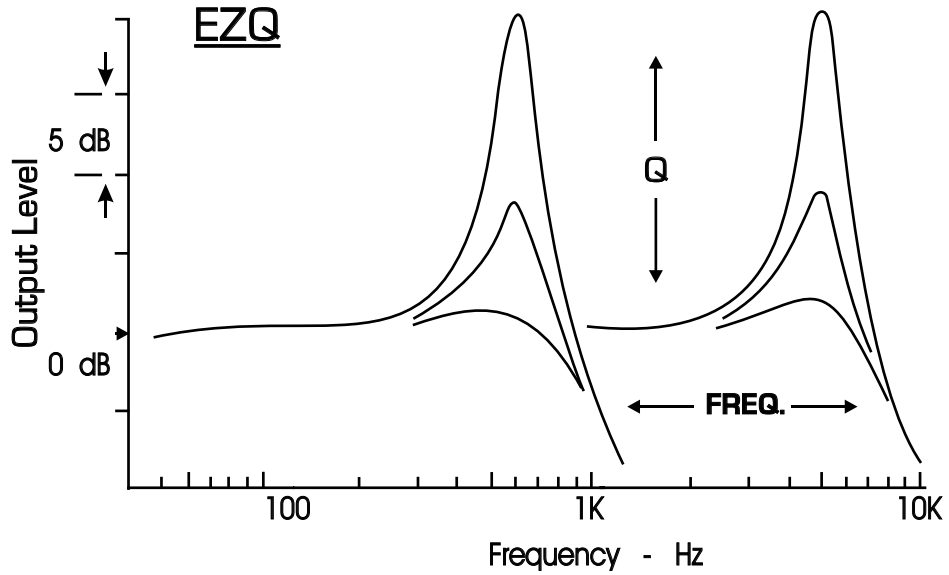
PARAMETRIC FILTER - EZQ MODULE

This module is specifically intended as a low pass filter with variable (compensated) Q, but it can also be used a bandpass or highpass filter.

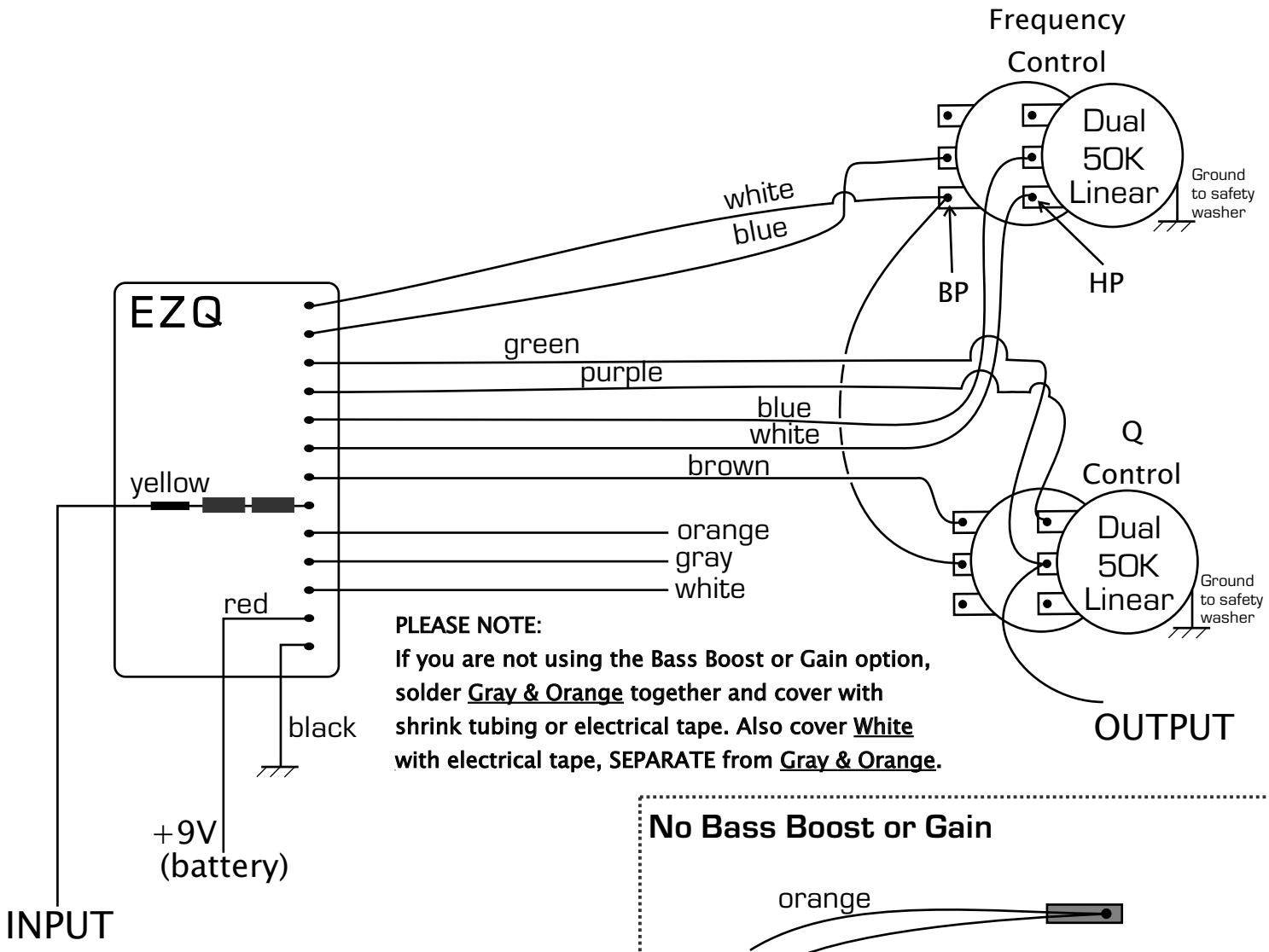
Using the EZQ with our brighter in-line coil hum-cancellers provides the utmost definition for percussive (string slap) bass techniques, as well as a wide range of tonalities not achievable with standard (shelving) tone controls.

The EZQ is a low noise filter that will accept input from any pickup or combination of pickups without instability or oscillation. This unit is the same size a TCT and also uses a single 9V battery. Battery life is 2 months of continuous use. The EZQ requires 2 dual 50-K ohm pots for frequency and Q control. The frequency range extends from 600Hz to 5000Hz and the boost at maximum Q exceeds 20dB. Decreasing the Q value increases the overall gain to maintain nearly constant loudness.



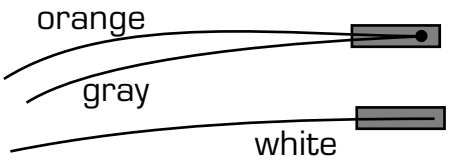
The Input impedance of the EZQ is 270K-ohms, the output impedance is 10K-ohms. Its maximum undistorted output is 2.5V RMS.

The lugs marked BP and HP on the frequency control potentiometer (see next page) provide bandpass and highpass response from the EZQ. A 1 mfd capacitor with its (+) terminal towards the EZQ should be used to connect these points to output jacks or cables. The (-) terminal of the capacitor should have a 27K-ohm resistor to ground to avoid 'pops' when first plugging into these outputs.

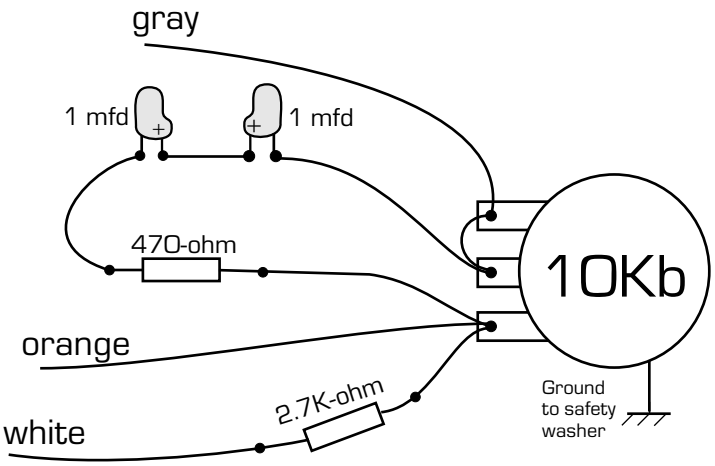


PLEASE NOTE:
If you are not using the Bass Boost or Gain option, solder Gray & Orange together and cover with shrink tubing or electrical tape. Also cover White with electrical tape, SEPARATE from Gray & Orange.

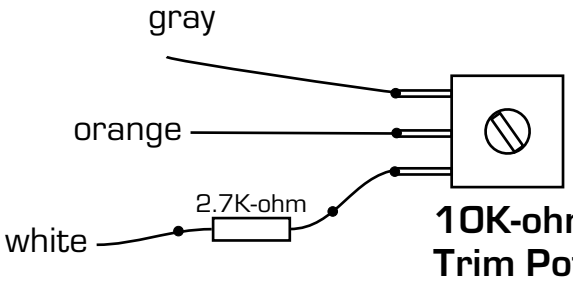
No Bass Boost or Gain



Optional Bass Boost

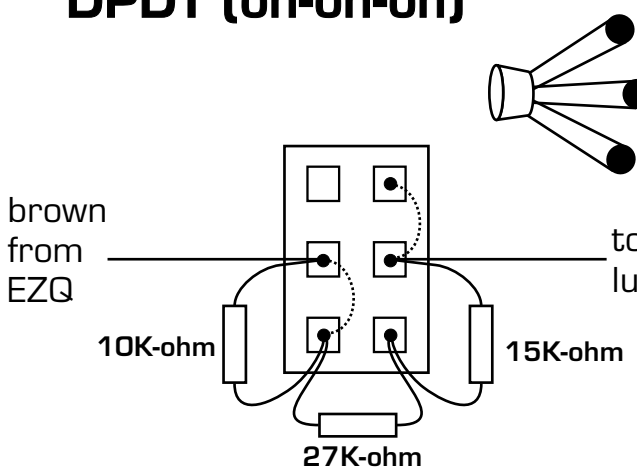


Optional Gain



10K-ohm Trim Pot

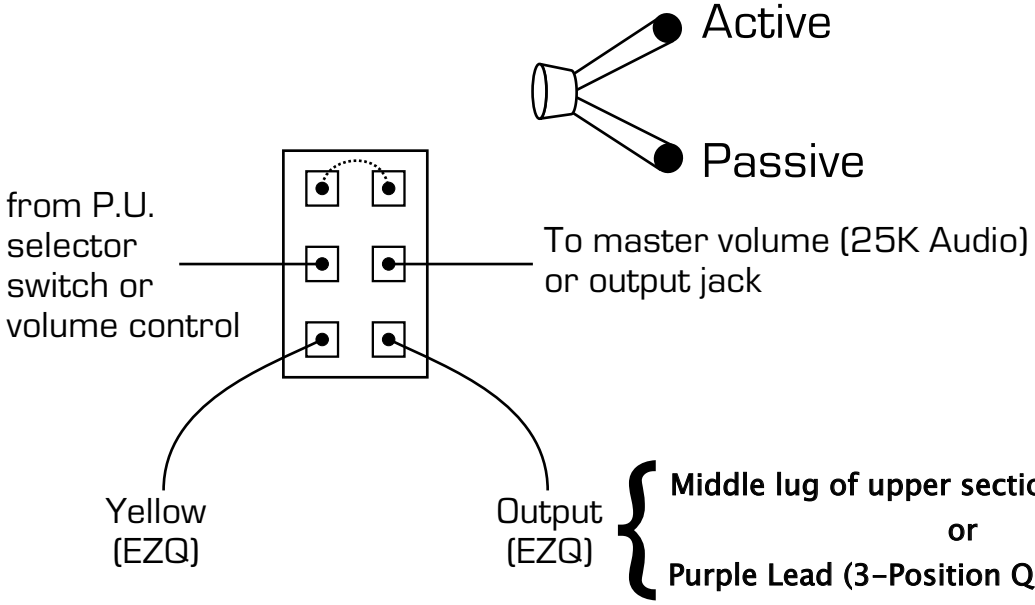
3-Position Q-Control Switch DPDT (on-on-on)



Use purple lead for output to master volume or output jack. Use shrink tubing or electrical tape on green lead to avoid grounding.

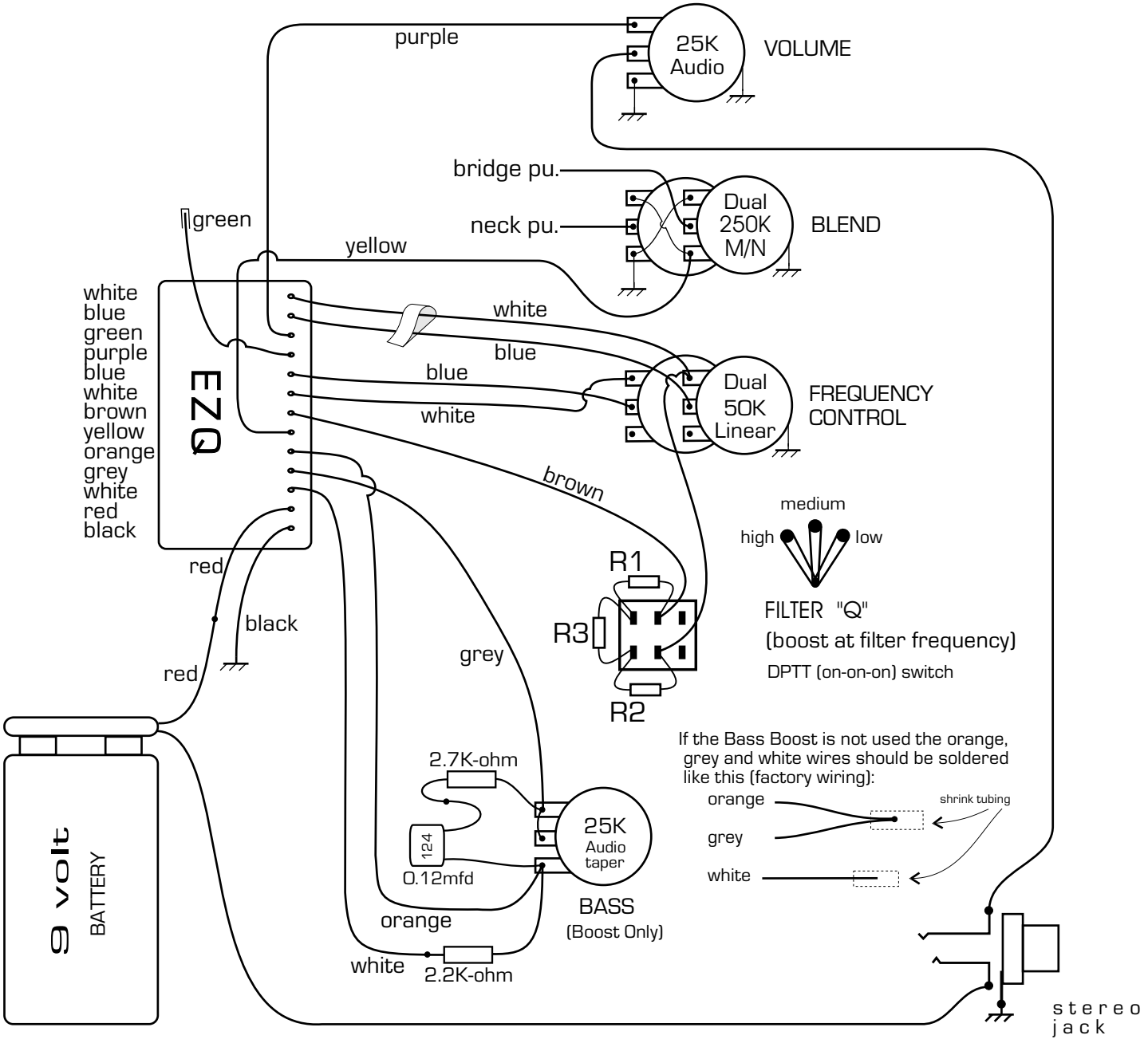
Output level ~ 6 dB higher than variable Q-Control Option

Bypass Switch DPDT (on-on)



Middle lug of upper section of Q-Control
or
Purple Lead (3-Position Q-Switch Option)

Volume - Blend - Filter Frequency - switched "Q"control - Bass Boost



Use tape or shrink tubing on green wire to keep it from grounding.

R1 + R2 + R3 determine the maximum boost at the filter frequency (Filter "Q")

The sum R1+R2+R3 should be approximately 50 K-ohm. If it exceeds 55 K-ohm,

the EZQ may oscillate (whistle) at the filter frequency.

R1 controls the "step" size from "high Q" to "medium Q" switch positions.

R2 controls the "step" size from "medium Q" to "low Q" switch positions.

Try R1 = 27K-ohm R2 = 18K-ohm R3 = 10K-ohm

For a bigger difference between the first two switch positions

Try R1 = 33K-ohm R2 = 12K-ohm R3 = 10K-ohm