

KODAK NEXPRESS
Dimensional Printing System



CREATIVE AND FILE PREPARATION GUIDELINES

Stand out from the crowd with print that sparkles

Captivate your audience by adding metallic features to digitally-printed communications with the **Kodak NexPress** Gold Solution.

It's easy to heighten both impact and creativity with the unique printing capabilities available only with **Kodak NexPress** Digital Production Color Presses.

This guide will walk you through several proven techniques for getting the most out of printing with **Kodak NexPress** Gold Solution, and provide tips and tricks for how to create your own metallic effects.

The steps in this guide assume a working knowledge of **Adobe** Creative Suite, including **Adobe Illustrator**, **Photoshop**, **InDesign** and **Acrobat** software programs.

This design guide covers:

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Successfully adding gold effects can be subjective. Be sure to talk with your print provider about the results you want to achieve. Proofing the job before it runs is a great way to make sure your intentions are being fully realized.



Proven techniques

These techniques will help you quickly and easily integrate eye-catching gold features into print jobs.

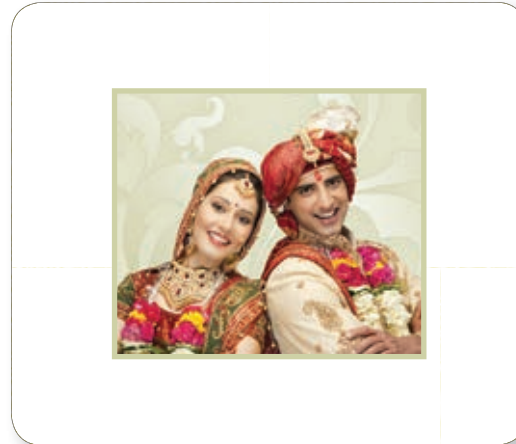
TECHNIQUE

1

Creating vector effects

Illustrator software can be used to create decorative borders that frame photographic images, and beautiful vector patterns that stand alone in applications such as greeting cards and certificates.

Using gold to create decorative borders is a great way to draw the eye into the piece.



Photographic images are beautifully framed by sparkling gold border art.

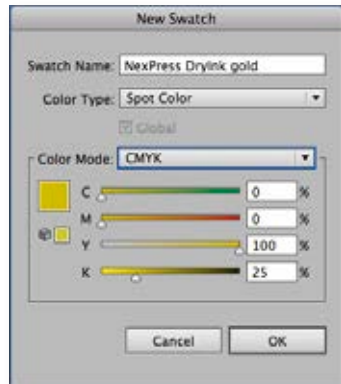


Vector patterns can be used to dramatic effect for many types of applications, including greeting cards and certificates.

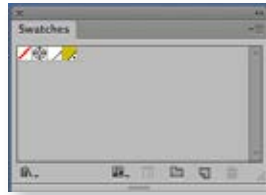
2 Proven techniques: Creating vector elements with Adobe Illustrator Software

Get started by creating a new file:

1. Place source graphic on bottom layer for reference, if necessary (*this layer will need to be removed from the final file*).
2. Create a new spot color swatch
 - a. Name the swatch "NexPress DryInk gold." (Make sure you use this exact name, including capital letters and spaces, exactly as it appears above.)
 - b. Designate it as "Spot"
 - c. Set the color to CMYK:
0 | 0 | 100 | 25



3. Create gold elements on a new layer, in position, using Illustrator's shapes and/or drawing tools.
4. Fill objects with the new "NexPress DryInk gold" swatch..
5. Make sure the only swatches that remain in your file are "NexPress DryInk gold" and white.



6. Delete the reference source file on the bottom layer.

7. Save your file: "FileName_gold.eps"



Note: You can combine a variety of gold tints to beautiful effect. Just adjust the percent of "NexPress DryInk gold" in the swatches palette.

If you will be placing vector work on top of an image, make both files the same height and width to ensure proper alignment.



TECHNIQUE

2

Creating raster effects with Adobe Photoshop Software

You can use NexPress Gold Dry Ink to add extra sparkle to photographic images.

Before NexPress Gold Dry Ink



After addition of NexPress Gold Dry Ink



File Structure Overview

Using NexPress Gold Dry Ink requires creating two files: one with the original color image, and another for the gold layer, which will be combined with the original in your **InDesign** layout.



If the gold layer needs to be perfectly aligned with the original image, it is best to make both files the exact same height and width.

4 Proven techniques: Creating raster elements with Adobe Photoshop Software

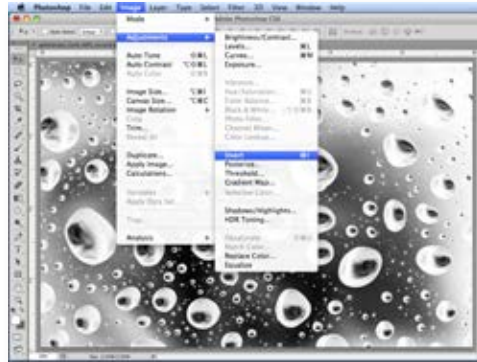
Get started by creating a base image:

1. Open the image that you would like to enhance with gold.
2. Convert to grayscale.
(Image / Mode / Grayscale)

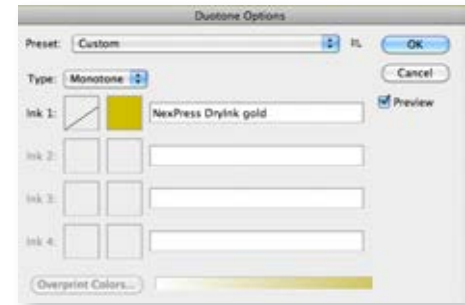


3. Increase image contrast.

4. Invert the image to ensure that the heaviest application of gold ink occurs in the lightest tonal areas. (Image / Adjustments / Invert)



5. Convert to duotone (Image / Mode / Duotone), then to monotone.
6. Set the color of Ink 1 to:
CMYK: 0 | 0 | 100 | 25
7. Name ink 1 "NexPress DryInk gold"



8. Adjust duotone curve so the maximum coverage is set at 70%.
9. Save your file: "FileName_gold.psd"



In some cases, you may want to spend time manipulating the inverse mask. For images with highly saturated backgrounds where gold ink would not be either desirable or effective, you may want to mask out the background.

This image shows a basic inverse mask for the gold layer.



In this version, we have masked out the image's red velvet background, over which a gold overprint wouldn't be noticeable.



You want the heaviest application of gold ink to occur in the lightest tonal areas of the image.

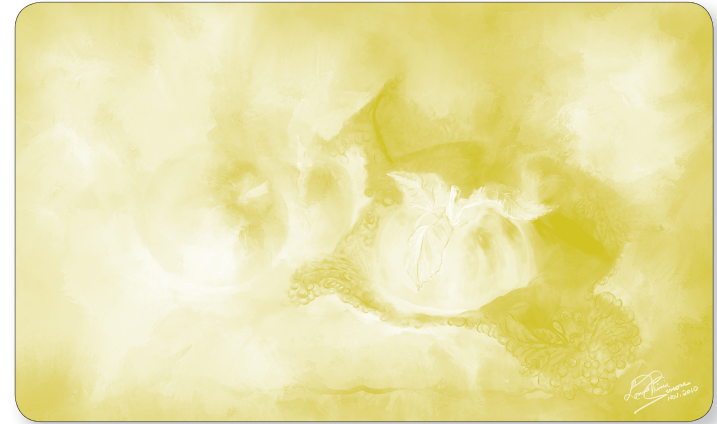


6 Proven techniques: Creating raster elements with Adobe Photoshop Software

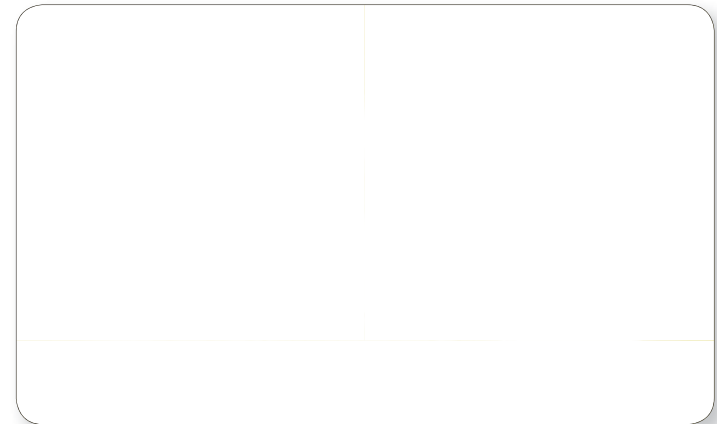
In other cases, you may want to remove dots from image highlights if printing gold in these areas is undesirable. For example, enhancing this fine art image with gold will require additional manipulation to ensure that the lace napkin remains pristine white.



This image shows a basic inverse mask for the gold layer.

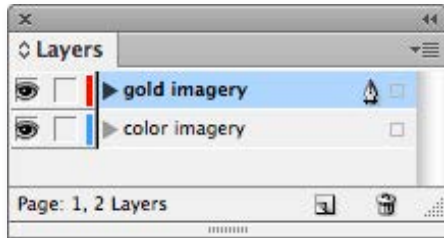


In this version, we have retouched the mask to eliminate any gold ink in highlight areas, which need to remain white.



Pulling it all together with Adobe InDesign Software

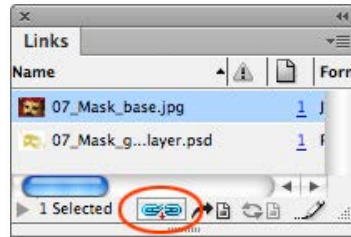
1. Create a new **InDesign** document, or open an existing layout.
2. Add 2 new layers in the Layers Palette.
 - a. Name the TOP layer “gold imagery” (this layer will hold the gold art you created)
 - b. Name the BOTTOM layer “color imagery” (this layer will hold the original base art or color image files)



You can have multiple layers for images with gold enhancements, but gold elements must always be on higher layers in order to print correctly. Text or imagery placed on layers above gold elements will knock out the gold beneath.



3. **Place** your base art or color image on the bottom layer.
4. **Copy** it.
5. **Paste in Place** on the “gold imagery” layer above.
6. **Relink** the file



- a. Select the newly pasted image and go to the Links palette
- b. Re-link it to your “gold” raster or vector file

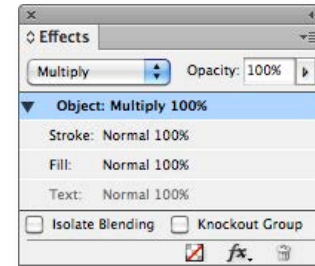
Note: This replaces the top image with the gold art you have created. If your gold file has dimensions that are identical to the source file or base art, both layers will align perfectly.

PUTTING IT ALL TOGETHER

Step 7 is critical. A blend mode of “Multiply” tells the NexPress Press to overprint gold ink on top of the image below, rather than knocking it out.



7. With the gold file still selected, go to the Effects palette and select a blend mode of “Multiply” from the drop-down menu.

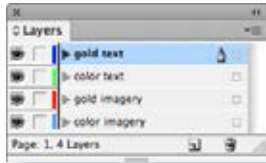


Doublecheck that you have a “NexPress DryInk gold” spot color in your InDesign swatches palette. It will show up automatically if you have relinked to your gold file correctly.

8 Proven techniques: Pulling it all together with Adobe InDesign Software

8. To add gold typography, add 2 new layers in the Layers palette:

- Name the TOP layer "gold text"
- Name the BOTTOM layer "color text"



- Make sure both text layers are placed above the existing "gold imagery" and "color imagery" layers.
- On the "color text" layer, lay out your text as you normally would.
- Select** the entire text frame that you want to enhance with gold, then **Copy** and **Paste in Place** on the "gold text" layer above.
- With the copied text still selected, go to the Swatches palette and change the text's fill and/or stroke to the "NexPress DryInk gold" swatch.
- Multiply** - Keep the entire "gold" text box selected and go to the Effects palette. Select "Multiply."
- Save your file, make sure that all gold layers are visible, then export a PDF using settings that have been optimized for printing on a NexPress Press, which can be supplied by your print services provider.

*The gold effect will vary depending on the fill color of your text, and the tint % of gold applied over it. Consult the **Kodak NexPress Gold Color Guide** to see the possibilities.*



VISUAL OVERVIEW

Gold image/text layers

- Contains the gold element(s) you created using the "NexPress DryInk gold" color swatch.
- Blend mode must be set to "Multiply" in the Effects palette.

Carnevale di Venezia
Carnevale di Venezia



Color image/text layers:

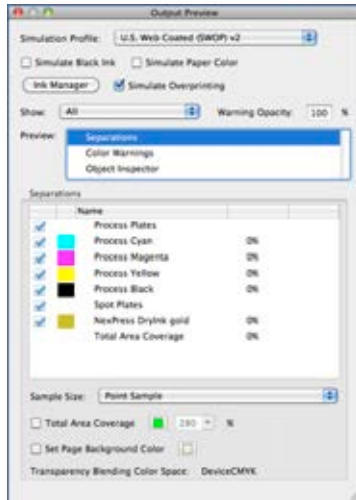
- Contains the corresponding color imagery or text.
- Blend mode should be set to "Normal" in the Effects palette.



CHECKING YOUR WORK

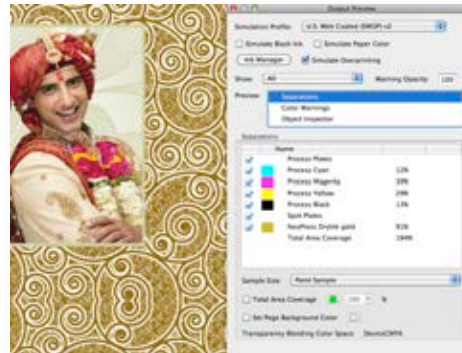
As a last step, you should check that you have properly prepared your print-ready PDF for printing with **Kodak NexPress Gold Dry Ink**.

1. Open the high resolution PDF file with **Acrobat Professional Software**.
2. Go to: Print Production/Output preview (within the Tools menu).



Note: There should be only 1 spot color, named "NexPress DryInk gold." If you see additional spot colors, convert them to process in the original art, or by using Ink Manager in either InDesign or Acrobat.

3. Mouse over the areas where you expect to have dimensional clear dry ink.
 - a. If you have set up the file correctly, the percentage of "NexPress DryInk gold" will change.



CHECKING PRINTER'S PROOFS

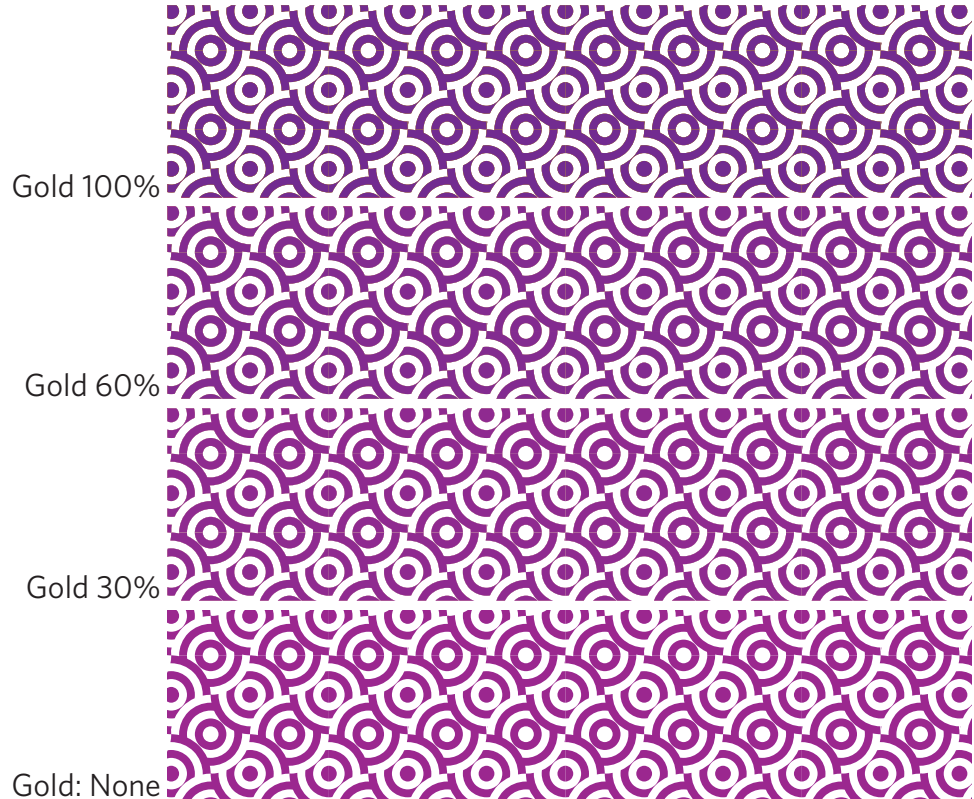
- If gold dry ink has knocked out color that you expected to see underneath it, check your file to be sure that the gold layer's drop-down menu blend mode is "Multiply."
- If some gold prints correctly but other parts have been knocked out, check your file to be sure that nothing is directly above the gold in a higher layer.
- Text on a layer above gold should knock out the gold letter by letter. If the text block is knocking out a rectangular area, check that the text layer's drop-down menu blend mode is "Normal."
- If there is no gold ink where you expect it, and no higher layer knocking it out, check that the element's swatch color has been correctly named as "NexPress DryInk gold."
- If the gold elements print your reference color instead of gold dry ink, ask your print services provider to check their workflow.

Achieving the best gold effects

As with any special effect, experimentation is often required to achieve the most effective results.

With vector art, the color of the final printed result depends in large part on both the undercolor and the percentage of gold you are printing on top of it. The illustrations below demonstrate how differing percentages of gold change the appearance of the final art.

All 3 pattern strips have the same base color:
CMYK purple 44 | 99 | 0 | 0



*For extra eye-catching appeal, laminate or UV coat pieces that have been enhanced with **NexPress Gold Dry Ink**. The coating's extra sheen makes the gold ink really pop off the page!*



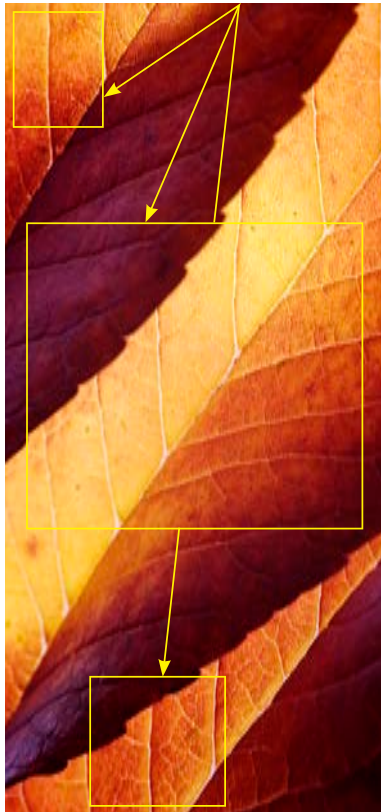


With raster files, it's a great idea to create multiple test images that use different percentages for the gold treatment. You then generate a press proof to determine which percentage gives you the results you want.

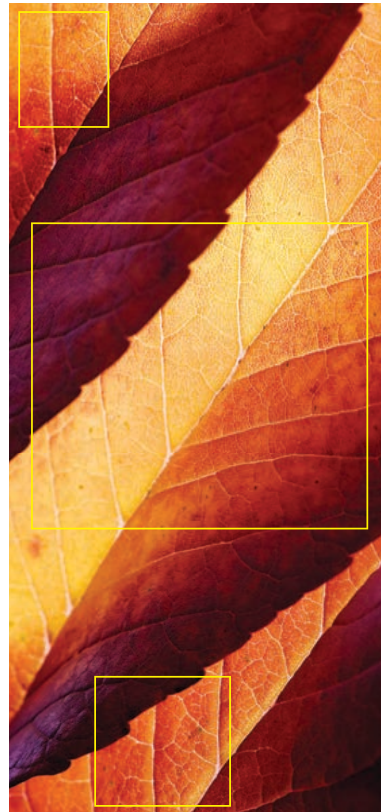
Note that you only need to create one "FileName_gold.psd" file for each gold element in Photoshop: the various percentages are determined in **InDesign** by selecting the .psd file and changing **opacity** in the Effects palette.

Gold is the last ink applied by the press. Using a higher percentage of gold may impact image detail, highlights and contrast. Creating a test print with different percentages of gold is an excellent tool in achieving the results you want.

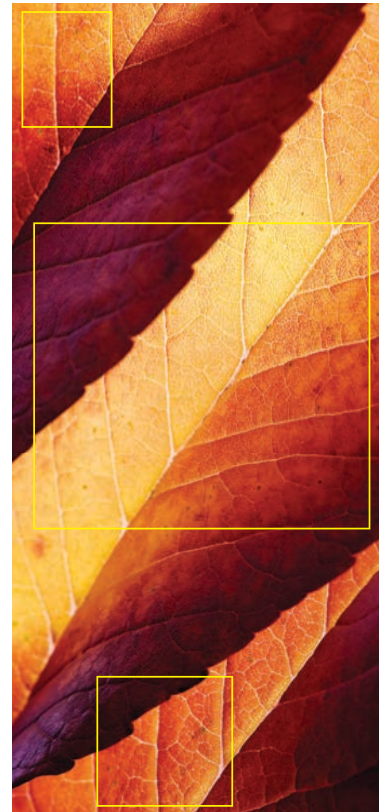
Compare these areas in the 4 images to see the subtle detail changes that occur as gold increases from 0% to 80%.



Compare: CMYK + 0% gold



CMYK + 45% gold



CMYK + 65% gold



CMYK + 80% gold

Frequently asked questions

Why must the color swatch for gold be named “NexPress DryInk gold”?

The exact name, including capital letters, is very important. This swatch name is recognized by the NexPress Press' front end, which then assigns gold dry ink to the correct layers. The specific ink name also enables the front end to automatically set important press parameters including fuser temperature, speed and other press settings, to help for optimum print quality for each of the dry inks.

(NOTE — there are variations in temperature and speed for the various specialty inks, therefore the proper naming convention is required to ensure optimum quality for all output.) The press also alerts the operator if gold dry ink is not in the fifth imaging unit when needed.

Could another “reference color” be used to create artwork, instead of CMYK: 0 | 0 | 100 | 25?

Yes. We chose this mix because it looks gold and is transparent enough to see through on a monitor. Whatever color you choose, *be consistent!* Use the identical color in all **Illustrator**, **Photoshop** and **InDesign** Files to avoid multiple reference colors coming into your production file when you assemble the job.

Can NexPress Gold Dry Ink be used to achieve metallic effects other than gold?

Yes. By altering the color underneath gold dry ink, a variety of interesting metallic effects can be achieved including pewter and bronze tones. Refer to the **Kodak NexPress** Color Guide to see what the possibilities are.

Is NexPress Gold Dry Ink safe, and are pages with gold dry ink recyclable?

Yes. Unlike some other digital printing processes, pages printed with **Kodak NexPress** Dry Inks, including gold, do not contain any Volatile Organic Compounds (VOC's) and are easily recycled.

Can common substrates be used?

Yes, the substrate range for gold is the same as your press boundaries. For a complete list of qualified substrates visit: http://printlab.rit.edu/pdf/KodakNexPress-020510_web.pdf



Can gold dry ink be laminated or UV coated?

Yes. In fact, we recommend one or the other to optimize the sparkly effect of **NexPress** Gold Dry Ink.

NOTE — depending on the solution used, adding a laminate or UV coating may impact the ability to de-ink or recycle the finished product.

How will I know what the final piece will look like?

We recommend a press proof before your final production run to be sure you are achieving the desired effect. If you are enhancing a 4-color image and are not sure how much gold is needed to be most effective, try preparing a test file with multiple percentages of gold — 20, 50, 70 or 100% — and to proof the image first before you go into final your production. See page 11 for more tips on this testing/proofing technique.

Can there be layers in the final file on top of the gold layer/s?

Yes, but the text, images or graphics on those layers will knock out any gold ink directly below them. See page 7 for more tips on this topic.

Do I need to adjust my speed or press settings for gold?

No. As long as your file includes the properly named ink color (“NexPress DryInk gold”), the digital front end will automatically select the optimum press settings.

NOTE — for 120 ppm presses, the operator will need to move all 5 dry ink stations from position 2 to position 1 to enable the 83 ppm print rate.

NOTE — operators, do not override or select any default options that may impact speed or fusing temperature. The DFE will select the press settings as appropriate for printing gold dry ink.

Can other software programs create gold elements?

Yes, as long as the program allows you to assign a spot color named “NexPress DryInk gold” to the elements that will print in gold, “Multiply” that layer with color artwork on a layer below, and produce a layered, print-resolution PDF. Talk with your print services provider about testing the file on their **Kodak NexPress** Digital Production Color Press.



Produced using Kodak Technologies.

For more information, visit www.kodak.com/go/nexpress

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