

LiPo Battery Chargers and Safety Bags

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



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LiPo chargers balance-charge lithium polymer batteries with the correct current and cell count, while safety bags contain fires if a damaged cell vents. Together they make battery-powered robotics projects safe and teach students about responsible battery use.

Key Features

- 1-6 cell balance charging
- Charge current selection 0.1-5 A
- Discharge and storage modes
- Safety bags in cell and pouch sizes
- Balance board connectors for packs

Typical Uses in the Workshop

- Charge robot and drone batteries safely
- Balance and store LiPo packs correctly
- Teach battery care and fire safety
- Recharge project power packs between lessons

Safe Operation

1. Check the cell count and capacity on the pack label
2. Connect the balance lead first, then the main lead
3. Select the 1C or lower charge rate
4. Start charging and monitor the first minutes
5. Return charged packs to the safety bag for storage

SAFETY NOTES

- Only use LiPo-safe chargers and correct settings
- Never charge unattended or on flammable surfaces
- Use a safety bag for charging and storage
- Never puncture, crush or short a LiPo pack
- Dispose of swollen packs properly - never charge them

Maintenance & Consumables

- Keep contacts clean
- Check the balance leads for breaks
- Update the charger firmware if supported
- Inspect packs for swelling before charging
- Store packs at storage voltage when idle

Specification & Buying Notes

A balance charger with a power supply and a selection of safety bags covers classroom needs. Buy quality chargers with current limiting. Stock a LiPo-safe disposal bin for damaged packs.