**Low pass filter Subwoofer bass booster circuit**

Today i will show you how to make subwoofer low pass filter with base frequency control as always first let's take a look at circuit diagram to understand the working as you can see here goes the 12 volt dc input and this diode here is used for wrong polarity protection and 1k resistor for led indicator also 100 ohms resistor for current limiting to the ic with a filter capacitor it goes to vcc pin off ic and the dc negative goes directly to negative pin of ic now as you can see here is audio input connector where both channels are combined with these 10k resistors and a potentiometer with one uf ceramic capacitor for frequency control also another potentiometer for base volume control then passes through 2.2 k resistor and 2.2 uf capacitor and goes to ic is inverting input also here 33k resistor is for noise reduction and 47 nf ceramic capacitor for high tunes reduction and non-inverting input for gain is given to ic from dc positive through this 10k resistor and capacitor and resistor for smoothing of signal and again passes through 10k resistor to ic as the ic used as dual operational amplifier we need to connect a 22k resistor from output 2 to input 1 for further amplification to get high quality bass without any voice or high tune notes just only bass notes and here again 33k resistor for noise reduction and 47 nf ceramic capacitor for high tunes reduction and the secondary operational amplifier gets non-inverting input for gain from positive signal through 10k resistor.

Our soldering is complete now let's trim the excess lead of components and yes please don't forget to solder 22 kilo ohms resistor between pin 2 and 7 off ic to remove the flux residue now let's clean the pcb with ipa solution now our pcb is nice and clean so let's move forward here is dc input connector here audio input connector here subwoofer output and over here we will place ic i'm going use this ne5532p dual operational amplifier ic even you can use jrc4558 but this ic is more better to test the circuit i will use this amplifier board that i made in my previous video you can also check that out on my channel let's connect audio input of amplifier with low pass filters output connector also connect dc input connector of low pass filter with dc input of amplifier i used this aux cable for audio input to low pass filter circuit i will use this pioneer speaker for testing it has 400 watts 4 ohm speaker i just grabbed this foam piece to put under pcbs okay now let's connect the speaker wires with amplifier connect 12 volt dc supply to both amplifier and low pass filter circuit okay it is all set now let's turn on power this is base volume control.