

## Setup & Operation

xlrntidea



*CD/DVD Printer*



with **DiscStudio**



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Xi440 Manual revision 2.0a



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# XLNT Idea Xi440 and DiscStudio

Your new Xi440 CD/DVD Printer with DiscStudio software is intended for small to medium-scale disc printing operations. The XLNT Idea Xi440 prints directly to inkjet-printable CDs or DVDs eliminating the need for stick-on labels with their attendant cost and inconvenience.

This manual is intended to:

- Familiarize you with the basic operation of your new Xi440 CD/DVD Printer.
- Provide detailed instructions for using the included **XLNT Idea DiscStudio** graphic design software.

## Features

Your Xi440 has the following important features:

- 4 colors for photo quality prints
- Up to 4800 x 1200 DPI resolution
- Simple one button tray load mechanism
- High quality Lexmark engine
- Disc prints cost less than labels
- Print discs in as little as 18 seconds with 80% coverage
- Interface for use with most autoloaders
- Stylish modern Beige and Black case
- Includes software for Windows

## Computer Requirements

Your Xi440 is designed to work with Windows 2000, Server 2003, Windows XP and Vista. The supplied software does not work with earlier versions of Windows. Other minimum requirements are:

- 128MB RAM
- 300MB hard disc space
- Pentium® or equivalent 300 MHz or greater
- Windows 2000, 2003 Server, XP or Vista
- 2x CD-ROM drive
- Free USB Port

## Unpacking Your XLNT Idea Xi440

Your Xi440 is packed complete with these accessories:

- Xi440 printer
- 12 VDC plug in AC adapter
- Black and Color ink cartridges
- Software and driver CD
- Xi440 Quick Start guide
- This manual

You will also need:

- a USB printer cable (not included)
- blank printable CDs or DVDs<sup>1</sup>

To unpack the printer, open the top of the shipping carton and remove the accessories. Then place the box on its side and slide the Styrofoam shipping supports out of the box along with the printer.

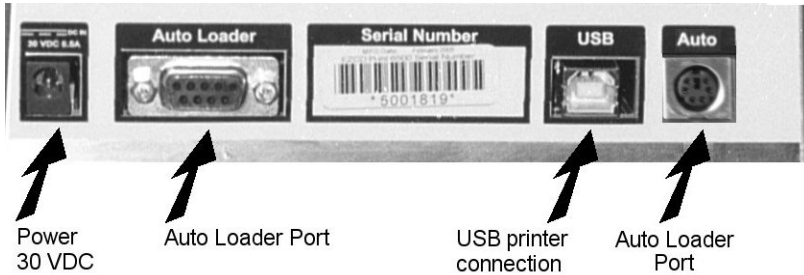
*IMPORTANT: The shipping carton and custom designed packaging should be saved to avoid damage to the Xi440 in case you ever need to transport or ship it.*

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<sup>1</sup> The Xi440 can only print on CDs/DVDs designed for ink jet printing. Most media with a glossy surface is designed for use with stick-on labels and can't be printed in the Xi440.

## XLNT Idea Xi440 Connections

The rear panel of the Xi440 has four connectors as shown below:

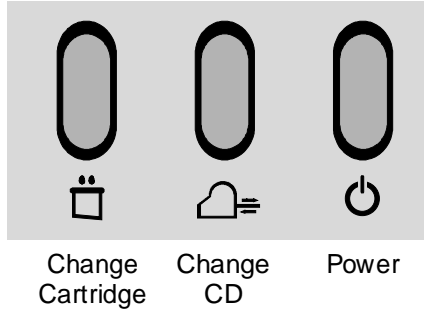


The connectors are as follows:

- Power** Use only the original 30V DC adapter that comes with your printer. If the cord or adapter becomes damaged, replace it with an identical unit.
- Auto Loader** Up to two different serial connectors (depending upon ordered configuration) are provided (a DB-9 and/or a 6 pin DIN) for use with an external CD/DVD auto loader. The Xi440 is compatible with many different auto loaders. Go to [www.xlntidea.com](http://www.xlntidea.com) for further information and support software.
- USB Connector** Use a USB printer cable to connect this port to your computer. The port is functional even if the printer is powered off so your computer will recognize the printer even while turned off.

## XLNT Idea Xi440 Controls

Your Xi440 has three operating controls for user input as shown below:



**Power** Turns printer power on or off. A green LED in the button illuminates when the printer is on.

**Change CD** Pressing the Change CD button will extend the CD tray so you can insert or remove a CD. A red LED in this button will light either when the CD tray is extended or when the Change Cartridge button is pressed.

Press the button a second time to draw the tray and CD into position for printing.

**Change Cartridge** Pressing the Change Cartridge button will move the cartridge holders into position so you can access them to change cartridges. The red LED in the Change CD button will light when this button is pressed.

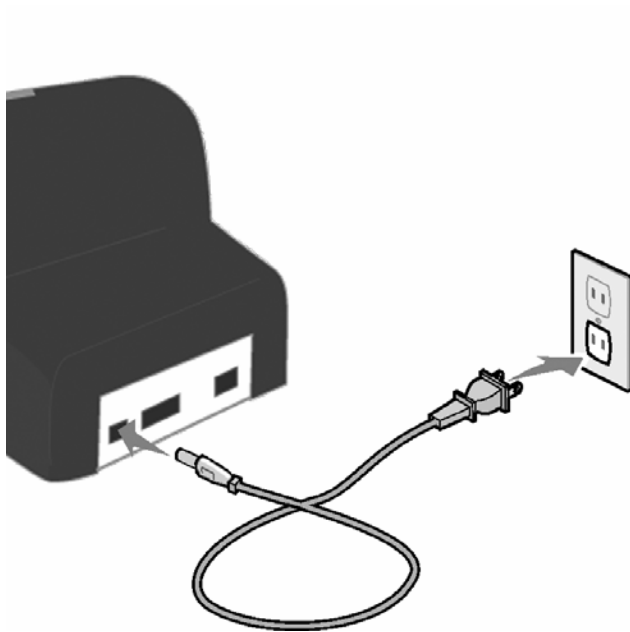
Press the button a second time to move the cartridge holders back to default position and restore normal operation after cartridges are changed. See page 13 for details.

## XLNT Idea Xi440 – Set Up

To properly and quickly install your Xi440 and DiscStudio software, please follow the included Quickstart Guide. The following sections of this manual give the same information as the Quick Start Guide with more detailed information.

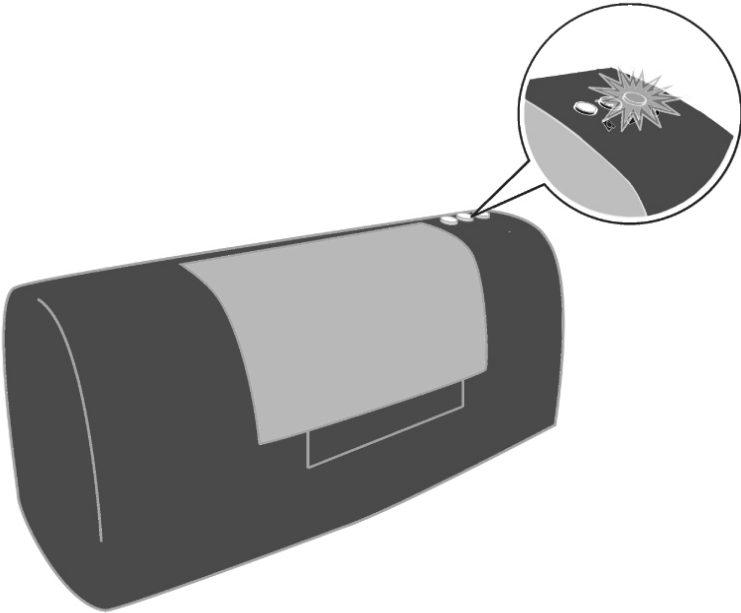
### Step 1 – Plug In

Locate the AC adapter and plug the AC power plug into the nearest AC wall outlet. Plug the small male connector into the female connector on the back of the Xi440 CD/DVD Printer.



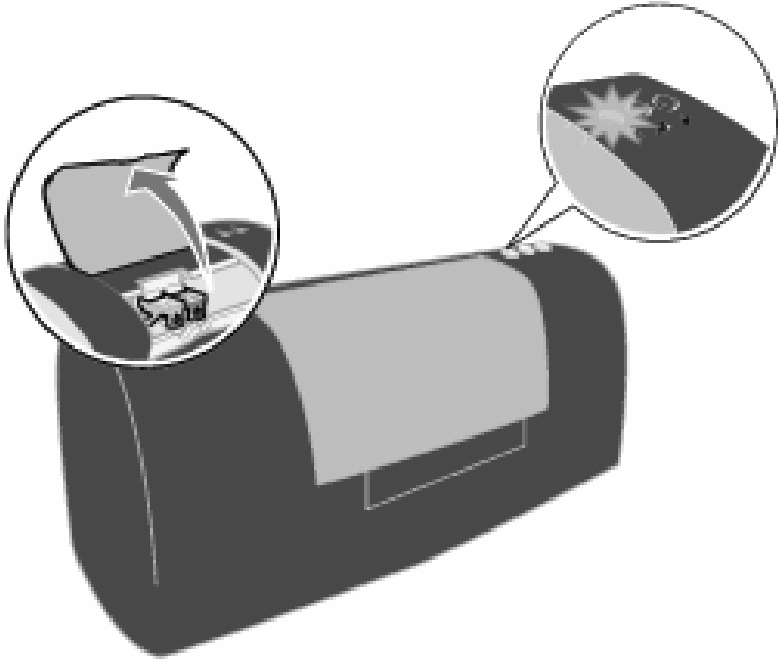
## Step 2 – Power On

If it does not automatically turn on when the power adapter is plugged in, press and hold the Power button until the light inside the button turns on.



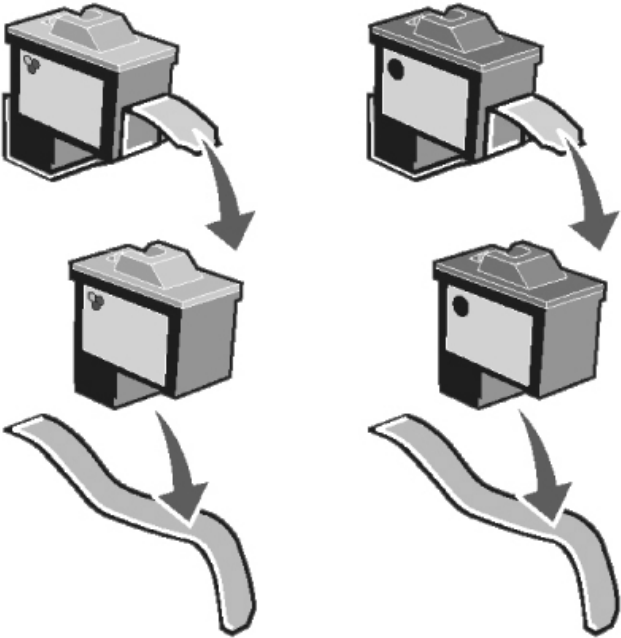
### Step 3 – Installing the Ink cartridges

With the printer powered on, raise the center lid of the printer and press the Change Cartridge button to slide the ink cartridge holders into exchange position.



**Step 3 – Installing the Ink cartridges - continued**

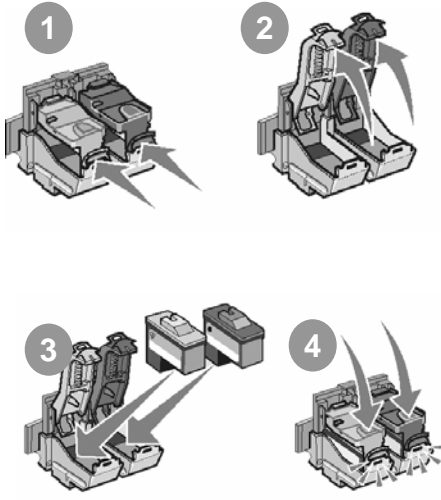
Remove the ink cartridges from their foil packages and remove the tape covering the print heads taking care not to touch the print heads or the gold contacts on the back.



### ***Step 3 – Installing the Ink cartridges - continued***

Press the tabs on the front of the cartridge holders inward.

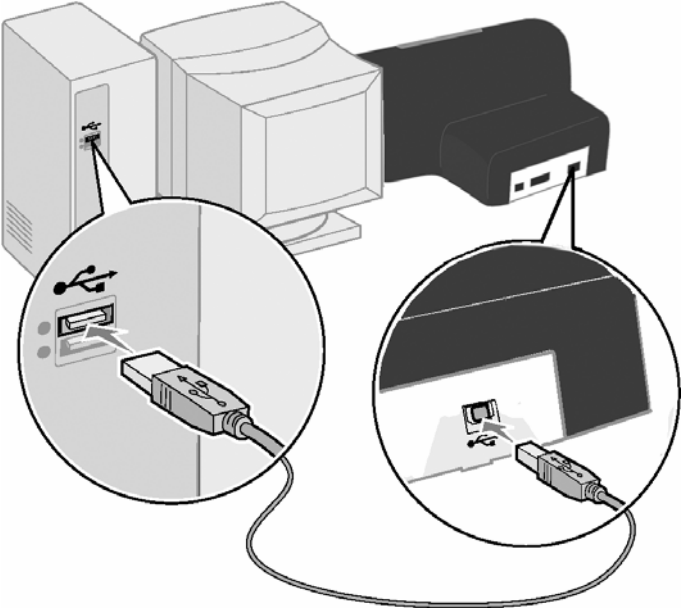
1. Press the tabs inward
2. Lift the covers upward to open.
3. Place the ink cartridges into their holders taking note to use the correct color coded holder (light green cartridges go into the light green holder and dark green cartridges go into the dark green holder).
4. Close the covers until they latch onto the lower holders as before.



*Note: You should never have to force the ink cartridges into their holders, if excessive force is necessary, remove and reinsert the cartridges or check for any obstructions within the holders.*

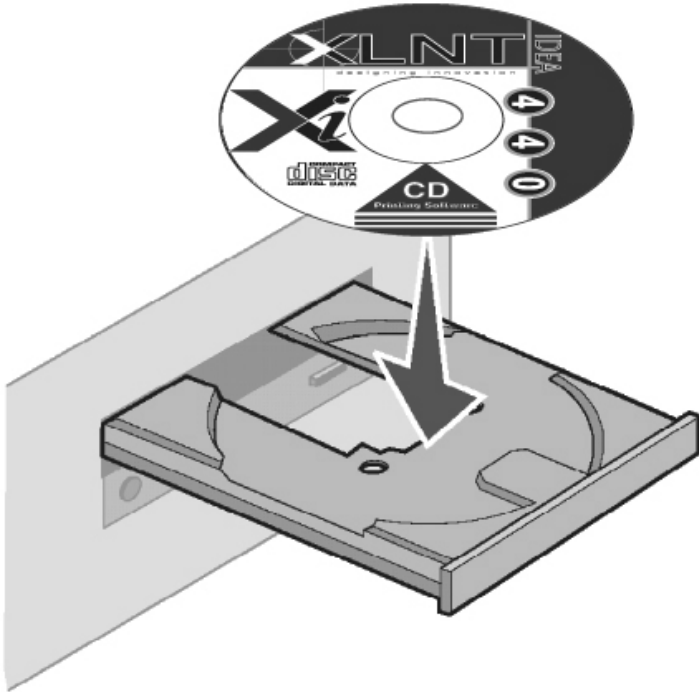
## Step 4 – Connect the Xi440

With the XLNT Idea Xi440 CD/DVD Printer and your computer turned on, plug the male rectangular end of the USB cable into an available female USB port on the back of your computer; plug the male square end of the cable into the female USB port on your printer.



## Step 5 – Install Software

Open the CD-ROM drive on your computer and place the XLNTIdea Setup CD into the DVD drive and close the drive.



## Step 5 – Install Software - continued

If autorun is enabled on your computer the following screen will appear. If autorun is not enabled navigate to the drive you placed the XLNT Idea Setup CD and double click on the “setup.exe” application contained on the disc and the following window will appear.

Leave this window open but **DO NOT** click the “NEXT” button at this time.

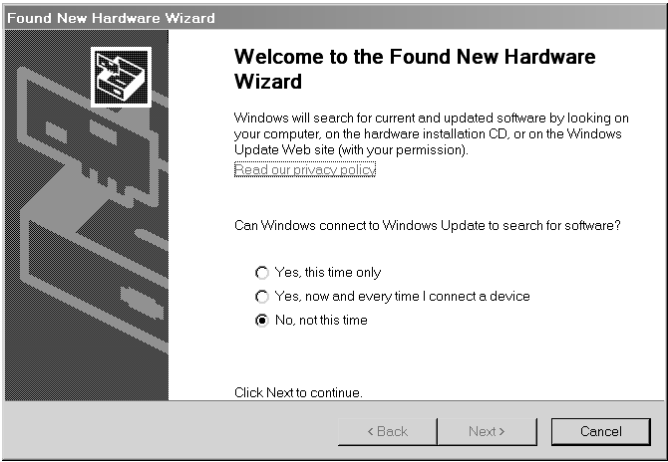
The image shows a window titled "QuickStart" with five numbered steps:

- 1 Plug In**: Remove the AC adapter from the box and plug your printer in. (Illustration shows a power adapter being plugged into a printer and a wall outlet.)
- 2 Connect**: With your computer on connect your Xi440 printer to an available USB port. (Illustration shows a USB cable being connected to a printer and a computer's USB port.)
- 3 Power On**: Power up your printer by pressing the Power button on the far right side until the light comes on. (Illustration shows a printer with a power button being pressed.)
- 4 Install Drivers**: Once windows detects your new hardware follow the windows prompts to install the Xi440 Drivers (Refer to the included Quick Start Guide). (Illustration shows screenshots of Windows driver installation prompts.)
- 5 Install Software**: Let Windows finish installing the Xi440 Driver before continuing to the next step! Once Windows has finished installing the Xi440 Driver you will need to install the printer software included with your xi440 by clicking the "Next" button below. (Illustration shows a "STOP" sign and a "Next>>" button.)

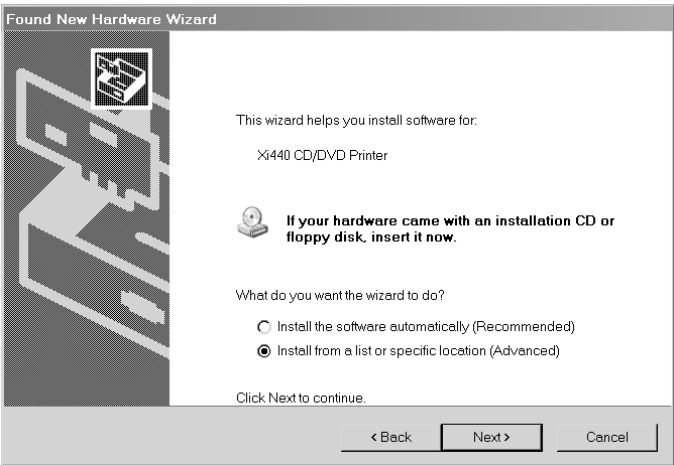
On the right side of the window is the logo for **IDEA XLNT** with the tagline "designing innovation". At the bottom right, it says "Copyright 2005 XLNT IDEA".

**Step 5 – Install Software - continued**

When the Xi440 printer is powered up and connected to your computer, Windows will automatically detect the Xi440 the first time the printer is connected. The New Hardware window shown below will appear:



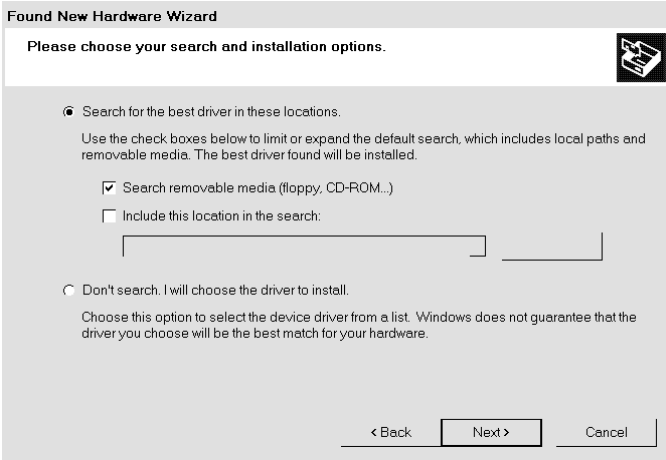
Select **"No, not this time"** and click the **"Next"** button, the following window will then appear.



Check the **"Install from a list or specific location"** box and click **"Next"** button.

### Step 5 – Install Software - continued

This will then open the following window. Check the "Search removable media" box and click "Next".



Once your computer locates and begins copying the drivers from the XLNTIdea Setup CD the window shown below will appear. In spite of Windows warning, this software will not impair or destabilize your computer! Click on the "Continue Anyway" button.



**Step 5 – Install Software – continued**

After the Xi440 driver installation has completed the final window will appear. Click the “**Finish**” button. The required drivers for your Xi440 have now been installed.

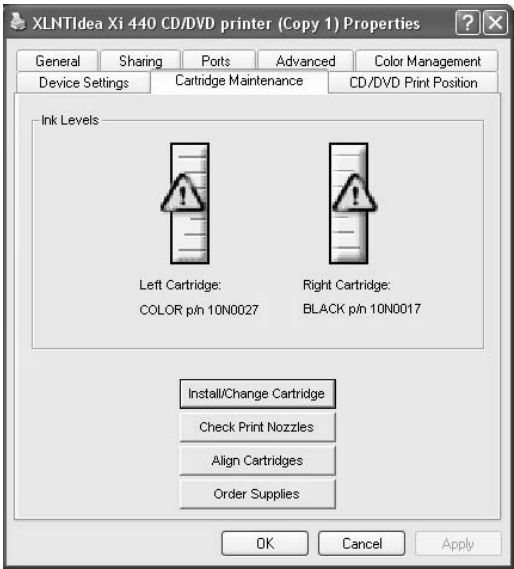


Cartridge Alignment can now be setup by continuing to Step 6.

# Step 6 – Cartridge Alignment

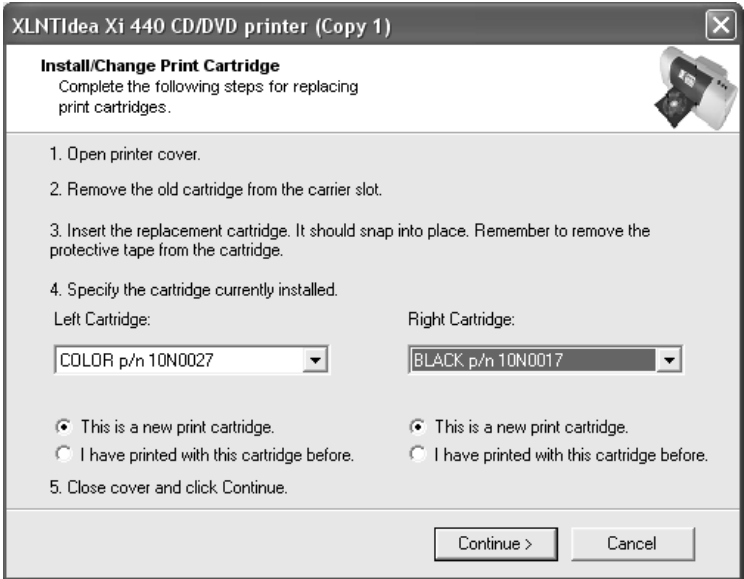
The ink jet cartridges must be aligned **EVERY** time new cartridges are installed.

To align the ink cartridges go to “**Start Menu > Settings > Printers and Faxes**” find the Xi440 printer icon in the list and **Right Click** on it. From the pop up menu select “**Properties**” and then select the “**Cartridge Maintenance**” tab in the XLNTIdea Xi440 CD/DVD printer Properties window. Then **Click** the “**Install/Change Cartridge**” button from the window (shown below) that opens.



**Step 6 – Cartridge Alignment (continued)**

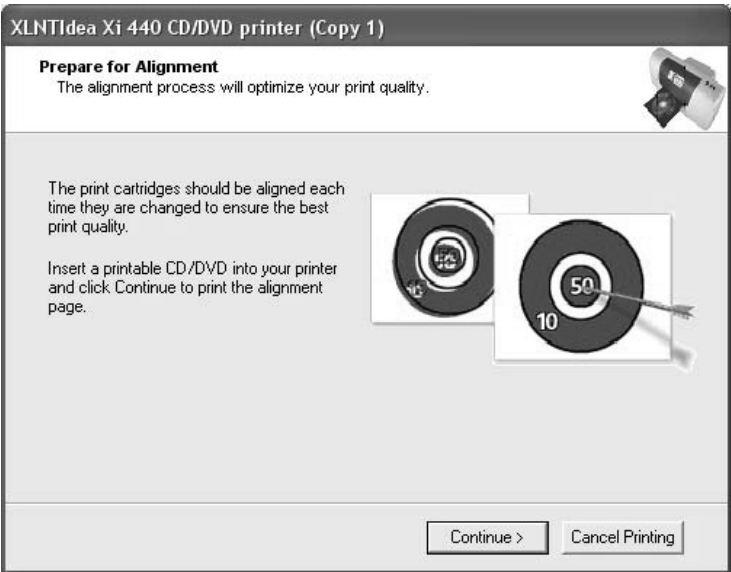
From the pull down menus of the window that opens (Shown below) select the type of cartridge you have installed. (The XLNTIdea Xi440 is shipped with **10N0027** and **10N0017** cartridges). Then click the “**Continue**” button.



**Step 6 – Cartridge Alignment (continued)**

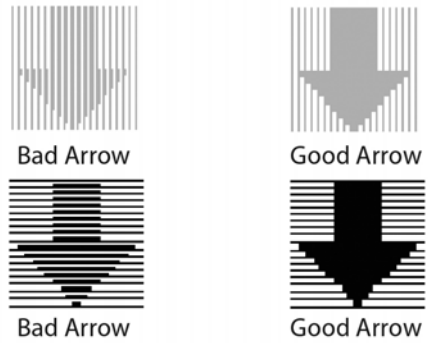
On the next screen that appears click the Continue button again.

After a few moments the XLNTIdea Xi440 will extend its Disc Print Tray and the **Center Control Button** will turn RED, Place a blank inkjet printable CD/DVD into the tray and press the center **Change CD Button** on your Xi440. This will draw the tray back into the printer and begin the “**Cartridge Alignment Test**”.

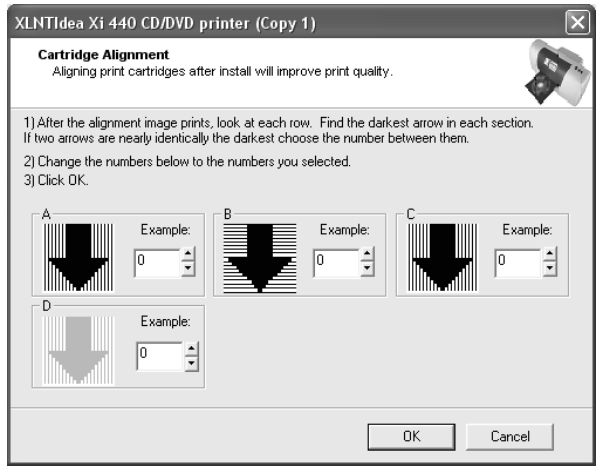


**Step 6 – Cartridge Alignment (continued)**

When the disc has finished printing, remove the disc from the tray and note the arrows that were printed onto your disc, Use your best judgment to pick the arrow that stands out most from the surrounding lines. Taking note of the letter (**A,B,C** or **D**) next to each row of arrows.



Enter the number of the arrow judged best into the corresponding letter box in the window (Shown below) that opens. When you are finished click the "OK" button to close the window.



Congratulations you have successfully setup your XLNTIdea Xi440 CD/DVD Printer for optimum printing.

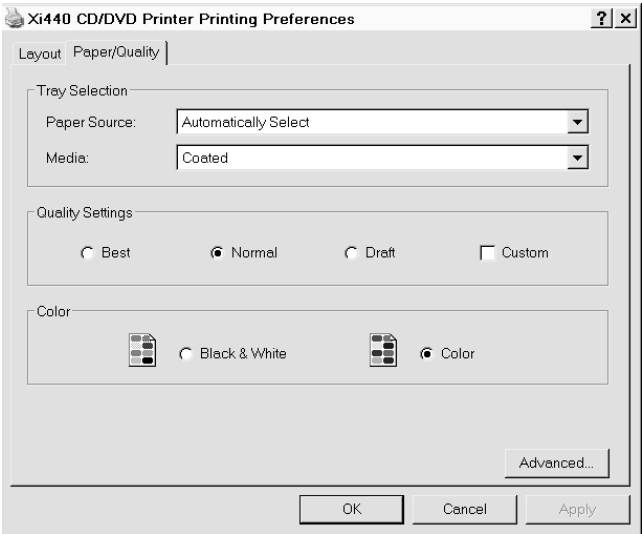
# Setting Printing Characteristics

The XLNTIdea Xi440 can be set for different print quality and densities. Choosing the best values can make a significant difference in the quality of your printed discs.

Quality settings are made from the Xi440 Properties panel. Go to **Start Menu > Settings > Printers and Faxes**, then right click the Xi440 printer icon and select "Properties".

1. From the Xi440 CD/DVD printer Properties window that opens **Click** on the General tab.
2. Click Printing Preferences button from that tab to open the Printing Preferences window.<sup>2</sup>
3. Click on the Paper/Quality tab to change your printing preferences.

*Don't change any settings under the Layout tab. Settings under this tab don't apply to the Xi440.*



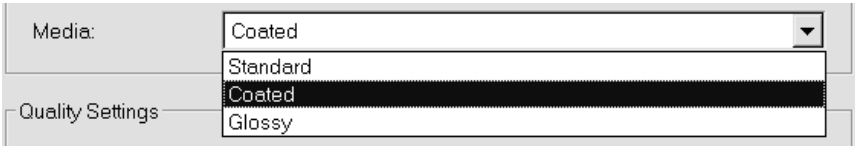
<sup>2</sup> The Printing Defaults window is also available under the Advanced tab (Printing Defaults).

## Setting Printing Characteristics (continued)

*Paper Source* Leave this setting at “Automatically Select”

*Media* The Media settings affect the amount of ink used per pixel. Settings will effect the color saturation of the image, but will use more ink. Use the lowest setting that gives the results you want in order to conserve ink.

- **Standard** (lowest saturation and ink use, quicker prints)
- **Coated** (medium saturation and ink use – default setting for your Xi440)
- **Glossy** (highest saturation and ink use, longer print time)



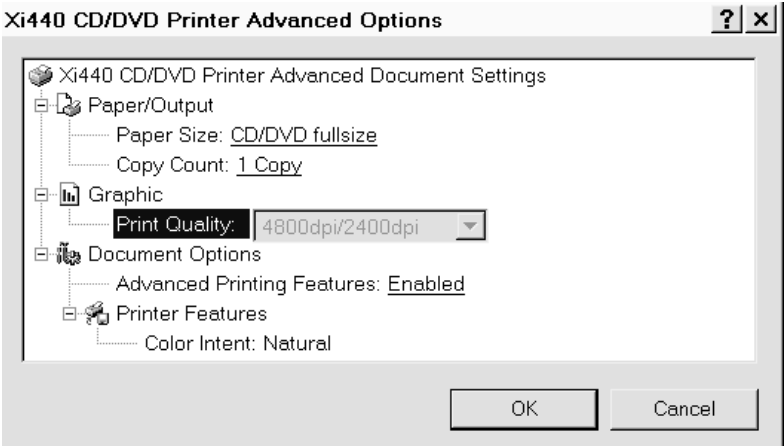
*Quality Settings* These quality settings affect the print resolution in DPI (dots per inch). Higher resolution means a clearer image but takes longer to print. Available settings are:

- **Best** (4800 x 2400 DPI)
- **Normal** (600 x 600 DPI, default setting)
- **Draft** (300 x 300 DPI)
- **Custom** (set by clicking the Advanced button)

*Color* You may choose to print in Black and White or Color. If your label is in black and white or grays only, you can choose Black and White. This will disable the color cartridge in the printer and print from only the Back cartridge.

**Setting Printing Characteristics (continued)**

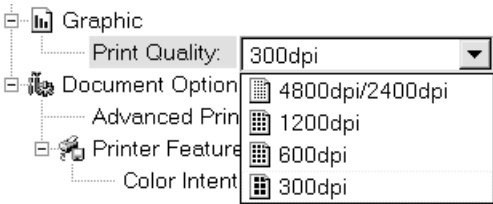
Click the Advanced button from the Paper/Quality window (see page 29).



A number of printer features may be adjusted from this window see descriptions on next page.

**Setting Printing Characteristics (continued)**

- Paper Size** This allows you to select CD size. Unless you have the printer adapters which allow the use of smaller CDs, leave the setting at CD/DVD fullsize.<sup>3</sup>
- Copy Count** Leave this set to 1. You may adjust the number of copies at print time.
- Print Quality** This sets the printer resolution. It is the same as using the Quality settings in the Paper/Quality window except that a 1200 x 1200 DPI option is available here. Click on the numbers to open the pull down list, and then select the desired setting.

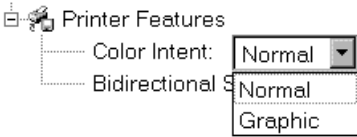


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*Note: This list is only available if you have checked Custom in the Paper/Quality window's Quality setting.*

---

- Document Options** Leave Advanced Printing Features at the default "Enabled" setting.
- Color Intent** For photographic and continuous tone images select Normal. For line drawings and most graphic images select Graphic. The Graphic mode will produce greater saturation and more vibrant colors.



- Bidirectional Support** This must be left ON.

---

<sup>3</sup> The Paper Size setting is also available from the Device settings tab in the main printer Properties window where it is called Upper Paper Tray.

# Installing DiscStudio

Place the **XLNTIdea Setup CD** into the DVD-ROM drive of your computer

- If the program doesn't start, double click on My Computer and navigate to the CD drive (on most computers this will be D:\. Double click the file named "setup" or "setup.exe".

The software setup window (below) will display:

**1 Plug In**  
Remove the AC adapter from the box and plug your printer in.

**2 Connect**  
With your computer on connect your Xi440 printer to an available USB port.

**3 Power On**  
Power up your printer by pressing the Power button on the far right side until the light comes on.

**4 Install Drivers**  
Once windows detects your new hardware follow the windows prompts to install the Xi440 Drivers (Refer to the included Quick Start Guide).

**5 Install Software**  
Let Windows finish installing the Xi440 Driver before continuing to the next step!  
Once Windows has finished installing the Xi440 Driver you will need to install the printer software included with your xi440 by clicking the "Next" button below.

**Next >>**

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**XLNT**  
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Click "**Next**" to continue with software installation. During this process you may either install to the default folder or choose another location. We recommend using the default folder.

Click the "**Finish**" button once the installation is done.

The installation will also create a program shortcut in Start Menu.

# DiscStudio – Setup and Use

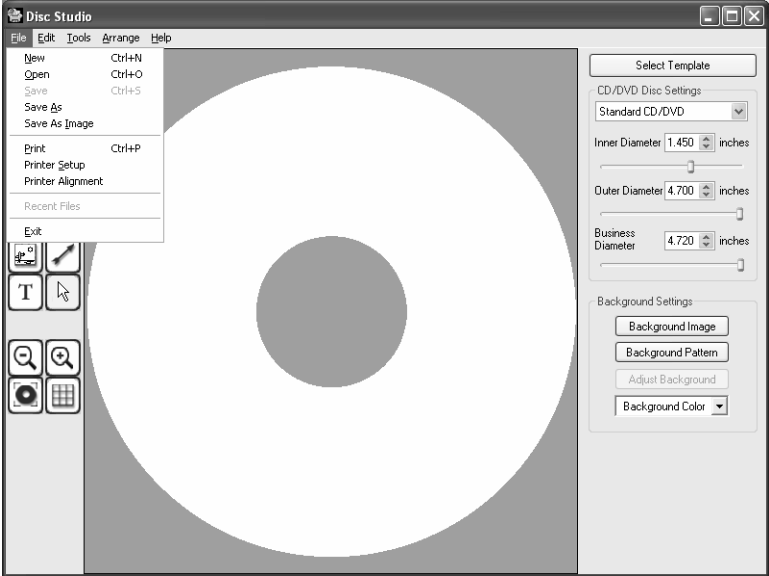
The DiscStudio software included with your printer is a full featured software solution for the design and printing of full color labels directly onto ink-jet Printable CD/DVD discs.

## Calibrate Print Position

The first time you run **DiscStudio** a Print Setup window will prompt you to select a printer. Please select **Xi440 CD/DVD Printer** from the drop down menu and click **OK**.

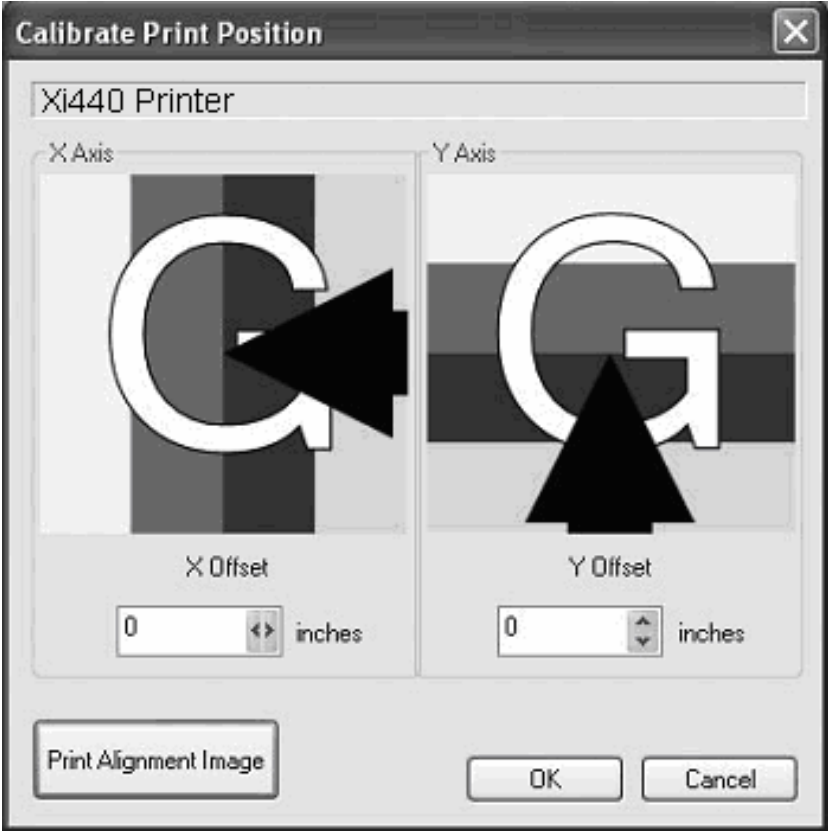
DiscStudio must be aligned to your printer before you can print CDs or DVDs accurately. This procedure need only be done once unless you change printers. Alignment is remembered from session to session and saved when you quit the program.

Open DiscStudio then from the **File** menu select **Printer Alignment**.



**Step 16 – Calibrate Print Position (continued)**

The following window will appear:



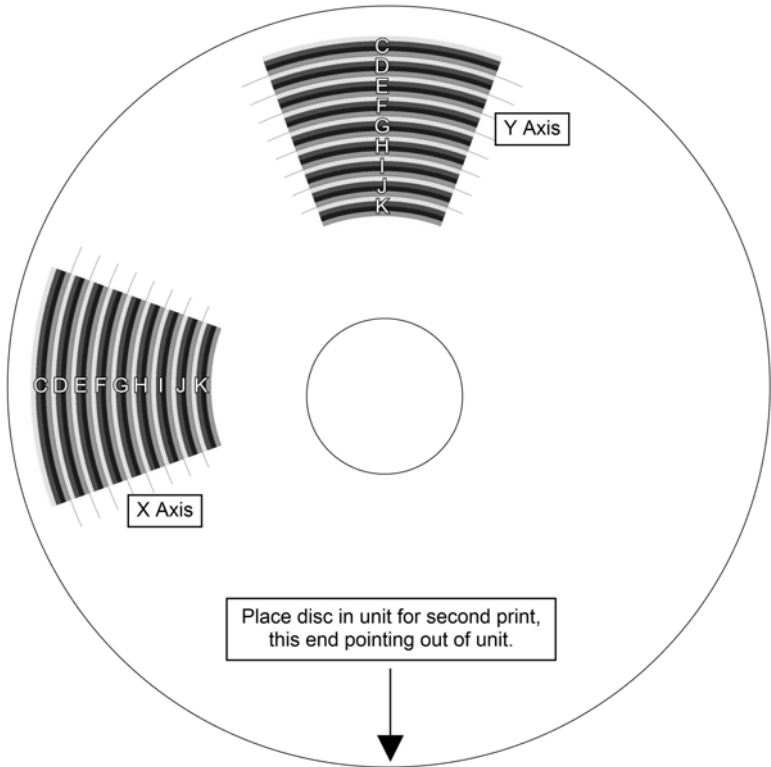
This window provides adjustment for the X and Y positions of the printed image. Do not set them manually at this point. Click the **Print Alignment Image** button in the lower left corner and the Xi440 will extend the print tray. Place a disc to print into the print tray and press the center Change CD button.

The Xi440 will then begin to print.

**Step 16 – Calibrate Print Position (continued)**

When the disc has finished printing and the tray has fully extended remove the disc from the tray and examine it.

The printed disc will look like the following image:



**Step 16 – Calibrate Print Position (continued)**

Now place this disc back into the Print Tray with the arrow on the printed disc pointing directly towards the front of the Xi440.

Close the Xi440 cover and click the “**OK**” button in the onscreen window.

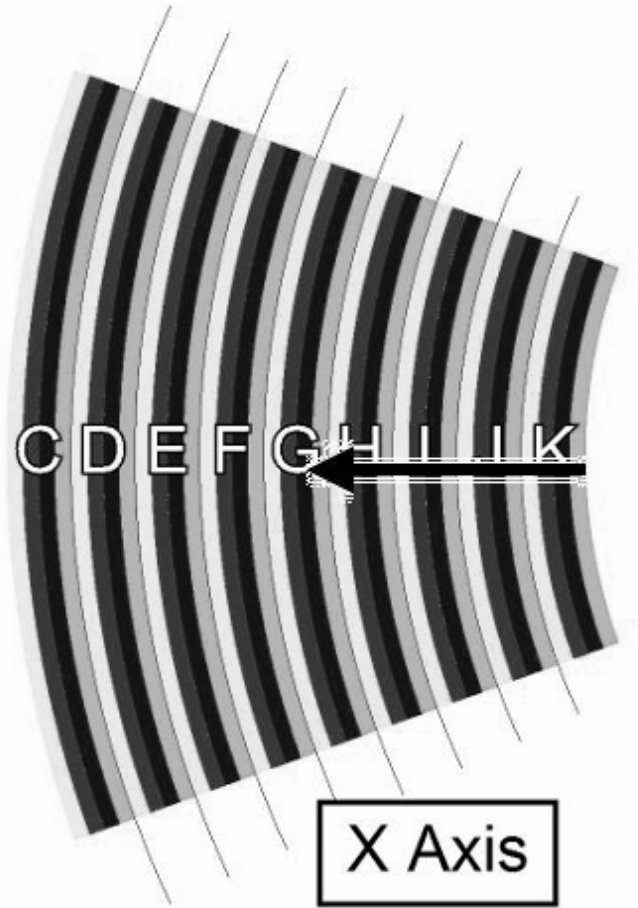


This will print a second image of 2 black alignment arrows on the previously printed disc. After the Xi440 has finished and the print tray has fully extended, remove the printed disc.

**Step 16 – Calibrate Print Position (continued)**

**X Axis alignment**

Examine the printed CD carefully looking first at the area marked X Axis.

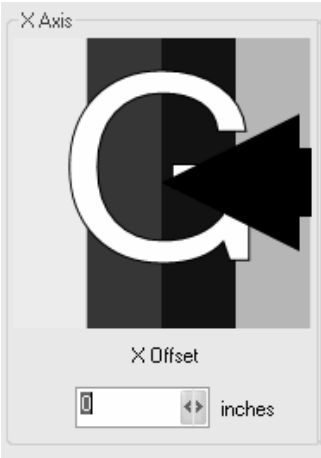


Note that (in this example) the tip of the arrow points to the right edge of the blue line under the letter G.

**Step 16 – Calibrate Print Position (continued)**

To adjust X Axis alignment, use the Right and Left arrows to scroll through the letters and colors to match as closely as possible those on the printed disc.

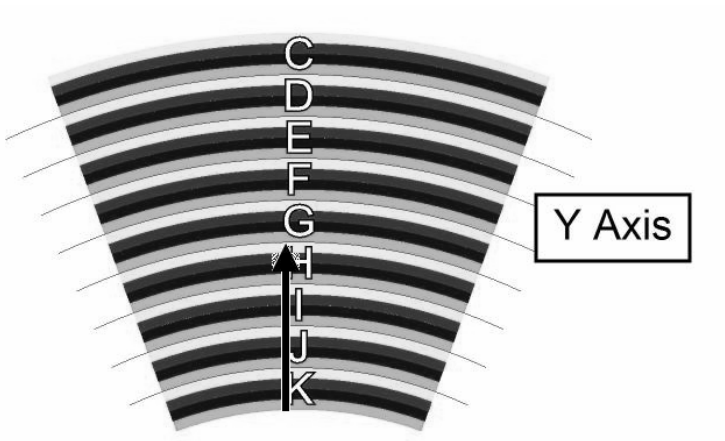
*Note: The values for your printer will almost certainly differ from those shown here, which are examples for illustration only.*



**Step 16 – Calibrate Print Position (continued)**

**Y Axis alignment**

Now examine the area of the CD marked Y Axis.



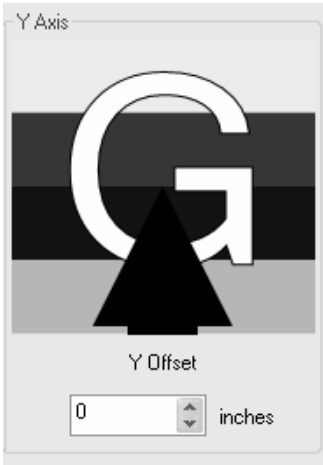
**Step 16 – Calibrate Print Position (continued)**

The tip of the black arrow is at the beginning of the green band under the letter G.

To adjust the Y Axis alignment, use the Up and Down arrows to scroll through the letters and colors to match as closely as possible those on the printed disc.

*Note: The values for your printer will almost certainly differ from those shown here, which are examples for illustration only.*

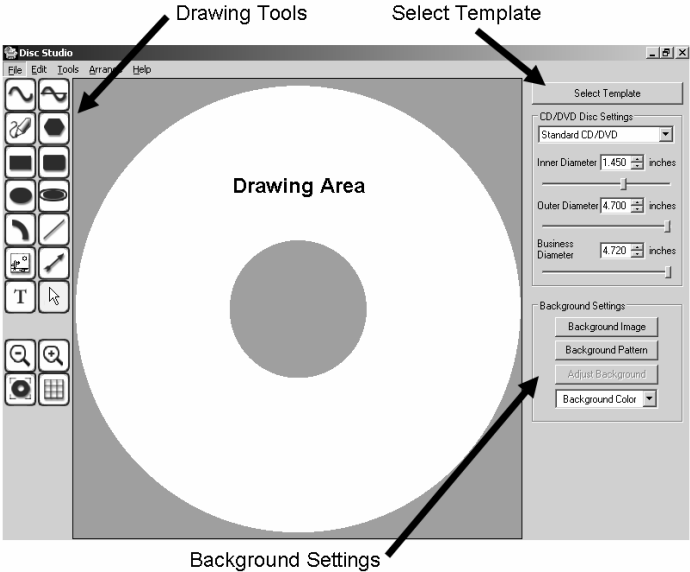
Both X and Y values will be remembered from session to session and need only be set once for each Xi440 printer that you use.



Congratulations! You have successfully setup your Xi440 for optimum printing. You may now continue with **DiscStudio**.

# Navigation

The DiscStudio window is divided into several main sections, as shown in the illustration below.



## Drawing Tools

These tools allow you to draw and manipulate objects of various shapes. You can set line colors, fill colors and gradients, move objects in front of or behind others, and select a grid to make alignment easier.

## Select Template

Default templates are provided for various sizes of discs and may be further adjusted to fit your needs.

## Background Settings

Allows you to import and adjust bitmap graphic files to use as backgrounds.

## Drawing Area

This is where you manipulate elements of your design and preview your label to be printed.

## Included Fonts, Backgrounds and Clipart

A DiscStudio installation includes a large selection of images and fonts you can use for your labels.

### **Fonts**

A large selection of True Type fonts is included with DiscStudio. These fonts extend the selection you already have installed within the Windows operating system. By default you'll find these fonts in:

```
C:\Program Files\XLNTIdea\DiscWorks\Fonts
```

*The fonts are not installed within Windows which means they cannot be used in other applications. This avoids slow Windows performance that may occur when large numbers of fonts are installed within the Windows operating system.<sup>4</sup>*

### **Backgrounds and Clipart**

DiscStudio includes a large selection of background and clipart images. By default these are stored in the following folders:

```
C:\Program Files\XLNTIdea\DiscWorks\Backgrounds
```

```
C:\Program Files\XLNTIdea\DiscWorks\Clipart
```

For further information about backgrounds and clipart see page 76.

---

<sup>2</sup> You can use the normal Control Panel Fonts utility to install any of the supplied fonts if you need them for other applications.

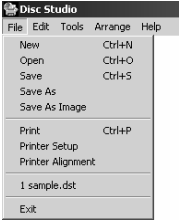
# Opening and Saving Files

## Starting a New File

When you start DiscStudio, it's all set for you to start creating a label. So you don't actually need to use the *New* button to create a new file. However, if you are done with one label and want to work on another, save the first label, then select *File > New* to clear your workspace completely.

To open or save files, or start working on a new label, click on the File option in the **upper left** of the DiscStudio window.

Labels are opened from and saved as single composite files, which embeds all backgrounds, artwork and text. These files can be copied to another computer which has DiscStudio installed. To do this, when ready to save a label, choose *Save As Image*. To simply save the label, without the need of copying the label to another computer, click on *Save As*, and choose a file name.



## Saving a File

Once you have prepared your CD/DVD label, save it by selecting *File > Save*. This will open a standard Windows file dialog where you can choose the filename and location.

By default, DiscStudio will save files in the *My Documents* folder. If you want to change this choose any folder you want using the file dialog window.

## ***Opening and Saving Files (continued)***

### **Opening a File**

Select *File > Open* to open an existing label file, and if you have a label open that has not been saved prompt you to save it.

**Note:** DiscStudio label files have the extension *.dst*.

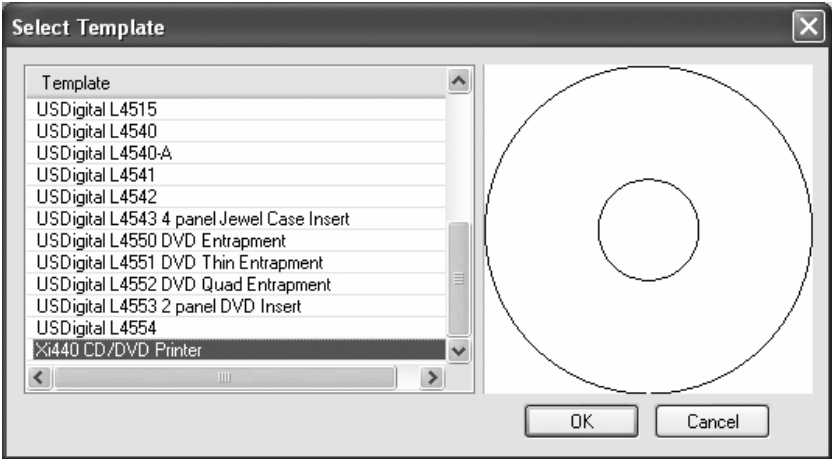
The default folder for DiscStudio is the *My Documents* folder unless you have changed this when saving a file previously. You can open DiscStudio files from any accessible folder; as the Windows file dialog window allows easy browsing to find the correct file you need.

### **Other Options**

As described earlier, *Printer Alignment* can be performed from this menu. In addition, the *Printer Setup* and *Print* choices are located here. It is a very good idea to check your setting in *File > Printer Setup*, prior to printing, as changing these options will greatly affect the quality of your print, and the amount of time required to print each label.

## Selecting a Template

To select a template, click the *Select Template* button (top right of the Disc Studio screen) and choose a suitable template from the list. If you are going to print to your Xi440, the Xi440 CD/DVD Printer should be selected by default. The Disc Studio software also includes many popular templates so if you are going to print to another printer (i.e., a desk jet, or laser printer) you may choose from the available templates that matches the label template that you will be printing on (see image):



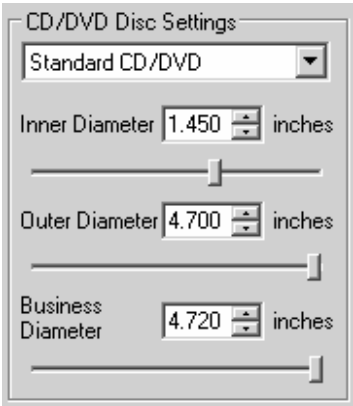
## CD/DVD Disc Settings

When printing to your Xi440, you may choose the type of CD/DVD that you are printing on from the drop down list, by clicking on the down arrow to the right. If this option is not shown the Xi440 CD/DVD AutoPrinter has not been selected from your templates as previously shown.



**CD/DVD Disc Settings (continued)**

You may also adjust the template to suit your requirements using the sliders or input windows in the Templates section, shown below:



All dimensions are in inches by default. To change to metric simply select the Edit menu and click the Metric option. Click Standard to change back to inches.

Each setting can be set either by moving the sliders or typing values into the text boxes. The changes appear immediately in the Drawing Area of the window.

*Inner Diameter* sets the diameter of the blank area at the center of the CD/DVD.

*Outer Diameter* sets the outer diameter of the printable area.

*Business Diameter* sets the cutoff at top and bottom of the

Note: Be careful in the adjustments as printing too far into the inner diameter or too far to the outside diameter of some discs may result in excess ink that is not absorbed by the disc resulting in ruined discs or damage to the Xi440.

CD/DVD, as used for "business card" CDs or DVDs.

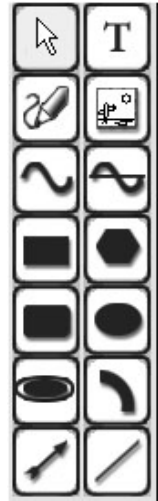
## Using the Drawing Tools

The drawing tools are available from the Drawing Tools section of the interface (shown at the right). To use a tool, click one of the buttons and then click in the drawing area to build your object.

To help you align objects accurately, a *grid* is available by clicking the grid button below the drawing tools:



Once objects are aligned you can remove the grid by clicking the grid button a second time although the grid is only for reference and will never be printed.



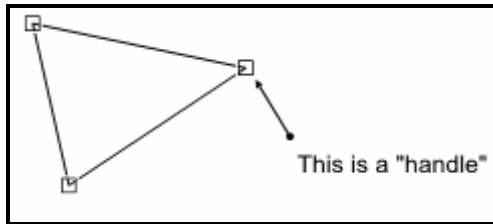
Drawing tools include (from top left):

Selection Tool	Text
Freehand	Clipart
Open Curve	Closed Curve
Rectangle	Polygon
Rounded Rectangle	Ellipse
Halo	Arc
Arrow	Line

The drawing tools are described in detail starting on page 49.

## General Notes

To draw any object, click the button for the object you wish to create then click within the drawing area. When you are done, finish the object either by *double clicking* on the last handle (see image, below) or by releasing the mouse button and clicking once in the same position (differences are described for each tool in the sections below).



Once an object has been created, it can easily be resized, moved, reshaped and its line and/or fill properties can be modified.

### *Correcting Errors*

DiscStudio has multi-level Undo (Ctrl+Z) and Redo (Ctrl+Y) functions, located under the *Edit* menu. Simply select UNDO to undo the last action. Selecting UNDO repeatedly steps back through your previous steps. If you step back too far, or change your mind, click REDO to step forward again.

## ***General Notes (continued)***

### ***Selecting and Adjusting Objects***

To select a closed object (rectangle, circle, etc.) left click anywhere within the object. When selected, small black, square handles will appear. Click and drag a handle to reshape or resize that object.

To select a line object (curved or straight), left-click anywhere on the line. Handles will appear to let you resize or reshape that object.

You can select multiple objects by clicking and dragging a selection rectangle just as you would select multiple icons on the Windows desktop (make sure the cursor pointer is a normal "arrow" before doing this).

You can move most objects by clicking anywhere within a closed object (or on the line for a line object) and dragging with your mouse. *Do not click on a handle or the object will be reshaped instead of being moved.*

To unselect an object, click anywhere outside the object, or click the *Selection Tool*, on the left-top of the screen.


### ***Clearing a Drawing Tool Selection***

If you have selected a drawing tool and then change your mind, right click outside the drawing area (the grey area), to clear the selection and return to the *Selection Tool*, on the left-top of the screen.

## Description of the Drawing Tools

**Note:** The following sections refer frequently to Line and Fill properties. For detailed information, see page 66.

### Open Curve Tool


Function	Draws a curved line.	
Position	Any	
Features	Line properties	

The Open Curve tool lets you draw curved lines. Click this button then click and release to set the starting point in the drawing area. Move the mouse to the set the next fixed point on the curve, and click to establish the next fixed point. Continue to make as many fixed points as required.

Double-click to close the Open Curve Tool. When the object is selected, drag any of the fixed points to change the size or shape of the curve.

**Description of the Drawing Tools (continued)**

**Closed Curve Tool**

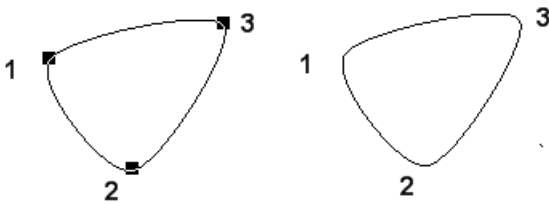
Function	Draws a curved line with the ends connected to make a solid object.	
Position	Any	
Features	Line and fill properties, background, clipart	

The Closed Curve tool lets you draw shapes with curved sides. Unlike the Open Curve tool these shapes are closed and can be filled. Select the tool button, then click and release to set the starting point in the drawing area. Move the mouse to the next fixed point on the curve and click to establish the fixed point. You will see that the latest fixed point is connected to the starting point.

The object will remain selected. After you have made your last desired point, double-click to close the object. While the object is selected, drag any of the fixed points (handles) to change the size or shape of the curve.

**Example and Hints**


As an example, we'll draw a shape resembling a guitar pick.



We start by clicking at point 1, move to point 2 and click again, then move to point 3 and click to complete the object as shown at the left, then, double-click to close the object. Then, click outside the object to unselect it, so we can take a look. The finished object is shown on the right. If it's not symmetrical, click a handle and adjust it as required.

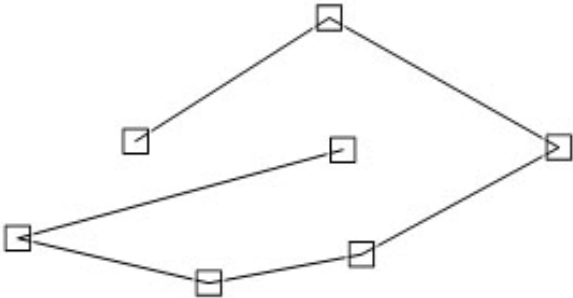
**Description of the Drawing Tools (continued)**

**Freehand**

Function	Draws a freehand shape made of straight line segments	
Position	Any	
Features	Line properties (for closed shapes use Polygon Tool)	


The Freehand tool lets you draw an object made of line segments. Unlike the Polygon tool (see below) the object is a line, and even if you attempt to close it by putting the end point on the starting point, it remains a line and can not be filled.

Simply click where you want the freehand shape to start, release, move to the next point, click again, and so on. Double-click to create the final point and close the Freehand tool.



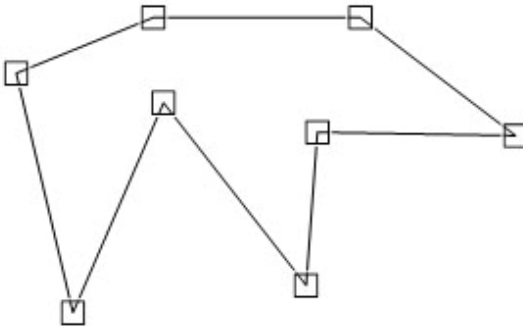
## *Description of the Drawing Tools (continued)*

### **Polygon**

Function	Draws a closed freehand shape made of straight line segments.	
Position	Any	
Features	Line and fill properties, background, clipart	


The Polygon tool works much like the Freehand tool, but it creates closed shapes that can be filled. As you create fixed points you'll see that the last one is always connected back to the starting point.

Simply click where you want the polygon to start, release, move to the next point, click again, and so on. Double-click to close the Polygon tool.



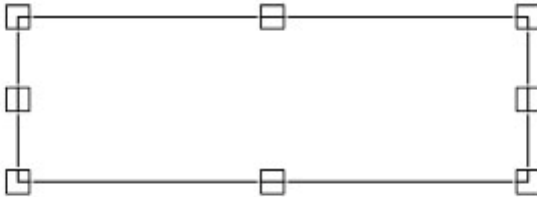
## *Description of the Drawing Tools (continued)*

### **Rectangle**

Function	Draws a rectangle (including squares).	
Position	Any	
Features	Line and fill properties, background, clipart	


The Rectangle tool draws a rectangle starting from the first point you click. Click the Rectangle tool, click where you want the first corner to be, then hold and drag to set the size and shape. When you're done, release and click to create the final point and close the Rectangle tool.

To make perfect squares use the Grid to align the sides to the lines in the grid. You can adjust your rectangle by re-selecting it and dragging a handle.

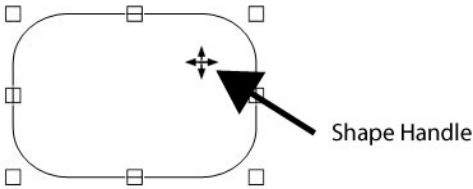


**Description of the Drawing Tools (continued)**

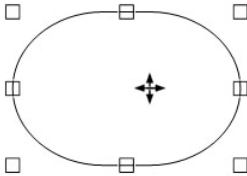
**Rounded Rectangle**

Function	Draws a rectangle with rounded corners.	
Position	Any	
Features	Line and fill properties, background, clipart	

The Rounded Rectangle tool behaves much like the Rectangle tool, but lets you have rounded corners. Click where you want the first corner to be, then hold and drag to set the size and shape. Release and click to set the final point and close the Rounded Rectangle tool. Now the Rounded Rectangle will look like an ellipse.




Created within the rounded rectangle is a *shape handle* which looks like the points on a compass, this can be dragged horizontally or vertically to shape the corners of the object. A little experimentation will show you how this works. Of course, the size and aspect ratio can be adjusted by dragging any of the other handles.

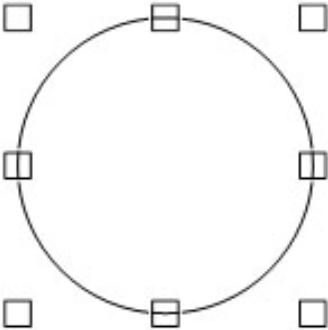


**Description of the Drawing Tools (continued)**

**Ellipse**

Function	Draws an ellipse (including circles)	
Position	Any	
Features	Line and fill properties, background, clipart	


The Ellipse tool lets you draw ellipses and circles. Click where you want one "corner" of the ellipse frame, and drag to create the size and shape you want. Release and click to set the final point and close the Ellipse tool. Use the Grid to adjust the ellipse accurately, for example if you want to create a circle.



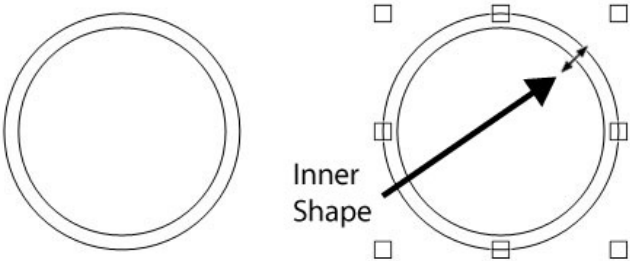
*Note: By default the Ellipse tool will always draw a perfect circle, to change this select the object and uncheck the Lock Aspect Ratio box under the Shape box on the Upper Right hand side of the window.*

**Description of the Drawing Tools (continued)**

**Halo**

Function	Draws an elliptical "ring" or halo (including circular).	
Position	Any	
Features	Line and fill properties, background, clipart	

The Halo tool draws a 360° solid elliptical arc such as the one shown at the left, below:




When selected, the shape of the inner ellipse can be changed by moving the *Inner Shape* handle in two dimensions. The shape of the outer ellipse can be adjusted using the outer handles.

Click the Halo tool then click in the drawing area. This will create the starting point of the rectangle that contains the halo. Drag to generate the halo with the approximate size and shape you want. Release and click to set the shape and close the Halo tool.

*Note: By default the Halo tool will always draw a perfect circle, to change this select the object and uncheck the Lock Aspect Ratio box under the Shape box on the Upper Right hand side of the window.*

**Description of the Drawing Tools (continued)**

**Arc**

Function	Draws an elliptical arc (including circular arcs)	
Position	Any	
Features	Line and fill properties, background, clipart	

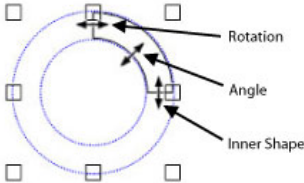
An *elliptical arc* looks like this:

It is a solid object that can be filled. The position and shape can be adjusted in a variety of ways.



Click the Arc tool then click in the drawing area. This will create the starting point of the rectangle that contains the arc. Drag to generate the arc with the approximate size you want. Release and click to set the final shape and close the Elliptical Arc tool.

To adjust the arc, click anywhere within the arc itself. The arc will be selected and handles will appear. Note the drawn arc is the darker line while the circle is used only as a reference to the limits of the arc.



Click and drag the *Angle* handle to increase or decrease the angular size of the arc. Click and drag the *Rotation* handle to rotate the arc around its midpoint. Click anywhere within the rectangle (but not on a handle) and drag to move the arc anywhere on the drawing area.

## ***Description of the Drawing Tools (continued)***

### ***Arc (continued)***


The *Inner Shape* handle moves in two dimensions to control the shape of the inner ellipse only. Use any of the outer handles to control the shape of the outer ellipse. Use the *grid* to help adjust the arc to be circular, if required. When you're done, click anywhere outside the rectangle to un-select the object.

Important: Don't drag the *Angle* handle to either 0° or 360°. If you do, the arc will vanish and you'll have to start over again. If you need a full 360° use the *Halo* tool instead.

*Note: By default the Arc tool will always draw within perfect circle, to change this select the object and uncheck the Lock Aspect Ratio box under the Shape box on the Upper Right hand side of the window.*

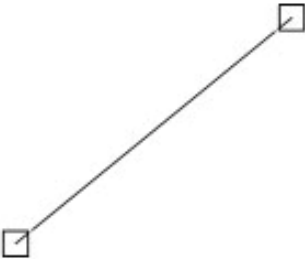
**Description of the Drawing Tools (continued)**

**Line**

Function	Draws a straight line.	
Position	Any	
Features	Line properties	


The Line tool draws a straight line at any angle between any two points. Click the tool, click and hold to set the starting point, drag the line to set the angle and length, then release and click again to set the end point.

In addition, changes can be made to the line, from the options on the right of the screen, such as border and arrow styles. Experimentation will quickly show you how it works.

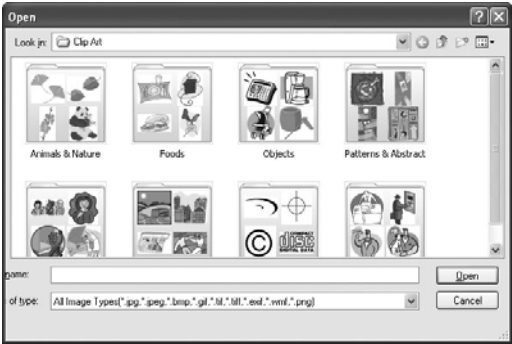


**Description of the Drawing Tools (continued)**

**Clipart**

Function	Draws an elliptical "ring" or halo (including circular).	
Position	Any	
Features	Line and fill properties, background, clipart	

The Clipart Tool, allows you to insert an image onto your label. It can be from the clipart library, or an image of your own. Simply click on the Clipart Tool, then click anywhere in the drawing area. A dialogue box will appear, giving you the ability to locate, and select the image that you want to add. Simply locate the image, then double-click it, or click on Open.




After an image from the clipart library has been opened in the drawing area it can be easily resized by click and dragging the handles surrounding that image as shown below.



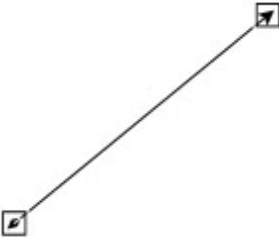
**Description of the Drawing Tools (continued)**

**Arrow**

Function	Draws a straight arrow in any direction	
Position	Any	
Features	Line properties, arrow properties	


The Arrow tool works just like the Line tool but generates heads and tails for the arrows. Click the tool, click the point where you want the arrow point to begin, then hold and drag the mouse to draw the arrow. Release and click to set the final position and close the Arrow tool. You can adjust the position later if required.

In addition, changes can be made to the arrow, from the options on the right of the screen, such as border and arrow styles. Experimentation will quickly show you how it works.



**Description of the Drawing Tools (continued)**

**Text**

Function	Places straight or curved text on the label.	
Position	Any	
Features	Text properties	

The Text tool lets you place text anywhere on the drawing area. The font, size, color, edge and shadow properties can be set using the text properties, either before or after the text is created.

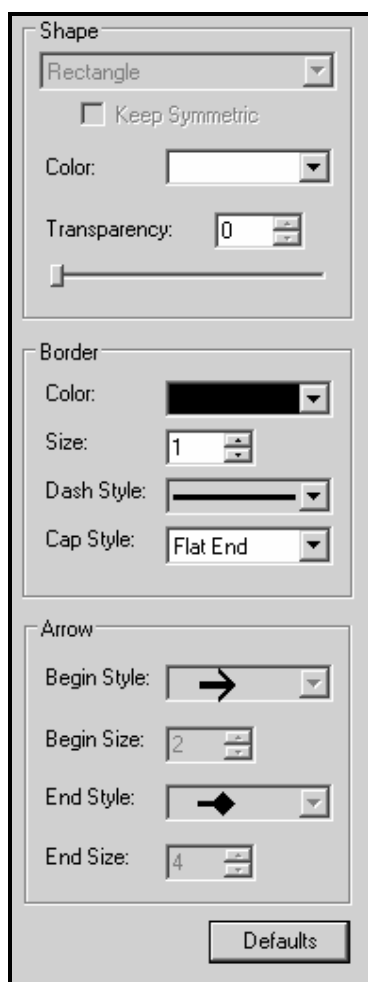
Text will be generated inside a *text box*. To create a text box, click on the Text Tool. Then, click anywhere in the drawing area. The word "Text" will appear. Now, click in the window on the right, where word "Text" is also located. Delete the word, and type the text that you want in your text box. It will automatically appear in the drawing area. When finished typing, click anywhere in the drawing area. To edit the text and / or its properties, simply click on the text box that you just created, and the text window, and its properties will appear to the right. Any changes that you make therein will be applied immediately.

You can resize the text box. Text will automatically word wrap as necessary to fit the box.

Also notice the Format, Font and Effects tabs that appear when you are using the Text tool these allow almost infinite variations to the text on screen by offering changes in shape, size, a multitude of special effects as well as hundreds of included fonts to fit any design you can imagine. Examples of these features can be found beginning on page 82.

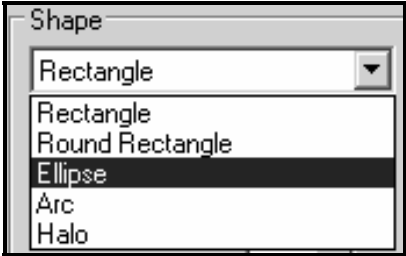
## Manipulating Objects

The attributes of objects can be changed by selecting the object and then utilizing the options on the right (see image):



**Manipulating Objects (continued)**

**Shape:** Any selected shape (other than line or arrow), may be changed to another shape, by selecting another shape from the dropdown box (see image):



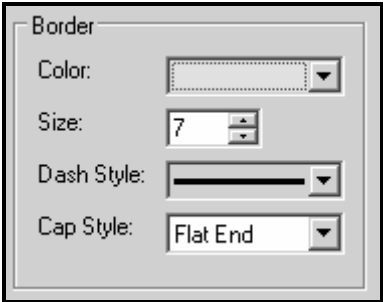
**Keep Symmetric:** When checked, if the shape is resized, it will be centered, and will also be sized symmetrically.

**Transparency:** The transparency of an object may be changed by either manually entering a number into the box, using the up and down buttons or by using the slider (see image):

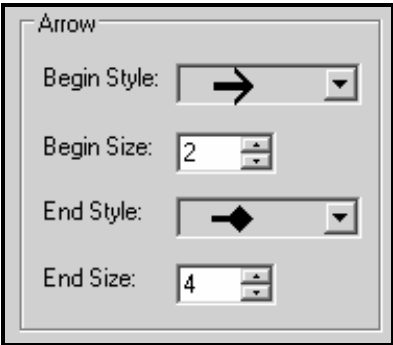


*Manipulating Objects (continued)*

**Border:** The border of objects may be changed here (Color, Size, Dash style, and Cap style). See image:



**Arrow:** The properties of an arrow (Begin Style & Size, End Style & Size), may be changed from the following section (see image):



**Defaults:** The defaults button (lower right of window) can be very useful. If an image is selected, and custom colors / settings have been applied, and you click the Default button, its settings will revert back to DiscStudio's default settings, and be applied to that image. In addition, if no image is selected and the button is pressed, any custom settings on the right of the screen (Color, Border, etc.) will be reset to DiscStudio's default settings.

## Line and Fill Properties

DiscStudio lets you set a number of parameters that control both lines and fills (the color, background, patterns and images that fill areas of solid figures). You can set these properties before or after an object is created, and you can set properties that apply to all subsequently created objects until they are changed.

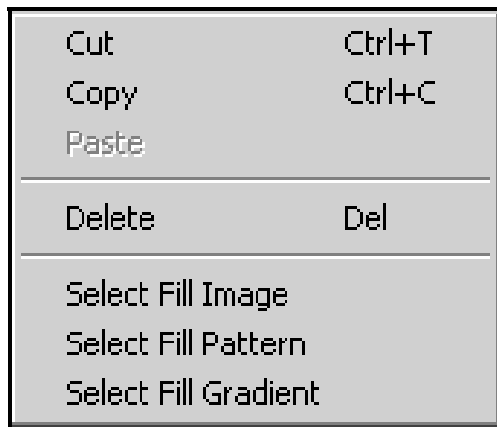
Note: If you select multiple objects by dragging a selection rectangle around them, you can then apply properties to all of the objects simultaneously by using the techniques described below.

**Warning! Use caution: if you change the shape, for example, all of the selected objects will be changed to the new shape.**

## Line and Fill Properties (continued)

### Patterns and Gradients

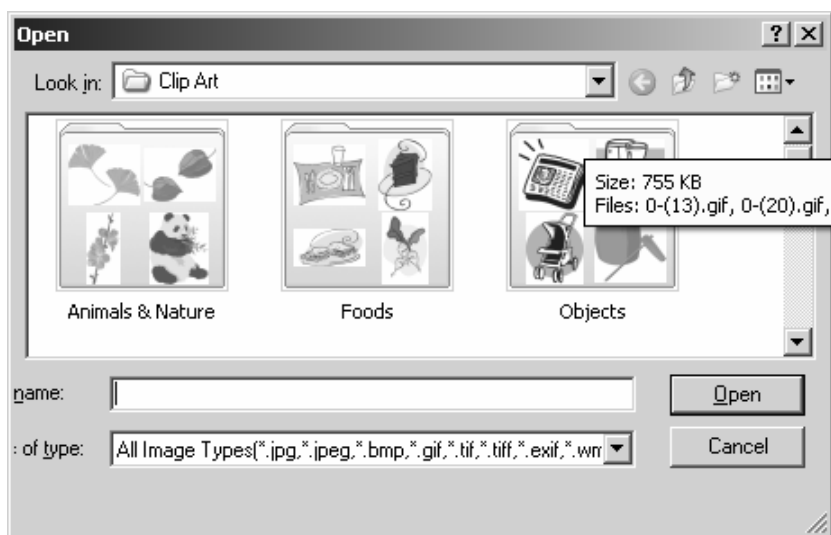
In addition to solid and transparent colors, objects can be filled with an *image*, *gradients*, and *patterns*. An *image* is a graphic file on your computer (such as the included clipart or your own image). A *gradient* is a combination of colors where one color gradually shifts to another color. A *pattern* is a bitmap such as crosshatching, diagonal lines, etc. To apply any of these to an object, simply right-click on the object to see the following image:



## Line and Fill Properties (continued)

### Fill Image

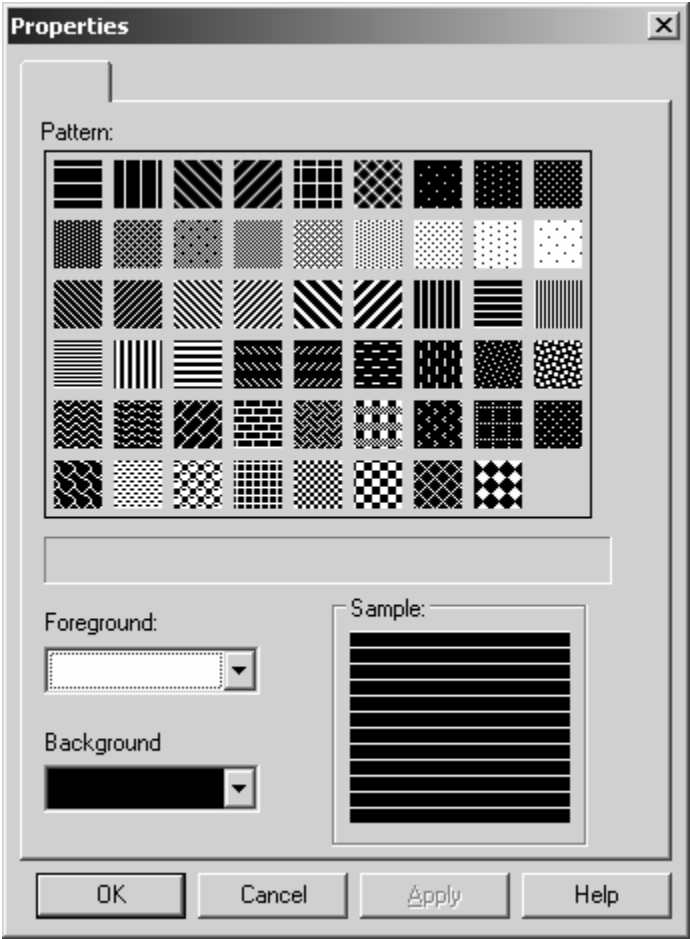
Select this to fill the selected object with an image (such as the included clipart or your own image):



*Line and Fill Properties (continued)*

**Fill Pattern**

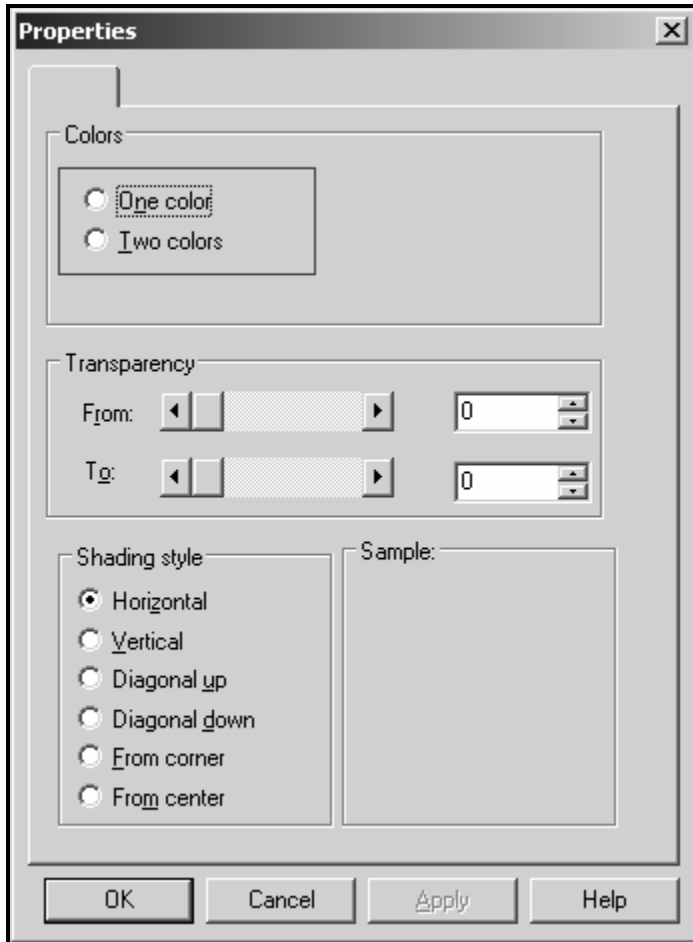
Select this to apply a pattern to an object. The following window will appear where you can choose the pattern, and the colors for the pattern:



## Line and Fill Properties (continued)

### Fill Gradient

Select this to apply a gradient fill to an object. The following window will appear where you can choose the colors, transparency, and shading style:



# Duplicating Objects

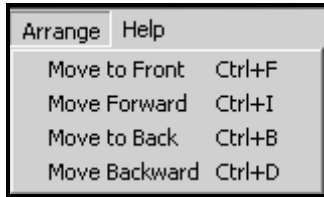
Objects can be duplicated and used as often as required. Each duplicate is actually a new object, so its properties can be adjusted after it has been created. For example, you could have the same object in different places on your label, but having different colors in each place. Click on *Edit*, in the upper left of the window (see image):

<b>Edit</b>	<b>Tools</b>	<b>Arrange</b>
Undo		Ctrl+Z
Redo		Ctrl+Y
Cut		Ctrl+T
Copy		Ctrl+C
Clone		Ctrl+L
Paste		Ctrl+V
Select All		

To duplicate an object, select the object, then click on *Edit*, and choose *Copy*. Then, click on *Edit* again, and choose *Paste*. Another way to duplicate an object is to simply select the object, click on *Edit*, and click on *Clone*. A duplicate of that object will appear in the drawing area.

## Using Levels

DiscStudio provides extensive *level* support. This allows objects to be moved in front of or behind other objects. Used in conjunction with transparency, a useful range of effects may be obtained. Click on *Arrange* in the upper left of the main window (see image):

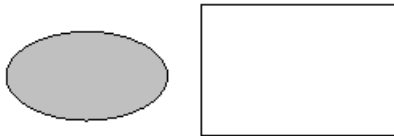


***To utilize these functions, simply select an object, and then choose one of the above options to change its order on the page. Objects in the Print Area are “layered” in that, they can overlap (or even cover) one another.***

You can't move an object behind the label background. Backgrounds form the base level for the label.

Example:

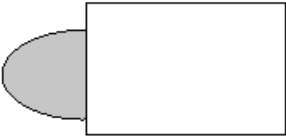
The simplest way to explain the operation of the level controls is to use an example. We will start by drawing two shapes, an ellipse and a rectangle.



The ellipse is filled with light grey and the rectangle is filled with white.

**Using Levels (continued)**

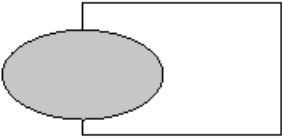
Next, we will select the ellipse and slide it so that it overlaps the rectangle.



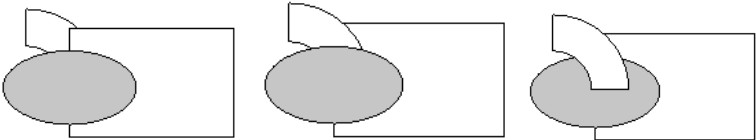
The ellipse appears to slide behind the rectangle because its level is behind the level of the rectangle.

*Note: Objects are created in the foreground, so more recent objects will appear to be in front of older ones.*

If we want the ellipse to be in front of the rectangle, select the ellipse, and then click on *Arrange*, and then *Move Forward* (you may need to do this more than once depending on how far "back" the ellipse is).



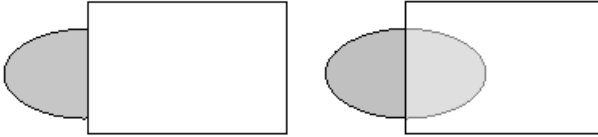
Since there are multiple levels, you can have several objects overlapping and decide in which order they are to be stacked.



In the above example, the arc is progressively moved from back to front, one level at a time.

## Transparency and Levels

Transparency can be used with levels to allow objects to "show through" other objects. In the left image below, the ellipse is behind an opaque rectangle (the rectangle's transparency is zero).



In the right image, the rectangle's transparency has been set to 50%. Now you can see the ellipse through the partly transparent rectangle.

Note: Set transparency using Fill properties as shown on page 109.

## Zoom

You can zoom in and out to make working with small objects easier using the three Zoom buttons:

*Zoom in* makes the image larger



*Zoom out* makes the image smaller



*Zoom full size* returns to the full sized label



When you click a zoom tool, the mouse pointer changes to a magnifying glass with a + (zoom in) or - (zoom out). Click anywhere on the drawing area to zoom. Once selected, the *Zoom in* and *Zoom out* tools remain selected so you can zoom larger or smaller without re-selecting the tool each time. The Zoom tool button is unselected if you choose any drawing tool.

To unselect a zoom tool without selecting a drawing tool, just click on the Pointer selection



## Using Backgrounds and Clipart

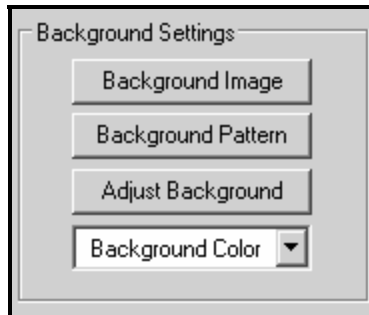
DiscStudio includes a large selection of backgrounds and clipart. These are stored in subfolders of the DiscStudio program folder, and are shown as thumbnails when you use the Select Background or Select Clip Art buttons.

Backgrounds can be applied to either the entire CD/DVD or to any selected object. Clipart (usually smaller images) is designed to be used for adding images as individual objects.

### Applying a Background

Background images and patterns are always *behind* all objects you've drawn. You can't move an object behind the background.

To apply a background to the entire CD/DVD use the tools in the Backgrounds section of the main interface, on the far right:

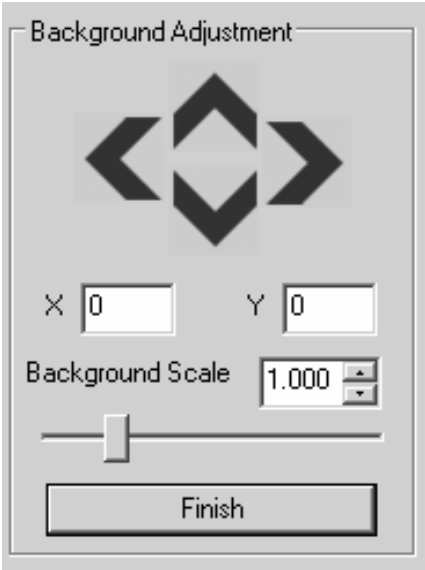


Here you can choose a background image, a hatched pattern, a solid color, and make adjustments to the background you've selected.

*Using Backgrounds and Clipart (continued)*

**Adjusting the Background Image**

Once a background has been applied, click *Adjust Background* to open the adjustment overlay.



Use the arrows (or type in + or – X and Y values) to move the left, right, top or bottom margins of the background image, and the *Background Scale* slider, to adjust the size of the image within the design area.

When you're done, click *Finish* to close the overlay.

**Using Backgrounds and Clipart (continued)**

**Adding Your Own Backgrounds or Clipart**

Bitmap images created by other graphics programs, imported from digital cameras, scanners or any other source can be used by DiscStudio as backgrounds or clipart.

*Usable Image Types*

You can add images with any of the following formats:

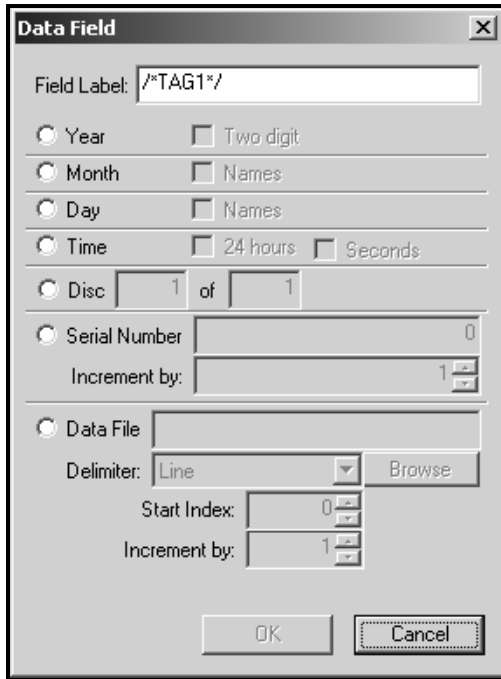
Type	Extension	Notes
JPEG	.jpg, .jpeg	Compressed bitmap graphics, used primarily for photos. Not recommended for line drawings, cartoons, etc. <b><i>This is the default for backgrounds.</i></b>
Windows Bitmap	.bmp	Windows standard uncompressed bitmap format.
GIF	.gif	Compressed bitmap graphics, 256 color maximum. Allows transparency. Good for line drawings, cartoons, etc. <b><i>This is the default for clipart.</i></b>
TIF	.tif, .tiff	May be compressed using LZW lossless compression. Cross platform.
Windows Metafile	.wmf	Used by Windows clipboard. Metafiles may be vector or bitmap.
PNG	.png	More modern replacement for GIF. Allows transparency and full color range. Good for any images.

## Insert Data Field

In addition to the text formatting functions outlined earlier, there is a “Data” function, which has been added to DiscStudio (see image). These buttons are visible in the lower right of the screen, when a text box is being edited or created:



Selecting this option you will see the following window:

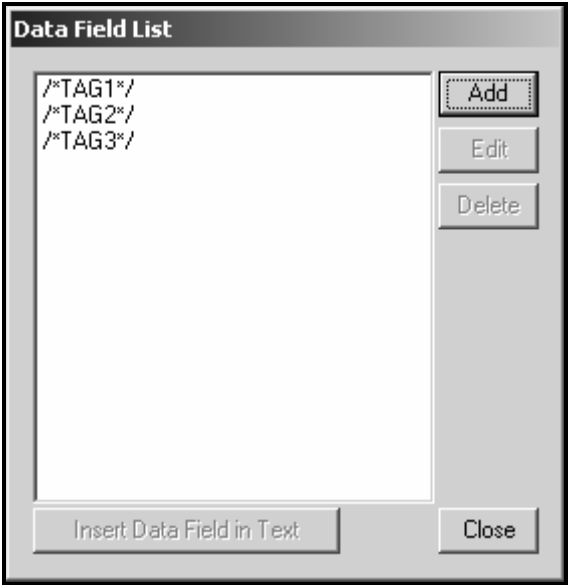


These are helpful features to add data functions to your label.

*Insert Data Field (continued)*

**Data Field List:**

Select this option to see the following window:



This is used to store Data Fields that you have created. In the example above, three have been created, and can easily be added, edited or deleted by the buttons on the right.

## Text

DiscStudio offers a wide range of text options.

### Adding Text to your Label

To add text to your label click the *Text* tool button, then move the mouse pointer to the approximate position in which you want the text to appear, and click again.



*Note: We recommend adding text as the last step in creating your label. Text with complex formatting involves considerable computing time and may slow down moving, adjusting or creating other objects.*

## A Sample Text Session

The simplest way to explain the use and the associated options and effects of the text tool is to use an example and create some fancy text for a label. Once you understand the steps involved, you'll be able to experiment and create virtually any effect you want.

### Step 1 – Entering the Text

Click the *Text tool* and move the cursor to approximately where you want the text to be placed.



Now click again in the area to the right where the words "Text" are located and clear the letters out, now type the word "Bombastic" notice the real time preview as the letters change as you type into the text box.



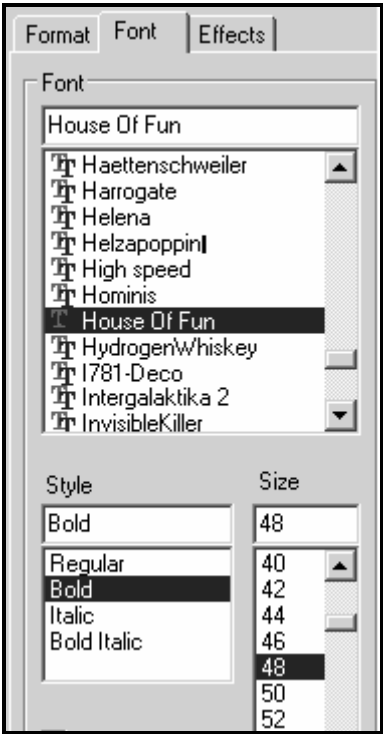
The text is small and not very impressive. In the next few steps we'll adjust it to look much nicer.

*A Sample Text Session (continued)*

**Step 2 – Setting the Typeface and Size**

Click on the existing text in the drawing area. Click the *Font* tab. The new window lets you select Font, Font Style and Size, as well as a couple of simple effects.

We're going to use a more entertaining font: House of Fun. We will set the size to 48 points, and set the Style to Bold.



You can see the effect in the drawing area, as you make the changes.

## *A Sample Text Session (continued)*

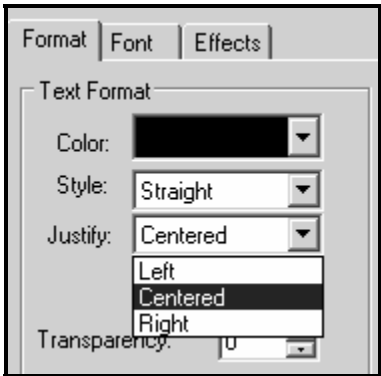
### **Wordwrap**

As you are typing text in the text area on the right of the screen, the text box will automatically resize itself. For an example, see the images below. In the second box, the Enter key has been pressed after the word "some," in order to create multiple lines and to keep larger sized text from going outside the printable area:

**This is some test text.**

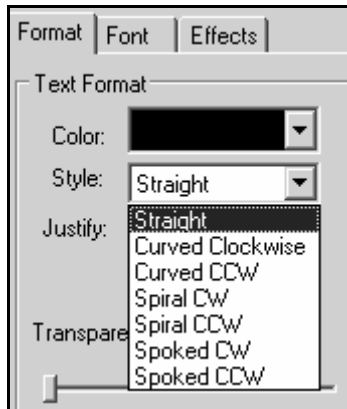
**This is some  
test text.**

In addition, the justification of the text block may be changed to Left, Centered, or Right (see image):



## *A Sample Text Session (continued)*

The style of the text may also be changed (see image):

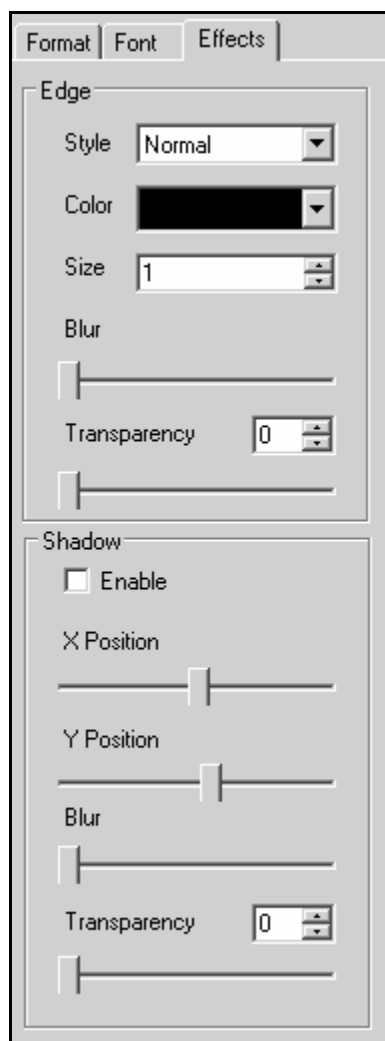


This function allows the user to have unparalleled control over the positioning of the text. This is a very powerful function and warrants taking the time to experiment with it in order to achieve optimum results.

## *A Sample Text Session (continued)*

### **Effects**

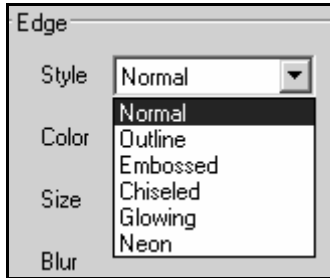
By clicking the Effects tab additional effects can be applied to your text. See image below:



## *A Sample Text Session (continued)*

### **Edge:**

The outer edge of the text can be changed from the Style pull-down menu (this is different from the Styles under the Format menu):



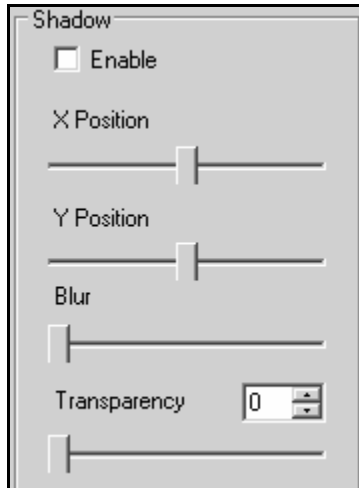
The Size menu underneath the Style pull down menu is used to change the width of the effect when using the Glowing and Neon styles.

The text may also be blurred via the *Blur* slider although this only applies to the Glowing and Neon styles.

The transparency of the text effect can be adjusted by using the Transparency slider, or by setting a numeric value in the box. This function also, only applies to the Glowing and Neon styles.

### *A Sample Text Session (continued)*

Shadow effects can also be applied to your text (see following image). To utilize Shadow effects, place a check in the **Enable** box. The X and Y positions of the shadow may be adjusted. In addition, the shadow of the text may also be blurred and / or made partially transparent:



### Summary

There are many available text manipulations, and thousands of combinations. Make use of the real time text preview, and have fun experimenting.

## **DiscStudio Questions and Answers (FAQ)**

In this section you will find answers to some questions that may arise during the operation of DiscStudio:

Q. Why can't I import a particular TIFF file for use as a background?

A. TIFF allows programmers to select from a wide array of optional features depending on their requirements. This means that some TIFF files may not be usable for some applications. If possible, use another graphics program to convert the TIFF to another format which can be imported into DiscStudio.

Q. When I try to copy a graphics image from another application using the Windows Clipboard it doesn't have an option to paste.

A. Windows Copy and Paste is not supported in DiscStudio from external applications. The correct way to load an external image is by the Clipart button or as a background image (see page 108).

Q. DiscStudio doesn't seem to work on my Windows 98 computer.

A. DiscStudio is designed for Windows 2000 or later versions of Windows only. While it may work on some Windows 98 computers, such use is not supported.

## ***DiscStudio Questions and Answers (FAQ) (continued)***

Q. DiscStudio occasionally crashes or exhibits odd behavior (objects can't be selected "ghost" images appear, etc.).

A. Make sure you have the latest updates for your version of Windows. Some errors of this type have been traced to the use of an outdated version of the "gdiplus.dll" file. Also, make sure you are using a supported version of Windows.

Q. I can see an object but I can't select it because it's "behind" a larger, transparent object.

A. Use the Move Back tool (under Arrange, at the top menu bar) to move the larger object behind the smaller one. Then you can select the smaller object. When you are done, move the smaller one behind the larger one again.

Q. I am trying to select a curved object by dragging a selection rectangle around it, but it won't select.

A. Make the selection rectangle larger. Some shapes (particularly curves and closed curves) may be larger than their drawn size indicates.

Q. How can I unselect a tool if I change my mind and no longer want to use it?

A. For most tools right click outside the main circular drawing area, or click on the selection (cursor) tool.

Q. My text object slows down DiscStudio and interferes with manipulating other objects.

A. That's normal. Text objects require a lot of processor time. We recommend doing text as the last step of creating your label.

## ***DiscStudio Questions and Answers (FAQ) (continued)***

Q. How can I delete a background image? I added the image when I started my drawing and now I don't want it, but UNDO would cause me to lose all the changes since then.

A. Delete a background image by setting the background color to white.

Q. Why can't I see the fonts that are included with DiscStudio in Control Panel, Fonts?

A. The fonts included with DiscStudio are not installed in the Windows Fonts folder. You can use the Control Panel, Fonts, Add Font utility to install any of them if you wish. Then they will be available to all applications.

**Note:** It is not a good idea to install fonts you don't use frequently. This can slow down both booting and operation of Windows, as well as consuming Windows resources.

Q. Can I add my own background or clipart images to DiscStudio?

A. Yes. Normally, backgrounds are jpeg images and clipart uses transparent GIF or PNG. DiscStudio will also accept other bitmap image types. See page 79 for more information and page 41 for default folder locations.

Q. Can I add my own background or clipart images to DiscStudio?

A. Yes. Normally, backgrounds are jpeg images and clipart uses transparent GIF or PNG. DiscStudio will also accept other bitmap image types. See page 76 for more details.

Q. I have an inkjet printer that has a tray for printing DVDs or CDs. Will it work with DiscStudio?

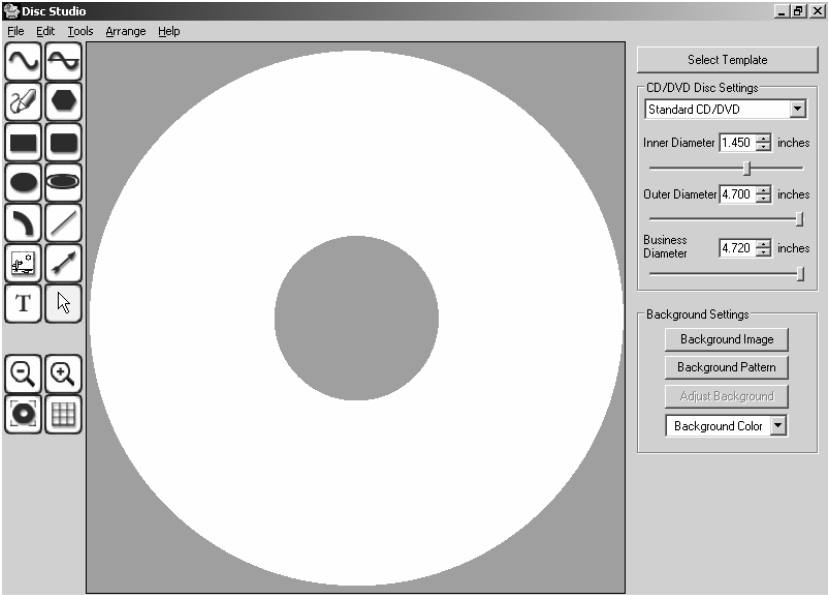
A. Although it is not guaranteed that DiscStudio will work with printers other than those from XLNT Idea, Disc Studio includes many popular templates so chances are good that it will work with your printer.

# Sample Session: Printing a CD/DVD

## Printer Properties Setup

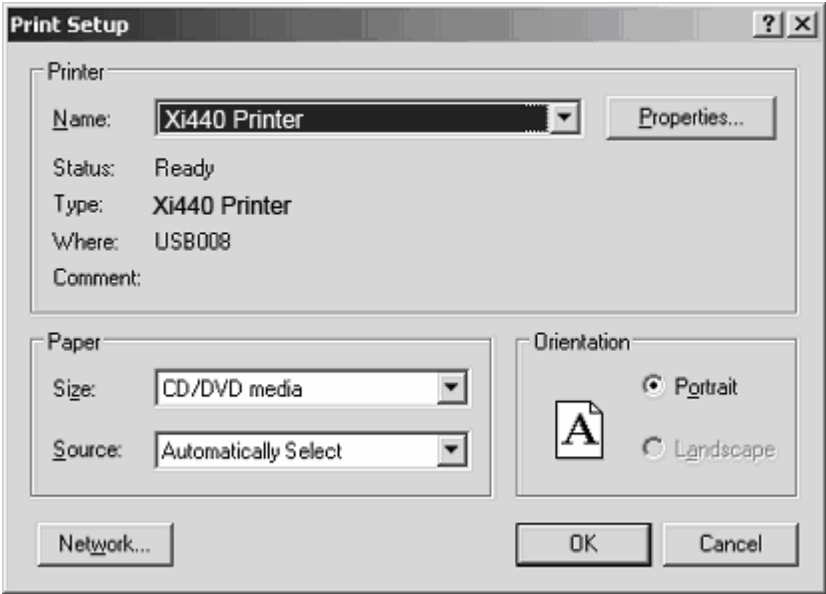
As installed, the printer driver is set for optimal printing for most Ink-jet Printable discs. The following shows you how to change the settings to suit your taste and your particular media.

To change these settings run **DiscStudio**. This will open the window shown below:



**Sample Session: Printing a CD/DVD (continued)**

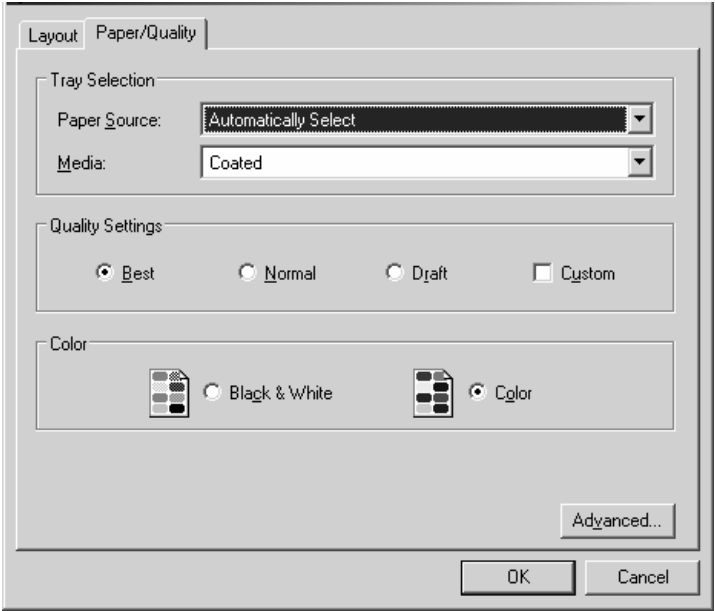
Click *File > Printer Setup* to open the following window:



If you have more than one printer installed on your computer make sure "**Xi440 CD/DVD Printer**" is selected in the pull down *Name* window.

**Sample Session: Printing a CD/DVD (continued)**

To change specific quality settings from their defaults, click the *Properties* button. This will open the Document Properties window shown below:



Since the Xi440 will always automatically load a disc for a print job your Paper Source will always be set to **“Automatically Select”**.

The Media option should be set to **“Coated”**, as this has been determined to be the best setting for all around use with the majority of ink-jet printable discs.

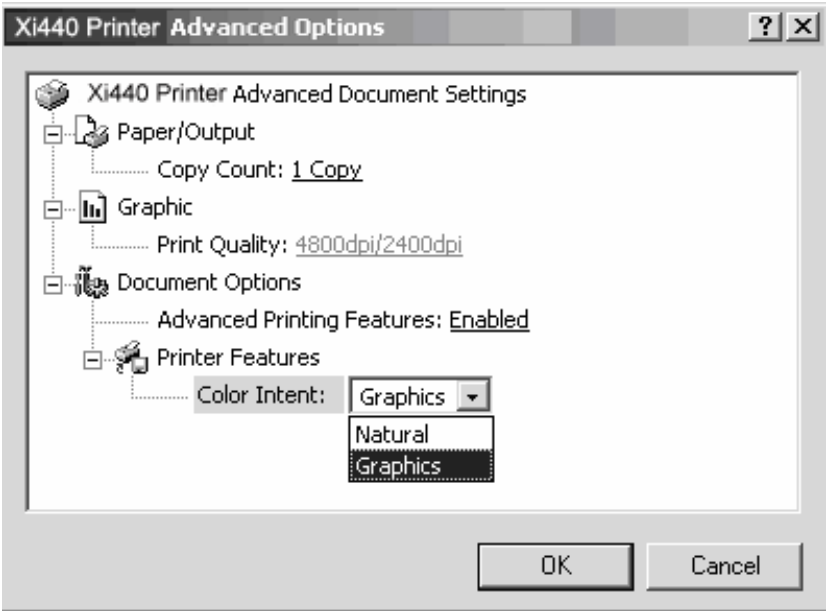
For faster prints you can try selecting **“Normal”**. In the Quality Setting although you trade off print quality for faster speed.

For the highest print quality output, set Media to **“Glossy”** and Quality settings to **“Best”**.

**Sample Session: Printing a CD/DVD (continued)**

The *Quality* setting simply determines the DPI (dots per inch) being printed. *Best* setting is 4800/2400 DPI, *Normal* setting is 600 DPI, and *Draft* setting is 300 DPI. 1200 DPI can be used by selecting *Custom*, and editing the *Advanced* options.

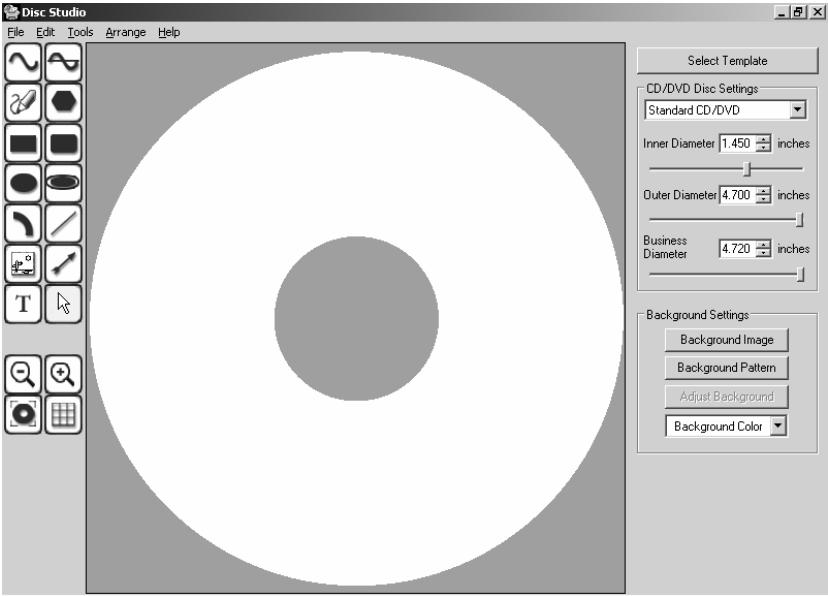
To open the Advanced options click on the *Advanced* button in the lower right of the Document Properties window, to see the following window:



Please click on the *down arrow*, to the right of Color Intent, and choose "Graphics." Then, click OK. And, click OK again to return to DiscStudio.

**Sample Session: Printing a CD/DVD (continued)**

Click on the *DiscStudio* button in the lower right of the screen. This will open the **DiscStudio** program showing the following window:



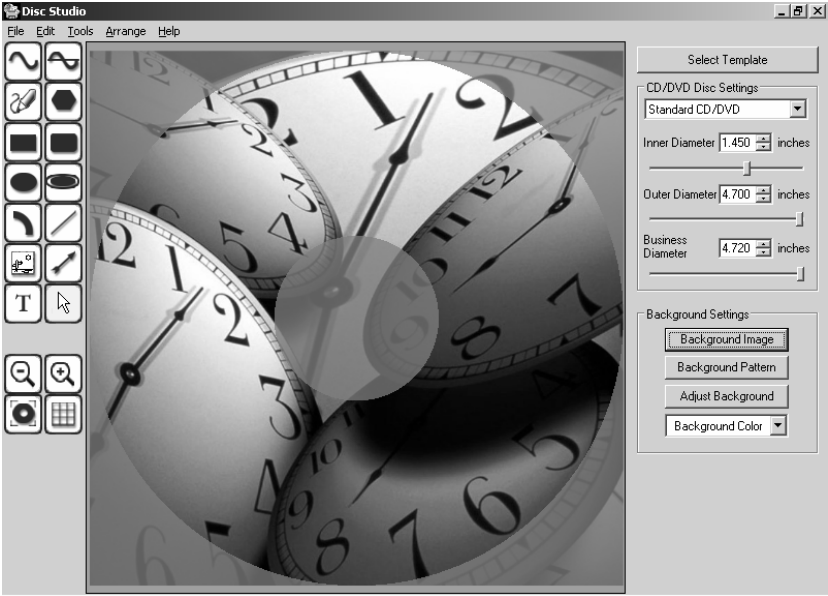
**Sample Session: Printing a CD/DVD (continued)**

As stated earlier, the options for creating a label in **DiscStudio** allow for an almost infinite variety of design options. For this tutorial, the simplest way to create a label will be shown. From the above window click the *Background Image* button on the right hand side of this window. This will open the selection window as shown below:



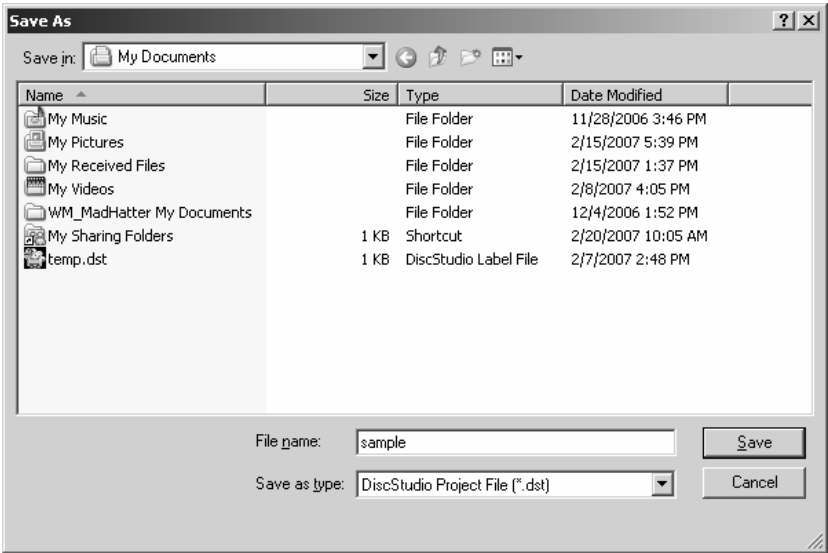
**Sample Session: Printing a CD/DVD (continued)**

Again, for this tutorial you will just be shown the basics of the **DiscStudio** software. Select the **3dclocks.jpg** image, and then click the *Open* button. This will bring you back to the main **DiscStudio** window with the **3dclocks.jpg** image centered in the window as shown:



**Sample Session: Printing a CD/DVD (continued)**

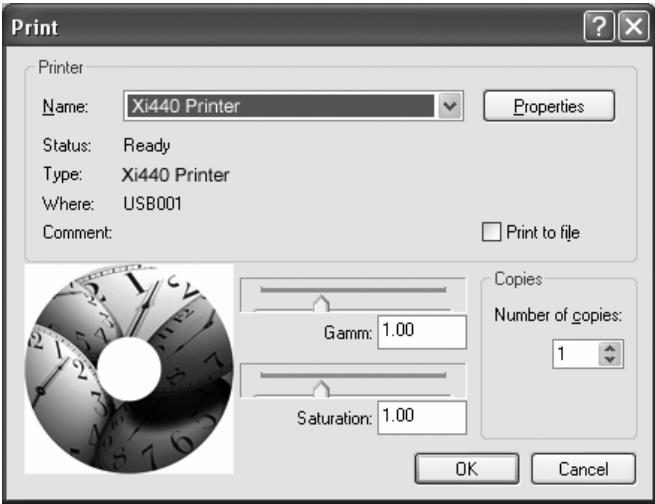
Now click the *File > Save As*, to open a standard Windows save dialog:



**DiscStudio** saves its created labels as .dst files, so select where you want this label to be saved, type a name for it, then click *Save*. In this example we have saved it to the My Documents folder and named it **sample.dst**.

**Sample Session: Printing a CD/DVD (continued)**

Not click File > Print, to open the following print window with preview.



You may notice some differences from the standard Windows print dialog box. The Preview window and Gamma and Saturation controls are added to allow fine tuning to the final printed output which can vary between the different manufacturers of ink-jet printable CD/DVDs.

To print click the OK button, this will eject the print tray. Place an ink-jet printable disc in the tray and press the center Change CD button. This will draw the disc into the Xi440 and begin printing. When the Xi440 has finished printing and fully ejected the tray you may remove and examine your disc.

Congratulations! You have now printed your first disc using your new Xi440.

## Uninstalling DiscStudio

If you have installed DiscStudio as a stand-alone program, and later want to install the DiscWorks package, we recommend uninstalling DiscStudio first to avoid having two copies in different locations.

From the Start Menu choose Settings/Control Panel/Add or Remove Programs. Locate the DiscStudio entry and left click on it. Now click the Change/Remove button. Uninstallation is automatic.

If you have added graphic images to the Backgrounds or Clipart folders, or you have saved disk labels, the uninstaller will not remove them automatically. For a complete uninstallation, remove these entries and folders manually by deleting the folder:

C:\Program Files\XLNTidea\DiscStudio (and all its subdirectories).

If you are uninstalling DiscStudio prior to installing DiscWorks, you should copy any images you have added to the new folders (under Program Files/DiscWorks) before deleting the originals.

# DIN Connector Interface

The 6-pin minicircular auxiliary interface located conveniently on the rear of the Xi440 is used for connecting the Xi440 with auxiliary equipment such as an automated CD transporter or auto-loader.

Pin assignments are as illustrated below



Pin Number	Signal Description
1	<b>Busy</b> Output is high when the printer is busy or is moving the Disc Tray.
2	<b>Tray Out</b> Output is high when the Disc Tray is fully ejected.
3	<b>Tray In</b> Output is high when the Disc Tray is fully inserted.
4	<b>CD In</b> Output is high when the Disc Tray is in and a CD is present.
5	<b>Ground</b>
6	<p><b>Tray In/Out</b> A low input and release moves the Disc Tray in if it is out, and out if it is in.</p> <p><i>note:</i> the Tray In/Out pin can also be used to turn the Xi440 On and Off.            If you set the pin low for longer then 4 seconds the Xi440 will turn off.            If the Xi440 is off and you set the tray pin low and release the Xi440 will turn back on.</p>

## DiscStudio Questions and Answers (FAQ)

In this section you will find answers to some questions that may arise during the operation of DiscStudio.

- Q** *Why can't I import a particular TIFF file for use as a background?*
- A** TIFF allows programmers to select from a wide array of optional features depending on their requirements. This means that some TIFF files may not be usable for some applications. If possible, use another graphics program to convert the TIFF to another format which can be imported into DiscStudio.
- Q** *When I try to copy a graphics image from another application using the Windows Clipboard it has a rectangle that can't be deleted surrounding it.*
- A** Windows Copy and Paste are not supported in DiscStudio. While the procedure above may work, the correct way is to create a rectangle and import the graphics image as a picture or clipart, or to use the quick Clipart button on the main interface (see page 76). The outline of your rectangle can be set to "clear" to make it disappear.
- Q** *DiscStudio doesn't seem to work on my Windows 98 computer.*
- A** DiscStudio is designed for Windows 2000 or later versions of Windows only. While it may work on some Windows 98 computers, such use is not supported.
- Q** *DiscStudio occasionally crashes or exhibits odd behavior (objects can't be selected, "ghost" images appear, etc.).*
- A** Make sure you have the latest updates for your version of Windows. Some errors of this type have been traced to the use of an outdated version of the "gdiplus.dll" file. Make sure you're using a supported version of Windows.
- Q** *I can see an object but I can't select it because it's "behind" a larger, transparent object.*
- A** Use the Move Back arrow to move the larger object behind the smaller one. Then you can select the smaller object. When you're done, move the smaller one behind the larger one again.

- Q** *I made a circle and moved it to the right place on my label, but when I try to resize it, it snaps back to the center of the label.*
- A** Circles are designed to be centered. If you want to be able to freely move and resize circles, create them using the Ellipse tool.
- Q** *I imported a clipart image, but it's stuck at the middle of the label and can't be moved.*
- A** Instead of importing the image to the label itself, create a rectangle (or other suitable shape) and import the image using the *clipart* feature found in the Fill/color properties for the object. You can then move the object (and the clipart) anywhere you want. Alternately, use the quick clipart button (see page 78)
- Q** *I am trying to select a curved object by dragging a selection rectangle around it, but it won't select.*
- A** Make the selection rectangle larger. Some shapes (particularly curves and closed curves) may not select unless the selection rectangle is significantly larger than the object appears to be.
- Q** *Can I set new defaults for objects?*
- A** You can set the default line and fill colors using the pull down menus at the left of the main window. You can set default text properties by checking the *Default for new object* box in both the *Font Selector* and *Format* tabs of the *Text properties* window.
- Q** *How can I unselect a tool if I change my mind and no longer want to use it?*
- A** For most tools just right click outside the main drawing area. (You may have to move the mouse slightly before the pointer reverts to being an arrow).
- Q** *My text object slows down DiscStudio and interferes with manipulating other objects.*
- A** That's normal. Text objects require a lot of processor time, and the container boxes may be large. We recommend doing text as the last step of creating your label. Remember that you can always select and manipulate objects by moving the interfering object back (use the *Move Selected Object to Back* button). Move it to the proper level again once you're done.

**Q** *How can I delete a background or clipart image? I added the image when I started my drawing and now I don't want it, but UNDO would cause me to lose all the changes since then.*

**A** Delete a background or clipart image for either an object or the entire label by setting the background color to white.

**Q** *Why can't I see the fonts that are included with DiscStudio in Control Panel, Fonts?*

**A** The fonts included with DiscStudio are not installed in the Windows Fonts folder, but are only available to DiscStudio. You can use the Control Panel, Fonts, Add Font utility to install any of them if you wish. Then they will be available to all applications.

---

*Note: It is not a good idea to install fonts you don't use frequently. This can slow down both booting and operation of Windows, as well as consuming Windows resources.*

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**Q** *Can I add my own background or clipart images to DiscStudio?*

**A** Yes. Normally, backgrounds are jpeg images and clipart uses transparent GIF. DiscStudio will also accept other bitmap image types. See page 79 for more information and page 41 for default folder locations.

**Q** *I have an inkjet printer that has a tray for printing DVDs or CDs. Will it work with DiscStudio?*

Although we don't guarantee that DiscStudio will work with printers other than those we supply, chances are good that it will work with your printer. Note that DiscStudio is **not** intended for use with stick-on DVD or CD labels as it does not have positioning controls intended for this purpose.

# Supplies

## Ink Cartridges

Your Xi440 CD/DVD Publisher uses standard Lexmark ink cartridges which are widely available:

Color – full ink:	Lexmark 26
Color – half/full ink:	Lexmark 27
Black – full ink:	Lexmark 16
Black – half/full ink:	Lexmark 17

Note: The full ink cartridges are more economical if you normally print many discs over a short period of time.

Ink cartridges can be replaced separately. It is only necessary to replace the cartridge that is low on ink.

***Supplies (continued)***

**CDs and DVDs**

Ink-jet printable CDs and DVDs are now widely available at computer and office supply stores. Your Xi440 CD/DVD Publisher can use:

Standard CD/DVD (normal or "full face"<sup>5</sup>)

Mini CD/DVD (normal or "full face") – requires an adaptor available at [www.xlntidea.com](http://www.xlntidea.com).

Business Card CD/DVD in 63, 61 or 57 mm sizes – requires an adaptor available at [www.xlntidea.com](http://www.xlntidea.com).

Most ink-jet printable CDs or DVDs will have a matte white finish, some have a matte silver finish. Either type will work with your Xi440. Just make sure any media you buy are ink-jet printable: some CDs or DVDs have a glossy white surface that looks printable but is not (they are designed for stick-on labels).

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<sup>5</sup> "Full face" CDs or DVDs are printable on their inner diameter up to the center hole; normal ones have a clear plastic area around the center hole.

## **Cleaning the Print Head**

Print head cleaning is required if your prints show horizontal "banding" in either the black or any of the colored inks. Bands are horizontal lines that show white or are fainter than the surrounding areas. This happens when one or more nozzles in the print head become blocked. This may occur if the printer has been left unused for several weeks or months, and is always required when new ink cartridges are installed.

1. From the Printer Driver Control Panel (see page 22) click on the Cartridge Maintenance tab.
2. Make sure an expendable printable CD is in the printer tray.
3. Click the "Clean print nozzles" button and wait for the cleaning procedure to finish.

If cleaning the print heads does not eliminate the banding, replace the cartridge.

## Xi 440 Questions and Answers (FAQ)

The following questions and answers should help you solve problems you may encounter with your Xi440.

**Q** *My Xi440 won't print.*

**A** Check to make sure your Xi440 has power: the Power button should light green when pressed. If it doesn't, check the outlet where the power adapter is plugged in and make sure the power adapter is plugged into the back of the printer.

Check the USB cable by replacing it with a new one. Try plugging it into another USB port. (You may have to reinstall the printer driver if you do this.)

If the printer won't work the first time you try to use it, the driver may not have been correctly installed. Try uninstalling and reinstalling the driver (see page 17.)

**Q** *There are horizontal lines in the printed output.*

**A** This indicates a partially blocked printhead. Try cleaning the printheads (see page 107). If this doesn't solve the problem, replace the color or black cartridge as appropriate. The ink cartridges for the Xi440 have built-in printheads.

**Q** *The printed image on the CD isn't centered.*

**A** Centering (print alignment) is adjusted from the DiscStudio software. See page 22 for the detailed procedure. The software remembers the setting between sessions so you should only have to do this once unless you change printers.

**Q** *Can I use any CDs in the Xi440?*

**A** You must use ink-jet printable CDs or DVDs in the printer. The surface on ordinary CDs won't absorb the ink properly. Printable CDs and DVDs are available from most office supply stores and from many suppliers on the internet.

**Q** *Can I refill the ink cartridges to save money?*

**A** It's theoretically possible to do so, but since the printheads are built into the cartridges refilling a cartridge doesn't renew the head. This can result in poor quality (blurred print or poor colors) and horizontal lines in your printout.

**Q** *I put in new cartridges and the black (or color) doesn't seem to print.*

**A** Are you sure you removed the tape that protects the printhead? On some 3<sup>rd</sup> party cartridges this tape is not obvious and is difficult to see. (Lexmark cartridges have it clearly marked.) Use a magnifying glass if necessary to find the end of the tape (it's normally a transparent blue color) and carefully remove it.

Try pressing a paper towel against the printhead (which is the small projection at the bottom of the cartridge). A small amount of black or three colors (cyan, magenta, yellow) should be deposited on the paper. If not, the cartridge has been dried out or is empty. Follow the cleaning procedure on page 22.

It is sometimes possible to restore a dried out printhead by applying a mild solvent like distilled water or hydrogen peroxide<sup>6</sup> to the printhead using a pad made of a paper towel. Let it soak for a couple of minutes then install the cartridge and run a printhead cleaning cycle (page 107). If it doesn't work, replace the cartridge

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<sup>6</sup> Some users recommend denatured alcohol but that has the potential to damage the print head jets and is not recommended by XLNTIdea.





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