

GC Audio - Graham Langley Inherit Cartridge:

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

GC Audio introduce a new preamp cartridge designed by Graham Langley, co-founder of Amek and designer or co-designer of many large format mixing consoles (Amek Mozart, Rembrandt, Angela, etc...). This new design, exclusive to the Inherit system, has been designed to make the best use of the resources offered by the reception rack.

The synoptic is a premium differential preamp composed of paired transistors and constant current sources. It is digitally controlled in order to isolate the analog signal path in the metal cartridge (and therefore separated from the radiation of the linear power supply). Common mode rejection and output balancing are manually calibrated to achieve optimized values. The resistive ratios are composed of low value in order to obtain an optimal EIN.

This preamp is perfect for user needing uncompromising sound pickup with a transparent and powerful result.

Technical Data :

 $\label{eq:PAD} \begin{array}{l} \mbox{PAD} = -20 \mbox{dB} \\ \mbox{Input impedance} = 5 \mbox{K Ohms.} \\ \mbox{EIN (150 Ohms source @ max gain - 22/22 \mbox{Khz}) = Better than -127 \mbox{dB.} \\ \mbox{THD} + \mbox{N} = 0.04 \mbox{\%} \end{array}$

1) 16dB	7) 40dB
2) 20dB	8) 44dB
3) 24dB	9) 48dB
4) 28dB	10) 52dB
5) 32 dB	11) 56dB
6) 36dB	12) 60dB

Gain Step +/-1dB:

Overview by Graham Langley:

"When I first discovered the GC Audio "Inherit" system I was impressed by the innovative concept of interchangeable microphone amplifier cartridges allowing customers the flexibility and freedom of choice to enhance their creativity.

The thought that had gone into the design and the build quality of the product also appealed to me.

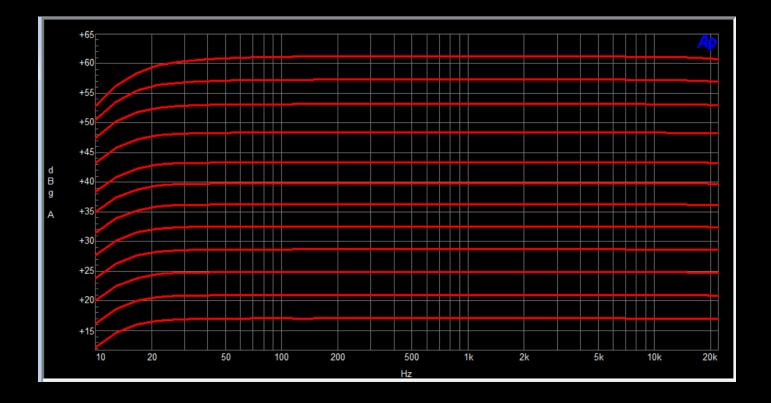
I was therefore honoured when invited to contribute a "Langley" microphone amplifier cartridge design.

I designed a custom preamp to completely match the capabilities of the Inherit System. The circuit is reminiscent of the topology that I used in Amek console microphone amplifier designs in the 1970s and 80s but with significant improvements, particularly in noise performance. This cartridge is intended to provide a clean, transparent sound over the full audio frequency spectrum.

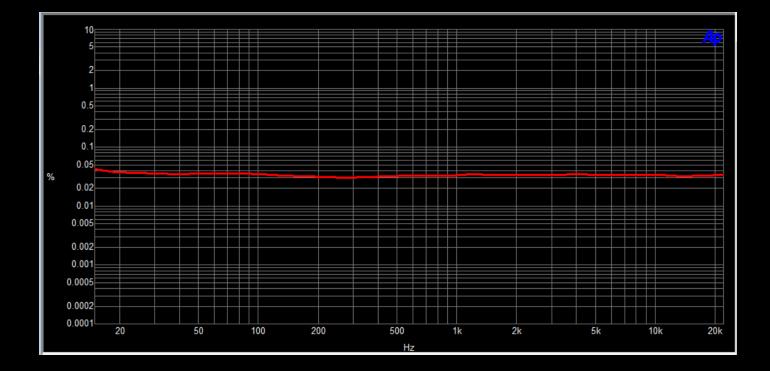
I hope you enjoy using this addition to your "Inherit" cartridge collection."

Graham Langley

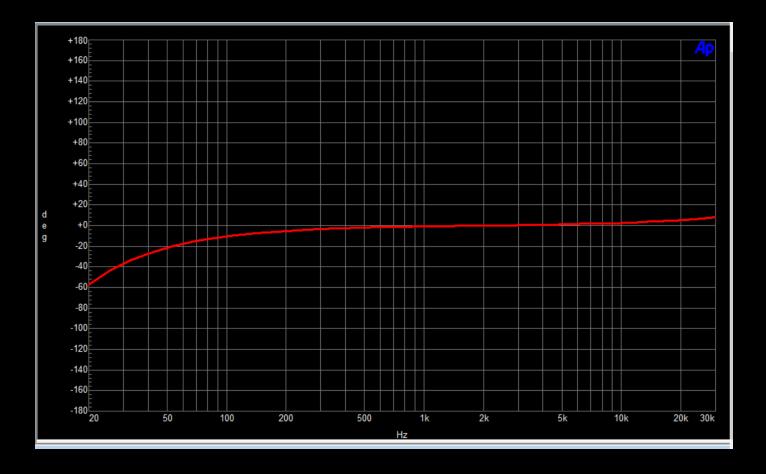
➢ Gain VS frequency:



➤ THD + N VS frequency:



Phase:



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