



DIY Low Pass Filter Active SubWoofer Controller

The principle of Frequency small size (or ELFTM) [1] is surprisingly rare, with a manufacturer that I found their use in subwoofer. I think it's a different, but I'm not sure that the same method is used – even if the principle is the same. Since ELF is a registered trademark, I will not use the term in this [project](#), but my version is for electronic assistance systems Subwoofer (EAS). I thought briefly Principe subwoofer (ESP).

The foundations were discovered by Edward Long and Ron Wickersham (although the possibility exists that others have similar principles are used to advance, there is little literature available), and they note that “There are big problems when playing deep bass, highlighting the fact that the bass was the foundation on which the sound image is created and that the phase response can be worn by pregnant “smearing” of sound in water time domain. I do not know, “Error”, but I know that my prototype bass, the deeper and stronger than what I've heard before, is provides. bass reflex certainly cause problems with the sound, as the mechanism of reproduction in two resonant systems is based, and it takes time for the accumulation and decomposition.

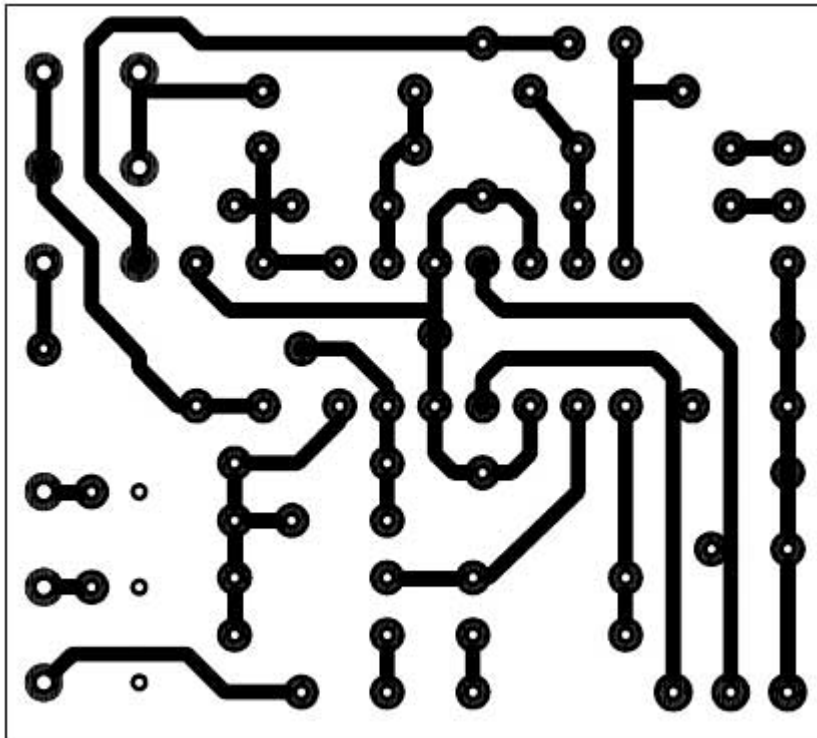
Siegfried Linkwitz have developed a circuit that is similar to the lower end of the [system](#), but does not affect the high frequencies. This is illustrated and described in detail in Project, and should be used with a crossover. Although it offers several advantages over the EAS system described here, it is also much more dependent on detailed knowledge of the driver control panel of speakers.

The [electronics](#) are necessary to carry out the treatment are easy to construct, with the only difficult part of a high [power amplifier](#) correctly, and the right choice for drivers with loudspeakers. The company is very simple because it is small and narrow, so there are no problems with the response and mood to make.

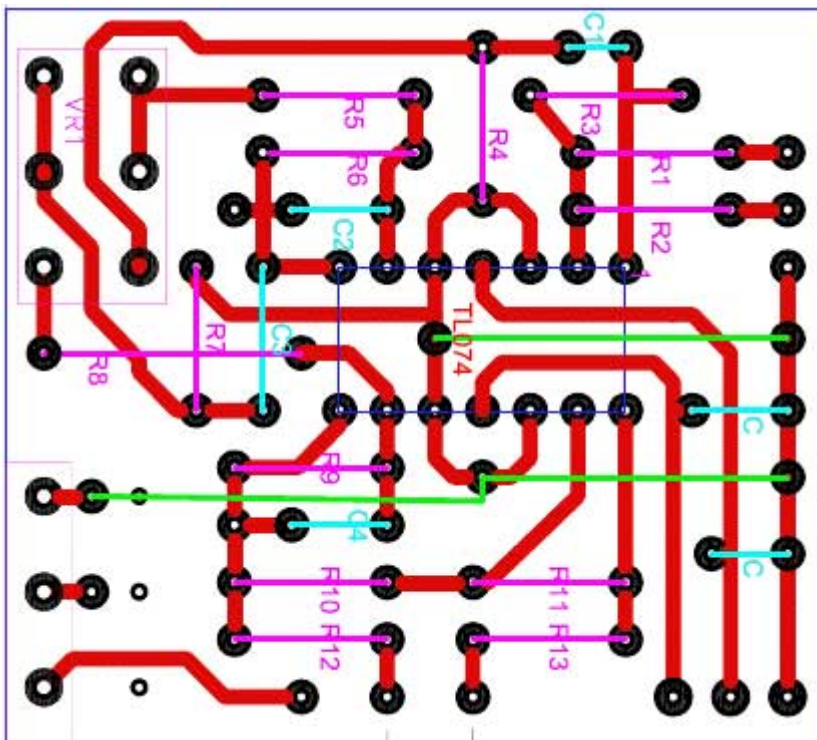
What? A small waterproof box for a subwoofer – That can not be right. Well, it is, and the principle is quite different than the conventional approach. When a speaker is installed in a

The EAS approach is the idea to the speaker below the resonance frequency where the impedance of all peaks in the high frequencies have been neglected, so that a very predictable performance management lever for running the low frequency range. With a little experimenting, I decided that a 55-liter box is ideal (it proved to be 60 liters, without the speaker so that the installed speakers, it is correct) for the driver that I have a 4 ohm , 250W 380mm monsters, with a resonance frequency of 18Hz free air. The small box, this is increased to 63Hz, and this determines the maximum frequency of operation. Resonance should probably have been a little higher, but it manages to sound right, so I do not worry too much.

Low Pass Filter Active SubWoofer Controller Schematic



Low Pass Filter Active SubWoofer Controller PCB



Low Pass Filter Active SubWoofer Controller Layout Design