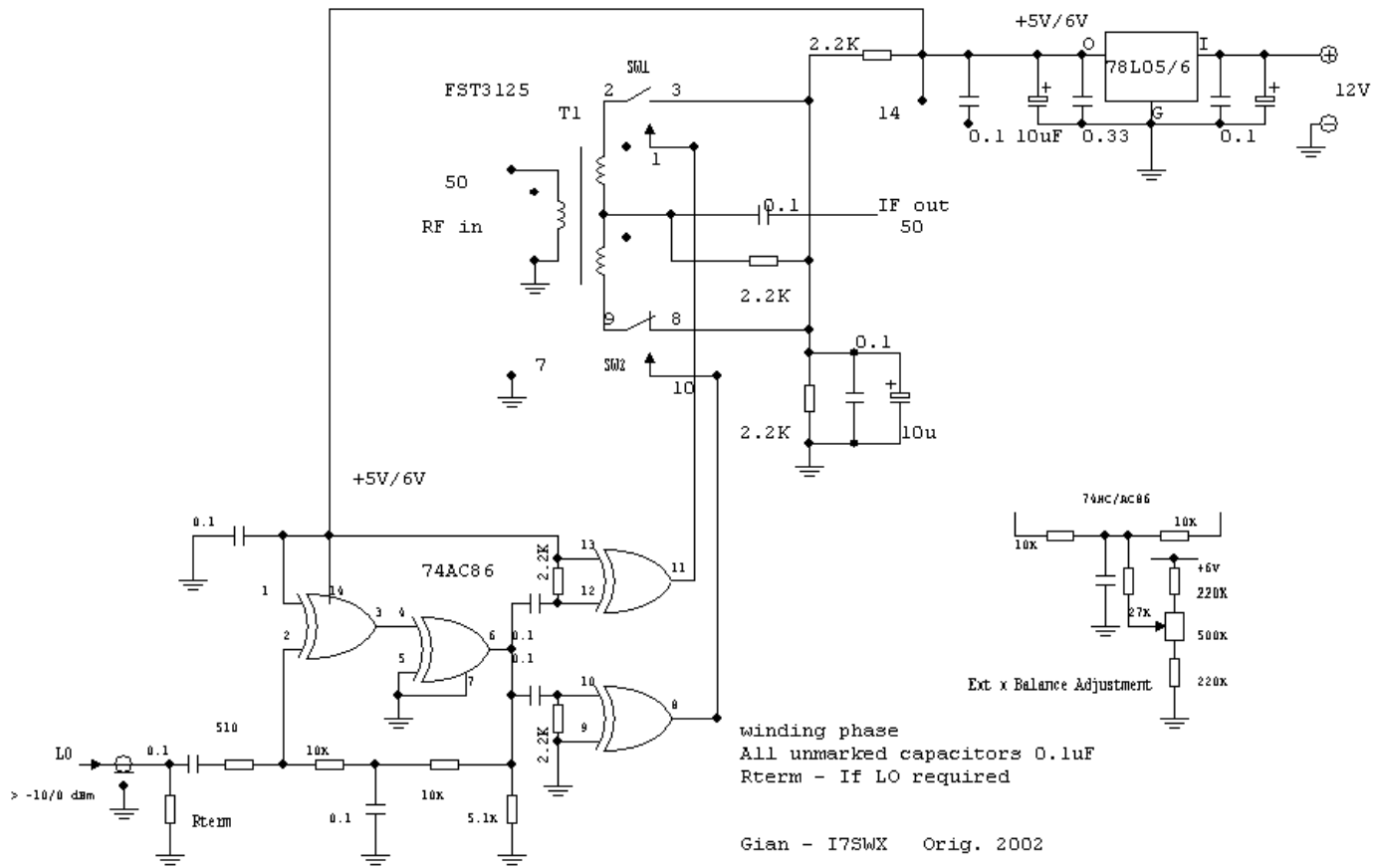


SIMPLE I7SWX 1 TRANSFORMER FST3125 MIXER

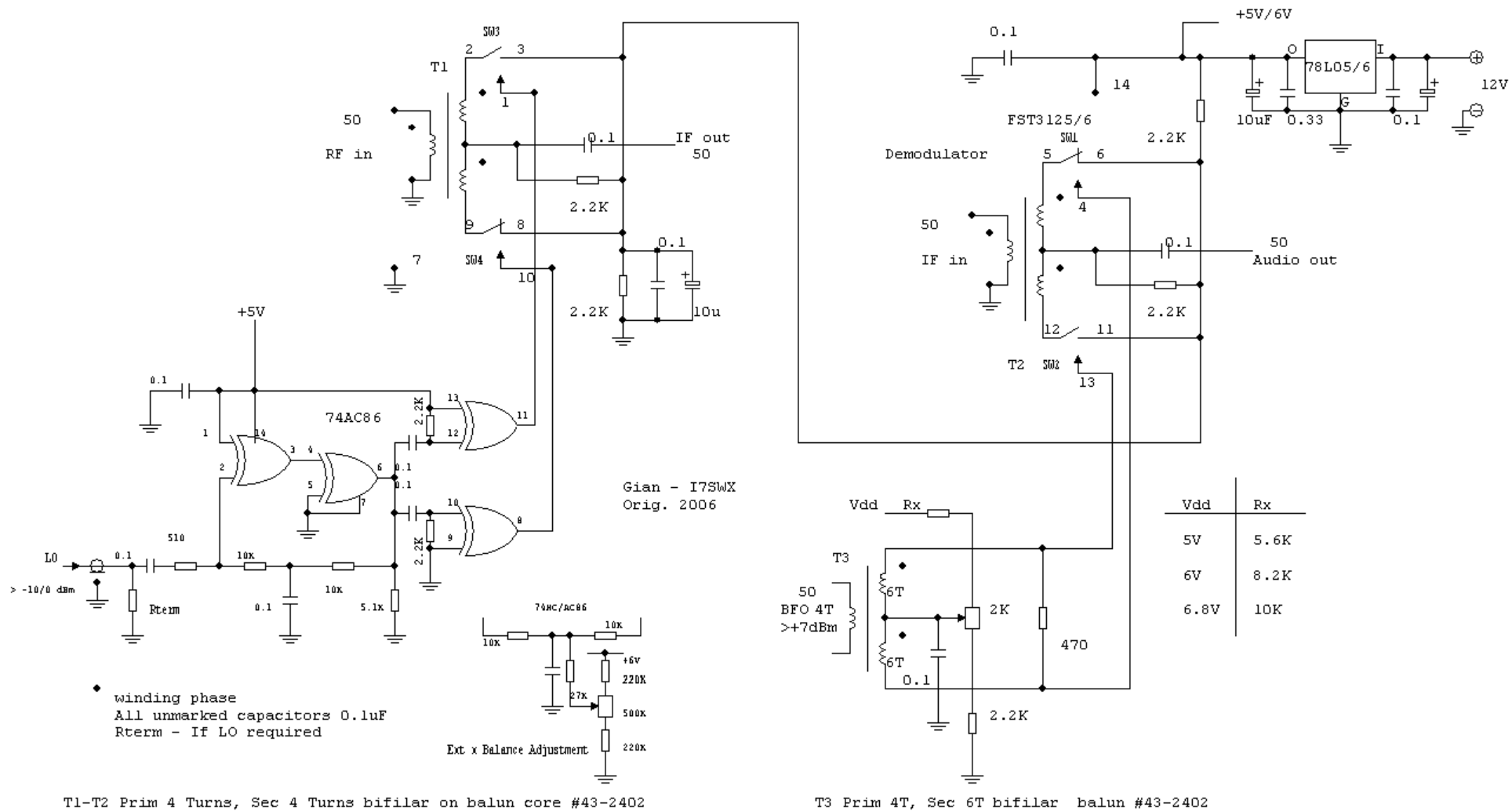
The 1T FST3125 Mixer has been developed to replace classic 2 or 4 diodes mixer with a more performing one, particularly regarding the IP3 of +25dBm versus the average one of diodes, generally equal to the LO power drive (+7dBm).



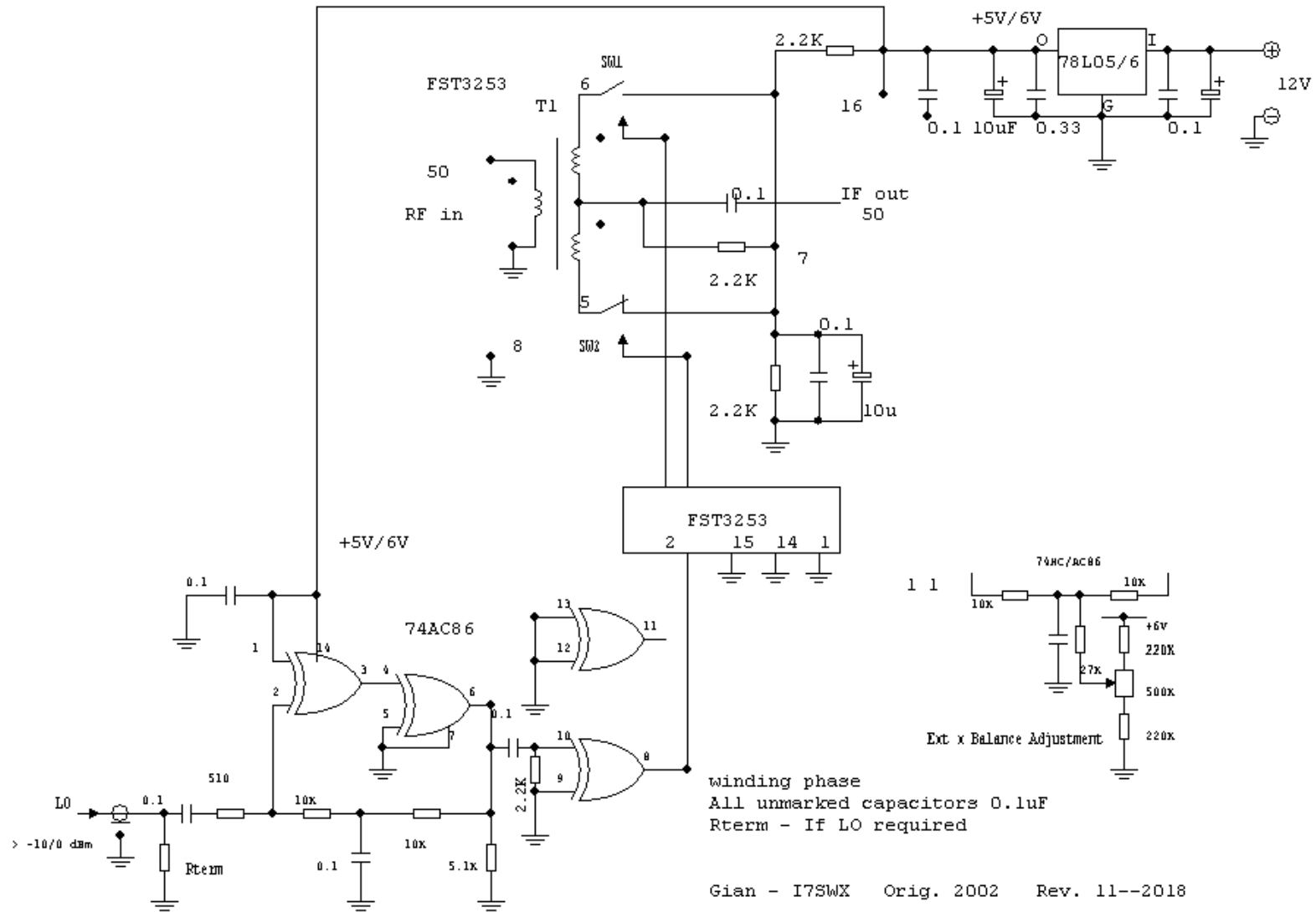
T1-T2 Prim 4 Turns, Sec 4 Turns bifilar on balun core #43-2402

This is the simple I7SWX 1 T Mixer, using FST3125, to replace the classic 2 diode mixer.

The squarer driver is the 74AC86, a balance adjustment can be applied between pins 2 and 6.

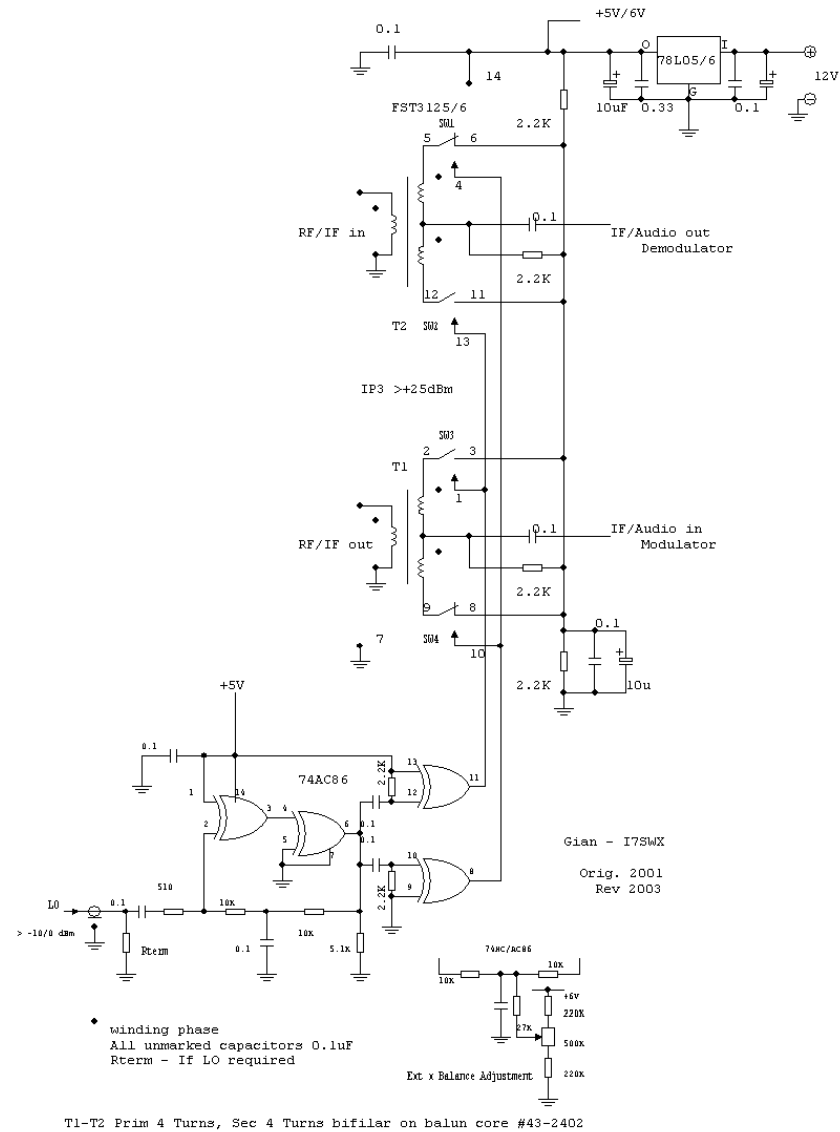


This is an example of how the simple I7SWX 1T Mixer can be utilized as an HF Front end conversion, using a 74AC86, a balance adjustment can be applied between pins 2 and 6. A simplified 1T demodulator is suggested with direct LO driving.



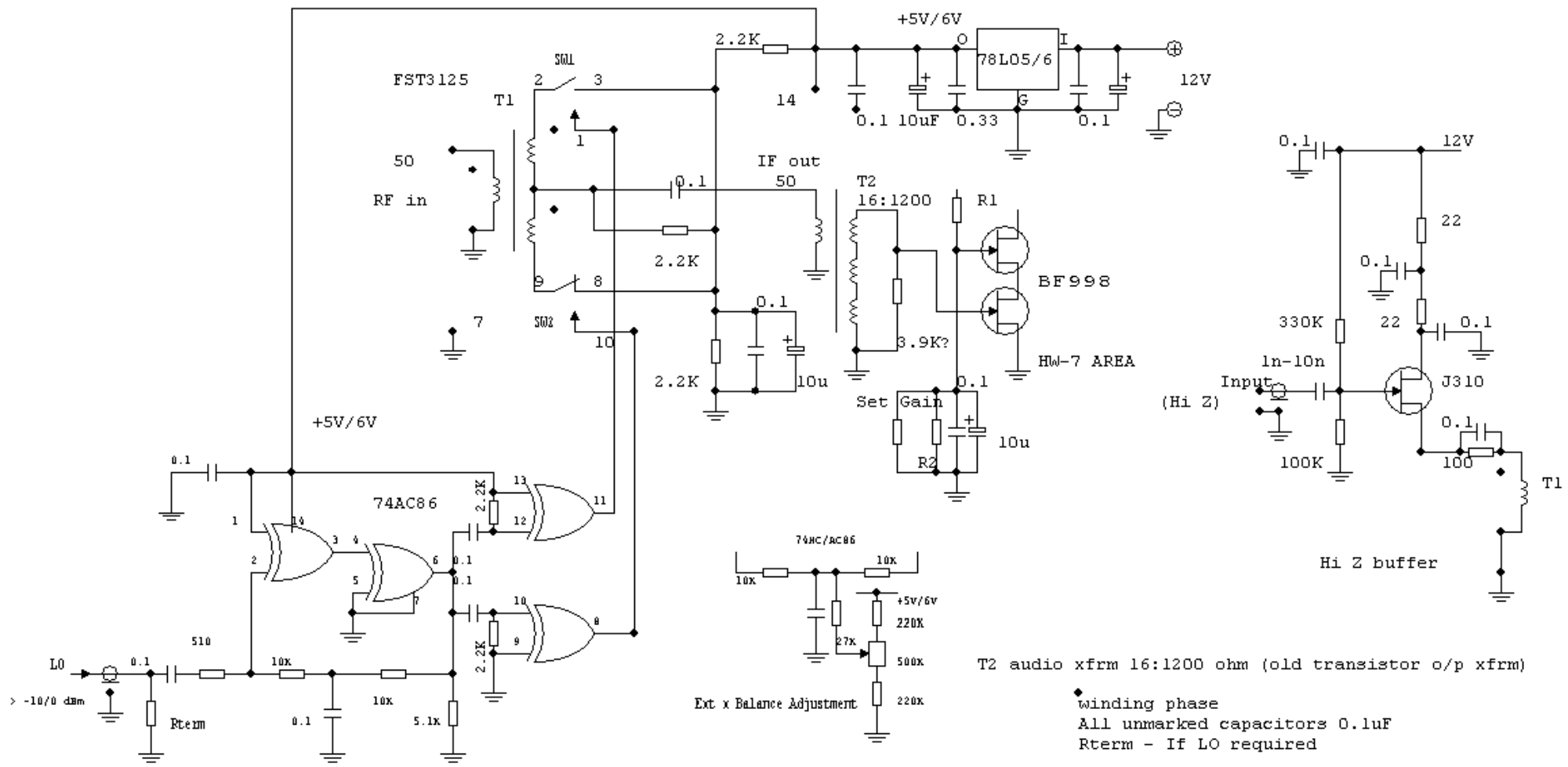
T1-T2 Prim 4 Turns, Sec 4 Turns bifilar on balun core #43-2402

This is an I7SWX 1T Mixer using and FST3253 in place of an FST3125



The simple I7SWX 1T Mixer using FST3125 and squarer 74AC86 as a splitted demodulator and modulator for a simple HF transceiver.

A balance adjustment can be applied between pins 2 and 6.



T1 Prim 4 Turns, Sec 4 Turns bifilar on balun core #43-2402

Gian - I7SWX Orig. 2002 Rev 11-2018

This schematic is a suggested mod for replacement of the Heath Kit HW7 mixer with the I7SWX 1T Mixer.

The squarer driver is the 74AC86, a balance adjustment can be applied between pins 2 and 6. Not tried.

T2 audio xfrm 16:1200 ohm (old transistor o/p xfrm)
 * winding phase
 All unmarked capacitors 0.1uF
 Rterm - If LO required