12/4/21, 11:05 PM CD 4001 | ElecHelp





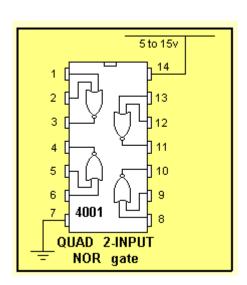






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TRUTH TABLE

NOR		
Α	В	Output
0	0	1
0	1	0

1 0 0 1 1 0

- The CD 4001 is a very versatile CMOS chip.
- It contains 4 NOR gates.
- Minimum supply voltage 3v
- Maximum supply voltage 15v
- Max current per output 10mA
- Maximum speed of operation 4MHz
- Current consumption approx 1uA



Follow the inputs and note when the LED is illuminated.

GATING

The secret to understanding the operation of the gate is show in the diagram on the right.

It is called **GATING**.

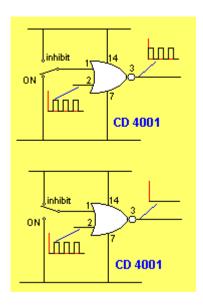
When one input is held LOW, the signal on the other input will be inverted by the gate and appear on the output.

When one input is held HIGH, the output is a constant LOW.

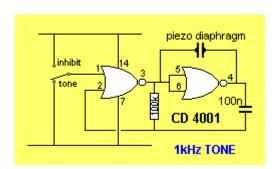
This is also shown in the 1kHz tone circuit below.

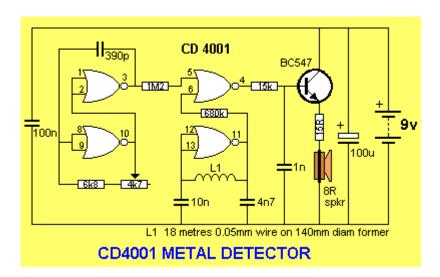
Note:

Do not leave an input "open" (non-connected) as the high input impedance (approx 10M) will pick up noise and create faulty operation.



Circuits built around a CD 4001:















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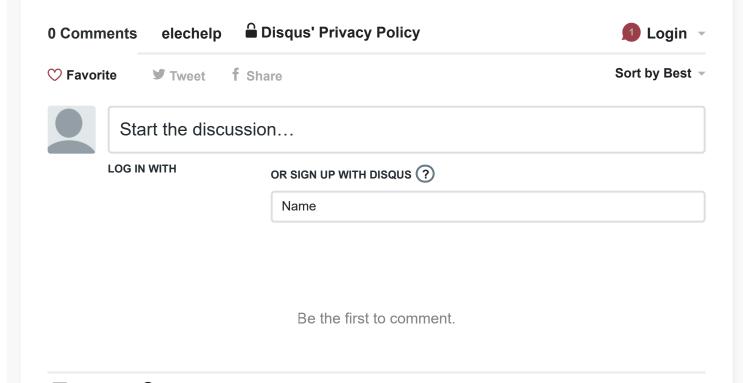
Sad

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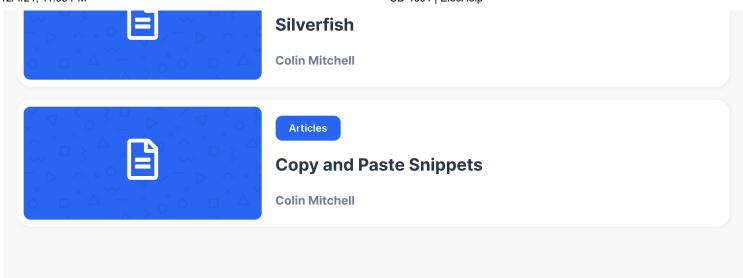
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