

# *hey, ed?*

ANSWER GUIDE  
& PRINT PRODUCTION  
REFERENCE MANUAL

BY EDWIN BURGOYNE

Hey, Ed?

## *Hey, Ed?*

*It's one of those phrases  
I hear a thousand times a day.*

*Art directors, production designers, AE's  
& the like are always asking my thoughts  
on common and not-so-common print  
production issues.*

*I'm always glad to help with their  
questions and usually all it takes is a  
simple answer.*

*At times, I would get asked some of  
the same questions over and over  
again. I thought, wouldn't it be nice  
to gather the background material for  
those answers into a quick, little  
reference guide?*

*Well, here it is. I hope this book helps  
to answer some of those production  
questions you might have – for those  
times when you can't call out,*

*Hey, Ed?*

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PRE-design

*things to think  
about while designing*

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## *Don't be shy...*

### *Bug your production guy*

They may look a little stressed but, secretly, they actually kind of like being asked about stuff. If they give you a frown when they look at your piece and say that it's too expensive and it's budget busting – don't let them kill your idea. Challenge them, ask them lots of questions. Believe me, they want to work on cool stuff just as much as you do, they may just need a little time to gather their thoughts and do a little research. Who knows...they may even come back with something that makes everyone smile.

## *Request Samples*

### *Don't feel the need to second guess*

There is nothing wrong in this day and age to still ask for paper samples, paper dummies or drawdowns for your project. While you may not always get the time, your vendor will be happy to work with you on getting samples.

If time is an issue and you need to see paper samples without interacting with your printer, you can contact your local paper merchant or the paper mill directly. Although they won't cut the paper down to size, they will ship you fullsized sheets.

If you're even more pressed for time, places like xpedx or Hudson City even have local stores where you can walk in and purchase a ream or two of one of the papers they represent. While they may not have everything in stock, it's great for picking up a box or two of envelopes or matching blank sheets of your stationery stock.

*Website address for Paper Merchants:*

*[www.xpedx.com](http://www.xpedx.com)*

*[www.fredparsons.com/express](http://www.fredparsons.com/express)*

*[www.lindenmeyr.com](http://www.lindenmeyr.com)*

## *Print Advertising Ad Sizes for Creating Comps*

These sizes should be used for *comping only*, please contact the publication individually for their most current media kits, specs and sizes.

### *Typical Sizes (Width x Height)*

<b>Newsprint</b>	<b>Size</b>
The New York Times - Full Page	11.55" x 21"
The New York Times - Half Page Horizontal	11.55" x 10.5"
USA Today - Full Page	11-1/2" x 21"
USA Today - "T" Size	8-1/2" x 14"
USA Today - Spread	24" x 21"

<b>Magazines</b>	<b>Trim</b>	<b>Live</b>	<b>Bleed</b>
Time Magazine - Page	8" x 10-1/2"	7" x 10"	8-1/4" x 10-3/4"
Time Magazine - Spread	16" x 10-1/2"	15" x 10"	16-1/4" x 10-3/4"
Sports Illustrated - Page	8" x 10-1/2"	7" x 10"	8-1/4" x 10-3/4"
Sports Illustrated - Spread	16" x 10-1/2"	15" x 10"	16-1/4" x 10-3/4"
New York Times Mag - Page	9-3/4" x 11-3/4"	9-1/4" x 11-1/4"	10" x 12"
New York Times Mag - Spread	19-1/4" x 11 3/4"	18-3/4" x 11-1/4"	10-1/2" x 12"
Rolling Stone - Page	10" x 12"	9-1/4" x 11-1/4"	10-1/4" x 12-1/4"
Rolling Stone - Spread	20" x 12"	19" x 11"	20-1/4" x 12-1/4"

<b>Advertising Publications</b>	<b>Trim</b>	<b>Live</b>	<b>Bleed</b>
Ad Age - Page	10-7/8" x 14-1/2"	10-1/4" x 14"	11" x 14-3/4"
Ad Age - Spread	12-3/4" x 14-1/2"	21" x 14"	22" x 14-3/4"
Adweek - Page	8-5/8" x 11-1/8"	8-3/8" x 10-7/8"	7" x 10"
Adweek - Spread	17-1/4" x 11-1/8"	16-3/4" x 10-7/8"	15-1/2" x 10"
Creativity - Page	10-1/4" x 14"	11" x 14-1/2"	11-1/8" x 14-7/8"

*Need other specs for print ads?*

*Your media or production department has an "SRDS" book that lists most publications. Remember, the best way to get specs is directly from the publication's advertising production department.*

*For more info go to, [www.srds.com](http://www.srds.com)*

## ***Outdoor and Transit Sizes for Creating Comps***

Here is a short list of some of the typical outdoor material sizes that you can use for comping your designs. Of course, you should always check with the outdoor vendor before creating the final mechanicals. These sizes are for COMPING ONLY; sizes in each location/market vary!

### ***Outdoor Billboards (Height x Width)***

***Don't forget to figure in your live area!***

<b>Name</b>	<b>Actual Dimensions</b>	<b>File Ratio Size for Comp</b>
Bulletin 1	10' 6" x 36'	5-1/4" x 18"
Bulletin 2	14' x 48'	7" x 24"
Bulletin 3	20' x 60'	10" x 30"
Full Bleed 30-Sheet	123" x 273"	10-3/16" x 22-3/4"
Regular 30-Sheet	114" x 255"	9-3/8" x 21-3/16"
Eight Sheet	60" x 130"	12" x 26"

### ***Transit (Height x Width)***

<b>Name</b>	<b>Trim Size</b>	<b>Live Area</b>	<b>Mech Trim</b>	<b>Live Area</b>
1-sheet NY Subway	45-7/8" x 29-7/8"	44" x 28"	23" x 15"	22" x 14"
1-sheet TDI	46" x 30"	44" x 28"	23" x 15"	22" x 14"
2-sheet NY Subway	45-7/8" x 59-7/8"	44" x 58"	11-1/2" x 15"	11" x 14-1/2"
2-sheet TDI	46" x 60"	44" x 58"	11-1/2" x 15"	11" x 14-1/2"
Bus Shelter	70" x 48"	68" x 47-1/4"	17-1/2" x 12"	17" x 11-13/16"
Telephone Kiosk	50" x 26"	49" x 25"	12-1/2" x 6-1/2"	12-1/4" x 6-1/4"

*Did you know? Transit materials often have different black and CMYK color limits than offset print? When printing on VINYL material, solid black is best as 100% black and 65% each CMY. When printing on PAPER material for billboards, solid black is best as 65% each of CMYK. Recommended Photoshop 5.0 settings for CMYK separations should be SWOP 20%, 80% Black ink Limit, 300% Total Ink Limit.*

*Need other outdoor or transit specs?*

*Check out Kubin-Nicholson's website at <http://www.kubin.com>*

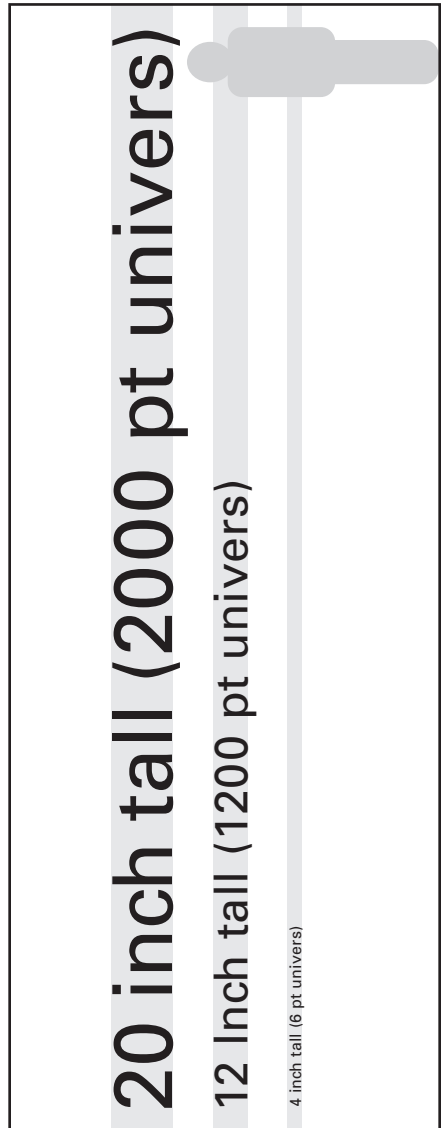
*Remember to consult with your media and production department,  
since these specs might not conform to the locations the agency may purchase.*

## *Viewing Outdoor Billboards Distance vs. Comprehension*

It can be difficult to gauge how much information can register with the viewer of an outdoor billboard. Comprehension of an outdoor advertising design depends not only on the style of type and colors used, but also on how these elements work together at a distance. Distance itself is a variable because the audience is in motion. Accordingly, the font size is an important consideration. A headline must be legible at any reasonable distance from close by to at least 400 feet. As illustrated, a letter height of 20 inches is recommended. No letters should be less than 12 inches if we are to communicate a message effectively at a distance. Letters 4 inches high are included simply to illustrate what happens to letters this size at a distance. This size lettering is typically used for mandatory phrase, identification, legal lines, etc. The billboard shown is 12' x 30'.

Hold chart at  
arms length to view

Viewed from 100 feet  
2000pt type is equivalent to 31 pt  
1200pt type is equivalent to 17.5  
400pt type is equivalent to 6 pt



## *Envelopes*

### *Sizes for Creating Comps*

Use common envelope sizes to reduce costs. Since not all paper stocks have all sizes, its best to check with the paper merchant or your printer to make sure the envelope you want is in stock. Of course, you can create an envelope to any size, just be aware that it may increase your printing and postage costs.

#### ***Commercial Envelopes***

Size	Dimensions (h x w)
6-1/4	3-1/2 x 6
6-3/4	3-5/8 x 6-1/2
7	3-3/4 x 6-1/2
7-3/4	3-7/8 x 7-1/2
Monarch	3-7/8 x 7-1/2
8 5/8	3-5/8 x 8-5/8
9	3-7/8 x 8-7/8
10	4-1/8 x 9-1/2
11	4-1/2 x 10-3/8
12	4-3/4 x 11
14	5 x 11-1/2

#### ***Common Business Envelopes***

Size	Dimensions (h x w)
6-3/4	3-5/8 x 6-1/2
Monarch	3-7/8 x 7-1/2
9	3-7/8 x 8-7/8
10	4-1/8 x 9-1/2

Standard window size (1-1/8" x 4-1/2"), square corners, 7/8 left, 1/2 bottom.

#### ***"A" Size Square Flap Envelopes***

Size	Dimensions (h x w)
A2	4-3/8 x 5-3/4
A6	4-3/4 x 6-1/2
A7	5-1/4 x 7-1/4
A8	5-1/2 x 8 1/8
A10	6 x 9-1/2
Slimline	3-7/8 x 8-7/8

#### ***Baronial Pointed Flap Envelope Style***

Size	Dimensions (h x w)
4 Baronial	3-5/8 x 5-1/8
5 Baronial	4-1/8 x 5-1/2
5-1/2 Baronial	4-3/4 x 5-3/4
6 Baronial	4-3/4 x 6-1/2

*Need an envelope for a quick design or a promo?  
Check out Jam (in NYC) at [www.jampaper.com](http://www.jampaper.com)*

## *Stationery and Collateral Sizes for Creating Comps*

Common Sizes for Collateral work. (Folded and finished dimensions.)

### *Stationery*

<b>Item</b>	<b>Dimensions (w x h)</b>
Business Card	3-1/2 x 2
Letterhead	8-1/2 x 11
#10 Envelope	9-1/2 x 4-1/8
Monarch Sheet	7-1/4 x 10-1/2
Monarch Envelope	7-1/2 x 3-7/8
Folder (Closed)	9-1/2 x 12
Notepad	5-1/2 x 8-1/2

### *Postcards*

<b>Item</b>	<b>Dimensions (w x h)</b>
Standard	6 x 4-1/2
Oversized	9 x 6

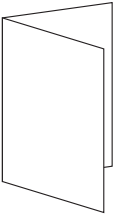
### *Slim Jim Brochure*

<b>Item</b>	<b>Dimensions (w x h)</b>
Standard 3 Panel	3-3/4 x 8-1/2
Oversized 3 Panel	5-11/16 x 11

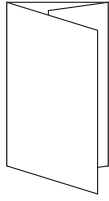
# *Brochures and Pocket Folders*

## *Folding Designs*

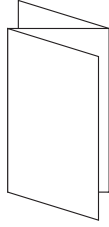
### Common Brochure Folds



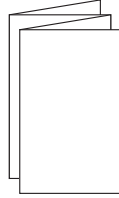
4-Page



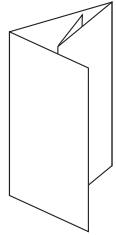
6-Page (Roll Fold)



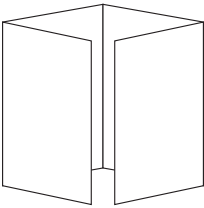
6-Page "Z" Fold



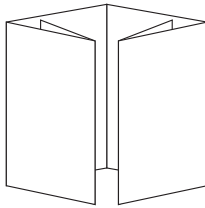
8-Page "Z" Fold



8-Page (Roll Fold)

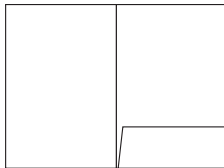


8-Page Gate Fold

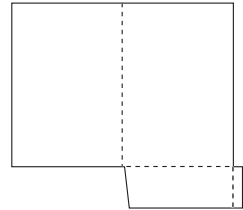


12-Page "Double" Gate Fold

9" x 12" Single Pocket Folder

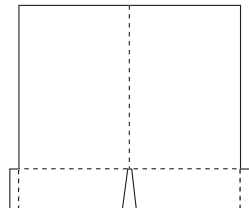
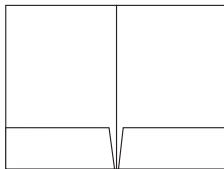


Open to the inside



Inside open showing flaps and scores

9" x 12" Double Pocket Folder



## *Web Resources*

### *Links to Downloadable Templates*

Although you should talk to your production person about the specs of a particular project, there may be times when you need quick sizes to get the design process going. Here are a few quick links to some downloadable templates,

#### *CD-Rom Templates and Packaging*

<http://www.dismakers.com/templates/cdrom/index.asp>

#### *Folders and binders*

<http://www.printpromotions.com>

#### *Outdoor*

[www.kubin.com](http://www.kubin.com)

#### *Direct Mail*

[www.usps.com](http://www.usps.com)

or

<http://www.usps.com/directmail/templates/welcome.htm>

#### *Various Printed Materials*

[http://www.psprint.com/creative/downloads/product\\_temp.asp](http://www.psprint.com/creative/downloads/product_temp.asp)

Always consult with your production manager or printer before creating your mechanical using these templates, as they may have other template options available directly from the vendor.

In the agencies that I've worked in, we keep a set of common templates on the server where everyone can pick them up and utilize them.

## *Talking About Papergrades When They Use the Term, Number 1 or 2?*

At times you might hear your production person talk about paper as being premium, number “one” or number “two.” Although they are describing general category of coated papers they no longer necessarily talk about the “brightness” of a sheet (how white the paper looks to the naked eye).

In general terms, when you can convince them to spend the money, you always want to stay with a number 1 or premium sheet. The brightness, quality and consistency of these papers, in most cases, will give you the best looking finished piece.

In today’s world of papers, technology has improved to the point where mills are now offering number 2 grades that should be given the chance to be reviewed. Number 2 papers can often come close to the look of a number 1 paper.

This is why it’s important to handle and look at paper samples, and samples of the stock that has already been printed upon.

Always compare your paper samples on brightness, but also compare the whiteness, holdout, opacity, smoothness, finish and paper content to select which paper is right for your job.

Check with your printer. Find out if they have a “house” stock. Sometimes a bigger printer can get some great buys when they buy in bulk... and it may actually cost less than if you picked some other lower grade paper!

Lastly, your paper choice should be picked based on what is best suited to your design and budget.

### **Standard grade for all paper finishes:**

<b>Quality</b>	<b>Brightness</b>
Premium	88 and above
Number 1	85.0 to 87.9
Number 2	83.0 to 84.9
Number 3	79.0 to 82.9
Number 4	73.0 to 78.9
Number 5	72.9 and below

### **Coated Paper Examples:**

Premium Papers	Utopia Premium Mead Prima Sappi Astralux McCoy Gloss Strobe
Number 1	Utopia One Centura Mead Signature Sappi Vintage Gloss Sappi Lustrò
Number 2	Utopia Two Productolith Mead Offset Enamel Sappi Northwest Gloss Sappi Opus Sappi Aero

PHOTOSHOP-image tips

*making the most  
out of your images*

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## ***DPI? SPI? LPI? PPI?*** ***Talk Your Vendors Language***

**DPI** refers to “dots per inch.” It is used when describing an output device’s resolution only, such as a laser printer or imagesetter. You might have a 300 dpi dye sub printer or a 2400 dpi film output device.

**LPI** is “lines per inch.” It describes how many lines of dots per inch are in your output device’s line screening. Your laser printer might print out at 85 lpi or your ads might get printed at 133 or 150 lpi.

**PPI** describes “pixels per inch,” the number of pixels per inch in your electronic bitmap image files. A typical high-resolution file might be 300 ppi. Any image on your screen is seen at 72 ppi. Also called **SPI** or samples per inch.

Each one means something different. So try to remember what each one is to avoid confusion!

### ***What the heck does Res 12 mean?***

Normally when we talk about scanning resolution we specify in pixels per inch (ppi). “Res 12” is in a metric resolution scale, pixels per millimeter. This number means that Res 12 (pixels per millimeter) = 305 pixels per inch (ppi). It is common to see Res 12 also referred to as 120 pixels per centimeter (ppi). These types of measurements usually come up when dealing with a vendor using an older high end drum scanner.

## *Scanning To The Right Size Scan Once, Retouch Once*

For color halftones that will be conventionally printed, a good basic rule is approximately 300 ppi at 100 percent of the size at which you will be reproducing the image. Typically you should always double the amount of line screen you will be printing at to get the ppi you should scan at (ie. for 150 lpi, scan your image at 300 ppi.)

- Always scan your image as close to the final print-out size as possible.
- Eliminate the need for image reduction/ enlargement in your page layout program — it shortens your image processing time, or how long things take to print out.
- Many agencies consider a common “master” scan size. This size often includes the larger size file that will be used for outdoor signage purposes.

- When you can, scan large. Just take into consideration your budget. In the long run, it will cost you and the agency less money and time if you only have to work on the image once.

*For conventional color halftone printing, use this resolution rule:*

*For halftones with a line screen 133 lpi or higher:*

Line screen x 2 x scaling of original

*For halftones with a line screen less than 133 lpi:*

Line screen x 1.5 x scaling of original

For example, if you are scanning a 4x5 photo that will be reproduced at 8x10 (200 percent of the original) with a final printed line screen of 150, you would scan at 600 ppi. Or,  $150 \times 2 \times 2 = 600$ .

### *EPS Previews*

*When saving an EPS file, you will be presented with several choices.*

*The Preview pop-up menu determines what your image will look like in a page layout program. 8-bit/pixel is the default setting which will give you a 256 color preview.*

*You can reduce your file size AND improve the on-screen appearance of your images by changing this pop-up menu to JPEG. This will not degrade the quality of the printed result.*

## *Dealing with soft images Utilizing unsharpen mask*

The human eye has a natural tendency to view a scanned image as “soft” or out-of-focus. You'd think that a higher resolution scan would help, but that's not the case. All scanned images need some sharpening, even those scanned on high-end drum scanners.

### *Unsharp masking*

is the trade term for a standard technique that printers and color separators use to sharpen images by accentuating the differences between adjoining areas of significantly different hue or tone. The traditional technique uses a mask that's a slightly out-of-focus duplicate of the original image. You can apply this same sharpening technique to your images with the Unsharp Mask filter in Photoshop.

**Here's how.** There are three settings you can choose when you select Photoshop's Unsharp Mask filter, radius, amount & threshold.

### **Radius**

Refers to the dimension, in width, of every sample that will be affected by the Unsharp Mask algorithm. I generally choose a setting between 1 and 1.5, depending on the resolution of the file and what I've designated for the amount (see next page) and resolution of the file. The higher the resolution of the image, the greater the numerical setting for radius.

The formula to use is: output resolution divided by 200. For example, designate a radius of 1 for a 200 ppi image. **Designate a radius of 1.5 for a 300 ppi image.** The more amount you use, the less Radius is necessary.

### **Amount**

Refers to the intensity of the Unsharp Mask effect. A setting between 100% and 200% will do, depending on the radius. The bigger the radius, the less amount needed. My “standard” amount setting is 120% however, some images need more than this, and others less.

*(Continued on next page)*

## *Dealing with soft images Utilizing unsharpen mask*

### **Threshold**

Specifies how many numbers of samples in an image will be sharpened. A setting of 0 will affect every sample, whereas a setting of 50 will affect almost none of the samples. **Highly detailed images such as line art, require a setting of 3, whereas portraits look best with a setting between 5 to 9.** (We want to keep minor wrinkles down to a minimum, don't we?) It can take a while to come up with the right combination of settings for an image. That's why many manufacturers of scanning software now offer sharpening as an option during image capture.

*A starting point for images @300dpi:*

*Amount = 120*

*Radius = 1.5*

*Threshold = 5*

## *Screen vs. Printed Color*

### *Why One Doesn't Match the Other, Part 1*

The top reason your screen doesn't match your proof is because it's not calibrated properly. Sounds simple, but for those of you out there who have to explain why your printed projects look different than what someone may look at on screen (i.e. a client's non-calibrated PC), there are a couple of reasons. The color on your computer screen will never match exactly what will be actually printed. Your screen is in RGB color, a different colorspace than a printed page which could be in CMYK or spot colors. RGB is called projected color, and the printed page, is called reflective. The best way to eliminate color problems is by calibrating your monitor and output devices. Use the PMS process and spot color guides to choose colors. **It's always best to use mathematical values for CMYK than to just pick what looks best on screen. Even to this day there are still problems with color matching on monitors.**

*How to describe color:*

*Hue, Value & Saturation*

#### **Hue**

Hue is the name we give color, such as "yellow, red, green" It's the range of colors in a rainbow.

#### **Value**

Value is the amount of lightness or darkness in a color. An example of value is a baby blue compared to a royal blue.

#### **Saturation**

Saturation is the amount of intensity in a color An example is pink to a blood red.

## *Screen vs. Printed Color*

### *Why One Doesn't Match the Other, Part 2*

#### *What's the difference between reflective and projected color?*

Reflective color refers to color ink or toner on a printed page. Light waves bounce off the ink and reflect or “travel” back to our eyes. Color from a computer screen or a film transparency is projected and backlit, and the light goes through the color to get to our eyes. The distinction between the two is important when discussing or selecting color. Many colors that can be seen as reflected fall out of the printed projected color palette or “gamut.”

When the colors coming from an RGB monitor come together to form a spectrum, they are called additive. In additive color the more colors added, the closer to white the color becomes. All colors together create white.

CMYK - cyan, magenta, yellow and black are colors that we use in print. The colors created by ink on the printed page are the colors of reflective light. In subtractive color, light rays are absorbed. When all the colors are printed you move closer to black.

# Working in Newsprint

## How to un-Muddy Images

*All printed pieces are effected by “dot gain.”*

When ink hits the paper on press, the halftone dots can change shape. This is caused by the absorbency of the paper and the speed of the press. The result is a darkening of the image overall. Dot gain is usually worst in the midtones of an image.

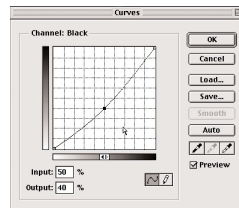
You can adjust for dot gain by changing the image “curve” that reduces the size of the 50 percent dot and the other tones as well. The idea is that if you make the dot smaller in proportion to the dot gain, the tones should neatly fall into place on press.

How much to change the curve is a function of the press and paper. Running a test will let you know exactly, *but a quick talk with your printer will give you a guide.* The guide below shows a good start. However, if you are separating into CMYK correctly, you won't and shouldn't need to make this adjustment.

Press	Dot Gain	Size of 50%
Web		
/coated	15-25%	36-30%
Sheetfed		
/coated	10-15%	41-36%
Sheetfed		
/uncoated	18-25%	35-30%
Newsprint	30-40%	28-25%

*The previous chart suggests some pretty big numbers. Your best course of action is always talk to your printer and find out from them what the dot gain is for their press!*

This chart says that if you expect a 10 percent gain on press, a 41 percent midtone dot will produce roughly a 50 percent dot.



For grayscale adjustments a quick and easy way to change the image is with a Curve correction. If you do this, remember to save your new file with a description “scan w/10% gain.eps” This gives you the opportunity of going back and readjusting your scan if you need to.

## *Setting the dmax* *Why it Should be Corrected*

### **What would happen if I let the image run with a dmax of 300 instead of 240?**

If you had printed the ad as is, the printed piece would look clogged up and you would lose detail. Every press has a specific recommend limit amount of overall ink coverage. Always adjust for this amount before sending out the file to the publication.

*If you do not know how to make the adjustment, ASK the service bureau to make the adjustment for you. You can find out what the total ink limit number is by referring to the SRDS book, the pub's film spec page or by contacting the publication's production department.*

### **What do you mean total ink coverage?**

Normal offset printing is around 300%, most magazines are around 240-260%. Think about generating the darkest color you can, if you were to create a color that was 100C, 100M, 100Y, 100K, the overall ink number would be 400! This would be way over the total limit!

### **Where do I see the initial set of numbers?**

Along with the other options in the CMYK Setup dialog box, the separation options control how the CMYK plates are generated. The separation options determine the method used for black generation and undercolor removal and specify the total ink limit for the press. This is an important number when initially scanning to adjust. For when converting RGB values to CMYK, Photoshop uses this information in the dialog boxes to adjust the image to the appropriate maximum values.

## *Image Color Cast Looking for Neutral Gray*

Because we know what combinations of color add up to gray, if you see gray areas in our original, you've got a great tool for color correcting. You can measure the values that create the color in your scan. If it should read as a neutral and doesn't, you've got a color cast. What's even better is that because you know what colors add up to gray, you know how to correct the scan. If you can do this at the scan level, your color correction will be much easier.

### *Identify and adjust your neutrals.*

A good place to look for neutrals is in your diffused highlight. The highlight may not be neutral, but it's a good place to start looking. Run your cursor around the diffused highlight and

measure it. Remember that you're looking for two things now - neutrality and printability. **If your highlight dot is too small, it will probably fall off press.**

If the dot is not the right color, the cast is probably affecting the entire image.

Fixing the neutrals often swings the rest of an image's color into line.

Remember that as you inspect CMYK neutrals, let cyan be your guide. The cyan value will be greater than your other two colors, which will be about equal.

The resulting gray will be roughly the same as the cyan value. So a highlight of 5C, 3M, and 3Y will be a 5 percent gray, the same value as the cyan.

### *Typical Gray Balance Relationships*

<i>Cyan +</i>	<i>Magenta +</i>	<i>Yellow =</i>	<i>Resulting Gray (K)</i>
5	3	3	5
10	6	6	10
25	16	16	25
30	21	21	30
40	29	29	40
50	37	37	50
60	46	46	60
75	64	64	75
80	71	71	80
90	82	82	90
95	87	87	95

This chart should be thought of as a guide, not as gospel. The important thing is the relationship between the colors. If a color is off by a point or two, it's pretty neutral. Cyan is stronger than the other colors in differentiating amounts along the gray ramp.

## *Image Color Cast Fixing the Image*

Remember our short discussion about the highlight dot on the last page? Let's say you have a neutral highlight in your original image and the highlight in your scan measures 5C, 6M, and 3Y. The whites look slightly too warm and pinkish. They have too much magenta in them. This is where Curves come into play. This gamma correction, pulls just a little magenta out of the highlights and even smaller amount out of the quarter tones. The rest of the image gets left alone. To make the curve, go into the Curves command and select the magenta channel. Place a point on the curve itself and then drag down to where the 5 percent magenta becomes three percent magenta. You're working in percents of inks and not levels. It's a good idea always to save your before and afters, just in case you want to make another correction.

A very powerful tool for color correction is in the Curves (and Levels) command dialog box. The highlight, shadow, and midtone Eyedroppers can be used as a color correction tool. By double clicking on either the highlight and/or shadow tool you can enter a target value and then move out into your image and select a point you would like to map to that value.

The Eyedroppers compare the value you plugged into the target picker with the value of the selected pixel. They then proportionally affect all the pixels in the image by that ratio. Although you can get very smooth results, you need to be careful about the values that you put in!

To beat a color cast this way, put in a neutral endpoint whose values are tonally similar to those in the original image.

<b>Color</b>	<b>C%</b>	<b>M%</b>	<b>Y%</b>	<b>K%</b>
Highlight	5	3	3	0
Shadows	70	65	65	80

### *Histogram Accuracy*

*The Histogram that appears in the Levels dialog box is not always accurate. To make sure you get an accurate one, be sure to turn off the "Use Cache for Histograms" check box in the File>Preferences>Image Cache dialog box.  
(This has been fixed in Photoshop CS, it defaults to off.)*

## ***Common Colors*** ***Color Target Chart for Images***

<b>Color</b>	<b>C%</b>	<b>M%</b>	<b>Y%</b>	<b>K%</b>
Highlight	5	3	3	0
Shadows	70	65	65	80
Pink	5	40	5	0
Beige	5	5	15	0
Caucasian Flesh	18	45	50	0
Caucasian, Dark	20	55	55	0
Caucasian, Light	10	40	55	0
Asian	15	40	55	0
AfricanAmerican	35	45	50	28
Chocolate	45	65	100	38
Gray	55	42	42	15
Silver	20	15	14	0
Deep Violet	100	68	10	25
Sky Blue	60	23	0	0
Aqua	60	0	25	0
Kelly Green	100	0	100	0
Lemon Yellow	5	18	75	0
Gold	5	15	65	0
Orange Red	10	100	100	0
Orange	5	50	100	0
Deep Red	25	100	80	0
Rich Black	55	45	10	100

## *Black Inks in Printing*

### *Why Black Looks Different from One Process to the Next*

All black inks are not all the same. In printing, process black, dense black, and work-and-turn black inks may all look different on a different day.

When you print on an inkjet printer, or color copier the blacks will differ as well.

Process black is an ink formula specifically designed for four-color process printing. Unlike other black inks, process black is a little weak.

But it's exactly this transparent property that allows process black to mix with cyan, yellow, and magenta to visually resemble the colors process colors.

When printing four color process designs with a large black background, usually require more than just "black" to look nice and dark. To get this deep black color you create a black that is comprised of a mixture of process colors.

Although many people have a specific "formula" the color selection is subjective. (Some like to go to a warm or cool black for example.)

The key is not to make the black so rich that there's too much ink on the paper. Safely speaking, the total coverage of CMYK should not exceed 240% for newsprint or 320% for coated premium papers. (Note how "Dmax" comes into play here.)

Most commercial printers would agree that 200–250% total ink coverage is plenty rich for most black backgrounds and that less works fine, too.

Below are some common rich black formulations for offset printing. For publication work these numbers will be different.

#### **Rich Black Chart**

<b>Color</b>	<b>C%</b>	<b>M%</b>	<b>Y%</b>	<b>K%</b>
Cyan Black	70	0	0	100
Cool Black	70	30	30	100
Warm Black	30	40	40	100

#### **Neutral Blacks**

240% Black A	60	40	40	100
240% Black B	50	45	45	100
Shadow Target	70	65	65	80

MISC-resources

*links & charts*

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## *Design Supplies & Specialty Resources*

### *Local NYC Vendors*

#### **Custom Plastics & Samples**

Canal Plastics Center  
345 Canal Street  
212.925.1666  
[www.canalplasticscenter.com](http://www.canalplasticscenter.com)

#### **Small Run Bookbinding**

Allied Book Binding  
1170 Broadway @ 28th Street  
Suite 209 BMW  
New York, NY 10001  
212.229.1493  
[www.alliedsales.qpg.com](http://www.alliedsales.qpg.com)

#### **Art Supplies**

Pearl Paint  
308 Canal St  
New York  
212.431.7932

Sam Flax INC  
800-SAM-FLAX  
12 W 20 Street, New York  
425 Park Avenue, New York  
212.935.5353

A. I. Friedman  
44 West 18th Street  
New York, New York  
212.243.9000  
[www.aifriedman.com](http://www.aifriedman.com)

Utrecht Art Supplies  
111 Fourth Avenue  
(Between 11th and 12th Streets)  
New York City  
1.800.223.9132

#### **Laminating**

Dennis Laminating  
17 West 20th  
212.929.1050

Laminall  
11-42 46th. Rd.  
Long Island City, NY 11101  
718.786.5783

#### **Short Run Letterpress**

Eddens Letterpress  
1275 First Avenue  
New York, NY  
Contact: Clif Eddens  
212.746.5675

Soho Letterpress  
69 Greene Street, 4th Floor  
New York, NY  
Contact: Anne Noonan  
212.334.4356

#### **Book Binding Supplies**

*(Those cool aluminum posts,  
and book binding)*

Talas  
20 West 20th Street  
5th Floor  
New York, NY 10011  
212.219.0770  
[talasonline.com](http://talasonline.com)

# Quark Formating Key Chart

## Modifying Font Size

---

Increase Preset range	⌘+Shift+>
Increase 1 point	⌘+Option+Shift+>
Decrease Preset range	⌘+Shift+<
Decrease 1 point	⌘+Option+Shift+<
Resize Interactively	
Proportional	⌘+Option+Shift+drag handle
Constrained	⌘+Shift+drag handle
Nonproportional	⌘+drag handle

---

## Modifying Horizontal/Vertical Scaling

---

Increase 5%	⌘+] ]
Increase 1%	⌘+Option+] ]
Decrease 5%	⌘+[ [
Decrease 1%	⌘+Option+[ [

---

## Modifying kerning/tracking

---

Increase 1/20 em	⌘+ Shift+}
Increase 1/200 em	⌘+ Option+Shift+}
Decrease 1/20 em	⌘+ Shift+{
Decrease 1/200 em	⌘+ Option+Shift+{

---

## Modifying Baseline Shift

---

Up 1 point	⌘+Option+Shift++ (plus)
Down 1 point	⌘+Option+Shift+- (hyphen)

---

## Modifying Leading

---

Increase 1 point	⌘+Shift+''
Increase 1/10 point	⌘+Option+Shift+''
Decrease 1 point	⌘+Shift+:
Decrease 1/10 point	⌘+Option+Shift+:

---

# Quark Formating Key Chart



## Modifying Font Size

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Increase Preset range	⌘+Shift+>
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Decrease 1 point	⌘+Option+Shift+<
Resize Interactively	
Proportional	⌘+Option+Shift+drag handle
Constrained	⌘+Shift+drag handle
Nonproportional	⌘+drag handle

---

## Modifying Horizontal/Vertical Scaling

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Increase 5%	⌘+] ]
Increase 1%	⌘+Option+] ]
Decrease 5%	⌘+[ [
Decrease 1%	⌘+Option+[ [

---

## Modifying kerning/tracking

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Increase 1/20 em	⌘+ Shift+}
Increase 1/200 em	⌘+ Option+Shift+}
Decrease 1/20 em	⌘+ Shift+{
Decrease 1/200 em	⌘+ Option+Shift+{

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## Modifying Baseline Shift

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## Modifying Leading

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Increase 1 point	⌘+Shift+''
Increase 1/10 point	⌘+Option+Shift+''
Decrease 1 point	⌘+Shift+:
Decrease 1/10 point	⌘+Option+Shift+:

---

## Key Charts

“	Option [	
”	Option Shift [	
‘	Option ]	
’	Option Shift ]	
–	Option hyphen	en dash
—	Option shift hyphen	em dash
...	Option ;	ellipsis
•	Option 8	bullet
°	Option shift 8	degree
fi	Option shift 5	
fl	Option shift 6	
©	Option g	
™	Option 2	
®	Option r	
¢	Option 4	
¡	Option 1	
¿	Option shift ?	
£	Option 3	
ç	Option c	
Ç	Option shift c	

ˆ	Option e (then the character)
˘	Option ~ (then the character)
¨	Option u (then the character)
˜	Option n (then the character)
ˆ	Option i (then the character)

## *Conversion Chart*

### *Fraction to Decimal*

Fraction	Decimal Value
1/32	.0312
1/16	.0625
3/32	.0937
1/8	.125
5/32	.1562
3/16	.1875
7/32	.2187
1/4	.250
9/32	.2812
5/16	.3125
11/32	.3437
3/8	.375
13/32	.4062
7/16	.4375
15/32	.4687
1/2	.500

Fraction	Decimal Value
17/32	.5312
9/16	.5625
19/32	.5937
5/8	.625
21/32	.6562
11/16	.6875
23/32	.7187
3/4	.750
25/32	.7812
13/16	.8125
27/32	.8437
7/8	.875
29/32	.9062
.15/16	.9375
31/32	.9687
1	1.0