

fischertechnik FAN CLUB News 01/1997

[EDITORIAL]

Hello Fans,

A warm welcome to all of you who have joined our FAN CLUB in the past weeks and months. Our FAN CLUB News, which is free of charge, reports twice a year on everything that is new in and around fischertechnik. We offer a marketplace for exchanging, purchasing and selling, and we present the ideas of other club members. Do you have any suggestions or ideas? Then write to us and send us photos of your ideas.

We have now closed the questionnaire action in which we asked some of you for your co-operation. Many thanks to everyone who replied. Our new UNIVERSAL building kit, which is described in more detail in this issue, will show you how important your wishes are to us. If you build with fischertechnik, you will learn about and try out technical functions. And you will enjoy success the simple way with the new fischertechnik UNIVERSAL!

Have fun with the new
NEWS! Yours,
KAY

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Titel

In this year, too, fischertechnik was represented at the Nuremberg International Toy Fair with numerous up-to-date building kits. fischertechnik attracted a great deal of press and TV interest during the large innovation show on the first day. Look at our trade fair article to see what new building kits you can expect this year. But please remember that the new building kits will probably only be available in toy shops from September. Of course, we will automatically send you the new catalogue with detailed product descriptions together with the next edition of NEWS in autumn.

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Wir nehmen die Roboter von der Leine! (We let the robots off the leash!)

You could control self-made machines and robots by computer using fischertechnik 13 years ago. Up to now, models have been limited to an action radius of about 1.2 metres since they were linked to the interface (the link between the PC and the components) by a ribbon cable. Now we have taken the robots off the leash in the new MOBILE ROBOTS building kit.

The building kit offers an active interface with its own processor. In future, computer freaks will be able to write their own programs on the PC using a new version of our LL WIN control software. Then they can download it onto the interface, disconnect it and move the battery-operated models without the computer. For example: a mobile robot equipped with tactile sensors and a special control unit can be prevented from falling off the dining room table.

Facts:

New: Active interface

4 bi-directional motor outputs, 8 digital inputs, 2 analogue inputs, integrated microcontroller, power supply 9 V.

New: LL WIN software - Lucky Logic for Windows

Graphical programming system for Windows 3.xx and Windows 95, real-time processing, autorouting function, freely programmable. Further information in this copy of the News.

Positiv: (Positive): More high-tech need not cost more. If our PROFI COMPUTING COMBI building kit was too expensive for some, this building kit now has a genuine alternative since MOBILE ROBOTS will cost much less than its predecessor and will contain Windows software, a new active interface and a power block.

PROFI SENSORIC

Back again due to huge demand!

No sooner had we removed the PROFI SENSORIC from our product range in 1996 than a genuine storm was unleashed on this building kit. Contactless switching and automating using sensors - from a hand-dryer to cash dispensers, from safes to egg coolers: this building kit shows how it really works by means of realistic, detailed models.

fischertechnik UNIVERSAL

Our new fischertechnik UNIVERSAL basic building kit is totally new and is tailored to your wishes after analysing our FAN CLUB questionnaire. The technical function is the heart of this building kit. How does a gearbox function? How does a garage door drive function and how are the rotary movements transferred? The 24 proposed models give you enough scope to realise your own ideas. Suddenly, while building and testing out the models, you will understand how appliances which you have been using for many years work but have never "thought them through".

In the **ENERGY-SET**, fischertechnik is offering a new, powerful power adapter (9 V DC/1000 mA) and a POWER CONTROLLER in a single package at much lower cost than before.

The sun shines happily: The **new SOLAR-SET** - already available in the shops in spring!

Even solar energy enthusiasts have something to be happy about: the innovative solar components by fischertechnik in the new SOLAR-SET are now available separately in a drive and expansion set for all fischertechnik models. The set contains the crystalline solar module (3.0V/240mA), the gold capacitor (2.3V/10F) which stores energy, the solar switch which acts as the switching station, and the bell armature gear motor, which has a particularly soft start and sets even vehicles strongly in motion. The capacitor is charged by sunlight. In weak light, the motor receives its power directly from the energy store, not the solar cell.

We will now show you one possible application for the new SOLAR-SET: our RACING CAR (30333) can be turned into a solar racer (see photos).

Also in the shops in spring: the **ICARÉ** solar glider. The small solar building kit is a reproduction of the first airworthy solar glider in the world. It won the "Berbling Solarflug Wettbewerb" (Berbling solar flight competition) in 1996 and there was an article about it in the last News.

[Reportage]

fischer sponsert Tierheim (fischer sponsors animal home)

Just under 1000 spectators came to the sports hall in Landstuhl on 15 January: the handball players of TuS Landstuhl and the German Football Cup winners I. FC Kaiserslautern, with generous support by fischertechnik and fischerCBOX, played 30 minutes of football and handball. The final result was 21:21, DM 5000 for the Kaiserslautern animal home and many happy tombola winners. Uwe Wegmann from I. FC Kaiserslautern was specially lucky: on his 33rd birthday, the 1. FCK striker received a present of fischerCBOX.

Wolfgang Schneider

fischer zu Gast am Center Court (fischer - guests at the Centre Court)

fischer can also be found live on the major "playing fields" in the world. The fact that "the best tennis professionals in the world all came to a single tournament" even impressed the "Stuttgarter Zeitung". 36 of the top 38 players came to Swabian metropolis and, one week later, Boris Becker won in a superb final against Pete Sampras. fischer customers (and not only them) experienced a sensational sporting event last October. For the fourth time, fischer sponsored the ATP tournament which has been one of the Super-9 events since 1995 and therefore one of the world's leading competitions (single-week championship). "A super program!" enthused fischer guests who were invited to Tumlingen and Stuttgart. And when Pete Sampras, Michael Chang or Boris Becker served, fischer was in the (TV) picture all over the world.

fischertechnik in Fernost (fischertechnik in the Far East)

fischertechnik is gaining more and more enthusiastic fans in the Far East. With a selected product range, we have been represented in Taiwan, for example, since the beginning of last year. And in China we created a minor sensation when fischertechnik appeared for the first time at the last autumn trade fair in Chongqing - as the only foreign manufacturer among about 1000 domestic teaching aid producers and dealers. Our stand was literally under siege from the first trade fair day onwards.

5 Jahre fischertechnik FAN-CLUB Niederlande (Dutch fischertechnik FAN CLUB 5 years old) We have already reported many times in the past about the independent fischertechnik FAN CLUB in the Netherlands. Recently, this very active club celebrated its 5th anniversary. On this occasion, they organised themselves an exhibition with an area of 750 square metres. Just under 1000 visitors made use of this unique opportunity to see fischertechnik models in action. Many members of the fischertechnik club brought their own self-built models with them. In the Netherlands, people often build using original photos. This is how the impressive fair models and the typical Dutch windmills were created. And today we would like to present them to you.

Die Dresdener Frauenkirche aus fischertechnik (The Church of Our Lady in Dresden made with fischertechnik)

Heinz and Friedel Wollnitz, a married couple from Frankfurt, have managed to build a model of the Church of Our Lady in Dresden using fischertechnik. The miniature marvel is 70 centimetres high and it took the 75-year-old pensioner and his wife six months to build ("with lots of breaks - a hobby shouldn't turn out to be work"). The fascinating model was built using fischertechnik components spanning three decades and some "non-fischertechnik" accessories, in particular the interior design which is fitting for a place of worship. The builder has even equipped the work with interior lighting. The original, and 18th-century Baroque monument built by the Dresden architect George Bahr, was destroyed on 15 February 1945 after a British bombing raid under the weight of its 6,500 tonne heavy dome. The renovated nave was consecrated in August last year.

Programmieren wie die Profis: (programming like professionals)

Mit LLWIN im Trend (Up-to-date with LLWIN)

A new language for SPC (stored-program control) is currently being tested in the development laboratories of General Motors in the USA. The magic word here is Flow Chart and means programming with graphic symbols in the program flowchart. fischertechnik is fully up-to-date here since that it is exactly what our new software LLWIN (Lucky Logic for Windows) can do. Running under Windows 3 or Windows 95, the individual program blocks can be selected from a library. The processing order follows the links which can be made between the blocks on screen using the mouse.

New features make programming with LLWIN an exciting experience. Processing is performed in real time which is not interrupted when another program is started. Real time under Windows? If specialists are asked, they say this is actually not possible. This is not the case with fischertechnik:

LLWIN was developed on the basis of the programming system iCon-L which is already used in industrial automation and which permits real-time processing.

We have gathered together some of the highlights of LLWIN here for you. If you want to know more, you can order a demo version from us as fully functional freeware (please send DM 5 in cash or in stamps to cover postage and photocopying costs). However, the demo version does not support all the inputs and outputs of the fischertechnik interface.

Unterprogrammtechnik (Subroutines)

Several blocks can be linked to form subroutines. Up to 99 subroutine levels can be created, especially for extensive programs or with repetitive block sequences - a "powerful" programming tool.

Anzeige von Zuständen (Status displays)

The current variable values are displayed in the LL WIN blocks. In addition, the blocks you have just processed are highlighted in red. You can therefore observe how a block waits for an event on screen.

Bedienen und Beobachten mit dem Terminal-Baustein (Operating and observing using the terminal block)

This block can be used in LL WIN programs as the master control. The state and the direction of motor rotation are displayed in the top line. The current variable values are indicated in the large 7-segment display. A text window underneath can contain up to 16 characters for text messages. The 4 input fields for the terminal parameters can be evaluated as analogue values in the program. The 10 latching keys E17 to E26 are additional binary inputs which can be operated directly on screen.

Parallelverarbeitung (Parallel processing)

Using LLWIN, several processes can be processed in parallel and several motors can even be controlled at a single level.

(With the kind assistance of Prof. Dr.-Ing. Giinther)