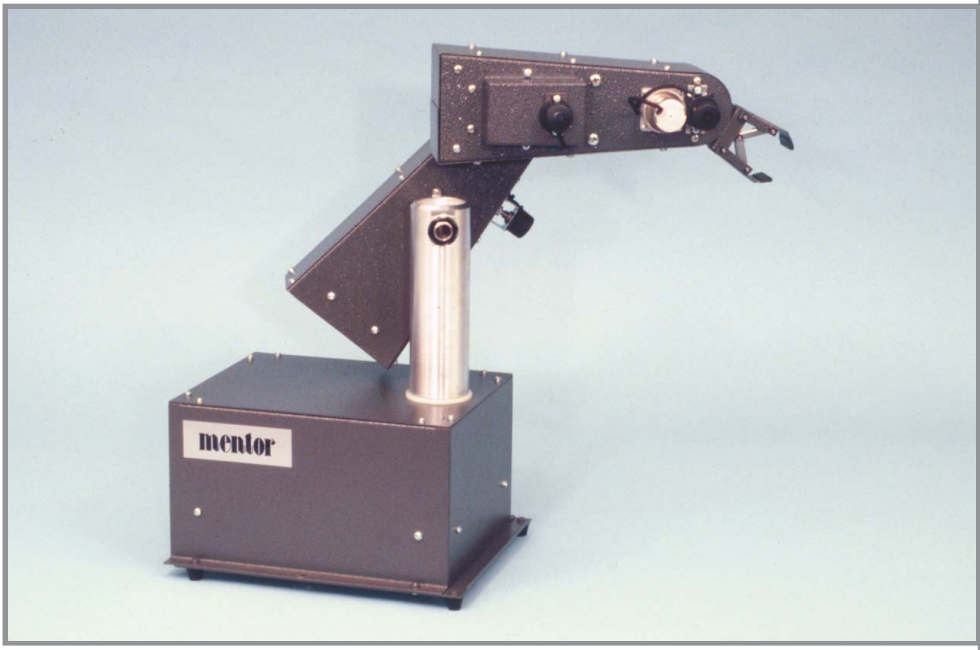
Feedback
Feedback Instruments Limited

Robotics &
Mechatronics

Mentor Desktop Robot 35-001-USB



Features

Safe, low-cost, versatile, robust and reliable.

5 Axes + Gripper
Human-arm configuration used widely in industry. All axes under closed-loop servo control system.

Self contained
The built-in control system makes an easy-to-handle, desk-top training system thats ready to run.

Safe and robust
Young students can be left alone to experiment and learn.

The practical and economic way to learn how to use robots.

Low priced, versatile, robust and reliable, the Mentor is the ideal entry point into the world of robotics and Computer Integrated Manufacturing.

The Mentor has an articulated arm with joints similar to that of the human arm and this configuration is widely used industrially.

Each of the axes is driven by a DC servo motor with its' position monitored by a potentiometer.

An built-in controller provides closed-loop control of the system and constantly provides monitoring data for the computer.

Programming may be from the computer by setting the data for each axis or by incrementing the axes by selecting them and using the + and - keys or the scroll bar.

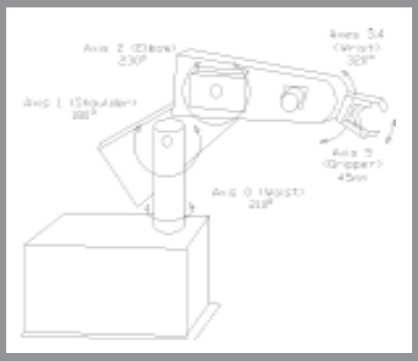
Alternatively the motors may be switched off and the Mentor then moved by hand. Another means of programming, is simulator control where the robot copies the movements of the hand-held model of the robot (Simulator).

Easy to use Windows software, helpful manual and on-screen assistance enable the robot to be unpacked and running programs within minutes.

The manual includes program examples and suggested robot experiments on accuracy, repeatability etc.

Also provided is full information on the control system and the computer interface.

Examples of computer code are also in the manual for assistance with student and research projects.



Mentor Simulator

The Mentor simulator is included.

It is a small scale model of the Mentor robot which is operated by hand.

Every movement is copied by the robot. The moves can then become part of the program for the robot.

Specification

Axis 0 (waist)
Angular movement 210º. Axle centre from top of base 185mm.

Axis 1 (shoulder)
Angular movement 180º. Arm length between axle centres 165mm.

Axis 2 (elbow)
Angular movement 230º. Arm length between axles 150mm.

Axis 3 (left wrist axle)
Angular movement 320º.

Axis 4 (right wrist axle)
Angular movement 320º.

Wrist Pitch
Angular movement 140º.

Wrist Roll
Angular movement 320º.

Gripper
Jaw opening 45mm. Jaw pressure10N.

Repeatability
2mm.

Lifting
1000gm at full reach.

Reach
428mm from axis 1 axle centre.

Base
320 x 270 x 189mm.

Control System
8 bit (0.4%).

Workcell
Digital outputs 8.

Interface
USB connector to host PC.
Digital inputs 8. Analogue inputs 4.

Ordering Information

Complete Mentor Package	35-001

Contact:

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