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User Support

User Registration

User registration is very important for us to confirm your purchase of the software. If you do not register, you may not receive future updates or services we provide.

Please register at RETAS!PRO home page.

RETAS! PRO Home Page

The RETAS! PRO Home Page will provide the latest technical information about the RETAS! PRO series, and allow you to download updates.

RETAS! PRO Home Page

URL: <http://www.retas.com>

Dongle Replacement

If the RETAS! PRO dongle is damaged, it can be replaced by your local dealer free of charge within 90 days of purchase. This free replacement is only provided to users who have sent in their User Registration Card.

After 90 days, basic costs may apply. Please contact your dealer for further information.

Introduction

1. Main Features

A. Line Protection For Cel Painting

Lines and colors are stored in different layers. Line closing and color painting are performed in separate layers.

B. Paint With Grayscale Lines Preserved

Grayscale lines can be preserved during painting to reproduce the fine touch of drawings.

C. Easy Management Of Large Volume Jobs

Large numbers of files are easily managed by cel folders.

D. Sub Palette Color Pickup

One click can pick up a color directly from a color module loaded in this "paint mirror". Desired colors can be quickly found.

E. Color Locator Editing

Zoomed image can be edited directly in the Color Locator.

F. Various Special Features For Painting

"CloseFill" and "AutoFill" special features lighten your work by each pixel, as well as the "Airbrush Effect" for effective airbrush effects creation.

G. Light Table

Any image can be loaded transparently like an "onion skin", allowing you to compare and adjust each move you have made.

2. Changes In New Version

A. New Interface For Faster Operation

Various floating palettes have been combined into one.

B. Animation Line Combine

Lines in separate parts of drawings can be pre-combined in Light Table for easy and quick painting.

C. New Tools And Features Added.

C-1. Extender Tool

Very small ending part can be easily "spotted" with an existing color.

C-2. CloseFill Tool

The "CloseFill" command is also a tool.

C-3. Separate Palette

Selected colors can be separated and exported by bulk, which is convenient for making masks.

D. Increased Performance Of Existing Tools

D-1. Light Table

Easy paint for pre-combined animation.

Opacity controllable.

Monotone display control.

Images larger than the main window can be loaded.

D-2. Paint Palette

Free combination of red, blue, green lines and custom 1 ~ 3 lines.

Line "Protect" option added.

D-3. Color Chart

Editable by using drag & drop.

D-4. Airbrush Fade Supported

Fade effect has been added for more real airbrush look.

D-5. Additional Colors Can Be Added In ColorReplace And Airbrush Effect Palette.

Old palettes can use only 8 colors. Now unlimited colors can be added.

3. Image File Management

Certain rules such as scene folder structure and file naming are established. For details, please see "Technical Info".

4. File Extensions

RETAS! PRO Mac OS version automatically adds a file extension for compatibility with Windows.

5. Import & Export Formats

Please see "Appendix".

Setup Guide

1. Before Installation

This manual is written in a way which assumes you already have the following knowledge of basic computer operation:

- Starting and turning off the computer
- Basic use of the mouse (click, double-click, drag, etc.)
- Basic operation of files (create folder, move a file, copy, delete, etc.)
- Basic knowledge of personal computer (SCSI, hard disk, monitor, sort, etc.)

For basic operation information, please refer to the user's manual that comes with your computer.

2. Package Verification

Before installation, please verify the contents of PaintMan package:

| | |
|--------------------------------------|---|
| •[RETAS! PRO Infinity] disk (CD-ROM) | 1 |
| •User's Manual (this book) | 1 |
| •Hardware Dongle (MicroGuard/HASP) | 1 |
| •Keyboard Shortcut List | 1 |

If anything is missing, please contact your dealer.

3. System Requirements

PaintMan has the following system requirements:

PC Compatible

| | |
|--------------------|---|
| CPU | : Pentium, Pentium Pro, Pentium MMX, Pentium II, Celeron, Pentium III and compatibles |
| Clock Speed | : 200 MHz or higher recommended |
| Memory | : minimum 90 MB, 128 MB or higher recommended |
| Monitor Resolution | : SVGA (800 x 600 pixel) or higher |
| Monitor Color | : full color (16,7 million) required |
| Hard Disk | : 20 MB or higher available |
| OS | : Windows 98/NT 4.0 (SP3 or higher) |
| Other | : printer port required for dongle QuickTime (3.0 or higher) recommended |

Macintosh

| | |
|--------------------|---|
| CPU | : PowerPC 601, 603, 604, G3 (iMac included) |
| Clock Speed | : 200 MHz or higher recommended |
| Memory | : minimum 90 MB, 128 MB or higher recommended |
| Monitor Resolution | : 15 inch (800 x 600 pixel) or higher |
| Monitor Color | : full color (16,7 million) required |
| OS | : Mac OS 8 or higher, Mac OS 8.6 compatible |
| Other | : ADB or USB port required for dongle QuickTime (3.0 or higher) required |

Please confirm the above requirements before use.

4. Dongle Installation

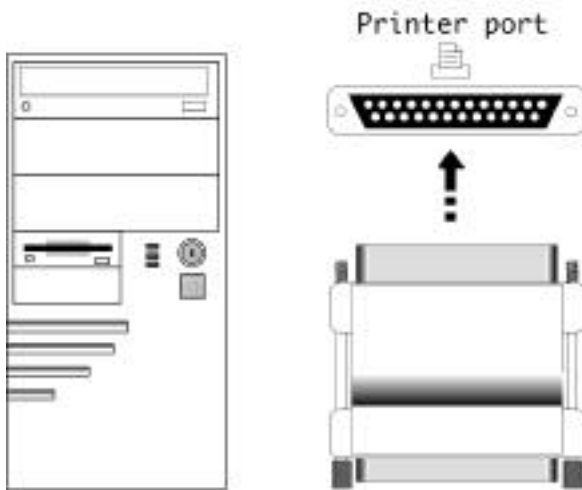
A hardware dongle (MicroGuard/HASP) is required to use RETAS! PRO.

Before installing the dongle, quit all running applications and turn off the computer.

PC Compatible

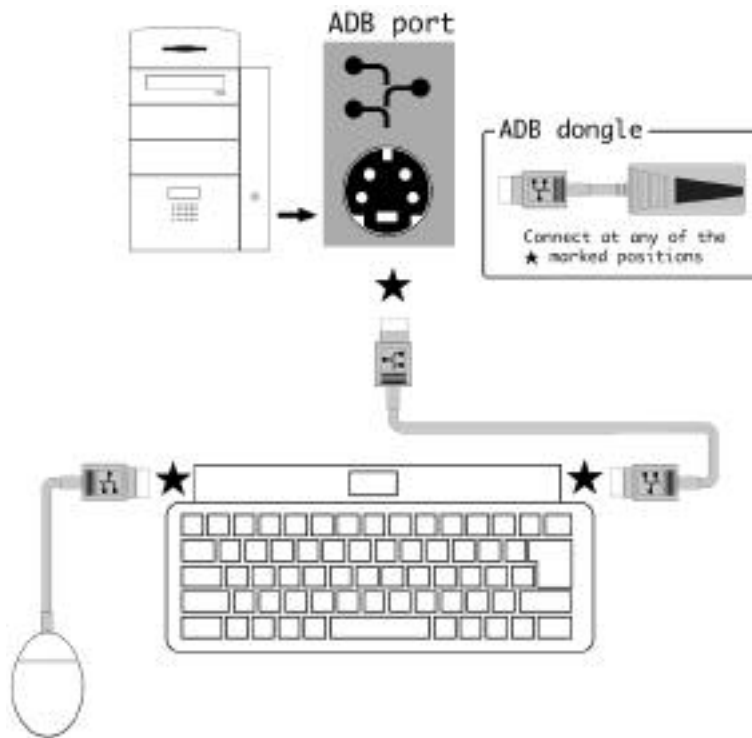
Connect the dongle to the printer port.

Make sure it is properly connected and then restart the computer.

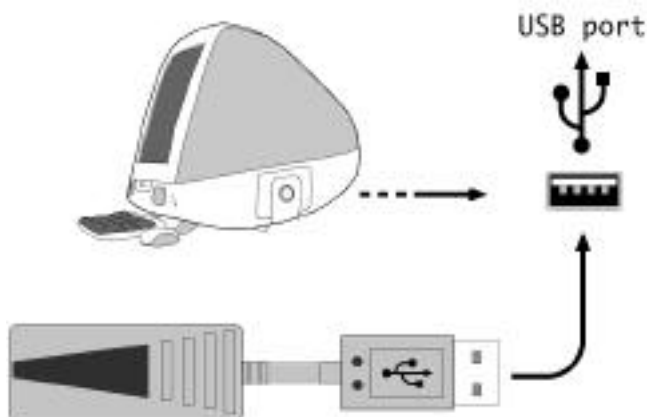


To use multiple RETAS! PRO applications, multiple dongles need to be placed inline.

Macintosh (ADB port)



Macintosh (USB)



Note: The USB dongle is for Macintosh only. (As of October 1999)
Third party USB boards on PCI cards are not supported.

Note:

- Do not connect or disconnect the dongle if the computer is turned on. This may damage the dongle.
- The dongle is sensitive to electronic fields and it needs to be stored under low humidity conditions when not in use.
- If the dongle is damaged, the software may not launch.
- The dongle has a serial number on it. This number is required in case of repair, so please record it below.

(Dongle Number)

(_____)

5. Software Installation

Windows Version Installation

Note:

Windows NT requires the user to log-on as "Administrator" before installation.

1. Start The Installer Program

Find the **Program/PaintMan** folder in the CD-ROM, double-click the Setup.exe. PaintMan setup program will start.

2. Installer Option

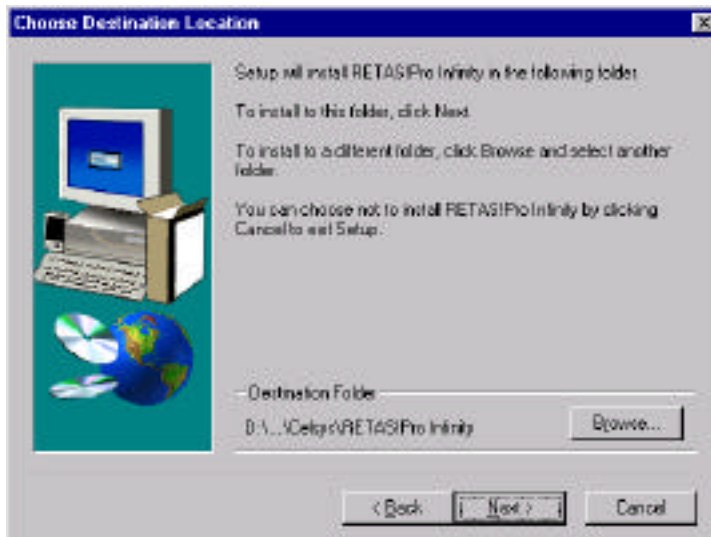
The following window will appear.

Click "Next" to continue. To cancel the installation, click "Cancel".



The next panel will determine the installation destination of PaintMan.

PaintMan will be installed in the following folder.



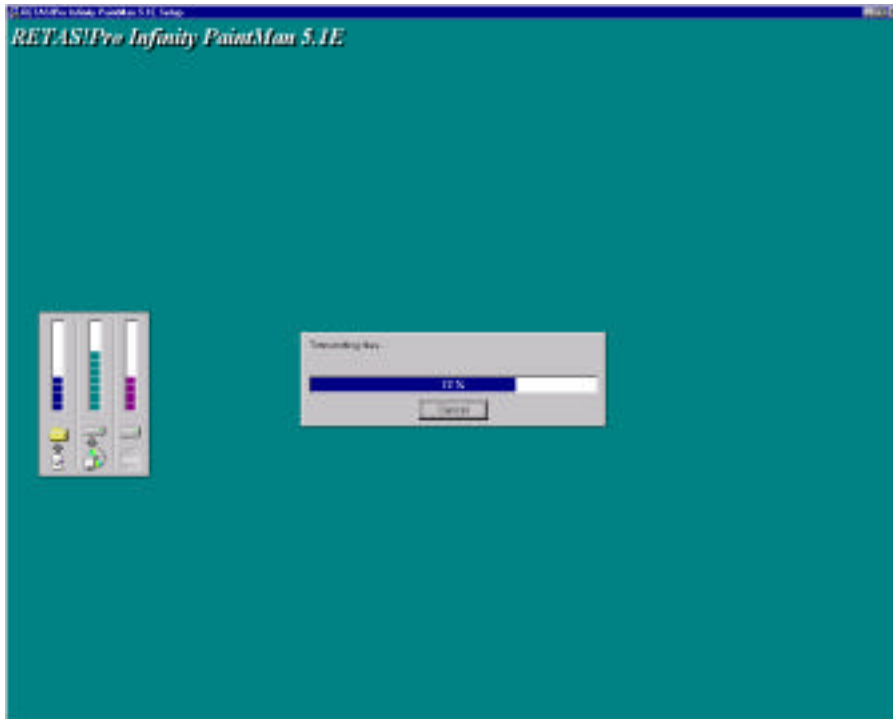
Note:

If other RETAS! PRO applications need to be installed on the same machine, it is highly recommended that they be installed in the same folder. If each application is installed in a different folder, they may not coordinate correctly.

Installing in the default folder is recommended.

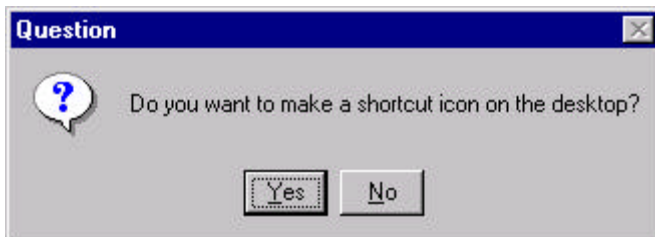
3. Installing

Installation process.

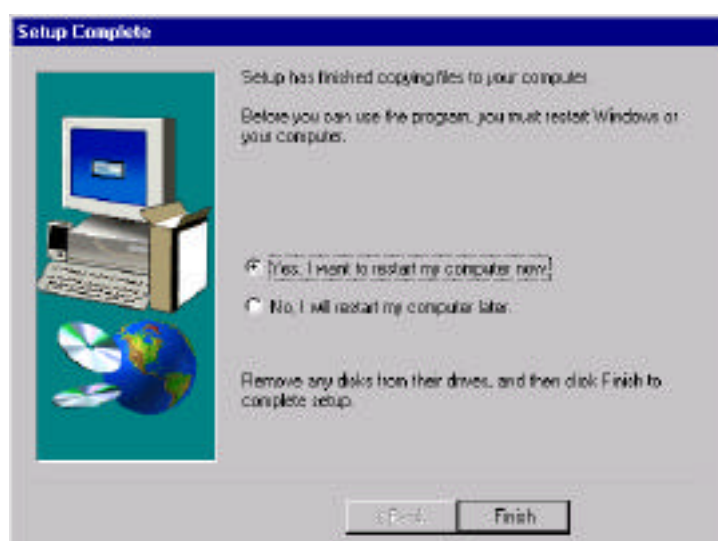


4. Finish Installation

The following dialogue appears after the installation is complete.



This creates a PaintMan shortcut on desktop.



PaintMan installation is complete.

Macintosh Version Installation

1. Create A Folder

Create a RETAS! PRO folder on your hard disk.

The location and name of the folder is not important, although it is easier to create a common folder to share with other RETAS! PRO applications (TraceMan, CoreRETAS, etc.).

"RETAS! PRO Infinity" folder is created here.



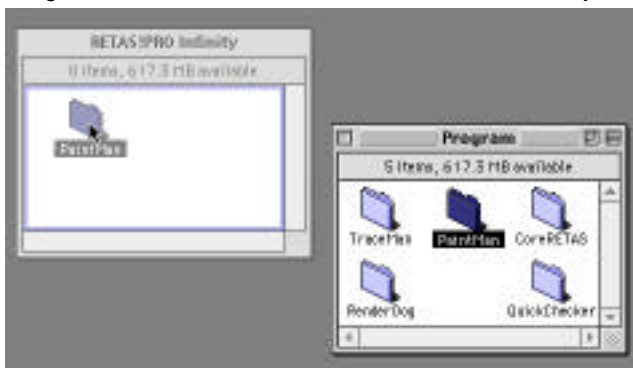
2. Insert The Disk.

Insert the "RETAS! PRO Infinity" disk in the computer. Find the "Program " folder as shown below.



3. Copy Into Folder

Drag the PaintMan folder into the "RETAS! PRO Infinity" folder to copy it.



4. Sample Data Installation

Copy the desired sample data from the "Sample Data" folder onto your hard disk.

5. USB Driver Installation

To use USB dongle, copy the "USBMicroGuardDriver" from the "USB Driver" folder into the "Extension" folder of your "System Folder".



Note:

"USBMicroGuardDriver" will take effect after restarting the computer.

6. Eject The Disk

Eject the "RETAS! PRO Infinity" disk and store it in a safe place.

PaintMan installation is complete.

6. Monitor Setup

Before using PaintMan, you should set up the monitor and memory (Macintosh).

PaintMan takes advantages of full color. Setting the monitor to full color mode is highly recommended. Other color modes still work, but user will be unable to confirm precise color differences.

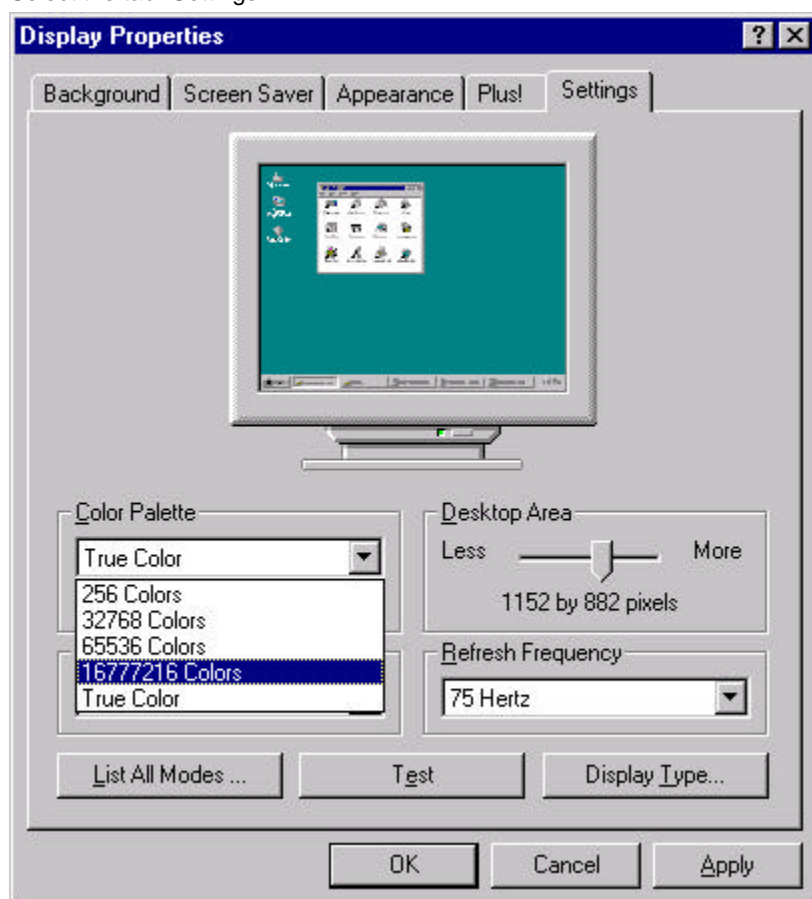
Windows

To change the display color settings, find "Display" in the "Control Panels".



Double-click "Display", the following window appears.

Select the tab "Settings".

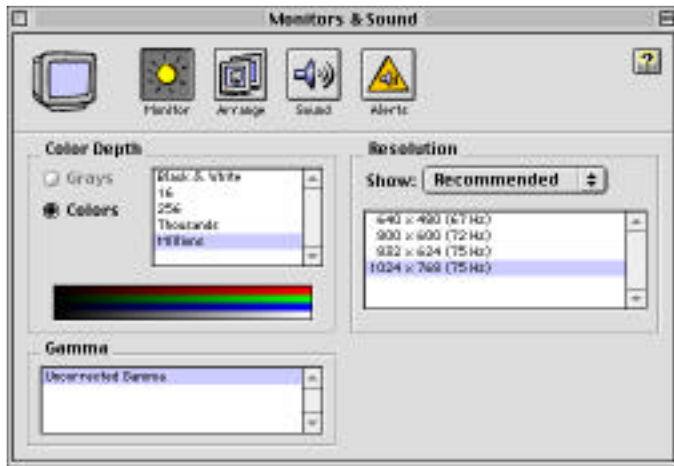


Select "True Color (24 bit)".

Macintosh

Find "Monitor & Sound" in the "Control Panels" of the System Folder.

Double-click "Monitor & Sound", and the following window appears.

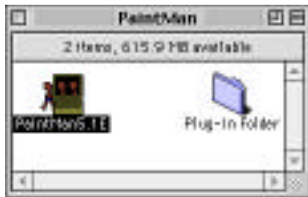


Click "Millions".

Some machines may have different amount of VRAM or video card installed, and may be unable to display full colors. If this is the case, add more VRAM or purchase a full color video card.

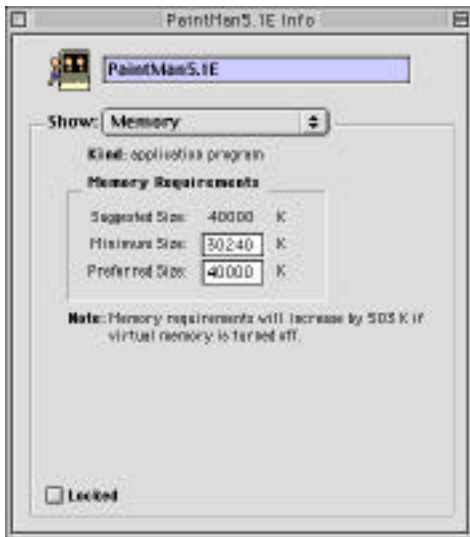
7. Memory Setup **MacOS**

1. In the Finder, double-click the PaintMan icon to highlight it.



2. Use "Get Info" under "File" menu.

Choose "Get Info/Memory" under "File" menu.



3. Change the "Preferred Size" under "Memory Requirements".

4. Memory size increases dramatically if image files are large. Minimum size should be 30 MB, 90 MB or more is recommended.

Choose "About This Computer" under the Apple menu to see the current running application memory usage.

Quick Guide

Here we'll use a sample data mono-traced by TraceMan to explain the basic painting operation of PaintMan.

1. Launch PaintMan

Double-click PaintMan icon.



The start-up screen appears.

The following dialogue may appear if the dongle is not installed. You will need to turn off the system and connect the dongle.



For users with USB compatible machines, the following dialogue may appear if the USB dongle driver is not installed. For details, see "Setup Guide".

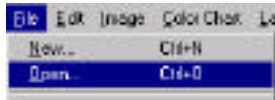


Open Files

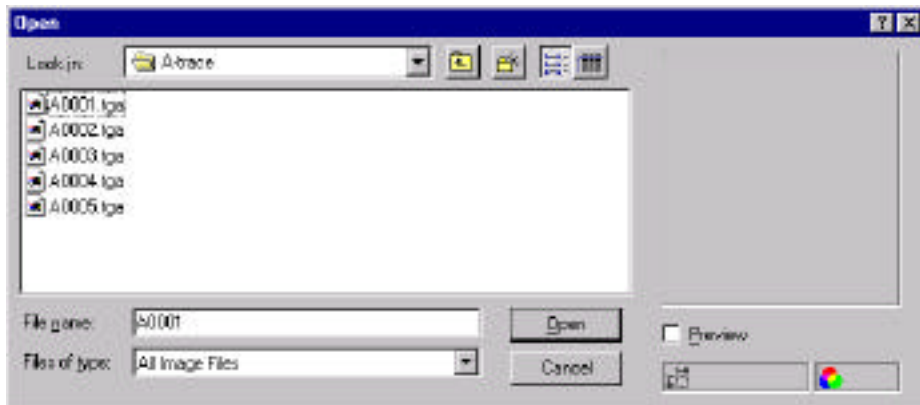
We will now open the sample files and color chart.

Open Image Files

Choose "Open..." under "File" menu.



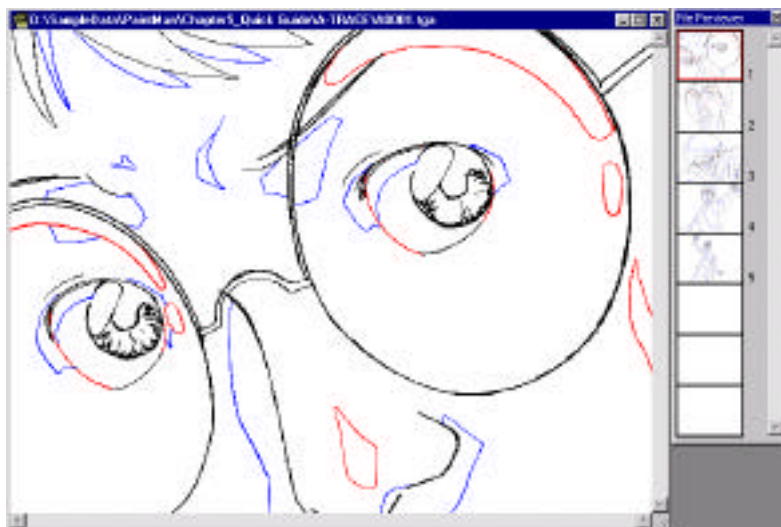
The Open dialogue appears.



Select the desired files in this dialogue.

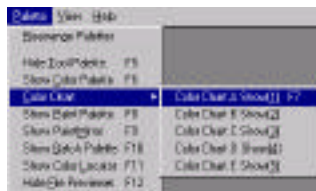
Select the file "A0001.tga" in folder "A-Trace" of "QuickGuide".

All files in the same folder will be loaded in PaintMan's File Previewer.

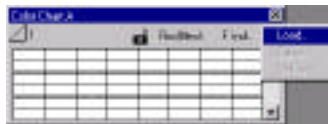


Open A Color Chart

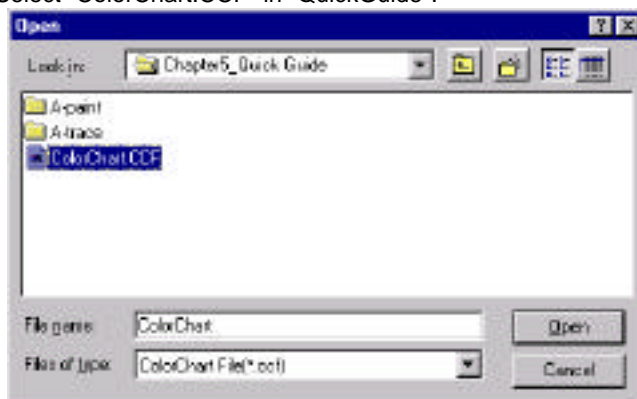
Choose "Show Color Chart A" under the "Palette" menu.



Choose "Load..." from the popup menu in the color chart palette.



Select "ColorChart.CCF" in "QuickGuide".



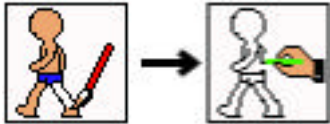
Repair Outlines (Line Layer)

Line repair should be performed in the line layer by using the "Pencil" tool and "Zoom" tool.

A. Change Layer

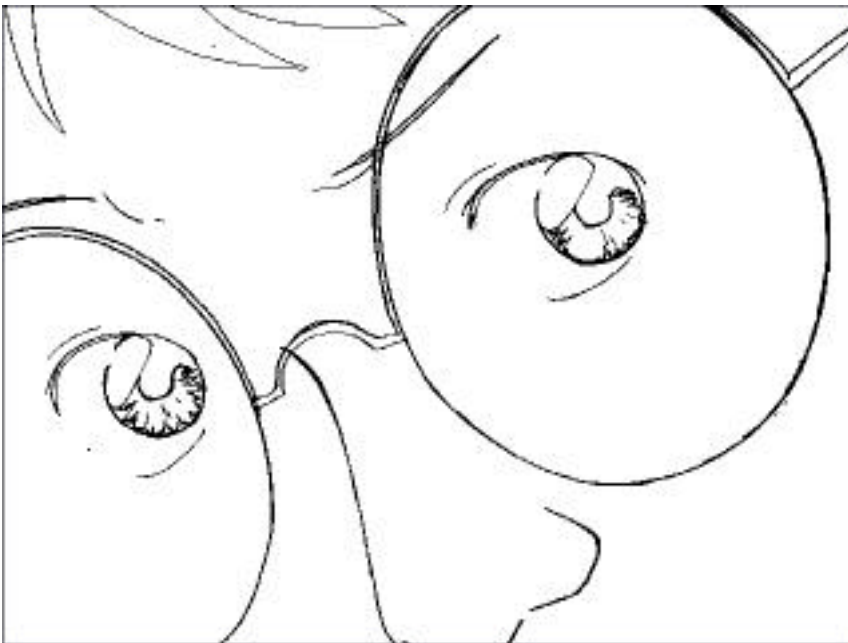
"Color Layer" is the default mode after launching. It should be switched to "Line Layer".

Click the first icon in the Tool palette to switch.



[Figure: From "Color Layer" to "Line Layer"]

Now the color trace lines disappear, only the outlines are visible to be repaired.



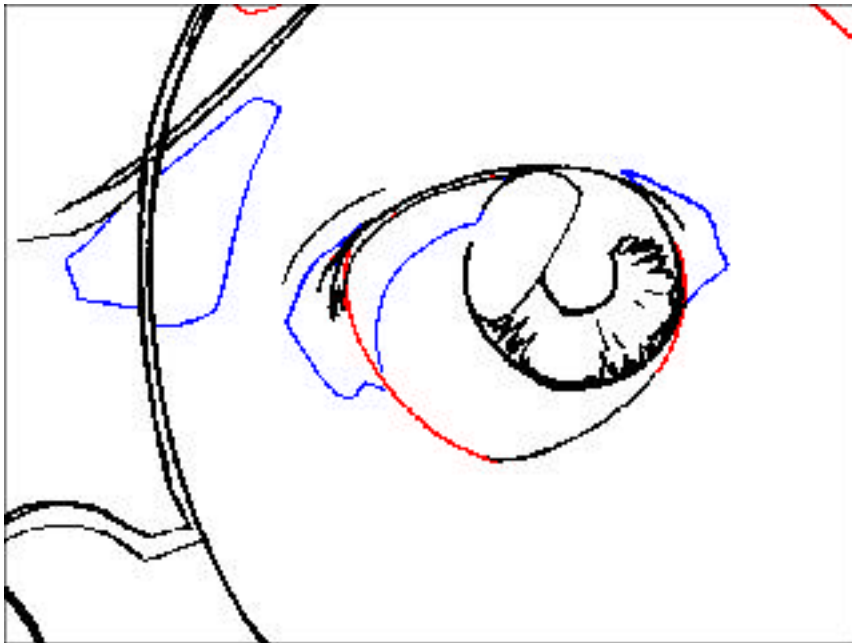
[Figure: Outlines only]

B. Enlarge The Image (Zoom Tool)

Use the "Zoom" tool to enlarge the image in order to see small details.

Click the "Zoom" tool icon in the Tool palette to select it.


When the mouse cursor changes to the Zoom tool, click the area you want to enlarge.



[Figure: Enlarged]

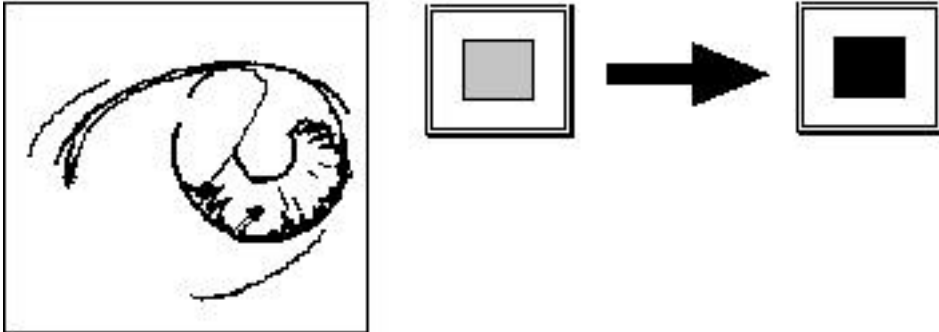
To reduce, Alt/Opt-click the image.


C. Set The Foreground Color As The Line Color

(Eyedropper) 

Click the "Eyedropper" tool icon in the Tool palette.

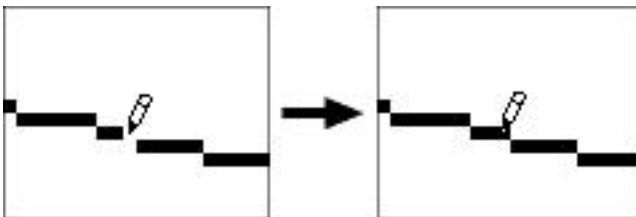
Click on the outline to pick up its color as the foreground color.



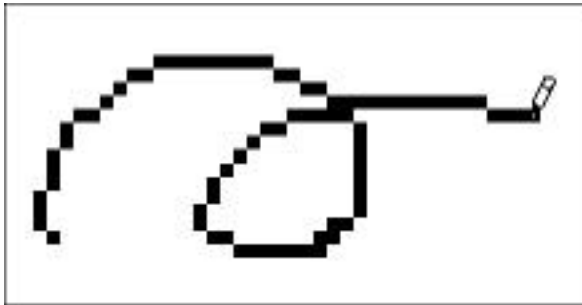
D. Repair (Pencil Tool) 

Click the "Pencil" tool icon in the Tool palette.

Click on a line gap to draw one pixel.



Or drag to draw a line.



If you click on a line which has the same color as the foreground color, it will be changed to the background color (Auto Erase). Use this feature to easily switch an outline color.

Paint (Color Layer)

Paint means to pick up a color from the color chart and use the "Fill" tool to color areas.

A. Change Layer

Click the first icon in the Tool palette to switch to "Color Layer".



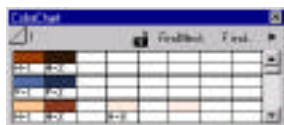
[Figure: From "Line Layer" to "Color Layer"]

B. Repair Color Trace Lines.

First, repair the color trace lines. Similar to repairing the outlines, use the "Eyedropper" to pick up the color of a color trace line and use the "Pencil" tool to repair it.

C. Pick Up A Color (Color Chart)

Move the mouse in the color chart palette and it changes to the Eyedropper. Click a color to make it the foreground color.



[Figure: Pick up a color from the chart]

D. Fill A Color (Fill Tool)

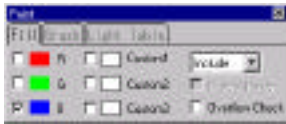


Click the "Fill" tool icon in the Tool palette.

The "Fill" tool is used for painting a continuous area with a single color.

Here we will explain how to fill an area surrounded by a blue line.

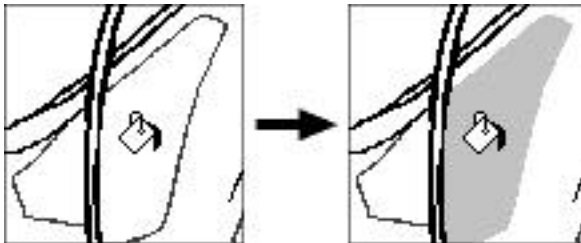
Choose "Show Paint Palette" under the "Palette" menu. Then click the "Fill" tab.



[Figure: Paint palette / "Fill" tab]

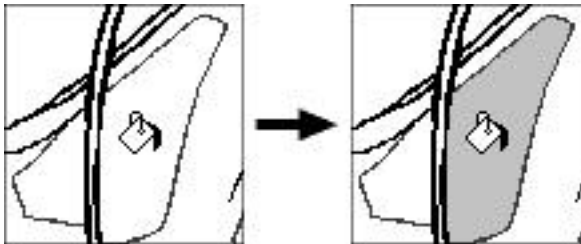
Check the blue box "B", then select the "Include" mode from the popup menu.

Next, click inside an area you want to fill with the color. The surrounding blue line will be filled as well.



[Figure: Paint with blue line]

If the blue box "B" is unchecked, the surrounding blue line will not be filled.



[Figure: Paint without blue line]

Paint Check

A completely white area (R: 255, G: 255, B: 255) will be treated as transparent in CoreRETAS compositing.

Here we will check to see if there are any white areas left over after painting.

Choose "Paint Check" under "View" menu.



All colors will be shown in black except pure white. That is how you can easily find out what you have missed.



[Figure: Paint check]

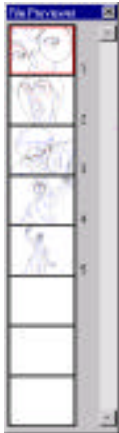
The above figure shows that you have forgotten to paint the eyes and the highlights of the glasses, so you need go back to correct them.

Go To Next Drawing (Save)

PaintMan can automatically save the current drawing if you switch to the next.

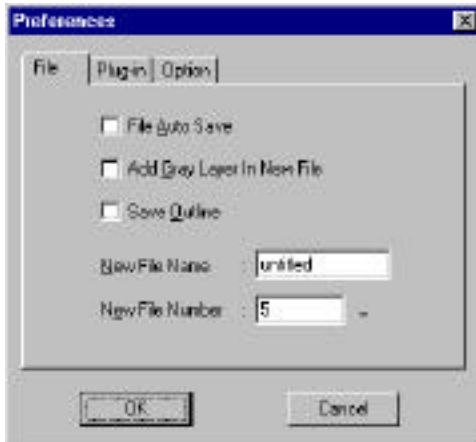
Click the Next icon in the File Previewer to go to the next cel.

Or click the Right arrow in the Tool palette.



The Save dialogue will appear if you have made any changes to the current cel.

If the "File Auto Save" option is selected in the "Preferences" settings, PaintMan will automatically save the current cel without asking.



After saving, the icon in the Previewer will be refreshed.

If you want to save during painting, choose the "Save" command at anytime.

Quit PaintMan

Choose "Quit" under "File" menu to quit PaintMan.

Command References

Symbol



Windows



Mac OS



Ctrl key (Windows), Command key (Mac OS)

Usually, the Windows Ctrl key and Mac OS Command key have the same function.



Alt key (Windows), Opt key (Mac OS)

Usually, the Windows Alt key and Mac OS Opt key have the same function.



Shift key



CapsLock key



Esc key



Tab key



Return key, Enter key



Function key (Sample: F5 key)

Shortcut

Sample:



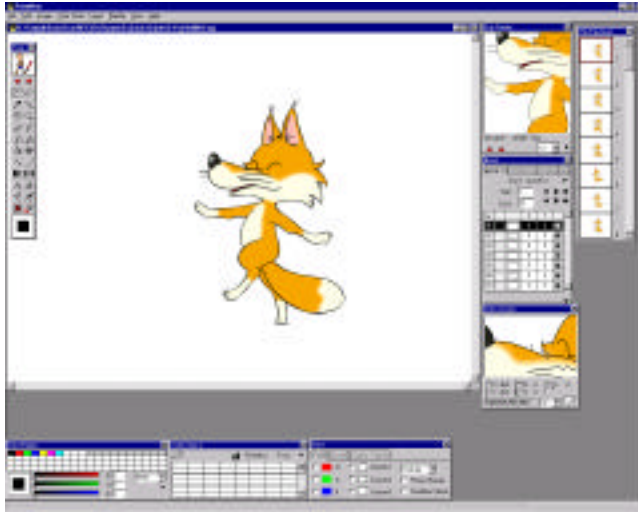
Hold "Ctrl" key and press the "S" key.



Hold "Ctrl" & "Shift" key and press the "S" key.

Menus & Palettes List

The menu bar and various floating palettes are used throughout all of the operations of PaintMan.



[Figure: PaintMan screen shot]

Floating Palettes

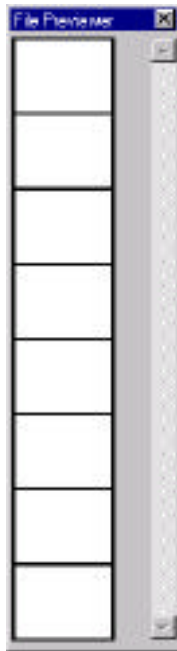
A. Tool Palette

To switch between image editing tools.



B. File Preview

To confirm and switch between image files.



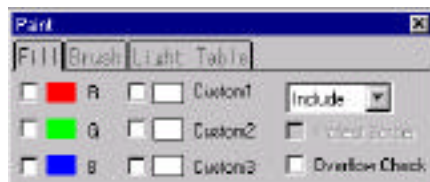
C. Sub Palette

Holds the modules.



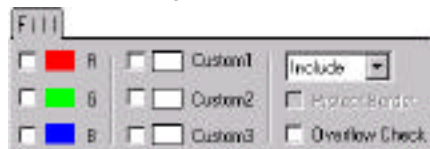
D. Paint Palette

Painting related feature switches and settings.



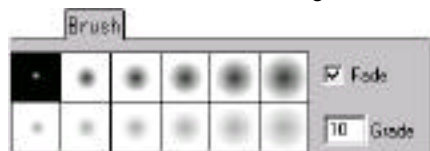
d-1. Fill

Fill mode settings.



d-2. Brush

Airbrush size and fade settings.



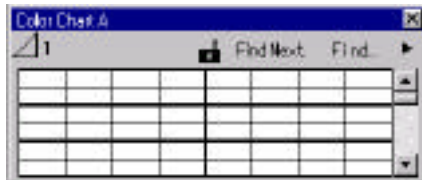
d-3. Light Table

Light Table settings.



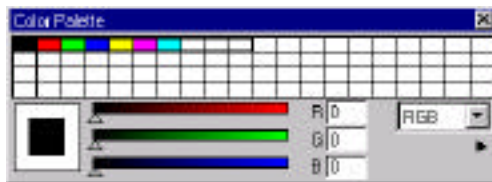
E. Color Chart Palette

Register, rename and manage colors.



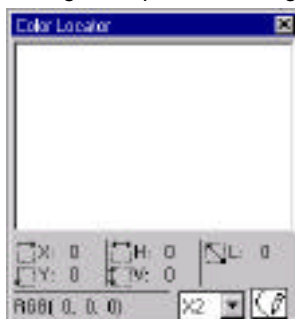
F. Color Palette

Edit and select paint colors.



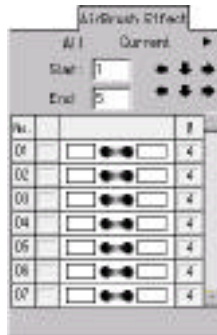
G. Color Locator

Enlarge and precise editing of an image.



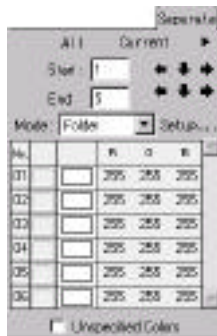
h-3. Airbrush Effect

Airbrush Effect settings.



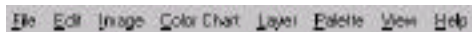
h-4. Separate

Separate settings.



Menu Bar Commands

Menu Bar



The white bar on top of the screen, which shows titles like "File", "Edit"... etc.

A. File

File import/export commands.



New...

CTRL + N , ⌘ + N

Open...

CTRL + O , ⌘ + O

Close

CTRL + W , ⌘ + W

Save

CTRL + S , ⌘ + S

Save As...















CTRL + SHIFT + S ,
⌘ + SHIFT + S

Revert

CTRL + R , ⌘ + R

Revert Selection

CTRL + SHIFT + R ,
⌘ + SHIFT + R

| | |
|----------------|---|
| <hr/> | |
| First Cel | ALT +  , OPT +  |
| Previous Cel |  |
| Next Cel |  |
| Last Cel | ALT +  , OPT +  |
| Slide Show | (Forward) ALT + SHIFT +  , |
| | OPT + SHIFT +  |
| | (Backward) ALT + SHIFT +  , |
| | OPT + SHIFT +  |
| <hr/> | |
| Page Setup... | MacOS |
| Print... | CTRL + P ,  + P |
| Print (All)... | MacOS |
| <hr/> | |
| Quit | CTRL +  ,  +  |

B. Edit

Editing commands and preferences settings.



Undo

CTRL + **Z** , **⌘** + **Z**

Cut

CTRL + **X** , **⌘** + **X**

Copy

CTRL + **C** , **⌘** + **C**

Paste

CTRL + **V** , **⌘** + **V**

Clear

Select All

CTRL + **A** , **⌘** + **A**

Select Foreground Color

CTRL + **U** , **⌘** + **U**

Select Other Colors

Hide Selection

CTRL + **H** , **⌘** + **H**

Deselect

CTRL + **D** , **⌘** + **D**

Reverse Selection

CTRL + **SHIFT** + **I** ,
⌘ + **SHIFT** + **I**

Preferences.

C. Image

Image editing commands



Fill CTRL + E , ⌘ + E

CloseFill CTRL + SHIFT + E ,
⌘ + SHIFT + E

Join Line CTRL + J , ⌘ + J

Airbrush Effect CTRL + K , ⌘ + K

Gray Line Color Change CTRL + L , ⌘ + L

Crop

Send To Line Layer / Color Layer / Gray Layer

Rotate

Mirror

Canvas Size...

E. Color Chart

Color Chart related commands.



Load...

Save...

Clear

Find...

CTRL + F , ⌘ + F

Find Again...

CTRL + G , ⌘ + G

Edit... .

F. Layer

Layer related commands.



To Line Layer / Gray Layer / Color Layer

Q

Show Gray Layer / Color Layer

D

Add/Delete Gray Layer

G. Palette

Floating palettes related commands.



Arrange Palettes

Show/Hide Tool Palette

F5

Show/Hide Color Palette

F6

Color Chart Show/Hide Color Chart A

F7

 Show/Hide Color Chart B

 Show/Hide Color Chart C

 Show/Hide Color Chart D

 Show/Hide Color Chart E

Show/Hide Paint Palette

F8

Show/Hide Sub Palette

F9

Show/Hide Batch Palette

F10

Show/Hide Color Locator

F11

Show/Hide File Previewer

F12

H. View

Windows display commands.



Zoom In **CTRL** + **+** , **⌘** + **+**

Zoom Out **CTRL** + **-** , **⌘** + **-**

Show All

Normal Size

Screen Mode **MacOS**

Paint Check **CTRL** + **B** , **⌘** + **B**

Show/Hide Light Table **CTRL** + **T** , **⌘** + **T**

Animation Check **CTRL** + **M** , **⌘** + **M**

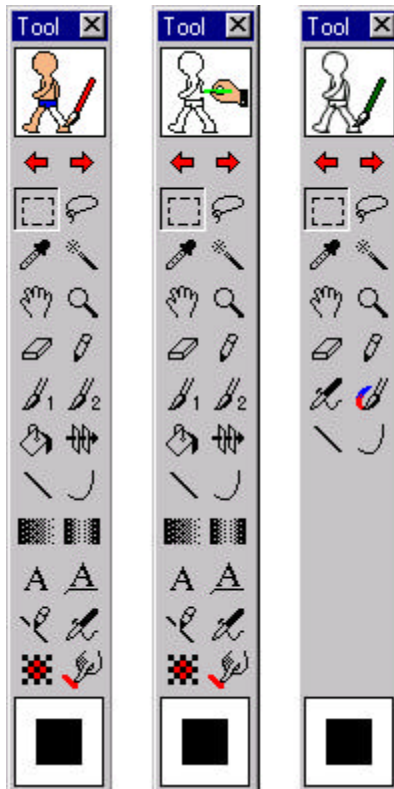
(Window Select)

Floating Palettes

The small windows in front of the image window, in which tools can be selected and necessary information are displayed.

Tool Palette

To select image editing tools.



To select a tool, click its icon, or use keyboard shortcut.

1. Layer Switch Button



[Figure: Layer Switch button]



[Figure: Color Layer]



[Figure: Line Layer]



[Figure: Gray Layer]

Click to toggle between the three layers.

To repair outlines, switch to "Line Layer". To repair color trace lines, switch to "Color Layer".

To repair grayscale lines, switch to "Gray Layer".

Mono-Traced Image



[Figure: Color Layer <--> Line Layer]

Gray-Traced Image



[Figure: Color Layer <--> Gray Layer]

If "Add Gray Layer" in a mono-traced image, the "Line Layer" will be changed to "Gray Layer".

2. Left/Right Arrow

Click the left arrow to move to the previous cel, click the right arrow to move to the next cel.

The Save dialogue will appear if the file has not been saved.

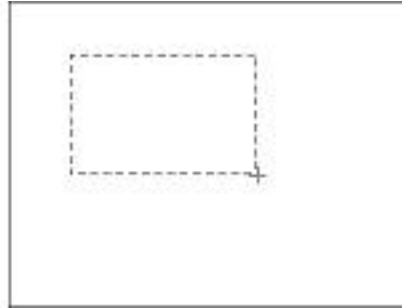
If the "File Auto Save" option in the "Preferences" is selected, the dialogue will not be shown and the file will be automatically saved.

3. Rectangle Selection Tool



To make a rectangular selection.

Drag the mouse to make a selection.



[Figure: Rectangle Selection Tool]

Double-click the tool icon to select the entire image.

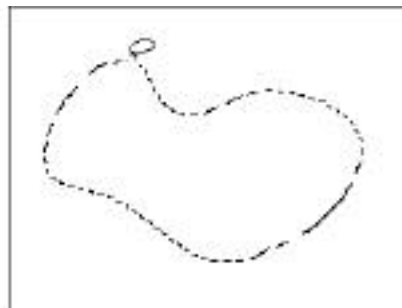
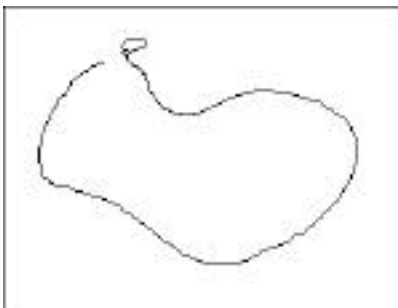
Some of the editing tools are usable only inside the selections.

Press the Space bar to switch to the "Eyedropper" tool.

4. Lasso Tool



To make a selection a free shape.



[Figure: Lasso Tool]

Press the Space bar to switch to the "Eyedropper" tool.

Alt/Opt-click to select with straight lines.

5. Eyedropper Tool

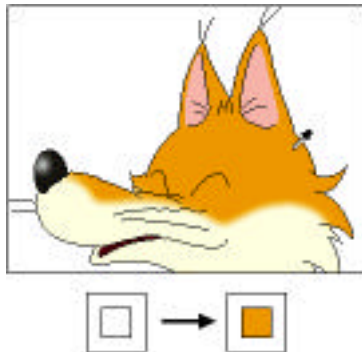


Click to pick up a color as the foreground color.

Alt/Opt-click to pick up a color as the background color.

When using assorted other tools, holding on the Alt/Opt will temporarily switch to the Eyedropper tool. (Note)

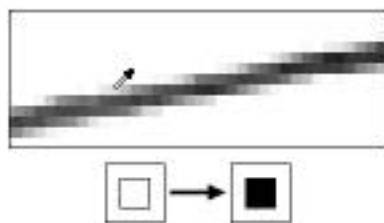
Shift-click to pick up a color from the light table.



[Figure: Eyedropper tool]

In color layer mode, it only picks up colors from the color layer even though the gray layer is visible.

In gray layer mode, it only picks up the base color of a grayscale line, it does not pick up its surrounding grades.



[Figure: Eyedropper Tool used in Gray Layer]

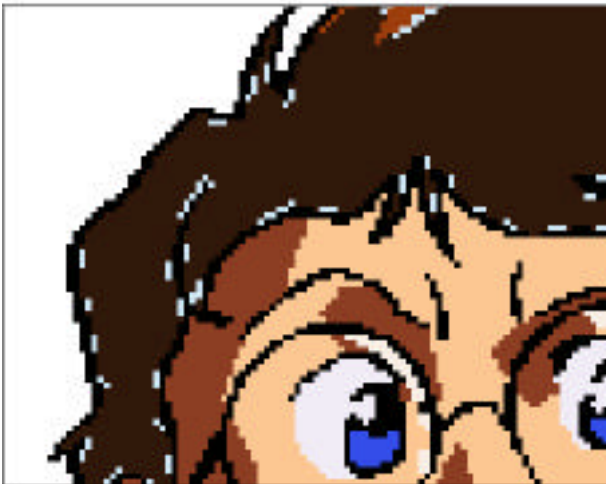
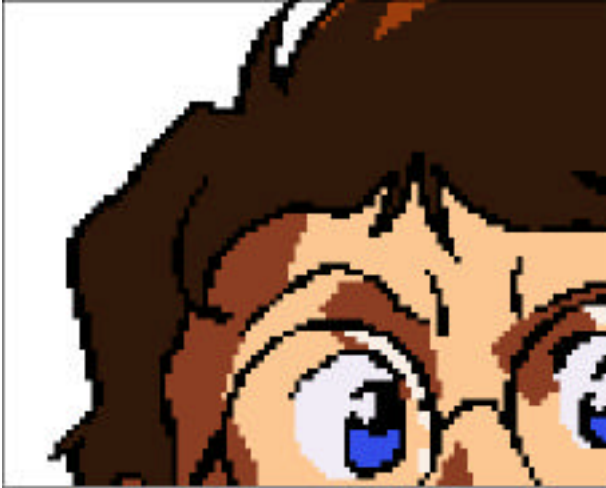
Note: holding the Alt/Opt key will temporarily switch the following tools to the Eyedropper tool:

"Pencil Tool", "Brush-1", "Brush-2", "Fill Tool", "AutoFill Tool", "Line Tool", "Curve Tool", "Join Line Tool", "Airbrush Tool", "CloseFill Tool" and "Extender Tool".

6. Magic Wand

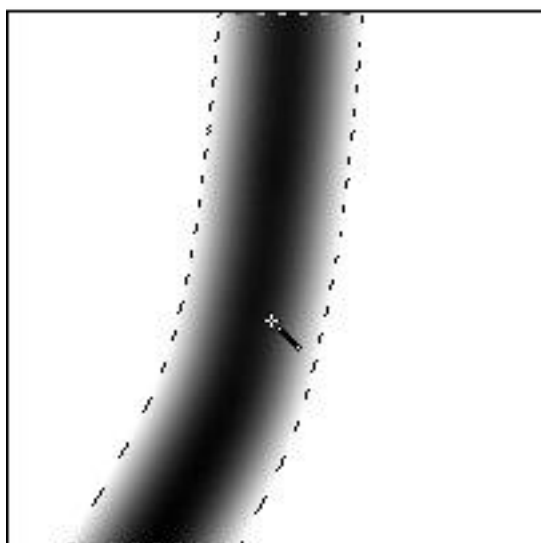
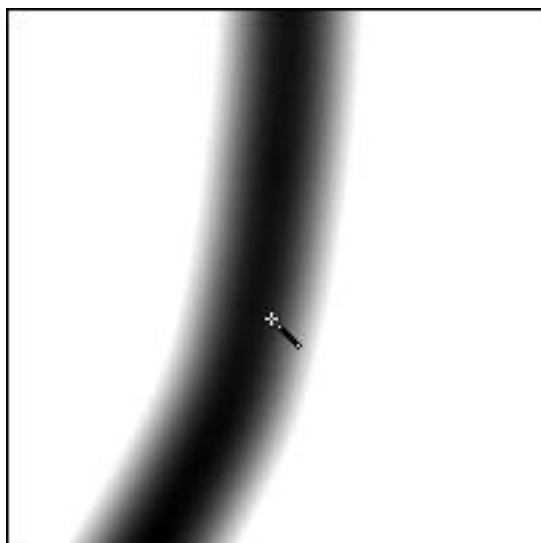


The "Magic Wand" selects all areas having the same or similar color as where you click. Press the Space bar to switch to the "Eyedropper" tool.



[Figure: Magic Wand Tool]

In the gray layer, it will select an continuous portion of a grayscale line with the same color.



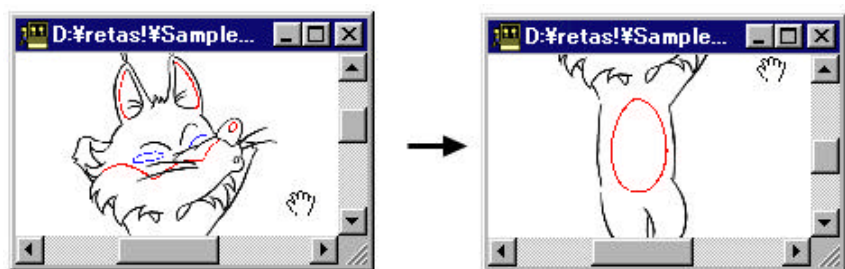
[Figure: Magic Wand Tool used in Gray Layer]

7. Hand Tool

Drag and scroll the image inside the image window.

Shift-drag will scroll the image in the Light Table.

When using another tool, holding the Ctrl key will temporarily switch to the Hand tool.



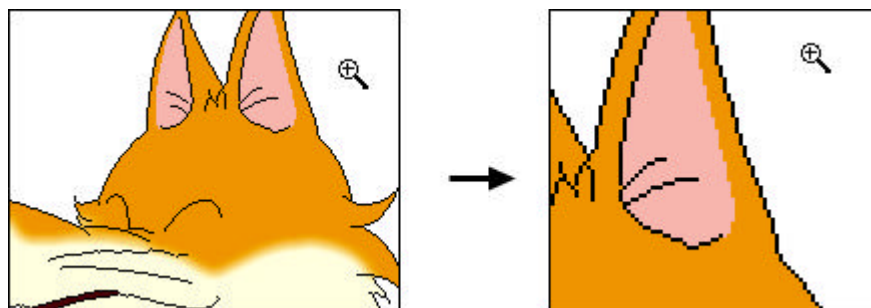
[Figure: Hand Tool]

8. Zoom Tool

Click to zoom in to the image.

Alt/Opt-click to zoom out from the image.

Double-click this icon to return to normal size.



[Figure: Zoom Tool]

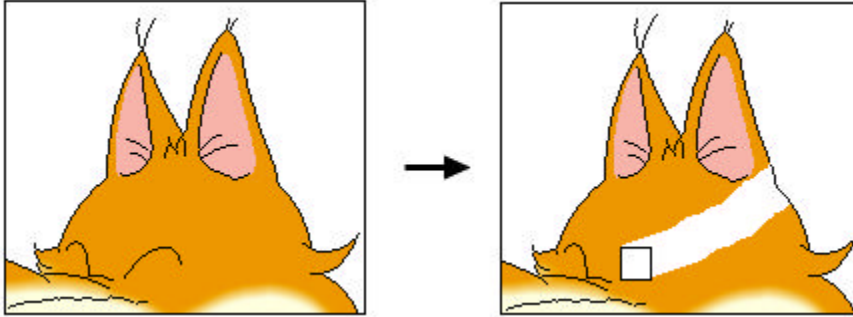
9. Eraser Tool



Erases where the cursor is dragged. The erased portion will become the background color.

Double-click this icon to erase the entire image.

Hold the Alt/Opt key and it reduces to 1/4 size.

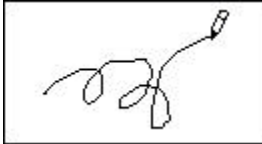


[Figure: Eraser Tool]

10. Pencil Tool



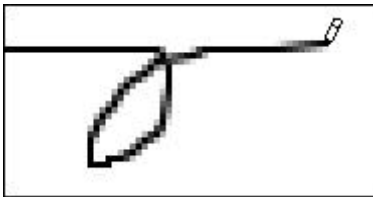
Draw in 1 pixel pen size.



[Figure: Pencil Tool]

Pencil Tool is for repairing outlines.

In the gray layer, it will be antialiased.



[Figure: Pencil Tool used in Gray Layer]

If you click on a pixel which has the same color as the foreground color, it will become the background color (Auto Erase).

Holding the Shift key will disable the Auto Erase feature.

11. Brush-1 Tool

Brush size and shape can be configured in the setup dialogue.



[Figure: Brush-1 Tool]

Double-click this icon to set up the brush size and shape.



[Figure: Brush-1 Setup dialogue]

Brush size ranges from 1 to 99.

"Change Cursor To Brush" will change the cursor shape to a brush.

12. Brush-2 Tool

Same as Brush-1, except that it will only paint on the same color as the first pixel clicked.



[Figure: Brush-2 Tool]

Double-click this icon to set up the brush size and shape.



[Figure: Brush-2 Setup dialogue]

Brush size ranges from 1 to 99.

"Change Cursor To Brush" will change the cursor shape to a brush.

13. Fill Tool

Click a closed area to fill with the foreground color.

Press the Space bar to switch to the "Pencil" tool.

Holding the Alt/Opt key switches to the "Eyedropper" tool.



[Figure: Fill Tool]

Double-click this icon to bring up the "Paint Palette -> Fill"



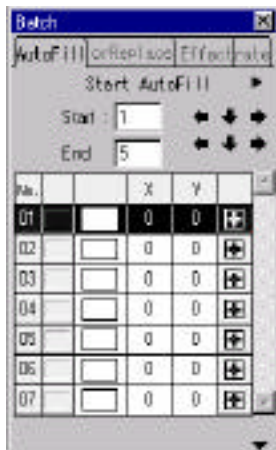
[Figure: Paint Palette]

Choose the desired options in this palette.

For details, go to "Paint Palette".

14. AutoFill

Double-click to bring up "Batch Palette -> AutoFill".



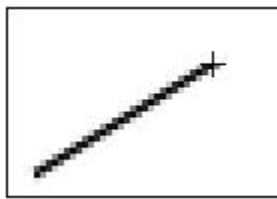
[Figure: Batch Palette]

For details, go to "Paint Palette".

15. Line Tool

Drag the mouse to make a straight line.

In the gray layer, the line will be antialiased.



[Figure: Line Tool (Line & Color Layer/Gray Layer)]

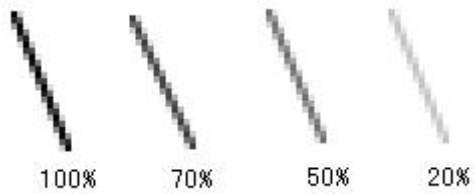
Double-click this icon to bring up the "Line Setup" dialogue.



[Figure: Line Setup dialogue (Line & Color Layer/Gray Layer)]

Line width ranges from 1 to 99.

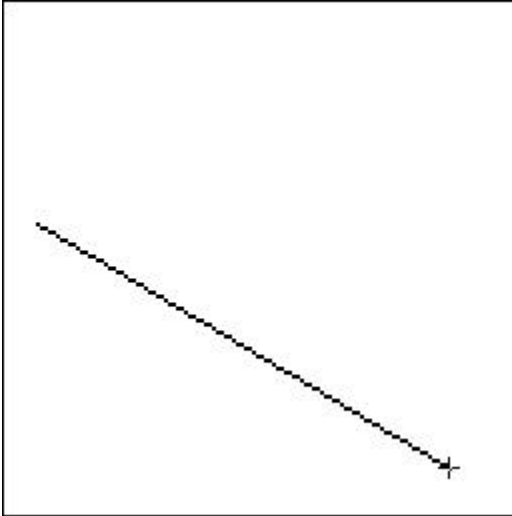
Line darkness ranges from 1% to 100%.



[Figure: Line Tool used in Gray Layer]

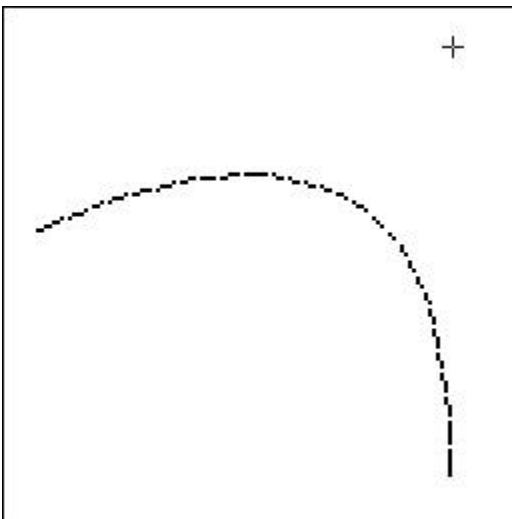
16. Curve Tool

Drag the cursor to make a straight line.



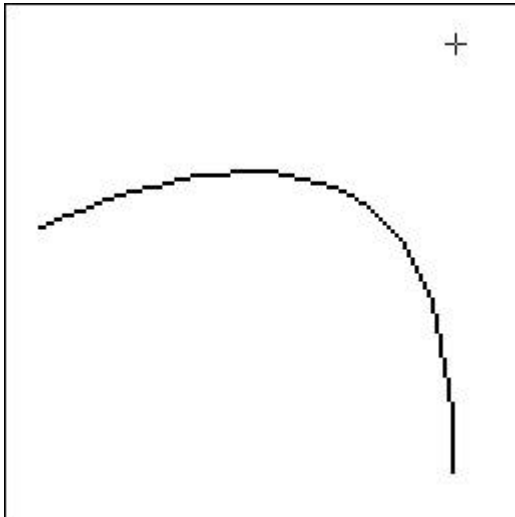
[Figure: Curve Tool step 1]

Then release the mouse button to make a curve.



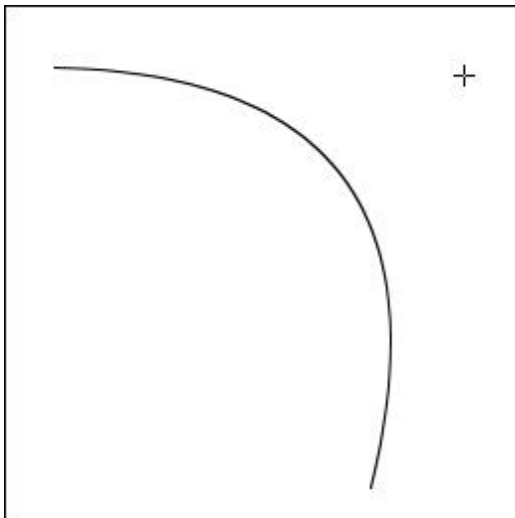
[Figure: Curve Tool step 2]

Then click again to decide the curvature of the line.



[Figure: Curve Tool step 3]

In the gray layer, it will be antialiased.



[Figure: Curve Tool used in Gray Layer]

Double-click this icon to bring up the "Line Setup" dialogue.



[Figure: Line Setup dialogue (Line & Color Layer/Gray Layer)]

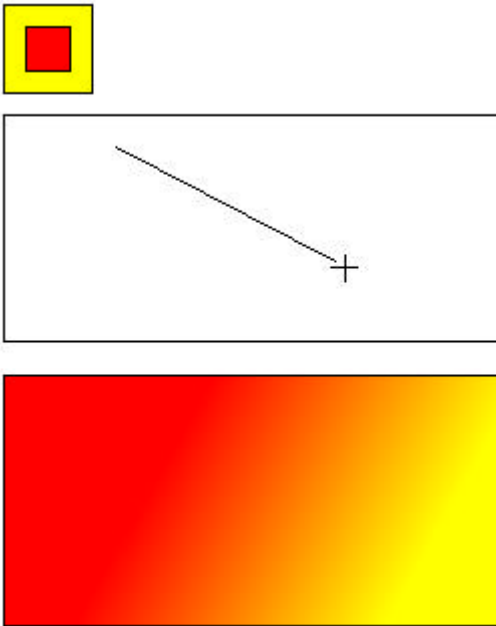
Line width ranges from 1 to 99.

Line darkness ranges from 1% to 100%.

17. Gradient Tool

Drag to create a foreground-to-background color gradient.

If a selection exists, the gradient is only applied inside the selection.

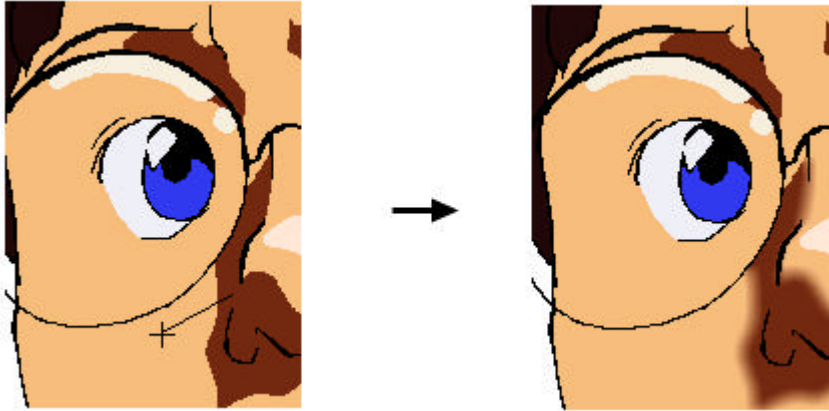


[Figure: Gradient Tool]

18. Airbrush Effect

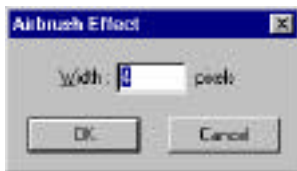


Drag between two colors to create a airbrush-like gradient.



[Figure: Airbrush Effect]

Double-click this icon to bring up the "Airbrush Setup" dialogue.



[Figure: Airbrush Effect dialogue]

The gradient ranges from 1 to 2000.

For details, go to "Airbrush Effect".

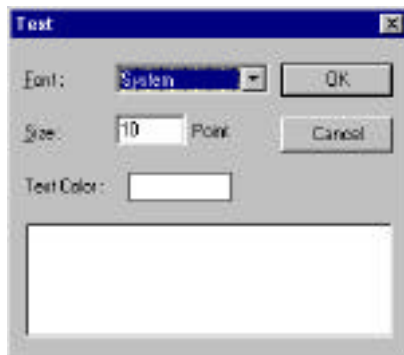
19. Text Tool

Click anywhere you want to add text and the "Text" dialogue will appear.



[Figure: Click where you want to add a text]

Choose a font face and size here. Click the "Text Color" box to choose a text color.



[Figure: Text Tool dialogue]

Type your text inside the Text Input Area, then click "OK".



[Figure: Text Tool added text]

20. Line Text Tool

Text with both a line and an underline.

Drag the line.



Then release the mouse and the dialogue will appear.



"Add RGB Value" will input the RGB value of the first pixel of the line.



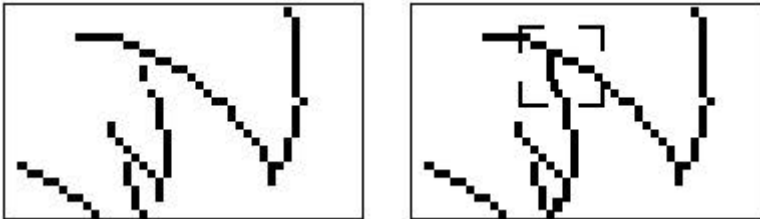
Type your text and click "OK".



[Figure: Line Text Tool added text and line]

21. Join Line Tool

Automatically closes a line gap.



[Figure: Join Line Tool]

Double-click this icon to bring up the "Join Line Setup" dialogue.



[Figure: Join Line Setup dialogue]

Line precision, tool size and color can be configured here.

For details, go to "Join Line".

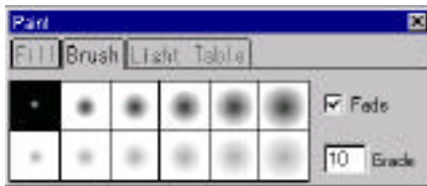
22. Airbrush Tool

A "spray" paint tool.



[Figure: Airbrush Tool]

Double-click this icon to bring up the "Paint Palette -> Brush".
Size and fade can be configured here.

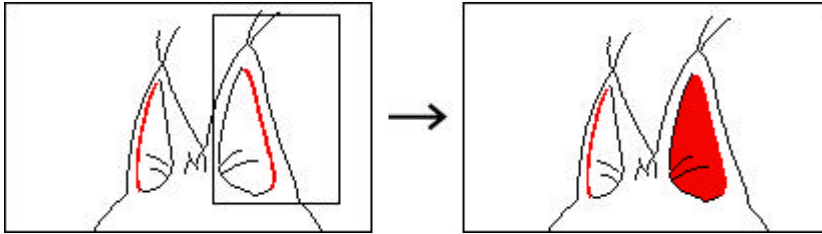


[Figure: Brush (Paint Palette)]

For details, go to "Paint Palette".

23. CloseFill Tool

This tool uses the rectangle selection or lasso tool to select and paint closed areas.
For details, go to "CloseFill Tool".



[Figure: CloseFill Tool]

Double-click this icon to bring up the "CloseFill Setup" dialogue and choose "Rect" or "Lasso".

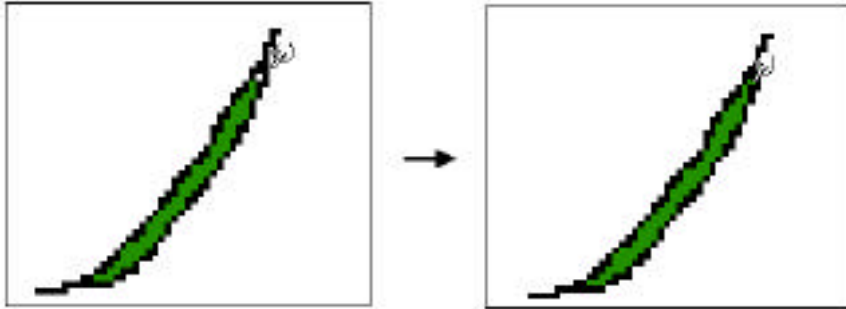


[Figure: CloseFill Setup dialogue]

24. Extender Tool

Extends an existing color to small "holes" of a closed area.

Click an existing color and drag to extend it.



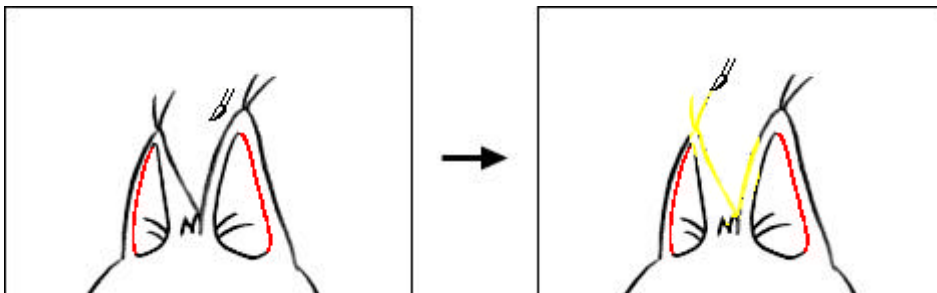
[Figure: Extender Tool]

This tool is designed for covering small "holes" at the end of a painted area.

25. Color Change Tool

Change the grayscale line color in the Gray Layer.

Drag on a gray line to change its color.



[Figure: Color Change Tool]

Double-click this icon to bring up the "Brush Setup" dialogue.



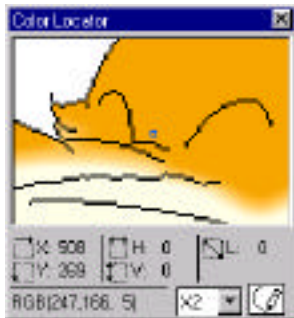
[Figure: Brush Setup dialogue]

Size and shape can be configured here. Size ranges from 1 to 99.

"Change Cursor To Brush" will change the cursor shape to a brush.

Color Locator

Displays detailed info around the cursor.



[Figure: Color Locator]

1. Enlarged View Area

Displays an enlarged view around the cursor.

When the Capslock key is on, this area will freeze and can be edited.

To unfreeze, turn off the Capslock.

2. Coordinates

Displays the cursor position and the size of a selection.

2-1. Cursor X Coordinate

Cursor's X coordinate relative to the upper left of the image.

2-2. Cursor Y Coordinate

Cursor's Y coordinate relative to the upper left of the image.

2-3. W

Width in X direction of a selection. (Unit: pixel)

Effective when using "Rectangle Selection Tool".

2-4. H

Height in Y direction of a selection. (Unit: pixel)

Effective when using "Rectangle Selection Tool".

2-5. L

Diagonal line of a selection. (Units: pixel)

Effective when using "Rectangle Selection Tool".

3. RGB

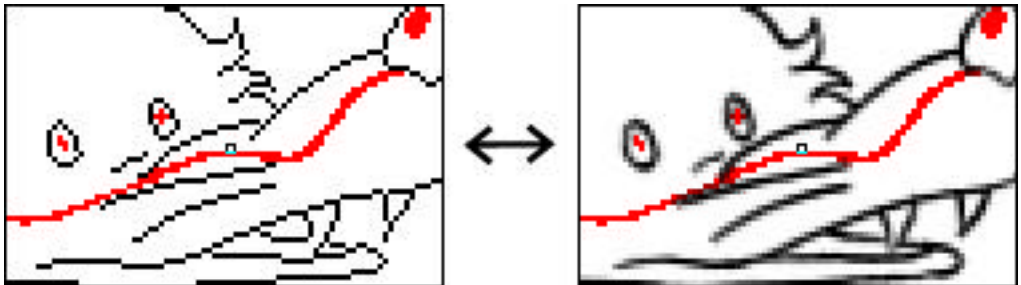
Displays the RGB value (0 ~ 255) of the pixel your cursor points to.

4. Magnification Change Menu

Select a magnification size for the enlarged view (x 2 ~ x 16).

5. View Mode Switch

Show or hide the gray layer.

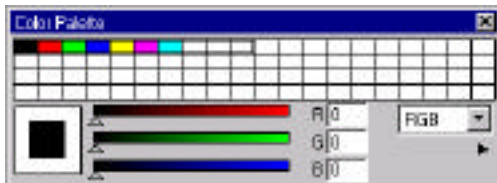


[Figure: Gray Layer hidden/shown]

Color Palette

Used for creating and selecting colors.

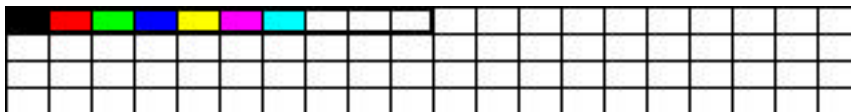
Two color modes are available: RGB and HSV.



[Figure: Color Palette]

1. Color Box

Used to register and to select colors.



[Figure: Color Box]

Move the mouse to a color box and the cursor change to the Eyedropper. Click to select the color as the foreground color.

Alt/Opt-click (cursor changes to the Fill Tool) will register the current foreground color in the color box.

Black-framed color boxes can be selected using the main keyboard "1 ~ 10" keys. Press the Tab key to jump the black frame by 10 color boxes at a time.

2. Foreground/Background Color Box



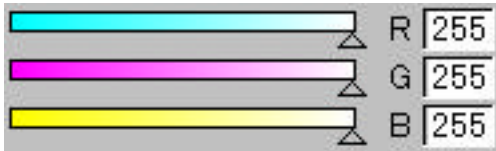
[Figure: Foreground/Background Color Box]

The center box indicates the "foreground color" while the surrounding area indicates the "background color".

Click a box to select it. The selected box is indicated by a black border.

Double-click to bring up the "Color Picker" to set up a color.

3. Color Edit Scroll Bar



[Figure: Color Edit Scroll Bar]

Drag the sliders to edit a color.
Or directly input parameters in the right fields.

4. RGB/HSV Switch Menu

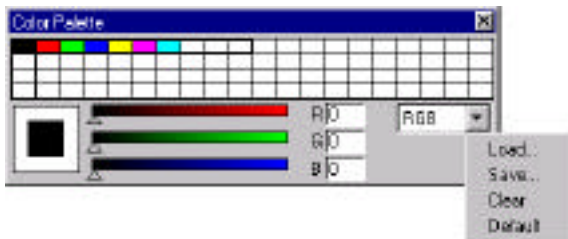


[Figure: RGB/HSV Switch Menu]

Select a color mode:

| | | | |
|----------|-----------|---------------|-----------|
| R: Red | (0 ~ 255) | H: Hue Angle | (0 ~ 359) |
| G: Green | (0 ~ 255) | S: Saturation | (0 ~ 100) |
| B: Blue | (0 ~ 255) | V: Value | (0 ~ 100) |

5. Palette Menu



[Figure: Palette Menu]

5-1. Load...

Load a color palette file previously saved on disk. The Save dialogue will appear if you have made changes to the current chart.

5-2. Save...

Save the current color palette as a file (extension: *.cpf).

5-3. Clear

Clears all colors in the color palette.

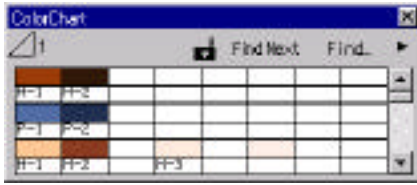
The Save dialogue will appear if you have made changes to the current chart.

5-4. Default

Reset all colors to default.

The Save dialogue will appear if you have made changes to the current chart.

Color Chart Palette



[Figure: Color Chart Palette]

Used to register, rename and manage colors.

A chart can be saved as a file.

A maximum of five charts can be displayed at a time ranging from A to E.

1. Chart Page

Displays the current page number. Click to switch to another page.

10 pages can be stored per chart.

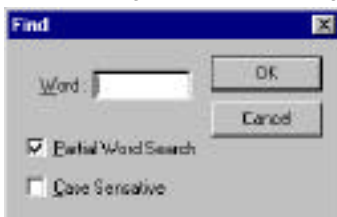
2. Chart Lock Button

The chart can be locked to prevent modifications.

3. Find Button

Find a color in the current chart.

Click to bring up the Find dialogue.



[Figure: Find dialogue]

Enter the name of the color you want to find and click "Find".

"Partial Word Search" will search with a partial name entered.

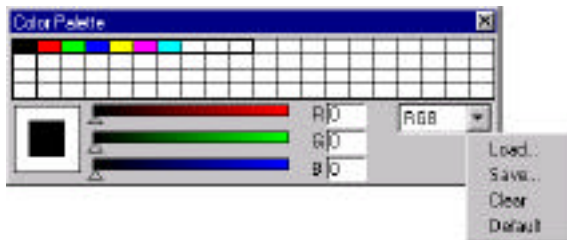
"Case Sensitive" will check upper case and lower case.

The found color will flash 3 times.

4. Find Next Button , +

Finds the next color with the same name.

5. Palette Menu



[Figure: Palette Menu]

5-1. Load...

Load a color chart file saved on disk. The Save dialogue will appear if you have made changes to the current chart.

5-2. Save...









Save the current color chart as a file (extension: *.ccf).

5-3. Clear

Clears all colors in the color palette.

The Save dialogue will appear if you have made changes to the current chart.

6. Color Box

| | | | | | | | |
|---|---|--|---|--|---|--|--|
|  |  | | | | | | |
| H-1 | H-2 | | | | | | |
|  |  | | | | | | |
| P-1 | P-2 | | | | | | |
|  |  | |  | |  | | |
| H-1 | H-2 | | H-3 | | | | |

[Figure: Color Box]

Stores colors and names.

Move the mouse to a color box and the cursor change to the Eyedropper. Click to select the color as the foreground color.

Alt/Opt-click will register the current foreground color in the color box.

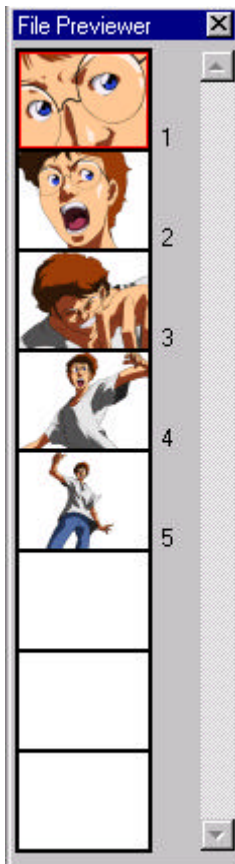
The lower part of a color box is the name area. Double-click to bring up the "Color Box Name" dialogue and enter a name up to 5 characters (or 2 characters in a 2-byte language).



[Figure: Color Box Name dialogue]

File Previewer

Displays the thumbnails of all imported images.



[Figure: File Previewer]

Cel numbers will be displayed on the right side of the thumbnails.

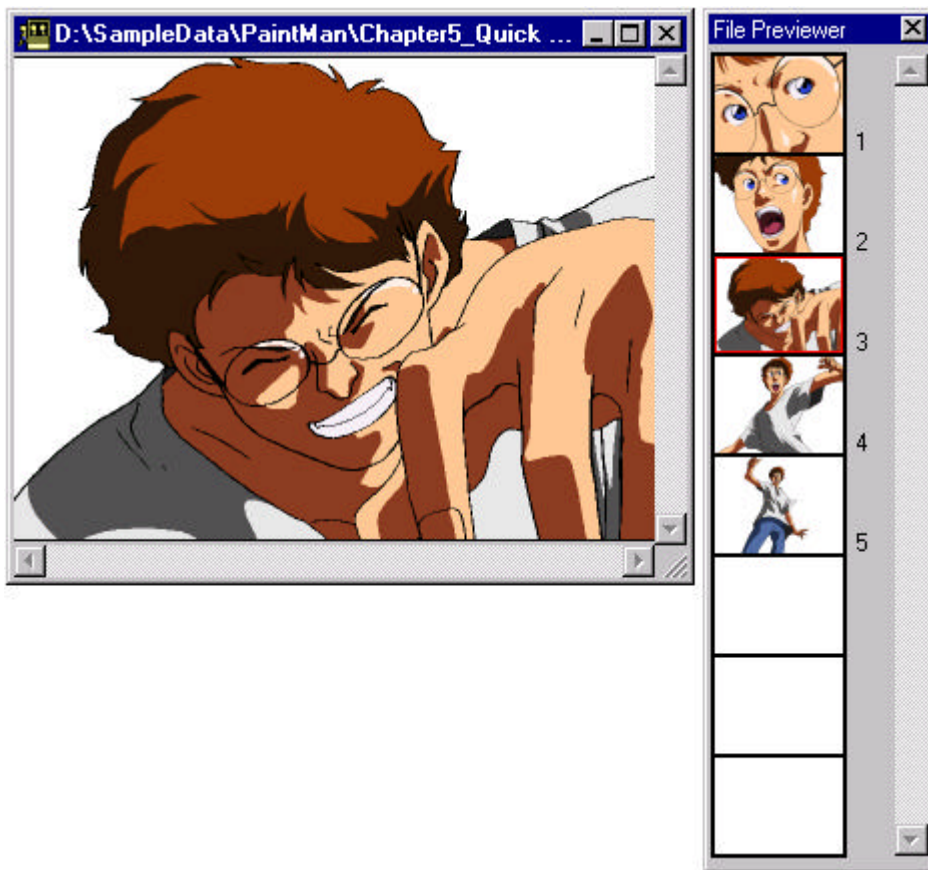
These cel number have nothing to do with the original file name, but only the sorting number.

For details, go to "RETAS! PRO File Numbering".

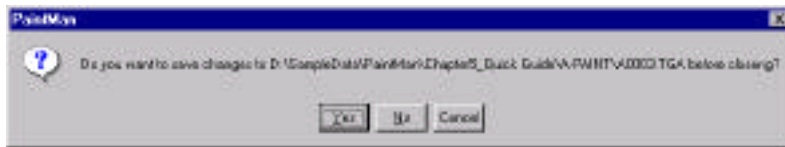
File alphabetical order can be viewed in the Windows Explorer (on Windows) or in the Finder (on Macintosh).

The current selected image has a red border around its thumbnail.

To switch to another image, click its thumbnail.



If the current image has not been saved, the Save dialogue will appear.



[Figure: Save dialogue]

If the "File Auto Save" option is checked in the "Preferences" settings, files will be automatically saved without asking.

Thumbnails can be displayed vertically by dragging the Previewer window.



[Figure: File Previewer dragged to vertical]

Paint Palette

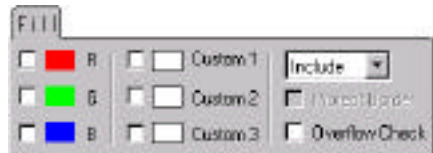


[Figure: Paint Palette]

Painting related settings.

"Fill", "Brush" and "Light Table" features can be switched by clicking the header tab.

Fill

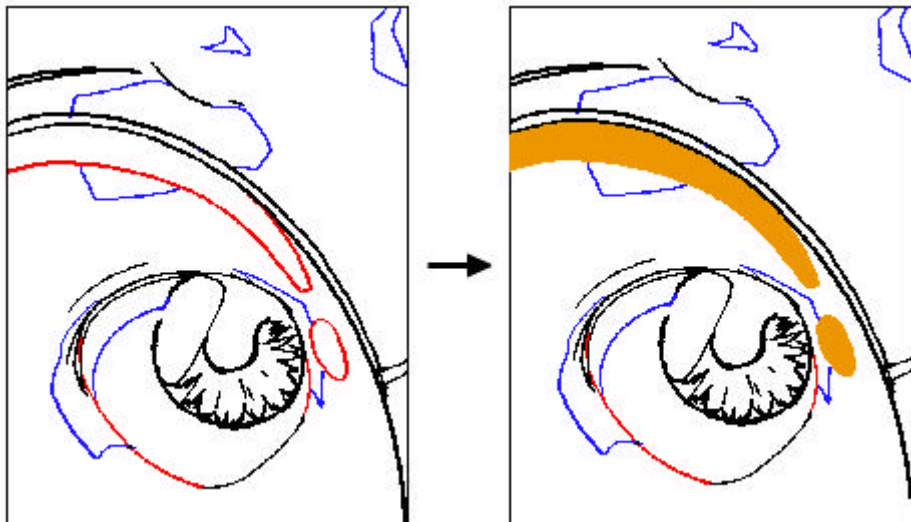


[Figure: Fill]

1. Fill Mode Switch Menu

If "Include" is selected

The color trace lines will be included when filling.

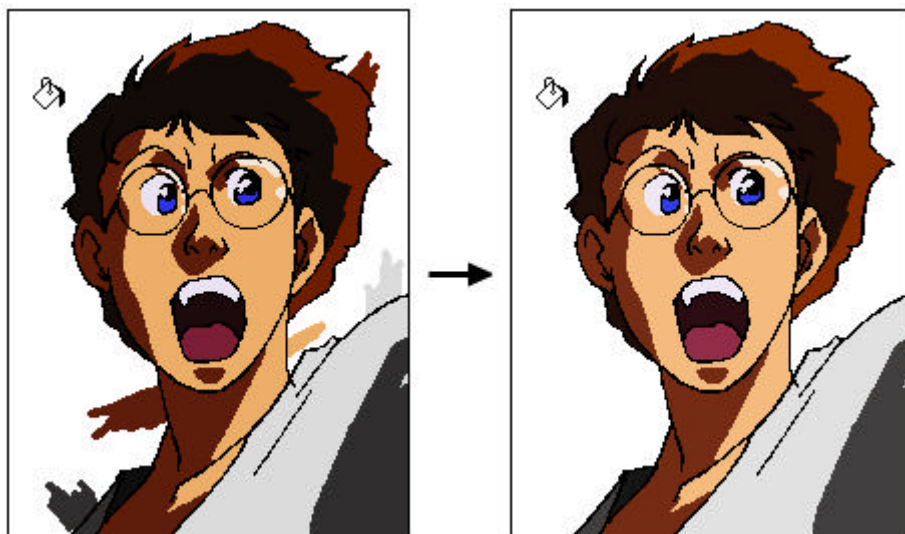


[Figure: Fill with "Include" activated]

If "Protect" is selected

The color trace lines will be protected while filling.

The below figure has the outline color black (RGB = 0, 0, 0) protected.



[Figure: Fill with "Protect" activated]

The Mode Switch Menu controls "Fill" and "AutoFill".

2. Color Check Box



























[Figure: Color Check Box]

Select a color or colors to be "included" or "protected".

"Red (R: 255)", "Green (G: 255)" and "Blue (B: 255)" are fixed colors.

Custom 1 ~ 3 are user defined colors.

Keyboard shortcut to turn on/off the check boxes:

| | |
|----------|---|
| R |  +  ,  +  |
| G |  +  ,  +  |
| B |  +  ,  +  |
| Custom 1 |  +  ,  +  |
| Custom 2 |  +  ,  +  |
| Custom 3 |  +  ,  +  |

Click a Custom Color Box to bring up the "Select Color" dialogue. Drag the sliders to make a color, or click the "Foreground Color".



[Figure: Select Color dialogue]

3. Protect Border Line

The border line will be protected when painting a gray-traced image.

If you click on a border line with the Fill tool, it will not work.

Note:

"Border Line" is a 1-pixel line for separating filling areas.

It must be black (RGB: 0, 0, 0).

4. Overflow Check



Stops painting automatically when a line gap is detected.



[Figure: An overflow detected]

Brush



[Figure: Brush]

Airbrush size, darkness and fade settings.
Click an icon to select the brush size and darkness.

Check "Fade" to create a fading effect.



[Figure: Fade on/ Fade off]

The grade of fading can be entered from 1 to 200.

Light Table



[Figure: Light Table]

Another image will be displayed transparently under the active window.

Any size of image can be loaded in the light table.

Any number of images can be loaded in the light table.

1. Light Table Check Box ☒ Light Table

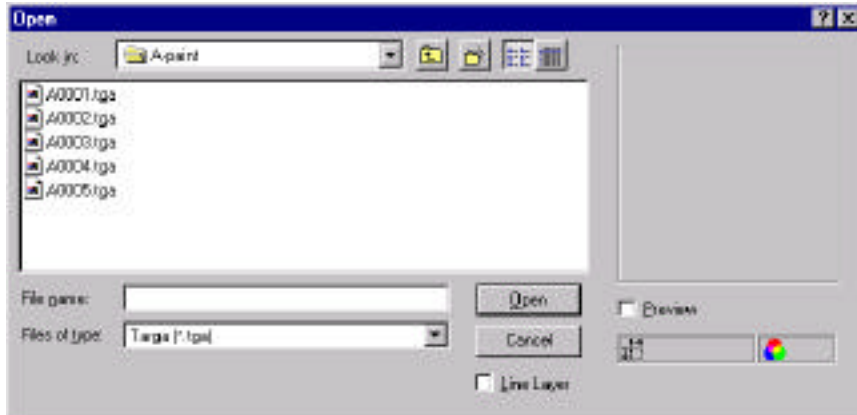
Turns the light table on or off.



[Figure: Light Table activated]

2. Load Button Load...

Loads an image in the light table. Check "Line Layer" to load the line layer only.



3. Delete Delete

Deletes the image(s) in the light table.

4. Full Path Display

Displays the full path of the last image loaded in the light table.

5. Opacity

The opacity of the light table can be set from 0% to 100%.

6. Monotone Monotone

The image(s) in the light table will be displayed in monotone.

7. Monotone Color Box

Select a monotone color here.

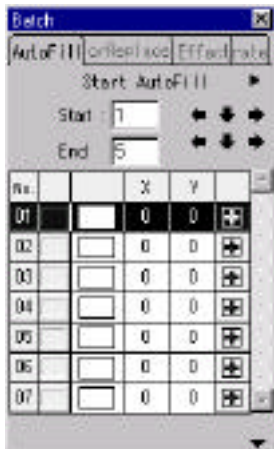
Click to bring up the "Select Color" dialogue and drag the sliders to make a color.

8. Combine Check Box Combine

The image(s) in the light table can be "combined" with the image in the main window and can be painted.

For details, go to "Combine Paint" in "Commands & Tools".

Batch Palette

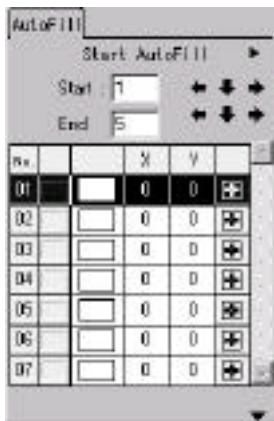


[Figure: Batch Palette]

Click a tab to switch between the 4 features: "AutoFill", "ColorReplace", "Airbrush Effect" and "Separate".

AutoFill

AutoFill settings.



[Figure: AutoFill]

1. Start AutoFill Button Start AutoFill

Applies AutoFill.

Note:

You cannot undo this action.

2. Start/End

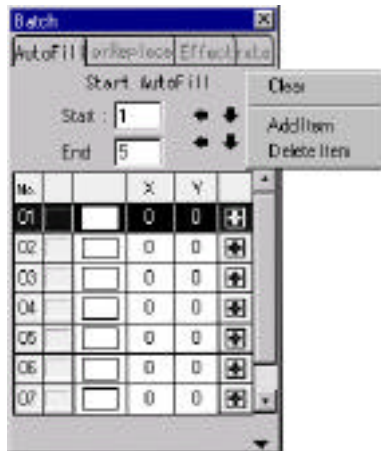


Start : 1 ← ↓ →
End : 5 ← ↓ →

Select a range for AutoFill by cell numbers. Click the left and right arrow to change the starting and ending cell numbers. Click the down arrow to jump to the current cell.

Or enter cell numbers directly in the fields.

3. Palette Menu



[Figure: Palette Menu]

3-1. Clear

Clears the current settings.

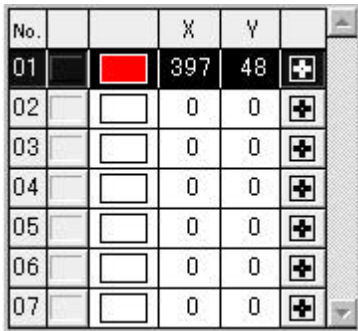
3-2. Add Item















Adds an additional item to the end of the list.

3-3. Delete Item

Deletes the last item at the end of the list.

4. AutoFill List



| No. | | X | Y | |
|-----|---|-----|----|---|
| 01 |  | 397 | 48 |  |
| 02 |  | 0 | 0 |  |
| 03 |  | 0 | 0 |  |
| 04 |  | 0 | 0 |  |
| 05 |  | 0 | 0 |  |
| 06 |  | 0 | 0 |  |
| 07 |  | 0 | 0 |  |

[Figure: AutoFill list]

AutoFill color and position settings.

The color box to the left of "X" coordinate indicates the color to be filled.

Click in a color box to drop the current foreground color in it.

"X" & "Y" displays the position of AutoFill.

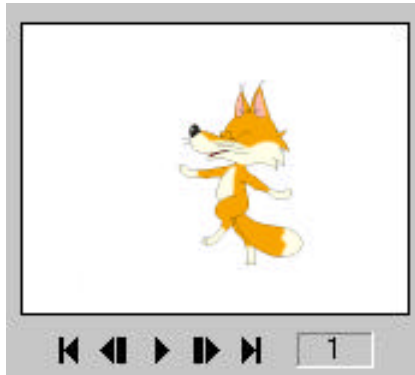
5. Position Confirmation Button

Click this button, the AutoFill position can be confirmed in the main window.

6. Preview Area Button

Show the Preview Area and the control buttons.

7. Preview Area



Images in a smaller size are shown here for AutoFill position confirmation.



Control Bar



First Cel



Previous Cel



Play



Next Cel



Last Cel



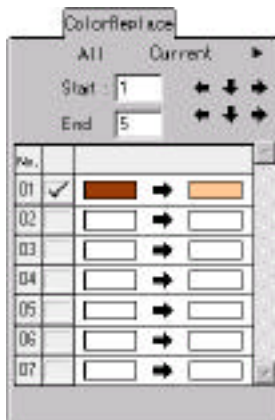
Cel Number

For details, go to "AutoFill" in "Commands & Tools".

ColorReplace

ColorReplace settings.

ColorReplace replaces existing colors with new colors.



[Figure: ColorReplace]

1. All **All**

Replaces colors in the entire range from "Start" to "End".

Note:

You cannot undo this action.

2. Current **Current**

Replaces colors in the current image.

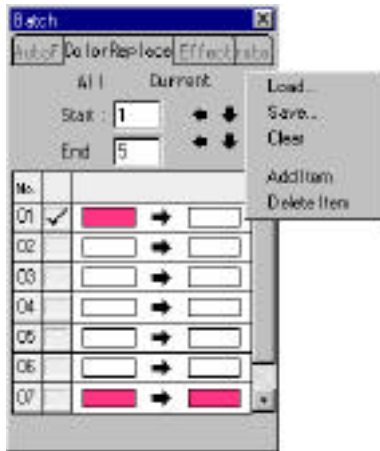
3. Start/End



Select a range for ColorReplace by cel numbers. Click the left and right arrows to change the starting and ending cel numbers. Click the down arrow to jump to the current cel.

Or enter cel numbers directly in the fields.

4. Palette Menu



[Figure: Palette Menu]

4-1. Load...

Loads a ColorReplace file saved on disk. The Save dialogue will appear if the current settings are not saved.

4-2. Save...

Saves the current settings as a file (extension: *.crf).

4-3. Clear

Clears the current settings.

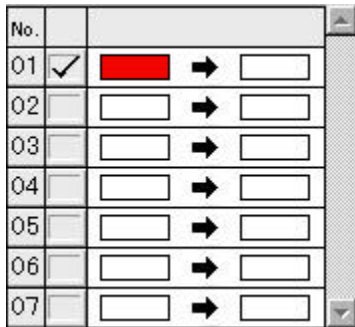
4-4. Add Item

Adds an additional item to the end of the list.

4-5. Delete Item

Deletes the last item at the end of the list.

5. ColorReplace List



[Figure: ColorReplace list]

Displays both the existing and new colors.

The left color box is the existing color and the right box is the new color.

Click a color box to change it to the foreground color.

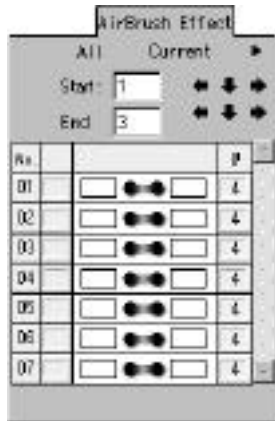
Click the arrow to switch the colors back and forth.

For details, go to "ColorReplace" in "Commands & Tools".

Note:

In the Gray Layer, the grayscale line gradient will be preserved on ColorReplace.

Airbrush Effect



[Figure: Airbrush Effect]

Airbrush Effect settings.

1. All

Applies the Airbrush Effect in the entire cel range from "Start" to "End".

Note:

You cannot undo this action.

2. Current

Applies Airbrush Effect in the current image.

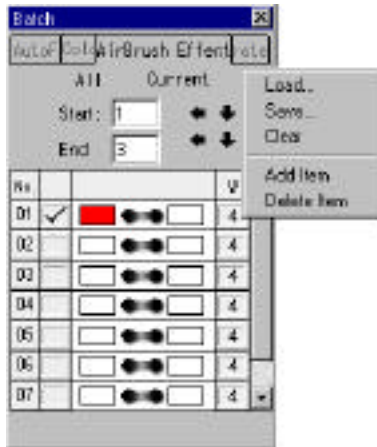
3. Start/End



Select a range for the Airbrush Effect by cel numbers. Click the left and right arrow to change the starting and ending cel numbers. Click the down arrow to jump to the current cel.

Or enter cel numbers directly into the fields.

4. Palette Menu



[Figure: Palette Menu]

4-1. Load...

Loads an Airbrush Effect file saved on disk. The Save dialogue will appear if the current settings are not saved.

4-2. Save...

Saves the current settings as a file (extension: *.abf).

4-3. Clear

Clears the current settings.








4-4. Add Item

Adds an additional item to the end of the list.

4-5. Delete Item

Deletes the last item at the end of the list.

5. Airbrush Effect List

| No. | | | W |
|-----|-------------------------------------|---|---|
| 01 | <input checked="" type="checkbox"/> |  | 4 |
| 02 | <input type="checkbox"/> |  | 4 |
| 03 | <input type="checkbox"/> |  | 4 |
| 04 | <input type="checkbox"/> |  | 4 |
| 05 | <input type="checkbox"/> |  | 4 |
| 06 | <input type="checkbox"/> |  | 4 |
| 07 | <input type="checkbox"/> |  | 4 |

[Figure: Airbrush Effect list]

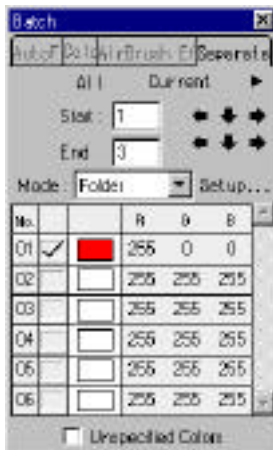
The Airbrush Effect will be created between the left color (box) and the right color (box).

Click a color box to drop the foreground color in it.

Click a "W" box" and the gradient width can be entered in the "Airbrush Effect Setup" dialogue.

For details, go to "Airbrush Effect" in "Commands & Tools".

Separate



[Figure: Separate]

Separate settings.

"Separate" picks up your desired colors and transfers them to another layer or exports them as files.

This is mainly used for creating masks.

1. All All

Separates colors for the entire range of cels from "Start" to "End".

Note:

You cannot undo this action.

2. Current Current

Separates colors in the current image.

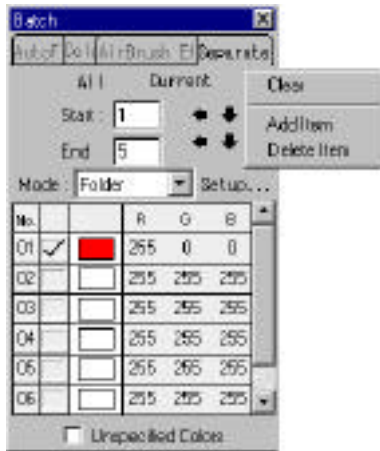
3. Start/End



Select a range for Separate by cel numbers. Click the left and right arrows to change the starting and ending cel numbers. Click the down arrow to jump to the current cel.

Or enter cel numbers directly into the fields.

4. Palette Menu



[Figure: Palette Menu]

4-1. Clear

Clears the current settings.

4-2. Add Item

Adds an additional item to the end of the list.

4-3. Delete Item

Deletes the last item at the end of the list.

5. Separate Mode Select Menu



[Figure: Separate Mode Select Menu]

Data export mode settings.

5-1. File

Exports the separated colors as a file to a folder.

5-2. To Color

Sends the separated colors to the Color Layer.

This is the same as pasting to the color layer in white transparent mode.

5-3. To Line

Sends the separated colors to the Line Layer.

This is the same as pasting to the color layer in white transparent mode.

Note:

Folder export is not available in Gray Layer mode.

Export cannot be performed between the Gray Layer and Color Layer.

6. Setup Button

Separate settings dialogue.



[Figure: Separate settings dialogue.]

6-1 . Save

Save destination.

Click "Select..." to select a destination.

6-2 .Format

- Same File Name
Use the current file name.
- New File Name
Exports to a new file name.
- File Name
Enter a new file name.
- Number
Enter a new starting number.
- Format
Select a file type.

6-3. Separate

- Export As Settings
Exports the colors according to the settings.
BG color will be white (RGB = 255, 255, 255).

- Export In Specified Color







Exports all color as one user defined color.

To define the color, click the color box.

If multiple colors were registered in the list, all of them will be replaced by the user defined color on export (except BG color).

BG color will be white (RGB = 255, 255, 255).

7. Separate List

| No. | | R | G | B |
|-----|---|-----|-----|-----|
| 01 |  | 255 | 0 | 0 |
| 02 |  | 255 | 255 | 255 |
| 03 |  | 255 | 255 | 255 |
| 04 |  | 255 | 255 | 255 |
| 05 |  | 255 | 255 | 255 |
| 06 |  | 255 | 255 | 255 |

[Figure: Separate List]

Register the colors to be separated.

Click a color box to drop the foreground color in it.

8. Unspecified Colors

All colors except the registered colors in the Separate List will be separated.

Sub Palette



[Figure: Sub Palette]

Displays a painted image and lets you sample colors in it.

1. Display Area



Displays a loaded color module.

Click a color to sample it.

Ctrl-drag to scroll the image.

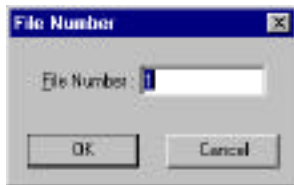
2. Left/Right Arrow



Click the left arrow to move to the previous image, or the right to the next image.

3. File Name File Name : A0001.tga

Displays the name of the file currently loaded.
Click and enter a cel number to jump to that file.



4. Magnification Change Menu



[Figure: Magnification Change Menu]

Select a magnification size here.

5. Palette Menu



5-1. Load Current

Loads the active window image into the Sub palette.
The entire folder will be loaded, similar to the File Previewer.

5-2. Load...

Loads any file you specify.
The entire folder will be loaded, just like the File Previewer.

5-3. Release

Clears all images.

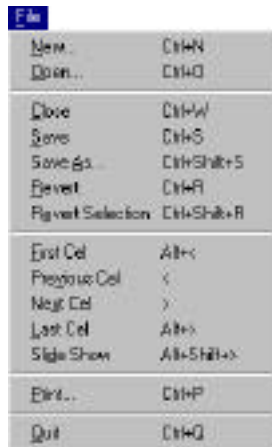
5-4. Autoload Previous

Automatically loads the previous cel when you move to the next cel in the File Previewer.

If the cel number is "1", no previous cel can be loaded.

Menu Bar Commands

File Menu



New...



Creates a new image window.



In the "New" dialogue, enter desired image size (width and height), and click "OK" to create a new window.

The default size is the same as the last selection copied to the clipboard.

The new window's name and number can be preset in the Preferences.

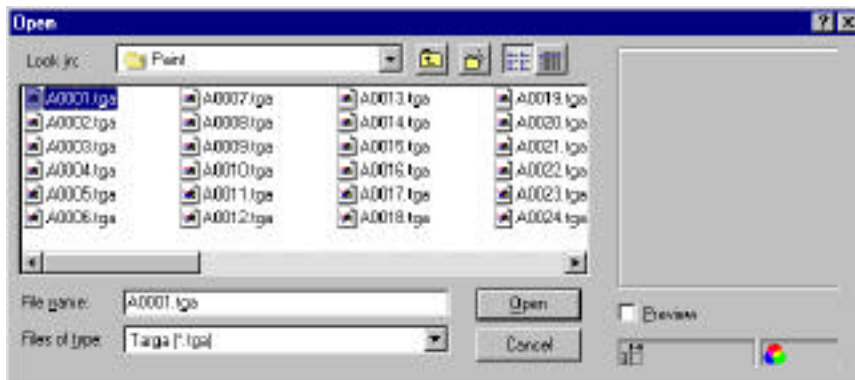
Open...



Opens a saved image file from disk.

Select a desired file from the Open dialogue.

Click "Open" to open it in a new window. All files in the same folder will be loaded in the File Previewer.



Readable file types can be selected from the File Type popup menu.

Note:

The Windows version cannot read a file that has no extension even if "All Image File" is selected.

The Macintosh version recognizes a file by its File Creator if created on the Mac OS, or by its extension if created on another platform. If there is no file creator or extension, it cannot be read.

RETAS! PRO version 5 automatically adds a file extension while saving a new file on the Macintosh in order to avoid trouble when exchanging data with other platforms.

Close

CTRL + W , **⌘ + W**

Closes an active window.

If not saved yet, the Save dialogue will appear.



Save

CTRL + S , **⌘ + S**

Saves the image in the active window.

If it is a newly created image, the Save dialogue will appear.

The thumbnail in the File Previewer will also be refreshed.

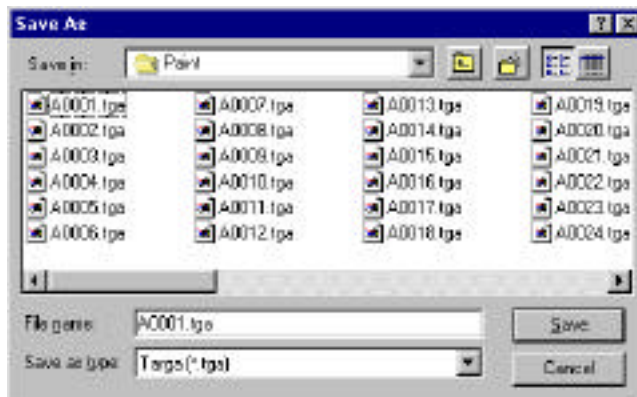
Save As...

CTRL + SHIFT + S , **⌘ + SHIFT + S**

Saves the active image as another file.

Determine the name, format and location in the dialogue box.

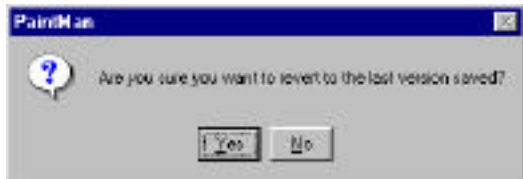
The thumbnail in the File Previewer will also be refreshed. If saved in the same folder, the File Previewer will reload all the files in a new sorting order.



Revert

CTRL + R , **⌘ + R**

Reverts to the last saved version. If you made a mistake, use this command to reverse any changes.



Revert Selection

CTRL + SHIFT + R , **⌘ + SHIFT + R**

Reverts to the last saved version with a selection. If you made a mistake, use this command to reverse any changes.



First Cel

ALT + < , **OPT + <**

Jumps to the first cel.

Previous Cel

<

Jumps to the previous cel.

Next Cel

>

Jumps to the next cel.

Last Cel

ALT + > , **OPT + >**

Jumps to the last cel.

Slide Show

ALT + SHIFT + > : forward

OPT + SHIFT + < : backward

Continuously displays all files loaded in the File Previewer.

To stop, press the Esc key.

Page Setup...

MacOS

Printer settings.

For details, see your printer manual.

Print ...

The image shows two keyboard shortcuts for the Print command. The first is 'CTRL + P' where 'CTRL' is in a box, followed by a plus sign and 'P' in a box. The second is 'Command + P' where the Command symbol (a square with two diagonal lines) is in a box, followed by a plus sign and 'P' in a box. They are separated by a comma.

Prints the image in the active window.

For details, see your printer manual.

Print (All)...

MacOS

Prints all images loaded in the File Previewer.

Quit

The image shows two keyboard shortcuts for the Quit command. The first is 'CTRL + Q' where 'CTRL' is in a box, followed by a plus sign and 'Q' in a box. The second is 'Command + Q' where the Command symbol (a square with two diagonal lines) is in a box, followed by a plus sign and 'Q' in a box. They are separated by a comma.

Quits PaintMan.

If an image is not saved yet, the Save dialogue will appear.

Edit Menu



[Figure: Edit menu]

Undo



Cancels the last change and returns to the previous state.

Note:

Not available for all operations.

Cut



Cuts out a selection and stores it in the clipboard.

This only cuts in the current layer.

To cut off a selection in both layer, hold on the Shift key and choose "Cut".

For details, go to "Cut & Paste Operation" of "Selection" in "Technical Information".

Copy



Copies a selection and stores it in the clipboard.

It only copies from the current layer.

To copy a selection in both layer, hold on the Shift key and choose "Copy".

For details, go to "Cut & Paste Operation" of "Selection" in "Technical Information".

Paste



Pastes the data stored in the clipboard into a selection.

You can use a selection tool to select the pasted image and move it.

The same image can be pasted repeatedly until the clipboard contents have changed.

It only pastes into the current layer.

To paste a selection in both layers, hold on the Shift key and choose "Paste".

PaintMan can remember the position of the selection when pasting.

For details, go to "Cut & Paste Operation" of "Selection" in "Technical Information".

Clear

Erases the contents of a selection.

It only clears in the current layer.

To clear a selection in both layers, hold on the Shift key and choose "Clear".

For details, go to "Cut & Paste Operation" of "Selection" in "Technical Information".

Select All



Selects the entire image.

For details, go to "Selection" in "Technical Information".

Select Foreground Color



Selects all areas in foreground color.

Use this command in combination with the "Fill" command to easily change a color.

Select Other Colors

Select all colors except the foreground color.

Show/Hide Selection ,

Shows or hides the selection dotted line.

The selection is still effective even if the selection dotted line is hidden.

Deselect ,

Cancels the current selection.

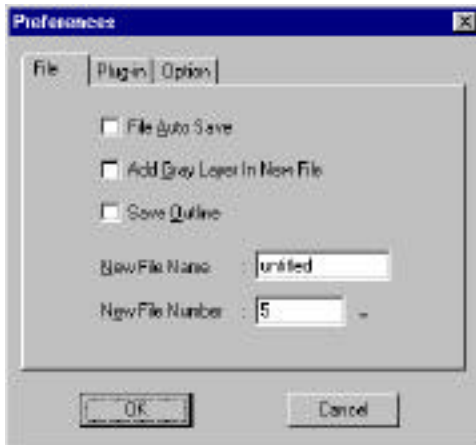
Reverse Selection ,

Reverses the current selection.

The selected area will become unselected, and the unselected area will become selected.

Preferences...

PaintMan preference settings.



1. File



1-1. File Auto Save

When switching to the next file through the File Previewer or the Tool Palette, the current file will be automatically saved without asking.

1-2. Add Gray Layer In New File

When creating a new file, a gray layer will be added.

If not activated, the new file will be in mono-traced format.

1-3. Save Outline

CoreRETAS can display images in "Outline" compositing mode on stage. This command will create the compositing outlines for CoreRETAS.

1-4. Create Preview Icon **MacOS**

Creates a file preview icon on save.

1-5. Add File Extension **MacOS**

Adds a file extension on save.

1-6. New File Name

Enter a file name for creating new files.

1-7. New File Number

Enter a file starting number.

2. Plug-In



2-1. Plug-in Setup

Plug-in settings.

Click "Setup..." to select options such as compression.

2-2. Plug-in Folder Location

Shows the plug-in folder path.

All applications of the RETAS! PRO series share the same plug-in folder. It is strongly recommended that the position not be changed.

If the plug-in folder is moved to another location, your application may fail to find it.

Click "Select" to locate a new plug-in folder if it was moved.

3. Option



3-1. Change Cursor To Cross

The cursor will change to a cross mark.

3-2. Paint Check For R/G/B

When it is turned on, the color trace lines will be displayed in their own colors during Paint Check.

When it is turned off, the color trace lines will be displayed in black during Paint Check.

3-3. Selection White Transparent On Paste

The white part (RGB: 255, 255, 255) within a selection will become transparent when pasting.

Paste when "Selection White Transparent On Paste" is on



Paste when "Selection White Transparent On Paste" is off



3-4. Register Sub Palette Color In Color Palette

When a color is picked from the Sub Palette, it will also be registered in the last color box of the Color Palette.

Image Menu



Fill

CTRL + E , **⌘ + E**

Fills the foreground color in a selection.

Not available if there is no active selection.

CloseFill

CTRL + SHIFT + E , **⌘ + SHIFT + E**

Fills all closed areas within a selection with the foreground color.

For details, go to "CloseFill" in "Commands & Tools".

Join Line

CTRL + J , **⌘ + J**

Repairs broken lines within a selection.

For details, go to "Join Line" in "Commands & Tools".

Airbrush Effect

CTRL + K , **⌘ + K**

Creates an airbrush effect between two colors.

For details, go to "Airbrush Effect" in "Commands & Tools".

Gray Line Color Change

CTRL + L , **⌘ + L**

Changes the gray line color within a selection.

Crop

Crops a selection to reduce the image size.

Send To Line/Color Layer

Sends a selection to the line layer or the color layer.

Rotate

1. Left

Rotates the image 90° counterclockwise.

2. Right

Rotates the image 90° clockwise.

Mirror

1. Horizontal

Flips the image horizontally.

2. Vertical

Flips the image vertically.

Canvas Size...

Changes the image canvas size.



"Position" indicates the starting position.

Enter "Width" and "Height" in pixels.

If the new size is smaller than the current, a warning dialogue will appear.



ColorChart Menu



Load...

Loads a color chart file. Same as "Load..." in the color chart palette.

1. Color Chart A

Loads a color chart file into color chart A.

2. Color Chart B

Loads a color chart file into color chart B.

3. Color Chart C

Loads a color chart file into color chart C.

4. Color Chart D

Loads a color chart file into color chart D.

5. Color Chart E

Loads a color chart file into color chart E.

Save...

Saves a color chart to disk. Same as "Save..." in the color chart palette.

1. Color Chart A

Saves color chart A to disk.

2. Color Chart B

Saves color chart B to disk.

3. Color Chart C

Saves color chart C to disk.

4. Color Chart D

Saves color chart D to disk.

5. Color Chart E

Saves color chart E to disk.

Clear

Clears the contents of a color chart. Same as "Clear" in the color chart palette.

1. Color Chart A

Clears all contents in color chart A.

2. Color Chart B

Clears all contents in color chart B.

3. Color Chart C

Clears all contents in color chart C.

4. Color Chart D

Clears all contents in color chart D.

5. Color Chart E

Clears all contents in color chart E.

Find...



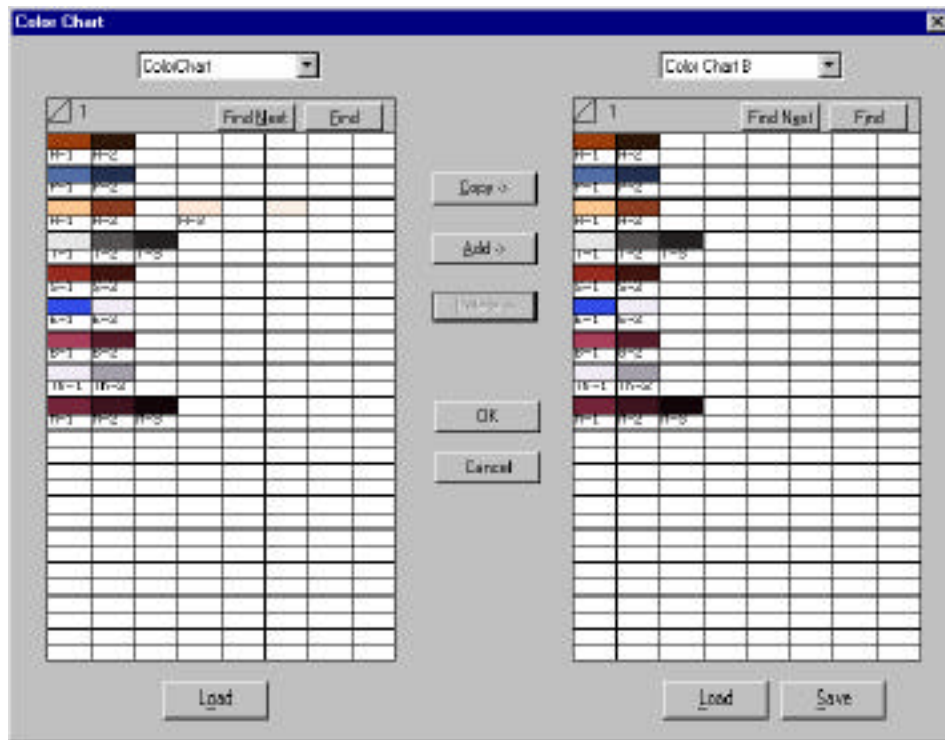
Searches for a color by its name in the current color chart.

Find Next



Searches for the next color with the same name.

Edit...



Two color charts can be edited next to each other.

To edit, drag a color from the left chart and drop it in the right chart

The source chart is displayed on the left.

The chart to be edited is displayed on the right.

1. Chart Menu Color Chart B ▼

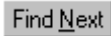
Select a chart here.

2. Find Find

Searches for a color by its name.

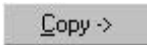
Same as the "Find" button in the color chart.

3. Find Next



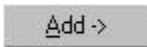
Searches for the next color with the same name.
Same as the "Find Next" button in the color chart.

4. Copy



Copies the entire left chart to the right.
The original right chart will be overwritten.

5. Add



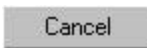
Adds the entire left chart page to the right.
The original right chart page will be preserved as the next page.

6. Delete



Deletes selected colors in the right chart.

7. Cancel



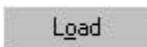
Cancels the editing.
No changes will be made.

8. OK



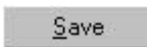
Confirms the changes.

9. Load...



Loads a color chart file.
Same as "Load..." in the color chart palette.

10. Save...



Saves the changes to the right chart.
Same as "Save..." in the color chart palette.

Layer Menu



To Line/Gray/Color Layer Switch



Switches between layers.

If a mono-traced image, "Line Layer" and "Color Layer" are available. If a gray-traced image, "Gray Layer" and "Color Layer" are available.

Show Gray/Color Layer



In Color Layer mode, the gray layer can be made visible. In Gray Layer mode, the color layer can be made visible.

Not available if there is no gray layer.

Add/Delete Gray Layer.

Adds a gray layer to a mono-traced image.

For details about layer structure, go to "Paint Layer Structure" in "Technical Information".

Palette Menu



Arrange Palette

Arranges all palettes in proper positions.

All floating palettes can be made visible or invisible simultaneously by pressing the "Return" key.

- | | |
|------------------------------|------------|
| 1. Show/Hide Tool Palette | F5 |
| 2. Show/Hide Color Palette | F6 |
| 3. Color Chart | |
| 3-1. Show/Hide Color Chart A | F7 |
| 3-2. Show/Hide Color Chart B | |
| 3-3. Show/Hide Color Chart C | |
| 3-4. Show/Hide Color Chart D | |
| 3-5. Show/Hide Color Chart E | |
| 4. Show/Hide Paint Palette | F8 |
| 5. Show/Hide Sub Palette | F9 |
| 6. Show/Hide Batch Palette | F10 |
| 7. Show/Hide Color Locator | F11 |
| 8. Show/Hide File Previewer | F12 |

View Menu



Zoom In CTRL + + , ⌘ + +

Enlarges the image window size.

The current magnification size is indicated in the window title bar after the file name.

Zoom Out CTRL + - , ⌘ + -

Reduces the image window size.

The current magnification size is indicated in the window title bar after the file name.

Show All

Automatically adjusts the magnification size to display the entire image.

Normal Size

Returns to 100% normal size.

Screen Mode/Window Mode MacOS

"Screen Mode" will hide the desktop, window title bar and scroll bar. "Window Mode" returns back to normal view.

Paint Check CTRL + B , ⌘ + B

Displays the image in black-and-white to check for painting misses.

CoreRETAS treats complete white (RGB = 255, 255, 255) as transparent when compositing. So the Paint Check will show all colors in black except complete white. This makes it easy for you to see any small areas that have been missed while painting.

If the "Paint Check For R/G/B" option is selected in the "Preferences", the color trace lines will be displayed in their own colors during Paint Check. If it is unselected, the color trace lines will be displayed in black during Paint Check.

To stop, press the Esc key.

Show/Hide Light Table ,

Shows or hides the light table view.

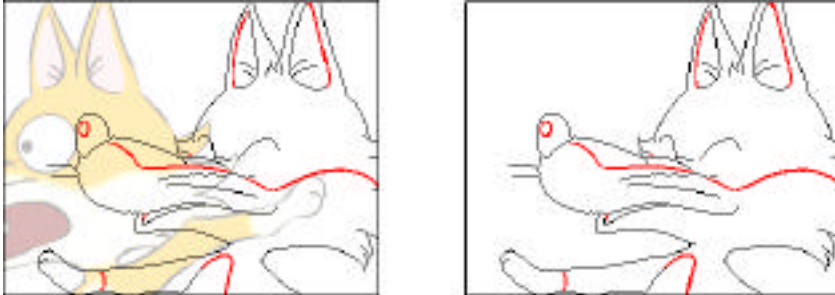


Figure: Light Table on (left)/off (right)]

Animation Check...

Plays back an entire sequence at high speed.



[Figure: "Animation Check" dialogue]

1. Full Color

"ON" will display in full color.

"OFF" will display in 256 colors.

2. Light Table

"ON" will display the light table image underneath.

3. Selection Only

"ON" will only playback within the current selection area.

This is useful for checking only a portion of the animation when the images are very large

4. BG Color

Select a color as the playback background.

Click the color box to bring up the "Select Color" dialogue to choose a color.

5. Size

Playback size can be selected from "1/4" to "x 4".

6. Range

Enter a starting and an ending frame number in the fields to limit the range of playback.

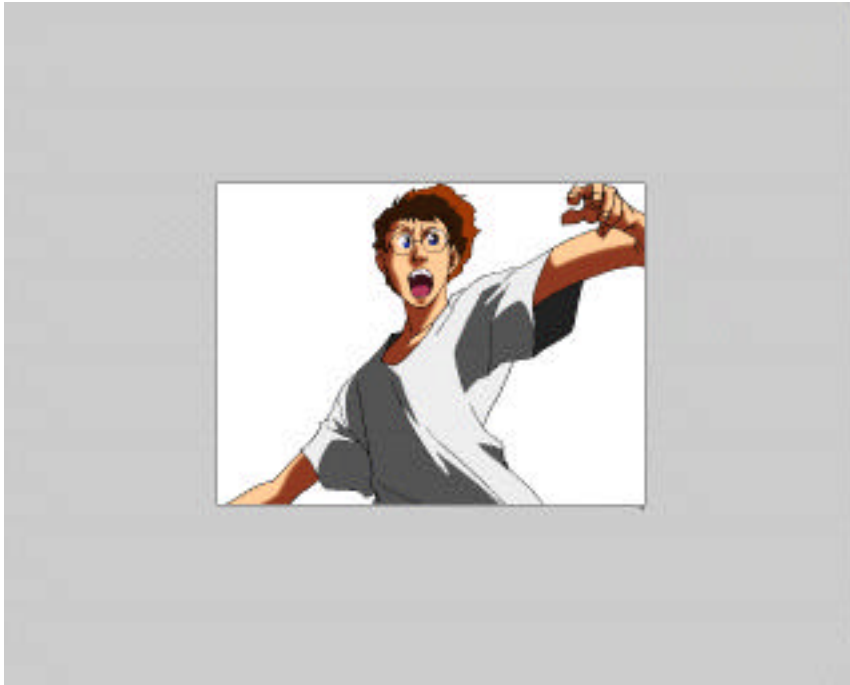
7. OK

Click "OK" to start.

8. Cancel

Click "Cancel" if you want to stop.

9. Playback Speed



[Figure: Animation Check screen view]

Use the 1 ~ 7 keys on the main keyboard to control the playback speed.

| | | | | |
|------------------|----------------------------|---------------------------|------------------|------------------|
| 1: 30 fps | 2: 25 fps | 3: 24 fps | 4: 12 fps | 5: 10 fps |
| 6: 8 fps | 7: 1 frame backward | 8: 1 frame forward | | |

To stop playback, press the Esc/Space key.

10. Frame Number

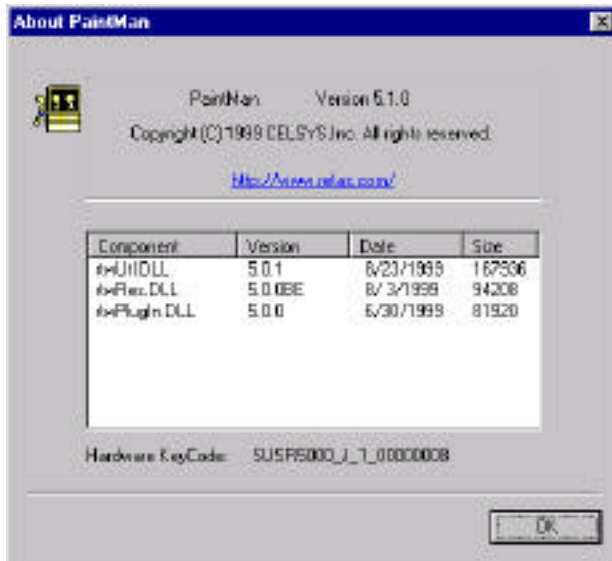
The frame number will be displayed at the lower right corner during playback.

Window Select

The lower part of this menu displays all currently opened windows. Select a window from this list will bring it to the front.

Help Menu

About **Windows**



[Figure: Version Info]

1. Version Information

PaintMan **Version 5.1.0**

Tells you the current PaintMan version number.

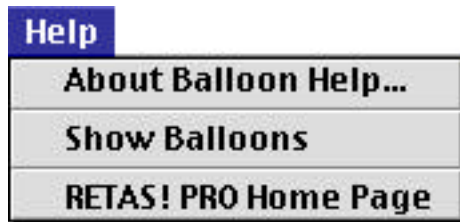
This number is required for technical support.

2. RETAS! PRO Home Page

<http://www.retas.com/>

Jumps to the RETAS! PRO home page if you have Internet access.

The latest info and updates can be downloaded there.

RETAS! PRO Home Page **MacOS**

Jumps to the RETAS! PRO home page if you have Internet access.
The latest info and updates can be downloaded there.

Apple Menu MacOS



About PaintMan...

Tells you the current PaintMan version number.
This number is required for technical support.



[Figure: About PaintMan]

Commands & Tools

Fill

The "Fill" tool fills up an area with the same color as the first pixel clicked.

PaintMan can also paint with color traced lines.

Fill Settings

Double-click the "Fill" tool icon in the Tool Palette, "Paint Palette -> Fill" will appear.

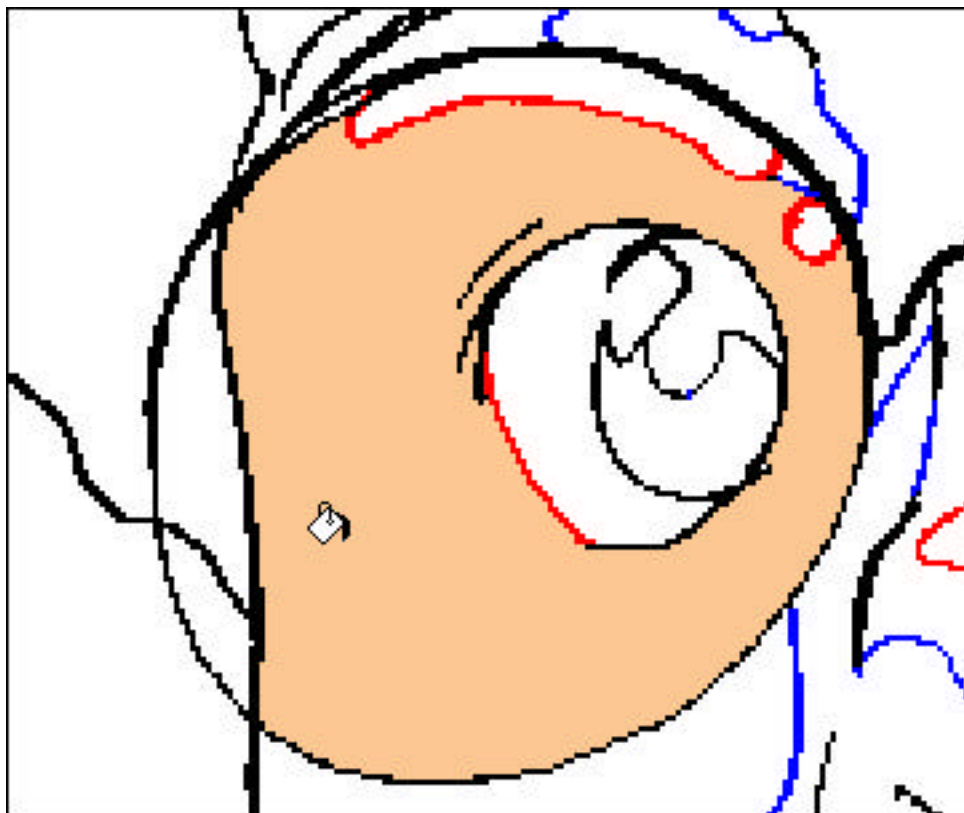


[Figure: Paint Palette -> "Fill"]

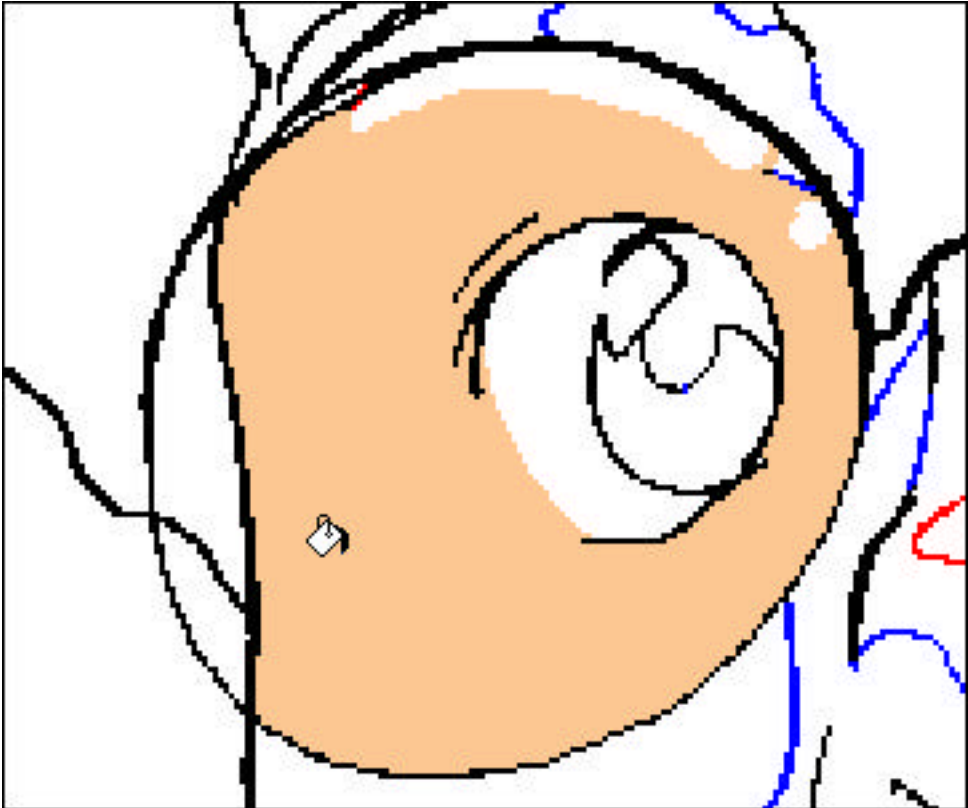
Use the check boxes to control fill modes.

1. When "Include" Is Selected

If all check boxes are "off", the Fill tool will fill up an continuous area with the same color as the first pixel clicked.



If the "Red" check box is "on", the surrounding red line will be filled as well, as shown below.



[Figure: "Red" line included]

If both "Red" and "Green" check boxes are "on", both red and green lines surrounding the area will be filled.

PaintMan treats red (RGB: 255, 0, 0), green (RGB: 0, 255, 0) and blue (RGB: 0, 0, 255) as standard color trace lines.

If you want to include other nonstandard colors, use "Custom 1 ~ 3".



[Figure: Custom colors setup]

Click a custom color box to bring up the "Select Color" dialogue.



[Figure: "Select Color" dialogue]

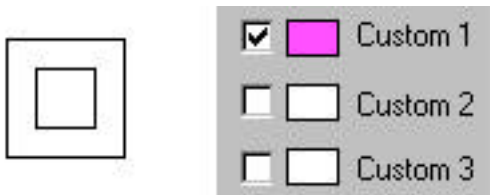
Drag the sliders to make a color, or enter RGB values directly in the fields.
Click "Foreground Color" to select the current painting color.

2. When "Protect" Is Selected

If a color box is checked, this color will be protected.

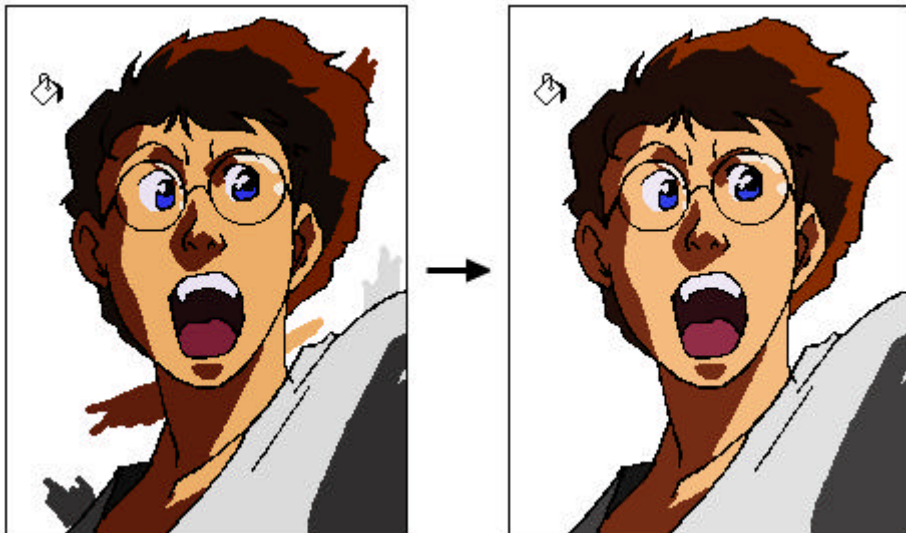
If all check boxes are "off", an entire selection will be filled with the same color without any lines being protected.

This does not make much sense however. Usually at least one color should be protected.



[Figure: Foreground color = white, outline color (black) should be protected]

Set the "Custom 1" to outline color "black", then fill the character's surrounding area with "white" for a clean-up.



[Figure: Clean up all "leaked" colors around the character]

Make sure the outline has no gaps, or the white will penetrate into the character.

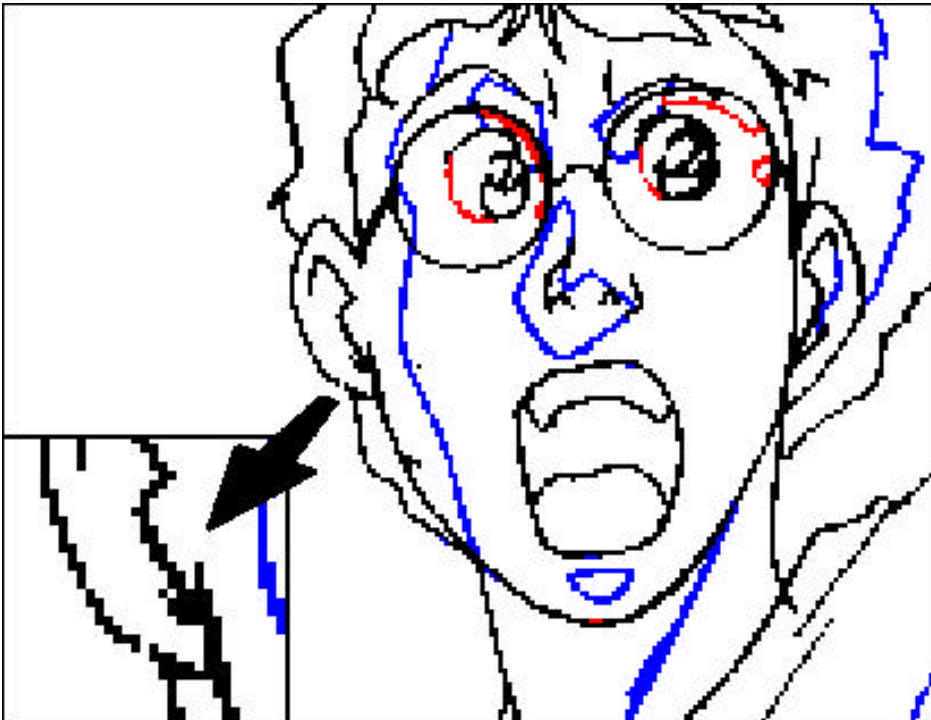
3. Protect Border ☐ Protect Border

When selected, if you are painting a gray-traced image, the border line will be protected.

The "border line" resides in the color layer and it must be black (RGB: 0, 0, 0).

4. Overflow Check ☒ Overflow Check

When checked, if the Fill tool detects a leak, it will automatically stop.



[Figure: A line gap]

Turn it off, and try to paint this image.

The color will leak from the line gap out to the surrounding area. The gap is very difficult to find.



[Figure: Color leaked from the line gap]

Turn it on, and try to fill it again.

It automatically stops and shows you the location of the gap.



[Figure: The Fill tool automatically stops when it detects a leak]

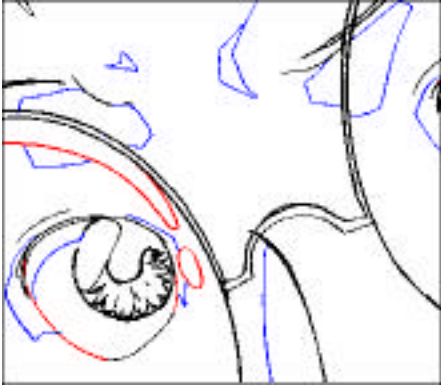
AutoFill

"AutoFill" will automatically paint an entire sequence instead of having to manually paint frame by frame.

This is most effective for slow moving sequences.

AutoFill Operation

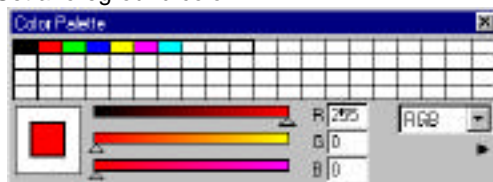
Open the sequence you want to AutoFill.



Double-click the AutoFill tool icon in the Tool Palette to bring up "Batch Palette -> AutoFill".



Set a foreground color.



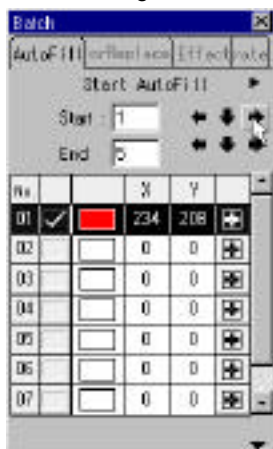
Click where you want to fill.

The clicked position and the color will be shown in the AutoFill list.

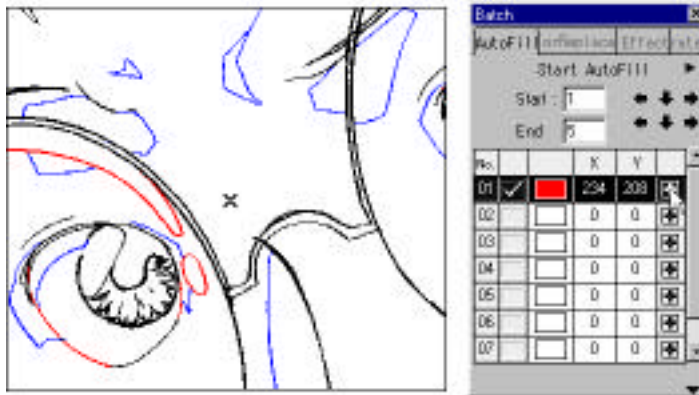
Repeat the same steps to add items in the list.



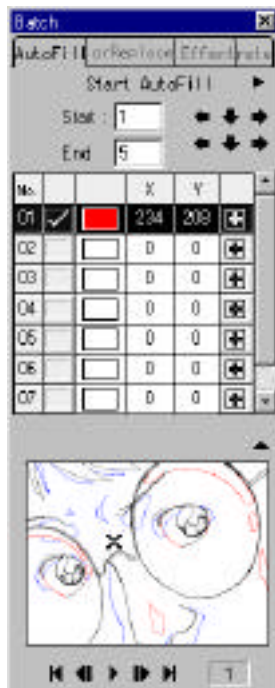
Before starting "AutoFill", click the arrows to set up "Start" and "End" frame range.



To confirm the fill position, click the "+" button at the right and the corresponding position will be shown in the main window as an "x" mark.



Click the Preview Area button to expand. Registered position(s) in the list will be shown as "x" marks.



Click the control panel to "Play" or to move "Forward" or "Backward" to confirm AutoFill position(s) before starting.

Click "Start AutoFill" and the confirmation dialogue will appear. Click "Start" to proceed.



To stop, press the Esc key at any time.

Please note that you cannot "Undo" this action.

ColorReplace

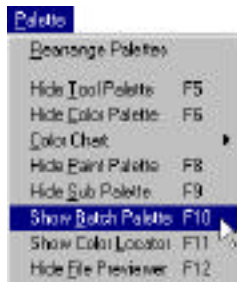
"ColorReplace" will replace selected colors in a sequence.

ColorReplace Operation

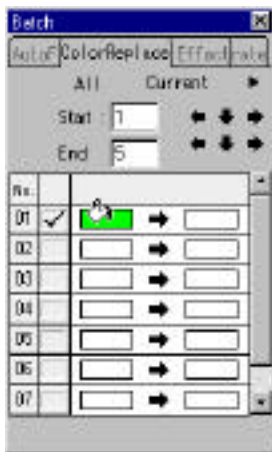
Open a sequence of images you want to change colors in.



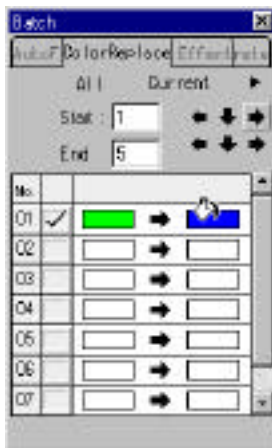
If the palette is not present, choose "Show Batch Palette" and then select "ColorReplace".



Choose a "color to be replaced" in the main window, then click the left color box in the palette to set it.



Set a "new color" as the foreground color, then click the right color box to set it.



Click "Current" to change the color in the current frame.

Or click the arrows to set up the "Start" and "End" range



Then click "All" to change the color in all frames in the range.

To stop, press the Esc key at any time.

Please note that you cannot "Undo" this action.

Airbrush Effect

The "Airbrush Effect" uses an Airbrush to blur or smooth the edge between two colors.



PaintMan also has an Airbrush Effect Tool, but the tool will be too slow for a large amount of images.

The Airbrush Effect Palette will batch the entire sequence at one time.

Airbrush Effect Operation

There are 3 ways to use the Airbrush Effect.

1. "Airbrush Effect" Tool & Mouse

Click the "Airbrush Effect" tool icon and drag the mouse between two colors.



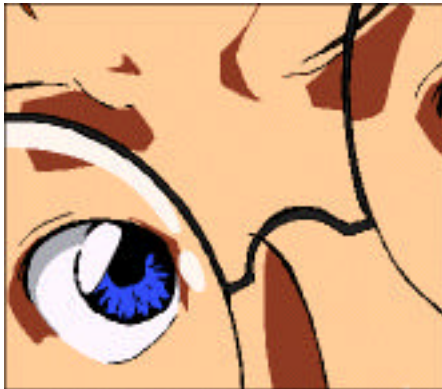
2. Airbrush Effect Within A Selection

Make a selection, then choose "Airbrush Effect" command under the "Image" menu.

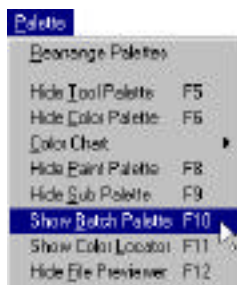


3. "Batch Palette -> Airbrush Effect"

Open a sequence of images.

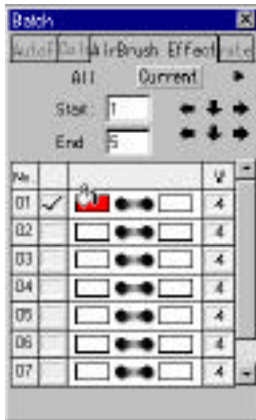


If the palette is not present, choose "Show Batch Palette" and then select "Airbrush Effect".

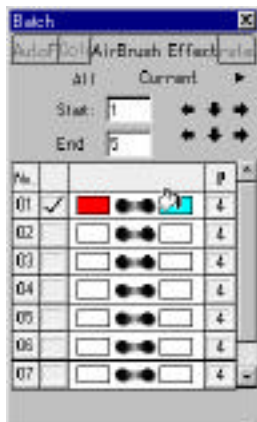


First, pick up the first color from the main window and move the cursor onto the left color box in the palette.

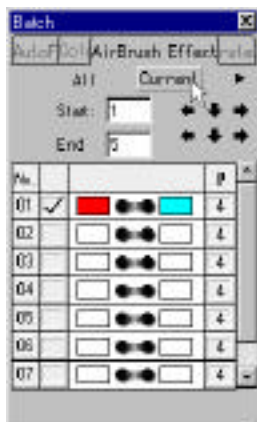
When the cursor changes to the "Fill" tool, click to drop the color in the box.



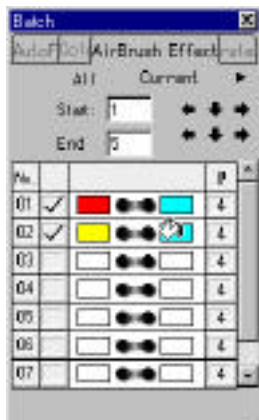
Then pick up the second color and drop it in the right color box.



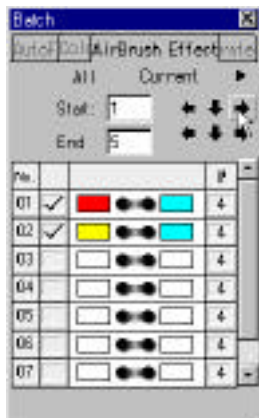
Click "Current" to change the color in the current frame.



To add more pairs of colors to the list, repeat the same steps.



To apply the effect to a sequence, click the arrows to set up a "Start" and "End" range.



Then click "All" to change the color in the range.

To stop, press the Esc key at any time.

Please note that you cannot "Undo" this action.

Airbrush Effect Width

Double-click the "Airbrush Effect Tool" icon in the Tool Palette, or click the "W" box in the "Batch Palette -> Airbrush Effect" to bring up the "Airbrush Effect Setup" dialogue.



The width ranges from 1 to 2000.

Difference Between Airbrush Effect & Blur

Airbrush Effect automatically detects the edge between two colors and creates a gradient across it.



Original



Airbrush Effect



Blur

While the Airbrush Effect only smooths the edge, Blur will smooths all surrounding areas. Blur cannot detect color edges, thus the effect is quite different from Airbrush.

Join Line

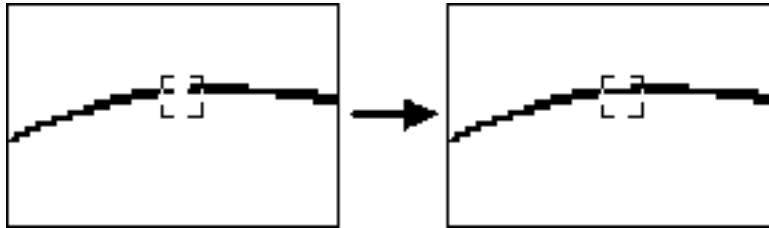
"Join Line" will automatically close line gaps.

Join Line Operation

There are 2 ways to use this function.

1. "Join Line Tool" & Mouse

Select the "Join Line" tool from the Tool Palette and click a line gap to close it.

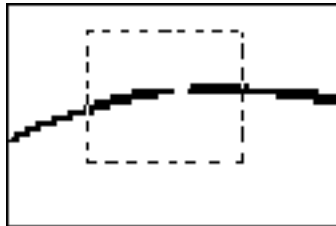


2. Join Line Within A Selection

This will repair lines within a selection.

If no selection made, all lines in the entire image will automatically be repaired.

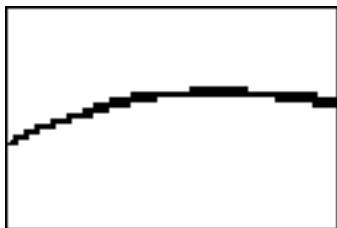
Use the "Rectangle Selection" or "Lasso" tool to spot the line gap.



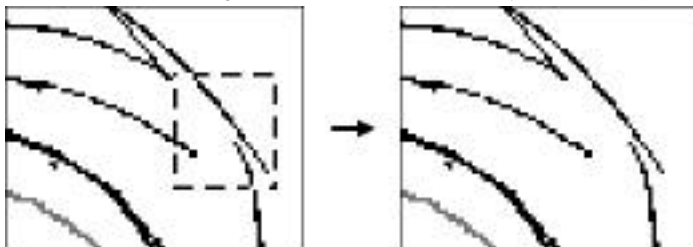
Choose "Join Line" command under "Image" Menu.



The gap is closed.



If the lines are heading in different directions, they will not be joined.



If the lines gap is too large, it will be considered as being made intentionally, so it will not be joined.

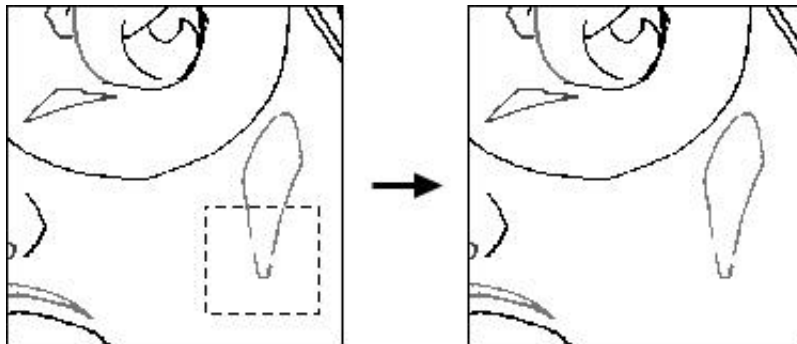
Join Line Setup

Double-click the "Join Line" tool icon in the Tool Palette to bring up the "Join Line Setup" dialogue.



"Precision" control the maximum distance between the two lines "to be joined". It ranges from 3 to 99.

If this value is set too small, the line gap cannot be closed (as shown below).



"Tool Size" controls the size of the "Join Line" tool. It ranges from 16 to 99.

If "Specified Color" is checked, the indicated color will be used to join a line.

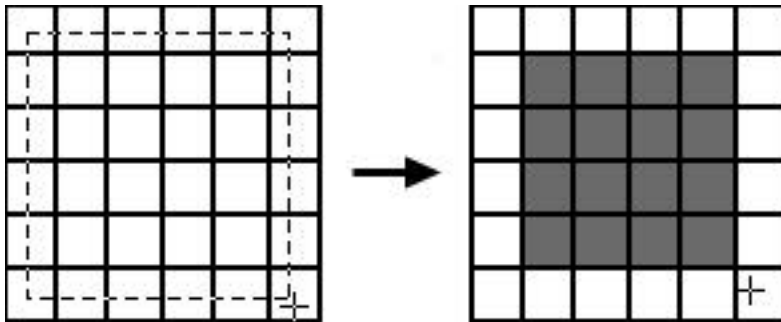
"Red (R= 255)", "Green (G= 255)", Blue (B= 255)" and "Foreground Color" can be selected from the popup menu on the right.

To select a custom color, click the color box to bring up the "Select Color" dialogue.

If the check box is off, PaintMan will automatically use the line's original color.

CloseFill

"CloseFill" will fill all "closed areas" within a selection so you do not have to use the Fill tool to fill each area one by one.



For example, to fill the latticed bars as shown in the figure with the Fill tool, you would have to click many times. With "CloseFill", you can select the entire area and fill them all at once.

Closed Area

If the "closed area" is not correctly indicated, the filled result may not be as expected. Figure 2 indicates the correct selection and correct filled result.

Figure 1

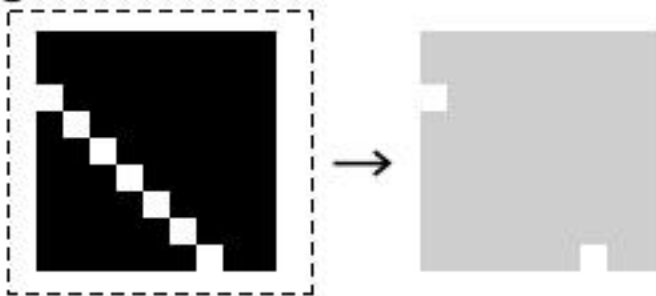
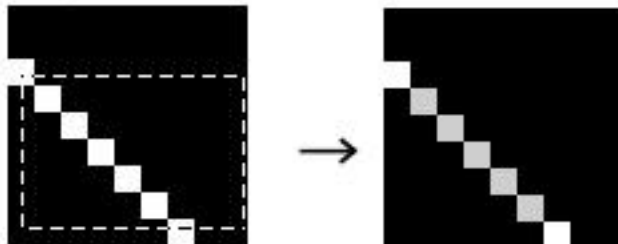
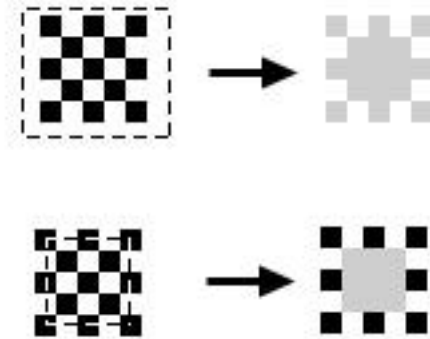


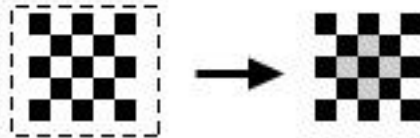
Figure 2



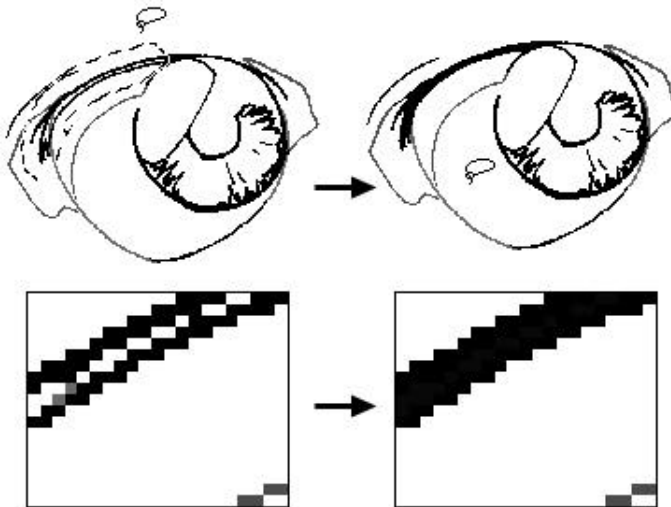
If the color elements are not properly handled, the fill result may not be as expected.



PaintMan can protect the line layer while painting in the color layer. So you can easily select some closed areas in color layer mode and fill them, without touching the black lines.



The "Lasso" tool can be used for selecting small areas.



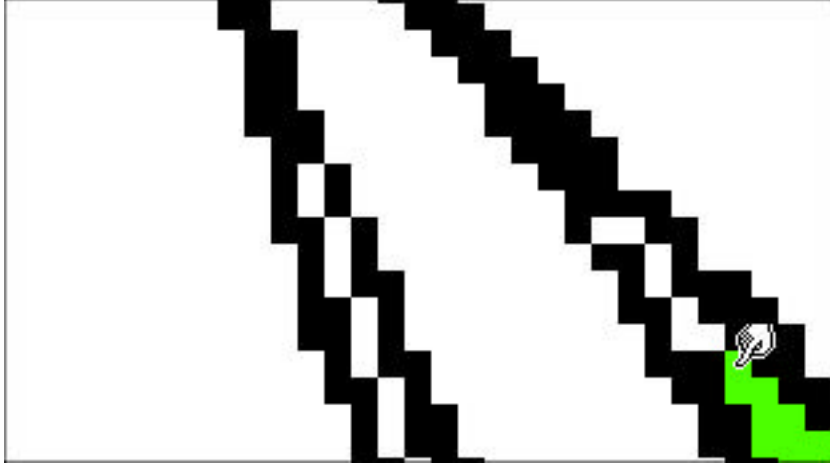
1-pixel lines can be quickly colored by using the "CloseFill" feature.



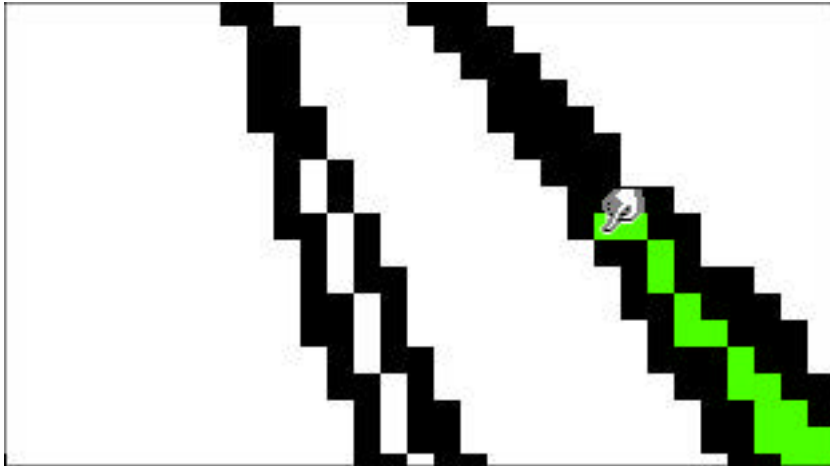
Extender

"Extender" will pick up a color from a painted area and extend it.

Small areas between lines would be very hard to paint using normal painting tools.
"Extender" tool works best in these small areas.



The Extender tool can find a "narrow area" around the cursor and extend an existing color into it.



The Extender tool may mistakenly paint some unwanted pixels outside the character. In this case, use "Paint Palette -> Fill" to clean them up.

Combine And Paint

"Combine" is to combine a non-animated "mother cel" and animated "child cels" in order to reduce the number of drawings.

1. Open A Mother Cel.



[Figure: Mother cel window]

2. Load A Child Cel In Light Table.



[Figure: Child cel loaded in light table]

Select "Paint Palette -> Light Table" and check the "Combine" box.

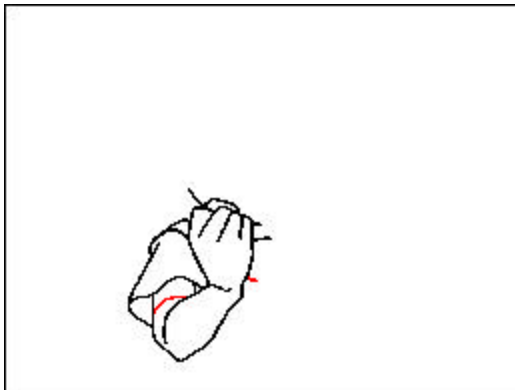


3. Use The "Fill" Tool To Paint The Mother Cel.



[Figure: Painted mother cel]

4. Close The Mother Cel Window, Open The Child Cel.



[Figure: Child cel window]

5. Load The Child Cel In The Light Table.



[Figure: Mother cel loaded in light table]

6. Use The "Fill" Tool To Paint The Child Cel.



[Figure: Painted child cel]

The above figures demonstrate that the light table image's line layer can be combined with the main image to create a combined painting.

Note:

Only the "Fill" tool can recognize the border lines in the light table.

Technical Information

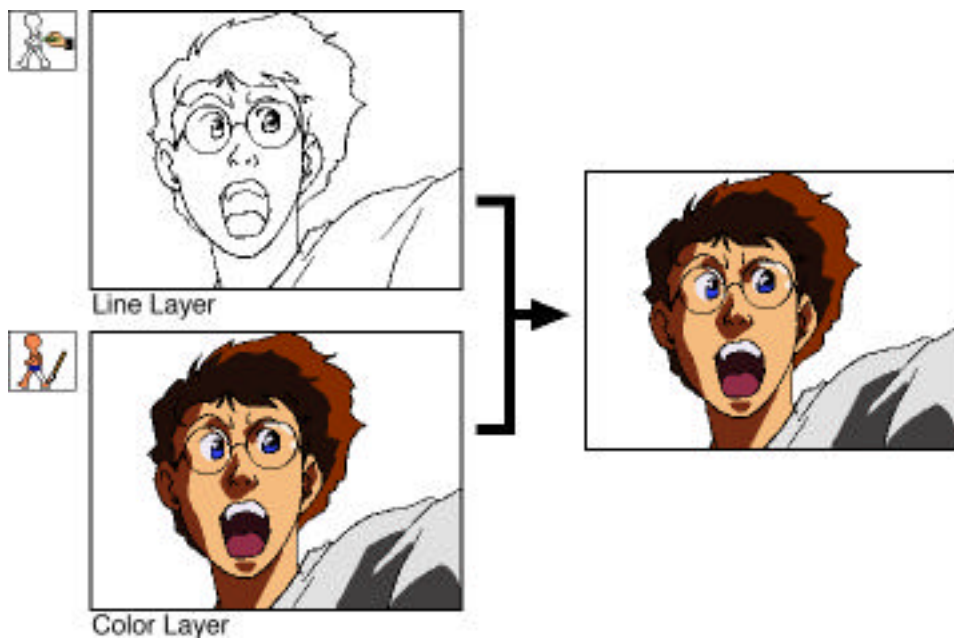
About PaintMan Layer Structure

PaintMan uses more than one layer to store images.

The structures of mono-traced images and gray-traced images created by TraceMan are slightly different.

Layer Structure Of Mono-Traced Image

A mono-traced image has 2 layers: the "Line Layer" and Color Layer". As shown below, "Line Layer" holds outlines, "Color Layer" holds color trace lines and painting colors.



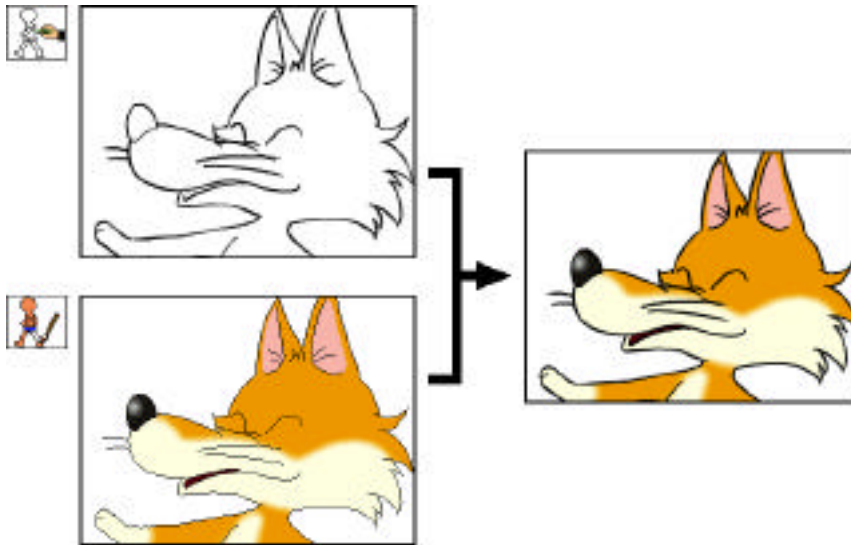
[Figure: Layer structure of mono-traced image]

Layer Structure Of Gray-Traced Image

A gray-traced image has 2 layers: the "Gray Layer" and "Color Layer".

The "Gray Layer" holds outlines with their grayscale info.

When you paint a gray-traced image, it may look like you are painting around the grayscale lines, but actually you are painting in the color layer and you are seeing the composited result of the painted color and gray layers. If you see a line gap in the color layer, this gap has nothing to do with the grayscale lines.



[Figure: Layer structure of gray-traced image]

Besides the above, painting a gray-traced images is the same as painting a mono-traced image.

About Color Configuration

Computer Color Configuration

A computer has 2 ways to express colors: RGB and HSV.

CoreRETAS can use both methods. Here we explain the basic RGB method.

"Color" on a computer is the mixture of 3 primary light sources: red (R), green (G) and blue (B).

Full color mode can handle 256 levels of scale from 0 ~ 255 in each channel of R/G/B. For example, a 50% gray is a mixture of RGB = 128, 128, 128.

The system Color Picker gives you 256 levels, sampled as below.

(Sample)

| | | | |
|------------------|--------|--------|--------|
| Skin | R: 252 | G: 199 | B: 146 |
| Skin (shadow) | R: 140 | G: 62 | B: 35 |
| Skin (highlight) | R: 255 | G: 232 | B: 217 |
| Hair | R: 252 | G: 199 | B: 146 |
| Hair (shadow) | R: 157 | G: 62 | B: 13 |

About Display Device Color

Usually, the colors are configured on a computer display. But the final output of most projects are done to video or film.

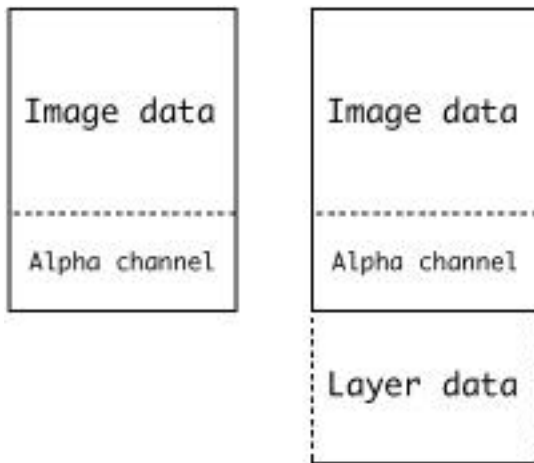
The color of a video monitor or film may be slightly different from that of a computer display, so the output color should always be checked on the final output device.

Exchanging Data With Other Software

Save Format

RETAS! PRO saves images in multilayer format, which is specially designed for animation painting. When TraceMan traces an image, it automatically sends the outline data to a line layer and the color trace lines (RGB) to a color layer.

Outline data usually is not used by other software, so it is stored at the end of an image file.



[Figure: Layer info stored at the end of an image file]

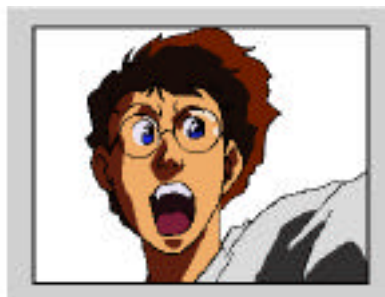
If an image file traced by TraceMan is opened and re-saved by an application program other than PaintMan, the layer information will be lost.

Mono-traced image opened by other applications

[Opened by PaintMan]

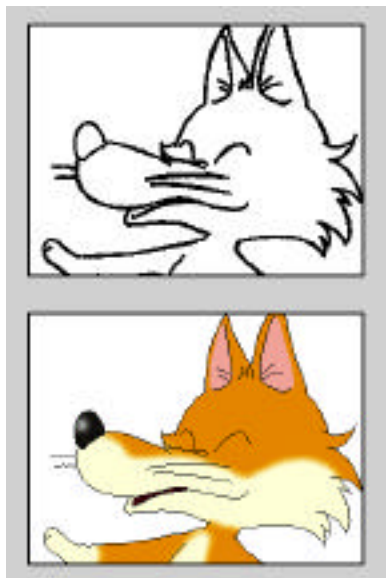


[Opened by other retouching software]

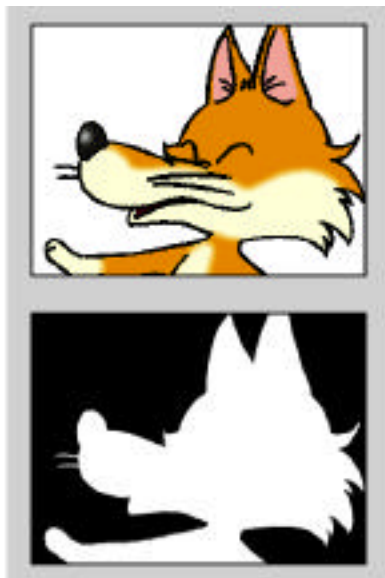


Gray-traced image opened by other applications

[Opened by PaintMan]



[Opened by other retouching software]



If the images are mono-traced, one of the following methods can be used to separate the layers again.

- (1). Use PaintMan's "Separate" function in the Batch palette to separate the main lines.
- (2). Use TraceMan to trace again.

Compatibility With Other Software

When using another application program to open a RETAS! PRO traced image, the layer information at the end of the file may be treated as "incorrect info". Sometimes it may not be opened.

(e.g.: Photoshop 4.0 or 5.0 Windows version)

Compatibility Of Gray-Traced Image (PaintMan)

An image gray-traced by version 5 no longer contains the "line layer", but can still be exchanged with version 4.

Making A Selection

About A Selection

A selection - an area enclosed by a dotted line - is made by a selection tool such as the "Rectangle Selection", "Lasso" or "Magic Wand". When there is a selection, only this area is editable if you apply a command or a tool.



[Figure: A selection]



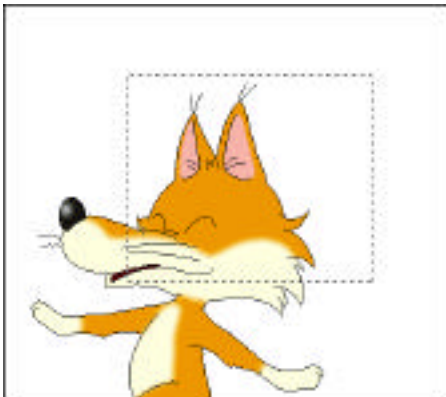
"CloseFill", "Fill" and "Airbrush Effect" can only apply within a selection.

Move A Selection

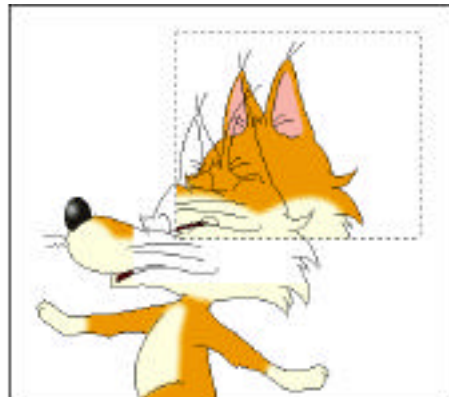
Drag a selection to move it around. Or use the arrow keys to move it.

When you move a selection, both layers will be moved in the same direction and distance.

A selection cannot be moved in only one layer.

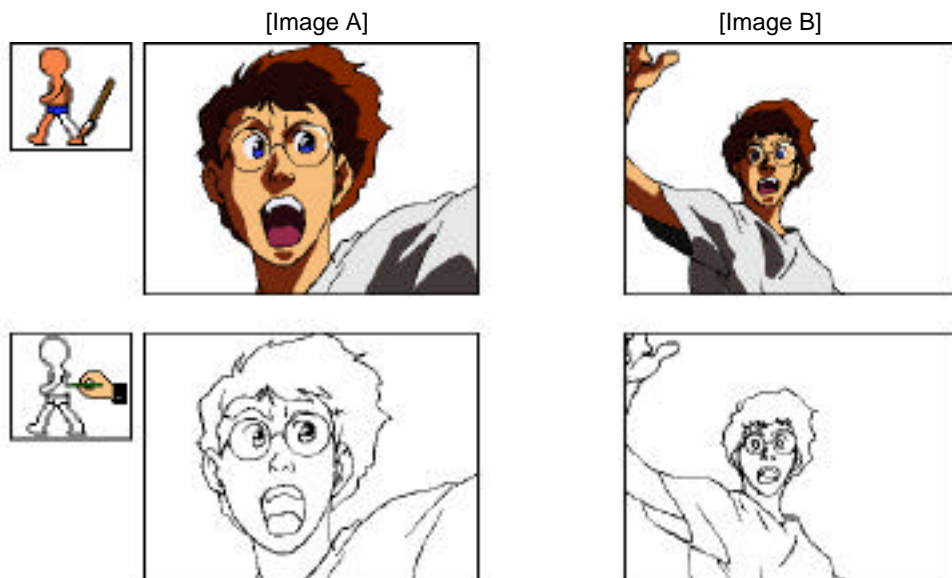


[Figure: Move a selection]



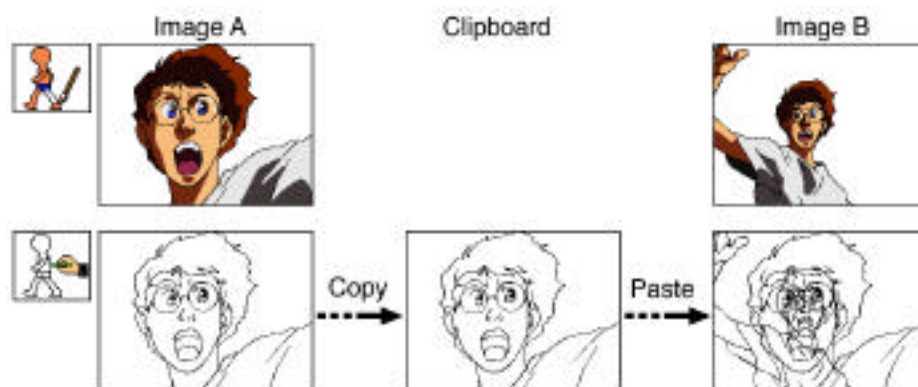
Cut & Paste A Selection

Cut (or Copy) & Paste is only effective in the same layer.



If you cut (or copy) in the line layer, only line layer data will be sent to the clipboard.

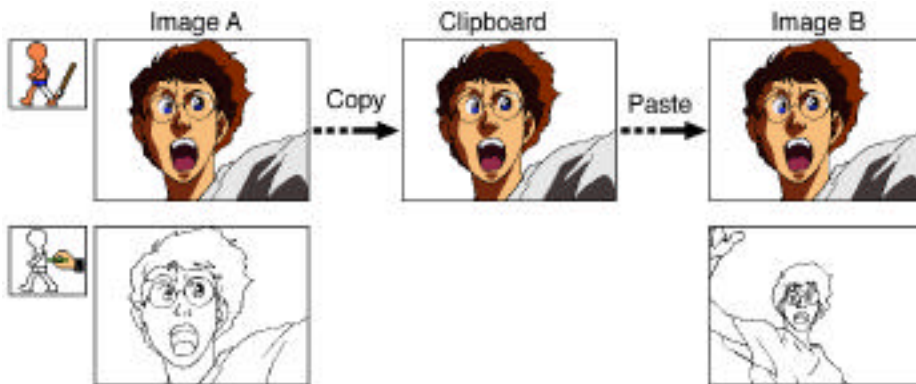
The data can only be pasted into a line layer.



[Figure: Line -> Line cut & paste]

If you cut (or copy) in the color layer, only color layer data will be sent to the clipboard.

The data can only be pasted into a color layer.



[Figure: Color -> Color cut & paste]

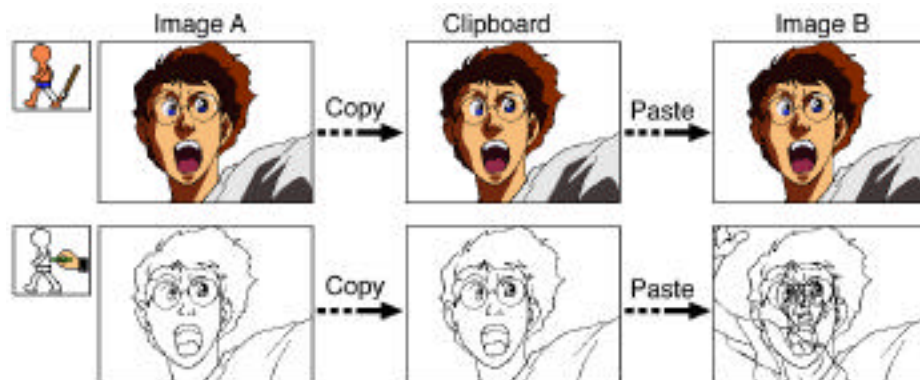
The pasted image in the line layer uses white to define transparency.

If the pasted image and the original image are overlaid in the gray layer, the darker will be picked. This is the same as the "Darker" composite mode in CoreRETAS and Photoshop.

If only a selection of the image has been cut and pasted, the position of the original selection will be retained on paste.

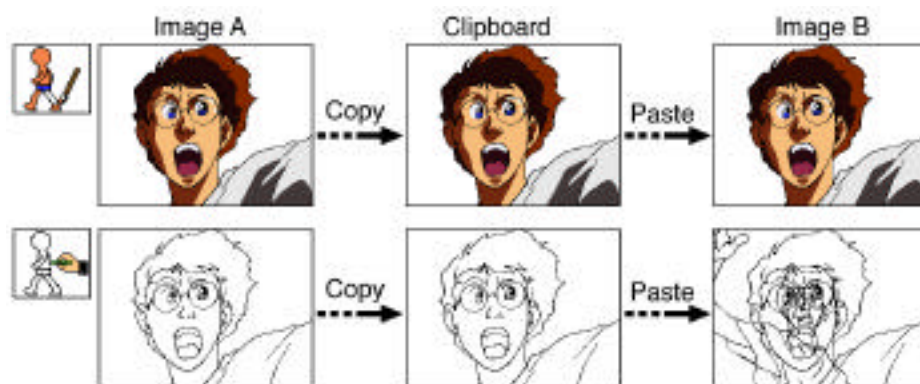
Shift-cut (or shift-copy) and shift-paste will cut (copy) and paste both layers.

In this case, PaintMan will send both layers to the clipboard separately.



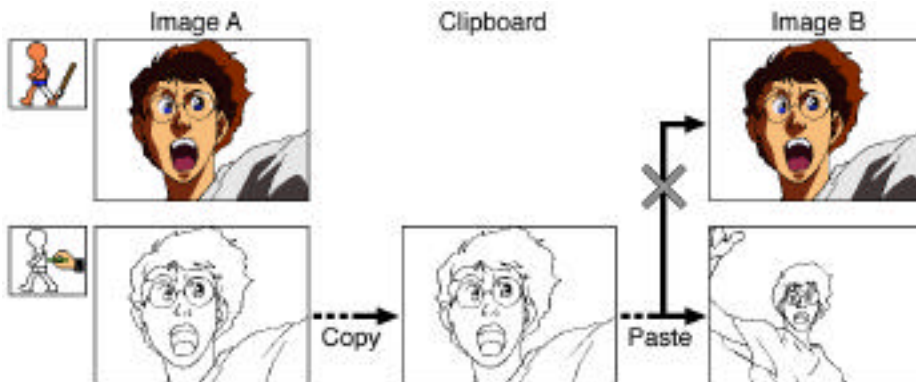
[Figure: Cut & paste both layers]

Even if both layers are copied, you can paste only to one layer, and leave the other layer unpasted.



[Figure: Both layers copied -> one layer pasted]

If only one layer is copied, then only one layer can be pasted and the other layer cannot be pasted.



[Figure: One layer copied -> both layers pasted]

The "Clear" command follows the same rule.

If you choose the "Clear" command, only the current layer will be cleared.

Shift-clear will erase both layers.

Make A Selection

Use the following methods to make a selection.

Rectangle Selection Tool

Drag the mouse to select a rectangular region.

Lasso Tool

Drag the mouse to select any region.

Magic Wand Tool

Click to select an area with the same or similar color. Tolerance values can be configured.

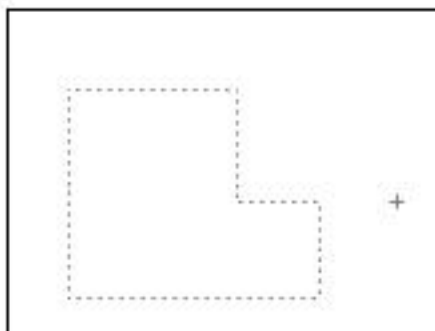
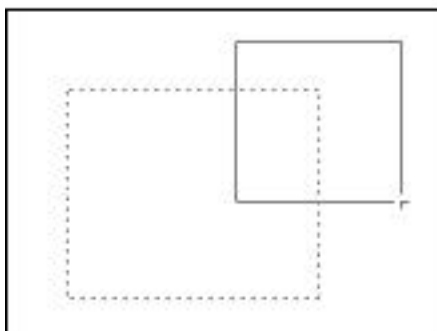
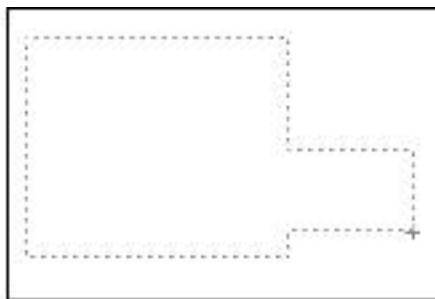
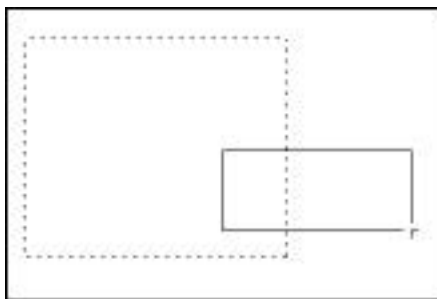
"Select Foreground Color" Command

Select all areas with the same color as the foreground color.

"Select Other Colors" Command

Select all colors except the foreground color.

Shift-select will add a selection. Alt/Opt-select will subtract a selection.



Scene Folder System

Animation production requires a great deal of cooperation when working with large amounts of image files. If any person names the files and folders in his own way, the file names and contents may become confusing to others, making subcontracting impossible.

In order to build an effective system of managing large amount of files, RETAS! PRO manages files by folders.

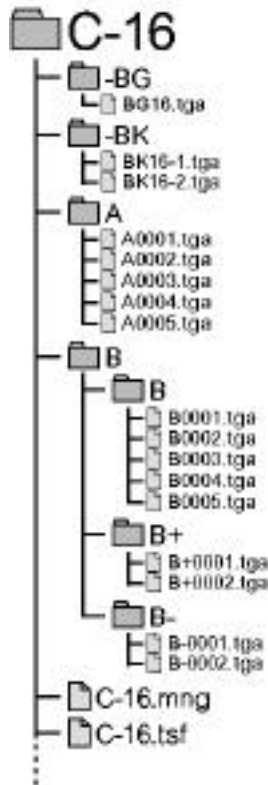
RETAS! PRO version 5 uses a new standard file management system. This new file management system is called the "Scene Folder System".

By using this "Scene Folder System", data can be smoothly exchanged even between different productions.

The scene folder system keeps all necessary data of a scene stored in its "Scene Folder".

Scene Folder

A "scene folder" contains the following folders and files.



[Figure: A scene folder sample]

1. Cel Folder

BG (background), A cels, B cels, C cels are kept in individual cel folders.

A folder should be named the same as the layer name.

A layer cels should be placed in the "A" folder, B layer cels in the "B" folder, and so on.

When CoreRETAS reads a "scene folder", if it finds any sub-folders with same name as the layer folders (-BG, A ~ Z...), and treats them as "cel folders".

CoreRETAS imports the "cel folder" into a celbank and then links it to a cel layer with the same name.

BG and overlay folders should be named "-BG", "-BK" or "-BOOK", with a hyphen (-) or underscore (_) inserted at the beginning.

Folders with a "hyphen (-)" and "underscore (_)" at the beginning are ignored by TraceMan's Batch process.

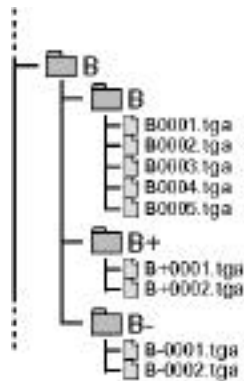
2. Sub-cel Folder

Another new concept in RETAS! PRO version 5 is the "sub-cel layer".

There are 2 types of sub-cel layers attached to a cel layer: upper cel and lower cel.

Mainly used for "motion combining". If possible, always use the "lower cel" first.

CoreRETAS automatically searches for cel folders inside a "scene folder", imports them to celbanks and then sets up their layer mode. If sub-cel folders exist, celbank import will follow the order shown below.



[Figure: cel folder with sub-layers]

If a sub-folder inside a cel folder has the same name as the cel folder (-BG, A ~ Z...), it will be imported into a celbank and linked to a cel layer with the same name.

If a sub-folder inside a cel folder has a name like ["(layer) folder name" + "+"] or ["(layer) folder name" + "-"], it will be imported into a celbank and linked to a sub-cel layer (upper or lower) of the cel layer.

Other files or folders will not be imported by CoreRETAS automatically.

3. Image Files

Images files are stored in cel folders.

The scene folder system names a file as follows.

Layer name + (4 digit) image number + extension

The "layer name" should be a letter indicating A, B cel, etc.

The "number" should be a digit (normally 4 digits).

Numbering starts from "1" not from "0".

An "extension" should be attached unless there is some reason not to.

Sample: A cel folder

A0001.tga

A0002.tga

A0003.tga

A0004.tga

"

"

Incorrect values:

A0000.tga the number starts from "0".

the number must start from "1".

A1.tga the number does not have enough digits.

A0002 no extension

Except for the extension, other portions must follow the naming rules in order to be used with the RETAS! PRO system. RETAS! PRO manages image files in numerical order so the number must be in proper ascending order.

To learn more about this, go to "RETAS! PRO File Numbering".

4. X-sheet Files (Extension *.tsf)

An exposure sheet file created by CoreRETAS.

5. Management Files (Extension *.mng)

These files contain various data required by the applications of RETAS! PRO series.

Only when a management file is in a scene folder will RETAS! PRO be able to recognize it and perform automatic operations.

The management file can only be created automatically by TraceMan when it creates a "New Scene Folder". You cannot make this file on your own.

RETAS! PRO applications write necessary data to this management file, and require it to perform automatic operations.

Please do not move, delete or modify the management file.

If the "management file" has been moved, deleted or modified, an existing x-sheet may become corrupted, and then you will have to manually modify it.

6. File Management By Folders

RETAS! PRO manages large amounts of files by folders. Please note the following when managing your folders.

6-1. Moving, copying or deleting must be performed by folders.

RETAS! PRO reads files by the folders. If one file is moved out of a folder, the x-sheet will lose its overall order.

Even if you only have one image file, always place it in a folder.

6-2. Do not place unnecessary files in a folder.

As above, if you place unnecessary files in a folder, the File Previewer (PaintMan) and CelBank (CoreRETAS) will lose the numerical order (see "RETAS! PRO File Numbering"). Additional files should be placed in new folders.

6-3. Folders that you do not want to be batch processed

To exclude a folder from Batch processing, insert a "-" (hyphen) or "_" (underscore) at the beginning of the folder name such as "-BG" or "_temp".

7. Scene Folder Name Format

Scene folder names are recommended to be in the following format.

Sample: scene number 12
S-012 (or C-012)

If the scene is a part of a sequence:

Sample: sequence 07 scene number 20
S-07-20 (or C-07-20)

If it is a shared scene, use comma to separate the scene numbers.

Sample: scene 17, 19, 22 sharing
S-017,019,022 (or C-017,019,022)

Files scanned with fixed frame for camera work can be placed in a folder named -FRAME (or -FIELD).

Sample:
-FRAME (or -FIELD)

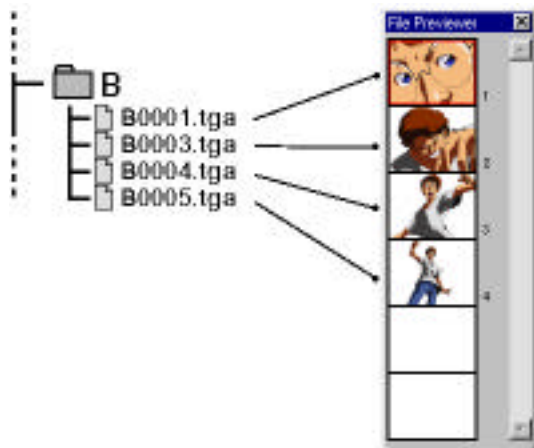
8. RETAS! PRO File Numbering

RETAS! PRO's cel order is not directly linked to a file number.

When RETAS! PRO imports image files from a folder to a celbank, it numbers the cels in the order imported.

Beginning from 1, it follows the file name sorting order.

Because of this, sometimes the cel numbers in File Previewer (PaintMan) and CelBank (CoreRETAS) may be different from the file numbers.



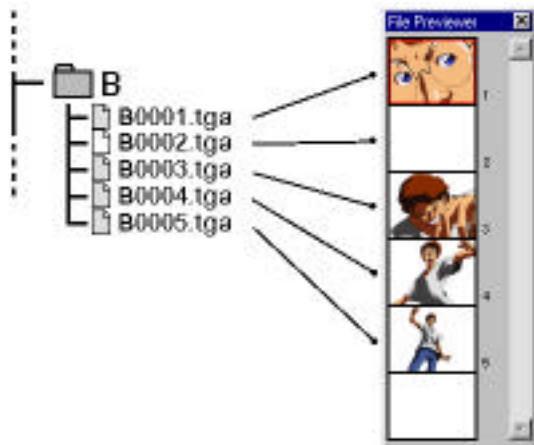
[Figure: Missing number]

In the above sample, A0002.tga is missing, so the cel numbers registered in File Previewer and CelBank are different from the file numbers.

To avoid this, use the following methods to make RETAS! PRO operation smoother.

8-1. When an image is missing (deleted)

When an image file has been deleted, the cel numbers in the File Previewer and CelBank are shifted from the file numbers. This can be corrected by inserting a dummy file.



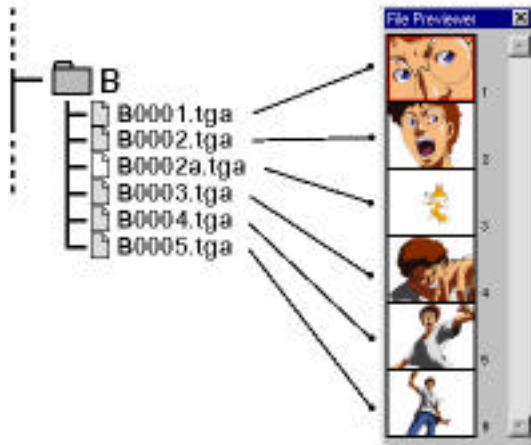
[Figure: Insert a dummy file (A0002.tga)]

The dummy file should be pure white (RGB = 255, 255, 255), so it will be complete transparent in the CoreRETAS x-sheet.

8-2. When adding an image

For example, you can add a new image between the 2nd (A0002.tga) and the 3rd (A0003.tga).

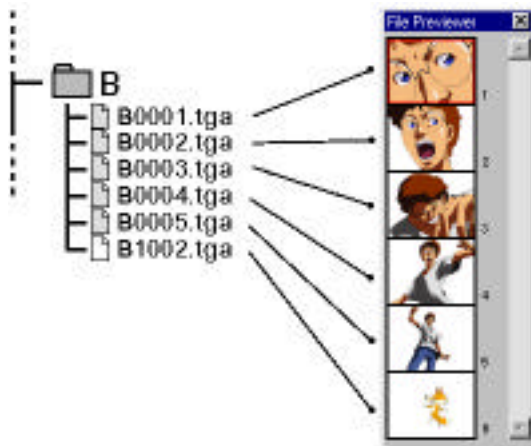
Normally, it will be added as "A0002a.tga". But if imported into CoreRETAS, the cel numbers will be shifted.



[Figure: "A0002a.tga" added]

To avoid this, you can give it a larger number so it will appear at the end.

For example, if you name it "A1002a.tga". It will make it easier to recognize the added image since the number is very obvious.



[Figure: "A1002a.tga" added]

Directory Arrangement

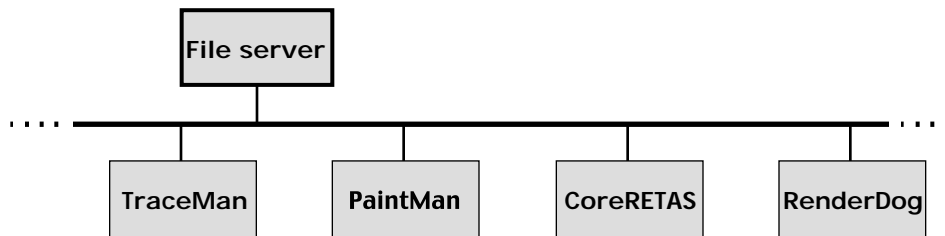
An animation production creates a very large amount of files. If the file names and locations are not properly determined, other operators may not know where to find data, which will cause confusion.

Proper control is very necessary to manage RETAS! PRO image data.

The following directory arrangement is recommended for efficient management.

This directory structure is easy to understand and allows error-free file management.

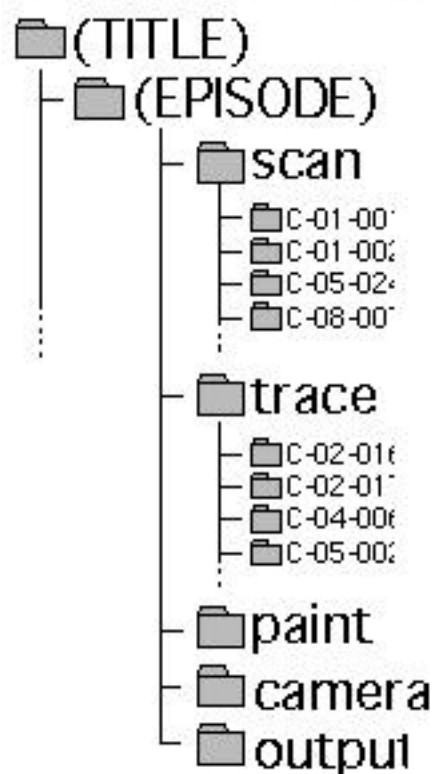
A large system should use a file server as its center, with client machines around it.



The following directory structure should be created on the disk of the file server.

| | |
|---------|------------------------------------|
| TITLE | title |
| EPISODE | story number and sub-title |
| scan | scanned scene folder (cels & BG) |
| trace | traced scene folder (before paint) |
| paint | painted scene folder |
| camera | completed camera work scene folder |
| output | output folder |

Scene folders should reside in "scan ~ camera".



The following directory structure should be created on the local disk of a client machine.

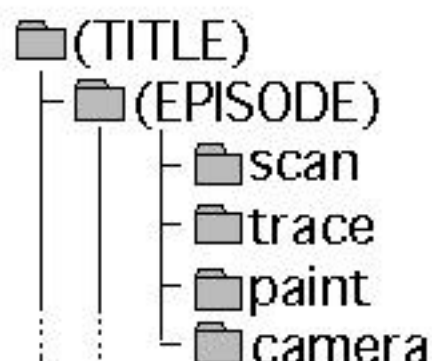
***TraceMan**

| | |
|---------|---------------------------------------|
| TITLE | title |
| EPISODE | story number and sub-title |
| scan | scanned scene folder (cels & BG) |
| trace | traced scene folder (before painting) |



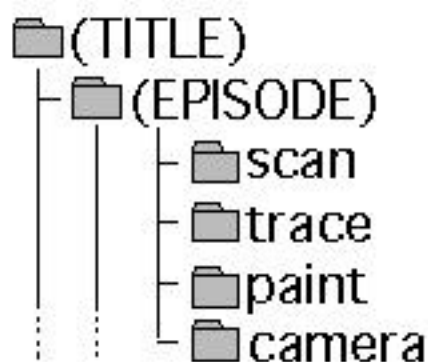
***PaintMan**

| | |
|---------|---------------------------------------|
| TITLE | title |
| EPISODE | story number and sub-title |
| scan | scanned scene folder (cels & BG) |
| trace | traced scene folder (before painting) |
| paint | painted scene folder |



*CoreRETAS / RenderDog

| | |
|-----------------------|------------------------------------|
| TITLE | title |
| EPISODE | story number and sub-title |
| trace *1 | traced scene folder (before paint) |
| paint | painted scene folder |
| camera | completed camera work scene folder |
| output | output folder |
| (*1: mostly not used) | |



Work Flow: from opening a scene folder, initial scanning to complete movie export

[For Oels]

Operation Steps

Save Location

Scene contents arrive

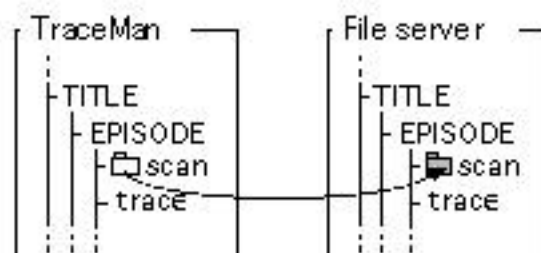
Begin scan

scan (TraceMan)



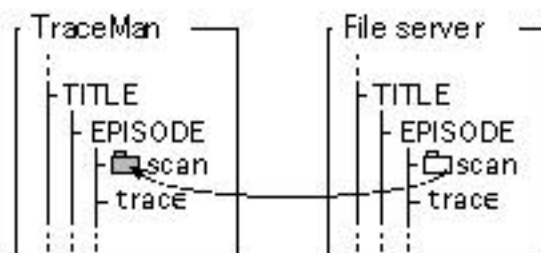
Scan complete

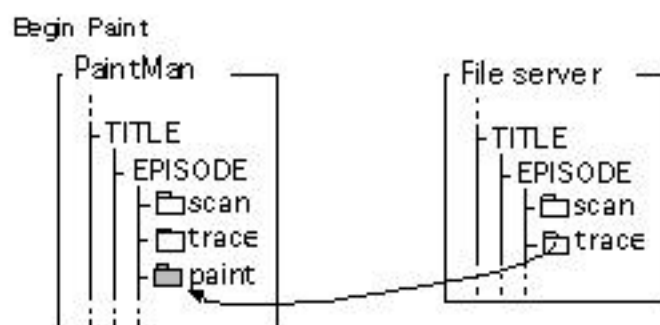
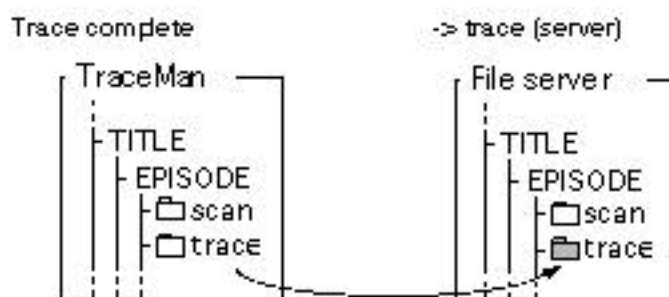
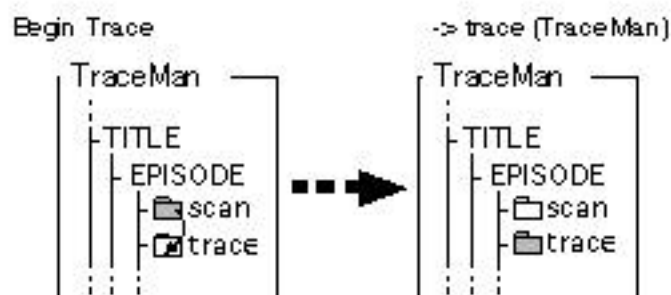
-> scan (server)

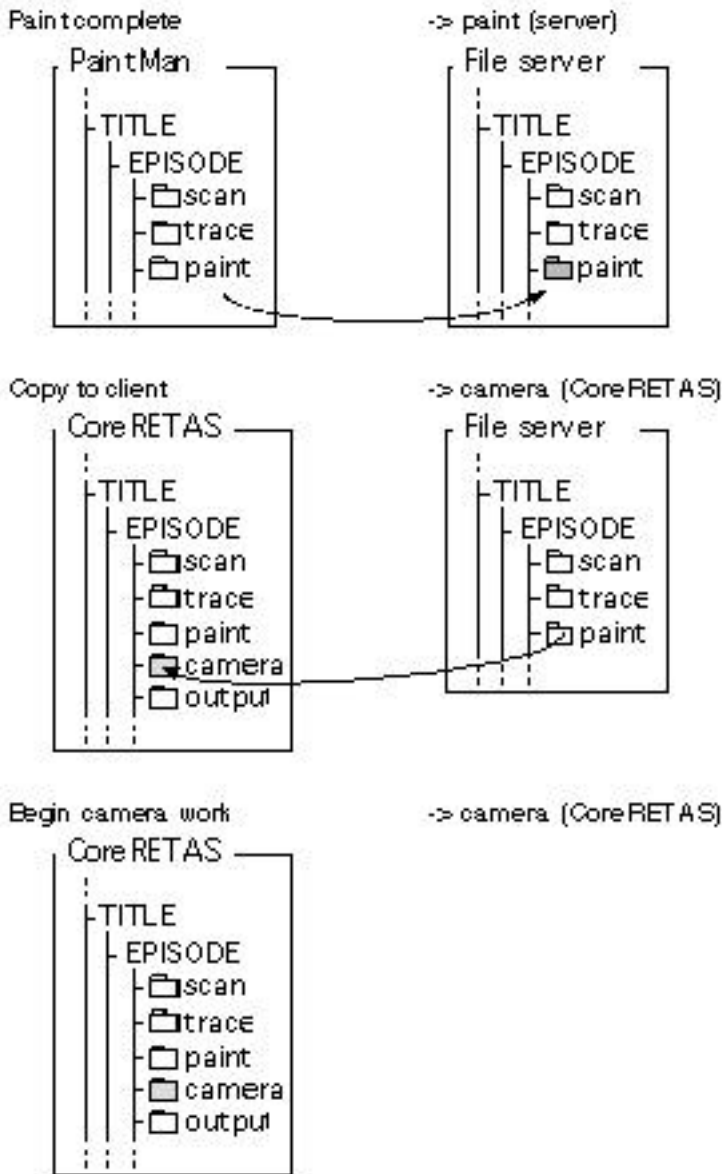


Copy to client

-> scan (TraceMan)



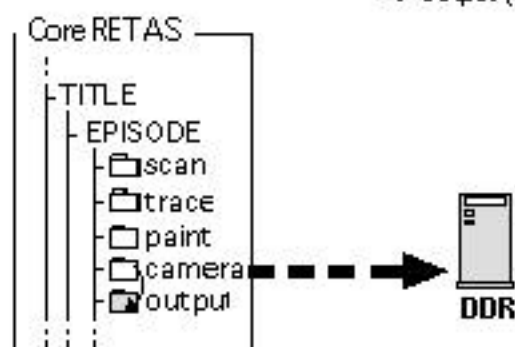




Note: All of this is in the same folder

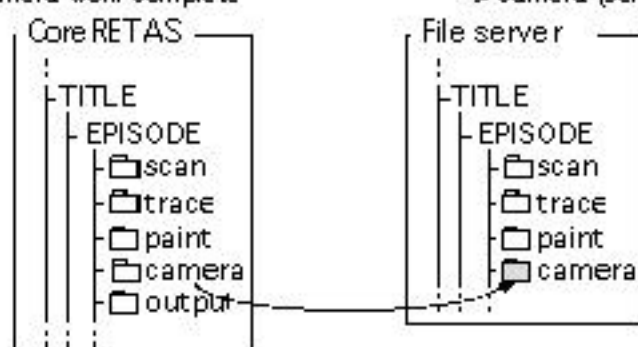
Export

-> DDR or
-> output (CoreRETAS)



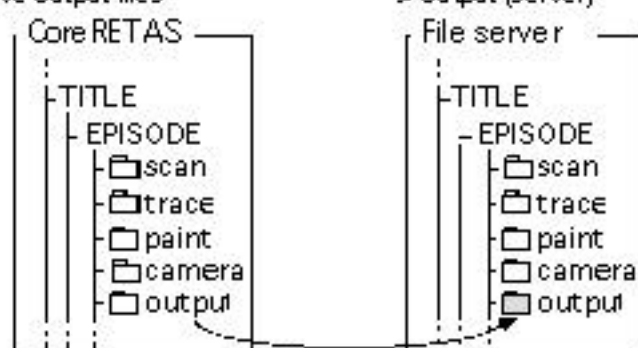
Camera work complete

-> camera (server)



Save output files

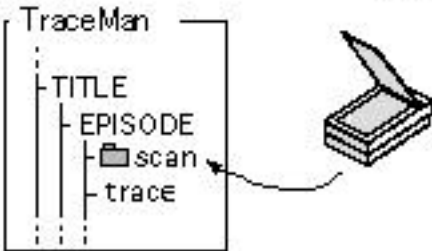
-> output (server)



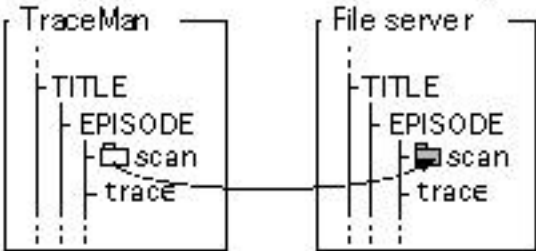
[For BG]

| Operation Steps | Save Location |
|-----------------|---------------|
| ----- | |
| BG arrives | |

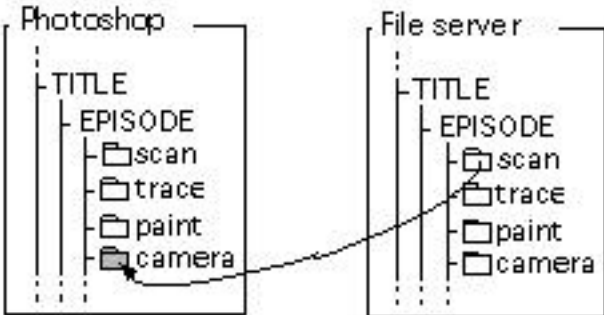
Begin scan scan (TraceMan)

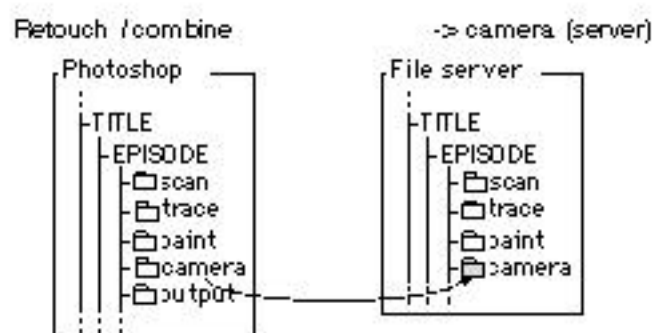


Scan complete -> scan (server)



Copy to client -> camera (-)





Exchanging Data Between Different Platforms

File Names

To avoid trouble when exchanging data between different platforms, be careful with the file naming.

1. Do not use the following characters in a file name.

[/], [:], [?], [*], ["], [<], [>] or [[]].

2. Do not exceed 32 characters.

3. Do not use 2-byte characters

4. Do not use any special characters available only on certain platform.

5. Always use a file name extension.

About Extensions

Windows recognizes a file by the extension.

The Mac OS does not require an extension, so when it sends files to Windows, Windows cannot recognize the files.

To avoid this, RETAS! PRO automatically adds an extension.

Troubleshooting

Before Contacting Support

Before contacting user support, please carefully review this list of frequently asked questions, to see if your question has already been answered.

1. Is your question is answered in the troubleshooting section?

2. Is your system configuration according to the guidelines?

RETAS! PRO requires certain hardware and system software.

Read the "Setup Guide" and double check your system.

3. Is RETAS! PRO correctly installed?

Read the "setup Guide" about installation.

4. Is your copy of RETAS! PRO the most recent version?

New updates correct bugs and incompatibilities. An updated version will show a newer version number.

Updates can be downloaded from the RETAS! PRO home page at:

<<http://www.retas.com>>.

If your problem is still not solved after the above checks, please contact your dealer.

To ensure smooth support, please provide the following information when you contact your dealer.

1. Your computer type?

2. Your OS version?

Please provide the exact version number.

3. Your RETAS! PRO version?

Please provide the exact version number.

4. Any error message?

If an error message appears, what is it?

Take note of the error message, it will help us to determine the cause of the problem.

5. What were you doing when the error occurred?

The more detail the better, including "which command was executed?", "which button was clicked?", etc.

6. Frequency of the error?

Does a specific operation always produce the same error?

How consistent is the error?

For user support, please contact your dealer.

Q1. PaintMan does not launch.

- A1. (1) Does your computer meet the correct system requirements?

PaintMan requires certain CPUs, OS versions and amounts of memory

Double check your computer to make sure it meets the requirements.

- (2) The PaintMan application may be corrupted.

An error may cause damage to the PaintMan application. Reinstalling PaintMan may solve the problem.

Q2. PaintMan freezes.**I reinstalled PaintMan, but still not fixed.**

- A2. (1) Any nonstandard software installed in your system?

Nonstandard "device drivers", "extensions" or "control panels" may be incompatible with PaintMan.

Reinstall the standard OS, and see if the problem happens again.

- (2) The preferences file may be corrupted.

PaintMan preferences file may be corrupted. Use the following method to delete it.

Deleting the preference file only resets PaintMan to default settings, it does not hurt PaintMan operation.

Double-click PaintMan icon to launch it, and immediately press the Shift key, this will reset the preferences file.

Q3. The display color is strange.

- A3. (1) Is the monitor set to full color mode?

Monitor must be set to full color mode.

To learn how to set up the monitor, see "Setup Guide".

- (2) The display is not correctly adjusted.

Each display's color may be slightly different. Adjust the brightness, contrast and other settings. To learn how to adjust them, see the manufacture's manual.

Q4. Error messages appear: "Not enough memory for UNDO" or "Not enough memory to execute this command".

A4. (1) Is there another application running?

PaintMan requires a lot of memory. Quit other applications to free more memory and restart PaintMan.

(2) Is PaintMan given enough memory?

If you're using the Mac OS, go to "About This Macintosh" under the Apple menu to check the memory usage. If you have unused memory block, give PaintMan a larger memory size.

If not enough unused memory block can be given to PaintMan, adding more system memory is recommended. Insufficient memory not only limits your file size, but also may cause problems.

You can temporarily turn on "Virtual Memory" if absolutely necessary. Virtual memory is very slow and adding memory is recommended for the long run.

Q5. The Open dialogue does not show my image files.

Image files created by other applications cannot be read by RETAS! PRO.

A5. Double check the file format.

PaintMan version 5 readable file formats are listed in the "A. Image File" in the "Appendix".

On Windows, file extension must be correct.

On the Mac OS, use a utility such as File Buddy to check a file format.

Q6. PICT files saved by Photoshop (Macintosh version) have noise.

A6. Is the PICT file JPEG compressed?

Some graphic applications can use JPEG compression in QuickTime to compress PICT files.

JPEG compressed images contains noise. Please do not use JPEG compression.

Q7. Cannot save files on disk.

A7. Does the disk have enough available space?

If there is not enough available disk space and the images cannot be saved, the OS may also become unstable. If possible, always make sure there is a minimum of 200 ~ 300 MB available disk space.

Q8. I deleted a file by mistake.

A8. Use a file utility to unerase it.

Use SYMANTEC's Norton Utilities or similar disk tools to unerase the deleted file.

This method does not guarantee the file will be 100% recovered. So be very careful when deleting files.

If a file has been overwritten, there is no way to recover it.

Always make backups.

Q9. When PaintMan v5 files are opened by PaintMan v3, the color layer data is shown in the line layer.

A9. PaintMan v3 cannot correctly read files created by PaintMan v4 and v5.

PaintMan v5 files should only be read by PaintMan v5.

Q10. AutoFill preview is too small.

A10. Are the files saved by TraceMan or PaintMan v2 or earlier?

Use PaintMan v5 to re-save the files.

Q11. Can I paint in the line layer?

A11. You can paint in the line layer but the line protection feature will not work.
The same goes for the gray layer.

Q12. The Fill tool and Pencil tool do not work.

A12. (1). Are there any other colors except white in the line layer?

Except for white, all other colors in the line layer are protected as outlines.

(2). Is the painting color pure black?

When "Show Gray Layer" is activated, the pure black (R:0 G:0 B:0) is considered as the "border line" and will become invisible.

If you want to use black, set it to a near-black color (R:1 G:1 B:1).

Q13. The Fill tool beeps and stopped.

A13. If the "Overflow Check" in "Paint Palette -> Fill" is turned on, the Fill tool will stop when it detects a leak.

If you want to proceed with the leak as it is, turn off this option.

Q14. Unwanted line-closing occurs.

A14. The Join Line command works under certain conditions.

For details, go to "Join Line" in "Commands & Tools".

Q15. After erasing the gray lines, a gradation appears on the color edge.

A15. To ensure a smoother look, when PaintMan combines the gray line with the colors, the border line (R:0 G:0 B:0) will be deleted.

In other words, when the gray line is combined (or erased), a gradation is created on the border line.

Normally, the gray line is above the border line, so this gradation looks fine. If you do not want the gradation, change the border line to near-black (R:1 G:1 B:1) or another color.

Q16. The Eraser erased my outline (outline protection does not work).

A16. If you repair the outlines in color layer mode, the lines will be drawn in the color layer.

When repairing the outlines, make sure it is in line layer mode.

Q17. Files created on a Macintosh cannot be opened on a Windows system.

A17. Did you check the "Add File Extension" option in the "Preferences"?

Windows requires a file to have an "extension" in order to detect its file type. The Mac OS does not require this.

Always turn on the "Add File Extension" option if possible.

To read a file without an extension on Windows, add an extension to the file in the Finder or in Windows Explorer.

Appendix

File Extensions List

A. Image Files

| Name | Extension | TraceMan | PaintMan | CoreRETAS | RenderDog | Note |
|-----------|-----------|----------|----------|-----------|-----------|---------------------------------|
| TGA | *.tga | R/W | R/W | R/W | R/W | |
| PICT | *.pct | R/W | R/W | R/W | R/W | QuickTime 3 required on Windows |
| BMP | *.bmp | R/W | R/W | R/W | R/W | |
| TIFF | *.tif | R/W | R/W | R/W | R/W | LZW compression unsupported |
| Raw File | *.raw | -/W | -/- | -/W | -/W | |
| SoftImage | *.pic | R/W | R/W | R/W | R/W | |
| RLA | *.rla | -/- | -/- | R/- | R/- | |
| YUV | *.yuv | -/- | -/- | -/W | -/W | |
| Photoshop | *.psd | -/- | -/- | R/- | R/- | |
| QuickTime | *.mov | -/- | -/- | R/W | R/W | QuickTime required |
| AVI | *.avi | -/- | -/- | -/W | -/W | Windows only |

B. RETAS! PRO Special Files

| Name | Extension | TraceMan | PaintMan | CoreRETAS | RenderDog | Note |
|------------------------|-----------|----------|----------|-----------|-----------|------|
| Mono Trace Settings | *.t2f | + | | | | |
| Gray Trace Settings | *.tgf | + | | | | |
| Tone Curve | *.tcf | + | | | | |
| Color Chart | *.ccf | | + | | | |
| Color Replace Settings | *.crf | | + | | | |
| Color Palette | *.cpf | | + | | | |
| Airbrush Effect | *.abf | | + | | | |
| X-sheet | *.tsf | | | + | + | |
| InBetween Settings | *.ibf | | | + | | |
| Management File | *.mng | + | | + | | |

Field-to-Pixel Sample Chart

"1 field = 1 inch, DPI = dot (pixel) per inch."

Field-to-pixel conversion: Field x DPI = Pixel (Width).

| Field (Inches) | Resolution (DPI = 72) | Pixel (Width) | Height (4:3) | Height (16:9) | Height (9:5) | 100Frame (%) (If = 16 Field) | 100Frame (%) (If = 12 Field) |
|-------------------|---------------------------|------------------|-----------------|------------------|-----------------|---------------------------------|---------------------------------|
| 16 | 72 | 1152 | 864 | 648 | 640 | 100% | 133% |
| 15 | 72 | 1080 | 810 | 608 | 600 | 94% | 125% |
| 14 | 72 | 1008 | 756 | 567 | 560 | 88% | 117% |
| 13 | 72 | 936 | 702 | 527 | 520 | 81% | 108% |
| 12 | 72 | 864 | 648 | 486 | 480 | 75% | 100% |
| 11 | 72 | 792 | 594 | 446 | 440 | 69% | 92% |
| 10 | 72 | 720 | 540 | 405 | 400 | 63% | 83% |
| 9 | 72 | 648 | 486 | 365 | 360 | 56% | 75% |
| 8 | 72 | 576 | 432 | 324 | 320 | 50% | 67% |
| 7 | 72 | 504 | 378 | 284 | 280 | 44% | 58% |
| 6 | 72 | 432 | 324 | 243 | 240 | 38% | 50% |
| | | | | | | | |
| Field (Inches) | Resolution (DPI = 144) | Pixel (Width) | Height (4:3) | Height (16:9) | Height (9:5) | 100Frame (%) (If = 16 Field) | 100Frame (%) (If = 12 Field) |
| 16 | 144 | 2304 | 1728 | 1296 | 1280 | 100% | 133% |
| 15 | 144 | 2160 | 1620 | 1215 | 1200 | 94% | 125% |
| 14 | 144 | 2016 | 1512 | 1134 | 1120 | 88% | 117% |
| 13 | 144 | 1872 | 1404 | 1053 | 1040 | 81% | 108% |
| 12 | 144 | 1728 | 1296 | 972 | 960 | 75% | 100% |
| 11 | 144 | 1584 | 1188 | 891 | 880 | 69% | 92% |
| 10 | 144 | 1440 | 1080 | 810 | 800 | 63% | 83% |
| 9 | 144 | 1296 | 972 | 729 | 720 | 56% | 75% |
| 8 | 144 | 1152 | 864 | 648 | 640 | 50% | 67% |
| 7 | 144 | 1008 | 756 | 567 | 560 | 44% | 58% |
| 6 | 144 | 864 | 648 | 486 | 480 | 38% | 50% |
| | | | | | | | |
| Field (Inches) | Resolution (DPI = 300) | Pixel (Width) | Height (4:3) | Height (16:9) | Height (9:5) | 100Frame (%) (If = 16 Field) | 100Frame (%) (If = 12 Field) |
| 16 | 300 | 4800 | 3600 | 2700 | 2667 | 100% | 133% |
| 15 | 300 | 4500 | 3375 | 2531 | 2500 | 94% | 125% |
| 14 | 300 | 4200 | 3150 | 2363 | 2333 | 88% | 117% |
| 13 | 300 | 3900 | 2925 | 2194 | 2167 | 81% | 108% |
| 12 | 300 | 3600 | 2700 | 2025 | 2000 | 75% | 100% |
| 11 | 300 | 3300 | 2475 | 1856 | 1833 | 69% | 92% |
| 10 | 300 | 3000 | 2250 | 1688 | 1667 | 63% | 83% |
| 9 | 300 | 2700 | 2025 | 1519 | 1500 | 56% | 75% |
| 8 | 300 | 2400 | 1800 | 1350 | 1333 | 50% | 67% |
| 7 | 300 | 2100 | 1575 | 1181 | 1167 | 44% | 58% |
| 6 | 300 | 1800 | 1350 | 1013 | 1000 | 38% | 50% |