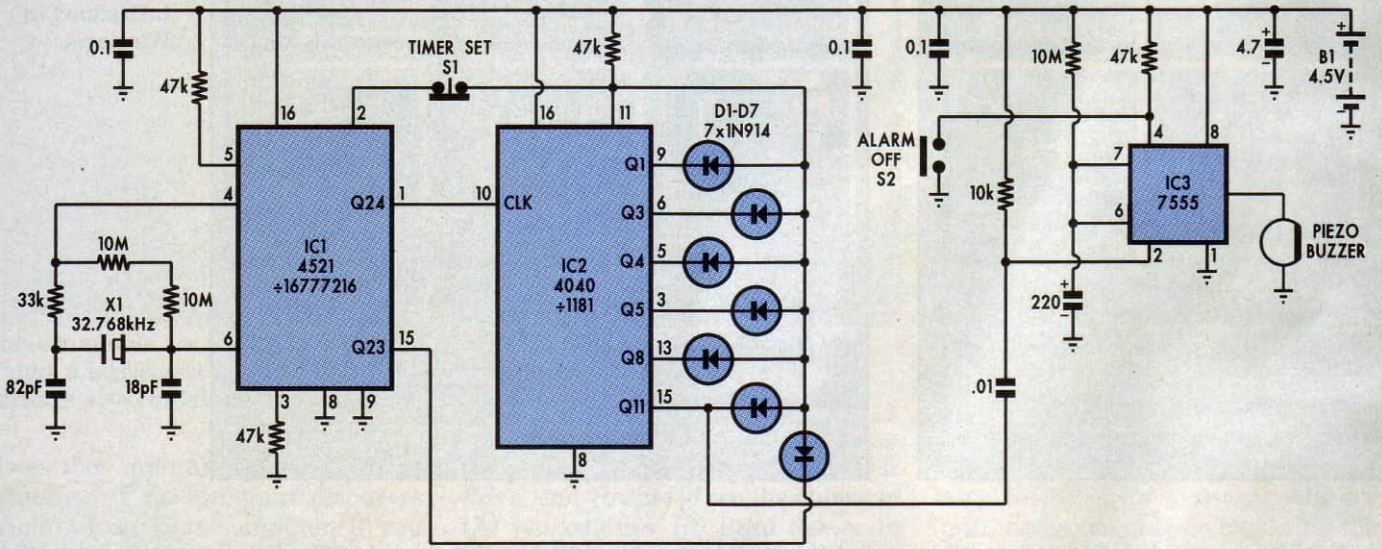

Weekly rubbish reminder

This circuit operates a buzzer once a week to remind you to take out the rubbish bin. IC1 is a 4521 oscillator and 24-stage divider which is clocked at 32.768kHz. Its output has a period of 8.53 minutes – 256 seconds high and 256 seconds low. This is fed to IC2, a 4040 12-stage binary counter. Six of IC2's outputs are fed to a diode AND gate to give a division of 1181. The same diode network provides the reset pulse for both counters.

At reset, all the counter outputs are pulled low, including pin 15 of IC2 which momentarily pulls the trigger pin of IC3 low. IC3's output then goes high for a period of 45 minutes, as set by the 10MΩ resistor and 220µF capacitor at pins 6 & 7. The buzzer therefore sounds for 45 minutes unless the timer is reset manually by the pushbutton at pin 4.

The normally-closed pushbutton S1 must be pressed to set the alarm to sound exactly one week later.

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