

Opti-Lenticular Technologies

- **OPTI MULTI-PHASE**

Visualize a moving car, a swinging pendulum or a person swinging a bat. Multi-phase animation uses multiple frames of a photographed action or illustrated art arranged in order of occurrence to show the action from the beginning of a movement to the end. Instant movement is achieved with the twist of a wrist. A common background must be maintained for optimum effect. Photography can be provided as 35mm frames or high resolution digital files with as many sequences as possible to select from.

Opti Multi-Phase ... it's a moving experience!

- **OPTI MORPH**

You have seen it used on television and in movies, and now this exciting process is available in print! Morphing is an effect that enables one image to gradually change into another image with the help of computer animation. The best morphs are those which are of similar shapes, although it is possible to morph any two images. Morph two faces, two pieces of equipment or two logos - the sky is the limit, and with the twist of the wrist one image turns into another. As in Multi-Phase, a common background must be maintained for optimum effect. Opti Morph changes the way people see your product.

- **OPTI 2-PHASE**

Use two images to convey one message. Two separate images are stacked to switch back and forth to each other with the twist of the wrist. This process allows these separate images to exist on the same printed page, and works best when the animation is designed to occur in the same place on the printed piece. With Optigraphics technology, the images can be combined to give the art an animated appearance. You can use two different photos to show the feature and corresponding benefit of your product or service. Think of the endless possibilities!

- **OPTI ZOOM**

Zoom in on something exciting! You'll bring instant attention to your message with this process which is based on multi-phase animation. Multiple sizes of the same image are put together and quickly merged into each other conveying a zooming effect. Zooming animation uses multiple frames of illustrated art, photography or line art. A common background must be maintained for optimum effect. Opti Zoom magnifies the effectiveness of your message as nothing else can.

- **OPTI 3-D**

3D at its best! Opti-3D is achieved by layering multiple illustrations or photographic elements. The finished piece conveys the perception of three dimensions. Using your multiple illustrations or photographic elements and the Optigraphics lenticular process, 3D is achieved by layering forced perspective and advanced technology. Artwork supplied on disk is prepared in layers, output to hi-res color proofs and photographed. Images can be generated in 3D programs such as Infnit-D or other platforms. Optigraphics works with you. Your creative director can work directly with our design engineers to achieve the best possible results.

- **OPTI FULL-MOTION**

Imagine your favorite moments from a popular cartoon or movie right in your hand. Full-Motion technology uses flicker free sequences taken from video frames to create optimum action. First generation video should be provided (Beta or VHS) with 15 or 30 frames to make up each animation. Opt Full-Motion ... video at your fingertips.

Opti Multi-Phase

TECHNICAL REQUIREMENTS

Art Preparation Requirements

Software Applications

Our electronic prepress department is Macintosh based, therefore, if you are preparing electronic art files, please provide them in Mac format. We can accept the most commonly used application documents for graphic design such as: Adobe Illustrator™ 9.0, Macromedia Freehand™ 9.0, QuarkXPress™ 4.1 and Adobe Photoshop™ 5.5 (send layered files when applicable). We prefer that the application documents are sent rather than Postscript files in order to expedite changes that may be requested.

Fonts

Optigrphics has an extensive type library, but with so many type faces available today, we request that you always include a font folder that contains both printer and screen fonts used in your designs. When working with text in Illustrator or Freehand, it is recommended that you do not convert any text to outlines that could possibly need corrections later. We also recommend that pixel based programs like Photoshop™ not be used for typographical elements.

Disk Directories & Printouts

Please provide a full directory of all disks sent. We also recommend a content page that will detail which documents will be used and their purpose. For jobs to be processed efficiently, printouts of the final design are required. This print, marked "FINAL", should be in color, at actual size when possible, and include all trim and bleed marks as well as any special instructions that will be required. If the print is not at actual size, please indicate on the printout the percentage of the print.

Electronic Media

We can accept files on the following electronic media formats: 44MB - 270MB Syquest™ removable disks, 128MB optical disks, 600MB - 1.2 GB optical disks and 3.5" floppy disks.

Scanned Images

We can accept scanned or created images in the following file formats: .tiff, .eps, .jpeg and native Photoshop™. Images that are scanned or created must allow for bleed. Work with your images in CMYK color, not RGB. Converting CMYK to RGB will produce unpredictable results in color; therefore, a color proof should be included for Optigrphics to use for color matching on press. The resolution of your scan is important to the quality of the finished piece and will require being saved at 304.8 pixels per inch. When providing originals to be scanned by Optigrphics, we will be able to accept the following types: Transparency (35mm, 2.25", 4"x5", 8"x10", 11"x14"), C-Prints, Illustrated artwork (must be on flexible board material) and Cine format film strip (Bell & Howell perforations only).

Tips

Tips

1. Keep background constant.
2. All lines should be 2pt.
3. Stay away from horizontal or vertical lines running in the same direction as the lens.

Estimated Timeline

FOR ONE DESIGN

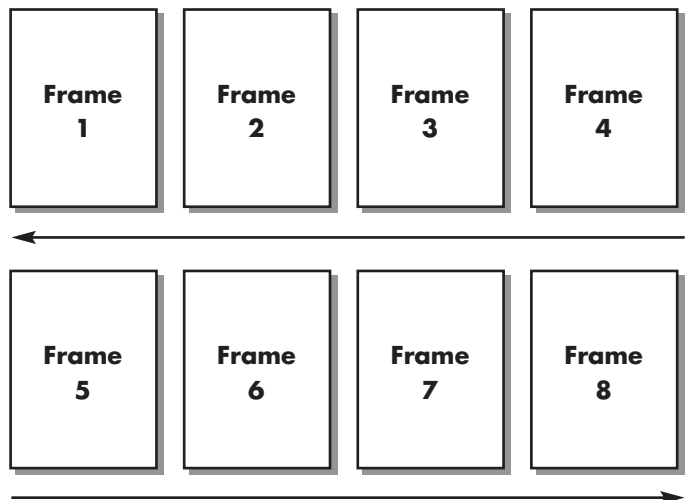
- Day 1 Usable art received
Day 7 Animated Transparency proof to customer
Day 13 Animated Opti-Stick™ proof to customer
Day 17 Produce combined film for printing
Day 31 Printed material ready for shipment

Note: Any changes received after Day 1 will add a minimum of 5 working days and push all dates back.

Opti Multi-Phase Layout

Bleed 1/8"

The lens enables you to focus on individual frames depending upon the viewing angle.



Opti Morph

TECHNICAL REQUIREMENTS

Art Preparation Requirements

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Tips & Tricks

Tips

1. Use a common background.
2. All lines should be 2pt.

Estimated Timeline

FOR ONE DESIGN

- Day 1 Usable art received
Day 7 Animated Transparency proof to customer
Day 13 Animated Opti-Stick™ proof to customer
Day 17 Produce combined film for printing
Day 31 Printed material ready for shipment

Note: Any changes received after Day 1 will add a minimum of 5 working days and push all dates back.

Opti-Morph Layout

Bleed
1/8"

Provide the beginning and ending image, Optigrraphics technicians will produce the morphed image.



Opti 2 Phase

TECHNICAL REQUIREMENTS

Art Preparation Requirements

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Tips

Tips

1. Try and stay away from large areas of white or yellow to minimize ghosting.
2. All lines should be 2pt.

Estimated Timeline

FOR ONE DESIGN

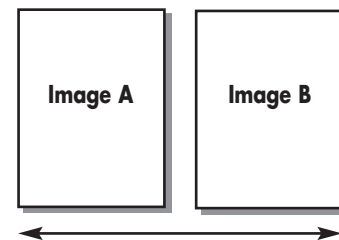
- Day 1 Usable art received
- Day 8 Animated Opti-Stick™ proof to customer
- Day 11 Produce combined film for printing
- Day 26 Printed material ready for shipment

Note: Any changes received after Day 1 will add a minimum of 5 working days and push all dates back.

Opti-2Phase Layout

Bleed

1/8"



Opti Zoom

TECHNICAL REQUIREMENTS

Art Preparation Requirements

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Tips

Tips

1. Stay away from horizontal or vertical lines running in same direction as the lens.
2. All lines should be 2pt.
3. Art should be a darker color moving over a lighter color.

Estimated Timeline

FOR ONE DESIGN

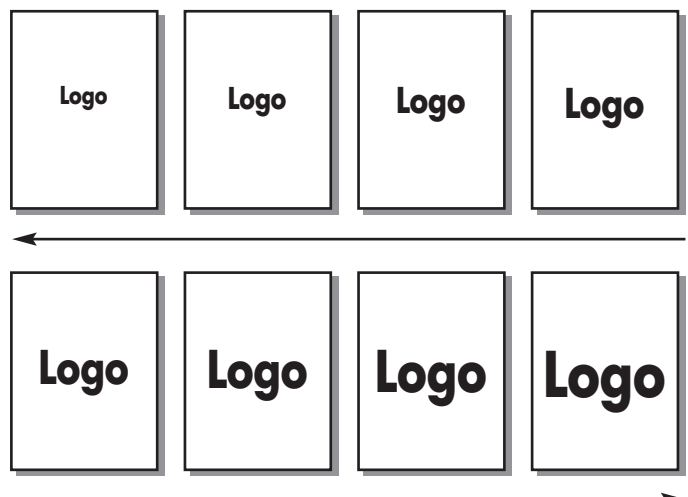
- Day 1 Usable art received
- Day 7 Animated Transparency proof to customer
- Day 13 Animated Opti-Stick™ proof to customer
- Day 17 Produce combined film for printing
- Day 31 Printed material ready for shipment

Note: Any changes received after Day 1 will add a minimum of 5 working days and push all dates back.

Opti-Zoom Layout

Bleed
1/8"

Provide the beginning and ending image, Optigraphics technicians will produce the morphed image.



Opti 3-D

TECHNICAL REQUIREMENTS

Art Preparation Requirements

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Tips & Tricks

Tips

1. Actual sets with models produce more layers and depth.
2. All lines should be 2pt.

Tricks

1. Use forced perspective - the forced appearance to the eye of objects in respect to their relative distance and positions.

Estimated Timeline

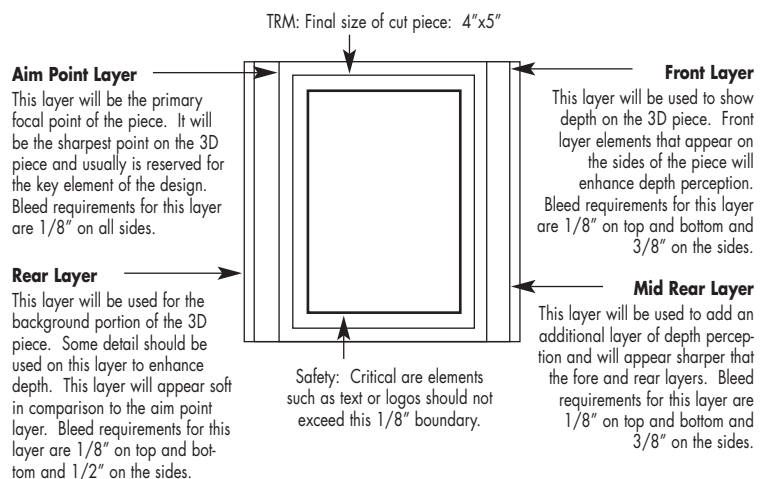
FOR ONE DESIGN

- Day 1 Usable art received
Day 6 Animated Transparency proof to customer
Day 11 Animated Opti-Stick™ proof to customer
Day 14 Produce combined film for printing
Day 29 Printed material ready for shipment

Note: Any changes received after Day 1 will add a minimum of 5 working days and push all dates back.

Opti-3-D Layout

This is an example of the set-up required for a 3D piece with a final trimmed size of 4"x5". The requirements for bleed will be the same for any 3D piece. Your electronic files need to be set-up with the appropriate elements on the correct layers as shown below.



Opti Full-Motion

TECHNICAL REQUIREMENTS

Film Requirements

Electronic Media

Please provide film sequence using a Beta SP or regular VHS tape (depending on resolution and/or content.) We accept virgin or first generation video, any third generation video is not usually acceptable. 15 to 30 original video frames are needed to make up each animation replay.

When a customer submits a video (Beta or VHS), we will send a VHS with a time code burn so the customer can choose the area in which they want to capture. We will then convert from our original and then the customer will see a new VHS containing only the sequence for approval.

Archived video approved by Optigraphics must be converted before pre-press can start work. (This is done in-house). Full Motion products are available in our M lens and 40 line environments. Estimated timeline below with approved production video.

Art Preparation Requirements (Backprints)

Software Applications

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Tips

Tips

1. Keep Background constant.
2. Flicker-free animation sequence produces best quality.
3. Stay away from horizontal or vertical lines running in the same direction as the lens.

Estimated Timeline

FOR ONE DESIGN

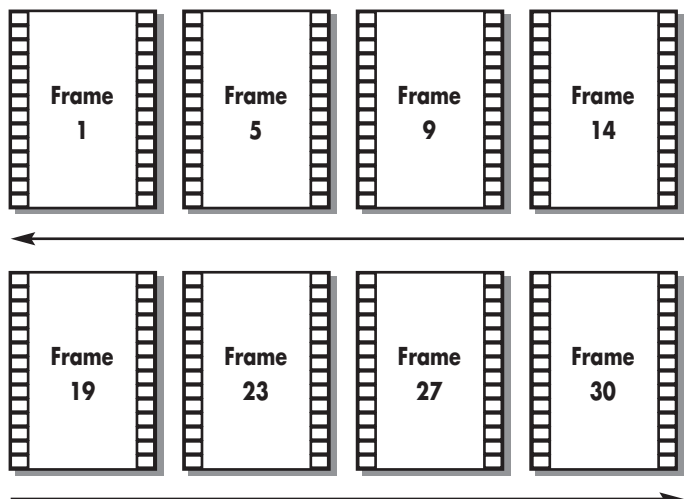
- Day 1 Usable art received
- Day 7 Animated Transparency proof to customer
- Day 13 Animated Opti-Stick™ proof to customer
- Day 17 Produce combined film for printing
- Day 31 Printed material ready for shipment

Note: Any changes received after Day 1 will add a minimum of 5 working days and push all dates back.

Opti-Full Motion Layout

Bleed 1/8"

Frames 15 to a maximum of 30 Frames are used.



Creatives: All set-ups for the various Opti technologies can be included in unit price or broken out separately, provided art is supplied to plant specifications. Set-ups are included in unit prices, but due to the varying alternatives for providing art for creations, pricing can only be classified as ballpark until artwork to be provided has been reviewed by technicians.

Packaging: Bulk Pack (Special Packaging available for additional charge).

Shipping: F.O.B. Plant in Texas. Quantity shipped subject to plus or minus 10%.

Lead Time: Approximately 4 to 6 weeks from receipt of art and P.O. We have a large facility and, when needed, can turn jobs quicker when necessary.

Prices are subject to change without notice.

Note: This is just a sample of the many products that can be made with our amazing lenticular graphics. There are very few restrictions or limitations on what can be done. Curious? Unsure? Questions? Give us a call. You may be surprised at how extensive our capabilities are. We have over 30 years of experience in this highly specialized field.

Here are a few examples of other product applications. Custom pricing available with specs.