

NEWSLETTER

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What's New?

The Computing Starter Pack (p/n 16553) and the Computing Starter Kit (p/n 18353) have been released by fischertechnik. Our own evaluation of this kit suggests that it is an excellent starting kit for those interested in computerized models and for schools interested in introducing their students to computer technology. Any of the eight models in this kit can be constructed in 15 to 20 minutes making it ideal for a 45 minute lab class.

Primary and secondary schools will find the LLWIN software - a flowchart style language - and 'activity booklet' great for instructing students on the fundamentals of control technology. Whereas TAFE colleges and Universities will find the VisualBASIC software and accompanying documentation of interest. Many other languages are also available - including LOGO - please see our website for the complete list!

The 16553 pack includes the 30402 'intelligent' serial-port interface and the LLWIN version 3 software. The eight models in the kit include; motor control, hand dryer, traffic light, sliding door, temperature controller, stamping press, carpark barrier and welding robot.

The kit contains; 1 motor, 4 lamps, 3 switches, a photo-transistor for building a light barrier, a temperature

sensor (NTC resistor) and more than 120 other parts.

On the Net

Don't forget to check our website for the latest information, free software and discount specials:
www.procontech.com.au

Training Models

A little while ago fischertechnik released the 3 axis robot or 3-D-Robot (p/n 16286). Two other ready-to-run models are now available. These models may be used in vocational training and development. For example, Siemens in Australia uses fischertechnik models in their PLC (Programmable Logic Control) courses which they run in-house. Other 'big name' companies, schools and universities around the world also use fischertechnik models.

The simplest model available is the 'Punching Machine with Conveyor' p/n 51663. This model consists of a conveyor that transports 'product' to a punching machine. It contains; 2 motors, 2 limit switches and 2 light-barriers. It is an ideal add-on to the 3-D-Robot.

The other new model is the 'Indexed Line with 2 Machining Stations' p/n 51664. This model consists of two machining stations, four conveyors (arranged in a U-shape) and two 'product' pushers. It contains; 8 motors, 4 limit switches and 5 light-barriers.

All models are available in 9V or 24V versions. The 9V version is available with or without the fischertechnik interface unit.

Feedback...

Paul Siedle, VIC: 'I am thrilled to have finally found somewhere in Australia where I can buy fischertechnik! It's got to be the best kept secret in kids toys ... I remember how much I enjoyed playing with the system when I was a child, I'm keen to introduce my 2-year-old to the fun and learning. Could you tell me if there is a retail outlet where we can view the selection?' Ed. Generally, we sell by mail-order only. That reduces the cost to the customer. In fact our pricing is so competitive that more than half our sales are to overseas customers!

Michael Chan, Phillippines: 'Sorry, I already got my order from another Web store but the price difference is really substantial. Next time I order, I will definitely get it from you...'

Iain Rankin, England: 'What do they feed those Qantas pilots on? The package arrived yesterday! That's as quick as if I ordered something from Maplin - and they're in Essex...'

T. Kerruish, NZ: 'I have a small collection of fischertechnik from the mid 70's which I think started out as 200 kit with a few additions. Do you have any old stock which would be compatible with this - used stuff would be fine. Also are they still mak-

ing the grey building blocks etc. and do they sell these in multiples? Ed. Procon Technology still has a large stock of the old fischertechnik parts with some used parts - such as the old M motor. Many of the old grey components are still manufactured, although some parts have been phased out. Only a few parts are sold in bags of multiples, however quantity pricing is available.

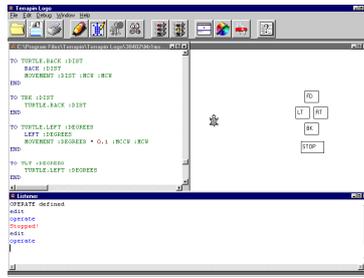
A. Wherrett, TAS: 'We purchased fischertechnik as a building/engineering kit for our children some 20 years ago and found them to be great. Will the purchase of kits like Mobile Robots or Industrial Robots be able to be used in conjunction with the old Mot 1 and Mot 2 Kits and the bricks/plates etc. We are coming into the grandchildren era now and would like to give them opportunities with today's technology of computer programming...'

Ed. You will find that the old parts are compatible with the new - colour is the only difference! Also, all of the old motors are compatible with the new computer and infra-red controllers. Only the old mini-motor has been discontinued. The new motors are black with more flexible mounting and accessories.

Software

Did you know that a substantial number of technical high schools and colleges in Japan now use our 32 bit software? This software has been recently updated and provides examples in Visual-BASIC, Delphi and VisualC++ for the fischertechnik 30402 interface under Windows 95, 98, 2000 & NT.

In addition to this, over 100 copies of our relay-ladder-logic programming software has been sold to Japan. This low-cost DOS software provides all the editing and debugging capabilities found in most PLCs (Programmable Logic Controllers). PLC example programs are available for all fischertechnik kits including the 16553 computing starter kit.



Finally, a new version of PC-LOGO for Windows has been released by Harvard Associates. The new 32 bit version, called 'Terrapin Logo' is now available from us for the Mac or PC. New features include; a Logo toolbox that allows colours, window controls, patterns and shapes to be dragged and dropped into an application. There is also a new help system and a new music system capable of producing multiple voices on multiple instruments. Two comprehensive manuals and two quick-reference manuals are also provided. These give a step-by-step approach for both kids and adults who wish to learn about the Logo language.

Children, in particular, quickly learn how to produce interesting and colourful graphics whilst being introduced to structured programming concepts. But adults should not be deceived into thinking that Logo is 'only for kids'. It's a powerful language that can be used to solve 'high-level' problems.

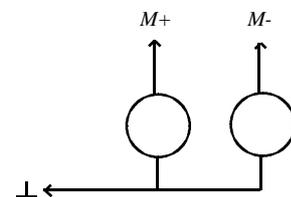
Ed. My 9-year-old daughter (after having had limited instruction from school) could work through the instruction booklet and start producing 'delightful' patterns on the screen after only 20-30 minutes. I have never seen her so captivated and excited about using the computer before!

Naturally, Procon can provide 'Terrapin Logo' example programs for all fischertechnik kits including the computing starter kit. Instructional documentation is also provided with software that runs the 30520 or 30402 interfaces. Extending the control of the turtle on the screen to actual robots enhances the Logo learning environment of problem solving, science,

math and logic. The construction and animation of robots provides concrete, hands-on, experience with goal-setting and achievement, cause and effect, estimation and measurement, and logical reasoning. It's ideal for home or school. Terrapin Logo has also been endorsed by the National Education Association and The National Parenting Center in America.

Hints & Tips

1. In previous newsletters we showed you how to control two lamps or solenoids from one M output using two diodes. Did you know that the latest version of the 30402 interface (FTI v2.14) allows you to do this without diodes? The circuit diagram below shows how to connect two devices to a single output. Unfortunately, only one output can be on at any time (unlike the 30520 interface) so activating clockwise operation turns one output on and activating counter-clockwise operation turns on the other.



2. Another interface problem that has been solved with the release of v2.14 is that open-circuit analogue inputs now return a value of 1024 rather than zero. This makes the 30402 interface more compatible with the 30520 and simplifies programming when devices such as the LDR (Light Dependent Resistor) are used.

3. Did you know that you can insert your own template file in LLWIN version 3? When a new program is started, LLWIN allows you to select a template file. You can insert your own file by modifying 'templates.ini' located in the 'template' sub-directory. Insert in this directory the .MDL program and icon (.ICO file) required.