

Reverse to Regular  
(PC Magazine Vol 4 No 6 Mar 19, 1985 Spreadsheet Clinic)

The patch for switching the highlighted border with the cell address from reverse video to regular display is shown below. The two bytes at addresses 17D and 17E are the attribute bytes used by the 123 program for border display and cell display. 17D is the attribute byte for the cell, and 17E is for the border. Try changing byte 17D to 02 (black background and green foreground) and byte 17E to 72 (light grey background and green foreground) for a pleasant 123 screen. Note that this patch does not work for Version 1.0 of 123.

This patch may have limited appeal for monochrome displays. The patch switches attributes for the cells and borders, which, while changing the border from reverse video to regular, puts the rest of the screen in reverse video. If only the byte at 17E is changed so that both have a value of 07, things look great, but the cell pointer is invisible. If you are doing all your work on a color display, it may be desirable to change your screen colors. Try different values at the ENTER command (e 17d) during the DEBUG procedure, but have a backup of the original TD.DRV file on hand in case you make a mess. The patch:

```
A>debug b:td.drv
-d 17d 17e
xxxx:017D 07 70      (Quit if results right of colon don't match)
-e 17d
xxxx:017D 07.70 <spacebar> 70.07
-w
Writing 02E9 bytes
-q
```

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Let There Be Color  
(PC Magazine Vol 4 No 14 July 9, 1985 Spreadsheet Clinic)

All it takes to change the colors Lotus uses is a little DEBUG work on the TD.DRV file in 123 and the LOTUS.SET file in Symphony. There are the device-driver files that you installed on your disks when you first configured the program. There are five areas in Lotus products that use color that you can modify: background, cursor, border, unprotected cells, and the cursor when it is in an unprotected area.

The chart below lists the addresses of the bytes in the device drivers that control color and also gives Lotus's default values at these addresses.

	1-2-3		Symphony			
	-----		-----			
	Ver1a*		Ver1.0		Ver1.01	
	Address	Value	Add.	Val.	Add.	Val.
Background	17d	07	985	07	19f9	07
Cursor	17e	30	986	30	19fa	30
Unprotected Cells	17f	1e	987	0a	19fb	0a
Cursor in Unprotected Cells	180	28	988	20	19fc	20

In 123, the cursor and border are always the same color, and in Symphony the border and unprotected cells are the same. This is why the chart only has four addresses and byte values.

To change the colors in 123, put your program disk in drive A: and a disk with DEBUG.COM in drive B: . Proceed as follows:

```
A>B:DEBUG TD.DRV
```

-d 17d 180 (displays the default values)  
-e 17d

This will display the contents at that address and allow you to change the values. Type a new value for contents at this address to obtain the desired color. Hit the space bar and the value of the next address will appear. Type a new value.

Continue until you have typed four values and then hit Enter followed by "w" and "q", which will take you back to the A>. Now load 123 and see what happens. The procedure is the same with Symphony, only you do the DEBUG operation on the LOTUS.SET file and use different addresses.

Editor's Note: This procedure works fine, though disappointing that it doesn't affect the colors used in graphics. The value at each address is composed of two single-digit numbers, not a single two-digit number. Thus, in 123, the number at address 17d controls not only the background color but also the color of characters in the control panel. If you change it to 3F, for example, you will get a light-blue background and high-intensity white characters. The number for the cursor works the same way. Change the value at address 17e to 1C and you will get a blue border with high-intensity red cell coordinates. You get the same colors when you move the cursor to a cell with characters in it. For those who don't know color numbers, here is a hex table:

0	Black	8	Gray
1	Blue	9	High-intensity Blue
2	Green	A	High-intensity Green
3	Light Blue	B	High-intensity Light Blue
4	Red	C	High-intensity Red
5	Purple	D	High-intensity Purple
6	Brown	E	Yellow
7	White	F	High-intensity White

You needn't be uneasy about tackling your device driver with DEBUG. The original files are still on your Lotus utility disk, and you can always re-install them if you make a mistake. Experiment until you find the color combination you like best. Be careful when using the high-intensity colors (especially when in the first position); certain combinations will create blinking characters, not the kind of visual effect that will improve your spreadsheets.

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Setting 123 and Symphony Colors  
By Bill Todd

The July 9, 1985 issue of PC Magazine the Spreadsheet Clinic column described a procedure for changing the default colors in 123 and Symphony. The information in the article is both inaccurate and incomplete.

The colors can be changed by modifying the file TD.DRV for 123 or LOTUS.SET for Symphony using the DOS debug utility. The values to be changed are listed in the following table.

Description	Color	
	123	Symph.
Background/Cell Text	07	07
Cursor	30	30

Unprotected cells	1E	0A
Cursor in unprotected cells	28	20

Each of the color values in the table above consists of two hex digits. The first digit selects the background color while the second digit sets the foreground or text color. The hex color values are shown in the following table.

Color	Normal	Bright
Black	0	8
Blue	1	9
Green	2	A
Cyan	3	B
Red	4	C
Magenta	5	D
Yellow	6	E
White	7	F

The PC Magazine article gives specific addresses for the location of the color values and these addresses are not always correct. To find the location of the addresses proceed as follows. In this example I will use the file name and color values for Symphony.

First save a copy of the file to be changed under a different name or on a different disk. Next, start DEBUG program by typing DEBUG LOTUS.SET. Next, use the search command to find the four values by typing S CS:0100 07 30 0A 20. Debug will respond with the location of the string 07 30 0A 20.

To make the change type E nnnn where nnnn is the address reported by debug. Debug will display the first value followed by a period. Type the new value then press the space bar. Debug will display the next value followed by a period. Enter the new value and repeat the procedure for the two remaining values.

After typing the last value press ENTER. Then type W followed by ENTER to write the new file to disk, and Q followed by ENTER to leave DEBUG.

...and if that doesn't do it, try the following .....

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(Letters to PC Magazine, Vol 4 No 19 Sept 17, 1985)

The addresses for changing colors with DEBUG work for Symphony only for a specific combination of drivers. To find the address where color-control data is stored in your configuration, use DEBUG to search Symphony's LOTUS.SET file. With LOTUS.SET in drive A: and DEBUG.COM in drive B:, type: B:DEBUG LOTUS.SET. At the DEBUG prompt, type: RCX. This will give you the hex ending address of the file - it is the four-digit number after the characters CX. Write that address down and hit a blank carriage return to leave the file's contents unchanged.

Now at the DEBUG prompt, type: S 100 XXXX 07 30 0A 20. For XXXX you substitute the hex address you wrote down. The S is the SEARCH command, so DEBUG will scan from the beginning of the file (100) to its end (XXXX) looking for the values you typed in (which are Symphony's default color values). Finding them, the command will return their address (say, YYYY), the four digits after the colon. To change the colors, type: E YYYY.

This will display the contents at that address and allow you to change colors by entering the new two-digit values you desire. After entering the first, hit the space bar, and the value at the next

address will appear. Type a new value, then a space, then continue until you have typed four values and hit carriage return. Next, write the new values to your file and exit DEBUG with the W and Q commands.

Bear in mind that each two-digit value you change affects two different colors, background and foreground. You might try 3F 1C 4E 24 for a pleasant effect.

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 1-2-3 Screen Colors  
 (PC World October 1985 Star-Dot-Star)

You can change 123's default color settings by using DEBUG.COM to modify the screen driver, TD.DRV. The tables below provide the offset addresses and the color values. Each feature has a 2-digit default value. The first digit controls the background color, the second its foreground color. Only colors 0 through 7 are allowed for the background.

Use a copy of TD.DRV and DEBUG.COM. At DEBUG's prompt, type E followed by the appropriate offset address and press Enter. DEBUG will display the offset address and its current value. Make sure the current value matches the default value shown below. If it doesn't, you may have an incompatible version of 123 and shouldn't attempt these changes.

If the current value matches the default value, type the desired color value and press Enter. For example, to make the border color and cursor green, type E17E and press Enter, then 20 and press Enter. You can repeat the E command to change another feature's color. When you are through, type W and press Enter followed by Q and Enter. Put the new TD.DRV file on your 123 disk, and the next time you run 123 it will display the worksheet using the colors you selected.

	Offset	Default
Worksheet cells, menus and help screens	17D	07
Border and cursor	17E	30
Unprotected worksheet cells and headings on help screens	17F	0A
Cursor on help screens and cursor on unprotected worksheet cells	180	28

0 Black	4 Red	8 Gray	C Light red
1 Blue	5 Magenta	9 Light blue	D Light magenta
2 Green	6 Brown	A Light green	E Yellow
3 Cyan	7 White	B Light cyan	F Bright white

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