# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Loading MicroPainter Plus</td>
<td>1</td>
</tr>
<tr>
<td>Option Menu</td>
<td>1</td>
</tr>
<tr>
<td>Tasks</td>
<td>1</td>
</tr>
<tr>
<td>Quick—Reference List</td>
<td>2</td>
</tr>
<tr>
<td>The Tasks Explained</td>
<td>2</td>
</tr>
<tr>
<td>Option Menu, Catalog, Load Picture</td>
<td>2</td>
</tr>
<tr>
<td>Save Picture</td>
<td>3</td>
</tr>
<tr>
<td>Lock File, Unlock File, Delete File</td>
<td>4</td>
</tr>
<tr>
<td>Rename File, Information Bar OFF/ON</td>
<td>4</td>
</tr>
<tr>
<td>Pen Selection, Color &amp; Luminance Selection</td>
<td>5</td>
</tr>
<tr>
<td>Accept Color &amp; Luminance Selection</td>
<td>6</td>
</tr>
<tr>
<td>Color/ Luminance Negate (Trade)</td>
<td>6</td>
</tr>
<tr>
<td>Clear Pens 2 &amp; 3</td>
<td>6</td>
</tr>
<tr>
<td>Free Hand Drawing, Straight-Line Drawing</td>
<td>6</td>
</tr>
<tr>
<td>Precision Drawing, Pattern Fill</td>
<td>8</td>
</tr>
<tr>
<td>Solid Color Fill</td>
<td>9</td>
</tr>
<tr>
<td>Cancel Fill, Interrupt Fill, Undo Line Draw or Fill</td>
<td>10</td>
</tr>
<tr>
<td>Clear Canvas, Magnify/Exit Magnify</td>
<td>10</td>
</tr>
<tr>
<td>Color Cycle</td>
<td>11</td>
</tr>
<tr>
<td>A Step-By-Step Example</td>
<td>11</td>
</tr>
</tbody>
</table>
MicroPainter Plus lets you design graphics, create borders, and make patterned backgrounds to enhance your Video Titler Sequences. You can also use MicroPainter Plus to modify the Canvases and Border Canvases provided in Graphics Companion I.

**Note:** Files from most Atari paint programs are compatible with Video Titler. Just make sure that any picture files you load into Video Titler are from single-density formatted disks.

**Loading MicroPainter Plus**

Turn off the computer and connect a Joystick. Turn on the Monitor or TV and disk drive.

Insert MicroPainter Plus into the drive, label side up, and close the door. Turn on the computer (with XL and XE machines, hold down the OPTION key while turning on the computer). The program loads automatically.

The first thing you see after MicroPainter loads is the Title Screen. Press the START key and you're taken to the Option Menu.

**Option Menu**

The Option Menu lists several Tasks (the Tasks are listed on the right, the keystrokes on the left):

- **C** = Catalog
- **L** = Load picture
- **S** = Save picture
- **+** = Lock file
- **-** = Unlock file
- **D** = Delete file
- **R** = Rename file

You have to press START to call up the Option Menu the first time. After that, you can access this Menu by pressing the OPTION key.

**Tasks**

Getting results from Video Titler means performing certain Tasks. These are explained under *The Tasks Explained OR Getting Your Hands Dirty!* section which appears shortly.
Quick—Reference List
Included with this manual is a MicroPainter Quick—Reference List showing the Keystrokes for Tasks. Look at this now. The list is numbered, with each number appearing inside this symbol: { }. These numbers correspond with The Tasks Explained OR Getting Your Hands Dirty! section below.

Remember, this manual is merely meant as a starting point. As with any creative tool, the best way to master MicroPainter is through practice and experimentation.

The Tasks Explained OR Getting Your Hands Dirty!
Once you’ve loaded MicroPainter, you can dig right in and start designing a Canvas. Follow the material below and experiment with each Task and Selection as you read about it. You'll quickly become comfortable with MicroPainter.

Caution: Never press the SYSTEM RESET key while working with MicroPainter. IF YOU PRESS THIS KEY, YOUR WORK WILL BE LOST!

Note: Tasks {2} through {Z} can only be used from the Option Menu.

{1} Option Menu............OPTION brings you from the Canvas (either blank or work-in-progress) to the Option Menu. The Option Menu lists several Tasks: Catalog, Load Picture, Save Picture, Lock File, Unlock File, Delete File, and Rename File. Press RETURN to go back to your Canvas.

{2} Catalog............OPTION C lists every file on the disk. To get to the Catalog, Press OPTION, then C, then RETURN. To return to the Option Menu, press RETURN again.

{3} Load Picture............OPTION L asks which Canvas you want to load ("Load File Name"). Type in a file name and press RETURN or the Joystick Fire Button. The artwork loads. If you're not sure of the Canvas' name, check the Catalog.

Caution: The Inverse key ( ) must NOT be depressed when you type a file name.

A) When typing the file name, make sure you specify which drive the computer has to read. If the program is in Drive 1, just type the file name exactly as it appears in the Catalog (upper-case letters only, with no spaces between the letters).
If the program is in Drive 2, you must type D2: before typing the file name ("D2:" means "Drive 2").

**Example:** If the Catalog lists a Canvas as SUNSET, you must type the complete word, spelled the same way (typing SONSET, sunset, or SUN SET doesn't cut it).

**Example:** A file accessed from Drive 1 is typed: SUNSET. The same file accessed from Drive 2 is typed: D2:SUNSET.

B) Don't include any punctuation when typing a file name (the program doesn't like words like, SUN-SET!).

**Exceptions:** There are two exceptions for punctuation when typing file names:

1) Use an * (asterisk) to abbreviate a word.
   **Example:** Instead of typing SUNSET, type SUNS *, SU*, etc.

2) Use a ? (question mark) to take the place of letters.
   **Example:** Instead of typing SUNSET, type SUN???, or S??SET, etc.

**Note:** If there are two files with similar names (e.g., SUNSET and SUNRISE), using the asterisk or question marks might confuse the program.

(4) **Save Picture..........OPTION S** saves whatever graphics you've been working on. Don't forget to save often. The first time a Canvas is saved, you're asked to give it a file name of up to 8 characters (no spaces or punctuation). If the data disk is in Drive 2, you must type D2: before the file name.

**Example:** D2:SUNSET (data disk is in Drive 2).

The Disk number (e.g., D2:) doesn't count as part of the file name.

You can also use Extenders, 3-letter additions which might help you remember a file's contents. To use Extenders, follow the file name with a period (the period won't appear in the Catalog).

**Example:** SUNSET (without Extender);
SUNSET. RED (with Extender).
Caution: Don't attempt to save anything on the program disk (make sure the program disk is write protected). Save work on data disks only.

Note: If you have a finished piece of art, but would like other versions of it (using different borders, colors, etc.), simply save the original under other names, like: SUNSETS, SUNSET2, etc. You can alter these copies as much as you like. And you can use these embellished graphics in Video Titler.

{5} Lock File.........OPTION + locks a Canvas file so it can't accidentally be altered or deleted. After pressing +, type in the file name and press RETURN. When you call up the Catalog, each locked Canvas file appears with an asterisk (*) next to it.

{6} Unlock File.........OPTION – unlocks a locked Canvas file. After pressing –, type the file name and press RETURN.

{7} Delete File.........OPTION D removes a Canvas from the disk. Type in the Canvas file name, then press RETURN. Once a Canvas is deleted, it's gone for good.

{8} Rename File.........R changes the name of a Canvas file. The old name is replaced in the Catalog with the new. You're prompted to type the old and new names. Separate these with a , (comma).

Example: SUNSET,SUNRISE.

{9} Information Bar OFF/ON.........B turns the Information Bar OFF or ON. When it's OFF, you can work on your Canvas without clutter. When it's ON, you can see the available patterns and colors.
Note: You can't turn the Information Bar ON or OFF when the Cursor is on it.

{10} Pen Selection........1, 2, 3, 4, and SHIFT S (or click on Color Box 1, 2, 3, 4) selects one of the four drawing Pens available. The program defaults to: Pen 1—Black; Pen 2—Blue; Pen 3—Red; Pen 4—White (these are displayed in the upper right-hand corner of the Information Bar). Pen 1 is always the background color.

Important: If you're selecting from the Color Box, don't move the Cursor out of the Information Bar before you've finished choosing parts of a selection (e.g., pattern and colors). If you do, Micro-Painter thinks you've changed your mind about selecting and you'll have to start again.

{11} Color & Luminance Selection........1, 2, 3, 4, SHIFT C and CURSOR KEYS or JOYSTICK gives a useful array of colors and luminances (intensity of colors). To Select a Pen color, first make sure the Cursor isn't on the Information Bar. Next, type a Pen number (1, 2, 3, or 4). Then, hold down SHIFT while typing C.

The program is now ready to show its pallet of colors. Colors are selected by using the Up/Down actions on the Cursor Keys or Joystick (watch the Pen Color Box change as you do this).

There are 16 colors in the Atari pallet:

0) Grey 4) Pink 8) Light Blue 12) Yellow-Green
1) Light Orange 5) Purple-Blue 9) Turquoise 13) Orange-Green
2) Orange 6) Purple 10) Green-Blue 14) Light Orange
3) Red-Orange 7) Blue 11) Green 15) Peach

These colors may vary, depending on your TV or Monitor and the color's luminance. Each color has a choice of 8 luminances.

Example: Grey is one of the colors, but its 8 luminances range from pure white to pitch black, with 6 different greys in between.

Note: Only four colors (with luminances) are available on one Canvas at one time. Colors and luminances can be changed at any time.

To change a color's luminance, use the Left/Right actions on the Cursor Keys or Joystick (watch the Pen Color Box change as you do this).
[12] Accept Color & Luminance Selection........BREAK or FIRE BUTTON accepts the color or luminance chosen in [11], so you can draw with that color.

[13] Color/Luminance Negate (Trade)........N trades colors from one Pen to another. The trade is always made between Pen 1 and Pen 4 and between Pen 2 and Pen 3. A very appealing effect. Try it.

[14] Clear Pens 2 & 3........CTRL X erases everything in the picture that was drawn or filled with Pens 2 & 3. Some quick and interesting effects can be had with this selection. And, if you don't like what you did, you can undo the erasure (press U). Sorry, there's no Task for clearing Pens 1 & 4.

[15] Free-Hand Drawing........SELECT then CURSOR KEYS or JOYSTICK (P or Fire Button) gives you a Free-Hand Drawing Cursor (press SELECT until the Free-Hand Drawing Cursor appears). It looks like this:

![DRAW FREE HAND](image)

The Information Bar shows that you're in Draw mode by displaying a D (for Draw) in the left-hand corner.

Now, you can draw by holding down the Fire Button and moving the Joystick. When you release the button, drawing halts.

You can also draw using the Cursor Keys (especially nice in Magnify Mode – see [24]), but instead of pressing the Fire Button, you press P. You'll have to use a combination of Cursor Keys to make diagonal lines, arcs, etc. To stop drawing, press P again!

[16] Straight-Line Drawing........SELECT then CURSOR KEYS or JOYSTICK (P or Fire Button) lets you draw computer-straight lines at angles. It's a good way to create squares, rectangles, and angular shapes (press SELECT until the Straight-Line Cursor appears).
STRAIGHT LINE

The Information Bar shows that you're in Straight Line mode by displaying an L (for Line) in the left-hand corner.

To use this feature, hit the Fire Button or P and start "dragging" the line via the Joystick or Cursor Keys (the Joystick is decidedly easier). Notice you can drag this line anywhere on the Screen. To "anchor" it, hit the Fire Button or P, then start dragging the same line from the anchor point.

A

Press the Joystick Button or "P", use Joystick or Cursor Keys to drag a line anywhere on the Canvas.

B

Anchor the line via the Fire Button or "P", hit the Fire Button or "P" again to drag another line.

C

After you've made your masterful design, hit the Joystick Button or "P" to anchor the final line.

D

You can leave the design area blank or you can Fill it with a pattern or solid color.

You can draw using the Cursor Keys (especially nice in Magnify Mode - see (24)), but instead of pressing the Fire Button, you press P. You'll have to use a combination of Cursor Keys to make diagonal lines. To stop drawing, press P again!
Precision Drawing...........SHIFT plus CURSOR KEYS lets you draw computer-straight horizontal and vertical lines while you're in Free-Hand or Straight-Line Drawing modes. By holding down SHIFT and a Cursor Key, long lines can be made quickly. Holding SHIFT and tapping a Cursor Key builds a line pixel-by-pixel.

**Note:** A pixel is a tiny square. When you draw lines, you're making a string of pixels (or using pixels to make a string, depending on how you look at it).

**Pattern Fill............ SELECT then FIRE BUTTON or P**  Fills any shape with one of the three patterns shown in the Information Bar: Horizontal Stripes, Vertical Stripes, or Checkerboard (press SELECT until the Fill Cursor appears).

The Information Bar shows that you're in Fill mode by displaying an F (for Fill) in the left-hand corner.

To create a Pattern Fill, follow these steps:

1) Select the Fill Cursor (SELECT);
2) Click on one of the three Pattern boxes in the Information Bar;
3) Move the Cursor to the right and choose two Pens;
4) Move the Fill Cursor to the area to be filled and press the Joystick Fire Button or the letter P.

**Important:** Don't move the Cursor out of the Information Bar before you're done choosing parts of a selection (e.g., pattern and colors). If you do, the program thinks you've changed your mind about selecting and you'll have to try again.

**Note:** If you want to get rid of a Fill you've just done, press U.

It's vital that there are no gaps in your border or the Pattern Fill will spread to other areas. If this does happen, hit U to Undo the error, then Magnify the area to find your gap, fix it, and try the Fill again.
Note: If you place the Fill Cursor on a line instead of in an open space, the Fill bleeds along the lines (quite a nice effect, actually, but it might not be what you wish). To stop this, press BREAK.

![Broken Line](triangle_wrong.png)  ![Bleed](triangle_bleed.png)

![Right](triangle_right.png)  ![Perfect Fill](triangle_perfect_fill.png)

{19} Solid Color Fill............SELECT then FIRE BUTTON or P Fills any shape with a solid color based on the Pen you're drawing with. To create a Solid Color Fill, follow these steps:

1) Select the Fill Cursor (SELECT);
2) Click on PURE in the Information Bar;
3) Move the Cursor to the right and choose a Pen;
4) Move the Fill Cursor to the area to be filled and press the Joystick Fire Button or the letter P.

Important: Don’t move the Cursor out of the Information Bar before you’re done choosing parts of a selection (e.g., pattern and colors). If you do, the program thinks you’ve changed your mind about selecting and you’ll have to try again.

Note: If you want to get rid of a Fill you’ve just done, press U.

It’s vital that you don’t leave gaps in your border or the Solid Fill will spread to other areas. If this happens, hit U to Undo the error, Magnify the area to find your gap, fix it, then try the Fill again.

Note: If you place the Fill Cursor on a line instead of in an open space, the Fill bleeds along the lines (quite a nice effect, actually, but it might not be what you wish). To stop this, press BREAK.

Areas Filled with solid colors may be repainted with other solid colors. They can’t be repainted with a pattern containing the original Fill color unless you’re using the Checkered pattern.
Important: MicroPainter won't let you use the original Fill color in a Horizontal or Vertical pattern. You can get around this by first changing the original color (use a different Pen to do this). Once the color's changed, you can switch back to the original Fill color for your pattern.

{20} Cancel Fill..........BREAK cancels pattern or solid colored Fills.

{21} Interrupt Fill.........interrupts a Fill. This is great if you have a large area, but only want to fill it part way. Just start the Fill and interrupt it when it gets to a pleasing point.

{22} Undo..........U undoes the last Line Drag or Fill made on the Canvas. Let's say you draw a line, then decide it looks awful. Erase this error by immediately pressing U! Remember though, this only works for the last thing you drew.

Important: You can't undo an Undo command.

Undoing a Free-Hand line isn't as simple. Pressing U gets rid of all the lines you've drawn in free-hand mode, not just the last one. To get around this, every time you draw a line, stop and cycle through the Cursors till you get to the Free-Hand draw Cursor again. Now you can delete that line without deleting any other lines drawn before it.

{23} Clear Canvas......... SHIFT + CLEAR erases the entire Canvas at a stroke. Remember, SHIFT & CLEAR must be pressed simultaneously.

Important: The Clear Canvas command can't be undone, so make sure you really want the Canvas permanently deep-sixed before clearing!

{24} Magnify/Exit Magnify.........SPACEBAR magnifies the area you're working on so you have precise, pixel-by-pixel control of your drawing. To exit the Magnify mode, press the SPACEBAR again.

Note: A "pixel" is a tiny square. When you draw lines, you're making a string of pixels (or using pixels to make a string, depending on how you look at it).

Note: You can't change colors, Pens, or Cursors in Magnify.
Color Cycle........NO USER CONTROL prevents damage to your TV or monitor by cycling through the Atari color palette. Color Cycling doesn't occur unless MicroPainter hasn't been worked on for several minutes. Since your have a VCR, you might want to tape this feature (the Cycling can create bizarre effects). If not, just start working again and the Cycling stops.

A Step-By-Step Example
BY now, you're probably a master of Straight-Line Drawing, Fills, color changes, and pixel-by-pixel detail.

Still, we thought you might like to follow a rather simple, step-by-step Example of a MicroPainter creation. Remember, no two MicroPainter versions of the same work will look exactly alike; this is, after all, ART. Also, keep in mind that not every function of the program is used here.

In this Example, you're told how to enter and exit drawing Tasks. These appear within bold parentheses (). Refer to The Tasks Explained... again if you need more info.

Note: We begin by using the colors available when you first start the MicroPainter program. If you've already been playing around with color changes, etc., reload MicroPainter to get the default colors.

A) The first step is deciding what to draw. Let's say you're making a video about favorite evening cruises; the obvious subject is a boat, and that's our Example.

First, what color should the boat's outline be? Black. Yes, Pen 1 is Filled with Black ink (Click on Pen 1). Now, back to the Canvas.

Though we could draw our boat free-hand, using the Straight Line Task is easier since this makes shapes quickly (SELECT to choose the Straight-Line Cursor; Fire Button or P to exit). All the lines in the sail, mast, cabin, and hull were made with Pen 1, Black.

How do we like the Canvas so far? Good? Then take a moment to SAVE (OPTION S to Save; RETURN to return to the Canvas). Remember to do this often.
B) Our boat outline is done. Detailing is next, and for this we can stick with Pen 1, Black, but switch to Free-Hand Draw mode (SELECT to choose the Draw Free-Hand Cursor; Fire Button or P to exit). With this, we can put in the portals, rigging, and ID number. To make the portals as round as possible, we'll probably need to go into Magnify Mode (SPACEBAR to enter; SPACEBAR to exit). Notice that you can't make true circles. You must fudge the pixels a bit to give the illusion of roundness.

C) Now it's time to add some color. Let's use Pen 3, Red for the hull. We can either draw the Red into the hull, or take the easy way out and use a Fill (SELECT to choose the Fill Cursor; Fire Button or P to exit). We choose the latter, press the Fire Button or P in the hull, and in moments the hull is Filled.

The cabin also needs "something." Back to Pen 1 Black to add grey highlights. These are achieved by making every other pixel in the cabin Black (SPACEBAR to Magnify; SPACEBAR to exit). This small, Black-and-White checkerboard creates a grey Screen (similar to the look of a newspaper photograph). Check the Magnified and un-Magnified illustration below.

D) Our boat needs a sea to sail across and a sky to be against. Use the Straight-Line Task to make a horizon. Now use the Fill option for Pen 1, Black (SELECT to choose the Fill Cursor; Fire Button or P to exit). Place the Cursor above the horizon and press the Fire Button or P.
E) All of the sky highlights are done with the White in Pen 4. The stars are placed randomly, pixel-by-pixel (Fire Button or P); the cloud line and moon are drawn in freehand (though you might want to round some corners in the Magnify Mode).

To make our sea, we'll use a Pattern (Click on the Checkered Pattern). We'll use Pen 2, Blue and Pen 3, Red here (Click on Pen 2 and Pen 3 immediately after clicking on the Checkered Pattern). Place the Cursor under the horizon and press the Fire Button or P.

And, Voila! The Example is complete. Naturally, if you'd decided you wanted two sails on your boat instead of one, or a cloudy day instead of a starry night, these would be perfectly acceptable embellishments!