# Minimum quality

This option will produce a palette with a minimum colors/floss usage, you can refine color/floss usage by changing the Max colors/Max floss settings.

# Medium quality

This option will produce a palette with a resonable colors/floss usage, you can refine color/floss usage by changing the Max colors/Max floss settings.

## Maximum quality

This option will produce a palette with a maximum colors/floss usage, you can refine color/floss usage by changing the Max colors/Max floss settings.

# Keep original palette.

 If this is checked, color search leaves the composition palette unchanged before processing, else it resets it to the Main Dotmat palette.

# Maximum amount of floss wanted

This instructs the color searcher not to stop reducing floss usage until this setting has been reached.

# Delete palette entries

If this is checked, palette entries matching less than the minimum amount of dots specified will be deleted.

# Minimum amout of dots

This instructs the color searcher to delete palette entries that are not relevant for the picture. If a color is used less than N times it is deleted. (N is the value of this setting).

# Minimum level of light

Color search removes colors by similarity, you can protect crucial entries (often very light entries) by specifying the minimum level of light that an entry must have to be deletable.

# Similarity increment

Similarity removal function, scans entries of the palette and removes colors that are near one another. The distance within colors before a color is deleted is incremented everytime the color searcher run a similarity pass. The bigger the increment, the closer colors get, the faster color amount will reduce.

# Printer name

This is the name of the printer the print spooler will use.

# Print all pages

The print spooler will print all the pages making the pattern.

# Print selected pages

The print spooler will print only the specified pages of the pattern.

# First page

Specify what what page printing starts.

# Last page

Specify what what page printing ends.

# Print to BMP file

Makes the print spooler redirect it's output to BMP files.

# Print floss list

Prints the list of floss required.

# Print symbol list

Prints the list of symbols used in the pattern.

# Print in color

This setting is valid only when print to file is enabled, it prints a pattern with colors instead of symbols. (it is currently disabled)

# Print floss lengths

This makes the print spooler print the lenght of floss used next to every floss in the floss list.

# Print picture map

Prints a map of the picture that represents the different pages of the final pattern with a page number in every block.

# Cell size

This setting controls the size of one symbol cell on the pattern. You can fit more cells one a page if the cell size is smaller but keep in mind that a pattern must be human readable,

# Main palette

When DOTMAT starts, it needs to load the Main DMC palette, this palette will be assigned to a composition one you create a new document. Type in this field where the (DMC25-95.CLR) file resides.

# Unit

Choose the programs unity (Inches or Centimeters).

# Number of characters in table

# List of symbols in table

A popup menu is available when right clicking the mouse.

# Font grid

Use the popup menu to select a font, then double click on characters to add them in the table.

# Character table grid

Use the popup menu for different actions, double click on characters to remove them from the table.

# Floss report

This function reports how many dots match a specified floss/color. A popup menu is available in this function.

# Print the pattern

Print pattern        ☒

| HP LaserJet 4M Plus on FILE: (300 DPI) |

◉ <u>A</u>ll

○ <u>S</u>elected     **From page** `1`
                    **To Page** `4`

☐ Print to <u>B</u>MP files    ☐ Print in C<u>o</u>lor
☑ Print <u>F</u>loss list       ☐ Print Floss <u>L</u>engths
☑ Print Symbol list    ☑ Print Picture Map

[ <u>O</u>k ]    [ <u>S</u>etup ]    [ <u>C</u>ancel ]

# Composition notes

You can attach notes to a composition, the menu item 'Edit composotion notes' in the 'Tool' menu will also open an edit dialog box. Type in the notes you want to keep with the composition.

# Image Zoom

Zoom the image in the composition window.

# Cotton size

This is the size in inches of the cotton you are going to use to make the embroyedrie.

# Image size
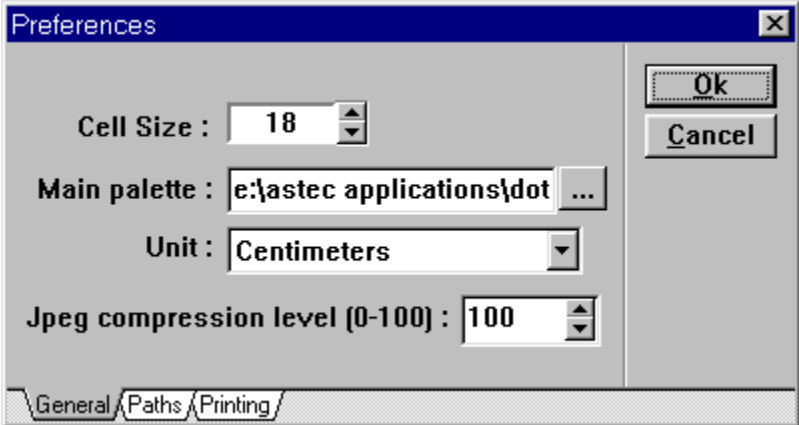
this is the size of the image in pixels.

# Embroyederie size

This is the size of the embroyderie in the current unit

# Floss / Colors used

Amount of Floss used and amount of colors used.

# Preferences



Preferences

Cell Size : 18

Main palette : e:\astec applications\dot  ...

Unit : Centimeters

Jpeg compression level (0-100) : 100

Ok

Cancel

General  Paths  Printing

# Import

Import a file in the current composition window.

# Symbols preview

You ca preview the symbols of the pattern in a window while working on your composition. Redrawing might makes processing slower.

# Picture viewer

Dotmat has a small buildin image viewer, you can load BMP files and view them with this viewer.

# Main speedbar

Zoom: 3:1    Cotton: 14

Image size : [50],[70]
Embroydery : [9.1],[12.7]
Floss/Colors : [13],[13]

# Open composition

Open a composition by choosing its name in the left list box, and click the OK button. Doubleclicking works to accept a name. Click the right mouse button for preview, or click the preview button.

# Save composition

Saves your composition to a file. The save dialog box will allways open in the directory defined in the preference dialog box. type in the name of your composition, extention '.DMC' is automatically added.

# New document

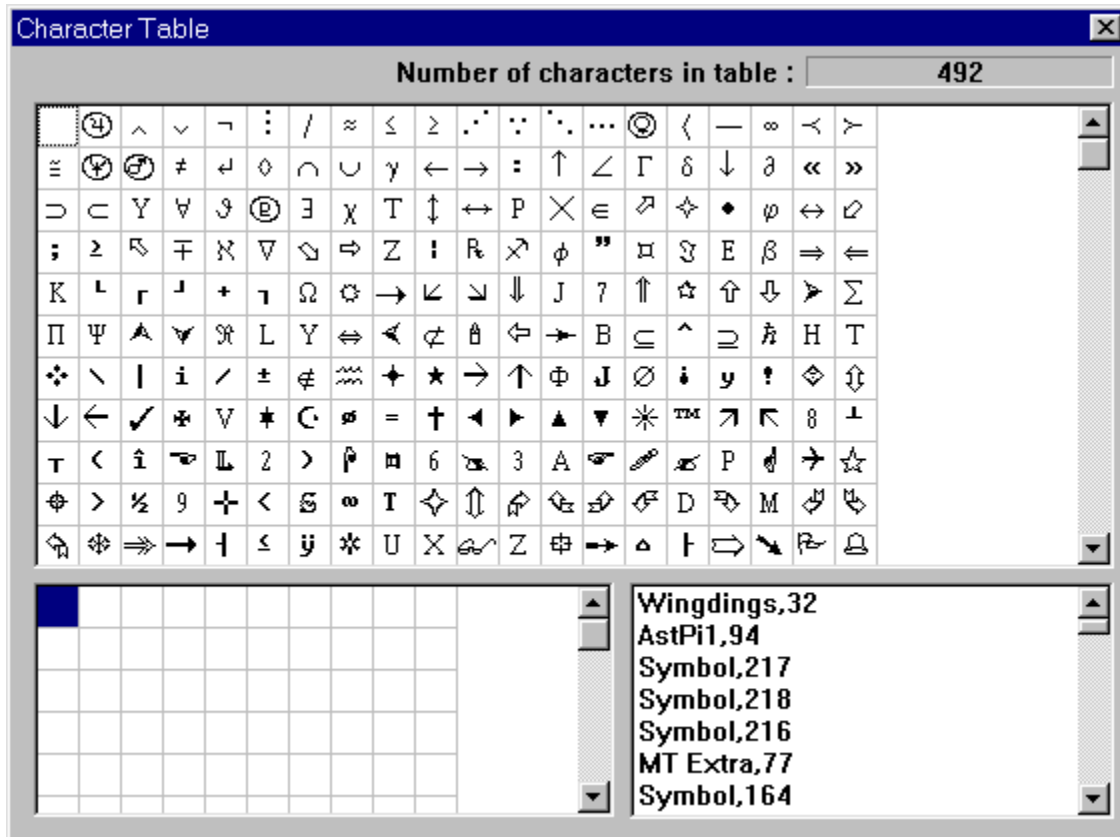Creates a new composition, you will have to import an image then.

# Character table

You can set up new characters in the symbol table, by choosing a font with the FONT button, then clicking ok.
Double click on a character in the big box to remove it, double click on a character in the little box to add it. On the bottom left is the amount of available symbols.
Once you have added or removed characters, sort the table so the pattern looks better.

Characters are sorted from the lightest to the darkest, so are colors, that way you can get a feel of what the actual drawing looks like when you look at the pattern. Not sorting the palette or the colors, does not make the pattern unusable but just makes it harder to read.

# Load colors

Load a palette from the disk into the current composition.

# Make a design

The menu 'Tools' also offers a link to the Design Maker.

This function creates a 'Cross stitch' looking picture from the current composition. In fact it is the original image matched with the colors, drawn in a grid. Nice to print out and present as what the final cross stitch will look like. The function allocates memory, so it is normal to wait a few seconds for things to happen, especially when the grid size is changed.

Font        : Sets the font for printing color names.
Draw Grid : Draws the grid.
Map Image : Maps the image in the grid.
Colors      : Splits windows and draws the color names.
Save        : Saves work to disk.

When saving, two names will be ased for, the filename for the picture and the filename for the Colors.

# Exit dormat

Quit DOTMAT, you are prompted to save changes if compositions haved changed.

# Preferences (printing)

Preferences

Start printing at :

| 0 | Hour | 0 | Minutes |

End printing at :

| 0 | Hour | 0 | Minutes |

Language to use  French ▾

Ok

Cancel

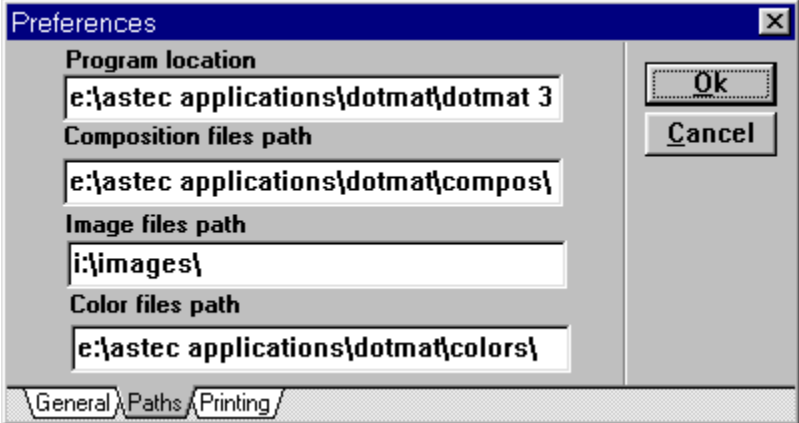General / Paths / Printing

# Start printing

Specify at what time printing will start.

# End printing

Specify at what time printing will stop.

# Language to use

Set the language the print spooler will use to print it messages.

# Preferences (paths)

| Preferences | ☒ |
|---|---|

**Program location**

`e:\astec applications\dotmat\dotmat 3`

**Composition files path**

`e:\astec applications\dotmat\compos\`

**Image files path**

`i:\images\`

**Color files path**

`e:\astec applications\dotmat\colors\`

[ **Ok** ]

[ **Cancel** ]

\General \Paths \Printing \

# Program location

Path where DOTMAT.EXE resides.

# Composition files paths

Path where compositons files (.DMC) can be found.

# Image files path

Path where color images (.BMP) can be found.

# Color files path

Path where color files (.CLR) can be found.

# Color used

Number of colors in this palette.

# Color index

Index of the selected color.in the palette.

# Number of floss used

Number of DMC flosses used in this palette.

# DMC color name

Name of the DMC floss used for the selected color.

# Colors

List of colors in the current palette.

# Similarity level

This is used in conjonction with the Similar button.

# Preview button

Preview palette changing on the image in the composition window.

# Clear palette

Clear palette to white and black. (first and last color of main palette).

# Sort palette

Sort the entries in the palette from lightest to darkest.

# Find used colors

Serach composition and remove unused colors from palette.

# Remove similar colors

This function look how near colors are from one another, color removal is controlled by the similarity level, the higher the level, the more colors will be removed.

# Reset palette

Reset current composition palette to the main palette.

# Add Color

Add a single color from the main palette list.

# Add Color table

Merges the current palette with a palette on disk.

# Add Tempoary palette

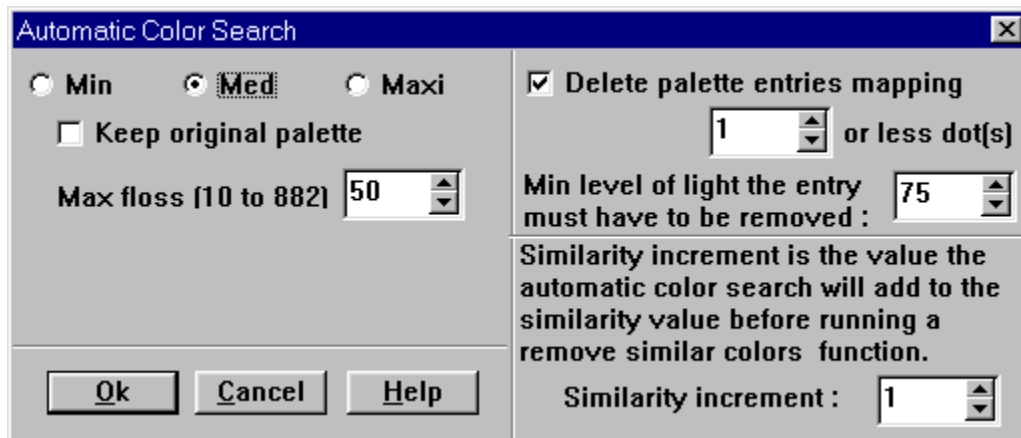Merges the temporary palette with the current composition palette.

# Stop processing

This is availble when some functions are running.

# Automatic color search

aThis is a very powerfull background processing function.

This function will create the palette for the current composition, using ranged values.

Three levels are offered, 'minimum', 'medium', 'maximum', but you can modify the settings as you please.



**REMOVE UNIQUE ENTRIES SUBFUNCTION:**
You can tell the color searcher to remove any entry that matches less than a specified minimum amount of dots. You can also protect important colors (dark colors) from beeing removed (by this function) by specifying a level minimum of lightness for a color to be removed.
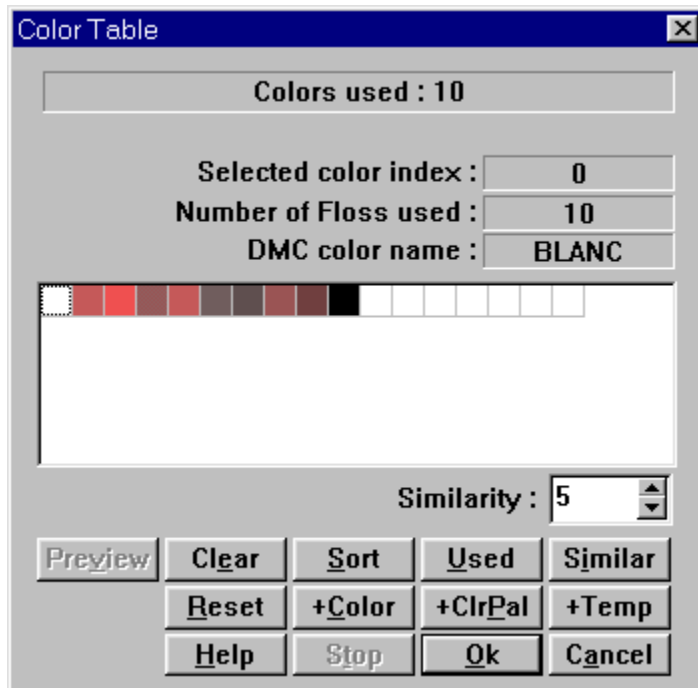
The increment value is similar to the value used in the  Color Table ('Similar function'). This value is used for similarity function.

see also
Color Table

# Color Table

If you need to work on colors yourself, you need the color table (tool,color table).

In the color table, you can see the colors used in your composition. First thing you should do is look for the floss that are used in the picture, using the "USED" button, this button will figure out the floss needed to render the picture.



 (You most definitly will have to work on the palette to reduce the amount of colors used, work with the similar button starting from 0 similarity and work you way up (increasing the similarity value) until you reach the amount of colors you wanted).

DO NOT FORGET TO SORT THE COLORS AFTER WORKING THEM so the pattern looks nice.

# Color usage report

Color usage report allow you to check the amount of dots matched by one color. If one color only match two or three dots, you might want to remove them with the DEL key. The popup menu available with the right mouse button, offers a search function allowing you to search for text.

EX:
Find '**1 DOT**' or '**2 DOT**'.

Once an entry is found, you can delete with the DEL Key or with the Delete command from the popup menu.

# Create a pattern

1) Scan the picture in photostyler.
2) Resample, setting 14 DPI in resolution field.
   then set unit to inches and set the picture
   size.

3) Run Dotmat.
4) Open a new window (menu window, new)
5) Import a picture (menu file,image,import)
6) Run automatic color search (menu tool,automatic search)
   choose the apropriate color settings, then press ok.
7) Wait for processing to be over.

note: you can run several color search in the same time, while color processecing is running, just open a new window and repeat the steps 1 to 5.

If you are working portraits, once color processing is over, open the color table (menu tool, color table) and click on the "+crlpal" button and add the 'skin.clr' palette, to get better rendering of the skin (only white skin), then click on the "USED" button to find what colors are used in the picture, then use the "SIMILAR" button, slowly increasing the similarity value (start from 0) until the amount of wanted colors is reached. (look at the "working with the color table" section for more information).

Once a picture is loaded in a window, it becomes a composition, you can save a compositiion to disk through the file-composition-save item, you can load a composition from disk with the file-composition-load menu item.

The difference between a composition and a picture is:
a composition is a file that contains a picture along with the definition of the colors it uses in regard to the DMC color palette. If you import a picture (24 bits BMP file) in a window, the colors a reseted to the main dotmat palette.

Now lets get to the real stuff.

# Design editor

The design editor, is a simple drawing program. Draw in your design choosing the colors you want to use. Left mouse button draws in forground color, right mouse button draws in background color.

# Exporting an image

You can export the image part of any composition, use the 'File'+'Image'+'Export' menu commands.

# Hardware requirements

Dotmat requires a fast computer equiped with at least 16 Mb of physical memory. Dotmat will work fine with any printer, but DotMatrix printers will run slow.


Notes:
8 Mb of physical memory is fine for Dotmat, but the Composition Print Spoooler requires a lot of memory when printing.

If you want to know how much memory Dotmat Composition Print Spoooler uses, calculate the size in bytes for 2 pages.

The size of a page can be obtained :

PageWidth   = PrinterDPI * PageWidthInINCHES.
PageHeight = PrinterDPI * PageHeightInINCHES.

PageSizeInBytes = PageWidth * Pageheight

The memory used is then:

MemoryUsed = (PageSizeInBytes / 8) * 2

# Personalized patterns

Process the picture in photostyler, following the steps
1 and 2 at the begining of this document. Draw an elipse, a square or any shape around the picture. Invert the selection and fill (menu edit,fill) with a color that is not present in the drawing.

Load the picture in dotmat, then process the colors with the color table. Once color processing is done, close the color table, and click on the background color, a window will popup, click the 'use transparency feature' checkbox to make that color transparent. The choosen color will be the transparent color of the Pattern. No symbol will be assigned to it, a grey square will print instead.

see also
Make a design
Design editor

# Printing the final pattern

Once a composition is ready to print, just hit the print button, then print spooler will start printing.

Check the print to BMP file if you want to print into a bitmap file (for brochures for exemple). You can send several compositions to the print spooler.

# Save colors

You can save the color definitions of the current composition in a palette file. Use the 'File' + 'Colors' + 'Save' menu commands.

# Temp palette

Dotmat has a a temporary palette.

You can add colors to the temporary palette by clicking in the image.

Colors from the temp palette can be added to the composition in the Color Table.