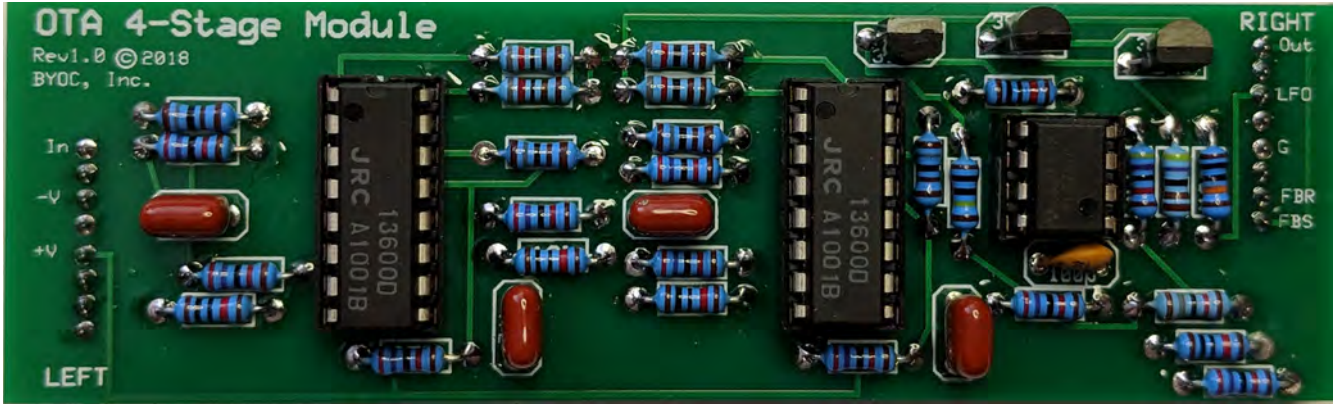


Build Your Own Clone Phase Royal OTA Module Instructions



Parts list for the Phase Royal OTA Module Pack

Resistors:

- 4 - 1k8 (Brown/Gray/Black/Brown/Brown)
- 1 - 4k7 (Yellow/Purple/Black/Brown/Brown)
- 4 - 8k2 (Gray/Red/Black/Brown/Brown)
- 5 - 10k (Brown/Black/Black/Red/Brown)
- 1 - 18k (Brown/Gray/Black/Red/Brown)
- 9 - 27k (Red/Purple/Black/Red/Brown)
- 1 - 47k (Yellow/Purple/Black/Red/Brown)
- 1 - 100k (Brown/Black/Black/Orange/Brown)
- 1 - 1M (Brown/Black/Black/Orange/Brown)

Capacitors:

- 1 - 100pf ceramic disc (May say '101' on the body)
- 4 - .0047uF/472 Film Cap (May say "472" on the body)

IC:

- 1 - TL072 or similar dual opamp
- 2 - 13600 OTA ICs

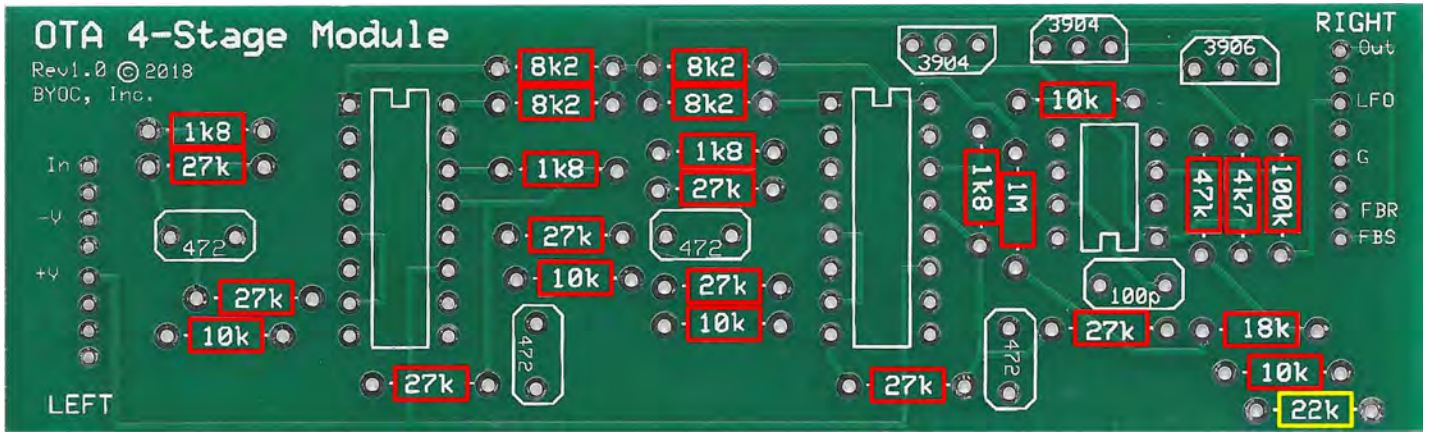
Transistors:

- 1 - 2N3906 or similar PNP transistor
- 2 - 2N3904 or similar NPN transistor

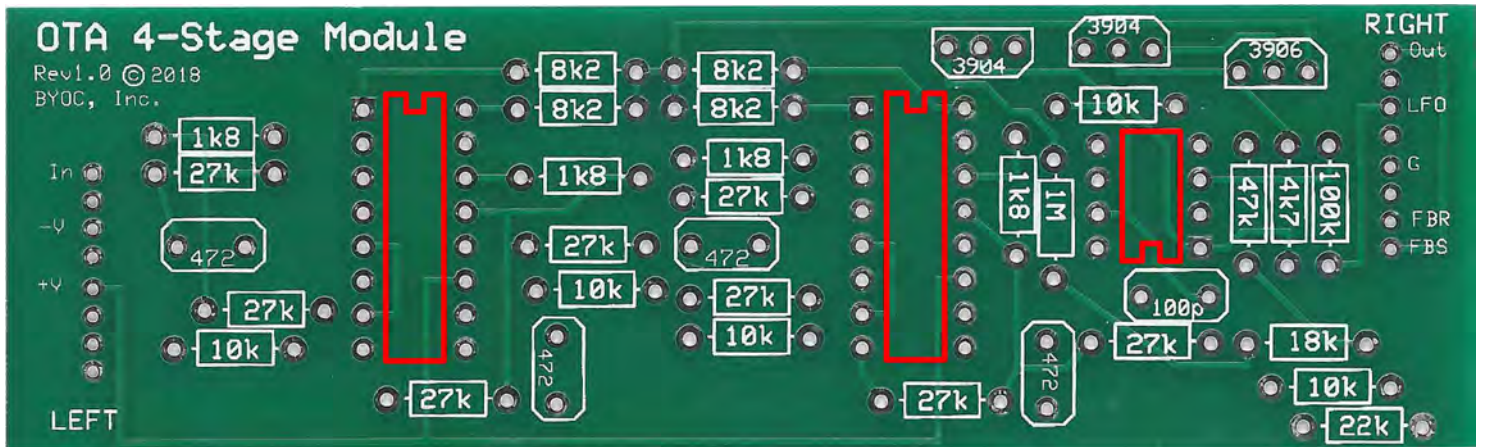
Hardware:

- 1 - DIP-8 Socket
- 2 - DIP-16 socket
- 4 - 1X4 pins

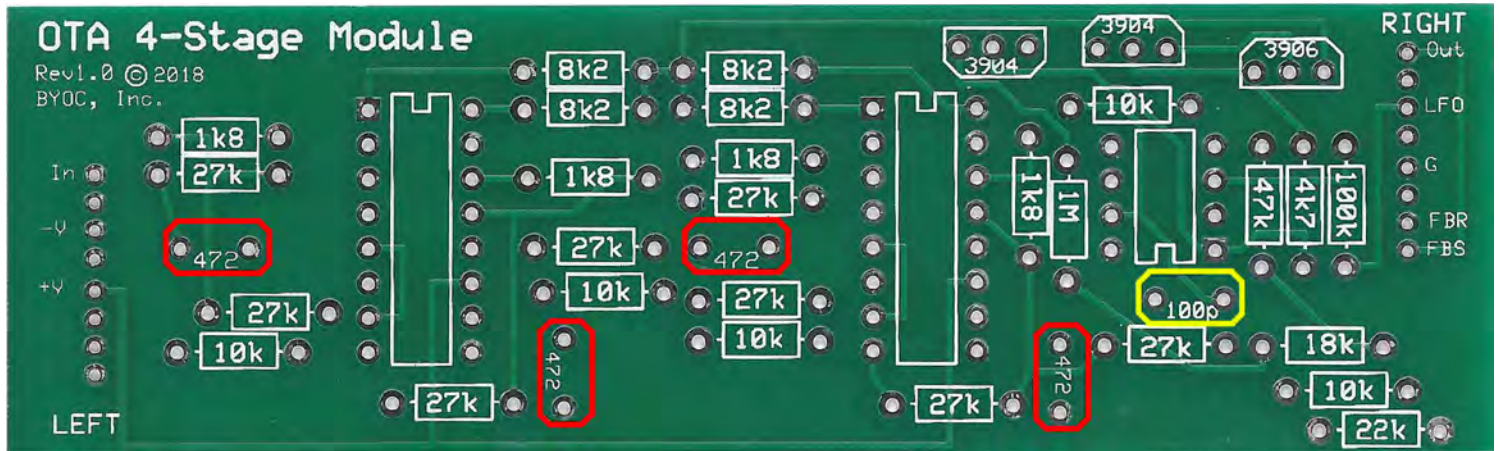
Step 1: Add the resistors. These are not polarized and can go in either direction. The resistor highlighted in yellow is a 27k.



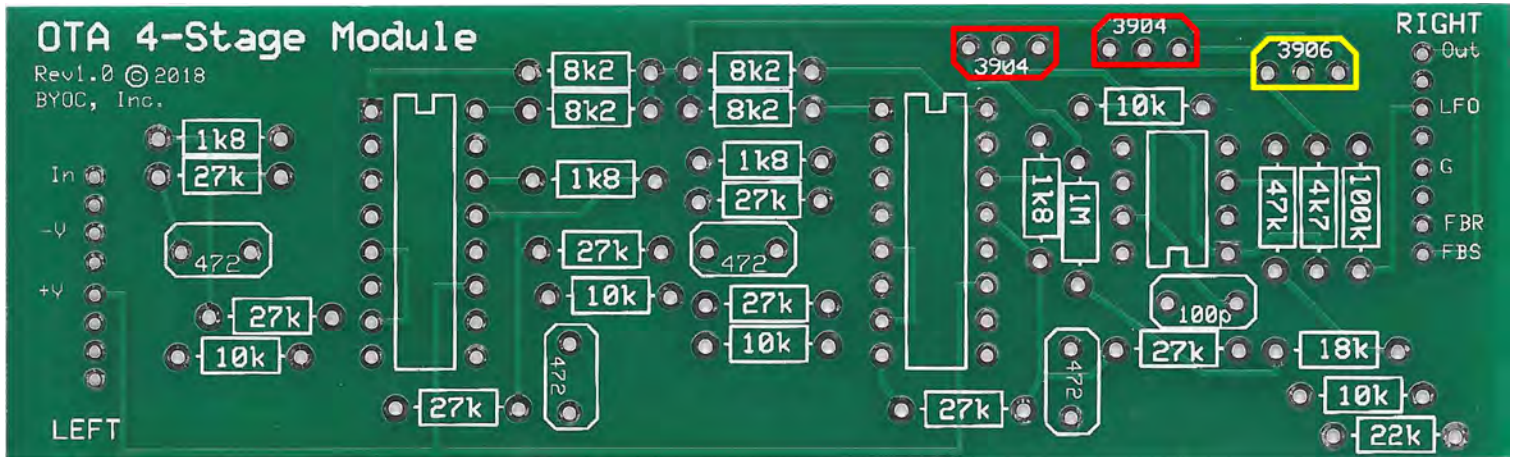
Step 2: Add the IC socket. Be sure to match the notch on the socket with the notch outline on the PCB screenprint.



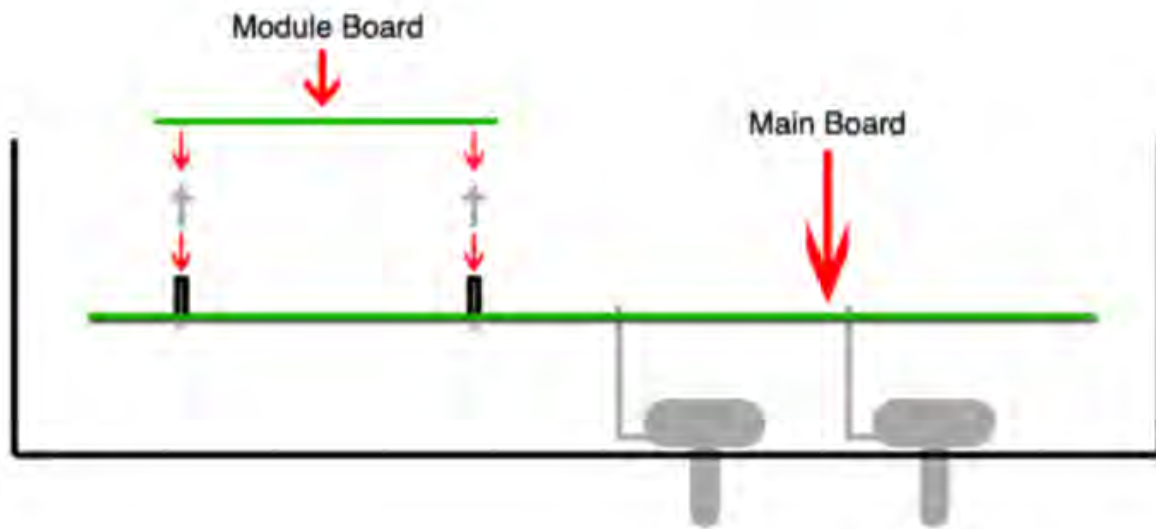
Step 4: Add the Film caps. These are not polarized and can be placed in either direction. The capacitor highlighted in yellow is the ceramic disc capacitor.

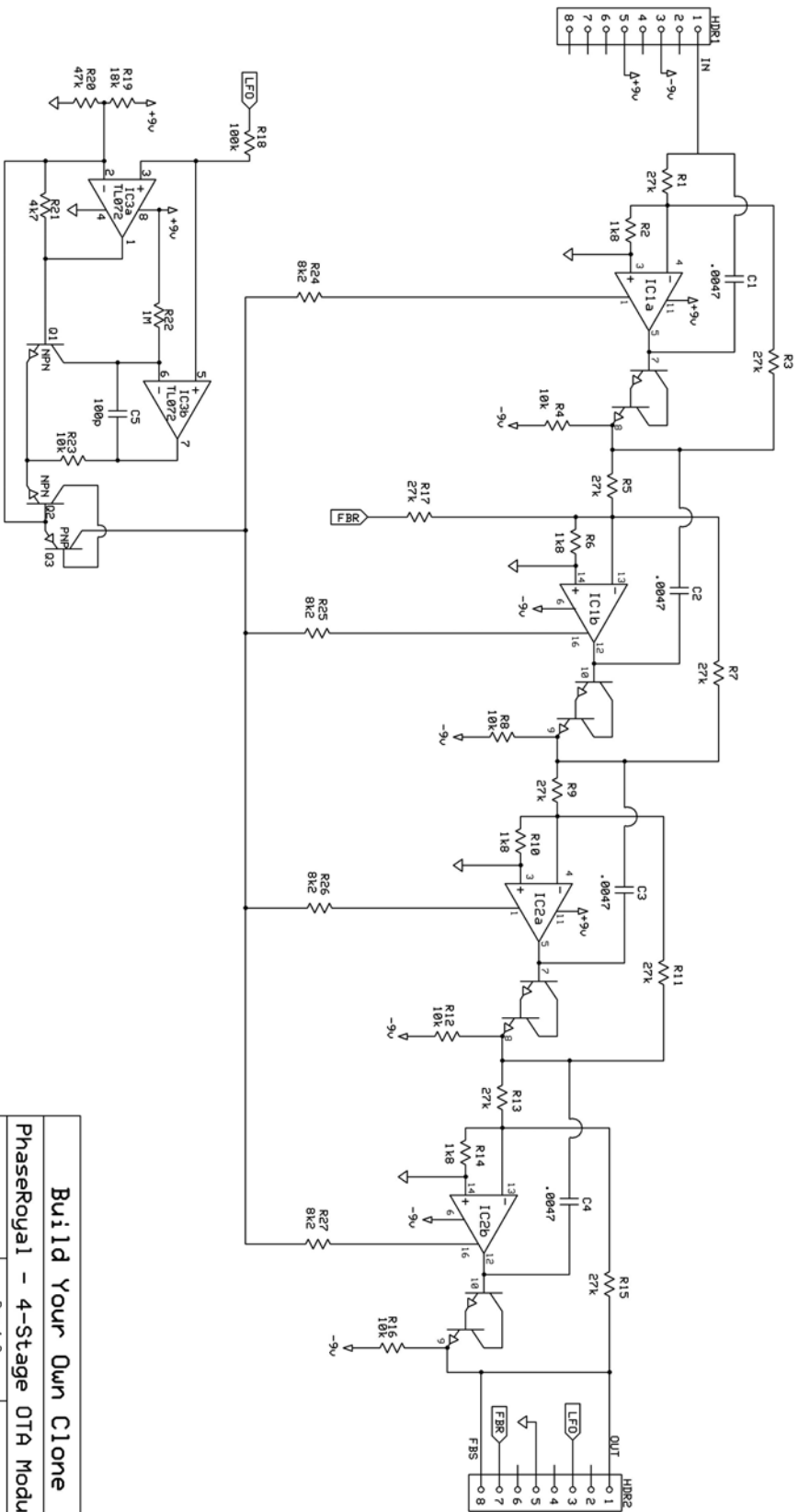


Step 5: Add the transistors. The transistor highlighted in yellow is the 2N3906.



Step 6: Insert the pins into the Phase Royal header spots as shown below be sure to place the longer end of the pins into the headers. Once the pins are placed, guide the module board onto the pins and press down slightly so the module is sitting flush on the pins. Solder the top-side of the module at the pins. This helps align the pins and headers to the module board.





Build Your Own Clone

Phaseroyal - 4-Stage OTA Module

N.W. Kenning

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8/6/2018

Page # or name