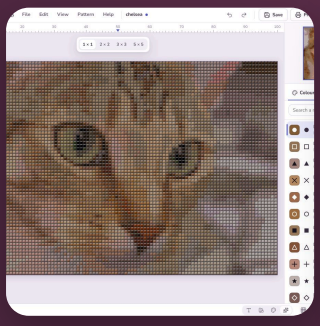
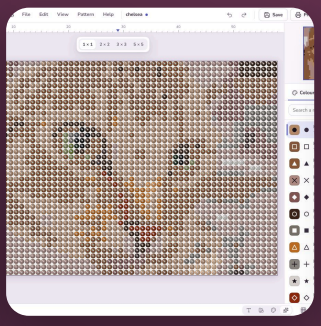
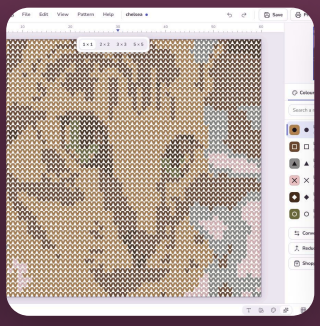
FFSMC

FFSMC Pixel Craft Lab

User manual

One photo, and the pattern to go with it: diamond painting, fuse beads, mosaic, jacquard knitting or bricks, with real brand colours and a list of what to buy.


Contents

1 **Welcome** 3

What the software does 3

What you need 3

How to read this manual 3

Installation, trial and licence 4

2 **The home screen** 5

Choosing your craft 5

Three ways to start 5

At the bottom of the screen 6

3 **The wizard: photo and style** 7

Choosing a good photo 7

Cropping and touching up 7

A photo taken at an angle 8

Old photos 8

The three previews 8

Step 2: the style 8

4 **Size and support** 9

The craft 9

The width 10

Knitting 10

5 **The brand and the colours** 11

Choosing the brand 11

The number of colours 11

Setting a colour aside 12

The background 12

Finishing 12

6 **The editor** 13

The three areas 13

The colour list 13

Touching up 14

The views 14

The Pattern menu 14

The Support tab 14

7 **The shopping list and my stock** 15

Reading the shopping list 15
Price and budget 15
Exporting the list 15
My stock 15

8 **Printing and exporting** 16
The PDF 16
The files 16

9 **Frequently asked questions** 17
The printed colours are not quite those of my pieces 17
My pattern has too many colours 17
My brand is not in the list 17
How do I find a saved pattern? 17
The trial has ended 17
Need help? 17

10 **Keyboard shortcuts** 18

I Welcome

Thank you for choosing FFSMC Pixel Craft Lab. Read this manual in order the first time; after that, the contents page takes you straight to what you need.

What the software does

You give it a photo. It turns it into a pattern made of small coloured pieces, all the same size, and tells you exactly how many of each colour you need. There are five crafts:

Diamond painting	square or round diamonds stuck onto an adhesive canvas;
Fuse beads	beads placed on a pegboard, then melted together with an iron (Hama, Perler, Artkal, Nabbi…);
Mosaic	small tiles stuck down one by one, for a picture or a wall;
Jacquard knitting	a pattern knitted with two colours per row, using real yarn brands;
Bricks	a portrait in building bricks, with the list of parts to order.

In every case the colours on offer come from the real colour chart of the brand you choose. So you buy exactly what the pattern asks for.

What you need

- A computer running **Windows 10 or 11** (64-bit), or a recent **Mac**. A screen of at least 1366 × 768 is recommended.
- About 600 MB of disk space.
- An internet connection to activate the licence and check for updates. The rest of the time, the software works offline.
- A printer, if you want the pattern on paper. Otherwise the PDF file reads very well on a tablet.

How to read this manual

Button and menu names are written **like this**. A menu path is written **File › Save**: open the *File* menu, then click *Save*. Keyboard keys look like this: `Ctrl` + `S` (on a Mac, `Cmd` instead of `Ctrl`).

> **Tip**
> Pink boxes give tips that save you time.

> **Good to know**
> Lilac boxes add a useful detail.

Warning

Orange boxes point out a common mistake.

You can also open this manual from the software: **Help › User manual**, or press F1.

Installation, trial and licence

Install the software like any other, then start it. You have **one week of free trial** with every feature of your edition. The badge at the bottom of the home screen shows the days left.

To carry on after the trial, buy a licence on **ffsmc.fr**: you receive a key by e-mail. Click the badge, paste the key into the window that opens, then confirm. There are three editions:

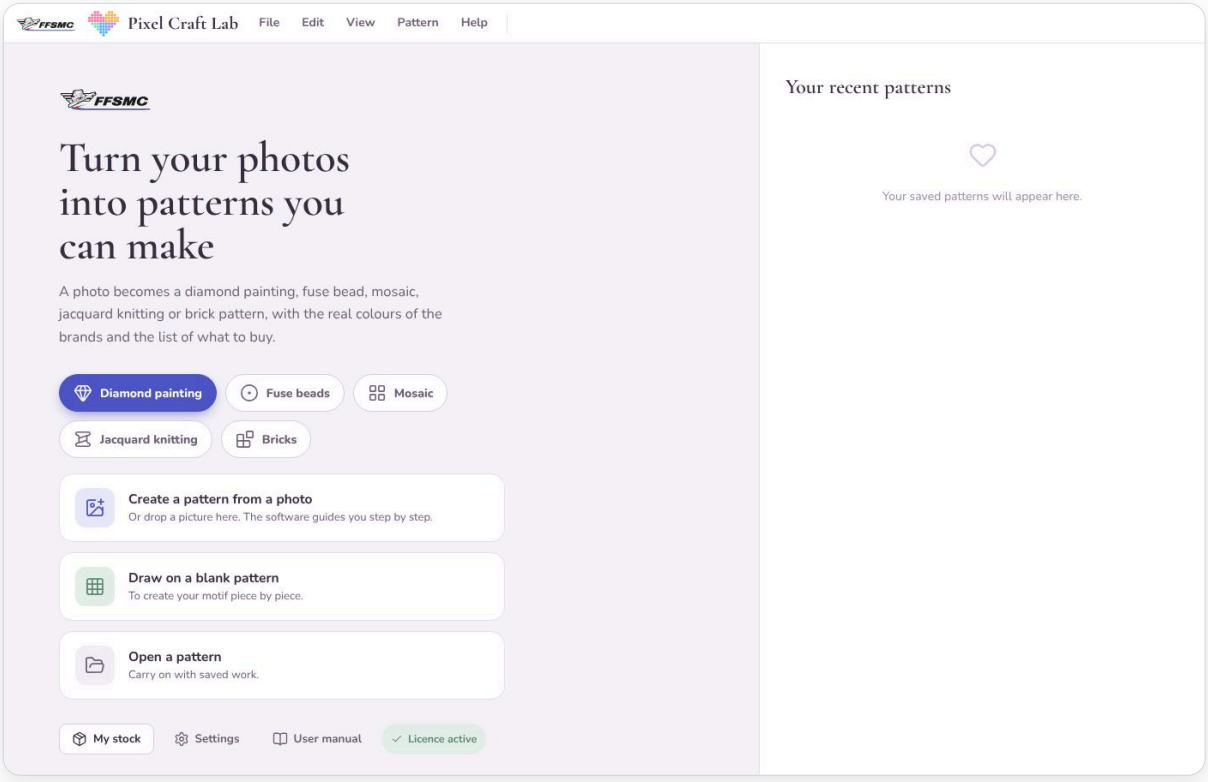
Essential edition	create, edit and print your patterns from your photos, in all five crafts;
Complete edition	adds the eighteen artistic styles (comic book, watercolour, pop art, stained glass…), restoration of old photos and colourising them;
Studio edition	includes every feature of the Complete edition.

One licence, several computers

The same licence works on Windows and on Mac. Your key is personal: do not share it, it is tied to your purchase.

2 The home screen

This is where you land when you start. Everything begins with choosing a craft.



The home screen: the five crafts at the top, three ways to start in the middle, your latest patterns on the right.

Choosing your craft

The five buttons under the title are the crafts. Click the one you want: it lights up, and everything that follows adapts (piece shapes, brands, wording, shopping list). You can change it later, even in the middle of the wizard.

Three ways to start

Create a pattern from a photo	Opens the four-step wizard (chapters 3 to 5). This is the most common route.
Draw on a blank pattern	Creates an empty grid of the size you want, so you can draw piece by piece.
Open a pattern	Picks up a saved piece of work.

Drag and drop

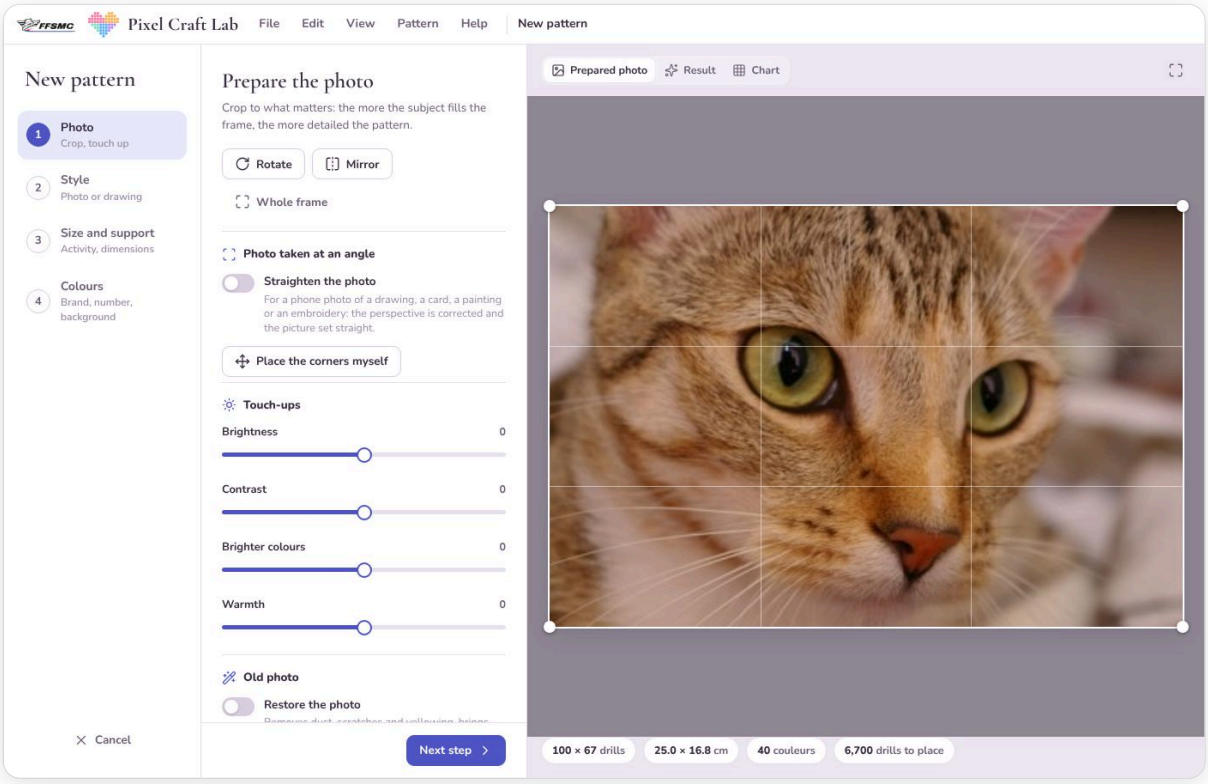
Drag a photo from your folder and drop it on the window: the wizard opens with that photo.

At the bottom of the screen

- **My stock**: what you already own (chapter 7).
- **Settings**: language, look, preferred brand for each craft.
- **User manual**: this document.
- The licence badge.

3 The wizard: photo and style

The four steps are listed on the left: Photo, Style, Size and support, Colours. Click any of them to go back: nothing is lost.



Step 1: the white frame can be moved and resized; under the preview, the figures for the future pattern update live.

Choosing a good photo

- **A sharp, well-lit subject.** Daylight, with no backlight, gives the truest colours.
- **A subject that fills the picture.** A pattern is a few dozen to a few hundred pieces wide: small details lost in the distance disappear.
- **Strong contrasts.** A ginger cat on a blue background works better than a grey cat against a grey wall.

Cropping and touching up

Drag a corner of the white frame to resize it, or its inside to move it. **Rotate** turns the photo a quarter turn, **Mirror** flips it, **Whole frame** cancels the crop.

Further down, four sliders correct the photo before conversion: **Brightness**, **Contrast**, **Brighter colours** and **Warmth**. A slightly dull photo often benefits from a little contrast.

Crop tightly

The more the subject fills the frame, the more pieces it gets and the more detailed the pattern. A portrait cropped on the face gains a lot of finesse.

A photo taken at an angle

Did you photograph a drawing or a painting without being straight on? Turn on **Straighten the photo**: the software finds the four corners and puts the picture upright. If you do not like the result, **Place the corners myself** lets you set them by hand.

Old photos

For an old, damaged photo, the **Restore the photo** option softens scratches and flaws before conversion. A black-and-white photo can also be colourised: the software offers it when it recognises one. Both features belong to the Complete edition; colourising downloads its engine once, with your agreement.

The three previews

Above the preview, three buttons change the view:

Prepared photo	the photo as it will be converted;
Result	a realistic simulation of the finished pattern, with real diamonds, beads or bricks;
Chart	the pattern in colour, with the grid.

The mouse wheel zooms, dragging moves the picture.

Step 2: the style

The Style step transforms the photo before conversion. *True photo* keeps it as it is: this is the default, and the only choice in the Essential edition. The Complete edition offers eighteen others, shown as thumbnails: black and white, sepia, monochrome, comic book, comics, manga, ink, pencil, realistic drawing, baby, child's drawing, watercolour, pastel, pop art, stained glass, pixel art, silhouette and outlines only.

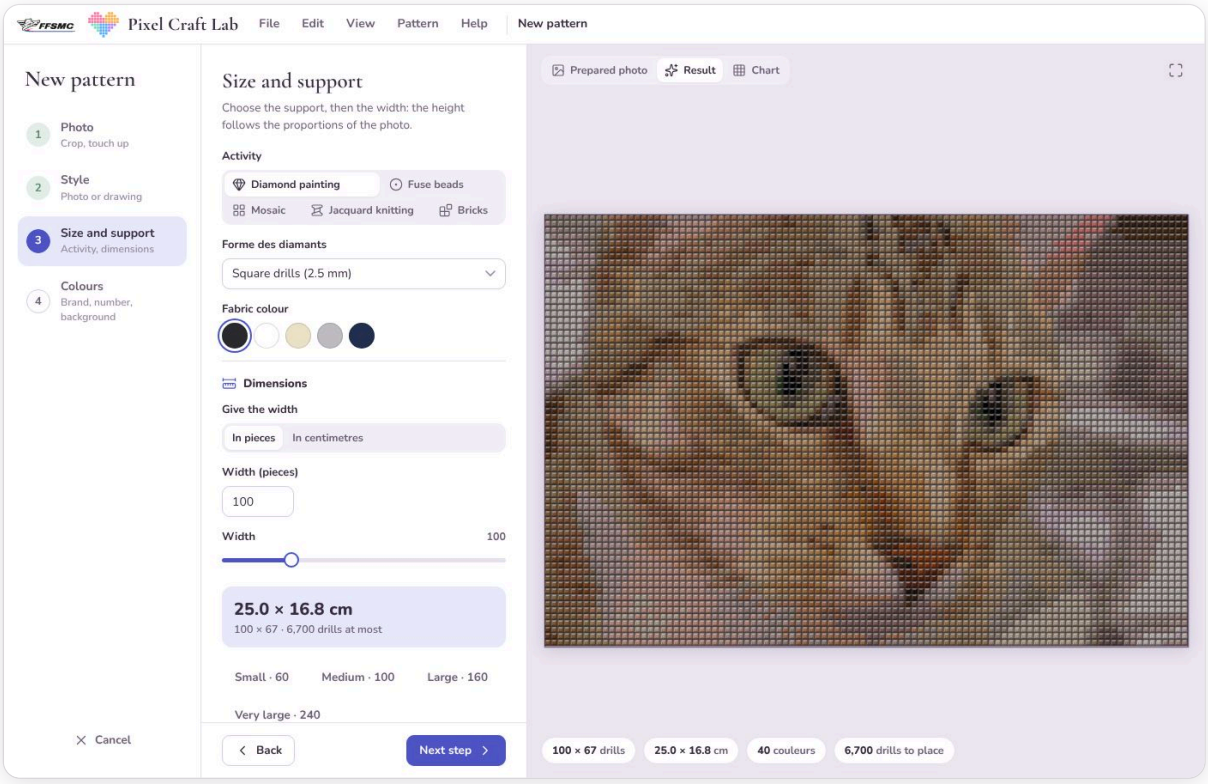
Click a thumbnail: the preview updates, and settings specific to that style appear below (line thickness, simplification, tint…). *Silhouette* and *Outlines only* leave the background empty.

Good to know

A style that simplifies a lot (watercolour, stained glass, pixel art, pop art) gives a pattern that is easier to make, with fewer colours.

4 Size and support

This step fixes the real size of your piece. The software works everything out in centimetres, as you would in front of your canvas.



Step 3: the craft, the piece shape, the background colour and the width. The blue box gives the finished size.

The craft

You can switch between the five crafts here with one click. Depending on your choice, the software then asks for:

Diamond painting	the diamond shape (square or round) and the canvas colour;
Fuse beads	the board colour; the bead size depends on the brand, chosen in the next step;
Mosaic	the tile size (10, 15 or 20 mm, with a 2 mm grout line);
Jacquard knitting	the technique (jacquard, yarn carried behind, or intarsia, one yarn per area) and your gauge: how many stitches and rows per 10 cm;
Bricks	the type of part (1 × 1 plates, smooth tiles or round plates); the number of baseplates is shown.

The width

Enter the width **in pieces** or **in centimetres**: choose either with the two buttons. The height follows the proportions of the photo. The blue box shows the size of the finished piece, the number of pieces and, for beads, the number of boards needed. Four shortcuts offer ready-made sizes: small, medium, large, very large.

> **Warning**
> The bigger the pattern, the more precise it is, but the more pieces you have to place. A portrait 100 pieces wide is a good first try.

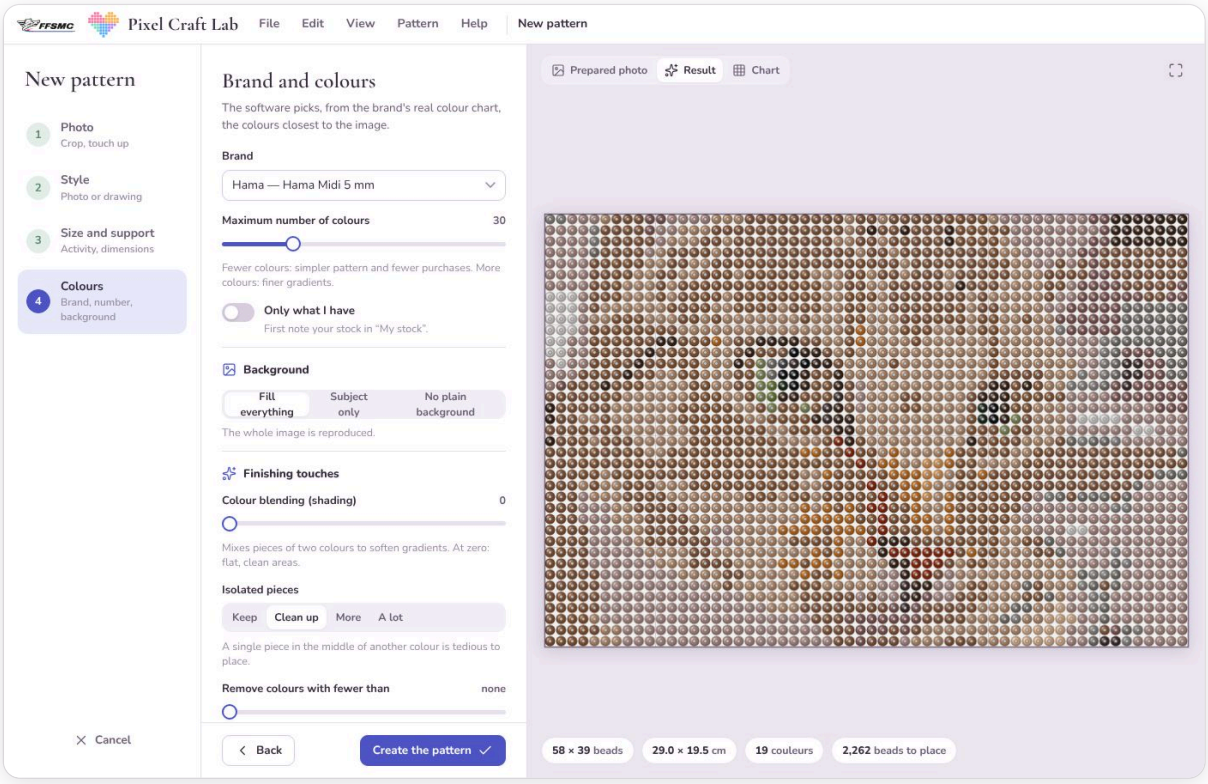
Knitting

For knitting, first knit a swatch with your yarn and needles, measure 10 cm, and count the stitches and rows. Enter these two figures in **Stitches per 10 cm** and **Rows per 10 cm**: the software works out the real width and height. As a stitch is taller than it is wide, the chart is proportioned accordingly.

> **Jacquard: two colours per row**
> Jacquard is knitted with two colours per row at most. The software flags the rows that have more, and the "Maximum number of colours" option helps keep things simple.

5 The brand and the colours

This is where the software picks, from the brand's real colour chart, the colours closest to your photo.



Last step: brand, number of colours, background and finishing. The preview on the right changes live.

Choosing the brand

Depending on the craft, the software offers the colour charts of several makers: DMC and Diamond Dotz for diamond painting; Hama, Perler, Artkal, Nabbi and others (including their mini and maxi beads) for beads; glass tiles; common yarn colours; LEGO® for bricks. The references are the ones you will read on the packets in the shop.

> **Approximate colours**
>
> For some charts (yarn in particular), the colours shown are approximations. A message tells you so: compare with the maker's swatch before buying.

The number of colours

The **Maximum number of colours** slider limits the choice. Fewer colours means a simpler pattern and less shopping; more colours give finer gradients.

If you already own some pieces, turn on **Only what I have**: the software then uses only the colours in **My stock**.

Setting a colour aside

Below the list, each colour in use appears as a small swatch. Click the one you do not want (a shade you cannot find in the shops, for example): it is excluded and the software replaces it with the nearest one. A second click brings it back.

The background

Fill everything	the whole picture is reproduced;
Subject only	the software cuts out the subject and leaves the background empty;
No plain background	removes a single-colour background (the white background of a logo, for example).

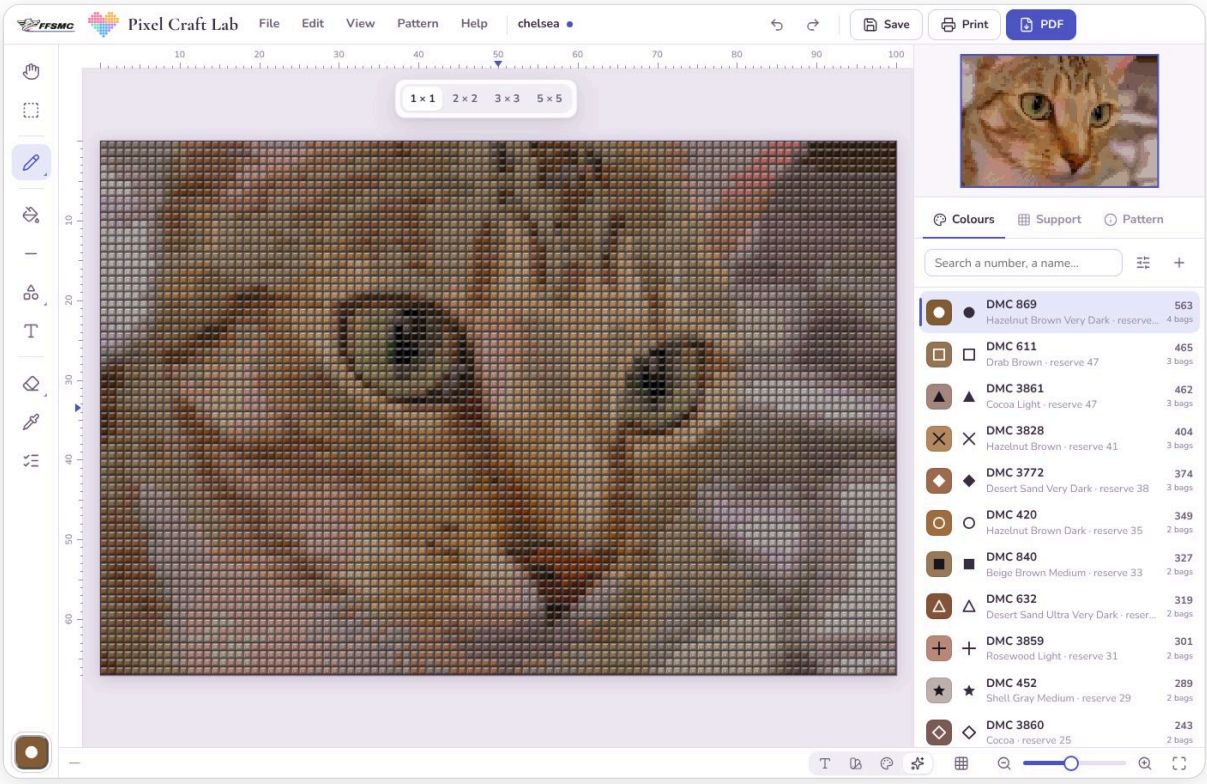
Finishing

Colour blending (shading) mixes pieces of two neighbouring colours to soften gradients; at zero, flat areas stay crisp. **Isolated pieces** decides what to do with a lone piece in the middle of another colour, which is tedious to place: *Keep*, *Clean up*, *More* or *A lot*.

When you like the preview, click **Create the pattern**: it opens in the editor.

6 The editor

The pattern is created. The editor is for touching it up, checking it and preparing it for printing.



The editor: tools on the left, the pattern in the centre, the colour list on the right.

The three areas

- **On the left**, the toolbar: hand (move), selection, pencil, paint bucket, line, shapes, text, eraser, eyedropper.
- **In the centre**, the pattern, with rulers graduated in pieces. At the bottom, zoom and display options.
- **On the right**, the overview and then three tabs: **Colours**, **Support** and **Pattern**.

The colour list

Each line gives the brand reference, the colour name, the number of pieces and the quantity to buy. One click picks the colour for drawing. The magnifier searches for a number or a name; the **+** button adds a colour from the chart.

Touching up

Pick a colour in the list, then the **pencil**: one click places a piece. The **paint bucket** fills a whole area of the same colour. The **eyedropper** picks up the colour of a piece already placed. Ctrl + Z undoes, Ctrl + Y redoes. Hold the space bar to move the pattern without changing tool.

The views

The **View** menu offers four modes, also reached with keys 1 to 4: *Symbols* (as on paper), *Colours and symbols*, *Colours* and *Preview* (the realistic rendering of the pieces). You also set the grid (G), the rulers, the zoom, and the **Show what is placed** option, which helps you follow your progress.

The Pattern menu

Add a colour	picks a colour from the brand's chart;
Convert to another brand	redoes the pattern with the equivalent shades of another brand;
Reduce the number of colours	merges neighbouring colours to simplify the pattern;
Shopping list	see chapter 7;
Size and support	changes the dimensions or the type of piece;
Text in pieces	writes text directly into the pattern;
Redo the photo conversion	goes back to the wizard settings, with the original photo.

The Support tab

It gathers the piece size, the background colour and, for beads, the brand. The finished dimensions are recalculated at once.

> **Save often**
>
> **Save** (or Ctrl + S) creates a **.pixelcraft** file that you can reopen later with **Open a pattern** (Ctrl + O).

7 The shopping list and my stock

This is the feature that spares you nasty surprises in the shop: knowing exactly what to buy, and how much.

The shopping list of a brick portrait: references, number of pieces, quantity to buy.

Reading the shopping list

Open it from the editor, through the menu **Pattern › Shopping list…**. At the top, four figures: the number of colours, the number of pieces, what you need to buy and the number of references to order. The table details each colour.

- **Pieces**: the exact number the pattern uses.
- **With reserve**: the same number plus a margin for lost or damaged pieces (5 to 10% depending on the craft; you set it in **Settings**).
- **In stock**: what you already have.
- **To buy**: the difference, rounded up to the usual pack size (packets, balls).

Price and budget

Enter the price of one piece (diamond, bead, tile, stitch or brick depending on the craft): the software works out the total cost and compares it with your budget. These prices stay on your computer.

Exporting the list

Spreadsheet (CSV)	a file to open in a spreadsheet;
BrickLink list (XML)	for bricks: to import into a BrickLink wish list;
Print with the pattern	adds the list at the end of the PDF.

My stock

From the home screen or the shopping list, **My stock** is where you note what you own: for each craft, enter the colours and quantities. The software deducts them from the shopping list, and can restrict the pattern to those colours only.

8 Printing and exporting

The pattern comes out as a PDF, ready to print or to read on a tablet.

The PDF

Click **PDF** at the top right (or Ctrl + E). The window lets you build the document: the cover with the preview, the *colour key* (symbols, references, number of pieces, packets to buy), the *page plan* in black symbols or in colour with symbols, a full-page preview, your notes and the shopping list. You also choose the paper and the cell size: the bigger they are, the easier to read, but the more pages. A preview on the right shows the result before you save. **Print** (Ctrl + P) opens the same window for your printer.

The chart is split into pages, with markers to find your place where pages meet. For knitting, you can add the *written instructions, row by row* ("3 stitches A, 2 stitches B..."), with over-long floats flagged.

> **Black and white**
> To print without colour, use the page plan in black symbols: each colour has its own sign, repeated in the key.

The files

- **.pixelcraft**: your saved pattern, to reopen and edit.
- **PDF**: to print and share.
- **CSV** and **BrickLink XML**: the shopping lists.

9 Frequently asked questions

The printed colours are not quite those of my pieces

Screens and printers never reproduce colours exactly as they are. Trust the references in the key, not the printed shade.

My pattern has too many colours

Go back to the Colours step, lower the "Maximum number of colours" slider and raise "Isolated pieces". The pattern will be simpler and cheaper.

My brand is not in the list

Choose the closest brand: many makers use the same shades. Check against the swatch before buying.

How do I find a saved pattern?

It is in the **Your recent patterns** column on the home screen, or with <kbd>Ctrl</kbd> + <kbd>O</kbd>.

The trial has ended

Click the licence badge and paste your key, received by e-mail after your purchase on ffsmc.fr.

Need help?

Write to **support@ffsmc.fr**, describing what you were doing and, if possible, attaching a screenshot.

10 Keyboard shortcuts

Ctrl + **N**	New pattern from a photo
Ctrl + **O**	Open a pattern
Ctrl + **S**	Save (with **Shift**: Save as)
Ctrl + **E**	Export as PDF
Ctrl + **P**	Print
Ctrl + **Z** / **Y**	Undo / redo
Space **(held)**	Move the pattern
F1	Open this manual

On a Mac, replace **Ctrl** with **Cmd**.