

# DuraLabel<sup>®</sup> 4000

## USER GUIDE



800.788.5572  
DuraLabel.com

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Home of **DuraLabel** 

# Introduction

Welcome... and congratulations on the purchase of your new DuraLabel® 4000 Thermal Transfer Printer! This guide is provided to get you printing as quickly as possible.

In this guide, you'll find information on setting up your printer, configuring your software and creating custom labels. We understand not every topic relating to the printer can be addressed in this document, so at Graphic Products we stand ready to help. If you have any questions or concerns, you are welcome to call us anytime!

Please contact us for all your labeling needs. From standardized labels to custom labels, we're ready to provide the labeling supplies you need. Call today to get your labeling problems solved.



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# 1. Warranties

## 1.1 5-Year DuraLabel Printer Warranty



Graphic Products' DuraLabel printers are warranted to be free from defects in materials and workmanship for a period of five (5) years from the date of purchase. Within this period, Graphic Products, Inc. will, at its sole option, repair or replace any components which fail in normal use. Such repairs or replacement will be made at no charge to the purchaser for parts or labor, provided that the purchaser shall be responsible for any transportation cost. This warranty does not cover loss, damages from accident, or equipment or parts which have been misused, altered, neglected, carelessly handled, used for purpose other than those for which the printer was manufactured, or damages resulting from unauthorized service.

### 1.1.1 REPAIRS

Repairs are warranted for 90 days. If the original warranty is still in effect, repaired units will remain under their original warranty or for 90 days from the date of service, whichever is longer.

### 1.1.2 BATTERIES

The optional battery packs for the DuraLabel Toro and Lobo portable systems are warranted for three years from the date of purchase.

The battery for the DuraLabel 2000 PLUS system is warranted for one year from the date of purchase.

### 1.1.3 WARRANTY DETAILS

The warranties and remedies contained herein are exclusive and in lieu of all other warranties whether express, implied, or statutory, including any liability arising under any warranty of merchantability or fitness for a particular purpose, statutory or otherwise. This warranty gives the purchaser specific legal rights, which may vary from state to state.

In no event shall Graphic Products be liable for any incidental, special, indirect, or consequential damages, whether resulting from the use, misuse, or inability to use the product for any reason including defect. Some states do not allow the exclusion of incidental or consequential damages, so the above limitation may not apply in all areas.

Graphic Products retains the exclusive right within all warranty periods to repair, replace, or offer a full refund of the purchase price at its sole discretion. Such remedy shall be the purchaser's sole and exclusive remedy for any breach of warranty.

General maintenance and cleaning of the DuraLabel printer is the purchaser's responsibility and is not covered by the warranty. Expendable items or parts such as label supply and ribbon are not covered by this warranty.

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**NOTE:** Specific preparation may be required before shipping. Please contact your Graphic Products representative to ensure correct return procedure: please call 800.788.5572 for details. Graphic Products, Inc. shall not be responsible for any loss or damages incurred during shipping.

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## 1.2 5-Year DuraLabel Premium Vinyl Warranty

DuraLabel supplies are tested for durability under various conditions, including UV exposure, moisture, heating and cooling cycles, abrasion, and chemical exposures. Graphic Products warranties labels made from its Premium vinyl supplies for a period of five (5) years.

Within five years of purchase and after proper application, Graphic Products will replace labels made with DuraLabel Premium Vinyl which become unreadable or fail to maintain adhesion with the labeled surface. In such instance, Graphic Products, Inc. will provide a one-time replacement roll of the same supply.

## 2. Safety Instructions

Please review the following safety instructions prior to using the printer:

1. Keep the printer away from humidity.
2. Before you connect the printer to a power outlet, please check the voltage of the power source.
3. Disconnect the printer from the voltage of the power source to prevent possible transient-over-voltage damage.
4. To avoid electrical shock, DO NOT pour any liquid onto the printer or printer parts.
5. ONLY qualified service personnel should attempt to repair the printer.
6. Under any circumstances, DO NOT repair or adjust energized equipment without supervision. For your protection, a person capable of providing first aid must always be present.
7. Obtain first aid or medical attention immediately after an injury. Never neglect an injury, no matter how slight it seems.

# 3. Getting Started

## 3.1 Minimum System Requirements

- Operating System – Windows: 2000 SP4, XP SP2, Vista and 7
- Memory– 128MB RAM
- Additional Requirements– IT administrative privileges

## 3.2 Supplies

The ribbon and various print media for the DuraLabel 4000 have been optimized for compatibility and print quality. Only authorized supplies from Graphic Products will print correctly in the DuraLabel 4000.

## 3.3 Prepare Printer

Instructions for loading supplies and connecting your printer are located in the QuickStart Guide as well as this User Guide. Please read and follow those instructions carefully before continuing.

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**NOTE:** To view the electronic version of the User Guide, you will need a corresponding document viewer (.PDF or .doc).  
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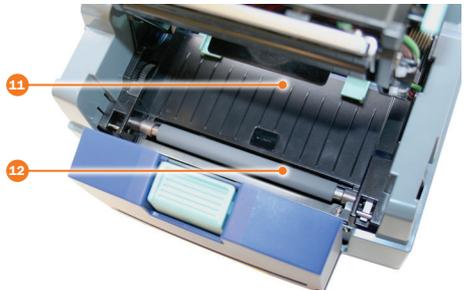
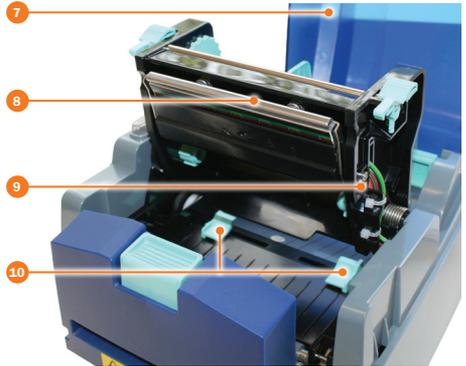
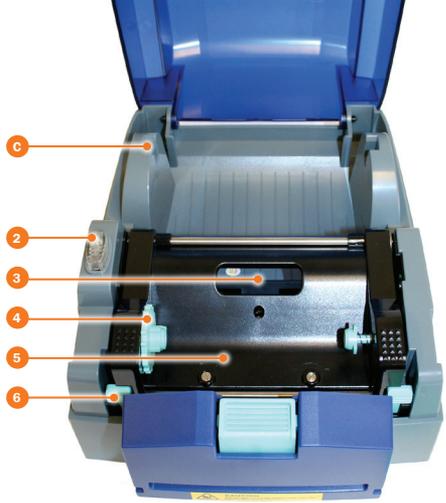
# 4. Load Printer

## 4.1 Printer Inside Parts

- 1. Label Supply Spindle
  - A Supply Shaft
  - B Label Stop Plates (2)
  - C Label Mount Slots (2)



- 2. LED Light
- 3. Ribbon Observing Window
- 4. Ribbon Rewind Wheel
- 5. Print Carriage
- 6. Locking Levers
- 7. Printer Cover
- 8. Thermal Print Head
- 9. Print Line Adjustment Gear
- 10. Label Guides
- 11. Label Sensor
- 12. Platen Roller



## 4.2 Supplies

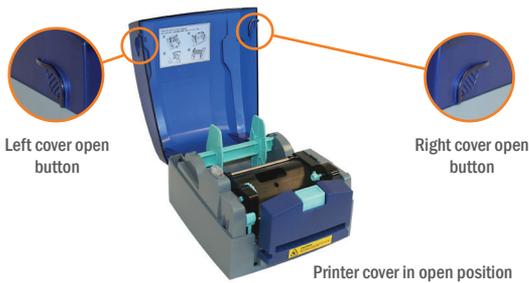
**IMPORTANT!** Always turn OFF the power first! Always wait at least 5 seconds before turning the power back ON.

The ribbon and various printer media for the DuraLabel 4000 are optimized for compatibility and print quality. Only authorized supplies from Graphic Products will print correctly in the DuraLabel 4000.

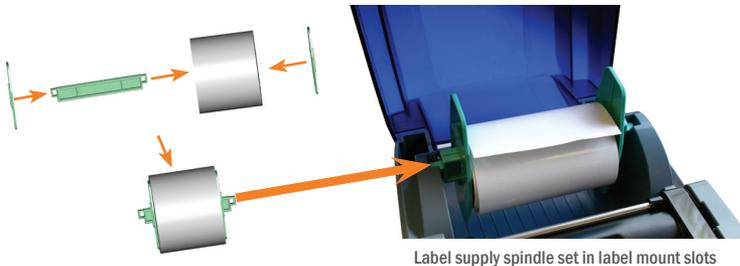
## 4.3 Load Label Supply

**IMPORTANT!** Always turn OFF the power first!

1. Open the printer cover by pressing the cover open buttons located on each side of the printer cover.



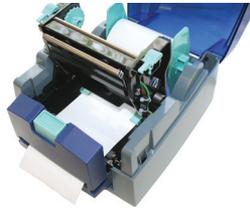
2. Place label supply onto the supply shaft. Assemble the label stop plates on each end of the supply shaft, centering the label supply using the measurements on the supply shaft.
3. With the label supply extending over the top, towards the front of the printer, place the loaded label supply spindle in the label mount slots at the back of the printer.



4. Press the locking levers inward, and lift up the print carriage. Feed the end of the label supply under the print carriage and through the manual cutter module, leaving an inch or two of label supply visible outside of the printer.

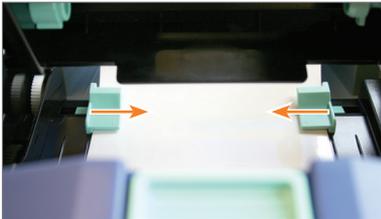


Print carriage in up position



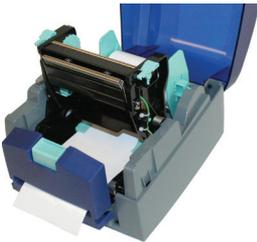
Label supply threaded through printer

5. Align the label guides to the edges of the label supply by sliding both label guides toward the label supply at the same time.

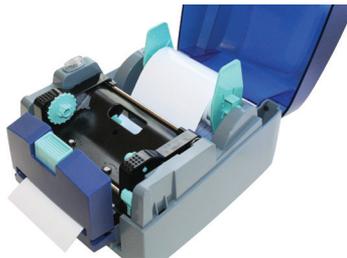


Label guides adjusted to label supply

6. Close the print carriage by gently pressing down until it locks into place.



Print carriage in up position

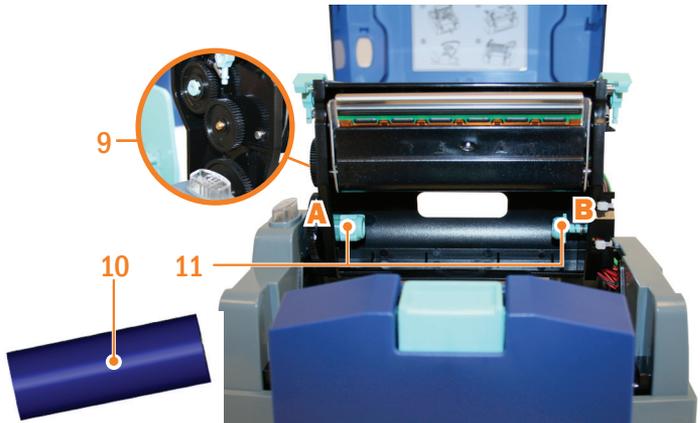
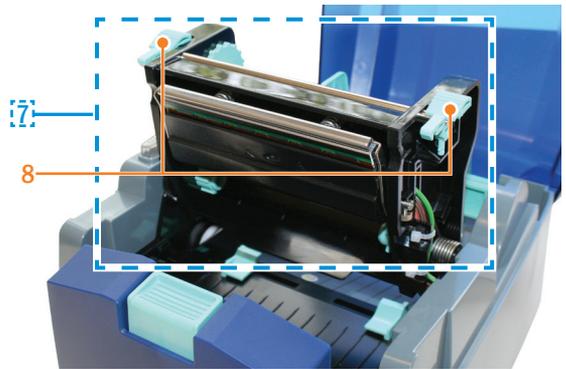
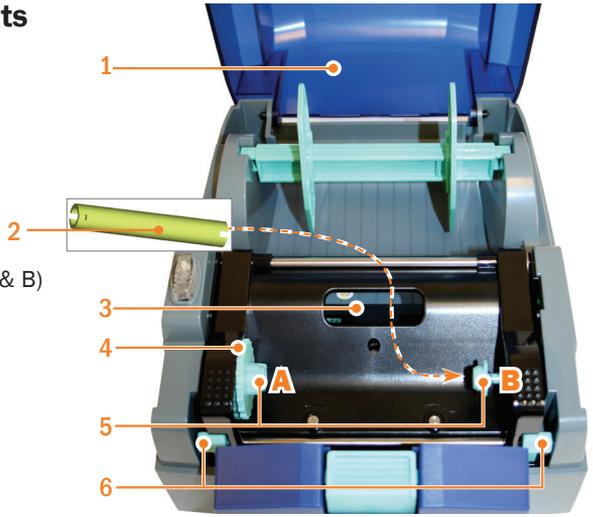


Print carriage down in locked position

## LOAD PRINTER

### 4.4 Printer Ribbon Parts

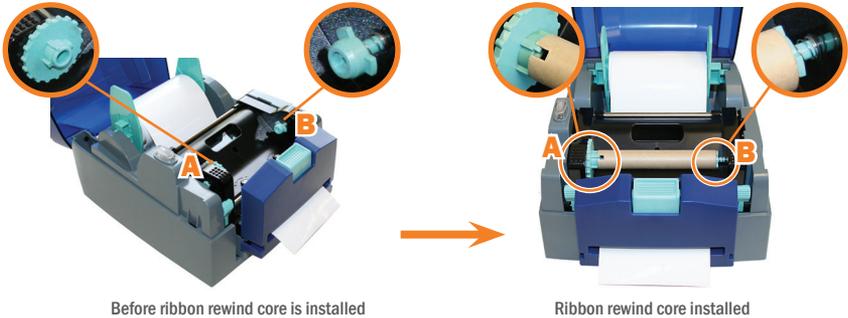
1. Printer Cover
2. Ribbon Rewind Core
3. Ribbon Observing Window
4. Ribbon Rewind Wheel
5. Ribbon Rewind Holders (A & B)
6. Locking Levers
7. Print Carriage (outlined)
8. Locking Levers
9. Ribbon Wheels (3)
10. Ribbon
11. Ribbon Holders (A & B)



## 4.5 Load Ribbon

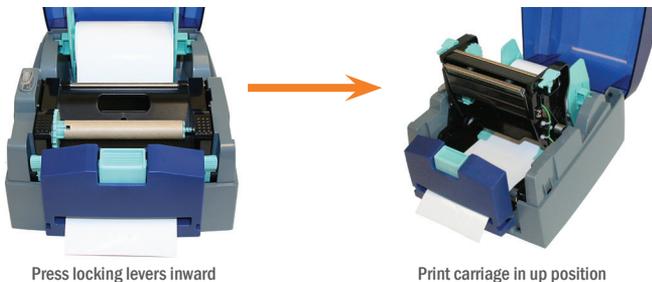
**IMPORTANT!** Always turn OFF the power first before loading supplies! Always wait at least 5 seconds before turning ON the power.

1. With the printer cover open, install one end of the ribbon rewind core onto ribbon rewind holder (B), located inside right. Install the other end of the ribbon rewind core onto ribbon rewind holder (A), located inside left.



**NOTE:** Make sure to align the notch on the ribbon rewind core with the notch on ribbon rewind holder A. You may rotate the ribbon rewind wheel to help align the ribbon rewind core.

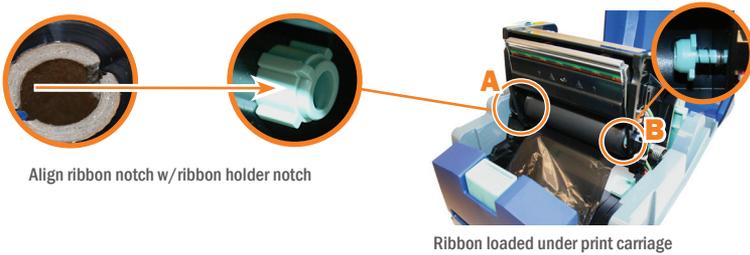
2. Press the locking levers inward and lift up on the print carriage.



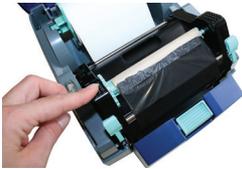
## LOAD PRINTER

3. Hold the ribbon so that the loose end of the ribbon falls to the rear of the printer, then install one end of the ribbon onto ribbon holder (B), located inside right; then install the other end of the ribbon onto ribbon holder (A), located inside left.

**NOTE:** Make sure to align the notch on the ribbon core with the notch on ribbon holder A.

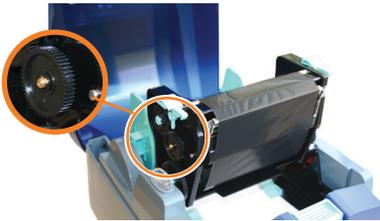


4. Extend the ribbon back over the "top" of the print carriage and, using a small piece of tape, adhere the ribbon onto the ribbon rewind core.



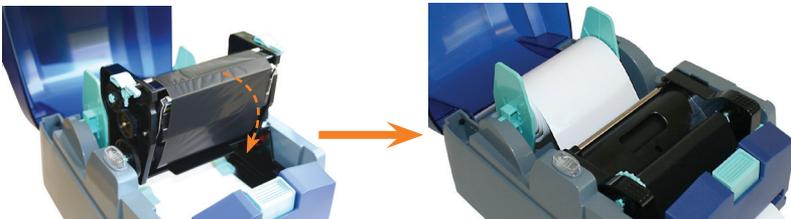
Ribbon supply taped to rewind core

5. Rotate the center ribbon rewind wheel clockwise; toward the back of the printer to make the ribbon tight and smooth.



Ribbon tightened

6. Close the print carriage until it gently snaps into place.



Print carriage in up position

Print carriage down in locked position

7. Close the printer cover.

---

**IMPORTANT!** You must have administrative rights in order to install the driver.

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**NOTE:** Find out your Windows version by right-clicking on the My Computer icon (located on your desktop). Select the Properties option. Your Windows version is located under the System heading. Make sure you have installed the latest updates from Microsoft, including service packs.

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## 5. Install Driver

### 5.1 Auto Install Instructions

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**IMPORTANT!** If you are upgrading from an existing DuraLabel installation, see the inside cover of the QuickStart Guide.

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**NOTE:** Make sure the printer is powered OFF prior to connecting the printer.

---

Insert the DuraLabel 4000 installation CD into your CD-ROM.

Connect the power supply from the DuraLabel 4000 to an electrical outlet. Connect the USB cable\* from the DuraLabel 4000 to your PC. Power ON the DuraLabel 4000.

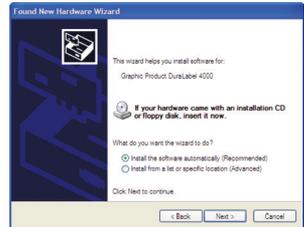
\*Since Windows keeps track of printers by port, each time you plug a printer into a port that isn't configured, Windows assumes that it's a new printer and tries to reinstall it. Our recommendation is to leave the USB Cable connected to the computer, MPS 150 Plus, or laptop, whichever operating system the DuraLabel is connected to. Identify the USB Cable with a label and wrap the cord out of the way until next use.

## INSTALL DRIVER

A “Found New Hardware” window may appear. If so, select **No, not this time** then click **Next**.



Select **Install the software automatically (Recommended)** and click **Next**.



A window may appear showing the progress of searching for the files.



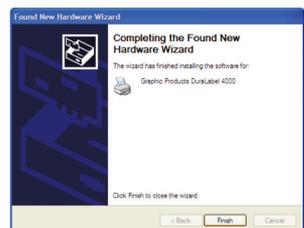
If a hardware installation window appears, click **Continue Anyway**.



A screen may appear showing the progress of copying the files.



Click **Finish** to Completing the Found New Hardware Wizard.



## 5.2 Manual Install Instructions

**IMPORTANT!** If you are upgrading from an existing DuraLabel installation, see the inside cover of the QuickStart Guide. Insert the DuraLabel 4000 installation CD into your CD-ROM.

Connect the power supply from the DuraLabel 4000 to an electrical outlet. Connect the USB cable\* from the DuraLabel 4000 to your PC. Power ON the DuraLabel 4000.

\*Since Windows keeps track of printers by port, each time you plug a printer into a port that isn't configured, Windows assumes that it's a new printer and tries to reinstall it. Our recommendation is to leave the USB Cable connected to the computer, MPS 150 Plus, or laptop, whichever operating system the DuraLabel is connected to. Identify the USB Cable with a label and wrap the cord out of the way until next use.

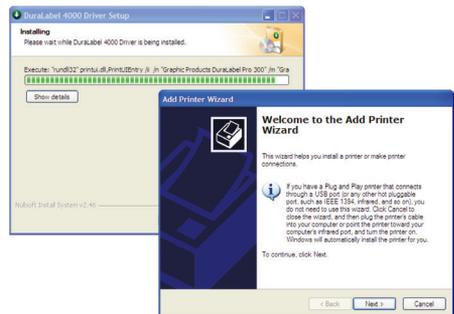
To begin, click **Install Driver** from your DuraLabel 4000 setup screen.

Click **Next** to Welcome to the Add Printer Wizard window. Read the License Agreement and the click **I Agree** to continue installing.



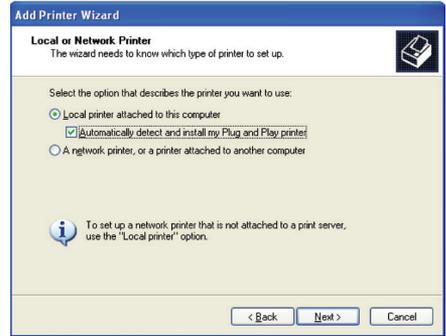
Verify the installation directory chosen. The default is "C:\DL4000" and click **Install**.

A window may appear showing the progress of installation. Click **Next** to the Add Printer Wizard window.

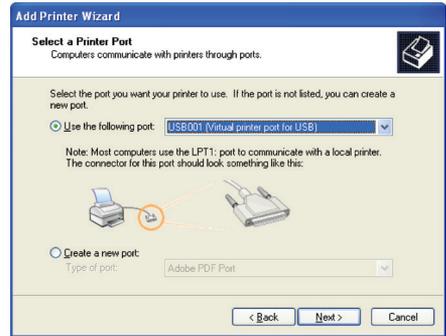


## INSTALL DRIVER

Select either **Local** or **Network** for your printer driver. If you select Local, make sure the "Automatically detect and install my Plug and Play printer" is checked.



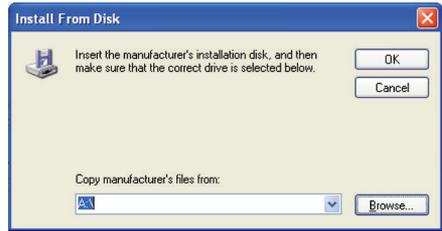
Check **Use the following port**, and select **USB001 (Virtual printer port for USB)** and click **Next**. (This step may automatically be skipped.)



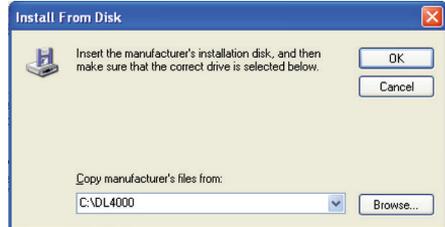
Select **Graphic Products DuraLabel 4000** and click **Have Disk....**



Click **Browse** on the Install From Disk window.



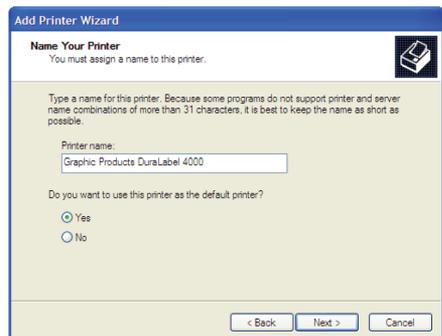
Select **C:\DL4000** and click **OK**.



Select **Keep existing driver (recommended)** and click **Next**.

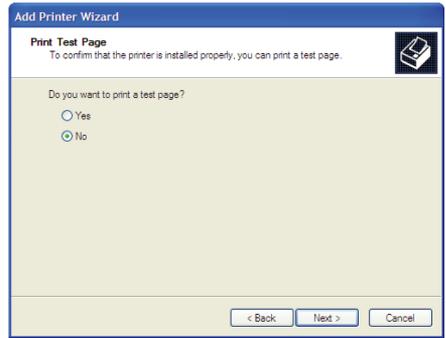


Keep existing printer name as **Graphic Products DuraLabel 4000** and select **Yes** if you wish for it to be set as your default printer, then click **Next**.

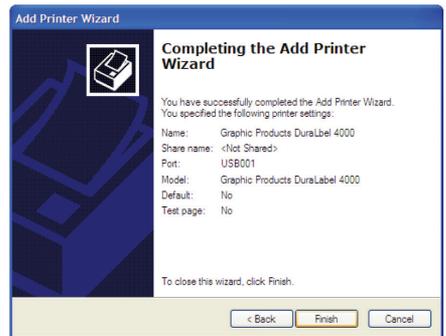


## INSTALL DRIVER

Select **No** to “Do you want to print a test page”, then click **Next**.



A window will appear regarding Completing the DuraLabel 4000 Driver Setup. Make sure your settings are correct, click Back to change settings or click **Finish** if settings are correct.



A screen may appear showing the file progress.



Click **Finish** to complete the printer driver installation.

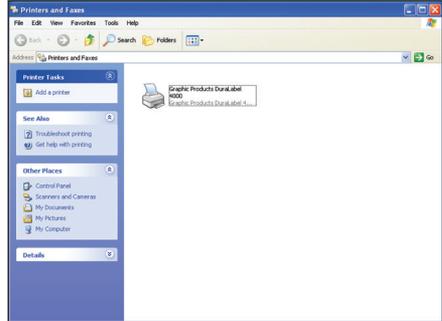


# 6. Driver Settings

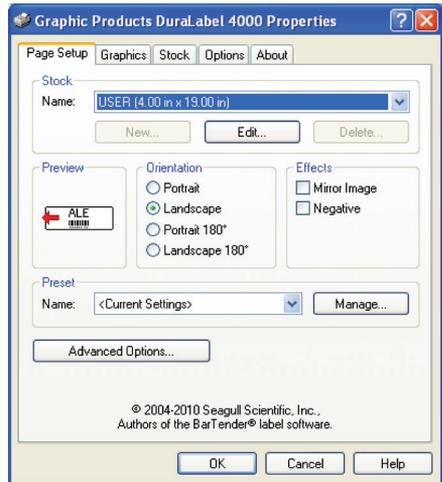
## 6.1 Configure Printer Driver

**IMPORTANT!** Perform the driver configuration before opening the document you wish to print.

Access the DuraLabel 4000 Printer Properties by clicking the **Start >> Settings >> Printers**. This will bring up the Printers folder.



Right-click on the DuraLabel 4000, and select **Printing Preferences** from the drop-down menu. This will bring up the DuraLabel 4000 Printing Preferences. Click on the **Page Setup** tab. Select either Landscape or Portrait to match the orientation of the label document. (OpenOffice Draw users only: If you are printing from OpenOffice Draw, you need to click **Edit** to change the size of the label to match the label document).

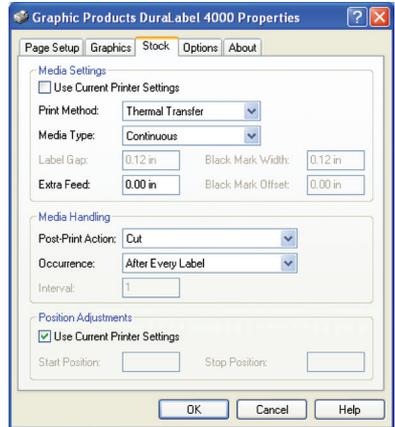


## 6.2 Continuous Vinyl Printing Instructions

### 6.2.1 CALIBRATE CONTINUOUS VINYL LABEL

In order to print on continuous vinyl labels, the label stock needs to be calibrated. To do so, with the printer power OFF, hold the FEED/STATUS button down while turning ON the printer. The feed/status button will blink green twice, switch to solid red, then begin to blink red. Release the feed/status button when it begins to blink red. Supply will feed out while the printer calibrates.

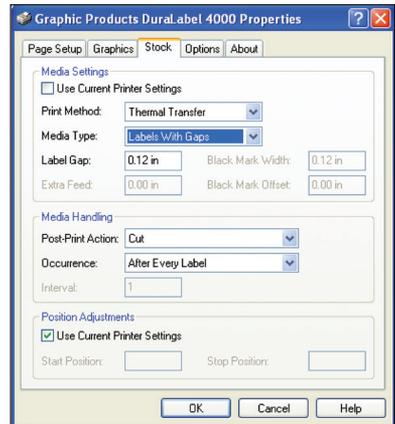
To set the cutter, select the **Stock** tab. Set the Media Settings “Type” to **Continuous**. In order for the automatic cutter to cut after each label, under Media Handling “Post-Print Action,” select **Cut**, and next to “Occurrence” select **After Every Label Page** (these settings may be adjusted later to your specifications in the Printer Properties as you are printing your labels). Select **OK** on the bottom of the Printing Preferences window.



## 6.3 Die-Cut Label Instructions

### 6.3.1 CALIBRATE DIE-CUT LABEL

In order to print die-cut labels, the label stock needs to be calibrated. To do so, with the printer power OFF, hold the FEED/STATUS button down while turning ON the printer. The feed/status button will blink green twice, switch to solid red, then begin to blink red. Release the feed/status button when it begins to blink red. Supply will feed out while the printer calibrates to the die-cut gap.



### 6.3.2 DRIVER SETTINGS FOR DIE-CUT LABELS

For die-cut labels with the 1/8" gap, the settings on the **Stock** tab should be as follows: “Print Method” should be set to **Thermal Transfer**, the “Media Type” should be set to **Labels With Gaps**.

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**NOTE:** It is possible that the position of the supply causes two labels to feed out; however, the third label will be aligned correctly and ready to print.

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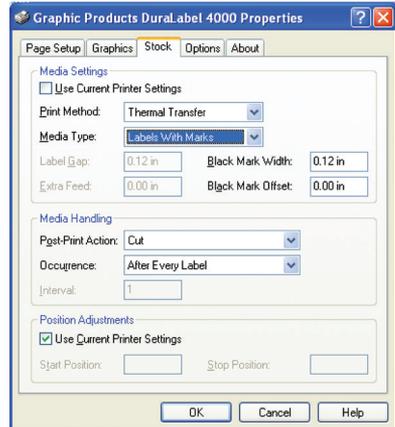
## 6.4 Black Mark Label Instructions

### 6.4.1 CALIBRATE BLACK MARK LABEL

In order to print labels with black marks, the label stock needs to be calibrated. To do so, with the printer power OFF, hold the FEED/STATUS button down while turning ON the printer. The feed/status button will blink green twice, switch to solid red, then begin to blink red. Release the feed/status button when it begins to blink red. Supply will feed out while the printer calibrates to the black mark.

### 6.4.2 DRIVER SETTINGS FOR BLACK MARK LABELS

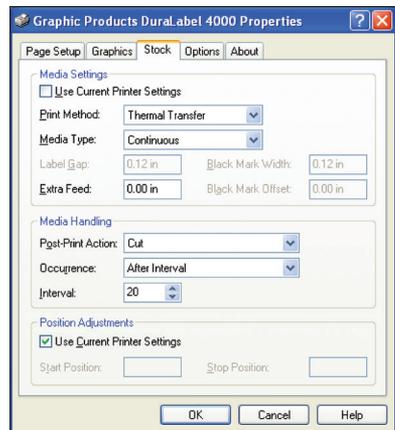
For black mark labels with the 1/8" black mark, the settings on the **Stock** tab should be as follows: "Print Method" should be set to **Thermal Transfer**, the "Media Type" should be set to **Labels With Marks**.



**NOTE:** It is possible that the position of the supply causes two labels to feed out; however, the third label will be aligned correctly and ready to print.

## 6.5 Cut Labels in Intervals

To cut labels in intervals, you may do so by setting the "Occurrence" to **After Specified Interval** under the **Stock** tab. Set the "Interval" to the number of labels needed. Click **OK** to save your settings.

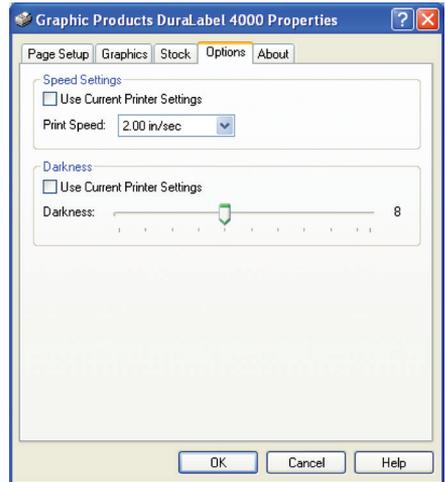


## 6.6 Adjust Print Speed

Print Speed is adjustable from 1.0" to 3.0"/sec. Choose the print speed from the **Option** tab by clicking on the arrow to the right of the "Print Speed" box.

## 6.7 Adjust Darkness

Darkness is adjusted from 0 to 19 in increments of 1. From the **Option** tab, change the darkness by clicking on and dragging the slider on the "Darkness" bar. In the "Graphics Format" settings, change Dithering to **None**. When finished with your settings, click **OK**.



Your driver is now set up and you are ready to create your labels!

---

**NOTE:** In certain situations, you may need to change the print settings to optimize the DuraLabel 4000 for printing with certain ribbons or a specialty tape supply. Generally, higher speeds require higher densities. If the ribbon wrinkles, lower the darkness. Increase the darkness to prevent fading. Decrease to prevent wrinkling.

---

# 7. Installing Labeling Software

## 7.1 Installing DuraSuite Label Software

DuraSuite Labeling Software lets you create professional-quality pipe markers and arc flash, NFPA Diamond, RTK, GHS and custom labels, quickly and easily. To install, from the DuraLabel 4000 startup screen, click on DuraSuite Label Software and follow the directions that appear. Refer to the DuraSuite Labeling Software User Guide for additional information.

---

**NOTE:** You may need IT administrator privileges to perform this installation.

---

## 7.2 Installing LabelForge Label Software

LabelForge Labeling Software lets you design your own custom labels and signs and includes barcode creation tools for 2D and linear barcoding. To install, from the DuraLabel 4000 startup screen, click on LabelForge Label Software and follow the directions that appear. Refer to the LabelForge Labeling Software User Guide for additional information.

---

**NOTE:** You may need IT administrator privileges to perform this installation

---

## 8. Label Creation

The examples in this tutorial were tested with Microsoft Word 2000. Some variations may occur with different versions of Word, or with different word processors, but the basic principles will be the same. The DuraLabel 4000 is designed to work with any currently supported Windows software, and should work with the software packages that you already have installed on your computer.

All portions of this tutorial assume that the DuraLabel 4000 has been properly installed and is connected in the online mode. Please see the installation guide for more information before proceeding with this tutorial.

### 8.1 Label Creation With Your Word Processor

Many have invested in high-end word processing software that is never used to its full potential. Today's word processors come packed with features and capabilities that far surpass the average user needs. Advanced page layouts, graphic manipulation and printing options are only the beginning of what most word processors have to offer.

The DuraLabel 4000 operates off of a standard Windows printer driver that makes the printer accessible from a wide variety of software packages. Many printers will only work with expensive, proprietary software that is often buggy and overpriced. With the DuraLabel 4000 you will be able to use the software which you are most familiar with and get the most out of an investment you've already made.

In this tutorial, we will show you how to use Microsoft Word to create and print custom labels and signs. If you have further questions concerning your software package, or label creation in general, please call 800.788.5572 to speak with a representative.

## 8.2 Use Templates

We have provided a variety of templates on the DuraLabel 4000 to help you print labels in no time. To get to these templates, you should install from the startup screen on your Installation CD. This should only take a minute or two.

Click on **Templates & Symbols** on the startup screen, then follow the instructions. The templates will install to the desktop on your computer.

After installation is complete, templates and symbols will be located in a folder called DL4000 Templates and Symbols located on your Desktop.

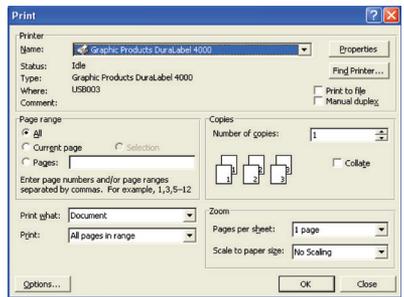
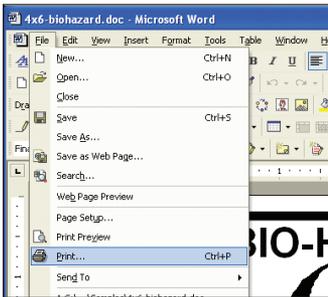
Now, when you want to use a template, just open **Microsoft Word**. Select **Open** then browse the **DL4000 Templates and Symbols** folder. There are a variety of templates from which to choose; all are setup to print correctly on the DuraLabel 4000. Just customize the label to your specifications, and print!

## 8.3 Set Up Microsoft Word Document

Once you open a new or existing document, you must change the paper size and margins. Word processors will default to 8.5" x 11", but changing these settings is generally very simple. The steps are outlined for Microsoft Word below.

## 9. Select Printer

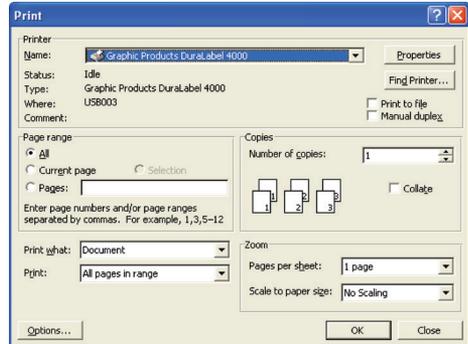
Before you make any changes to the page layout you must first select the DuraLabel 4000 as your printer. The word processor communicates with the selected printer driver to determine if margin and other settings are within the printers limits. To select the DuraLabel 4000, click on the **File menu** then **Print**. Next to "Name", simply locate the pull-down selection and choose **Graphic Products DuraLabel 4000** as your printer. Click **OK** to continue.



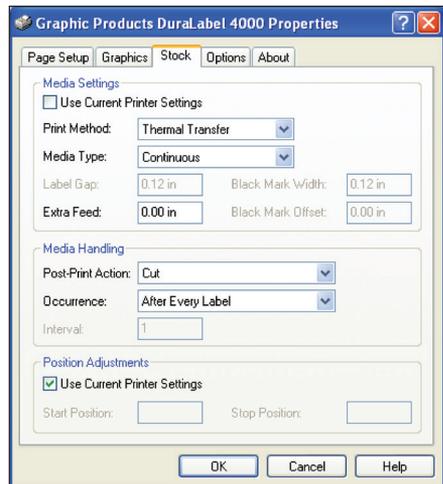
## 9.1 Change Automatic Cutter Settings

You can change the automatic cutter settings without going back into the printer driver.

Go to **File >> Print**, then click on the **Properties** button next to DuraLabel 4000.



Choose the **Stock** tab.



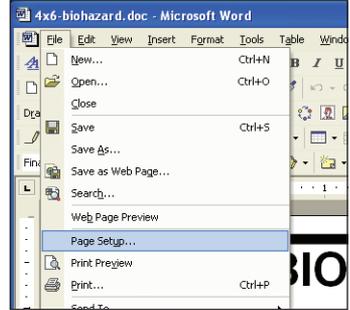
A new dialog will open which allows you to change the cutter options.

If you do not want to cut between labels select **None** under *Media Handling* next to “Post-Print Action”. If you want to cut between labels, select **Cut** and next to “Occurrence” select **After Every Page**.

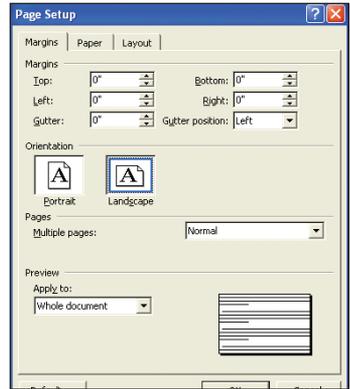
Click **Apply** then click **OK** in the Properties window to save your new settings.

# 10. Change Page Setup

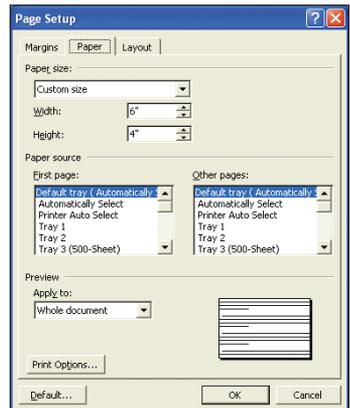
Click on the **File** menu, then the **Page Setup** selection.



Now click the **Margins** tab. Set all of your margins and edges to **0**. This will allow you to print on the entire area of your tape. Set the orientation to desired layout. Depending on your operating system, the orientation may be on another "tab".

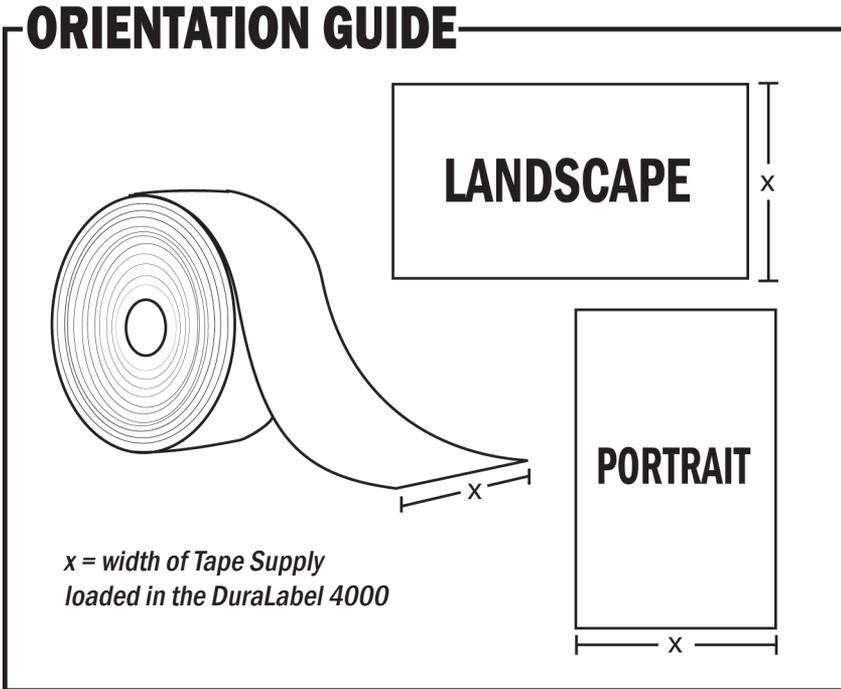


Select the **Paper Size** tab. Set your paper size to the size of the label you wish to create. Either the width or the height should match the width of the tape supply you have loaded in the machine.



## 10.1 Orientation

Create the label with the width and height of the label. If the width of the label is the width of the tape installed in the printer, then set the *orientation* to **Portrait**. If the height of the label is the width of the tape installed in the printer, set the orientation to **Landscape**.



Click **OK** to apply your changes. With your document properties set correctly you're ready to move on to label design!

# 11. Label Design

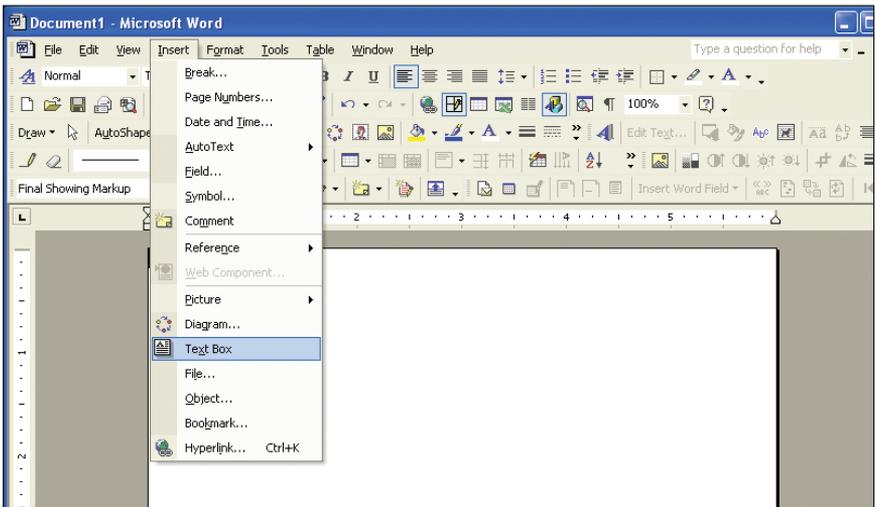
## 11.1 Text

Working with text for label design is only slightly different from working with text in a normal document. In a document, text can be treated as a whole: formatting, layout and design can be universal. With a label, each section of text is easier to format if handled separately and allows for complete customizing.

Titles will have to be moved and adjusted, portions of text will have to be moved around independently and with more detail than in a normal document. In a document it is sufficient to have most text single or double-spaced; in a label you may want to move text only a few millimeters, or several centimeters.

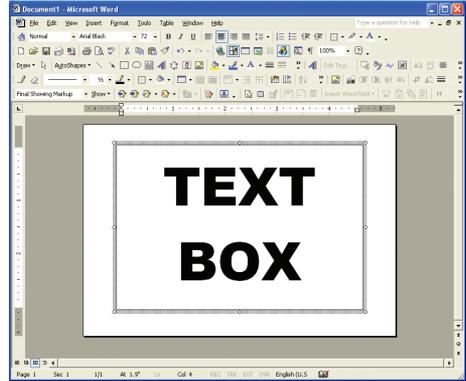
### Text Boxes

A text box may be formatted or positioned anywhere on the document. The box can have borders and can be filled with different colors, or it can have no borders and be transparent. All of these features make text boxes ideal for label creation. In MS Word add a text box using the following steps. Click on **Insert >>> Text Box**.



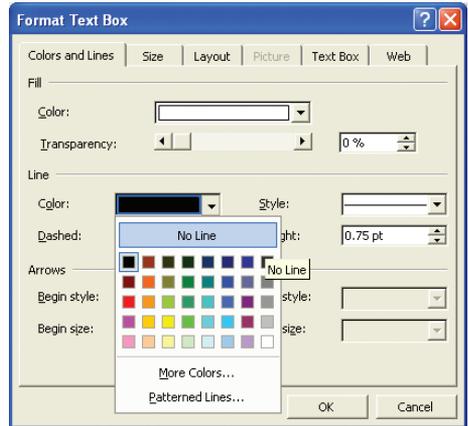
Next, holding down the left mouse button, drag (in the document window) the square handles on the border of the text box until it is the desired size. You can scale and position text boxes with ease. The squares only appear after a text box is created. While creating, the cursor is a cross.

Format the text inside the box to any size and style, then position the box for the desired layout. Initially, the text box will have a border around it. To get rid of the border, double-click the text box. When you do this, the Format Text Box dialog will appear. Click the **Colors & Lines** tab. Click the *Color* drop-down menu under *Line* and select **No Line**. Click **OK**, and the border will be removed.



**NOTE:** If you choose not to use text boxes for your text, you will still be able to print your label, but formatting problems may prevent you from getting the results you desire.

Information on the text box tool is available through your word processors help file. Consult the help file for more detailed information on using text boxes.



## 11.2 Graphics

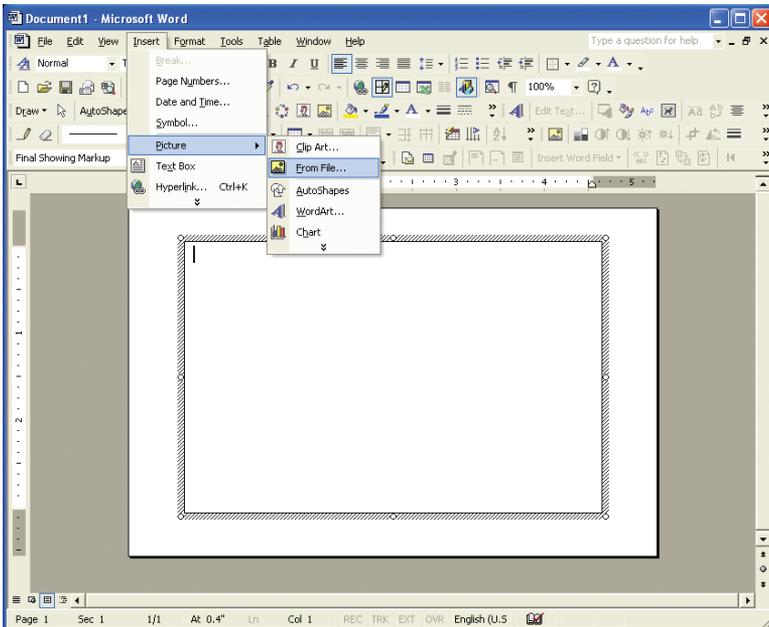
### Drawing Tools

Many word processors have built-in drawing tools. You can use these tools to enhance the look of your labels. Designs can be as complex as you desire, but colors should be kept to black and white. Black and white will give you the best contrast, and the best printing output. Actual print color depends on the ribbon and vinyl loaded in the DuraLabel 4000 and is unaffected by the colors shown on your computer screen.

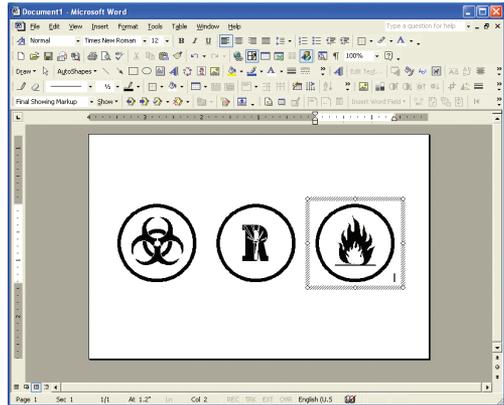
### Images

To insert a picture into a Word Document, first create a new text box so you can insert the picture into the text box (this allows the image to be moved). Once you've created a text box, select it by clicking inside the box, then click on **Insert >>> Picture >>> From File**, then select the location of the file you desire to insert.

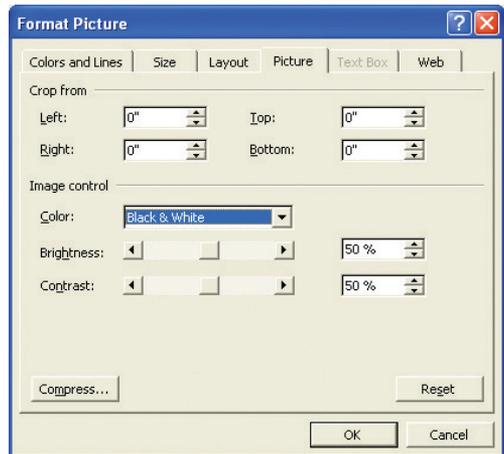
Insert symbols by browsing to the Symbols folder from the DuraLabel 4000 CD previously installed on your desktop. The picture is automatically placed in your Word document. Change the size by clicking and holding down on the corner of the box, while dragging it to the desired size.



You can insert other objects, graphics and clip art from the same pull-down menu. When working with images it is important to remember the type of printer you are using. Images should be formatted so that your printing output matches the capabilities of the printer. The DuraLabel 4000 is designed for label creation, and has a monochromatic output (meaning it can only print one color at a time.)



With Word it is easy to make your images print in monochrome. Once the image is inserted into the document simply double-click on it and select the **Picture** tab. Under the "Image Control" section choose the "Color" pull-down menu and select **Black and White**. Your image will be instantly converted to a format that the DuraLabel 4000 can handle.



## 11.3 Symbols

Symbols can be used on labels and signage to get your point across visually. When safety is a concern, it is important to have a language that is universal, and symbols accomplish just that.

For your convenience, we've included more than 1800 ready-to-use symbols, divided by category, on your DuraLabel 4000 CD. Just choose a symbol, insert it into your document, then print a visually appealing and informative label or sign. To view or print a list of all of the included symbols, browse to the Symbols folder on the CD. A PDF of all of the symbols in their respective categories is included in that folder.

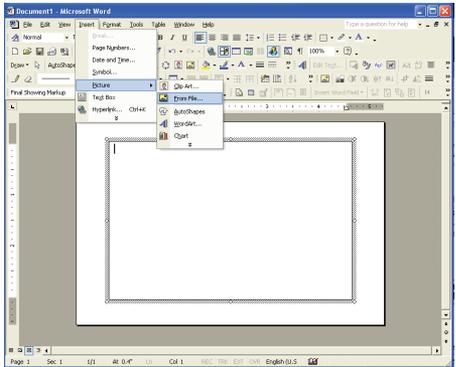
### Inserting Symbols

Insert symbols into an Microsoft Word document by clicking on **Insert >>> Picture >>> From File**. From that window, browse to the Symbols folder. If you have already installed the symbols from the CD (they automatically install when you install the templates), there is a folder on your Desktop called DL4000 Templates and Symbols.

The symbols folder is located inside the DL4000 Templates and Symbols folder.

Just choose the symbol you want from the categorized folders and insert into your document.

Once your symbol is inserted into your text document, you can resize and move it to your desired layout.




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**HELPFUL HINT:** When trying to determine the size of your label or the size of the symbol you place on it, take into consideration the distance from which the sign or label will be viewed. You should make the symbol large enough that a viewer can comprehend it from as far away as deemed necessary.

---

**NOTE:** To Install the Symbols, insert the DuraLabel 4000 CD into your CD drive. When the startup screen appears, simply click the “Templates & Symbols” button, follow the on screen directions, and they will be automatically installed on your Desktop in the DL4000 Templates and Symbols folder. You can browse to that folder at any time to use the symbols or templates.

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## 11.4 Sequencing

### How to do Number Sequencing using Word and Excel.

Sequencing is most commonly used to increment a numeric value to be used in labels for wire wrapping. You can use of an Excel spreadsheet template as well as a Word template (included on your installation CD):

1. Open an existing template from the DuraLabel CD or start a new Word document.
2. Because Excel uses pixel measurement instead of inches, you will want to set this to match in Word. Go to **Tools >>> Options** to bring up the property sheet for Word. Click on the **General** tab, and locate the option to change the unit of measure. See Fig. 1. Change it to **Points** as this is the same as pixel.
3. Next go to **File >>> Page Setup** and click on the **Paper** tab. If you started from a supplied template, make note of the width and height of the page as you will need to use these values to set the cell size in the Excel template. See Fig. 2. If you're starting from scratch, set the width and height to the desired size of the label.

**HELPFUL HINT:**

Inches to Points Chart:

- 1" = 72 points
- 2" = 144 points
- 3" = 216 points
- 4" = 288 points

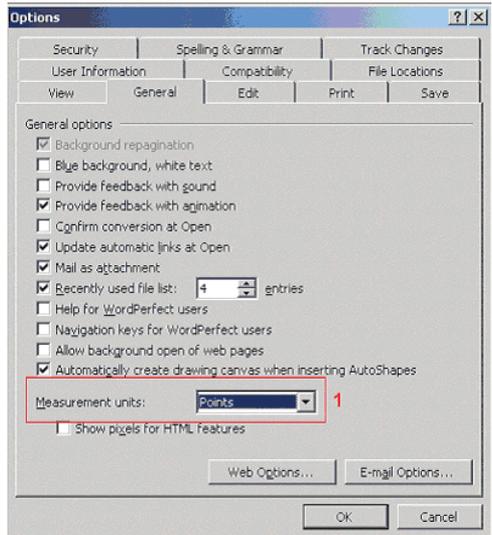


Fig. 1

## LABEL DESIGN

Now that you have the desired label size, its time to add the text to it. Keeping Word open, browse to the provided Excel template **Number Sequence.xls**

This is a predefined template with the formula already in place to increment a numeric value by one.

1. Open the existing Excel template **Number Sequence.xls**
2. First, format the cells to match the size of label you have. Click on the upper left corner of the spreadsheet to highlight the entire document. See Fig. 1.
3. Next, left-click and hold the column line between A and B. See Fig. 2. You can see a small box pops up giving you the pixel size of the width. You will want to set that value to the same width as your label. Do the same for the row height. See Fig. 3

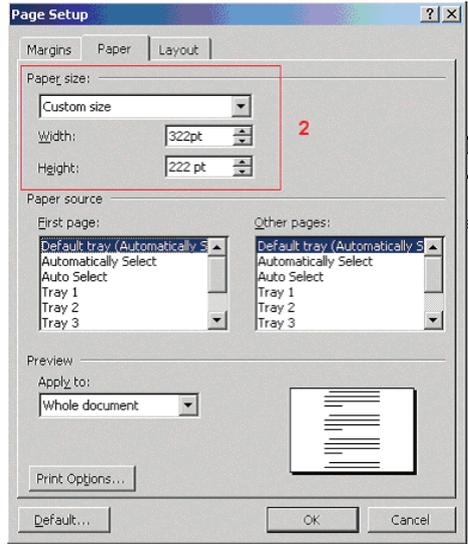


Fig. 2

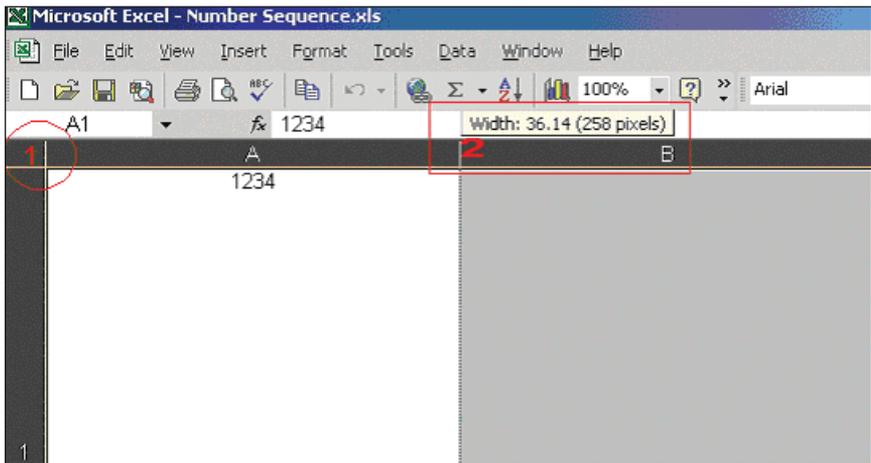


Fig. 3

4. Now that you have the correct size matching your label, change the value in the first cell (column A, row 1) and enter any static text you want. Leave it blank for none. In the next cell (column B, row 1) enter the number you would like to increment. See Fig. 4. The next cell (column C, row 1) enter the value you would like to increment by Default is 1.

After setting this, you should see the increment in each cell below cell 1. In this example, the cells have been adjusted in increments of 10. However, to increment

further, simply left-click on cell 10 to highlight it, then left-click and hold on the small point in the lower right corner of the cell and drag down over how many cells you want to increment. See Fig. 5.

Example: to increment the value 100 times, drag the cells down to the 100th row.

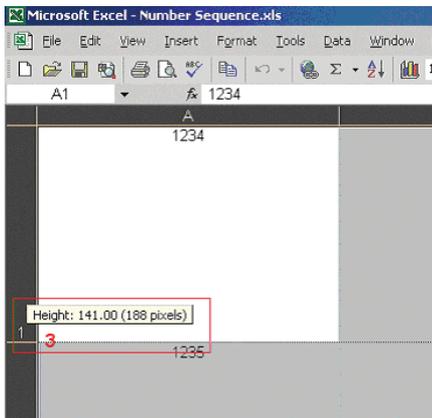


Fig. 4

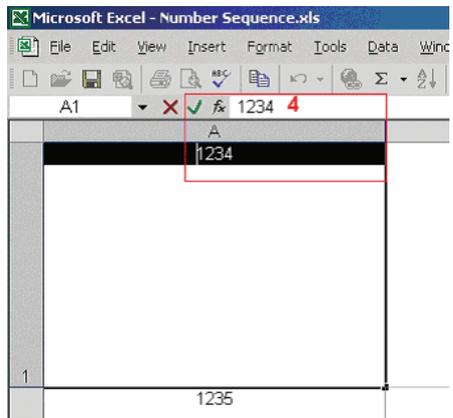


Fig. 5

## LABEL DESIGN

Once you're satisfied with the amount of increments and cell span, its time to copy this into your Word template. Go back to the Word document that you previously

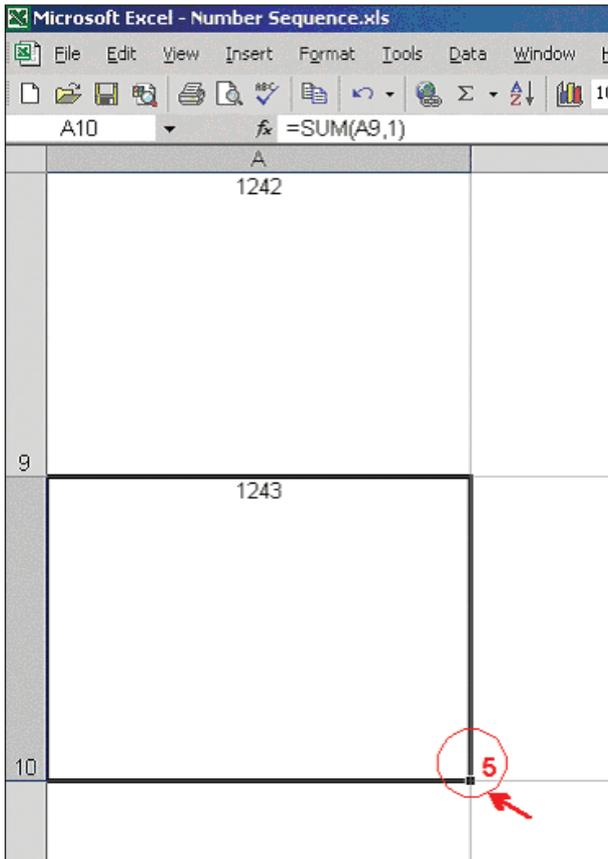
created. **!!Remember!!** The page layout of the Word template must match the cell size you specified in your Excel template.

Select the entire Column you just created by clicking on the top header of the cell. In this case, the "A". Go to **Edit >>> Copy**, to copy the entire column. Now switch over to your Word document, click anywhere inside your predefined page and go to

**Edit >>> Paste.**

If the cells don't paste into the exact measurements of your label, adjust the margins so that they encompass the entire label.

You should be ready to print.



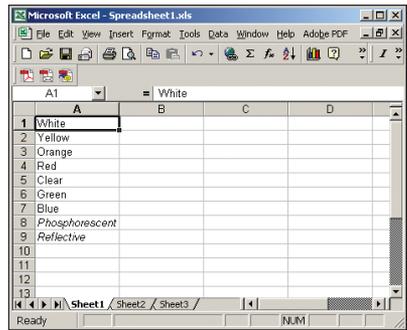
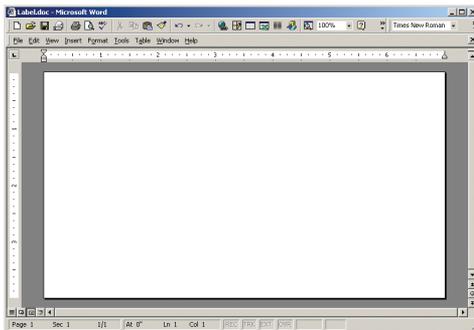
## 11.5 Import from Excel

### How to transfer Excel spreadsheet information into a Word label

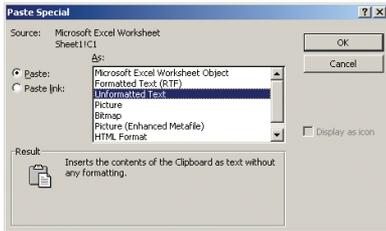
**NOTE:** These instructions are for users of Windows 2000.

#### A. Merging One Column from a Spreadsheet to a Label:

2. Make sure the Excel file you are going to merge has been saved.
3. Open up the Word Document with the label template.
4. Alter the font in Word to the size of your choosing.
5. Open up the Excel file you intend to merge into the Word label. 5. Click on column header A, right-click the mouse and select Copy.



6. Click on column header A, right-click the mouse and select **Copy**.
7. Toggle **Alt-Tab** over to the Word document and find the **Edit** button on the Windows Tool Bar (top left of screen) and then click and select **Paste Special**.
8. Next, select **Unformatted Text** and click **OK**.



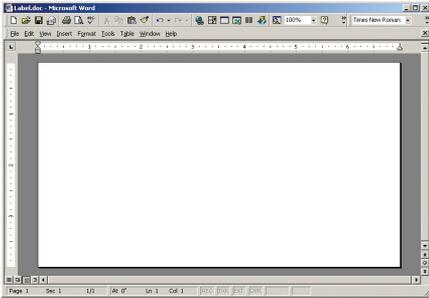
9. The Excel column should now be in the Word label. You are now ready to print your labels.



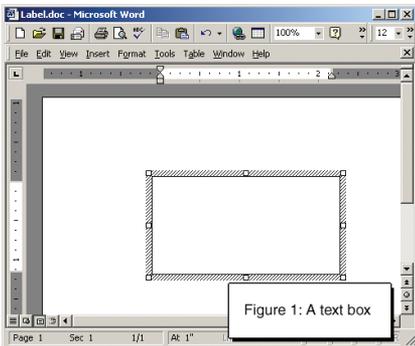
**B. Merging One Column from a Spreadsheet to a Label:**

1. Open the saved Excel document you plan to merge into Word.
2. Open your blank label template within Word.

- On the toolbar on top of Word, click on **Insert**, then click **Text box**.

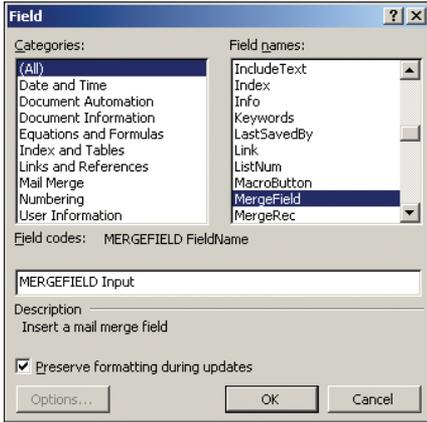


- Use the cross hair cursor. Click in the field of the document, a text box will appear.
- Resize the text box to your preference. (See below)



- When the text cursor is blinking in the text box, click on the **Insert** menu and select **Field**.
- The box on the left should remain with the blue highlighting of the word "All".
- On the right column, move the cursor so the blue highlight is over **MergeField**.
- In the long horizontal box below, "MERGEFIELD" will appear.
- Put a space after "MERGEFIELD" then type in the column heading from your Excel document that you will want to merge into the label (i.e., "Input").

**11.** It will then look like this: “MERGEFIELD Input”. (See below)



**12.** Click **OK** and the box will vanish.

**13.** At this point, you should have the word “Input” (for example) in your text box.

**14.** Create an additional text box(es) within the label and repeat steps 3-12 for each additional cell you plan to transfer from the Excel document into the Microsoft Word label.

**15.** Close the Excel document.

**16.** On the word toolbar, click on **Tools** then **Merge documents**.

**17.** At the bottom, click the **Files of Type** drop-down menu.

**18.** Click on the **All Files** item, then find the file name of the Excel document you plan to merge into Word.

---

**NOTE:** Make sure you are looking in your My Documents folder.

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**19.** Double-click on the correct Excel document.

20. On the next box you see, “ENTIRE WORKBOOK” will be blue highlighted. Click **OK**.
21. You will then see a pop up box with a question mark. Click **OK**.
22. On your Word document, click on **Tools**, then **Mail merge**.
23. Click on **Create**, then **Form Letters**, then click **Active Window**. See below.



24. Click on **Get Data**, then click on **Open Data Source**.
25. At the bottom, you will see **Files of Type**.
26. Click on the drop-down menu of **All Files** at the bottom.
27. Find and **double-click** on the file name of your Excel document.
28. Click **OK**.
29. Click **Merge**.
30. Click **Merge** and the document will merge from Excel to Word. You are now finished

Help is also available under the Word Toolbar. Click on **Help** and type in “Merge from Excel to Word”, then click on **Search**. Then click the option **Use mail merge...**

## 12. Printer Settings

### 12.1 FEED Key

After pressing the FEED key, the printer will feed the media (according to media type) to the specified stop position. When printing with continuous vinyl, pressing the FEED key will feed the vinyl out to a certain length. When printing with die-cut labels, the printer will feed one label each time the FEED key is pressed. If the label is not sent out in a correct position, please proceed with Auto Sensing (see below).

### 12.2 Auto Sensing

The printer can automatically detect the label and record the result of the detection. By doing this, the printer will calibrate the printing position of the label, and the user can print without setting the label length.

#### To Perform Auto Sensing:

1. Make sure the label is correctly loaded in the printer.
2. Power off the printer, then press and hold the FEED key.
3. Power on the printer while still holding the FEED key. Keep holding the FEED key, wait for the LED light turn to flash red, and then release the FEED key. The printer automatically detects the label and records it.

# 13. Cleaning & General Maintenance

Cleaning the Print Head, Adjusting the Print Head, Cleaning the Cutter Modules and Cleaning the Platen Roller

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**IMPORTANT!** Always turn the printer OFF before cleaning, performing maintenance, or loading supplies. Always wait at least 5 seconds before turning ON the power.

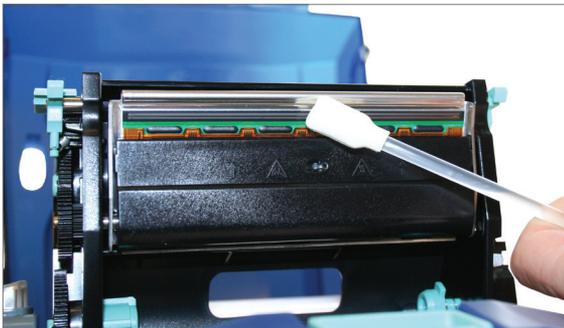
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Basic cleaning of the print head, cutter and platen roller will prolong the life of the printer and allow crisp, clear labels and signs with every print. Please refer to section 4. Load Printer of the User Guide for better clarification of Printer Inside Parts.

## 13.1 Clean Print Head

Unclear printouts may be caused by a dusty print head, ribbon stain or label supply residue. Therefore, when printing, it is necessary to keep the top cover closed. Also, prevent vinyl from being stained or becoming dusty to ensure print quality and to prolong print head life.

1. Turn the printer power OFF.
2. Open the printer cover, and remove the ribbon and/or label supply from the printer.
3. Open the print head by pressing the locking levers.
4. To open a cleaning swab, place the swab between your index finger and your thumb. Squeeze the swab until it snaps. Alcohol will be distributed to the cotton side of the swab.
5. Run the swab back and forth several times across the front and underside of the print head to remove any built-up adhesive, residue or dust particles.

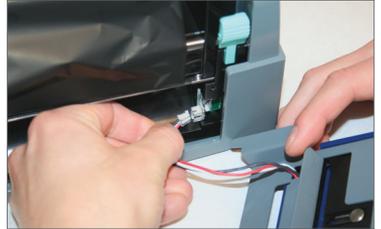


## 13.2 Clean Manual Cutter Module

1. Turn the printer power OFF.
2. Remove the screws on both sides of the manual cutter module.
3. Unplug the sensor connector and remove the cutter module.



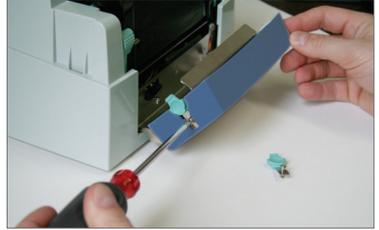
4. Open a cleaning swab, and place the swab between your index finger and your thumb. Squeeze the swab until it snaps. Alcohol will be distributed to the cotton side of the swab. While pressing down on the cutter, run a cleaning swab back and forth several times across the upper blade on of the back side of the cutter.
5. Run the cleaning swab back and forth several times across the upper blade on the front side of the cutter.



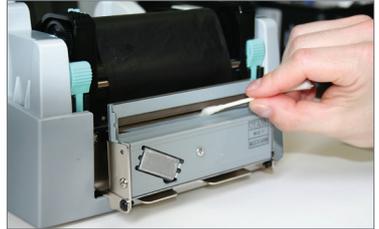
.....  
**NOTE:** Press down on cutter while cleaning the upper cutter blade.  
.....

### 13.3 Clean Electronic Guillotine Cutter Module

1. Turn the printer power OFF.
2. Unscrew the cover screws on both sides of the module and remove the plastic cover.



3. Run a cleaning swab back and forth several times across the upper and lower blades of the cutter.



## 13.4 Clean Platen Roller (DL4000 with a manual cutter module)

1. Turn the printer power OFF.
2. Remove the screws (2) from both sides of the manual cutter module.
3. Open the printer cover by pressing the cover open buttons located on each side of the printer cover, and then press the locking levers inward to lift up the print mechanism.
4. Unplug the sensor connector, and remove the cutter module.



5. Open a cleaning swab, and place the swab between your index finger and your thumb. Squeeze the swab until it snaps. Alcohol will be distributed to the cotton side of the swab. Run the swab back and forth several times across the platen roller.



6. To clean the other side of the platen roller not currently exposed, position your fingers on the platen roller. Then, using your fingers, roll the platen roller toward you so it rotates, exposing the other side of the platen roller in need of cleaning.
7. Run the cleaning swab back and forth several times across the platen roller. Allow alcohol to dry.



## 13.5 Clean Platen Roller (DL4000 with an electronic guillotine cutter module)

1. Turn the printer power OFF.
2. Open the printer cover by pressing the cover open buttons located on each side of the printer cover, and then press the locking levers inward to lift up the print mechanism.
3. Press the cutter tabs on each side of the electronic guillotine cutter module inward, and let the module drop down 90 degrees to further expose the platen roller.



4. Open a cleaning swab, and place the swab between your index finger and your thumb. Squeeze the swab until it snaps. Alcohol will be distributed to the cotton side of the swab. Run the cleaning swab back and forth several times across the platen roller. Allow alcohol to dry.



5. To clean the other area of the platen roller not currently exposed, position your thumbs on the metal plate between the electronic guillotine module and the platen roller, and position your fingers on the platen roller. Using your fingers, roll the platen roller toward you so it rotates, exposing the other area of the platen roller in need of cleaning.

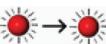
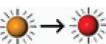


6. Run the cleaning swab back and forth several times across the platen roller. Allow alcohol to dry.

# 14. Troubleshooting

When an error occurs during the printing process, different LED light messages are displayed. Users can diagnose the printer error according to the LED light message. The following table shows LED light messages, their associated printer errors and solutions to each error.

<b>Frequency</b>		Quickly blinking		Slowly blinking		Steady
<b>Color</b>		Red light		Orange light		

LED Light	Error	Solution	
		Unable to detect the media	Please perform the Auto Sensing again.
		Media Out	Replace with new label roll or ribbon roll.
	Media Error	Media Jam	Possible causes: card tags or paper fall into the gap behind the platen roller; can't find label gap/black mark; black mark paper out or ribbon out. Please adjust it according to actual usage.
	Print Mode Error	Ribbon is not installed when in Thermal Transfer mode.	<ol style="list-style-type: none"> <li>1. Please install the ribbon if you want to print in Thermal Transfer mode, or</li> <li>2. Change the print mode to Direct Thermal mode, and print with Direct Thermal media.</li> </ol>
	Door Open	Printing mechanism is not firmly closed.	Re-open the printing mechanism, and close it tightly.

LED Light	Error	Solution	
	Memory Error	Memory is full; printer will print out "Memory full".	Delete unnecessary data in the memory.
		Can't find the file; printer will print out "Filename cannot be found".	Use "~X4" command to print out all the files, and then check whether the file exists and if the file name is correct.
		File name is duplicated; printer will print out "Filename is repeated".	Change the file name, and download again.
	Print Head Error	The temperature of the print head is too high.	Wait for the print head temperature to drop to normal temperature range. The printer will go back to the standby mode, and the LED light will stop flashing.

Problem	Recommended Solution
Power on the printer, but the LED does not light up.	<ul style="list-style-type: none"> <li>• Check the power connector.</li> </ul>
LED light turns red (power/status) after printing stops.	<ul style="list-style-type: none"> <li>• Check for software setting or program command errors.</li> <li>• Replace with suitable label or ribbon.</li> <li>• Check if label or ribbon is empty.</li> <li>• Check if label is jammed/tangled up.</li> <li>• Check if printer mechanism is not closed correctly. (thermal print head not positioned correctly)</li> <li>• Check if sensor is blocked by label stock.</li> </ul>
Printing started, but nothing was printed on the label.	<ul style="list-style-type: none"> <li>• Check if label is placed upside down or if label is not suitable for the application.</li> <li>• Select the correct printer driver.</li> <li>• Select the correct label and print type.</li> </ul>
When printing, label is jammed/tangled up.	<ul style="list-style-type: none"> <li>• Clean the label jam. If label is stuck on thermal print head, remove it with a soft cloth and alcohol.</li> </ul>

<b>Problem</b>	<b>Recommended Solution</b>
When printing, only part of the contents were printed.	<ul style="list-style-type: none"> <li>• Check if label or ribbon is stuck on the thermal print head.</li> <li>• Check if application software has errors.</li> <li>• Check if start position setting has errors.</li> <li>• Check if ribbon has wrinkles.</li> <li>• Check if ribbon supply shaft is creating friction with the platen roller. If the platen roller needs to be replaced, please contact Graphic Products for more information.</li> <li>• Check if power supply is correct.</li> </ul>
When printing, part of the label was not printed completely.	<ul style="list-style-type: none"> <li>• Check if thermal print head is stained or dusted.</li> <li>• Use internal command “~T” to check if thermal print head can print completely.</li> <li>• Check the media quality.</li> </ul>
Printout not in desired position.	<ul style="list-style-type: none"> <li>• Check if sensor is covered by paper or dust.</li> <li>• Check if liner is suitable for use. Contact Graphic Products for more information.</li> <li>• Check if label roll edge is aligned with label width guide.</li> </ul>
When printing, page skipping occurs.	<ul style="list-style-type: none"> <li>• Check if error occurs on label height setting.</li> <li>• Check if sensor is covered by dust.</li> </ul>
Unclear printout.	<ul style="list-style-type: none"> <li>• Check print darkness setting.</li> <li>• Check if thermal print head is covered with glue or stain.</li> </ul>
When using cutter, label would not feed, or abnormal cutting occurs.	<ul style="list-style-type: none"> <li>• Check if cutter is installed properly.</li> <li>• Check if paper feed rods are sticky.</li> </ul>
Print job sent but does not print label.	<ul style="list-style-type: none"> <li>• Turn off printer and disconnect cable.</li> <li>• Wait at least 1 minute, then connect cable, turn printer ON and send print job again.</li> <li>• If that doesn't fix problem, reboot the computer.</li> </ul>

Please call Graphic Products at 800.788.5572 if you need further assistance with your DuraLabel 4000 thermal transfer printer.

# 15. Specifications

## Printer

- Type: Thermal Transfer / Direct Thermal
- Print Speed: 2 in. per second
- Resolution: 203 dpi
- Max. Print Width: 4.25 in.
- Max. Print Length: 68 in.

## Indicators & Buttons

- Indicators: POWER (Green = Standby Mode; Orange = Error; Red = Auto Sensing Mode)
- Buttons: POWER, FEED, COVER OPEN, MANUAL CUTTING

## Communication Interface

- Communications: USB 2.0
- Memory: 4MB Flash (2MB for user storage); 8MB SDRAM

## Power Requirements

- Input Voltage: Auto Switching 100-240VAC, 50-60 Hz
- DuraLabel labelers have worldwide voltage capability.

## Environment

- Operating Temperature: 41°F – 104°F (5°C – 40°C)
- Operation Humidity: 30% – 85%, non-condensing
- Storage Temperature: -4°F – 122°F (-20°C – 50°C)
- Storage Humidity: 10% – 90%, non-condensing
- Ventilation: Free air movement

## Label Stock

- Type: Continuous, Black Mark & Die-Cut
- Width: 1 in. Min. – 4.64 in. Max

## Ribbon Supply

- Type: Wax, wax/resin, resin
- Width: 1.18 in. Min. – 4.33 in. Max.
- Capacity: 360 ft. with 0.5 in. core diameter

## Printer Body

- Dimensions: 8.8"W x 10"D x 6.7"H
- 5.5 lbs (2.5Kg), excluding consumables

For more specifications, please call 800.788.5572, and a Graphic Products representative will gladly assist you.

## 16. FCC Compliance

This equipment has been tested and found to comply with the limits for a CLASS A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at own expense.

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**800.788.5572 | [DuraLabel.com](http://DuraLabel.com)**

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