CoCo Max®

USER'S MANUAL

COLORWARE

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1. Welcome To CoCo Max

Thank you for choosing CoCo Max. We hope
that it will provide you and your family
with many hours of creative enjoyment.
CoCo Max is probably the most sophisticated
program ever created for the Radio Shack
Color Computer, yet it is delightfully
simple to learn and use.
The key to CoCo Max's simplicity is its
extensive use of "Icons" (small symbols
that you point at to get a function). "Pull
Down Menus" control all the other functions
with equal ease.

Although these concepts are not new, (the
Xerox STAR System pioneered them and the
APPLE McIntosh made them popular) CoCo Max
represents a unique achievement by bringing
this unprecedented power to your Color
Computer.

Please do not use your original CoCo Max
disk. Make several copies using the
standard "BACKUP" function. For your
convenience, the CoCo Max disk is NOT copy
protected. Store away your original CoCo
Max disk in a safe place and only use the
backups.

IMPORTANT: Do not "Write protect" your
disks. CoCo Max must write to the disk for
some editing functions.
Your CoCo Max disk contains several "image"
samples. You may want to delete them from
your disks to make room for more of your
own pictures. Image files are easy to
identify because CoCo Max automatically
adds the "/MAX" extension to the file name
when you save the image on disk.

2. System Requirements

DISK SYSTEM. To use CoCo Max your system
must include:
- A Color Computer with 64K of memory.
- One disk drive (and controller).
- The Radio Shack MULTI-PACK interface or a
simple "Y" cable.
- The CoCo Max HI-RES input module.
- A Joystick, Mouse or Koala Pad. We have
found the Mouse to be best for CoCo Max.

- The CoCo Max diskette.

The Hi-Res Input Pack

3. Set-up

IMPORTANT: Make sure your computer is
turned off before connecting anything to it
(or to the Multipack).
As you will see, setting up your CoCo Max
system is as easy as 1-2-3.

1) CONNECTING THE HI-RES INPUT MODULE.
  a) Systems with MULTI-PACK:
     The HI-RES pack may be plugged
     into slots 1,2 or 3. Your disk
     controller must be plugged in
     slot 4 as usual. If you have the
     optional DS-69 digitizer, it must
     be plugged in slot 1.
  b) Systems with Y-Cable:
     Be careful to plug the packs with
   their labels facing up.

2) CONNECTING YOUR JOYSTICK, MOUSE OR KOALA
PAD.
All Radio Shack devices that normally plug
into the Joystick Input at the rear of your
Coco will work with the HI-RES Input Pack.
This includes the Joystick, the Mouse and
the Radio Shack Koala Pad. Simply plug the
device that you are using into the
connector located at the rear of the HI-RES
pack.

Note: We highly recommend the use of a
Mouse with CoCo Max. As an input device, it
allows great speed and accuracy in graphic
applications.

3) Double check your connections. Turn the
system on. The normal Radio Shack sign-on
message should appear within a few seconds
as always. If it does not, kill the power

SET UP
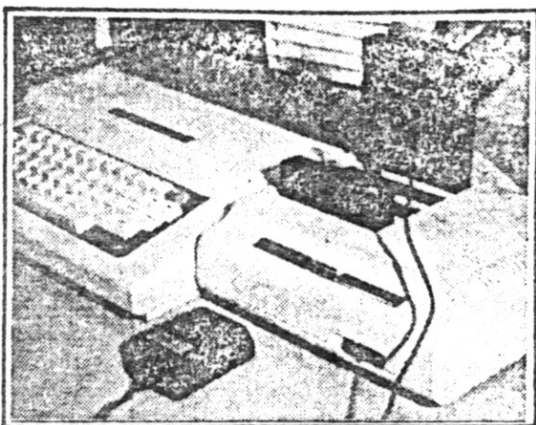
Systems with MULTI-PACK
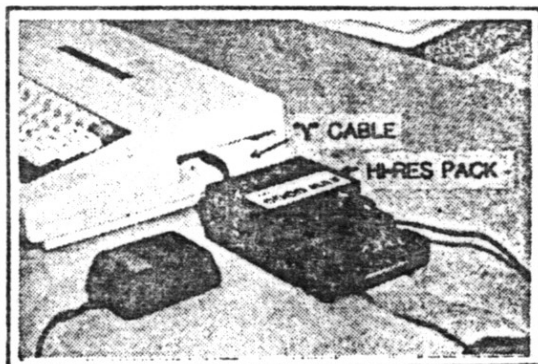
Systems with Y-Cable

COCO MAX

immediately. Any abnormality at power-up is
an indication that something may be
seriously amiss.

4) LOADING THE COCO MAX SOFTWARE:

Simply place the diskette in the drive and
type: RUN"COCOMAX"
CoCo Max will take a few seconds to load,
then the CoCo Max screen will appear.

Important: If you intend to use a printer,
CoCo Max must be "configured" to your
particular printer. The procedure is very
simple. From BASIC type:
RUN"CONFIG".
This basic program is self promting and
will automatically "patch" your CoCo Max
program to your printer.
CONFIG must only be run once, unless you
change printer model.
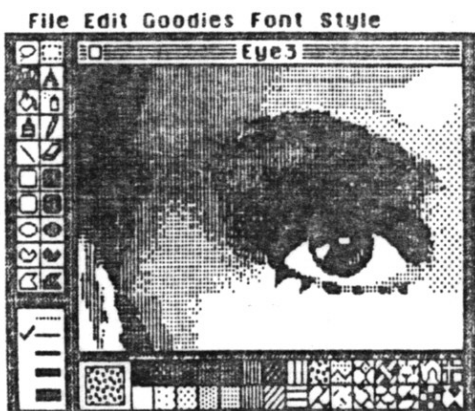
4. Basic Instructions

Your CoCo Max system is essentially
controlled by four functions using the
Mouse (or Joystick or Koala Pad).
These four functions are: POINT, CLICK,
DOUBLE-CLICK and DRAG.

- POINT. When we say POINT, we simply mean
to place your pointer (cursor) at a
particular location on the screen.

- CLICK. In order to register a position or
a function, simply "CLICK" by pressing the
button on your Mouse, Joystick or Koala Pad
just once.

- DOUBLE-CLICK. Some "shortcuts" and a few
functions are achieved by hitting the
button twice in a very rapid succession.

- DRAG. You "DRAG" by holding the button
down while moving the cursor.

Know these four functions and you will have
mastered CoCo Max. With the exception of
text entries and naming your disk files,
all of the many capabilities of CoCo Max
are accessible without touching the
keyboard.
There isn't a single command to memorize.
In fact, it is so easy to use CoCo Max that
even a child too young to read can enjoy
it.

Let's just try a brief example of POINT,
CLICK and DRAG to get a feeling for CoCo
Max. Using your Mouse, Joystick or Koala
Pad, POINT to the Icon representing the
rectangle (below the diagonal line in your

Tool Box). Place the cursor on top of the
box (the tip of the arrow can be anywhere
within the rectangle).
Now CLICK the button on your Mouse by
pressing it once.
Then you can move over to the work area
(the large empty box that we call the
"Window") of your screen.
Select a position somewhere near the upper
left hand corner of the Window. Press and
hold down the button (on the mouse,
Joystick , etc.). While holding it
down,"DRAG" your rectangle out to any size
you wish.
Once the first corner of your rectangle is
fixed, you can DRAG the opposite corner
anywhere you want, as long as you do not
release the button. When you find a
rectangle size that pleases you, release
the button. This fixes the rectangle onto
the screen. Try creating a few rectangles
in this fashion.
This CLICK and DRAG technique is how all of
CoCo Max's "rubber band" shapes are used.

CoCo Max always gives you three levels of
control on your work:
From the smallest up, they are:

1) The area delimited by the "LASSO" or the
"EDITING BOX".
Inside their boundaries you can perform any
of the graphic special effects which are
accessible from the EDIT Menu.

2) The actual working area on the video
screen is the "WINDOW". We often refer to
it as the Work Area. Some of the EDIT
functions can be made to affect the whole
"Window".

3) The terms PICTURE, IMAGE and PAGE, refer
to the entire work. It includes the part of
the PICTURE that you can see in the WINDOW
as well as the rest of it, which sits in
your computer. You can bring any part of
the picture to show in the WINDOW using the
HAND tool (described in the Tool Box
chapter).
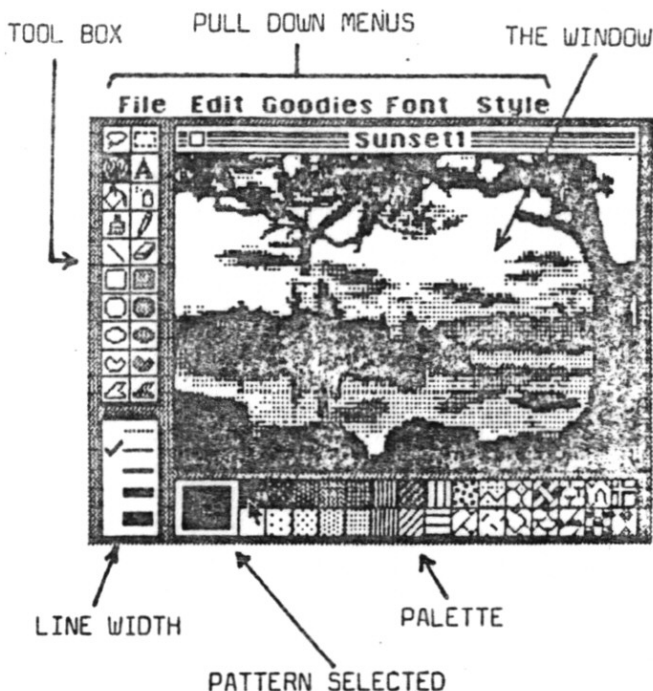
5. The TOOL BOX

The left side of your screen is your tool
box. It is comprised of 20 "icons". Icons
are graphic symbols representing the tools
that you will be using.
To select a tool simply position the
pointer on the corresponding Icon, CLICK
once, then return to the work area.

THE TOOLS
Be careful to click only once when
selecting a tool. Some special functions
are activated by DOUBLE CLICKING on certain
tools (Icons).

PENCIL.
Use this tool for fine line free-hand
drawing.
The pencil draws as long as the button on
your input device is pressed. If you start
a line when the tip of the pencil is on a
black spot, the pencil will draw in white.

ERASER.
DRAG it to selectively erase. There are
other ways to erase that we will see later.
DOUBLE-CLICKING on the eraser Icon clears
the whole Window.

RUBBER BAND LINES.
This function allows you to create
perfectly straight lines quickly and
easily. Simply position your cursor where
you want the line to begin, then DRAG (hold
button down) the cursor to the other end of
the line you wish to draw. When you release
the button the line is fixed.

RECTANGLE.

Position the pointer where you wish one
corner of the rectangle to be and DRAG it
out to the desired size. Release the button
to secure the rectangle.

RECTANGLE WITH FILL.
Same as RECTANGLE above, but your rectangle
will be filled with the selected pattern.
The selected pattern is the one shown in
the larger square on the bottom left of the
screen. To select any of the patterns shown
on the bottom of the screen, simply point
to it and CLICK.

CIRCLE AND ELLIPSE.
Position the pointer and DRAG to any
desired size and shape.
As you DRAG, the circles or ellipses drawn
will remain tangent to 2 imaginary lines
drawn at right angles from the location of
the pointer where the button was first
pressed. What? Yes I know, as usual with
CoCo Max I wish I could show it to you
rather than talk about it.

CIRCLE AND ELLIPSE WITH FILL.
Same as above but filled with the selected
pattern.

ROUNDED RECTANGLE.
This function produces rectangles with
rounded corners. Position the pointer and
DRAG to any desired size.

ROUNDED RECTANGLE WITH FILL.
Same as above but filled with the selected
pattern.

FREE-HAND SHAPE.
DRAG for desired shape, release button to

close the shape.
This tool is very much like the PENCIL,
except that it always draws in black even
if you start on a black area (the pencil
draws in white if you start on a black
area).

FREE-HAND SHAPE WITH FILL.
Same as above but when the button is
released a straight line is automatically
drawn from your point of origin to the end
of your last line. Then the closed area is
automatically filled with the selected
pattern.

POLYGON.
CLICK to anchor the starting point. Move to
the end point, CLICK again to anchor the
end of the first line and at the same time
anchor the beginning of the second line,
and so on.
You can exit the polygon three ways:
        - DOUBLE-CLICK.
        - CLICK at the starting point.
        - CLICK outside the Window.

POLYGON WITH FILL: same as above but the
shape is filled with the selected pattern.

FILL.
Any outlined area is filled with the
selected pattern. You can for example draw
any shape using the Pencil and then FILL it
with this function. (The Icon represents a
paint bucket being poured).
Note: Your outline must be unbroken. Any
gap will allow the fill to reach adjacent
areas. Note: large areas with complex shapes
                may not fill completely.
SPRAY CAN.

Works just like a can of spray paint. Your
button is the valve of the spray can. Any
selected pattern can be sprayed within the
work area. Try changing the density of
paint by selecting different dot patterns
from the "Palette" on the bottom of the
screen.

PAINT BRUSH.
The Paint Brush paints with the selected
pattern using the selected brush shape.
Many brush shapes are available.
DOUBLE-CLICK (with pointer on the Paint
Brush Icon) to call the Brush Shape menu:
POINT and CLICK on the desired shape and
width of brush. Now you can paint by
DRAGGING the Brush within the Window.

HAND.
What you see in the Window on your screen
is only part of the entire picture. The
screen is actually a moving Window on the
whole image. You can move your Window
anywhere over the larger picture by
DRAGGING the Hand in any direction.

ALPHA-NUMERIC.
You may place text anywhere in your
picture. There are a variety of Fonts and
Styles to work with. This will be explained
later in the "Pull Down Menus" section.

EDITING BOX: This is a powerful tool. We
will explain it in detail in the "Pull Down
Menus" section. Basically, the EDITING BOX
restricts the Editing Functions (such as
REVERSE, TRACE EDGE, FILL Etc.) to the area
inside the Editing Box. The Editing
functions are available from the EDIT
pull-down Menu.

Select your beginning point and DRAG to the
desired area. To cancel, CLICK outside the
editing box.

LASSO.
The Lasso is used to isolate and extract
any picture element. You may then move the
picture element anywhere within the Window.
There are many other things you can do with
the Lasso. All will be described later when
we examine the EDIT Menu.
Any part of the screen can be cut and
pasted to another location. Let's try it:
- Draw a line around any part of the
picture. When you release the button, the
lasso line is closed and the picture inside
blinks.
- Place the pointer on any blinking black
area so that the pointer changes from a
cross-hair to an arrow.
Now you can DRAG that part of the picture
anywhere within the work area.
- Release the button to secure the move.
Note that as long as the area moved is
still blinking, you could DRAG it again to
another location.
- To lock the change and remove the lasso,
move the pointer outside of the lasso area
and CLICK. The blinking stops.

- LINE WIDTH
When using the shape drawing functions (all
of the ten tools below the Paint Brush in
both columns), you have the ability to
select different line widths.
Simply position the pointer at the Line
Width of your choice and CLICK.
Note: The dotted line has a special
function. Use it in conjunction with any of
the filled shapes to create "borderless"

shapes. Let's try it: select a pattern
(except solid white or black), try the Fill
Circle function. See that your circles have
no frame or border around them.

THE TOOLS

LASSO	🔲🔲	EDITING BOX
HAND		ALPHA-NUMERIC
FILL		SPRAY CAN
PAINT BRUSH		PENCIL
RUBBER BAND LINES		ERASER
RECTANGLE		RECTANGLE WITH FILL
ROUNDED RECTANGLE		ROUND. RECT. WITH FILL
CIRCLE AND ELLIPSE		CIRCLE WITH FILL
FREE-HAND SHAPE		FREE-HAND WITH FILL
POLYGON		POLYGON WITH FILL

File Edit Goodies Font Style
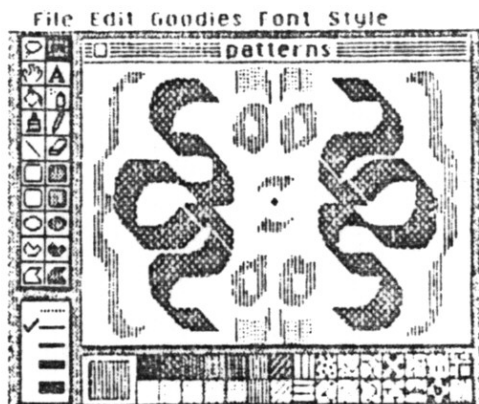
patterns

6. THE PATTERNS

At the bottom of your screen is the pattern
selection "Palette". The larger box on the
left of the palette always displays the
currently selected pattern. To change the
selected pattern, simply POINT to any of
the 30 patterns that are displayed on the
palette and CLICK.
There are 60 standard patterns available.
Only 30 are displayed on your screen at one
time. To alternate between the two sets of
patterns, simply point to the "active
pattern" box (that's the larger square near
the bottom left corner of the screen), and
CLICK. The other set of patterns will
immediately replace the current one. The
second set was particularly designed to
produce color shades, but is very useful in
black and white as well. Furthermore, you
can create your own custom patterns with a
function called "Edit Pattern". More about
this later when we describe the "GOODIES"
Menu.
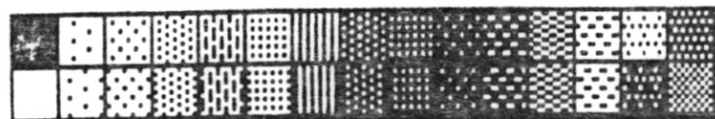
The two sets of Patterns

7. PULL DOWN MENUS

At the top of your screen are the words:
    FILE   EDIT   GOODIES   FONT   STYLE
Under each of these headings hides a "Pull
Down Menu". Each controls a part of CoCo
Max's capability.
To select one of the menus, simply POINT to
it and CLICK.
The Menu will appear below the heading.
Move the pointer to the desired function
(which will be highlighted in reverse) and
CLICK again to select it.
To exit the menu, CLICK anywhere outside
the Menu Box.

Some Menu functions "toggle" on and off.
Click it once and the function is on. Click
it a second time to turn it off. Any menu
function that is "on" or "selected" will
have a check mark next to it.
We will examine the Menus in detail. Here
is a brief description of their major
functions:

FILE allows you to Print, Save and Recall
(Load) images

EDIT. Use it to Cut and Paste, Rubberstamp,
and activate the special graphic effects
(Invert, Trace Edges, Flip, Etc.)

GOODIES to access Fat Bits, Edit Pattern,
select Brush Shape, etc.

FONT to select a particular typeface for
text.

STYLE to modify the typeface (font) to
produce variations of type style such as:
bold, italic, outline, shadow.

8. The "FILE" Menu.

POINT to "FILE" then CLICK to pull down the
FILE menu.

CLEAR PAGE. As its name implies the whole
picture is cleared. Remember that when we
refer to the "page" we refer to the whole
image not only the Window on the screen
(your active Work Area).

So CLEAR PAGE will erase your entire work,
but don't worry if you activate it
accidentally, CoCo Max is very forgiving
and will allow you, in most instances, to
"UNDO" a mistake. (More on that in the next
chapter)

LOAD PAGE. You can recall and load into
CoCo Max any picture previously saved. You
are presented with a box on the screen.
Type in the name of the picture file that
you want to Load.
Press ENTER or move the pointer to OK and
CLICK. The picture will take a few seconds
to load from the disk and appear on the
screen. The name of the file is always
shown above the Window.
As you may already know, when loading any
disk file you must spell the file name
exactly as it was saved. Since CoCo Max has
upper and lower case letters you must also
adhere to it in file names. A file called
"Pix" is not the same as a file called
"PIX".
To exit without loading a file, POINT to
"CANCEL" and CLICK.

SAVE. Saves your current picture to disk
and automatically assigns the file name

that appears above the Window. This allows
you to quickly save the latest revision of
your work. If no name was given, CoCo Max
assigns the name "Untitled" to the file.
All CoCo Max image files are automatically
assigned the extension /MAX.

SAVE AS. Saves your current picture with any
file name you want to assign to it. Normal
Radio Shack file name conventions should be
observed (no more than 8 letters, etc.). Do
not add your own extension. Remember that
CoCo Max automatically adds the extension
/MAX to all picture files.

DIRECTORY. You guessed it. The disk
directory is displayed. Only the picture
files (with the /MAX extension) are shown.
To load any picture from the disk, type in
the exact file name.

QUIT. It is used to exit CoCo Max and
return to Basic. If you do this by mistake,
simply type EXEC to return to CoCo Max,
your picture will be intact.

The PRINT functions are the object of a
separate chapter.
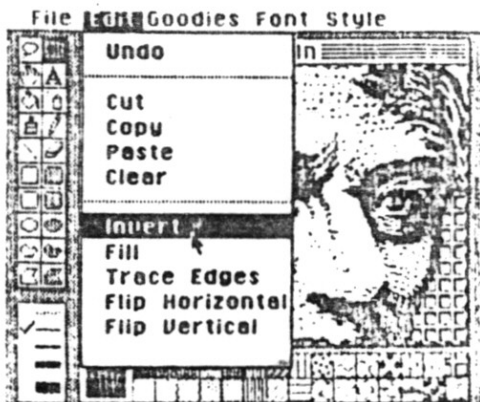
9. THE "EDIT" MENU

UNDO. This is certainly one of CoCo Max's
more likeable features. You can actually
UNDO your mistakes.
Suppose you had spent considerable time and
effort on a creation and then you
accidentally filled your masterpiece with
the wrong pattern, or you sneezed violently
during your last brush stroke.
Don't despair, simply UNDO. To get this
function, CLICK the EDIT Menu and then
CLICK UNDO. Try it and see. UNDO will clear
whatever you have done back to your
previous CLICK. Draw a line and then UNDO.
The line disappears. Now draw two separate
lines and UNDO. Only the last line is
undone.
And yes, you can even undo what you have
undone. Suppose you decided that your last
keystroke was not so bad after all, but you
had already undone it. Select UNDO again
and your undone stroke re-appears.

Since UNDO is so useful, particularly when
trying different patterns with the FILL
function, we have provided a short cut.
There is a little white box above the
Window on your screen. The box is just at
the left of the line which contains the
file name (right below the "EDIT").
CLICKING on this white box is a short cut
way to UNDO.
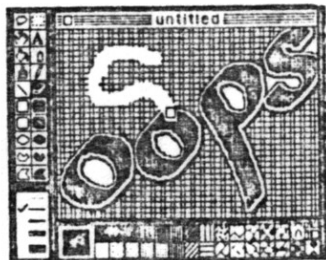
CLEAR, INVERT, FILL, TRACE EDGES,
FLIP HORIZONTAL, FLIP VERTICAL.

To use any of the above functions, you must
first surround part of your image with an
EDITING BOX. Then by CLICKING on one of
these functions the operation is performed.
Although their names describe what they do,
we suggest that you try each function to
see their effect.
Remember that by simply DOUBLE-CLICKING on
the EDIT BOX Icon, you automatically place
an Editing Box around the entire Window.
Then the EDIT functions will effect your
whole Work Area. As usual, if you do not
like the result of a certain action, you
can UNDO it.

THE CLIPBOARD. Your CoCo Max has an
invisible "Clipboard". Any part of the
picture can be "extracted". Simply surround
it with the LASSO or the EDITING BOX. Now
you can CUT or COPY it and the defined area
is placed on your "Clipboard". The
Clipboard is a dynamic file (named CLIPBORD)
on your disk, that's why you should not put
a "write protect tab" on your CoCo Max
diskettes.
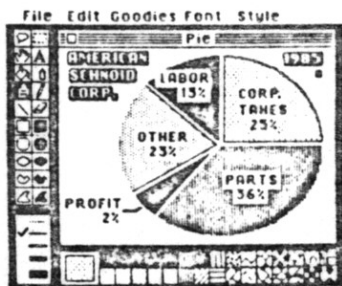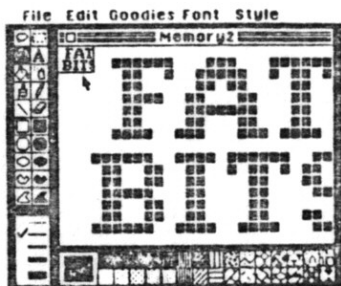
CUT. When you CUT, the area that you
selected with your Lasso or Editing Box is
erased from the Window and placed in the
invisible Clipboard, so it can be recalled
later by PASTE.

COPY. This is similar to CUT. The selected
area is copied onto the Clipboard but the
Window is left intact.

PASTE. This is one of the nicest features
of CoCo Max. Any part of a picture can be
transferred to any other area of the same
picture, or even to different pictures
stored on your disk. This is possible
because loading a new image from disk does
not alter the content of the Clipboard.
When you CLICK on the PASTE function,
whatever was placed on the Clipboard last
(even during a previous session several
days ago), will appear in the Window. You
can move it around by placing the cursor
inside the "pasted" area and DRAGGING it
around. CLICKING outside the area will lock
the PASTED area in place.
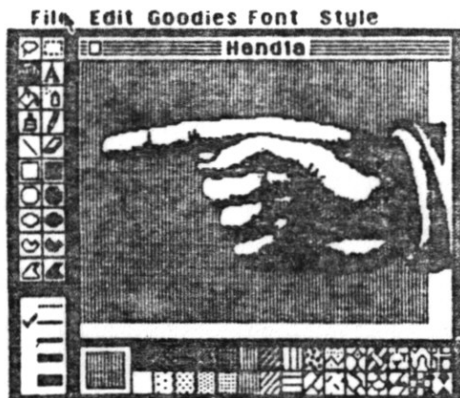
MULTIPLE IMAGES. This one might surprise
you. Try making a little drawing with the
Paint Brush. Circle it with the LASSO. Move
your cursor inside the blinking area. Hold
the button down and drag it around while
you hold the SHIFT key down...
The rate at which the images are stamped
can be adjusted. When CoCo Max is doing
multiple images, the Line Width box serves
as a spacing control. If the thickest line
is selected the image is stamped every 8
pixels when you DRAG it. If you select the
thinner line just above, the image is
stamped every 4 pixels. The next thinner
line up, when selectd will yield a stamp
every 2 pixels. If you select the thinnest
line or the dotted line the image is
stamped every pixel, giving the effect of a
___:inuous trace. If you DRAG your Mouse
fast, the "stamps" will be spread further
apart.

RUBBER STAMPING. To get a simple duplicate
image (rubber stamp) follow the same
instructions as above, but press the SHIFT
key once while holding down the Mouse
button. You can Rubber Stamp with either
the LASSO or the EDITING BOX.
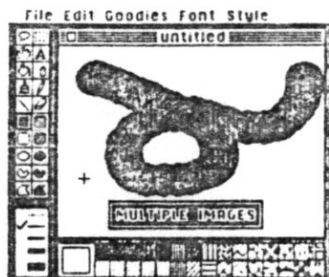
10. THE "GOODIES" MENU

GRID. This handy function is used with all
the "rubberbanding" tools (lines, squares,
circles...). Imagine an invisible grid
pattern on which the lines, rectangles and
circles are forced to lock on. The points
on the invisible grid are 8 pixels apart.
This makes it easy to draw perfect squares,
circles, horizontal and vertical lines,
because the cursor jumps 8 pixels at a
time. Try using the "Rubber band Line"
function with GRID on and GRID off to see
how it works. To toggle this feature off
POINT to it and CLICK again.

FAT BITS. This is the Zoom-In function. You
may select it from the GOODIES Menu or it
can be conveniently activated by
DOUBLE-CLICKING on the Pencil Icon.
When FAT BITS is on, the work area looks
very different: in the top left corner is a
small area representing a very small part
of the picture. This small area is
magnified 8 times and shown on the rest of
the Window. At this magnification each
"Pixel" appears as a large black square. A
Pixel is the smallest "dot" that the
computer can display.
It is now very easy to change any detail
Pixel by Pixel:
POINT and CLICK at the Pencil tool. Return
to the work area and see how the pencil
works as usual, point by point. To add a
Pixel, CLICK; to remove one, CLICK. The
Click will add a Pixel if there is none at
the pointer location; clicking on an
existing Pixel will erase it.
As you are touching up your picture with
FAT BITS you can see the result in actual

size in the top left corner box.

Note that most of the TOOL-BOX functions
will still operate in the FAT BITS mode.

When you enter FAT BITS, you might not get
exactly the part of the picture that you
want to edit. The HAND tool will allow you
to move to any part of the picture. POINT
to the Hand and CLICK. Then return to the
Window and DRAG the image until you find
the desired area in the Window. Select the
pencil (or another tool) and return to the
Work Area to experiment.
With a little practice you will realize the
power of FAT BITS. It is like a powerful
magnifier above your picture allowing very
detailed work.
To exit FAT BITS you have 3 choices:

  - POINT to the Pencil Icon and
    DOUBLE-CLICK.
  - Pull down the "GOODIES" Menu and
    CLICK on FAT BITS.
  - CLICK on the small corner Window where
    the actual size is shown.

SHOW PAGE. Normally, only a part of your
whole picture is shown on the screen. CoCo
Max provides two ways to view the whole
image. SHOW PAGE is one of them. The entire
picture is reduced to fit on the screen. Of
course this shrunken picture is not as
detailed as your actual picture, but it
does give a good idea of how your printed
page will appear.
Another way to see the complete picture
without loss of resolution is the SCROLL
PAGE described later.
To return to the regular screen, simply

CLICK.

EDIT PATTERN. You may edit any of the
various patterns on the bottom of the
screen, except the solid white and the
solid black patterns.
A typical example would be as follows:
-POINT and CLICK to one of the patterns
(except the solid white or solid black).
-POINT and CLICK to the GOODIES Menu.
-POINT and CLICK to "EDIT PATTERN".
At this point, a new Window appears in the
center of your screen. The left rectangle
is a FAT BITS representation of the
pattern. All patterns are constructed from
an 8 by 8 matrix.
The rectangle on the right shows the
pattern in actual size. This is convenient
to judge the visual effect of a pattern
over a large area.
Use the pointer to CLICK-ON or CLICK-OFF
any of the magnified pixels. You are free
to create any combination of pixels to
create many new patterns.
Special note about color: in the HI
Resolution mode (used by CoCo Max), the
Color Computer can only generate two true
colors (besides black and white). However,
many colors and hues can be created using
the "Fringe" and "Dithering" effect.
Experiment with different patterns and see
how the placement of the pixels affects the
color of the pattern.

BRUSH SHAPE. Click on this menu item and
you will be presented with a "BRUSH MENU"
displaying 32 different brush shapes. Click
on any one of the shapes and it will be
selected.

Note: choosing a Brush Shape does not
select the Paint Brush tool. If the Paint
Brush is not already selected, you must go
over the tool box and click on the BRUSH
Icon.

DOUBLE-CLICKING on the Brush Icon will also
bring up the brush shape menu. This is easy
to remember and requires one less CLICK!
Remember that the Brush always paints with
the selected pattern. If the brush refuses
to paint, check the selected pattern, it is
probably solid white.

BRUSH MIRROR H. (HORIZONTAL) If this
function is selected while using the Brush,
a second brush creates a symmetrical image
of the first brush, yielding a mirror
effect. This feature can be toggled on and
off.

BRUSH MIRROR V. (VERTICAL) This feature is
the same as described above. The symmetry
is vertical instead of being horizontal.
Both MIRRORS can be turned on to create
pleasant symetrical patterns reminiscent of
a kaleidoscope effect.
Mirrors work with the Paint Brush only.

INERTIA. This is a special function to be
used only if you use a Koala Pad as your
input device. When the inertia function is
on, the sometimes jerky signal from the pad
is smoothed out. If you already own a Koala
Pad you might want to experiment with it.
However, if you intend to purchase an input
device to replace your joystick, we
recommend the Mouse instead of the Kola
Pad.

SCROLL PAGE. The CoCo Max frame disappears
and the entire screen becomes a Window
displaying a large part of the image. Move
your input device up and down to smoothly
reveal the rest of the picture. This is a
good way to show your creation on screen.
To exit this mode, simply CLICK.
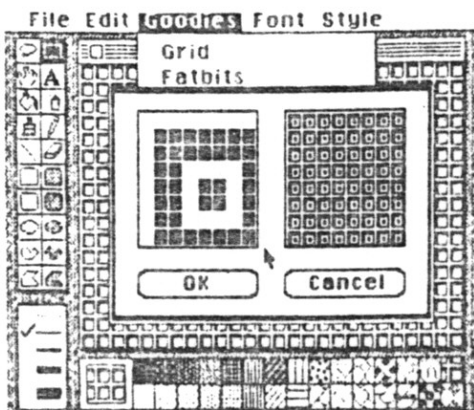
EDIT PATTERNS
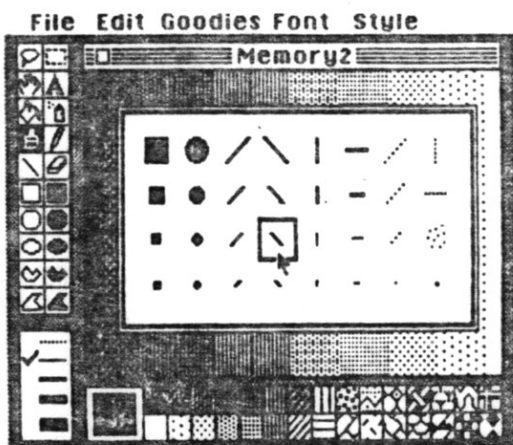
PAINT BRUSH SHAPES

11. THE "FONT" MENU.

In the typesetting industry, different
letter designs are known as FONTS. Your
CoCo Max includes several fonts. We have
given them the name of some cities.
One of the nice features of CoCo Max is
that it allows you to change the Font AFTER
the text has been typed in. Try this:
POINT and CLICK at the "A" Icon to get
"alphanumerics". Place your pointer
somewhere in the lower half of the Window
near the center. CLICK again to register
the position where the text is to be
entered. Type anything (your name for
instance). Do not press Enter. Now pull
down the FONT menu, select the different
fonts, and see how the letters on the
screen immediately change according to the
new selection.
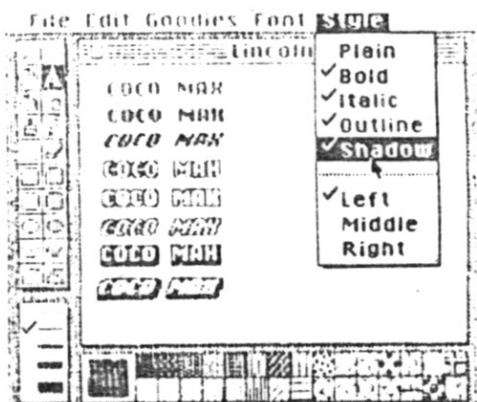
STYLE MENU

12. THE "STYLE" MENU.

Each FONT can accept any one of the five
styles shown in this menu. To see this
feature in action repeat the sequence
described on the previous page, so that
some text shows on the lower part of the
screen.
Pull down the STYLE Menu. You can click at
random on all the styles and see the effect
on your text.

Some styles are exclusive. For instance,
the letters are either PLAIN or BOLD but
not both at the same time. However, the
other styles such as ITALIC, OUTLINE and
SHADOW are independent features. They can
be added to the basic BOLD or PLAIN
letters.
For instance, letters can be simultaneously
BOLD, OUTLINED and SHADOWED. You may also
italicize the whole thing if you wish.

Note that only the current line of text can
have its style changed. Any previous line
of text will not be affected by any change
in Font or Style. Once you hit ENTER, the
text is fixed.
This allows you to mix the different fonts
and styles on the same page.

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                    COCO MAX
                    COCO MAX

13. Special effects of the SHIFT key.

Some very useful and interesting special
effects are available by using the SHIFT
key with certain tools:

A) WITH THE PAINT BRUSH:
Let's see an example to demonstrate the
effect of pressing the shift key on the
keyboard while DRAGGING the paint brush:
- Call the Paint Brush Menu (double-click
on the Paint Brush Icon)
- Select one of the biggest solid Brush
Shapes.
- Click to return to the Window.
- Select one of the lightest patterns on
the palette (but not solid white).
- DRAG the Mouse on the Window. A fat line
is drawn with the pattern which you have
selected. Drag the Mouse so that it crosses
its own path several times. Now select a
different light pattern. Note that when the
Brush paints over a previously painted
area, it covers it. This could be compared
to opaque oil paint that covers and hides
the previous coat.
- Now clear the Window (Double-Click on the
Eraser Icon) and repeat the above step but
as you DRAG the Mouse on the second pattern
of paint, hold down the shift key (on your
keyboard). Notice when you paint over a
different patern, the Paint Brush does not
cover the previous coat but adds to it.
This effect could be compared to painting
with water colors. The added patterns mix
with the existing one instead of covering
them like oil paint does.

As you DRAG the Mouse, you can press or
release the shift key at will, "on the fly"

to get the Water Paint or the Oil Paint
effect.

B) WITH THE RUBBER-BANDING TOOLS.
The ten tools located below the Paint Brush
Icon on your tool box can be used with the
following option:
If you hold the SHIFT key down while
DRAGGING a shape (rectangle, circle,
polygon etc.), the lines drawn instead of
being solid black are made using the
selected pattern. The width is selected as
usual with the line width box.
Note: This function also works with the
"RUBBER BANDING LINE" tool.

C) WITH THE SPRAY CAN.
As with the paint brush, if you hold down
the SHIFT key, you can Spray and mix
patterns. Try to Spray a light pattern,
then spray a different one on top while
holding down the Shift key.
See how the patterns combine.

D) WITH THE TRACE EDGES.
You may press the Shift key with the TRACE
EDGES function (available from the EDIT
Menu). The result will be a "Shadow effect"
the lines traced will be thicker on the
bottom right part of the subject. This is
useful in creating fancy lettering and "3D"
effects.

E) WITH THE PASTE.
When an area is defined with the LASSO or
is recalled with PASTE, pressing the SHIFT
key will "rubberstamp" it or create
multiple images (see chapter 9).

14. The DOUBLE-CLICK SHORT-CUTS.

As you have seen, most of the tools and
functions of CoCo Max can be directly
accessed by the Tool Box Icon or by the
Pull-Down Menus.
For added convenience and speed some Icons
have DOUBLE-CLICKING features. These are
called "Short-cuts" Most of them have been
described previously. They are summarized
here.

EDITING BOX (top right in the tool box):
DOUBLE-CLICKING on the EDITING BOX Icon
causes an Editing Box to surround the
entire Window. Use this function when you
want the editing feature to effect the
entire Window instead of just part of it.
For example: Draw anything on the screen.
Then DOUBLE-CLICK on the EDITING-BOX Icon.
Pull down the EDIT Menu and select INVERT.
The whole Window is now in reverse video.

Note: to use the EDIT features, an EDITING
BOX must be first defined. You can make the
whole Window become the EDITING BOX by
DOUBLE-CLICKING on the EDITING BOX Icon.
If you pull down the EDIT Menu and see that
most of the functions are shown in shaded
letters, it means that no Editing Box has
been defined. Therefore, the functions are
not enabled.

For the EDIT functions (except PASTE) to
operate you must first:
- DOUBLE-CLICK on the EDITING BOX Icon to
indicate "the whole Window" or:
- Define a rectangular area by DRAGGING the
Editing Box to the particular area that you
want to EDIT.

ERASER: DOUBLE-CLICKING on this Icon clears
the Window. Only what shows in the Window
is erased, the rest of the big picture is
not affected. To erase your entire picture,
select the CLEAR PICTURE from the FILE
Menu.

PENCIL: a DOUBLE-CLICK on the Pencil Icon
will put you in the FAT BITS Mode.
DOUBLE-CLICKING again will bring you back
to the normal mode.

HAND: the "SHOW PAGE" is performed if you
DOUBLE-CLICK on the Hand Icon. To return to
the Window display, CLICK.
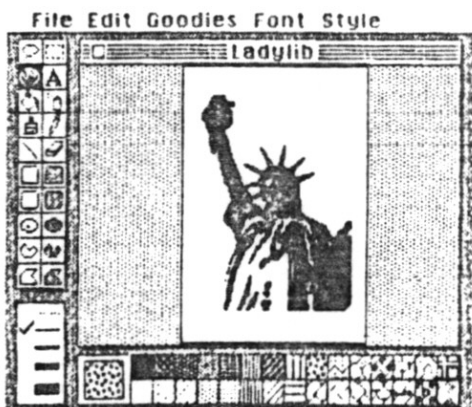
SHOW PAGE

15. PRINTING YOUR WORK

As you know there are a large number of
printers available for your Coco. Most of
them behave basically the same way when
printing alphanumeric characters. When it
comes to graphics, however, there is no
standard. Each manufacturer has its own way
of handling "dot addressable graphics". The
various methods also depend upon the
features of the given printer (number of
pins in the printhead, number of dots per
inch etc.). Writing "print routines" for
all the printers is a complicated and never
ending task since new models appear every
week.
For these reasons you must install a "print
routine" designed especially for your
printer.
This procedure is simple and neeed only to
be done once.
As it is constantly evolving, we have
treated this subject in a separate
program. From BASIC, type RUN"CONFIG".
Simply answer the questions on the screen.
There are eight ways to print your CoCo Max
creation. You can select:
- Regular size (small size) where one
pixel on the screen is represented by one
dot on the printout.
- Double size where one pixel on the
screen will correspond to 4 dots on the
printout
- Double strike or single.
- Print the entire picture or do a "screen
dump".
These 3 choices give you a total of eight
combinations.
Here is how to select them:
Pull down the FILE Menu. The bottom part,
below the dotted line should read:

- Double Strike
- Double Size
- Print

When you first load CoCo Max it is set to:
Double Strike off, Double Size off. Moving
the pointer to "Double Strike" and CLICKING
will cause a check mark to appear,
indicating that this option is now turned
on. Clicking again will turn it back off.
Use DOUBLE STRIKE to produce your final
artwork. The printing will take longer but
the printout will look better.

Now that you have chosen the size and the
single/double strike option, you must start
the printing.
For a simple "Screen Dump", simply press
SHIFT-RIGHT ARROW on your keyboard. The
printout will be an exact replica of what
appears on the screen, including borders,
Tool Box, Patterns, etc.
You can perform a "Screen Dump" anytime by
pressing SHIFT-RIGHT ARROW. The printing is
always done according to the options shown
in the FILE Menu.
If you want a printout of the whole
picture, pull down the FILE menu and CLICK
on PRINT.
You may Print part of the picture, without
the Tools, palette, title, etc. To do so,
simply Click the GOODIES Menu and Click
SCROLL PAGE. You can scroll the picture up
and down with your mouse. Pressing the
Shift/right arrow key will cause whatever
is on the screen to be printed.

16. THE DIGITIZER OPTION.

With just a bit of practice you will be
quickly creating great graphics with CoCo
Max. But imagine if you could load any
possible picture into CoCo Max; such as:

- The faces of your family and friends
- Cartoons and drawings from books
- Images from TV shows
- Pictures from magazines
- Etc, etc.

You could edit, modify, enhance, the
picture using all of CoCo Max's tools.
You can print the original picture or the
modified one on your printer. Possible
applications range from genuinely useful to
downright silly.

The device which allows this is the
DIGISECTOR DS-69.
Not unlike CoCo Max, the DIGISECTOR is a
hardware/software system.
The hardware consists of a cartrige which
plugs into slot 1 of the RADIO SHACK
Multipak (the Multi-Pak is required).
On the rear of the DS-69 cartridge, there
is a standard RCA jack like those on your
stereo. You can feed any "video signal"
into this jack. It could come from many
sources such as:
  -The "VIDEO OUT" on your Video casette
recorder.
  -The output from a video camera (color or
black and white)
  -Another computer with a video output
(Apple, Commodore, etc.)

The SOFTWARE:

The Digisector is simple to use. Once the
software is loaded your CoCo can take
electronic snapshots.
The "digitized" pictures are displayed on
your screen at the rate of 2 per second. By
simply pressing a key, the computer will
"grab a frame". Once a picture is frozen in
the computer memory, it can be saved on
disk to be recalled later.
The picture may also be printed.
The DIGISECTOR is a complete system and
does not necessarily require CoCo Max.
The image files created by DIGISECTOR can
also be used by your CoCo Max. Then you
have the CoCo Max array of graphic tools of
transform the image
Call us for additional information on the
DS-69.
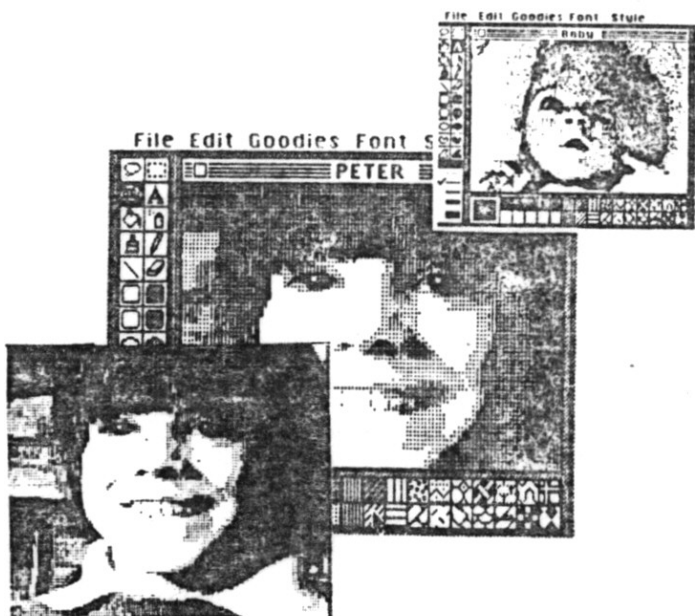
17. MISCELLANEOUS.

- The HI-RES Input Pack is addressed at
FF90
- When CoCo Max is in any mode, pressing
SHIFT/RIGHT ARROW will cause a Screen
dump.

DISPLAYING A COCO MAX SCREEN FROM BASIC.
If you wish to save a CoCo Max screen for
use in Basic, simply press SHIFT/UP ARROW.
Whatever is on the screen at that instant
will be saved on a disk file named
SCREEN/BIN.
To save a screen without the CoCo Max
borders, tools, palette, etc. go into the
SCROLL PAGE mode before using the SHIFT/UP
ARROW save function.
The SCREEN/BIN file is 6144 bytes long and
is similar to any Extended Basic
Hi-Resolution screen file.

This short program will display the
SCREEN/BIN file created by CoCo Max.
From Power up (cold start) type:
    10 PMODE 4,1 : SCREEN 1,1
    20 LOADM"SCREEN"   (load at Hex E00)
    30 GOTO 30
All the BASIC standard functions are
available on the image.

If you create some outstanding pictures
with your CoCo Max, kindly send us a
printout or a disk (or both), we might use
them in future advertisements, flyers, etc.

LIMITED WARRANTY

Your CoCo Max is warranted to the original consumer only, for 90 days, to be free from defects in materials and workmanship under normal use. Our obligation under this warranty is limited solely to repairing the product without charge. Please send any defective units to us insured and properly packed to prevent loss or damage during shipment. Colorware Inc. is not liable for incidental or consequential damages due to malfunction of this product, and any recovery may not be greater than the purchase price of this product.

This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.
   Colorware Inc. shall have no liability or responsibility to the purchaser or any other person regarding liability, loss, or damage caused or alleged to be caused by use of the programs or this manual. This includes, but is not limited to, any loss of business or anticipated profits resulting from such loss of business, or any interuption of service or consequential damages, whether physical, monetary, material, or of any other kind, resulting from use of such programs or this manual.
   Important : Opening the COCO MAX unit will void your warranty.

COCO MAX

COLORWARE

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