

# CDFORGE PACKAGING GUIDE

© 2008 CD Forge

You've recorded the album. You've mastered the CD. Now it's time to replicate the CD. Follow the steps provided in this Packaging Guide to help you create the graphics files you need for your CD. It'll help you avoid frustration, error, and time-consuming delays at the manufacturing plant.

While the CDForge Packaging Guide is intended to help you make your project go smoothly, we also offer graphic design services — the easiest solution of all. If you're interested in pursuing this option, find out more at [http://cdforge.com/graphic\\_design/](http://cdforge.com/graphic_design/).

## Table of Contents: CDForge Packaging Guide

1. The Idea Stage — Conceiving a Design
2. Get a UPC Barcode
3. Place Your Order
4. Download the Template(s) You Need
5. Designing Your Package
  - 5a. Using the Graphics Software
  - 5b. Using the Layout Software
  - 5c. Designing the CD or DVD Face
6. Print Out Color Proofs for Yourself
7. Send Your Files and Mastered CD or DVD to CDForge
8. Now What? Proof Approval and Production

### Appendices

- CDForge's Top 10 Keys to Smooth Prepress Production
- Packaging Types & Color Schemes
- What's Wrong With My Type?
- What Graphic Format Should I Use?

## 1. The Idea Stage — Conceiving a Design

Think about what you want to convey with your cover art and packaging, and how you want to convey it. Then start assembling your ideas. Sketching and/or printing out your concepts will help you get a feel for how the finished artwork will look.

During this stage, be sure to use CDForge's Instant Quote to ensure the packaging you want fits your budget. Go online to [http://cdforge.com/instant\\_quote/](http://cdforge.com/instant_quote/) and compare the cost between, for example, a simple 4 panel digipak, a jewel box with an 8 panel poster folder, and a Design 1000 flat cardboard sleeve.

Once you've done that, you'll be able to select the packaging that will best fulfill your goals and your budget.

## 2. Get a UPC Barcode

If you already have your own barcode, great. Otherwise, contact CDForge at [orders@cdforge.com](mailto:orders@cdforge.com) — we can issue you a barcode for free. It's important to complete this step *before* you place your order.

## 3. Place Your Order

Download CDForge's order form at <http://cdforge.com/ordering/>. You'll need to submit this form with your mastered CD or DVD and the finished graphics files.

## 4. Download the Template(s) You Need

You should download and use the templates CDForge provides on the web site so there are no hassles at the manufacturing plant. Download the templates at <http://cdforge.com/templates/> — and be sure to download the CD Face template as well as the packaging template!

Open the templates in a layout program such as Quark, InDesign, Illustrator. Here, you'll see the exact dimensions you need for the finished file. You'll want to note these dimensions before you begin step 5, the actual graphic design work.

Note that the packaging templates refer to **bleed area**. During the printing and cutting process, paper can shift slightly in the machines. If your graphic files do not "bleed" off the intended print area, you may have an unintended white boundary next to your image. So, while the finished print size of a single jewel box panel is 4.75" x 4.75", the artwork that fills the panel should actually be slightly larger so it

fills the bleed area.

## 5. Designing Your Package

The first thing you need to know about package design is that we generally don't work with film anymore. Instead, you'll need a computer (Mac or Windows, it doesn't matter which) and two different kinds of software.

First, you will need a graphics program such as Adobe Photoshop. This is the program where you work with photos or any kind of scanned images.

Second, you will need a layout program — either Quark, InDesign or Illustrator. This is the program where you will set images into the template you downloaded. You will also type in your song titles on top of the images. You can also create vector artwork (i.e., flat areas of color rather than scanned or photographed images) with these programs.

### 5a. Using the Graphics Software

The graphics software, such as Adobe Photoshop, allows you to adjust and crop images for use in the final package.

*IMPORTANT NOTE ABOUT COLOR!* The first thing you should do when you import a full-color image into Photoshop is convert it to **CMYK mode**. If you do not do this first, your files may not print correctly (if your project will be printed as a 1 color / black-and-white job, then convert the file to Grayscale mode).

CMYK refers to the color printing process — when the four colors **C**yan, **M**agenta, **Y**ellow, and **B**lack are combined, these combinations can produce every color in the color spectrum.

Even so, your computer monitor is not a piece of paper, so the colors you see on screen will probably be a little bit different than the finished, printed piece. That's why you'll want to run color proofs for your project — but we'll get to that step a little bit later.

*IMPORTANT NOTE ABOUT SIZE!* Make sure that your images are at least 300 dpi (pixels/inch, same thing). You will then want to crop (or resize) the image so it matches the bleed dimensions referenced in the packaging template you downloaded.

Beyond that, it's up to you. We cannot give you any tips on using Photoshop — there are 500 page books for that — but in general, you can adjust the

tint, brightness, and sharpness of your images, among millions of other things. There are so many things you can do, in fact, that it's tempting to use them all. Don't. Excessive use of Photoshop's filters can look hokey; when in doubt, keep it simple.

Do not use type (fonts) in Photoshop unless you intentionally want the type to end up a bit blurry and fuzzy. You will probably want to add song titles and credits using the layout software (see step 5b below).

*NOTE:* Photoshop files use *layers* to make them easy to work with. Always use the layered version as your master file. But when you are finished making changes to it, save a copy as a flat TIFF file with no layers. Again, be sure it's at 300 dpi (or pixels/inch) and also make sure it's in CMYK color mode. You will then use this flattened TIFF file in your final artwork that you send to CDForge.

## **5b. Using the Layout Software**

When you've finished sizing and adjusting your images, you'll want to lay them out into the template. Using layout software such as QuarkXPress or Adobe Illustrator, open the template you downloaded from CDForge. Then import the TIFF images you created in Photoshop and place them into the template.

Now you will want to type in the song titles and recording credits on top of the images. Note which font you use — you will need to send the font in your finished package, along with the images.

## **5c. Designing the CD or DVD Face**

The Face has a different printing process than on-paper printing — ink is screened directly onto the disc — so you need to prepare your graphic files differently.

For optimal results, we recommend you use the vector art capabilities of Illustrator, InDesign or Quark for CD or DVD Face files. Set them up using 4 or less Coated PMS Colors. We accept, but do NOT recommend using CMYK for the CD or DVD Face. (The Pantone Matching System — PMS — is a color system that assigns a numbering system to specific colors.)

We recommend you **not** use Photoshop when you create the Face, unless you're experienced with the Posterize and Threshold tools and know how to use them to achieve the results you want.

## 6. Print Out Color Proofs for Yourself

So you're done, right? Not quite. CDForge requires that you provide printouts of your artwork for layout reference only; we DO NOT match colors from your printouts. The PDF proofs we send you are solely based on your electronic art files.

Even before you send *us* the art files, print it out for yourself. Does it look right? Is everything spelled correctly? Is the type aligned properly? Is the color just about right? (Note that there will be minor variations in color between the laser print and the final version in the finished CD).

You may even want to cut the printout down to size. It's the best way to ensure it feels and looks right. You may find you need to go back and adjust or replace some images, but better now than to have mistakes forever enshrined on your CD.

## 7. Send Your Files and Mastered CD or DVD to CDForge

OK, you're set. All computer files should be sent on CD-R or FTPed. Here's the checklist of what we need:

- Fonts.** Include *all* fonts you used in your layout program. Did you use Garamond and Garamond Bold? We'll need both fonts, please.
- Image Files.** i.e., any TIFF or EPS files you used in your job. This includes the CD Face, the layout, and the supporting images.
- Printouts.** Printouts should be output at 100% size, and exactly match the most recent file being output. Booklets, Folders Digipaks, Sleeves, and Folders larger than 4 Panels should include at one Mock-Up. The Mock-Up does NOT need to be at 100% size.
- Mastered CD or DVD.** *Please* be sure to listen or view your master before sending it to CDForge. You may be unhappily surprised if you don't — the best gear at the best mastering studio is no guarantee that the copy is perfect.
- Order Form, IPR Forms, Track Listing.**

*Send your files and disc to:*

CDForge  
412 NW Couch St, #203  
Portland OR 97209

## **8. Now What? Proof Approval and Production**

Within 5 business days after we receive your materials, we will email you PDF proofs for the Print & CD or DVD Face. The proofs will not arrive in the same email... often not the same day. We can provide hard copy proofs for print on request.

After you review the proofs you will email your CDForge contact an approval. Any changes needed must be listed in detail in the email, and correction charges may apply. **MAKE SURE YOU ALWAYS KEEP A COPY OF YOUR ART FILES!**

Once you have approved all of your proofs (CD Face & Print) your job will go into production and then completed product will ship in 10-12 business days.

# CDForge's Top 10 Keys to Smooth Prepress Production

## **1. Send latest lasers.**

Hardcopy (color print outs) should be output at 100% size, marked for color-breaks or color separated, and exactly match the most recent file being output. Booklets, Digipaks, and Folders larger than 4 Panels should include at least one Mock-Up.

## **2. Disk requirements.**

Files may be supplied on CD-R or FTP. Please include a printout of the disk contents and indicate which specific files to output. You must provide a separate disk for the CD Face files.

## **3. Applications supported.**

Documents must be created in Quark, InDesign, Illustrator, or Photoshop. MAC based files are the industry preferred standard. We accept PC files, although this may lead to problems when transferring files.

## **4. Page size vs. Trim size.**

Be sure that the application page size matches the final trim size of the printed piece.

## **5. The bleeding edge for print.**

Allow 1/8 inch (or .125") bleed extends objects off the print area to ensure that when the printed paper is trimmed during the finishing process, the ink coverage extends to the edge of the paper. This does NOT apply to CD Face files.

## **6. Send support files.**

All "art files" (EPS, TIFF, etc.) used in page layouts files should be sent with the job.

## **7. Photoshop files.**

All imported Photoshop files should be saved as *CMYK*, or *Grayscale*, for images, *Bitmapped* for line-art. Do NOT use *RGB*, *LAB*, or *Index Color*. Imported photos should be created at a MINIMUM of **300 DPI**. Save Photoshop files as **EPS**, or **TIFF** files; do NOT use **JPEG** compression.

## **DO NOT create type in Photoshop.**

Not only is the final outcome substandard, it also will incur charges for any corrections.

## **8. Don't trust your monitor or printer.**

Process color builds or spot colors should be chosen from a PMS swatch book rather than by viewing the computer monitor, which is probably not calibrated to industry standards.

## **9. Send ALL fonts.**

Send all Screen and Printer Fonts used in all provided files, even EPS files. This assures that all typefaces in the documents being output will be correct, and that text will flow as you have specified. Only use Postscript fonts, do not use True Type fonts. Do not use the type style menu or control bar to stylize your type. Select the actual stylized font from the font menu. For example, use Helvetica Bold instead of applying a "bold" style to the Helvetica font.

## **10. Final preparation of disk for output.**

Please put all placed, or imported elements of your final document into on folder and label it **ART**. Please place the final document file itself into another folder and label it **MECHANICAL**. This folder should contain only the final version of your document, and no earlier versions, and should match the hard copy you supplied of the file. Please place all fonts used in the document, or any of its placed elements into another folder and label it **FONTS**. Remember to include both Printer and Screen fonts. These fonts will be used for output purposes only, and will be deleted after job has been completed.

# Packaging Types & Color Schemes

## **What is CMYK / four color process?**

### **What does 4/1 and 4/4 mean?**

Four-color process refers to the color method used to print CD Folders, Booklets, Tray Cards, LP Jackets, Digipaks, etc. The four colors are **Cyan, Magenta, Yellow, and Black**. When percentages of these colors are combined, these combinations can produce every color in the color spectrum.

4/1 = CMYK (outside) / Black & White (inside)

4/4 = CMYK (all sides)

## **What is a PMS Color?**

The Pantone Matching System (PMS) is a color system that assigns a numbering system to specific colors, and shade of those colors. You need to set up the CD Face Files in 3 or less Coated PMS Colors. We accept, but do NOT recommend using CMYK for the CD Face.

## **What is the difference between Panels, Booklets, and Folders?**

A "panel" or "page" is defined as a printable square. Imagine a 4 Panel folder as a book cover with no pages inside. You have 2 printable panels (pages) on the outside and 2 printable panels (pages) on the inside.

Folder = a printed insert with Folds.

Booklet = a printed insert with STAPLES.

## **What type of paper do you print on?**

Folders, Booklets, and Tray Cards are printed on a 100# White Semi-Gloss Stock.

Digipaks & Sleeves are printed on a 15pt White Cardboard Stock. We can print on a thick 18pt Stock for an additional charge. Also available is a 18pt Chipboard Stock which does not incur extra charges.

LP jackets are printed on a 20pt White Cardboard Stock. Clay Coated News Back (recycled stock) is also available for a discounted price.

## **What are Tray Cards?**

Tray Cards are the back piece of print in a Jewel Case. These come standard with no additional charge for ALL Booklets and Folders. The color scheme for the Tray Card is the same as the Booklet or Folder it comes with (either 4/1 or 4/4). Other Tray Card color options are available, but a special quote needs to be obtained by a CDForge Project Manager.

## **Can I print on the Entire CD Face?**

Yes, but we do not recommend it, and will NOT guarantee the outcome. There is a stacker ring on the CD Face, which creates a small divot (this is made clear on the Template). There a possibility that the ink will not completely fill in this divot, and so blemishes may occur.

## What's Wrong With My Type?

Because of the manner in which font technology developed on desktop computers, this area can be fraught with problems. With diligence and organization of font files, these headaches can be lessened.

### **1. Why does my font look jagged on the screen?**

The most common reason is that the font is an Adobe Type 3 font. A type 3 font is not easily rasterized for screen display and often do not print properly. It is recommended that Type 1 fonts be used instead.

If you are using an Adobe Type 1 font, it could be that you only have the Screen (or Bitmap) font loaded and not the Printer (or PostScript) font. When only the screen font is loaded, it will look okay in the point size it was designed for, but will be jagged at any other size. Also, make certain that both the Screen font and Printer font are in the same folder so that the computer can find the Printer font and download it to the output device.

If you do have both the Screen and Printer fonts loaded, check to see if Adobe Type Manager is loaded and working properly. Even if both fonts are loaded into the Fonts Folder of the System Folder, they will not be "rastered" properly without Adobe Type Manager.

### **2. Why does my font print all jagged?**

This usually means that the output device is receiving information about the Screen font, but not the Printer font.

First, check to see if the Printer font is loaded properly. On the Mac, Postscript Type 1 fonts require two files, a Screen (or Bitmap) font and a Printer (or Postscript) font. The Screen font (often stored in a Suitcase file) is required for screen display while the Printer font is required for high-resolution printing. Make certain that both the Screen font and Printer font are in the same folder so that the computer can find the Printer font and download it to the output device.

If the Printer font is loaded properly, then the reason is most likely that the computer is having trouble down-loading the font to the output device. In this case, try sending the font to the output device using a program such as Font Down-loader before sending your file.

### **3. My type printed in courier instead of the type face I had selected. Why?**

The RIP either received improper information from the computer or else decided it couldn't rasterize what it had and substituted Courier for the typeface you had selected. Check that Adobe Type Manager is working properly. If it is, try sending the font to the output device using a program such as Font Down-loader before sending your file.

Another reason could stem from applying a style to a font instead of choosing the font version. For example: applying Bold to Palatino from the Style Menu instead of choosing the font Palatino Bold. To avoid problems, use the font version instead of the styles in the Style Menu.

### **4. My type was supposed to be bold (or italic, etc). Why did it print as normal type?**

The styles under the Style Menu use a QuickDraw routine to make a font look Bold or Italic. Unfortunately, QuickDraw does not always translate to Postscript properly. Sometimes a document with Bold applied will print to a laser printer, but won't to an imagesetter. The only real fix is to use the font version instead of the styles in the Style Menu.

# What Graphic Format Should I Use?

## **TIFF: Tagged Image File Format.**

A raster (composed of pixels) format used for scanned images. This format is recognized by most major graphic and desktop publishing applications. For high-resolution prepress output, use either bitmap (line art), grayscale or CMYK color-modes. Some applications allow you to save TIFF files with LZW (Lempel-Ziv-Welch) compression. Extreme caution is suggested when using a compression routine.

For color, CMYK TIFF is the preferred file format in the Electronic Prepress industry.

## **EPS: Encapsulated Postscript.**

This format can handle either raster or vector (lines and objects described with mathematical formula) graphics. In either case, the graphic is described using the PostScript language. With raster images, file size is larger than if the file is saved as a TIFF. For raster images, EPS is preferred when a clipping path is used in order to display/print only a portion of the image. Also some image-setters can only handle raster color separations using EPS files saved with DCS (Desktop Color Separations).

For vector images, EPS is preferred as there are fewer problems with EPS when imaging to PostScript printers.

Recommended for Electronic Prepress when compression is necessary!

## **EPS with JPEG (joint Photographic experts group) compression.**

EPS files using the JPEG compression algorithm can reduce the file size considerably. Compression, though, usually leads to some image data loss. Also, some high-end output devices cannot parse files compressed with JPEG. Extreme caution is suggested when using any compression routine.

## **JPEG (joint Photographic experts group) compression.**

Files saved as JPEG can be imported into some programs such as Quark. However, these files often take longer to RIP than files saved as TIFF or EPS. Also, compression usually leads to some image data loss.