

MARCHANT DICE LTD.



CNC Machine Guide

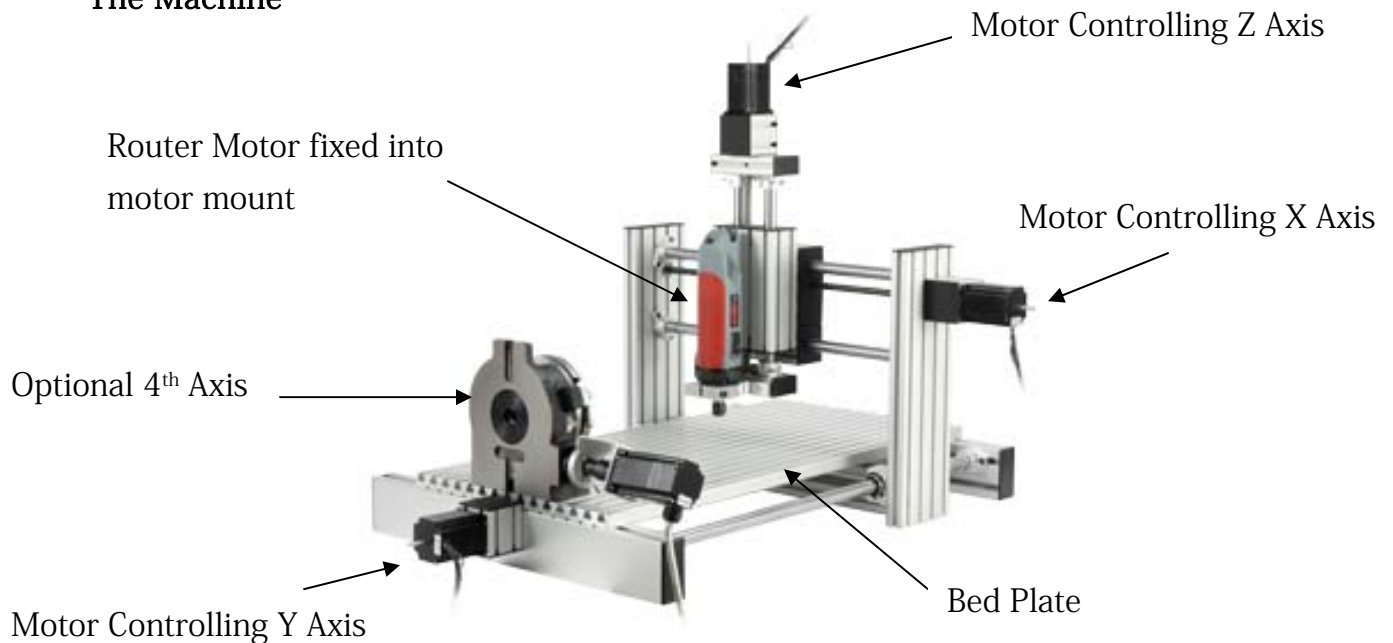
Marchant Dice Ltd offer standard size and bespoke CNC Machine solutions. We offer a complete consultation service and are able to advise the best solution for you based upon your specific requirements and specification.

Uses/Examples of Application

- PCB
- Plasma cutting
- Wood Carving / Drilling
- Sign Making
- Engraving of materials: glass, stone, marble, wood, metals

Components of a CNC Machine Solution

The Machine



We currently offer various standard size machines as well as offering bespoke machine sizes based upon customer requirements.

Standard size machine are named according to the machining area of the tool. See below for a breakdown of standard machine sizes.

Size	X Axis	Y Axis	Z Axis
Mini	mm	mm	mm
A4	mm	mm	mm
A3	mm	mm	mm

We currently offer machines using both ballscrew and trapezoidal spindle. We will advise the best solution based upon your requirements.

We currently offer both 3 axis machines as standard with an optional 4th axis to suit customer specification.

Motors controlling Axis' s

The motors control the movement of the X,Y and Z axis.

There are two types of motor we supply: servo and stepper motors. Linking in with the controller below, the selection between the two types is dependant on the intended use of the machine and the workload. Generally servo motors are used for heavy industrial use whereas stepper motors tend to be used with home/hobby and light industrial use. We can advise the best option for you based upon your intended use.

The Controller

The controller acts between the computer and the motors. It is made up of 3 boards namely the driver boards, interface board and power supply. The controller connects to the PC via a parallel port and currently can only be used with PC workstations and not laptops. The motors controlling the machine axis are plugged into the controller.

SBOX – Light Industrial / Home / Hobby

Used in conjunction with stepper motors the Marchant Dice SBOX controller and is supplied with settings for use with Mach3 software is recommended for use of around 40 hours per week.

Available in 3 and 4 axis as well as 240V and 110V.



Industrial Controller

Used in conjunction with servo motors the Marchant Dice industrial controller and is supplied with settings for use with Mach3 software and is recommended for heavy industrial use of more than 40 hours per week.

Available in 3 and 4 axis.



PC and Control Software

We recommend using Artsoft Mach3 software for use with our controllers. Our controllers are supplied with settings for use specifically with Mach3. Other controllers and software can be used and we will endeavour to support this.

The minimum PC specification for Mach3 software is outlined below:

- 32-bit version of Windows 2000, Windows XP, Windows Vista, or Windows 7 Operating System
- 1Ghz CPU
- 512MB RAM
- Non-integrated Video Card with 32MB RAM
- Parallel port interface.

The Code

Mach3 software runs lines of G-code in a variety of formats.

This code is produced from a range of programs including Vectric Aspire among many others. Mach3 also is supplied with LazyCam allowing easy generation of G-code from a variety of inputs e.g. JPG pictures.

We recommend using SheetCam for import of DXF, HPGL, SVG and Excellon file types. It is up to date software that is easy to use.

All software mentioned can be found in our online shop.

Router Motor

We supply four router motors.

Kress 530 No speed variation. Available in both 240V and 110V.

Kress 800 FME Speed variation.

Kress 1050FME Speed variation.

Dewalt 2.5hp. Speed control. Can fit up to ½inch collet.

Tooling

We can offer advice with regards to tooling depending on your intended use and requirements.

Pricing / Leasing

Quotations: to provide a quotation we require as much information as possible regarding your requirements. This includes the intended use of the machine, materials being machined, duration of use (hours per week).

Leasing Options – we do offer a leasing service, this allows you to pay an initial deposit and spread the remaining payments over a period of time, usually 12-24 months. Please contact us to discuss further.

Guarantee

One year guarantee is supplied with all Marchant Dice machines and products. Extended guarantees can be supplied by arrangement.

Servicing / Replacement Parts / Support

Our machines are manufactured by our own employees in our factory unit based in Devon. We offer a next day service for all machine parts. All machine parts are modular and interchangeable. We offer telephone support with all our products.