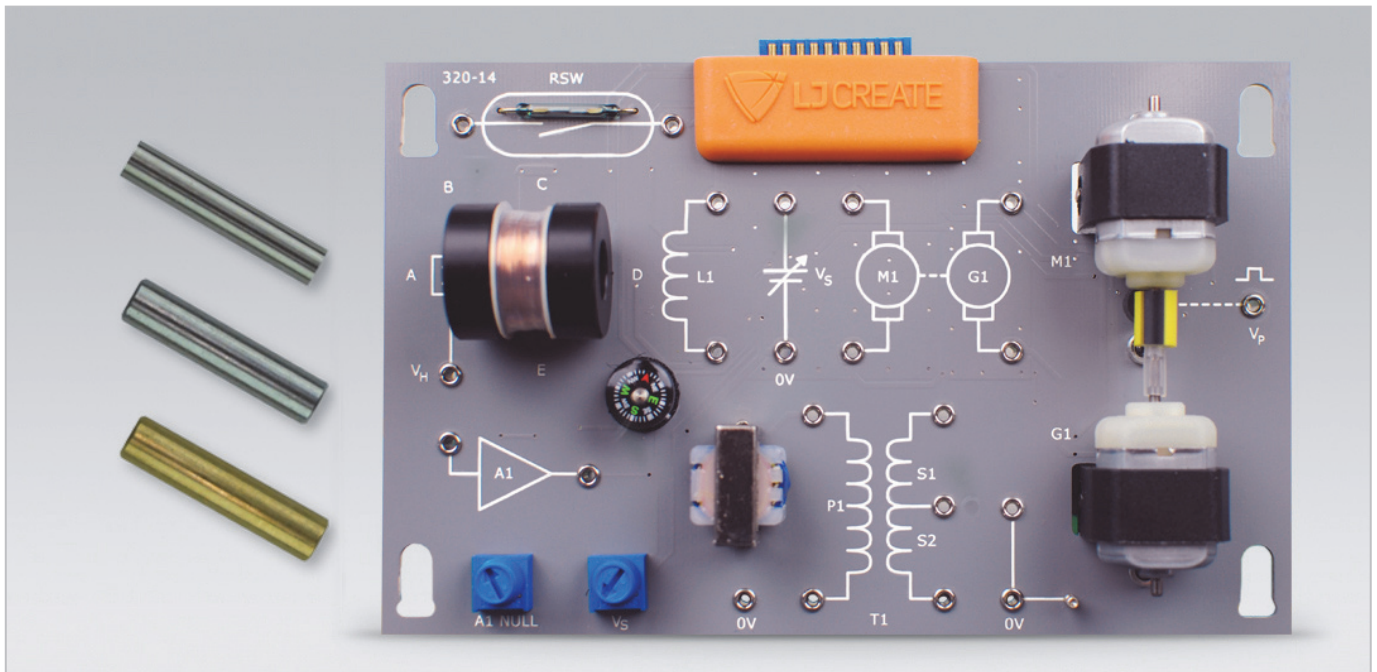


# Product Information Sheet

## Electromagnetism Card



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 Electronics Study Trainer (320-00).

Practical activities based around this card are available within the digital curriculum materials provided with the Electronics Study 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 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:

- Electronics Study Trainer (320-00)
- 2x 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 m<sup>3</sup>  
Storage box: 0.015 m<sup>3</sup>

### 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**

P9050-C

**For more information visit [www.ljcreate.com](http://www.ljcreate.com)**