



# **101 Software**

## **User Guide**

---

IOLINE CORPORATION  
14140 N.E. 200th Street, Woodinville, WA 98072  
Voice: 1.425.398.8282 • Fax: 1.425.398.8383  
info@ioline.com • www.ioline.com

File Number: 108427R1

# Table of Contents

Introduction .....	2
101 Software Features .....	2
<b>Installation .....</b>	<b>3</b>
Install Ioline Software.....	3
Starting the Ioline 101 Software .....	3
<b>The Basics .....</b>	<b>4</b>
Opening a File .....	4
Design Window .....	5
Design Window Functions.....	6
Design Setup Window .....	7
Sending a Cut File to the Cutter .....	8
Pausing Cutting.....	9
Canceling a Cut .....	9
Save File .....	9
Port Setup .....	10
Help .....	10
Exit .....	10
<b>Tutorials .....</b>	<b>11</b>
Cutting a Design .....	11
Using CorelDRAW® to Make a Design .....	12
Creating a Design.....	12
Welding Letters.....	13
Creating a Contour .....	14
<b>End Notes .....</b>	<b>15</b>
Getting Help.....	15
The FCC Wants You to Know.....	16
Your Comments Are Requested .....	16
Customer Service.....	16
Limit of Liability Statement .....	17
Index .....	18

## Introduction

The Ioline 101 software is designed to work with Ioline cutters used for apparel applications. The 101 software will use imported file data or design files to cut patterns on the cutter. For more information about Ioline cutters, please see the **User Guides** for those products.

## 101 Software Features

- Interfaces with Ioline cutters.
- Imports designs created in CorelDRAW®.
- Nests and cuts multiple copies of pattern outlines, minimizing material waste.

**Note:** Make sure the 101 software is installed as shown in the *Installation* section.

# Installation

## Install Ioline Software

1. Insert the software CD-ROM into the PC CD-ROM drive.
2. The installation should start automatically. If it does not, go to **Start Menu>Run**. Click on **Browse** and choose the CD-ROM drive (usually D:\). Select *iosetup.exe* then **Open** and **Run**.
3. Follow the self-guided installation instructions to install the Ioline Control Center, 101 Software, Acrobat Reader, and all manuals. Figure 1.
4. A window may appear asking to install 'Hardlock Drivers'. Answer 'Yes' to all questions.
5. Restart the computer if requested.

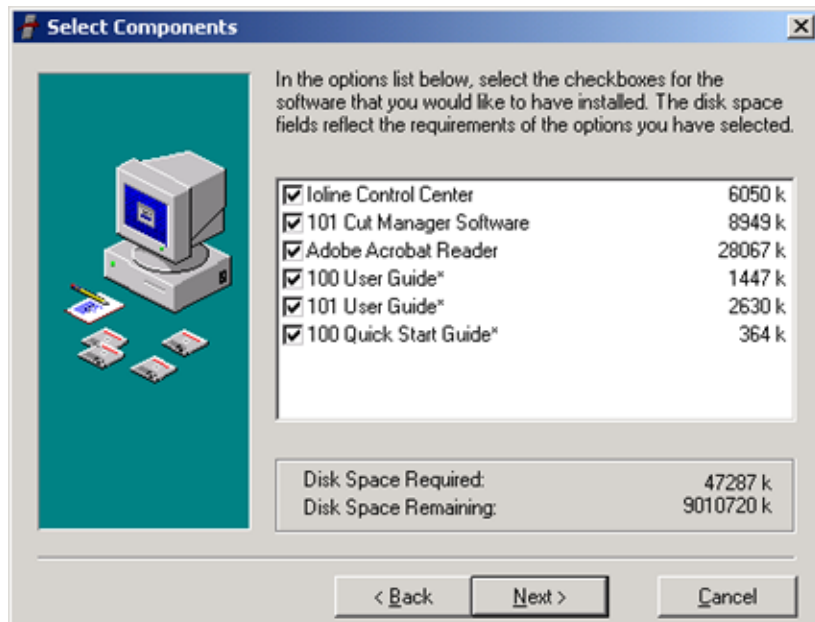


Figure 1 - The 100 software installation screen.

## Starting the Ioline 101 Software



Ioline 101

1. Locate then double click on the **Ioline 101** icon. If selected during the installation this icon is on the desktop.
2. The **Main Window** will appear. Figure 2.

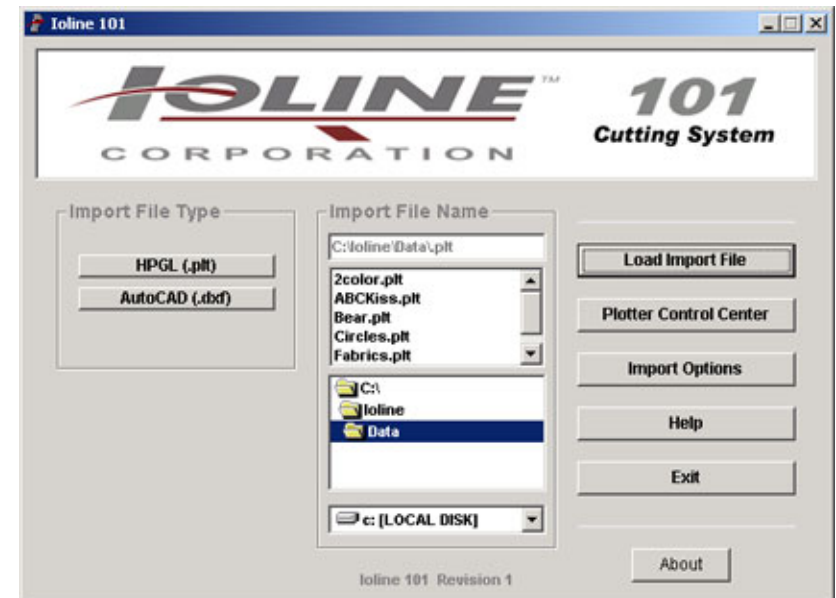
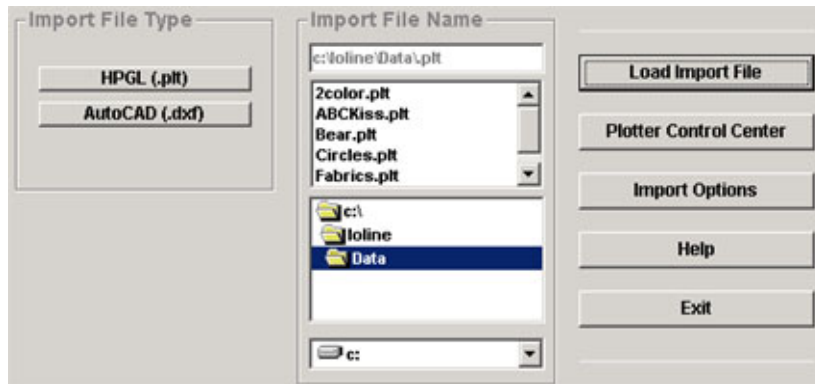


Figure 2 - 101 Software Main Window.

# The Basics

## Opening a File

1. Choose a file type. The 101 supports CorelDraw HPGL.plt and limited DXF formats.
2. Check the **Import Options** by pressing the button and reading the descriptions.
3. Use the center file window to locate the folder and file to import. The default folder is **C:\Ioline\Data**. Figure 3.
4. Click on the file name to import. If the file is not



**Figure 3** - Loading a file into the 101 Software.

shown make sure that the file type and folder location are correct.

5. Click on **Load Import File**.
6. The **Design Window** will appear. Figure 4.

# Design Window

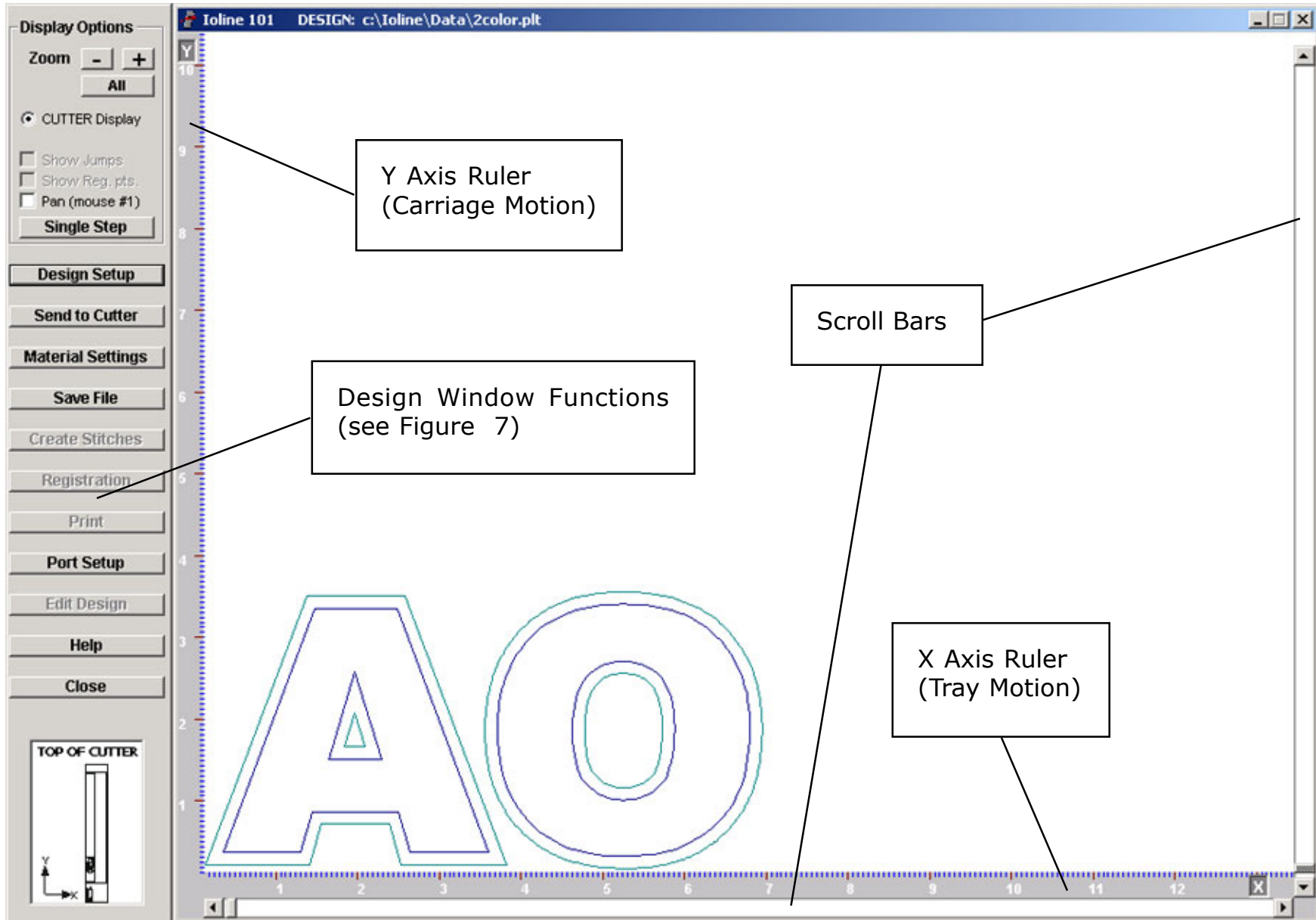


Figure 4 - 101 Design Window

## Design Window Functions

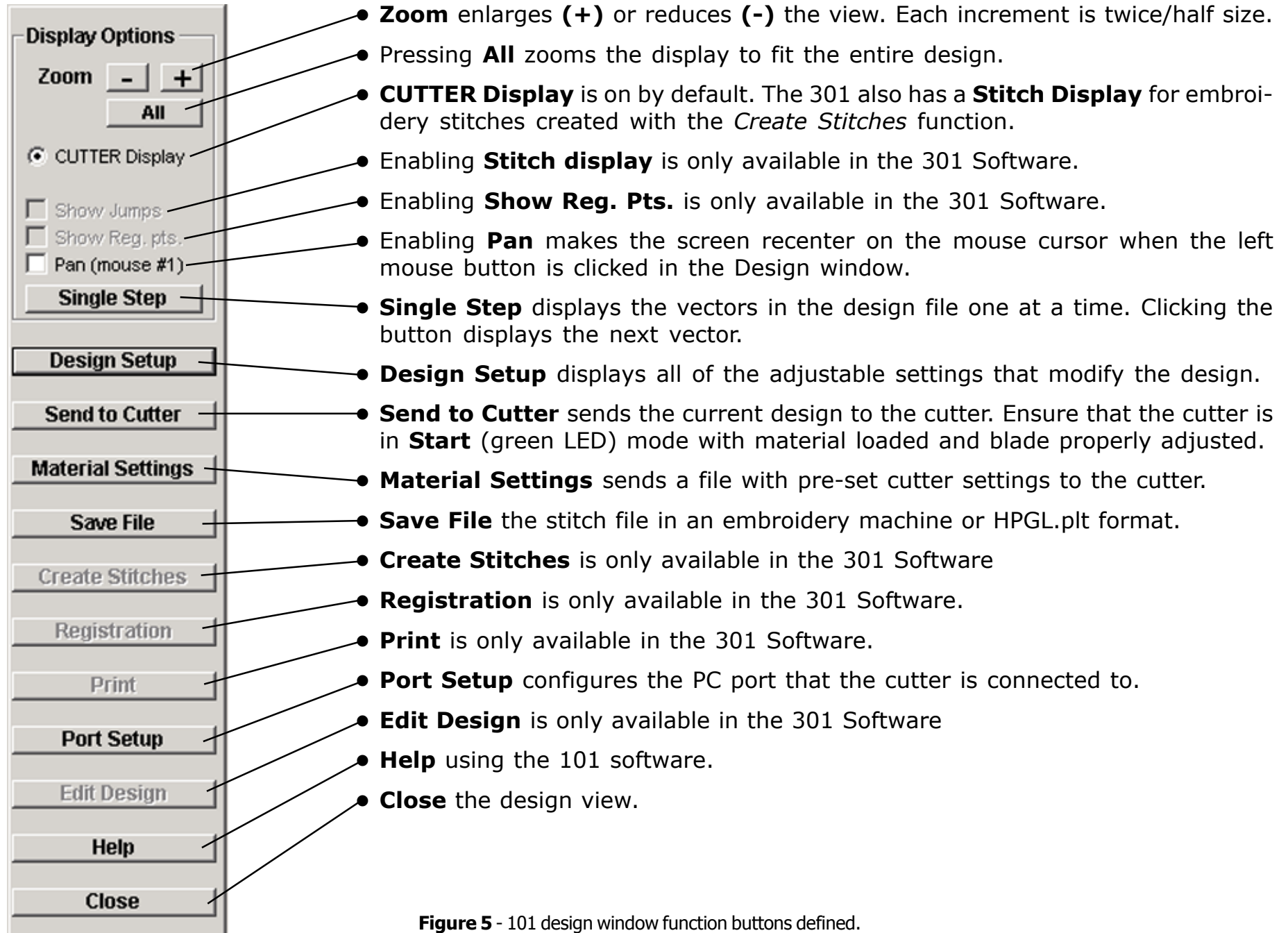


Figure 5 - 101 design window function buttons defined.

# Design Setup Window

**Remove Segments...**  
Combines small vectors into longer smooth vectors. Improves cutting.

**Close Gaps Less...**  
Repairs shapes that are not continuous. Gaps affect cutting quality.

**Rotate**  
Rotates base design.

**Mirror**  
Mirrors base design.

**Ruler Type**  
Change default display units.

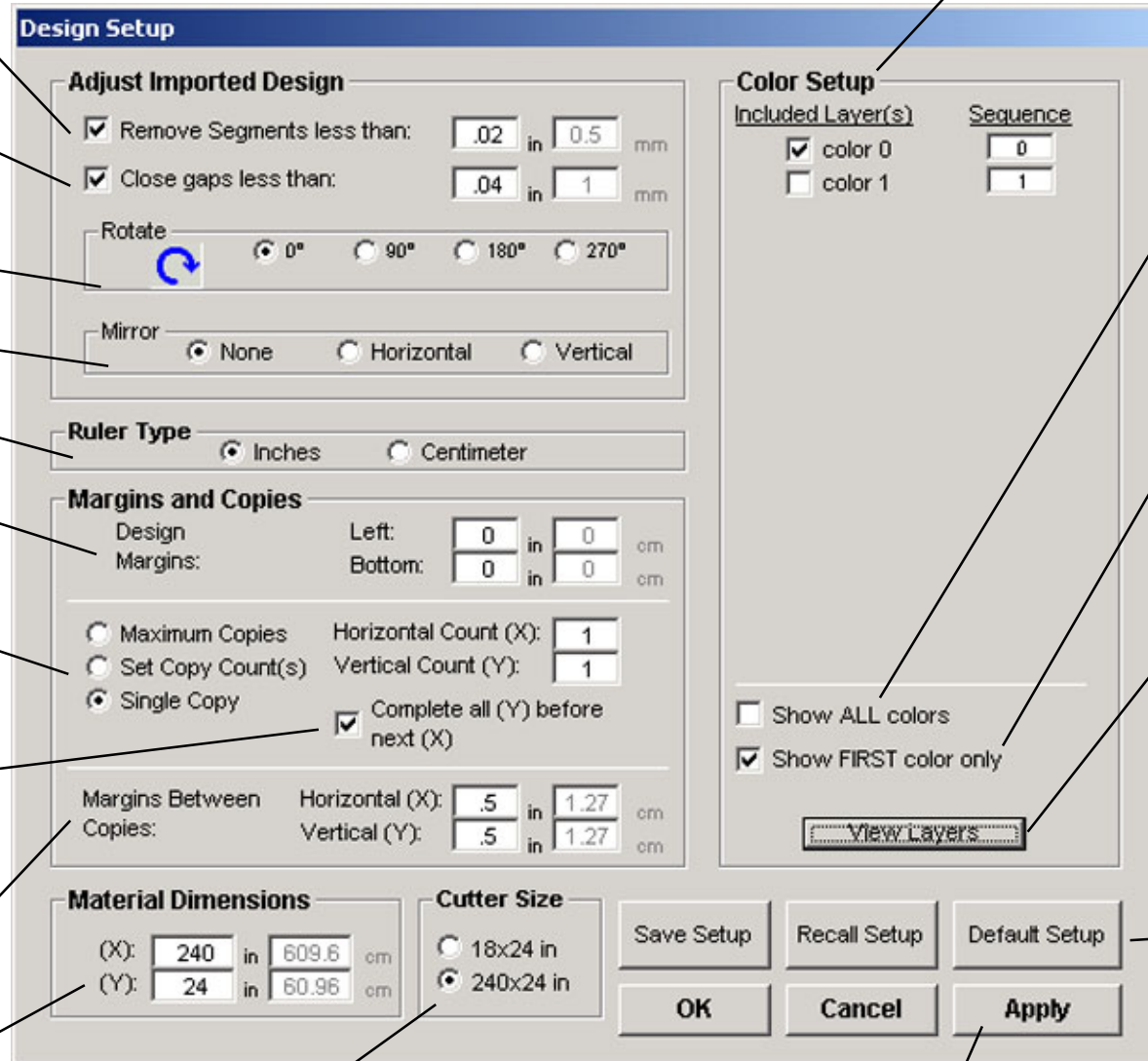
**Design Margins**  
Sets the white space border around the tray edge.

**Copies**  
Automatically make copies of the embroidery design. 'Max' fills the tray.

**Complete all Y ...**  
Optimizes cutter motion to reduce long movements of the material through the machine.

**Copy Margins**  
Control the space between copies.

**Material Dimensions**  
Changes the dimensions of the displayed cutting area to match the material size.



**Color Setup**  
Allows the user to work on individual layers and create a different file for each layer.

**Show ALL Colors**  
This immediately displays all layers in the design.

**Show First Color Only**  
Turns on only the first layer and hides all other layers.

**View Layers**  
Opens a preview window that displays the results of changes in Design Setup.

**Setup Buttons**  
Save and Recall custom settings with these buttons. Pressing the Default button will reset all settings to the factory default.

**Cutter Size**  
Change cutting area for different cutter models.

**Apply**  
Applies the changes in the Design Setup window without closing it.

Figure 6 - Design Setup window.

## Sending a Cut File to the Cutter

Pressing the **Send to Cutter** button displays the window shown in Figure 9. Pressing **Send** will transmit the design displayed in the Design window to the cutter.

Before Sending...

Always load the cutter and make test cuts to determine the correct settings before sending any files. See the **Adjusting Blade Exposure** and **Force** sections of the cutter *User Guide* for more details.

**Important:** Make sure that the carriage and material are in the proper position and that an origin is set by pressing "Set Origin" on the keypad (LED is green).

Send the file directly from the 101 software following the directions later in this manual or;  
From the **Ioline Control Center Software:**

1. From the menu bar select **File, Send Cut/Plot File**.
2. Either enter the path and file name of the cut or select the correct location from the directory\file lists in the dialog box. For example, the path might be:

C:\Ioline\Data\

3. Select **OK**.

**Note:** Registration features are not available in the 101 software. The *Adjust output using registration data* setting is only functional in the 301 software.

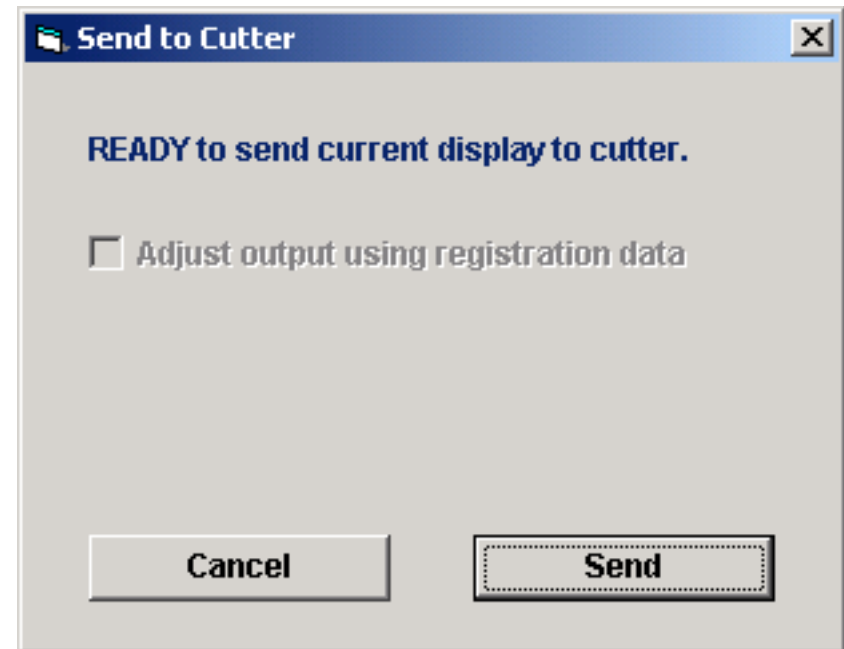


Figure 7 - Send to Cutter window.



## Pausing Cutting

1. Press the **Start/Stop** key to place the cutter in **Stop** mode (red LED).
2. When cutting is interrupted, the carriage and material can be moved with the keypad **Arrow** keys.

**Important:** Make sure that the blade tip is not touched while examining a cut. This could damage the blade and cause inaccurate cutting.

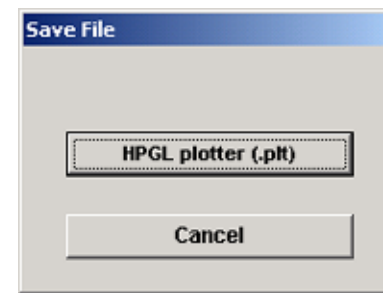
3. Press the **Start/Stop** key to resume cutting. The cutter will return to the original cutting position and continue plotting where it stopped. The keypad LED will change from red to green.

## Canceling a Cut

1. Press the **Start/Stop** key to place the cutter in **Stop** mode (red LED).
2. Cancel the cut by clicking on the **Abort** button in the **Send File** window. **Note:** If this step is skipped the cut will continue when a new origin is set with the **Set Origin** key.
3. Press the **Set Origin** key to make the cutter delete the cut data it has already received but has not yet plotted.

## Save File

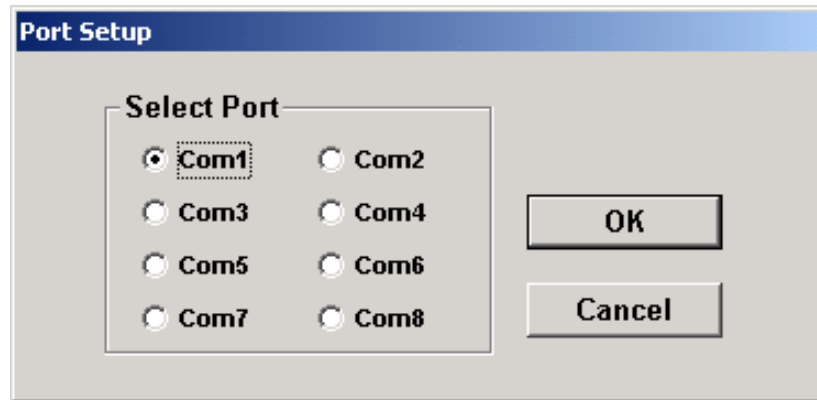
The Save File window will appear when the **Save File** button is pressed (Figure 8). HPGL (.plt) format is the only available format in the 101 software. Saving the file will keep the outline for later use.



**Figure 8** - Choose file format to save the cut file.

## Port Setup

Choose the PC serial port that the cutter is connected to.



**Figure 9** - Port setup window.

## Help

Opens the 101 help file.

## Exit

Closes the *Design* window and returns to the *Main* window.

# Tutorials

## Cutting a Design

**Note:** Fabrics.plt requires a 5" x 11" piece of material. Load the cutter with the 5" edge of the material on the long (Y) edge of the tray.

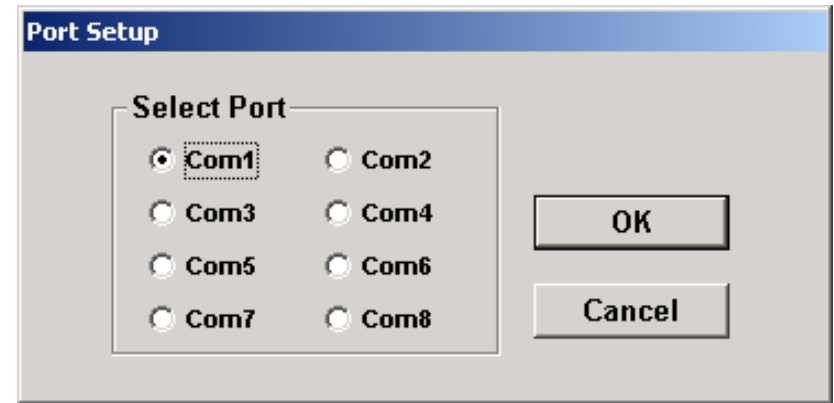
1. Use the *Keypad Arrow* keys to position the *Material* and *Carriage* so that the *Blade* tip is over the lower right corner of the material.
2. Press **Set Origin** on the *Keypad* to obtain a green *Keypad* light.
3. Click on the **All** button under **Zoom** in the upper left corner of the screen.



4. Click on CUTTER Display.

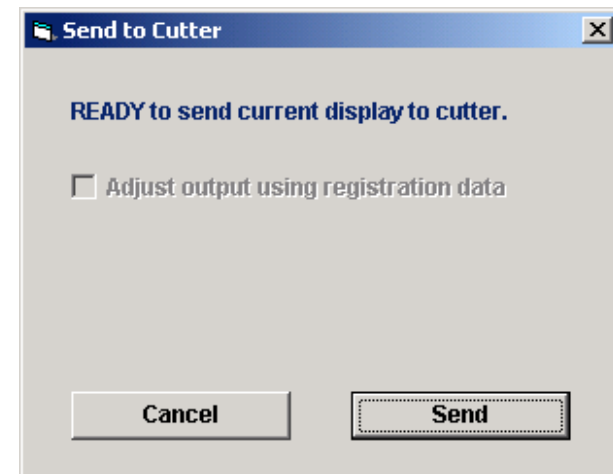


5. Click on **Port Setup**. Ensure that the current port is the same as that which the cutter is connected to. See the cutter *User Guide* for help identifying the com port. Click **OK**.



**Figure 10** - Select Port window.

6. Click on **Send to Cutter**. Click on **Send**. The cutter will begin the cut sequence. Wait until this is finished.



**Figure 11** - Ready to Send window.

7. Remove (weed) the excess material. Remove the cut letter. Put them aside for use later.

## Using CorelDRAW® to Make a Design

This exercise will illustrate the fundamentals of using CorelDRAW® to create a design, *welding* letters together, creating a *contour* (or background layer), and exporting the file in HPGL format for use in the *101 Software*.

These are general steps so may work differently on other versions of CorelDRAW®. Please contact Corel Corporation for more information on the use and features of CorelDRAW®.

### Creating a Design

1. Start CorelDRAW®.
2. Click on the **Text Tool**, then click the cursor anywhere near the lower left hand corner of the page.
3. Type the word "Cougars". Highlight the word with the mouse, or by pressing **Ctrl** and **Shift**, then the left arrow on the keyboard.
4. Go to the **Font List** and select **Brush Script MT**. "Cougars" will change to a scripted font with all the letters overlapping but not joined. Resize the letters by typing "200" in the **Font Size List**.
5. Click on the **Pick Tool**.
6. In the **Color Palette**, **Left click** on the **X** which is usually the top box. The image will go away.

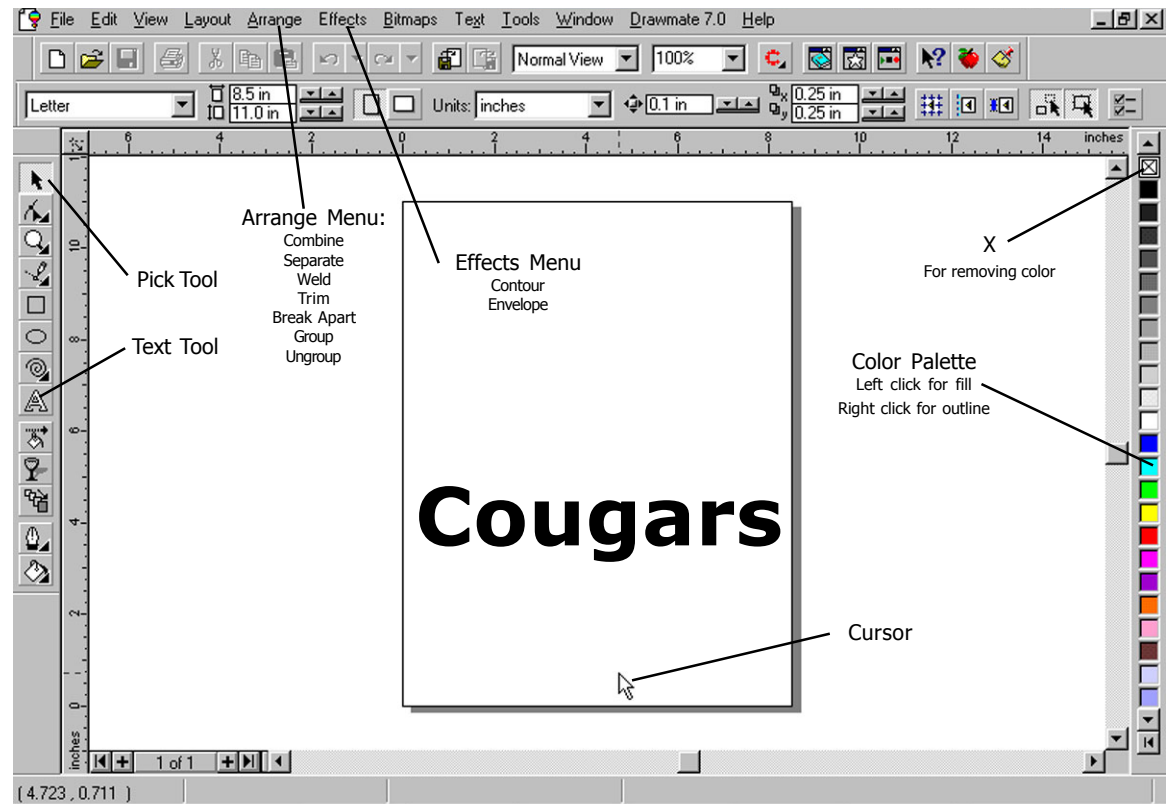


Figure 12: CorelDRAW® Main Screen.

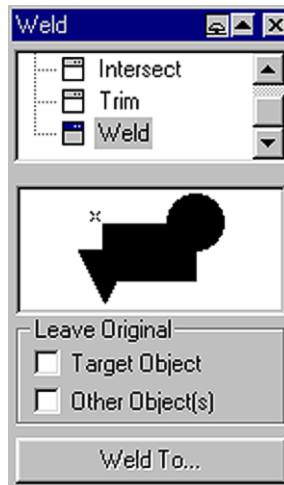
7. In the **Color Palette**, **Right Click** on the color of your choice. The image will reappear as an outline only.

**Note:** Look at the outline and notice how the individual letters are not actually connected to one another. The lines on the screen are the lines the cutter will cut. **Welding** (Figure 13) will connect the lines.

## Welding Letters

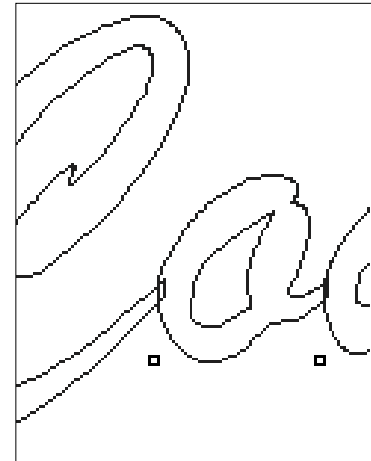
1. Click on "Cougars" with the **Pick Tool**. Go to the **Arrange** menu. Click on **Weld**. A large black arrow will appear.

**Note:** CorelDRAW® version 7.0 has a bug that will cause the welding process, explained below, to fail. If using version 7.0, please call Corel at 800.772.6735 for help.



**Figure 13:** The weld roll up.

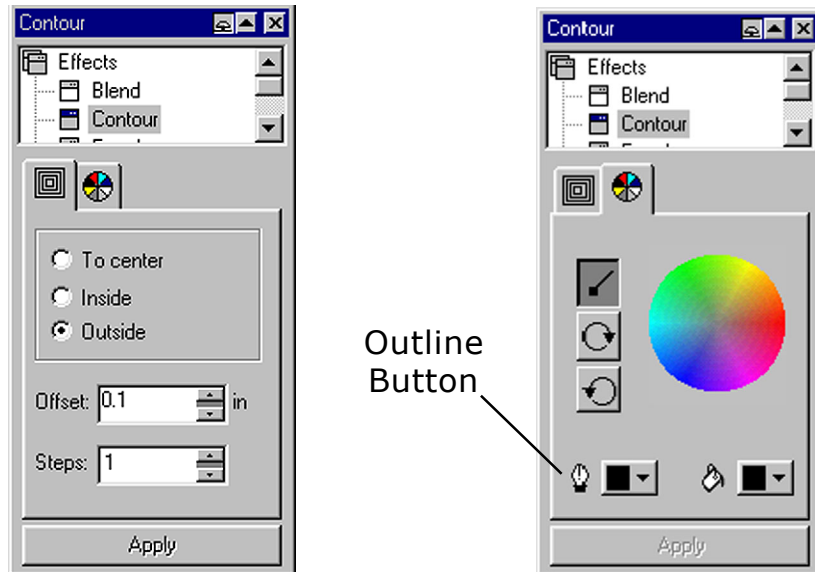
2. With that arrow, click on the "C" in Cougars. The cut lines that are in between the letters will disappear. "Cougars" is now one object instead of seven. See Figure 13.
3. Click and drag the grips (small-black squares visible after selecting an object) to make the object the desired size.



**Figure 14:** Letters before welding and a contour

## Creating a Contour

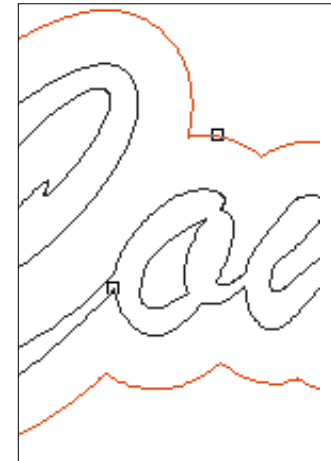
1. With the "Cougars" object selected, open the **Effects** menu and select **Contour**. The Contour roll up will appear.



**Figure 15:** The contour roll ups.

2. Check the box next to **Outside** and enter ".25" in the **Offset** box. In the **Steps** box, enter "1". Figure 15.
3. Click the **Color Wheel** tab in the **Contour** dialogue box. Click on the **Outline** icon and select a color for the design. Figure 15.
4. Click on **Apply**. This will create a 1/4" contour around "Cougars" in the selected color. See Figure 16.

5. Open the **Arrange** menu and select **Separate**. Click the mouse somewhere on the empty page. This will deselect both "Cougars" and the new background design.



**Figure 16:** Contour added to the shape.

### *Saving the File*

1. Open the **File** menu. Select **Export**. Select **PLT HPGL Plotter File** as the file type. Name the file "Cougars," and click **OK**. Accept the default settings for the export process.
2. The file is now ready for importing into the *101 Software*. Different colors are treated as different layers in the 101 software so the Cougars.plt file will open into the 101 with two layers.

## End Notes

### Getting Help

Ioline is committed to providing the highest quality service and support to its customers. Use the following resources to obtain assistance with an Ioline product:

1. First, refer to this User Guide.
2. Second, consult the support section of the Ioline web site: [www.ioline.com](http://www.ioline.com).
3. Contact your dealer or Ioline Customer Service.

Any warranty servicing requires authorization in writing from Ioline Customer Service. Call, email or fax Ioline Customer Service for this authorization. The technicians will help you determine the nature of the problem and whether factory repair is necessary. You will receive a RMA (Return Material Authorization) if the repair requires it.

1. Please gather the information indicated in the next column before contacting your dealer or Ioline.
2. For repair, carefully package any Ioline product in its original container or equivalent. **Ioline is not responsible for any damage due to inadequate or improper packaging.** Seal the container and note the RMA near the address block.
3. Ship the container using FED-EX or another approved carrier. **COD SHIPMENTS ARE NOT ACCEPTED.** Ioline will get approval from you based on an estimate before starting repairs. All repairs are warranted for 90 days.

Please gather the following information about your cutter before contacting Ioline for technical support.

Name: \_\_\_\_\_

Company Name: \_\_\_\_\_

Phone Number: \_\_\_\_\_

Fax: \_\_\_\_\_

Model: \_\_\_\_\_

Serial Number: \_\_\_\_\_

Date of Purchase: \_\_\_\_\_

Dealer: \_\_\_\_\_

Type of Material Used: \_\_\_\_\_

Type of Computer: \_\_\_\_\_

Type of design software: \_\_\_\_\_

New Software or Peripherals: \_\_\_\_\_

Service History (if any): \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**Note: Ioline Customer Service contact information is listed on the last page of this section.**

## The FCC Wants You to Know...

This equipment generates and uses radio frequency energy and, if not installed and used properly (in strict accordance with manufacturer instructions), it may cause interference to radio and television reception. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation. If this equipment does cause interference to radio or television reception - which can be determined by turning the equipment off and on - you are encouraged to try to correct the problem by one or more of the following measures:

- Use only shielded interface cables.
- Reorient the receiving antenna.
- Relocate the host computer.
- Move the host computer away from the receiver.
- Plug the host computer into a different outlet so that the host computer and receiver are on different branch circuits.

If necessary, consult the dealer or an experienced radio/television technician for additional suggestions. The following booklet, prepared by the Federal Communications Commission, is a helpful reference:

*How To Identify and Resolve Radio-TV Interference Problems:*

The stock number is: 004-000-00345-4

This booklet is available from:

**U.S. Government Printing Office  
Washington, D.C. 20402**

## Your Comments Are Requested

Ioline Corporation is interested in comments on our documentation and products. Please send corrections or suggestions to:

**IOLINE CORPORATION**  
14140 NE 200th Street  
Woodinville, WA 98072 USA  
Voice: (425) 398-8282  
Fax: (425) 398-8383  
[info@ioline.com](mailto:info@ioline.com)  
[www.ioline.com](http://www.ioline.com)

Ioline has many years of experience working with designers. Feel free to contact us if you have questions or to share information.

## Customer Service

Ioline Corporation is committed to providing quality service and support to our customers. If you need assistance with an Ioline product, contact your local dealer, an Ioline authorized service center, or:

**Ioline Customer Service Department**  
**Monday through Friday**  
**7:00 A.M. - 5:00 P.M. U.S. Pacific Time**  
Voice: (425) 398-8282  
Fax: (425) 398-8383  
[support@ioline.com](mailto:support@ioline.com)  
[www.ioline.com](http://www.ioline.com)



## **Limit of Liability Statement**

It is the responsibility of the operator of the equipment and/or software to monitor the performance of the equipment and/or software and maintain it in proper working condition by following the instructions in this Help File and other documentation supplied with the equipment. It is the responsibility of the operator to follow all safety precautions and warnings that are described in all documentation. Ioline is not responsible for injuries that may occur as a result of unsafe operating procedures. Ioline is not responsible for substandard operational performance as a result of failure to maintain the equipment and/or software as described in all documentation.

This user guide is provided for informational purposes only. The contents are subject to change without notice and Ioline Corporation assumes no responsibility for any errors that may be contained herein. No part of this user guide may be copied, disseminated, or distributed without the express written consent of Ioline Corporation.

All trademarks used herein are the property of their respective owners.

# Index

## A

Abort 9  
Acrobat Reader 3  
Adjusting Blade Exposure 8  
Apply 7  
Arrow Keys 9, 11

## C

Canceling a Cut 9  
Carriage 8, 9  
Close 6  
Close Gaps Less Than 7  
Color Setup 7  
Complete all Y 7  
Computer 16  
Contour 12, 14  
Control Center 3, 8  
Copies 7  
Copy Margins 7  
CorelDRAW® 2, 12  
Create Stitches 6  
Cutter Display 6, 11  
Cutter Size 7

## D

Design Margins 7  
Design Setup 6, 7  
Design Window 4, 5

## E

Edit Design 6  
Exit 10

## F

FCC 16  
Force 8

## G

Getting Help 15

## H

Hardlock Drivers 3  
Help 6, 10, 15  
HPGL.plt 4

## I

Installation 3  
Ioline Customer Service 15, 16

## M

Main Window 3  
Material 8  
Material Dimensions 7  
Mirror 7

## N

Nest 2

## O

Opening a File 4

## P

Pan 6  
Pausing Cutting 9  
Port Setup 6, 10, 11  
Print 6

## R

Radio frequency energy 16  
Registration 6  
Remove Segments Less Than 7  
Return Material Authorization 15  
Rotate 7  
Ruler Type 7

**S**

Save File 6, 9  
Send to Cutter 6, 8, 9, 11  
Serial Port 10  
Set Origin 9, 11  
Setup Buttons 7  
Show ALL Colors 7  
Show First Color Only 7  
Show Reg. Pts. 6  
Single Step 6  
Start/Stop 9  
Stop mode 9

**V**

View Layers 7

**W**

Warranty 15  
Welding 12, 13

**Z**

Zoom 6