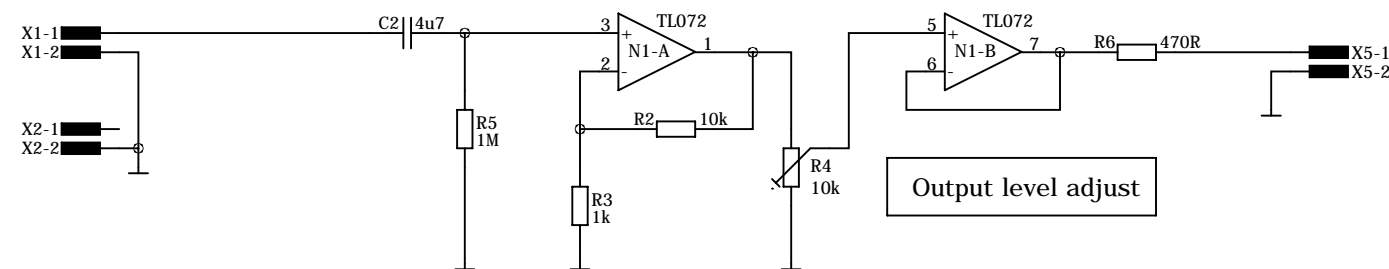


Output level is adjusted so that when the injected signal has low frequency (5-20 Hz), output channel shows about 100-200 mVp-p signal, i.e. signal level in ARTA measurement setup level indicator is near fullscale

Sound card line out

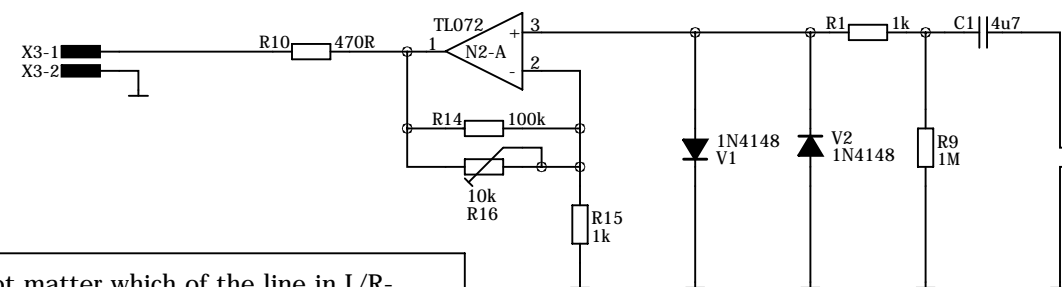
Coupling transformer in



Output level adjust

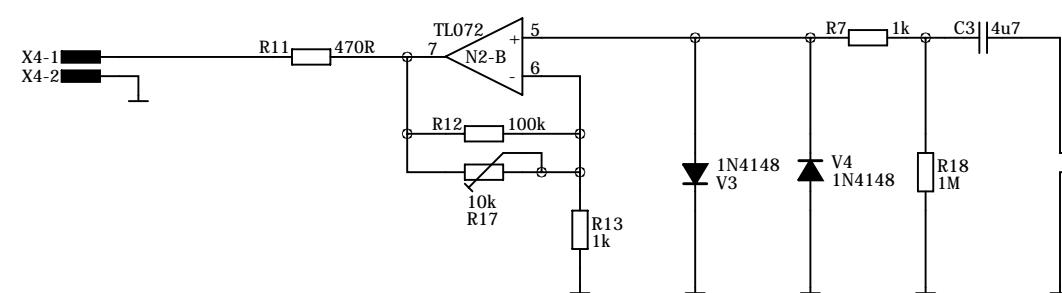
Sound card line in

Adjust the input channel gains so that you get near full-scale signal with 100-200 mVp-p in input, ensure that gains are as equal as possible



Output channel

Signals from feedback



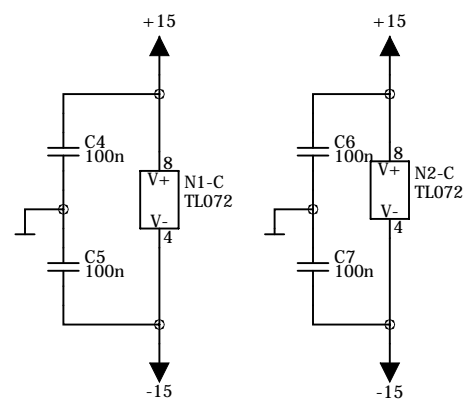
Reference channel

Coupling transformer

Coupling transformer is not especially critical it can be almost any mains transformer (cheap!) TI appnote recommends using one with 1:10 turns ratio so 230 VAC in 24 VAC out is about right However, I had one with 8.7 VAC secondary lying around and it worked perfectly for this purpose Input signal is connected to 230 VAC side and feed to Rext on secondary side

Rfb1/Rfb2 are the actual output voltage setting resistors in power supply Rext is added for measurement, but suggested value of 20 ohms is usually low enough for it to be ignored even in the final product

For ARTA, it does not matter which of the line in L/R-channels is the output and which is the reference channel, it can be swapped in measurement setup



JTA Design	Loop gain measurement adartor		
	Sheet Description		
	Design date 2012-08-23	File name Loop gain measurement adartor.schSheet	Version 00 1 OF 1