

NEWSLETTER

1st issue 1997 edition

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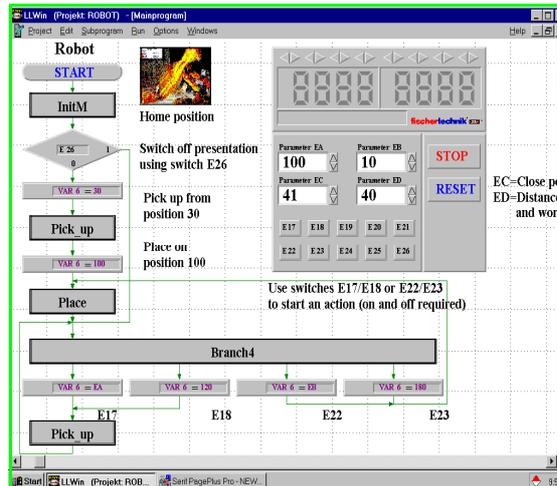
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Lower Cost!

Due to the improved exchange rate, lower duty and a bigger manufacturer's discount a number of high volume kits have been significantly reduced in price. reductions have occurred with the Profi Computing Kit (30330), the Experimental Special Kit (95381-1) and the Profi Sensoric Kit (30491). In addition to this Procon Technology now provides free Windows software with all computing kits sold and provides a 14 day return policy if not completely satisfied with your purchase (conditions apply).

Fan-Club News

The German fan-club magazine, which is now available in broad sheet format, describes how fischertechnik is used as an enclosure for a PC called the 'Alphaville 2001'. According to the German economics magazine DM; "experienced kids can build the computer in an hour - adults need a little longer". The case of the PC contains over 500 fischertechnik black, red and yellow building blocks - it's the ultimate in do-it-yourself construction!



Profi kit or send name, address and proof-of-purchase to:

FAN-CLUB
fischerwerke GmbH
Postfach 1152
72176 Waldachtal
Germany

If you would like to receive a sample copy of the newsletter, send 4 x 45c stamps to Procon Technology. Note, each issue includes a free club model construction leaflet.

Other articles include; an Eiffel Tower standing over 2 metres tall and consisting of more than 6,000 fischertechnik parts was built by four school children (from Overberg school in Oesede) to celebrate the 20th anniversary of the founding of fischertechnik AG. And a group of German school children entered an unusual walking robot in a regional competition entitled 'Youth researches' in Augsburg. Their aim was to design a robot that could go on voyages of discovery on the ocean floor or on uncharted planets. Their solution was a four legged robot called 'Alfons the first' with each leg driven by two motors using the same principle as muscular power in nature. The robot required two fischertechnik interface units controlled by a TurboPascal computer program. The young inventors qualified for the state competition.

Should you wish to become a fan-club member and receive the German newsletter (now with English translation) twice a year, simply complete the coupon found in any

New Software

The new Lucky Logic for Windows software (LLWIN) in English is now available (shown illustrated). The Lucky Logic software provides a flowchart style of programming language, which is ideal for machine control. The language provides a graphical depiction of the flowchart including; decision blocks for switch inputs, action blocks to control each motor and other blocks to increment and test up to 99 variables. New features include; a terminal block to aid testing and monitoring, time delay blocks, one-shot blocks, subprogram blocks and improved aids such as; automatic routing and the ability to add comments & graphics to the page.

The Windows software for the Training Robot (30572) now has a program that provides the ability to control the robots movements in a sequence of up to 999 steps! The sequence may be saved and then re-played at a later time. This software was recently demonstrated at an

exhibition in Melbourne using Voice Assist to command the robot to pick up a block and then on the command "execute" it would repeat the sequence automatically!

The same program has been adapted for use with the Profi robot contained in the 30330 kit. In fact all twelve Profi projects have now been converted to run under Windows; including those requiring sound. E.g. the tune memory game and the CD player.

All programs are provided in source code format for those wishing to modify them or write their own programs for Windows. VisualBASIC version 3 or above is required.

For a limited time only, the Profi kit will be supplied with PLC (Programmable Logic Control) software and voice recognition demo software FREE-OF-CHARGE!

New for '97

Currently under development is a new state-of-the-art active or intelligent interface unit. This unit, being battery powered with inbuilt control capability, should be of great interest to those wishing to construct fully mobile robots or other 'independent' machines. The interface unit will be programmed through the serial port of the PC using LLWIN (Lucky Logic for Windows) software. It is expected that the first kit with this interface and software will include two or three mobile robot projects.

At the low end of the fischertechnik range a new 'Starter Kit' will be available with 24 models teaching the basics of mechanisms like levers, friction, gearing, ratio and movement. This kit is expected to fully replace the MASTER kit within one year.

The Internet

You'll find us at:

www.procontechology.com.au

An incredible amount of information about robotics is available over the internet. The best place for hobbyists to start:

www.robotics.com/robomenu/

From these pages you'll see lots of links to other interesting sites. Of course more information can be reached by looking at any Internet directory under 'Robotics' or search the web using any of the popular search engines - check out the Australian/New Zealand search engine at:

www.webwombat.com.au

Another valuable source of information is the news groups under 'comp.robotics', here you can enter into discussion with other enthusiasts and read the FAQ (Frequently Asked Questions) page.

Hints & Tips

Those wishing to upgrade their Computing kit (30554) to the Experimental Kit (95381) may do so by purchasing part 95381-3. The price of \$120 ex-tax includes the 20 pin connector and 2m cable plus the software and manuals (the software alone is normally \$90) and all the additional items needed (temperature and light sensors for example). For those wishing to purchase the Computing Kit, the additional upgrade is available for less than \$100. Order 30554-2.

Hot Tip. In the last newsletter we showed you how to extend the two analogue inputs to four using a relay connected to M1. To read the four analogue inputs we needed a delay. The following procedure provides a general purpose delay in QBASIC or VB for Windows:

```
SUB Delay (max%)
FOR i%=1 TO max%
t!=TIMER
j%=InputWord
DO WHILE t!=TIMER
'DoEvents
LOOP
NEXT i%
END SUB
```

Max% is the number of timer ticks; where one tick is 0.055 seconds. 18 ticks provide a one second duration. The program line 'j%=InputWord' is used to ensure that the interface does not shut-down when duration's of 0.5 seconds (9 ticks) or more are executed. Note, the line 'DoEvents' is needed in VB for Windows. To read the four inputs into t1 to t4 use:

```
Motor M1, MOFF
Delay 2
t1%=AnalogIn(EX)
t2%=AnalogIn(EY)
Motor M1, MCW
Delay 2
t3%=AnalogIn(EX)
t4%=AnalogIn(EY)
```

More?

Why not write to me, Peter King, and tell me what you'd like to see in this newsletter. If you'd like a full color 96/97 catalogue please send 4x45c stamps to cover costs.

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