

Conductive Ink Pens

DT Workshop Equipment Reference — D&T / STEM resource for school workshops | Electronics & Prototyping

Conductive ink pens draw working electrical traces with silver or carbon ink on paper, card and plastics, letting students prototype circuits, repair traces, connect cardboard projects and add touch pads without copper.

Key Features

- Silver and carbon conductive inks
- Pen applicator tips
- Dries in minutes
- Adheres to paper and plastic
- Conductivity after cure

Typical Uses in the Workshop

- Draw working circuits on paper
- Repair broken PCB traces
- Build paper and cardboard electronics
- Prototype touch and bend sensors

Safe Operation

1. Sketch the trace path lightly
2. Draw thick, continuous lines
3. Let the ink dry and cure
4. Test continuity with a meter
5. Overdraw broken sections

SAFETY NOTES

- Ink is conductive - keep off skin and eyes
- Let lines dry before powering
- Keep pens capped away from young children
- Work in a ventilated area
- Do not use near flames

Maintenance & Consumables

- Cap the pen immediately after use
- Store nib down in a cool place
- Shake before use
- Check the conductivity periodically
- Replace dried pens

Specification & Buying Notes

Silver ink pens give the best conductivity for paper circuits. Quality pens flow evenly - cheap ones clog and dry patchy. Pair with copper tape for robust joints.