



Design Studio

version 1.5

User's Manual

This snapshot of the [online User's Manual](#) was generated on June 17, 2021

Table of Contents

| | |
|---|----|
| Table of Contents | 2 |
| Getting started | 6 |
| The Intro Screen | 6 |
| Creating a New Design | 6 |
| Opening an Existing Design | 6 |
| The Main Window | 8 |
| Chart Editor | 11 |
| Overview | 11 |
| Drawing with Yarns and Stitches | 12 |
| Select | 12 |
| Draw Freehand | 12 |
| Draw Line | 13 |
| Draw Rectangle | 13 |
| Draw Filled Rectangle | 13 |
| Fill | 15 |
| Erase | 15 |
| Rotate 90 Degrees Counter Clockwise | 16 |
| Rotate 180 Degrees | 16 |
| Rotate 90 Degrees Clockwise | 17 |
| Horizontal Flip | 17 |
| Vertical Flip | 18 |
| Crop | 18 |
| Zoom | 19 |
| Zoom to Fit | 20 |
| Zoom to Height | 21 |
| Zoom to Width | 22 |
| Cut | 22 |
| Copy | 22 |
| Paste | 23 |
| Undo | 23 |
| Redo | 23 |
| Drawing Chart Motifs | 24 |
| Draw Chart | 24 |
| Border Mode | 25 |
| Denoting the Border in the Written Instructions | 25 |
| Border Tools | 26 |
| Draw Border Line | 27 |
| Draw Rectangular Border | 27 |
| Draw Border Text | 28 |
| Border Select | 28 |
| Draw Border Around Selection | 29 |
| Instruction Mode | 30 |
| Starting on Right or Wrong side | 30 |
| Working In the Round | 30 |
| Colorwork | 31 |
| Chart Repeats | 31 |
| Including Stitch Counts | 32 |
| Repeated Sections | 32 |
| Repeat Settings | 32 |
| Omitted Sections | 33 |
| Repeat Overlays and Appearance | 33 |
| Instruction Text Options | 34 |
| Preview Mode | 35 |
| Chart Preview Options | 36 |
| Title Options | 36 |
| Grid Options | 36 |
| Index Lines | 36 |
| Row Stripping | 37 |
| Numbering Options | 37 |
| Number Justification | 37 |
| Number Size | 37 |
| Row Numbering | 37 |
| Column Numbering | 38 |
| Legend Options | 38 |
| Instruction Options | 38 |
| Chart Notes | 38 |
| Chart Export | 39 |
| Other Chart Editor Features | 40 |
| Replacing Stitches and Yarns | 40 |

| | |
|--|-----------|
| Replace Yarn | 40 |
| Replace Stitch | 40 |
| Replace Yarn and Stitch | 40 |
| Replace in Selection | 41 |
| Create New Chart from Selection | 41 |
| Inserting and Deleting Rows and Columns | 42 |
| Rulers | 43 |
| Cursor Coordinates | 44 |
| Grid Settings | 44 |
| Chart Gauge | 44 |
| Chart Numbering | 44 |
| Setup Rows | 45 |
| Pass Settings for Brioche and Other Multiple Pass Charts | 45 |
| Viewing the Chart in Grayscale | 47 |
| Yarn and Stitch Masking | 48 |
| Chart Masking | 48 |
| The Chart Checker | 49 |
| Pattern Editor | 51 |
| Including Charts in the Pattern | 51 |
| Including Photos in the Pattern | 52 |
| Exporting or Printing the Pattern | 53 |
| Printing and Exporting | 54 |
| Export Formats | 54 |
| ZIP (Compressed Export File Archive) | 54 |
| SVG (Vector Image) | 54 |
| PNG (Raster Image) | 54 |
| BMP (Raster Image) | 54 |
| JPEG (Raster Image) | 54 |
| DOCX (Word Document) | 54 |
| ODT (Open Office Document) | 55 |
| PDF (Adobe Document) | 55 |
| PDF Password Protection | 55 |
| TXT (Text Document) | 55 |
| Printing | 56 |
| Yarn Studio | 57 |
| Selecting Colors | 57 |
| The Color Wheel and Shade Slider | 57 |
| Entering a Color Name | 57 |
| Stitch Symbol Color | 57 |
| Matching Colors | 58 |
| Stitches | 60 |
| Stitch Palettes | 60 |
| Built-In Stitch Palettes | 60 |
| Basic Stitches | 60 |
| Increases | 61 |
| Decreases | 62 |
| Cables and Twists | 62 |
| Texture Stitches | 63 |
| Edge Stitches | 63 |
| Brioche Stitches | 63 |
| Custom Stitches | 66 |
| Automatic Stitch Palettes | 66 |
| Designer Stitch Palettes | 67 |
| Stitch Properties | 68 |
| Symbol Editor | 69 |
| Creating New Symbols | 69 |
| Settings | 71 |
| Default Design Settings | 71 |
| Default Pattern Settings | 71 |
| Default Chart Settings | 71 |
| Default Yarn | 72 |
| Default Border | 72 |
| Default Stitches | 73 |
| Default Fonts | 73 |
| Import and Exporting Settings | 73 |
| Font Settings | 74 |
| Selecting Fonts | 74 |
| Pattern Text Settings | 75 |
| Instruction Text | 75 |
| Row Text | 75 |
| Parentheses Style | 75 |
| Stitch Counts | 75 |
| Row Repeats | 75 |

| | |
|--|-----------|
| Stitch Repeats | 75 |
| Color Instructions | 75 |
| Row Labels | 75 |
| Override Every-other-Row Preamble | 76 |
| Row Side | 76 |
| Legend Text | 76 |
| Headers | 76 |
| Stitch Legend | 76 |
| Page Settings | 77 |
| Tools | 78 |
| Importing Charts, Yarns and Stitches | 78 |
| The Import Tool | 78 |
| Select the Design File | 78 |
| Select and Import a Chart | 79 |
| Importing a Yarn | 79 |
| Importing a Stitch | 80 |
| Importing a Chart | 80 |
| Replacing Yarns | 81 |
| The Imported Chart | 81 |
| Creating Picture Charts | 82 |
| Choosing an Image | 82 |
| Selecting Colors | 82 |
| Sizing and Positioning the Chart | 82 |
| Creating Charts from Written Stitch Instructions | 84 |
| Stitch Syntax Rules | 84 |
| Settings | 85 |
| Examples | 85 |
| Example 1 | 85 |
| Example 2 | 86 |
| Example 3 | 86 |
| Example 4 | 86 |
| Other Features | 87 |
| Updates | 87 |
| Autosave, Crash Recovery and Bug Reports | 87 |

This manual is a work in progress. It is continuously being improved and revised to reflect the latest version of EnvisioKnit Design Studio. If you feel that anything is missing or unclear, please let us know and we'll be happy to fix it.

In addition to this manual, we also have a [15 minute demonstration video](#), which is probably a better place to start if you are new to EnvisioKnit.

Getting started

The Intro Screen

When you start EnvisioKnit Design Studio, the first thing you will see is the intro screen. From here, you can choose to create a new design or open one that you've already started.

If it's been a while since you downloaded EnvisioKnit, there may be an update available. EnvisioKnit checks for updates every time it starts, so if there is one, a window will appear and ask if you'd like to update. The updater takes care of downloading and installing the new version automatically, but afterwards you will need to close EnvisioKnit and restart it to run the new version.



Intro Screen

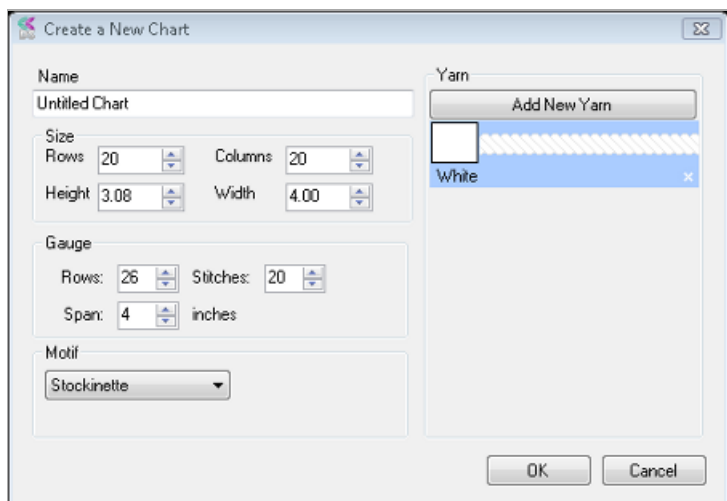
Creating a New Design

If you select to create a new design you will be prompted to create your initial chart.

You can enter the name of the chart, its size, gauge, and you can specify the yarn and stitch motif that will be used to fill the chart.

The size of the chart can be set either by entering the number of rows and columns, or by entering the height and width. If you enter rows and columns, the height and width fields will be calculated for you. Likewise, if you enter the height and width, the rows and columns will be calculated. The calculation is based on your gauge setting.

The available stitch motifs are stockinette (all knit), reverse stockinette (all purl), garter, moss, seed, rib and blank (all no-stitch).



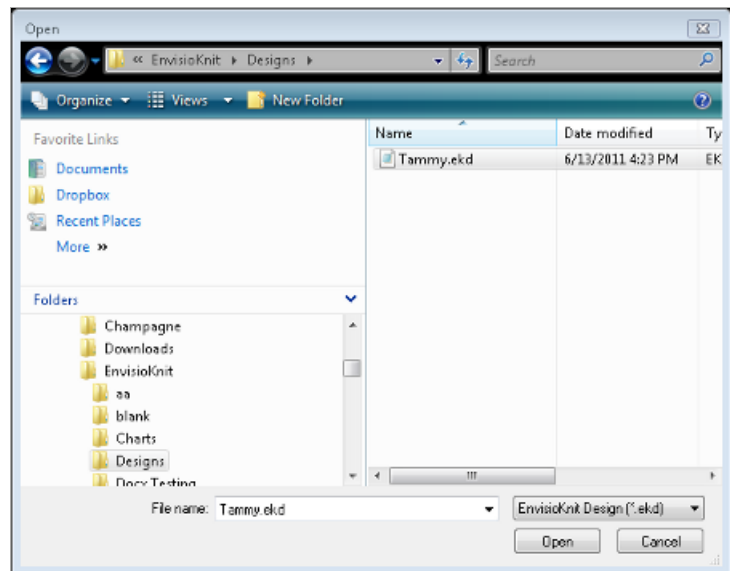
Create a New Chart

You can add additional yarns to your design by clicking the **Add New Yarn** button. Additional yarns can also be added at any time later. To change the existing yarn, just double click on it, and the [Yarn Studio](#) window will appear. To remove a yarn from the design, select the yarn and click the 'X' icon that appears in the lower right of the yarn button.

Opening an Existing Design

If you choose to open an existing design, you will get the typical **Open File** window, where you can select the EnvisioKnit design file you want to load.

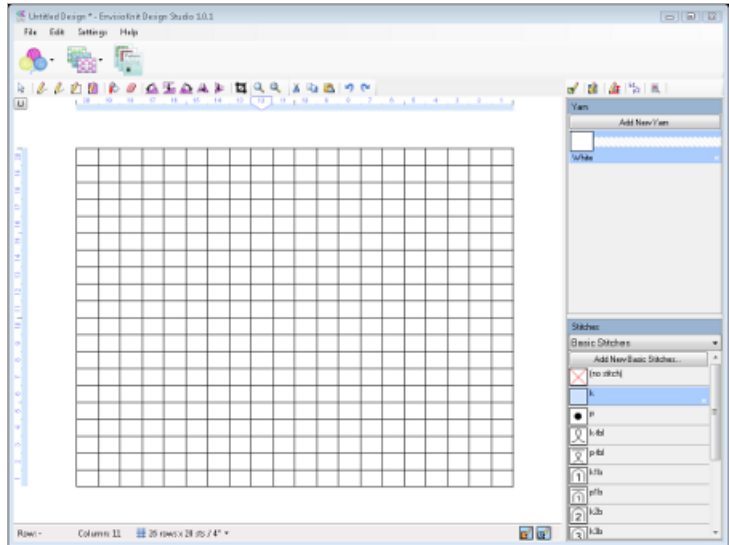
EnvisioKnit uses the file extension .ekd for design files.



Open a Design File

The Main Window

Once you have a design open, you will see the main EnvisioKnit Design Studio window. At the top, you will notice a toolbar with three large buttons: Yarn, Charts and Pattern.



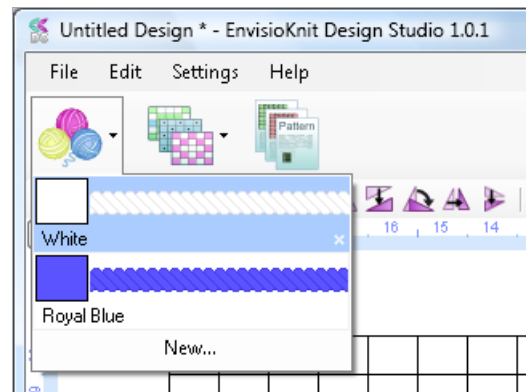
The Main Window

This is the Navigation bar. These buttons let you navigate through the elements of your design.



Navigation Bar

Clicking the Yarn navigation button will allow you to add a new yarn or select one to edit.



Yarn Navigation Button

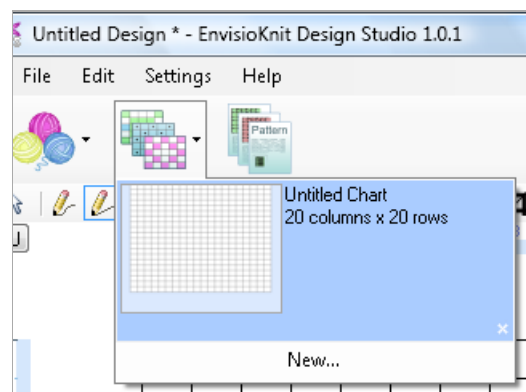
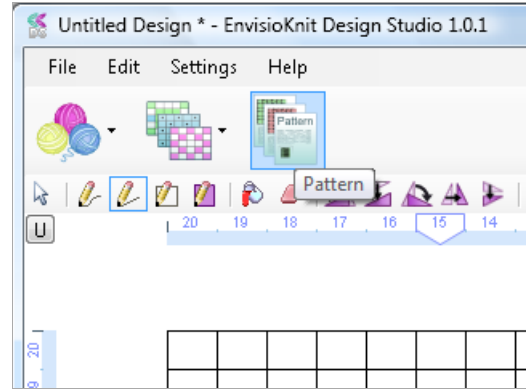


Chart Navigation Button

Likewise, clicking the Charts button will let you add a new chart or select a chart to edit.

The pattern button will open the pattern editor. You always have one pattern associated with your design.

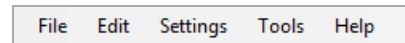


Pattern Navigation Button

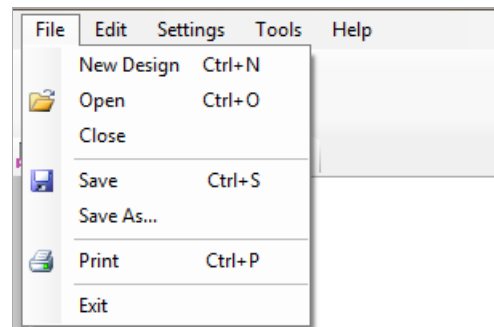
Above the Navigation toolbar you will find the Menu bar.

The Menu bar contains the typical menus you are probably familiar with from other applications.

From the File menu, you can create a new design, open an existing design, close, save or print the current one, or exit the program.

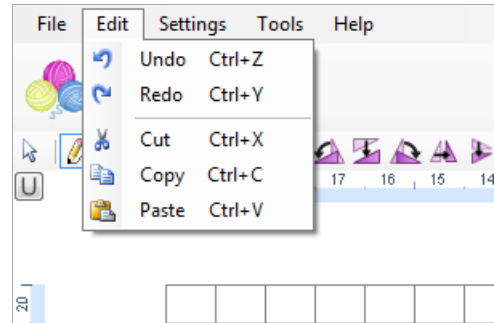


Menu Bar



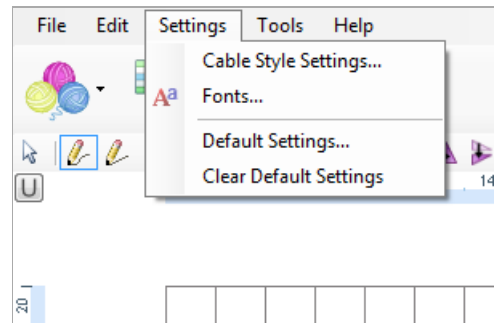
File Menu

The Edit menu provides the usual editing commands: Undo, Redo, Cut, Copy and Paste.



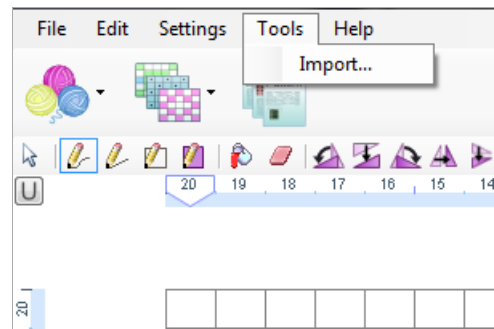
Edit Menu

The Settings menu contains options to set the cable symbol style used for all your cable stitches and to set the fonts used in your current design (see [Font Settings](#)). It also has options for setting and clearing your default preferences (See [Default Design Settings](#)).



Settings Menu

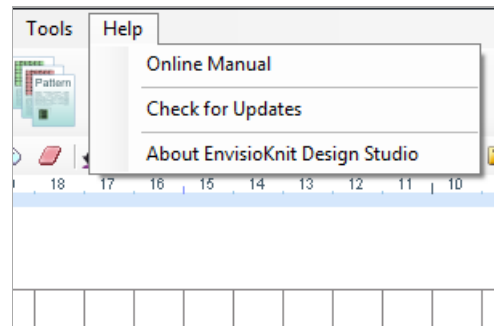
The Tools menu has an Import tool that will allow you to bring charts, yarn and stitches from other design files into your current design. (see [Importing](#)).



Tools Menu

The Help menu features a link to this Manual, which will open in your browser when you click on it. There is also a Check for Updates option that will check the website and let you know if there is an update available. The About EnvisioKnit page will simply tell you the version of the program.

Below the Navigation toolbar you will have your chart editor, which we will continue with in the next section.



Help Menu

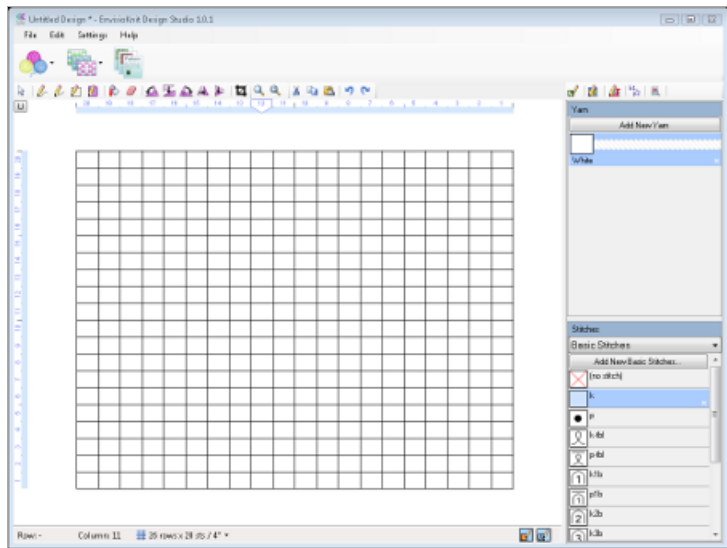
Chart Editor

Overview

The chart editor will open whenever you select a chart or create a new one. It also opens by default when you open a design.

(Note: if your screen doesn't look similar to the one on the right, you may have clicked the pattern navigation button earlier. To go back to the chart editor, click the Charts navigation button and select the chart to edit.)

The chart editor is split into two panes. The large pane on the left is the edit pane, and it's for displaying and editing the chart. The narrow pane on the right is for palettes and settings.



The Chart Editor

If you look at the top of the palette pane, you will notice five small buttons.

These buttons allow you to switch editing modes. There are five chart editing modes: the Yarn and Stitch, Chart, Border, Instructions, and Preview editing modes. If you click any of these buttons, you will notice that the toolbar buttons and the palettes will change according to the current mode.



Mode Buttons

Drawing with Yarns and Stitches

The Yarn and Stitch editing mode allows you to draw on your chart using a particular yarn and stitch. Select the yarn and stitch from the palettes on the right, and the tool you want to draw with. The Yarn and Stitch Mode toolbar will look like this:

Now let's go through what each of these tools does.



Yarn and Stitch Toolbar

Select



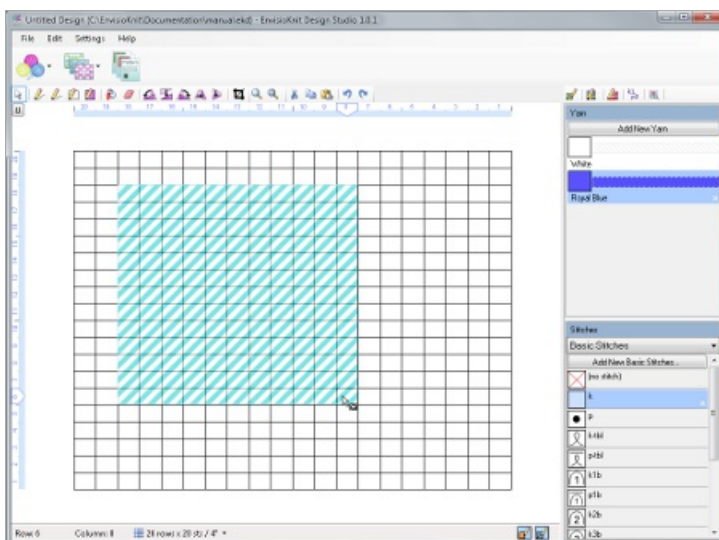
Allows you to select regions of your chart. Usually select is used with other tools, for instance, to select a region and then copy and paste it to another location.

To select an area of the chart, left-click on one corner, drag to the opposite corner of the area and release the mouse button.

To add additional regions to your selection, hold the **Control** key and select another area. New areas can overlap or be separate from your initial selection. This makes it possible to select areas which are not rectangular or connected.

Once you have an area selected, right-click on it to see a menu with the functions that you can apply to it. In addition to the cut, copy and paste functions, there are options to:

- [Replace yarns and stitches](#) within the selection.
- [Draw a border](#) around the selection.
- Create a [new chart from the selection](#).
- [Repeat the selection](#) in the written instructions.
- [Omit the selection](#) from the written instructions.

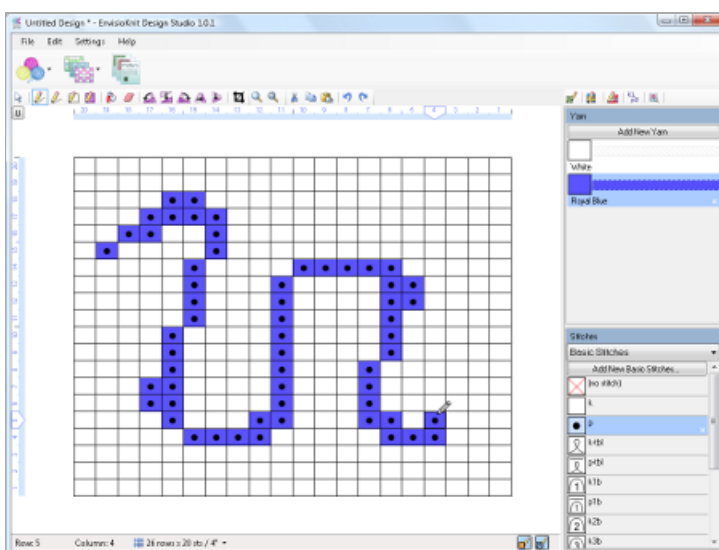


Selecting Stitches

Draw Freehand



The basic draw tool. Draws the selected yarn and stitch wherever you click on the chart. Click and drag to create a continuous line of stitches.

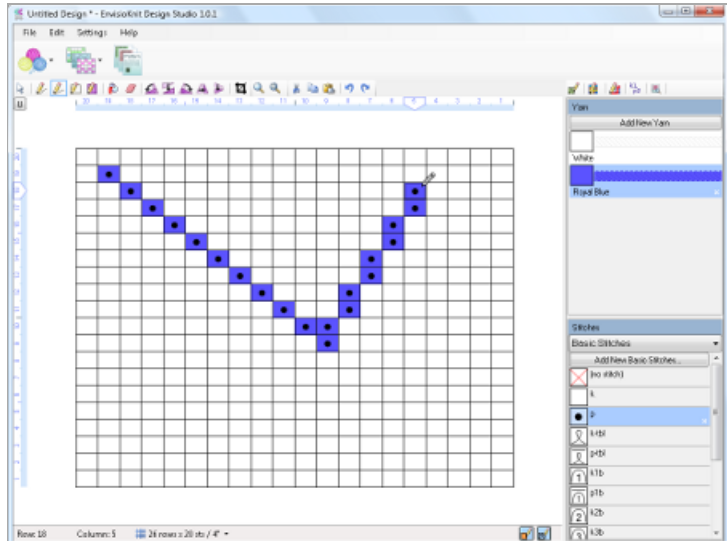


Drawing Freehand

Draw Line



Draws a straight line. Click where you want the line to begin, drag to where you want it to end, and release the mouse button.

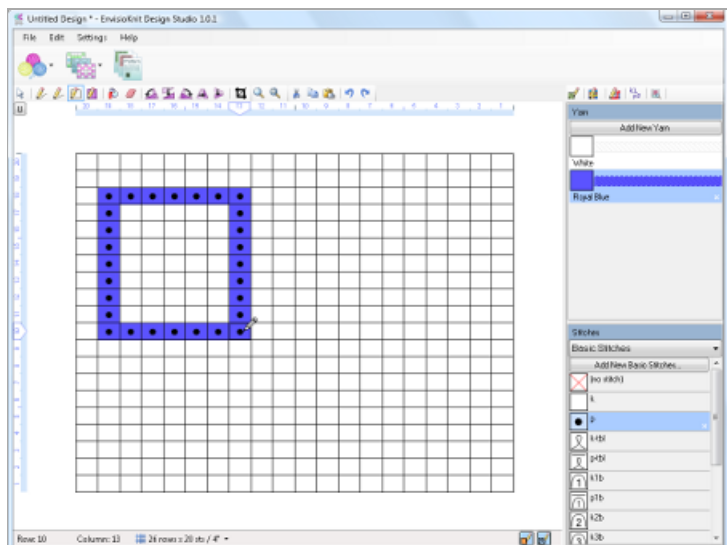


Drawing Lines

Draw Rectangle



Draws an unfilled rectangle. Click where you want one corner of the rectangle to be, and drag to where you want the opposite corner and release the mouse button.

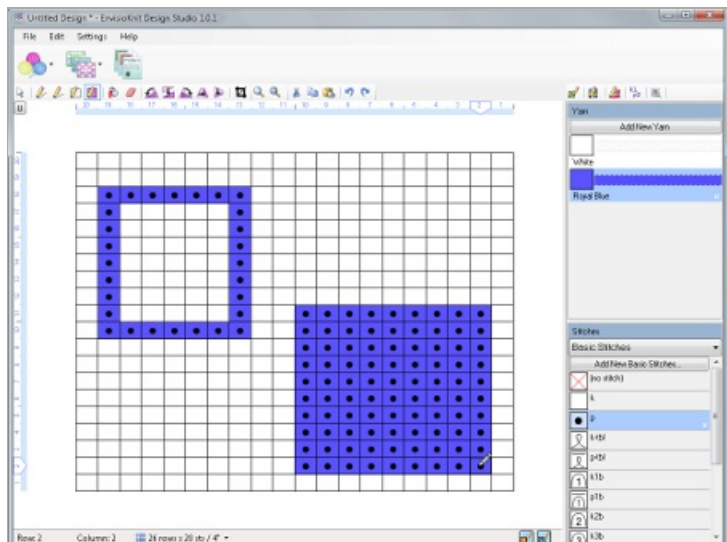


Drawing a Rectangle

Draw Filled Rectangle



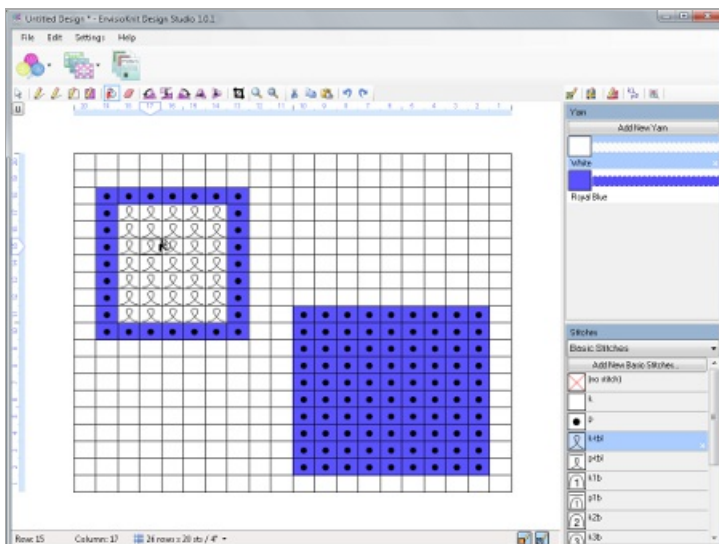
Draws a filled rectangle. Again, click where you want one corner to be, and drag to the opposite corner.



Fill



Fills all cells in a connected region with the selected yarn and stitch. Click inside the area you want to fill.

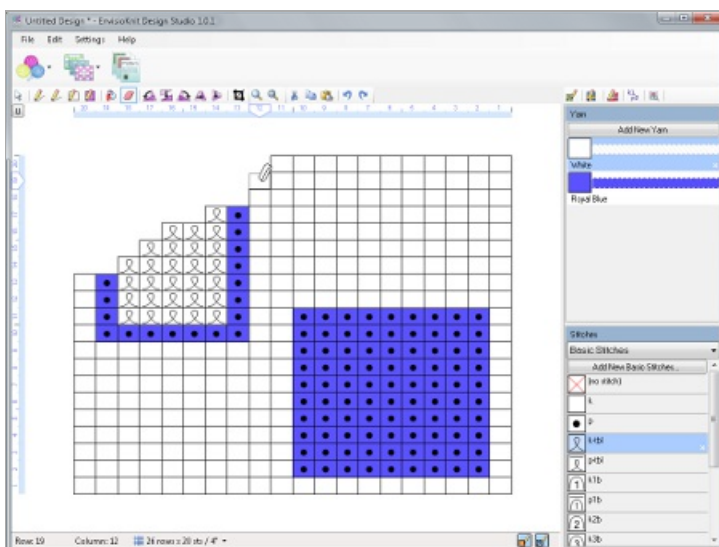


Filling Inside the Rectangle

Erase



Erases stitches. This is identical to drawing with the no-stitch.

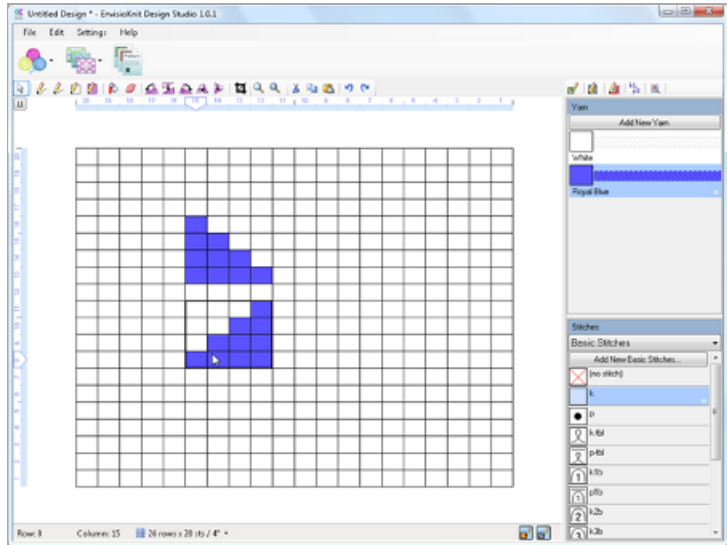


Erasing part of the chart

Rotate 90 Degrees Counter Clockwise



Copies the selected region of stitches and rotates it by 90 degrees counter clockwise. The rotated copy will follow your cursor around the chart until you click the mouse button to place it.

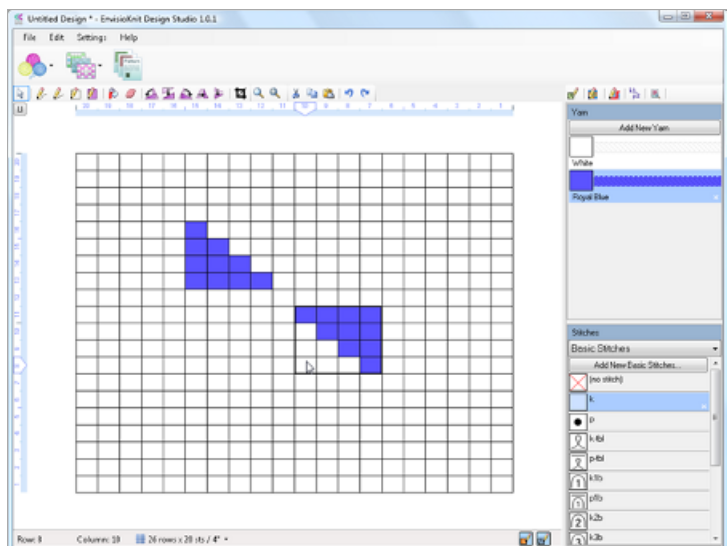


Rotating Stitches 90 Degrees CCW

Rotate 180 Degrees



Rotates a selected region of stitches 180 degrees. Works the same way as the rotate 90 degrees tool, but rotates 180 degrees.

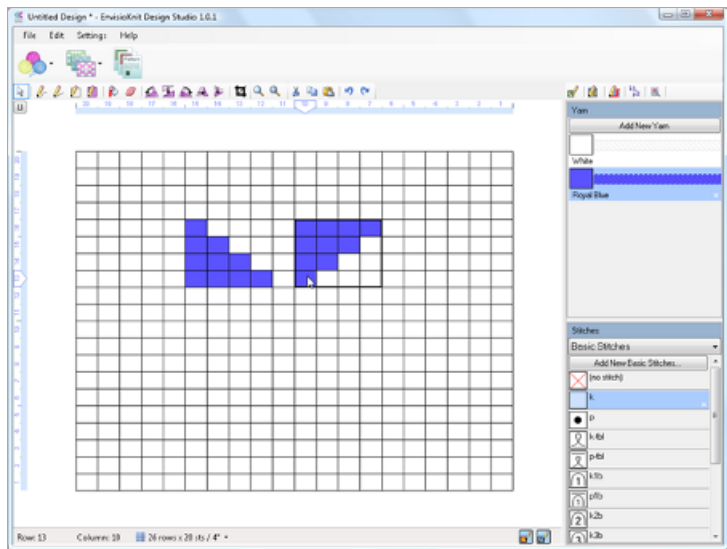


Rotating Stitches 180 Degrees

Rotate 90 Degrees Clockwise



Rotates a selected region of stitches 90 degrees clockwise.

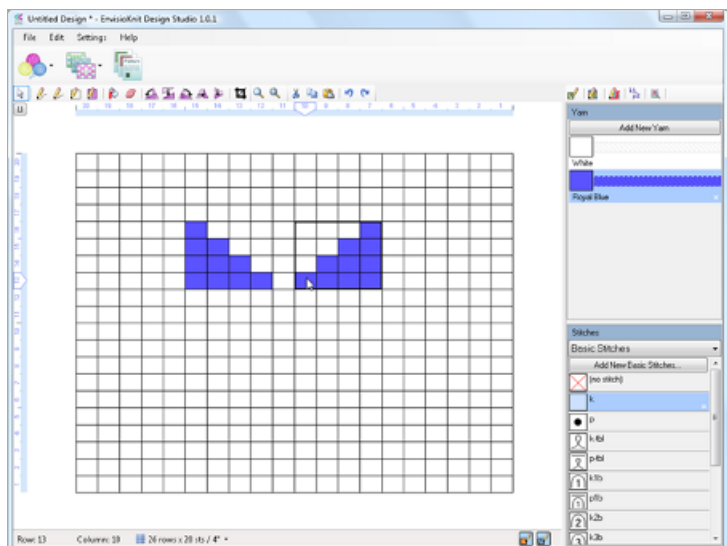


Rotating Stitches 90 Degrees CW

Horizontal Flip



Copies the selected region of stitches and flips it horizontally. The flipped copy follows your cursor around the chart until you click the mouse button to place it. Mirrors directional stitches such as decreases, increases and cables horizontally as well (for instance, k2tog flips to ssk).

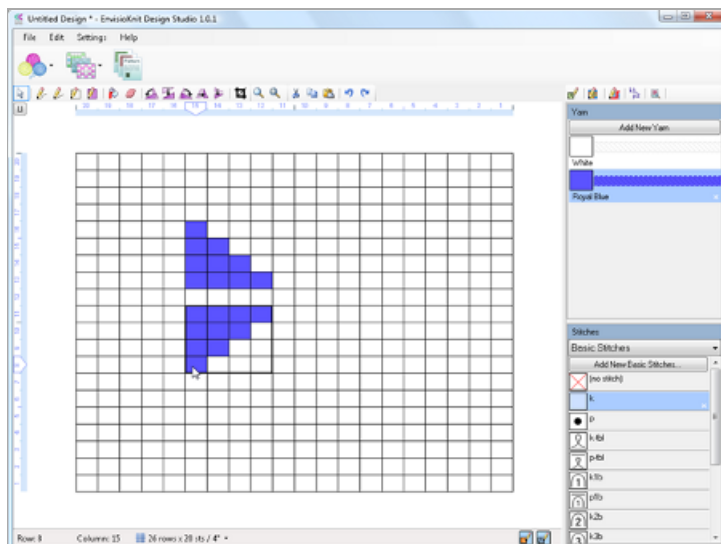


Flipping Stitches Horizontally

Vertical Flip



Flips the selected region of stitches vertically. Works like the horizontal flip tool, but flips vertically.

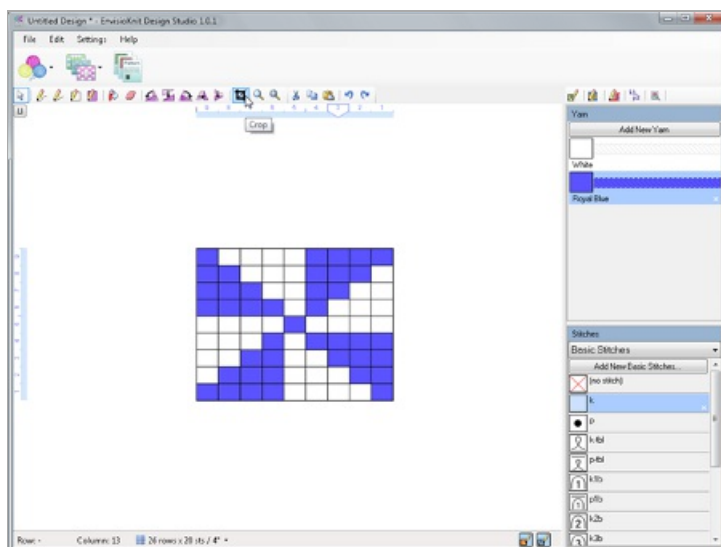


Flipping Stitches Vertically

Crop



Reduces the size of the chart to just the selected region. To use the crop tool, first select the region you want to crop to and then press the crop button. Your chart will be reduced to just the region you selected.

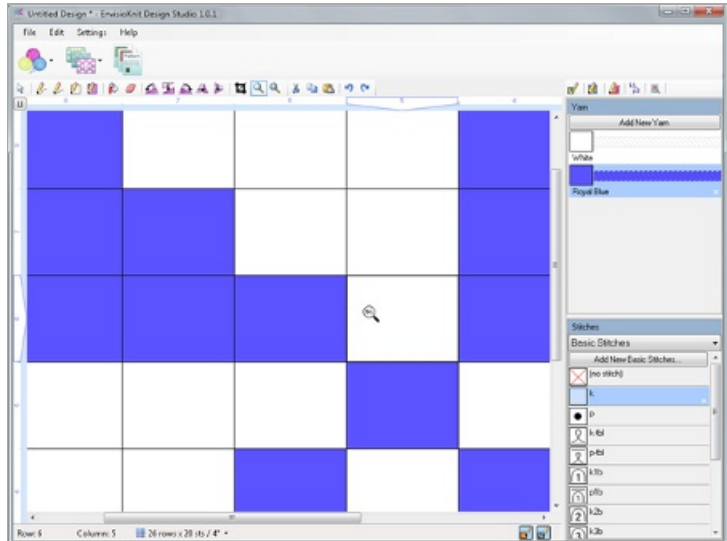


Cropping the Chart

Zoom

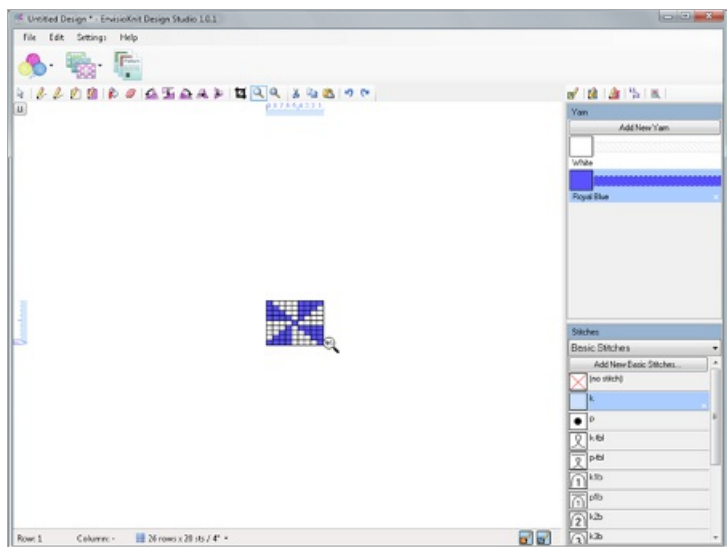


Zooms in or out, making the chart appear larger or smaller. Clicking the left mouse button zooms in...



Zooming In

And clicking the right mouse button zooms out.

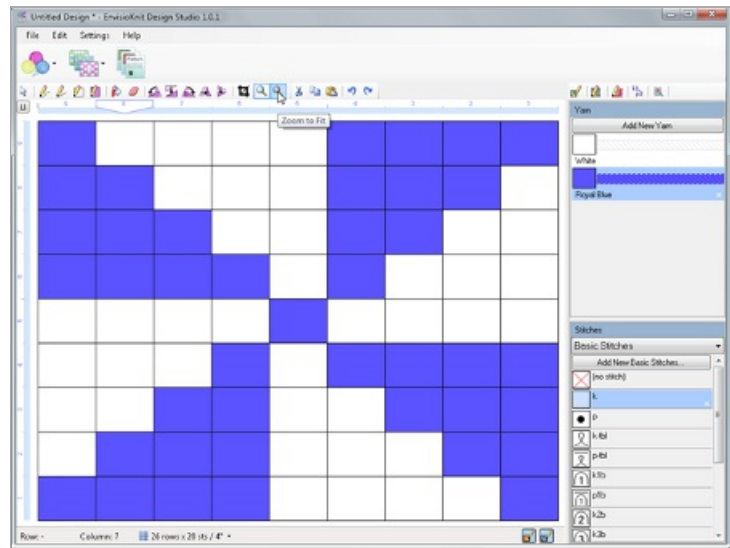


Zooming Out

Zoom to Fit



Zooms the chart to best fit the edit window.



Zooming to Fit

Zoom to Height



Zooms the chart to fit it vertically within the edit window.

Zoom to Width

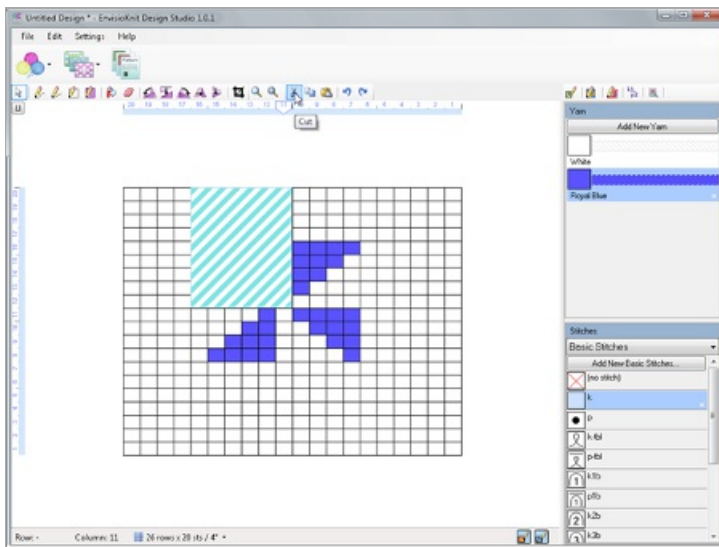


Zooms the chart to fit it horizontally within the edit window.

Cut



Removes a region of stitches from the chart, copies them to the clipboard, and replaces them with no-stitches. Select the stitches you want to cut, and press the Cut button. Alternatively, you can press Ctrl-X on the keyboard.



Cutting Stitches Out

Copy

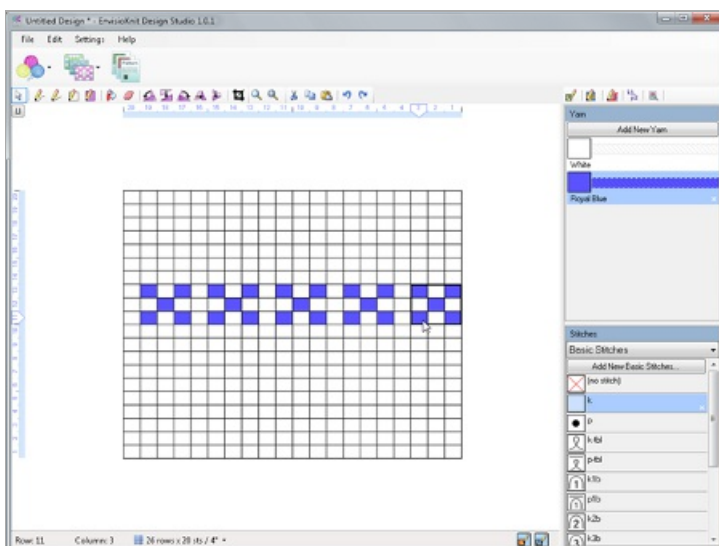


Copies the selected region of stitches to the clipboard. Select the stitches you want to copy and press the Copy button. Alternatively, you can press Ctrl-C on the keyboard.

Paste



Pastes the stitches on the clipboard to the chart. If you have already cut or copied stitches, press the the paste button, or alternatively Ctrl-V on the keyboard. The pasted stitches will follow your cursor around the chart until you click to place them.



Pasting Stitches

Undo



Reverts your last chart edit.

Redo



Redoes the last chart edit you have undone.

Drawing Chart Motifs

The Chart drawing mode allows you to draw on your chart using your other charts as motifs.

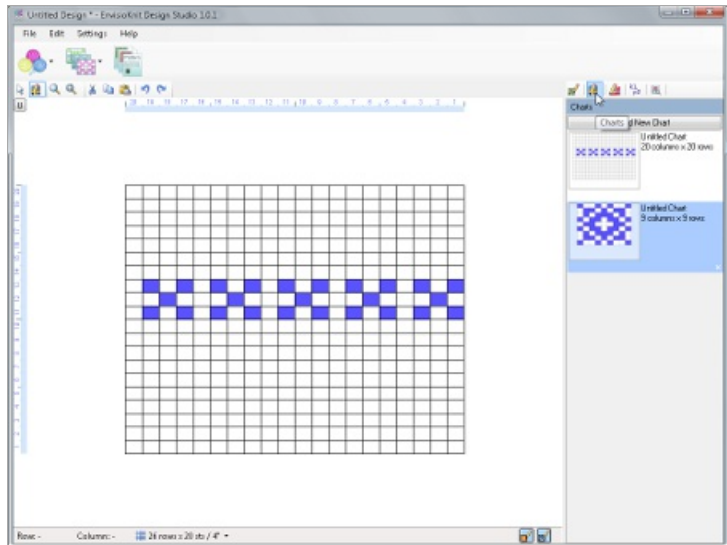


Chart Drawing Mode

The **Draw Chart** tool is the only tool in the Chart Drawing Toolbar that we didn't see already in the Yarn and Stitch Toolbar.

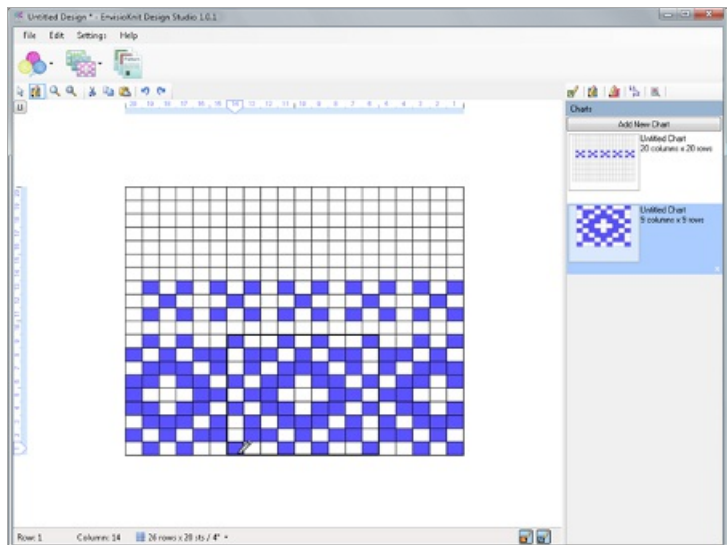


Chart Drawing Toolbar

Draw Chart



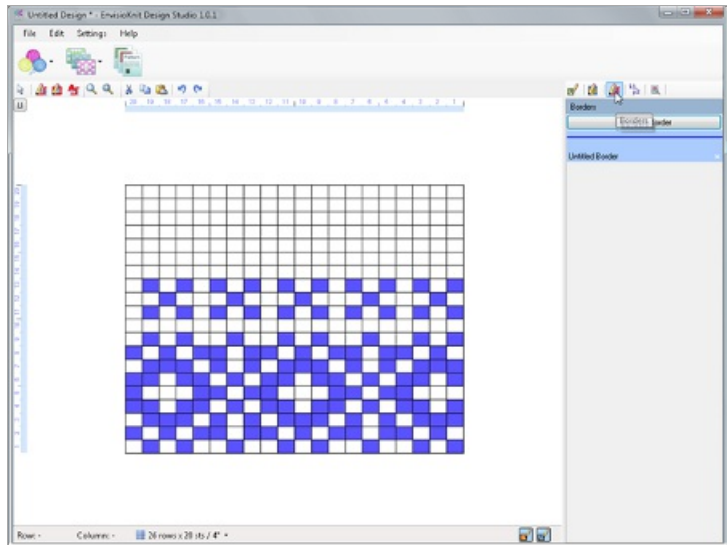
Select a chart to draw with from the chart palette on the right. Then select the **Draw Chart** tool button. The selected chart will follow your cursor around the chart until you click the mouse button to place it.



Drawing with another Chart as a Motif

Border Mode

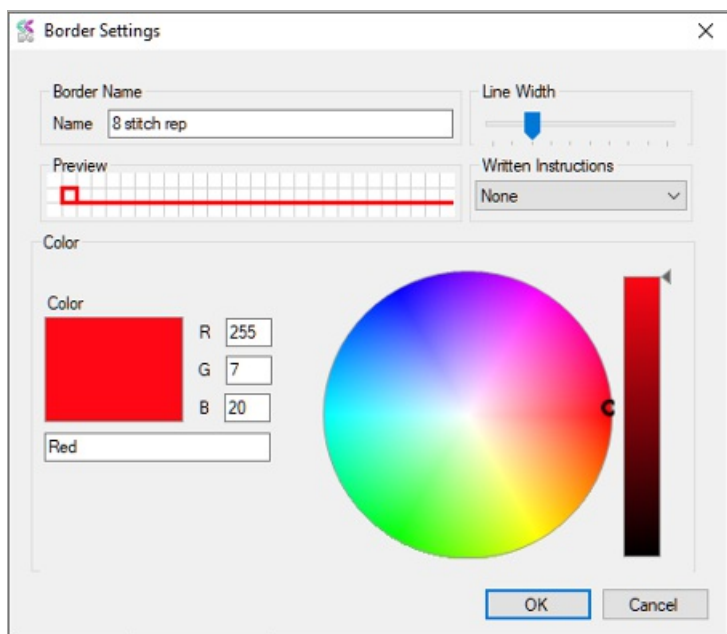
The border editing mode lets you draw borders on your chart. The available borders are shown in the palette on the right.



Border Mode

Click **Add New Border** to create additional borders, or double-click on a border in the palette to edit it.

The **Name** you give your border will be shown in the legend. You can customize the border **Color**, which is used for both lines and text. The **Line Width**, or thickness, can also be adjusted, relative to the size of the chart grid.

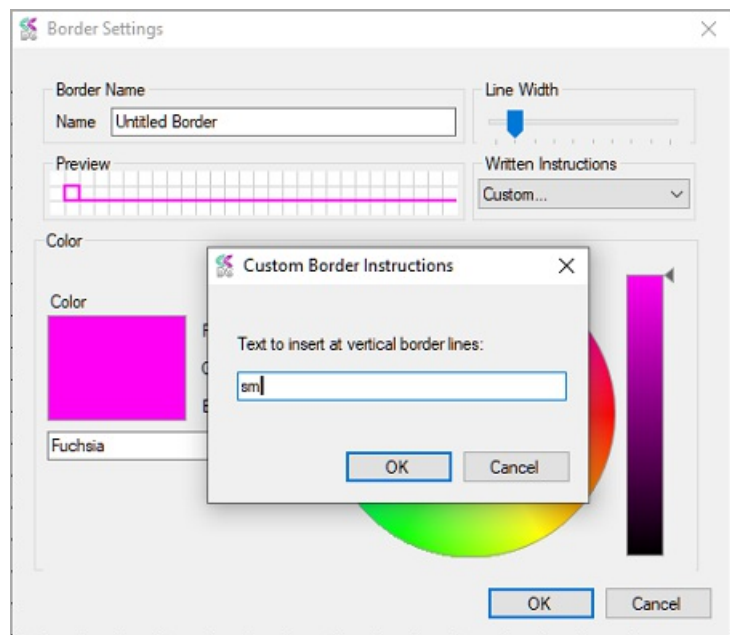


Editing Border Properties

Denoting the Border in the Written Instructions

The **Written Instructions** option allows you to denote the border in the written stitch instructions. The **Written Instructions** setting options are:

- **None** - This is the default setting, so no written instructions are initially associated with the border.
- **Place Marker: pm** - Inserts the text "pm" into your written stitch instructions, at the location of vertical border lines.
- **Custom** - Inserts any text that you specify into the written instructions, at the vertical border lines.



Setting Custom Border Instructions

Border Tools



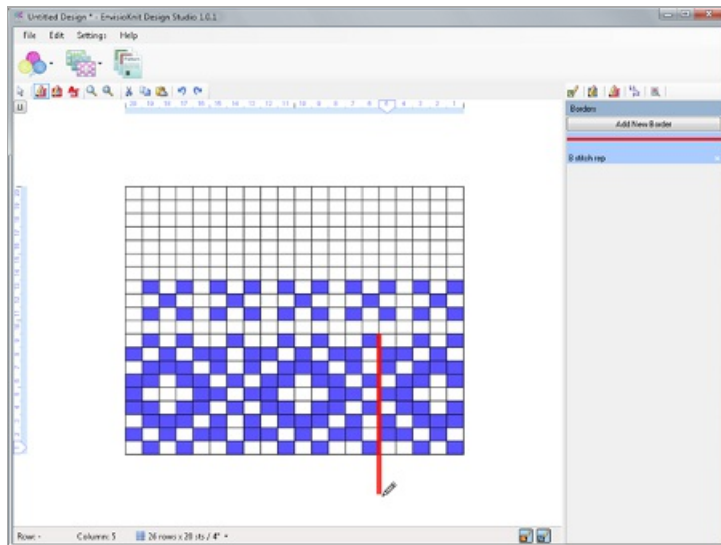
Border Toolbar

Once you have selected a border, click one of the border drawing tools to draw it on your chart.

Draw Border Line



Draws the selected border on your chart. Left-click where you want the border line to start, and continue left-clicking everywhere you want an end-point. Right-click or press Escape to finish the border line.

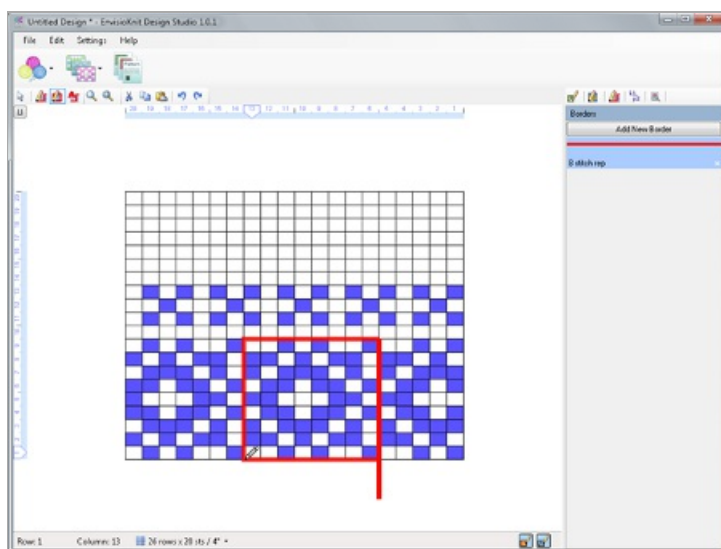


Drawing a Border Line

Draw Rectangular Border



Draws a rectangular border on your chart. Left-click where you want one corner of the rectangle, and click again where you want the opposite corner. Right-click or press Escape to cancel.

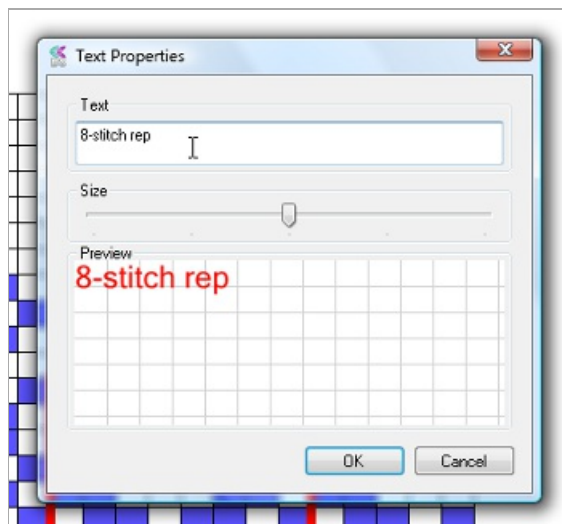


Drawing a Rectangular Border

Draw Border Text



Draws text associated with your selected border. Left-click on the chart and you will get a pop up window to set the text content and size. When finished, left-click on the chart to place the text. To cancel the text placement, right-click or press Escape.



Border Text Settings

Border Select

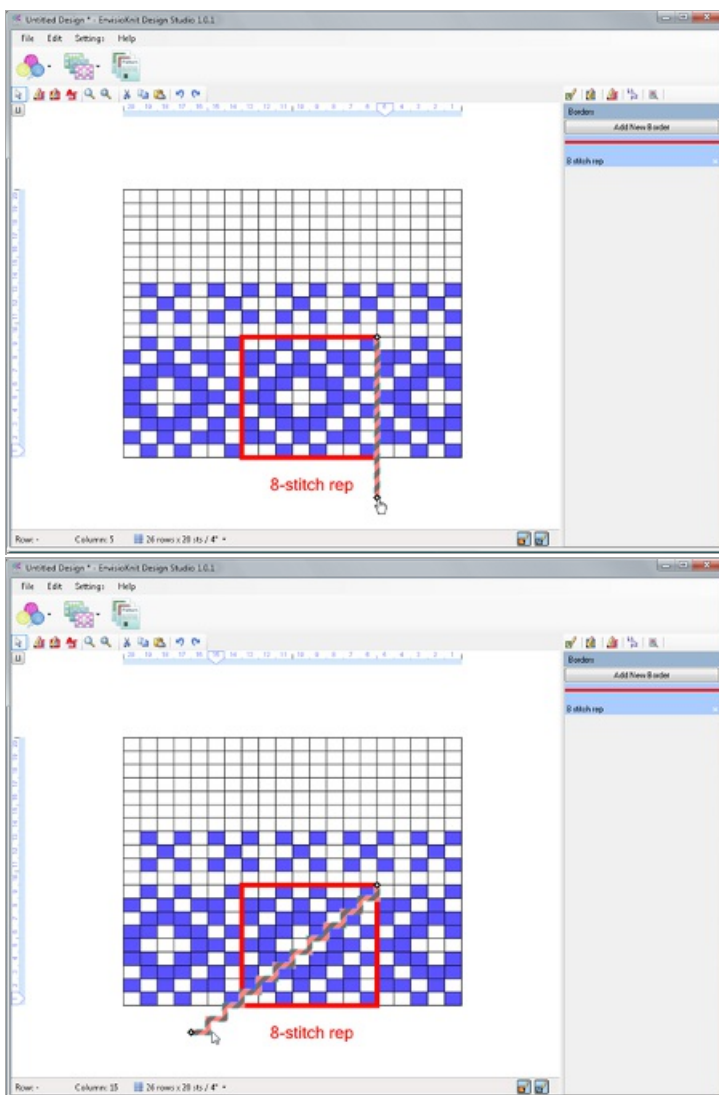


You can select and edit your existing border lines and text with the border select tool.

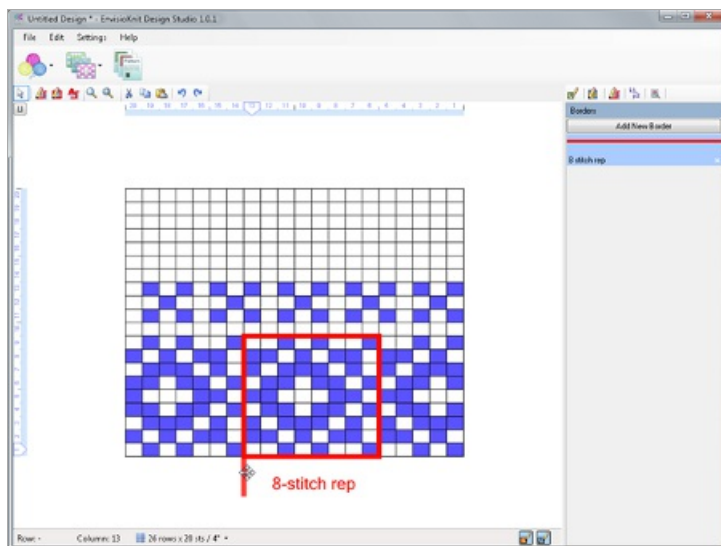
To edit border text, use the select tool to click on the text. The text will appear highlighted to show that it is selected. To move the text, click on it and then drag to the desired location. To change the text, double click on it and the border text editing window will appear where you can change the content and size of the text.

To edit a border line, left-click anywhere on the line. The line will be highlighted and the endpoints will be shown as diamonds.

Click an endpoint to drag it to a different location...



Or move the whole border line as one by clicking anywhere else on the border and drag it to the new location.



Draw Border Around Selection

Borders can be drawn without using the border tools. [Stitch Drawing Mode](#), you can select an area of the chart, right-click on it and choose **Draw Border Around Selection** from the menu. A window will appear where you can choose the border to use. Click OK and a border line that outlines the selection will be added to your chart. The **Border Around Selection** tool works for non-rectangular and non-connected selections as well. This is a quick and simple alternative to drawing border outlines manually.

Instruction Mode

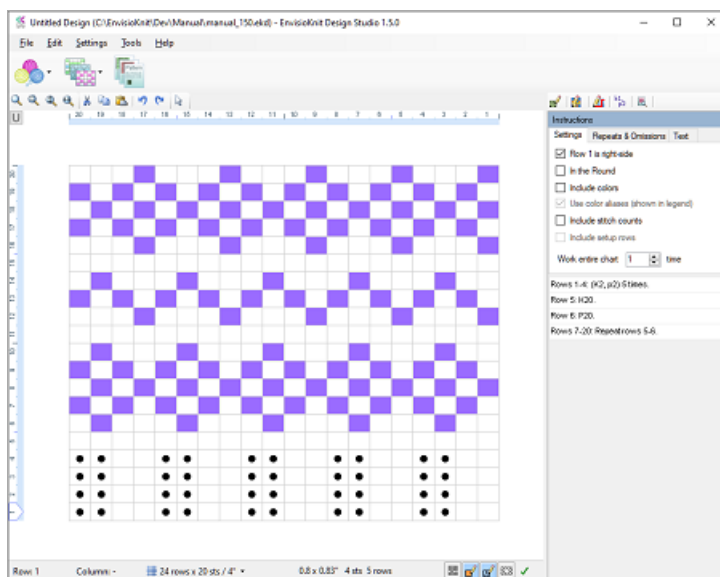
The Instruction Mode displays the written instructions for your chart and provides several options to determine how they should be generated. The options are listed on the right, above the instructions. The instructions are generated automatically and are continuously updated as you design.

Starting on Right or Wrong side

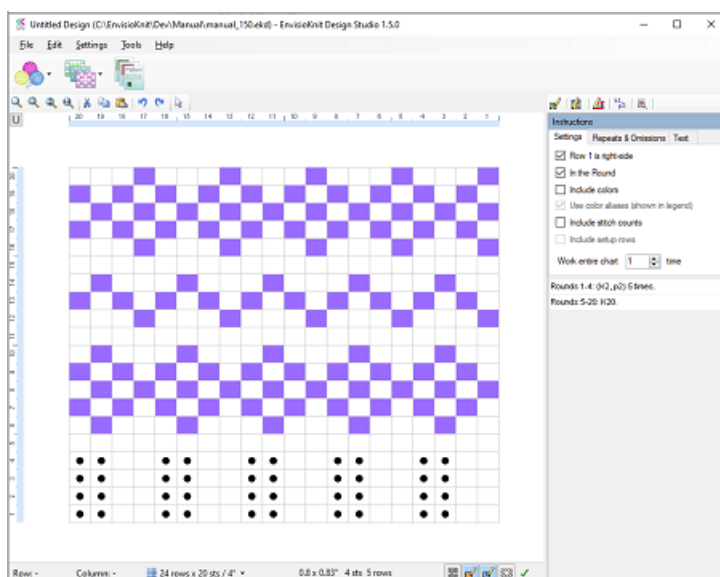
The **Row 1 is right-side** option specifies whether the first row of the chart is a right-side row. If the chart is worked flat, then the row following the right-side row will be a wrong-side row. If the chart is worked in the round then all the rows will be either right-side or wrong-side, as determined by the setting for the first row.

Working In the Round

The **In the Round** option determines whether the instructions are generated for working the chart flat or circular. If set, instructions are generated in the round (circular). Otherwise, they are generated for flat knitting.



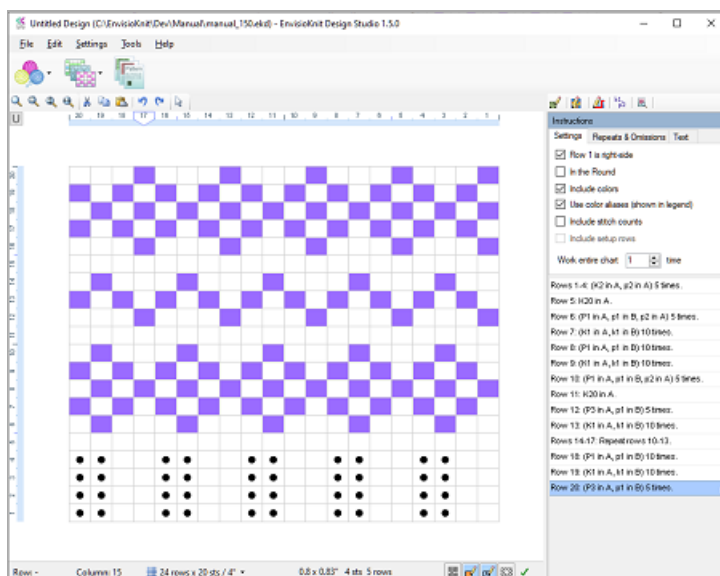
Instruction Mode (Flat knitting)



Changing Instructions generated in the Round

Colorwork

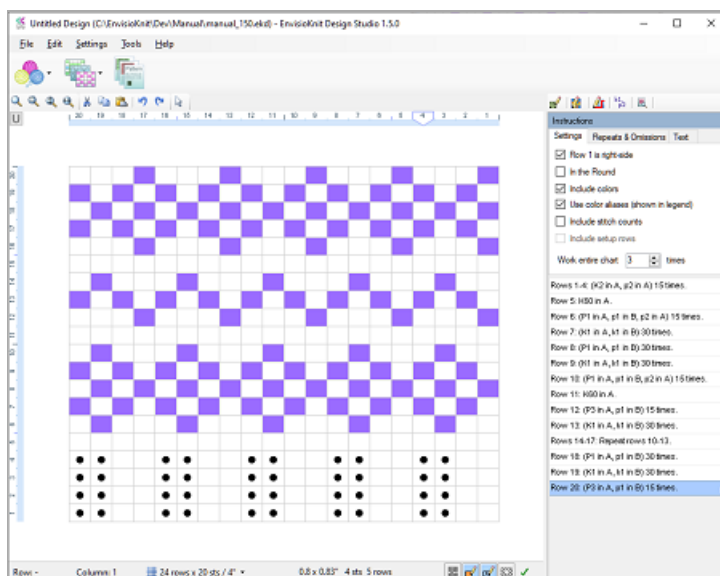
By default, written instructions are generated only for the stitch pattern and color changes are omitted since they are shown in the chart. The **Include Colors** option can be set to include color changes in the written instructions. The **Use Color Aliases** option can be used to represent the yarn colors with letters (i.e. A, B, C...). If this option is used, the letters corresponding to each yarn color will appear in the yarn legend. Unsetting **Use Color Aliases** will generate the colorwork instructions using the full name of each yarn. For complex colorwork charts, you may find that using aliases for the colors helps simplify and shorten the instructions.



Generating Colorwork Instructions

Chart Repeats

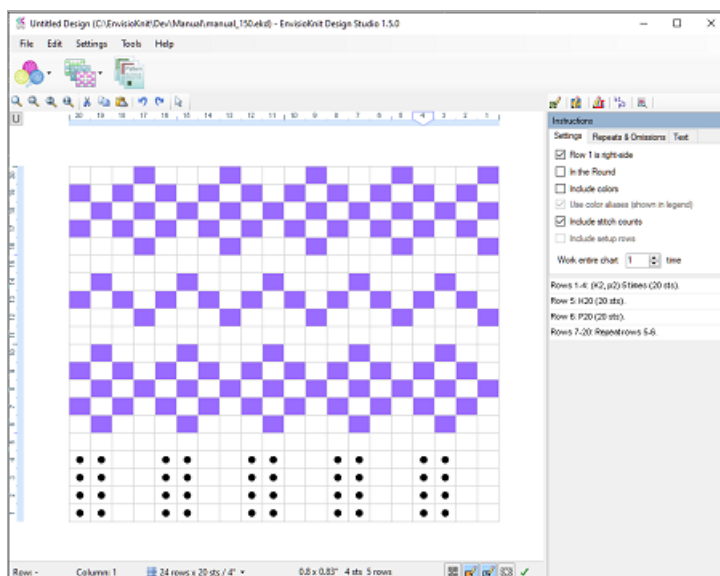
The instructions can be generated to repeat the chart a specified number of times. By default, the instructions are generated for each row in the chart to be worked once. Setting the **Repeat Chart** number will generate instructions for working the chart the number of times that you set. For example, if you have a row of 20 knit stitches and you set **Repeat Chart** to 3 times, the corresponding instructions will read **K60**. This option is handy if you have a chart that is repeated across several times and only want to chart the first repetition.



Instructions Repeated 3 Times

Including Stitch Counts

The number of worked stitches can be automatically included at the end of each row instruction. This option can be enabled by setting the **Include Stitch Counts**. Including the stitch counts in the written instructions can help the knitter check that each row has been worked correctly. The instruction count is shown in parentheses at the end of each row. For example, **[K2, p2] 5 times (20 sts)**.



Showing the Number of Worked Stitches

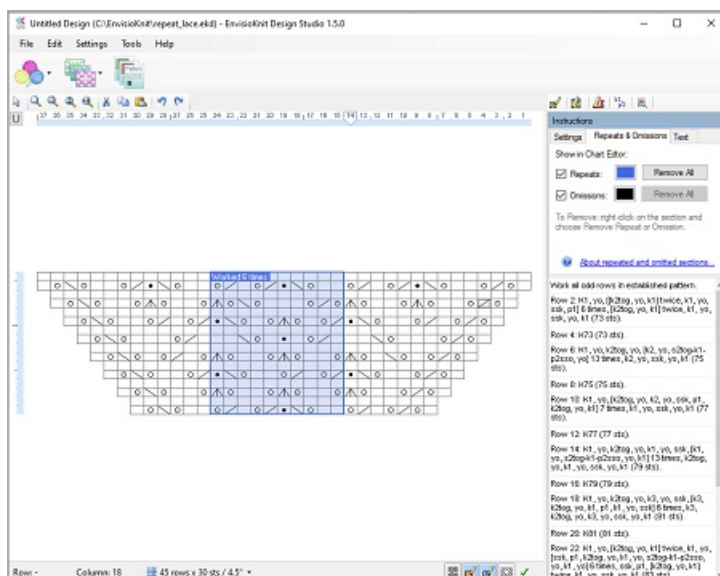
Repeated Sections

You may want to generate the written instructions so that a section of a chart is repeated, but the rest of the chart is not. You can do this with repeated sections.

To mark a repeated section, [select the area](#) and right-click on it. Select **Repeat Selection** from the menu that pops up and the [Repeat Settings](#) window will appear.

Specify the number of times that the selection should be worked and click OK. The written instructions will be automatically regenerated to reflect your settings. Also, because you are changing how the chart is worked, the [Chart Checker](#) will be updated as well.

You can mark non-rectangular and non-connected selections as repeated sections. Overlapping areas will be merged together. The Undo and Redo commands for adding repeats, so you can use them to revert unwanted changes.



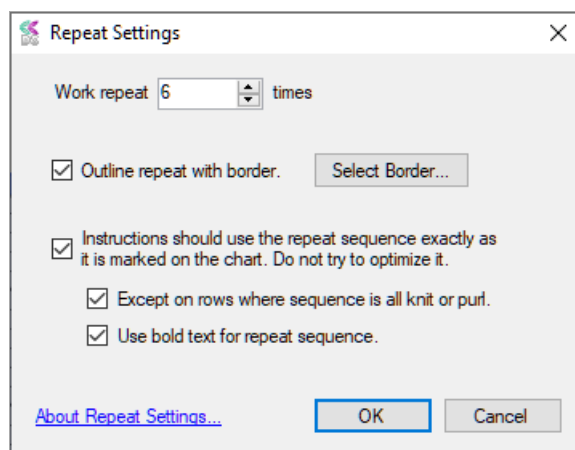
Repeated Chart Sections

Repeat Settings

Each repeated section has settings that you can adjust to configure how the associated written instructions are generated. The Repeat Settings specify the following properties:

- The number of times that a repeat is worked.
- If the repeat should be outlined with a border line.
- If the literal sequence of repeat stitches should be preserved, as marked by the selection, in the generated stitch instructions. This can optionally be done only

on patterned rows (i.e. not all knit or all purl). Additionally, the marked sequence text can be set to appear in a bold typeface in the written pattern.



Repeat Settings

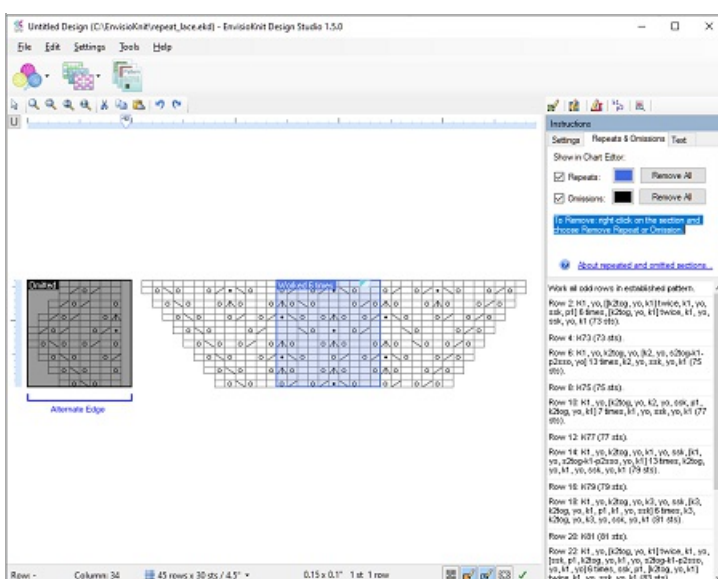
Omitted Sections

You can mark areas of your chart to be omitted from the automatically generated written instructions. The instruction generator will simply skip over them. This can be used for many purposes, but generally it is to show things on the chart that are not meant to be worked literally.

Omissions can be added and modified on the **Omissions** tab. As with repeated sections, to mark an omitted section, select the area (with the select tool) and right-click on it. Select **Omit Selection** in the menu that pops up. The written instructions will be automatically regenerated to reflect your settings and the [Chart Checker](#) will re-validate the chart.

You can have multiple omitted sections. Select additional areas and click the **Omit Selection** button. Overlapping areas will be merged together. The Undo and Redo commands can be used to revert unwanted changes. Repeated and omitted sections can overlap, the omissions will take precedence.

To remove an omission, right-click on the area in the chart and select **Remove Omission** from the menu that appears.

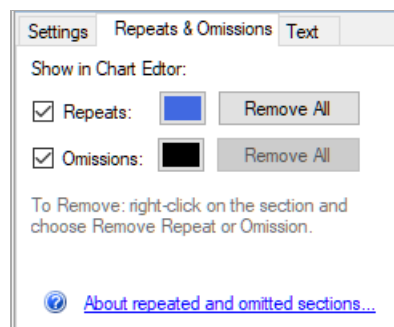


Omitted Chart Section

Repeat Overlays and Appearance

A tinted overlay is shown to visually indicate the location of repeats and omissions in the Chart Editor. This is for your reference while you design, so that you can clearly see where the repeat is. The overlay will not appear in the final exported chart. You can configure the appearance of the overlay on the **Repeats & Omissions** tab (on the right, above the instructions). Under **Show in chart**, uncheck **Repeats** to not show the repeat overlay in the chart editor. Alternatively, you can change the color to one that works better for you. Likewise, uncheck **Omissions** to disable the omissions overlay.

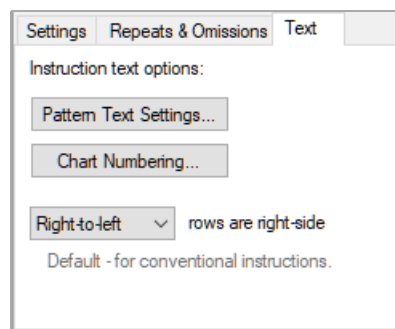
If you want a visual indicator of a repeat shown on the exported chart, visible to the knitter, you can automatically add a border line to your repeat by enabling it in the [repeat settings](#). The border line will be automatically drawn to outline your repeat and will sync with your repeat shape if you change it later. Alternatively, you can manually draw a border line around your repeat using the [border tools](#).



Overlay Settings

Instruction Text Options

The **Text** tab contains a few more options for the instruction text. The **Pattern Text Settings** and **Chart Numbering** buttons are fairly self-explanatory. The **Right-side rows** option allows you to specify which rows should be read as right-side. In the vast majority of cases, this should be set to the default **Right-to-left** rows are right-side. This is the convention for hand knitting charts. However, if you are adapting your pattern for loom or machine knitting, the **All rows are right-side** setting will generate right-side stitch instructions on rows that are worked both right-to-left and left-to-right. The **Left-to-right** rows are right-side setting parses the chart left-to-right on right-side rows and right-to left on wrong-side rows, for left-handed knitting.



Text Options

Preview Mode

The Chart Preview Mode presents the chart as it will appear when you export it. There are several options for customizing the look of the chart.

Please note that, with the exception of the font settings (which apply to the entire pattern), these settings only affect your current chart.

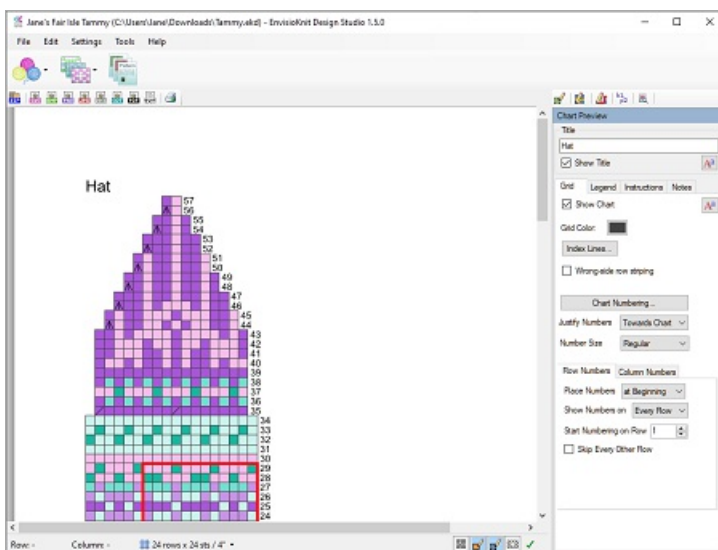


Chart Preview

The main window on the left side of the screen shows a preview of your chart, and the title, legend and instructions associated, formatted for the printed page. EnvisioKnit automatically formats your chart to fit on the first page, and the written instructions follow, spanning subsequent pages, if necessary. When you export your chart to a paged format (such as PDF, Word, or Open Office), the page layout should match very closely, if not exactly, what you see here in the preview.

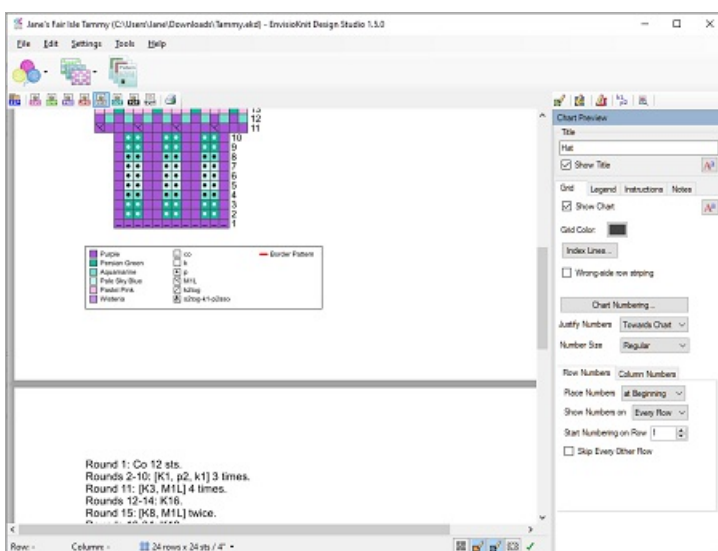


Chart Preview - Scrolling Down

Chart Preview Options

The panel on the right side of the screen contains several options that you can apply to customize the appearance of your chart. The **Title** setting for the chart is at the top and underneath it are 4 tabs containing additional settings: **Grid**, **Legend**, **Instructions** and **Notes**. The chart preview will update automatically as you modify the settings, so you can instantly see the result of your choices.

Title Options

In the title settings, you can set the title of your chart. Just type it in under **Title**. If you don't want the title to appear on your chart, disable the **Show Title** checkbox. On the right side of the Title settings is a font button, which will open the font settings for the Chart Titles in your pattern.

Grid Options

There are several options on the Grid tab. The first few items pertain to the grid itself. You can change the color of the grid by clicking the colored button next to **Grid Color**. Clicking the font settings button will open the font settings for the Chart Numbers.

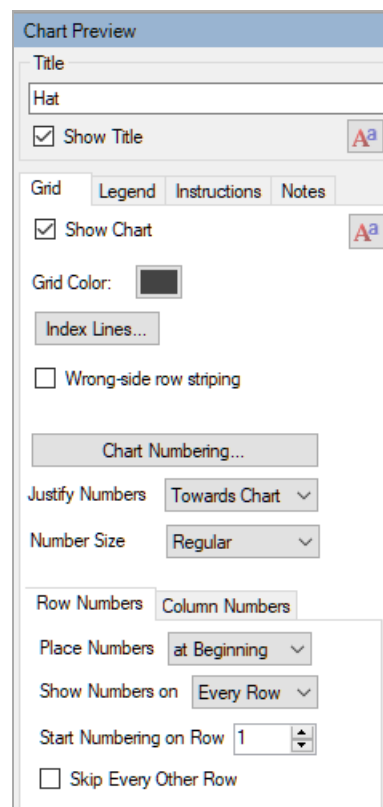


Chart Preview Options

Index Lines

Clicking the **Index Lines...** button will open the **Index Line Settings** window. This tool allows you to configure index lines for your chart grid. Index lines are heavy grid lines spaced at intervals to help knitters track their position in the chart. Index lines are only shown in the chart preview and the exported chart output, and will not be visible while you are editing the chart.

You can configure 2 sets of index lines: a minor set and a major set. This way you can indicate a small interval and a larger interval, say 5 and 10. To enable a set of lines, check one or both of the **Horizontal** or **Vertical** checkboxes under **Orientation**. You can configure the color, interval and line width for each set. Please note that the major set of lines is displayed over the minor set, so the major set will look best with a line width as thick or thicker than the minor set.

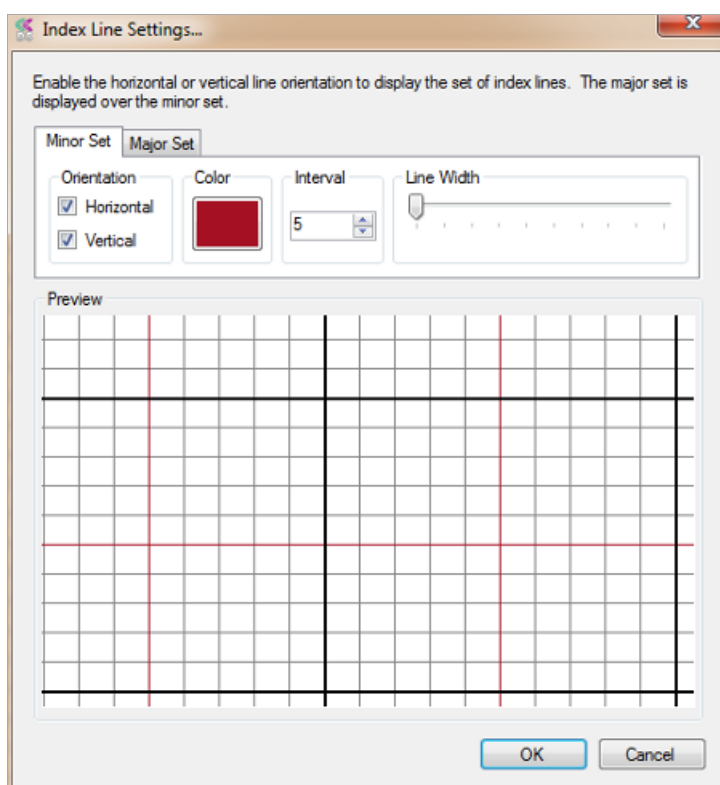
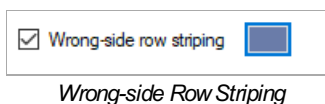


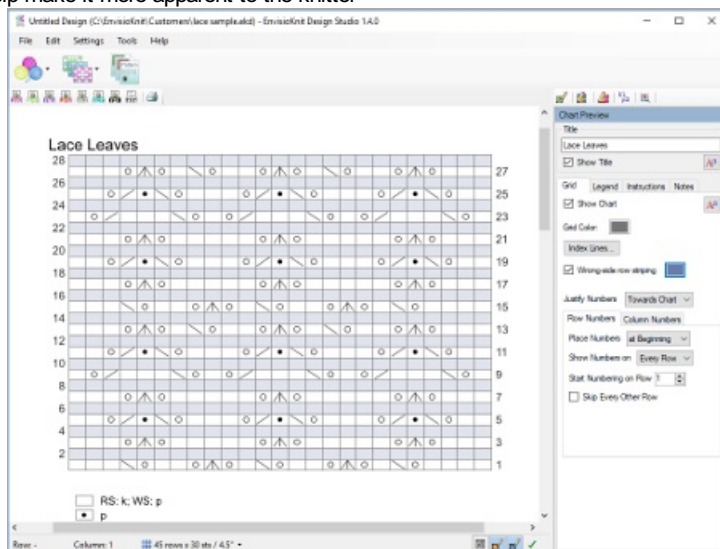
Chart Preview Options

Row Striping

You can check the **Wrong-side row striping** option to enable a shaded overlay on your wrong-side rows. Once checked, you can configure the color and opacity of the overlay. The row striping is a knitting chart convention that can help make it more apparent to the knitter that these rows are to be worked from the wrong-side.



Wrong-side Row Striping



Row Striping Enabled

The rest of the settings in the Grid group are related to the numbering of the chart. From the drop-down next to **Justify Numbers**, you can select whether to justify the number text to the right, to the left, or towards the chart (numbers on the right of the chart will be left-justified, and numbers on the left of the chart will be right-justified).

Numbering Options

The numbering options in the chart preview control the appearance of the row and column numbers around the chart grid. To change the chart numbering scheme (i.e. the starting row and column, etc.) select [Set Chart Numbering in the Grid Settings](#).

Number Justification

Chart numbers can be justified **towards the chart**, always to the **left**, or always to the **right**.

Number Size

The size of the numbers can be set to **large**, **regular**, **small** or **extra small**. The number size is relative to the row height.

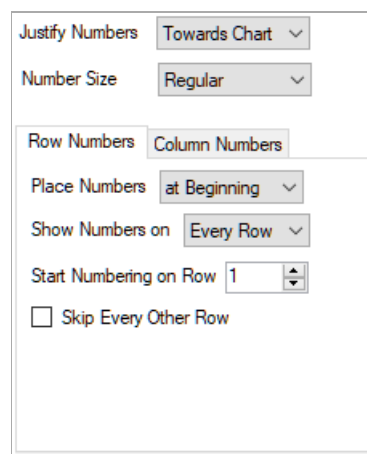
Row Numbering

Under the **Row Numbers** tab, you can choose to place your chart's row numbers at the beginning of the row, on both sides of the row, always on the right, or on the left of the row. When numbers are placed at the beginning of the row, the position is determined by whether the row is a right-side or a wrong-side row. Right-side rows begin on the right side of the chart, so the row number is placed on the right. Wrong-side rows begin on the left side of the chart, so the row number is placed on the left.

From the drop down next to **Show Numbers on** you can select **Every Row**, **Alternate Rows**, or **No Rows**. Selecting every row will show row numbers on every row in the chart. Selecting **Alternate Rows** will show numbers on alternate rows, and if you choose this setting, an additional option will appear where you can set how many rows you want to alternate by.

You can set the chart row that you want to start numbering on by adjusting the number next to "Start numbering on row".

Enabling the **Skip Every Other Row** checkbox will number the chart skipping every other row number (i.e. 1, 3, 5, ...). In this case, the chart instructions will be generated as though those intermediate rows are not charted, and will include a note that they are to be worked in the established pattern. This option is particularly useful for lace or aran designs where the stitch patterning is on alternate rows and the rows between are knit plain.

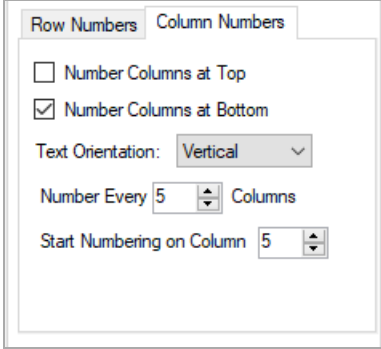


Numbering Options

Column Numbering

Switching to the **Column Numbers** tab, you will find checkboxes for enabling column numbers on the top and bottom of the chart.

The **Text Orientation** option allows you to specify whether the column numbers should be oriented vertically or horizontally. If the column numbers are oriented horizontally, EnvisioKnit may scale them down, if necessary, to fit the width of a chart cell (so that they do not overlap each other).

The dialog box has two tabs: 'Row Numbers' and 'Column Numbers'. The 'Column Numbers' tab is active. It contains the following options: 'Number Columns at Top' (unchecked), 'Number Columns at Bottom' (checked), 'Text Orientation' (set to 'Vertical' in a dropdown), 'Number Every' (set to 5 in a spinner), 'Columns' (set to 5 in a spinner), and 'Start Numbering on Column' (set to 5 in a spinner).

Column Numbering Options

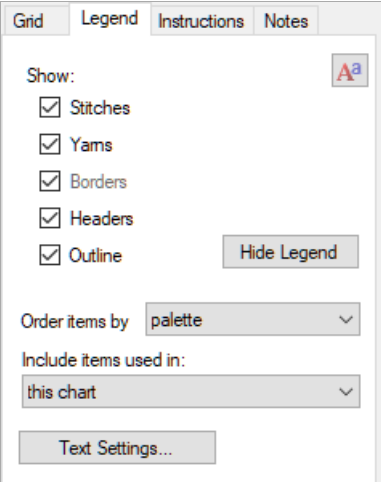
Legend Options

The legend options includes a set of checkboxes with which you can disable or enable parts of the legend. You can choose to include or exclude the list of stitches, yarns and/or borders used in the chart. You can also choose whether those lists should have headers (i.e. **Stitches**, **Yarns**, and **Borders**), and whether the legend should be outlined.

Clicking the Font button on the right will open the [font settings](#) for the chart legends in your pattern. You can set separate font styles for the legend contents and the legend headers.

The **Legend Order** can be set to order items by their:

- order in the **palette**
- **appearance** in the chart (left-to-right only - this is a legacy option, use **worked** order instead)
- **name**, alphabetically
- order in which they are **worked** in the chart

The dialog box has four tabs: 'Grid', 'Legend', 'Instructions', and 'Notes'. The 'Legend' tab is active. It contains a 'Show:' section with checkboxes for 'Stitches', 'Yarns', 'Borders', 'Headers', and 'Outline', all of which are checked. There is a 'Hide Legend' button. Below this is 'Order items by' set to 'palette' in a dropdown. Then 'Include items used in:' set to 'this chart' in a dropdown. At the bottom is a 'Text Settings...' button.

Legend Options

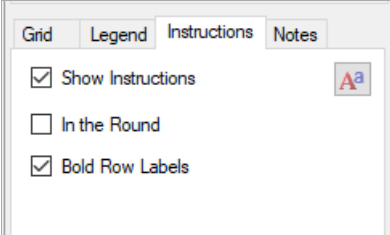
The Legend can **include items used in** just the current **Chart** or all items used in the entire **Pattern**.

The **Text Settings** button will open the [Text Settings](#) for your pattern. Here you can customize the fixed text used for the legend headers and the stitch legend items.

Instruction Options

The instruction options configure the appearance of the written stitch instructions in your chart. If you do not want to show the written stitch pattern instructions with your chart, you can disable the **Show Instructions** option. Checking the **In the Round** option will interpret your chart for circular knitting when generating the instructions for it.

The **Bold Row Labels** setting determines whether the row labels (i.e. "Row 1:") should use a bold font. Using a bold font can help to visually separate the row labels from the instruction text.

The dialog box has four tabs: 'Grid', 'Legend', 'Instructions', and 'Notes'. The 'Instructions' tab is active. It contains checkboxes for 'Show Instructions' (checked), 'In the Round' (unchecked), and 'Bold Row Labels' (checked). There is a font icon button on the right.

Instruction Options

Chart Notes

Designers can include chart notes to appear in the pattern along with an individual chart. Notes should be text that is supplementary to the charts written instructions and too specific to the chart to belong in the Pattern summary. The placement of the chart notes is configurable with the **Place Notes** setting. The placement options are: before the chart title, after the chart title, before the written instructions or after the written instructions.

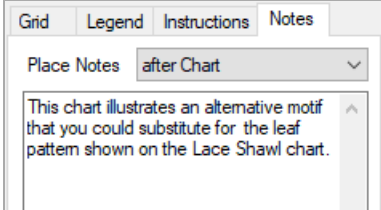
The dialog box has four tabs: 'Grid', 'Legend', 'Instructions', and 'Notes'. The 'Notes' tab is active. It contains a 'Place Notes' dropdown set to 'after Chart'. Below this is a text area containing the text: 'This chart illustrates an alternative motif that you could substitute for the leaf pattern shown on the Lace Shawl chart.'

Chart Notes

Chart Export

You can directly print or export the chart in the Chart Preview by clicking the print or export buttons in the toolbar (above the main window). Printing or exporting from the chart preview outputs the current chart only. To print or export the full pattern, you will need to go to the [Pattern Editor](#).



Chart Preview Toolbar

The available export formats are ZIP, SVG, BMP, PNG, JPG, Microsoft Word (DOCX), Open Office (ODT), PDF and TXT.

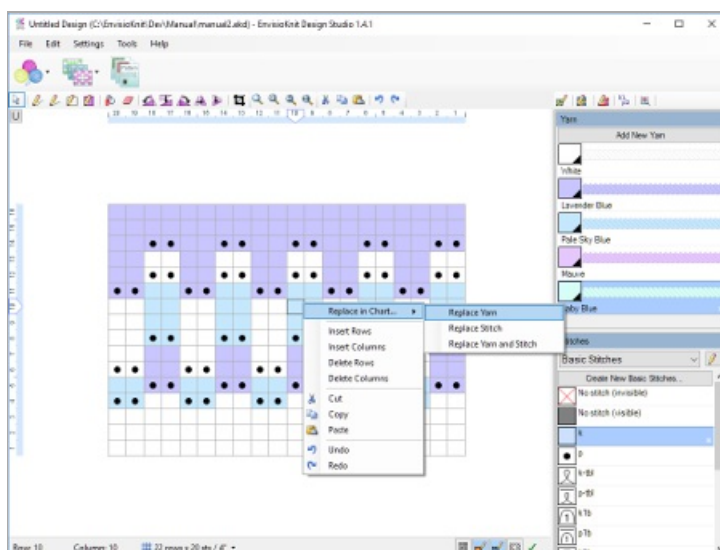
Please see the [Printing and Exporting](#) documentation for more information about the available options.

Other Chart Editor Features

Replacing Stitches and Yarns

Once you've drawn a design on your chart, you may want to exchange one stitch or yarn for another. You can do this instantly with the **Replace** feature. Right-click on your chart, on a cell containing the stitch or yarn that you want to swap. A menu will appear where you can select **Replace in Chart**. Then select one of the following sub-items: **Replace Yarn**, **Replace Stitch** and **Replace Yarn and Stitch**

You will be replacing all instances in the chart of the yarn, stitch, or yarn and stitch (together) of the cell you have right-clicked on. A window will appear allowing you to select the replacement yarn and/or stitch. Make your selection and your chart will be instantly updated with the change. If you make a mistake or change your mind you can revert this command with the Undo button.



Right-Clicking a cell on the Chart Shows the Menu

Replace Yarn

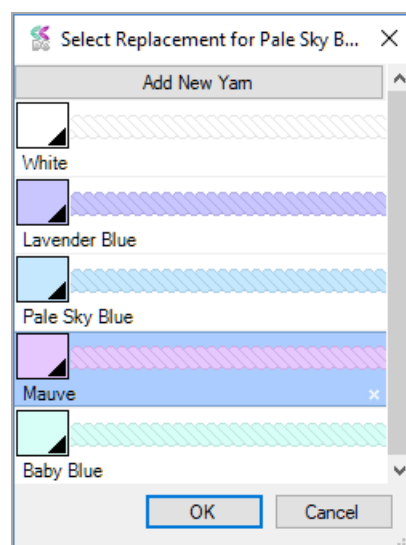
Right-clicking a chart cell and doing the **Replace Yarn** command will replace the yarn of the cell you have clicked, throughout the chart, with another yarn of your choice. The yarn will be replaced in all cells that use it, regardless of their stitch. The replacement is done within the scope of the current chart, so other charts in your design will not be affected.

Replace Stitch

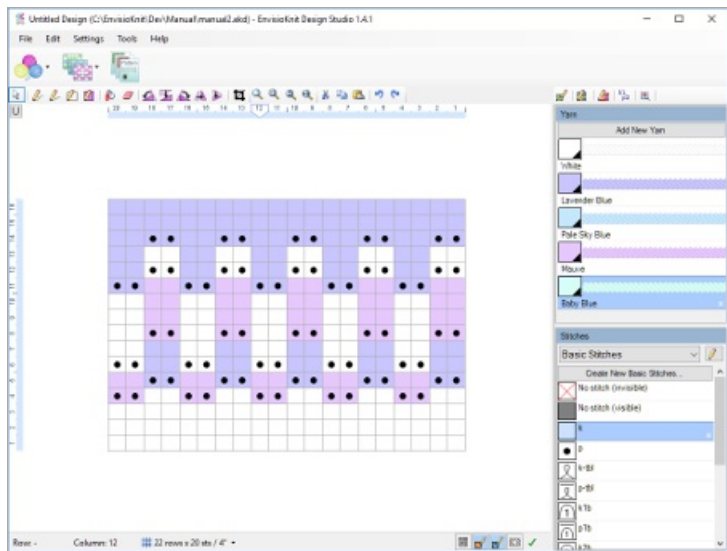
Similar to **Replace Yarn**, the **Replace Stitch** command will swap the stitch of the cell you have right-clicked, throughout the chart, with an alternate. The stitch will be replaced in all instances in the chart, regardless of the yarn it is being used with.

Replace Yarn and Stitch

The **Replace Yarn and Stitch** command will swap the contents of all cells that use **both** the yarn and stitch of the cell you have right-clicked. For example, consider a chart that uses white and black yarns, and knit and purl stitches in both colors. If you do **Replace Yarn and Stitch** on a black knit cell, only other cells that are both black and knit will be replaced.



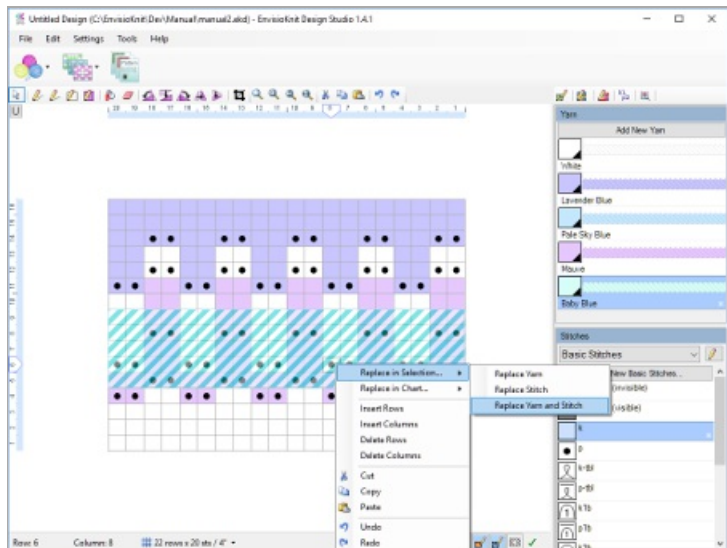
Select a Replacement Yarn



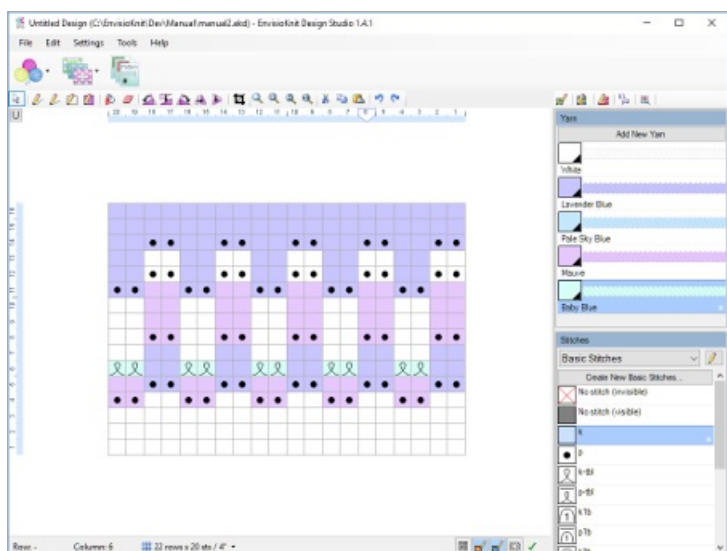
The Result after Replacing Blue Yarn with Mauve

Replace in Selection

You may want to make a replacement, but only within a certain part of your chart. You can do this by first selecting the part of the chart that you want to replace (with the Select tool). Then, in the selected area, right-click on a cell containing the yarn and/or stitch you want to replace. A menu will appear containing a **Replace in Selection** option, with the same sub-options as **Replace in Chart**. **Replace in Selection** works identically, but only applies the replacement within the selected area.



Replacing in Selection: Replace Yarn and Stitch for White Purl



The Result after Replacing White Purl with Baby Blue K-tbl in Selection

Create New Chart from Selection

You can create a new chart from a portion of an existing chart. Select the part of the chart that you want, and right-click on it.

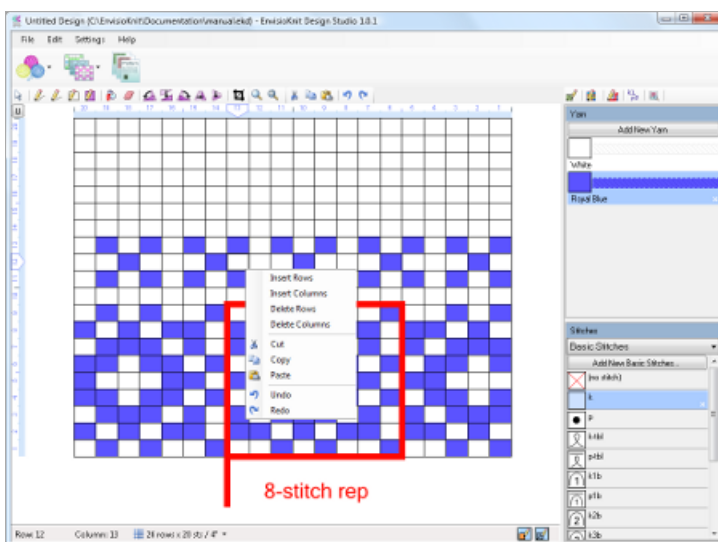
Select Create New Chart From Selection from the menu that appears. A window will appear where you can set the name of the new chart, as well as which row and column the chart starts on.

By default, the First Row and Column will reflect the location of your selection in the original chart. If your selection included setup rows, those will be included by default in the new chart as well. If the first row of your chart is a right-side row, the checkbox indicating this will be set. All of these settings can be adjusted. The Open in Chart Editor checkbox can be set if you would like to immediately open this new chart for editing when you click OK.

Inserting and Deleting Rows and Columns

It's possible to remove or insert rows and columns anywhere on your chart. To do this, just right-click on the chart where you want to make the change. A menu will appear so that you can select what you want to do.

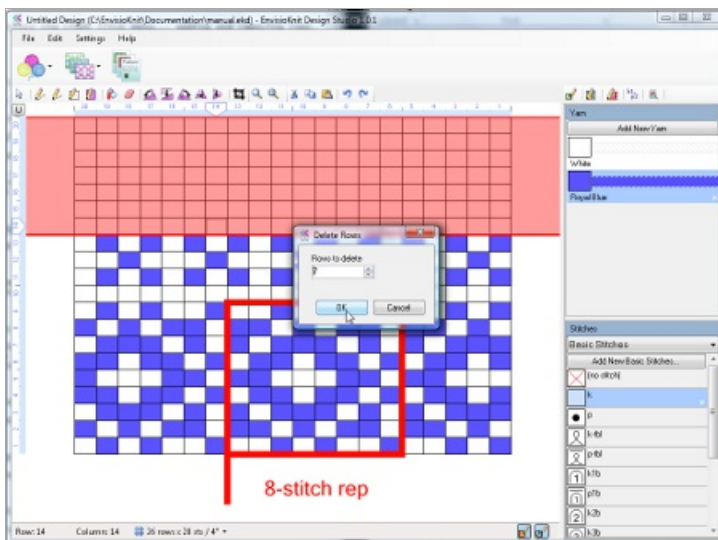
In the example shown on the right, we are choosing to delete rows.



Right-Clicking on the Chart Shows the Menu

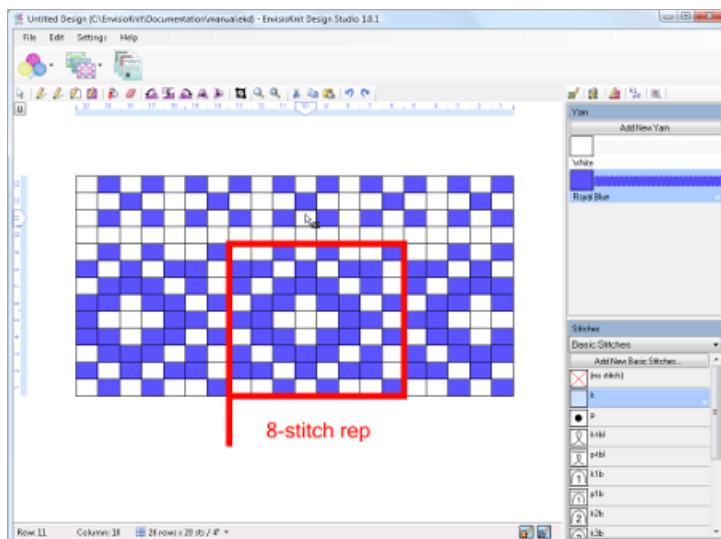
Select the number of rows or columns to insert or delete. When inserting, the yarn and stitch motif of the inserted stitches can be selected.

In our example, we are deleting 7 rows. The rows that will be deleted are shown highlighted in red.



Select Number of Rows to Delete

Click OK and the insertion or deletion is executed.



The Rows are Removed from the Chart

Rulers

The chart rulers are always visible whenever the chart is in an editable mode (every mode except Preview). By default, the rulers track your cursor position on the chart by row and column.

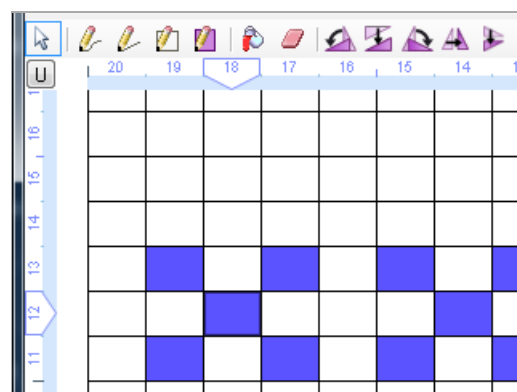


Chart Rulers Tracking Rows and Columns

Clicking the small button in the upper left corner switches the rulers to track the cursor by units instead (inches or centimeters, depending on your settings). This helps give you a sense of where you are on the chart in terms of dimensions. Click the ruler button again to switch back to rows and columns.

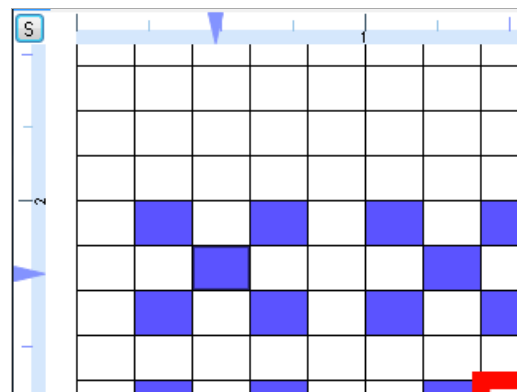
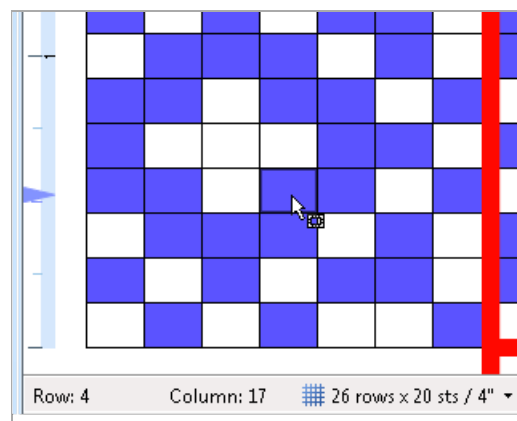


Chart Rulers Tracking Units

Cursor Coordinates

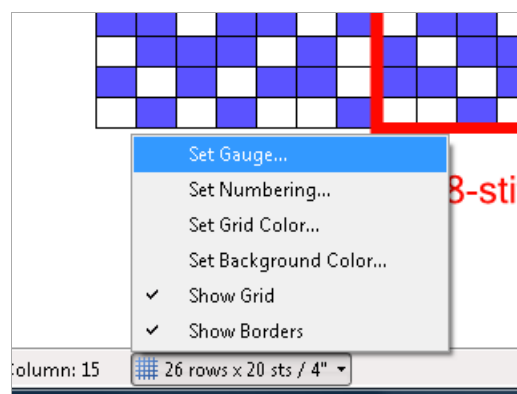
You can always tell which row and column your cursor is on by looking at the cursor coordinates below chart, on the left.



Cursor Position

Grid Settings

Clicking the grid settings button, in the lower left below the chart, opens a menu with several options related to the chart grid. These settings include the **gauge**, **numbering**, **grid color** and **background color** (the no-stitch color), as well as the options to **show the grid** and **show borders**.



Grid Settings Menu

Chart Gauge

Choosing the **Set Gauge...** item will allow you to adjust the gauge of the current chart. You can set the number of **Rows** and **Stitches** over a **Span** of inches or centimeters.

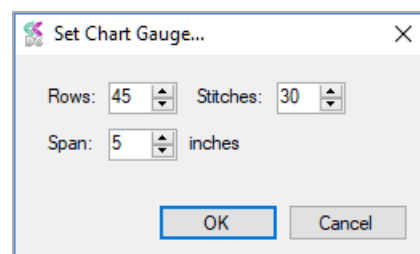


Chart Gauge Settings

Chart Numbering

Selecting **Set Numbering...** from the Grid Settings will open the chart numbering options. Here, you can set the **First Row** and **First Column** numbers for the chart. These can be any number 1 or greater.

Enabling the **Skip every other row** option will indicate that your chart only shows odd or even rows (depending on your **First Row** setting). For example, if the first row is 1, then the next row will be 3, then 5 and so on. This setting is useful if you are designing a chart that has patterning only on right side rows. Uncharted wrong-side rows are assumed to be worked in the established pattern.

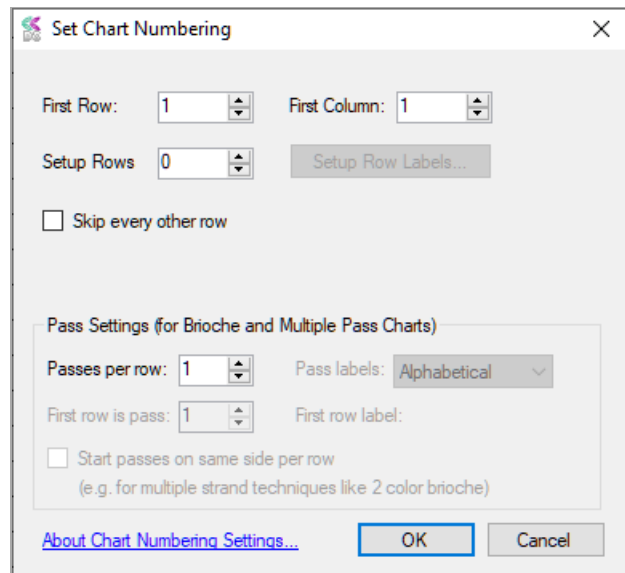
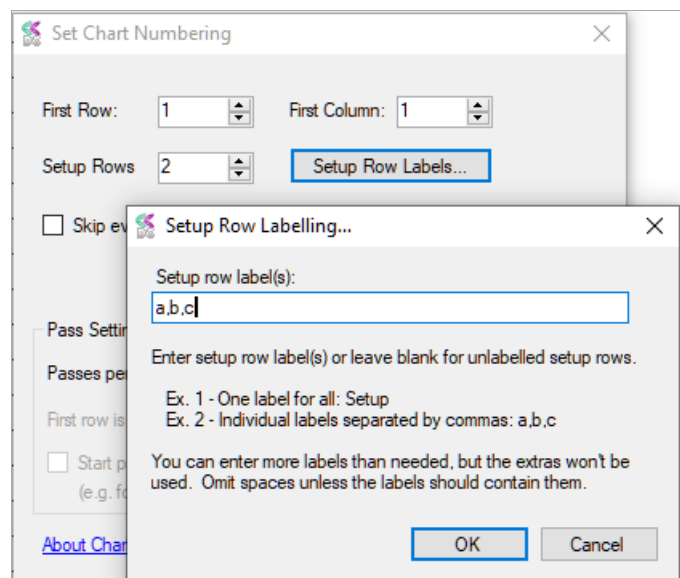


Chart Numbering Options

Setup Rows

It is possible to have unnumbered setup rows before the numbered chart rows begin. You can add them by specifying the number you want in the **Setup Rows** setting. After the setup rows, the chart will begin numbering with the number you have specified for the first row. If your chart has setup rows, the first row of the chart is considered to be the first row after your setup rows.

Setup rows are unnumbered by default. You can apply custom labels to setup rows by clicking the **Setup Row Labels...** button and entering the label(s) that you want. Setup rows can be blank, uniformly labeled, or individually labeled. For example, if you have 2 setup rows, you can specify "Setup" for the label and it will apply to both setup rows. For individually labeled setup rows, specify the labels for each row, separated by commas (e.g. "Setup Row 1, Setup Row 2"). Each setup row will be labeled correspondingly.



Labeling Setup Rows

Pass Settings for Brioché and Other Multiple Pass Charts

Some knitting techniques (such as Brioché and other slipped stitch patterns) require 2 or more passes to be worked for each row. This can affect how the chart is numbered and worked. The **Chart Numbering** settings include options for such charts. In addition to specifying the number of **Passes per row**, you can specify **Pass Labels** (in addition to the row numbers) and which of those passes your chart begins with.

Pass labels can be set to alphabetic, none or custom. The **Alphabetical** setting will append a letter to each row number indicating the pass (i.e. for 2 pass rows: 1a, 1b, 2a, 2b, etc.). Setting pass labels to **None** will number the rows numerically, without pass labels (i.e. 1, 2, 3, 4, etc.). With **Custom** pass labels, you can enter a comma-separated sequence of pass labels to use. For 2 pass rows, you could

specify custom pass labels " LC, DC" and the result would be rows labeled 1 LC, 1 DC, 2 LC, 2 DC, etc.

If you have more than one pass per row, but your first row (not counting setup rows) does not start on the first pass, you can set the **First row is pass** setting to the starting pass. For example, if you have 2 passes per row, a and b, and you want your chart to start with 1b instead of 1a, then **first row is pass** should be set to 2.

If you are working with separate strands of yarn for each pass (such as for 2 color Brioche) you may want each pass to start on the same side of the chart per row. With flat knitting, this means that if the first pass is a right-side pass, subsequent passes will also be right-side. The passes for the following row will then be wrong-side. Check **Start passes on same side per row** to enable this. If this setting is not enabled, each pass will start at the end of the previous pass. The generated stitch instructions and position of the row numbers at the starting side of the row will reflect this setting.

Set Chart Numbering

First Row: 1 First Column: 1

Setup Passes: 0 Setup Row Labels...

☐ Skip every other row

Pass Settings (for Brioche and Multiple Pass Charts)

Passes per row: 2 Pass labels: Alphabetical

First row is pass: 1 First row label: 1a

☐ Start passes on same side per row
(e.g. for multiple strand techniques like 2 color brioche)

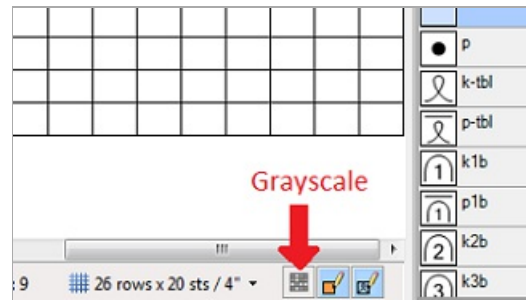
[About Chart Numbering Settings...](#) OK Cancel

Rows with Multiple Passes

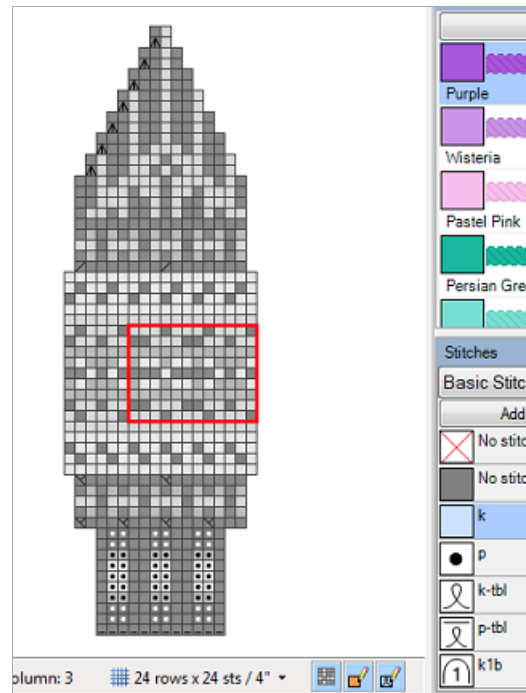
Viewing the Chart in Grayscale

For colorwork designs it can be helpful to view the pattern in grayscale to see how the color values are balanced. EnvisioKnit has a grayscale viewing option that you can enable to view your chart in grayscale.

The grayscale button is located at the bottom right of the chart editing panel. Click it to view the chart in grayscale, and click again to view the chart normally. Please note that grayscale is only a viewing tool, your chart output will still be in full color even if grayscale is enabled. Also, the chart preview will be in color even with grayscale enabled.



The Grayscale button



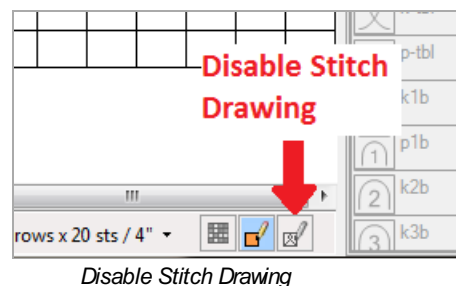
Viewing a Chart with Grayscale Enabled

Yarn and Stitch Masking

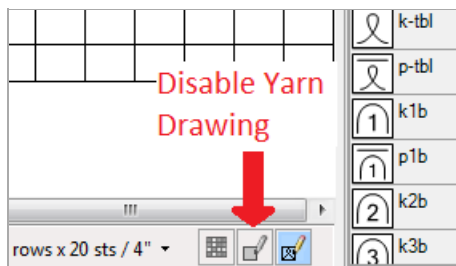
It is often useful to draw only yarns or only stitches. To do this, EnvisioKnit allows you to disable either yarn drawing or stitch drawing. The buttons for disabling stitch drawing and yarn drawing are located in the bottom right of the chart editing panel.

Disabling stitch drawing is helpful when you are drawing color patterns and don't want to draw over the established edge of the chart.

Similarly, adding texture or shaping to a color-patterned area can be easier if you disable yarn drawing.



Disable Stitch Drawing



Disable Yarn Drawing

Chart Masking

When enabled, the chart mask will preserve masked areas from being drawn or pasted over. For example, if you would like to draw over your chart without affecting wrong-side or right-side rows, or without drawing over an established no-stitch edge, you can do so with the Chart Mask. Which areas should be masked can be specified by clicking the **Mask** button and adjusting the **Chart Mask Settings**.

The Mask button is located at the bottom right of the chart editing panel. If the mask is enabled, the button will appear highlighted.

The Mask Settings include: mask every-other row (with the sub-option to start on the first row), mask the background (invisible no-stitch), mask the visible no-stitch, and an option to show the mask in the Chart Editor as an overlay covering masked regions.

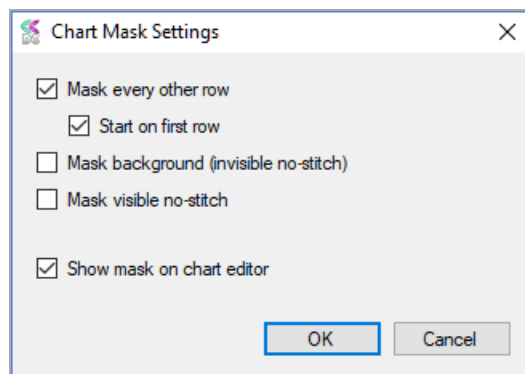


Chart Mask Settings



*Chart Mask Button
(outlined in red)*

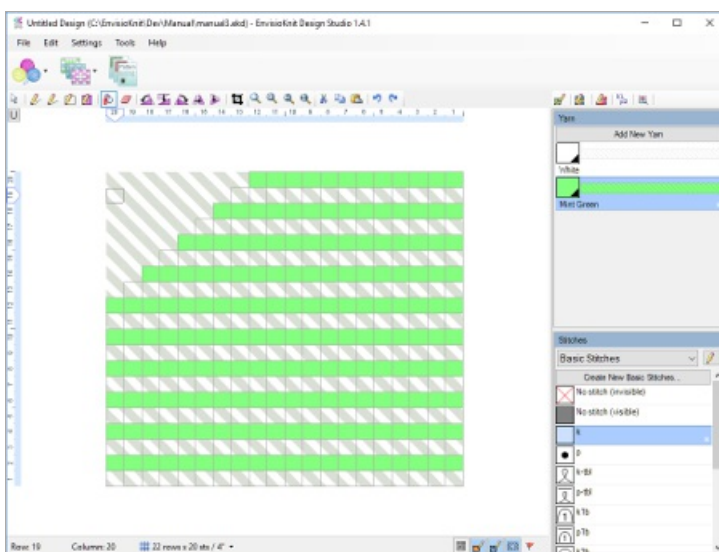


Chart Mask Shown and Enabled on Every Other Row and Background

The Chart Checker

The **Chart Checker** is a tool for finding errors in your chart that would make it unknittable. In general, the number of stitches worked on a row should be equal to the number of stitches made on the previous row. If that is not the case, a chart error is flagged. The chart checker errors are only informational, but they can be helpful when proof reading your chart.

The **Chart Checker status icon** is shown in the lower right corner of the Chart Editor. When no chart errors are found, the indicator shows a green check icon. If there are errors, a red flag is shown. The chart checker status is refreshed automatically whenever you change the chart.

Clicking the Chart Checker icon will open the Chart Checker window. If there are errors in the chart, it will present a list of them. Each error specifies the row it occurs on and the reason why it was flagged. Selecting an error in the list will highlight its row in the chart editor window.

In the example shown here, there are two rows with errors found. As indicated in the **Chart Checker** window, **Row 11** is lacking an increase and is highlighted in red on the chart. Inspecting the row, it appears that a yarn-over is missing from the pattern. **Row 15** is also listed as lacking a decrease, which could be fixed with a double-decrease to replace the k2tog in the middle of the row.



No errors found



Chart contains errors

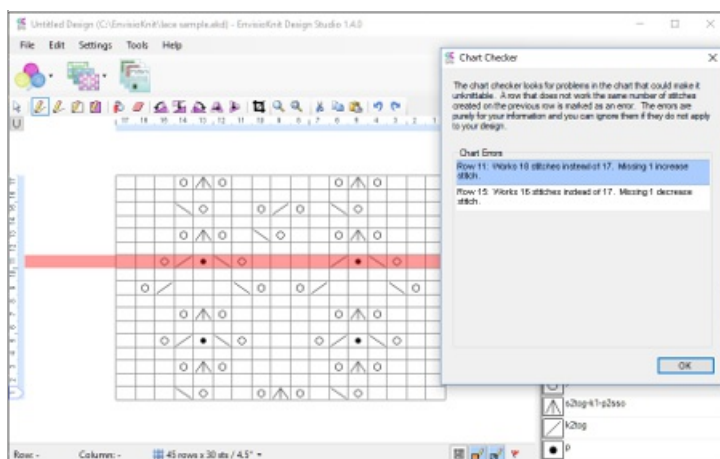


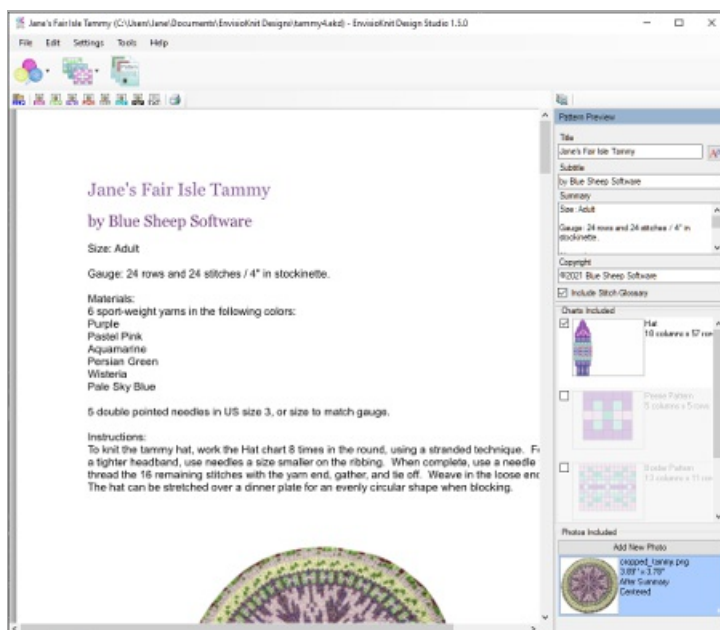
Chart Errors Indicated on Chart

Pattern Editor

Clicking the Pattern button in the navigation bar will open the pattern editor. Like the chart editor, the pattern editor has a large pane on the left for displaying the pattern and a narrow pane on the right for settings. The pattern editor only has one mode, which is the Pattern Preview mode.

Here, you can see a preview of what your final pattern output will look like. You can also give your pattern a **Title** and **Subtitle**, include a pattern **Summary** and set the **Copyright** footer text.

A Stitch Glossary containing instructions for all the stitches used in all your charts is automatically compiled and appended at the end of your pattern. You can omit the Glossary by unchecking **Include Stitch Glossary**.

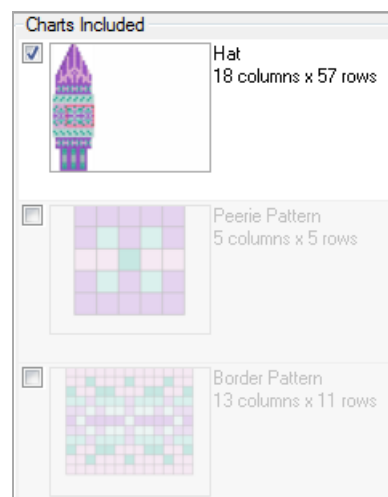


Pattern Editor

Including Charts in the Pattern

All the charts in your design will be listed under **Charts Included**. You can decide which of those charts should be included in your pattern by checking or unchecking them. Each time you add a new chart to your design it is included in your pattern by default.

If you would like to change the order in which the charts appear in your pattern, you can reorder the charts in the list by dragging and dropping them into the order you want. Your pattern will be automatically updated to reflect the chart ordering in the list.



List of Charts Included in Pattern

Including Photos in the Pattern

Under **Photos Included** you can click the **Add New Photo** button to include photos or other image files in your pattern. Photos can be PNG, JPG or BMP files.

After you have selected a photo to include the **Photo Size and Placement** window will appear. This window contains options for configuring the size and placement of the photo within your pattern.

The maximum size of the photo is constrained by the page size. By default, EnvisioKnit will find the best fit for the photo you provide, scaling it down to fit the page if necessary. You can reduce the photo size further by setting a custom **Width** or **Height**. The aspect ratio of the original photo will be preserved as you change the size, so changing the width or height will correspondingly adjust the height or width. Clicking the **Set to Default** button will set the image size to the best fit.

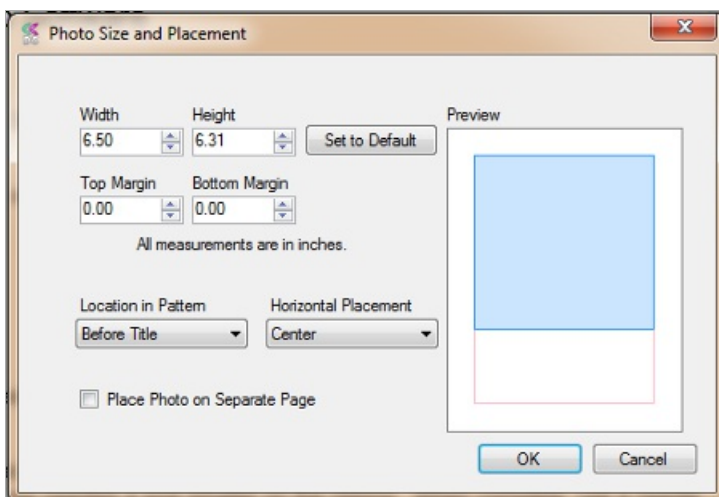
The **Top Margin** and **Bottom Margin** settings are used to set the upper and lower spacing between your photo and other pattern content. The preview box will show the image margin in gray, along with your image in blue, sized relative to the page. The page margin is shown as a red line.

The image can be placed at various places in the pattern. The options for placement are: **Before Title**, **After Title**, **After Designer**, **After Summary**, **After Charts**, or **After Stitch Glossary**. Multiple images can be placed at the same location, and they will be ordered according to the **Photos Included** listing, which can be sorted. Please note that sorting will only affect ordering with regards to images at the same pattern location.

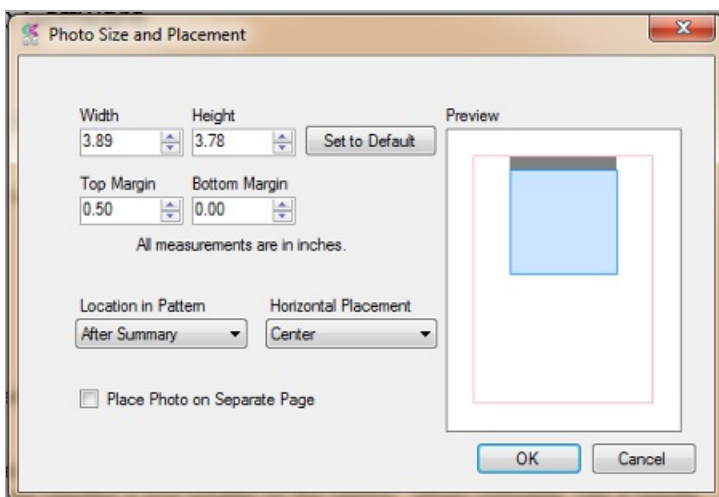
The **Horizontal Image Placement** options are Centered (default), Left or Right. This determines the justification of the image horizontally across the page.

Finally, you can set the **Place Photo on Separate Page** option to put the image on its own page in the pattern.

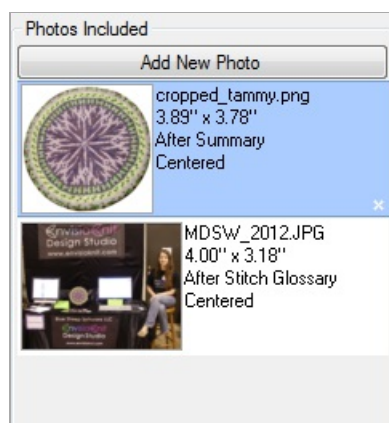
Each photo added to the pattern will be listed under **Photos Included**. A thumbnail along with the name of the photo and its size and placement in the pattern will be shown. To change the settings of a photo double-click on it in the photos list. To remove a photo, select it and then click the red circle X that appears in the lower right corner.



Configure the Photo Size and Placement



Sizing the Image, Setting Top Margin and Placing After Summary



Exporting or Printing the Pattern

The Pattern Editor can export the full pattern as an SVG, PNG, JPG, BMP, Microsoft Word, or Open Office document, with paging and resolution adjustments available for the image formats. To export, click the button corresponding to your desired format in the Pattern Editor Toolbar. You can find detailed information about exporting, printing and the different export formats in the [Printing and Exporting](#) section of this manual.



Pattern Editor Toolbar

Printing and Exporting

When you are finished designing your chart or pattern in EnvisioKnit you may want it in a format you can knit from, edit and tweak, or distribute to others. EnvisioKnit provides several options for exporting charts and patterns and it is also possible to print a hardcopy directly from the program.

Export Formats

Both the Pattern Editor and the Chart Preview provide options for exporting. The Pattern Editor will export the full pattern document with the title, summary, all your charts, stitch glossary and any photos you have added to the pattern. The Chart Preview will export just the individual chart that is being previewed. Both tools have an identical export tool strip and show a preview of the document that will be exported. To export the document, simply press the tool strip button for the format you want. The last button in the export tool strip is for printing the document directly from EnvisioKnit.

The export formats supported by EnvisioKnit are:



The Export Toolbar

ZIP (Compressed Export File Archive)



A Zip export file contains a collection of export documents in multiple formats:

- PDF, Word (.docx) and Open Office (.odt) documents.
- PNG and SVG image files for both the full document and parts of the charts and legends. The chart and legend parts can be useful if you are reformatting your pattern in a word processor or other program.
- Text content of the chart or pattern.
- A snapshot of the EnvisioKnit Design file at the time of the export

SVG (Vector Image)



SVG (Scalable Vector Graphics) is a vector image format. This means that you can zoom in infinitely without the image becoming jagged or pixelated. SVG supports both editable text and images. SVG is a fairly new format, but is quickly being adopted as an image standard in image editing software. We recommend using Inkscape (free) or Adobe Illustrator to view and edit this format.

PNG (Raster Image)



PNG (Portable Network Graphics) is a compressed, but lossless pixel-based image format. This means that PNG images can have a reduced file size without a reduction in quality. Compared to BMP, PNG is a relatively new format, and though it is now standard in most modern programs, older ones may not support it. PNG images can also support transparency.

BMP (Raster Image)



BMP (Bitmap) is an uncompressed pixel-based (or "raster") image format. It's one of the older image formats, so most older image processing programs will support it. However, because it is not compressed, the image files can be quite large (in terms of bytes).

JPEG (Raster Image)



JPEG is a compressed and lossy pixel-based image format. This means that JPEG images have a reduced file size, but achieves this at the cost of reduced quality. JPEG is an older format, and widely supported, but is not optimal for images containing text and symbols, where PNG can usually produce better results in terms of both quality and file size. For quality reasons, we generally don't recommend using the JPEG format for charts, but the option is available if it is needed.

DOCX (Word Document)



DOCX is the Microsoft Word document format. It is supported by Word 2010 and later. This format supports both editable text and images.

ODT (Open Office Document)



ODT is the Open Office document format, which is an open source word processing application. This format can contain both editable text and images. EnvisioKnit uses the SVG (vector graphics) format for charts and legends in Open Office. If you plan to edit the pattern after exporting, we recommend using the Open Office format. Open Office supports exporting your edited document to PDF.

PDF (Adobe Document)



PDF is a widely used document format and one of the most popular formats for distributing patterns online. EnvisioKnit takes advantage of the PDF vector graphics capabilities to generate infinitely scalable pattern documents. Several PDF viewers are freely available, the most popular being Adobe Reader. PDF files can be edited by Adobe Illustrator, and other editors exist as well, but may have limited capabilities.

PDF Password Protection

EnvisioKnit has the capability to add password protection to your PDF files. When you export a chart or pattern as a PDF, EnvisioKnit will ask if you would like to password protect it. Additionally, you can password protect a PDF that has already been created by clicking **Tools>Password Protect PDF** in the main menu. The PDF file is not required to have been created with EnvisioKnit.

A PDF can have one or two passwords. The first password is the "User" password, which allows access to the PDF with the security limitations that you choose. The second password is the "Owner" password, which allows full access to the PDF file with all permissions and no limitations. The owner password is optional and if you do not set it then owner access will be disabled.

The security options for user access are to allow:

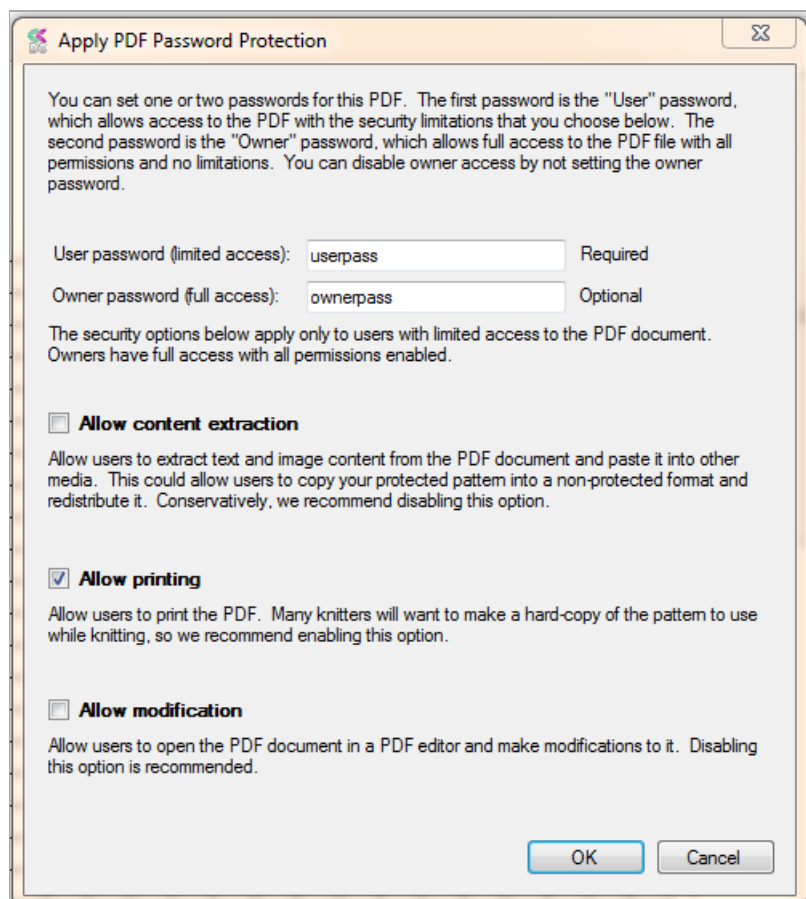
Content extraction which lets users copy text and images from your PDF and paste them into other documents.

Printing to hard-copy.

Modification or editing in a PDF editor.

As an example, you might choose to give test knitters an owner password so that they can edit and copy and paste content from your pattern PDF as they provide feedback during testing. At the same time, you could have a different user password for regular customers who purchase your pattern, with which editing and copying capabilities are disabled.

TXT (Text Document)





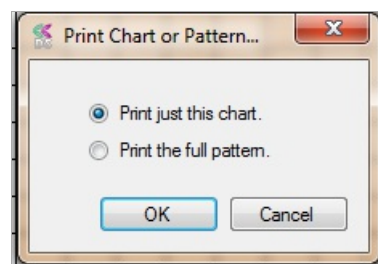
TXT is a plain text document format. Text documents contain only the text content of the exported patterns or charts (i.e. Title, author, summary, notes, written instructions and stitch glossary) and do not include images or the charts themselves. If you choose to do your final editing in a program that does not support any of the other document formats, you can use the text export option to extract the text of your pattern from EnvisioKnit so that you can paste or import it into the other program.

Printing

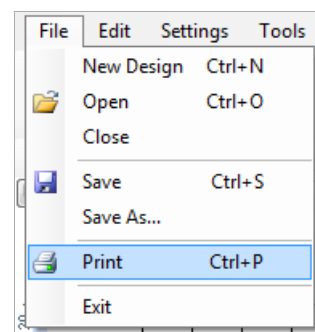


The last button in the export toolbar is the Print button. Pressing the print button will allow you to print the document shown in the preview directly from EnvisioKnit. This is a handy option if you need to make a quick hardcopy of your pattern.

Another way to get a quick printout is to go to **File->Print** in the main menu. You can also print by pressing **CTRL+P** at any time. If you do this with the chart editor open, EnvisioKnit will ask you if you would like to print just the current chart or the full pattern.



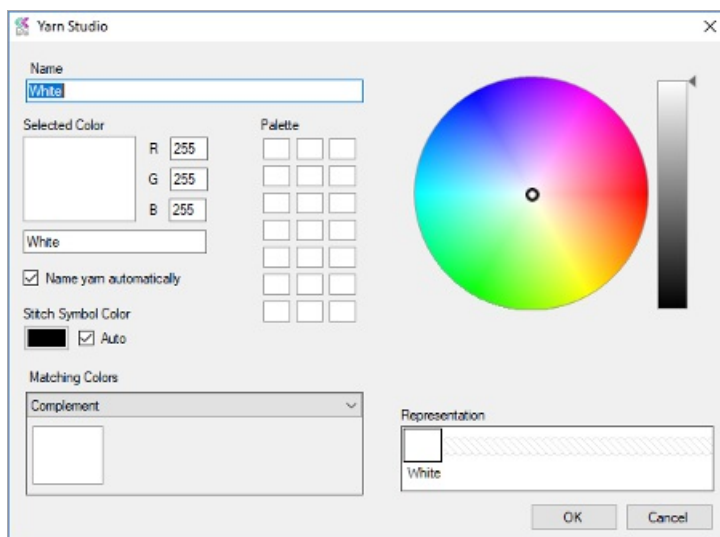
Print Chart or Pattern



Print from the Main Menu

Yarn Studio

The Yarn Studio is a pop-up window that will appear whenever you double click a yarn or select it from the Yarn navigation drop-down. It will let you name your yarn and provides several ways for selecting the color.

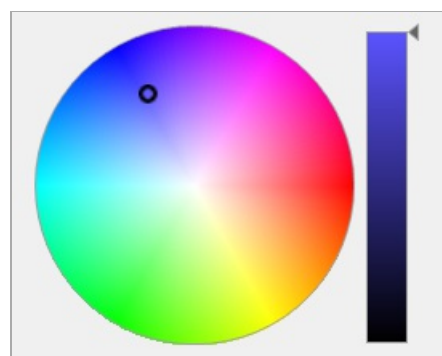


Yarn Studio

Selecting Colors

The Color Wheel and Shade Slider

The color wheel shows all the color hues and tints. You can select a color simply by clicking on it. Move towards the center of the wheel to get a lighter tint of your color. Drag the shade slider down for a darker shade.

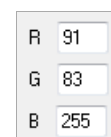


Color Wheel

Entering a Color Name

If you know what color you want but are having trouble getting it with the color wheel, you can just type the name of the color into the color name box. For instance, you can enter Alizarin, Amaranth, Cinnabar, Crimson, Scarlet, or just Red. EnvisioKnit has a very large color vocabulary. The color name box is located directly under the selected color.

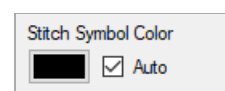
Those who have done web design or graphical editing are probably familiar with RGB values, which are numbers representing the amount of red, green and blue in a color on a scale of 0 to 255. The RGB selector allows you to specify a precise color by setting these numbers. If the last two sentences didn't make much sense to you, don't worry, it's just another way to pick a color - you can skip it.



Edit RGB Values

Stitch Symbol Color

The color of the stitch symbol used with a yarn is configurable. By default, the setting is automatic so that the symbols are either black or white, to best contrast with the lightness or darkness of the yarn color.



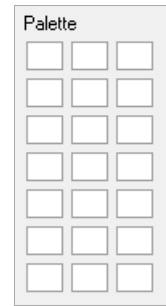
Stitch Symbol Color

To set a custom symbol color, click the color button next to the **Auto** checkbox. A color selection window will appear. Choose the symbol color you want, and click OK. The **Auto** setting will automatically be unchecked. If you change your mind, you can check it again and let the software choose the symbol color.

Matching Colors

If you're designing with a lot of colors, the color palette can be useful for picking them out and putting them together. Select the palette box and then select a color. The palette box will take and keep the selected color for use later. You can drag and drop a color into a palette box from the selected color, from the colors in the selected color scheme, or from other palette boxes.

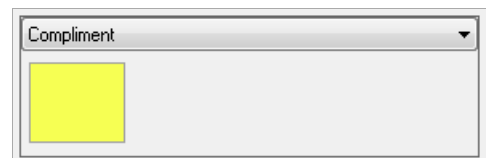
The matching colors tool will suggest other colors that match your selected color, according to different color schemes. The available color schemes are compliment, split-compliment, triad, tetrad, pentad, double compliment, analogous, tints, and shades. You can also drag any of these colors into the palette to save for later.



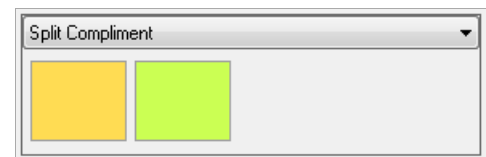
Color Palette



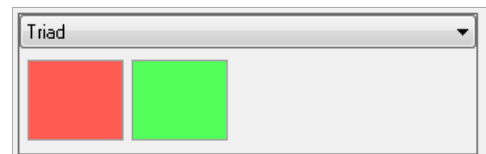
*Selected Color
(Royal Blue)*



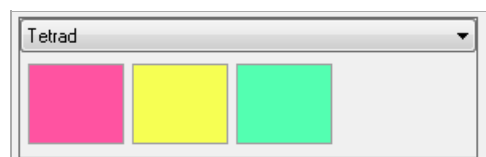
Compliment of Royal Blue



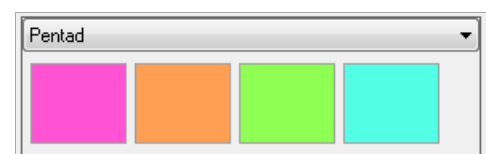
Split-Compliment



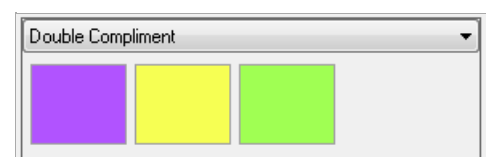
Triad



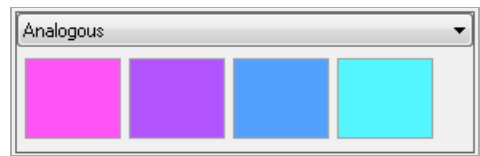
Tetrad



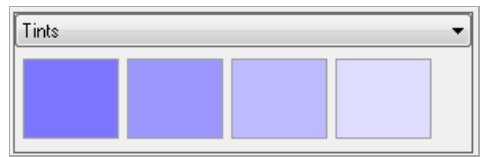
Pentad



Double Compliment



Analogous



Tints



Shades

Stitches

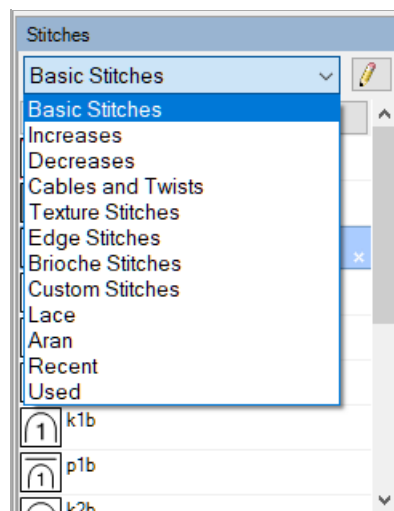
Stitch Palettes

EnvisioKnit stitches are organized by type into stitch palettes. The built-in stitch palettes are [Basic Stitches](#), [Increases](#), [Decreases](#), [Cables and Twists](#), [Texture Stitches](#), [Edge Stitches](#), [Brioche Stitches](#) and [Custom Stitches](#). There are also two automatically generated palettes: **Recent** and **Used**. In addition to these, designers may create their own "designer" palettes to organize sets of stitches according to their preferences. The **Aran** and **Lace** palettes are [designer palettes](#) that include a variety of stitches specific to those types of knitting charts.

The current stitch palette can be chosen by selecting the name of the palette from the drop-down list at the top of the stitch selector. The stitches contained in the current palette are listed below. The current stitch can be selected by clicking on it in the list. It will be highlighted to indicate that it is selected.

All stitches are fully customizable. The abbreviation, instructions and symbol for any stitch can be modified. To edit a stitch, double-click on it in the stitch palette. The [Stitch Properties](#) window will appear to allow you to make these changes.

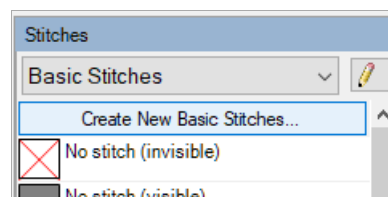
A stitch can be removed from a palette by selecting it and then clicking the 'X' icon that appear in its bottom-right corner. Any stitch in the list can be reordered by clicking on and dragging it to the desired position.



Selecting a Stitch Palette

Built-In Stitch Palettes

The built-in stitch palettes contain a set of the most commonly used stitches by default. However, you can add additional ones or create your own fully custom stitches. Each of the built-in palettes has a "Create New..." button at the top of the palette. Clicking it will open a tool to add stitches to the palette. The tool is different for each palette and specific to the type of stitch.



Create New Stitch button

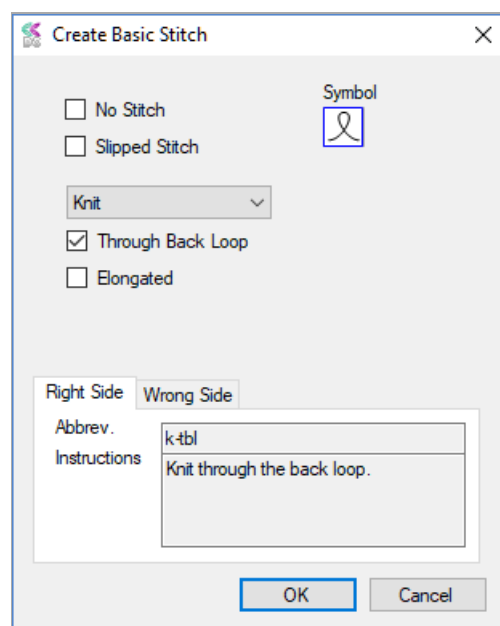
Basic Stitches

The basic stitches include knit, purl, no-stitch, slip one, knit through the back loop, knit one below, and many others. In general, they are single stitches that do not involve increases or decreases.

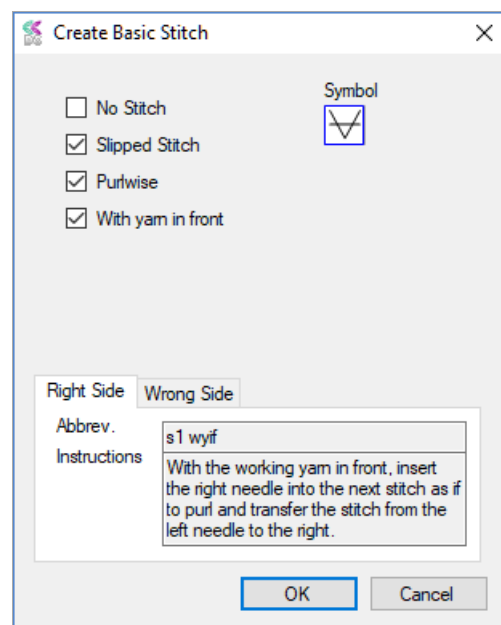
The **Create Basic Stitch** tool has several options. You can create a No-stitch, a knit stitch, purl stitch, slip stitch, a stitch that is worked through the back loop, a stitch that is elongated by wrapping the needle additional times, and many combinations of these.

You may discover particular selections will change your options appropriately. For example, if you check **Slipped Stitch** new options will appear for slipping the stitch **purlwise** or **with the yarn in front**.

A stitch symbol, abbreviations and instructions for the stitch are automatically generated. If you wish, you can customize them later after clicking **OK** and adding the stitch to your palette.



Making new basic stitches

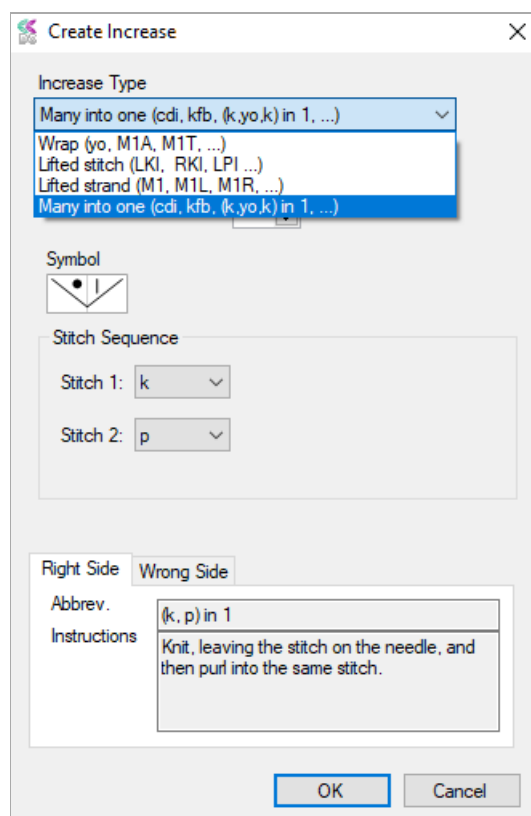


Slipped stitch selected

Increases

The increase stitch palette contains yarn over, make one, lifted increases, knit front and back, various permutations of those and more. More specific stitch options become available depending on which general type of increase you select.

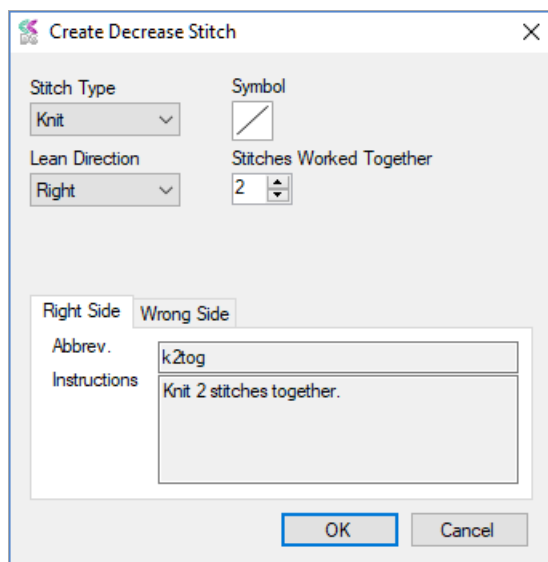
Wraps are increases such as yarn-overs in which the working yarn is wrapped around the needle to create additional loops. **Lifted stitches** are increases made by lifting a stitch from the previous row and working into it. **Lifted strand** increases involve lifting and working into the strand running from the last stitch to the next stitch. **Many into one** increases are stitches that work several stitches into the next stitch by alternating the stitch type (front/back, knit/purl, knit/yo/knit, and so on).



Increase stitch options

Decreases

Stitches which create one stitch from many are found in the Decreases palette. The decrease stitch options allow you to set the **Stitch Type** (knit or purl), the **Lean Direction** (right, left or centered) and the **number of stitches worked together**.



The 'Create Decrease Stitch' dialog box contains the following fields and options:

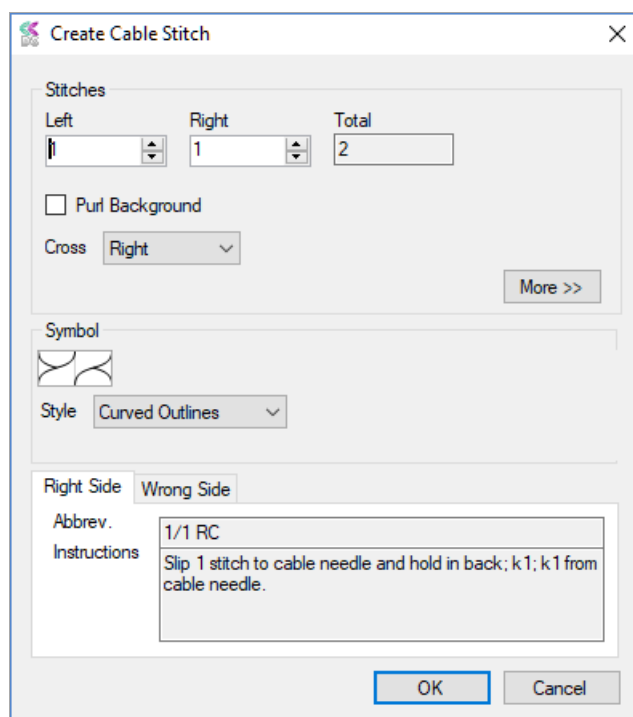
- Stitch Type:** A dropdown menu set to 'Knit'.
- Symbol:** A text box containing a diagonal line symbol.
- Lean Direction:** A dropdown menu set to 'Right'.
- Stitches Worked Together:** A numeric spinner box set to '2'.
- Right Side / Wrong Side:** Two tabs, with 'Right Side' selected.
- Abbrev.:** A text box containing 'k2tog'.
- Instructions:** A text box containing 'Knit 2 stitches together.'
- Buttons:** 'OK' and 'Cancel' buttons at the bottom right.

Decrease stitch options

Cables and Twists

Cables and Twists are stitches involving multiple loops that cross one another in various ways. This palette is populated with several of the simpler and more common stitches of this type.

New cable stitches can be made by selecting the number of stitches on the **Left** and **Right** sides, the direction of the **cross** and whether the stitches crossing in back should be purled. Clicking the **More >>** button will give the additional option of specifying middle stitches. The cable symbol **style** can be specified, and the options are curved outlines, straight outlines, and crossing lines.



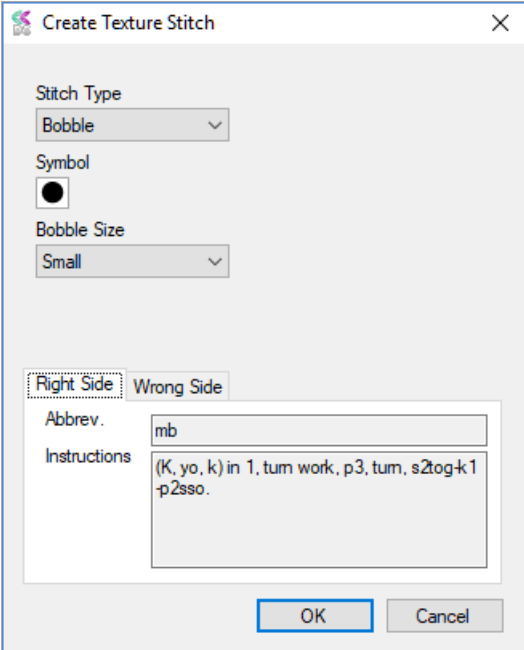
The 'Create Cable Stitch' dialog box contains the following fields and options:

- Stitches:** A section with three numeric spinner boxes: 'Left' (set to 1), 'Right' (set to 1), and 'Total' (set to 2).
- Purl Background:** An unchecked checkbox.
- Cross:** A dropdown menu set to 'Right'.
- More >>:** A button to the right of the 'Cross' dropdown.
- Symbol:** A text box containing a cable symbol.
- Style:** A dropdown menu set to 'Curved Outlines'.
- Right Side / Wrong Side:** Two tabs, with 'Right Side' selected.
- Abbrev.:** A text box containing '1/1 RC'.
- Instructions:** A text box containing 'Slip 1 stitch to cable needle and hold in back; k1; k1 from cable needle.'
- Buttons:** 'OK' and 'Cancel' buttons at the bottom right.

Cable stitch options

Texture Stitches

Texture stitches are stitches that pop out from the knitted fabric. The **Stitch Types** include bobbles, nupps and cluster stitches. Detailed options specific to each type will appear when you select the stitch type.

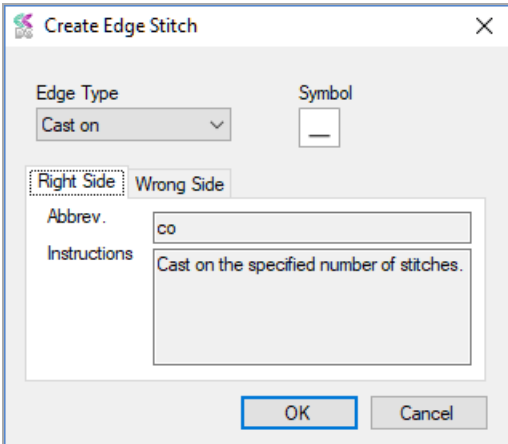


The 'Create Texture Stitch' dialog box is shown. It has a title bar with a close button. Inside, there are three dropdown menus: 'Stitch Type' set to 'Bobble', 'Symbol' showing a black circle, and 'Bobble Size' set to 'Small'. Below these are two tabs: 'Right Side' (selected) and 'Wrong Side'. Under the 'Right Side' tab, there are two text input fields: 'Abbrev.' containing 'mb' and 'Instructions' containing '(K, yo, k) in 1, turn work, p3, turn, s2tog-k1 p2sso.'. At the bottom right are 'OK' and 'Cancel' buttons.

Texture stitch options

Edge Stitches

Edge stitches deal with the bottoms, tops, or sides of the knit fabric. They are cast-on, bind-off and wrap and turn stitches.



The 'Create Edge Stitch' dialog box is shown. It has a title bar with a close button. Inside, there are two dropdown menus: 'Edge Type' set to 'Cast on' and 'Symbol' showing a horizontal line. Below these are two tabs: 'Right Side' (selected) and 'Wrong Side'. Under the 'Right Side' tab, there are two text input fields: 'Abbrev.' containing 'co' and 'Instructions' containing 'Cast on the specified number of stitches.'. At the bottom right are 'OK' and 'Cancel' buttons.

Edge stitch options

Brioche Stitches

Brioche stitches are used for brioche knitting charts. Brioche knitting is a slipped-stitch technique, recently popularized by [Nancy Marchant](#). Brioche Stitches include the brioche basics (brk, brp and sl1yo), as well as brioche increases (brkyobrk, br4st inc, etc...), decreases (brRsl dec, brLsl dec, br4st dec, etc...), and cables.

Create Brioché Stitch

Brioché Stitch Type

Neutral

Knit

Knit

Purl

Slip

☐ Double brioché

☐ Through back loop

Right Side

Wrong Side

Abbrev.

brk

Instructions

Brioché knit: Knit stitch together with its yamover.

OK

Cancel

Brioché stitch options

Create Brioché Stitch

Brioché Stitch Type

Increase

Neutral


Increase

Decrease

Stitches worked into 1

3

Symbol



Right Side

Wrong Side

Abbrev.

brkyobrk

Instructions

Brioché knit, leaving the stitch on the needle, then yam over, and then brioché knit into the same stitch.

OK

Cancel

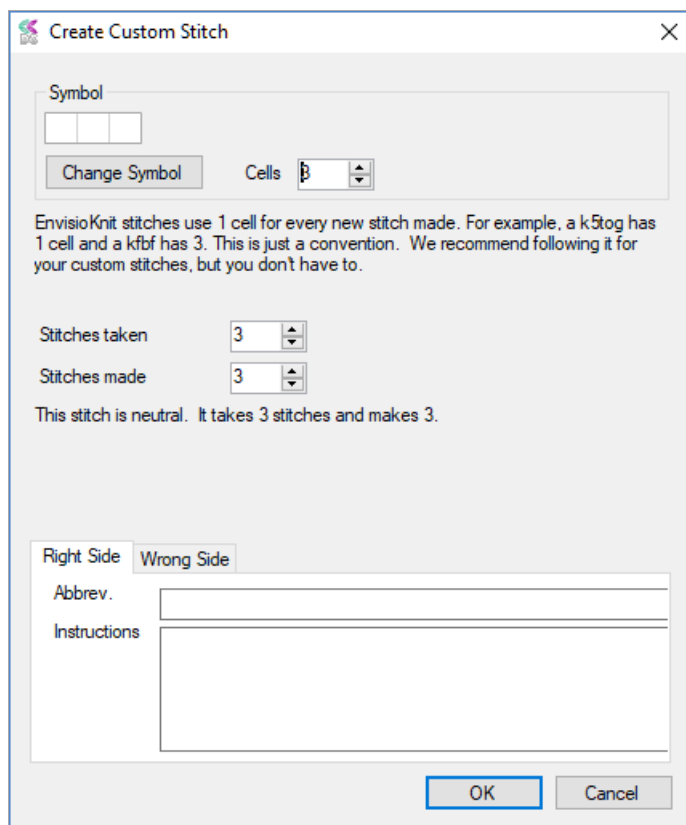
Brioché increase options

Custom Stitches

The custom stitch palette contains stitches that you create, and is empty by default. Custom stitches are fully configurable. You specify the abbreviation and instructions, right side and wrong side. You also set the symbol and the number of cells that the stitch should occupy on the chart.

The **Stitches taken** and **Stitches made** settings are by default both equal to the number of cells that the stitch uses. **Stitches taken** refers to the number of stitches worked into on the previous row (taken from the left needle). **Stitches made** is the number of new stitches made (put onto the right needle) when the stitch is worked. If the stitches taken equals the stitches made, then the stitch is neither a decrease nor an increase. However, if the stitch takes more stitches than it makes then it is a decrease. If the stitch takes less stitches than it makes it is an increase.

The [stitch counts](#) that are optionally included in the written instructions use these settings to determine how many stitches will be on the needle when the row has been worked. The [Chart Checker tool](#) also uses these settings to determine if the number of stitches taken by one row equals the number of stitches made on the previous row, and thereby determine if the chart has errors that would make it unknittable.



Create Custom Stitch

Symbol: [] [] []

Change Symbol Cells: 1

EnvisioKnit stitches use 1 cell for every new stitch made. For example, a k5tog has 1 cell and a kfbf has 3. This is just a convention. We recommend following it for your custom stitches, but you don't have to.

Stitches taken: 3

Stitches made: 3

This stitch is neutral. It takes 3 stitches and makes 3.

Right Side Wrong Side

Abbrev.:

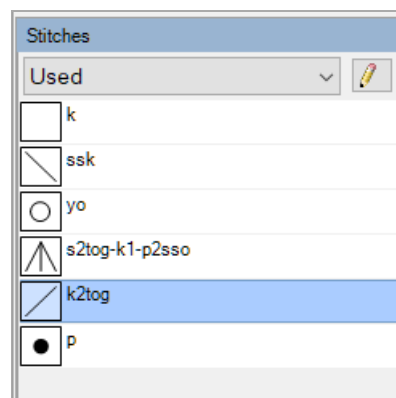
Instructions:

OK Cancel

Creating custom stitches

Automatic Stitch Palettes

EnvisioKnit automatically populates two stitch palettes: **Recent** and **Used**. The **Recent** palette is initially empty and contains the last 10 stitches you have selected (by clicking them) in the stitch palette. The **Used** palette contains all the stitches used in the current design and it is dynamically updated as you work. Once you have established your designs, you may find it more convenient to work from these palettes than to switch back and forth between the built-in palettes to select stitches of different types. Since they are automatically generated, the Recent and Used palettes are not editable and are always the last palettes in the palette list.



Stitches

Used

k

ssk

yo

s2tog-k1-p2sso

k2tog

p

Used stitch palette

Designer Stitch Palettes

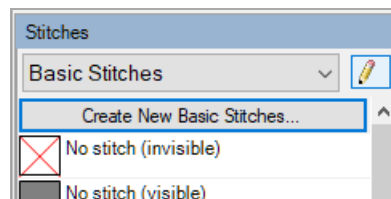
You can create designer stitch palettes and add them to the list of built-in and automatic palettes. Designer stitch palettes can contain any stitch from any of the other palettes, including custom stitches. They are a convenient way to organize stitches that are frequently used together in a particular context.

Two designer stitch palettes are added by default: Aran and Lace. Aran contains the basic knit and purl stitches as well as a selection of cables, and Lace contains the basic stitches, yarn-over and a set of decreases.

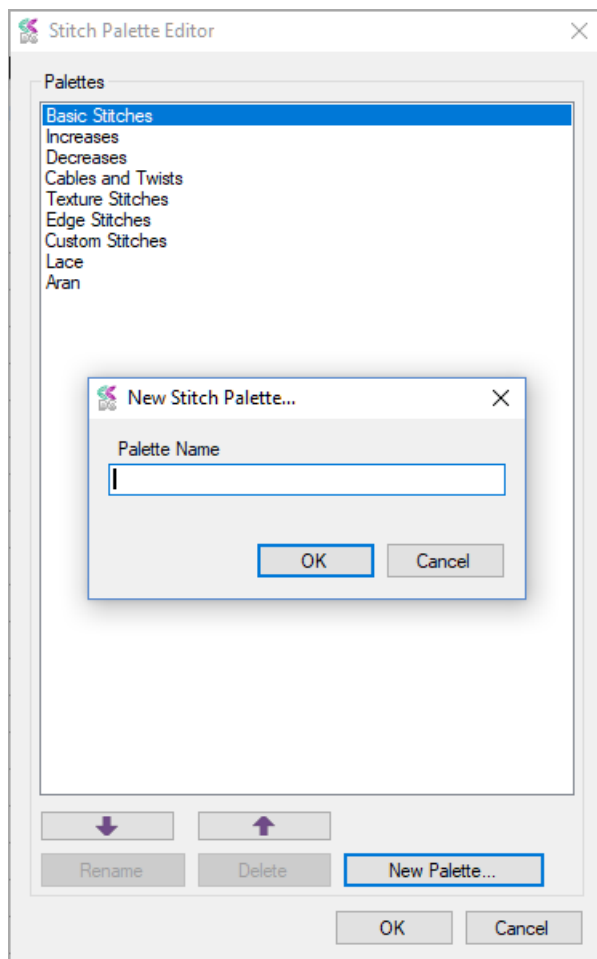
To create a new designer palette, click the button with the pencil icon to the right of the palette list drop-down. The **Stitch Palette Editor** will appear. Click **New Palette...** and enter a **Palette Name**. Click **OK** and your palette will be added to the list.

The **Stitch Palette Editor** also allows the list palettes to be ordered according to the designer's preferences. To move a palette, first select it in the list, then use the arrow buttons to move it up or down.

Designer palettes may also be renamed or removed from the palette list. The built-in palettes (Basic Stitches, Decreases, Increases, etc.) are fixed and may not be renamed or moved, but may be reordered.



Stitch Palette Editor button (pencil)



Adding a new designer palette

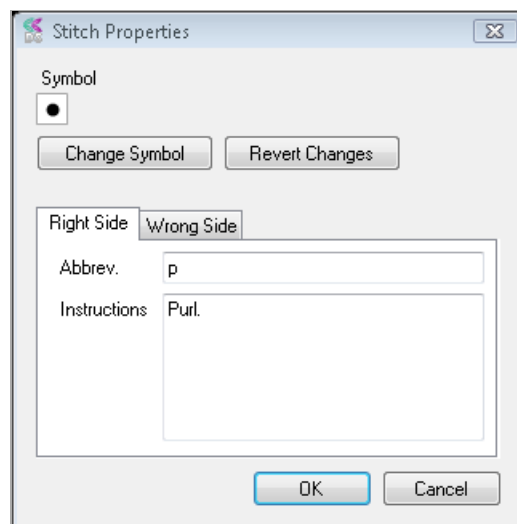
Stitch Properties

The stitch properties window is a pop-up that will appear when you double click on a stitch in the Stitch Palette. You can edit any stitch, custom or built-in, except the no-stitch.

The stitch editor allows you to customize the stitch abbreviation and instructions for both the right-side and wrong-side (the reverse side). Also, you can change the stitch symbol by clicking the Change Symbol button, which opens the Symbol Editor.

If you decide that you are not happy with your customizations, you can always revert the stitch to its out-of-the-box default settings by clicking the **Revert Changes** button.

EnvisioKnit also allows you to modify or add a stitch so that it is in your stitch palette by default by making your changes in the default stitch palette. Go to the main menu and select Settings->Default Settings... The Default Settings window will appear. Select the Stitches tab, and then add your new stitches or make changes to the existing ones (double-click on a stitch to change it). When you click OK, your default settings will be saved. Then, when you create a new design, your customizations will appear in the palette. Existing designs will not be affected by your changes to the default palette, because each design file contains its own stitch palette so that stitches can be customized independently for each design. See [Default Settings](#) for more information about default design options.



Stitch Properties

Symbol Editor

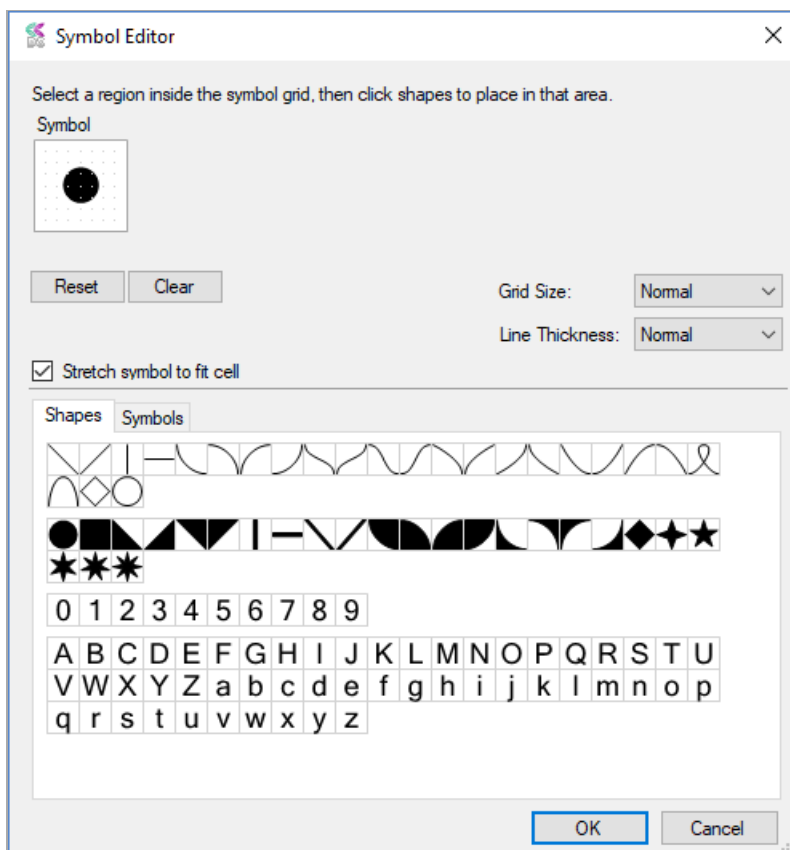
With the symbol editor, you can customize the existing stitch symbol, or start from scratch and draw your own using the provided symbol components. Under the "Shapes" tab, you will find basic shapes as well as letters and numbers that you can place and combine to create custom symbols.

By default, most symbols are set to stretch to fit the entire stitch cell (or cells, in the case of cables and other stitches that use multiple cells) which is usually not perfectly square (it depends on your chart's gauge). If you do not want your symbol to be stretched, you can uncheck the **Stretch symbol to fit cell** checkbox.

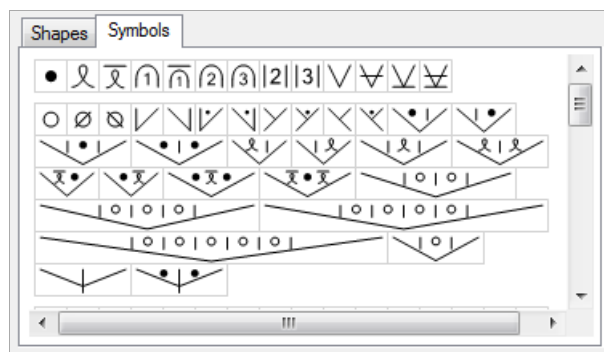
When editing the symbol, you may require a finer grid to achieve the size and positioning you want. The **Grid Size** setting is set to Normal by default, but can be changed to Fine or Extra Fine.

The **Line Thickness** setting for the symbol lines is set to Normal by default, but other options include Extra Fine, Fine, Thick, Extra Thick, 2x Thick and 3x Thick.

The "Symbols" tab contains every stitch symbol already in your stitch palette, so you can choose an existing symbol to use as part of your new custom symbol.



Symbol Editor

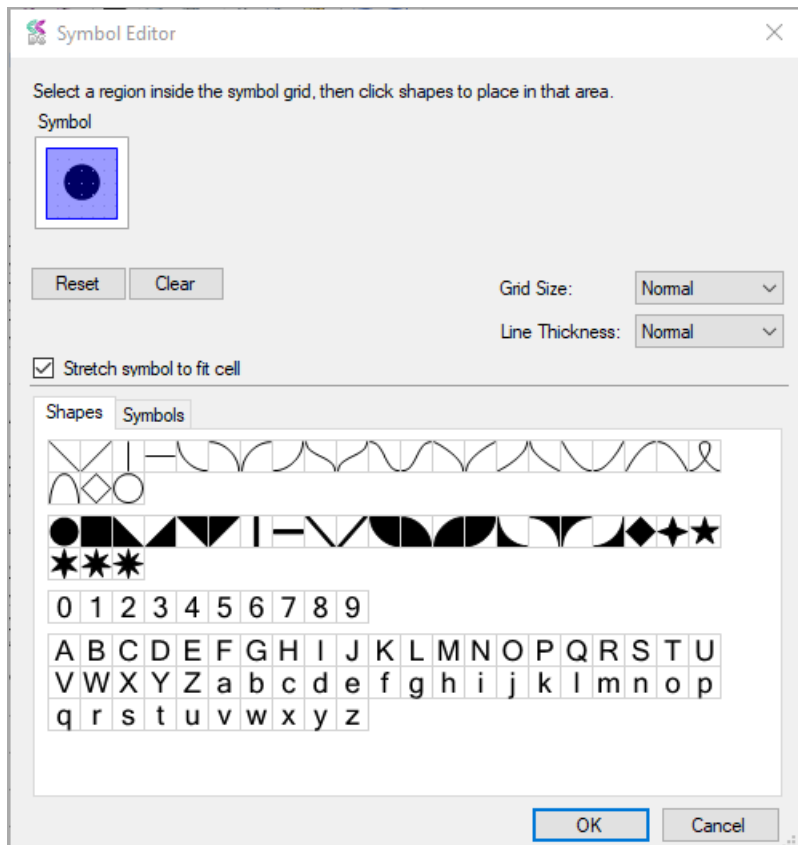


Symbols Tab

Creating New Symbols

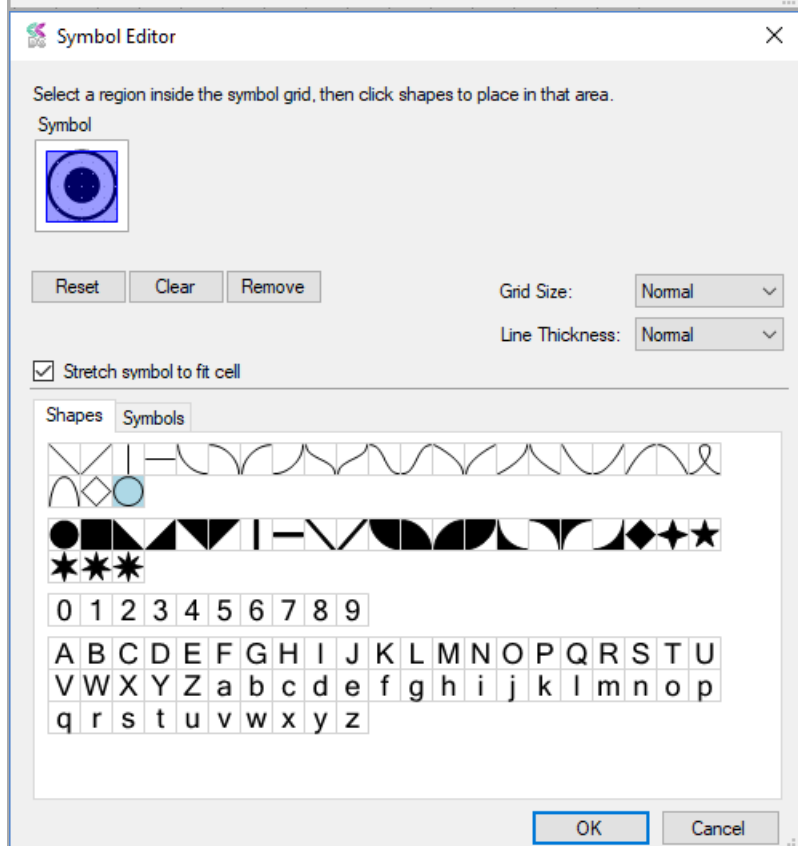
To add a new shape to your stitch symbol, first select the area where the new shape should go. Click on one corner of the area inside the Symbol box, and drag the cursor to the opposite corner. The region you've selected will be highlighted in blue.

Select the area to place the new shape



Now just click the shape you want in the palette. The open circle was clicked in the example shown on the right. The new shape will be positioned and sized to fit inside the area you have selected.

You can continue to add and combine shapes this way to build more complex symbols. If you make a mistake, you can click the "Remove" button and the last shape you added will be removed. To revert back to the original symbol click "Reset". Click the "Clear" button if you want to clear the entire symbol.



Click the shape to add

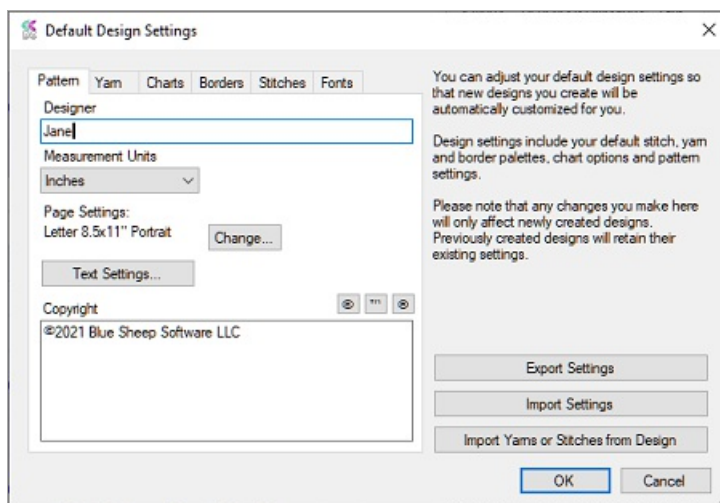
Settings

Default Design Settings

EnvisioKnit allows you to adjust your default design settings so that new designs you create will be automatically customized for you. You can set defaults for your patterns, charts, yams, borders, and stitches. When a new design is created, it copies the settings and palettes currently in the default settings. Changing the default settings does not change existing designs.

Default Pattern Settings

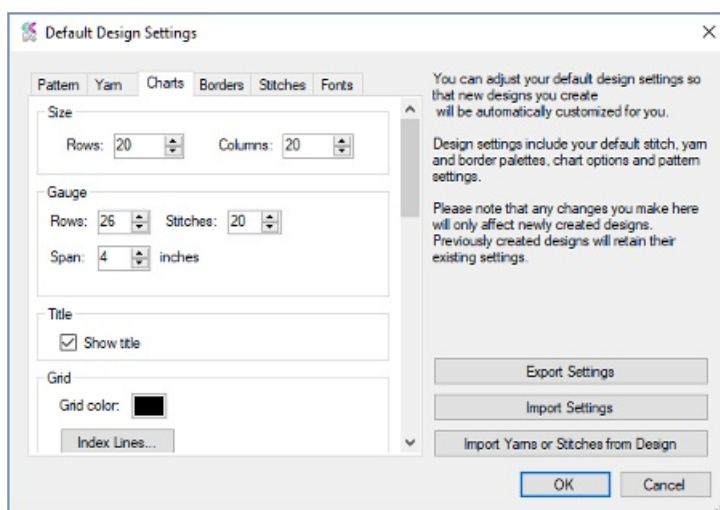
The Pattern Settings include the default designer name, measurement units (inches or centimeters), default page settings, pattern text settings and copyright notice. Please note that if you prefer to use centimeters rather than inches in your designs, this is where you should make that adjustment.



Default Pattern Settings

Default Chart Settings

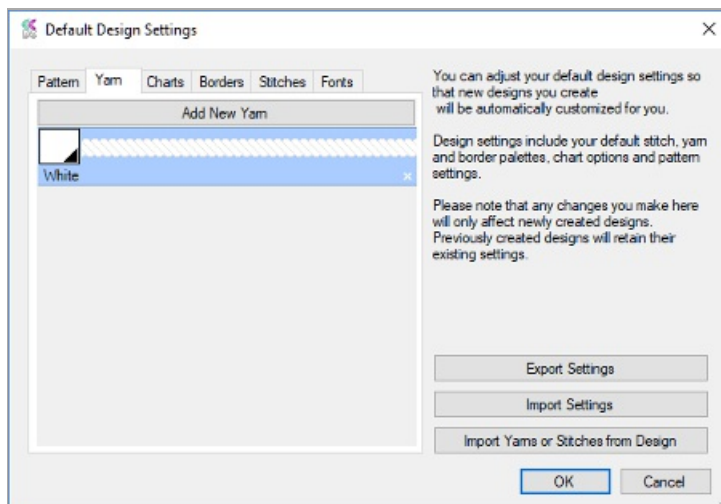
The Chart Settings include the size, in rows and columns, and gauge for your charts. You can also set defaults for most of the options in the chart preview, such as whether the chart is in the round, the chart numbering style, legend options, grid color and whether to display the chart title.



Default Chart Settings

Default Yarn

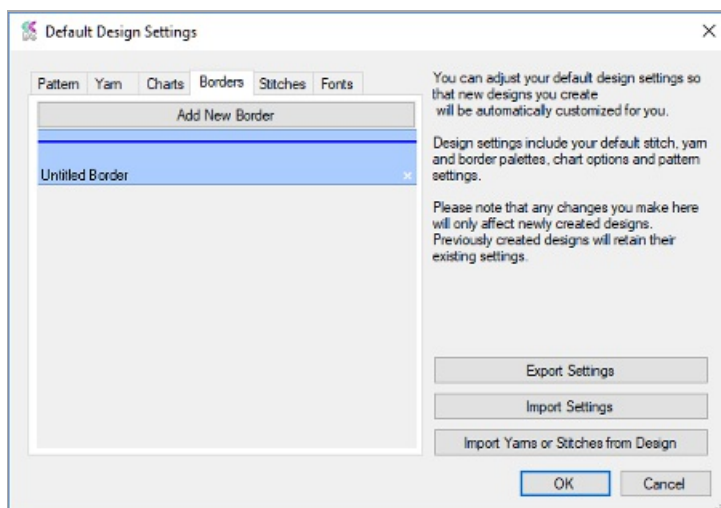
Customize which yarns you start with. Instead of the default white yarn, you can start every design with, for example, a red yarn and a blue yarn, or whatever color(s) you want.



Default Yarn Settings

Default Border

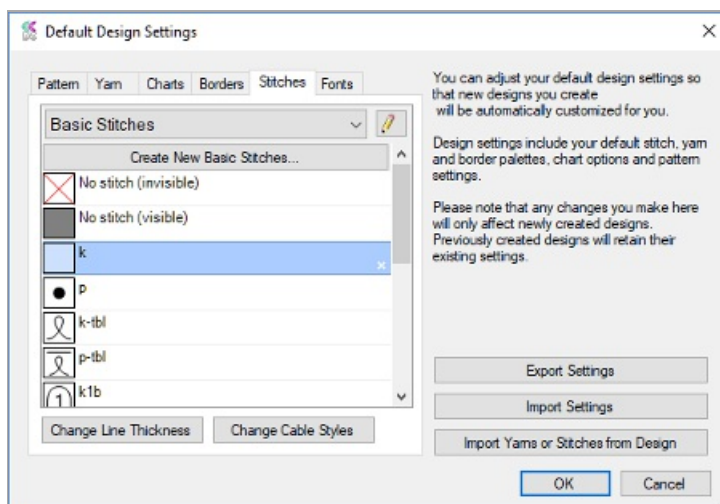
Set your default borders. For instance, you could always start with a wide green border instead of a thin blue one.



Default Border Settings

Default Stitches

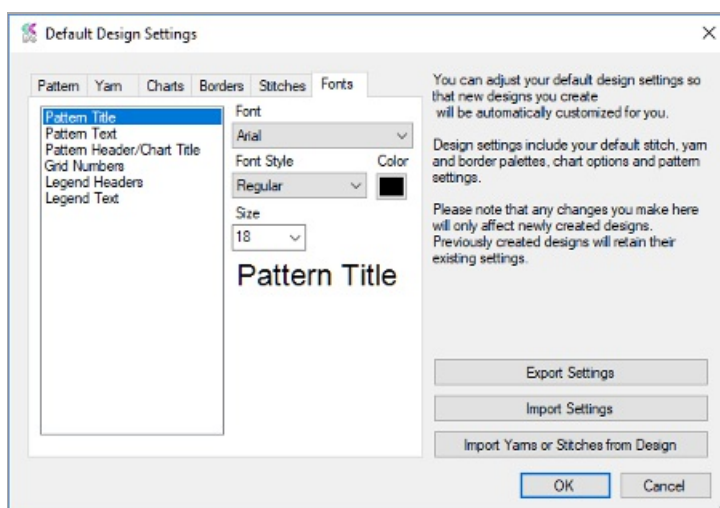
Setting your default stitch palette is particularly useful, as this allows you to save the entire stitch palette, with all your customizations and custom stitches, just the way you want it.



Default Stitch Settings

Default Fonts

Select your default fonts. Choose the style, size and color of the fonts used in your patterns. The default fonts are set in the same way as the [Pattern Font Settings](#)



Default Font Settings

Import and Exporting Settings

The default settings can be exported to and loaded from a settings file. You may find that when doing a particular kind of project, you prefer particular settings that are different than you would normally use.. Or, you may have installed EnvisioKnit on another computer and want it to have the same settings. Click the **Export Settings** button to export the current settings to a file. Click **Import Settings** to import them from file. The EnvisioKnit settings files end in the extension ".eks".

Individual yarns and stitches can be imported into your settings from existing project files. For example, you may have created a custom stitch for a particular design that you would like to reuse in other projects. Click the **Import Yarns or Stitches from Design** button, select the file to import from and select the items you want. Click OK and the items will appear in your default settings palettes.

Font Settings

Clicking "Fonts..." in the Settings menu will bring up the Pattern Fonts window, where you can select the style, size and color of the fonts used in your pattern.

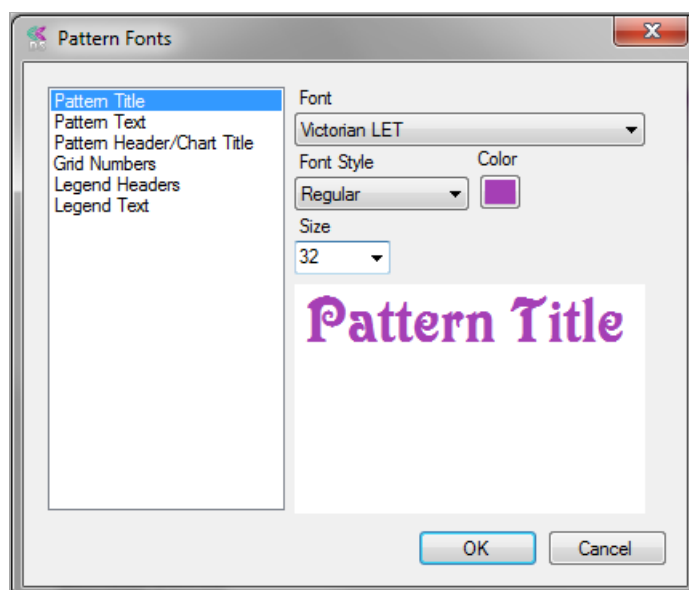
Selecting Fonts

Select the type of text that you want to customize from the list on the left side of the window. The options include the pattern title, regular text, chart titles and other section headers in your pattern, the numbers for your chart grid, and the chart legend headers and regular legend text.

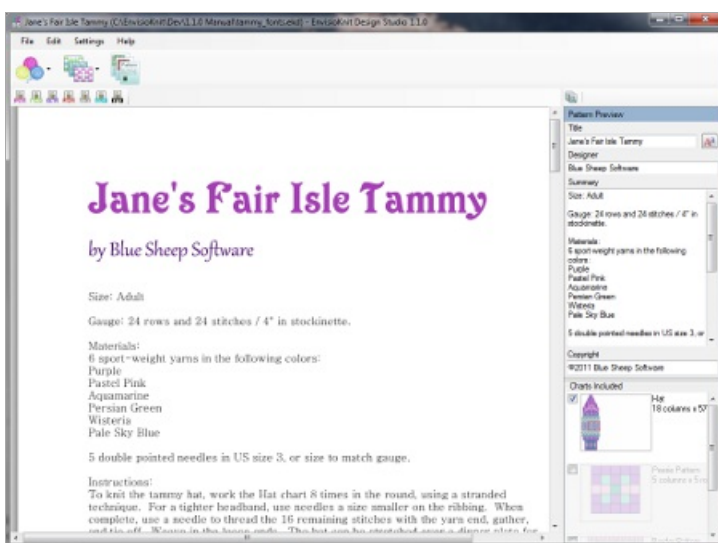
Now select the font you want to use from the drop-down list under "Font". You can also specify a font style such as bold or italic from the Font Style drop-down, and you can click the "Color" button to select a font color. The preview window on the bottom will show how your font will look as you change your selections.

You can also set your desired font size from the Pattern Title, Pattern Text and Pattern Header/Chart Title. The Grid Number and Legend text types are sized automatically.

When you are satisfied with your selections, click OK. Your pattern and chart previews will be automatically updated to reflect the new settings.



Pattern font settings



Pattern preview shows the new fonts

Pattern Text Settings

There are several fixed words and annotations (such as "row", "twice", "sts", etc.) that EnvisioKnit uses in its automatically generated written instructions and chart legends. These can be customized to your preferences in the **Pattern Text** settings. To change them, go to **Settings->Pattern Text** in the main menu. Your text customizations will apply to all charts in your pattern.

Default pattern text settings can be set on the **Pattern** tab of the [Default Settings](#).

Instruction Text

The **Pattern Text** settings window organizes the options onto two tabs: **Instructions** and **Legend**. On the **Instructions** tab you will find:

Row Text

Parentheses Style

The **Parentheses Style** setting determines the type of parentheses used for repeats in written stitch instructions. The default is the **Square** parentheses style, which uses only square brackets: []. The **Round** setting will similarly use only round parentheses: (). The **Nested** setting will use a combination of bracket styles, depending on how many times the sequence of stitches is nested within another sequence.

With the **Nested** setting, a repeated sequence of stitches that does not contain another sequence is grouped using round parentheses: (). Sequences containing these groups use square parentheses: [], and sequences containing 2 levels of nested sequences use curly braces: {}. For example: {[(K2, p1, k2tog, yo) twice, k2, yo, s2tog-k1-p2sso, yo] twice, k1, p3} 5 times.

Stitch Counts

There are several text options for stitch counts in the instructions:

- **Sts:** Customize the "sts" text that appears after the count number.
- **Surround With:** The parentheses that surround the stitch counts can be modified or omitted. For example, enter [] to use square brackets instead of round parentheses. Leave the setting blank to show just the number.
- **Place period after stitch count:** can be unchecked to place the period at the end of your instructions, before the stitch count.
- **Text Style:** sets the stitch count text style to Regular, Bold or Italic.

Row Repeats

The **Flat** and **Circular** settings determine the text used to indicate repeated rows or rounds in the written instructions. For example, with a stitch pattern consisting of 20 rows of stockinette, setting the **Flat** setting to "rep" will result in the final line reading: Rows 3-20: Rep 1-2.

Stitch Repeats

- **Twice:** If a stitch sequence is repeated twice, the word "twice" is used in the stitch instructions. This setting could, for example, be changed to a non-english setting like "2x" or "zweimal".
- **Times:** If a stitch sequence is repeated more than twice, the word "times" is used in the stitch instructions, following the number of repeats. This could be changed to "x" or "mal".

Color Instructions

- **In:** If color instructions are enabled, the stitch instructions will give the stitch sequence, followed by the word "in" and then the yarn name or alias. This can be changed to another word, such as "with" or "mit".

Row Labels

The screenshot shows the 'Pattern Text Settings...' dialog box with the 'Instructions' tab selected. The 'Row Text' section includes 'Parentheses Style' set to 'Square: [[]]', 'Row Repeats' with 'Flat' set to 'repeat rows' and 'Circular' set to 'repeat rounds', 'Stitch Counts' with 'Sts' set to 'sts' and 'Surround With' set to '()', 'Place period after stitch count' checked, and 'Text Style' set to 'Regular'. The 'Row Labels' section includes 'Flat' and 'Circular' settings for 'Single' and 'Plural' rows, 'Every-other-row' settings for 'Even' and 'Odd' rows, and 'Indicate row side' options for 'Right-side: (RS)' and 'Wrong-side: (WS)', with 'Label first instance only' checked. A note at the bottom states 'Note: Pattern text settings are shared by all charts in this design.' and there are 'OK' and 'Cancel' buttons.

Pattern Text Settings

- **Single:** The stitch instructions for a single row is preceded by a label with the word “row” followed by the row number. The “row” text can be replaced with a word of your choice. For circular instructions, the label uses the word “round”, which can also be replaced.
- **Plural:** For a group of rows, the label uses the word “rows” followed by the row numbers. For circular instructions, it uses “rounds”. Both words can be overridden with a custom setting.

Override Every-other-Row Preamble

Charts using the “Skip every other row” numbering setting will automatically include a line at the beginning of the written instructions that says “Work all even rows in established pattern” (or odd rows, if that is the case). To override this line, check the **Override Every-other-Row Preamble** checkbox and set the text to your preference, or leave it blank to omit the line altogether.

Row Side

It can be helpful to indicate which side of the fabric a row is worked on (i.e. RS or WS). You can enable row sides in the row labels by checking the box next to the side you want to show. Once enabled, you can also customize the text that will be displayed. The indicators will be inserted after the row number and before the colon. For example, Row 1 (RS): K20. By default, only the first instance of each side is labeled, but you can label all of them by unchecking Label first instance only.

Legend Text

The **Legend Text** tab contains custom settings for the legend headers and the stitch legend:

Headers

Each section of the legend can include a title, or header, which can be customized. The default headers are **Yarn**, **Stitches** and **Borders**.

Stitch Legend

A charted stitch that is worked from both the right and wrong sides of the fabric will include the abbreviation for both sides. For example, with the default settings, a charted knit stitch will be listed in the legend as follows: RS: k; WS: p. The **RS**, **WS** and separating semicolon can all be customized here.

The screenshot shows the 'Pattern Text Settings...' dialog box with the 'Legend' tab selected. The 'Instructions' tab is also visible. The 'Legend' tab contains two main sections: 'Headers' and 'Stitch Legend'. The 'Headers' section has three input fields: 'Yarn:' with the value 'Yarn', 'Stitches:' with the value 'Stitches', and 'Borders:' with the value 'Borders'. The 'Stitch Legend' section has three input fields: 'Right-side prefix:' with the value 'RS:', 'Wrong-side prefix:' with the value 'WS:', and 'Separator:' with the value ':'. There is a link 'About pattern text settings...' in the top right corner. At the bottom, there is a note: 'Note: Pattern text settings are shared by all charts in this design.' and two buttons: 'OK' and 'Cancel'.

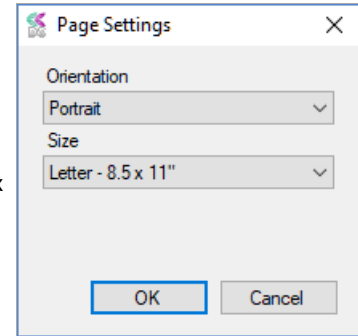
Legend Text Settings Tab

Page Settings

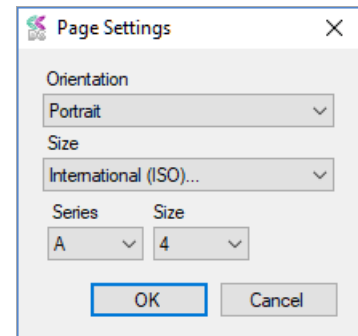
EnvisioKnit lays out patterns and charts according to its Page Settings. By default, the page settings are set to 8.5x11" (portrait) pages. To change the page settings, go to **Settings>Page Settings...** in the main menu. A window will appear where you can set the page size and orientation.

The orientation can be set to either **Portrait** or **Landscape** and the size options are **Letter** (8.5 x 11"), **Legal** (8.5 x 14"), **Ledger** (8.5 x 17") or **International ISO**. If **International ISO** is selected, additional options will appear to select the ISO 216 **Series** and **Size**. Supported ISO 216 page sizes are A3, A4, A5, B3, B4 and B5.

Default page settings can be set on the **Pattern** tab of the [Default Settings](#).



Page Settings



ISO A4 Page Size

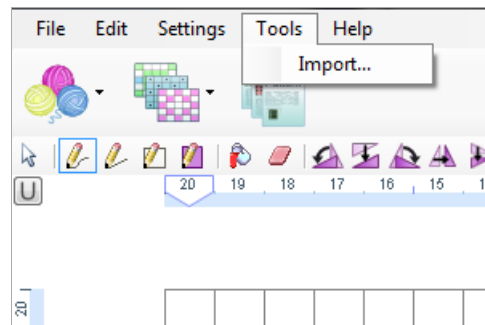
Tools

Importing Charts, Yarns and Stitches

The Import Tool

EnvisioKnit has an Import tool that allows you to bring charts, yarn, and stitches created in other design files into your current design. This allows you to use your existing design files as libraries to build on for future designs.

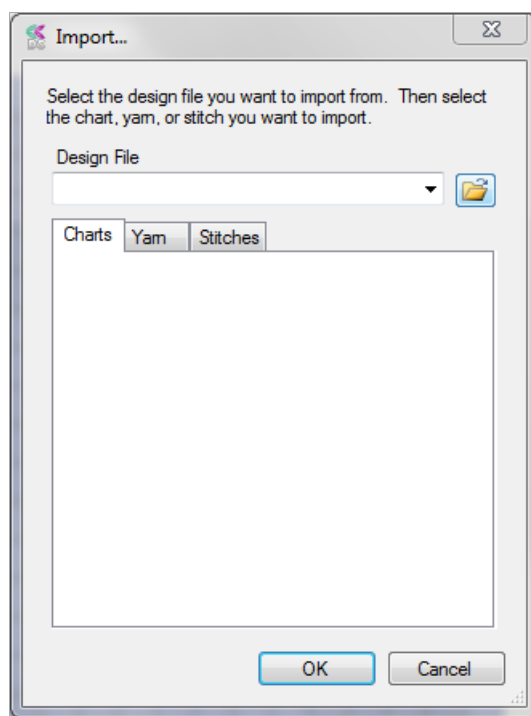
You can find the Import tool under "Tools" in the main menu.



The Import tool is in the "Tools" menu

Select the Design File

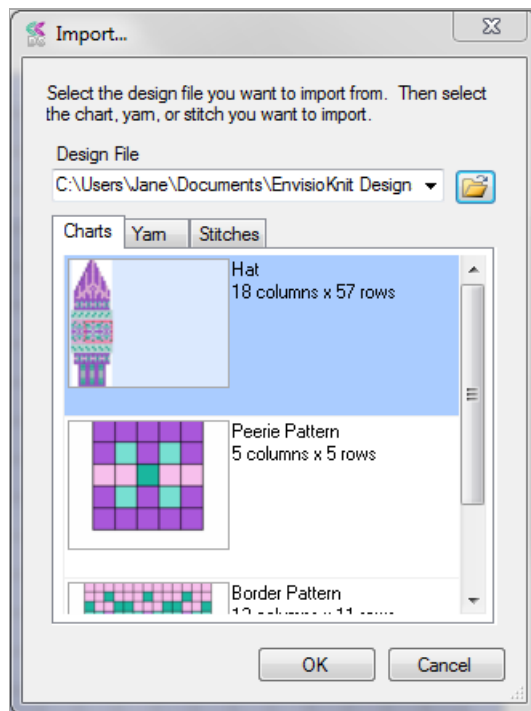
To use the import tool, first select the design file you want to import from. Once you've opened a design, it will stay listed in the "Design File" drop down for easier access in the future.



First select your design file

Select and Import a Chart

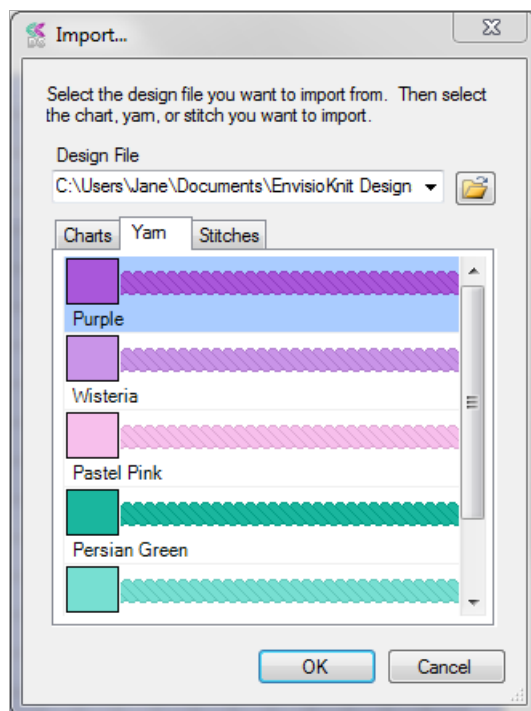
Now that you've loaded a design file, you can choose which of its charts, yarns, or stitches you would like to import. The charts, yarns and stitches contained in the design file are listed in the tabs below. To import a chart, select a chart from the "Charts" tab and click OK.



Select a chart to import

Importing a Yarn

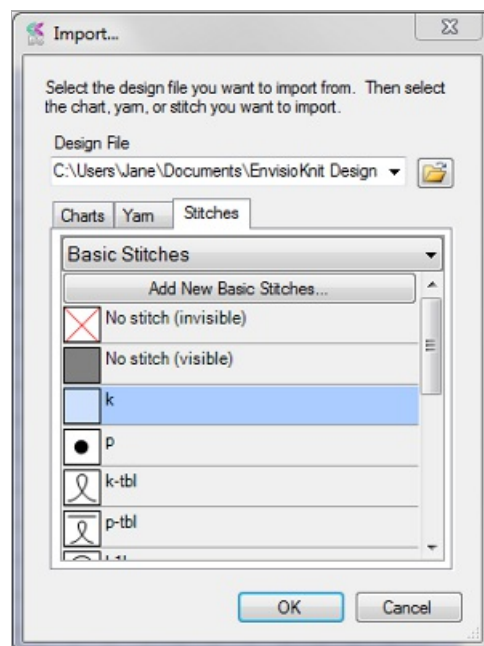
To import a yarn, select the yarn you want from the "Yarns" tab and click OK. The selected yarn will be added to your current design's yarn palette.



Select a yarn to import

Importing a Stitch

To import a stitch, select the stitch you want from the "Stitches" tab and click OK. The selected stitch will be added to your current stitch palette. If the stitch is already in your palette, you will be given the option to replace the existing stitch with the stitch you are importing.



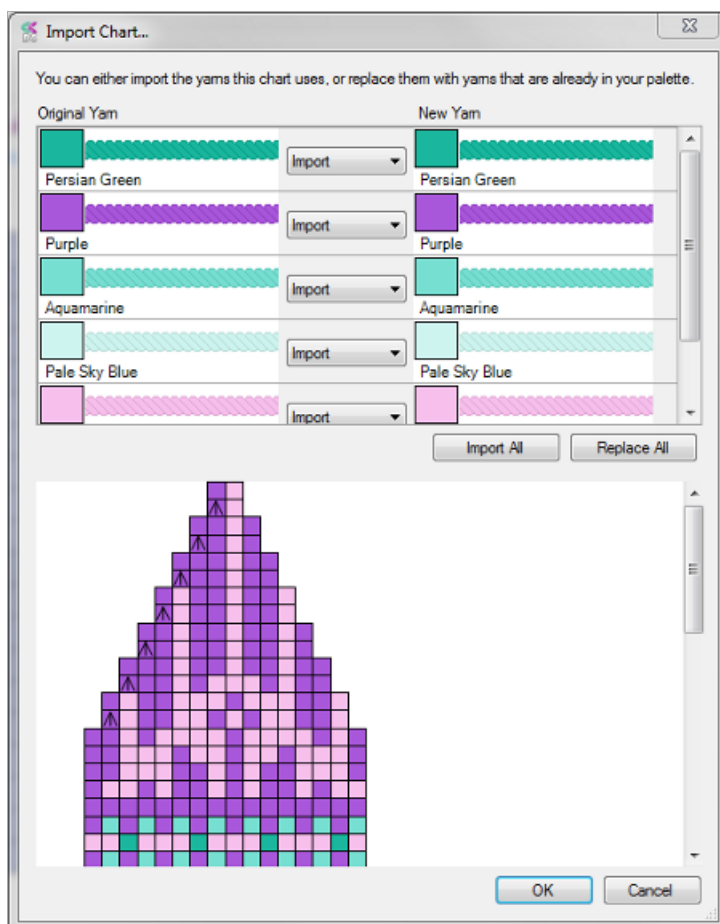
Select a stitch to import

Importing a Chart

When you import a chart, EnvisioKnit will let you decide how to import the yarns that it uses.

After selecting the imported chart, the "Import Chart" window (shown on the right) will appear. At the top of this window, you will see a list of all the yarns used in the chart. The original yarn from the chart is shown on the left side, and the yarn it will import as is shown on the right. The button in the middle lets you select whether you want to import or replace the original yarn with one from your design. At the bottom of the window, you will find a preview of the chart as it will appear when it is imported.

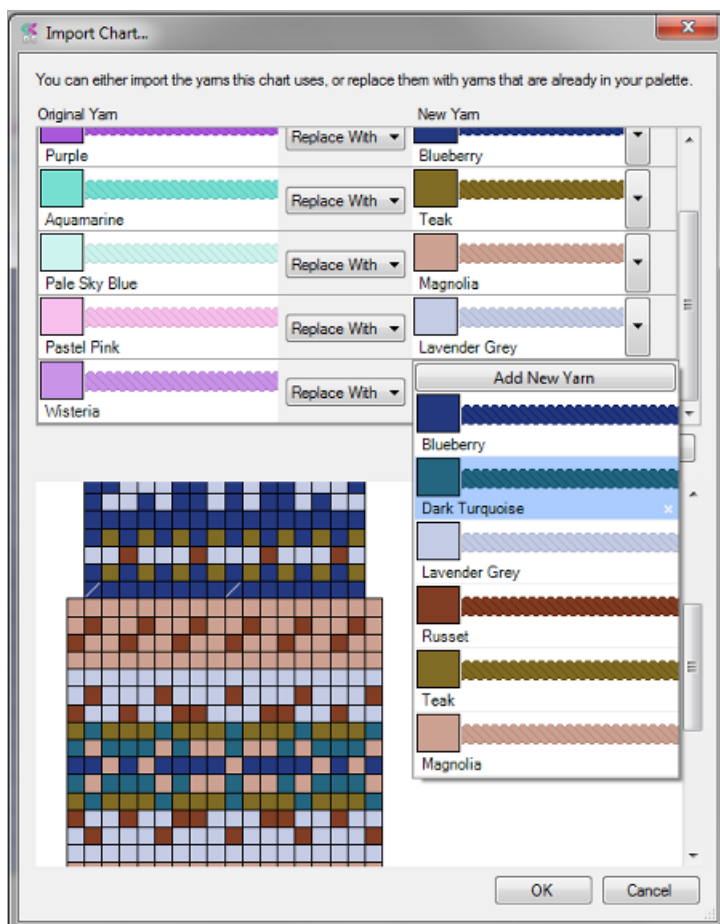
By default, each yarn will be imported, resulting in the chart remaining in its original color scheme. Each yarn will be added to your current design's yarn palette.



Choose to import or replace the chart's original yarns

Replacing Yarns

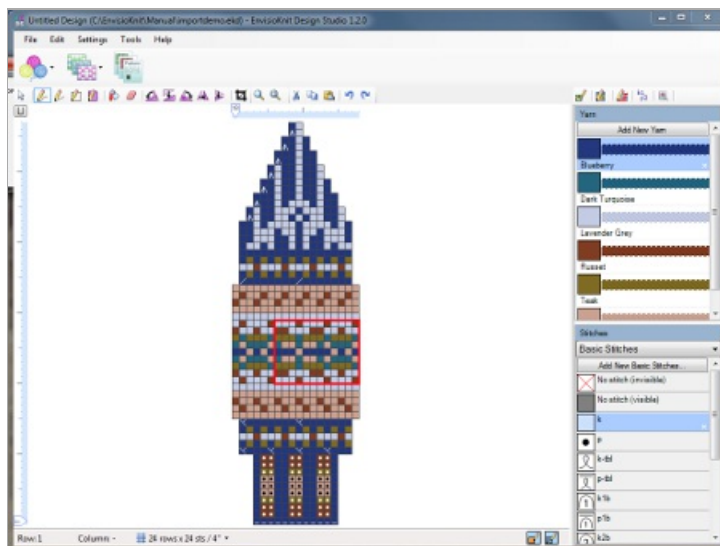
If you use the "Replace With" option, the yarn on the right will be replaced with a drop down in which you can select a yarn from your current palette. The preview window at the bottom will be updated to reflect your selection.



You can replace the chart's original yarns with yarns from your palette

The Imported Chart

Once you have finished with the Import Chart window, click OK, and the chart will be imported into your current design using the yarns you selected.



The chart is imported using the yarns you selected

Creating Picture Charts

EnvisioKnit's Picture Chart tool creates knitting charts from photos or other images. This tool offers fantastic creative possibilities, allowing you to quickly create striking graphical charts. To open the Picture Chart tool, go to **Tools>Create Picture Chart**.

Choosing an Image

When you first start the **Picture Chart** tool, you will need to select an image file to use. You can use .png, .jpg or .bmp image files. For graphical charts, images with good color contrast work best. You will be able to position and size the chart to use all or just a part of the image.

Selecting Colors

With your image loaded, you must now choose the set of colors that you want in the chart. Most images are composed of thousands of colors, but to make a practical knitting chart you will want to use only a handful of yarns. You may choose as many yarns as you want to use, but you must choose at least two. The image will be simplified to use only the yarn colors you have chosen.

One way to choose a color is to click on the image over the color you want. A selection ring will appear on the image where you clicked and the color at that location will be added to your yarn palette. You can adjust the color you have just added by dragging the selection ring around the image. The associated yarn color will be updated to the color of the image under the selection.

To remove a selection, click on it and then press the **Delete** key. You can also remove the yarn in the list by selecting it and clicking the red **X** that appears in the lower right corner.

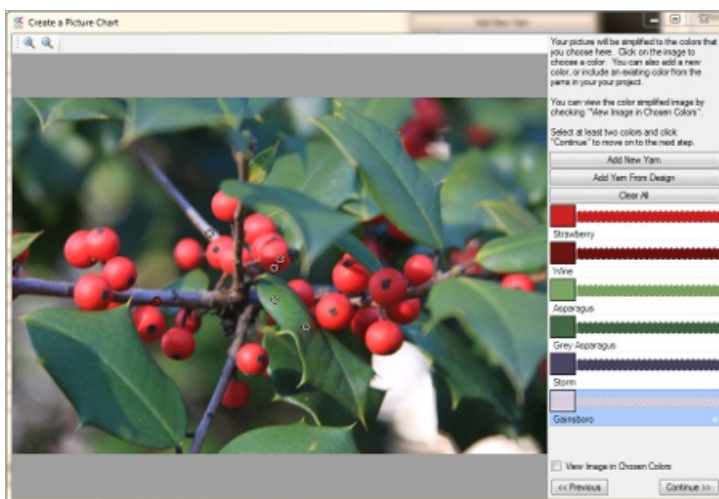
Another way to add yarns to the list is to click **Add New Yarn**. Doing so will allow you to choose colors that are not in the image. Yarns that are already in your current design can be added by clicking **Add Yarn from Design**. If you choose yarns from your design you can import the image using the color scheme you have already established.

To see how your image looks in just the colors you have chosen, check the "View Image in Chosen Colors" option, under the yarn list. In the reduced image, each color will be replaced with the closest color that you have chosen.

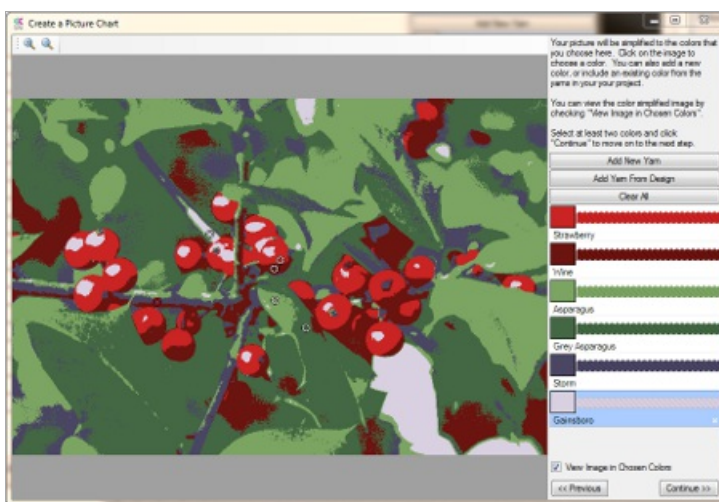
Click **Continue** to proceed to the next step.

Sizing and Positioning the Chart

You will now have a chart overlaid on your image. Initially, the chart size, gauge and grid color will be set according to the default. The gauge, or aspect ratio of the grid cells, as well as the grid size and color, can be adjusted using the controls in the panel on the right.



Selecting Colors to Use from the Image



Viewing the Image in the Chosen Colors

Click and drag a corner of the grid to expand or contract the size of the chart relative to the image.

Click and drag the sides of the grid to increase or reduce the number of rows and columns.

Click and drag on the middle of the grid to reposition it over the image.

When you are satisfied with the grid representation of your image, click the **Finish** button to add it as a new chart in your design.

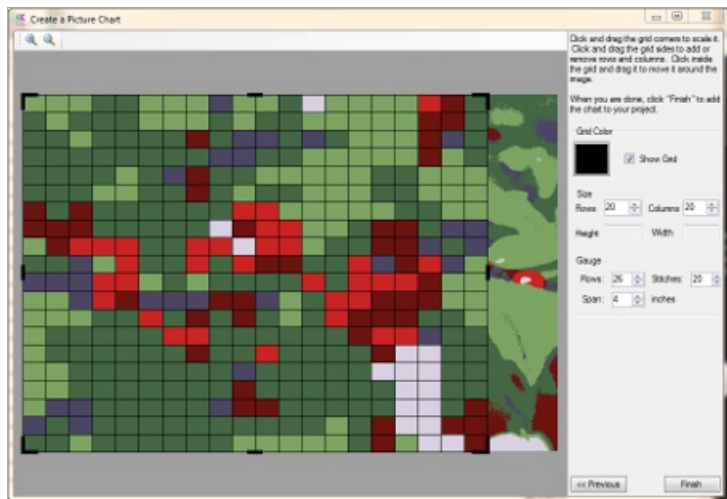


Chart Overlay Before Sizing and Positioning

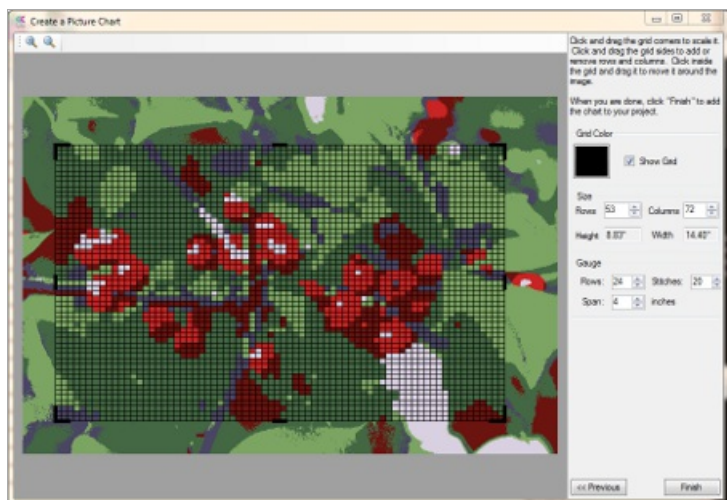
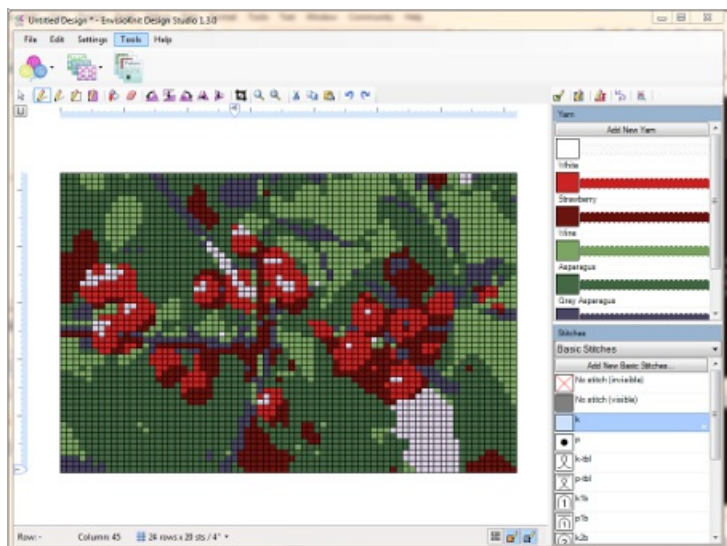


Chart Overlay After Sizing and Positioning



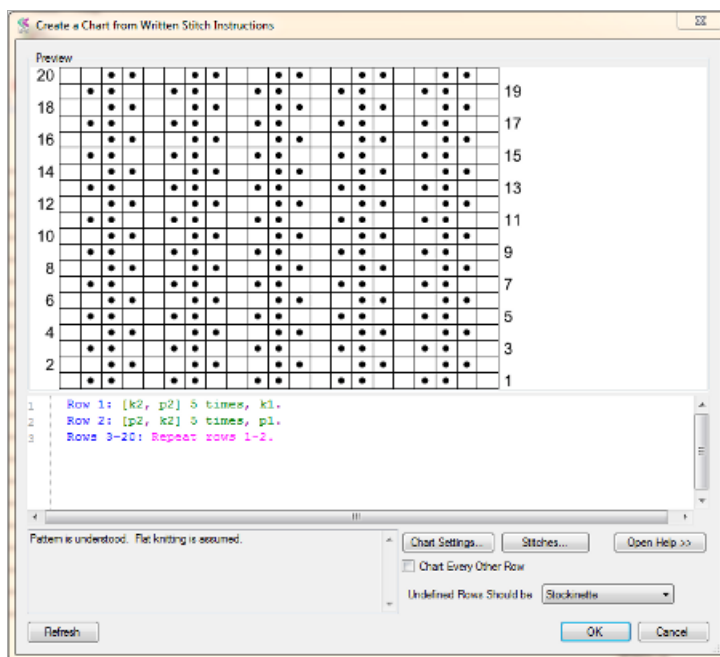
Finished Picture Chart

Creating Charts from Written Stitch Instructions

EnvisioKnit has a special tool for generating charts from knitting stitch instructions. This tool is very useful if you have an existing pattern in written form that you would like to bring into EnvisioKnit as a chart. You can find the **Chart from Written Instructions** tool under **Tools->Create Chart from Written Instructions...** in the main menu.

When you open the tool, you will initially see a blank preview area at the top and a text editing area below. There is a status area at the bottom left of the window, and a settings area at the bottom right. The preview will automatically update as you enter stitch instructions in the text area.

The stitch text you enter is "parsed", or interpreted by the program. If there are no errors, a draft chart is constructed and shown in the preview. The parser will wait for you to stop typing momentarily before re-parsing and updating the chart. If the parser finds errors in your instructions, the status area will turn red and list the errors. To force an update, click the **Refresh** button in the lower left corner.



Create a Chart from Written Instructions

Example Shown:

Row 1: [k2, p2] 5 times, k1.
Row 2: [p2, k2] 5 times, p1.
Rows 3-20: Repeat rows 1-2.

Stitch Syntax Rules

In order for EnvisioKnit to understand your stitch pattern, the format of the written instructions must conform to certain rules. If the program cannot parse or understand the entered text, it will indicate this with a message in the status area, and will also underline the problematic text in the text editor. The whole pattern must be understood and error free before a chart can be generated.

- Stitches must exist in the Stitch Palette.
 - The stitch abbreviation will be used to match a written stitch to a charted stitch. Matching is not case sensitive.
 - The stitch must exist in the stitch palette for the *current* design.
 - If you need to add a stitch to the palette, click the **Stitches...** button and add it there.
- Stitches must be separated by commas.
 - Semi-colons are treated as commas.
 - Whitespace before and after the stitch name is ignored.
-
- Each row instruction must be on a separate line.
 - Periods are optional at the end of lines. Periods within the line will be treated as commas.
- Repeats of a single stitch must be written directly after the repeating stitch, i.e. "k2tog 3 times" or "k2tog 3x".
 - Knit and purl stitches are special and can be written with the repeat number appended to the stitch abbreviation, i.e. "k20" or "p20".
 - Repeats of 2 can be written "twice", i.e. "k2tog twice".
- Repeats of multiple stitches must be enclosed in square brackets and followed by the number of repeats, i.e. "[k2, p2] 10 times".
 - Like single stitches, the repeats must be of the format "5 times" or "5x" and "twice" can be used instead of "2 times".
 - Repeats of single or multiple stitches can be nested within larger repeats of multiple stitches.
- Row instructions can be labeled with a row or round number, i.e. "Row 1: k20".
 - If the first row does not have a row number, it will be numbered row 1. Subsequent unnumbered rows will be numbered sequentially.

- The same number cannot be assigned to multiple rows.
- For circular instructions, use the label "Round" instead of "Row", i.e. "Round 1: k20."
 - If any row is labeled "Round", then the full pattern will be interpreted as a circular pattern. Otherwise, flat knitting is assumed.
- You can indicate that the first row is a wrong-side row by adding "(WS)" to the row label, i.e. "Row 1 (WS): p20."
 - If the first row is not labeled with "(WS)", it will be a right-side row.
 - Only the first row may be labeled with "(WS)". If subsequent rows use the label it will be ignored.
- A row instruction can define multiple rows, which have identical instructions. For example: "Rows 1-10: K20."
 - For circular knitting, use "Rounds" instead of "Rows", i.e. Rounds 1-10: K20.
 - A set of non-sequential rows can be labeled with commas between row numbers, i.e. "Rows 1, 5, 9: P20."
- A row instruction can refer to a previous row. For example: "Row 3: Repeat row 1."
 - A row instruction can also refer to a range of previous rows. For example: "Rows 11-20: Repeat rows 1-10."
- Charts will begin with the first defined row and end with last one.
 - Undefined rows within this range will be charted as determined by the **Undefined Rows** setting.
 - The default setting for **Undefined Rows** is stockinette.

Settings

The settings for the **Chart from Written Instructions** tool are located at the bottom right of the window.

The **Chart Settings** button opens a window where **Name**, **Gauge** and **Default Yarn** of the chart can be set.

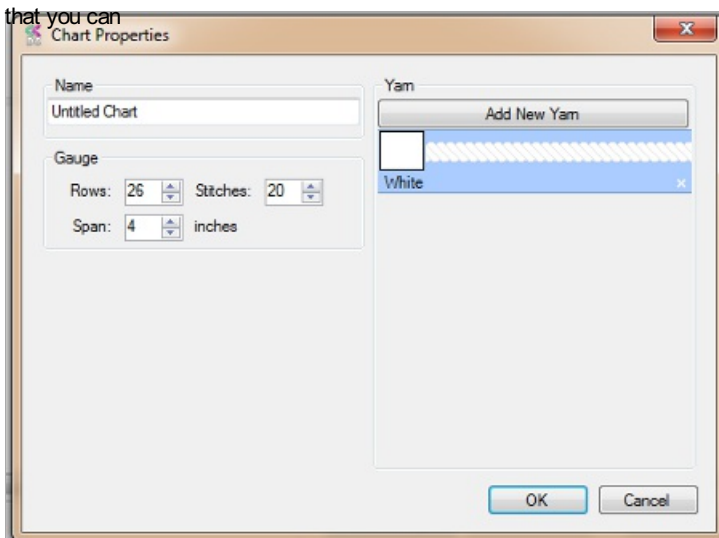


Chart Creation Settings

The **Stitches...** button opens the current stitch palette so that you can add or modify stitches if necessary.

If you would like to create a chart in which only alternate rows are charted (i.e. for cables or lace where alternate rows are plain) then check the **Chart Every Other Row** box.

Your written instructions may not define every row within the chart. Undefined rows will be charted as determined by the **Undefined Rows** setting. The options are **Stockinette**, **Blank**, **Skipped** and **Renumbered**, **Knit Across**, and **Purled Across**. **Stockinette** will set undefined rows to stockinette stitch, so right side rows will be knit and wrong side rows will be purled. **Blank** will set undefined rows to the invisible (background) no-stitch. **Skipped** and **Renumbered** will skip undefined rows, renumbering subsequent rows to follow previous rows sequentially. **Knit Across** will set undefined rows so that they are worked as knit rows, whether they are right-side or wrong-side. **Purl Across** will set undefined rows so that they are worked as purl rows, whether right-side or wrong-side.



Set the Chart's Name, Gauge, and Default Yarn

Examples

The following four examples all produce 10 rows of 20 stitches of stockinette:

Example 1

In example 1, row numbers are not specified, so the first row is assumed to be 1 and the following rows are numbered sequentially from there. The first line shows that stitches may be separated by commas. Whitespace between stitches is optional and effectively ignored by the parser. Periods at the end of lines are optional. The third line in example 1 illustrates that stitches may be repeated by specifying "5 times" after the stitch, where 5 can be replaced by any number of repeats. The fourth line shows that several stitches, "p4,p2,

Example 1:

```
k10, k5, k1, k4.
p20
k4 5 times
[p4,p2, p4] twice.
k10 2x.
```

p4" can be repeated as a set using square brackets [], and that "twice" can be optionally used instead of "2 times". The fifth line demonstrates that the syntax "2x" can be alternatively used to "2 times". The seventh line shows that repeated sets can be nested within larger repeated sets. Any stitch abbreviation defined in your current stitch palette may be used. Only knit and purl stitches may use the syntax k20 or p20, where 20 is the number of times to work the knit or purl. Instead, repeats of other single stitches should be indicated using the "twice", "2x" or "2 times" syntax, for example "yo twice".

```
p20
[[k1, k1] 2 times] 5 times
p20
k20
p20
```

Row numbers are optional. Example 1 does not use any row numbers, but the other examples do. Lines may optionally be prefixed like so: "Row 1:" or "Round 5:", where the number must be included. If at least one line is prefixed with "Round", then the instructions will be interpreted as being knit in the round, otherwise they will be interpreted as flat knitting. The first row is assumed to be a right-side row. If rows are written without prefixes, they are numbered sequentially from the previous rows. An unnumbered first row is assumed to be Row 1.

Example 2

In example 2, the prefix "Rounds" is used to indicate that the instructions should be interpreted in the round. Examples 2 and 3 show that one line may specify the instructions for a set of rows. The syntax for this is "Rows 1-10:", where 1-10 may be any range of rows that have not yet been defined, and "Rows" may be replaced with "Rounds" if the chart is worked in the round.

Example 2:

Rounds 1-10: k20.

Example 3

In example 3, the third line specifies a range of rows, 3-10, that should repeat a set of previous rows, 1-2. Example 3 defines a range of 8 rows that repeats a previous set of 2 rows. The syntax for this is "Repeat rows 1-2", where 1-2 may be replaced with any range of rows that have been previously defined in the instructions. If the chart is in the round, then "rows" may be replaced with "rounds".

Example 3:

Row 1: k20.
Row 2: p20.
Row 3-10: Repeat rows 1-2.

Example 4

In example 4, the first line is marked as Row 4, so the first row of the chart will be labeled "4". It is also marked as a wrong-side row, using the "(WS)" tag before the colon. Only the first row of the chart should be marked right-side or wrong-side via the tags (RS) or (WS). Use of these tags on any other row will be ignored.

Example 4:

Row 4 (WS): p20.
Row 5: k20.
Rows 6-13: Repeat rows 4-5.

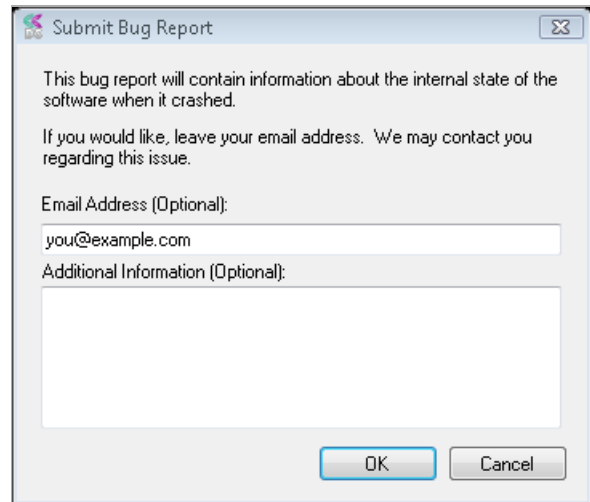
Other Features

Updates

EnvisioKnit Design Studio has a built-in updater. When the program starts it checks the website for a newer version. If there is one, the updater will inform you of it and ask if you'd like to do the update now. You can also check for updates using the Check for Updates button in the Help menu.

Autosave, Crash Recovery and Bug Reports

We do everything we can to prevent situations in which the program will crash. However, to reduce the potential for loss of work, EnvisioKnit autosaves your design once every minute, and retains the last five minutes of autosaved files. If a crash occurs, EnvisioKnit will attempt to load one of the autosave files when it restarts, starting with the most recent. Also, if the program crashes, we provide a form for you to automatically submit information about what the program was doing when it crashed (a bug report). Submitting this form automatically sends us the internal details of the crash, and helps us provide a fix for the issue as quickly as possible.



The Bug Report Form