

Jumper wires are short, flexible wires used to connect electronic components on a breadboard or other circuit.¹ They're like little bridges that help electricity flow between different parts of your circuit.

Types of Jumper Wires

- **Solid Core:** These wires have a single, solid wire inside. They're usually stiffer and less flexible than stranded wires.
- **Stranded Core:** These wires have many small wires twisted together inside. This makes them more flexible and less likely to break.
- **Different Colors:** Jumper wires often come in different colors. This can help you visually organize your circuits and make them easier to understand.
- **Male-to-Male:** Both ends of the wire have the same type of connector, usually small metal pins that fit into the holes on a breadboard.
- **Male-to-Female:** One end of the wire has a male connector, and the other end has a female connector. This allows you to connect to different types of components.

Using Jumper Wires

- **Connect Components:** You can use jumper wires to connect components on a breadboard, such as resistors, LEDs, and sensors.⁵
- **Create Loops:** You can use jumper wires to create loops in your circuit, which can be useful for certain types of circuits.
- **Experiment:** Jumper wires make it easy to experiment with different circuit configurations. You can easily change the connections between components to see how it affects the circuit's behavior.

Safety Tips

- Always be careful when working with electronics.
- Make sure you understand the circuit you're building before you start connecting components.
- If you're not sure what you're doing, ask for help from a qualified adult.

By understanding how to use jumper wires, you can build a wide variety of electronic circuits.

[Stranded vs. Solid Wire Cable: How to Choose](#)

[What is a Jumper Wire?](#)

[Connecting resistors in series and parallel using a breadboard](#)