

Stepper motors

When you connect an ordinary motor to the power it spins, stepper motors are different.

Get a stepper motor board and connect a stepper motor or floppy disc drive. Connect the power lead to the power pack and operate at about 15v with a maximum current of about 1.5A.

Press one of the switches, what happens?

Using the switches, try and make the motor turn. What do you have to do?

How do you make the motor reverse?

You can connect the stepper motor board to a breadboard using wires. Put a microcontroller on your breadboard and connect the four stepper motor coils to the output port of your microcontroller. Do not forget the 0v connection.

Experiment with a disc drive.

Write a program to make the read/write head move to the centre of the disc and then back again and stop.

Experiment with a stepper motor

Look at the label on the motor. How much does the motor turn each step?

Write a program to make the motor turn with the speed of the second hand of a clock