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ATARI swept into the prestigious PCW Show with all the poise of royalty dropping in on Ascot. From its 1,000 square metres of stand space or the upper floor it gazed impecuniously – if not disdainfully – down on such lesser mortals as Amstrad.

Mind you that brain and vulgar rival had attempted to steal some of the thunder the day before with the launch of its IBM clone.

But if Atari was at all concerned, no one was showing it. Instead it turned the first day of the show into an unofficial first birthday party for the ST.

First came the news that 250,000 of the machines have now been sold worldwide – though no one was prepared to come up with an accurate figure for the UK.

But of more interest to current British ST users was the announcement that more than 850 software titles are available.

And that – as Rob Harding, Atari UK’s marketing manager gleefully pointed out – far exceeds that of the IBM PC in its first year. In fact there is a growing confidence in the Atari camp that the IBM PC will eventually be superseded by the ST as industry standard.

The thinking behind this is that it is becoming generally known that IBM itself is more than a little bashered off with being cloned all round the world.

So it is becoming increasingly likely that the giant of giants in the computer industry may well pull out of this market sector.

What would follow would be a bloody battle between the clones, with Amstrad’s almost certainly coming out on top. Now this is where the Atari thinking starts to make sense, for Amstrad is little more than a package of other people’s good ideas.

It could be argued that Alan Sugar’s organisation has never had an original thought in its corporate life.

In fact Amstrad readily admits that such words as research and development just aren’t on its payroll. They follow, buy cheap, sell cheap and make a killing.

But once they’ve become number one in PCs where do they go from there? Who else is there to follow?

“This will result in the IBM PC market grinding to a halt,” observed a most senior Atari man, “and that will leave the ST cut on its own...”

Not that Atari is prepared to write off IBM just yet. After all, it is still struggling to perfect its own IBM emulator for the ST.

It currently has a prototype which will run part of Lotus 123, the package that every clone must run if it wants to be accepted. But it won’t be released until it can run the entire program and conform to other points on what the company’s boffins describe as their “wish list”. And until that happens no one will even speculate on a price tag.

Meanwhile back at the PCW Show, Atari announced its own clone – but this turned out to be of the software variety. dBMAN is a £50 version of dBase III, which usually retails for, in excess of £500.

The package allows the user to create anything from simple mailing lists that use a single file to complex applications such as order entry systems using many files with multiple indexes. Features include 10 active databases, up to seven index files per database, unlimited memory variables, and the software supports dBase, DIF and DIF delimited file formats.

It comes with a 300 page manual which claims to be suitable for both the beginner and the advanced user which – if true – would in itself be some sort of breakthrough.

Back to the show once more, where Atari for its second trick on opening day produced Fastcom. This allows ST users – for a modest £49 – to embrace electronic mail and access bulletin boards and informational databases.

Naturally those people wishing to avail themselves of the delights of such organisations as MicroLink in the UK or The Source in the United States will also require a modem.

Atari insists the security of data transmission is assured through the utilisation of the X-Modem and binary protocols. For the uninstructed in comms, this does not mean it is safe from hackers, but rather that the data will not become merged on transmission.

Do you want to turn your ST into a versatile, intelligent terminal graphics workstation at a fraction of the normal cost? Atari offered the answer at the PCW Show. It takes the form of the Terminal/ST software package with a price tag of £69.95. This allows the machine to emulate DEC VT100 (character based) and Tektronix 4010 (graphics based) terminals connected to a mini or mainframe directly or via a network.

Mike Cowley reporting
I HOPE that those of you who visited the Atari Village at the PCW Show at the beginning of September enjoyed yourselves, saw all the new hardware and software, and managed to meet lots of new Atari friends. For those of you who didn’t go, Andre Willey takes a look at the new hardware in this month’s editorial and we will be presenting a full show report in next month’s issue. Don’t miss it!

Now to your problems. Mr. Van Tienen from Bury St. Edmunds asks whether ST disc drives from companies other than Atari are totally compatible with the Atari drives. A number of companies have recently started to produce 3.5in drives for the ST, most notably AST and Cumanate. These are usually 1mb drives and are as much as £90 cheaper than Atari’s SF314 drive. So where’s the catch? Well, eight bit owners will remember the same situation with the disc drives for their machines. About four years ago various companies in the States started to produce cheap disc drives for the Atari 800. Although they were said to be totally compatible, they were found not to like certain program protection schemes. The non-Atari drives worked perfectly except when trying to load some – and I stress only some – protected programs.

Now we have the same potential problem with non-Atari drives for the ST. Though the drives for the ST should be easy to make since the disc controller is housed inside the ST itself, there are two potential problems. The first is that small differences from the Atari drives that don’t show up now might start causing loading problems in two or three years’ time when the software companies are using more exotic methods of software protection.

The second problem stems from GEM, which allows you to open a directory window, change the disc in the drive and then press the Esc key to re-read the directory. The Atari drives have a special circuit which tells the ST whenever you change a disc. The AST and Cumanate drives both have this circuitry, but some others might not.

What you must consider is whether you want to save £90 now and have a possible problem later, or pay the full price and play safe. I’ll keep you posted if I hear of any drives that are causing problems, but so far the AST and Cumanate versions have a clean bill of health.

My thanks to Robert Young from Borehamwood who has written to tell me how you can insert printer codes in your 1st Word documents. If you look at the character chart which is displayed behind the document windows in 1st Word, you will see that it includes many characters that are unavailable when using most printers.

You can use these characters to trick 1st Word into sending special codes to the printer when your document is printed. For example you can now use superscript, subscript and even condensed modes in your documents. To do this, simply edit the printer installation file by changing the code for the letters into the codes for the special printing modes. To use that mode, you simply include the character at the place where you want the mode to start.

On the subject of 1st Word, Ian Carman has written to complain of the problems he’s having with version 1.00. It is unfortunate that some dealers are still supplying STs with old versions of 1st Word. The latest version, 1.06, solves all of these problems and has been available for some time. If you take a disc to your local dealer and ask him nicely, I’m sure that he’ll give you an updated copy.

Several of you have written in to ask for the fix to the Degas bug which Kev Bulmer mentioned in his graphics article in the May issue of Atari ST User. Sometimes when you load a black and white picture into Degas the picture is reversed. The only solution seems to be to start drawing the picture from scratch.

However, there is a simpler answer – one click on the Set Colors option and the picture will be restored to its normal colours. Hopefully we’ll see this bug permanently fixed in the next version of Degas.

That’s it for another month. Keep the questions rolling and I’ll do what I can to solve your problems. If you’d like to help your fellow ST users, why not send in your favourite hints and tips?

Hints

● How many times have you started a screen dump using the Alt+Help key combination only to find that there is no paper in the printer or you are printing the wrong screen display? Luckily the designers of the ST had you in mind when they included a command to stop the screen dump before it has finished. Do this simply by pressing Alt+Help again and the screen dump will stop as soon as the printer buffer is empty.

● Also, if you use the Show option to look at a document and you don’t wish to view the entire text, simply press Control+C keys at the More prompt and you will be returned to the desktop.

Send your Atari ST queries to:

ANDREW BENNETT,
Atari ST User,
Europa House,
68 Chester Road,
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Stockport
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MEGAMAX C: Best for the ATARI ST

Reviewed in ATARI User, September 1986 by Peter Knowles and Roger Wier.

“You get a complete development system — everything necessary to produce commercial quality software is provided ... Clearly, Megamax C compiles faster and produces much smaller files. These are great advantages, and may well prove to be the overriding consideration to many prospective buyers — together with its friendly front-end shell and complete manuals.”

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Program: Flash
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Supplier: Antic Software, imported by Software Express, 514-516 Alum Rock Road, Birmingham. Tel: 021-328 3566.

Last month we took a look at communications – using your computer to talk to another which could be almost anywhere in the world. To do this you need two things. The first is a modem, which allows you to connect your ST to the telephone and thus to any other computer with similar facilities; without it you are limited to direct connection with the other computer.

The second thing you need is software. To start with, you can try using the VT-52 Emulator accessory provided with your computer, which will allow you to send and receive text but nothing else. If you want to make the most of your new found link with the world, you need a sophisticated communications program.

There are a number of relatively simple public domain programs which can be used, but they all tend to be rather raw. One of the first of the more advanced packages to come from the States was PC Intercom, which offered a host of features, but at a rather advanced price.

However, now there is an alternative for less than £40. Flash, from Antic Software, does almost everything that PC Intercom could offer plus an awful lot more.

Perhaps I should say from the outset that this is a text-based package, and that it originates from the United States, which means there is no support for the split baud rates used by some British databases. Such rates as 1200/75 are simply not used in the States, where they prefer to use 300/300 or 1200/1200. The other omission which will be noticed over here is the lack of the Prestel standard, which again is not used in the States.

In fact it was Prestel that brought about the need for 1200/75, as it only required short single-key entries from the user – the long-winded menus being sent by the system. This meant that it was most convenient for Prestel to send its information quickly – hence 1200 baud but the user need only send at a fast typing pace – 75 baud. The split baud rate can be achieved quite easily by using a speed buffered modem such as the Miracle WS4000, but there is little you can do about the lack of a Prestel decoder.

That said, this package more than makes up in other ways. You are provided with three main modes – Ateri text mode, VT-100 and Vidtext. The first is a straightforward character-only mode. VT-100 also allows the host system to control the on-screen cursor and text and is quite impressive when used with systems that support the standard, such as MicroLink. Vidtext is the system used on CompuServe to provide graphics as well as text, and is of little use unless you plan to communicate with the States.

Flash can configure a wide range of parameters including full and half duplex, multiple baud rates, word size/stop bit settings, linefeeds On/Off, echoxep (echo text back to the host system in the same way as bulletin boards do to you), screen size, printer echo, Xmodem and many others. Any option can be called by pressing the Insert key and then entering your command.

These commands are two character significant, so BA 300 means the same as BAUDRATE 300. All operations have Insert key commands, but many also have quick access by using the Alternate key. For example, Alternate + H selects hardcopy and Alternate + U selects an Ascii file upload.

Clicking on the right mouse button takes you to the control panel and buffer screen. The normal menu bar is now visible, having been removed during comms to get the full 24 line display for VT-100, and features pull-down menus to cover every aspect of Flash.

Below this is the text buffer, which includes a very useful word processor. With a 520ST with TOS in ROM you have about 250k in the empty buffer – or about 60 A4 pages of text – and you can either capture text from an on-line session, load from disc or type in directly from the keyboard.

With text in the buffer, you have normal word processor cursor and cut/paste/delete functions. Once you have highlighted a block, you may deal with it separately from the rest of the buffer – either uploading it, or saving it back onto disc. Uploads and downloads may be achieved via plain text transfer or by Xmodem, and each has its own menu item to allow total flexibility. Pauses, metering and prompting on any character are available for text, and Xmodem features 128 or 1024 byte blocks and the option of blank fill or terminate block options for EOT (End Of Transmission). Any upload can operate from disc or straight from the buffer, or from the current marked block.

Flash also allows you to create as many macro functions as you like. These are similar to short...
programs which Flash will execute to do various
tasks. The 10 function keys can each have a text
string assigned to them, with the Shift key
doubling this up to 20 single-key commands.

Any feature of Flash can be accessed from
these keys via the same command protocol as
the Insert key commands mentioned earlier, and
text and carriage returns can be freely mixed with
internal commands. Any function key can call
another, or it can call a disc file where more
instructions or text are stored. These disc files
may be of any length and it is possible to write
very powerful operations and to call them with a
single key.

Pressing the left mouse button brings up the
dial window which allows you to select the name
of the system you want to call. All you need to do
is click on the relevant item and Flash will do the
rest. This operation can be customised to use any
automated modem, but is initially configured for
the popular Hayes standard. Even the number of
automatic re-tries can be set according to
preference.

The dialler can also be called by the command
or function key systems, and entering DIAL
ATARI will search the dial directory for the first
try beginning with ATARI, and then dial it. If the
directory entry is followed by an @ and a
filename, Flash will run that command file as
soon as it has logged on. This allows an entire
log-on sequence to be automated to a single key.

One very nice feature is the WT - Wait for
Time - option. This will pause a macro until the
system clock reaches a certain time, then
continue execution. Thus you can tell your
computer to phone the States at cheap rate
while you are asleep, download some informa-
tion, log-off again and sit and wait patiently until
7.30 when it will ring its bell to wake you up
before printing a hardcopy. Perhaps later
revisions might also interface with a teasmade...

I have been working with Flash for a couple of
months now, and have been trying desperately to
find something about it that I didn't like. One
minor problem I found was that when printing or
buffering a VT-100 session the horizontal tabs
were not accounted for apart from on-screen, so
some text on menus was crammed together on
the stored copy. Also, uploading from a disc file
rather than from the buffer could be a little
quirky, but with a 250K buffer, who will notice?

Presentation.......................... 9
Features................................ 10
Ease of use............................ 10
Value for money..................... 10

Quality Language Compiler for Atari ST Programmers

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It has the best "jump to compile error feature" yet seen by Bruce Webster of Byte Magazine. All
compilation errors are stored and displayed one after another on the screen for speedy correction.
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Modula2 is the logical development of the Pascal language (Pascal programmers will only take a
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standalone code.

"A fine example of what a good language should be" and "a good way to move away from DRI's C" is
the way Sol Guber describes Modula-2/ST in Atari User.

To fully exploit the potential of Modula-2/ST, we recommend a minimum configuration of 1MB disk
storage and the purchase of any of the recently published books on programming with GEM.

Modula-2/ST is available from the following distributors:

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User-friendly takes on a whole new meaning...

I've got a friend. His name is Fritz. He lives in a nice little house with his dog, Sheila, and I visit him as often as I can.

Come to that, most of the staff in the office drop in on him from time to time. In fact, visiting Fritz has often caused work here at Database to come to an abrupt standstill.

Fritz is my Little Computer Person, and he lives inside my 520ST. Most computers have Little Computer People (or LCPS) living inside them, but they are too shy to come out. You may have noticed them at work when a file suddenly vanishes, or a program simply won't run for no readily apparent reason. This may well be the work of your very own LCP.

In order to meet your own LCP, all you need to do is give him a pleasant house to live in. Those thoughtful people at Activision have done just that, with their new game, Little Computer People.

Upon booting up, your LCP friend will soon notice this nice new house, and after a little trepidation, he will move in. Each computer has a different LCP inside, and the program writes back to the disc periodically to record the current health and status of your own LCP.

If you forget to provide food and water he will get rather distressed and go very pale. I must admit to feeling rather guilty the last time that happened, and I had to feed the poor chap immediately.

Although he doesn't speak in English, Fritz is an active chap. He often writes me letters, and I regularly send them presents. He seems to like receiving records, because he usually goes straight upstairs to play them. He is quite keen on music, because he plays the organ too. If you have a synthesiser connected to your ST via the Midi port you can hear him play, too. Otherwise the sound comes from the monitor as usual.

You can ask an LCP to do all sorts of things, or to play games with you. Fritz quite often suggests a game himself, and he will often bring the subject up when nothing much else is happening. He seems keen on card and word games, which suits me fine.
Fritz at home: Doing exercises, playing the organ, typing a letter and relaxing in his armchair.
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The 1Mb 1040STF.
This is the state of the art 16/32 bit technology at an unbeatable price. The American magazine 'Byte' commented, "for some time to come the 1040STF will be the clear leader in price/performance."

As for software, the doubting Thomas should simply take a look at our latest software catalogue. And bear in mind too that the 1040STF will also run software written on several other operating systems, including CP/M.

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The 1040STR, with Gem, mouse-driven icon and window presentation, makes the software fast to use and easy to store. The titles are also economical to buy.
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Golf as it should be played

LET me see now. I’m in the rough, about 150 yards short of the green. The north easterly wind’s blowing pretty strongly and I’ve got to clear the lake about 90 yards ahead. Better watch out for that gaping bunker on the left, too—a hooked shot and I’d be up to my plus-fours in thick sand.

A full-blooded whack with a 5 iron should be just right to put the ball slap bang up against the flag. Start the backswing; get the shoulders right behind it; snap the wrists thus and—FORE! Oh, niblicks! I’ve sliced straight into the branches of those trees!

Well, whether you’re a duffer or a Sevvy or even if the nearest you’ve come to swinging a club is on a seaside crazy putting course, you’re going to love Leaderboard.

This is a superb golf simulation, offering a testing game across four different courses. You don’t play against the computer, rather you pit your skills against the course and, optionally, up to three other human players.

Each game can be an 18, 36, 54 or 72 hole match, using any combination of the courses available. There are three skill levels to pick from, ranging from novice which leaves your shots unaffected by slice, hook or wind, to pro, which leaves you susceptible to all.

Each hole is depicted in 3D perspective against a varying horizon and is played up the screen. At the bottom of the picture, and so facing towards the hole, is a smoothly animated golfer (the current player) who realistically swings and smacks the ball at your command.

Control of the golfer during play is by mouse only and is perfectly satisfactory. You select appropriate clubs from the three woods, iron and pitching wedge (but not putter— you are given that automatically and only when on the green). A small cross hair can be moved to determine your line of aim.

Pressing the right mouse button starts the swing, while the length of time it is held down determines the power of the shot. A further press at the moment the club connects with the ball effectively “snaps” the golfer’s wrists. The more premature the snap, the more vicious the hook, the later the release, the wider the slice.

To help gauge power and the right time to snap, two indicators are shown at the right of the screen. These graphically depict the build up of power and the approach to optimum snap time.

When struck, the ball sails convincingly away to land in the distance, after which the picture is swiftly updated to show the new view to the green. Once on the green, the two indicators are replaced by a single power indicator. While putting, the wind has no effect and slicing or hooking is impossible—thank goodness—but you must take account of the green’s incline,

shown by the slope indicator.

Other information on show is a score indicator (score on this hole for each player and how many each is under or over par for the round so far), a wind strength and direction indicator, current club selected and remaining distance to the green, or hole if already on the green. Between holes, a fully detailed leaderboard is displayed.

On the top-selling version of Leaderboard for the Commodore 64 every hole was made up of water-separated fairway islands—attractive but totally unrealistic—and a green, while the mountainous horizon was always the same, no matter where you were.

A great game has been much improved for the Atari ST. There is still plenty of water but thankfully far less of those daft islands. Bunkers, trees and rough have now been incorporated, making the courses very realistic.

When your ball curled off to the left or right of the picture on the 84, it was deemed out of bounds and you had to retake the shot. On the ST, even if your ball does go out of the picture you get to play it from where it lands.

The horizon now varies—mountains (red and sometimes snow-capped), skyscrapers, clouds and boulder formations—and the vista is adjusted according to where you stand.

But it’s not all unmitigated praise. The few sound effects could have been a lot better given the ST’s capability. The whooshes of club swing and the crash when ball hits tree are OK but the rest—splash of water, clack of putting stroke and
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Atari ST User  October 1986
rattle of ball into cup - are pretty dire.

The game is not entirely bug-free. Despite the instructions stating that you could abandon a hole and go on to the next by pressing H, the program refused to respond to this command. Once or twice I also managed to play my ball from the middle of a lake.

It seemed easier to hit straight shots on the ST version than the 64, probably because the authors have slightly slowed down the speed of the snap run-up. I would have preferred a slow or fast option.

But those are small niggles. Leaderboard is first rate and hugely entertaining, whether you're into golf or not. The variety of levels, player participation and courses give it depth enough to keep you coming back time and again.

Pass me my mouse, caddie, let's see if I can break 190.

Bob Chappell

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Accounts time-saver

OF all the various tasks that the new businessman must face, keeping the books up to date must surely be one of the most difficult.

When his accountant first shows him the large amount of work that must be done in order to keep the accounting of the business running smoothly, the ordinary businessman starts thinking in terms of early retirement or a live-in bookkeeper.

Owners of small businesses are constantly having to spend their non-working days slaving to get the various ledgers ready for the coming week. Falling behind one week causes a ripple that can be felt as little as three months later when the VAT man arrives with their adding machines.

STAccounts sets out to solve these problems for the small to medium sized business. Written in C with some routines in fast machine code it is integrated with Gem, so all selections are made with the mouse from the usual drop-down menus. The package is split into four separate parts: Sales Ledger, Purchase Ledger, Stock Control and Nominal Ledger. Each part of the program can communicate with and use data from the others.

It can support up to 300 sales, 300 purchase accounts, 10 VAT rates and 10 discount rates. Every time a rate is used in the ledgers it is referred to by its number. If the VAT or discount rates should change, the only alteration that needs to be made is to these 10 settings.

A separate data disc is specially set up from the program. The different parts of the program can generate reports ranging from VAT sales and turnover to aged creditors and from total turnover to statements of accounts.

The 44 page manual supplies all the information that someone who is setting up a business or computerising his accounts will need, and is presented in a simple and helpful way.

Most ST programmers assume that since the mouse is so easy to use they don't have to provide any Help screens inside the program itself. Silicon Chip has taken the unusual step of providing in-program help via a small icon of a teddy bear located in the bottom left hand corner of the screen. You simply click on this and a full screen explanation is given about the part of the program you are currently trying to use.

Although STAccounts doesn't have the extra facilities, such as a build-in word processor, that Cashlink Accounts has (see the review in the August issue of Atari ST User), it is less than half the price. In addition it can be used with one or two 500k drives whereas Cashlink requires at least one 1mb drive.

Is it worth having an accounts program at all? To answer this question you must weigh up the cost of your time saved and the saving in accountant's fees. But do make sure you see the software demonstrated before you commit yourself.

Andrew Bennett
SOFTWARE FOR THE ATARI ST

NEW CAMBRIDGE LISP
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Metaacomco is pleased to open up the world of Artificial Intelligence to ST owners. Until now only available on mainframe computers, Cambridge LISP is particularly appropriate for work in robotics, symbolic algebra, natural language interfaces and for expert systems. Cambridge LISP is a fully integrated development environment featuring interpreter and compiler which includes full interface to GEM functions and comes complete with Menu+, screen editor, and a free example export system.

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MENU+
£19.95
MENU+ provides ST users with a friendly command shell to control their programs, using pull-down menus and the mouse. Easy-to-use. Runs single programs or batch programs, avoids repetitive command line entry. The user can add his own tools, arguments and options. Runs any program - not just Metaacomco products.

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Bar graphs? Easy as pie charts

Program: K-Graph
Price: £39.95
Supplier: Kuma, 12 Horseshoe Park, Pangbourne, Berks. Tel: 07345 4335

As its name suggests, this program produces graphs either from data typed directly into the program or loaded in from another program such as K-Spread. K-Spread is Kuma’s spreadsheet program, reviewed by Andre Willey in the March issue of Atari ST User.

K-Graph can produce everything from ordinary line graphs through 3D bar graphs to pie charts. Up to four different graphs can be displayed simultaneously on screen. The various values and the axes can be labelled and a number of patterns are available to fill in the graphs.

Graphs can either be printed out or saved to disc in a format that can be read into Degas for further editing. K-Graph is supplied with a 56 page manual which deals with each of the many aspects of the program and includes many examples.

This is an excellent program for anyone wishing to produce graphs from data produced by K-Spread or typed in by hand. Owners of K-Spread should note that K-Graph will only accept data produced by version 1.25 or greater. If you have an older version, Kuma will be happy to replace it if you return the disc to them.

Andrew Ralston

Lost for a word?

Program: Thunder
Price: £37.95
Supplier: Arilasoft, 66 Long Acre, Covent Garden, London WC2E 9JJ. Tel: 01-936 3411

How many times have you spent hours looking through your dictionary for the correct spelling of some obscure word? And how often have you spelled checked documents that you assumed were finished, only to have the spell checker tell you that every second word is completely misspelled?

Thunder, from Arilasoft, is the answer to both of these problems. It works in one of two ways, either as a stand alone spell checker or as a desk accessory which checks your spelling as you type.

As an ordinary spell checking program Thunder performs well, checking at a rate of over 2,000 words per minute against its 60,000 word dictionary. When Thunder meets a word it doesn’t know it shows the word in context and asks you whether it is spelt correctly.

You are given the usual options of adding the word to the user dictionary, correcting the word, or leaving it alone. The program also suggests up to seven possible alternatives for the word’s correct spelling. You simply click on one of these or type the correct word and Thunder inserts it into the text at the correct position.

As a desk accessory, it checks the words as you type and sounds a bell if you type a word that it doesn’t know. When you select the Thunder option from the Desk menu you are given the same choice of up to seven words to select from, or you can type the correction and Thunder will replace the misspelt word with the correct version.

Although not exactly cheap, Thunder is probably the best spelling checker on the market for the ST and compares well with Turbo Lightning, which has caused a storm of interest on the IBM PC.

Andrew Ralston
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In the Atari tradition of 'Power without the Price' the total cost of the complete system, with professional GEN software and user guide is only £175.00.

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38 Mistle Grove, Reading RG6 2BN
Tel: (0734) 664595

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enthusiasm to master new machines as they
appear on the market. Flair and initiative are
qualities which we expect in all our programmers.
You must have a proven programming ability and
a determination to complete your work to the
highest standards.

QUALITY CONTROLLERS
You will work as a member of a team
and be expected to interact closely with
the programmers during all stages of
software development. This will involve
aiding program design, testing and bug
tracing, constructive program appraisal
and assistance in the production of
documentation.
Ideally you should be reasonably
conversant with several different
business packages.

For an application form please apply in writing to:
The Personnel Manager, Database Software, Europa House,
68 Chester Road, Hazel Grove, Stockport SK7 5NY