

Hook-up Wire Spools (Assorted Colors)

DT Workshop Equipment Reference — D&T / STEM resource for school workshops | Consumables & Spares

Hook-up wire is flexible insulated wire used for wiring breadboards, robots and control panels, sold on spools in assorted colours for easy circuit tracing. Typical gauges are 22-30 AWG solid for breadboards and stranded for flexing builds.

Key Features

- 22 AWG solid for breadboards
- 24-26 AWG stranded for flexible joints
- Colour spools for signal tracing
- PVC or silicone insulation
- Lengths per spool 10-100 m

Typical Uses in the Workshop

- Wire breadboard and prototype circuits
- Connect sensors, motors and switches
- Repair broken leads and cables
- Colour code power, ground and signals

Safe Operation

1. Cut the length plus a little spare
2. Strip 5-10 mm of insulation to fit
3. Solid wire inserts into breadboards and headers
4. Stranded wire suits crimps and solder joints
5. Tuck excess neatly with ties

SAFETY NOTES

- Match the wire gauge to the current carried
- Check insulation for cuts before use
- Do not run thin wires for motor power
- Keep wires away from heat and moving parts
- Store spools off the floor

Maintenance & Consumables

- Keep spools capped and labelled
- Restock the common colours (red, black, yellow)
- Check the wire for brittle insulation with age
- Store in a dry place
- Organise spools on a rack or stand

Specification & Buying Notes

Buy solid 22 AWG in red, black, yellow, blue and green for breadboards, plus stranded 24 AWG spools for robot wiring. Silicone-insulated wire survives soldering heat better.