

THE NEWSLETTER OF THE NATIONAL DRAGON USERS GROUP.



# DRAGON UPDATE



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## The Gaffer's Bit . . . . .

Well, it's 1986, and the future for the Dragon looks just as gloomy now as it did in 1985. It's not the fault of the machine....it's still one of the best, but it IS the fault of those who produce and market it so disastrously. Let's get things straight. I don't blame anyone for wanting to make a reasonable profit, but NOT at the cost of killing off a good machine and ripping off the owners. Compusense have a monopoly on Dragon sales, so if their claims are to be believed and they ARE only adding a reasonable mark-up to the price, why don't they USE that monopoly to FORCE Eurohard to reduce the UK price?....All they need to say is "We don't consider the machine commercially viable at that price, and we won't accept it unless you give us a more realistic one". Well, Ted and Stan....why haven't you?....give me your reasons and I'll print 'em.

The other major foul-up is very similar.....Just who...told Eurohard that FLEX was the popular OS?...less than 10% of our DOS using members use FLEX, and even some of those are changing to OS9, but the big majority don't WANT either, they much prefer to use standard Microsoft plus DragonDOS, so how about someone providing a BOOTable version of Microsoft BASIC that will allow a D64 to run in 64k mode and still retain all its Dragon features?. Likewise with the Dragon+ board, sure, it has its uses, but all most people want is a straight replacement for the 6847 chip and a modified ROM, to provide an 80 column display with true lower case. Not difficult, surely?. Who NEEDS 128k anyway?...you have to be an exceptionally bad programmer to use THAT much memory!.

OK, so I'm wasting my time, I know, but SOMEONE has to say it. Anyway, I hope 1986 will be a better year for all of you, and that you won't have TOO many complaints about the Group!. Many thanks to all of you who sent cards etc, they were a nice surprise!

## THE EDITORIAL BIT

My new years resolution is to be nice to the computer firms. If that lasts more than one issue, I for one will be amazed. Now for a small request. All of you software companies, please can we have good software at reasonable prices. No, really, I mean it. Look, I'll explain it to you: if you overprice your products (or produce duff ones) then by the time you sell half a dozen tapes (actually, lots of us have discs you know) then the word will get round and you'll find that they stop, selling and you lose money. If you produce a good product at a sensible price then people like us hear about it and print nice things, then you end up selling lots and making lots of money. There, isn't it easy?. (Sorry, I told you that resolution wouldn't last long). T.C.

*Paul G.*

BOARD WALK . . . . . GARY COXHEAD

Following the fantastic success of my recent articles on communicating with your Dragon (okay, 3 phone calls). Your dear editor has asked me, (well, ordered me, and he seemed such a nice boy !) to write a regular monthly column on communications, which I agreed to do (well to be honest, I only agreed to stop him crying and I am a sucker for a sob story - but that's another tale). Anyway, I have decided to call it BOARD WALK. (I hope you like the name, Tim). In the coming months (if I last that long) I will be going into greater detail than my original articles and follow a similar format. I will also cover such things as protocols, PSS, Word formats, cellular radio, Modem reviews, software reviews, teleshopping, telebanking, security, MUD and anything else I can think of to do with communications. However, this time, I hope the information will be 2 way in that I want you to tell me what you want to know about. I also want to know if you have had any experience of the subjects I've just mentioned and any problems or comments you may have, plus the type of system you use, software etc.. I can't promise to answer all your questions as I am no expert, but by airing your troubles in the column, I am sure we can find someone somewhere who has already solved it. Personally, I am interested in anyone having registered and used the 300 baud access to Prestel. Please, please phone or write to me and let me have some feedback and comments on what you want, and correct me when I am wrong (which I'm bound to be at some time). If I don't know much about a particular subject, I will make an effort and find out, but I need your support. Jeremy Hoyland wrote a review in issue 5 (yes Ed., I do read them again) about Cotswold computers Modem package for the 32 and 64, with various favourable and unfavourable comments. He also said that some software to drive the 64's RS232 port and give a text buffer would be nice. Anyone out there got any news on that front? Alan Butler did a nice article on building a fairly comprehensive RS232 interface for 32's and modified 32's to work with DragonDOS, and followed it with a modem program. Anyone had any experience of building the kit and using it? Many of you may be aware that communications is probably the fastest growing aspect of computing at the moment, and it will probably affect all of us in one way or the other. There is even a bi-monthly magazine called Telelink totally devoted to communications, so it is as well that we keep ourselves abreast of everything. In recent years we have seen many new products appearing on the scene where before there was very little. Take the QL for instance (spit, spit). One of the first add ons to be produced was a communications package, which just goes to prove something (I'm not sure what) and there is a communications package for just about every computer you care to mention. A friend of mine recently bought a twin PCB kit which enables him to decode weather satellite signals and produce a display on his monitor just like the one you see on the telly. I am just wondering where it is all going to end. As those of you who have read my articles will know, I gave some hints on what to do and not to do when accessing bulletin boards. For those of you who haven't bought anything yet, here are some more dos and donts.

1. DONT buy a simple Modem if you think that your interest will outgrow it, that is false economy. Most Modems are NOT upgradable. Buy the best that you can afford.
2. DO make sure that there is a good software package to go with your Modem, or that you know one is available which makes the most of it's facilities.
3. DO shop around !! Competition is fierce at the moment. Don't forget the second hand market, but make sure that you know your subject and know what you are buying.
4. DO make sure that a connecting cable is included. Some cables can cost between 10-15 pounds.
5. DO check for the green BAPT approved sticker. If it hasn't got one, it isn't approved (although I have yet to hear of anyone prosecuted for using a non approved terminal)

Well, that's all for now. Don't forget to write or phone ! GARY COXHEAD (Tel 0375 672137), 54 The Sorrells, Corringham, Essex. SS17 7DS.

DRAGON DIARY . . . . . NEIL SCRIMGEOUR

As I said last month, I shall now have a go at the companies, and I'll start with Compusense and Microdeal. Before going any further, I think that I should point out that all companies are treated the same by the Group, but more complaints come in about these than any others.

Compusense have messed me about in the past with regard to problems but that is a personal gripe and doesn't really come into this piece. The main problem with Compusense is their pricing policy. There is no way that someone is going to pay 199.00 for a Dragon 64 when they can get machines with the same memory plus some extras for the same price (Amstrad & Commodores). As has been said, you can't expect Compusense to sell a 64 for 75 quid, but it is clear that most of their range is well overpriced. The new expansion board could have breathed new life into the Dragon but it's not going to do so at 110 quid. If Compusense get their prices right, they could make a fortune. If you could get a 64 for 120-130 or an expansion board for 75 then I bet that a whole new market would open up. I must also redress the balance a bit as a lot of people I know who run FLEX have had superb support from this company and they are always willing to talk on the phone. This is all very well but if you can't afford to run FLEX (or any other system) because a disc drive is going to cost at least 180 nicker then there's not a lot of use in a good back up service. What makes it worse is that Compusense have a monopoly on Dragon related stuff so there's no pressure on them to bring down their prices. I would love to know how many Dragons they sold in 1985.

Microdeal are a law unto themselves and they just don't seem interested in the Group. What has puzzled me is that they have just sent me 5 new games to review. This is the first time that they have sent me (as software editor) anything at all. Microdeals pricing has been fixed ever since the first day they produced software. All games cost 8 quid or more and it is only due to firms like Mastertronic that they have introduced a budget range. One of their recent releases called Module Man isn't worth 0.99, never mind the 1.99 it actually sells for. This morning, I got a pamphlet from them saying that if I wanted to receive further editions of the Cuthbert Chronicle I'll have to pay 5.00 for 4 editions. I seem to remember that when it first started, it was going to be free.

Microdeal have produced a near monopoly of the software as they keep buying up stock of the other companies and selling it cheaper. You could say that this is a good thing but the point is that the smaller companies concerned can't sell their own stock, causing cash flow problems etc. and we all know what happens then ! The most amazing development is that Microdeal now don't sell stock to shops. There are few enough shops selling Dragon stuff as it is and now the only place you can get Microdeal programs is from themselves. In theory this should bring prices down because the middle man has been cut out but I've seen no reduction.

One further thought. There could be a very logical reason Microdeal sent the 5 new games. If Dragon User ceases to be then we would be the only ones producing any kind of magazine for the Dragon. Maybe the penny has finally dropped and they realise that our members are the core of the existence of the Dragon and that we are the future market. OK, but if anyone thinks that they can use the NDUG, they are in for a shock.

CROSSWORD 7 ANSWERS

Across : 1A)Quantum Leap 3D)Chub 3I)Octal 4D)Vimto 5H)Route 8A)Dull 8F)Apollo 9E)Terrific 11A)Waif 11G)Macabre 13A)Hallucination

Down : A1)Quasimodo B10)Data C2)Haemoglobin E4)Incentive F2)Cumana G7)EPROM H1)Laboratory J3)Crumb J9)feast K4)Steroid L9)Cargo M1)Halley's Comet

Well, no correct answers to this one, so we'll add the prize to this month's competition.

ASCII CORNER . . . . . PAULINE HAMPSON

This month I am nominating two firms for awards. Firstly for the most stupid ~~continent~~ and the least helpful firm. I nominate a Birmingham company who have Dragonised Scott Adams adventures. Having waited several weeks for a reply to a query, I lost patience and gave them a ring. I was told that nobody here plays the games and the programmers couldn't be disturbed. Let me sell you a help book she offered. I replied with clenched teeth that I had one and resented the implication that I couldn't read. Is this the sort of service that we want ??

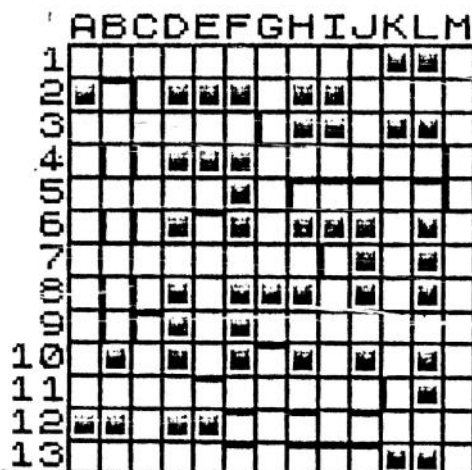
In contrast my nomination for the best and most helpful firm goes to Wintersoft for their excellent Barons of Ceti V and the help they gave me to finish it. I liked Return of the Ring but it had irritations like endless battles and having to load different parts of the game while playing. All this is a thing of the past and the game is great. I had to be dragged away from it screaming, 'just another few minutes please', which shows how it held my attention.

You are servitor Cross on a mission to the lands of Baroness Black. On the planet all the locations are shown graphically and in the city the game is in text form with a small illustration in the corner. Your first task is to deal with an evil droid and to find the items needed to survive outside. Special passes are needed to enter different lands and you perform tasks to earn these as you progress to the lands of Baroness Black. The tasks are entertaining and the game includes a most necessary save game feature. My own personal problem was that you could go in 8 compass directions and I have trouble with east and west so I got into some terrible messes. Why I play these games with such a handicap is a mystery. Does anyone else wish to nominate any awards ??

CROSSWORD NO. 8

Across : 1A&J1) Binary manipulation (reversing 1's and 0's, then adding 1 to the result)  
2J) Cover with paper 3A) Sickness 4G) Vidipix game  
5A) Rope 5H) Parts of speech 7A) The splitting of a rock or mineral 9G) Pertaining to an orbit  
11A) Ultimately 12F) A device or formula to aid the memory 13A) Having the same centre

Down : A3) Ore of copper B2) Handcuffs C1) Thick syrup extracted during sugar manufacture  
C9) back of a boat E6) Throw out G1) Chinese game  
G10) Country dance I7) Preserve J1) see 1A  
K4) The act of bringing to life M1) Seasonal weighing machine



No winner for last X-word. Prize for X-word 8 is TREKBOER.

BULLETIN BOARDS

More from the list of bulletin boards:

NAME	BAUD	TELEPHONE	HOURS	COMMENTS
BETTIESFIELD	300	0948 75378	0900-2100	C/PM BOARD
BASUG	300	0742 667983	?	NOT ACCESSED
BABBS 2	300	0268 778953	24	NOT ACCESSED
BULLETIN	1200/75	0462 677177	24	NOT ACCESSED
BIRMINGHAM NTH	300	0827 288810	24	N/A BBS
CITY (FIDOFOR)	300&1200/75	01 301 4110	24	GOOS TBBS
CENTRAL B'HAM	300	021 430 3761	24FR12-WE2400	NOT ACCESSED
CITY	300&1200/75	01 606 4194	24	NOT ACCESSED
CFC	300	0395 272611	24	N/A
CBBS HERTS	1200/75	0387 53116	24	N/A
COLCHESTER FIDO	300	0206 865737	1800-0830	N/A
C-VIEW	1200/75	0702 546373	24 (ROCHFORD COUNCIL)	



I would like to welcome all the members who I met at the 6809 show and apologise to those who turned up on the Sunday (I was unable to attend on the Sunday). Two things surprised me at the show. The first was the high calibre of many of our members. As an example, one member told me how he writes 'C' source code on his Dragon and then ports (via the RS232) the code across to a UNIX system at work ! Apparently, the code runs first time after only a small number of mods to some OS9 system calls. AMAZING !! On the subject of the OS9 'C' compiler, I've recently discovered a bug in the compilers error routines. The problem occurs when multiple structs (complex data structures) are defined containing a name which is common to both structures. Sometimes the compiler will detect the error but on others it won't - and then promptly grinds to a halt, leaving you with no idea what's wrong - You have been WARNED. I always remember when I first started using OS9, the fear and trepidation I felt at having to use the DSAVE command. Back to page 7-20 of the manual I would go, only to have my worst fears realised - I really didn't know what I was doing. This command really is a lot easier to use than the manual suggests, so for all OS9 users who still need an aspirin when they read that page, I devote this months OS9 page:

THE DSAVE COMMAND There are 3 principal uses to which this command can be put - informative, direct or edited, but before discussing them, I'll redefine the command itself. 'DSAVE generates commands to standard output which would copy the current directory to whichever directory you are in when the command is executed'. It says this much in the manual and that's all you need to remember.

INFORMATIVE - If someone hands you an OS9 disc out of the blue, how do you find out what's on it ? You can't just ask for a DIR or CAT as you might with DragonDOS or FLEX as this on OS9 only shows the root directory. There may well be hundreds of files lurking in lower directories. The answer is to use [chd /d1 ; dsave /d1 -im >/pl. This will give a hard copy of every file and directory on the disc (the -i indents the listing to show directory depth, the -m just saves paper.

DIRECT - The definition of the DSAVE command suggests we have to wait (to execute the commands), but then OS9 is a multitasking system so why should we ? To make DSAVE work in a direct mode, all we need to do is to pipe the DSAVE output into another shell which is running concurrently. We can also instruct the new shell to use a different directory to the current one and thus control where our directory is copied to. The command takes the form :- [chd /d0 ; dsave ! (chd /d1)] which will copy a complete disc. This form of the command can be made to work like the backup command ie. used without the system disc in position - just [load copy tmode mkdir dsave] and the system disc may be removed allowing you to copy one data disc to another. [chd /do/cmds ; dsave ! (chd /d1/cmds)] will copy only the command directory. There is an interesting bonus to this method of copying. Although the second shell will abort on error, the first shell will not. This makes the command very useful if for example you want to make a disc containing the combined files of two others. All you need to do is copy one disc onto the other. The only thing you need to beware of is that you don't run out of disc space and that files of the same name have the same content on the two discs.

EDITED - This is the form described in the manual and is useful if you only want to copy a selection of files from one directory to another. Just generate a procedure file and then edit it with stylo. Don't forget that any of the many dsave options may be added to the examples given. Used together with DELDIR, you should find DSAVE very useful for transferring whole directories (or parts of them) to where ever you want them. Several commercial utility packages are available from the USA which act a lot faster than DSAVE and are easier to use. DP Johnson supplies a set of such utilities called 'Filter kit#1' for about \$30. If you want to make your OS9 system really fly, you'll find this package truly amazing. I hope to cover some of the mouth watering morsels available from across the Atlantic in a future Update, for unless Compusense can buck their ideas up with regard to OS9 support, this is the direction my money will be going.

NEED ANY HELP...???

For the benefit of new members, (and we've quite a lot of 'em recently), and those of you with less than perfect memory, I thought it would be an idea to mention that if you need help etc, you only need to ask! I'd suggest that you make a note of the following:-

SOFTWARE PROBLEMS GENERALLY:-contact Neil Scrimgeour at 125, Occupation Road, Corby, Northants. (0536-66590).

EDUCATIONAL AND ADVENTURE SOFTWARE PROBLEMS:-Pauline Hampson at 10, Cherry Lane, Lanton Heath, Alsager, Stoke-on-Trent.

HARDWARE REPAIRS AND QUERIES:- Paul Grade at 6, Navarino Road, Worthing, Sussex. (Worthing 207585).

UPGRADE PROBLEMS:-Bob Hall on 0271-294113, or write c/o Paul Grade.

OS9 PROBLEMS:- Jason Shouler on 0202-722599.

MACHINE CODE PROBLEMS:-John Martin, 35, Little Gaynes Lane, Upminster, Essex.

ADVERTISING QUERIES:-Paul Grade. or Barry Caruth, 132, Donaghadee Road, Bangor, Co. Down.

MODEM COMM. PROBLEMS:-Gary Coxhead, 54, The Sorrels, Corringham, Stanford-le-Hope, Essex.

MEMBERSHIP QUERIES, COMPLAINTS, ARTICLES for PUBLICATION, etc:-Paul Grade.

ALL OTHER QUERIES re UPDATE:-Tim Lowas, 211a, Amesbury Avenue, London SW2.

MAILBOX...from Harris Micro Software.

This is a database designed for storing names and addresses, working from disc. The package comprises two main programs, "Mailbox" and "Mailrep", two auxiliary programs, "Mailmerg" and "Mailpurg" and, just for once, an intelligible manual. One of the very best points of the program is the re-defined character set, which is used throughout "Mailbox" and "Mailrep". It really is nice to use - both lower and upper case characters have been very clearly designed, with the inclusion of a pound sign. Using the database is very much like using other databases. First set up a file, define headings, then enter information. The weakest point of the system is that the important details, like name, address, etc. have pre-defined headings with, unfortunately a pre-set amount of space to enter the information. This does not allow for addresses with extra-long street names, for instance, or sub-districts of a main town. In addition, up to ten user-defined fields are allowed for, but again, there is a severe restriction on space to enter the information. Eight characters per field just isn't enough for many purposes. This is because the program writes a blank datafile with a pre-set amount of space for each record, before any data is entered. Now for grouse No.2. That damned auto-repeat facility! It is NOT helpful for data entry. It slows the process down, and this particular routine in its default mode has so little delay before the auto repeat begins, that it is unusable. I made the prescribed POKE to reduce the repeat factor to a minimum. This improves response to acceptable level, but I wish they'd left the standard Dragon keyboard poll as it was! In the interests of research, I put up with it to enter a few records so I could test the "search and retrieve" routines. An interesting point is that, once entered up and checked, each record is stored and shuffled into alphabetical order on disc. With twenty or so records to the file, the "search to change or print" facility works very well. Even more interesting is a "search by field" option. Up to five fields can be combined in a search to produce a mini-survey. For instance, the number (and names) of Group members over 40 who have disc drives and Shinwa Printers could be found, or a mailshot can be made up aimed at people living in a specified area. The two other programs, "Mailmerg" and "Mailpurg", are designed to merge or kill either selected records from files, or complete files. Overall, a very useful package; it has been made over-complicated, I think, with too many clever tricks such as the auto-repeat, the constant prompts "Are you sure?" when you're waiting to start the next entry or next sequence, and the constantly spinning disc drive. The review copy had the drive set to rotate continuously by default, contrary to what is stated in the manual. This does not speed up access time, it merely overworks the drive (which makes nasty noises after an hour or so) - and uses electricity! I think if more attention had been paid to flexibility this package would have a wider market. The price is very reasonable - 14.99 - (MST "Mailer" is still 25 pounds, I believe, and is not nearly so comprehensive). Harris Micros will provide a "customised" version if required. Their address is: 49 Alexandra Rd., Hounslow, Essex. Many thanks to them for supplying the review copy. ... (Ken Grade).

## CANOE (CCS) . . . . CHRIS PARKINSON

The idea of this 'unique action' game is to paddle your way through some 35 odd gates in a canoe, up river, all against a time limit. If you succeed with this then it's off to dodging rocks. As soon as the game has loaded, a title screen asks whether a red or green canoe is required. (green shows up better on a B/W TV) The only real problem that I found with this option was that it didn't work: I could only get a green canoe and never a red one - Oh well, it was a nice thought. Once the game actually starts, play switches to PMODE 3 in which believe it or not, a patch of blue colour represents the river. As you move, the river scrolls down the screen bringing the gates with it, these you have to move the canoe through. To move, the joystick has to be moved frantically from right to left (as in Microdeal's Athletyx). Joystick right has the effect of putting your right paddle in the water and vice-versa. So by keeping up a regular rhythm, the canoe can be kept in a straight line. To move left or right, paddling has to be kept to one side of the canoe only - just like the real thing. (for those who haven't canoed before, just take my word for it OK). Sounds like a good game? Well, it would be if it played a bit faster and something was added to relieve the monotony of it. If you are still alive by the 35th gate, the game progresses to harder levels in which you have to dodge strategically placed rocks. The graphics are very simple as is the sound. Generally, the basic idea of the game is good, but not enough thought has been put into making the game more playable.

## D64 EDGE CONNECTOR 32 - CTS SIGNAL (2)

FOR THE HARDWARE NOVICE: If you have previous experience, this little modification should be a doddle. If you have no previous experience, it should present no problems if you follow the rules.

1. Read and fully understand the drawings and notes and relate what is required to the main PCB.
2. Arm yourself with a very fine pointed soldering iron, solder, Stanley knife, and fine insulated wire ie. wrapping wire or similar.
3. Practice soldering pieces of wire to a piece of stripboard or similar until a good joint is achieved with heat application of less than 3 seconds. It is quite in order to put small blobs of solder on the stripboard first as this will in some ways resemble the blobs of solder on the PCB.
4. Psyche yourself up for confidence, care and patience.
5. If 1-4 leave you in any doubt as to your ability, get someone else to do it for you.
6. If you are happy with 1-4 and thought 5 was an unfounded statement then motor on and do it, but note the following:-

TRACKCUTS - ought to be at least 0.5mm, ie. 2 cuts and pick out the bit in between. No hatchet jobs please, care and patience will produce a neat clean gap in the track.

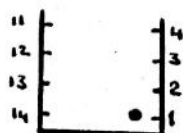
WIRE JOINTS - My preference is to strip about 4mm of insulation and form a small circle which is soldered over the point at which the IC legs poke through the PCB. No more than 3 seconds of heat should be applied and if 2 joints on the same IC are to be made one after the other, wait at least 10 seconds between them.

WIRE LINKS - Do NOT make them a tight fit between two points, leave a little slack and if it won't lie flat after soldering then a little drop of solder at a convenient point works wonders.

IC IDENTITY - IC integrated circuit has pin 1 marked in one of 2 ways as shown, regardless of the number of legs. Top views are shown so don't forget to invert your mind's picture when you turn the circuit over to solder wires to the legs.



Half moon indent



Small circular indent

WHERE TO CUT: 1. ON underside by 1/22 (ie. IC 1 pin 22)

2. On topside under IC holder - Remove IC 37, ensuring that it is lifted evenly or the legs will get bent. Locate socket pin 22, drill or cut a 1/4 inch hole in the holder; close to pin 22 but NOT closer than 1mm. The track can be seen through the hole and should be cut at this point.

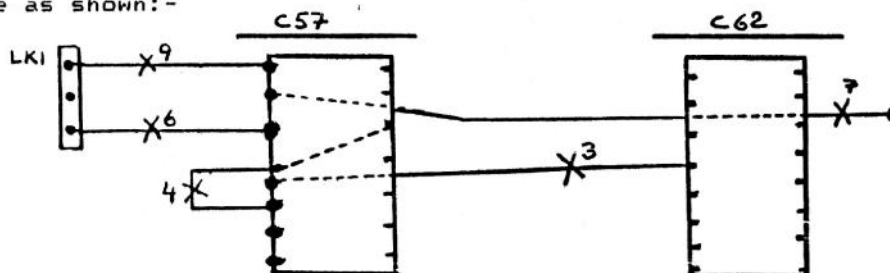
5. On topside near to 25/19

8. On underside between pins 36/2 and 36/3

10. On underside - Optional, only if centre pin of LK1 needs to be isolated.

11. On underside between 7/3 and ground rail (0v) AFTER 7/3 has been linked to 36/1

3,4,6,7&9 - On top side as shown:-



NOTE 1 IC7 is an unbuffered CMOS device and hence static sensitive. Uncased inputs are always tied low for protection of IC.

NOTE 2 Cut 4 on my machine is on a white line under which the track runs, so look closely.

WHAT HAPPENS: The SAM outputs S0, S1 and S2 are address independant, binary coded outputs normally referred to as device selects, and are used to enable sections of memory. Hence they provide the bulk of the decoding for the memory map.

The 3 to 8 line demultiplexer, IC40, decodes to 8 discreet control lines, only one of which can be active low at one time. The Dragon uses 7 of these, Y0 to Y6 inclusive.

LS138 Function Table

INPUTS					OUTPUTS							
G2A	G2B	ENAB	SELECT		Y0	Y1	Y2	Y3	Y4	Y5	Y6	Y7
X	H	X	X	X	H	H	H	H	H	H	H	H
H	X	X	X	X	H	H	H	H	H	H	H	H
L	L	L	L	L	L	H	H	H	H	H	H	H
L	L	L	L	H	H	L	H	H	H	H	H	H
L	L	L	L	H	H	H	L	H	H	H	H	H
L	L	L	L	H	H	H	H	L	H	H	H	H
L	L	L	L	H	H	H	H	H	L	H	H	H
L	L	L	L	H	H	H	H	H	H	L	H	H
L	L	L	L	H	H	H	H	H	H	H	L	H
L	L	L	L	H	H	H	H	H	H	H	H	L

S2 S1 S0

H=High or logic '1'

L=Low or logic '0'

X=IRRELEVANT

NOTE - One other enable exists (pin 6) but does'nt concern you so do not touch. Note that the outputs are acting only if G2A and G2B are both low

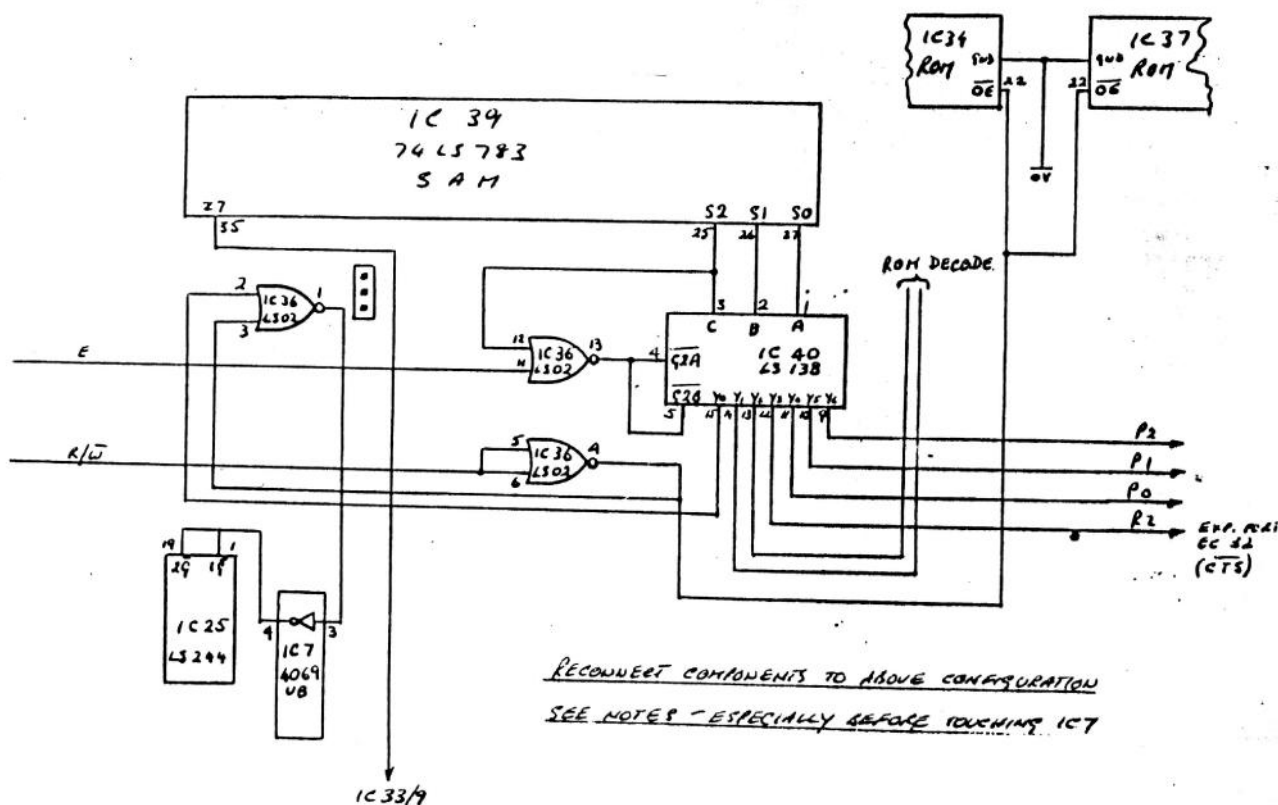


Note from circuit 1 that G2A and G2B are both low if S2 is high or if E and RW is high.

We are concerned with the CTS signal which is the Y3 output. which can only be low when S2 is low, E is high and RW is high.

S2 and E are both necessary to the basic function, our problem is the RW line which is high for read and low for write, by removing its influence from the Y3 line then CTS will be active low for read and write to the address range C000-FEFF. This is achieved by cut 3 but it is necessary to connect G2B to G2A (or ground) to maintain the function of IC40. Also Y0, Y1 and Y2 are no longer low only during read which causes a problem which must be rectified. Y1 & Y2 are used for enabling ROM and although ROM'S cannot be written to, it is good practise to prevent attempted writings to ROM'S. Y0 controls IC25 which is the RAM output/MPU buffer and if this is active during read and write then the MPU data and VDU data gets mixed up giving very amusing and pretty screen displays, terminating in a system lock up. Therefore Y0, Y1 & Y2 must be brought back under RW control and is achieved by the rest of the track cuts and the reconfigured part is quite easy to work out so I'll let you do it yourself.

DRAGON 64 MAP DECODE. CTS ACTIVE FOR READ AND WRITE TO ADDR C000-FEFF



Any detectives out there??

Do you remember, long, long ago, there was going to be a machine called the Dragon Professional?.

Well, it WAS made, or at least a few prototypes were, and some even went out to various reviewers....but at the same time Dragon Data folded up, and the prototypes were never seen again.

How about it?...someone must know where they are.....is it YOU?...how about seeing if we can trace 'em?.

# DISC FILE PROTECTION ... GRAHAM STRONG

I have recently spent many hours sat in front of my Dragon, trying to organise my collection of programmes on disc and arranging back up copies. In the haste of attempting to complete the task in the shortest possible time, I found it remarkably easy to remove wanted files from the disc. It is also very tiring to cover up the write protect notches with those horrible sticky labels, which were being used by the dozen. I then looked for another means of using the Dragon for an automatic protection system. Below is a short program which reads the directory track and auto protects every file on it. It is possible to reverse the process by changing line 270 to 'PROTECT OFF' if required. If the disc contains a type of program for which protection is not required ie. data then the following line may be included.

225 IF TY\$="DAT" THEN RETURN (note dat can be any type)  
A further use is that recently added programmes stand out on the directory track by the missing inverse 'P'. This can be of use to show whether a back up copy has been made by using the auto protect immediately after a back up has been made. No harm is done by protecting an already protected file.

```
10 CLS: CLEAR5000
20 PRINT@96, "PROGRAM TO PROTECT ALL ITEMS ON", "A DISC DIRECTORY"
30 PRINTSTRING$(32, "*")
40 PRINT@288, "ENTER DISC IN DRIVE AND PRESS", "ANY KEY"
50 I$=INKEY$: IF I$="" THEN 50
60 CLS: T=20: S=1: SS=16: DV=1
70 POKE1546, 1
80 SREADDV, T, S, A$, B$
90 D$=A$+LEFT$(B$, 122)
100 FOR X=1 TO 9
110 SZ=0
120 W$=MID$(D$, X*25+1, 25)
130 ST$=LEFT$(W$, 1)
140 IF ST$=CHR$(00) THEN GOSUB 210
150 IF ST$=CHR$(2) THEN GOSUB 210
160 IF ST$=CHR$(137) THEN END
170 IF ASC(ST$)>15 AND ASC(ST$)<127 THEN GOSUB 210
180 NEXT X
190 S=S+1: CLOSE: IF S>SS THEN END
200 GOT080
210 NA$=MID$(W$, 2, 8)
220 TY$=MID$(W$, 10, 3)
230 IF ASC(NA$)<33 OR ASC(NA$)>127 THEN RETURN
240 NZ$="": FOR Y=1 TO 8
250 NC$=MID$(NA$, Y, 1): IF ASC(NC$)<32 OR ASC(NC$)>127 THEN 270
260 NZ$=NZ$+NC$
270 NEXT Y: PROTECTONNZ$+"."+TY$
280 RETURN
```

As promised we're printing the three best entries from our lightpen competition, and this one is from Christopher Corker. (Joint second place).

\*

```
10 PMODE3, 1: SCREEN1, 0
20 A=RND(4): PCLS A: FOR Q=1 TO 30
30 B=RND(250): C=RND(190): D=RND(255)
40 POKE178, D: LINE-(B, C), PSET, BF
50 NEXT: GOT010
```

## UNDERBEINGS OF CROTH...D. Bateman

Adventure lovers with any cash left after the festive season, could do a lot worse than send off for a copy of 'Underbeings of Croth' (Maridian Software). It is a mixture of m/c & basic and takes about 5 mins. to load. Using PMODE 4, the screen has the appearance of a piece of parchment with the redefined text scrolling upwards. There are over 80 locations and a vocabulary of over 160 words. Commands can be entered as either double/single words or in complete sentences. The adventure begins with the hero(?) fastened in a cage suspended by a long chain over a dark pit containing nasties. After being killed, drowned or imprisoned on several occasions, a little thought and common sense soon leads to greater things down in the valley. Although the seasoned adventurer might find it too easy, personally I find trying to feed the hungry ape woman, catch the owl or mountain goat, or even escaping from the well or labyrinth of caves quite a stern challenge. All in all, it seems to be very well written with logical and not impossible clues to be solved. It also seems to have an atmosphere all of its own and the player becomes totally engrossed always one more move or one more life when much more important things like eating or sleeping should be done. Fortunately there is a save game facility to allow for these annoying interruptions. Priced at 3.95, it shows that some real bargains can be found in the small ads of Dragon User. Well, what are you waiting for? get your money in the post, there's even a 7 day money back guarantee (not that you'll need it).

## COSMIC CRUSADER ..... STEPHEN DENMAN

This program is a fairly recent release from Blaby and probably one of their better games. This game is in the good old traditional style shoot 'em up with a few other added extras such as refuelling, shield and loads of different aliens to blast away. The graphics are very good and use the PMODE 3 resolution to its best, there are also some very good 3D effects. So far, I have discovered about 7 different types of alien as well as meteor storms and a refuelling level when fuel gets low. There are also very good sound effects and a very good introductory tune based on the Star Wars theme. You can use either joystick or keyboard, I preferred the joystick. There is also a very useful pause option if you want to stop for a quick cuppa, half way through an anti matter storm.

Overall, I think this is a very good, fast shoot 'em up and a definite for all you arcade fans at only 3.99

Graphics 80% Sound 80% Playability 90% Value 85%

## THE END BIT.....

Well, here I am at the end of another edition. This month I have included a few reviews, mainly because the past couple of issues have been a bit technical. What's coming in the next one you ask?, well, that's a secret, you'll just have to wait and see!.

Just a little tip, don't kick out your disc power supply during a disc write (or anything else for that), no, I didn't do that, I had a power cut and you should have seen the mess it made of the disc.

Tim Lomas....London.....January 1986

## The Late, Late, Gaffer's End Bit!

Just a couple of last minute odds and sods.....Neil Scrimgeour has just phoned me to say that he has a FEW copies of "Trial of Arnold Blackwood" on offer for THREE POUNDS EACH...a very considerable saving, so phone him NOW if you want one.

Other thing is a complaint: PLEASE, when you're ordering things advertised in Update, read the ad. properly before writing your cheque!....it adds to our costs when we have to send refunds to those who send in too much, and even worse when we have to correct those who don't send enough!, so read carefully please. OK?.

Paul G.