



BassEater_v0.0.2

2010-04-03 12:16:56

Sheet: 1/1

1 Power supply

Provides positive and negative voltage to IC4. Stabilized +12 and -12 to IC3. And stabilized +5 to the microphone.

2 Input buffer and Highpass filter

Lowest frequencies are cut off to avoid excessive cone movements. The speaker element won't pop out of the box when you close the door.

3 Lowpass filter

Frequencies above 200Hz are cut off.

4 Linkwitz filter

This part of the design can be used for tweaking. It boost's the gain on low frequencies.

Is there a need for a Linkwitz filter?

Q: The speaker element I plan to use does not provide enough bass output. What to do?

A: The Linkwitz filter can be used to compensate for that.

Q: Do the enclosure volume really need to be big?

A: The Linkwitz filter can be used to compensate for that.

Q: I don't have room resonance problems in low frequencies. Should I use the Linkwitz?

A: No, you will probably do fine without it. Just remove all capacitors in this part and IC3D will have a fixed gain.

5 Gain set

Adjust the potentiometer so there is almost self oscillation.

6 Output stage

Drives the loudspeaker.