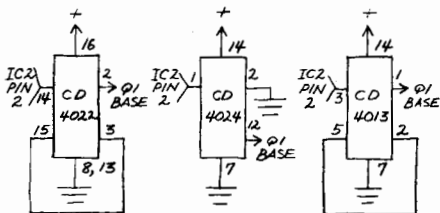


TO "READER CIRCUIT"

Many thanks for publishing my circuit for the calculation/stopwatch adapter in the April 1977 Solid State column. I note, however, that I omitted the connection from pin 13 of IC2 to ground. This connection must be made to enable the chip. Also, the debounce circuitry in some calculators apparently does not respond properly to the commands given at the 10-Hz rate. The solution to this is to put another divider into the circuit so that the switch operates at a 5-Hz rate. Some circuits that can be used to accomplish this are shown below. Using these circuits, it may be



necessary to experiment with the value of C4, which determines the time the switch remains closed; I found 0.033 μF to work best on one of my slow calculators. With the slower rate, naturally, the calculator should be keyed ., 2, +, but the rest of the operation is the same.

—Will Hobbs, Eugene, OR