



C172 Project Wiring Standards

COLOR

Colors must be easily discernable because I'm colorblind. Selfish. I know.

Color Guidelines

Unforgivable colors: Refrain from using these colors other places

Red: 5V

Black: GND

Forgivable colors: These sometimes have odd use cases

White: Switch (toggle/button usually)

White bundled with black wire: 5V --Only use this combo in backlighting--

White bundled with black and red (ex potentiometer): Signal/Analog In Wire

Yellow: LED (think of it as something lighting up)

IN1:

IN2:

IN3:

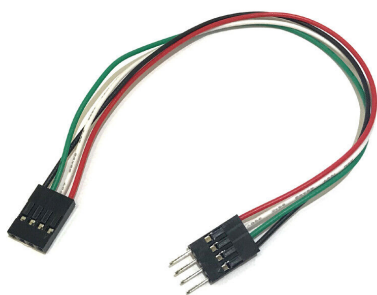
IN4:

Connector Guidelines

REGARDLESS OF CONNECTOR: 2.54mm pin spacing should be used (1/10")

"DuPont" Connectors:

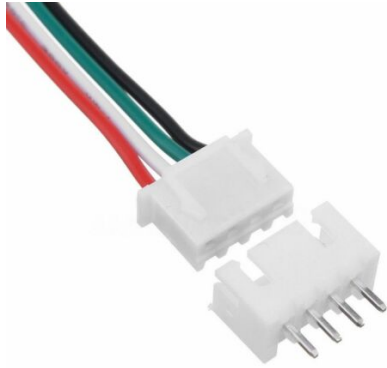
If connecting to an Arduino, style wire is used.



JST XH connectors:

Quick and sturdy disconnect

8 pins or less

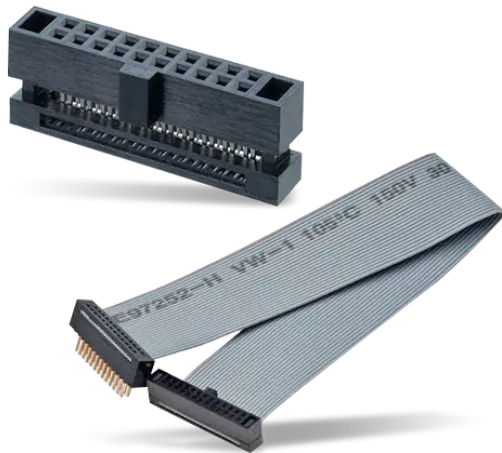


IDC Connectors:

Use these for Circuit Board to Circuit Board connections: (like porting wires from one GPS to another)

Use if more than 8 connections

Come in sizes of 6, 8, 10, 14, 16, 20, 24, 26, 30, 34, 40, 50, 60, 64



*NOTE: IDC connectors do not play nicely directly to Arduino, so custom Arduino PCB would likely need to be used.

MILITARY CONNECTORS:

Use these to add a little spice to your wiring.

Use these at your own risk:



These can be extra fun for quick disconnects



Wire Specs:

Wire must be of a quality that allows long-term operation.

Standard electronics wire is

- AWG #22 to #26
- Stranded
- Ideally Copper (even though it's expensive)