



Hydrophone/Microphone DC Eliminator, 4-ch

J1 through J4 are BNC inputs from hydrophones/microphones.

J5 through J8 are BNC-terminated coaxial cables leading to recorder.

All capacitors are rated 25V where noted

All resistors are 1/8 or 1/4W, 5% except where noted.

12VDC operation  
<20mA current draw

$$A_V = -10 \text{ (20dB)} \\ 110\text{dB supply rejection} \\ 60\text{dB channel separation}$$

$$[A_V = -(R_3 + R_3 R_2 + R_2)/(R_2 R_1)]$$

$$\text{Where } R_2^2 = 2 V_{BE} / 100 I_Q^2 \\ \equiv \frac{1.25 \times 10^{-6}}{24K} \text{ Ohm}$$

$$R_3 = (V_{cc}/2.4 - 1) R_2$$

R1 is varied for gain.

Flat 30Hz to 75kHz  
3dB from <10Hz  
to >200kHz

Banana  
Jack  
(batter)