## REPLAY REPORT

## A Survey of Vine Micros Products

Those of you who have met me know that I am an unrepentant Acorn/BBC microcomputer fan, in part because of the grip of the school market which Acorn have acquired. With some reluctance last year, I traded in the ageing Model B for the latest, at the time, gofaster version, the MASTER. However, I was pleased to find both that the software compatibility was excellent and that most of my ROMs would still work. On the other hand, I found that the availability of the ROM sockets was limited, especially if you want to keep the sideways RAM active, since normally fitting more than one extra ROM involves switching out some of the 64K of sideways RAM. If you run out of ROM sockets and try loading your own (not pirated) disc copies of some of the better ROMs into sideways RAM, then some ROMs will corrupt themselves in the interest of preventing unauthorised copy. Some of the heavilyprotected educational tapes still cannot be converted to run from disc even though five-year olds have little patience with cassette loading systems! Consequently, I was quite pleased when Vine Micros asked me to review some of their products which, on the face of things, seemed to be the answer to most of my problems. The products, all for the BBC MASTER, were Replay, 'Write-Protect' Module, and ROMboard 3 Overlay Board.

ROMboard 3 Overlay Board: Starting with the Overlay Board, I was impressed with the packaging and protection of the small board supplied. It is designed to allow up to three extra ROMs to be installed within the machine which, instead of displacing RAM, overlay any of the eight built-in ROMs in the 1Mbit ROM. The documentation which is supplied is comprehensive and contains full fitting details. The installation is quite straightforward, involving no soldering whatsoever. The only proviso is that the 1Mbit ROM must be socketed. Quite what you do if you buy the board and then discover that IC24 is soldered in place, I don't know. Ring Vine Micros, I suppose. My 1Mbit ROM was socketed, so I had to tackle the only frightening bit of the installation which was prising it out. Thoughts of 'how do I explain to the kids that the computer won't work anymore' did cross my mind, but, in fact, the operation was painless. Vine Micros do put a disclaimer in their documentation at this point, so, presumably, the thought crossed their minds as well. The

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For Tape to Disk Transfer... the REPLAY system can't be beaten.

Ever wanted to break free from the hassle of waiting for ages while tape programs load? If you have a disk drive then it's easy... just plug REPLAY in, connect a few wires (No soldering, very easy to fit connections - as our customers say), and you'll have installed a 'Magical piece of equipment' (quote from an A&B review) into your computer. It won't take you long to find out why....

REPLAY has established itself as THE BEST in tape to disk transfer... there's quite simply no competition. If you buy REPLAY and find that it won't transfer more programs than your present tape to disk program then we'll refund your money in full! And if you don't currently have such a program, then don't waste your money on anything else, but go straight to the top with REPLAY. REPLAY works by 'freezing' the computer and dumping the whole 32k of memory onto disk, ready for reloading to the point where you saved it.

Standard REPLAY features include: Very fast saving and loading of programs (about 7 seconds); Saving of programs at any point (eg while playing a game); Screen dumping of games (printer dump routine needed); Program alterations such as infinite lives in games, etc.

Saving of upto 22 files per disk (depending on DFS); Fully menu driven; Will even save some disk programs.

Extra Master version features: Saving from 32k to 128k of RAM (you specify how much); Completely invisible to other software ('clashes' are impossible); To date it will save ANYTHING loaded into the computer; Enables Master to B conversion kit to be fitted. All REPLAY prices have been reduced for the Christmas period. And don't forget our guarantee!

BBC B and B+ versions of REPLAY now cost \$28 all inclusive (was \$35) Save \$7! State your DFS type exactly. Self contained REPLAY for Master computers now costs £35 all inclusive (was £41.95) Save £6.95! REPLAY to fit on our ROMboard '3' for the Master now costs £27 all inclusive (was £36.95) Save £9.95!

>>>> or Master REPLAY+ROMboard '3' for Master 128 all for only £39 all inclusive Save £17.90! <<<<

Master to B conversion kit (allows most BBC B tapes to run on the Master) £14.95 State Master REPLAY type. fitted

Goldstar disks Boxed Unboxed Packs of 10 x 5.25" Branded Unbranded Goldstar Disks 10+ £5.70 1-9 10-49 50+ £6.50 S/sided D/density 48tpi £5.50 D/sided D/density 48tpi £7.00 £6.00 £6.10 D/sided Q/density 96tpi £9.00 £8.00 £7.50 £5.50 £4.00 NB. Add 15% VAT plus 70p carriage per box. Call for bulk.

Printers, prices include VAT and carriage Amstrad DMP2000, 80col 105cps, NLQ parallel i/f £162.00 Amstrad LQ3500, 80col 100cps, NLQ parallel Citizen LSP100 80col 175cps, NLQ parallel interface SBC TP180-9, 80col 180cps, NLQ parallel interface Lead for BBC B, B+, Master only £9.20 £358.00 £232.00 MATRIX ROM only £26 all inclusive (was £41.40)

ADDCOMM ROM only £23 all inclusive (was £28)

ROMboard '3' for Master 128, was £19.95, now £16 The first ROMboad ever to be produced for the Master computer, and by far the most popular. Its ease of installation and use makes it ideal for anyone who finds they need more ROM sockets in their Master. At its new price, who can resist it? Simply deselect the computer's built-in ROM software and plug in your own. Takes 3 ROMs including the Inter-series of ROMs by Computer Concepts.

ROMboard '4' for Master 128, was £29.95, now £25 This ROMboard allows up to 4 extra ROMs to be fitted inside the computer, replacing either the cartridges or the sideways RAM. The board also includes a read/write proctect switch. Ideal for those users who dislike cartridges but require extra ROM space, or for the school environment where cartridges tend to disappear.

Write Protect Switch for Master 128, now £7.95 Again, Vine Micros were the first with their device to write-protect either 2 or all 4 of the sideways RAM banks of the Master computer.

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◄ instructions have clearly been written by someone who has experience of carrying out the installation, as there is even a warning about a possible foul on the Econet connector advising use of masking tape to prevent any electrical contact. In fact, on my machine, there was no foul.

In use, the board has been completely transparent. Any of the three extra sockets can be selected to overlay any of the 1Mbit ROMs. Vine Micros advise fitting switches in the select lines so that the extra ROMs can be paged in and out. This is almost essential as the Acorn-designed architecture of the 1Mbit ROM means that odd bits of code are tucked into unexpectedly-odd corners, eg, the Terminal ROM contains part of the Operating System, and View contains part of Basic. To be fair, Vine Micros do warn of this and using the switches means that View can be safely replaced by your preferred Word Processor, such as Wordwise, whenever desired. Certainly, I have found the overlay board a worthwhile asset, solving the problem of fitting extra ROMs while retaining RAM for data storage.

This review was printed in the Autumn 1987 edition of "COMPUTAIR" which is the journal of the Royal Air Force Computer Association.

We have been asked to point out that the views expressed in this article are the personal views of the reviewer and do not reflect MOD, RAF or Establishment policy.

Replay: The next product for review was the Replay board. Way back in the days of BBC model 'A's, Vine Micros brought out a product to enable programs to be saved to disc easily - a boon for those whose ability to decipher 6502 code was limited. Over the years, this product has been progressively upgraded. Once again, the Replay board looked well-designed and arrived wellpackaged. The instructions are well-presented with clear diagrams and a comprehensive manual. Although it is possible to buy a stand-alone version, the example I obtained required the Overlay board to be fitted. Again, there are warnings of possible inadvertent electrical contact. Once fitted internally, again without soldering, the small red activation button is located at a convenient external spot, and a small sigh of relief is breathed, as always, after poking around inside the case. Vine Micros claim that the system is completely invisible. Certainly, I have experienced no clashes at all to date and my machine has behaved perfectly normally, any irrationality being solely due to the operator, up to the point when the Replay Button is

Prior to pressing the red Replay Button, the system must be used to format its own dedicated disc. Replay uses a double density 18 sector disc format peculiar to

itself. The programs on the disc are coded as well so that the system cannot be used for piracy - an important point. Once the disc is formatted, programs can be run entirely normally either from DFS, ADFS or Tape. At any time thereafter, the Red Button can be pressed. Programs are instantly frozen, even halfway through a screen refresh. There is then an option to simply continue, ideal if you have to answer the telephone, or to save to disc. Saving to disc can involve up to the full 128k of memory, and, after saving, the program carries on exactly from where it left off — even halfway through that screen refresh. Thereafter, there is the option to reload the program at that point. It is also possible to edit the file, and, for many popular games, Vine Micros provide a list of pokes to give extra lives etc. Moreover, it is also possible to recall the screen in order to print it out. Suddenly some of the more difficult adventures/games become possible, ending hours of frustration for the children (and me) and, of course, shouts of 'I can't come for tea, I'm in the middle of...

The only problem area with some programs is that the 6845 video controller chip has some write-only registers which require initialising prior to reloading. Vine Micros provide code within Replay for many popular programs and provide hints to let you work out your own solution for other programs. Certainly, Replay has successfully transferred every program I have tried, and replayed them successfully. As far as my family are concerned, the little Red Button is a magic wand — we don't understand how it works, but are always impressed with the results.

Write-Protect Module: The last product I received for review is the 'Write-Protect' Module. With this product, the built-in sideways RAM banks can be isolated so that they cannot be written to. Data or programs can be loaded into the RAM, the RAM write-protected, and thereafter the data remains incorruptible until switch-off or selection of write-protect off. The smallest of all the products, it again arrived well-protected and documented. Again, it was of simple plug-in design, taking somewhat less than five minutes to install, even though it is not just a simple switch. As part of the installation procedure, it is necessary to decide how many of the MASTER's RAM banks are to be protected. To change this decision requires delving back inside the computer to alter links. Once fitted, write-protecting is simply a matter of throwing a switch. Vine Micros' documentation is so complete that they even warn that BAS128 uses the sideways RAM for program storage and so cannot be used with writeprotect on.

Overall: So, are the products worth buying? Between them, they certainly solved all the problems I listed in my opening paragraph. All the products are well-designed and require a minimum of experience to fit — common sense and the ability to read English are all that is needed. The 'write-protect' switch is very cheap and excellent value on its own. If you really cannot get along with View and want something like Wordwise or Inter-Word fitted permanently, then the Overlay Board is invaluable. And, finally, either on its own or in conjunction with the Overlay Board, Replay is the answer to the game player's dreams. To answer my own question — Yes, they're well worth the money.

**Graham Evans**