

General Audio Research

HELIOS 2128

MIC PREAMP

BOM+DOC

this board offer a possibility to make this legendary UK preamp

Helios consoles were used to record and mix pop , reggae and rock classics ever produced.

Led Zeppelin, Queen, The Beatles, Bob Marley ,the Rolling Stones, The Who, Roxy Music, Jimi Hendrix and many others

WARNING!

This modification is for technicians only. It subjects you to the health and safety risks associated with chemical solvents and soldering. You must use all normal safety precautions when working with these tools and materials.

General Audio Research and its principals are not responsible for any injury that may occur should you proceed with this modification.

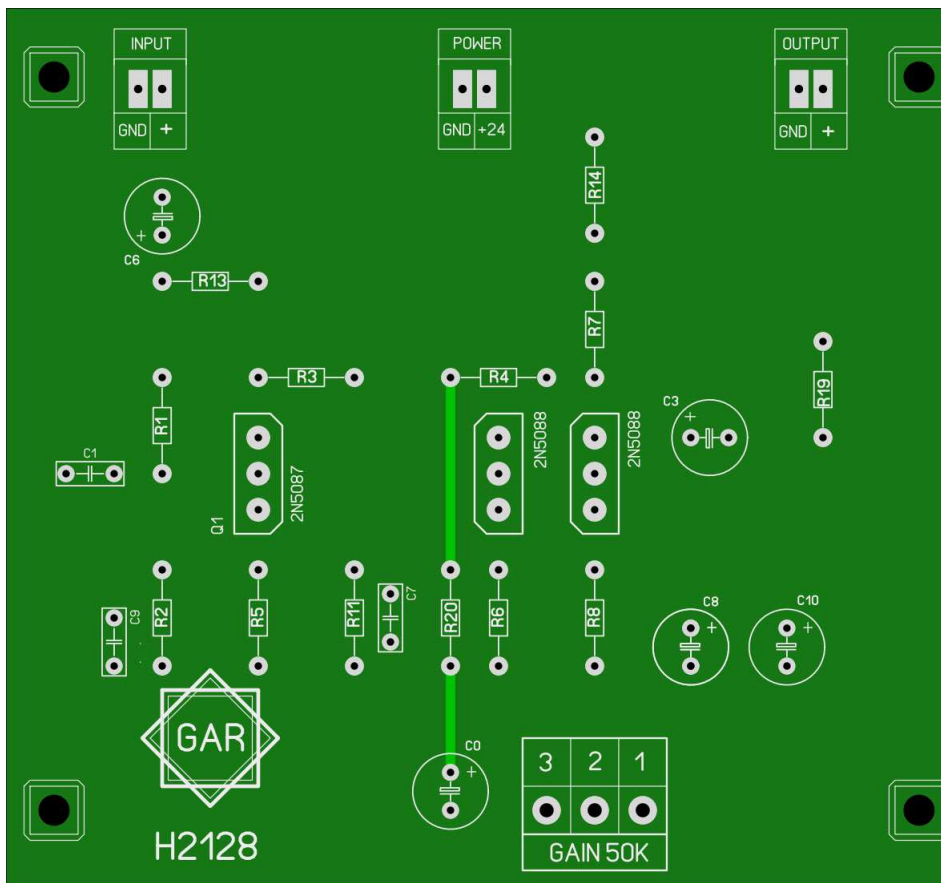
General Audio Research are indemnified from any damage to your audio equipment and any connected electronic, your other property, and your person, that results from the operation of your equipment after you have tampered with it.

! warning !

tube preamp use lethal High voltage.

Difficult level / easy

2128 amplifier card



BOM

Q1	2N5087
Q2	2N5088
Q3	2N5088

be careful it is marked 2n4058 on the pcb

This is an error, you must use 2n5088

R1	820K
R2	680K
R3	1K
R4	47K
R5	220K
R6	22K

R7 1K2
R8 470
R11 220
R13 180k
R14 120
R19 150
R20 200

Potentiometre = 25k or 50 kC antilog or log

C0 220uf / 50v (for gain)
C1 1uf
C3 10uf /63v
C6 47uf /63v
C7 1200pf
C8 220uf /63v
C9 120pf
C10 47uf/ 63v
C0 220uf / 50v (for gain)

Audio transformer recommend

the input transformer is extremely important for the Helios preamp, it gives a large part of the color of the sound

here are some examples which are recommended

INPUT transformer = ratio 1:10 (600/10k)

- Lustraphone M10
- sowter 7490 (clone m10)
- Raindirk Audio DESIGN
- UTM2522 (no clone but good)

Output transformer = ratio 1:2 or 1:1 (150/600 600/600)

- sowter 9825 , 3603

- UTM3581

- jensen Wire Lead JT-11 series

- jensen Wire Lead JT-123 series

Recommend PSU power supply

favor a very good power supply with good filtering for good audio quality

+24vdc power

FOR BUILD THIS MIC PREAMP YOU NEED

rack enclosure

power transformer

regultated power supply +24vdc

regultated power supply +48v for phantom power

connector xlr in & out

knob

solder

ect ...

for the attention of studio geeks

this preamp can be used in this germanium first version olympic studio !

for the most motivated among you

the germanium version operates at negative **-24vdc**

be careful to position the capacitors in the other direction

and double check the transistor position

good luck.