

Based on your description, I'll provide a step-by-step guide to assembling the circuit on a breadboard:

- 1. Place LM555CN IC: Position the LM555CN integrated circuit at the center of the breadboard, ensuring its pins straddle the center divide.
- 2. **Connect Power Supply**: Connect the positive terminal of your power supply to one of the rows on the breadboard. Place a 470 ohm resistor on the same row and connect its other end to pin 7 of the LM555CN.
- 3. **Connect 100k ohm Resistor**: Place a 100k ohm resistor on the breadboard, connecting one end to the same row where pin 7 of LM555CN is connected. Connect the other end of the 100k ohm resistor to pins 6 and 2 of the LM555CN. These pins can be connected using a small piece of wire to merge them.
- 4. **Connect Capacitor**: Connect the positive terminal of the capacitor to the same row where the 100k ohm resistor ends. Then, connect the negative terminal of the capacitor to the ground rail of the breadboard.
- 5. **Ground Connection**: Ensure that the ground (negative) terminal of your power supply is connected to the ground rail of the breadboard. This typically involves connecting the ground terminal of the power supply to one of the rows on the breadboard and then connecting that row to the ground rail.

Remember to double-check your connections and ensure everything is securely in place before applying power to the circuit. Also, make sure to verify the pin connections of the LM555CN according to its datasheet to ensure proper functionality.









