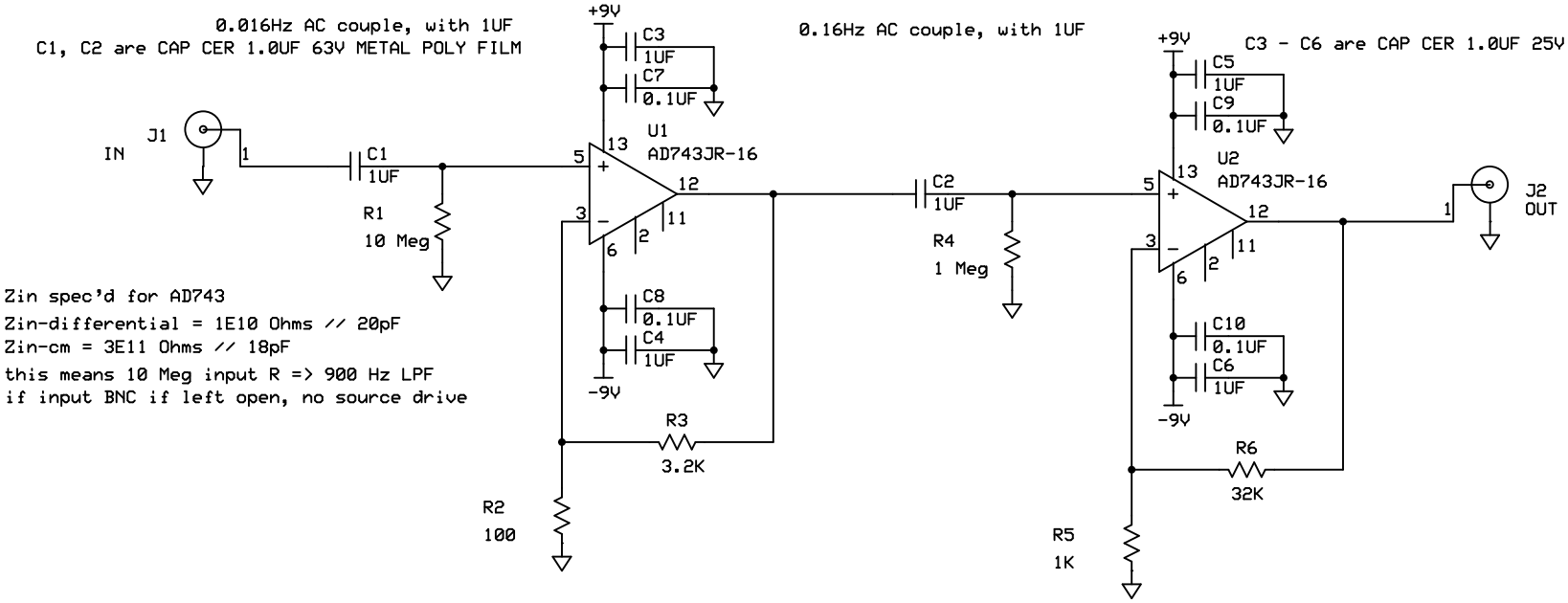
each stage has x32 gain

total gain is x1000

BW approx 500kHz
BW is lower when driven by high Z source,
due to Cin of U1 approx 19pF

STAGE 1

STAGE 2

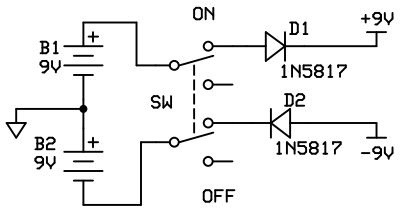


Zin spec'd for AD743
Zin-differential = 1E10 Ohms // 20pF
Zin-cm = 3E11 Ohms // 18pF
this means 10 Meg input R => 900 Hz LPF
if input BNC if left open, no source drive

since U1 has a low output impedance
the LPF due to the Cin of U2 is at a higher frequ
than that of the U1 stage when input is open

the amplifier is AC coupled, no need to null one or both op-amps;
with x30 gain, 1mV max spec offset is 60mV total
with 0.25mVos typ, x30 + x30 gain = 15mV, no trim

each AD743 uses about 8 to 10mA
with 2 of them, assume 20mA total supply drain
Panasonic specs a 9V battery to last about 10 to 20 hours



based on Motchenbacher, Connelly design
from Low-Noise Electronic System Design, ISBN 0-471-57742-1

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Low Noise x1000 amplifier, model 101		
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