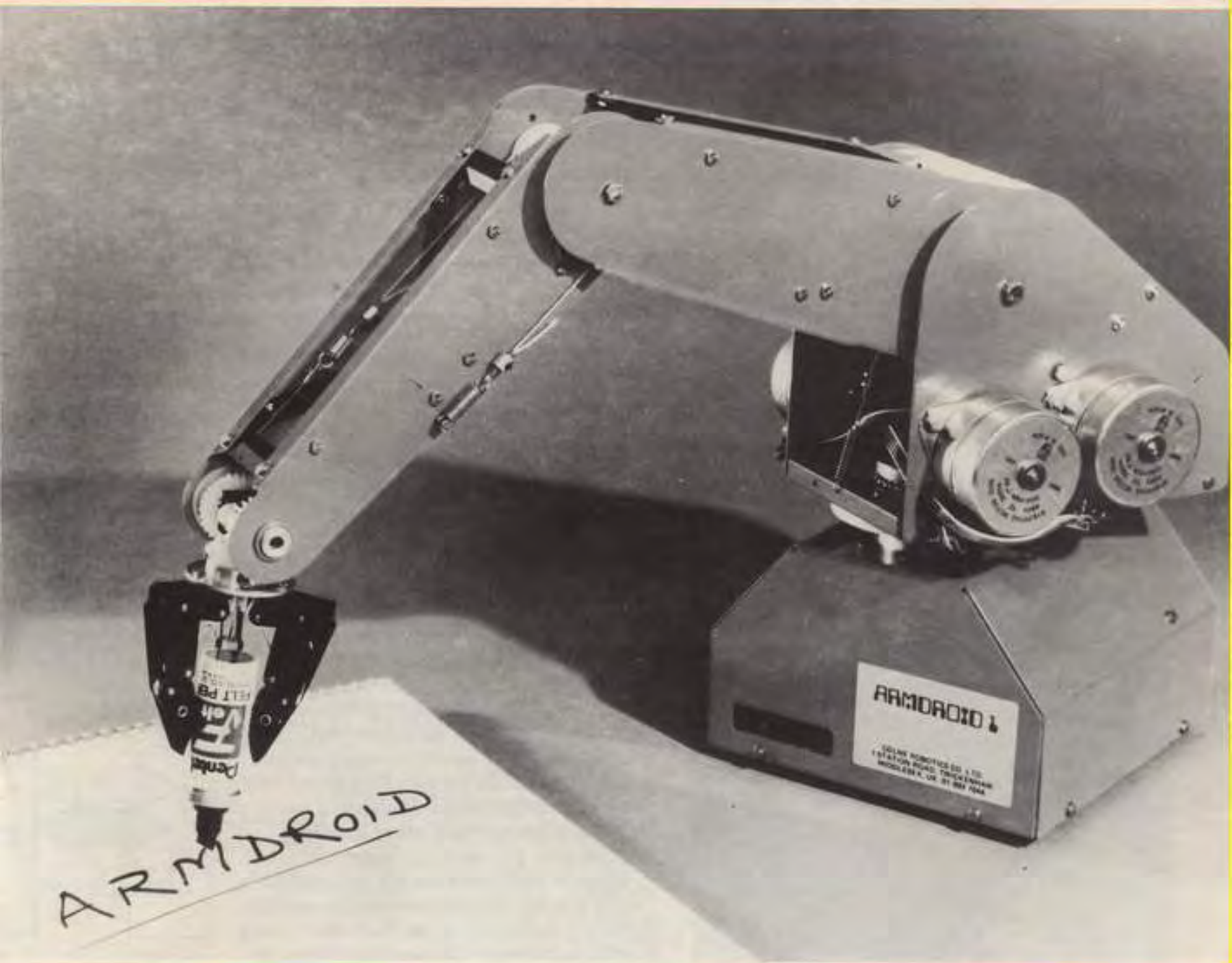
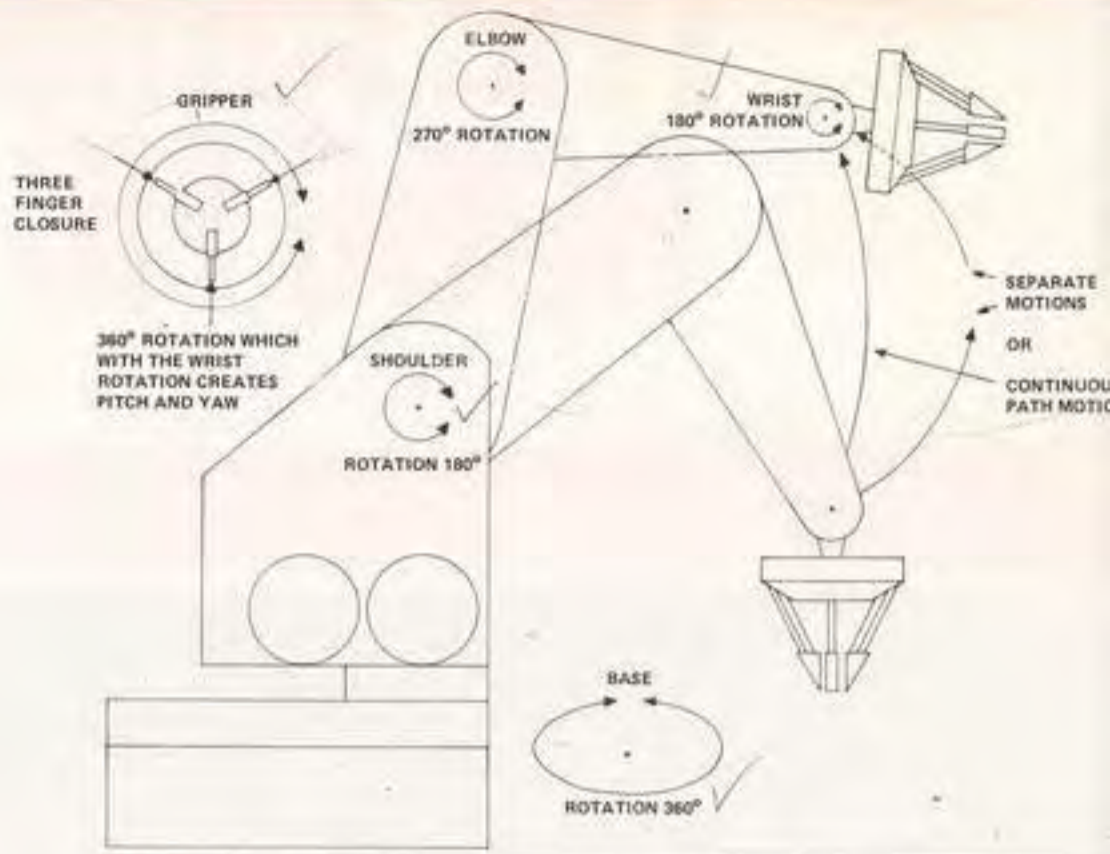


THE ARMDROID ROBOTIC ARM



COLNE ROBOTICS LTD



THE DEVICE

The *Armdroid* represents an important step forward in automation and handling. The device has five axes of rotation and is a continuous path machine. In other words it is able to use several joints at once and devise its own path in the movement of the gripper base and arm. The robot comes either as a kit or in assembled form. This cost effective robotic development tool can be used in the home or school as an educational device or in the factory or research laboratory as a light industrial tool.

THE COMPUTER

The *Armdroid* can be driven by most micro computers and can be used as a handling device or alternatively as a computer peripheral. All the well known names will operate the machine such as Pet, Apple, TRS 80, Nascom, Acorn, BBC Computer and many more. In addition there is a manual control box to drive the machine without a computer.



INDUSTRIAL ROBOTICS

In addition to this model of *Armdroid* there is also an industrial robot. This can handle up to 2 kilos and more and can be designed to your requirements. It can be fitted to your production line with variations particularly to the gripper. Such variations could include pneumatic suckers for handling board or sheet, an electro magnetic manipulator, a two fingered gripper or any other handling effector that you wish to design.

There is also provision for limit switches, tactile sensors, potentiometers for position reporting and many other "add ons". Such devices can change the *Armdroid* from an existing open loop system to a much more intelligent closed loop robot.



THE ELECTRONICS

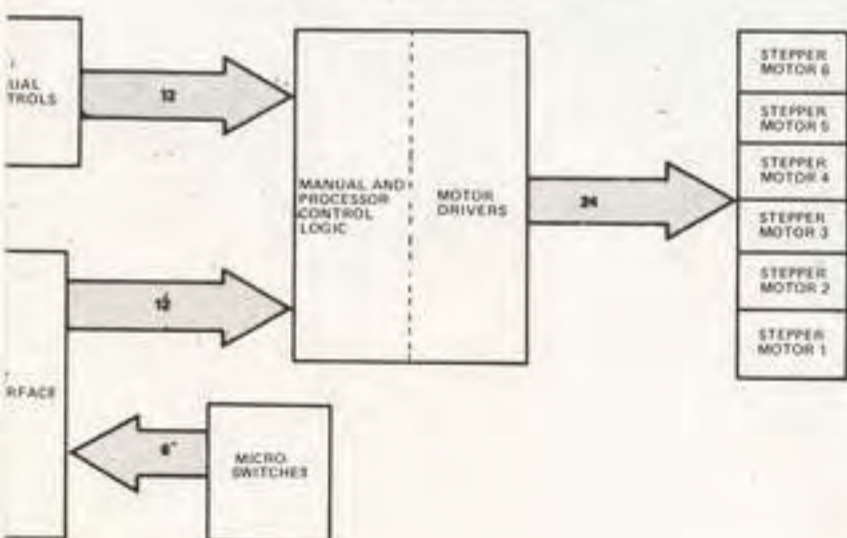
The robot has an interface board for an 8 bit bi-directional parallel port. Micro switches for position sensing are optional. The power pack which uses a 200 or 240v supply to drive the arm delivers 15.0 volts DC at 3 to 5 amps.

SOFTWARE

Programs have been written to suit almost all of the micro computers either in machine code or in basic. They are memory orientated and have a learning capability if required so that a robot will repeat a sequence which has been taught to it as many times as required.

THE MANUAL

A set of instructions for both construction and operation is a part of the kit and contains full engineering drawings, electronics schematics and detailed software listing and description.



ROBOTIC TRAINING

The use of *Armdroid* is an educational "hands on" experience. We do however draw upon our wide experience to offer further instruction. One day seminars for managers in the principles of low cost robots and automation are regularly given and can be tailored for "in house" requirements.

We also visit factories to evaluate robotic handling possibilities in medium and light engineering. Such visits can lead to Manufacturing Advisory Service grants giving up to 15 days consultancy at no cost to yourself. We are always ready to discuss your needs in robot technology. Our counselling service has a wide base including assembly, sampling in laboratories, work-piece transfer, small furnace feeding and even the feeding of disabled patents using voice control techniques.

OPTIONAL EXTRAS

A series of extras are being designed. Those that are available now are reed switches, control box and alternative grippers to specification. To keep *Armdroid* owners in touch with developments a newsletter is also available.

SPECIFICATIONS

Configuration	5 Axes of revolution
Gripper	3 Fingers (modifications if needed)
Drive	6 Stepper motors with open loop control
Controller	Any micro computer with an 8 bit parallel port
Power Requirement	15 volts 3 to 5 amps
Weight	8 lbs without power pack
Size	6" x 9" x 12" high

PERFORMANCE

Resolution	0.15 inch
Load Capacity	10 oz
Gripping Force	5 lbs
Reach	17 inches

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