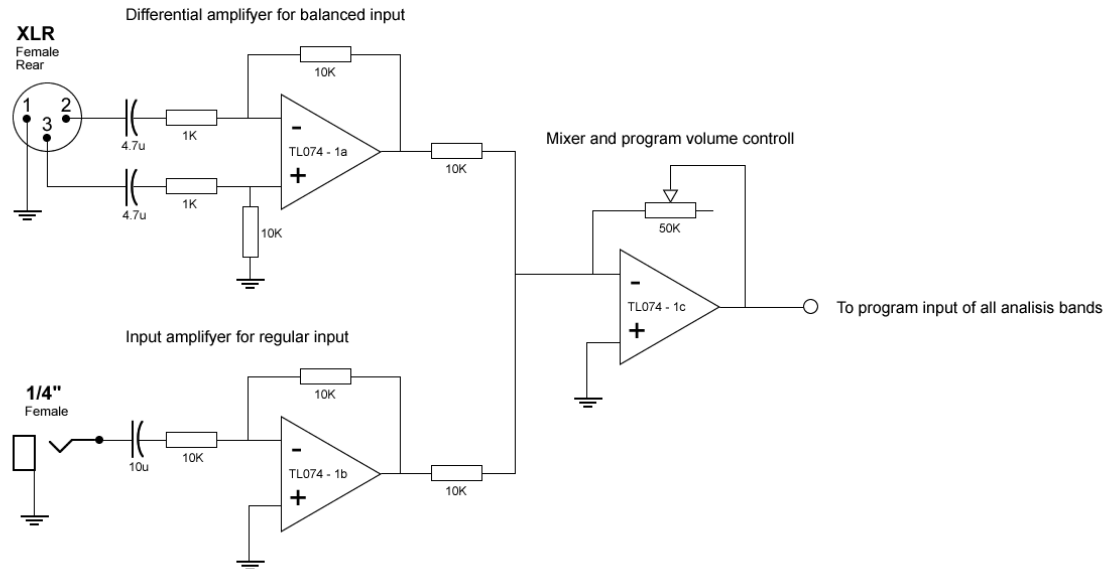


# Vocoder

Source: <https://www.instructables.com/Build-an-analog-vocoder/>

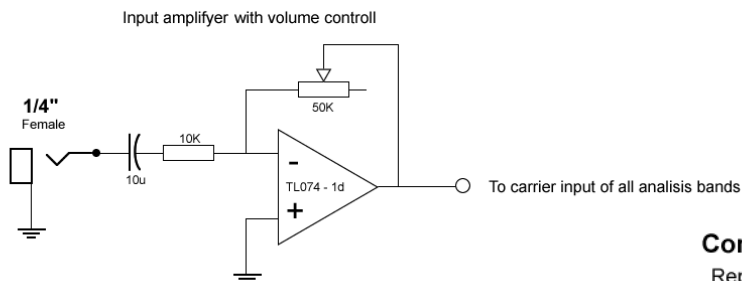
## Program input amplifier:

Since this input is usually coming from a microphone, I have designed this such that it can receive a balanced (XLR) signal or a normal (phone jack) signal.



## Carrier input amplifier:

This input stage is simpler, it uses up the fourth op amp in the first TL074.



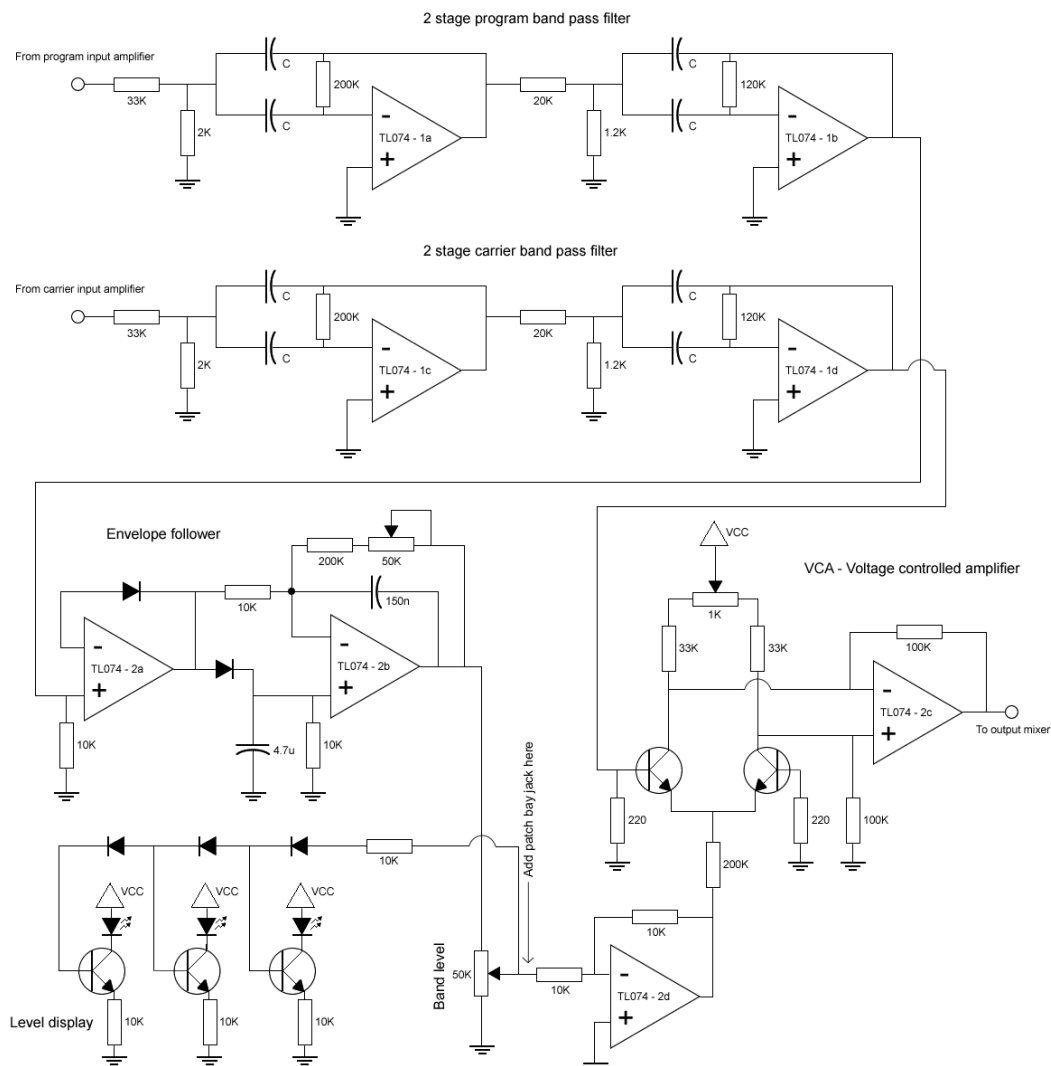
## Condenser value chart

Replace these values of condensers for each band pass filter. These values are based on a 1/2 octave subdivision.

Frequency	Condenser
41 Hz	180n
82 Hz	100n
123 Hz	68n
164 Hz	50n
246 Hz	33n
328 Hz	22n
492 Hz	18n
656 Hz	12n
984 Hz	8n2
1312 Hz	6n8
1968 Hz	3n9
2624 Hz	3n3
3936 Hz	2n2
5248 Hz	1n5

## Analysis circuit:

This circuit needs to be repeated for as many bands as you like (I made 14). You must only switch the condensers according to the chart.



## Output Mixer

This just mixes all the signals from the analysis block. Odd bands are routed to the left channel and even bands are routed to the right channel.

