

Basic Electricity and Electronics

Locktronics



Simplifying electricity

Locktronics remains the system of choice for teaching the basics of electricity in over half of UK school science departments - but it has huge potential for Design and Technology too. Locktronics solutions now provide teaching applications for schools, universities and industry and the technology covers everything from simple circuits through analogue and digital electronics to microprocessor control. Customers include blue-chip names such as Rolls Royce, Porche and General Motors, to name just a few. Locktronics is based around a simple, robust base board with a grid of connecting pillars. Electronic components are mounted on a sturdy carrier with the appropriate circuit symbol bonded into the upper surface. These then snap into the grid to effectively reproduce the circuit diagram but with real components. As students build and test the circuit, they will be maintaining a strong, tangible link between theory and practice. If they turn the carrier over, the component itself is visible making it a short step to soldering their own project circuits. All Locktronics kits are supplied with comprehensive teaching materials in digital format. Worksheets can be freely copied or made available to students. Locktronics kits neatly pack away into robust cases which makes classroom management very easy. The system is proven to be mechanically and electronically robust so will cope with years of enthusiastic use by students of all ages.



Fundamentals of Electricity



Covers everything students need to know about conductors and insulators, simple switches and connecting output devices such as lamps and motors. Series and parallel circuits are explored and students learn how to read and draw conventional circuit diagrams. Although aimed at KS2 science requirements, the Fundamentals solution is perfect to help D&T students at KS3 understand, design, model and test the simple circuits that they need for projects including using E-Textiles elements.

Prices £* *See Pricing Information on page 2

EL-LK6444	Locktronics - Fundamentals of Electricity	
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PICmicro Systems



Programmable components are an essential for KS3 D&T and provide a rich resource for clever and relevant D&T project work at KS4. The PICmicro Solution uses a pre-programmed PIC controller that snaps into the Locktronics base board. Input and output devices from previous work are then snapped into place. The PIC controller is then switched to replicate the common logic gates that are fundamental to all digital devices. Using a variety of inputs, outputs and logic functions, students construct and test some fascinating solutions to familiar problems.

Prices £* *See Pricing Information on page 2

EL-LK8922-2	Locktronics - PICmicro Microcontroller Systems	
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Electricity Magnetism and Materials



An introduction to electronics that provides students at KS3 with the knowledge they need and a sound foundation for future work with digital and analogue systems. Practical exercises lead students through the concepts of voltage, current, resistance and electrical power and their relationship using Ohms Law is introduced. Further exploration of conductors and circuits leads to the idea of a semiconductor. LEDs, LDRs and Thermistors are explored as useful input devices for simple electronic control systems.

Prices £* *See Pricing Information on page 2

EL-LK9071-2	Locktronics - Electricity, Magnetism and Materials	
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Energy and Environment



Some lively and relevant exercises explore our need for energy and how we can measure energy use to make judgements. Green sources of energy are tested and measured but can these be relied on for a continuous supply? Practical ways of storing energy are investigated which develops into understanding the need for energy management. In conclusion, students will build and program input devices and energy sources through an on-board PICmicro-controller to provide energy that meets demand but is sustainable. There are no easy answers!

Prices £* *See Pricing Information on page 2

EL-LK7345-2	Locktronics - Energy and the Environment	
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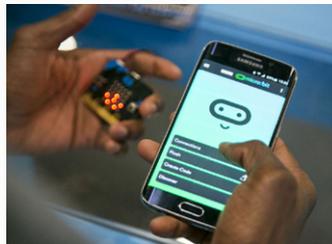


Teach coding with the BBC micro:bit

For some students (and teachers) coding can be daunting, but the BBC micro:bit is a powerful handheld, fully programmable computer designed to be classroom-friendly from day one. Spiritual successor to the BBC Micro of the 1980s (which itself introduced a generation of children to computing) the BBC micro:bit carries on this 30 year tradition doing it 18 times faster on a scale 70 times smaller than its predecessor.

How does it work?

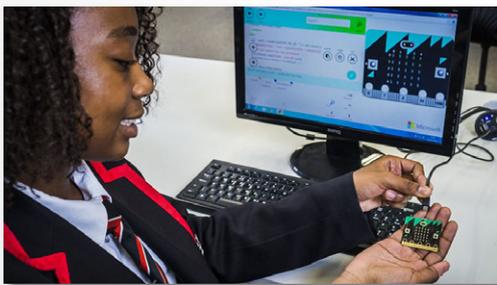
No software is required - code can be prepared using one of the simple block editors provided on the BBC micro:bit website, or using JavaScript, Python, Scratch or Microsoft's Touch Develop. There are also free apps for Apple and Android devices. The program is compiled using your preferred editor and then transferred wirelessly or via USB directly onto your BBC micro:bit. It couldn't be more simple.



What can it do?

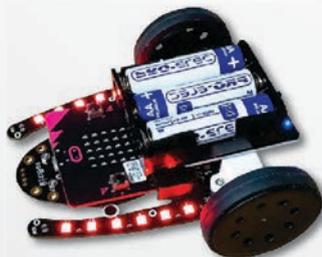
Featuring a matrix of 25 individually programmable LEDs, two integrated push buttons and a range of motion and environment sensors, the device makes a great introduction to the world of programmable components. The large main I/O rings are easy to connect to with crocodile clips or conductive thread. These can be used as outputs to control LEDs, motors and much more, as well as connections for external sensors and switches. More than 200 different activities and resources are available, from simple experiments to creative coding challenges.

The BBC micro:bit is the ideal way to get students engaged and actively involved in writing software and building new things that will be controlled by it. Wireless, Bluetooth Low Energy technology makes it simple to connect to mobile phones and tablets, take a selfie or drive the music playlists. All of this in a device only 5cm wide!

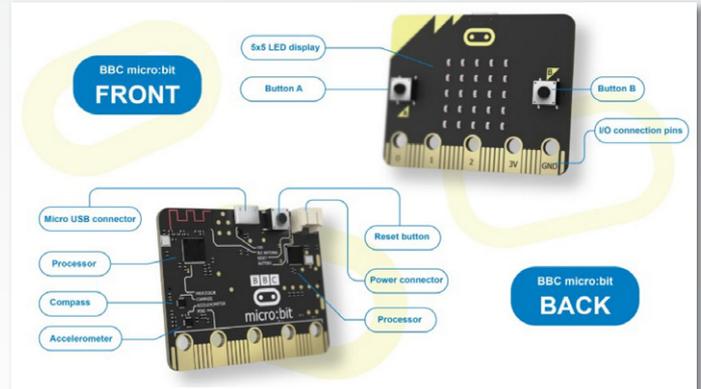


These skills will be vital for so many jobs in the future, and it's great to see that the BBC micro:bit has shown young people there's no need to be daunted. Sinead Rocks, BBC Director, Education

Students have enormous enthusiasm for the micro:bit. The BBC have released figures stating that 88% agree that the BBC micro:bit helped them to see that coding isn't as difficult as they thought it was, and that half of teachers who've used the micro:bit now feel more confident teaching coding.



Project Examples



Micro:bit Features:

- Micro-USB and wireless connectivity via Radio and Bluetooth Low Energy (BLE)
- 25 individually programmable LEDs (5 x 5 LED matrix)
- Motion Sensors: Digital Compass & Accelerometer
- Environment Sensors: Light & Temperature
- 2 x programmable buttons
- 23 x external connection pins with the option to use a 21 pin edge connector
- 5 x rings for 4mm banana plugs or crocodile clips (3 x general purpose I/O, 2 x power)

Micro:bit Specifications:

Dimensions: 42(W) x 52(D) x 11.7(H)mm

Weight: 8g

Power Requirements: 2x AAA batteries or external USB power source

Processor: 32-bit ARM Cortex M0 CPU (16K RAM 16MHz)

BBC micro:bit with Accessories



BBC micro:bit (Board Only)

A portable, low power, user programmable computer.

EL-BM10

12.95



BBC micro:bit (Board Only) Retail Pack

A portable, low power, user programmable computer. In retail packaging.

EL-BM11

13.95

Electronic Control & Coding

BBC micro:bit Accessories

BBC micro:bit with Accessories



BBC micro:bit Starter Kit. Contains BBC micro:bit, 1m anti-tangle USB cables, AAA battery cage and 2 AAA batteries.

EL-BM12



BBC micro:bit 10 Student Classroom Pack. Contains 10 BBC micro:bits, 10 1m anti-tangle USB cables, 10 AAA battery cage and 20 AAA batteries.

EL-BM13



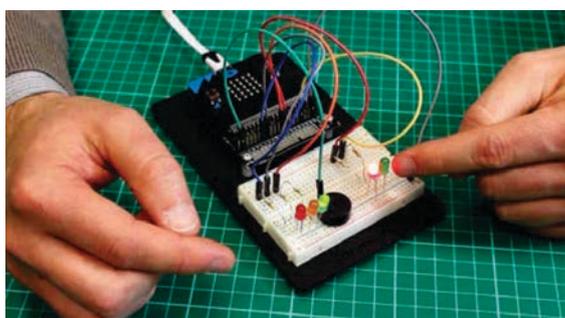
BBC micro:bit with MI:pro Case and Accessories. Contains a BBC micro:bit, MI:pro protector case, 1m anti tangle USB cable and a AAA battery pack.

EL-BM14



BBC micro:bit with MI:power Board and Cable. Contains a BBC micro:bit, MI: power board, 1m anti tangle USB cable.

EL-BM15



BBC micro:bit Add-Ons



Fizz bit Module - Create Your Own Vibrating Robot

EL-BM7 Single

EL-BM7-10 Pack of 10



E-Textiles Kit for the BBC micro:bit

EL-BM17



Edge Connector Break out Board (Unbuilt) for BBC micro:bit. Gives access to all the important pins on the bottom edge of the BBC micro:bit.

EL-BM1 Single

EL-BM1-10 Pack of 10



Edge Connector Break out Board (Built) for BBC micro:bit. Gives access to all the important pins on the bottom edge of the BBC micro:bit.

EL-BM1B



(micro:bit not included)

Mi:pro Mountable Case for BBC micro:bit. A 'mountable' case for the BBC micro:bit featuring two keyhold mounting slots.

EL-BM4



(micro:bit not included)

Mi:pro Protector Case for BBC micro bit. Keeps the BBC micro:bit in perfect condition and also allows access to the bottom edge pins. Available in clear, blue, green & orange. *Please state colour required.*

EL-BM5



(micro:bit not included)

Prototyping System for BBC micro:bit. Break out all 21 pins of the BBC micro:bit and easily connect additional components using this Prototyping System.

EL-BM6



Audio Cable for BBC micro:bit

EL-BM20 Single

EL-BM20-10 Pack of 10



ZIP Halo for the BBC micro:bit.

EL-BM23 Single

EL-BM23-10 Pack of 10



Inventors Kit

The Inventor's Kit is a great way to get started with programming and hardware interaction with the BBC micro:bit, and a fantastic way for students to learn about constructing and controlling electronic circuits. The kit contains everything you need to complete 10 experiments including using LEDs, motors, LDRs and capacitors.

The easy to follow tutorial book included provides all the information you will need to get the most out of the kit.



Contents include: Mounting Plate, Potentiometer & Finger Adjust Spindle, 2 x Plastic Spacer 10mm, Sticky Fixer for Battery Pack, Small Prototype Breadboard, Terminal Connector, 4 x Push Switch, Motor, Transistor, 2 x Red 5mm LED, 2 x Orange 5mm LED, 2 x Yellow 5mm LED, 2 x Green 5mm LED, RGB 5mm LED, Fan Blade, 5 x 2.2KΩ Resistor, 5 x 10KΩ Resistor, 5 x 47Ω Resistor, Edge Connector Breakout Board for BBC micro:bit, Miniature LDR, 10 x Male to Male Jumper Wires, 10 x Male to Female Jumper Wires, 470uF Electrolytic Capacitor, Piezo Element Buzzer, 4 x Pan Head M3 Machine Screw



Inventors Kit for BBC micro:bit

- EL-BM3 Single
- EL-BM3-20 Pack of 20

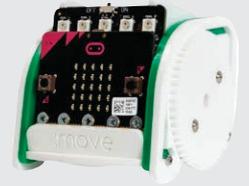


BBC micro:bit with Inventor's Kit & Accessories
Contains a BBC micro:bit, Inventor's Kit, 1m anti tangle USB cable and a AAA battery pack.

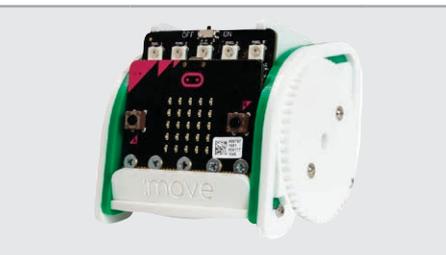
EL-BM16

:MOVE Mini Buggy

The :MOVE mini for the BBC micro:bit is a two wheeled robot that is suitable for autonomous operation or wireless remote control projects, which makes an exciting introduction to robotics. Adding a pen increases the possibilities, and various add-ons such as a line following board are also available. The buggy also has 5 x RGB individually programmable ZIP LEDs (NeoPixel compatible) – these can be used as indicators, reverse lights etc. To steer, the two continuous rotation servo motors can be controlled independently by altering the PWM (Pulse Width Modulation) signal to the servo – this is easy to do using the Servo blocks in the Microsoft MakeCode block editor. Custom blocks for the included Servo:Lite board, and a range of free and simple training resources are available to make the task of coding as quick and painless as possible.

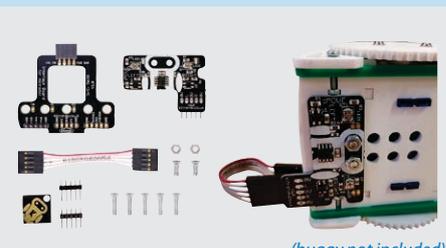


Contents include: Set of chassis parts, 2 x Micro 360 degree continuous rotation Servos with accessories, Servo:Lite board, 2 x Counter sunk M3 6mm screw, 5 x Counter sunk M3 8mm screw, 6 x M2 16mm Pan head steel screw, 6 x M2 Hex Full Width Nut, 3 x AAA Batteries



:MOVE Mini Buggy Kit (excluding Micro:bit)

- EL-BM30 Single
- EL-BM30-20 Pack of 20



(buggy not included)

Line Following Add-On for the :MOVE mini

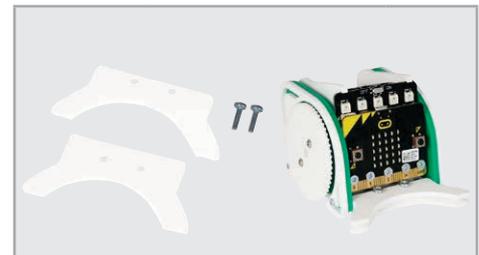
- EL-BM34 Single
- EL-BM34-10 Pack of 10



(micro:bit & buggy not included)

Tipper Trailer Add-On for the :MOVE mini

EL-BM31



(micro:bit & buggy not included)

Bumper Add-On for the :MOVE mini

EL-BM33



Servo:Lite Board for the :MOVE mini

EL-BM35



(micro:bit & buggy not included)

Bulldozer Add-On for the :MOVE mini

EL-BM32



Raspberry Pi

What is a Raspberry Pi?

The Raspberry Pi is a low cost, credit-card sized computer that can plug into a standard computer monitor/touchscreen or TV. It can be used with a standard keyboard and mouse and/or a touchscreen. It is a capable little device that enables people of all ages to explore computing, and to learn how to program in languages such as Scratch.

The latest model is the Raspberry Pi 3 Model B+ which includes a 64-bit 1.4Ghz quad core processor, 1GB of RAM together with 4 USB ports and 300Mbit/s ethernet. A micro SD slot supports the addition of an SD card where the operating system is stored along with any files.

Which Operation System Will I Need?

Beginners should start with 'NOOBS' – New Out Of the Box Software. This is an easy operating system installer which contains Raspbian, the official supported operating system. It also provides a selection of alternative operating systems which are then downloaded from the internet and installed.

Raspbian comes pre-installed with plenty of software for education, programming and general use. Software includes Python, Scratch, Sonic Pi, Java, Mathematica and more.

We supply a 16GB Micro SD Card with NOOBS pre-installed on it.

What Else Will I Need?

You will definitely need a Raspberry Pi power supply before you can do anything. You will also need either a Raspberry Pi Touchscreen or a standard mouse, keyboard and monitor. If you want to keep things safe, you will need protective cases for the Raspberry Pi itself and the touchscreen.

We sell a complete pack including all these parts – see EL-RP2PK2 opposite.



PC in your hand

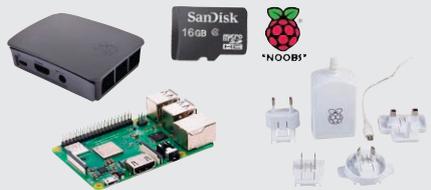


Raspberry Pi and Accessories



Raspberry Pi 3 Model B+. Raspberry Pi computer with 64-bit 1.4Ghz quad core processor, 1GB of RAM, 4 USB ports, 300Mbit/s ethernet, Wi-Fi and Bluetooth.

EL-RP2



Raspberry Pi 3 Model B+ c/w SD Card, Power Supply and Case. Includes Raspberry Pi 3 Model B+, 16GB SD Card pre-installed with NOOBS, Power Supply, Case.

EL-RP2PK1



Raspberry Pi 3 Model B+ Touchscreen Pack.

Includes Raspberry Pi 3 Model B+, 16GB SD Card pre-installed with NOOBS, Power Supply, Case, 7" Touchscreen, Touchscreen Case.

EL-RP2PK2



16Gb Micro SD Card - SanDisk Class 10 Pre-Loaded with NOOBS. NOOBS stands for New Out of Box Software. On first boot, you are given the choice of six recommended OS including Raspian (the recommended OS), OSMC, LibreELEC and Windows 10 IoT Core

EL-RPSD1



Official Black Raspberry Pi 3 Case.

EL-RPCS1



Official Black Raspberry Pi 5.1V 2.5A International Power Supply. (for UK, EU, USA & AUS)

EL-RPPS1



LCD (Official Raspberry Pi 7" Touchscreen Display).

EL-RPLCD1



Official Raspberry Pi 7" Touchscreen Display Case.

EL-RPDCS1



Display Case for Raspberry Pi 7" Touchscreen. Available in black, green, blue, purple, red and orange.

EL-RPDCS2

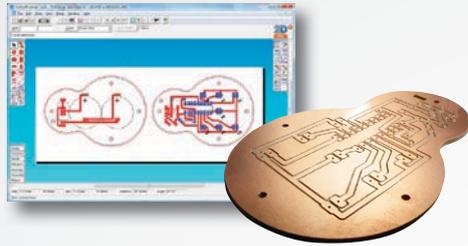


Raspberry Pi Camera Module V2 (Official Camera Board).

EL-RPWC1

Guillotines, Lightboxes & Drill

CAD/CAM PCB Manufacture



PCB Design and Manufacture

TechSoft PCB software (see pages 14-15) provides a student-friendly means to design circuit boards of almost any complexity. The output side of the package is (in effect) a fully-featured application in its own right and offers three PCB production options.

Printing Artwork

Output to a printer will provide the necessary 1:1 scale artwork needed for UV exposure and photo-etching. Tracks and pads will automatically be solid-filled in black and inverted for the solder layer.

Self-Adhesive PCBs

Stika and CAMM 1 knife-cutting machines (see pages 33-35) will happily cut self-adhesive 'Cutronics' copper foil. Output from TechSoft PCB will produce an accurate knife-cut track layout that can be peeled and stuck to a suitable substrate.

Engraving PCBs

Isolation engraving is well-proven for commercial PCB prototyping and has many benefits in education. Output from TechSoft PCB automatically inverts the design and creates a tool path around and between each pad and track. Any of TechSoft's CNC milling machines (see pages 64-71) will quickly engrave copper-clad board to isolate each track, cut the board to profile and drill precisely at pad centres.

UV Exposure Units



These cost-effective units enable controlled UV exposure of PCB artwork onto pre-sensitised copper-clad board. Both feature a pressure pad in the lid which, when clipped shut keeps the artwork in close contact with the board for faithful reproduction of intricate designs. Operation could not be simpler. Once the laminate and artwork are in place, exposure time is set on the electronic timer.

Specifications	EL-UVBOX1	EL-UVBOX2
Maximum Board Size:	250 x 160mm	365 x 240mm
UV Source:	4 x 8W	4 x 15W
Timer:	0-600 secs, 0-100 mins	0-600 secs, 0-100 mins
Weight:	10kg	14kg
Dimensions:	317(W) x 225(D) x 90(H)mm	473(W) x 310(D) x 93(H)mm
Power Requirements:	240V, 13A Socket	
Warranty:	UK Mainland: 1 Year Return to Base Elsewhere: 1 Year Return and Collect	

Prices £*		*See Pricing Information on page 2
EL-UVBOX1	UV Exposure Unit Single Sided (250 x 160mm)	
EL-UVBOX2	UV Exposure Unit Single Sided (365 x 240mm)	

Guillotines



MM-GUILLOTINE5

MM-GUILLOTINE6

MM-GUILLOTINE10

These powerful guillotines provide the safest and most accurate means of trimming PCB laminate to size. Cutting with a guillotine avoids harmful dust, rough edges and blunted blades that result from sawing – especially when working with modern epoxy-glass boards. Safety is ensured by heavy Perspex blade shields and a safety latch to prevent inadvertent operation. Both feature a recessed rule on the bed which aids dimensional accuracy and helps secure the workpiece.

Specifications	DM9000	DM9001	18" Precision
Cutting Capacity:	203mm	305mm	457mm
Thickness Capacity:	Plastics 2mm, PCB Laminate 3.175mm, Aluminium 1.5mm		
Weight:	6kg	8kg	14kg
Dimensions:	140(W) x 335(D) x 514(H)mm	245(W) x 440(D) x 670(H)mm	360(W) x 570(D) x 700(H)mm
Warranty:	UK Mainland: 1 Year Return to Base Elsewhere: 1 Year Return and Collect		

Prices £*		*See Pricing Information on page 2
MM-GUILLOTINE5	8" 203mm PCB Guillotine (DM9000)	
MM-GUILLOTINE6	12" 305mm PCB Guillotine (DM9001)	
MM-GUILLOTINE10	18" 457mm Precision PCB Guillotine	

Low Cost PCB Drilling Station



A complete low cost high speed drilling station consisting of a FX1 variable speed drill and a PCB Drill Stands. The FX1 drilling machine assembly can be raised and lowered to set the desired drilling height and there is an adjustable depth stop to facilitate rapid repetitive drilling operations. The sturdy base plate is 120mm wide with a throat depth of 120mm and the drill lever gives a vertical travel of 21mm.

Specification	
Spindle Speed:	6000-30000rpm (variable, adjustable in 7 step increments)
Base Plate Width:	120mm
Throat Depth:	120mm
Vertical Travel:	21mm
Motor:	135W
Weight:	TBC
Dimensions:	120 x 120mm (stand baseplate)
Power Requirements:	240, 13A socket
Warranty:	UK Mainland: 1 Year Return to Base Elsewhere: 1 Year Return and Collect

Prices £*		*See Pricing Information on page 2
MM-DRILLPCB5	Low Cost High Speed PCB Drilling Machine (Includes a FX1 variable speed drill and a PCB Drill Stand)	

Production Quality PCB Drill



This high speed PCB drill machine is designed for continuous use in the accurate drilling of PCBs. The PCB drill press head is balanced on two internal springs so that very little force is needed to lower or raise the drill head. Two adjustable stops can be set to limit the drill movement. There is an integral lamp mounted under the throat casting to give good illumination. A drill guard is fitted to protect the operator from swarf and carbide drill bit breakages.

Specification	
Spindle Speed:	Two settings: 16000rpm and 22000rpm
Max. Circuit Board Width:	300mm
Throat Clearance:	150mm
Height under Chuck:	54mm
Chuck Capacity:	0-4mm
Motor:	100W
Weight:	12kg
Dimensions:	75(W) x 400(D) x 400(H)mm
Power Requirements:	240, 13A socket
Warranty:	UK Mainland: 1 Year Return to Base Elsewhere: 1 Year Return and Collect

Prices £*		*See Pricing Information on page 2
MM-DRILLPCB6	Production Quality High Speed PCB Drilling Machine (Includes a FX5 variable speed drill and a PCB Drill Stand)	

Production Quality PCB Routing/Drilling Machine



This high speed PCB router features a variable high speed spindle allowing complex rub-outs and contours to be mechanically etched to the surfaces of copper circuit board laminate PCB materials as well as conventional high speed PCB hole drilling. The unit includes a work illuminating lamp, a large base plate, key type chuck, fence and depth stop.

Specification	
Spindle Speed:	12000 - 22000rpm
Throat Clearance:	150mm
Height under Chuck:	54mm
Chuck Capacity:	0-4mm
Motor:	100W
Weight:	15kg
Dimensions:	200(W) x 420(D) x 400(H)mm
Power Requirements:	240V, 13A socket
Warranty:	UK Mainland: 1 Year Return to Base Elsewhere: 1 Year Return and Collect

Prices £*		*See Pricing Information on page 2
MM-DRILLPCB7	Production Quality Two Speed Routing/Drilling Machine (Includes a FX5R variable speed drill and a PCB Drill Stand)	

Tri-Etch Tank Unit



A self-contained triple process unit with built-in DEVELOP / SPRAY WASH / BUBBLE ETCH functions providing a convenient bench standing system. Connections are provided at the rear for drain and cold water requirements. Includes 2 heaters preset to 45°C approx. Ideal for the production of PCBs with a 310 x 240mm board capacity.

Specification	
Maximum Board Size:	310(W) x 210(D)mm
Weight:	6kg
Dimensions:	420(W) x 320(D) x 440(H)mm
Power Requirements:	240V, 13A Socket
Services:	Domestic-type cold water feed valve & drain
Warranty:	UK Mainland: 1 Year Return to Base Elsewhere: 1 Year Return and Collect

Prices £*		*See Pricing Information on page 2
MM-ETCHTANK8	PCB Etching, PA310 Tri-Tank Unit	

Rotary Vertical Spray Etchtank Machine

The Jet 34d is a rotary vertical etching machine ideally suited to the manufacture of prototype and small batch quantities of PCBs. As well as etching the unit can also be used for spray developing and spray resist stripping.

The Etching solution is contained in a tank at the base of the Etching machine. It is heated by a powerful quartz heater which assures a short warm up time and constant temperature which is controlled electronically. The Vertical Rotary Spray etches one side at a time and panels up to 400 x 300mm can be etched. In front of the etching chamber is a built-in overflow wash tank for the rinsing of the etched boards. The triangular form of the body of the machine makes it ideal to place in a corner of a room and the stand provides a convenient working height.



Specification	
Maximum Board Size:	400(W) x 300(D)mm
Weight:	6kg
Dimensions:	600(W) x 850(D) x 1100(H)mm
Power Requirements:	240V, 13A Socket
Services:	3 Cog Valves (etching tank, rinse overflow, rinse inlet)
Warranty:	UK Mainland: 1 Year Return to Base Elsewhere: 1 Year Return and Collect

Prices £*		*See Pricing Information on page 2
MM-ETCHTANK9	Jet 34D Rotary Vertical Spray Etchtank Machine	

Pneumatic, Electronic & Control Tech. Trunking

This trunking is modular and designed to mix and match types together into continuous runs, including corner sections using joining brackets. The rugged steel constructed body and fascia panel is assembled with tamper proof screws requiring a dedicated driver (supplied).



For workstations see page 214

Prices £*

*See Pricing Information on page 2



MP Trunking includes 2 x twin 13A switched sockets internally wired.

SF-TRUNKMP12	MP Trunking 1200mm	
SF-TRUNKMP15	MP Trunking 1500mm	
SF-TRUNKMP18	MP Trunking 1800mm	



MPLV Trunking 1200mm includes 2 x twin 13A switched sockets internally wired; key switched and short circuit protected low voltage facilities being a fixed 5 volt dc supply and dual rail +/- 2-15V variable supply set by reading the accurate analogue volt meter.

SF-TRUNKMPLV12	MPLV Trunking 1200mm	
SF-TRUNKMPLV15	MPLV Trunking 1500mm	
SF-TRUNKMPLV18	MPLV Trunking 1800mm	

Accessories

SF-TRUNKOCORN1	Corner Trunking Unit 800mm for SF-TRUNKMP/MPLV	
SF-TRUNKOCORN2	Corner Trunking Unit 1000mm for SF-TRUNKMP/MPLV	
SF-TRUNKOJB	Joining Bracket for SF-TRUNKMP/MPLV	
SF-TRUNKOENDC	Endcap for SF-TRUNKMP	
SF-TRUNKOFLYP	Flying Lead and Plug for SF-TRUNKMP/MPLV	

PECT Trunking Extras



SF-TRUNKOS11



SF-TRUNKOCA1



SF-TRUNKONS

Prices £*

*See Pricing Information on page 2

SF-TRUNKOS11	24V Soldering Iron Facility (provides 2 soldering iron sockets) for SF-TRUNKMP/MPLV*	
SF-TRUNKOCA1	Pneumatic Check Unit (provides 2 compressed air outlets) for SF-TRUNKMP/MPLV*	
SF-TRUNKONS	RJ45 Network Socket for SF-TRUNKMP/MPLV*	

* Must be ordered with trunking

Solder Fume Extraction Trunking



The fume extraction trunking fits under all of the P.E.C.T. trunking units including corner sections and attaches end to end. The system is designed to work with the 24V soldering iron facility where soldering irons are fitted with a tip extraction accessory which plugs into the face of the system.

Power Requirements: 240V 5A

Prices £*

*See Pricing Information on page 2

SF-SOLDER12	Nortek Solder FumeTrunking 1200mm	
SF-SOLDER15	Nortek Solder FumeTrunking 1500mm	
SF-SOLDER18	Nortek Solder FumeTrunking 1800mm	
SF-SOLDERCORN1	Nortek Solder FumeTrunking Corner 800mm for SF-SOLDER12/15/18	
SF-SOLDERCORN2	Nortek Solder FumeTrunking Corner 1000mm for SF-SOLDER12/15/18	
SFS-TRK-EC1	End Cap for SF-SOLDER Trunking with hole for pipe	
SFS-TRK-EC2	Plain End Cap for SF-SOLDER Trunking	
SFS-TRK-CAP1	Solder Fume Extraction Cap	
SFS-TRK-EXTJ2	Extraction Jointing Plates (one pair)	

For a Solder Fume Extraction Unit which connects directly to the Solder Fume Trunking, see page 191.

24V Soldering Irons with Tip Extraction Kit

These low-voltage soldering irons are every bit as effective as mains voltage versions, but provide the ultimate in security for the user. The 24V supply ensures electrical safety, and a steel extraction tube removes fumes from within a few millimetres of the work. Lightweight flexible tubing is used to carry fumes away to an extraction port. The power cable and extraction tube are clipped together for tidiness and prevent work being impeded. These soldering irons will be ideal for use with the Solder Fume Extraction Trunking and MPLV trunking fitted with SF-TRUNKOS11 24V outlets.



Prices £*

*See Pricing Information on page 2

MM-SOLDIRON1	24 volt Soldering Iron on Stand with Extraction Conversion Tubing	
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Pneumatic Air Compressor

A fully-regulated industrial compressor to deliver the required consistent air pressure to trunking fitted with SF-TRUNKOCA1 pneumatic check valves. The compressor is extremely quiet in operation and can be housed in either the mobile or fixed cupboards listed.



Prices £*

*See Pricing Information on page 2

MM-COMPRESSOR3A	Bambi BB24V Compressor (0.5hp, 50 litres/min, receiver 24 litres, oil lubricated)	
SF-CB18B	Workstation Compressor Cupboard	
SF-CB18	Mobile Compressor Cupboard	