



Capacitance multiplier

When an audio circuit calls for a large-value capacitor — such as in a filter — then this circuit can substitute for those very difficult to get, expensive, high-value capacitors. The circuit only synthesises the required impedance, it will not store energy.

The input, at V_{IN} , looks like a capacitor (C_{IN}) and you can calculate its value from:

$$C_{IN} = C(R1 + R2)/R1$$

Note that TL071 or NE5534 op-amps could be substituted for the TL081 specified.