IF it blows a fuse, replace it with a 1A (that's one amp) slo-blo fuse. DO NOT USE A BIGGER FUSE. IF it blows it again, call a qualified repair center as something is WRONG with the amp. A bigger fuse will only make matters worse, or catch something on fire.

More notes on tubes: You do not <u>need</u> to get matched pairs of output tubes, but it never hurts in this amp either. We have had good sounds and good noise levels with either the Sovtek 12AX7LPS or the Electro Harmonix EH12X7 in the preamp section. Of course, nothing beats a good old GE, RCA or one of those sophisticated foreign 12AX7s. We do not preload the amp with a vintage 12AX7 as some people prefer the slightly higher gain of the new ones.

If you need service you can contact TheAirtightGarage.

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