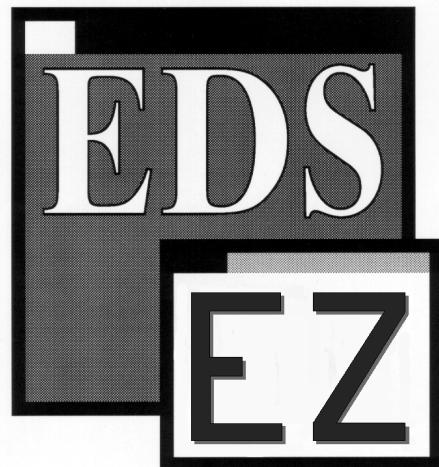


# Operation Manual for the EDS EZ Design Software



A Melco Embroidery Design System  
for use with  
Microsoft® Windows 3.x or Windows 95

**Melco**   
Embroidery Systems

Part Number 110285-01, Revision B

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## 1. How to use This Manual

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### Using Microsoft® Windows™

Windows has many useful features. Refer to the Microsoft Windows User's Guide for more information.

### EDS EZ Help

On-line help allows you to access context-sensitive information. Information is available by pressing the F1 key. You may press the F1 key:

- After highlighting an item on a drop-down menu
- While in a dialog box
- While in any EDS EZ program function

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## 2. Installing EDS EZ

### System Requirements

- 486/33 (ISA or EISA standards) with math co-processor and 8 MB memory
- 80 MB hard drive (controller board must have a Western Digital or Goldstar chipset to use Melco format disks)
- 3.5 inch disk drive, 1.44 MB capacity
- Super VGA Monitor 800 x 600, 16 color
- Melco Network Board
- Parallel port for Melco Security Dongle
- Mouse (Windows compatible)
- MS-DOS Ver 5.0 (or higher)
- Microsoft Windows Ver 3.1 (or higher) installed

If your computer was purchased from Melco, EDS EZ is installed and configured. Start your system by following the three steps below, then go to Chapter 2, An EDS EZ Overview.



1. Turn on the computer and monitor.
2. Type **win** at the DOS prompt (C:\>) and press [ENTER].
3. In the Melco Apps group, double click on the EDS EZ icon shown in Figure 2-1 to start EDS EZ.

**Figure 2-1**

If you purchased the EDS EZ software separately, completely install all included hardware and software using the procedures on the following pages.

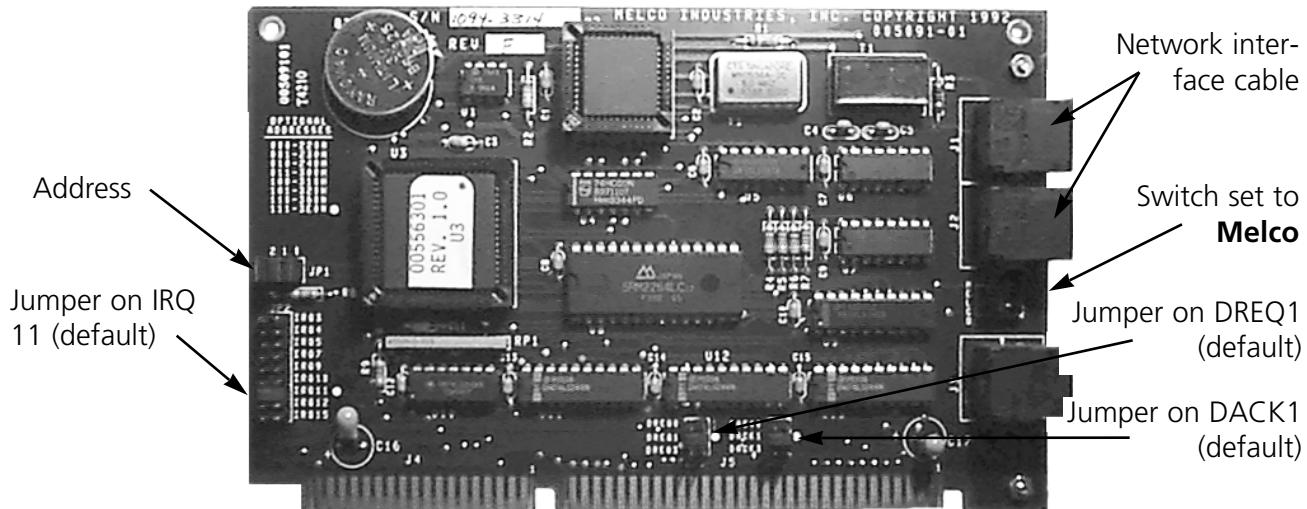
### Hardware Installation

#### Installing Printed Circuit Boards (PCBs)

Note: If you are upgrading from a non-Windows version of EDS EZ, use the currently installed network board.

1. Turn the computer OFF and unplug it from the wall outlet. Remove the computer cover.
2. Discharge any static charge in your body by touching a non-painted area of the computer frame.
3. Locate an empty expansion card slot.
4. Remove the expansion slot cover to the rear of the computer.

5. Remove the network board from the anti-static shipping bag.
6. Make certain the jumpers are placed correctly, as shown below.



**Figure 2-2**

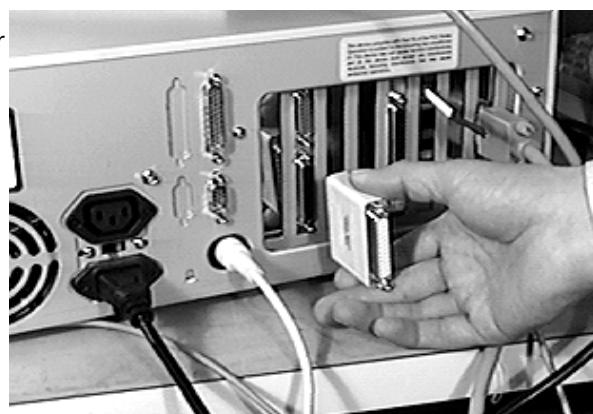
7. Be sure the network board is oriented the same way as the existing boards.
8. Insert the network board into the slot and press down firmly until the board is seated evenly and completely.
9. Attach the network board to the rear of the computer frame with the screw from the cover removed in step 4.
10. Replace the computer cover.

### **Installing the Dongle**

The dongle is a security device that must be installed in an active parallel port of your computer.

1. Locate the parallel port LPT1 on the rear of your computer.
2. Turn the computer power OFF.
3. Secure the dongle with the captive screws.

Note: If you have a printer attached to your parallel port, remove the printer cable, attach the dongle, then reinstall the printer cable to the end of the dongle when installation is complete.



**Figure 2-3**

## **Attaching the Peripheral**

See your embroidery peripheral operator manual for instructions on installing the network cable from the computer to the embroidery peripherals.

### **Bus Mouse Installation**

If your computer already has a mouse, skip this step. However, if the mouse is plugged into a serial port and you wish to do tablet digitizing, install the bus mouse to free up the serial port.

1. Turn the computer OFF and unplug it from the wall outlet. Remove the computer CPU cover.
2. Discharge any static charge in your body by touching a non-painted area of the computer frame.
3. Locate an empty expansion card slot.
4. Remove the expansion slot cover to the rear of the computer.
5. Remove the bus mouse and mouse interface board from the box.
6. Make certain that the jumpers are placed over the pins labeled **IRQ5**.
7. Be sure the interface board is oriented the same way as the existing boards.
8. Insert the board into the slot and press down firmly until the board is seated evenly and completely.
9. Attach the network board to the rear of the computer frame with the screw from the cover removed in step 4.
10. Connect the mouse cable to the connector on the back of the board.
11. Replace the computer cover.

## Software Installation

**Microsoft Windows must be installed prior to installing EDS EZ.** If Windows is not installed, refer to the Windows installation manual. If Windows is installed, proceed to EDS EZ Installation.

### EDS EZ Installation

Type **win** at the DOS prompt, and press [ENTER]. The Program Manager screen displays.

Insert the EDS EZ Program Disk 1 into the floppy disk drive.

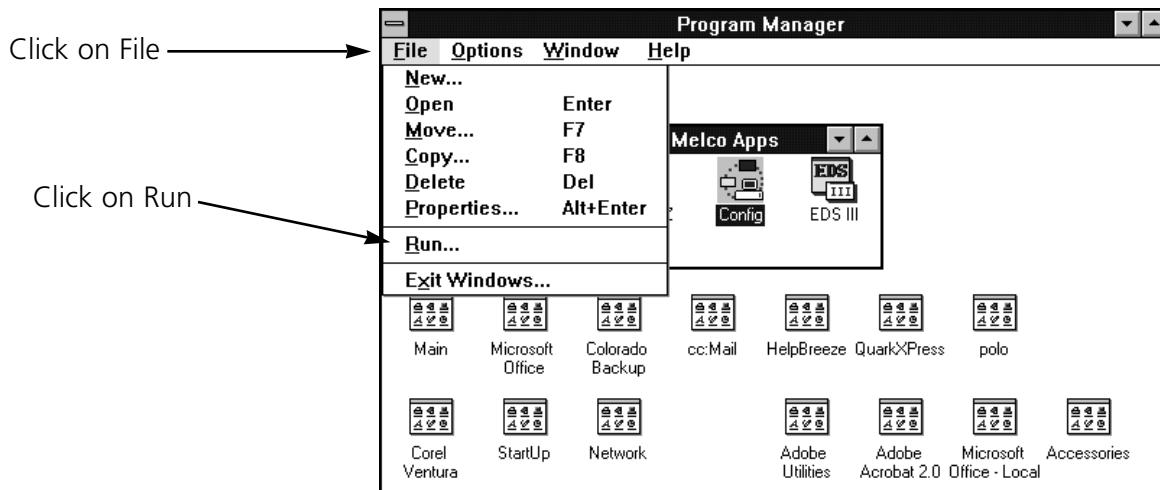


Figure 2-4

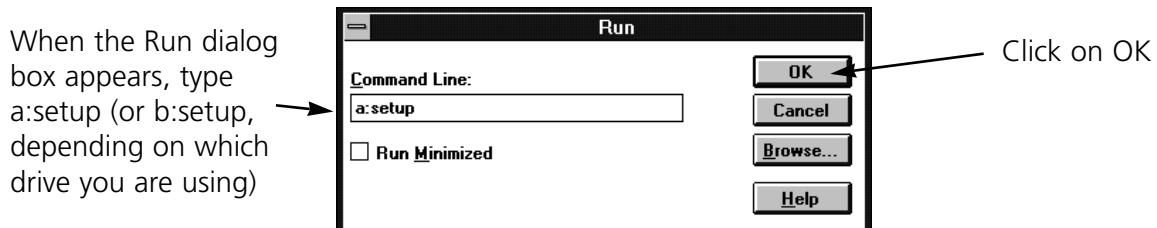


Figure 2-5

A message will appear warning that EDS EZ must be configured before use. Configuration is covered in the next section.

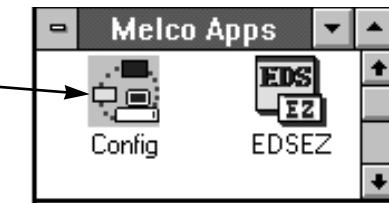
When the message displays instructing you to reboot the system, remove the disk from the disk drive, exit Windows and turn your computer off. Wait 3 seconds and turn it on again.

## Configuring EDS EZ

Before starting EDS EZ for the first time, use the Config program to configure EDS EZ. Start Windows and follow these steps to configure EDS EZ:

Note: If you are using a StarGate communications board, refer to the Stargate manual for proper port settings.

Double click on  
Config



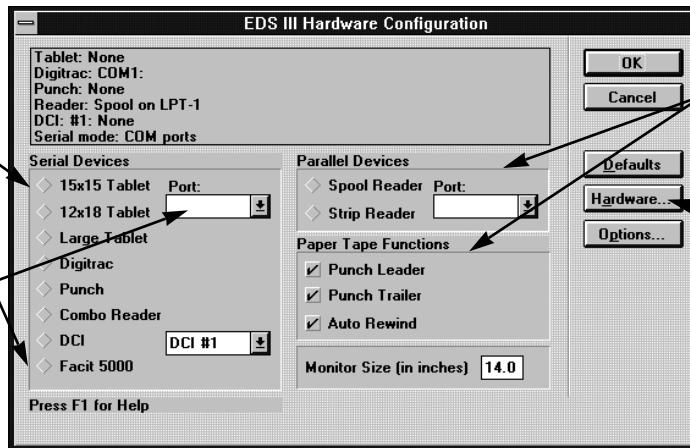
**Figure 2-6**

Click on the appropriate devices

Select the proper port for the digitizer (if applicable)

Select any parallel or serial devices

Click on Hardware



**Figure 2-7**

## Hardware Configuration

When you click on Hardware in the Configuration dialog box, the Advanced Configuration dialog box appears (Figure 2-8).

There is a StarGate and a Network section. Specify which IRQ (interrupt request) will be used for each if you do not use the defaults. Remember to change the jumper settings.

### EMC 10/12

EDS EZ is not compatible with the EMC 10/12, so this option is not available.

### Setting StarGate Options

If you have a StarGate multiport communications device, refer to its instruction manual. If you do not have a StarGate, make sure **Use COM Ports** is selected.

### Setting the Network Options

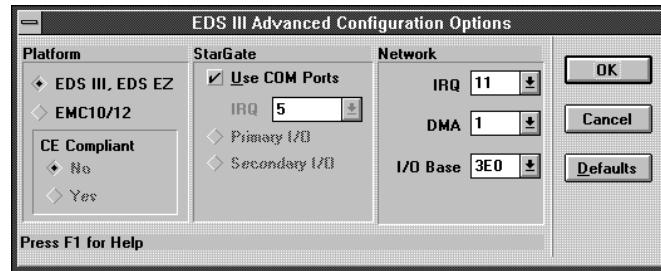
In most cases, the default settings will work fine. Click on Default to accept these settings. If you wish to customize the settings, select the appropriate values.

Note: No two pieces of hardware may use the same IRQ or DMA settings. These instructions for installing the Melco boards work in most computers sold today without changing other settings.

### Seeing Which Options Are Installed

Click on Options in the Hardware Configuration dialog to display the Set Options information box. Options are in gray if installed or black if not installed.

**If you encounter problems during software installation, call Melco Telephone Support at (303) 457-2025 for assistance.**



**Figure 2-8**

### 3. An EDS EZ Overview

This chapter provides an overview of the operation and features of EDS EZ.

#### Starting EDS EZ

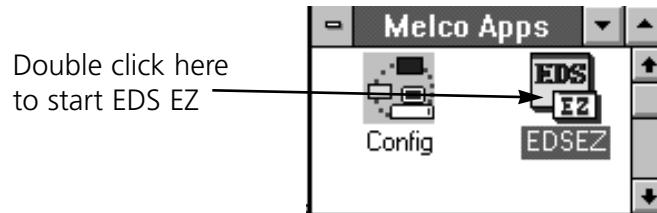


Figure 3-1

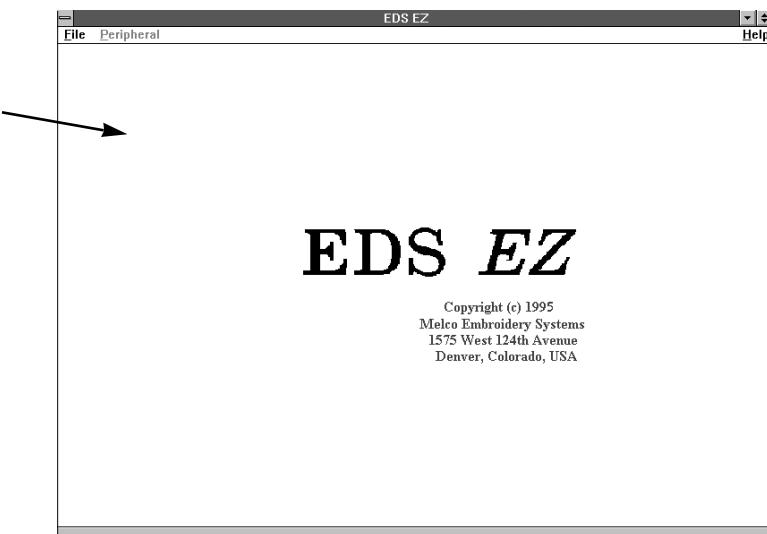


Figure 3-2

## The Application Window

The Application window is the first screen EDS EZ displays. It has File, Peripheral, and Help in its menu bar. Using these you can:

- Open a new layout window
- Open a file from a disk
- Import designs from non-DOS disks and paper tapes
- Send designs from the hard drive to the peripheral

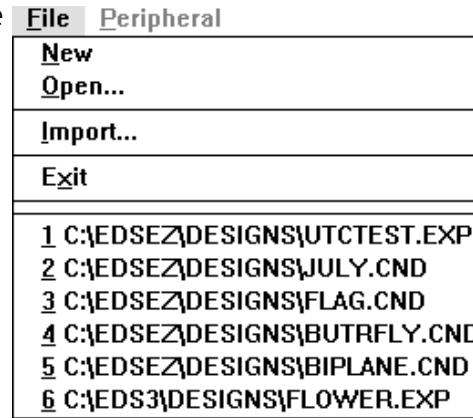
### File

Click on File in the menu bar and a drop-down menu (Figure 3-3) offers five options: New, Open, Import, Exit and a Design List.

**New** opens an empty Layout Window.

**Open** requests information for retrieving a DOS file. A more complete discussion of Open can be found in Chapter 7, "Working With Designs".

**Import** requests information for retrieving a non-DOS file. **Exit** closes EDS EZ and returns you to the Windows program manager.



**Figure 3-3**

The **Design List** is at the bottom of the menu. The last six open files are listed here. Clicking on a name opens that design in the Layout Window.

### Peripheral

Click on Peripheral to access the Transfer dialog box, which allows you to send .EXP or .ASD files directly to the peripheral.

### Help

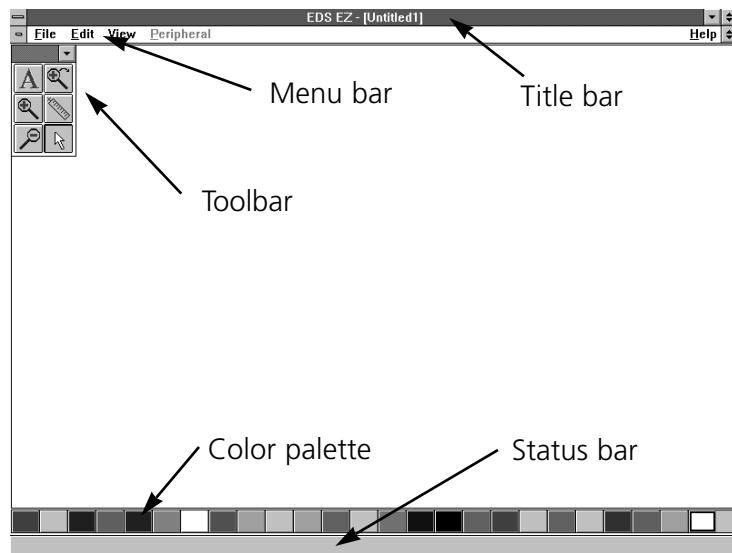
Provides information about the version of EDS EZ you are running. See Chapter 1 for more information on how to use help.

## The Layout Window

Open the Layout window from the Application window by clicking on File then New. The menu bar options are: File, Edit, View, Peripheral, and Help.

From the Layout window shown in Figure 3-4 you can:

- Create lettering
- Add lettering to a design
- Open files from the hard disk and DOS format disks
- Import designs from paper tapes and non-DOS disk formats (Melco, Tajima, Barudan, Premier, and ZSK)
- Export designs to non-DOS formats and paper tapes
- Save design files to the hard drive
- Perform some customization of designs



**Figure 3-4**

### The File Menu

Click on File in the menu bar and the drop-down menu (Figure 3-5) offers the following options; only the options in **bold** are available.

**New** opens an empty Layout window.

**Open** requests information for retrieving a DOS file. A more complete discussion of Open is in Chapter 7 "Working With Designs".

**Close** removes the design file from the active window.

**Save** allows you to save a new design or changes to an existing design. If you are saving for the first time, the Save As dialog box will appear and prompt you for a file name. If you are saving changes to an existing file, the original file will be overwritten.



**Figure 3-5**

**Save As** displays the Save As dialog box. It prompts you for information to save your current design as a new file, or a second copy of an existing file. If you change a design, you may want to keep both the original and the modified versions. Each must have a unique name.

**Import** displays the Import dialog box.

**Export** prompts you for information necessary to copy a design file to a non-DOS disk or paper tape.

**Send** transfers a design to a selected peripheral.

**Print** displays the Print dialog box.

**Printer Setup** prompts you for printer information. Clicking on Setup in the dialog box allows you to change or update information about the selected printer.

**Exit** terminates EDS EZ and returns you to the Windows Program Manager after giving you an opportunity to save any open files.

The **Design List** displays up to the last six opened designs.

### The Edit Menu

Only commands in bold print are accessible (see Figure 3-6). Some grayed-out commands will be available in other windows or when screen objects are selected.

**Center Design** places the design's center in the exact center of the peripheral's sewing field. This is an important step before sending designs to be sewn.

**Return to Origin** is on when a check mark appears next to it. Activate this option by clicking on it. It returns the needle to its origin point when a design has finished sewing.

**Cut, Copy, Paste** and **Clear** are used to duplicate or delete designs or portions of designs.

<u>Edit</u>	<u>View</u>	<u>Peripheral</u>
<b>Center Design</b>		
<b>Return to Origin</b>		
<b>Cut</b>	Shift+Del	
<b>Copy</b>	Ctrl+Ins	
<b>Paste</b>	Shift+Ins	
<b>Clear</b>	Del	

**Figure 3-6**

## The View Menu

Only the bold commands in the View menu can be accessed (see Figure 3-7).

**Regenerate** redraws the design in the current window.

**Ruler** allows you to measure on-screen designs.

**Zoom In** enlarges a portion of the design on the screen. Select the area by clicking and dragging the magnifying glass cursor over it. This is useful for more precise editing. It does not affect sewing size.

**Zoom Out** decreases the design size on the screen. Select the area by clicking and dragging the magnifying glass cursor over it. It does not affect sewing size.

**Zoom Last** returns you to the previous Zoom view.

**Fit Window** redraws the design to fill the entire screen.

**Actual Size** draws the design on the screen at its sewing size.

**Show Zoom Factor** displays the current zoom factor on the status bar.

**Tool Bar** allows you to hide or display the toolbar.

**Status Bar** toggles the design information displayed at the bottom of the screen on and off.

**Design Status** displays stitch count, number of color changes, size of the design, and other statistics about the current design.

## The Peripheral Menu

**Status** displays the Machine Status dialog box. This provides information on the status of the currently sewing job.

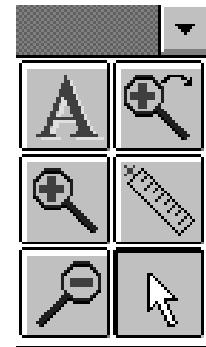
<b>View</b>	<b>Peripheral</b>
<b>Regenerate</b>	
<b>Ruler</b>	
<b>Zoom In</b>	
<b>Zoom Out</b>	
<b>Zoom Last</b>	
<b>Fit Window</b>	
<b>Actual Size</b>	
<b>Show Zoom Factor</b>	
<b>✓ Toolbar</b>	
<b>✓ Status Bar</b>	
<b>Design Status...</b>	

**Figure 3-7**

### **The Layout Toolbar**

The options in the toolbar allow you to customize your design and work with other features of EDS EZ. They are represented by tools arranged down the left side of your screen as shown in Figure 3-8.

-  The Text tool displays the Text dialog box where you create lettering objects for your designs.
-  The Zoom In magnifying glass enables you to look more closely at a selected area of the current design
-  The Zoom Out magnifying glass enables you to see more of the current design.
-  The Zoom Previous magnifying glass returns you to the previous zoom level.
-  The Ruler tool allows you to measure a design in the Layout window.
-  The Normal Cursor tool returns you to the standard arrow-type cursor.



**Figure 3-8**

## 4. Text Designs

Designs and alphabets are sometimes thought of as separate entities; but, alphabets are really a set of designs. Normally there is a design for each letter, number, and punctuation mark in the set.

### The Text Tool

Creating text begins with the Text tool shown in Figure 4-1. Click on it and the Text dialog box displays.

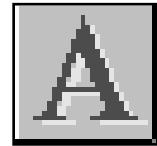


Figure 4-1

The options in this dialog box affect the way your lettering displays on the screen and the way it embroiders.

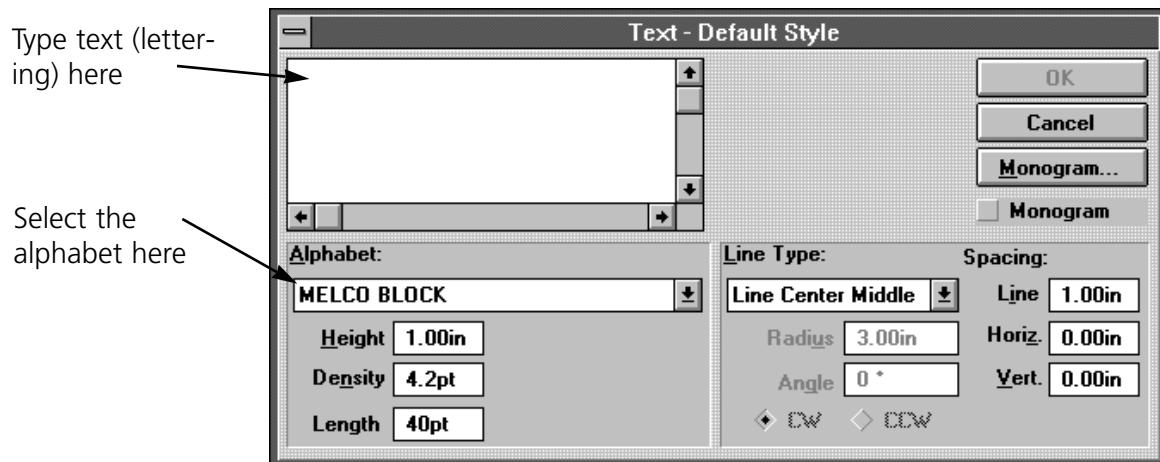


Figure 4-2

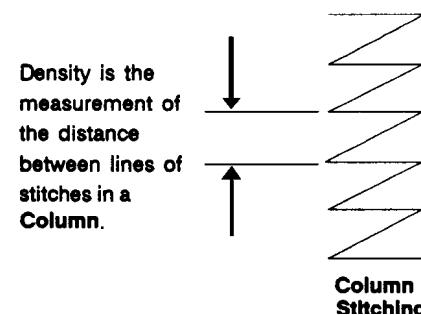
## Density

In the EDS EZ Text screen, the density box refers to the space between each line of stitching (see Figure 4-3). When this space is decreased, the lines of stitching per inch increases. To create more lines of stitching per inch, decrease the density value. A general rule of thumb is:

- As design size **increases**, density value should **decrease**
- As design size **decreases** density value should **increase**

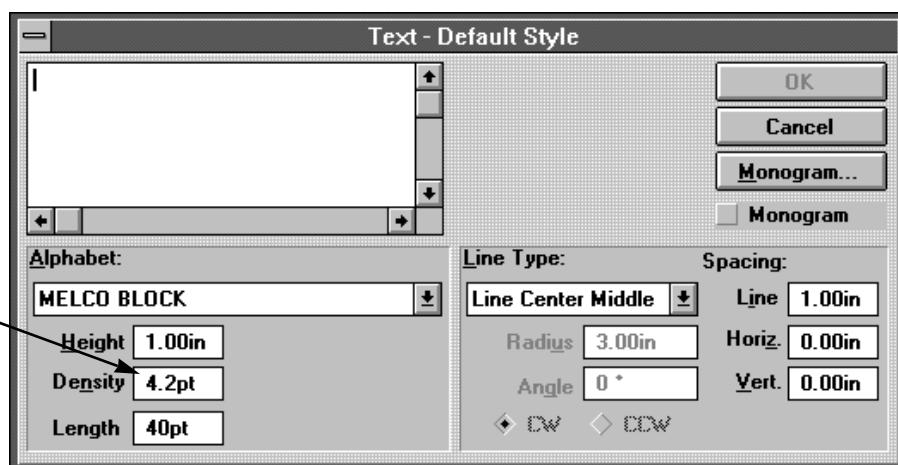
EDS EZ defaults to a density of 4.2 points (about 60 lines of stitching per inch). This is a useful density for many applications.

Note: Changing the density only affects column or satin stitches. Some alphabets are composed of fill stitches and changing the density will not alter their appearance.



**Figure 4-3**

Enter the density here



**Figure 4-4**

## Length

Length refers to the underlay, walking, or running stitches used to move from one area of sewing to another. These stitches are often covered by column stitching. Use the following as a guide:

Lettering Size	Running Stitch Length
0.5 inch or greater	30-40 points
0.25 inch to 0.5 inch	25-30 points
0.25 inch or smaller	20-25 points

## Line Type Options

There are five choices for line type:

- Line Center Middle
- Line Center Bottom
- Line Normal
- Arc Normal
- Arc From Center

You can sew in various types of arced or straight lines. Radius, Angle, CW and CCW are used when sewing the arc line types.

### Line Center Middle

Line Center Middle centers lettering both horizontally and vertically around the needle starting and ending point (see Figure 4-5).

### Line Center Bottom

Line Center Bottom centers lettering horizontally at the needle starting point, which becomes the lettering baseline (see Figures 4-6). In most alphabets the tails of the lower case letters such as g, j, p, q, and y extend below the baseline.

### Line Normal

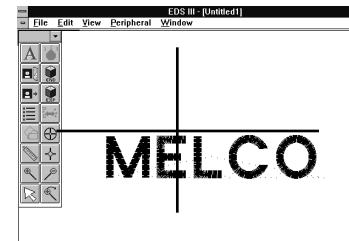
Line Normal starts the lettering at the current needle position, which is also the lettering baseline (see Figure 4-7). When the lettering is finished, the needle will not return to its original position.

### Arc Normal

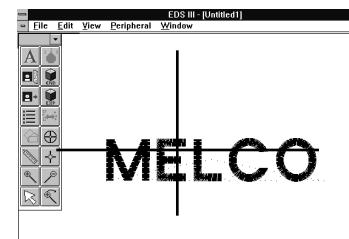
Arc Normal sews lettering in a curve. The needle starting position is the lettering baseline, with the text centered around the needle point (see Figure 4-8).

### Arc From Center

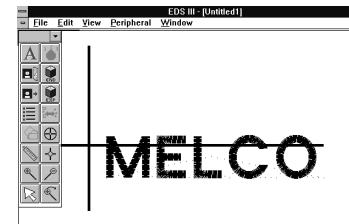
With Arc From Center, the needle position prior to sewing is at the center of a circle that would be formed if the arc were completed. The first needle movement is from that center point to the circumference which is the lettering baseline (see Figure 4-9).



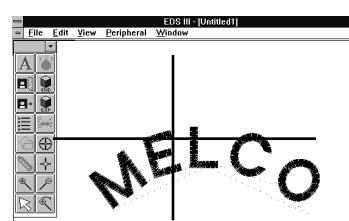
**Figure 4-5**



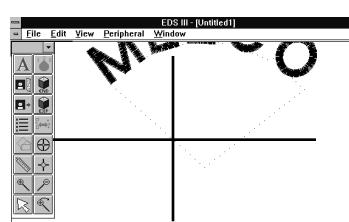
**Figure 4-6**



**Figure 4-7**



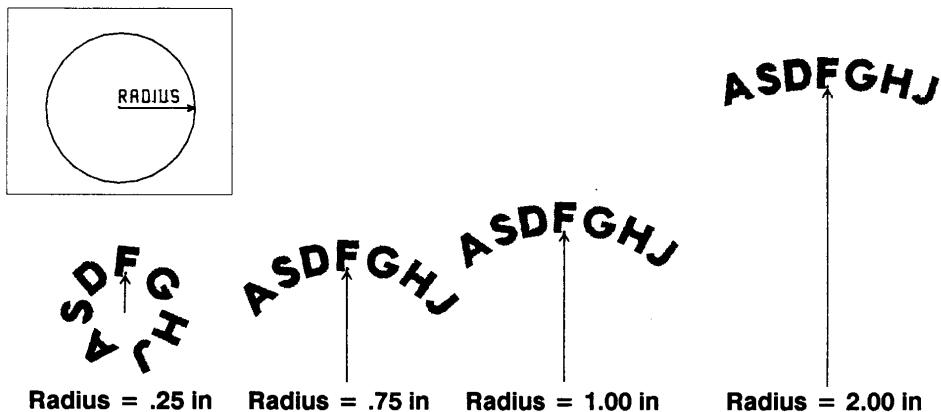
**Figure 4-8**



**Figure 4-9**

# Radius

Radius controls the degree of curve in an arc (see Figure 4-10). An arc is part of a circle's circumference or edge. The radius is the distance from the center of the circle to the circumference. The larger the radius, the flatter the curve.



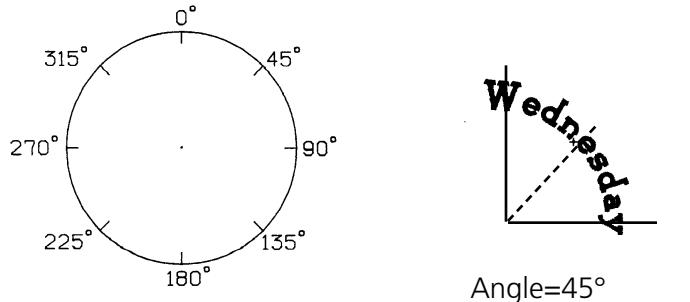
**Figure 4-10**

## Angle

Angle determines the location of the text center point. It is entered in degrees, with 0 at the top of a circle, and 180 at the bottom (see Figure 4-11).

**CW (Clockwise) and CCW  
(Counterclockwise)**

Figure 4-12 shows to sew in a clockwise direction when text is in the top half of a circle and counter-clockwise when text is in the lower half of a circle.



**Figure 4-11**



## CW - Top half of circle



### CCW - Top half of circle



CCW - Bottom half of circle



### CCW - Top half of circle



CCW - Bottom half of circle

**Figure 4-12**

## Spacing

Sometimes text is too crowded or too loosely spaced. This often happens to arc lettering (see Figure 4-13). Use the following techniques to adjust spacing.

### Uniform Spacing

At the Text dialog box, locate Spacing in the middle right corner. Under Spacing is an option which allows you to increase or decrease the distance between all the letters in your text by a uniform amount. With letters of 0.75 inches in height, adding 0.10" helped the spacing, but the E M B letters at the lowest part of the arc are still too close. If more horizontal spacing is added, some of the other letters would be too far apart. Now customized spacing is needed.

### Customized Spacing

Click on the Adjust tool. Place the cursor between the letters needing space added, then press F8. A » symbol appears between the letters (Figure 4-15). Repeat as needed until spacing is adequate (Figure 4-16).

Each » adds a space equal to 1/16 of the letter height. For example, with a 1" letter the space would be 1/16". With a 0.5" letter, the space would be 1/32".

### Deleting Space with the F7 Key

You can decrease the space between letters that are too far apart in a similar manner. In the Text dialog box, place the cursor between the letters that are too far apart and click. Press F7 and a « symbol appears between the letters. Click OK to move the letters closer together. Each « subtracts a space equal to 1/16 of the letter height.



Figure 4-13



Figure 4-14

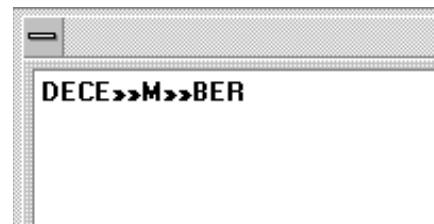


Figure 4-15



Figure 4-16

### Line Spacing

Line spacing is defined as the distance from the bottom of one line to the bottom of the next. A letter height of 1.0 inch with a line spacing of 1.0 inch makes the letters from each line touch (see Figure 4-17).



Figure 4-17

Use the following formula to determine line spacing:

$$\text{Letter height} + \text{desired space between lines} = \text{Line Space}$$

### Vertical Spacing

Vertical spacing allows you to stair-step lettering up or down. (This feature cannot be used with Arc formats.) In the text dialog box, locate the Vertical option. This value defaults to 0.00. Change the value and click OK (see Figure 4-18). The top of each letter is to the right and above the previous letter by the amount of space designated.

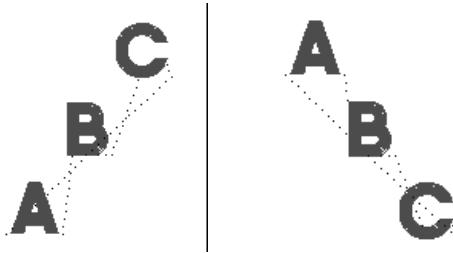


Figure 4-18

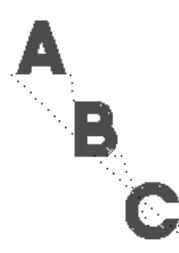


Figure 4-19

Insert a negative value to stairstep down (see Figure 4-19).

### Color Changes

A Color Change is an instruction to the peripheral to pause for a rethread on a single-needle machine, or to change to a different needle on a multi-needle machine. It also changes the color in the Layout window to the next color in the palette.



Figure 4-20

### Trims

A Trim command causes peripherals equipped with trimmers to perform a trim between each letter. Trims between lower case script lettering are unnecessary. Add a trim in the Text dialog box by placing the cursor between the letters where you want the trim and clicking, then pressing F9. A symbol will appear in the Text screen to mark the trim. There will be no visible difference in the Layout window.

## **Centering Text**

The Center Design command recenters your design in the center of your peripheral's sewing field. You can adjust the placement of the design at the peripheral before you begin to sew, but you should always perform this step before sending a design. To center the design, click on Edit, then Center Design.

## **Monogramming**

You can create a monogram in EDS EZ using either a monogram alphabet or a regular alphabet in Monogram mode. Letters for monograms are entered from the Layout window using the Text tool and dialog box.

### **Using a Monogram Alphabet**

To create a monogram using a monogram alphabet:

1. Click on the Text tool to display the text dialog box.
2. Select a Monogram Alphabet (for example, 3 LTR DIAMOND).
3. Type the initials (standard monogramming convention uses first, last, and middle initials in that order).
4. Type in the Height of the center letter. The heights of the other letters are controlled by the monogram alphabet.
5. Adjust the density as needed for the selected height.

Note: Do not click the monogram box when using monogram alphabets. It is used when monogramming with regular lettering alphabets.

6. Click on OK to display the monogram (see Figure 4-21).

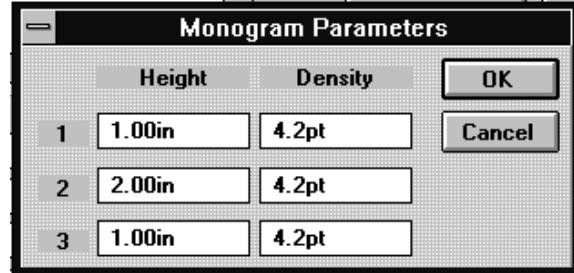


**Figure 4-21**

### **Monogramming With Regular Alphabets**

You can create a monogram using a regular alphabet by following these steps:

1. Click on the Text tool to display the text dialog box.
2. Select a regular alphabet.
3. Type in the initials.
4. Click on Monogram in the upper right quadrant of the Text dialog box, and the Monogram Parameters dialog box displays (Figure 4-22). The numbers 1, 2 and 3 refer to the letters in a monogram. Set number 2, the middle letter, at a height of 2.0 inches. Change the density, if so desired.
5. Click on OK. Now Monogram is checked in the Text dialog box as an indication that you are in the monogram mode and using a regular lettering alphabet.
6. Click on OK to display the monogram.



**Figure 4-22**

## 5. Working with Designs

---

### Designs as Objects

When EDS EZ draws a design in the Layout window, that design is referred to as an object. Each object is a separate item and maintains its own attributes. This allows you to have a mixture of expanded and condensed designs in the same window.

#### Using Cut, Copy, Paste, and Clear

The Cut, Copy, Paste, and Clear options are in the Edit menu and can be used with any object in a selection box. The first three options work with the Windows clipboard, which is a temporary memory area.

**Cut** copies the object to the clipboard and deletes it from the screen.

**Copy** copies the object to the clipboard but does not delete it from the screen.

**Paste** copies the contents of the clipboard to the screen.

**Clear** deletes an object from the screen without copying it to the clipboard. Once an object has been cleared it cannot be recovered.

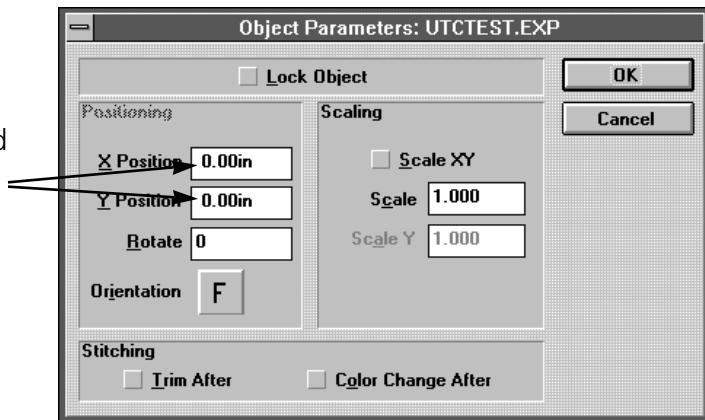
You can also delete objects by clicking them, then pressing the [DEL] key on the keyboard. As with clear, objects that have been deleted cannot be recovered.

An object remains on the clipboard until you end your EDS EZ session or until you Copy or Cut another object. There can only be one object in the clipboard at a time.

## **Moving Objects In The Window**

Click on the object, and a box with handles appears around it. Click and hold the object within the box (not the box handles) using the left mouse button, and you can move the object anywhere in the active area of the window. You can also move an object in a single axis (either up/down or left/right) by holding down the [Ctrl] key while using the mouse to click and drag.

Double-click on an expanded design and the Object Parameters dialog box (Figure 5-1) appears. ,



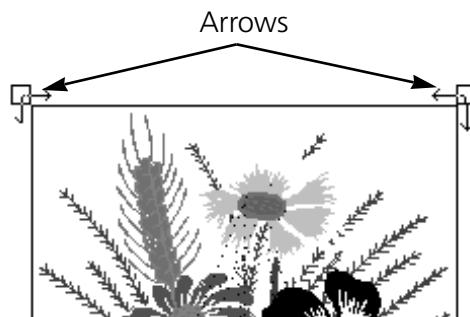
**Figure 5-1**

Double-clicking on a Condensed design brings up a different dialog box. You cannot move a Condensed design numerically.

## **Rotating Objects**

### **Condensed Designs**

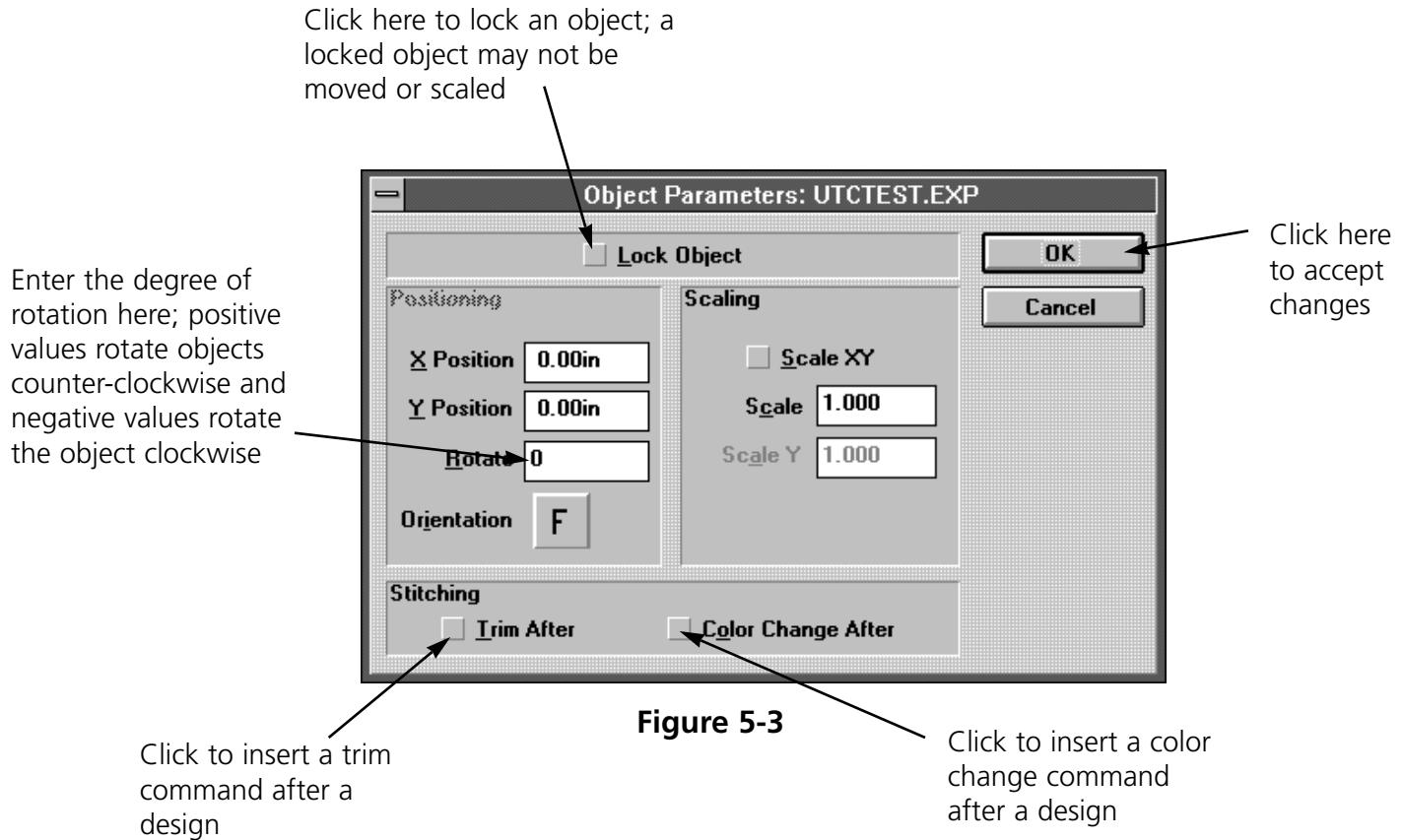
To rotate a condensed design, click on the object and drag handles appear. Click again and the handles turn into arrows (Figure 5-2). Click on a corner of the design with the left mouse button and drag to rotate the design. The status bar displays the degree of rotation.



**Figure 5-2**

### Expanded Designs

Expanded designs may also be rotated using the above procedure but may be rotated more precisely using the dialog box. Double-click on an expanded design to display the Object Parameters dialog box (Figure 5-3).



**Figure 5-3**

### Changing the Orientation of a Design

Sometimes design orientation must be altered for proper results. Figure 5-4 shows the various orientations available.

To change orientation, refer to these instructions.

1. Click on the Object Parameters tool to display its dialog box.
2. Click on the **F** under Orientation until the desired orientation displays.
3. Click on OK.



**Figure 5-4**

## **Deleting an Object**

EDS EZ gives you the flexibility to delete an object in two different ways.

### **The Layout Window**

1. Click on the object.
2. Press [DEL] on the keyboard.

### **The Menu Bar**

1. Click on the object.
2. Click on Edit in the Menu Bar.
3. Click on Clear.

## **Centering a Design**

The Center Design command recenters your design in the center of the sewing field. You can adjust the placement of the design at the peripheral before you begin to sew, but you should always perform this step before sending a design. To center the design, click on Edit, then Center Design.

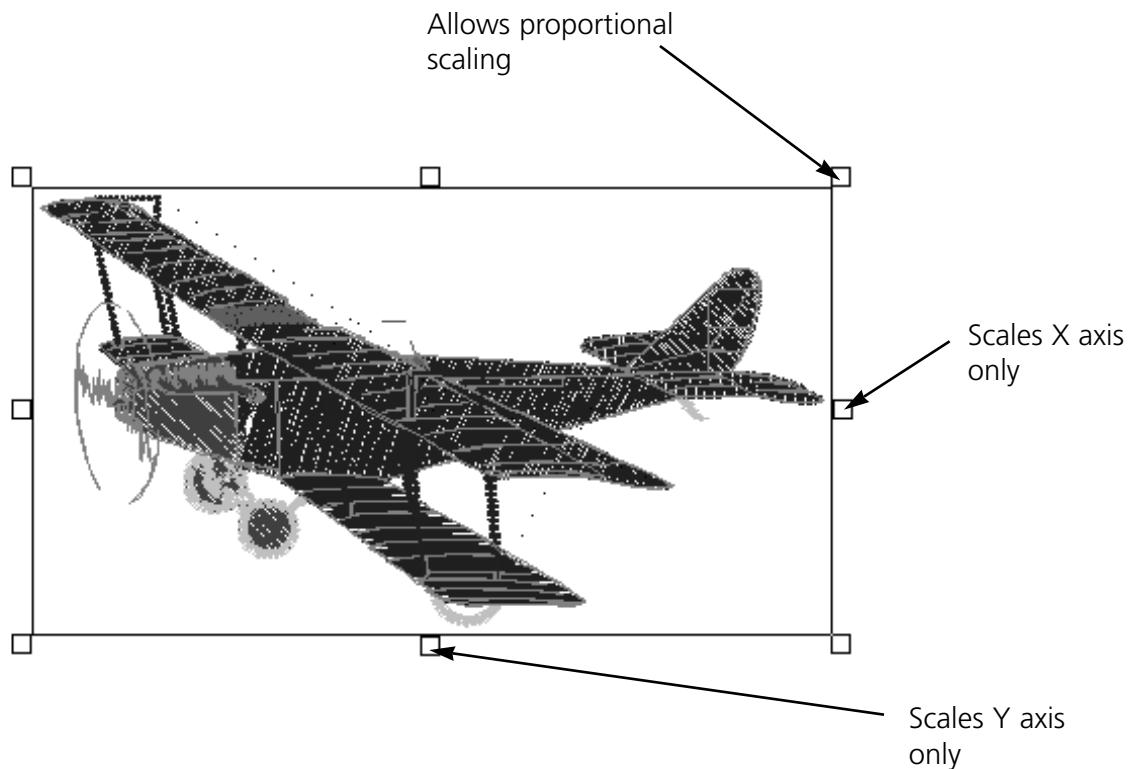
## **Scaling Designs**

Condensed designs can be increased in scale by up to a factor of three and reduced by as much as a factor of 0.2. Perform a test sewout if you dramatically change a design's scale.

Rescaling a condensed design adds or subtracts stitches to or from the design. Rescaling an expanded design does not.

### **Scaling a Condensed Design**

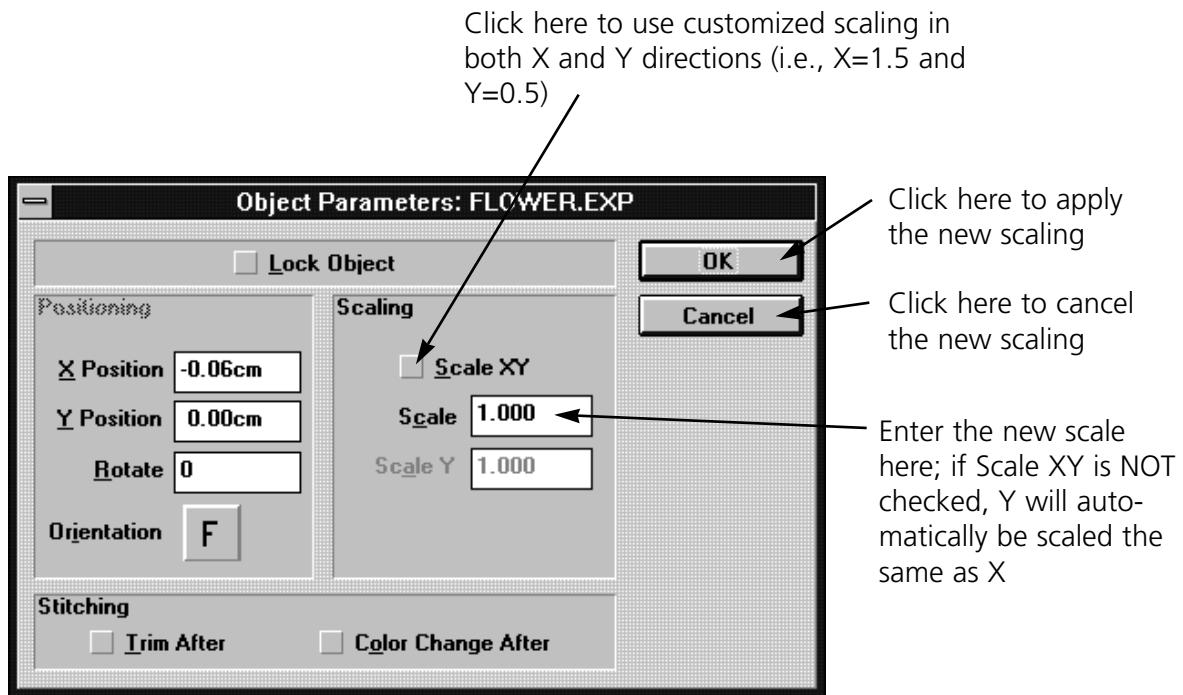
To scale a condensed design, click on the object and drag handles appear (Figure 5-5). Click on a corner of the design with the left mouse button and drag to scale the design. The status bar displays the new relative proportions.



**Figure 5-5**

### Scaling an Expanded Design

Expanded designs may also be scaled using the above procedure but may be scaled more precisely using the dialog box. Double-click on an expanded design to display the Object Parameters dialog box (Figure 5-6).



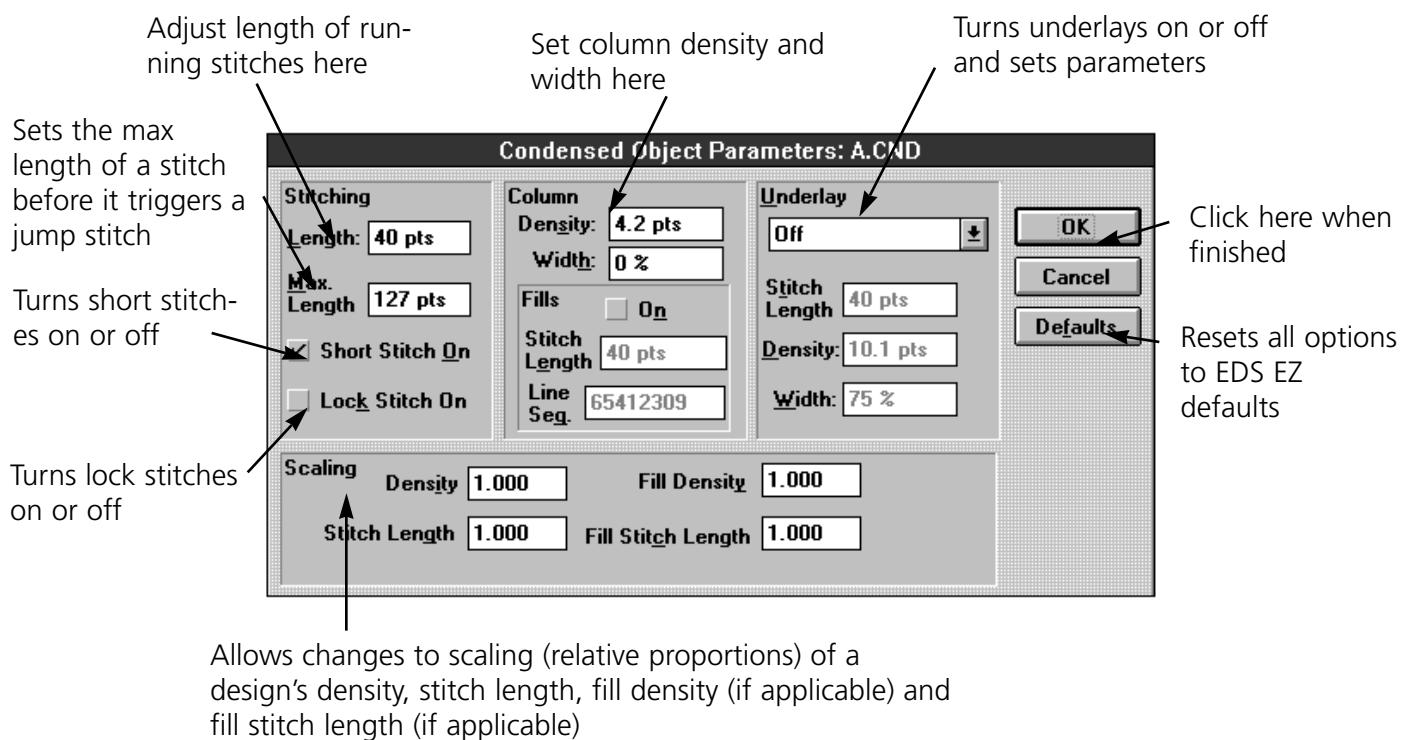
**Figure 5-6**

## Modifying Condensed Designs

EDS EZ allows you to modify the way a condensed design sews. This applies to condensed designs only.

Follow these steps to modify a condensed design:

1. Load a .CND file into the Layout window.
2. Double-click on the object to display the Adjust dialog box (Figure 5-7).



**Figure 5-7**

### Stitching

#### Length

Length refers to the walking or running stitches used to move from one area of sewing to another. These stitches are usually covered by column stitching.

#### Max. Length

Enter the maximum stitch length up to 127 pts. The default is 127 pts.

### **Short Stitch On**

Short Stitch sews less than the full column width on the inside of a curve or corner. This prevents repeated needle penetrations in one spot. The default is On.

### **Lock Stitch On**

Lock Stitch On sews three small stitches at the end of a letter to tack the stitching. The default is Off. If the design already features lock stitches, enabling this command will add three more.

### **Column**

#### **Density**

This is the space in a column between the lines of stitching. The value is entered in points.

#### **Width**

Width allows you to increase or decrease the width of the individual column. The height may also be slightly affected. The value can be changed in increments of 10%, from +70% to -70%.

### **Fills**

Fills converts column stitching to fill stitching. Instead of a single stitch across the entire width of a column, there are a series of shorter stitches. Turn on Fills when letters are too large for column stitching to be durable. Fills applies to all Alphabet, Monogram, and Design File column stitches.

### **Stitch Length**

This sets the length of Fill stitches. The default is 40 points.

### **Line Sequence**

When there are multiple stitches in a column, they can sew one directly under the other, or in a staggered pattern. Line Sequence determines where the needle penetrations will be on each line.

### **Underlay**

Turning Underlay On allows you to choose one of the three types of underlay for column stitching. Underlay works with Alphabet, Monogram, or Design files, but will not sew beneath fill stitching.

#### **Stitch Length**

Length sets the underlay stitch length for Edge Walk and Center Walk.

#### **Density**

This is the underlay density for Narrow Column. The range is 2.6 to 84.7 pts.

### **Width**

This is the underlay width by a percentage of the column width from 40% to 95%. It applies to Narrow Column and Edge Walk underlays.

### **Scaling**

This section allows you to change densities and stitch lengths by a percentage of the existing values. It does not change the overall size of the design.

### **Density**

Density resets column density. Values over 1 increase the density and decrease the stitching coverage. Values less than 1 decrease the density and increase the stitching coverage.

### **Stitch Length**

Stitch Length resets running stitch length based on a scale factor rather than points. A value of 2 doubles the stitch length, a value of .5 halves the stitch length.

### **Fill Density**

Fill Density resets the density of fill stitching. Values over 1 increase the density and decrease the stitching coverage. A value less than 1 decreases the density and increases the stitching coverage.

### **Fill Stitch Length**

Fill Stitch Length resets fill stitch length. A value of 2 doubles the stitch length. A value of .5 halves the stitch length.

## **Modifying Expanded Designs**

Double-click on an expanded object to display the Object Parameters dialog box. Following is a description of the options:

### **Lock Object**

If you have a mixture of text and a design, this will "lock" the objects together.

### **Trim After**

This will place a trim at the end of a design sewout.

### **Color Change After**

This will place a Color Change command at the end of a design sewout.

## Print

This feature allows you to print information about the currently loaded design to a connected printer. To access this option click on File, then Print. The Print dialog box (Figure 5-8) appears.

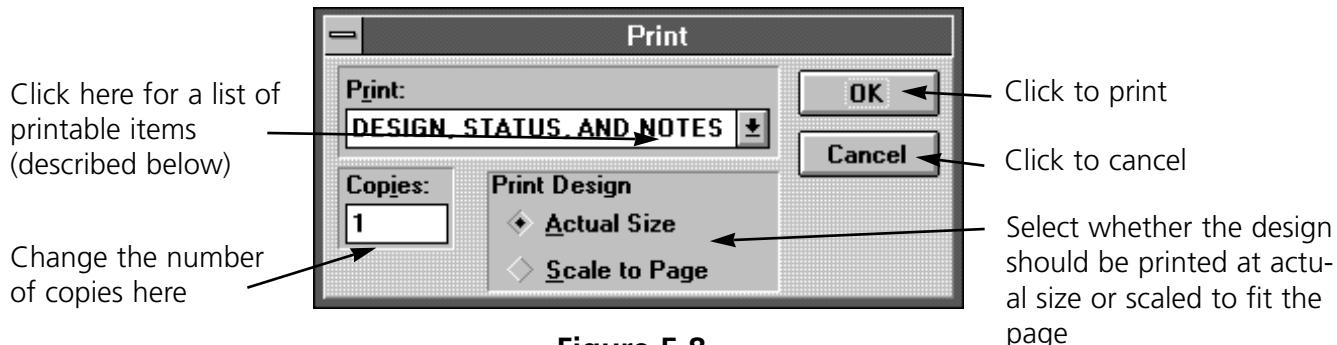


Figure 5-8

**Design, Status, and Notes** prints the current design, status, and any notes associated with the design.

**Print Design** prints the current design as shown on-screen.

**Object List** prints the name of all objects within the current design, their location, and orientation.

**Design Status** prints the size, location, and number of stitches (total stitches and total each color), and other information for the current design.

**Notes** prints the notes associated with the current design.

## Using the Color Palette

EDS III allows you to choose the colors used to draw your designs on the screen. When the palette bar display is on as shown in Figure 5-9, the colors are shown at the bottom of the Layout window. By changing these colors, you get a preview of a sewn garment.

EDS III begins drawing with the first color in the palette bar and moves once to the right each time a color-change command is encountered. EDS III refers to the colors as "Needle 1", "Needle 2", etc., but they do not control which needles are used at the sewing peripheral.

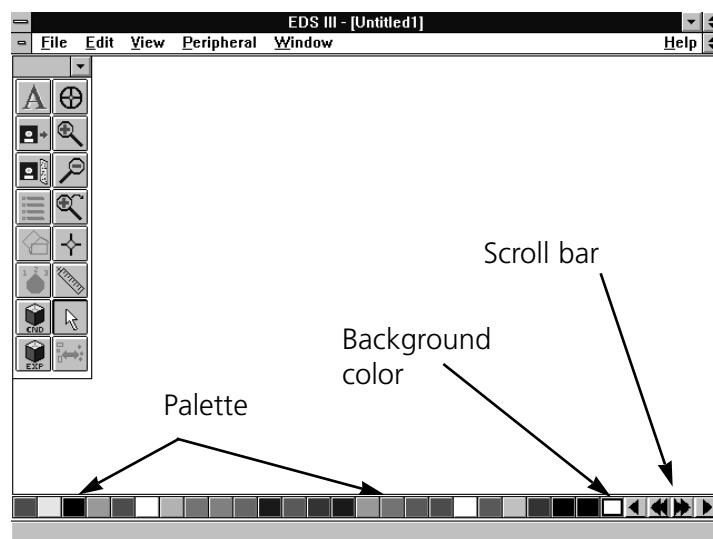


Figure 5-9

99 needles are available in the color palette bar and are displayed 24 at a time. The scroll buttons on the right end of the bar allow you to move forward or backward, one needle at a time or 24 needles at a time. The screen background color is permanently located in the last, outlined box on the right end. The screen color can be changed the same way you control the needle colors.

### Displaying the Palette Bar

To turn on or off the palette bar display, click on View, then Palette. The Named Palette dialog box (Figure 5-10) displays.

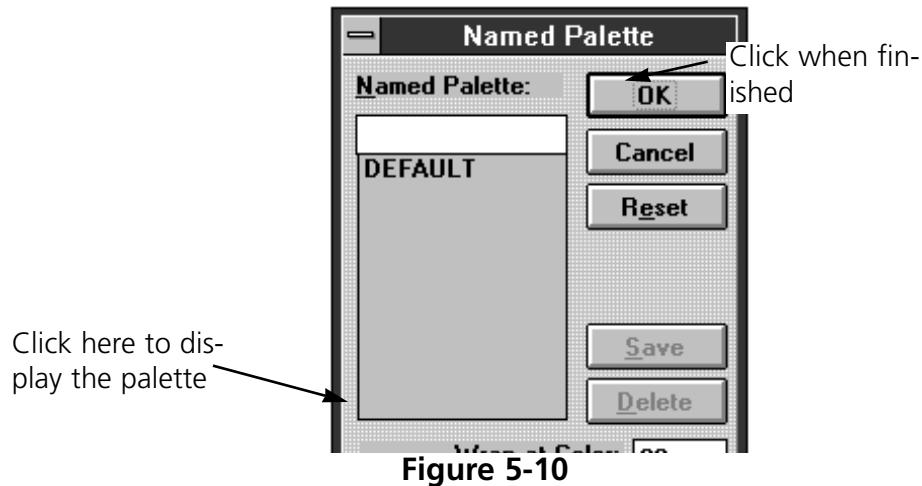


Figure 5-10

### Working with the Palette Bar

In the Layout window, double click any colored square (called "needles") to display the Needle dialog box (Figure 5-11).

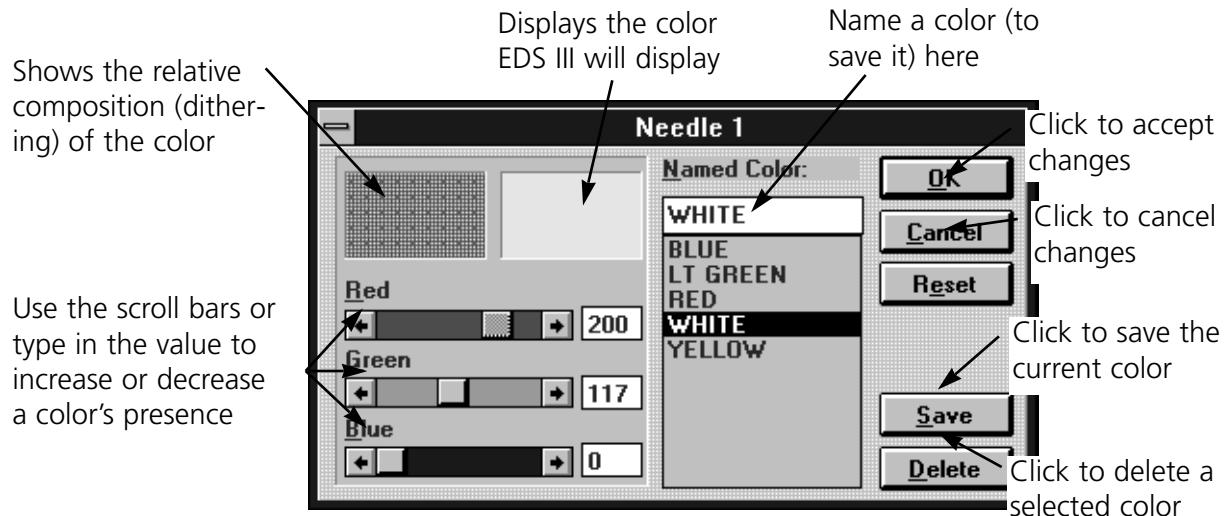


Figure 5-11

### Working with Palettes

You can also save an entire palette of colors. To save a palette of colors click on View, then Palette. The Named Palette dialog box (Figure 5-12) displays.

### Using the Saved Palette

1. Click on View, then Palette.
2. In the Named Palette dialog box, click on the desired palette name.
3. Click OK.



**Figure 5-12**

The Wrap at Color option determines how many colors are used before starting over with Needle 1. You may not want to set colors for all 99 needles.

1. In the Wrap at Color box, enter the last needle to use before starting over with needle 1. This will not affect the sewout.
2. Click OK.

### Color Information

The Red, Green, and Blue color values are in a range of 0 to 255. To see these colors on a 16-color monitor, enter their numerical values in the needle dialog box.

<b>Red</b>	<b>Red - 255</b>	<b>Green - 0</b>	<b>Blue - 0</b>
<b>Green</b>	<b>Red - 0</b>	<b>Green - 255</b>	<b>Blue - 0</b>
<b>Blue</b>	<b>Red - 0</b>	<b>Green - 0</b>	<b>Blue - 255</b>
<b>Yellow</b>	<b>Red - 255</b>	<b>Green - 255</b>	<b>Blue - 0</b>
<b>Magenta</b>	<b>Red - 0</b>	<b>Green - 255</b>	<b>Blue - 255</b>
<b>Cyan</b>	<b>Red - 255</b>	<b>Green - 0</b>	<b>Blue - 255</b>
<b>Reddish Brown</b>	<b>Red - 128</b>	<b>Green - 0</b>	<b>Blue - 0</b>
<b>Darker Green</b>	<b>Red - 0</b>	<b>Green - 128</b>	<b>Blue - 0</b>
<b>Darker Blue (Navy)</b>	<b>Red - 0</b>	<b>Green - 0</b>	<b>Blue - 128</b>
<b>Ocher (Pale Yellow)</b>	<b>Red - 128</b>	<b>Green - 128</b>	<b>Blue - 0</b>
<b>Turquoise</b>	<b>Red - 0</b>	<b>Green - 128</b>	<b>Blue - 128</b>
<b>Violet</b>	<b>Red - 128</b>	<b>Green - 0</b>	<b>Blue - 128</b>
<b>White</b>	<b>Red - 255</b>	<b>Green - 255</b>	<b>Blue - 255</b>
<b>Gray</b>	<b>Red - 128</b>	<b>Green - 128</b>	<b>Blue - 128</b>
<b>Light Gray</b>	<b>Red - 192</b>	<b>Green - 192</b>	<b>Blue - 192</b>
<b>Black</b>	<b>Red - 0</b>	<b>Green - 0</b>	<b>Blue - 0</b>

## 6. Working With Files

This chapter covers opening existing files, importing files from other formats, saving new files, and exporting new files to other formats.

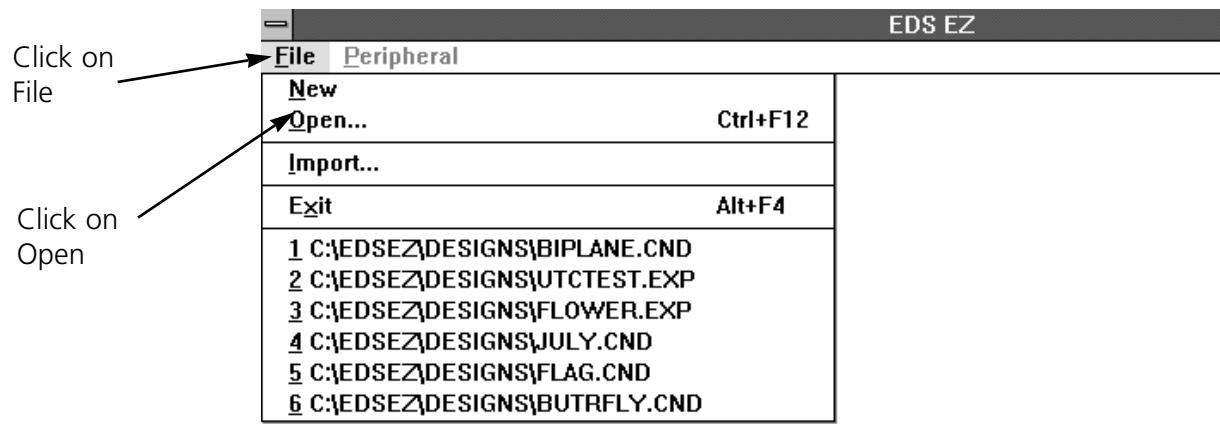
### Design Formats

Disk come in a variety of storage formats, but EDS EZ considers them as either a hard disk (DOS) or a floppy disk. EDS EZ can access both, but uses different commands with each as shown in the following table:

TO PERFORM THIS OPERATION:	USE THIS COMMAND	
	For DOS format	For NON-DOS format
Load design file into EDS EZ	OPEN or IMPORT	IMPORT
Save to hard disk. (All files saved on hard disk are DOS.)	SAVE/SAVE AS	SAVE/SAVE AS
Copy to floppy disk	DOS copy, WINDOWS File Manager copy, or EXPORT	FORMAT the disk appropriately, then EXPORT

## Opening Designs

Refer to Figures 6-1 and 6-2 to open a file.



**EDS EZ**

Figure 6-1

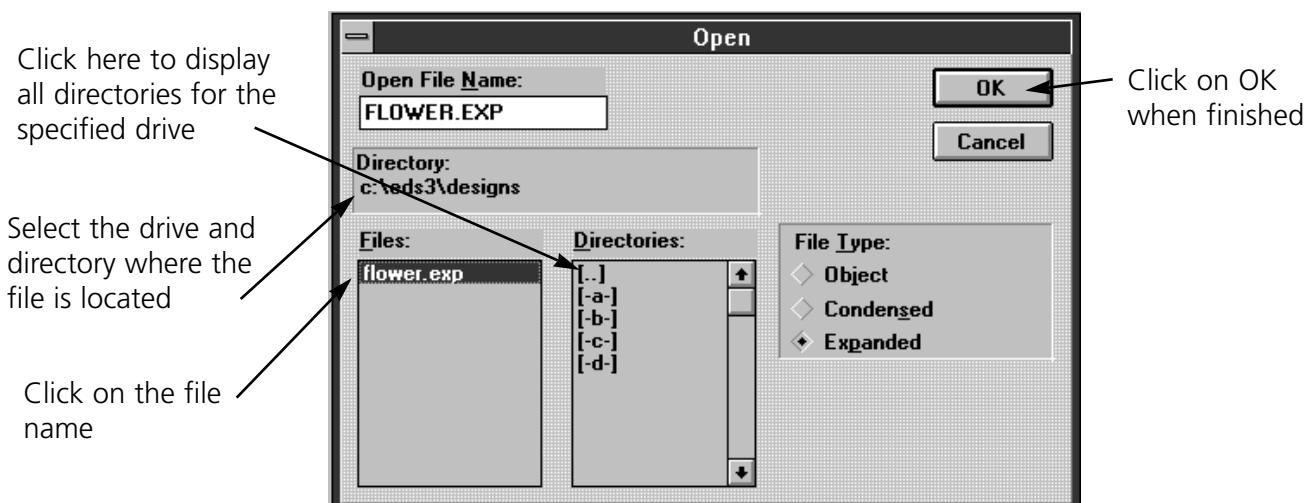
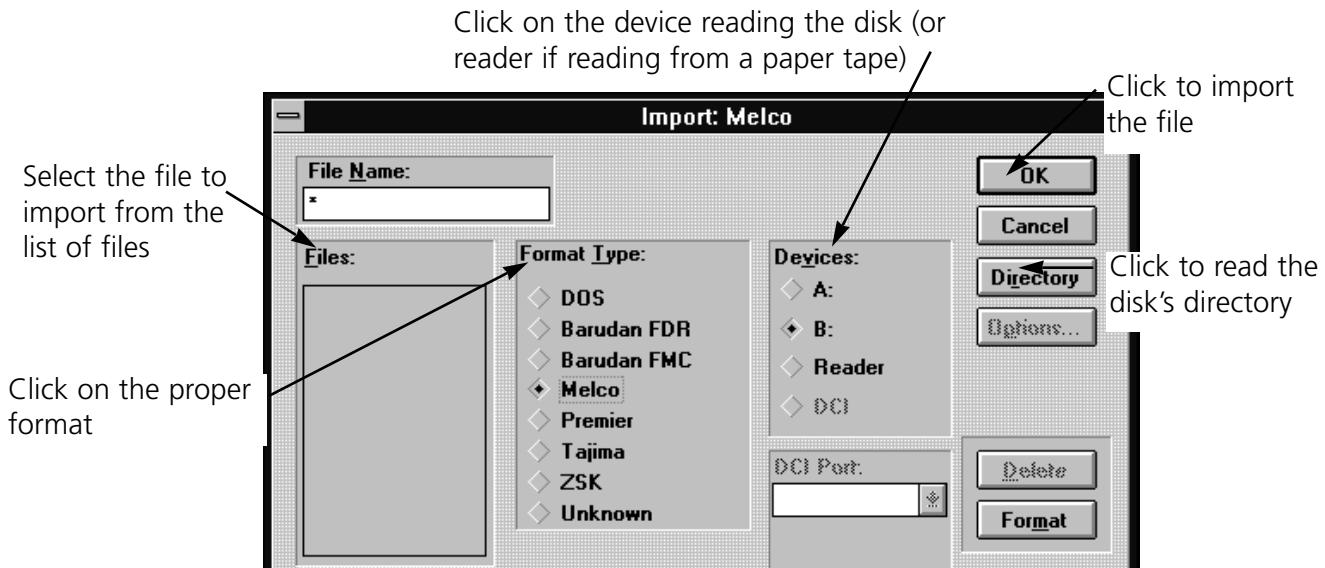


Figure 6-2

## Importing Designs

Some of the designs you work with may be on a floppy disk. EDS EZ is compatible with DOS, Melco, Premier, Tajima, Barudan FDR and FMC, and ZSK disks, all of which have unique formats. The following chart outlines when to use each command.

To import a design, click on File, then Import. The Import dialog box (Figure 6-3) displays.



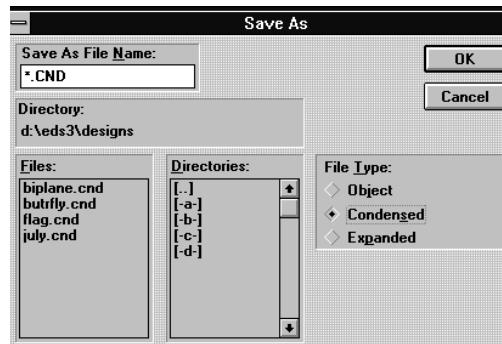
**Figure 6-3**

Note: If you click on the Options button while working with a Tajima format disk, a message box will ask you if you want to update the Boot Record of the disk. This refers to some Tajima disks that have an improper internal label and cannot be read by a DOS computer. If you have problems loading a Tajima disk, click on the Options button and respond Yes to the message.

## Saving Designs

To save a design:

1. Click on File in the menu bar.
2. Click on Save As in the drop-down menu. The Save As dialog box displays as shown in Figure 6-4.
3. Type a name for the design in the Save As File Name box.
4. Select a subdirectory or drive by double-clicking on it in the Directories box. You can move back one level at a time by clicking on [...].



**Figure 6-4**

- Note: If you do not select a subdirectory, your design will be saved in the EDS EZ main directory.
5. Under File Type, click on Condensed, Object, or Expanded, then click on OK. File types are discussed in later chapters.

The name of your file is now displayed in the EDS EZ title bar. After the file has been named and saved once, you can resave the file and any modifications by clicking on Save.

## File Types

The term **file type** refers to the way design data is coded and named. In EDS EZ there are four file types: Expanded, Condensed, Object, and Auto Send.

### Expanded Files

An Expanded design file contains instructions for each individual stitch. Modification of an expanded design is much more limited than modification of a condensed design. Once you save a file as Expanded, you cannot change it to Condensed. Expanded file names have the extension EXP.

### Condensed Files

A Condensed file contains summarized design instructions. Its format allows the design to be rescaled and its density and stitch length modified. Condensed file names have the extension CND.

### Object Files

An Object file contains information about multiple objects, each with its own separate instructions. For instance, you might combine into one Object file:

- An Expanded design of a team mascot
- A Condensed design of team member's name

Then, you can modify each object separately. You could rescale the name without altering the mascot. Object file names have the extension OFM.

### Auto Send Design Files

An Auto Send Design file is created by EDS EZ when transferring or sending files to a peripheral. In addition to your design data, the file contains special instructions added by EDS EZ to help the peripheral make a sewing recovery after a power failure. Auto Send Design files have the extension ASD.

ASD files are stored in the EDS3\ASD subdirectory. To prevent this directory from taking up too much of your hard drive, delete old files periodically using the Windows File Manager. For more information on how to use File Manager, consult your Windows User Manual.

### Exporting Designs

Click on File, then Export to display the Export dialog box (Figure 6-5).

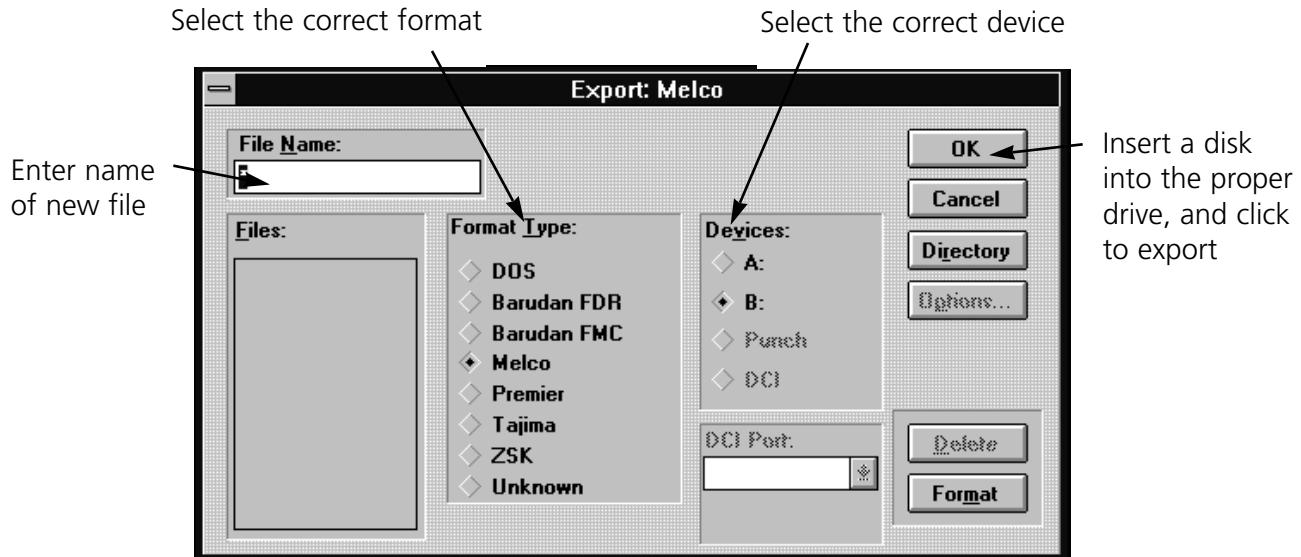
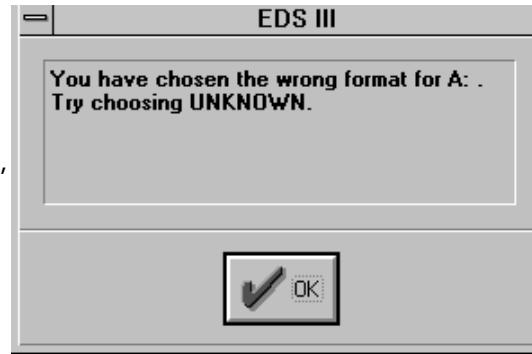


Figure 6-5

Note: If you are unsure of the format, click on Unknown, then on the Directory button. EDS EZ will determine the format of the disk and make the selection for you. If you selected a Format Type that does not match the format of the disk, the error message shown in Figure 6-6 will be displayed. If you are still unsure of the disk's format, click on Unknown.



**Figure 6-6**

The filename conventions for floppy disk formats are given below. These rules must be followed for the disk to be read by other systems:

### **DOS Format**

DOS format names consist of a 1-8 character filename and one of the following extensions:

- .CND - Condensed Format
- .EXP - Expanded Format
- .OFM - Object (Layout format)

### **Barudan FDR Format**

Barudan FDR uses a numeric format. The file number can be from 1 to 36. In addition, a label of up to 8 characters may be specified with this file number. The number and the label must be separated by a colon.

Examples:

- 3
- 26:SNAIL

### **Barudan FMC Format**

Barudan FMC uses a numeric format. The file number can be from 1 to 36. No character labels are allowed.

Examples:

- 3
- 26

### **Melco Format**

MELCO format names consist of a 1-6 character filename and one of the following extensions:

- .CND - Condensed Format
- .EXP - Expanded Format

### **Premier/Stellar Format**

The PREMIER/STELLAR format uses the Indirect mode of specifying file names (see your Premier or Stellar manual for a description of Indirect mode). In general, you can think of a Premier/Stellar filename as a number between 1001 and 1999.

Examples:

1001

1930

The Options button allows you to specify 5 different sizes for the hardware scaling of the design at sewout time. The defaults are:

Smallest: 50%

Smaller: 75%

Larger: 125%

Largest: 150%

Enter new sizes as a ratio to 1.00, for example 125% is entered as 1.25

Note: The Stellar 1 can only read files saved in this format. The Premier can read Tajima and DOS (.EXP) files as well.

For additional information on Premier/Steller formatting information (relating to digitizing and datastitch standards) refer to the Editing and Digitizing in EDS EZ manual.

### **Tajima Format**

Tajima format uses a numeric format with numbers ranging from 1-999. Beginning with EDS EZ release 1.32, any 1-8 character name is also supported. In addition to a filename, a 1-8 character label can be specified after the filename and separated by a colon (like the Barudan FDR format.)

Examples:

1

G001 (How the old Tajima format stored the name 1)

1:TEST

APPLE:TEST (The new Tajima Format)

### **ZSK Format**

Zsk format uses a numeric format with numbers ranging from 1-999.

Examples:

1

12

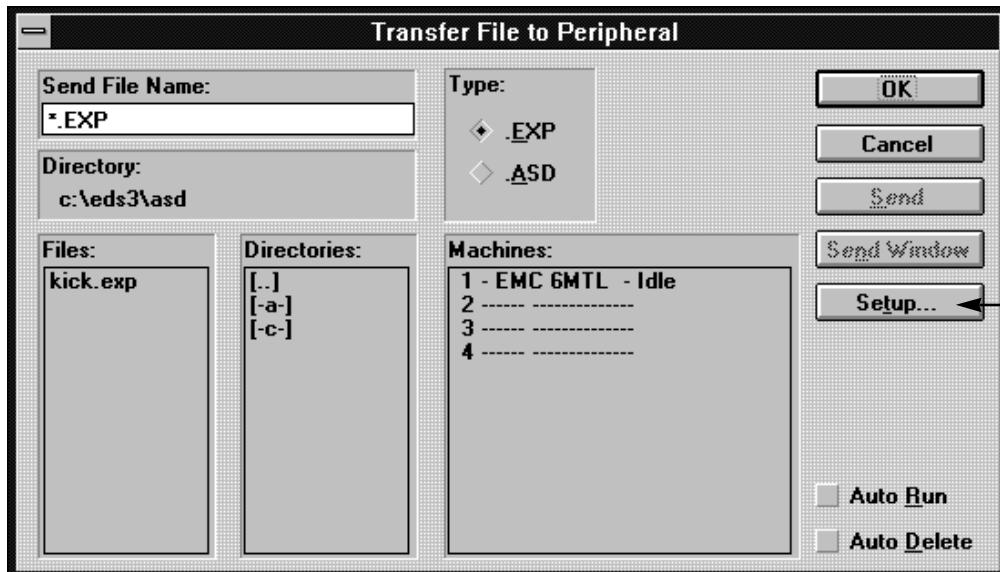
234

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## 7. Working with Peripherals

### Enabling the Peripheral

The peripheral(s) must be enabled before a design is sent. To enable the peripheral, Click on File, then Transfer to display the Transfer dialog box (Figure 7-1).



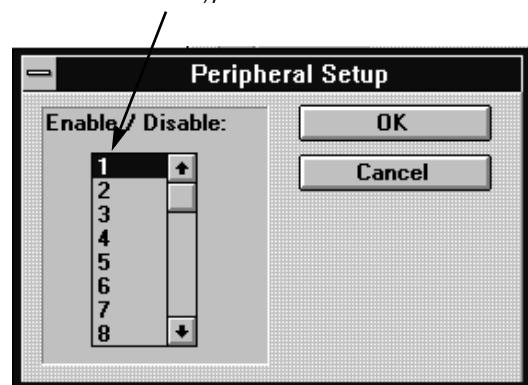
**Figure 7-1**

Before sending a design to the peripheral, make sure the following apply:

- The computer network cable is connected to the peripheral
- The peripheral's power is ON
- The peripheral software is downloaded

Note: The peripheral MUST be set to the same number. Refer to the machine Operator manual for information on how to properly configure the machine.

Click on the peripheral number to enable it (if it is highlighted, it is enabled), then click OK



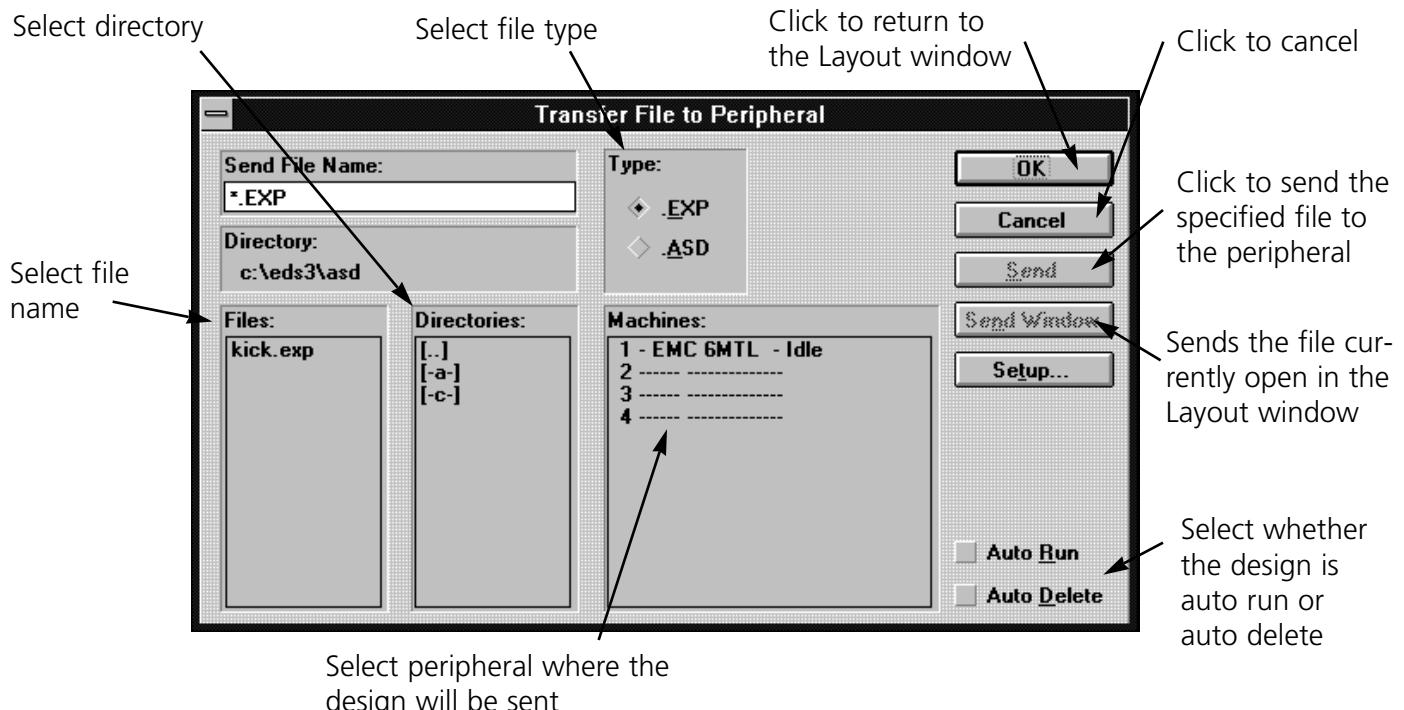
**Figure 7-2**

## Sending Designs

Designs may be transferred to the peripheral(s) one of two ways.

### Using Transfer

Click on Peripheral, then Transfer to display the Transfer dialog box (Figure 7-3).

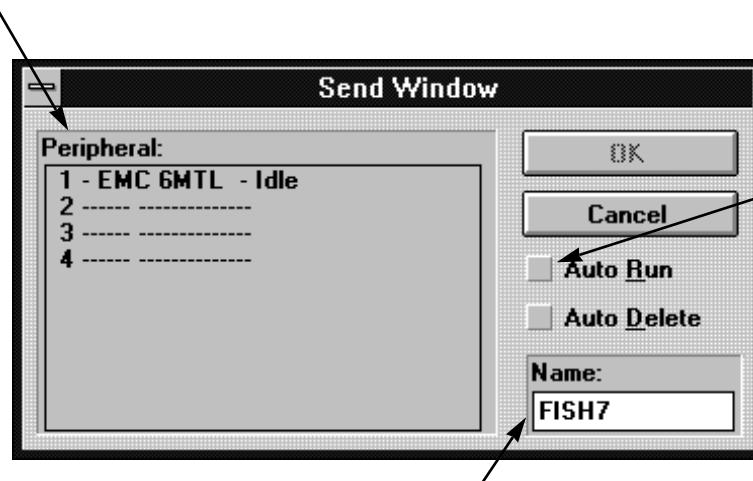


**Figure 7-3**

### Using Send

Click on File, then Send to display the Send dialog box (Figure 7-4).

Select the peripheral



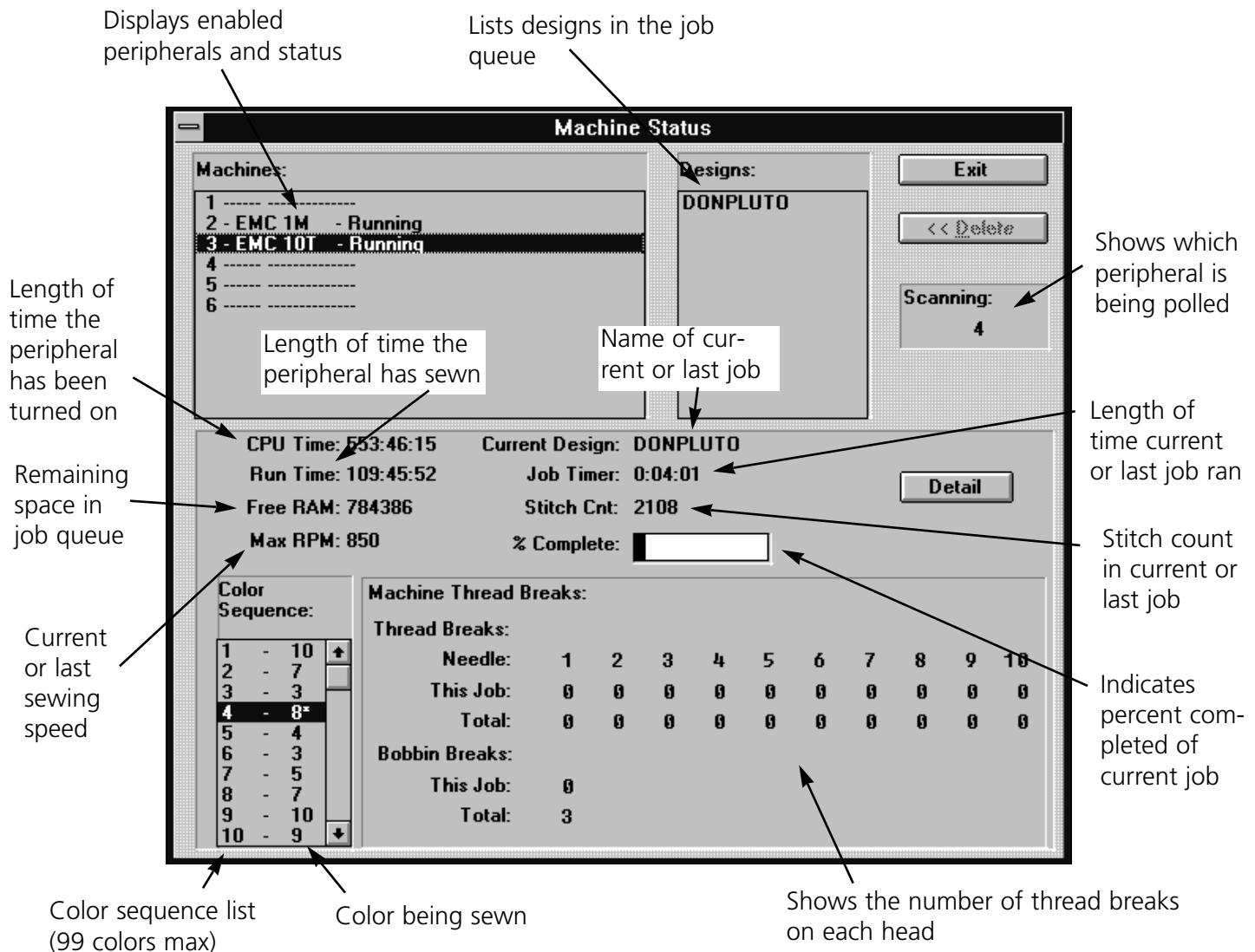
A name will be selected for the file (as it will appear at the peripheral); to change the default name, type the new name here

Click here to automatically queue the design at the peripheral

**Figure 7-4**

## Checking Peripheral Status

EDS EZ continuously surveys each peripheral for statistical data. This data is available on the Machine Status screen. To access the information click on Peripheral, then Status to display the Machine Status screen (Figure 7-5).



**Figure 7-5**

### Detail

This option is available for peripherals designed to relay this information. It appears grayed out if it is not available. Click to display the Thread/Bobbin Breaks information screen (Figure 7-6). Thread Breaks: Displays the thread breaks on each needle.

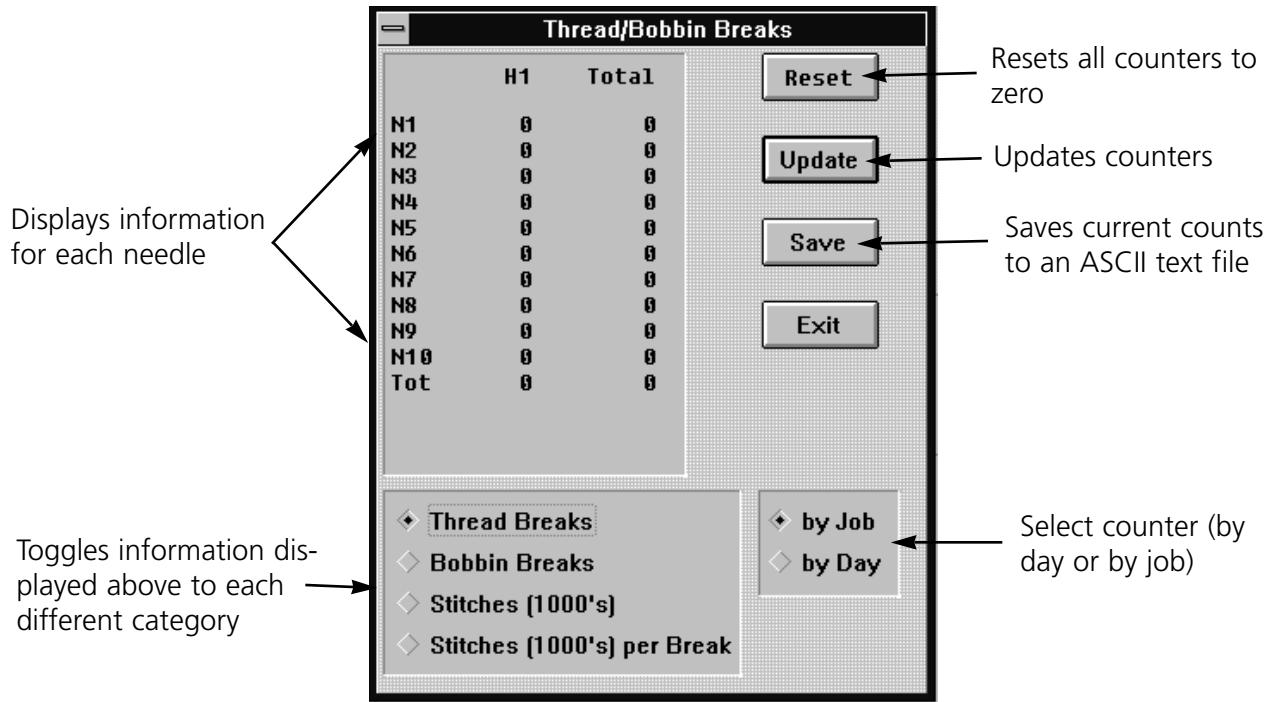


Figure 7-6

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# **Quick Reference Guide**

*for*

**EDS EZ**

**Melco™**  
Embroidery Systems

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110285-01 Revision B

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# EDS EZ QUICK REFERENCE

## Create Lettering

1. Click on File.
2. Click on New.
3. Click on the Text tool.
4. Type in your lettering.
5. Choose Alphabet and other parameters
6. Click on OK.



## Move a Design

1. Click on the design and a box forms around it.
2. Click and hold anywhere within the box.
3. Drag the design anywhere within the Layout window.

## Rotate or Scale a Design

1. Click on the design and a box forms around it.
  2. Click and hold on one of the box handles.
  3. Drag the handle to change the design.
- NOTE: For Expanded designs, double-click on the design to rotate or scale.

## Open a Hard Disk File

1. Click on File.
2. Click on Open.
3. Choose the directory, file type, and design name. Examples: A:boat.cnd, B:flower.exp, C:\eds\designs\july.ofm
4. Click on OK.

## Import a Floppy Disk file

- Melco, DOS, Premier, Barudan, Tajima, ZSK, or Unknown
1. Click on File.
  2. Click on Import.
  3. Select Format type.
  4. Choose the Directory and design name.
  5. Click on OK.

## Adjusting the Design

1. Click on the design and a box forms around it.
2. Double-click on the design and a dialog box appears.
3. Make the necessary adjustments.
4. Click on OK.

## Transfer a Design to the Peripheral

1. From the Application window, click on Peripheral.
2. Click on Transfer.
3. Choose File Type (EXP or ASD)
4. Choose which machine will sew it.
5. Choose the directory.
6. Select one or more files to send.
7. Click on Send.

## To View the Design Status Data

- Design must appear on-screen
1. Click on View.
  2. Click on Design Status.
  3. Click on OK when done.

## Center a Design

1. Click on Edit.
2. Click on Center Design.

## Save a Design

1. Click on File.
2. Click on Save As.
3. Choose the directory, file type, and design name. Examples: A:boat.cnd, B:flower.exp, C:\eds\designs\july.ofm
4. Click on OK.

## Export a Floppy Disk file

- Melco, DOS, Premier, Barudan, Tajima, ZSK, or Unknown
1. Click on File.
  2. Click on Export.
  3. Select Format type.
  4. Choose the Directory and design name.
  5. Click on OK.

## Send a Design to the Peripheral

- Design must appear on-screen
1. Click on File.
  2. Click on Send.
  3. Choose which machine will sew it.
  4. Click on OK.

