

4th DIMENSION[®]

RELATIONAL DATABASE FOR MACINTOSH[®]



4th DIMENSION[®]

RELATIONAL DATABASE FOR MACINTOSH[®]



The 4th DIMENSION Solution

4th DIMENSION is a relational database that completely solves your database management requirements. With 4th DIMENSION you can keep track of your customers, maintain an inventory system, or implement a full-fledged accounting system.

The 4th DIMENSION Path

4th DIMENSION is easy to learn and easy to use for beginners. For example, creating reports and labels is as simple as pointing and clicking. Yet 4th DIMENSION will keep pace with your needs as they grow in complexity and size. It's the last database that you'll ever have to buy.

The 4th DIMENSION Standard

4th DIMENSION has set the standard since 1987 for Macintosh relational databases. Now others are trying to implement similar functionality. When other companies say "yes you can," insist on finding out "how".

The 4th DIMENSION Reason

4th DIMENSION is an unquestionable reason to buy Macintosh. It combines ease of use, power, performance, and flexibility making it a cornerstone of Macintosh technology. It revolutionizes information management for personal, departmental or distributed use.

The 4th DIMENSION Test Drive

Don't take our word for it. Call the ACI distributor for 4th DIMENSION in your country to order a 4th DIMENSION test drive kit. It contains a tutorial and a fully functional version of 4th DIMENSION that only limits the size of your database.

4th DIMENSION

Features and Benefits

- True, complete Macintosh interface—easy to learn and use
- Relational database—data accuracy and efficiency
- Multi-user—shared information
- Customizable—less training and support
- High performance—time and cost savings
- Data security—confidentiality and safety

Specifications

- 4 GB (gigabyte) total database size
- 16 million records per file
- 100 files open simultaneously
- Unlimited relations between files
- 511 fields per file
- 511 subfiles per file
- 32,767 indexes
- 32,767 layouts
- 32,767 passwords
- Unlimited sets

Relational Capabilities

- Relations established immediately and at any time by simply dragging between fields
- Automatic, dynamic relations without programming
- One-to-many, many-to-one, many-to-many relations
- Searches, sorts, reports, and labels across multiple files
- Data entry into multiple files
- Included files with scrolling and direct data entry

Field Types

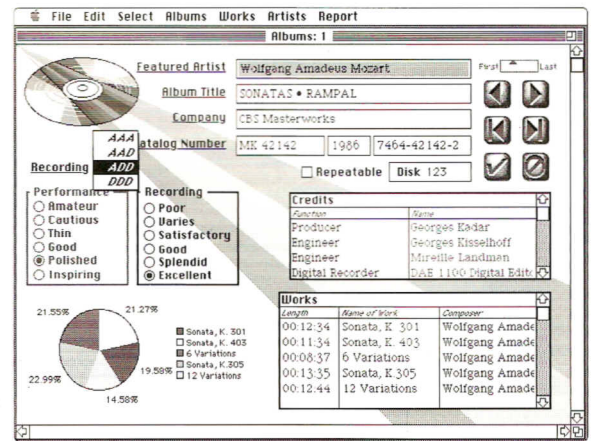
- Alpha** Up to 80 characters, variable storage length
- Text** Up to 32,767 characters, variable storage length, automatic scrollbars, variable size for printing
- Date** Extended date range, 4 display and print formats
- Numeric** Real, Integer, Long Integer types
Real precision to 19 significant digits
Scientific notation, 20 default modifiable formats, customizable styles
- Time** 5 display and print formats
- Boolean** Displayed as radio buttons or check boxes
- Pictures** Stores and prints pictures as well as any associated PostScript comment, 3 display and print formats (Truncated, Scaled to Fit, On Background)
- Subfile** Automatic sizing in layout, 3 options for printing

Search

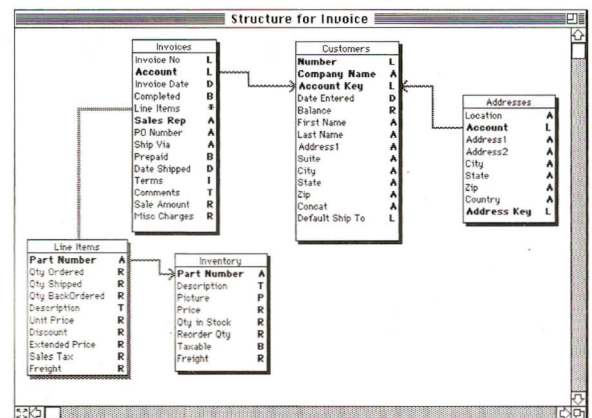
- Multiple criteria relational searches
- And, Or, Except conjunctions
- Eight comparison operators: equal, not equal, greater than, greater than or equal, less than, less than or equal, contains, does not contain
- Four search methods: Search Editor, Search by Layout (example), Search by Formula, Search and Modify
- Wildcard searches
- Visual selection of records
- Searches can be saved and loaded

Sort

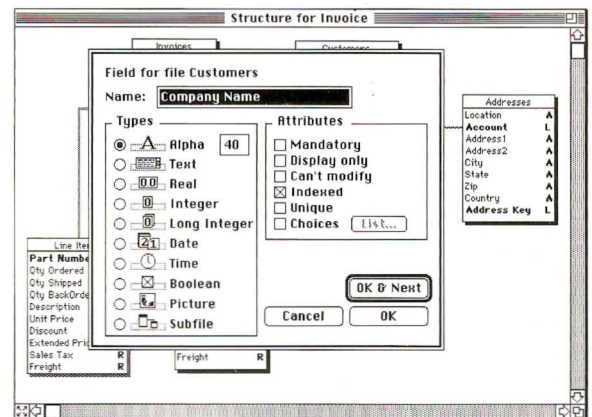
- Relational sorts
- Sort on formulas
- Permanent sorted order
- Up to 30 sort levels



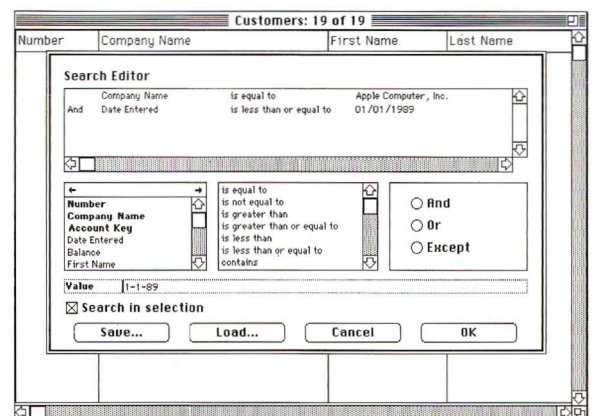
Custom database



Structure Editor



Field attributes



Search Editor

4th DIMENSION

Layout Creation

- True object-oriented layout editor
- 9 layout templates
- Instantaneous switching between layouts
- Maximum size of a layout page: 12 feet by 12 feet
- Multiple page layouts
- Complete control over font, size, style, and justification for all layout objects
- 3 measurement systems: pixels, inches, metric
- Rulers with object markers
- Built-in alignment tools
- Accepts graphics from other programs
- Positions objects by coordinates
- 256 colors from a structured palette of 16 million colors
- 33 patterns for fills and borders
- Line thickness from hairline to 72 point
- Grouping and ungrouping of objects
- MacDraw-style object selection
- Object layering control
- Nudge by pixel with arrow keys
- Automatic framing of objects
- Complete Undo, Cut, Copy, and Paste

Customizable User Interface

- **Automatic objects**

Buttons	Invisible Buttons	Dials
Check Boxes	Highlight Buttons	Thermometers
Radio Buttons	Included Graphs	Rulers
Radio Pictures	Scrollable Areas	Pop-up Menus
- **Automatic actions**

Accept	First Record	First Page
Cancel	Next Record	Next Page
Add to Included	Previous Record	Previous Page
Open Included	Last Record	Last Page
Delete Record		

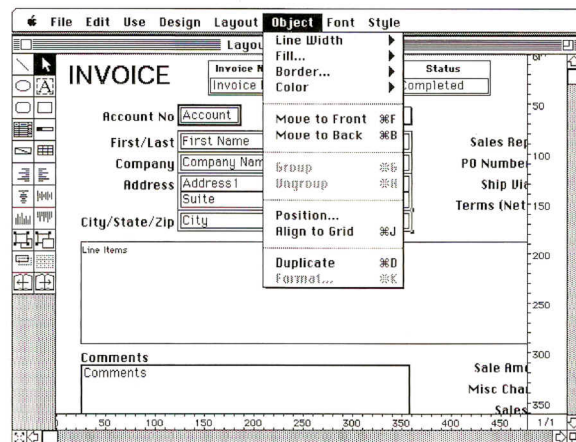
Data Entry Control

- Data entry through full layout display or spreadsheet-like format
- Configurable data entry order
- Automatic minimum and maximum range checking
- Default values including current time, current date, and sequence number
- Data entry filters (character level validation)
- Lists of permitted or excluded values
- Ranges of permitted or excluded values
- Mandatory fields
- Display-only fields and variables
- Uniqueness check for fields
- Choice lists (standard and hierarchical)
- Non-modifiable fields

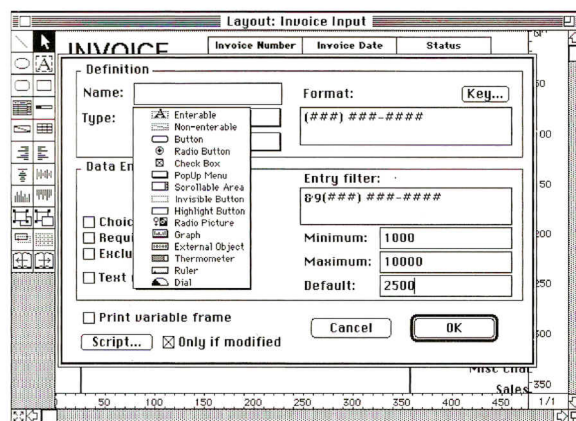
Note: All of these data entry controls are defined without programming. They can be tailored to specific needs with the language at the user's convenience.

Labels

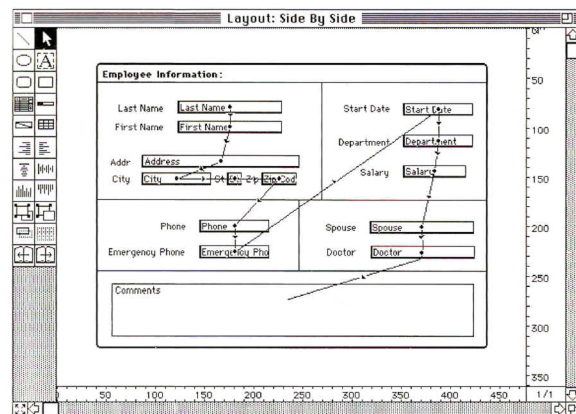
- Full-featured label generator
- Point and click design system
- WYSIWYG label definition
- Standard and high speed serial printing
- Label templates included



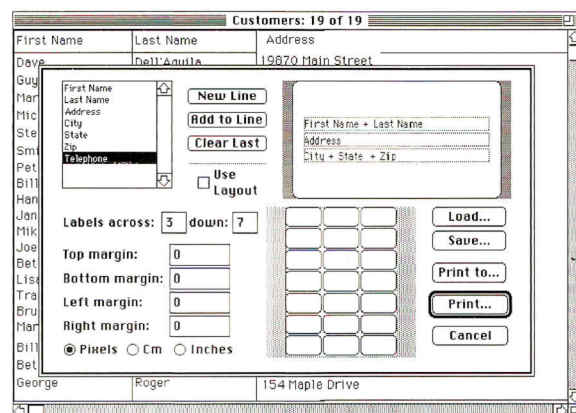
Layout Editor



Objects & data entry controls



Configurable data entry order



Mailing labels

4th DIMENSION

Executive Report Generator

- Point and click report definition
- Include fields from multiple files
- Automatic summary calculations (totals, subtotals, minimum, maximum, count, average)
- Complete control of fonts, size, style, and justification for each cell
- Numeric, date, time, text formatting
- Complete control of break labels and column titles
- Configurable headers and footers including current time, current date, and page number
- Up to ten sort and break levels
- Automatic or manual column sizing
- Reports can be framed
- User-definable formulas
- Full control of hidden report sections
- Print to standard printer, screen, disk, serial printer, and to graph
- Reports can be saved and loaded

Note: Reports can also be created with the layout editor.

Mailmerge

- Merge fields from multiple files
- Merge variables
- Change fonts, styles, and sizes
- Format merged data
- Unlimited mailmerge per document

Graphs

- Graphs on fields, subfields, and arrays
- Eight types of graphs: column, proportional column, stacked column, line, scatter, area, pie, picture
- X and Y axis grids
- User definable patterns and colors (256 for foreground and background)
- User definable scaling and data grouping

Passwords

- Password protection of files, layouts, menus, and procedures
- Creation of passwords for users, groups of users, and groups of groups
- Tracking of users and date of last use

Programmability

- Programming in listing or flow chart mode
- Over 280 built-in commands
- 32,767 local and global variables
- True one and two dimensional arrays
- 32,767 arrays
- 7 data types
- 40 operators
- If and Case tests
- 3 loop structures: For, While, Repeat
- Unlimited subroutines
- Parameter passing
- Pointers to data objects
- Scripts for fields and objects
- Scripts copy and paste with objects
- Global, file, and layout procedures
- Extensibility: external procedures and external areas
- Interactive symbolic debugger
- Access to the data structure

Reports... ☒ Report with frame

Speed Type Stock Qty Unit Price C1

H Speed Type Total Films: Sum Count

D All the totals for the # Total types: Sum

B2 Total Films: Sum

B1 Max Stock: Min

I Total Films: Sum

Max Stock: Min

Min Stock: Min

Sum Average Min

Max Count

Auto column width

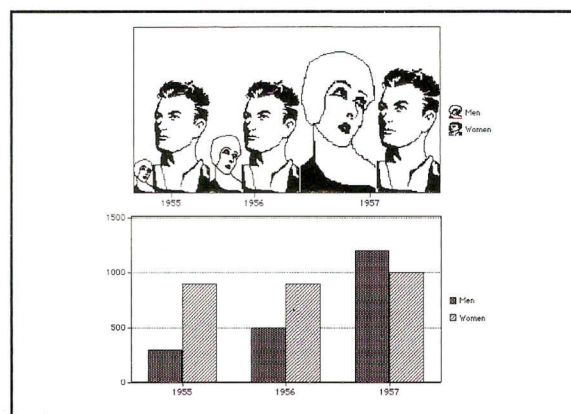
Cancel OK

Report Generator

Stock Report

Speed	Type	Stock Qty	Unit Price	
25 Asa	Fujichrome25	456	\$ 26.80	\$ 12,220.80
	AgfaPan	560	\$ 19.35	\$ 10,836.00
	Kodachrome25	1,800	\$ 16.25	\$ 29,250.00
All the totals for the 25 Asa	Total Films:	2,816		\$ 52,306.80
	Total types:	3		
50 Asa	FP4	762	\$ 18.35	\$ 13,982.70
	Cibacolor	40	\$ 34.45	\$ 1,378.00
All the totals for the 50 Asa	Total Films:	802		\$ 15,360.70
	Total types:	2		
64 Asa	Kodachrome64	125	\$ 12.45	\$ 1,556.25
	Fujichrome64	804	\$ 15.26	\$ 12,269.04
All the totals for the 64 Asa	Total Films:	929		\$ 13,825.29
	Total types:	2		
100 Asa	Kodacolor100	1,524	\$ 25.50	\$ 38,862.00
	Kodacolor100	2,586	\$ 26.95	\$ 69,692.70
	ZMcolor	2,300	\$ 21.25	\$ 48,875.00
	AgfaLine100	1,112	\$ 14.10	\$ 15,679.20
All the totals for the 100 Asa	Total Films:	7,522		\$ 173,108.90
	Total types:	4		
	Total Films:	12,069		\$ 254,601.69
	Max Stock:	40		
	Min Stock:	2,586		

Sample Report



Graphs

Structure for Invoice

Invoices: Invoice No. L, Account L

Customers: Number L, Company Name L

Passwords: Users... (Designer, Administrator, Mike Houston, Susan Okida, Jerry Jones), Groups... (Sales, Marketing, Accounting, Administration, Administrator, Mike Houston)

Addresses: Location L, Address1 L, Address2 L, City L, State L, Zip L, Country L, Address Key L

Line Items: Part Number L, Qty Ordered R, Qty Shipped R, Qty BackOrdered R, Description L, Unit Price R, Discount R, Extended Price R, Sales Tax R, Freight R

Qty In Stock R, Reorder Qty R, Taxable R, Freight R

Passwords

4th DIMENSION

Customizing an Application

- Access to all built-in user editors and generators
- Up to 32,767 menu bars
- Customizable Welcome screen for each menu bar
- Unlimited menu items
- Menu items can be enabled or disabled
- Style control of menu item text
- Command key equivalents for menu items

Multi-user

- Compatible with all HFS file servers including: AppleShare, TOPS, 3Com 3+Plus Mac
- Automatic record locking
- Remote data file and local structure file for improved performance
- Transactions with rollback

Communications

- Point and click data import and export definition
- Import and export Text, SYLK, and DIF
- ASCII map transforms data from other computers
- Asynchronous control of serial port activity
- Timeout for communication interruptions

Connectivity

- Interactive, real time connectivity with database systems on minicomputers and mainframes
- Adopted by leading minicomputer and mainframe vendors

System Requirements

- A Macintosh with a minimum 1 MB of RAM
- Hard disk
- MultiFinder compatible

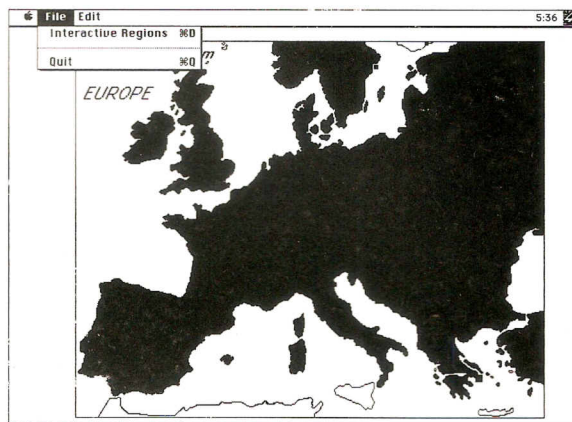
Test Drive Kit

A demonstration version of 4th DIMENSION is available. The test drive kit contains a tutorial and a fully functional version of 4th DIMENSION that only limits the size of your database.

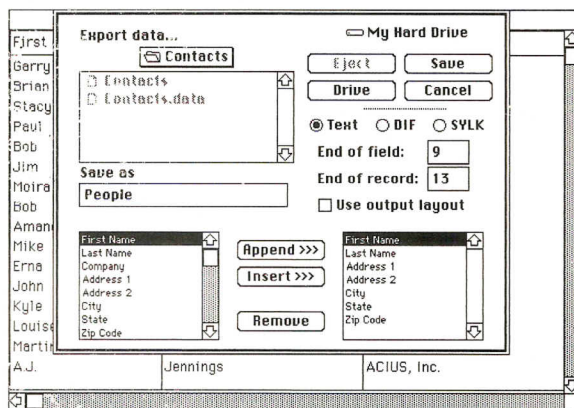
To obtain a test drive kit, call the ACI distributor for 4th DIMENSION in your country.

Distribution

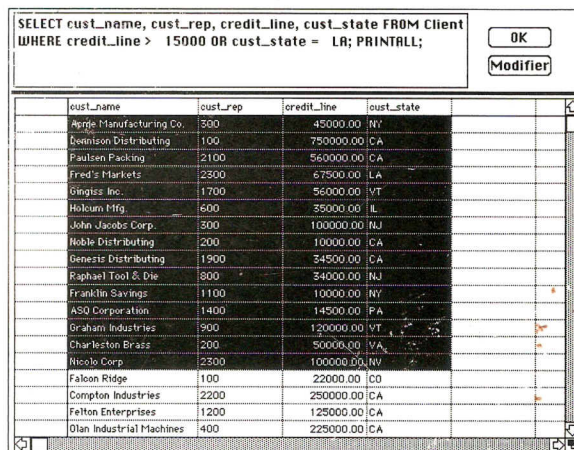
4th DIMENSION is available worldwide and in several languages. Contact ACI (Paris, France)



Custom menus and splash screen



Import and Export



Accessing a DB2 database from 4th DIMENSION

AppleCentre Harcourt,
13 Harcourt Street, Dublin 2.
Tel.: 01-750090 Fax: 01-750013

ACI UK
Analyses Conseils Informations UK Ltd
St. Ann's House Parsonage Green
Wilmslow Cheshire SK9 1HT
tel. 0625 536178 fax: 0625 536497

