

Cross-Stitch Designer, Version 2.1a

User's Manual

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Introduction

Cross-Stitch Designer is a Windows program that allows you to create and edit cross-stitch patterns. The goal of this program is to display your pattern design on a computer so that you can see how the stitched pattern will appear before any stitching is done.

Features

This program supports full, half, quarter, and back stitches. Many of the standard thread colors are provided in a list from which you chose when creating a pattern. Complete printing capability is provided. You can print a pattern using symbols for representing thread types and colors on a standard single-color printer, or print a pattern using stitches and actual colors on a color printer.

All pattern editing is done using the mouse. You use the mouse to select the type of stitch, the thread color, and the location of each stitch. The mouse can also be used to select a region of a pattern. Regions can be moved to another location on the pattern, copied to the clipboard, cut from the pattern, cleared, or flipped.

Cross-Stitch Designer also supports the conversion of bitmaps into a pattern region. This very powerful feature allows you to create patterns using existing graphics files. These bitmaps can be created using graphics programs such as the Windows Paintbrush program or any program that can create Windows bitmaps.

Cross-Stitch Designer supports the 256 color VGA mode, as well as the standard VGA mode. This capability allows patterns to be displayed in a more true-to-life manner since a wider range of thread colors can be represented.

Hardware and Software Requirements

Cross-Stitch Designer must be used with Windows 3.1 or later. This implies that the computer used must be capable of running Windows. This computer should have a VGA graphics display and adapter, and a mouse or other pointing device. To use the hardcopy print-out capability of this program, a Windows-supported printer is required.

Chapter 1 - Getting Started

This chapter covers how to get Cross-Stitch Designer installed, how to run and exit the program, and how to activate the on-line help feature.

Installation

Please follow these steps to install Cross-Stitch Designer.

1. Create a directory on your harddisk called 'XSTITCH'. This can be done either at the DOS prompt or from within the Windows File Manager. For the DOS prompt case, the following command can be used:

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md \xstitch
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This will create a directory called 'XSTITCH' in the root directory of the current drive. For more information on how to create directories, please see the DOS manual or File Manager documentation.

2. Copy all of the files that came with your copy of Cross-Stitch Designer into the directory created in step 1.
3. Add a program item for Cross-Stitch Designer to one of your Program Manager groups. This is done by selecting the 'File' menu of Program Manger, followed by the 'New' item, and then the 'Program Item' option of the dialog box that is displayed. At this point, another dialog box will be displayed where you can specify the following:

Description: Cross-Stitch Designer
Command Line: c:\xstitch\xstitch.exe
Working Directory: c:\xstitch

The other fields of this box can be left as is. Note that your drive letter for the Command Line field may be different. Press the 'Ok' button to save your new program item. At this point, you should have a program icon displayed for Cross-Stitch Designer. The icon looks like a small piece of cloth with a needle through it.

Starting and Exiting

To run Cross-Stitch Designer, simply double-click the Cross-Stitch Designer icon. The program banner will then be displayed for a few seconds or until you click the mouse on it. After acknowledging the notice, the program will be ready for your commands.

You can exit Cross-Stitch Designer simply by selecting the 'Exit' item of the 'File' menu.

Getting Help

Cross-Stitch Designer provides on-line help. To access this help, select the 'Index' item of the 'Help' menu. You will be given an index of topics from which you can chose. You may also search for information. Please refer to the Windows manual for more information on how to use the help system.

To make the best use of this help information, please explore its contents when you have an opportunity.

Chapter 2 - Basics

This chapter explains basic how-to steps. These should be understood before proceeding to the following chapters. Specifically, this chapter describes the window layout, how to draw stitches, how to select colors into a pattern, and how to select an edit region. This chapter assumes that you are familiar with basic windowing steps such as moving, sizing, minimizing, and maximizing windows, as well as, using menus. If you are new to Windows and need to know more about basic windowing, please refer to the Microsoft Windows manual.

Window Layout

The Cross-Stitch Designer window is organized into several areas. Some of these are standard to windows of all programs. Those that are not standard window areas, or are particular to Cross-Stitch Designer are described in the following sections.

Title Bar

The title bar is standard for all windows. The content, however, varies between applications. For this program, the title bar displays the name of the program and the name of the current pattern that is open. The pattern name is actually the filename of the pattern with the complete file path shown as well.

Menu Bar

The menu bar, which is located below the title bar, consists of menus that are specific to this program.

Tool Bar

The tool bar consists of icons that are located below the menu bar. These icons represent drawing tools that are used when drawing stitches, deleting stitches, or when selecting portions of the pattern. The following describes the icons starting from the left-most icon:

Full-stitch icon - Used to draw/delete full stitches

Half-stitch icons (2 icons) - Used to draw/delete one-half stitches

Quarter-stitch icons (4 icons) - Used to draw/delete one-quarter stitches

Back-stitch icon - Used to draw/delete back stitches

Select icon - Used to select a region of the pattern for editing

Pattern Area

The pattern area, as its name implies, is the area where the current pattern is displayed. This area comprises the majority of the window so that as much of the pattern as possible can be seen at one time. All drawing is done in this part of the window. Depending on the size of the pattern and the current viewing options, only a portion of the current pattern may fit in this area. To allow other areas of the pattern to be viewed in this case, scroll bars are provided on the bottom and/or right sides of the pattern.

Thread Palette

The thread palette consists of 30 boxes at the bottom of the window. Each box can be set to a particular color. These boxes are used to select a thread color when drawing stitches. Only one of these boxes can be selected at any given time. The currently selected box is indicated by a dashed border. As will be described in following sections, a thread box can be double-clicked to open the Select Thread dialog box. The thread boxes can also be clicked and moved on top of

other boxes to allow you to combine colors that you no longer want to be distinct.

Status Bar

The status bar is located at the bottom of the window. The status bar displays the following:

- The mouse coordinates
- The selected region size (if any)
- The currently selected color; color number and description
- The color used in the square pointed-to by the cursor

Please note that the used color information in the status bar only corresponds to the currently selected type of tool. For example, if the full-stitch tool is selected, then the used color information will only be displayed for those squares which contain a full stitch.

Drawing and Erasing Stitches

Follow these steps to draw a stitch on the current pattern.

1. Select the color to be used by clicking one of the thread boxes at the bottom of the screen.
2. Select the stitch type by clicking on one of the tool icons.
3. Move the mouse pointer to the location on the pattern where you want to add a stitch. Press the left mouse button to drop the stitch.
4. Continue drawing with the current color and stitch type or select a new type and/or color.

Note that you can draw continuously by holding the left mouse button down and dragging it over the pattern. A stitch will be drawn in every square that the mouse touches. Any time that you draw over another stitch, the new stitch will replace the current stitch.

To erase a stitch, follow these steps.

1. Select the stitch type by clicking on one of the tool icons.
2. Put the mouse pointer on top of the stitch to be erased. Press the right mouse button.

Note that you can erase continuously by holding the left mouse button down and dragging it over the pattern. Only the currently selected type of stitch will be erased.

Drawing and Erasing Back Stitches

Back stitches are drawn differently than the other types of stitches. To draw a back stitch, follow these steps.

1. Select the color to be used by clicking one of the thread boxes at the bottom of the screen.
2. Select the back stitch icon of the tool menu by clicking it with the mouse.
3. Enable grid lines if they are not already enabled by selecting the 'Grid' item of the 'View' menu.
4. Put the mouse pointer at the crossing of two grid lines where you want the back stitch to begin.

5. Press and hold the left mouse button.
6. Move the mouse pointer to the location where the back stitch should end.

7. Release the mouse button.

Back stitches can only be drawn in the vertical, horizontal, or 45-degree diagonal direction. While drawing a back stitch, a dotted line will appear. This dotted line shows where the back stitch will be drawn when the mouse button is released.

A cross-stitch square can have several back stitches passing through it. However, the color of all back stitches passing through a given square must be the same.

To delete a back stitch, follow the same instructions above except use the right mouse button instead of the left mouse button. Note that you can delete all or only part of a series of back stitches that were originally drawn together as one line.

Selecting Regions

Some editing operations require that a block of squares of the pattern be specified. Such a block is called a region. Follow these steps to select a region.

1. Select the 'Select' icon of the tool menu.
2. Move the mouse to one corner of the desired region.
3. Press and hold down the left mouse button.
4. While holding the left mouse button down, move the mouse to the opposite corner of the region.
5. Release the mouse button.

When a region is selected, a dotted box is displayed around it, and the size of the region is shown in the status window. To cancel a selection, simply click outside of the region on the pattern or click the 'Select' icon again.

Chapter 3 - Creating a Pattern

This chapter takes a step-by-step approach at describing how to create a new pattern. It assumes that you understand the procedures described in Chapter 2.

Opening a New Pattern

The first step in creating a new pattern is creating a blank pattern of the desired size. This is done by selecting the 'New' item of the 'File' menu. When 'New' is selected, a dialog box will appear. In this box, you specify the width and height of the new pattern. The maximum size is 999 by 999. Note that the larger the pattern, the more memory that will be necessary in your PC. If you try to select a size that is too large, the program will inform you. After pressing the 'OK' button of the New dialog box, the pattern area of the window will be cleared and redrawn to the new size.

Saving the Pattern

It is a good idea to immediately save the new pattern after creating it. Since your new pattern has not been saved before, you will need to use the 'Save As' item of the 'File' menu. This menu item should be used the first time a pattern is to be saved and whenever you want to save a pattern using a different filename.

When you select the 'Save As' item, a dialog box will be displayed. This is a standard Windows dialog box that allows you to specify the filename and location. The pattern will be saved when you press the 'Ok' button.

It is a good idea to save the pattern every so often while you are drawing in addition to when you are finished. This helps to prevent a power failure or other unfortunate circumstance from causing your work to be lost. To save your pattern using the current filename, select the 'Save' item of the 'File' menu or the function key F2.

When a file is saved, the following information is saved with it:

- Stitches
- Thread Palette
- Definitions of all threads listed in the palette
- Pattern Information
- Font and font size used for symbolic mode
- Font and font size used for the pattern information print-out
- Symbol used for each thread of the palette

Note that the thread definitions of all threads used in a pattern are saved in the pattern file. When a pattern is opened, a check is made to make sure that all of the threads required for the pattern are listed in the full thread list. If a thread is not found, the thread definition is automatically added. If the thread is available but its color is not exactly the same, then the user is prompted to choose between the color in the pattern and the color in the thread list. This feature makes it easier to share pattern designs among users.

Setting-Up the Thread Palette

The thread palette, located at the bottom of the screen, contains the thread colors that have been selected for the current pattern. A default thread palette is automatically setup when you run the program. Very likely you will want to select different colors for your particular pattern. To do this, follow these steps.

1. Double-click the box of the thread palette that you want to change. This will cause the Select Thread dialog box to open.

2. Select the thread type that you want to use; i.e. DMC, ANC, or custom. Currently, only DMC colors are provided with Cross-Stitch Designer.
3. Select one of the threads shown in the list of threads by clicking it with the mouse. You may have to scroll the list to find the color that you want.
4. Press the 'Use' button to use it in your pattern.
5. Select the 'Select Symbol' item of the 'Threads' menu to choose a symbol to be used for the color when viewing the pattern in the symbolic display mode.

If the thread that you want to use is not shown in the thread list, then you can define the thread if you know its color and number. See chapter 5 for more information.

You can repeat the above steps as many times as needed to select enough threads for your pattern. Remember, you can change the colors in the thread palette at any time. When you change a thread selection, the corresponding threads that are in the pattern will be updated to reflect the new color. Also note that it is okay to initially have too many shades of a particular color used in your pattern since you can always reduce the number of threads in the palette by merging two thread colors together. See the section in this chapter on Editing Patterns for more information.

Drawing the Pattern

After setting-up a blank pattern of the desired size and choosing a set of thread colors, it is now time to draw your pattern. Drawing is done as described in chapter 2. Please review that chapter if you need a refresher.

Changing the Fabric Type

You can change the way that a pattern is displayed at any time. A pattern can be displayed on either Aida 11, 14, or 18 with either a white or ivory fabric color. Use the 'Fabric' menu to change the fabric display.

You can also view a pattern using a non-standard stitch size. To view most or all of a pattern, select the 'Zoom out' item of the 'Fabric' menu. The zoom-out mode is useful when you want to select a large region for importing a large bitmap. In the zoom-out mode, the pattern can be zoomed-out to the point where one stitch square equals one pixel on the display. In most cases the complete pattern is visible when zoomed-out.

To take a close-up view of a region of a pattern, select a region and then the 'Zoom-in' item of the 'Fabric' menu. The zoom-in mode is useful for taking a close look at areas where one-quarter stitches are used or when you are drawing letters.

Editing the Pattern

The following sections discuss various ways to edit a pattern. For some of these methods, a pattern region must first be selected. If necessary, please refer to chapter 2 for details on how to select a pattern region.

Moving Regions

Often it is necessary to adjust the position of part of a pattern. To move a selected region, move the mouse pointer into the region and then press and hold the left mouse button. While holding the mouse button, move the mouse to position the dotted selection box in the desired location. When the selection box is where you want it, release the mouse button. The region will then be moved to the new location.

Deleting Regions

To delete a selected region, select the 'Clear' item of the 'Edit' menu.

Erasing Stitches

Please see chapter 2 for instructions on how to erase stitches.

Changing Thread Colors

To replace a thread currently selected for a pattern, double-click on the corresponding thread box

at the bottom of the window. This will cause the Select Thread dialog box to be displayed. At that point, select the thread type and thread color to be used. Next, press the 'Use' button to use the selected color. This will cause the pattern display to be updated as necessary.

Merging Thread Colors

Sometimes you may find it desirable to combine two threads of the palette into the same thread. For example, assume that you have a light green thread and a very-light green thread in the palette and that you have drawn stitches using both colors. Now assume that you want to use light green for both cases. The hard way to make this change would be to manually redraw all very-light green stitches as light green stitches. The easy way to make this change is to drag the very-light green color box that you no longer want over the light green color box, and then drop it (i.e. release the mouse button). When you do this, a dialog box is displayed to allow you to confirm your decision. Press 'Ok' to merge the colors or 'Cancel' to keep the threads distinct.

Deleting a Thread

All threads of a particular color can be deleted from a pattern by selecting the color in the palette and then selecting the 'Delete thread' item of the 'Threads' menu. When this menu item is chosen, a dialog box will be opened. This dialog box allows you to choose whether the selected thread is deleted just where used in the pattern or also from the thread palette.

Flipping a Region

To flip a selected region of a pattern, select the 'Flip horizontally' or 'Flip vertically' menu item of the 'Edit' menu.

Changing the Size of a Pattern

To change the size of a pattern, select the 'Change size' item of the 'File' menu. This will cause the 'Change Pattern Size' dialog box to be opened. This dialog box gives you three options. First, you can specify a particular horizontal and vertical size by entering the desired counts. Second, you can specify that the pattern size be changed so that only the used portion of the existing size be used. The used portion is defined to be the smallest rectangular area of the pattern that contains all stitches of the pattern. This option also allows you to specify a margin around the used portion. Third, you can specify the new size of the pattern to be the currently selected region (if any) of the pattern.

Chapter 4 - Printing a Pattern

To print the current pattern, select the 'Print' item of the 'File' menu. This will cause the Print dialog box to open. This dialog box allows you to specify what portion of the pattern is printed, as well as, change the printer setup. In specifying what to print, you can choose to have all of the pattern printed, only the selected region (if any), or only certain page numbers.

You can also open the Printer Setup dialog box from within Cross-Stitch Designer. This dialog box allows you to choose another printer, as well as, adjust the settings of the printer. To open this dialog box, select the 'Printer setup' item of the 'File' menu.

When a pattern is printed, the name of the pattern is printed at the top of each page. Page numbers are printed in the upper, left corner of each page when it takes more than one page to represent a pattern. To help in pasting together print-outs that take multiple pages, each corner of a page shows in parenthesis the page number of the adjacent page.

The format of the print-out depends upon the current viewing mode and fabric selection. The fabric selection controls the size of the stitch square and the fabric color. The viewing mode determines whether stitches are displayed, whether symbols are used in place of stitches, or whether solid squares are used for each stitch.

Stitch Format

When the stitch viewing mode is currently selected and the 'Print' menu item is selected, a print-out showing cross-stitches will be produced. If a color printer is used, the print-out will be in color. In this mode, the objective is to produce a print-out that is as close to the stitched pattern as possible.

Symbolic Format

When the symbolic viewing mode is currently selected and the 'Print' menu item is selected, a print-out using symbols will be produced. The objective of this mode is to produce a print-out that can be used as a guide when stitching the pattern.

The symbol used for each thread color can be individually selected via the 'Select Symbol' item of the 'Threads' menu. The symbol set listed, as well as its size, can be selected via the 'Symbol font' item of the 'Threads' menu.

Solid Format

When the solid viewing mode is currently selected and the 'Print' menu item is selected, a print-out using a solid square for each stitch will be produced.

Pattern Information

When the symbolic viewing mode is used, the symbol legend and pattern information are also printed. The symbol legend lists the threads used in the pattern and the symbols used to represent the threads. The pattern information includes the following information:

- Name of the pattern
- Name of the designer
- Size of the pattern in counts and inches
- Fabric used
- General notes

Most of this information may be edited by selecting the 'Information' item of the 'File' menu. When this menu item is selected, the Pattern Information dialog box is opened. The font used when the pattern information is printed is selected by pressing the 'Fonts' button of this dialog box.

Chapter 5 - Thread List

The thread list is used to define all thread colors available for use in patterns. Threads are chosen from the thread list when setting-up the thread palette for a pattern. Since the list that comes with Cross-Stitch Designer does not include all available threads, you can add new threads, as well as edit existing ones.

Adding New Threads

To add a new thread color, open the Select Thread dialog box. This can be done by double-clicking on one of the color boxes at the bottom of the Cross-Stitch Designer window, or by selecting the 'Select/edit thread' item of the 'Threads' menu. When the dialog box opens, first select the thread type. Then press the 'New' button. This will cause another dialog box to open. In this dialog box, enter the description of the thread and its color number, and then adjust the red, green, and blue amounts until the desired color is shown in the example box. When you are satisfied with the color, press the 'Ok' button.

Editing Existing Threads

To edit an existing thread, open the Select Thread dialog box. Next, select the thread type and color, and then press the 'Edit' button. This will open the 'Edit Thread Attributes' dialog box which will allow you to edit the description of the thread and/or actual displayed color. Press the 'Ok' button to save the changes or press 'Cancel' to keep the previous settings.

Deleting Threads

To delete a thread from the thread list, open the Select Thread dialog box. Next, select the thread type and color, and then press the 'Delete' button. This will remove the thread from the list.

Chapter 6 - Importing Bitmaps

A Windows bitmap can be converted into a pattern and pasted into a region of the current pattern. This feature is very useful for 'roughing-in' a pattern design. Follow these steps to convert and paste a bitmap into a pattern region:

1. Copy a bitmap onto the Clipboard from another program, such as Windows Paintbrush.
2. Select the region in the current pattern that should be filled with the converted bitmap.
3. Select the 'Paste Bitmap' item of the 'Edit' menu.
4. Wait for the conversion to complete.
5. Reposition the region as desired.

The quality of the bitmap conversion depends upon several factors. First, the more stitch squares used for the bitmap the better the result will be. Also, the more unused positions in the thread palette prior to importing the bitmap, the more accurate the color conversion. **It is highly recommended that you clear the thread palette by deleting threads or by opening the 'empty.pal' palette file before actually importing the bitmap.** Sometimes it may be necessary to repeat the procedure several times to get the most desirable results.

In general, this feature is meant to allow you to get at least a rough translation of an existing bitmap so that you don't have to start drawing the pattern from scratch.

Chapter 7 - Reusing Designs

At times, you may want to use part of an existing pattern in a new pattern that you are drawing. Follow these steps to copy all or part of one pattern into another pattern:

1. Open the pattern that is to be copied by using the 'Open' item of the 'File' menu.
2. Select the region of the pattern to be copied.
3. Select the 'Copy' item of the 'Edit' menu.
4. Open the pattern to receive the copied pattern.
5. Select 'Paste' item of the 'Edit' menu. The pasted region will be positioned in the upper left corner.
6. Position the copied region to the desired location.

Note that the thread colors used for the copied pattern are also used in the second pattern if possible. That is, if the same thread colors are already selected in the second pattern or if there is room in the thread list for the new thread colors, then exact colors are maintained in the copied region. However, if a copied thread does not already exist in the palette and there is not room in the thread palette for a new thread, then the closest thread color of the palette is used.

Appendix

Short-cut Keys

The following keys can be used to directly select certain menu items or tool icons.

F1	Opens help window
F2	Saves the pattern
F3	Selects previous thread in the thread palette
F4	Selects next thread in the thread palette
F5	Selects the full-stitch icon
F6	Selects the half-stitch icons
F7	Selects the quarter-stitch icons
F8	Selects the back stitch icon
F9	Selects the select icon
Ctrl-I	Zooms in
Ctrl-O	Zooms out
Ctrl-P	Previous view