









TABLE OF CONTENTS

1. Introduction	1-1
Using This Manual	1-1
Sketch Terminology	1-2
Stylistic Conventions	1-3
Word Usage	1-3
Command and Menu Names	1-4
Key and Keynames	1-4
2. Getting Started	2-1
Loading Sketch	2-1
From a Fileserver	2-1
From Floppies	2-1
Dependencies	2-2
Using Sketch	2-2
Opening a Sketch Window	2-2
Using the Sketch Command Menu	2-2
Accessing Submenus	2-4
Pop-Up Menus	2-4
Selecting Elements	2-5
Ending a Sketch Session	2-6
Saving a Sketch	2-6
Closing a Sketch Window	2-7
3. Using the Sketch Command Menu	3-1
Introduction	3-1
Delete	3-1
Move	3-3
Copy	3-5
Align	3-11
Change	3-17
TEXT BOX	3-19
	3-23
	3-29
	3-29
	3-31
	3-31
	3-33

	3-35
	3-37
Bit Image	3-39
Bury	3-41
Group	3-43
Ungroup	3-45
Undo	3-47
Defaults	3-49
Grid	3-55
Move view	3-57
Hardcopy	3-61
Put	3-63
Get	3-65

4. Manipulating the Sketch 4-1

Displaying Parts of a Sketch	4-1
Using the Sketch Display	4-1
Scrolling a Window	4-3
Moving the Region Viewed	4-4
Expanding or Shrinking an Image	4-5
Opening a Second Window onto a Sketch	4-5
Opening a Page-Sized Sketch Window	4-5
Cleaning Up the Display	4-5
Finding Your Way Around in a Sketch	4-6
Finding Your Way Home	4-6
Getting an Overview of the Sketch	4-6
Restoring a View on the Sketch	4-6
Returning to a View on the Sketch	4-7
Forgetting a View	4-7
Opening a Coordinate Display Window	4-7

5. Using Sketch With TEdit 5-1

Putting Sketches into Documents	5-1
Using SHIFT-Selection	5-1
Using the COPY Key	5-1
Using SHIFT-Snap	5-2
Formatting Sketches in Documents	5-2
Changing the Size of a Sketch	5-2
Centering a Sketch	5-2

Paginating Sketches	5-3
6. Using Bitmaps with Sketch	6-1
Using Bitmaps in Sketches	6-1
Freezing Pup-up Menus	6-2
Editing a Bitmap	6-3
Putting a Border Around a Bitmap	6-5
7. Programmer's Interface to Sketch	7-1
Introduction to the Programmer's Interface	7-1
Creating Sketch Elements	7-1
Manipulating Sketch Elements	7-5
Sketch Viewers	7-6
Monitoring Sketch Viewers	7-8
Line or Brush Properties	7-11
Changing Elements Like the Change Command Does	7-12
Clearing Out the Interactive Editing Change	7-12
Moving and Copying Sketch Elements	7-13
Writing Move Functions	7-13
Examples of Constraining Moves	7-15
Prompting the User for Element Positions	7-15
Letting the User Select a Collection of Elements	7-16
Sketch Element Properties	7-16
Control properties	7-17
Graphic properties	7-17
Text properties	7-17
Angle properties	7-17
BitMap properties	7-17
Specifications of data structures for Sketch properties	7-19
Sketch Utilities	7-20
Saving a Sketch on a File	7-20
Changing the Sketch Command Menu	7-20
Making an Image Object from a Sketch	7-20
Sketch Streams	7-20
Glossary	GLOSSARY-1
Index	INDEX-1

1-1.	A simple sketch	1-1
2-1.	The background menu	2-1
2-2.	An empty Sketch window	2-3
2-3.	The Sketch option and its submenu	2-3
2-4.	The Lisp prompt window	2-4
2-5.	Accessing sub-submenus in Sketch	2-5
2-6.	The Aspect menu for changing a Sketch box element	2-5
2-7.	Sketch elements with control points displayed	2-6
3-1.	Result of the Move elements subcommand	3-6
3-2.	Result of using the Move Point subcommand	3-6
3-3.	Result of using the Move points subcommand	3-7
3-4.	Copying an element with a two-point transformation	3-12
3-5.	Copying an element with a three-point transformation	3-13
3-6.	Selecting the Copy w/2pt trans subcommand	3-13
3-7.	Scaling with a two-point transformation	3-14
3-8.	Rotating with a two-point transformation	3-15
3-9.	Stretching with a three-point transformation	3-15
3-10.	Reflecting with a three-point transformation using the Copy command	3-16
3-11.	A three-point transformation using the Copy command	3-16
3-12.	The effect of using Align	3-17
3-13.	Control points aligned with the Space evenly in X subcommand	3-18
3-14.	Effect of using the Space evenly in X subcommand followed by the Space evenly in Y subcommand	3-18
3-15.	The pop-up menu for changing text	3-19
3-16.	The pop-up menu for changing a text box	3-20
3-17.	The pop-up menu for changing a text box's thickness	3-20
3-18.	The number pad menu for entering line thickness	3-20
3-19.	The menu that allows you to change the filling mode	3-21
3-20.	The menu of available filling modes	3-21
3-21.	Some examples of fillings over a filled box	3-21
3-22.	Some examples of text boxes	3-23
3-23.	A Text box and a box	3-27
3-24.	Example of polygon with the control points highlighted	3-30
3-25.	Some examples of curves	3-31
3-26.	Some examples of closed curves	3-32
3-27.	The control points of an arc	3-33
3-28.	The aspect menu for changing an arc	3-34

3-29.	The control points for an ellipse	3-35
3-30.	Two examples of circles with the control points displayed	3-37
3-31.	A sketch and a bitmap with control points displayed	3-39
3-32.	The pop-up menu for changing a sketch converted to a bit image	3-39
3-33.	An example of an enlarged (zoomed) bit image	3-40
3-34.	The Bury command and its submenu of commands	3-41
3-35.	The result of Bury applied to text box number 3	3-41
3-36.	The result of the Bring to top subcommand applied to text box number 1	3-42
3-37.	The result of the Reverse order subcommand applied to four text boxes but not the line	3-42
3-38.	How grouping affects a collection of Sketch elements	3-43
3-39.	A sample list of Sketch events to undo	3-47
3-40.	A sample pop-up menu that appears when you select Undo ?	3-48
3-41.	The menu for the Text subcommand	3-50
3-42.	The Defaults command's Text Box options	3-50
3-43.	Changing the direction of arcs	3-51
3-44.	The options for new arrowheads	3-52
4-1.	A sketch and its coordinate system	4-1
4-2.	A sketch and its home view	4-2
4-3.	A scrolled view	4-2
4-4.	A zoomed view	4-3
4-5.	Zooming in with the Move view command	4-4
4-6.	Zooming out with the Move view command	4-5
6-1.	The menu for editing bitmaps	6-3
6-2.	The pop-up menu for the bitmap editor window	6-4
6-3.	A sample bitmap editor window	6-4