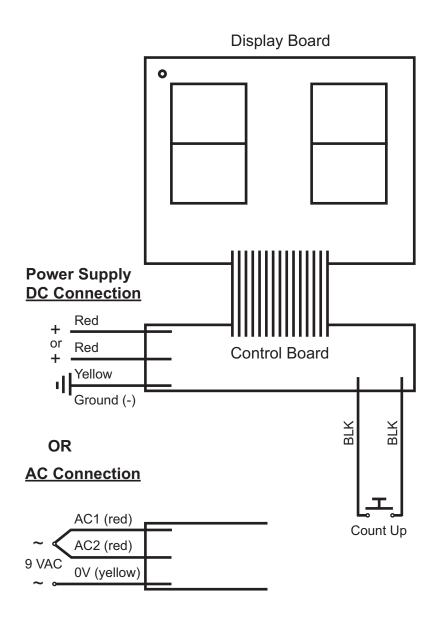
00 to 99 Counter Display - Connection Diagram Non-Resettable CAT# CTR-92

1) Connect power supply to control board

Cut small plug from end of wire and remove an inch or more of black jacket. White center lead is covered with wire mesh shield. Twist shield mesh together to form your ground lead (- lead) which connects to the yellow lead on the counter. Strip the end of the white lead and connect to one of the red leads.

2) Connect momentary, normally open push button to the black leads

Each time this is pushed, the counter advances one digit.



MODIFICATION FOR RESET FUNCTION CAT# CTR-92 – 2-DIGIT COUNTER

One of our customers figured out how to make our two-digit counter, CAT# CTR-92, resettable. Using that information, we present you with the following solution.

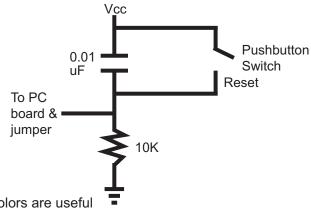
Required parts:

1 each -- Momentary, normally open pushbutton switch CAT# PB-160 or similar

1 each -- 0.01Uf, 50V disc capacitor CAT# 103D50

1 each -- 10K 1/4W resistor CAT# 291-10K

1-2 feet of insulated wire, 22AWG stranded or similar. Different colors are useful



- 1. See Figure 1 -- Cut the PC board copper traces in two places to isolate Pin 15 on the two CD4033 Counter ICs. You can carefully use a Dremel tool or blade of some sort. It is important to break the circuit to solder spot without harming the solder spot or the rest of the circuit. Note that the pin is in the lower quadrant of the IC on the left side of the board and the upper quadrant on the right side.
- 2. See Figure 2 -- Solder a jumper wire between the two pins.
- 3. See Figure 3 -- We attached all of the circuitry to the push-button switch. Obviously, if you have a better idea, go for it. Solder a 0.01uDF disc capacitor between the two terminals on the normally-open, momentary pushbutton switch. At the same time solder a wire lead to each terminal and another lead & a 10K resistor in-line to the other terminal.
- 4. The lead with the resistor connects to the Negative (-) lead of the power supply. The other lead on that side c onnects to the jumper on the circuit board. The other lead connects to the positive lead of the power supply.

