The best-selling integrated program for the Apple II.
Why more than 1 million people use AppleWorks

- Three powerful applications in one program
- Lightning fast
- Easy to learn and use

**Key Features:**

**Word Processor**

- 90,000-word spelling checker with custom dictionaries and spelling summary
- Multiline headers and footers
- Left, right, center and decimal tabs
- Multiple tab rulers
- Text find and replace capability
- Boldfaced or underlined text
- Superscripts and subscripts
- Up to 25 pages on a 128K system
- Up to 300 pages on systems with expanded memory

**Database**

- Up to 30 categories per record
- Up to 20 different reports per database
- Sort on multiple categories
- Record selection rules
- Two or more labels across a page
- Calculated categories
- Total and subtotals
- Up to 800 records on a 128K system
- Up to 16,000 records on systems with expanded memory

**Spreadsheet**

- Over 40 functions including:
  - Arithmetic functions (Average, Logarithm, Rounding)
  - Financial functions (Net Present Value, Future Value, Payment)
  - Trigonometric functions (Sine, Cosine, Tangent)
  - Logical functions (If, And, Not)
- Look-up tables
- Ability to reference strings
- Cell protection
- Sorting capability

**Required equipment:**

- Apple IIe, IIe Plus, IIe (minimum 128K), or Apple II GS
- For Apple IIe only: extended 80-column text card
- Disk Drive
- Monitor

**Optional equipment:**

- Second disk drive (recommended for 5.25-inch disk users)
- Memory expansion card
- Compatible with Apple ImageWriter, and various printers by Epson, Brother, and Panasonic.

This package contains the following:

- AppleWorks Reference manual
- AppleWorks Tutorial manual
- AppleWorks Getting Started
- AppleWorks Quick Reference
- Four 5.25-inch disks:
  - AppleWorks Startup/Program (Word Processor & Database)
  - AppleWorks Program (Spreadsheet)/Dictionary
  - AppleWorks Sample Files disk
  - AppleWorks Training disk
- Two 3.5-inch disks:
  - AppleWorks Startup (includes Program, Sample Files & Dictionary)
  - AppleWorks Training disk

Assembled in U.S.A.

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AppleWorks is a registered trademark of Apple Computer, Inc., licensed to Claris Corporation. Apple, Apple II GS, and ImageWriter are registered trademarks of Apple Computer, Inc. Brother is a trademark of Brother International Corporation. Epson is a registered trademark of Seiko Epson Corporation. Panasonic is a trademark of Matsushita Electric Industrial Co., Ltd.
AppleWorks Release Notes

Important! Please read before installing AppleWorks 3.0.

RAM Disk Users
The AppleWorks® 3.0 application will attempt to use all the memory installed in your computer for desktop space. Older versions of AppleWorks did not recognize certain kinds of memory cards, which typically functioned as “RAM disks.” If you do not partition your memory using special RAM disk software, you can use AppleWorks as you would normally, without any special procedures.

However, if you use special RAM disk software to partition your memory, Claris™ recommends that you call the manufacturer of the memory card or RAM disk software for information on compatibility with AppleWorks 3.0.

♦ Important: If you use a RAM disk, you must update your utility software for use with AppleWorks 3.0. If you do not use updated software, you will lose the contents of your RAM disk when you start AppleWorks. You might also experience lockups and other unexpected results when using AppleWorks 3.0 with outdated RAM disk software.

If you use a RAM disk to speed up AppleWorks operations, refer to pages B-8 through B-9 of AppleWorks Reference for information on preloading AppleWorks. AppleWorks is compatible with the built-in RAM disk option for Apple IIgs computers.

AppleWorks GS Users
AppleWorks GS, version 1.1 and later, can open all AppleWorks files, including files created or edited with AppleWorks 3.0. Earlier versions of AppleWorks GS will not read 3.0 files correctly.

Preloading AppleWorks 3.0
Please note, page B-8, paragraph 2 of AppleWorks Reference should read: “If you do not have at least 320K of RAM, AppleWorks will not preload any modules.”

@COUNT Function
Please note, page 13-20 and 13-23 of AppleWorks Reference should read: “@COUNT(list or range): When you supply a range, the number returned is the number of cells containing values, ignoring blank cells and cells with labels. When you supply a list, the number returned includes all cells — even those which have labels or are empty.”
Financial Functions
Please note, the formula given on page 13-13 of AppleWorks Reference for the general case of financial functions is incorrect. The correct formula, when rate ≠ 0, is:

\[ pv \times (1 + rate)^{\text{term}} + pmt \times (1 + rate \times \text{type}) \times \frac{(1 + rate)^{\text{term}} - 1}{rate} + fv = 0 \]

Calculated Data Base Fields
Please note, page 9-16 of AppleWorks Reference indicates you can use parentheses to control the order in which a formula is evaluated. This is incorrect. You cannot use parentheses in data base formulas; you must instead construct your formula so that it evaluates properly when read from left to right. For example, 2 + 3 × 2 yields 2.5, not 3.5.

AppleWorks Upgrade Package
The AppleWorks Upgrade package does not contain the AppleWorks Training disk or the AppleWorks Tutorial manual. These materials are for new AppleWorks users, and are similar to the training materials provided with earlier versions. Please disregard the reference to the AppleWorks Tutorial manual and the AppleWorks Training disk on pages 3 and 5 of the AppleWorks Getting Started manual.

Printer Setup
AppleWorks is preset to work with the Apple ImageWriter. If you wish to use a different type of printer, you must use the Printer Information setup menu. (Refer to Appendix A of AppleWorks Reference for information on how to remove and add printers.) However, for the most reliable printer setup, do not remove the ImageWriter from the printer list. Some users have experienced garbled text and extra characters when they have deleted the ImageWriter from the printer list.

Loading the Dictionaries to Memory
If you have extra memory in your machine, AppleWorks automatically preloads program segments to RAM. However, because the dictionary files are large, they are not copied to RAM and remain on disk.

If you would like to run the spelling checker from RAM, you must use the IIgs Control Panel (or AppleWorks 3.0-compatible utility software) to create a RAM disk on your memory card large enough to accommodate both the program and the dictionary files. Copy AppleWorks and the dictionary files onto the RAM disk, and start the program from RAM. Set up AppleWorks so that none of the program preloads (it is already running from memory). You must use this setup because AppleWorks requires that the dictionary disk be in the same drive as the program disk.
# AppleWorks® Compatibility

The following is a partial listing of popular AppleWorks add-on/enhancement software and Apple II hardware products. This list is provided as a customer service to inform users of the compatibility or incompatibility between current versions of these products and AppleWorks 3.0. For information on AppleWorks 3.0 compatibility with AppleWorks GS, refer to the Read Me file located in the subdirectory called SAMPLE.FILES.

This list was developed from information provided by the manufacturers. Claris makes no guarantees as to product compatibility. For more information on a specific product’s compatibility, call the vendor at the number listed.

<table>
<thead>
<tr>
<th>Software Company/Address/Phone</th>
<th>Product</th>
<th>Description</th>
<th>Compatibility Status</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>TimeOut updates are available from local user groups or directly from Baagle Bros. Send Baagle Bros your original TimeOut disk(s) and payment of $10 per update disk.</td>
<td></td>
</tr>
<tr>
<td>Intuit 540 University Ave. Palo Alto, CA 94301</td>
<td>Quicken</td>
<td>Personal finance and check writing</td>
<td>No upgrades available at this time; compatible only with 2.0</td>
</tr>
<tr>
<td>JEM Software P.O. Box 20920 El Cajon, CA 92021</td>
<td>AppleWorks enhancements</td>
<td>Most of the features of JEM are now built into AppleWorks 3.0</td>
<td>No upgrades planned; contact JEM for future 3.0-specific products</td>
</tr>
<tr>
<td>K-12 Micromedia Publishing 6 Arrow Rd. Ramsey, NJ 07446 (201) 825-8888</td>
<td>SchoolWorks Series OfficeWorks Family Files</td>
<td>Templates for education, office forms, and home computing</td>
<td>Upgrades planned; call or write for more information</td>
</tr>
<tr>
<td>Manzanita Software One Sierra Gate Plaza, #200A Roseville, CA 95678 (916) 781-3880</td>
<td>BusinessWorks, version 5.01</td>
<td>Full featured, modular-designed accounting system</td>
<td>Compatible with AppleWorks 3.0</td>
</tr>
<tr>
<td>PBI Software, Inc. 1592 Union St. San Francisco, CA 94123 (415) 349-8765</td>
<td>Visualizer II, Visualizer II GS</td>
<td>Graphing program for AppleWorks</td>
<td>No upgrades planned; compatible only with AppleWorks 2.1</td>
</tr>
<tr>
<td></td>
<td>CommWorks</td>
<td></td>
<td>Compatible with AppleWorks 3.0</td>
</tr>
<tr>
<td>RC Systems 121 W. Winesap Rd. Bothell, WA 98012 (206) 672-6909</td>
<td>AppleWorks Companion</td>
<td>AppleWorks enhancement for the visually impaired</td>
<td>Compatible with AppleWorks 3.0</td>
</tr>
<tr>
<td>Company/Address/Phone</td>
<td>Product</td>
<td>Description</td>
<td>Compatibility Status</td>
</tr>
<tr>
<td>-----------------------</td>
<td>------------------</td>
<td>----------------------</td>
<td>--------------------------------------------</td>
</tr>
<tr>
<td>Applied Engineering</td>
<td>RamFactor, RamWorks, GS-RAM, GS-RAM Plus RamKeeper AW Expander 3.0</td>
<td>Memory expansion cards Enhancement software</td>
<td>Built-in support for memory cards Upgrade planned for AW Expander software; call for more information</td>
</tr>
<tr>
<td>Checkmate Technology</td>
<td>MultiRam, MultiRam Plus MultiRam Ile MultiRam Expander</td>
<td>Memory expansion cards Enhancement software</td>
<td>Built-in support for memory cards Upgrade planned for MultiRam Expander software; call for more information</td>
</tr>
<tr>
<td>Innovative Systems</td>
<td>Math Coprocessor</td>
<td>Math Coprocessor</td>
<td>Compatible with AppleWorks 3.0</td>
</tr>
<tr>
<td>Orange Micro, Inc.</td>
<td>Grappler C HotLink Pro Grappler Serial Grappler+</td>
<td>Serial and parallel printer interface cards</td>
<td>Compatible with AppleWorks 3.0</td>
</tr>
<tr>
<td>Sequential Systems</td>
<td>Ram-80</td>
<td>Memory expansion card</td>
<td>Compatible with AppleWorks 3.0</td>
</tr>
<tr>
<td>ZIP Technology</td>
<td>ZIP Chip, 8 MHz ZIP Chip, 4 MHz RAM Expansion ZIP GS ZIP IICs</td>
<td>Accelerator cards</td>
<td>Compatible with AppleWorks 3.0</td>
</tr>
</tbody>
</table>
## Review/Add/Change Commands*

<table>
<thead>
<tr>
<th>Keyword</th>
<th>Keystroke</th>
<th>Word Processor</th>
<th>Data Base</th>
<th>Spreadsheet</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arrange</td>
<td>-A</td>
<td>Arrange</td>
<td>Arrange</td>
<td>Arrange</td>
</tr>
<tr>
<td>Blank</td>
<td>-B</td>
<td>Copy text</td>
<td>Copy records</td>
<td>Blank cells</td>
</tr>
<tr>
<td>Copy</td>
<td>-C</td>
<td>Delete text block</td>
<td>Delete records</td>
<td>Copy cells</td>
</tr>
<tr>
<td>Delete</td>
<td>-D</td>
<td>Delete character left of cursor</td>
<td>Delete character left of cursor</td>
<td>Delete cells</td>
</tr>
<tr>
<td></td>
<td>-Delete</td>
<td>Delete character at cursor</td>
<td>Delete character at cursor</td>
<td>Delete character at cursor when editing</td>
</tr>
<tr>
<td>Edit, Cursor Switch</td>
<td>-E</td>
<td>Switch between insert and replace cursors</td>
<td>Switch between insert and replace cursors</td>
<td>Switch between insert and replace cursors</td>
</tr>
<tr>
<td>Find</td>
<td>-F</td>
<td>Find text, page, marker, case-sensitive text, printer options</td>
<td>Find all records that contain</td>
<td>Find cell or text</td>
</tr>
<tr>
<td>Hard Copy</td>
<td>-H</td>
<td>Print hard copy of screen</td>
<td>Print hard copy of screen</td>
<td>Print hard copy of screen</td>
</tr>
<tr>
<td>Insert</td>
<td>-I</td>
<td>Insert records</td>
<td>Insert rows or columns</td>
<td>Insert rows or columns</td>
</tr>
<tr>
<td>Jump</td>
<td>-J</td>
<td>Jump split windows</td>
<td></td>
<td>Jump split windows</td>
</tr>
<tr>
<td>Calculate</td>
<td>-K</td>
<td>Calculate page breaks</td>
<td>Change record layout</td>
<td>Change record layout</td>
</tr>
<tr>
<td>Layout</td>
<td>-L</td>
<td>Move text</td>
<td>Move records</td>
<td>Move records</td>
</tr>
<tr>
<td>Move</td>
<td>-M</td>
<td>Change filename</td>
<td>Change filename, categories</td>
<td>Change filename</td>
</tr>
<tr>
<td>Name Change</td>
<td>-N</td>
<td>Display printer options</td>
<td>Display printer options</td>
<td>Display printer options</td>
</tr>
<tr>
<td>Options, Printer</td>
<td>-O</td>
<td>Print text</td>
<td>Print reports; go to report menu</td>
<td>Print worksheet</td>
</tr>
<tr>
<td>Print</td>
<td>-P</td>
<td>Switch to another file</td>
<td>Switch to another file</td>
<td>Switch to another file</td>
</tr>
<tr>
<td>Replace or Record Selection</td>
<td>-Q</td>
<td>Replace text</td>
<td>Set record selection rules</td>
<td></td>
</tr>
<tr>
<td>Save</td>
<td>-S</td>
<td>Save file to current drive</td>
<td>Save file to disk</td>
<td>Save file to disk</td>
</tr>
<tr>
<td></td>
<td>-Ctrl-S</td>
<td>Save file to original drive/directory</td>
<td>Save file to original drive/directory</td>
<td>Save file to original drive/directory</td>
</tr>
<tr>
<td>Tabs, Totals, or Titles</td>
<td>-T</td>
<td>Set tabs</td>
<td>Freeze or thaw titles</td>
<td>Freeze or thaw titles</td>
</tr>
<tr>
<td>Edit Cell Contents</td>
<td>-U</td>
<td>Freeze or thaw titles</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Value or Verify Spelling</td>
<td>-V</td>
<td>Set standard values</td>
<td>Set standard values</td>
<td></td>
</tr>
<tr>
<td>Window</td>
<td>-W</td>
<td>Split, join windows</td>
<td>Split, join windows</td>
<td></td>
</tr>
<tr>
<td>Clear/Delete</td>
<td>-Y/Ctrl-Y</td>
<td>Delete to end of line</td>
<td>Delete entry to end of line</td>
<td>Delete entry to end of line (editing)</td>
</tr>
<tr>
<td>Zoom</td>
<td>-Z</td>
<td>Zoom/display printer options</td>
<td>Zoom between Single and Multiple Record Layouts</td>
<td>Zoom/display formulas</td>
</tr>
<tr>
<td>Ruler</td>
<td>-1...9</td>
<td>Move within file to beginning (1), end (9), or proportionally (2-8)</td>
<td>Move within file to beginning (1), end (9), or proportionally (2-8)</td>
<td>Move within file to beginning (1), end (9), or proportionally (2-8)</td>
</tr>
<tr>
<td>Help</td>
<td>-?</td>
<td>Help</td>
<td>Help</td>
<td>Help</td>
</tr>
</tbody>
</table>

*See "Data Base: Report Format/Record Layout Commands" for additional Data Base commands.
Word Processor Options

Printer Options
Press \(Q\cdot O\) to get the Printer Options display. To set an option, type the two-letter code, then press Return.
Then, if AppleWorks prompts you, type a number for the setting.

Printer and Paper
PL Paper Length
PW Platen Width

Page Description
BM Bottom Margin
PH Pause Here
EK Enter from Keyboard
PN Set Page Number
FO Footer
PP Print Page Number
HE Header
PT Print Time
LM Left Margin
RM Right Margin
MM Mail Merge
SK Skip Lines
NP New Page
SM Set Marker
PD Print Date
TM Top Margin
PE Pause Each Page

Control Keys
Ctrl-B Begin/end bold-facing
Ctrl-C Begin center text
Ctrl-F Begin full justification
Ctrl-L Begin/end underlining
Ctrl-N Begin normal justification
Ctrl-P Page break
Ctrl-R Begin right justification

Font
CI Characters per inch
LI Lines per inch

Proportional Font 1
Proportional Font 2

Format
CN Center Text
JU Justify Text
DS Double Space
RJ Right Justify Text
GB Group Begin
SS Single Space
GE Group End
TS Triple Space
IN Indent
UJ Unjustify Text

Style
+B Superscript Begin
-E Subscript End
-B Subscript Begin
SC Special Printer Codes
BB Boldface Begin
UB Underline Begin
BE Boldface End
UE Underline End
+T Superscript End

Spelling Checker Menu Options

All
Word
Block
Dictionary
Options

Method
Summary
In Context
From a List
Spreadsheet Functions

Spreadsheet functions perform various arithmetic, search, financial, and logical operations. Some functions require an argument.

Types of arguments include:

Value — a number or label. You can also use a cell reference or formula that evaluates to a number or label.

Range — a series of adjacent cells in a single column or row, such as (A9...A19) or (B45...H45).

List — a list of single values, labels, cell references, or ranges (you can usually mix them) separated by commas, such as (B9, H19, A1...A13).

Reference — a cell reference, such as B1 or DW24.

Arithmetic Functions

^ Exponentiation
* Multiplication (times)
/ Division (divided by)
+ Addition (plus)
- Subtraction (minus) This also negates the value.
@ABS(value) Absolute value
@AVG(list or range) Average
@EXP(value) Raises e to the power of value
@INT(value) Integer portion of value
@LN(value) Natural logarithm (inverse of @EXP)
@LOG(10, value) Base 10 logarithm (inverse of @LN)
@MAX(list or range) Largest value in list or range
@MIN(list or range) Smallest value in list or range
@MOD(value, divisor) Modulo (remainder after division)
@PI 3.1415927...
@ROUND(value, decimal places) Rounds value to decimal places.
@SQRT(value) Square root
@SUM(list or range) Sums all values in list or range

Trigonometric Functions

@ACOS(value) Arcosine
@ASIN(value) Arcsine
@ATAN(value) Arctangent
@ATAN2(X value, Y value) Arctangent based on x and y coordinates
@COS(value) Cosine
@DEG(value) Radians to degrees
@RAD(value) Degrees to radians
@SIN(value) Sine
@TAN(value) Tangent
Financial Functions

@IRR(range, guess value)  
Internal rate of return
@NPV(rate value, range)  
Net present value (variable payments)
@RATE(term, pv, fv)  
Interest rate
@PV(rate, term, payment [, fv, type])  
Present value of annuity (fixed payments)
@TERM(rate, payment, pv [, fv, type])  
Term of annuity
@FV(rate, term, payment [, pv, type])  
Future value of annuity
@PMT(rate, term, pv [, fv, type])  
Payment of annuity

Logical Functions

@AND(logical value, logical value[,...])  
True if all logical values are true.
@FALSE  
Returns the value false (0).
@IF(logical value, true value, false value)  
Returns true value if logical value true; true value, false value if false.
@ISBLANK (reference)  
Returns the value true if the cell reference is empty; otherwise false.
@ISERROR(reference)  
Returns true if the cell reference has the value “ERROR”; otherwise returns false.
@ISNA(reference)  
Returns true if the cell reference has the value “NA”; otherwise it returns false.
@NOT(value)  
Returns the Boolean value 1 (true) if value = 0; returns the Boolean value 0 (false) for any nonzero argument.
@OR(logical value, logical value[,...])  
True if any logical value is true.
@TRUE  
Returns the value true (1).

Logical Operators

<  
less than
>  
greater than
=  
equal to
<=  
less than or equal to
>=  
greater than or equal to
<>  
not equal to
# Data Base: Report Format/Record Layout Commands

<table>
<thead>
<tr>
<th>Keystroke</th>
<th>Table Report Format</th>
<th>Label Report Format</th>
<th>Single Record Layout</th>
<th>Multiple Record Layout</th>
</tr>
</thead>
<tbody>
<tr>
<td>⌃-A</td>
<td>Arrange</td>
<td>Arrange</td>
<td>Delete (hide) category</td>
<td>Delete (hide) category</td>
</tr>
<tr>
<td>⌃-D</td>
<td>Delete (hide) category</td>
<td>Delete line or category</td>
<td>Delete (hide) category</td>
<td>Delete (hide) category</td>
</tr>
<tr>
<td>⌃-G</td>
<td>Group totals</td>
<td>Print hard copy of screen</td>
<td>Print hard copy of screen</td>
<td>Print hard copy of screen</td>
</tr>
<tr>
<td>⌃-H</td>
<td>Print hard copy of screen</td>
<td>Insert a line or category</td>
<td>Insert a deleted category</td>
<td>Insert a deleted category</td>
</tr>
<tr>
<td>⌃-I</td>
<td>Insert a category</td>
<td>Left-justify category</td>
<td></td>
<td></td>
</tr>
<tr>
<td>⌃-J</td>
<td>Left-justify category</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>⌃-K</td>
<td>Define calculated category</td>
<td>Change report name, title line</td>
<td></td>
<td></td>
</tr>
<tr>
<td>⌃-N</td>
<td>Change report name, title line</td>
<td>Change report name, title line</td>
<td></td>
<td></td>
</tr>
<tr>
<td>⌃-O</td>
<td>Display printer options</td>
<td>Display printer options</td>
<td></td>
<td></td>
</tr>
<tr>
<td>⌃-P</td>
<td>Print report</td>
<td>Print report</td>
<td></td>
<td></td>
</tr>
<tr>
<td>⌃-Q</td>
<td>Switch to another file</td>
<td>Switch to another file</td>
<td>Switch to another file</td>
<td>Switch to another file</td>
</tr>
<tr>
<td>⌃-R</td>
<td>Set record selection rules</td>
<td>Set record selection rules</td>
<td></td>
<td></td>
</tr>
<tr>
<td>⌃-S</td>
<td>Save file to current drive</td>
<td>Save file to current drive</td>
<td>Save file to current drive</td>
<td>Save file to current drive</td>
</tr>
<tr>
<td>-Ctrl-S</td>
<td>Save file to original drive/ directory</td>
<td>Save file to original drive/ directory</td>
<td>Save file to original drive/ directory</td>
<td>Save file to original drive/ directory</td>
</tr>
<tr>
<td>⌃-T</td>
<td>Total a category</td>
<td>Switch entry only and entry with category name</td>
<td></td>
<td></td>
</tr>
<tr>
<td>⌃-V</td>
<td>Delete to end of line (editing names)</td>
<td>Delete to end of line (editing names)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>⌃-Y</td>
<td>Display category name or entry contents</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>⌃-Z</td>
<td>Move within file to beginning (1), end (9), or proportionally (2-8)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>⌃-1...9</td>
<td>Help</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

## Cursor Moves

<table>
<thead>
<tr>
<th>Cursor Move</th>
<th>Table Report Format</th>
<th>Label Report Format</th>
<th>Single Record Layout</th>
<th>Multiple Record Layout</th>
</tr>
</thead>
<tbody>
<tr>
<td>Right Arrow</td>
<td>Move right one category</td>
<td>Move right one character</td>
<td>Move right one character</td>
<td>Move right one category</td>
</tr>
<tr>
<td>Left Arrow</td>
<td>Move left one category</td>
<td>Move left one character</td>
<td>Move left one character</td>
<td>Move left one category</td>
</tr>
<tr>
<td>Up Arrow</td>
<td>Move up one line</td>
<td>Move up one line</td>
<td>Move up one line</td>
<td>Move up one line</td>
</tr>
<tr>
<td>Down Arrow</td>
<td>Move down one line</td>
<td>Move down one line</td>
<td>Move down one line</td>
<td>Move down one line</td>
</tr>
<tr>
<td>-Right Arrow</td>
<td>Widen column width</td>
<td>Move category right</td>
<td>Move category right</td>
<td>Widen column width</td>
</tr>
<tr>
<td>-Left Arrow</td>
<td>Narrow column width</td>
<td>Move category left</td>
<td>Move category left</td>
<td>Narrow column width</td>
</tr>
<tr>
<td>-Up Arrow</td>
<td>Move category up</td>
<td>Move category up</td>
<td>Move category up</td>
<td>Move category up</td>
</tr>
<tr>
<td>-Down Arrow</td>
<td>Move category down</td>
<td>Move category down</td>
<td>Move category down</td>
<td>Move category down</td>
</tr>
<tr>
<td>⌃-&lt;</td>
<td>Move category left</td>
<td>Show previous record</td>
<td>Move category left</td>
<td>Move category left</td>
</tr>
<tr>
<td>⌃-&gt;</td>
<td>Move category right</td>
<td>Show next record</td>
<td>Move category right</td>
<td>Move category right</td>
</tr>
<tr>
<td>Tab</td>
<td>Move right one category</td>
<td></td>
<td>Move right one category</td>
<td>Move right one category</td>
</tr>
<tr>
<td>⌃-Tab</td>
<td>Move left one category</td>
<td></td>
<td>Move left one category</td>
<td>Move left one category</td>
</tr>
</tbody>
</table>
### Moving Around

<table>
<thead>
<tr>
<th>Keyword</th>
<th>Keystroke</th>
<th>Word Processor</th>
<th>Data Base</th>
<th>Spreadsheet</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cursor Moves</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Right Arrow</td>
<td>Right Arrow</td>
<td>Move right one character</td>
<td>Move right within category</td>
<td>Move cell pointer right</td>
</tr>
<tr>
<td>Left Arrow</td>
<td>Left Arrow</td>
<td>Move left one character</td>
<td>Move left within category</td>
<td>Move cell pointer left</td>
</tr>
<tr>
<td>Up Arrow</td>
<td>Up Arrow</td>
<td>Move up one line</td>
<td>Move up one line or record</td>
<td>Move cell pointer up</td>
</tr>
<tr>
<td>Down Arrow</td>
<td>Down Arrow</td>
<td>Move down one line</td>
<td>Move down one line or record</td>
<td>Move cell pointer down</td>
</tr>
<tr>
<td>▼-Right Arrow</td>
<td>▼-Right Arrow</td>
<td>Move right one word</td>
<td>Move right one screen</td>
<td>Move right one screen</td>
</tr>
<tr>
<td>▼-Left Arrow</td>
<td>▼-Left Arrow</td>
<td>Move left one word</td>
<td>Move left one screen</td>
<td>Move left one screen</td>
</tr>
<tr>
<td>▼-Up Arrow</td>
<td>▼-Up Arrow</td>
<td>Move up one screen</td>
<td>Move up one screen</td>
<td>Move up one screen</td>
</tr>
<tr>
<td>▼-Down Arrow</td>
<td>▼-Down Arrow</td>
<td>Move down one screen</td>
<td>Move down one screen</td>
<td>Move down one screen</td>
</tr>
<tr>
<td>▼-&lt;</td>
<td>▼-&lt;</td>
<td>Move to beginning of line</td>
<td>Move to first category</td>
<td>Move to first column</td>
</tr>
<tr>
<td>▼-&gt;</td>
<td>▼-&gt;</td>
<td>Move to end of line</td>
<td>Move to last category</td>
<td>Move to last nonblank column</td>
</tr>
<tr>
<td>Tab</td>
<td>Tab</td>
<td>Move to next tab stop</td>
<td>Move to next category</td>
<td>Move cell pointer right</td>
</tr>
<tr>
<td>▼-Tab</td>
<td>▼-Tab</td>
<td>Move to previous tab stop</td>
<td>Move to previous category</td>
<td>Move cell pointer left</td>
</tr>
<tr>
<td>Others</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>▼-Space bar</td>
<td>▼-Space bar</td>
<td>Sticky space</td>
<td>Accept</td>
<td>Enter</td>
</tr>
<tr>
<td>Return</td>
<td>Return</td>
<td>End paragraph; new line</td>
<td></td>
<td></td>
</tr>
<tr>
<td>▼-&quot;</td>
<td>▼-&quot;</td>
<td></td>
<td>Ditto (Multiple Record Layout only)</td>
<td></td>
</tr>
</tbody>
</table>

### Using the Clipboard

![Using the Clipboard Diagram]

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