

ROMANTIC ROBOT UK LTD

present

multiface 128TM

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MULTI-PURPOSE INTERFACE FOR THE ZX SPECTRUM

INTRODUCTION.

MULTIFACE 128 comprises three functions in one box:

- 1) Fully universal and 100% automatic SAVE facility for tape, microdrive, Discovery, Disciple & Beta
- 2) 8K RAM extension - usable as a buffer, etc.
- 3) MULTI TOOLKIT to study/modify/develop programs.

CONNECTING MULTIFACE 128.

Ensure that the power supply is disconnected before attaching or removing MULTIFACE. MULTIFACE plugs

- a) on the SPECTRUM edge connector - for tape users
- b) on the INTERFACE 1 edge connector - if used with Microdrive (it can also sit between the two)
- c) between SPECTRUM & DISCOVERY: the DISCOVERY aide connector is unusable because it lacks the NMI
- d) between SPECTRUM and DISCIPLE or BETA

Check all connections carefully before attaching the power supply and switching the Spectrum on. If these points aren't observed, serious damage may occur and your guarantee will be void. A proper attachment is vital for the functioning of MULTIFACE. If pressing the button produces random coloured squares or other garbage, clean the edge connector contacts and push MULTIFACE the furthest possible onto the connector. If your system and MULTIFACE still should not work, disconnect power supply, remove any add-ons except MULTIFACE. read all the instructions and try again. If unsuccessful please ring 01-6259463 or 01-200 8870 or write to us. If really necessary, we will ask you to send the MULTIFACE to us. In such case please use original packaging, state your name, address, phone, and describe the problem & the whole equipment used. Please note any repair. are carried free of charge only if guarantee was registered (see conditions).

INSTRUCTIONS FOR USE.

MULTIFACE works on any Spectrum in any mode. It can be activated anytime; it is immaterial what program is in the Spectrum at that moment or how & what from it was loaded. MULTIFACE does not save program., but computer contents (compressed RAM image). To use it:

- 1) Push the red button to activate MULTIFACE 128
- 2) Select function by pressing the relevant key

(inversely printed) of the displayed commands:

exit - to exit to BASIC to either

- a) leave the program and MULTIFACE 128 entirely
- b) study/alter/customize the program

All efforts are made to preserve program intact. The main pre-condition is the existence of standard system variables or else the Spectrum will crash. Successful exit gives full access to a program. To restart it, if needed, you need to know starting line or address. By re-activating the MULTIFACE. a program can then be saved. etc. EXIT is sometimes impossible in 128K (when Edit ROM is paged on and Spectrum ROM is off) and in such case it does not appear on the menu at all.

return - to continue the program

save - to proceed to SAVE routines:

- a) Input the name of program - up to 9 characters or just press ENTER to input RUN automatically;
- b) Save to: tape, hyper tape, cartridge, disc
You can save program or screen only by pressing p or s. Programs are automatically compressed to take minimal room possible and to load faster. Screens saved on their own are not compressed.
- c) FORMAT option - you should be able to format microdrive cartridges to 100+ K. You can change the format density by poking H2009 (8201 dec.):
1 - default aiming at 101K or more
2 - 96K 3 - 91K 4 - 86K 5 - 82K etc.

Cartridges are named as programs to be SAVED.

tool - to access MULTI TOOLKIT routines

quit - to return to the opening menu

ENTER - to PEEK and scroll through addresses or
to POKE any value to any address

SPACE - to allow you to type in a new address

hex - to toggle between hex and decimal display

reg - to show Z80 registers at time of stopping
starting from the program counter (PC-low,hi)

window - to display 128 bytes at a time with full on-screen editing by cursor keys. The flashing window address corresponds to the bottom one and both can be changed by ENTER/SPACE keys. Window display is in hex, but you can change to

text - to see bytes in window as text (in ASCII)

select - to inspect additional RAM banks 0-7 on
128K RAM models only - follow s by number 0-7

print - to dump screen to printer; for interfaces with COPY command like Kempston E or Lprint III. By poking address H2008 (decimal 8200), you can turn linefeed on - poke H71 (CR + LF)(default) off - poke H70 (CR only)
dump screen as text (text copy) - H11 (CR +LF)
- H10 (CR only)

on the above interfaces in EPSON default.

jump - not to return but jump to another address. Enter the address to jump to at 8192/3 (low/hi). You can jump to Spectrum ROM/RAM F. to M128 RAM. As MULTIFACE RAM overshadows ZX ROM (8192-16383) address 8194 determines paging status: if 0. 8K RAM remains paged, poking 1 unpages the RAM; any other value disables the jump command entirely.

You can not only jump from here, from the main Menu, you can actually pre-program MULTIFACE to jump directly upon pressing the red button and by-pass MULTIFACE operational system entirely. To program direct jump POKE 8192-3 with the jump address and 8195-7 with a special identification code RUN (82.85.78 dec.). Whenever you push the button you'll jump to the predefined address and not to MULTIFACE menu. To return 'to the program you stopped, just use RST 0. To revert back to MULTIFACE normal menu & operation, press the red button and BREAK key simultaneously - this also cancels the direct jump identification code RUN.

In standard mode MULTIFACE uses 8192-11144 as a buffer (8192-13496 once you proceed to SAVE) and overwrites anything in there. Using direct jump you have 8257-16338 of RAM available - plus all of Spectrum RAM, to which you can also jump to.

clear - to clear the extra 64K memory banks (in 128K mode only). You can clear anytime but it's only useful in 48K program. if extra banks were used previously & machine was not switched off; you should save 48K programs in 48K mode anyway.

In most cases - except for tape back-ups saved at hyper speed - MULTIFACE 128 needs not to be attached to re-load programs it saved. The only limitation if absent is a distortion in the top part of the screen which is usually restored during running of program. A screen is always saved as part of program to allow you to run programs without MULTIFACE 128 attached.

You must not infringe copyright when using MULTIFACE and if in any doubt, consult the copyright owner(s).

GENERAL HINTS and TIPS.

MULTIFACE has a software switch making it invisible. It can prevent possible clashes with other hardware/software. It is also vital to enable load programs saved with any version of MULTIFACE ONE, as they all can load when MULTIFACE is absent - or switched OFF. As a rule, MULTIFACE 128 can always be activated, no matter if previously set ON or OFF. Upon powering up the MULTIFACE is automatically OFF - thus loading a program saved by MULTIFACE will leave a corrupted screen and hyper tape back-ups will not load at all. To switch MULTIFACE ON, just press its red button. which both activates the MULTIFACE & switches it on. Upon returning the MULTIFACE will remain on. You can switch it OFF by pressing 2 when you are in the main MULTIFACE menu - o toggles between ON/OFF, as shown.

MULTIFACE has 8K ROM for its own software and 8K RAM as a buffer. You can use the RAM for your own m/c or data, but not for BASIC. The RAM must be paged to be accessed. Paging must be done in m/code, IN & OUT in BASIC can't be used. The 8K RAM overshadows Spectrum ROM - thus anything contained in M128 RAM can't make calls to anything in the ROM, as they both occupy the same area. Any m/c routine to be RUN in M128 RAM must be totally self-contained and independent on the Spectrum ROM. You can in fact make ROM calls if you jump out of M128 RAM into Spectrum RAM, page the M128 RAM/ROM off, call a Spectrum ROM routine, page the M128 ROM/RAM and jump back to your M128 routine. There are other ways & possibilities, but all in all the use of M128 RAM requires fair knowledge of m/c.

GUARANTEE.

This guarantee is in addition to and does not in any way affect any statutory or other rights of consumer purchasers. ROMANTIC ROBOT UK Ltd guarantee that if within 6 month. from the day of supply the MULTIFACE 128 proves to be defective by reason of faulty design, workmanship or materials it will be repaired or replaced free of charge provided:

- 1) The purchaser shall within 10 days complete the detachable slip and send it us for registration.

- 2) MULTIFACE 128 has not been in any way misused, nor used with unsuitable equipment nor subjected to deliberate, accidental or consequential damage.

- 3) No modifications. repairs or adjustments were made to the MULTIFACE 128.

The purchaser's sole and exclusive remedy under this guarantee is for repair or replacement of MULTIFACE. No other remedy, including, but not limited to, incidental or consequential damage or loss of whatsoever nature shall be available to purchaser.