

24 Whistler

□ At the push of a button, this circuit lets forth with an attention-getting whistle, which can be tailored to meet a variety of formats. The circuitry is built around a Twin-T oscillator, which is triggered into action by a varying positive potential placed on the non-inverting op amp input. Resistors R1, R2, and R3, together with capacitors C1, C2, and C3, determine the fundamental pitch, with R3 providing a useful

variation. When S1 is pushed, the potential stored in C4 is placed on the non-inverting input, causing the oscillator to function. The duration is determined by R5. The format of the whistle is modified by the setting of R4. At full potential, the effect is a sharply rising tone, followed by a more gradual decline. At about half setting, the effect is more bell-like.

PARTS LIST FOR WHISTLER

C1—100 to 200- μ F electrolytic capacitor, 15 VDC

C2, C4—0.001- μ F ceramic capacitor, 1 VDC

C3—0.002- μ F ceramic capacitor, 15 VDC

C5—100- μ F electrolytic capacitor, 15 VDC

IC1—741 op amp

R1, R2—100,000-ohm, $\frac{1}{2}$ -watt resistor

R3, R4, R5—10,000-ohm linear-taper potentiometer

SPKR—8-ohm PM type speaker

T1—audio output transformer 500-ohm primary/8-ohm secondary

