
IDEAnote 91-01

IDEAcomm 5251/Plus

Release 5.3 and Higher

This IDEAnote documents the following new features:

Page	Feature
2	Configuring the Hex Data Delimiter
3	Save Graphics Screen when hot keying back to emulation from a graphics program such as Lotus 1-2-3
5	More VGA adapter support
6	More PC Printer support
7	Begin/End Emphasis in 5219 printer configuration
7	Change of name from VIRTUAL FLOPPY TIMEOUT to FILE TRANSFER TIMEOUT
8	Hex data mode (use and its appearance on the Printer Control Panel)
10	Ability to end TWINAX from DOS
10	Screen dim
11	Utility to write your own VGA drivers
14	New TWINDIAG messages
15	Corrections to manual

IDEACFIG Configuration Options

Hex Data Mode Delimiter

Use of the Hex Data Delimiter is explained on page 8. To change the Hex Data Delimiter:

1. Invoke IDEACFIG.
2. From the main screen, select 4 (Printer Options)
3. Then select the configuration for the type of midrange printer you are emulating:

<p style="text-align: center;">5219 Printer Options</p> <p>1) Set Forms . . 8) Hex Data Mode Exit to Previous Menu</p>

<p style="text-align: center;">4214/5224/5225 Printer Options</p> <p>1) Set Forms . . 9) Hex Data Mode Exit to Previous Menu</p>

<p style="text-align: center;">5256 Printer Options</p> <p>1) Set Forms . . 7) Hex Data Mode Exit to Previous Menu</p>

3. Select the option for Hex Data Mode and press Enter. A screen appears with a blank box and the instruction:

Enter a 2-byte delimiter string for Hex Data Mode.
Normally the &% sequence.

4. Type in the two-character delimiter that you want to use.
5. Press Esc to save.

Save Graphics Screen When Hot Keying

This saves your DOS graphics screen (for example, a Lotus spreadsheet) to disk file or memory when you hot key back to Twinax, and reproduces it when you hot key again to the graphics application.

1. From the main screen, select 2 (Display Options.)
2. Then select 3 (Additional Display Options):
 - 1) Window Mode on Load
 - 2) Video Adapter
 - 3) **Save Graphics Screen No/Disk/EMS/XMS**
3. Select 3 (Save Graphics Screen).
4. Use the space bar to select Disk, EMS, or XMS.
5. Press Enter to confirm the selection.
6. If you selected Disk, you are prompted for the drive, which may be a virtual or network disk. A file name is not needed, as this temporary file is not saved after your return to DOS.
7. Press Esc to leave this screen.

Notes

Unload the DOS graphics application before unloading Twinax.

IDEA recommends using 256K of expanded memory to save most graphics screens.

If you are using EMS (Expanded Memory Specification), the EMS driver must be compatible with the LIM 4.0 standard.

This feature is geared to the most popular video monitors. For it to work with your monitor, your application must support modes D, E, 10, or 12 hex.

Graphics screens may take up a large amount of memory (500K or more). If you choose Disk for option 3, be sure you have enough disk space. If you do not, no error message will appear because the Hot Key is taking the system away from DOS control; when you return to DOS, you will find that your screen was not saved.

New VGA Adapter Options

1. From the main screen, select 2 (Display Options.)
2. Then select 3 (Additional Display Options):
 - 1) Window Mode on Load
 - 2) Video Adapter **Standard,**
Eva VGA, etc.
 - 3) Save Graphics Screen . .
3. Select 2 (Video Adapter).
4. Use the space bar to select the adapter you have.
5. Press Enter to confirm the selection.
6. Press Esc to leave this screen.

VID files accompanying release 5.3 include:

TVGA8900.VID	Super 8900 TVGA
AHEAD.VID	AHEAD systems
ATIWC.VID	ATI EGA Wonder color
ATIWM.VID	ATI EGA Wonder mono
EVA1024C.VID	Tseng Labs EVA 1024 color
EVA1024M.VID	Tseng Labs EVA 1024 mono
EVAC.VID	Tseng Labs EVA color
STBMR2C.VID	STB multi res color
STBMR2M.VID	STB multi res monochrome

New PC Printer Configurations

1. From the main screen, select 4 (Printer Options).
2. Then select 1 (Select PC Printer)
3. At the prompt, select the session number of the printer you want to change.
4. A list of available printer drivers appears. For Release 5.3, this is:

HPLASER.PRT	HP LaserJet II
HPDESK.PRT	HP DeskJet
IBMPRO.PRT	IBM ProPrinter
IBM4019.PRT	IBM 4019 Laser (IBM Mode)
IBMQUIET.PRT	IBM QuietWriter
IBMWHEEL.PRT	IBM WheelWriter
IBMCOLOR.PRT	IBM Color Printer
EPLQ1000.PRT	Epson LQ1000
EPLQ1050.PRT	Epson LQ1050
EPFX286E.PRT	Epson FX-286E
NEC3550.PRT	NEC 3550 Spinwriter
FUJITSU.PRT	Fujitsu DL2400
OKI84.PRT	Okidata 84 Microline
DEFAULT.PRT	User Defined Printer (1)

5. Use the arrow keys and Enter to select this printer.

Begin/End Emphasis Options for 5219

This item has been added to Advanced Printer Configuration. It causes laser printers to use bold.

1. From the main screen, select 4 (Printer Options).
2. Then select 4 again (5219 Printer Options).
3. Select 7 (Advanced Printer Options).
4. Press PgDn to see:

```
Begin Emphasis Mode 00 00 00 00 ...00
End Emphasis Mode  00 00 00 00 ...00
```

Virtual Floppy Timeout Changed to File Transfer Timeout in IDEACFIG

This number determines the number of seconds that IDEAComm allows for no host signal before it terminates file transfer. If file transfers are being terminated abnormally, increase this value.

1. From the main menu, select 3 (User Interface Options). The last option is:

```
File Transfer Timeout ..... 250
```
2. To change the timeout, type in a value between 1 and 9999.
3. Press Enter to save.

New Operating Features

Using Hex Data Mode

This option allows users to access features of the PC printer that are not supported by the emulated printer. For example, if your PC printer can support italic mode while the emulated host printer cannot, you can still print in italics by using the Hex Data Delimiter.

You can thus embed PC printer command sequences within a System/3X or AS/400 text file or other data stream file. Use IDEACFIG to set it as explained on page 2.

To use this feature in a file:

1. Enter the delimiter you have chosen in IDEACFIG. As an example, enter `&%`.
2. Enter the hexadecimal equivalent of the printer command sequence, preceded and followed by the delimiter. Use the ASCII tables in Appendix A. Many printer manuals give the command as an escape sequence. For example, italic printing on the HP LaserJet uses the escape sequence:

`ESC(s1S`.

In hexadecimal, enter:

`&%1B28733153&%`. Note that there are no spaces in the string.

3. Continue typing the text that you want to be italicized. (To return to normal printing, you must then enter the command sequence for ending italics.)

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4. On the Printer Control Panel discussed below, change Hex Data Mode to ON.

Note

Printing errors may result when line spacing, character spacing, or page length is changed within the printer data stream. Such physical format parameters should be changed globally with IDEACFIG or the host print application, not by commands with the hex data delimiter.

Hex Data Mode Display

On the Printer Control Panel, select 9 to cycle between OFF and ON for this option. When ON, the option name is highlighted.

PRINTER CONTROL PANEL	
OPTIONS:	STATUS:
1) Stop, Go Offline	Ready
2) Suspend Printing	LPC Printer Status
.	Error Check
.	etc.
.	
.	
9) Hex Data Mode	

This option is only accessible when the printer is stopped or offline. Then press 9 and Enter.

End TWINAX from DOS

Just type in ENDTWIN at the DOS command line.

ENDTWIN -S also stops the microcode. This means that the host knows you have signed out. Without the **-S** option, the host will continue to communicate with your sessions.

Note

First unload any memory resident programs that have been loaded **after** Twinax.

Otherwise, the functioning of such programs is unpredictable.

Screen Dim

You can set the screen so that, after 5 minutes with no key strokes, it blanks out with only a D on the status line. Press any key to refresh. This option is set to Yes by default. To change Screen Dim:

1. From the main IDEACFIG screen, select 2 (Display Options.)
2. Then select 3 (Additional Display Options):
 - 1) Window Mode on Load
 - 2) Video Adapter
 - 3) Save Graphics Screen . .
 - 4) **Dim Screen Yes**
3. Select 4 (Dim Screen).
4. Use the space bar to change Yes to No.
5. Press Enter to confirm the selection.
6. Press Esc to leave this screen.

Creating VGA Adapter Drivers

The VIDEDIT utility lets you create your own drivers for adapters with 132 column mode.

The adapter must be programmed through the BIOS. It must support 132 columns in text (not graphics) mode.

1. Invoke the program with the command:

VIDEDIT (filename)

If a filename is specified, the program loads the file if it exists, or creates it as a new file.

If no filename is included, the program searches the current directory for all filenames ending in .VID. If it finds any, it lists them on the first screen and prompts you to select one. If it finds none, it brings up the editing screen with a default filename of STANDARD.VID.

If you wish to create a new file where there are existing files, you must invoke VIDEDIT with the new filename you are going to create.

2. If you see a list of filenames, select one with the arrow keys and Enter.

The editing screen appears:

IDEAcomm 5251 Video File Editor (132 column support)
Copyright (c) IDEAssociates Inc. 19xx
Version x.xx

File: C:\TWINAX\STANDARD.VID

Description:

Number of Columns	132
Number of Rows	028
Video Mode Number	24
Optional (BX) parameter	0000
Set Mode Command	00
Adapter Address	B800

This is a line of help text
Press Esc to Exit

Description: Enter any description, maximum 28 characters.

Number of columns: This must be 132.

Number of rows: Enter in decimal the number of rows that your adapter supports.

Video Mode Number: This value is the BIOS mode number, a parameter usually loaded in register AL when the video mode is set. Consult the manual for your adapter.

Optional BX parameter: This hex number is used by some "super" VGA adapters that load the video mode in the BX register instead of AH. Consult the manual for your adapter.

Set video mode command: This hex value is the INT 10 set video mode parameter loaded in register AH. For most adapters, this value is 0.

Adapter address: This hex value is required to set the mode back to 80 x 25 columns. Choices

are B800 for color and B000 for monochrome.
Use the spacebar to select.

4. Press Esc to exit VIDEEDIT. The program will ask whether you want to save the file to the exiting filename.

Notes

The information is encoded in a file with the extension VID.

This program will **not** edit .VID files from previous releases of IDEAcomm 5251/Plus. Accompanying this release of IDEAcomm 5251/Plus are new versions of most existing .VID files. If you select one of the older files, an error is displayed and you have the choice of recreating the file. Adapter files available in release 5.3 are listed on page 5.

New TWINDIAG Messages

TWINDIAG-030-3 INTERRUPT n TEST ON THE MICRO-CHANNEL BOARD PASSED

The IDEA micro channel board is set for interrupt n and working.

TWINDIAG-034 TWINAX NOT RESIDENT, UNABLE TO PERFORM PRINTER DUMP

To perform the printer dump, be sure that TWINAX is loaded (type TWINAX and press Enter), and resident (press Shift-Shift). Then invoke TWINDIAG.

TWINDIAG-037 TWINAX MICROCODE NOT RUNNING. UNABLE TO PERFORM PRINTER DUMP

Emulation should be running with at least one printer configured before you execute TWINDIAG's printer dump.

TWINDIAG-038 WARNING! THIS TEST WILL HALT TWINAX MICROCODE. SESSIONS WILL HAVE TO BE RESTARTED.

Twinax emulation microcode is running on the IDEA card. Return to emulation, exit, and terminate the microcode.

TWINDIAG-039 TWINAX IS RESIDENT, UNABLE TO PERFORM DIAGNOSTICS.

Twinax emulation microcode is running on an IDEA card. Return to emulation, exit, and terminate the microcode.

TWINDIAG-040 NO PRINTERS CONFIGURED.

The Printer dump runs only on printer sessions.

TWINDIAG-051-054 INTERRUPT n TEST FAILED

The IDEA card is not set for this interrupt.

Corrections to Software Manual

Installation, page 4-3:

If you are running INSTALL from the B drive, your screen must show the **B:>** prompt. Typing **B:INSTALL** from another drive will not work.

Printing, pages 6-18 and A-5:

If the host job will have font changes and you are defining your own printer, you must fill in the escape sequences for Font Change, even with a dummy string that does nothing. Otherwise, when the host sends a font change command, the IDEA software cannot translate it and will halt.

Appendix B, keyboards:

The USPC1, USAT1, and USENHPC keyboard files do not contain a CMD key. Therefore, you cannot use two-key CMD functions in DisplayWrite/36, such as CMD-C or CMD-left-arrow unless you use the KYEDIT utility to map the CMD key as desired.

Appendix G: Customer Support Information

IDEAssociates provides technical support for its PC based emulation products by the following support mechanisms:

a) Technical Support Hot Line

The Technical Support hot line can be reached at 1-800-343-0056.

Support is available:

Monday-Thursday, 9.00 a.m. - 7:30 p.m.

Friday 9:00 a.m. - 5:30 p.m. EST.

Support problems can also be faxed to the attention of Technical Support at

1-508-663-8851.

b) Bulletin Board Service (BBS)

The BBS is provided as a means by which users can download software updates or fixes to IDEAcomm products. The BBS can be reached at

1-508-667-0280 (1500 and 2400 baud) or
1-508-667-3654 (1200 to 9600 baud)

The BBS communication parameters are 8 data bits, 1 stop bit and no parity. First time users need to answer a number of questions and then assign themselves a password for future connection to the BBS. When this process is complete you will reach a menu system. Once you have selected the file(s) and file transfer protocol that you are using, you will be given 60 seconds in which to initiate the download.

The file transfer protocol that you select on the BBS (for example, XMODEM CRC) must also be supported in the modem software that you are using to connect to the BBS.

c) Regional Office Support

IDEAssociates has a number of regional offices in the U.S.A., Canada, Europe and Asia which are capable of providing technical support. You should contact your Dealer or Distributor for details on how to contact these offices.