

BLANK CELLS**Page 1 of 1**

/B or
[Clear line]

BLANKS the cell(s) you type once this operation is started. All labels, values and formulas are erased. Formats and attributes are NOT affected.

Move the cell-cursor to the first cell you want to blank before starting this operation, or type [Back Space] to erase the cell on the input line, then type the first cell you want to blank.

Examples:

/B[Return]

Blank the cell at the cell-cursor location

/B C2...F2

Blank a series (range) of cells in row 2

CELL REFERENCES, RANGES AND LISTS Page 1 of 1

Cell References:

Cell names (example: J56). You can use cell references in formulas wherever numbers are allowed.

Ranges:

A series of cells in the same row or column (example: B2..B4).

Lists:

A sequence of arithmetic expressions and/or cell references, ranges separated by commas (example: B2..B5,100,C12).

CLEAR THE WORKSHEET**Page 1 of 1**

/C or
[Clear display]

CLEARs (erases) all cell labels, values and formulas. Sets all worksheets options to their standard settings. This operation only affects the worksheet in your computer's memory, not worksheets saved on disc.

When you see "Type Y to confirm, Backsp to cancel" you can cancel this operation, if you started it accidentally.

COLUMN (CELL) WIDTHS**Page 1 of 1**

/GC Attrib & Globals
 Glob Col Width

Sets the width of all columns to the number of characters that you type once this operation is started. You can type a number from 3 to 125.

/GCD

Sets the width of all columns to 9 characters.

/GCC Columns & Rows
 This Col Width

Sets the width of the column at the cell cursor location to the number of characters you type. You can type a number from 3 to 125.

/GCCD

Sets the width of the current column to 9 characters.

COLUMN & ROW OPERATIONS Page 1 of 1

(Touch item to select)

/IR Insert Row

Add a row of blank cells before the current row

/IC	Insert Col	Add a column to the left of the current column
/DR	Delete Row	Erase the current row of cells
/DC	Delete Col	Erase the current column of cells
/GCC	This Col Width	Set individual column widths (you type width)
/M	Move	Physically repositions rows and columns
/R	Replicate	Copies cells to other parts of the worksheet

COMMANDS AND MAIN FUNCTION KEYS Page 1 of 1

(Touch item to select)

/A	Attrib & Globals	ATTRIBUTE definitions for current cell
/B		BLANK one or more cells
/C		CLEAR (reset) the worksheet
/D	Columns & Rows	DELETE the current column or row
/E	Edit	EDIT current cell's contents or formula
/F	Format Cell	FORMAT current cell for display
/G	Attrib & Globals	GLOBAL (all cells) specifications
/I	Columns & Rows	INSERT a row or column
/M	Columns & Rows	MOVE the current column or row
/P	Print Sheet	PRINT all or a portion of a worksheet
/R	Columns & Rows	REPLICATE (copy) cell(s) to other locations-
/S	Load & Store	STORE and load worksheet
/T	Windows	TITLE rows and columns
/V		VERSION and copyright information
/W	Windows	Splits the WINDOW display
/-	Format Cell	REPEATS characters that you type in a cell

CORRECT CELL LABELS, VALUES AND FORMULAS Page 1 of 1

- Type /E, or touch Edit Lets you correct current cell (contents/formula typed previously).
 Touch Edit, or type Lets you correct current cell (in process of
 [CTRL] [E] being typed).
- Move to the characters you want to change:
 Up, down arrow keys Move to the beginning, end of the input line.
 Left, right arrow keys Move to the left, right one position.
- Type changes and/or:
 [Insert Char] Begins adding characters (type again to reset).
 [Delete Char] Deletes one character.
- End by typing [Return], or cancel by touching the Cancel function key.

DELETE A ROW OR COLUMN Page 1 of 1

/DR	Columns & Rows Delete Row	Deletes the row where the cell-cursor is located. Type Y to proceed with the deletion.
/DC	Columns & Rows Delete Column	Deletes the column where the cell-cursor is located. Type Y to proceed with the deletion.

FILE MANAGER

This function key lets you suspend VisiCalc temporarily and start File Manager. You can perform the usual File Manager operations, and when you're finished, you start VisiCalc where you left off. The File Manager function key appears whenever you begin a load, save or print-to-file operation.

Some ways you can use File Manager:

1. To find a file on your discs (directory lookup) -
 Touch in sequence: File Manager, Choose Dir, Set Wildcard (if necessary).
 Type the disc:\directory to display, then touch Start Display.

VisiCalc File, VisiCalc Dir forwards this information to VisiCalc.

2. To permanently change the disc:\directory that VisiCalc uses -
 Touch in sequence: File Manager, VisiCalc Dir.
 Now type and select the disc device/directory you need.
 Touch in sequence: Return Dir, Back to VisiCalc.

FORMATTING CELL DATA FOR DISPLAY Page 1 of 3

/FD	Format Cell Default*	Use the global formats currently in effect. If none were specified, use the General Format.
/FG	Format Cell General*	General Format: labels to left, values to right and shown exponentially (if necessary) to fit.
/F-	Format Cell Repeat Label*	Repeats characters you type until the cell is filled.
/F*	Format Cell Graph*	Converts integer portion of number to an equivalent number of asterisks.

Note: You can use the GLOBAL command (/G) or the *Attrib & Globals* function key to specify the above formats for all cells on the worksheet.

Type [Next] to turn the page to Numeric Formats

FORMATTING CELL DATA FOR DISPLAY Page 2 of 3

/FN	Format Cell <u>Numeric Formats</u>	
%	Percent % *	Multiplies number by 100, inserts % on left
,	Seprt , *	Inserts comma as thousands separator
(Paren () *	Encloses negative numbers in parentheses
A	Acctg CR/DR*	Follows negative numbers with CR, positive with DR
S	Scientific*	Expresses number exponentially
I	Integer*	Rounds number to nearest integer
F	Fixed Decimal*	Lets you type the number of decimals to show

Note: You can use the GLOBAL command (/G) or the *Attrib & Globals* function key to specify Numeric Formats for all cells on the worksheet

Type [Next] to turn the page to Currency and Justification Formats

FORMATTING CELL DATA FOR DISPLAY Page 3 of 3

/FC	Format Cell <u>Currency Formats</u>	
\$	\$ Format*	"\$" precedes the number in the cell

K	K\$ Format*	"K\$" precedes the number in the cell
M	M\$ Format*	"M\$" precedes the number in the cell

/FJ Format Cell
 Justify Formats

L	Left Justify*	Align labels and values to the left
C	Center Justify*	Align labels and values in the center
R	Right Justify*	Align labels and values to the right

Note: You can use the GLOBAL command (/G) or the Attrib & Globals function key to specify the above formats for all cells on the worksheet

Type [Prev] to turn the page back to Numeric Formats

FUNCTIONS **Page 1 of 1**

(Touch item to select)

Business and General Purpose Functions

AVERAGE, COUNT, ERROR, MAX, MIN, NA, NPV, SUM

Cell References, Ranges and Lists

Logical Expressions

<, >, =, <=, >=, <>

Logic Functions

AND, FALSE, IF, ISERROR, ISNA, NOT, OR, TRUE

Scientific Functions

ABS, EXP, INT, LN, LOG10, SQRT, SIN, COS, TAN, ASIN, ACOS, ATAN, PI

Select Alternative Value Functions

CHOOSE, LOOKUP

BUSINESS AND GENERAL PURPOSE FUNCTIONS **Page 1 of 1**

@AVERAGE(list)	Results in the average of the non-blank entries in the list. Maximum of 254 entries.
@COUNT(list)	Results in the number of non-blank entries in the list. Maximum of 254 entries.
@ERROR	Results in an "ERROR" value which causes all expressions referencing the cell to evaluate to ERROR.
@MAX(list)	Results in the maximum value in list.
@MIN(list)	Results in the minimum value in list.
@NA	Results in a "NOT AVAILABLE" value which causes all expressions using the cell to evaluate to NA.
@NPV(dr, RANGE)	Results in the Net Present Value of the RANGE of cash flows. The first cell in RANGE contains the initial investment (negative or zero), followed by the first period's cash flow, the second period, and so on. "dr" is the discount rate.
@SUM(list)	Results in the sum of the values in list.

LOGICAL EXPRESSIONS **Page 1 of 1**

v1<v2	Results in TRUE if v1 is less than v2; otherwise FALSE
v1>v2	Results in TRUE if v1 is greater than v2, otherwise FALSE
v1=v2	Results in TRUE if v1 is equal to v2, otherwise FALSE
v1<=v2	Results in TRUE is v1 is less than or equal to v2, otherwise FALSE
v1>=v2	Results in TRUE if v1 is greater than or equal to v2, otherwise FALSE
v1<>v2	Results in TRUE if v1 is not equal to v2; otherwise FALSE

Note: See LOGIC FUNCTIONS also

Caution: The way functions are calculated may give unexpected results (example: @SQRT(25)=4.99999..., but is shown as 5 when the column width is 9. Also, in this case, @SQRT(25)=5 would

evaluate to FALSE)

LOGIC FUNCTIONS

Page 1 of 1

@AND(list)	Results in TRUE if all values in the list are TRUE, else FALSE
@FALSE	Results in logical FALSE
@IF(b,v1,v2)	Results in v1 if b is TRUE; v2 if b is FALSE (v1 and v2 are logical expressions)
@ISERROR(v)	Results in TRUE if v is ERROR, else FALSE
@ISNA(v)	Results in TRUE if v is NA, else FALSE
@NOT(b)	Results in TRUE if b is FALSE, and FALSE if b is TRUE
@OR(list)	Results in TRUE if any value in list is TRUE, FALSE if all of the arguments are FALSE
@TRUE	Results in logical TRUE

Note: See LOGICAL EXPRESSIONS also

SCIENTIFIC FUNCTIONS

Page 1 of 1

@ABS(v)	Results in the absolute value of v
@EXP(v)	Results in the natural exponent of v
@INT(v)	Results in the integer portion of the v (truncated)
@LN(v)	Results in the natural logarithm of v
@LOG10(v)	Results in the base 10 logarithm of v
@SQRT(v)	Results in the square root of v
@SIN(v)	Results in the sine of v
@ACOS(v)	Results in the arccosine of v
@ASIN(v)	Results in the arcsine of v
@ATAN(v)	Results in the arctangent of v
@COS(v)	Results in the cosine of v
@TAN(v)	Results in the tangent of v
@PI	Results in a value of 3.1415926536

Note: All trigonometric arguments and results are in radians

Caution: The way functions are calculated may give unexpected results
(Example: @SQRT(25)=4.999999..., but you see 5 when the col.width=9)

SELECT ALTERNATIVE VALUE FUNCTIONS

Page 1 of 1

@CHOOSE(v,list)	Returns the element in list that corresponds to the integer portion of v. If v is zero or negative or if v is greater than the number of elements in the list, NA is displayed.
@LOOKUP(v,RANGE)	Compares the value v to the successive values in RANGE locating the largest value in the range less than or equal to v. Matches this entry with the corresponding entry in the column or row immediately to the right or below it. The values in RANGE must be in ascending order.

GLOBAL SPECIFICATIONS

Page 1 of 2

(Touch item to select, or type [Next])

/GAPY	Attrib & Globals Protect All*	Prevents you from typing cell labels, values and formulas into all cells on the worksheet
/APY	Attrib & Globals Protect Cell*	Prevents you from typing a label, value or formula into the cell at the cell-cursor location
/GAHY		Prevents the display of all cell labels and values in the window

/AHY	Attrib & Globals Hide Cell*	Prevents the display of a single cell's label or value in the window
/GC	Attrib & Globals Glob Col Width	Sets the width of all columns on the worksheet to the width that you type

GLOBAL SPECIFICATIONS **Page 2 of 2**

(Touch item to select, or type [Prev])

/GCC	Columns & Rows This Col Width	Sets the width of the column at the cell-cursor location to the number of characters you type
/GOC	Attrib & Globals Recalc Column*	Sets the recalculation order of the worksheet to column order (standard)
/GRA	Attrib & Globals Recalc Auto*	Recalculates the worksheet after you type each value or formula (standard)
/GF	Attrib & Globals Global Formats	Lets you specify cell display formats for all cells on the worksheet

HIDE AND PROTECT CELLS **Page 1 of 2**

/AHY	Attrib & Globals Hide Cell*	Suppress the display of the current cell's contents on the worksheet.
/AHN	Attrib & Globals Hide Cell	Display the current cell's contents on the worksheet normally.
/AHD		Use the global Hide specification currently in effect; if none is in effect, display the current cell's contents normally.

Note: You can use the GLOBAL command (/G) to set the Hide attribute for all cells on the worksheet in one operation.

Type [Next] to turn the page to Protect Cells

HIDE AND PROTECT CELLS **Page 2 of 2**

/APY	Attrib & Globals Protect Cell*	Prevents you from typing a label, value or formula into the current cell.
/APN	Attrib & Globals Protect Cell	Lets you type a label, value or formula into the current cell.
/APD		Uses the global Protect specification currently in effect; if none is in effect, lets you type data into the current cell as usual.

Note: You can use the GLOBAL command (/G) or the Attrib & Globals function key to specify protection for all cells on the worksheet. When you do this, the [Tab] key lets you skip to cells you "unprotect" individually using the second option above.

Type [Prev] to turn the page back to Hide Cells

HOW TO USE HELP **Page 1 of 1**

To ask for Help: Type ? or touch the Help function key

To turn Help display pages, you can type these keys:

[Next]	Next Help page, if any
[Prev]	Previous Help page, if any
[diagonal arrow]	Help Page 1
[Shift] [diagonal arrow]	Last Help page

To use the Topics Displays:

1. To see the complete list of Help topics, touch the Topics function key.
2. To select an item on a topics display, you can touch it. You can also type the up/down arrow keys to locate the item (or touch the Next/Prev Choice function keys), then type [Select].

To end Help, touch the Done function key

INSERT A ROW OR COLUMN **Page 1 of 1**

/IR	Columns & Rows Insert Row	Inserts a row of blank cells above the cell-cursor location. Rows below the cell-cursor are shifted downward to make space, and cell references in those rows are adjusted automatically.
/IC	Columns & Rows Insert Column	Inserts a column of blank cells to the left of the cell-cursor location. Cell references in the shifted columns are adjusted automatically.

LABELS **Page 1 of 1**

Labels are descriptive cell data; they are not used in calculations. You can use any character in a label, but if the first character is not alphabetic, you must type a quote (") first. The maximum number of characters you can use in a label is 125.

To correct typing errors, type [Back Space] or touch the Edit function key (see CORRECTING CELL LABELS, VALUES AND FORMULAS).

To end typing of labels, you can do one of these:

1. Type [Return] cell-cursor stays at the current cell
2. Type one of the arrow keys cell-cursor moves in the direction indicated
3. Touch a cell cell-cursor moves to the cell you touch

To cancel typing, touch the Cancel function key.

MAIN LEVEL INFORMATION **Page 1 of 1**

You can do this:	by:
-----	---
Move the cell-cursor	-> Touching the cell -> Typing the arrow keys -> Typing >, followed by a cell name and [Return]
End typing	-> Typing [Return] -> Typing the arrow keys
Start a command, function key	-> Typing /, touching the function key
Recalculate the worksheet	-> Typing !
View Help topics	-> Touching the Topics function key

Type a label, value or formula

-> Touching the cell to move to next

MOVE A ROW OR COLUMN

Page 1 of 1

/M Columns & Rows Move

Moves an entire row or column to another row or column on the worksheet.

From...

Touch or type a cell in the row or column you want to move. Type [Back Space] to correct.

To

To move a column, touch or type a cell in the column to the right of the column to which you want to move. Type [Back Space] to correct.

To move a row, touch or type a cell in the row below the row to which you want to move. Type [Back Space] to correct.

Example:

/M J56...F56[Return] Moves column J to the left of column F

PRINTER MENU Page 1 of 1

(Touch item to select)

Printer Equations

Printer Files

Printer Configuration

Send to Printer

PRINTING AND CREATING A PRINT FILE Page 1 of 1

/PE Print Sheet Print Formulas

Prints cell labels, values or formulas, formats and attributes.

/PP Print Sheet Print to Printer

Prints cell labels and values in the same format as you see in the window.

/PF Print Sheet Print to File

Creates a print-image file on disc. You can print it later using the MS-DOS PRINT command.

Note: The above printing operations begin printing with the cell-cursor location. You type the last cell (Lower Right) you want to print.

Type [Next] to turn to the next page

PRINTER CONFIGURATION Page 1 of 3

Controls various printer functions; in effect for all printing operations.

Line Feed After Carriage Return -

For printers that do not perform an automatic line feed after carriage return.

Paged Output -

Enables the next three options. If NO, prints lines with no page boundaries.

Pause at Page Breaks -

Pauses after each page so that you can change paper. Type [Return] to resume.

Time and Date Stamp Each Page -

Prints the time and date at the top of each page.

Number Pages -

Prints the page number at the top of each page.

PRINTER CONFIGURATION Page 2 of 3

Print Column Headings and Row Numbers -

Prints column/row headings when the Print to Printer function key is used.

Lines Per Page -

This is the maximum number of lines to print per page.

(Margins) -

You specify the boundaries for the printed page.

Local Print Device -

One of the printers you specified to File Manager can be used for printing.

Printer Setup String -

Sent to the printer before the worksheet is printed, lets you use special printer capabilities. Check printer manual and type keyboard equivalents of the ASCII characters (left arrow key to correct errors).

Type [Next] to turn the page to Modifying the Printer Configuration

PRINTER CONFIGURATION Page 3 of 3

When you need to modify the Printer Configuration, follow these procedures:

1. To start with: touch:
VisiCalc Standard Configuration Default Values function key
your own standard (saved previously) Load Values function key
2. Locate items to change by touching the item, or typing up/down arrow keys
3. To modify items touch the Next Choice/Prev Choice function keys
(exception: see Printer Setup String)
4. Save your own configuration (optional) by touching the Save function key
5. End by touching the Done function key

Type [Prev] to turn to the previous page

RECALCULATION ORDER Page 1 of 1

/GOR Attrib & Globals Set the recalculation of the worksheet to
 Recalc Column proceed in row order.

/GOC Attrib & Globals Set the recalculation of the worksheet to
 Recalc Column* proceed in column order (standard).

RECALCULATION FREQUENCY Page 1 of 1

/GRA	Attrib & Globals Recalc Auto*	Recalculate the worksheet after each value or formula is typed (standard).
/GRM	Attrib & Globals Recalc Auto	Recalculate the worksheet only when you request it by typing !.

REPEATING LABELS

Page 1 of 1

/- or	Format Cell	Repeats the sequence of characters that you type until the cell is filled.
/F-	Repeat Label*	

Example:

/-123[Return] Gives 123123123 when the column width is 9

REPLICATE (COPY) CELLS

Page 1 of 2

/R	Columns & Rows Replicate
----	-----------------------------

(source range) Copy all elements of the "source range" cells to the target range you specify. You are prompted for each cell reference adjustment.

(F Copy FORMATS and attributes only, leave the target cell contents and formulas unchanged.

(C Copy cell CONTENTS and formulas only, leave the target cell formats and attributes unchanged.

(B Copy all cell elements (BOTH). You can specify automatic cell reference adjustment, if necessary.

Type [Next] to turn to the next page

REPLICATE (COPY) CELLS

Page 2 of 2

When you copy cell contents and formulas, you can specify that cell references in the formulas be:

1. Copied unchanged (No Change)
2. Changed to reflect their new cell locations (Relative)
3. Changed according to your own specification as each cell reference is encountered (Ask)

Examples:

/R(F	A1...A1:B3...B3	copies formats and attributes from cell A1 to B3.
------	-----------------	---------------------------------------------------

/R(BR	A1...A10:B2...B2	copies ten cells in column A starting with A1, down column B starting at cell B2. Cell names in formulas are adjusted automatically.
-------	------------------	--------------------------------------------------------------------------------------------------------------------------------------

Type [Prev] to turn to the previous page

STORE AND LOAD A WORKSHEET **Page 1 of 2**

To Save/Load VisiCalc (VC) files (which contain all worksheet data):

/SL	Load & Store	Loads a worksheet file from disc. You type
-----	--------------	--------------------------------------------

Load Sheet the file name (see below), then [Return].

/SS Load & Store Saves a worksheet on disc. You type the
 Store Sheet file name (see below), then [Return].

File Names: Must conform to the rules outlined in the Owner's Manual. Type
 [Back Space] to change the name on the input line, or touch Edit.
 Touch File Manager to look at your disc directories.

/SDY DELETES a worksheet on disc. You type
 the file name (see above), then [Return].

/SQY Exit VisiCalc QUITS (ends) the VisiCalc session.

Type [Next] to turn the page to Dif Files

STORE AND LOAD A WORKSHEET Page 2 of 2

To Save/Load DIF (Data Interchange Format) files (which contain only values)

/S#L Load & Store Loads a DIF file from disc beginning with the
 Load Data starting cell (see below). You type the file name
 (see below) and the load order (row/column).

/S#S Load & Store Saves a DIF file beginning with the starting cell
 Store Data (see below). Type the file name (see below), the
 last cell to save, and the save order (row/column)

Starting Cell: Touch it, type its name, or use the arrow keys, then [Return].

File names: Must conform to the rules outlined in the Owner's Manual. Type
 [Back Space] to change the name on the input line or touch
 Edit. Touch File Manager to look at your disc directories.

Type [Prev] to turn to the previous page

TITLE A WORKSHEET Page 1 of 1

/TH Windows All rows on and above the cell-cursor location
 Horiz Title remain in the window at all times (they cannot
 be scrolled out of the window). You can specify
 horizontal titles for each window you use.

/TV Windows All columns on and to the left of the cell-cursor
 Vertical Title location remain in the window at all times (they
 cannot be scrolled out of the window). You can
 specify vertical titles for each window you use.

/TB All rows and columns (BOTH) on, above, and to the
 left of the cell-cursor remain in the window at
 all times. You can specify this for each window
 you use.

/TN Windows Cancels titles in the current window.
 No Titles

VALUES AND FORMULAS Page 1 of 1

VALUES

Values are numbers. You can type them directly or you can type a

cell formula. When you type a formula, it is evaluated automatically, producing a value. Examples: 35.4, -156E25.

FORMULAS

Formulas give the algorithms for calculating cell values. Formulas can consist of a mixture of arithmetic expressions, cell references, functions and parentheses.

Examples: 5*@SUM(A1...A10)
@SQRT(99+C3)
B6/C12+C13

VERSION

Page 1 of 1

/V Displays version and copyright information. Use this version information when you contact HP about this product.

WINDOW OPERATIONS

Page 1 of 2

/WH Windows
Horiz Window Splits the window horizontally above the row where the cell-cursor is located.

/WV Windows
Vertical Window Splits the window vertically to the left of the column where the cell-cursor is located.

/W1 Windows
One Window* Returns the display to a single window. Global formats and column widths of the current window are applied to the single window.

Note: You move the cell-cursor from window to window by touching the cell you want to locate, or by typing ; (this locates the last-accessed cell in the next window).

Type [Next] to turn to the next page

WINDOW OPERATIONS

Page 2 of 2

/WS Windows
Synch Window* All windows are scrolled in unison. This means that when you scroll one window, the remaining windows are scrolled in the same direction automatically.

/WU Windows
Synch Window All windows are scrolled independently. This means that when you scroll one window, the others are unaffected.

Type [Prev] to turn to the previous page