

M1 Dynamic Microphone

R1 300k  
R2 43k (adjust.)  
R3 3.3k  
R4 1k

C1 47uF, 6.3V

D1 1N5239B  
D2...D5 BAV20

Q1 MPS3904  
Q2 MPS2907A  
Q3 MPS3904

D1 - any Zener diode  
with  $V_{stab} = 8...12V$

D2...D5 - any low  
voltage, about 100mA  
current, diodes

Q1, Q3 - any low power  
N-P-N transistors

Q2 - any low power  
P-N-P transistor

Voltage between points A and B should be:

$$V_{ab} = \frac{(V_{stab \text{ of Zener diode D1}} - 1)}{2} + 1$$

For 1N5239B  $V_{stab} = 9V$ , then

$$V_{ab} = \frac{9 - 1}{2} + 1 = 5V$$

#### ADJUSTMENT

(Performs only one time in amplifier's life)

1. Shorting points W1, W2
2. Connect phone line to points W3, W4
3. Measure voltage between points A and B
4. Disconnect phone line from points W3, W4
5. If measured  $V_{ab}$  was over 5V then replace R2 with slightly more resistant one  
If measured  $V_{ab}$  was below 5V then replace R2 with slightly lower resistant one
6. Repeat paragraphs 2 to 5 until  $V_{ab} = 5V$
7. Unshorting points W1, W2 and connect microphone
8. Connect phone line to points W3, W4

Enjoy!

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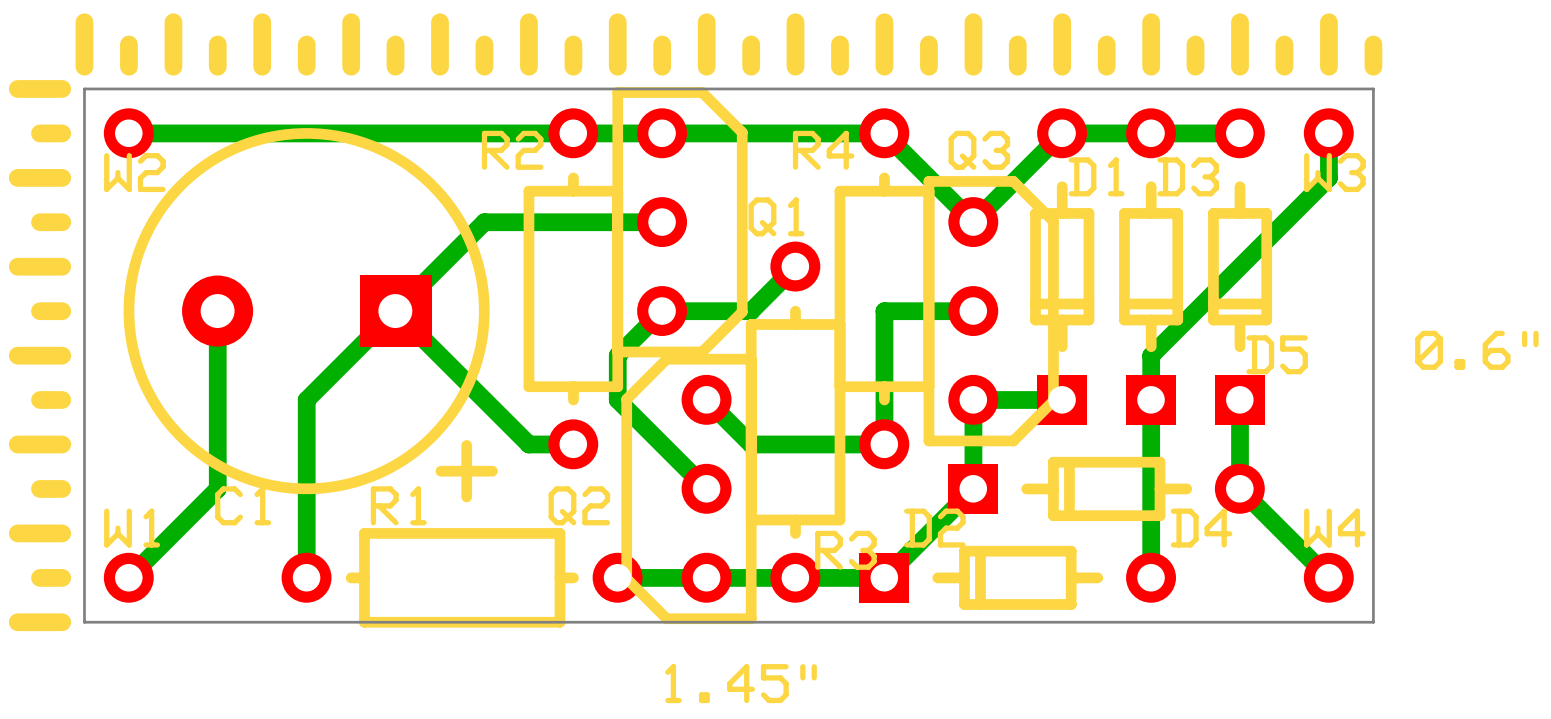
Priimak amplifier

Danko Priimak

Rev 1.0  
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Pitch=0.05"



1.45"

0.6"