

TIPS & TECHNIQUES

Negative Logic Gates

An experimenter who is accustomed to reading schematics containing positive-logic gate symbols might be confused when a gate symbol with negative-logic inputs turns up. Here's a simple way to

AND GATE WITH NEGATIVE-LOGIC INPUTS



TRUTH TABLE FOR AND GATE WITH POSITIVE-LOGIC INPUTS

A	B	Y
0	0	0
0	1	0
1	0	0
1	1	1

TRUTH TABLE FOR AND GATE WITH INPUTS INVERTED

\bar{A}	\bar{B}	Y
1	1	1
1	0	0
0	1	0
0	0	0

TRUTH TABLE FOR NOR GATE WITH POSITIVE-LOGIC INPUTS



decipher those gates. Draw a truth table for the gate, ignoring the inverted inputs, as shown here (see figure). Then invert inputs on the truth table. Determine which type of gate fits this truth table. The truth table with the inverted inputs is that for a NOR gate with positive-logic inputs, which is the actual gate used in such a circuit.—*John Fobel, Ontario, CA.*

Low-Cost Holders for Soldering Irons

Small clay flower pots (about 4 in. diameter) make good, inexpensive holders for soldering irons. The pot is simply inverted and the iron tip inserted into the drainage hole. Because of its wide base, the holder is very stable; and, since the material is a poor heat conductor, it can be put on a finished table or desk top without causing damage to the finish. Needless to say, the flower pot costs only a fraction of an ordinary soldering-iron holder.—*F. Penicka, Mississauga, Ontario, Canada*