

CD / DVD & BD Label Art Specifications

Electronic File Submission Specifications

Vantiva prefers all label art to be submitted electronically. Templates for the completion of the label art preparation process can be obtained at <http://www.vantiva.com>. Review Vantiva Label Art: Screen Printing and Offset Printing Requirements for specific file preparation instructions.

Contact Requirements

- Provide your Customer Service Representative with the following information:
 - Company Name|
 - Contact Name
 - Contact Number
 - Email Address
 - Label art Title
 - Label art Selection Numeric
 - FTP location of electronic files (including address, username, password, and posted filename)
 - Direct access to Vantiva's FTP site is available upon request
 - Listing of electronic files including graphic application type and version
 - Design studio contact name and number

Supported Applications (Apple Macintosh)

Adobe suite latest version or older.

Acceptable Media Submissions

- FTP Retrieval

Vantiva Label Art: Silkscreen Printing Requirements

Silkscreen Printing - A direct printing process by which ink is transferred through a porous screen onto the disc. Silkscreen printing requires the use of film positives.

For All Label Art

- Electronic templates are available from the Vantiva website at <http://www.vantiva.com>.
- A color-accurate proof is to accompany the label art submission.
 - The supplied proof must be produced from the electronic file to Vantiva.
 - Recommended proof output:
 - Foil stock.
 - If white stock is utilized the recommended brightness is 76% to 82% leaning cyan toward magenta.
 - 133 Lines Per Inch (LPI).
 - 5-color with white flood.
- Vantiva utilizes Sericol DVD Silkscreen UV Inks in the silkscreen printing process.

CD / DVD & BD Label Art Specifications

Vantiva Label Art: Silkscreen Printing Requirements - continued

- This ink is semi-gloss.
- Specify the desired PMS color (Pantone Matching System) on each color separation.
 - Vantiva offers PMS Coated Series Inks (Pantone Solid Coated).
 - Previous analysis and approval IS REQUIRED for special inks, clear coating or varnish.
- Choke/Spread trapping of 0.35 pt is to be applied whenever registration is critical.
- A solid white base (flood) is recommended for all 4-color process label art.
- Line screen minimum is 85 to 133 LPI. Vantiva output is 133 LPI unless requested otherwise.

For Electronic File Submissions

- Media accepted: FTP.
- Submitting files via FTP:
 - Compress each label art individually with ALL components. Include the Graphic elements (links), fonts (screen and printer fonts).
 - For file transfers we can use the customer FTP site or Vantiva will provide a FTP address, password and user name. Credentials need to be share on both sides
- Supported Operating System: Mac OSX
- Supported Applications: Adobe suite latest version or older.
- In addition to the label art files, provide a low-resolution PDF for color information and content reference.

For DVD-5 / DVD-9 and BD

- Allowed printable area is from 22mm to 115mm. (This is to avoid the cosmetics due to printing over the mold IFPI code.
- Sans Serif typeface (ex. Helvetica) is recommended for all minimum font sizes.
- Minimum font size is 6 pt.
- Minimum font size in knockout or reversed form is 6 pt. (Sans Serif)
- Minimum font size reversed out of halftone print with a flood is 7 pt. (Sans Serif)
- Minimum line width is 0.5 pt.
- Minimum line width in knockout or reversed form is 1.0 pt.
- Printing a halftone image with a solid flood will alter the ink color.
- Separation tonal ranges should be no less than 15% and no greater than 85%.
 - Below 15% may not transfer during printing and above 85% may appear solid.

For DVD-10, (Single-sided DVDs)

- Allowed printable area:
 - Outer-ring from 39mm to 43.8mm
 - Inner-ring from 20.5mm to 25.5mm
- No halftone or 4-color process printing.
- Minimum font size is 5.5 pt medium or bold.

CD / DVD & BD Label Art Specifications

Vantiva Label Art: Silkscreen Printing Requirements - continued

- Preferred fonts: Futura Medium Condensed and Futura Bold Condensed
- Minimum line width is 0.5 pt.
- Minimum line width in knockout or reversed form is 1.0 pt.

For CD (Singled-sided CDs)

- Allowed printable area is from 24mm to 116mm. (This is to avoid the cosmetics due to printing over the mold IFPI code.)
- Minimum font size is 6 pt.
- Minimum font size in knockout or reversed form is 6 pt. (Sans Serif)
- Minimum font size reversed out of halftone print with a flood is 7 pt. (Sans Serif)
- Minimum line width is 0.5 pt.
- Minimum line width in knockout or reversed form is 1.0 pt.
- Printing a halftone image with a solid flood will alter the ink color.
- Separation tonal ranges should be no less than 15% and no greater than 85%.
 - Below 15% may not transfer during printing and above 85% may appear solid

Vantiva Label Art: Offset Printing Requirements

Offset Printing - An indirect printing process by which ink is transferred to the disc from a blanket that carries an impression from the printing plate, rather than directly from the plate itself. Offset printing requires the submittal of the label art to Vantiva in an electronic file format.

For All Label art

- Electronic templates are available from the Vantiva website at <http://www.vantiva.com>.
- A color-accurate proof is to accompany the label art submission.
 - The supplied proof must be produced from the electronic file to Vantiva.
 - Recommended proof output:
 - Chromaline
 - If white stock is utilized the recommended brightness is 76% to 82% leaning cyan toward magenta.
 - 133 Lines Per Inch (LPI).
 - 5-color with white flood.
- Vantiva utilizes Sericol Offset UV Inks in the Offset printing process.
 - Vantiva offers PMS Coated Series Inks (Pantone Solid Coated).
 - Previous analysis and approval IS REQUIRED for special inks, clear coating or varnish.
- Choke/Spread trapping of 0.35 pt is to be applied whenever registration is critical.
- A solid white base (flood) is recommended for all 4-color process label art.



CD / DVD & BD Label Art Specifications

Vantiva Label Art: Offset Printing Requirements - continued

For Electronic File Submissions (digital artwork)

- Media accepted: FTP.
- Submitting files via FTP:
 - Compress each label art individually with ALL components. Include the Graphic elements (links), fonts (screen and printer fonts).
 - For file transfers we can use the customer FTP site or Vantiva will provide a FTP address, password and user name. Credentials need to be shared on both sides
- Supported Operating System: Mac OSX
- Supported Applications: Adobe suite latest version or older.
- In addition to the label art files, provide a low-resolution PDF for color information and content reference.

For DVD-5 / DVD-9 and BD

- Allowed printable area is from 22mm to 115mm (this to avoid cosmetics due to printing over the mold IFPI code).
- Sans Serif typeface (ex. Helvetica) is recommended for all minimum font sizes.
- Minimum font size is 6 pt.
- Minimum font size in knockout or reversed form is 6 pt. (Sans Serif)
- Minimum font size reversed out of halftone print with a flood is 7 pt. (Sans Serif)
- Minimum line width is 0.5 pt.
- Minimum line width in knockout or reversed form is 1.0 pt.
- Printing a halftone image with a solid flood will alter the ink color.
- Separation tonal ranges should be no less than 15% and not greater than 85%.
 - Below 15% may not transfer during printing and above 85% may appear solid

For DVD-10, (Double-sided DVDs)

- Offset printing is not offered. See Vantiva Label Art: Silkscreen Printing Requirements.

For CD (Singled-sided CDs)

Allowed printable area is from 24mm to 116mm. (This is to avoid the cosmetics due to printing over the mold IFPI code).

- Minimum font size is 6 pt.
- Minimum font size in knockout or reversed form is 6 pt. (Sans Serif)
- Minimum font size reversed out of halftone print with a flood is 7 pt. (Sans Serif)
- Minimum line width is 0.5 pt.
- Minimum line width in knockout or reversed form is 1.0 pt.
- Printing a halftone image with a solid flood will alter the ink color.
- Separation tonal ranges should be no less than 15% and no greater than 85%.
Below 15% may not transfer during printing and above 85% may appear solid.



NA-DVD-SPECIFICATIONS PACK	DATE: Feb 2020	FORM: F030651	REV: E	PAGE: 5 OF 6
----------------------------	----------------	---------------	--------	--------------

CD / DVD & BD Label Art Specifications

Vantiva Label Art Preparation Tips

The following guidelines should be followed to achieve the best printing results:

Color - Silkscreen printing on a disc is different than traditional paper printing, which may result in color difference when compared to your proof. There can be a +/- 1/2 shade deviation between printing on paper and printing on a disc. A disc has several different types of surfaces and the printing results may vary on each.

- Clear Plastic - Ink becomes transparent and tends to have a flat finish and/or loses color intensity.
- Metallized Area - When printing halftones, the reflection of the metal produces a shiny metallic look. When printing with a solid (PMS) color, a color change may occur.
- Inner-Mirror Band Area - Some color change may occur.

Printing a white flood will eliminate some of the differences of printing on the variable disc surfaces. A white flood will cover the metallized or clear areas of the disc and give the other applied inks a opaquer look. Colors will also be closer to what is expected. Discs printed without the use of the white flood will cause the color of the inks applied to alter. Colors may also not reproduce correctly when they are overprinted.

You should also consider not using gradual fades or "vignettes" in your label art. Gradual fading or halftones is not recommended because dot gain and tonal jumps can occur. Vantiva can correct "hard lines" created by gradual fades during the processing of the electronic file. However, if the gradual fade is supplied in a film positive, all "hard lines" are uncorrectable and will appear on the printed disc.

Font Size (Text Size) - Minimum 6 pt. Sans Serif

Reversed Font Size - Minimum 6 pt. Sans Serif. Fonts smaller than this have a tendency to close (fill-in) during the printing process.

Reversed Font Size Knockout of Halftone - Minimum 7 pt. San Serif.

Line Width - Minimum of 0.5 pt. This includes lines on fonts, logos, and placed images.

Reversed Line Width - Width of line knocked out to silver of the disc or background should be a minimum of 1 pt.

Trapping - Vantiva will trap all electronically supplied label art files.



CD / DVD & BD Label Art Specifications

Vantiva Label Art Preparation Tips - continued

Tonal Range - The measurement of the screen value (dot) in any given area of the label art. Less than 15% dot range will cause image loss during the printing process. In contrast, screen values above 85% dot range may tend to blend and appear solid. This may occur in halftones, solid screen backgrounds, and graduated fades (vignettes). Tonal jumps can occur in the silkscreen printing process, along with defined lines due to an extreme variation in tonal range. As a result, avoiding large color range vignettes in silkscreen label art is recommended.

LPI (Lines Per Inch) - The number of lines in an inch, as calculated on the screens used to create halftones and 4-color process images. The higher the line per inch, the more detailed the image will become. The Vantiva LPI standard for Silkscreen Printing is 133 LPI and Offset Printing is 175 LPI.

Moiré/Screen Interference - A pattern resulting from the use of inappropriate film and/or screen angles. When supplying film to Vantiva follow the guidelines outlined in DVD Label Art: Silkscreen Printing Requirements. Screen Interference is not true moiré. It is caused during the process of aligning the film positives over the stencil prior to exposure.

Emulsion - Emulsion side up on positive film.

Film Colors - Identify all specific colors in the electronic file package.

Bleeds/Key Lines/Die Lines - Bleeds are not required when designing in a layout application such as Adobe InDesign. When designing in Adobe Illustrator, the usage of bleeds is encouraged. If bleeds are created, use a key line or die line to identify the masking intention. However, die lines are required in the electronic file submitted to ensure proper alignment.

White Base Sizes – Preferred recommendation:

White base size	
ID	OD
22.5	115
24.5	116
27.5	116
34.5	116
37.5	116
46.5	116