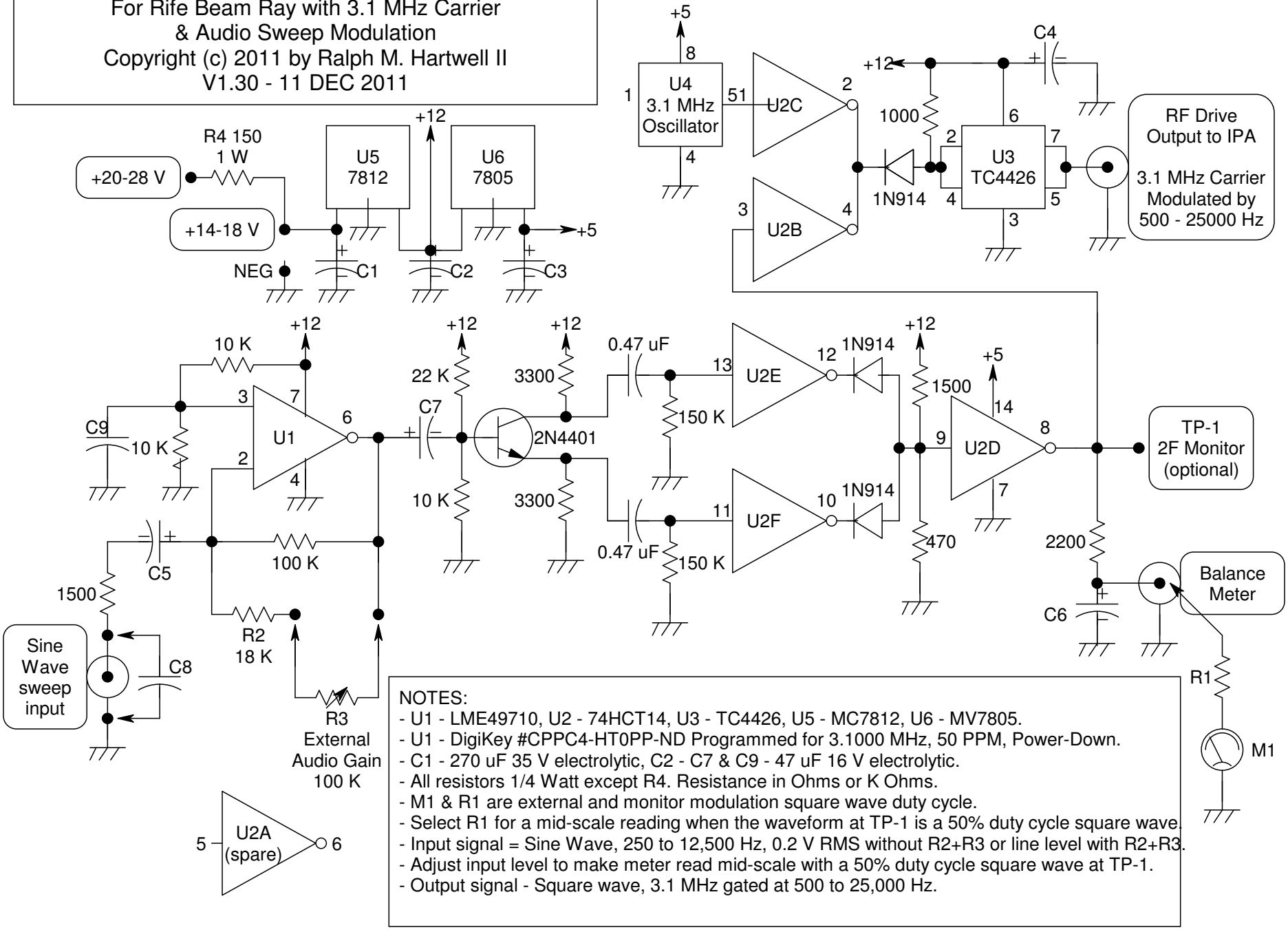
Sine to Square Wave Converter & Frequency Doubler
For Rife Beam Ray with 3.1 MHz Carrier
& Audio Sweep Modulation

V1.30 - 11 DEC 2011



NOTES:
- U1 - LME49710, U2 - 74HCT14, U3 - TC4426, U5 - MC7812, U6 - MV7805.
- U1 - DigiKey #CPPC4-HT0PP-ND Programmed for 3.1000 MHz, 50 PPM, Power-Down.
- C1 - 270 uF 35 V electrolytic, C2 - C7 & C9 - 47 uF 16 V electrolytic.
- All resistors 1/4 Watt except R4. Resistance in Ohms or K Ohms.
- M1 & R1 are external and monitor modulation square wave duty cycle.
- Select R1 for a mid-scale reading when the waveform at TP-1 is a 50% duty cycle square wave.
- Input signal = Sine Wave, 250 to 12,500 Hz, 0.2 V RMS without R2+R3 or line level with R2+R3.
- Adjust input level to make meter read mid-scale with a 50% duty cycle square wave at TP-1.
- Output signal - Square wave, 3.1 MHz gated at 500 to 25,000 Hz.

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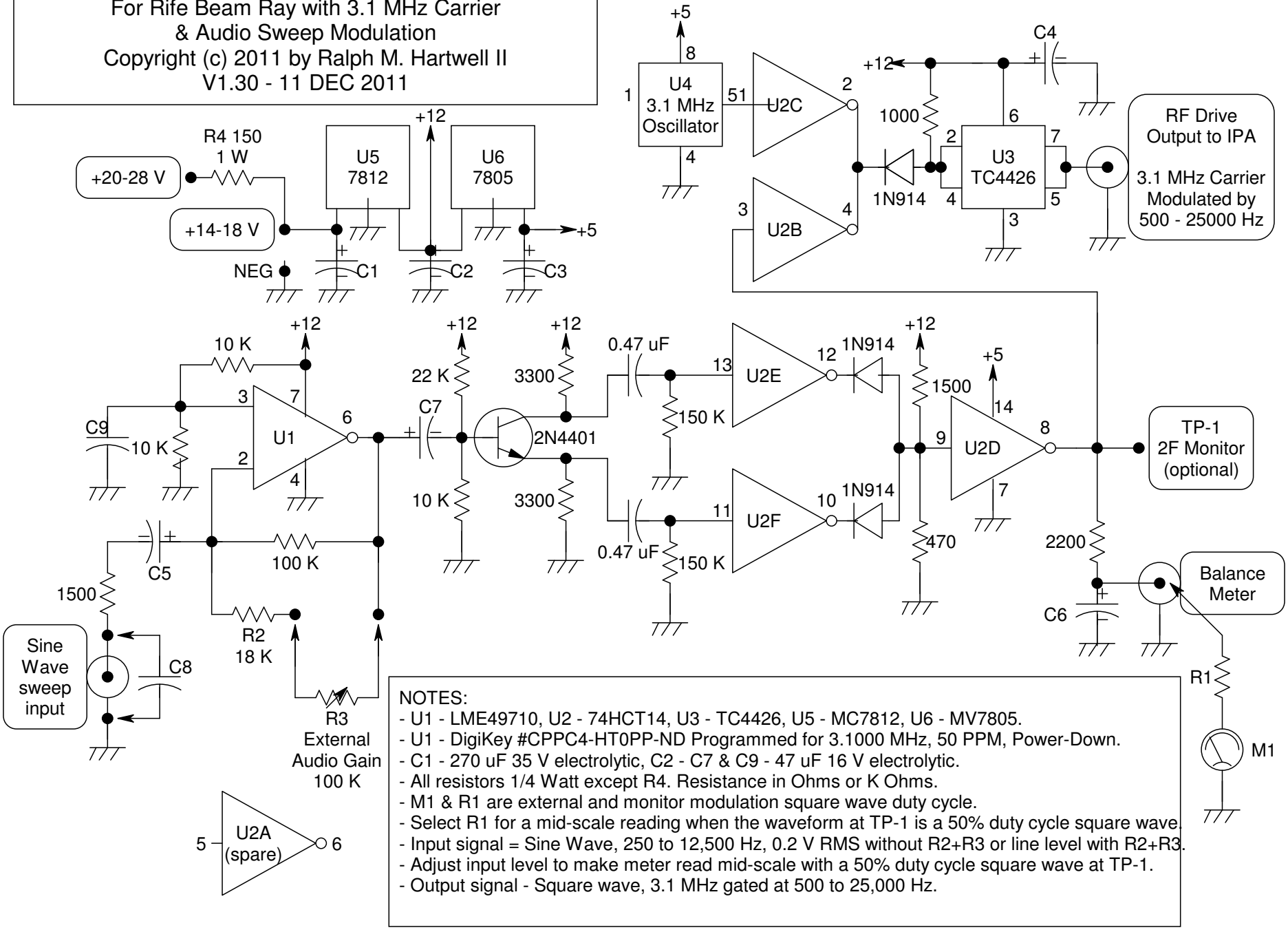

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