

# GC Audio — Gyraf Audio G4.5 Inherit Cartridge:

Thank you for purchasing the Gyraf Audio Inherit Cartridge. We hope you have as much fun using it as we had designing it!

GC Audio is proud to introduce a new preamp that extends the GC Audio cartridges family - based on a, now classic, design by Jakob Erland, founder of Gyraf Audio and designer of many high-end studio gears like the G9 preamplifier or the G22 compressor.

Jakob Erland is universally recognized as one of the leading experts in tube hardware design.

He is also very popular in the DIY community where he provides free help.

The G4.5 Inherit cartridge is, as its name implies, a single channel of the famous Gyraf Audio Gyratec 9 preamp. Faithful to the original in every detail.

GC Audio G4.5 is a genuine tube preamplifier: Coming with two ECC82 running on high voltage, no solid-state component in the signal path, input/output balanced by high-end Lundahl transformers.

The goal with this design is to achieve everything from a completely clean to a possibly very colorful sound imprint. All under the total control of the user. The most important aspect of this circuit is its very slow transition to overload - it has a sweet spot that seems to last for ages. We recommend it e.g. for vocals, where by raising gain and lowering output volume, you can get a nice dense analog saturation without overloading your converters. This cartridge is a real creative tool.

#### **Technical Data:**

PAD = -28dB Input impedance = 1K Ohms. EIN (150 Ohms source @ max gain - 22/22Khz) = Better than -124 dBu. THD + N = 0.1% @ 1Khz

#### Gain Step +/-1dB:

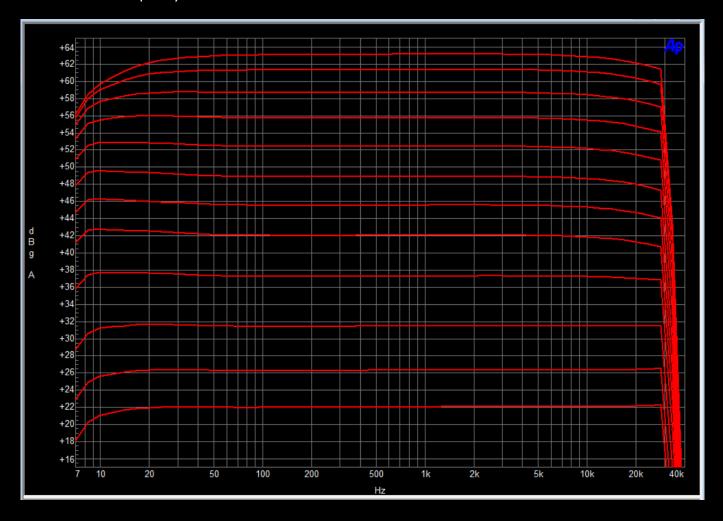
1) 22 dB	7) 49 dB
2) 26 dB	8) 52 dB
3) 32 dB	9) 56 dB
4) 37 dB	10) 59 dB
5) 42 dB	11) 61 dB
6) 46 dB	12) 63 dB

### **Overview by Jakob Erland:**

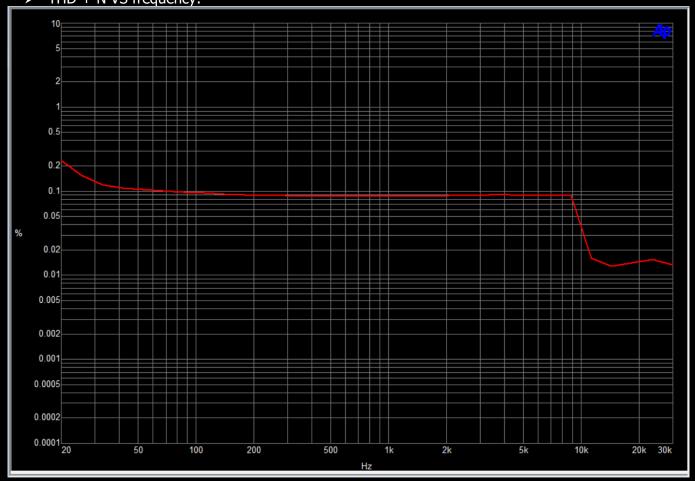
"The preamp-as-a-cartridge is simply a great idea: In this day and age where you can have clean and neutral preamps virtually for free with your converters, you don't want a big stack of the same type preamp - you want variety, something that matches the individual microphones and sources you are working with. The inherit cartridge system gives you exactly this - the ease of trying out a variety of flavors - the possibility of finding that sonic imprint that's just right for what you have at hand

The G9, which the G4.5 cartridge is based on, is an adaptation of the input circuit of the G36 tape recorder, that I have used and loved since I was a kid.. Update includes transformer balancing in and outputs, phantom power, switchable high-pass filter and switched gain settings"

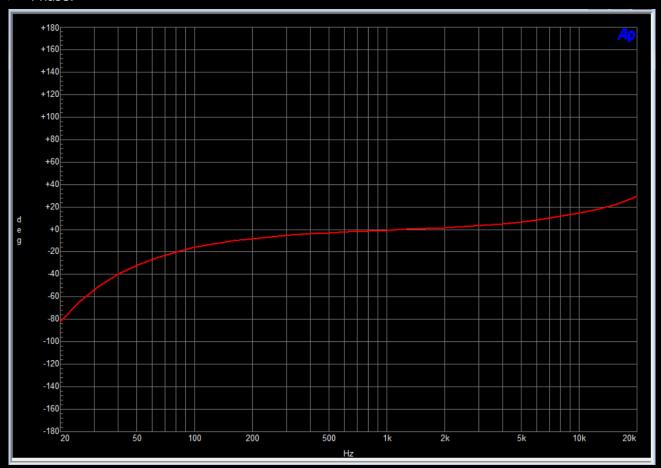
## ➤ Gain VS frequency:



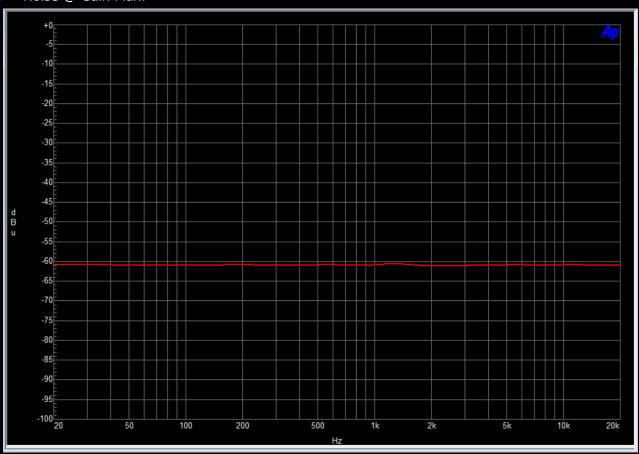
### > THD + N VS frequency:



### Phase:



# Noise @ Gain Max:



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