

littleBits electronic components are part toy, part electronic prototyping platform. They snap together magnetically and are color-coded for ease of use.



Orange modules offer logical functions, wires that extend distance, connections to computers and other devices (MIDI, wireless transmitters, MaKey MaKey, Arduino, and more).



## Tips and Troubleshooting

- Always start with a blue power module. All littleBits need a power module, either the battery power module or a special USB power module. (They will not automatically get power form the USB port.)
- Make sure you have a flat surface to work on, otherwise the bits may come apart slightly and not work. Use the white mounting boards for added stability.
- **Test complex combinations a section at a time.**
- Try a new battery.
- Some bits have tiny switches for on/off or different modes. Some have tiny sensitivity adjustment screws.
- Order matters! Build circuits from left to right. Input modules only affect the modules that come "after" them (meaning to the right).

## Project ideas

From the littleBits website littlebits.cc

- \* Logic Lesson <u>littleBits.cc/browse-lessons/introduction-to-logic</u>
- \* Investigating the Law of Reflection <u>littleBits.cc/</u> <u>browse-lessons/investigating-the-law-of-reflection</u>
- \* Creepy Crawly Cockroach <u>littleBits.cc/projects/creepy-crawly-cockroach</u>

## Challenges

- \* Make a robot that makes art
- \* Make a nightlight
- \* Invent a security system

The littleBits site offers projects, resources and a 15% educator discount <u>littlebits.cc</u>