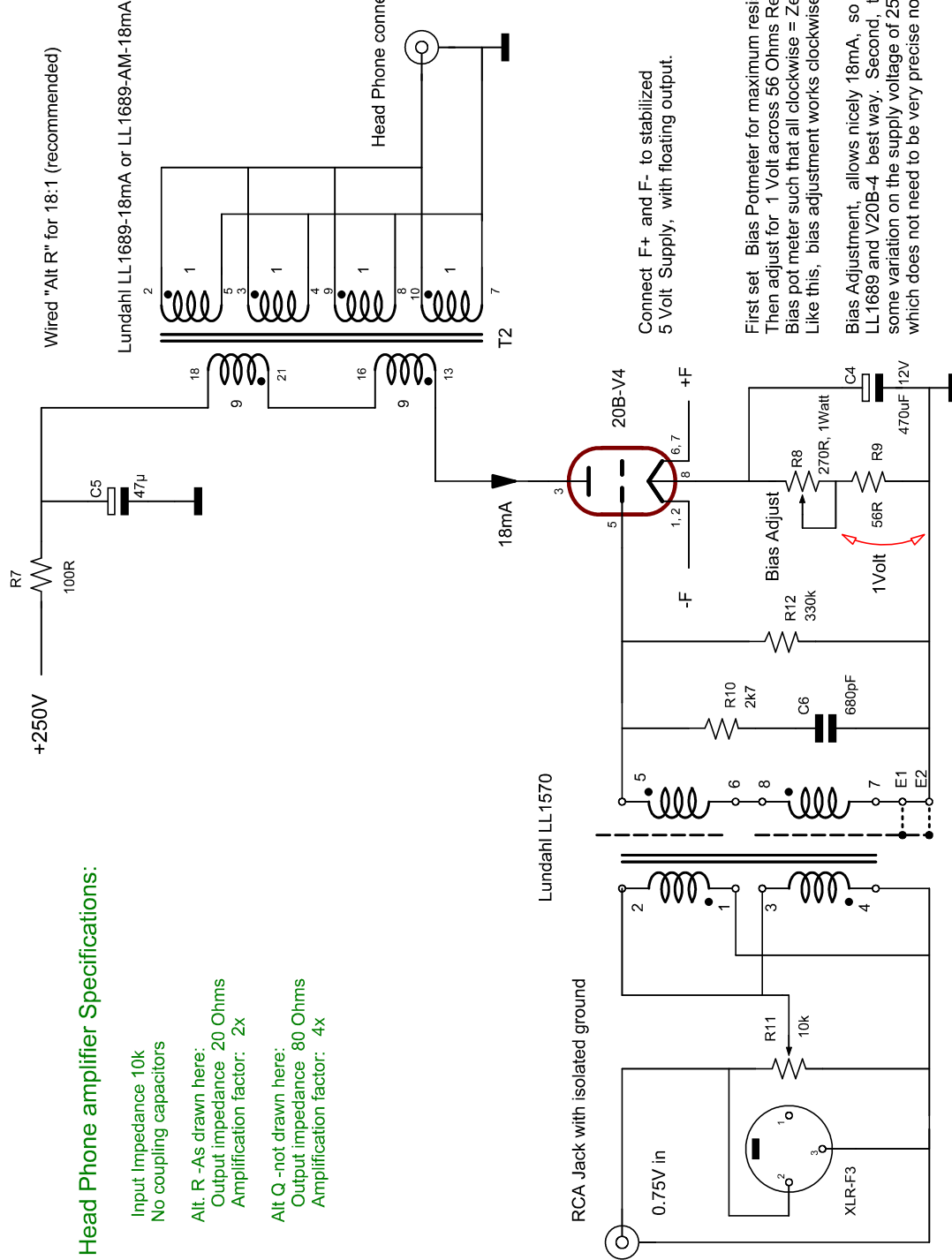


Head Phone amplifier Specifications:

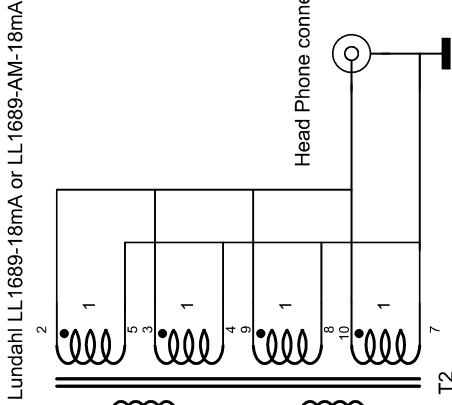
- Input impedance 10k
- No coupling capacitors
- Alt. R -As drawn here:
Output impedance 20 Ohms
Amplification factor: 2x
- Alt Q -not drawn here:
Output impedance 80 Ohms
Amplification factor: 4x



Resistor of 47k can be lowered, if another input impedance is preferred

Network of 2k7 and 680pF is optional for improved square wave response.

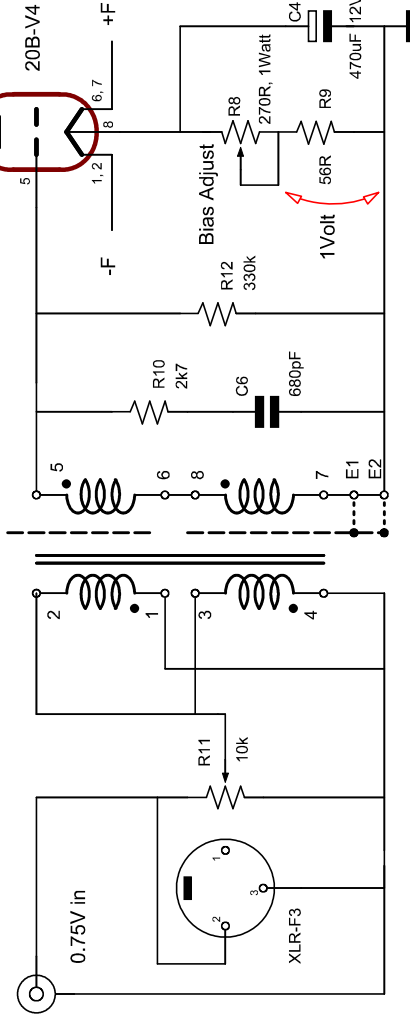
Wired "Alt R" for 18:1 (recommended)



Alt. R
18 : 1

Single End to Line Output

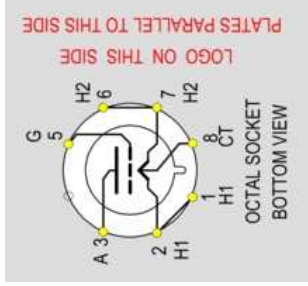
RCA Jack with isolated ground



Connect F+ and F- to stabilized 5 Volt Supply, with floating output.

First set Bias Potmeter for maximum resistance Then adjust for 1 Volt across 56 Ohms Resistor. Mount Bias pot meter such that all clockwise = Zero ohms. Like this, bias adjustment works clockwise for higher bias.

Bias Adjustment, allows nicely 18mA, so to use LL1689 and V20B-4 best way. Second, this allows some variation on the supply voltage of 250Volt, which does not need to be very precise now.



20B-V4 Connections

Revisions		Date	Name
		14-Dec-2017	JW

Name:		20B-V4 head phone Amplifier	
Date:		14-Dec-2017	
Drawn:		JW	
Name:		Dipl. Ing. Jac van de Walle	
Logo:			

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Drawing Nr.:		