BILL OF MATERIALS
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Design: tonectrl / SPn

Dokumentointi on tehty osittain myös englanniksi, koska ulkomaiset nettisivujemme käyttäjät ovat toivoneet englanninkielistä dokumentointia. (Kieliopillisesti englanti ei ole välttämättä oikein).

QTY	PART-REFS	VALUE
Resistors		
2	R1,R2	10k / 1% / metal film
Capacitors		
2	C9,C10	4.7nF / 63V / polyester / raster R. 5mm
3	C1,C7,C8	47nF / 63V / polyester / raster R. 5mm
1	C16	100nF / 63V / polyester / raster R. 5mm
1	C13	220nF / 63V / polyester / raster R. 5mm
2	C3,C4	2.2uF / 50V / polyester / raster R. 5mm
5	C5,C6,C11,C14,C15	3.3uF / 100V / electrolyt / vertical / raster R. 5mm
1	C12	10uF / 35V / 105°C / electrolyt / vertical / raster R. 5mm
1	C17	100uF / 16V / 105°C / electrolyt / vertical / raster R. 5mm
1	C2	470uF / 35V / electrolyt / vertical / raster R. 5mm
Integrated Circuits		
1	U1	78L08 / +8V voltage regulator / TO-92
1	U2	PT2350 / stereo tone control, subwoofer lowpass filter IC / DIP20
Diodes		
1	D1	1N4153
Miscellaneous		
1	J1	2 pole wire connector (terminal block) to pcb / raster r. 5 mm / hight 9.7 mm
1	P1	10k log stereo potentiometer / 6 mm saft
2	P2,P3	100k lin stereo potentiometer / 6 mm saft
5	J2 to J5	RCA female to PCB, straight, Hosiden any colour

!!! NOTICE ABOUT J2 to J18 !!!		if you make one stereo input device you need 5 pcs of RCA female as listed in parts list If you make 2 x 6 input device, you need total quantity of 15 pcs RCA female and also 2 x 6 changeover switch.
Code of J2 to J18		RCA female to PCB, straight, Hosiden, any colour
SW1	2 x 6 changeover	High quality DIP rotaryswitch to PCB 2 x 6, Alcoswitch DRS 2-6, 3.2mm saft

Frequency response of tone control unit is flat between 20 Hz … 20 kHz when treble and bass pots are in middle.
Overall gain is approx. 6 dB when treble and bass pots are in middle.
Treble and bass tonecontrol range is approx. 10 dB (50Hz / 4 kHz) with given component values.
Subwoofer cut off frequency can be adjusted by bass potentiometer… with component values as listed above it is as follows : bass pot in minimum (left) -3dB point, 240 Hz / -12dB 450 Hz, bass pot (middle) -3dB point 100 Hz / -12dB 200 Hz, bass pot maximum (right) -3dB point 60 Hz / -12dB 120 Hz.
Distortion was < 0.1 % when input level was < 0.3V rms.

There is no balance adjustment potentiometer in this application, if you need balance, you must add it separately in this device.