

Tynemouth Software

TYNEMOUTH PET ROM/RAM BOARD USER GUIDE

INSTALLATION

The ROM/RAM board plugs into the 6502 CPU socket in place of original CPU. This should be socketed on all PET models. The original chip goes into the matching socket on the ROM/RAM board. Pin 1 is closest to the edge of the ROM/RAM board.

DIP SWITCH SETTINGS

The DIP switches on the ROM/RAM board select which parts of the system ROM and RAM are replaced. Note, the video RAM and the character ROM cannot be replaced as they have external connections to the video circuitry not accessible from the CPU socket

RAM SETTINGS

Switch 1 controls the RAM replacement mode. When enabled, 32K of RAM is provided over banks 1 and 2.

Switch 1	Bank 1 (0x0000-0x3FFF)	Bank 2 (0x4000-0x7FFF)
OFF	On board	On board
ON	Replaced	Replaced

ROM SETTINGS

Switch 2 controls the ROM replacement mode. When enabled, the PET's onboard ROM chips can be replaced by the supplied ROM.

Switch 2	F000-FFFF (Kernal)	E000-E7FF (Editor)	D000-DFFF (BASIC)	C000-CFFF (BASIC)	B000-BFFF (BASIC/OPTION)	9000-AFFF (OPTION)
OFF	On board	On board	On board	On board	On board	On board
ON	Replaced	Replaced	Replaced	Replaced	Replaced	Replaced

Switches 3, 4 and 5 select the ROM set to be used.

Switch 2	Switch 3	Switch 4	Switch 5	ROM set
OFF	-	-	-	No ROMs replaced
ON	OFF	OFF	OFF	PET Tester (see below)
ON	ON	OFF	OFF	BASIC 1 (** * COMMODORE BASIC ** *)
ON	OFF	ON	OFF	BASIC 2 (### COMMODORE BASIC ###)
ON	ON	ON	OFF	BASIC 4 (** * COMMODORE BASIC 4.0 ** *)
ON	OFF	OFF	ON	CRTC 40n50 (BASIC 4, 40 column, normal keyboard, 50 Hz)
ON	ON	OFF	ON	CRTC 40n60 (BASIC 4, 40 column, normal keyboard, 60 Hz)
ON	OFF	ON	ON	CRTC 80b50 (BASIC 4, 80 column, business keyboard, 50 Hz)
ON	ON	ON	ON	CRTC 80b60 (BASIC 4, 80 column, business keyboard, 60 Hz)

If you have a 9" PET 2001 or 2001N, use the standard BASIC 1, 2 or 4 sets. BASIC 4 is recommended.

2001B model PETs have a different keyboard and are not supported by these ROM sets.

If you have a 12" PET (4016/4032/8032), use the appropriate one of the CRTC ROM sets.

PET TESTER

www.tynemouthsoftware.co.uk

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The second screen shows a character map which should look like this:



If you are running an original 2001 PET, there will probably be lots of snow on the screen when this page is shown. If you press and hold the reset button, you should see a clear screen.

If you see a random pattern or stripes or a screen full of the same character, this indicates a fault in the video RAM or supporting circuitry.

If any of the graphics are wrong, distorted or flashing, this indicates a fault in the video ROM or supporting circuitry.

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DOS WEDGE

All the BASIC 2 and BASIC 4 ROM images contain Nils Eilers DOS Wedge as an option ROM at 0x9000. To use this, type

```
SYS 36864
```

or it's easier to remember to type

```
SYS 9*4096
```

This provides some additional features to benefit disk drive operation.

For full information, see <http://petsd.net/wedge.php>

USEFUL COMMANDS

@\$ - show a directory

@ - show status info

@X? - show drive info

/name - loads a program

↑name - loads and runs a program

- show current device number

#n - change to accessing drive n

@C:dst=src - copy file src as file dst (within the same directory)

COMMANDS FOR REAL DISK DRIVES

@I - re-read current disk

@N:diskname - format a disk

@Dx=y - copy disk in drive y to drive x (dual drive units only)

COMMANDS FOR PETSD AND SD2PET DRIVES

@CD:image.d64 - load a disk image

@CD:/dirname - change to a directory

@CD← - change to parent directory / close disk image

@XE+ - set the option to hide .prg extensions (for this session only unless followed by @XW)

@XW - save options