## SD2PET FUTURE AND SD2PET PLUS USER GUIDE

INSTALLATION

There are three edge connectors on the back of most models of Commodore PET, which are usually unlabelled. Two 24 way, and one 12 way. With the PET switched off, the SD2PET should be plugged into the 24 way IEEE-488 bus connector on the left (looking from the front of the PET). The SD2PET power cable should be plugged into the 12 way datasette connector on the right hand end (with the writing facing up, note the orientation of the cable). The middle connector is the user port and this is not used. The SD2PET should always be plugged directly into the PET. Other combinations of adapters or extension cables are unsupported.
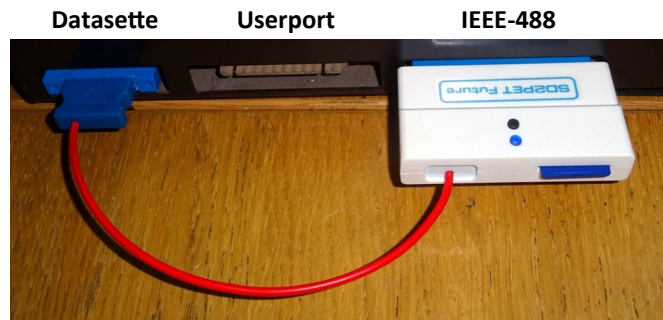
SD CARD PREPARATION

SD cards are available pre-loaded when ordering an SD2PET, there is also a download pack available to create your own (tfw8b.com/downloads), or you can start with a blank card and add the files you want. Cards should be formatted FAT16 or FAT32, if you have any problems, try using the official SD formatter tool from sdcard.org

USAGE

There are various different command sets that can be used to access the SD2PET devices. These are generally interchangeable, and you can use any ones you prefer. C64/VIC20 users may prefer the traditional commands. Users of fastload cartridges may prefer the DOS wedge. PET users may prefer the BASIC 4 disk commands.

TRADITIONAL COMMODORE BASIC DISK COMMANDS

This is the set of generic commands that are used across the range of Commodore machines, including PETs with BASIC 2.0 and 4.0. (BASIC 1.0 is effectively broken, so should not be used).

- **LOAD "$",8** - Load a directory as a file, use **LIST** to view. Overwrites current program.
- **LOAD "*",8** - Load the first file in the directory
- **LOAD "*filename*",8** - Load the program *filename*
- **SAVE "*filename*",8** - Save the current program as *filename*
- **VERIFY "*filename*",8** – Verify the current program matches the saved *filename*

PET / CBM BASIC 4.0 DISK COMMANDS

BASIC 4.0 introduced a few additional commands specifically for disk drives

- **DIRECTORY** – Displays a disk catalogue without overwriting the current program
- **CATALOG** – Displays a disk catalogue without overwriting the current program (yes it's the same)
- **DLOAD "*filename*"** - This is the equivalent of **LOAD "*filename*",8**
- **DSAVE "*filename*"** - The is the equivalent of **SAVE "*filename*",8**
- **SCRATCH "*filename*"** - Delete the file *filename* – you **will** be asked for confirmation
- **PRINT DS$** - This shows drive status
- SHIFT + RUN/STOP – This key combination will load and run the first file in the current directory

ADVANCED FEATURES

USING DOS WEDGE

The easiest way to control the drive is to use a DOS Wedge, such as Nils Eilers CBM DOS Wedge.

The TFW8b download pack and pre-loaded SD card already contains the wedge. To load, just type **LOAD "WEDGE",8** and **RUN** (or use SHIFT + RUN/STOP if you are using BASIC 4.0 and have the wedge as the first file on your SD card).

If you have a Tynemouth Software PET ROM/RAM board, all the BASIC 2 and BASIC 4 ROM images already contain the DOS Wedge as an option ROM at 0x9000. To activate it, type **SYS 36864** (or it's easier to remember to type **SYS 9*4096**)

You can also download the ROM image and burn to an option ROM or Steve Gray's Editor ROM.

COMMANDS:

- **/** *filename* – load the program *filename*
- **↑** *filename* – load a run the program **filename**
- **@** - Display drive status (at power on, this will show version information)
- **@$** - Display a directory of files (does not overwrite the current program like **LOAD"$",8** does)
- **@CD:** *folder* – change into a subdirectory on the SD card
- **@CD:** *games.d64* – mount a disk image (supported types D64, D71, D80, D81, D82)
- **@CD←** – unmount a disk image (if mounted) or change to the parent folder
- **@C:** *new=source* – create a copy of '*source*' called '*new*' in the current folder
- **@R:** *new=old* – rename a file to '*old*' to '*new*' in the current folder
- **@S:** *filename* – scratch (delete) the file *filename* (you **will not** be asked for confirmation)

WITHOUT DOS WEDGE

To access the more advanced features of the SD2PET without the DOS WEDGE requires use of **OPEN** and **CLOSE** commands. These always take the same format. The command in quotes is the same as the **@** commands above, but without the **@**. Here are some examples

- **OPEN 1,8,15,"CD:** *image.d64***" : CLOSE 1**
- **OPEN 1,8,15,"CD:** *games***" : CLOSE 1**
- **OPEN 1,8,15,"R:** *new=old***" : CLOSE 1**

NOTES

In many commands, the filename can use wildcards, so **DLOAD"inv*"** will load INVADERS. (As you can see, you can also miss off the closing quotes in BASIC 4 disk commands). You can also use **LOAD"inv*",8** or **↑INV***

Files on the SD card are not case sensitive, so will all be displayed in the current letter case.

The SD2PET is device ID #8. This can be changed, but it is best left at 8 as this is assumed by BASIC 4 commands

Disk commands in BASIC 1.0 are essentially broken, so that is not supported. If you have BASIC 1.0, you should look at upgrading to BASIC 2.0 or 4.0 using replacement ROMs or a Tynemouth Software PET ROM/RAM board.

BASIC commands that fail will not always show an error, this is how they normally operate with original Commodore disk drives as well. Remember to check status with **@** or **PRINT DS$** This is particularly important when saving files as if you have an existing file with the same name, it will fail rather than overwrite.

If you get **?DEVICE NOT PRESENT** errors, try cleaning the contacts of the edge connectors.

The button on the SD2PET Future will reset the disk drive, should that be required.