

Stepper Motor Drives (EB05)

INDUSTRIAL POWER ELECTRONICS



Stepper Motor Drives (EB05) delivers hands-on skills using stepper motor systems found in robots, precision linear positioning devices, CNC machines and other devices that provide motion control with calculated accuracy. Students acquire skills including confirming stepper motor step angle, installing and monitoring a basic stepper motor drive and troubleshooting stepper motor drives.

The skills-based curriculum builds on the concepts learned in the prerequisite courses in the Industrial Power Electronics series. Stepper Motor Drives (EB05) presents seven additional skills with an industrial-grade stepper motor and drive mounted on a Flexponent™ panel which attaches to the JobMaster Learning Station (not included). 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, wiring diagrams and troubleshooting charts, 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!

JOB MASTER



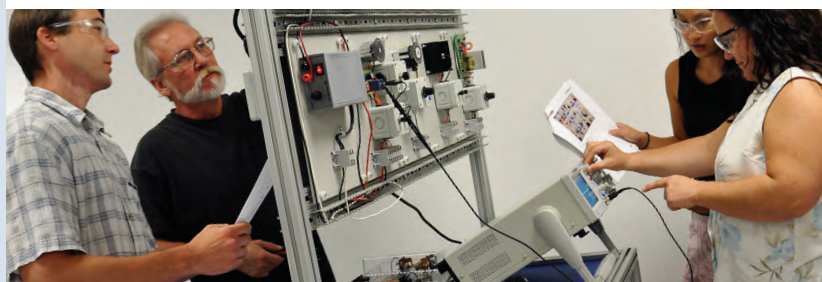
SKILLS-BASED TRAINING

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 curriculum.

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 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.

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



POWERED BY

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

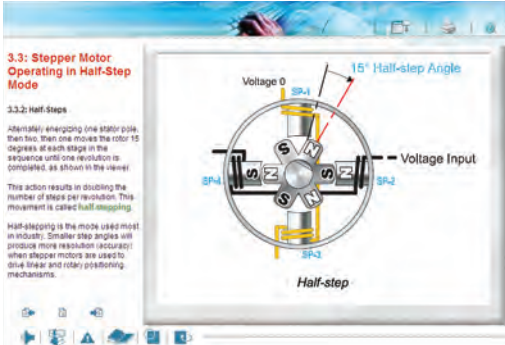
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www.intelitek.com

Stepper Motor Drives (EB05)

Materials Included

Order #14-EB05:

- Stepper Motor Drives (EB05) E-Learning Course and Teachers' Guide



- Flexponent™ panels:
 - E090 Stepper Motor and Drive 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
 - Electronic Timers (EB04) Order #14-EB04

Skills Acquired

- Skill 1 Identifying Detent Torque
- Skill 2 Confirming Stepper Motor Step Angle
- Skill 3 Demonstrating Stepper Motor Principles
- Skill 4 Confirming Stator Winding Connections
- Skill 5 Demonstrating Unipolar Stepper Motor Drive
- Skill 6 Installing, Connecting and Monitoring a Basic Stepper Motor Drive
- Skill 7 Testing and Troubleshooting a Basic Stepper Motor and Drive



INDUSTRIAL POWER ELECTRONICS

Stepper Motor Drives (EB05) is a fundamental course in the Industrial Power Electronics series which includes comprehensive instruction in industrial power, including test equipment, power supplies and motor drives. These courses deliver specific identified skills for industrial maintenance, mechatronics and automated manufacturing careers.

The Industrial Power Electronics series includes:

- Digital Multimeter (EB01B)
- Oscilloscope (EB01A)
- Single-phase and Three-phase Power Supplies (EB02B)
- Servo Motor Drives (EB06)
- and more!



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

Make Industrial Power Electronics part of a comprehensive STEM program!

Add virtual, hardware-based or blended learning labs to deliver in-depth Industrial Maintenance, Mechatronics and Advanced Manufacturing programs.



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-amperes at 600 volts.
- Dimensions:** 8"W x 11.5"H x 0.375"D (203 mm x 292 mm x 9.525 mm)

Panel E090: Stepper Motor and Drive



- Panel type: single
- 1 Stepper motor
- 1 Stepper drive
- 1 NO pushbutton switch
- 1 Potentiometer
- 1 Dial
- 1 IC test clip, 16-position
- 2 Fault switches, momentary, push-on/push-off, 4A, 250V

Affiliated with:



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intelitek

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35-EB05-DS01 Rev-C