

# DIRPLUS V7.0

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## Introduction

DIRPLUS is a SD2IEC file browser, program starter and file manager solution for your Commodore 8 bit home computer. My goal with the file management functionality has been that you never should have to put your SD card in a modern computer for file management. You can copy and paste files between folders, rename files etc. You can view some file formats and even extract files from disk images. You can also set 16 global tools that you can reach from any folder or disk image. For example, start an outside word processor inside of a disk image that only contains text files. DirPlus is also the only browser that lets you browse around while the directory is still being loaded.

## Computer model support chart

Computer	DirPlus Browser functionality	DirPlus Dos	Soft Jiffy disk turbo included	Pi1541 support
<b>C64</b>	Full	Yes	No. (Most C64 users have a fast loader cartridge).	Yes*
<b>Plus/4 (or expanded C16)</b>	Full	Yes	Yes, but only used if needed.	Yes*
<b>Unexpanded C16</b>	Partial. (It's slower and lacks many functions).	Yes	Yes, but only used if needed.	DirPlus Dos: Yes* Browser: No
<b>Vic-20</b>	Partial. More functionality with ram expansion than without. Also includes special Vic-20 features.	Exp: Yes Unex: No	Yes, but only used if needed.	Dirplus Dos: Yes* Exp. Browser: Yes* Unex. Browser: No
<b>C128 in 128 mode (40 and 80 column mode)</b>	No (cbm file browser 128 by nbla000 is started by default).	Yes	Yes	DirPlus Dos: Yes* Included browsers: No

*\*Pi1541 Support: Only functions possible on the Pi1541 works on a Pi1541 (of course). Read the pi1541 section for more information.*

The versions for the different computers are part of the same installation and the correct program is loaded when starting the program "D". This way, you can use the same SD card for all computers.

There is a built-in function that lets you put this “D” starter program as the first program of the current directory. This way you can easily restart Dir Plus from the current directory just by pressing Shift-Run/Stop (C128/Plus/4 or any computer with JiffyDos)..

To start C64 Dir Plus with The Final Cartridge III, it’s easiest to first type a D and then press Shift+RunStop. Then you will get an auto starting DLOAD, exactly like on the Plus/4 and C128.

On the Vic-20 (without JiffyDos), start with LOAD”1//:D”,8 and then RUN.

***Plus/4/c16 Warning***

**(264 computers only) The datasette should be disconnected** when using this software (because of SJLOAD). **Risk of damage** if you leave it connected! **But it should however be OK to take power from the cassette port to your SD2IEC.**

More information from the developer of SJLOAD here: <http://bsz.amigaspirit.hu/sjl264/>

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## ***How to install - Step One***

Extract the archive to the root dir of the first partition of your SD card. Keep the file folder structure and names as they are. Don't add ".prg" or anything like that!

```
//D
//1
//DIRPLUS/
//BOOTSECT.128
```

This is how it should look. These files and folders should be found in the root dir.

The program D is what you start. ("D" is short for "Dir" or "DirPlus").

### ***Step Two:***

#### ***Making DIR PLUS auto start when pressing shift+runstop***

(Not Vic-20): If you make sure the file "D" is the first file of your directory, then it will be loaded when pressing Shift+Run/Stop (On C64+TFCIII: Write D followed by Shift+Run/Stop). Dir Plus has a built-in function to make "D" the first file. When it's running, just press "P" (for "Prepare dir" or "Put D") in the directory you want to prepare. If the current directory doesn't contain a "D" then it will be copied there from the root. Note that under some conditions, you need to repeat the procedure and press "P" more than once.

Prepare the dirs that you use the most. For example your root dir and your games dir. Then after playing a game, you can just reset and then press shift-run/stop. Dir Plus will then start in the games directory right away. You can't "prep" disk images.

#### ***Restarting DIR PLUS from any subdirectory after a reset***

(except for from disk images on partition 1)

If you have prepared the dir (see above), then just press Shift-Run/Stop. If not, then do the following instead:

```
LOAD"1//:D",8
RUN
```

Now, DIR PLUS will be started and show the files of the sub directory you are in. Note that DLOAD doesn't work for this.

## **SD2IEC Partitions**

If you have more than one partition on your SD card, you can use the arrow up sign key ↑ in the browser(s) to change partitions. In Dirplus Dos, use the CP command. To my knowledge, the DirPlus Browser is the only browser in existence that supports SD2IEC partitions.

**IMPORTANT:** DirPlus should be installed on your first partition (nr 1).

**Partitions makes it possible to copy files in and out of disk images using the normal copy function (when copying between partitions).**

**You can also more easily restart dirplus when you are inside a disk image (on other partitions than 1).**

You can "prepare" (put the D starter) in any folder you like, including folders on other partitions and DirPlus will be loaded from partition 1 anyway. But be aware that this won't work if a disk image is currently mounted on partition 1. External viewers won't work either when a disk image is mounted on partition 1. So the best would be to put all of your disk images on other partitions than 1 to prevent this from happening. (I have no clue why SD2IEC was implemented this way).

**You can restart DirPlus with: LOAD"1//:D",8 and RUN. This can be done from any folder on any partition or from within disk images on other partitions than 1.**

Note that each partition has its own current directory so if you change partition and return to the same partition later, you will get back to the same folder you left from.

If you use partition 1 as a Dirplus system partition (plus some other useful tools) and keep all of your d64s and games on other partitions, then you would never have to leave the root dir of partition 1 and then you can always reload dirplus with just:

`LOAD"1:1",8`

or if you have JiffyDos:

`↑ 1: 1`

Why 1:1 and not 1:D? Well, you can use 1:D but I copied D to an extra file called 1 just because it's easier to type 1:1 than 1:D.

You can directly reach a file on any partition without making it the current partition first by using the partition number in the file name, for example:

"4:HELLO" means the file HELLO in the current directory of partition 4.

"2//GAMES:BG" means the file BG in the folder GAMES of partition 2.

SAVE"@2//GAMES:BG",8 means to overwrite the said file.

This works from any program.

**IMPORTANT:** Be sure to backup your SD card before attempting to create new partitions! Using a Windows PC, you can at maximum create 4 partitions on a SD card.

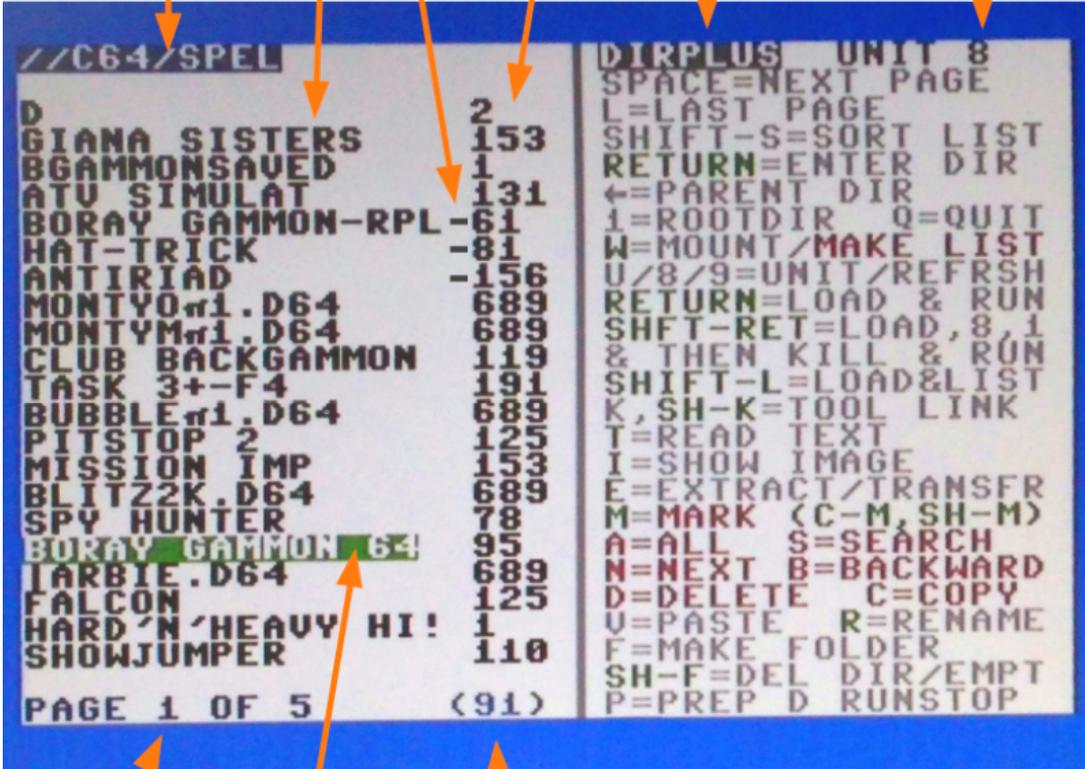
### *Pi1541 support*

DirPlus has some Pi1541 support. If you have both a SD2IEC and a Pi1541 connected, then start DirPlus from the SD2IEC and everything will work inside disk images on the Pi1541. In the Pi's browse mode however (which means outside of disk images), not everything will work. **Remember NOT to use any spaces in file names outside of disk images on the Pi.** You can browse around, rename files, delete files, create disk swap lists, enter disk images, start programs, create new d64s but that's about it. The Vic-20 browser has the best Pi support. With it you can also read text files outside of disk images and also get the start address of prg files.

If you only have a Pi1541 connected, then put the disk image DIRPLUS/PI1541.D64 on your Pi1541's SD card and start the first file in that disk image. Please note that many features of DirPlus and Dirplus Dos are dependent upon external files. None of these functions will work with Pi1541 when going outside of this disk image.

I've spent a lot of time trying to get around the incompatibility of the Pi1541 but unfortunately the browser may lock occasionally. You will hopefully not experience this, but if you do, then just press runstop+restore and then run. You might have to run twice.

*Using Dir Plus: General information (Old picture but the principles are the same)*



Current dir (red if path isn't known)      Marked files      Help section      Current unit

Names      Sizes

```

//C64/SPEL
D
GIANA SISTERS          2
BGAMMONSAVED          1
ATU SIMULAT           131
BORAY GAMMON-RPL     -61
HAT-TRICK             -81
ANTIRIAD              -156
MONTYD.r1.D64        689
MONTYM.r1.D64        689
CLUB BACKGAMMON      119
TASK 3+-F4           191
BUBBLE.r1.D64        689
PITSTOP 2            125
MISSION IMP           153
BLITZ2K.D64          689
SPY HUNTER            78
BORAY GAMMON 64      95
JARBIE.D64           689
FALCON                125
HARD 'N 'HEAVY HI!   1
SHOWJUMPER           110
PAGE 1 OF 5          (91)
DIRPLUS UNIT 8
SPACE=NEXT PAGE
L=LAST PAGE
SHIFT-S=SORT LIST
RETURN=ENTER DIR
←=PARENT DIR
I=ROOTDIR Q=QUIT
W=MOUNT/MAKE LIST
U/8/9=UNIT/REFRSH
RETURN=LOAD & RUN
SHFT-RET=LOAD, 8, 1
& THEN KILL & RUN
SHIFT-L=LOAD&LIST
K, SH-K=TOOL LINK
T=READ TEXT
I=SHOW IMAGE
E=EXTRACT/TRANSFR
M=MARK (C-M, SH-M)
A=ALL S=SEARCH
N=NEXT B=BACKWARD
D=DELETE C=COPY
V=PASTE R=RENAME
F=MAKE FOLDER
SH-F=DEL DIR/EMPT
P=PREP D RUNSTOP
    
```

Page nr      File name cursor      Number of entries

Use the cursor keys to move the highlighted **file name** cursor.

On the right side of the screen is a help section listing all different keys you can use.

The keys that are marked **green** in the help section act upon the highlighted **file name** cursor. For example, **RETURN** will load and start the highlighted filename or enter it if it's a dir or disk image. (Dirs shows a file size of zero).

There are also **light red/pink keys** in the help section. (In V4.0 these got cyan instead). These have to do with marking of many files and then acting upon them all in one go. You mostly mark files with **M**. Then you can delete or copy them all in one go.

### *The meaning of the status bars colors*

On the C64 and Plus4 the directory is loaded in the background while you can browse around and use DirPlus normally. You can go ahead and start a program and not bother about if the dir has been completely loaded or not. You will literally see the file list being filled in while you browse. You can use all navigation and marking keys while it's loading. If you use any other function, then the loading is stopped and you continue with what you have. The title/path bar is blue if the whole dir has been loaded and orange otherwise. The bottom status text (page 1 of 3...) is orange if the dir is loading and blue if the loading has stopped (doesn't need to be complete). So the color combination of these two will give you the current dir status:

Orange + Orange = The directory is being loaded.

Blue + Blue = The loading is ready and the file list is complete.

Orange + Blue = The file list is not complete. The loading was stopped by user activity other than navigating and marking.

On the Vic-20 and C16, the directory is loaded first and while it's loading you can't do anything else. You can press space though to break the loading and continue with the file list you have got so far.

On the Vic-20, the title and status bars are blue for the expanded version and green for the unexpanded version.

### *How to...*

Here follows a "how-to" section describing different tasks and functions. This is the opposite to the help screen which lists keys and then their action. Here is the other way around.

### *Cursor movement*

#### **Go one step up or down**

Press cursor up or down

#### **Go to the next page**

Press cursor right or space. Space differs as it loops back to page one after the last page.

#### **Go to the previous page**

Press cursor left.

#### **Go to the last page**

Press L

#### **Go to the last file**

Press L followed by cursor right.

**Go to the first file**

Press L followed by space.

**Go to the next marked file**

Press N

**Go to the previous marked file**

Press B (for “Backwards”)

**Go to the next folder**

Press Shift-N

**Go to the previous folder**

Press Shift-B

**Go to a random position in the list**

Press X

**Sort the file list**

Press Shift-S. If you want to break the sorting of a huge list, then press any key. (On the C64 you can also choose to “unsort” which randomizes the file list).

***Disk navigation*****Enter a dir or disk image**

In the file list, directories show a file size of 0. Move the highlighted **file name** cursor to the directory in question and press RETURN.

**Go to the parent dir**

Press ESC (Plus/4) or the <- arrow in the upper left corner of the keyboard.

**Go to the root dir**

Press 1.

**Change device number**

Press 8, 9 or U (for unit). Plus/4 note: SJLOAD doesn't work with non-jiffydos drives, so before going to (for example) an unmodded 1541 drive with the U command, first turn off SJLOAD with the J key.

**Reload the current dir**

Press 8,9 or U (for unit).

**Navigate using a link**

Read the section [Global tools / Tool Links / Folder and disk image links](#)

## *Loading/Starting programs*

### **Load and run a program**

Move the highlighted **file name** cursor to the file in question and press RETURN. You can also use this to display some text files and images. See below.

### **Load a program ,8,1 instead of ,8 and then turn SJLoad OFF (C64 kill) and then run.**

Move the highlighted **file name** cursor to the file in question and press Shift-RETURN. (If you give a program a ".k" name extension, then this will also happen if you press return.)

### **Load and list a program**

Move the highlighted **file name** cursor to the file in question and press Shift+L.

### **Load a program that is located in another directory while staying in the current directory.**

Read the section [Global tools / Tool Links / Folder and disk image links](#)

### **Start a cartridge image on the Vic**

Read the special Vic-20 section.

### **Turn soft SJLOAD ON or OFF**

Plus/4/c16 and Vic-20: Press J (J stands for Jiffy). Note: Don't use this function if you are not using soft jiffy. Then, the 3+1 software will be started instead.

C128: Turn off soft jiffy with run/stop-restore. Turn on by reloading D or with a F-key.

### **Quit in the current directory**

Quit to basic: Press Q twice. You can restart DIRPLUS with RUN.

Quit to Dirplus Dos: Press Q followed by D.

Quit to The Final Cartridge's Desktop: Press Q followed by F.

### **Restart DIR PLUS from anywhere on the SD card (except for disk images)**

```
LOAD"//:D",8
```

```
RUN
```

(also see separate section above)

### **Change your SD2IEC device to unit 9 (temporarily)**

Use the DirPlus Dos command MAKE. If you are in the browser, you can quit to DirPlus Dos by pressing Q and then D. In DirPlus Dos, use UNIT N to view different units (current unit is shown in the prompt). Use MAKE N to temporarily change the unit number of the device, for example MAKE 10. To go back to the browser, type BROWSE.

### **View a text file**

Press T. You can choose between an internal viewer and an external viewer. In the internal text viewer you can view petSCII files (and ASCII in reversed case letters). In the external viewer (C64 and Plus/4) you can view ASCII, PETSCII and SpeedScript files and you can also convert files between formats. To view a text quickly with the internal viewer, press T twice. In the internal viewer you can also write and view user notes and also create petSCII text files.

Something you will notice in the text viewers is something called a "fake address" and also questions on removing bytes at the start of the file. What is this? Well, if your text editor or word processor uses the kernal save routine to save your text, then the file will have a two-byte-address at the start of the file. This is the address that tells the computer where in memory the file should be loaded if you load it ,8,1. On the other hand, other programs save your file sequentially byte by byte instead, and then there will be no loading address. So these choices in DirPlus are to be able to read and create both of these. If you press T followed by T for the internal viewer, then it will try to decide automatically if it should remove two bytes or not. To override this, press R to remove the two bytes or K to keep them.

DirPlus' fake address is just a space and a return, which means it will load into editors not using the kernal load and save routines as well, without any troubles at all. The DirPlus Notes uses this "fake address" because I wanted to be able to edit them seamlessly with Final Cartridge's Notepad. Read more about the notes system under ["User Notes"](#).

### **View an image**

(Not Vic-20). Press "I". On the Plus/4, you can view Botticelli and Multi Botticelli pictures. On the C64 you can view Doodle, Koala Painter, Wigmore Artist 64, Art Studio and Advanced Art Studio. These are all autodetected when pressing return as well.

### **Slideshow**

(C64 only). Mark the picture files you want to include in the slideshow and then press "I". You will be asked if you want to shuffle the pictures and also how long to show each picture. The picture formats listed above are the supported ones. If you include other files, these will simply be skipped. (Note that the pictures need to have the correct loading address to be identified correctly).

During the slideshow you can press "Q" to return to DIRPLUS. You can also press "D" to delete the current picture. (There will be a yes/no question to confirm deletion). You can press "I" to see information about the picture (file name and file format) and after that, the next picture will be loaded. You can press "P" to pause the slideshow on the current picture. You can press "<-" to go to the previous picture and any other key (except "L" - see below) will skip the waiting and go to the next picture.

Let's say you want to use the slideshow for a retro style PowerPoint presentation, then name your files in alphanumeric order and use Shift-S to sort the directory before selecting the

files. Also set a high number for the waiting time. One hour is  $60*60=3600$  seconds. And then you can just go to the next or previous picture using the keyboard (or joystick).

If you put a joystick in port 1 then you can use it as a remote control. Press fire (or left or right) for the next slide. Move down for the previous slide.

Pressing "L" will engage the security lock which disables "quit" and "delete" and also locks runstop and restore. This is handy if you want a slideshow to run during a party or similar where there is a risk of people deleting your pictures "by accident". Only a hard reset will break the slide show when the lock is engaged.

### **Get information about a file**

(Not C16) Press "G" to GET information. On the Vic-20, you will get the file's loading address in HEX and DEC as well as the file size. On the C64 and Plus/4 you will also get an educated guess of what the file is, for example a program for 8K expanded Vic-20 or a koala painter picture. (You will get the same information with the Dirplus Dos Info command).

### ***Marking files***

#### **Mark the file under the cursor and go one step down.**

Press M.

#### **Mark all files.**

Press A.

#### **Mark no files.**

Press A again.

#### **Mark all files above the cursor**

Press Commodore+M

#### **Mark no files above the cursor**

Press Commodore+M again

#### **Mark all files below the cursor**

Press Shift+M. NOTE: On the Vic-20 this is multiload instead. See the vic-20 section.

#### **Mark no files below the cursor**

Press Shift+M again

#### **Mark a continuous subsection of the list**

Make sure no files are marked (by pressing A twice). Then go to the first file you want to mark. Press Shift-M. Then go to the file below the last file you want to mark and press Shift-M again. An alternative method would be to just press M for a while.

### **Search for files / Mark all files containing a specified word or letters**

(Not Vic-20) Press S and enter your search word. When the matches have been marked, press N and B to jump between them.

### **Search for files using a Commodore file name pattern**

When using the U key to load the directory, you can choose a CBM dos pattern and only filenames matching the pattern will be included. If you have a huge directory, this will be radically faster than the normal search function. This is especially useful on the Vic-20 which lacks the normal search function and also can't hold too many file names in memory. A pattern could be \*.d64, omega\* or ?????.txt for example. (But two stars doesn't work, eg \*gammon\*. Use the normal search function for that.) The search pattern will be shown immediately above the file list on the C64, Plus/4 and expanded Vic-20 browsers. On the C64 and Plus/4 you can omit the ending \* when entering a search pattern, for example, pressing U, then typing A followed by return will give you the search pattern A\* and all files beginning with A will be shown - all done with just three key strokes.

## *File management*

### **Copy files within the same unit**

First mark all the files that you want to copy (all in the same directory) for example by pressing M.

Then press C to reserve the names for copying.

Go to the target directory and press V. The files will be copied.

Plus/4/C64: If you copy to a different directory, the files will keep their original names. If your source and destination is the same directory though, you will be asked to edit every copy name.

Vic-20: You will be asked for an extension to add to the names. If you copy to the source directory, then you can write something like .bak which will be added to the new files. If you copy to a different directory, then just hit return on that question and no extension will be added.

### **Move files within the same unit**

First copy (as above). When the copy is complete and it asks you if you want to go back and mark the source files, press Y for yes. When it has loaded the dir and marked the files, press D to delete (as below). (On Vic-20/C16 you have to do it manually).

### **Copy a file from one unit to another**

(C64/Plus/4) Place the cursor on the file you want to copy. Then press "E". (See the note below).

### **Extract a file from a disk image (without disk partitions)**

(C64/Plus/4) Place the cursor on the file you want to extract. Then press "E".

*Note: For "E" to work, the file must be able to fit into memory. The loading address of the file can't be lower than about half of the screen memory either. ("E" even works for big programs that would cause "out of memory" if you try to LOAD and SAVE them manually on a C64). PLEASE NOTE that the destination filename may change when using E. This is to prevent possible problems with the SD2IEC file system. So if you attempt to extract a multi file program from a D64, then please check the names afterwards.*

### **Extract a file from a disk image (between disk partitions)**

Just use the normal copy function.

### **Delete files**

Mark all of the files you want to delete (for example with the M key). Then Press D.

### **Rename a file**

Press R to rename the file under the cursor. You can only rename one file at a time.

### **Create a new folder / directory**

Press F.

### **Delete an empty folder or a 0 blocks file**

Place the cursor on the directory or file you want to remove. Then press Shift-F.  
*(You can actually delete a normal file with this function as well, but it's slower than the normal delete function because the directory is re-loaded afterwards (not Vic-20)).*

### **Prepare this directory for shift-runstop start of Dir Plus**

Press P. Read more on page 3.

### **Create an empty D64 on Pi1541 (or format a physical disk drive)**

Press Commodore + N.

### ***Global tools / Tool Links / Folder and disk image links***

You can set up to 16 links that either can be tools/programs or folders/disk images (indicated by a "@").

If the link points to a tool, you can run that program from any directory or disk image regardless of where the tools reside on the SD card. To run one of the tools, press K and then select the tool to start from the list that will be shown. The program will be loaded and you will remain in the current directory! If the link is to a folder or a disk image, you will instead be taken to that folder and the directory will be loaded.

To set one of the 16 links, place the cursor on the entry you want to include in the list and then press Shift-K.

**On the Vic-20** this works in a quite different way compared to C64 and Plus/4, but the purpose is the same: To run an external tool but remain in the current directory. It works like this: Put the tools you want to reach this way in the folder //DIRPLUS/V/TOOLS/ and give them short meaningful names that you will remember. When you want to start one of the tools from DirPlus, first press K and then just type the tool's name you want to start. It will be started and you will remain in your current directory. Very simple and memory efficient. (Works on the expanded version only and not inside of disk images).

### ***Disk Swap Lists***

(C64/Plus/4) You (probably) have a disk swap button on your SD2IEC device. This button swaps between disk images defined in a disk swap list. To create (and mount) a swap list, first mark the disk images you want included in the list (use "M" for example), then press "W". If no files are marked, then pressing "W" will mount the file marked by the cursor as a swap list. Files ending with ".lst" will be auto mounted if pressing "return".

## User Notes

You can store 9 user notes (in each bank). These are stored in the directory //DIRPLUS/NOTES. You will quickly reach these from any directory by pressing T followed by the number of the note. You can also switch quickly between notes while reading by pressing 1-9. The notes are shown in the internal text viewer and you will remain in the current directory. You can create notes and add text to them directly in DirPlus without leaving the current directory. It works kind of like writing in a chat.

*With the internal text viewer, you can also add text to any petscii file, not just the notes, and also create new petscii files. You can also add the filenames currently marked in the browser, for example to add more .d64's to an existing swaplist.*

If you want more advanced editing than just adding text, then use a program that can edit petscii, for example Final Cartridge's Notepad. Tip: In Notepad you can use "@0:a1" as the load and save name to overwrite an existing file named "a1" (note 1 in the default "a" bank).

The DirPlus text viewer has automatic word wrap, so don't think about that while adding text. If you want to bypass the word wrapping, then use shift-space for spaces. You can also use the colors and effects that you normally reach with the control and commodore keys.

Note banking: You can use more than 9 notes by switching between banks (base names). The default base name is "a" which means your notes will be called a1, a2, a3... If you change the base name to something else, for example "games", then you will have 9 new notes with the names games1, games2, games3 and so on. Press "B" in the reader to switch between banks. If you want to move a note to a different number or bank, then just rename the file. If you for example rename the file "a9" to "b1" then it will move from bank "a" note 9 to bank "b" note 1.

Converting notes or other petscii text files to your PC: You can use DirPlus's external text viewer to convert texts to ascii. *(On the Plus/4 you have to go to speedsript format first though)*. Save your ascii text with a name ending with .txt and then you can just put your SD card in the PC and double click the file to open it.

Another option is to open the petscii files with PRG Starter on the PC. Just drop your file on the exe program PRG Starter and the text will be shown. There you can mark and copy the text or save a .txt file. This will even work if you stored your text in a .d64 (but why would anyone want to do that? ;-). PRG Starter is available at [www.boray.se](http://www.boray.se)

You can also reach the user notes from DirPlus Dos. Use NOTE A1 to view note 1 in bank A. Use NADD A1 to add text to note 1 in bank A. Write END to stop adding. This is the only way to handle user notes on the Vic-20 and C128.

### *The Vic-20 version*

The most obvious difference compared to the C64/Plus/4 is that the help section isn't visible all the time. Press H (help) to display it.

Be aware that the Vic-20 version doesn't have any error handling, so you have to observe for yourself that you got the result you wanted. For example, if you want to move a file, then make sure after the copy that you see the file in the destination folder before going ahead and deleting the source.

There are two versions, one for expanded Vic-20 (V51EX) and one for unexpanded (V40UN). The correct version is chosen automatically of course. The expanded version has more functions but not as many as the C64 and Plus4 versions. It doesn't have the picture viewers for example. Most of the features are there but implemented with limited memory in mind. The global tools feature works in another simpler way (read above). Only the expanded version works with the Pi1541.

There are different color schemes for the two different versions (blue for 51EX and green for 40UN) so that you will know right away which version you are running.

The vic-20 versions have extra Vic-20 specific features, such as automatic memory configuration depending on the program you try to run and automatic starting of cartridge images. The optimal is to have a fully expanded Vic-20 and then it will degrade to unexpanded or 3K expanded automatically when needed.

Soft jiffydos is selectable at startup and can be allocated to three different memory blocks, 0 (the 3k ram expansion), 3 or 5. You have to have ram expansion in the chosen block (of course) and you can not use that block for other things at the same time (of course). If Dirplus finds sjload in memory after a reset, it will restart it without any questions. However, if you hold down the Commodore key while starting DirPlus, sjload is removed from memory and you will get the start menu.

To run a cartridge image, make sure you have expansion memory in the area it is using. Then just press return on the file. You can see which memory location the program (or cart image) will use by pressing G on it (for GET information).

You can also autostart two-part cartridge images. Mark both files and then press Shift-M (for multiload). Note that Shift-M does something else in the C64 and Plus/4 versions (special marking feature).

Something to think about when using the Vic-20 version is that the browser auto starts programs with the correct configuration, for example it unexpands itself if you run an unexpanded program, BUT DirPlus DOS doesn't do that at all. It loads anything ,8 regardless of if the program is made for your current configuration or not.

Tokra's "Maxi Edit" is included in the Vic-20 tools dir and is useful if you want to read or write text in DirPlus Dos. It doesn't work with the browser. It requires RAM in block 5 to work. (Download the full Maxi/Uber-edit package if you want to put it elsewhere). You start it from Dirplus Dos with the command:

```
GET MAXI
```

...or from the browser you press K and then type MAXI. Then Maxi Edit will be started and Dirplus Dos will then be (re)started. Please note that Soft Jiffy will be disabled.

Dos Wedge works with Maxi Edit. Start it with GET WEDGE (from Dos).

If you want to restart DirPlus Dos with Maxi Edit active, then don't start it by loading "d". Do this instead:

```
LOAD"//DIRPLUS/DOS:CLI",8
```

```
RUN
```

Both Maxi Edit and Dos Wedge survive a RunStop-Restore!

With the tool UNEXPAND (GET UNEXPAND) you can reduce a 8+k expanded computer into an unexpanded machine or a 3k expanded machine. Please don't try to unexpand to a 3k expanded machine while using soft jiffy in block 0.

Note that Maxi-Edit and Soft Jiffy can be placed in block 5 at the same time, but Maxi-Edit will disable Soft Jiffy. It will however be detected and restarted if you start "d" after a reset.

## The C128

There is no full C128 version of the dirplus browser. If you start "D" on a C128, then Soft Jiffy will be loaded and the FB128 browser will be started. DraBrowser is also included. You start it by holding down C= while starting D.

The C128 starter auto detects if soft jiffy is already in memory and then starts it, (just like the Vic-20 version). On the C128, Soft-Jiffy is used even if you have a JiffyDos rom because there is a bug in the JiffyDos ROM sometimes locking the computer after load. So loading Soft Jiffy serves as a bugfix for this. If you prefer using the JiffyDos rom, then load the file //DIRPLUS/128, delete line 13 and re-save, like this:

```
LOAD"128",8 {return}
13 {return}
SAVE"@:128",8 {return}
```

The C128 auto boots. To auto boot, first reset your SD2IEC (or cd//) and then reset your C128. If you don't want it to autoboot, then delete or rename the file bootsect.128. (You can put this file and "D" in any directory you want to boot from... seems to work most of the time anyway).

DirPlus Dos is available on the C128. You start it by holding down shift while starting D. There are some special C128 commands in Dirplus Dos:

- The arrow left symbol switches between the 40 and 80 column displays which is handy if you have a dual screen setup.
- The other arrow symbol (arrow up) divides the 80 column display into two 40 column windows and also switches between them. To get the full 80 columns back, use CLS. If you want to continue to work in basic with the two windows, then use the command GET 2X40. This sets the F-key of your choice to switch between the two windows.
- You can also start a 2MHz border turbo with the command GET TURBO. It speeds up the SLOW mode by 35% and works well together with DirPlus Dos and Soft Jiffy. Note that the border turbo has to be disabled if a basic program uses GRAPHIC1 to open a graphics screen. If you want to use the turbo in your own graphics program, then disable the turbo with SYS4867 before the GRAPHIC1 command and then restart it with SYS4864 after the GRAPHIC1 command.

If you want to access the FAST command or any other basic command, do:

```
BAS FAST
```

(Read more about Dirplus Dos in the next section).

Tip: If you want to switch from one browser to the other or start DirPlus Dos from a browser, then just start the "D" program from the browser and hold down Shift or C= accordingly.

## DirPlus Dos

This is a feature available on the Vic-20, C128, Plus/4, C16 and C64. It's a command line interface or command prompt, something like Dos. So why did I add this to dirplus? There are two reasons: #1: I wanted to quickly reach global tool programs without having to start up the whole dirplus browser, for example compiling a program when the compiler isn't in the same directory. #2: The C128. I have not ported the dirplus browser to the C128 and I have no plans of doing that, but I still wanted a quick and useful way of navigating and performing file operations on the C128 in both 40 and 80 column display. Dirplus Dos is one and the same basic program running on all the machines, with adaptations for the different machines detected during run time. Dirplus Dos also lets you read or add text to the user notes, something that isn't possible in the browsers on the Vic-20, C16 and C128.

### Starting DirPlus Dos

You start DirPlus Dos by holding down the Shift key while starting the D starter. You can also quit to DirPlus Dos from the DirPlus browser by pressing Q and then press D. A third way is to start the program DIRPLUS/DOS/CLI.

Normally, you start the Dirplus Browser by starting the D program that should be located as the first file in every frequently used directory. Then you just press Shift+Run/Stop to start DirPlus. (On a C64 with TheFinalCartridge, you first type a D and then press Shift+Run/Stop). Now to the nice part: If you want to start DirPlus Dos instead of the DirPlus browser, then you just continue to hold down Shift. In other words: Hold down Shift and then briefly press run/stop and then continue to hold down shift.

Note: The Plus/4 is a little picky about holding down shift. The loading pauses so you will have to release it briefly and then hold it down again, one or two times.

### Using DirPlus Dos

Like all other command line interfaces, you type something and then press return to execute. Be aware that commands that are not recognized by DirPlus Dos will be sent directly to the command channel! So if you type hello and press return, this will happen: OPEN15,8,15,"HELLO":CLOSE15. And then the directory will be shown. The command HELLO won't harm your SD2IEC though so you should not be too afraid. But this means that you can use all SD2IEC commands there are and even future ones.

Never use "-signs. For example, LOAD"FILE NAME",8 in basic will equal to just LOAD FILE NAME

Arrow keys up and down lets you bring back the last eight commands entered.

Here follows a description of commands to use. These are a mix of SD2IEC commands, good old 1541 commands and internal DirPlus Dos commands:

HELP

Get help, similar to this description below. (External command)

Go to parent directory:

CD <- or CD:<- or CD .. or CD..

Go to root directory:

CD // or CD//

Go to the directory named files:

CD FILES

Full path example:

CD//C64/GAMES/NEW

Show directory contents

DIR (or just pressing return)

Wildcards works

DIR SUPER\*

You can break a directory listing with the run/stop key.

To turn on or off auto dir after cd commands:

AD

Load and run a program:

RUN NAME

Load and run first program:

RUN \*

Load and run the first program starting with the letters SUP

RUN SUP\*

Load and list a program:

LOAD NAME

Load and run one of your global tools (On the C64 and Plus/4 these are NOT the global tools of the DirPlus browser. More about this later).

GET NAME

Go to your global tools dir and show the files (autodir is also turned on)(More about this later).

TOOLS

Delete a file (S means Scratch):

S:NAME

Delete some files:

S:NAME1,NAME2,NAME3

Delete all files starting with Z

S:Z\*

Copy a file:

C:SAVENAME=FROMFILE

If you want to copy a file from another directory, then do like this: First CD to the target directory. Then copy and use the full path for the source file like this:

C:SAVENAME=//C64/GAMES:LE MANS

Using a path in the savename won't work!

Rename a file:

R:NEWNAME=OLDNAME

Make directory:

MD:NAME

Remove empty directory:

RD:NAME

Go to another drive:

UNIT N

(For example UNIT 9)

Change the unit number of current drive temporarily:

MAKE N

(For example MAKE 9)

Change SD2IEC partition number, for example go to partition 2:

CP2

Prepare this directory for Shift-Run/Stop start:

If the dir is empty:

PUTD

If not empty, then dir to see the name of the first file in the directory and then

PUTD NAMEOFFIRSTFILE

Show the contents of a text file:

TYPE NAME

You can pause with space and quit reading with run/stop. Full paths can be used, for example TYPE //TEXT/NOTEPAD:NAME

Add text to an existing file or create a new one:

ADD NAME

(END stops adding).

Show a user note (What is a user note? See the section about [user notes](#)).

NOTE bank+number, for example:

NOTE A1 for the first note in the default bank A.

Add text to an existing note or create a new one:

NADD bank+number

(END stops adding).

CD to the user notes dir:

NOTES

To turn on or off extra delays for Pi1541:

PI

To turn on and off some JiffyDos adaptations:

J

With J turned on, @\$ will be used for DIR (on C64 and Vic-20) and @T will be used for TYPE. Note that you can't use the stop key to break a listing in this mode.

Run a basic command:

BAS COMMAND

You can for example use this as a calculator:

bas print (34-11)/12

...will display the result 1.91666667

Get info about a prg file based on it's address (external command):

INFO NAME

Exit to Basic:

X

Start DirPlus Browser:

BROWSE or BROWSER

Switch between 40 and 80 columns on the C128 and go to slow mode:

{arrow left symbol}

(or Esc x)

Divide the C128 80 column screen into two 40 column windows and also to switch focus between these two windows:

{arrow up symbol}

Clear screen and cancel 2x40 80 column mode:

CLS

## Global Tools (Dirplus Dos)

These are NOT the global tools of the DirPlus C64/Plus/4 browser. They do however work in the same way as the global tools of the Vic-20 browser and use the same directory as those. (This was the seed to the whole DirPlus Dos!)

The purpose is to reach and run a program in a special folder, but remain in the current folder. There are four folders for this, one for each computer:

```
//DIRPLUS/C64TOOLS/  
//DIRPLUS/C128TOOLS/  
//DIRPLUS/PLUS4TOOLS/  
//DIRPLUS/V/TOOLS/
```

Just put the tools you want to reach from anywhere in there and give them short meaningful names that you will remember. To start one of the tools you do:

GET NAME

for example

GET EDITOR

and if you for example are on the C128, the file //DIRPLUS/C128TOOLS:EDITOR will then be started - but you will remain in the current directory.

To go the tools dir and show the directory you can use this command:

TOOLS

You can also make shortcuts to directories and put them in your tools directory. I have prepared for this by putting the short basic program "SHORTCUT" in the tools dir. Let's say you want to make a shortcut to your documents directory. Then first go to your tools directory with the command: TOOLS. Then load and list the file SHORTCUT with the command LOAD SHORTCUT. Edit it at the beginning where it says: "Put your dos command here" or similar, it could be something like: "CD//C128/TEXT/DOCS". Then save it with your shortcut's name, for example SAVE"DOCS",8. After this, you can jump directly to your docs directory with the command GET DOCS.

As an ending: An example from real life: I am editing a basic program somewhere in some directory and now I want to compile it with the boss compiler. I type a D

(because I'm on the C64) and then press shift+run/stop and then continue holding down shift. When the dos prompt 8> appears, I write GET BOSS and after a while, the boss compiler is up and running, ready for compiling the program.

### ***Credits, Background and short history***

SD2IEC DirPlus was created by Anders Persson in 2018 and it was developed from the "Vic-20 Disk Menu" which was developed in between 2004 and 2015 by the same Anders Persson. (Very first version by Leif "Schema" Bloomquist). Versions of Vic-20 Disk Menu has been included on a couple of Vic-20 cartridges, for example the legendary "Mega Cart".

Dir Plus V1.0 was heavily expanded from the Vic-20 version. The size of the source code increased by 300%. And even so, much of the original code was removed because it was Vic-20 specific. The included and utilized SJLOAD for Plus/4 (SJL264 Light V0.3) is used by permission and was made by Balazs Szabo (BSZ) in 2018, developed from the C64 version of SJLOAD.

With V3.0 the C64 was also embraced in the Dir Plus experience. This version was at the time the biggest upgrade ever. Soft Jiffy 128 used on the C128 in V3.0 and forward was made by Robert Willie / hydradix / h2obsession and is used by permission. The 2MHz border turbo was made by the same Robert Willie. FB128 by Nbla000 is also used by permission.

V4.0: As said, dirplus originates from the Vic-20 program "Vic Disk Menu" and now, this program has been reintegrated into DirPlus. Daddy has come home to the DirPlus family so to speak. Background loading of the dir was a big improvement in this version for the C64 and the Plus/4.

V5.0 news:

- "DirPlus Dos" (an additional command line interface for C128, C64 and the 264 computers).
- An internal text reader and a system for writing and keeping user notes on the C64 and Plus/4.
- A slide show function and more supported picture formats on the C64.
- Better text conversion on the C64.

V6.0: Various improvements. Search pattern dir. DirPlus Dos improvements and extra DirPlus tools for Vic-20 and C128.

V7.0: SD2IEC Partitions support. Improved JiffyDos support. Epyx Fastload support. Reduced loading time. Create D64. Various improvements.

## *Version History*

**V1.0** was released on Feb 17 2018.

**V1.1** was released on Feb 25 2018: While the directory is loading, the file names are now displayed in pages instead of continuously scrolling. There are two benefits with this:

- It's up to 30% faster.
- It's easier to spot a file name and know which page it's on even before the whole directory is loaded.

**V1.2** was released April 15 2018 and includes a couple of speed-ups and a minor fix.

**V1.3** is a bug fix version released July 22 2018. Previous versions didn't work properly with SD2IECs with device numbers other than 8. Thanks to André Fedorow for the bug report.

### **V1.4 December 2018:**

- In all previous versions, a wild card was inserted in the filename before loading if the filename was 16 characters or longer (for compatibility with 64HDD etc). So if two filenames were 16 characters long and only the last letter differed, the wrong program could be started. This behaviour was now removed for better compatibility with SD2IEC and normal disk drives.
- The rename function now checks if the name contains a slash (/) because if it does, you can accidentally delete a whole folder when trying to rename it.
- The border color is now set to the default.

### **V2.0 April 2019:**

- DirPlus will now display Botticelli and Multi Botticelli pictures automatically. The viewer is external (DIRPLUS/BV) and therefore you can't display pictures inside of D64 files (on your boot SD2IEC). After viewing the picture, you are returned to DirPlus. If you want to bypass the automatic picture viewing, press Shift-Return instead of Return and the file in question will be loaded as a program. (The picture viewer is based on an [example code by MMS/gerliczer/George.](#))
- When renaming files, the directory is no longer reloaded after every file operation, (unless there was an error or the filename given was longer than 16 characters). So renaming files in big directories will now be A LOT quicker.
- The same thing with deleting files. If there was no errors, the directory doesn't need to be reloaded. The file list in memory is adjusted accordingly instead, speeding it up a lot.
- You can now press Shift-L to just load a program and then list it instead of running it.
- The starter program "D" is now resetting the basic memory to the default address, which is good if you have run a basic program with graphics commands and then want to reload DIRPLUS.
- The "/" naming protection from the previous version now also includes other naming routines, such as paste and new folder.
- A bug fix regarding page numbers.
- Some other speed-ups.

### **V2.1 October 2019:**

- You can now display text files of three different formats: PETSCII, ASCII and SpeedScript. To show a text file, press T in the file browser. Files ending with .txt are shown automatically. Just as with the Multi/Botticelli viewer, the text viewer is an external program and launched when needed. Because of this, it won't work inside d64 files.
- You can also convert text files between ASCII and SpeedScript, and between PETSCII and SpeedScript. The converter is built into the viewer.
- The swedish extra letters (åöÄÖ) are supported in the viewer (if your Plus/4 is a swedish one) and in the conversions.
- The text viewer seems to work with just 16K of ram. This Dir Plus version was also tested with both PAL and NTSC machines.
- The shortcuts for "Tool Link" were changed to K and Shift K (instead of T and Shift T) because I think the text viewer will be used more frequently, and I didn't have many keys left to choose from.
- There is now an extra starter program beside "D" that's called "9". It's just like "D" except for that it sets your SD2IEC drive to become unit 9 first. I find this useful because I have a SD2IEC and a 1541-II both connected as unit 8 and power switches on both.
- This Dir Plus version was entirely developed and compiled on the Plus/4. This version info was written in SpeedScript on the Plus/4.

### **V3.0 March 2020:**

There is now a C64 version! The Plus/4 and C64 versions are part of the same installation and the correct program is loaded when starting "D".

The unexpanded C16 is no longer fully supported. A special version (V2.99) is started on the C16. It contains just a few of the new features of V3.0. The full V3.0 version simply won't fit in 16K.

The C128 has a very limited support included. It doesn't actually start Dir Plus, but Jiffy Soft 128 (by hydradix) and CBM file browser 128 (by nbla000).

The C64 version does NOT include any soft disk turbo. Please use something like The Final Cartridge III, JiffyDos ROM, or whatever you are using. Dir Plus for C64 was developed together with Final Cartridge III. To start Dir Plus with this cartridge, I find it simplest to first write a D and then press Shift+RunStop. Then you will get an autostarting DLOAD, exactly like on the Plus/4 or C128.

New features in V3.0:

- You can now view files (pictures and text files) EVEN INSIDE of disk images! The C64 will auto detect and display Koala Painter, Wigmore Artist 64, Doodle and also play Sound Monitor and Future Composer tunes. Speedscript, ascii and petSCII text

files are displayed (and you can also convert). The Plus/4 displays (as before) Botticelli and Multi Botticelli (and the text files).

- You can now extract files from disk images (one at a time) with the "E" key. You can also use "E" to copy files between units (which wasn't possible before). For "E" to work, the file must be able to fit into memory. The loading address of the file can't be lower than about half of the screen memory either. "E" even works for big C64 programs that would cause "out of memory" if you try to LOAD and SAVE them manually. PLEASE NOTE that the destination filename may change when using E. This is to prevent possible problems with the SD2IEC file system. So if you attempt to extract a multi file program from a D64, then please check the names afterwards.
- You can now generate and mount SD2IEC swap lists. To create (and mount) a swap list, first mark the disk images you want included in the list, then press "W". If no files are marked, then pressing "W" will mount the file marked by the cursor as a swap list. Files ending with ".lst" will be auto mounted if pressing "return".
- You can now set up to 16 tools/programs that can be started at any time from within any folder or disk image. This replaces the old tool link function. These 16 tools are stored in a prefs file and you don't need to visit the root dir to be able to start them, only to set them.
- You can now more easily move files. It works like this: After you have performed a copy-paste and there were no errors, you will be asked if you want to return and mark the source files. If you press "Y" for yes, you are taken back to the source dir and the files you just copied are marked. Now just press "D" to delete them.
- Shift-F was extended from just deleting empty folders to also deleting empty files (which wasn't possible before). (Well, it can actually be used to delete any single file).
- You can now press 8 or 9 to immediately change unit and/or read dir.
- Current unit number is now visible on the main screen.
- It's now easier to know if you need to visit the root dir before performing copy-paste. If you need to, the dir title is red. If you don't need to, the dir title is blue and also contains the path.
- When navigating around, the whole screen isn't cleared and rewritten while loading the dir, so this is a speed-up.
- The extra "9" starter was moved into the DIRPLUS dir. You can start it from the tool link command "K" to (temporarily) change unit number of your device.
- Various bug fixes.

- New colors.

### **V3.1 April 2020:**

- The global link list (K and Shift-K) is now not only limited to programs. You can now set links to folders and disk images as well. These are marked with an "at"-sign. There is a distinct difference between these and programs. With folders and disk image links, you are just taken to that folder and Dir Plus continues. With programs, the program is started and you will remain in the current directory (or disk image) regardless of where the program is located. The link list is now also loaded just once instead of being reloaded every time if you use it.
- G=gues: This is also related to the new folder links. If you start DirPlus in a folder that is not the root dir, the full path will not be known (indicated by red title). Before using copy or "set link", the path must be known. "G" (for guess/get) looks through your links and sees if you have a matching link there, and then uses that link, and the path will then be known.
- You can now press X to move the file cursor to a random position in the list. So if you want to play a game but you don't know which to play, you can press X to let Dir Plus make a suggestion.
- You can now press Shift-N to jump to the next folder in the file list and Shift-B for the previous folder. It works just like N and B for going to the next or previous marked file, which now also is faster than before because this whole routine was optimized.
- The move files function (copy and then return and mark source files) now also jumps to the first marked file when finished, just like the search function does.
- In the C64 version, the P now flashes if the current directory isn't prepared for D Shift-Run/Stop start. This has always been the case in the Plus/4 version, but there the hardware blink feature of the TED chip is used instead of color flashing.
- The C64 version of the text viewer is now radically faster!
- Some other small adjustments.

### **V3.1c May 2020**

This release only affects the C64:

- Main program: Compatibility fix.
- Text viewer: You can now display one page at a time by pressing return when the text is paused. This is also the default, so only one page is shown at start.

### 3.2 Spring 2020

There was a 3.2 version which had M2I support. It wasn't released. I discarded it when I found out that M2I support was removed in the latest SD2IEC firmware.

### 4.0 August 2020

- WELCOME TO THE VIC-20! There is now a Vic-20 version. But let's start with what's new in DIRPLUS as a whole:
- LOADING DIR IN THE BACKGROUND (C64/Plus4) The directory is loaded while you can browse around and use DirPlus. You can go ahead and start a program and not bother about if the dir has been completely loaded or not. You will literally see the file list being filled in while you browse. You can use all navigation and marking keys while it's loading. If you use any other function, then the loading is stopped and you continue with what you have. The title/path bar is blue if the whole dir has been loaded and orange otherwise. The bottom status text (page 1 of 3...) is orange if the dir is loading and blue if the loading has stopped (doesn't need to be complete). So the color combination of these two will give you the current dir status. The background loading of the dir makes using dirplus a lot quicker.
- IMPROVED PATH HANDLING (C64/Plus4/Vic-20) Something that has bothered me since the very first DirPlus release has now been solved and this came as a result of the Vic-20 development. Strangely enough, the SD2IEC has no command for getting the path of the current directory. So, before, if you wanted to copy something, you had to make sure that you had visited the root dir and then DirPlus could keep track of the path. No need for that any longer. The path is automatically traced from the current directory to the root and then back. (Because of this, the G=Guess command has become obsolete and removed. The G key has been reused for something else (see below)).
- ALTERNATIVE SEARCH (C64/Plus4/Vic20) When using the U key to load the directory, you can now choose a CBM dos pattern and only filenames matching the pattern will be included. If you have a huge directory, this will be radically faster than the normal search function. This is especially useful on the Vic-20 which lacks the normal search function and also can't hold too many file names in memory. A pattern could be \*.d64, omega\* or ?????.txt for example. (But two stars doesn't work, eg \*gammon\*. Use the normal search function for that.)
- FILE INFORMATION (C64/Plus4/Vic-20) You can now press G to GET some information about the file. On the Vic-20, you will get the file's loading address in HEX and DEC as well as the file size. On the C64 and Plus/4 you will also get an

educated guess of what the file is, for example a program for 8K expanded Vic-20 or a koala painter picture.

- A NEW AUTOMATION FEATURE (C64/Plus4/Vic-20) File names ending with .k are now automatically Shift-Return loaded. In other words, when you press return to load it, your cartridge will be killed after loading and before running. On the Plus/4, soft jiffy will be disabled instead. So, the .k extension stands for KILL. (I had actually started to rename files to remind me when to use shift-return to load, so automating it in DirPlus came as the next natural step).
- A FIX (C64) If you don't have a cartridge that can be killed (or if it's killed already), then Shift-Return (or .k extension as above) will work anyway instead of giving you a syntax error. Then you can use it to just load a program ,8,1 instead of ,8.
- ANOTHER FIX (C64/Plus4) The function to PUT the D Run/Stop starter started failing for me, maybe because I updated the SD2IEC firmware. This is now fixed by using other names for temporary files.
- THE VIC-20 VERSION (Vic20) There is now a Vic-20 version of DirPlus! Well, DirPlus originates from the Vic-20 program "Vic Disk Menu" and now, this program has been re-integrated into DirPlus. Daddy has come home to the DirPlus family so to speak. Be aware that the Vic-20 version doesn't have any error handling, so you have to observe yourself that you got the result yo wanted. For example, if you want to move a file, then make sure after the copy that you see the file in the destination folder before going ahead and deleting the source. There are two versions, one for expanded Vic-20 (V40EX) and one for unexpanded (V40UN). The correct version is choosen automatically of course. The expanded version has more functions but not as many as the C64 and Plus4 versions. It doesn't have the picture viewers for example. Most of the features are there but implemented with limited memory in mind. The global tools feature works in another simpler way for example. The vic-20 versions has extra Vic-20 specific features, such as automatic memory configuration depending on the program you try to run and automatic starting of cartridge images. Soft jiffydos is selectable at startup and can be allocated to three different memory blocks, 0 (the 3k ram expansion), 3 or 5. You have to have ram expansion in the choosen block (of course) and you can not use that block for other things at the same time (of course). If Dirplus finds sjload in the memory after a reset, it will restart it without any questions.

Here follows the changes since vic disk menu V28 (which it was based on):

- + Integrated into Dirplus. Start with LOAD"//:D",8. The old vic menu can actually co-exist on the SD card without problems if you like (but why would you?).
- + Key adaptations. Which keys to use has been matched to those of DirPlus.
- + Use pattern search while loading dir (see above).
- + Disk Format was removed to prevent from accidents.

- + Tool links (global tools)! This works in a quite different way compared to C64 and Plus/4, but the purpose is the same: To run an external tool but remain in the current directory. It works like this: Put the tools you want to reach this way in the folder //DIRPLUS//TOOLS/ and give them short meaningful names that you will remember. When you want to start one of the tools from DirPlus, first press K and then just type the tool's name you want to start. It will be started and you will remain in your current directory. Very simple and memory efficient. (Works on the expanded version only and not inside of disk images).
- +Now works with other boot device unit numbers than 8. Unit number is visible in the main screen.
- +Q key to quit.
- +Cursor keys also for page navigation. Also for going to the first and last file on the first and last pages.
- +T key for built in text viewer (expanded version only). Files with .txt extension are viewed automatically. The text viewer is very very limited compared to the C64/Plus4 versions. You can view petSCII texts and ASCII texts (with reversed case).
- +Shift-Return to force load ,8,1 (expanded only)
- +Files with a start address not ending with \$01 are loaded ,8,1 automatically. +Shift-L to load but not run. (expanded only). Tip: If you want to disable sjload after loading and before running something, then use Shift-L to load, then press runstop+restore and then run.
- +F key to create New Folder and Shift-F to remove an empty folder.
- +16 character support line for rename and new folder.
- +You can now see all 16 characters of the filenames.
- +8 and 9 keys for quick re-dir.
- +Different colors for the two different versions (blue for 40EX and green for 40UN) so that you will know right away which version you are running.
- +You can now copy files! First mark the files with M, then press C to copy and V to paste. A special feature of the Vic-20 version is that you can add an extra extension to all destination filenames in one go.
- +A-key to mark all files and then toggle to no files.
- +G key to GET information about the file (loading address and size).
- +New special Vic-20 feature: You can now easily autostart two-part cartridge images. Mark both files and then press Shift-M (for multiload). Note that Shift-M does something else in the C64 and Plus/4 versions (special marking feature).
- +The Turbo/Memory config screen was made into an external module to save space.
- +Various fixes and speed-ups.

## 4.1 October 2020

- The C64 and Plus/4 versions now have some Pi1541 support. If you have both a SD2IEC and a Pi1541 connected, then start DirPlus from the SD2IEC and everything will work inside disk images on the Pi1541. In browse mode however, not everything will work. **Remember to NOT use any spaces in file names in browse mode.** You can browse around, rename files, delete files, create disk swap lists, enter disk images, start programs, create new d64s but that's about it.

If you only have a Pi1541 connected, then the program to start is "64" for the C64. (You will find it in the dirplus folder). For the Plus/4 it's the file "DP". Put these two wherever you like on your Pi1541 SD card, for example in FB.D64.

Please note that many features of DirPlus are dependent upon external files or the sd2iec file structure. None of these functions will work with Pi1541 only, for example the text reader, image viewer, copying files between folders, global tools and links.

I've spent a lot of time trying to get around the incompatibility of the Pi1541 but unfortunately it still locks occasionally. You will probably not experience this though, but if you do, then just press runstop+restore and then run.

- C64/Plus4: You can now press Commodore + N to format the drive. (Don't worry, there will be security questions for you). On Pi1541 this will create an empty d64 image. That's why I added it.
- C64/Plus4: The free number of blocks will now be shown, but only if it's less than 300.
- C64/Plus4: Device not present error check.
- Includes a C64 Bonus Tune called "Drive 8". Two versions for different SID chip versions are included. The 8580 version is mainly for late C64s while the 6581 version is for early C64s and most C128s. If your C64 has the graphical symbols on the top of the keys, then it's the 8580.

#### 4.1.1 January 2021

- This is an update only affecting the Vic-20. The routine to detect and locate sjload in memory was moved from basic to machine language and now works 100 times better. (It now makes a checksum from all bytes in question instead of only 1/100 of them).
- You can also remove sjload from memory at startup by holding down the Shift key while DirPlus is loading/starting. Holding down Shift will in other words show you the start menu even if sjload previously was loaded. This way you can more easily disable or change the position of sjload.

#### 5.0 June 2021

- **DirPlus Dos** is a new feature available on the C128, Plus/4, C16 and C64 (with Final Cartridge 3). It's a command line interface or command prompt, something like Dos. So why did I add this to dirplus? There are two reasons: #1: I wanted to quickly reach global tool programs without having to start up the whole dirplus browser, for example quickly compiling a program when the compiler isn't in the same directory. #2: The C128. I have not ported the dirplus browser to the C128 and I have no plans of doing that, but I still wanted a quick and useful way of navigating and performing file operations on the C128 in both 40 and 80 column display.

You start DirPlus Dos instead of the browser by holding down the Shift key while starting the D starter. (You can also quit to DirPlus Dos from the DirPlus browser by pressing Q and then D). You will find a lot more information about DirPlus Dos in the manual under [DirPlus Dos](#).

- **Important / Updating:** The D starter and other related start files were completely reworked. To be able to hold down shift to start DirPlus Dos, you have to replace D in all folders where you want to be able to do that. If you have jiffydos roms installed in your Plus/4 or C128 you also have to do this:
  - On the C128 with Jiffy roms: Delete the file //DIRPLUS:128 and rename the file 128-PLAIN into 128.
  - On the Plus4 with Jiffy roms: Delete the file //DIRPLUS:DPS and rename the file DPS-PLAIN into DPS. (In all previous versions, the difference for JiffyDos roms was in the D starter itself. That is no longer the case.)
- The C128 starter now auto detects if soft jiffy is already in memory and then starts it, (just like the Vic-20 version). When this happens, the current directory will remain unchanged (instead of going to the root dir, which happens when soft jiffy first is loaded).

- (C64) The picture viewer now also displays Art Studio (hires) and Advanced Art Studio (multicolor) pictures. So now the following picture formats are supported: Koala Painter, Doodle, Wigmore Artist 64, Art Studio and Advanced Art Studio. All of these are auto detected and displayed if you press return on them (or pressing "I" for Image).
- (C64) Slideshow. Mark the picture files you want to include in the slideshow and then press "I". You will be asked if you want to shuffle the pictures and also how long to show each picture. The picture formats listed above are the supported ones. If you include other files, these will simply be skipped. (Note that the pictures need to have the correct loading address to be identified correctly).

You can also do things like deleting pictures during the slideshow, engaging a safety lock or using a joystick as a remote control. Read more about this in the manual under How to: Slideshow.

- (C64) Bonus pictures. Something for you to try the new slideshow function on. These are all made by me in 2021.
- (C64) The slideshow shuffling routine is also available separately if you press Shift-S. You will then be presented with the choice of sorting or shuffling.
- (C64/Plus4) In addition to quitting to basic when pressing Q, you can now also quit to DirPlus Dos or the Final Cartridge's Desktop. (Provided that you have a Final Cartridge (active) - or else you will just get an error).
- (C64) Koala Painter renaming help: When renaming a file, you can now put a spades sign as the first letter to be able to name files like Koala Painter: "{spade}PIC A NAME".
- (C64) You can now convert text files directly between ASCII and PETSCII in the external text viewer. Before, you had to convert to Speedscript in between. Read more about text conversion in the manual under How to:View a text file.
- (C64/Plus4) In addition to the external text viewer, there is now also an internal text viewer that you can choose when pressing T. In the internal text viewer you can view petscii files (and ASCII in reversed case letters). To view a text quickly with the internal viewer, press T twice. You can also create new petscii files and also add text to files.
- The internal text viewer also includes a user notes system. If you in the text viewer press 1,2,3...9 then the file with the corresponding number (and bank name) in //DIRPLUS/NOTES/ will be shown, regardless of what directory or disk image you are in at the moment. You can also add text to the end of the note or scratch it all for a new note. If you want more advanced editing than that, then use any editor that can edit petscii text, for example The Final Cartridge's Notepad. If 9 notes isn't enough

for you, then you can switch between any number of banks with 9 notes in each. Let's say you set the base name to "games", then you can quickly switch between the files games1, games2....games9 with the 1-9 keys.

- The loading of the tool links (when pressing K in the browser) is now loading a lot faster. You can now also reach the Dirplus Dos tools from there and go to the dos tools dir or the notes dir with some new choices (that you will see there).

## 6.0 Sep 2021

### **DirPlus Browsers news**

- The search pattern (that you can enter with the U button) will be shown immediately above the file list on the C64, Plus/4 and expanded Vic-20 browsers. On the C64 and Plus/4 you can omit the ending \* when entering a search pattern, for example, pressing U, then typing A followed by return will give you the search pattern A\* and all files beginning with A will be shown - all done with just three key strokes.
- C64 and Plus/4 browser: Total size blocks are visible before copy and delete.
- (C64/Plus4 Browser) It's now possible to write " signs in the text adder. But... there will be troubles with color codes if you just write one " sign until you write another or press return.
- The Vic-20 browser now works on Pi1541. (Only the expanded version ("MD")). The Vic-20 browser has the best Pi1541 support actually. You can display text files and show a file's address (by pressing "G") even outside of d64s. I tried to patch the C64 version with the same methods as in the Vic-20 version and it worked... until I compiled it. Then I gave up. If you want to display a text file on the Pi1541 with the C64, then just do it in Dirplus Dos instead. That works.
- Displaying text in the Vic-20 browser was made faster.
- Pi1541 browse mode bug bypass in the browsers: You can now delete files containing spaces in the file names. (They are replaced with question marks).
- A disk image was created for use with the Pi1541. Read more in the [Pi1541 section](#).

### **C128 specific news**

- Holding down C= while starting D starts drabrowser (while Shift starts Dirplus Dos and holding down nothing starts fb128). Tip: If you want to switch from one browser to the other or start DirPlus Dos from a browser, then just start the "D" program from the browser and hold down Shift or C= accordingly.
- The C128 now auto boots. To auto boot, first reset your SD2IEC (or cd//) and then reset your C128. If you don't want it to autoboot, then delete or rename the file bootsect.128.
- The C128 now remains in the current directory when started, even when soft jiffy has to be loaded.
- Localized/caps lock detection/fb128 bug prevention.
- DirPlus Dos: New command: <- (arrow left symbol) which lets you switch between the 40 and 80 columns screens on the C128. It also runs the SLOW command so that both screens should be visible at the same time in a dual screen setup.
- DirPlus Dos: The other arrow symbol (arrow up) divides the 80 column display in two 40 column windows and also switches between them. To get the full 80 columns back, use the new "clear screen" command: CLS. If you want to continue to work in basic with the two windows, then use the command GET 2X40. This sets the F-key of your choice to switch between the two windows.
- DirPlus Dos: A 2MHz border turbo (by Robert Willie) was also added in the C128 tools dir. You start it with GET TURBO and it will give you a 35% faster 40 column mode. (The display may flash a bit during disk access though). This speed increase makes Dirplus Dos feel more usable with a 40 column display or a dual screen setup. It works fine together with soft jiffy. Note that the border turbo has to be disabled if a program uses GRAPHIC1 to open a graphics screen. If you want to use the turbo in your own graphics program, then disable the turbo with SYS4867 before the GRAPHIC1 command and then restart it with SYS4864 after the GRAPHIC1 command.

### **Vic-20 specific news**

- Bugfix: Vic-20 sjload checksum included one byte to many.
- DirPlus Dos now works on the Vic-20, even on the unexpanded vic-20. Also included is Tokra's Maxi Edit 26x32 screen mode that you can start with "GET MAXI".
- As you now start DirPlus Dos when holding down shift on the Vic-20 just like on the other computers, you now use C= instead to clear soft jiffy.  
(read more in the [Vic-20 section](#))

### **DirPlus Dos specific news**

- New commands in Dirplus Dos for handling texts:  
ADD: Add text to a file (or create a new one).  
NADD: Add text to a note (or create a new one).  
END: Stop adding text.  
(Text commands that were already present in Dos 5.0: Type, Note and Notes).
- The type and note commands in DirPlus Dos were made faster.
- The dir command now works on the c64 without a final cartridge and on the vic-20. The vic-20/c64 dir routine is optimized for showing one name per line on a Vic-20.
- New command: INFO - For getting info about a prg file (external command).
- Another new dos command: BAS BASICCOMMAND, to run any basic command and then get back to dirplus dos, for example:  
    BAS SLOW  
will make your C128 go to slow mode. Or you can use it as a calculator:  
    BAS PRINT (34-11)/12  
...will display the result 1.91666667
- Changing text color in the command line interface will not affect the commands, but changing color while using the text add functions will get recorded.
- The AUTODIR command is now AD.
- The Q and EXIT commands were removed so now you have to use X to exit.
- CLS clears the screen (and cancels the new C128 2x40 on 80 mode - see C128 specific news above).

## V7.0 Apr 2022

- SD2IEC partition support was added. Use the arrow up sign key ↑ in the browser(s) to change partitions or use the CP command in Dirplus Dos. Partitions makes it possible to copy files in and out of disk images using the normal copy function (when copying between partitions). You can also more easily restart dirplus when inside a disk image (on other partitions than 1). IMPORTANT: Dirplus should be installed on your first partition (nr 1). If you only have one partition then Dirplus will work just like previous versions. To my knowledge, the DirPlus Browser is the only browser in existence that supports SD2IEC partitions. More about partitions in the [partitions section](#) of the manual.
- Better JiffyDos support: The d starter now detects if you have JiffyDos installed and if that's the case then it skips loading Soft-Jiffy on Vic-20 and Plus/4. This means that no special installation is needed any longer if you have a JiffyDos rom. On the C128, Soft-Jiffy is loaded even if you have a JiffyDos rom because there is a bug in the JiffyDos ROM that sometimes locks the computer after a load. So using Soft Jiffy serves as a bugfix for this. If you prefer the jiffyDos autodetection on the C128 as well, then load the file //DIRPLUS/128, delete line 13 and re-save, like this:  
LOAD"128",8 {return}  
13 {return}  
SAVE"@:128",8 {return}
- On the c64 it detects if you have JiffyDos+TheFinalCartridge3 and if that's the case, it disables the load routine of the final cartridge. This way you will get the best of both: JiffyDos load (faster and doesn't blank the screen), final cart save (faster) and all commands of both active. If you press RunStop-Restore however, you will get the final cart's load routine back.
- Some other extra JiffyDos support was added. These only works if you have JiffyDos installed:
  - In the C64 browser you can now press Commodore-L to list a basic program without loading it. Note: If you press break to break the listing, you then have to write CONT and press return to get back.
  - In DirPlus Dos you can use the J command to turn on and off some JiffyDos adaptations. With J turned on, @\$ will be used for DIR (on C64 and Vic-20) and @T will be used for TYPE. Note that you can't use the stop key to break a listing in this mode.
- You can now create a new .d64 image in the browser by pressing Ctrl-D. If you want a custom .d64 to be created instead of the default empty one, then replace the file //DIRPLUS:NEW.D64 with your custom D64.
- There is now also a general KILL command you can do from the C64 browser. Press Commodore-K. KILL will be performed and the browser will be restarted.

- The starting of the C64 and Plus/4 browsers was made quicker. In previous versions, the machine language part was poked in from data statements in a compiled basic program. That took some time and the program was bigger than needed, meaning longer loading time. Now, the machine language part is loaded separately and the main program is smaller. This means that the 64 browser isn't stand alone any longer, but it also reduced the loading/starting time. In the case of JiffyDos, the time from when you press Shift-run/stop to when the directory is starting to load was reduced from 4 to 3 seconds.
- In the C64 slideshow function you can now press E to start or stop a "Lamer Effect". So, what is a lamer effect? Well, you have to press E to find out. ;-) It doesn't seem to work on Doodle pictures though.
- Because of an inconsistency in SD2IEC, folders with a name longer than 16 letters appeared to be empty in the browser. This is now fixed.
- DirPlus now works with Epyx Fastload.
- The P no longer flashes if a dir isn't "prepared". The reason is that the routine gave an extra delay after loading huge unprepared directories. Preparing dirs is not that important if you have a dirplus system partition anyway and the flashing P could just be disturbing.

To upgrade Dirplus to V7.0, copy everything from the downloaded zip file to your SD card's root directory (on partition 1) so that the contents of the DIRPLUS folder will be overwritten with new versions etc.

If you want to refresh the D starter in some folders then just delete D in that folder and then press P to prepare it.

Anders Persson, Apr 2022  
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