

LCR Circuits (EA01C)

BASIC POWER ELECTRICITY



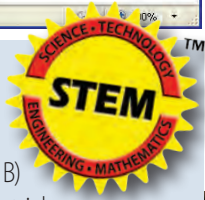
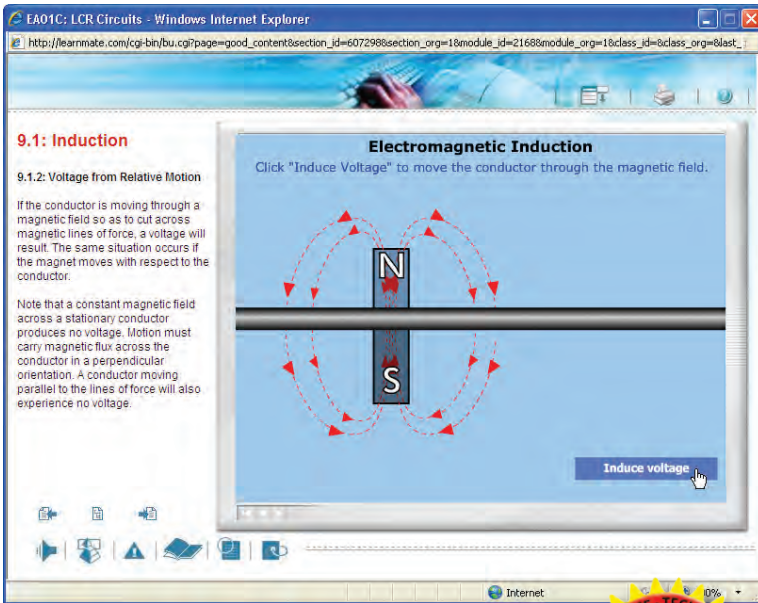
JOB MASTER

SKILLS-BASED TRAINING

The JobMaster™ Industrial Maintenance and Mechatronics Training teaches the specialized skills required for today's industrial technicians. JobMaster™ provides a superior blended learning solution for automated manufacturing training by combining industrial-grade components with engaging e-learning content.

JobMaster™ courses are entirely skill-based, consisting of individual exercises that reproduce essential tasks performed by maintenance technicians, equipment operators, and machine repairmen. Each skill has been analyzed and field-tested by qualified maintenance technicians to teach the specific skills needed in the industrial environment.

intelitek's partners in development of the curriculum include twelve major US industrial companies, including Boeing, Caterpillar, Ford, GE, and US Steel.



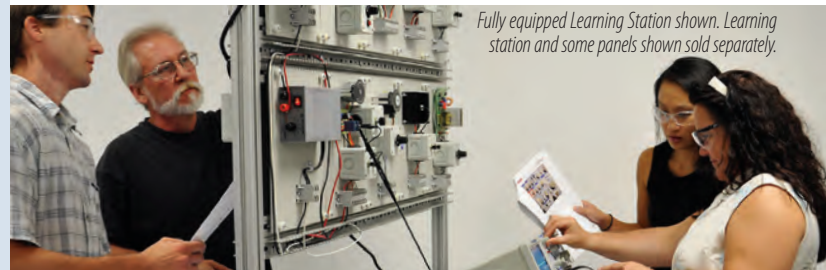
LCR Circuits (EA01C) teaches the relationships between electrical properties such as inductance, capacitance and reactance. The skills-based curriculum builds on concepts learned in the prerequisite Resistors and Conductors (EA01B) course. Using the same components they will find in industrial environments, including relays, contactors, capacitors and inductors, students learn to determine capacitance, assemble an electromagnet, induce voltage and operate transformers.

EA01C includes five additional Flexponent™ panels for use with the JobMaster™ Learning Station (not included) in eleven hands-on activities. Panels are easily added and exchanged allowing the workspace to be re-configured as multiple students progress through the course.

Core concepts are taught through self-paced e-learning curriculum. All the necessary resources, including printable instructions and wiring diagrams are available online, ready for use at the JobMaster Learning Station.

Instructors are also provided comprehensive resources, including a detailed instructors' guide. Teachers' versions of schematics and wiring diagrams as well as tips and tricks are all one click away.

With JobMaster, you can be sure your training program will deliver the skills needed for success in automated manufacturing careers!



Fully equipped Learning Station shown. Learning station and some panels shown sold separately.

**JobMaster™, the new standard in
industrial maintenance and mechatronics training!**

P O W E R E D B Y

LearnMate™

JobMaster™ courses are powered by LearnMate™ - intelitek's innovative e-learning platform. LearnMate's self-paced interactive content may be deployed stand-alone or through the robust learning management system (LMS). The LearnMate™ e-learning suite provides everything needed for the ultimate blended learning experience:

- SCORM-compliant interactive content
- Anytime, anywhere accessibility
- Student and class management
- Grade tracking
- Skill/competency reporting mapped to national academic skill standards

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LCR Circuits (EA01C)

Materials Included

Order #14-EA01C:

- LCR Circuits (EA01C) E-Learning Course and Teachers' Guide
- Flexponent™ panels:
 - E029: Magnetism Demonstration Panel
 - E043: Capacitance Panel
 - E044: Inductance Panel
 - E057: Motor/Generator Demonstration Panel
 - E150: Relay/Contactor Panel

Materials required (sold separately):

- JobMaster™ Learning Station Order #10-LS00-0200
- Power Control Panel: (120V)* Order #10-PC04-0000

* International step-down transformer package (Order #10-PC09-0000) required for international applications.

- Prerequisite courses:
 - Resistors and Conductors (EA01B) Order #14-EA01B

Skills Acquired



- Skill 1: Discharge a Capacitor
- Skill 2: Testing a Capacitor
- Skill 3: Determining Capacitance
- Skill 4: Applying Capacitance Principles
- Skill 5: Applying Magnetic Principles
- Skill 6: Inducing a Magnetic Field
- Skill 7: Assembling an Electromagnet
- Skill 8: Applying Electromagnetic Principles
- Skill 9: Inducing Voltage
- Skill 10: Inducing DC Voltage
- Skill 11: Assembling & Operating Transformers
- Skill 12: Applying Inductance Principles
- Skill 13: Operating Electromagnets
- Skill 14: Drawing Inductance Symbols

Most courses require a JobMaster™ Learning Station, sold separately. Some courses require other hardware purchased separately or as part of prerequisite courses in the same series. All included and required materials are noted on each product data sheet.

Affiliated with:



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BASIC POWER ELECTRICITY

LCR Circuits (EA01C) is the first in the four-course Basic Power Electricity series, which teaches the introductory electrical skills essential for success in automated manufacturing.

The Basic Power Electricity series includes:

- Electrical Circuits (EA01A)
- Resistors and Conductors (EA01B)
- LCR Circuits (EA01C)
- Motors and Generators (EA01D)



Learning Station shown fully equipped with Basic Power Electricity series panels. Learning Station and some panels sold separately.

Panel & Hardware Specifications

All included Flexponent™ panels meet the following specifications:

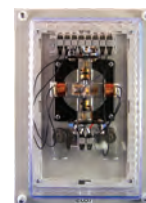
- Construction: 3/8" (9.5 mm) thick environmentally stabilized, chemically resistant, non-conductive, high density polyethylene.
- Terminal strips Industry-standard recessed and insulated fasteners rated for 50-amps at 600 volts.
- Dimensions 8"W x 11.5"H x 0.375"D (203 mm x 292 mm x 9.525 mm)

Panel E029: Magnetism



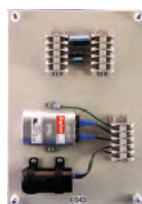
- Panel type: Single
- 1 Current Meter, 100-0-100, 3.5" x 3.5"
 - 1 Mini Compass, 1-1/2" diameter

Panel E057: Motor/Generator



- Panel type: Single
- 1 Motor/Generator
 - 1 Cover, Clear, 3.5" depth

Panel E043: Capacitance



- Panel type: Single
- 1 Start Capacitor, 88-106MFD, 110-125V
 - 1 Capacitor, 100uf, 50V, Axial, Aluminum
 - 1 Capacitor, 2200uf, 25V, Axial, Aluminum
 - 1 Capacitor, 3.3uf, 10V, Axial, Ceramic
 - 1 Capacitor, 47uf, 25V, Axial, Aluminum
 - 1 Run Capacitor, 12.5 MFD, 370V

Panel E150: Relay/Contactor



- Panel type: Single
- 1 Contactor, Mini, 6A, 24V
 - 1 Relay, 8 pin DPDT
 - 1 Socket, Relay, 8 pin
 - 1 Solenoid, 24V, Box Frame

Panel E044: inductance



- Panel type: Single
- 1 Primary-Secondary Coil
 - 2 Bar Magnets, 2"



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www.intelitek.com
35-EA01C-DS01 Rev-C