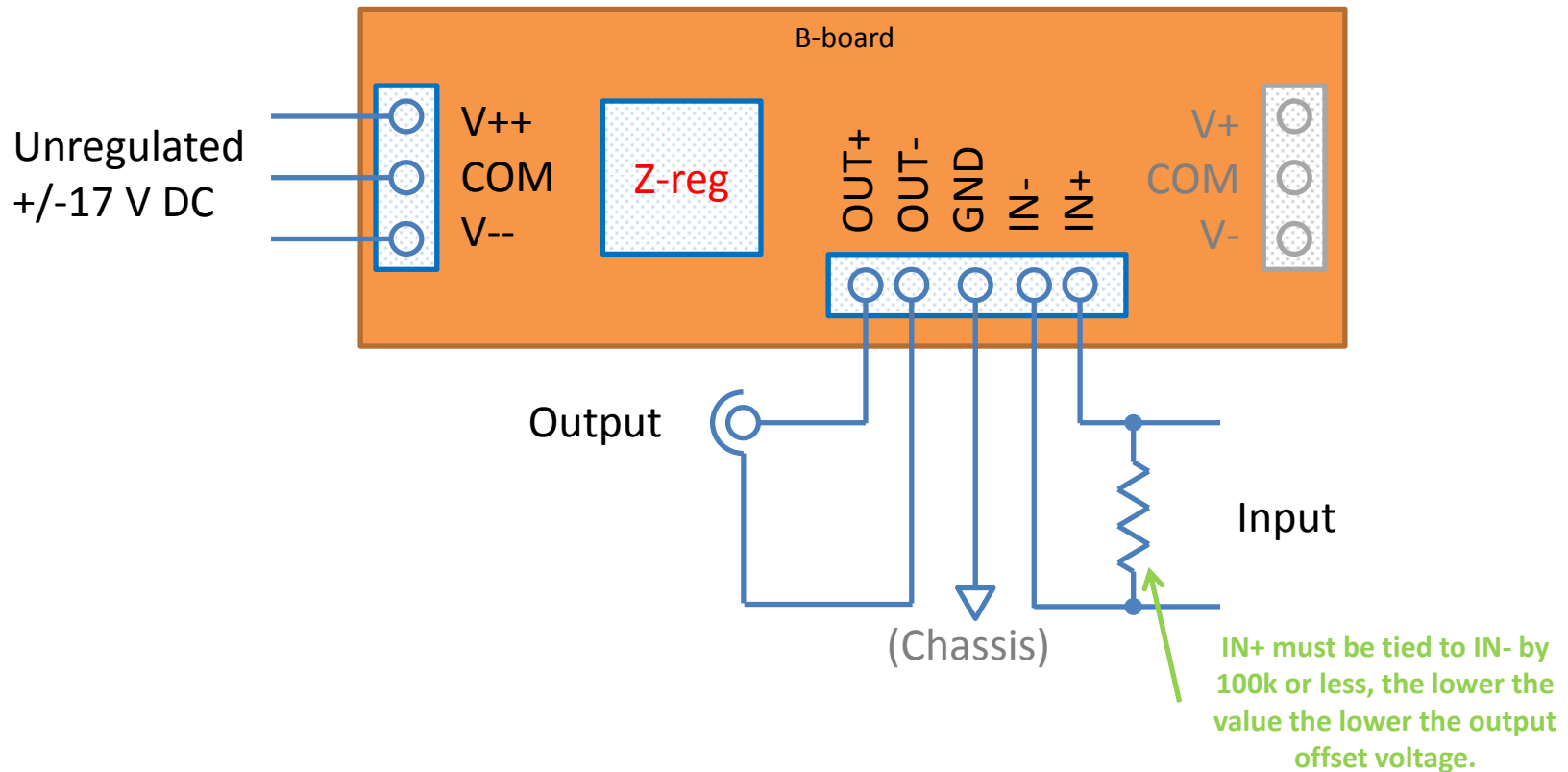
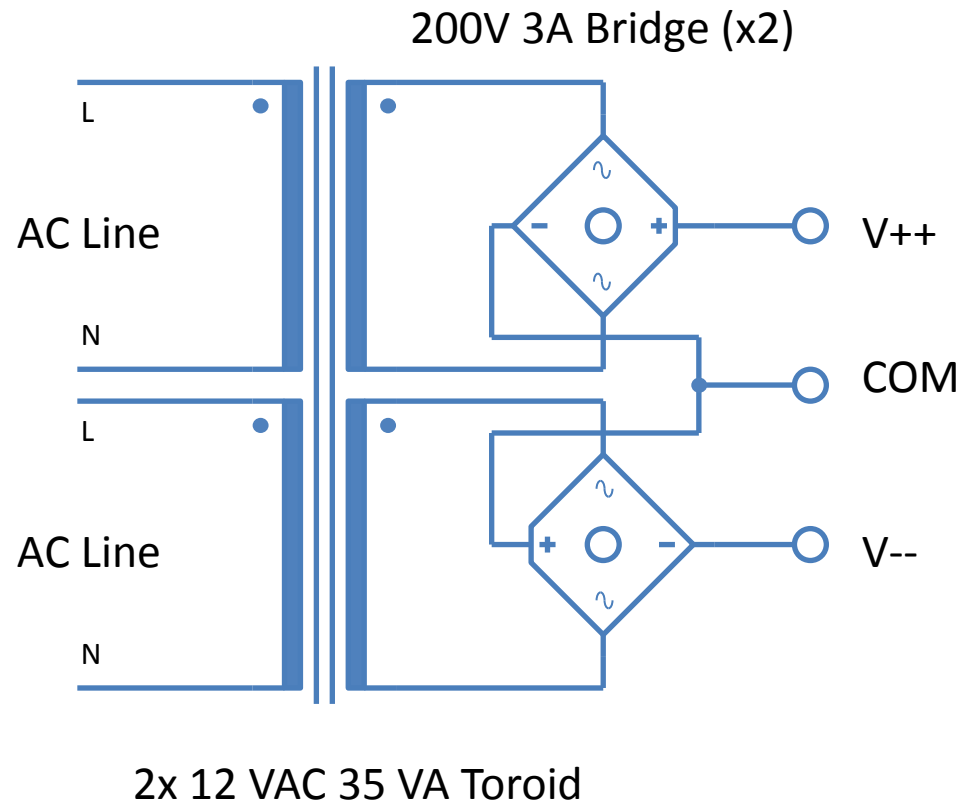


There is a voltage regulator and filter capacitors on board. The B-board can be run from an unfiltered split power supply, just like the Phonocloner and VSPS boards.

The regulated voltage (+11 V, -11 V) can be accessed on V+, V- and used to power a separate small circuit. (25 mA max)



This is the generic unregulated power supply for the B-board. It can be shared across channels or with other parts of the circuit.



Fuse and optional switch on AC line.



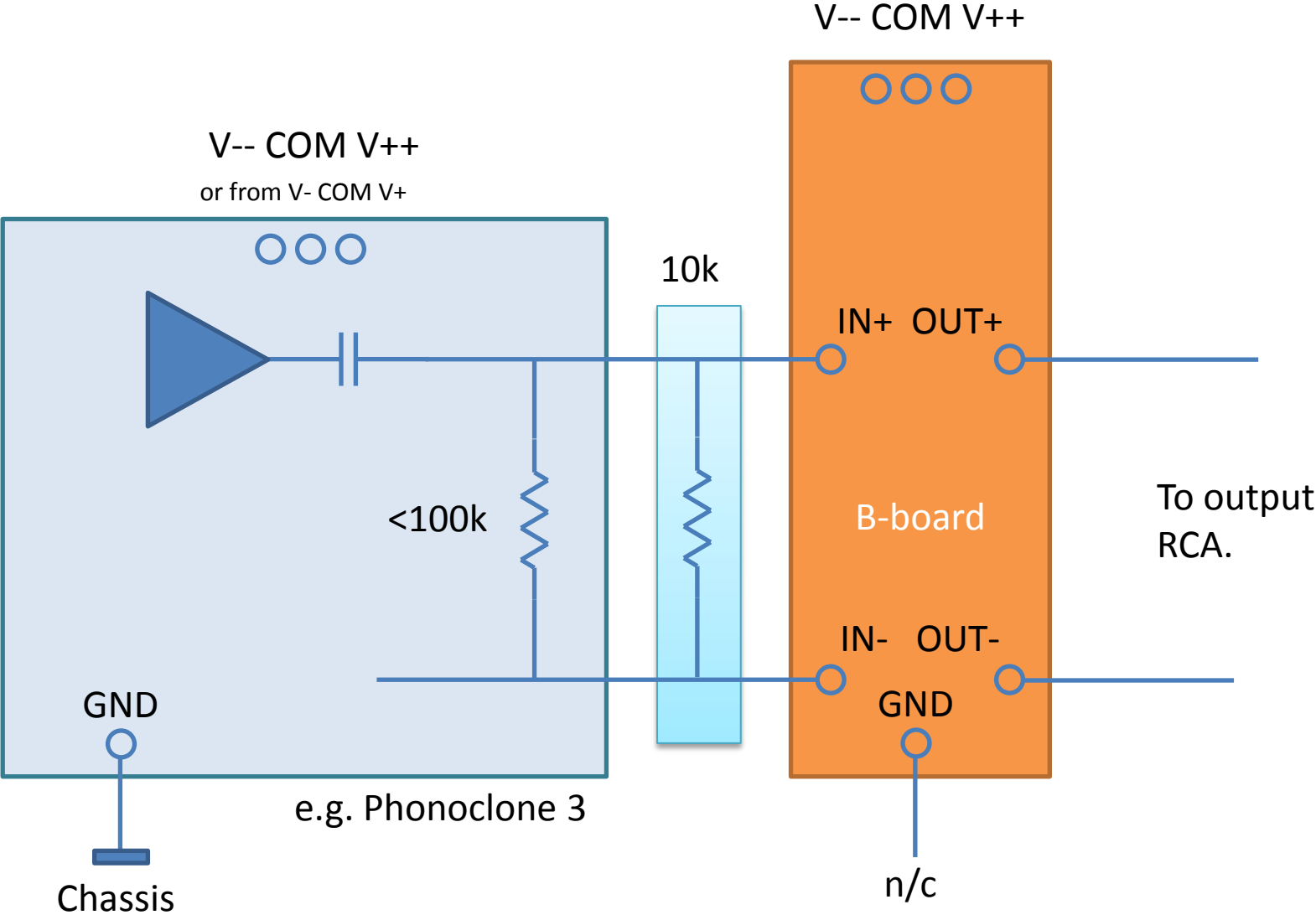
There has to be a resistor connected across the inputs IN+ and IN-. This resistance defines the input impedance of the buffer, so a large value is desirable. The larger the resistance, however, the larger the output offset voltage:

- For 100k, the output offset voltage will be ~200 mV.
- For 10k, the output offset voltage will be ~50 mV.
- For 1k or less, the output voltage will be ~10 mV.

These offsets are not unlikely to pose a problem since normally there are blocking capacitors in later stages. However, it is “best practice” to keep the offset below 50 mV in line stage equipment.

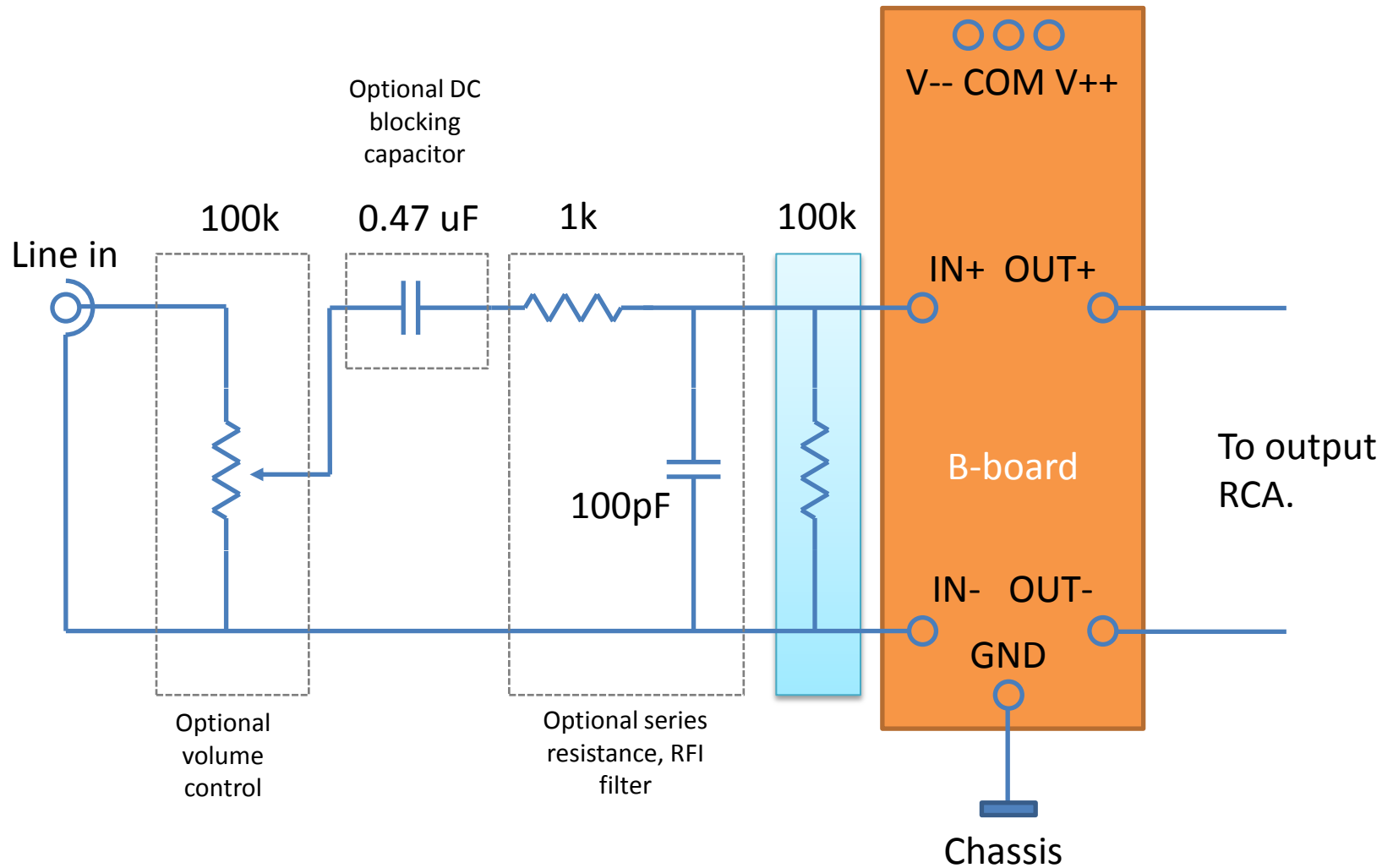
Thus 10k is the recommended value, but if you need the B-board buffer to have a higher input impedance and you are comfortable with 200 mV output offset use 100k instead.

Case 1 : B-board as output stage. AC-coupled driving stage output.



The 10k resistor across B-board inputs lowers is optional and lowers output offset voltage.

## Case 2 : B-board as unity gain pre-amplifier.



The input resistor of the B-board should have a value equal or greater than the resistance of the volume control. 20k or 50k potentiometer can be substituted.