

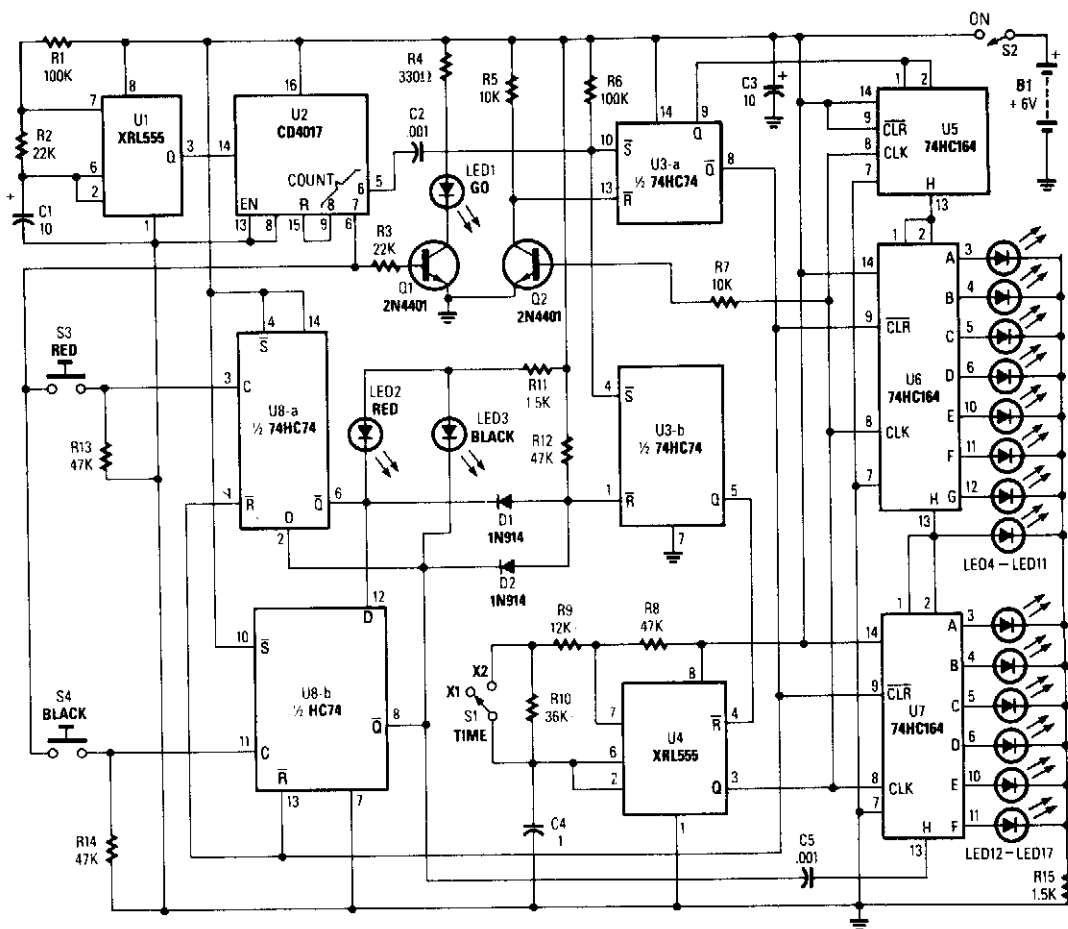
35

Games

The sources of the following circuits are contained in the Sources section, which begins on page 667. The figure number in the box of each circuit correlates to the entry in the Sources section.

Reaction Timer
Electronic Roulette Game
Run-Down Clock/Sound Generator
Wheel of Fortune
Simple Lie Detector
Electronic Dice

REACTION TIMER

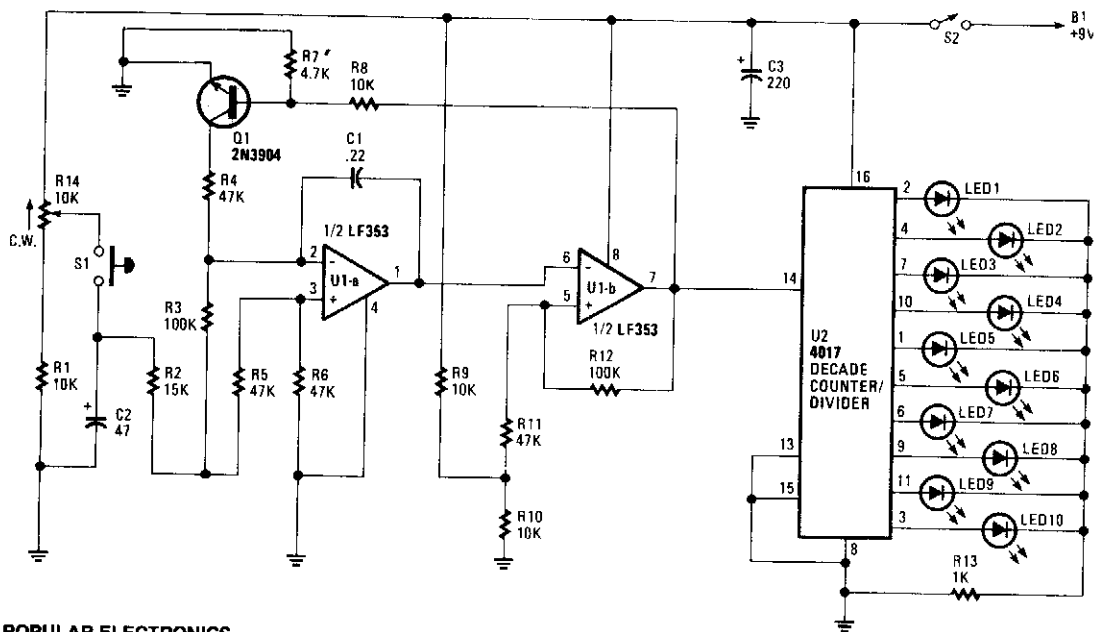


RADIO-ELECTRONICS

Fig. 35-1

This circuit uses a timer to generate pulses at a 5-ms clock rate. The pulses are shifted into the shift register, one at a time, lighting an LED. An auxiliary timer that generates one pulse per second is used to generate timing to activate the "go" LED and start the 5 ms pulses clocking into the registers. At the GO signal each player presses his buttons (S3 or S4). The delay (reaction time) is read out on LED 4 to LED 17; after six seconds, the sequence repeats.

ELECTRONIC ROULETTE GAME

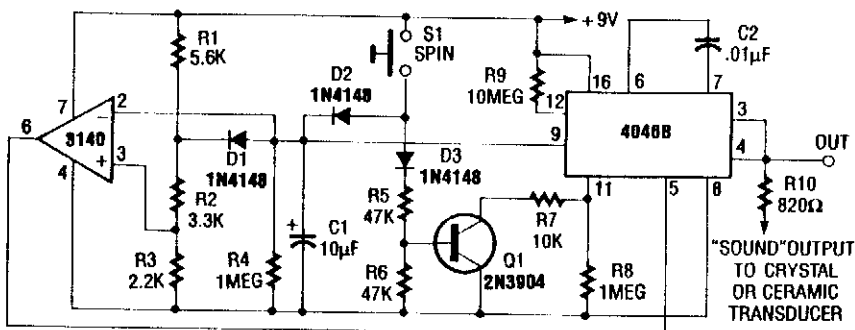


POPULAR ELECTRONICS

Fig. 35-2

R14 is set for an initial "starting" speed of the oscillator U1A and U1B. As C2 charges, oscillation begins slowing down as C2 discharges, giving a roulette-wheel effect on LED S1 through 10. The LED that remains on is the winning number.

RUN-DOWN CLOCK/SOUND GENERATOR

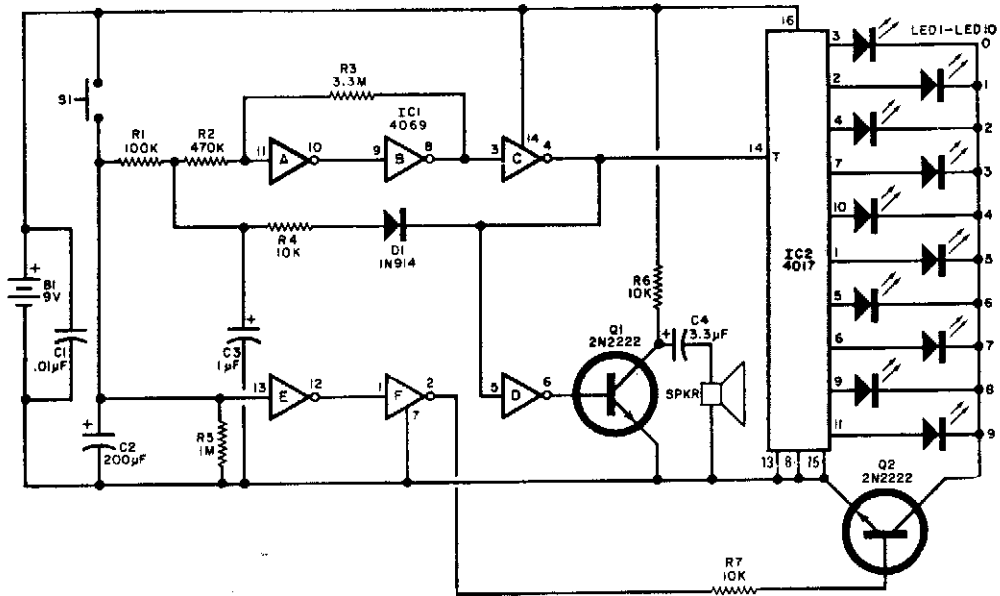


RADIO-ELECTRONICS

Fig. 35-3

Used in electronic roulette or dice games, this circuit produces a clock signal that initially is several tens of kHz (depending on C2) and gradually decreases to zero in about 15 seconds, as C1 discharges through R4.

WHEEL OF FORTUNE

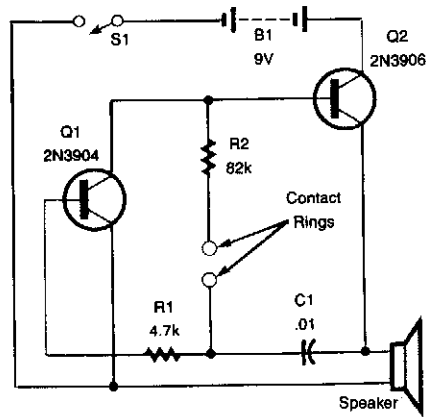


POPULAR ELECTRONICS

Fig. 35-4

This circuit is a 10-LED spinning wheel that “clicks” as the wheel passes each point. The rotation starts fast, then gradually slows down to a random stop (with a click at each position). After the rotation ceases, the selected LED stays lit for about 10 seconds, then goes out. The cycle restarts by depressing the pushbutton switch.

SIMPLE LIE DETECTOR



POPULAR ELECTRONICS

Fig. 35-5

The variation in skin resistance of the subject is used to vary the frequency of a tone oscillator. The contact rings are two brass rings, about $\frac{3}{4}$ " ID.

