ELECTRONICS

Step Motor Control

DL 2208

This board is designed to provide a valid support for the study of the operation and of the application criteria of these important electromechanical components.

It allows the students performing study and experimentation concerning the driving of a step motor, unipolar or bipolar.

The rotation can be performed with increments of a single step or with continuity, at a variable speed.

Position and direction are indicated by a disk.

An LCD display allows showing the number of steps, the number of turns, the rpm, the rotation direction and the selected parameters of the controller.

Experiments

- Analysis of the operation of a step motor
- Analysis of the control criteria and of the power modules
- Full step or half step
- Variable speed rotation control
- Inversion of the rotation direction
- Study of an incremental position encoder

Technical Features

- Step angle: 1.8°
- Number of phases: 4
- Max. power: 16 W
- Sense of rotation: reversible
- Current/phase max: 1.5 A
- Variable frequency from 20 Hz to 500 Hz through potentiometer

Power supply: 90/260 Vac, 50/60 Hz