

G-1000 Fucking Fucker guitar amp
owner's manual ver. 1.0
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READ THE WHOLE THING, DAMMIT!!!!

CAUTION: to reduce the risk of electrical shock, do not disassemble.

DANGER! DANGER! HIGH VOLTAGE INSIDE. No user serviceable parts inside. Refer servicing to qualified service personnel.

DETAILED SAFETY INSTRUCTIONS: All the safety and operation instructions must be read before the G-1000 is operated. *If you don't read and HEED them, you are a MORON and you deserve to be RAPED BY NICOLE RITCHIE.* She'll probably use a dead chihuahua.

RETAIN INSTRUCTIONS: The safety and operating instructions should be retained for future reference.

HEED WARNINGS: All warnings on the G-1000 and in the operating instructions should be adhered to.

FOLLOW INSTRUCTIONS: All operating instructions should be followed.

WATER AND MOISTURE: The G-1000 should not be used near water (e.g. near a bathtub, washbowl, kitchen sink, laundry tub, in a wet basement, near a swimming pool etc., ya stupid bastard). Care should be taken so that liquids are not spilled onto or near the enclosure.

VENTILATION AND COOLING: The G-1000 normally operates VERY warm to the touch. It MUST be situated so that its location or position does not interfere with convective cooling.

WARNING: The G-1000 runs VERY HOT. After one hour, the rear panel will become too hot to touch. Overheating may damage or cause shutdown of the switching power supplies that run the tube heaters. DO NOT LEAVE THE G-1000 POWERED UP FOR MORE THAN 2 HOURS, unless it is in a well-cooled room with additional fans. DO NOT USE THE G-1000 IN A HIGH-TEMPERATURE ENVIRONMENT. USE OF ADDITIONAL COOLING FANS IS STRONGLY RECOMMENDED.

The G-1000 MUST NOT be used on a bed, sofa rug or similar surface which may prevent proper cooling. It is NOT a toy, AND IT IS NOT A DILDO. If the G-1000 is mounted in a rack or other built-in installation, space must be left around it to allow convection from the case.

HEAT: The G-1000 MUST be situated away from heat sources such as radiators, heat registers, stoves, or other devices (including power amps) that produce heat.

POWER SOURCE: The G-1000 should be connected to a power supply ONLY of the type marked on the G-1000 rear panel.

POWER CORD PROTECTION: Power supply cords should be routed so that they are not likely to be walked on or pinched by items placed upon or against them. Don't burn your house down, child molester.

CLEANING: The G-1000 should only be cleaned with a soft cloth moistened with water. Unplug the power supply before attempting to clean.

NON-USE PERIODS: The power inlet of the G-1000 should be unplugged from the outlet when left unused for a long period of time.

DAMAGE OR TUBE REPLACEMENT REQUIRING SERVICE:

The G-1000 should be serviced by qualified service personnel when:

- The G-1000 has been dropped, physically damaged, or subjected to force;
- Liquid has been spilled onto the G-1000 or it has been exposed to rain;
- The G-1000 does not appear to operate normally or exhibits a marked change in performance.

SERVICING: The user should NOT attempt to service the G-1000. All servicing should be referred to qualified service personnel.
CHANGING THE TUBES IS NOT A TRIVIAL EXERCISE. DON'T TRY IT UNLESS YOU ARE INTIMATELY FAMILIAR WITH TUBE ELECTRONICS.
THIS MEANS YOU, STINKY!!!



METASONIX LIMITED WARRANTY and standard legal disclaimer

Thank you (yeah, right) for purchasing this Metasonix product. The following terms and conditions apply:

1. Warranty period is for one year from date of purchase with proof of purchase submitted. Warranty covers electrical failure of vacuum tubes and gas-filled tubes, except in cases explained in 3 below.

2. Operating instructions must be followed. This device was intended ONLY for use by AUDIO AND MUSIC PROFESSIONALS. ***IT IS NOT INTENDED FOR USE BY ORDINARY CONSUMERS!!***

Product must not have been damaged as a result of defacement, misuse, abuse, neglect, accident, destruction or alteration of the serial number, improper electrical voltages or currents, repair, alteration or maintenance by any person or party other than our own service facility or an authorized service center, use or installation of non-Metasonix replacement parts in the product, or the use of this product outside of the U.S.A. or Canada, or modification of the product in any way, or incorporation of the product into any other products, or damage to the product caused by accident, fire, floods, lightning, or acts of God, or any use violative of instructions furnished by Metasonix. It is also not intended for use as a condom-warmer.

3. Obligations of Metasonix shall be limited to repair or replacement with same or similar unit, at our option. To obtain repairs under this warranty, present the product and proof of purchase (e.g. bill or invoice) to the authorized Metasonix service center, transportation charges prepaid. When returning the product for repair, please pack it very carefully, preferably using the original packaging materials. Please also include an explanatory note.

IMPORTANT:

To save yourself unnecessary cost and inconvenience, please check carefully that you have fully read and followed the instructions in this instruction manual.

This warranty is in lieu of all other expressed warranties, obligations or liabilities. **ANY IMPLIED WARRANTIES, OBLIGATIONS, OR LIABILITIES, INCLUDING BUT NOT LIMITED TO THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, SHALL BE LIMITED IN DURATION TO THE DURATION OF THIS WRITTEN LIMITED WARRANTY.** Some states do not allow limitations on how long an implied warranty lasts, so the above limitations may not apply to you. **IN NO EVENT SHALL WE BE LIABLE FOR ANY SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES FOR BREACH OF THIS OR ANY OTHER WARRANTY EXPRESS OR IMPLIED, WHATSOEVER.** Some states do not allow the exclusion or limitation of special, incidental or consequential damages, so the above limitation may not apply to you. This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

METASONIX shall not be held liable for any incidental, consequential, or direct damages or expenses associated with the use or misuse of the G-1000. The audio output of the G-1000 is capable of damaging some types of solid-state audio equipment; such use is entirely at the risk of the user. METASONIX does not guarantee that any of its products are designed for any particular use or purpose. The entire risk of suitability and performance of this product lies with the user. Products manufactured and/or sold by METASONIX are not authorized for use as critical components in devices used in life support and other systems whose failure or performance could result in compromised safety or danger to life or property. Don't perform surgery with a G-1000. It has no healing magic, and might have deleterious effect on gonads.

Did we mention the DANGEROUS HIGH VOLTAGES inside the G-1000?

DO NOT OPEN THE G-1000 unless you're a service technician.

NOTE: All sales are FINAL, especially custom designs. Only a Metasonix authorized dealer is permitted to return products to Metasonix for a refund or exchange.

WHAT IT DOES

It's a guitar amp, pussyboy. But it's unlike any guitar amp you've ever seen.

Because lots of guitar wankers want GAIN, we gave them TOO MUCH GAIN in the G-1000. I've personally seen idiots drive the input of a guitar amp with the SPEAKER OUTPUT of ANOTHER guitar amp. So, instead of pretending there is no guitarist fucknuttery in this happy world, we decided to offer an amp that's SELF-ABUSING. The G-1000 is not stable in all regimes, and it oscillates and motorboats in a variety of ways, depending on the control settings. Just like cascaded amps.

If you want to sound like an old Deep Purple album, you came to the wrong place, shitbrain.

The G-1000 is a stereo amp, with a single instrument input and TWO completely independent amplifier sections. The power amps are identical, each using four 6BK5 power tubes and a phase inverter based on a 6GU7/6CG7 dual triode. 6BK5s were meant for low-cost TV sets as the audio output. They are very "undesirable" for modern usage, because they use a LOT of heater current. A pair of 6BK5s uses 2.4 amps of heater current, and produces about 7 watts of audio power. Compare that to a pair of

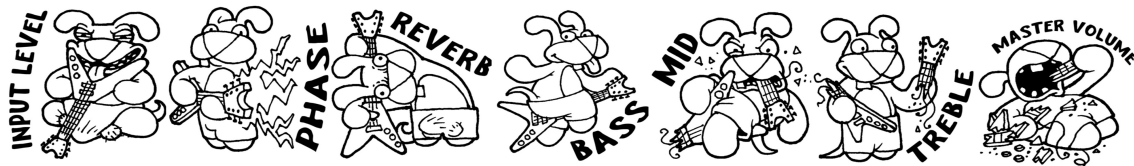
EL84s, which use only 1.5 amps and produce 12 watts of audio.

We used 6BK5s because (a) they're deviant, (b) nobody wants them, and (c) they KICK ASS on the junky tubes most guitar amps use. 6BK5s would also make great high-fidelity power tubes, thanks to very low distortion and great peak-power capability. But instead, we had to put them in an absolutely hideous guitar amp. Yes, we suck.

The preamp section of the amp is deviant as well. The very first section is two 6BF6 triodes. All they do is provide a strong amplified signal to the driver sections of the two amplifiers.

The two preamp driver sections use different lineups of tubes, and thus sound COMPLETELY DIFFERENT. We won't go into all the details, they'll just confuse your ass. They're weird tubes.

HAPPY:



The one on the left is the "HAPPY" channel. It has an input level control, a PHASE control, a reverb-amount control, a dead-typical set of guitar-amp tone controls, and a master volume which only affects the HAPPY channel. Suggest you start with INPUT LEVEL at 12 o'clock, PHASE and REVERB fully counterclockwise, BASS-MID-TREBLE at 12 o'clock, and MASTER VOLUME at 9 o'clock.

ANGRY:



The one on the right is the "ANGRY" channel. It has an input level control, a REAM YOUR ASS control, a reverb-amount control, a dead-typical set of guitar-amp tone controls, and a master volume which only affects the ANGRY channel. Suggest you start with INPUT LEVEL at 12 o'clock, REAM and REVERB fully counterclockwise, BASS-MID-TREBLE at 12 o'clock, and MASTER VOLUME at 9 o'clock.

How do you like the cartoons?

Also please note the little toggle switches. Each channel has an ENABLE switch, right before the input level control. It allows you to mute each channel separately. You have to flip the switch UP to hear anything, idiot.

The HAPPY channel has a DRIVE switch. Flip it up to get overdrive on that channel.

The ANGRY channel has a PAIN switch. It activates severe, massive distortion. (Overdrive, in fact. Just totally different from the HAPPY channel overdrive.) It uses remote-cutoff pentodes and one of those notorious 6BN6 tubes.

And in case you were wondering about footswitches: these little toggles are wired in parallel with the optional footswitch control, which plugs into the special 5-pin plug on the rear panel of the G-1000. You have to set all the toggles DOWN if you use the footswitch. So, with your fat ugly stinky foot, you can enable/disable each channel and enable/disable its overdrive/distortion/whatever. We should also note that the four-channel footswitch is a specially-wired custom item, which you HAVE to buy from us. No other footswitch will work. Heh.

HOW TO SET UP AND USE

First, SPEAKERS. The G-1000 is NOT a high-power metal machine. If that's what you're expecting, you're probably the guitarist from Dethklok—in which case, you're a FUCKING CARTOON, and where did you get the money to buy this amp?? Take it back to the shop NOW, Skwisgaar! Go sodomize William Murderface with a solid-state amp! He deserves it!

The G-1000 was intended as a practice or recording amp.....which happens to sound like it's about to explode in your face, turkeyneck. It wants to see a *separate 8-ohm speaker load on each channel*. (16 ohms is acceptable, 4 ohms is not recommended.) It is possible to modify a 2-driver or 4-driver cabinet for the G-1000, but it would require a technician's help. For best results, we'd recommend a *reasonably-efficient* speaker. Most 10-inch guitar speakers are suitable. Big, massive 4-12 cabinets with Celestions will not work as nicely, because they are power-wasters. Most “studio monitor” type 2-way speakers are not very efficient, and won't be loud enough. If you REALLY want more volume, either take the G-1000 back and buy one of those crappy Marshall things, or get EFFICIENT HORN-TYPE SPEAKERS. Horn systems for PA use would be suitable. So would hi-fi horn speakers like Klipschorns.

(I don't give a rat-fuck about your endless quest for the “brown tone”. Brown is what your face is like, after I wipe my ass on it.)

The SPEAKER outputs must NOT be plugged into a line input. THE SPEAKER OUTPUTS MUST BE LOADED WITH A PROPER 8-OHM LOAD. DO NOT use the outputs to overdrive another amp. Shithead. It won't get you any more distortion. The hell is already built into the G-1000. Because you like red-hot things up your butthole.

Each channel has its own SEND-RETURN jack. It is NOT necessary to connect anything to this jack to use the amp normally—it is provided for addition of outboard effects or for direct recording of the preamp outputs. You MUST use a 1/4” STEREO jack here. The output of the channel preamp goes to the TIP connection of the jack, and the input to the power amp for that channel goes to the RING connection. DANGER: The SEND signal is hot, about +10 dBu, and you CANNOT run it into a 600-ohm input. Nor can you run it into a guitar pedal—it *might destroy the pedal*. Run it into a HIGH-impedance (100k ohms or more) unbalanced input ONLY. The RETURN input to the amp can be driven from any impedance, and requires (guess what) about +10 dBu for full power.

Speaking of power. If your amp says “120v” on the rear panel, use 120v only. Changing it to another AC mains voltage is possible, but requires wiring changes inside the amp. Non-trivial. You wanted a deviant amp. Well, compromises have to be made.

The INPUT jack on the front panel can accept any instrument or line level signal. Since the G-1000's entire signal path is 100% vacuum tubes, you will be hard-pressed to damage anything. (As if it weren't “damaged” already.) You want to worry about something? Worry about the amp overheating. Free advice: pump cool air directly into the cabinet. It may help prevent damage. Buy it an air-conditioner, it will love you in the morning.

And in case you were wondering: yes, both the HAPPY and ANGRY channels are *not* entirely stable. With many settings of the controls, you will hear loud screeches, background noise, oscillations, and even “motorboating”. It's what you wanted—unstable and evil. Okay?

The reverb circuits are also not clean. We worked very hard to cram separate reverb into each channel. They use gen-you-wine Accutronics reverb springs. If you want clean reverb, buy something else. If you really must have a “conventional” sound, keep the INPUT LEVEL controls down below the 9 o'clock level. And excuse us as we snigger at you.

When you have speakers attached, plug your instrument in, and set the amp controls thus:
HAPPY: INPUT LEVEL at 12 o'clock, PHASE and REVERB fully counterclockwise, BASS-MID-TREBLE at 12 o'clock, and MASTER VOLUME at 9 o'clock.
ANGRY: INPUT LEVEL at 12 o'clock, REAM and REVERB fully counterclockwise, BASS-MID-TREBLE at 12 o'clock, and MASTER VOLUME at 9 o'clock.

Hit the power switch (on the back panel). There is no standby switch, because standby switches are stupid (they do NOT improve the lifetime of the tubes), and few people use them properly anyway. Yes, most guitar players are imbeciles.

Hit the ENABLE switch on the HAPPY channel. Play. Sounds awful? Ha ha ha. Twiddle the tone controls. Big deal. (Yes, just like the tone controls on most guitar amps, if you turn the bass, mid and treble all the way down, they kill the entire signal.)

Try turning up the REVERB. Note that it's probably noisy. Some people like that.

You can fiddle with the PHASE knob now. It uses a phase inverter circuit to mix together the straight and inverted instrument signal. At midpoint, the primary signal is canceled out—leaving only the distortion of the preamp circuit. Fascinating. I've never seen it on a tube guitar amp, though it appears on solid-state amps occasionally.

Now, if you dare, hit the DRIVE switch. It adds a “reasonable” amount of overdrive distortion. Please note that the MASTER VOLUME controls are not linked. Each channel is separate from the other. Don't like it? Eat me. If you can find one, use a stereo volume pedal inserted into the send-return jacks.

Disable the HAPPY channel and enable ANGRY. Beware—it has a LOT more distortion than the HAPPY channel. Try the various controls. The REAM YOUR ASS knob adds a feedback loop in the ANGRY preamp, making it oscillate in an unpredictable fashion. As if it wasn't prone to oscillation already. You wanted MORE GAIN, here it is.

Recording and miking the G-1000 is up to you. If you're itching for more volume, you can always take the SEND outputs and run them to a larger outboard power amp. Note that the MASTER VOLUMES occur AFTER the send-return, and will not control the level of the send outputs.



MAINTENANCE

WARNING: If you aren't familiar with the innards of tube guitar amps, **DO NOT OPEN THE G-1000**. It is a **VERY** complex amp, more so than any other guitar amp you've ever seen. The tubes are difficult to access, so changing them requires cabinet disassembly. Sorry about that.

BE CAREFUL removing the chassis from the wooden cabinet. There are two sets of cords going to the reverb tanks, which are attached to the rear of the cabinet front panel. Pull the chassis partway out, reach in and unplug the reverb tanks, then remove the chassis fully. The tubes have their heaters run on 5 volt regulated DC power. This will insure a maximal lifetime. They should last for many years, so why are you worried about replacing them already?

All of the tube types used are no longer made, except for 6CG7s. Fear not. All these tubes are **VERY** commonly available in great quantities in NOS form, and not available from your friendly guitar dealer. Try Antique Electronic Supply (www.tubesandmore.com) or Radio Electric Supply (www.vacuumtubes.net).

The 6BK5 output tubes are being run conservatively, and should last some years. You **DO NOT** need matched pairs, as they are in a self-balancing and self-biasing circuit. There are no bias adjustments. Sadly, there are no other tube types that will work here, so **DO NOT** try to “tube roll” different types.

The overdrive tubes in the **HAPPY** channel can be almost any sharp-cutoff pentode. 6AU6s or 6AK5s will work fine. There are a lot of pentodes that will work here. I can't list them all, for lack of space. Check with us if you want to “tube roll” here.

The tubes in the overdrive of the **ANGRY** channel are remote-cutoff pentodes. You can also use sharp-cutoff pentodes for a different sound. The 6BN6 tube can **NOT** be replaced with any other type.

Keep the same types in the reverb section. The **HAPPY** amp-input tube can be a 6AU7 or a 7AU7 (the difference in heater voltages will have very little effect on sound or gain).

DO NOT try 12AX7s anywhere in this amplifier. They won't work. **DO NOT** listen to guitar amp “tech gurus”. They know very little, and have never seen this circuit before. Check with us **BEFORE YOU DO SOMETHING STUPID**. Thank you.

The plate-circuit fuses should **NOT** blow. If they do, there is probably a shorted 6BK5 tube, or a shorted filter capacitor. Check with us if new 6BK5s don't fix the problem.

If an amp channel stops working or you smell melting plastic, the amp has overheated. DO NOT TAKE CHANCES. Turn the damn thing off IMMEDIATELY and let it cool for a few hours. Then, and ONLY then, can you have a technician look at it.

“Retarded Animal Babies” Cartoons ©2007 David C. Lovelace, all right reserved. Thanx man!
Check out Dave's horrendously offensive animations at umop.com

(text is copyright 2008 Metasonix. All rights reserved. It is a violation of federal law to reproduce, reuse or duplicate this publication without the express written permission of Metasonix or its assigned representative.) (Oh, you want to FIX it? You say you want a SCHEMATIC?? Oh, that's PRICELESS.

Contact us at METASONIX, PMB 109, 881 11th Street, Lakeport CA 95453, (707) 263-5343, synth@metasonix.com. We'll arrange for repair, while refusing to give you a schematic. The circuit of this bastard thing is so embarrassing, we didn't write it down anyway.)