

KERNAL++

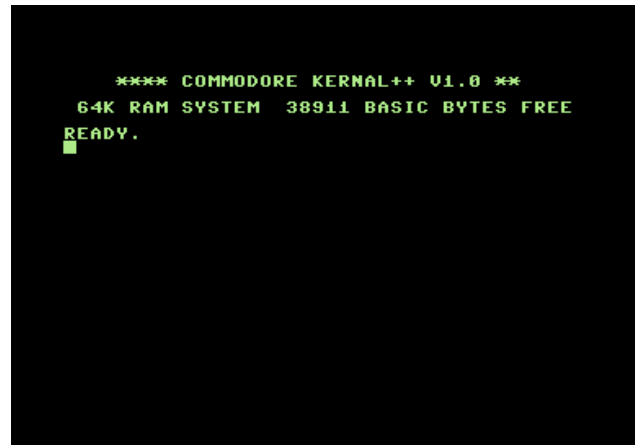
Adds a DOS Wedge to your C64 Kernal

Kernal++ is a Kernal enhancement for your C64. It adds a built-in DOS wedge, auto-loading of BASIC or ML programs at power-up, additional screen editor commands, and several other patches that make using the 64 easier.

There are two versions of Kernal++ available on EPROM – a standard version and a Powerload version. Both have the same functionality but the Powerload version is designed for users of 64HDD who have a PwrLoad cable for fast disk loads.



• Powerload version of Kernal ++



• Standard version of Kernal ++

DOS COMMANDS

The DOS Wedge intercepts the crunch vector (\$0304-\$0305), so program execution speed won't be affected. All wedge commands must start at the first position of a *logical* line. The following commands are supported:

- % Load an ML program (same as ,8,1). The end of program pointers are *not* modified, so you can load ML without affecting BASIC. However, for this reason, don't try to load a BASIC program with this command.
- / Load a BASIC program.
- ↑ Load and run a BASIC program.
- ← Save a BASIC program.
- = Verify the program in memory with a file on the disk.

- # Display a sequential file on the screen. The RUN/STOP key will abort the display. No character checking is done; cursor commands and colour changes will print, so be careful what you try to display. Only SEQ files will work.

All of the above commands have the same syntax: **%filename**. You don't need quotes. However, if you list a directory and place one of these characters in the first position of a line with a filename on it, the command will execute properly.

The following commands all begin with '@'. You can also use '>' instead if you prefer.

@ Read error channel.

@#<number> Change the drive number the wedge accesses. The number can be from 4 (yes it's possible to have a drive #4) to 9. To use device 10, enter @:, and for drive 11, @; (this works for most DOS wedges by the way).

@\$ Displays the disk directory without overwriting the BASIC program in memory. The F1 key acts as shortcut to type in the command @\$:* The RUN/STOP key will abort the listing.

@<disk command> Send a command to the drive, e.g. @s0:filename.

@Q Quit wedge. To re-enable, use **SYS 65526**.

THE '!' COMMANDS

The commands in this group of BASIC enhancements are preceded by '!':

!D Restore default screen colours. This command will set the screen colours to the power-up configuration.

!<number> Set background and border colours. Use the same number you would use if you were poking locations \$D020 and \$D021 directly.

!* Un-new BASIC. If you accidentally enter NEW (or hit a reset button), this restores your BASIC program. It's also handy if you inadvertently load a BASIC program with the '% command. Just use this command to set the pointers properly.

SCREEN EDITING

Several new Screen Editor commands have been added. All are activated by pressing the **CTRL** key at the same time as the key listed. They can also be used from within a program by using the CHR\$() code given.

- **INST/DEL - CHR\$(23)**: Toggles quote mode on and off. Cancelling quote mode will also cancel insert mode if that is active.
- **CLR/HOME CHR\$(22)**: Homes the cursor to the bottom of the screen.
- **RETURN CHR\$(21)**: Clears the line that the cursor is on from the cursor to the end of the line.
- **VERT. CURSOR CHR\$(25)**: Clears the screen from the cursor to the bottom of the screen.
- **HORIZ. CURSOR CHR\$(26)**: Clears the screen from the line the cursor is on to the top of the screen.

OTHER GOODIES

Several other patches are included to enhance the Kernal's operation or change the standard defaults:

- The default LOAD device is now 8. **LOAD "0:filename"** will load from the disk instead of the cassette.
- The default OPEN device is now 4 with a secondary address of 7. **OPEN 4** now behaves like **OPEN 4,4,7**.
- Pressing SHIFT and RUN/STOP together will generate **<RETURN> RUN <RETURN>**. The logo key and RUN/STOP will generate **LOAD"0:*",8,1** without a RETURN
- The screen will not scroll while the SHIFT (or SHIFT LOCK) key is depressed. This is handy when listing BASIC programs.
- Holding down the CTRL key while turning on the computer (or hitting the reset button, if you have one) will load the first program on your disk (same as **%0:?*).** This is a handy option for booting games and other programs that have an auto loader.
- Holding down the SHIFT key while turning on the computer will load the first program on the disk and RUN it (same as **↑0:?*).**

Code by William Coleman published in Transactor Magazine February 1989