


ITEM	OWNER'S MANUAL		
FOR	MJOLNIR 2		
DESCRIPTION	BALANCED CROSSFET HYBRID/SOLID STATE HEADPHONE AMPLIFIER		
MODEL NO	SCH-05-2	REVISION A	RANDOM NUMBER 1011101100
NOTES	<p>MJOLNIR IS THOR'S HAMMER IN NORSE MYTHOLOGY. MJOLNIR 2 IS A UNIQUELY CAPABLE BALANCED HEADPHONE AMP. YEAH, NO RELATION. BUT MJOLNIR 2 DOES HAVE TONS OF POWER. AND THE ABILITY TO BE BOTH A TUBE HYBRID OR SOLID-STATE AMP. YEP. IT'S MAGIC.</p>		
 S C H I I T		AUDIO EQUIPMENT	

ITEM

SAFETY INSTRUCTIONS



The following is required by the roughly 9,542 government agencies and regulations we have to comply with. If you have some common sense, they should seem pretty straightforward. In any case, read these instructions before proceeding farther, follow all instructions, and heed all warnings. Or else!

1. If you don't know how to install audio devices, get a qualified professional to help.
2. Never use this device near water, and clean only with a dry cloth.
3. Assure adequate ventilation, do not block any ventilation openings, or place near heat sources.
4. Use only the supplied power cord or suitable replacement. Route cords away from traffic areas and protect them from being pinched. Unplug the cord from the outlet if the apparatus is unused for a long period of time.
5. To prevent electric shock, do not use the plug with an extension cord, receptacle, or outlet unless blades can be fully inserted.
6. Refer all servicing to qualified service personnel. Service is required when the device has been damaged, including cord or plug damage, liquid has been spilled or objects have fallen into the device, the device has been exposed to rain or moisture, does not operate normally, or has been dropped.



WARNING: TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS DEVICE TO RAIN OR MOISTURE.



Application for Council Directives 72/23/EEC
Conformity declared for EN60065, EN50082-1

WELCOME

Mjolnir is Thor's hammer. The ultimate weapon to crush your enemies. Or something like that. We're from the USA, so we may not be up on all the Norse mythology, unless we saw it in a movie or something.

But back to Mjolnir 2. Don't use Mjolnir 2 to crush your enemies, use it to take control of the hardest-to-drive headphones on the planet, or to add new life to ultra-sensitive cans. Because Mjolnir 2 is flexible. Balanced out? Sure. Single-ended out? Sure. Gain switchable? Sure. We even put an input select on. Woo-wee!

And, Mjolnir 2 is the only amp that lets you run tube hybrid or all solid-state, thanks to the new Schiit LISST (linear, integral solid state tubes).

Bottom line: this is a serious end-game amp, not just two of the same amps in a chassis, or a single-ended amp with balanced connectors, or a balanced-to-single-ended-to-balanced converting amp with tons of extra circuitry. Enjoy your time with Mjolnir 2.

IMPORTANT

Mjolnir 2 is an inherently balanced amplifier. Do NOT use any balanced-to-single-ended converters on the balanced headphone OR preamp outputs. That's what the single-ended summed outputs are for.

So what happens if you use balanced-to-SE converters? It'll trip the protection circuits on the amp. Or sound like crap. Or both. Bottom line, use the balanced outputs for balanced stuff, and single-ended outputs for single-ended stuff, and everything will be fun and happy.

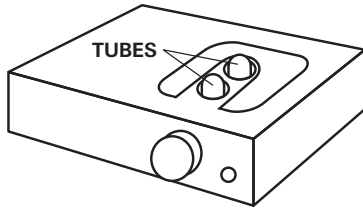
WHAT'S IN THE BOX

- ONE Mjolnir 2
- ONE Power cord (for, like, well duh)
- ZERO Stick-on feet (because the amp already has screw-in feet—you've reached the big leagues now, guys)
- ZERO Crystals, cryo-nano-dampers, alien wave absorbers, or any other magical parts

GETTING STARTED

CAUTION! Dangerous voltages inside. Follow all instructions!

1. **Before plugging in the amplifier, insert the tubes or LISST.** They're both the same, so it doesn't matter where they go.



2. **Ensure tubes are well-seated.** Align carefully and push down firmly.

3. **Plug in your amp and turn it on.** The tubes will glow after a few seconds, and the relay will connect the output after 30 sec.

4. **Connect your source.** And enjoy your music!

TUBE SWAPPING

Mjolnir 2 accommodates any 6DJ8, 6922, ECC88, 6N23P, and 6BZ7 tube types, as well as LISST. To swap tubes:

1. **Turn off and unplug the amplifier.** Wait a while for the tubes to cool.
2. **Carefully extract tubes** by gently rocking them back and forth and pulling upwards. Yes, we know it's a pain in the kiester. Tape helps.
3. **Carefully insert the replacement tubes.** Align the pins to the sockets and press down firmly until the tubes are seated.
4. **Plug the amplifier back in and turn it on.**

FAQ

Hey, the amp just clicked and I get no sound. What gives?

Mjolnir has sophisticated internal protection for overcurrent and DC? Or did you try to use a balanced-to-single-ended converter, or try to drive speakers with the amp? If so, you hit the protection. Unplug the headphones and turn the amp back on. The protection will reset.

There's no sound for a while after I turn Mjolnir on. Why?

That's perfectly normal. Mjolnir delays the headphone output for 30 seconds after you first turn on the amp.

Can I leave Mjolnir on all the time?

You can, but we really recommend you power down the amp if you aren't going to use it for an hour or more. Mjolnir uses a reasonable amount of power, and runs pretty warm.

Can I power speakers with Mjolnir?

That's not a great idea—speakers require more current than headphones, and you may trigger Mjolnir's internal protection.

It doesn't turn on, what do I do?

Plug it in to a different AC socket. Ensure you are not currently in a blackout. Then call us if it still doesn't turn on.

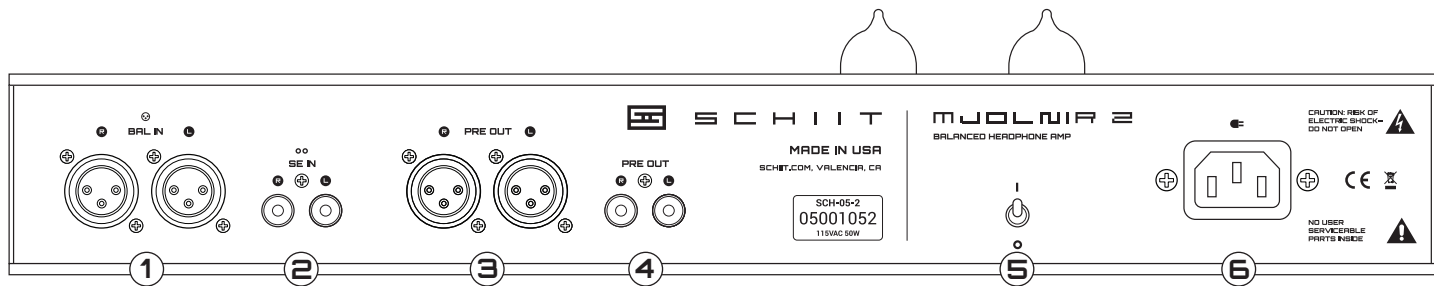
I hear hum through the headphones, what do I do?

It's most likely a ground loop. To fix a ground loop, try a GFCI outlet or a ground loop isolator.

Hey, you know this amp runs pretty warm?

Yep.

MJOLNIR 2 CONNECTIONS



1 Balanced Input.

Connect your balanced source here, using good XLR cables. You can select this source with the front panel switch.

2 Single-Ended Input.

Connect your single-ended source here using good RCA cables. You can select this input from the front panel as well. Both balanced and single-ended inputs can be connected at the same time.

3 Balanced Preamp Output.

Connect to external power amplifiers or powered speakers that accept XLR connections, using good XLR cables. Do NOT use any XLR-to-RCA or other single-ended adapters on this output!

4 Single-Ended Preamp Output.

Connect to external power amplifiers or powered speakers that accept RCA connections, using high-quality RCA cables, especially for longer runs.

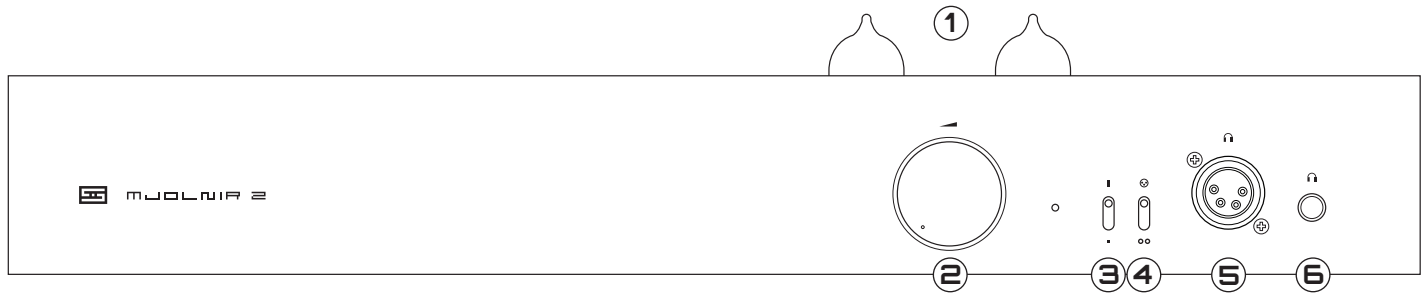
5 Power Switch.

Up for on, down for off. Very simple. There are no fancy “power down” modes with Mjolnir 2, just on or off.

6 Power Inlet.

Plug the end of the supplied IEC cord in here. You can also use fancy audiophile types, but they won't really do anything—what about the thousands of feet of crap copper cables in your walls, huh?

MJOLNIR 2 CONTROLS



1 Tubes or LISST.

Insert standard 9-pin 6DJ8/6922 style tubes or Schiit LISST here for solid-state gain. A full tube list and tube swapping instructions are a few pages back.

2 Volume Knob.

Turn it to the right to make the music louder. Stop before smoke comes out of your cans. Seriously. Mjolnir 2 makes a ton of power, and can easily light up your headphones.

3 Gain Switch.

Up is high gain for hard-to-drive headphones, down is low gain for high-efficiency headphones. Choose the one that sounds best to you, or has no audible noise. Easy, right?

4 Input Select.

Up selects the balanced XLR input, down selects the single-ended RCAs. Yes, Mjolnir 2 is also a 2-input preamp and balanced-SE and SE-balanced converter. Fun times!

5 Balanced Headphone Output.

Connect ONLY balanced headphones here using a 4-pin Neutrik connector. Do NOT use any balanced-to-single-ended converters on this output!

6 Single-Ended Headphone Output.

Connect unbalanced headphones here, using a 1/4" TRS plug.

SPECS

Frequency Response: 20Hz-20Khz, -0.1db, 2Hz-400KHz, -3dB

Maximum Power, 32 ohms: 8.0W RMS per channel

Maximum Power, 50 ohms: 5.0W RMS per channel

Maximum Power, 300 ohms: 850mW RMS per channel

Maximum Power, 600 ohms: 425mW RMS per channel

THD: <0.005%, 20Hz-20KHz, at 1V RMS

IMD: <0.006%, CCIR

SNR: >104db, unweighted, referenced to 1V RMS, in low gain mode

Crosstalk: >-75dB, 20 Hz-20KHz

Output Impedance: 1 ohms (high gain), 0.3 ohms (low gain)

Gain: 8 (18dB) or 1 (0db), via front-panel switch

Inputs: one pair balanced XLR, one pair single-ended RCAs, switchable via front panel switch

Outputs: one 4-pin balanced female XLR, one ¼" TRS phono, one pair 3-pin male XLR preamp, one pair single-ended RCA

Power Consumption: 45W

Size: 16 x 8.75 x 2.25"

Weight: 13 lbs

WARRANTY

Schiit Audio warrants to the original purchaser that the product shall be free from defects in material and workmanship for five (5) years from the date of purchase. Exceptions: Tubes. Tubes are covered by a 90-day limited warranty with the same terms. If a defect covered by this warranty occurs during this warranty period, Schiit Audio will repair the defective product, free of charge. Date of purchase will be based on customer-submitted receipts, otherwise date of manufacturing will be used to determine warranty period.

OBTAINING WARRANTY SERVICE

If you believe you need warranty service, contact us first. There may be a simple solution to your problem. Schiit Audio products sent back to us without a Return Authorization (RA) will be returned to the sender without repair. To contact us and obtain an RA, email support@schiiit.com. We will respond quickly to email inquiries.

WARRANTY LIMITATIONS

THIS WARRANTY SHALL NOT APPLY IF THIS PRODUCT: (a) IS MODIFIED OR TAMPERED WITH; (b) IS DAMAGED BY NEGLIGENCE, ACCIDENT, UNREASONABLE USE, COFFEE, OR BY OTHER CAUSES UNRELATED TO DEFECTIVE MATERIALS OR WORKMANSHIP; OR (c) HAS HAD THE SERIAL NUMBER ALTERED, DEFACED OR REMOVED.

ANY APPLICABLE IMPLIED WARRANTIES, INCLUDING WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, ARE HEREBY LIMITED IN DURATION TO THE WARRANTY PERIOD (5 YEARS). IN NO EVENT SHALL SCHIIT AUDIO BE LIABLE FOR CONSEQUENTIAL OR INCIDENTAL DAMAGES RESULTING FROM THE BREACH OF ANY IMPLIED OR EXPRESS WARRANTIES. SOME STATES DO NOT ALLOW LIMITATIONS ON HOW LONG AN IMPLIED WARRANTY LASTS OR EXCLUSION OF CONSEQUENTIAL OR INCIDENTAL DAMAGES, SO THE ABOVE LIMITATIONS MAY NOT APPLY TO YOU.

This warranty gives you specific legal rights. You may also have other rights which vary from state to state or province to province.

ITEM	OWNER'S MANUAL BACK COVER	
DESCRIPTION	GRAPHIC FOR THE BACK COVER OF THE MANUAL	
NOTES	<p>YES, ALL SCHIIT PRODUCTS ARE MADE IN THE USA. YES, PRIMARILY OF US-SOURCED COMPONENTS. YES, IT'S PRONOUNCED EXACTLY LIKE YOU THINK. NO, WE ARE NOT ON FACEBOOK. NO, WE'RE NOT ON TWITTER. AND NO, WE'RE NOT ON YOUTUBE.</p> <p>SCHIIT AUDIO 24900 ANZA DRIVE, SUITE A VALENCIA, CA 91355 USA INFO@SCHIIT.COM SCHIIT.COM</p>	
 SCHIIT		EVERYTHING ELSE AIN'T