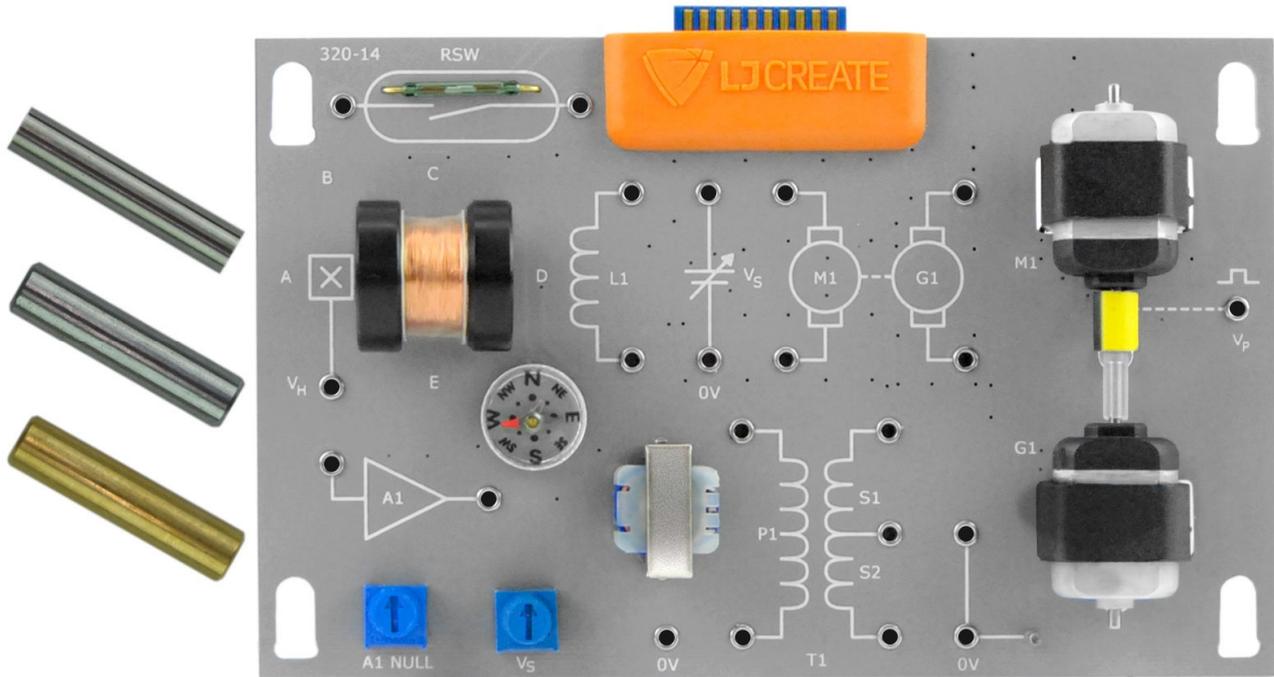


Product Information Sheet

320-14 Electromagnetism



This practical resource introduces students to the principles and applications of electromagnetism through a range of practical activities.

The card is designed for use with the 320-00 Electronics Study Trainer.

Practical activities based around this card are provided on the digital curriculum disk provided with the trainer.

The card may also be used with our optional cloud-based software. This contains theory presentations, investigations, and assessments, which link directly to the practical activities carried out using this resource.

The Card Includes the Following:

- Reed switch and bar magnet
- Coil with removable iron and brass cores
- Hall effect sensor and amplifier
- Magnetic compass
- Transformer with center-tapped secondary winding
- DC motor and shaft speed sensor
- DC generator
- Variable supply for coil and motor
- Switched faults for fault-finding activities

Practical Tasks Include the Following:

- Reed switch operation
- Hall effect sensor investigation
- Relationship between field strength and current for an electromagnet
- Relationship between field strength and core material for an electromagnet
- Field shape and direction for an electromagnet
- Electromagnetic induction
- Solenoid operation
- Transformer voltages and turns ratio
- Transformer power and efficiency
- DC motor operation
- DC motor-generator investigation
- Fault-finding electromagnetic devices

Items Included:

- Circuit Card
- Magnetic compass
- Bar magnet
- Iron and brass cores

Other Items Required:

- 320-00 Electronics Study Trainer
- 2 Digital Multimeters
- Oscilloscope

General Information:

Card Dimensions:
160 x 100 x 30 mm (W, H, D)

Packaging:

Orders for multiple 320-series cards are shipped in storage boxes.

Shipping Volume:

Single card: 0.001 m³
Storage box: 0.015 m³

Shipping Weight:

Single card: 0.35 kg
Storage box: 0.5 kg

Please contact LJ Create for estimated shipping volume and weight for your specific order requirements.

Order Code: 320-14

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For more information visit www.ljcreate.com