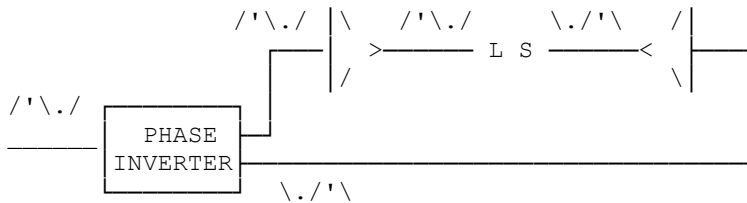


Subject: Dual phase AF AMP explained

From: G8MNY@GB7CIP.#32.GBR.EU
 To : TECH@WW

By G8MNY

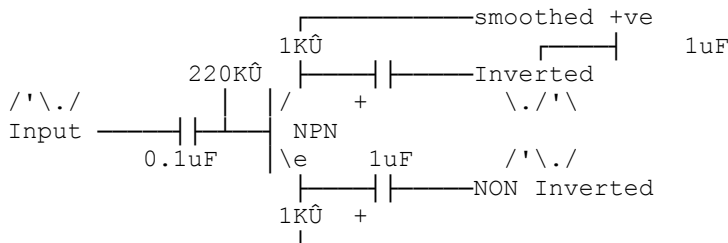
(New Graphics Dec 03)



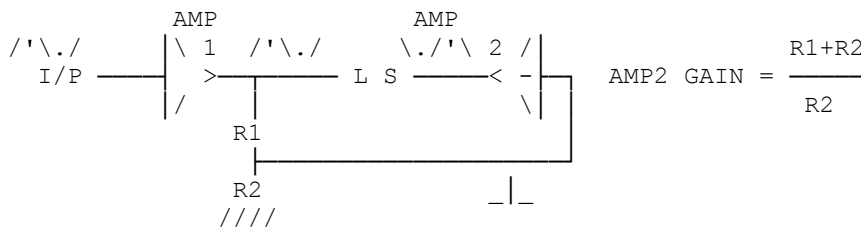
The LS sees 2x the voltage of a normal single amplifier arrangement. That is 4 times the power! e.g. a 4R LS with 0V & 13V DC on the amplifier may give ± 12V peaks to the LS. Peak crest power = 12 x 12 / 4 = 36W peak, = 18W RMS.

Or for typical commercial disco amplifier may use ±90V @ 22A PSU to power a pair of amplifiers in bridged to 8R LS load, to give a peak power of 179 x 179 / 8 = 4KW peak crest power (USA rating), or 2KW RMS. Although this sounds big they are made this size! But the power rails usually dip a lot under heavy load, but 4KW peak pulse is what the loud speaker system has to handle!

The phase inverter could be just this....



But it is more usual to attenuate the O/P of the 1st amplifier by the gain of the 2nd amplifier & feed it into the inverting input of the 2nd amplifier.



But with this simple passive method you do get 2x the distortion!

Why don't U send an interesting bul?

73 De John, G8MNY @ GB7CIP
 /EX