turley tech sheets

photo tips

scanning terminology

You may find it helpful to know some basic terms:

- Grayscale: A scan of a photograph or artwork that uses gray tones (up to 256 different shades of gray, to be exact).
- Line art: An image comprised of solid black and white — no gray tones.
- Image size: The physical dimensions of the final scanned image.
- File size: The total number of electronic pixels needed to create a digital image, measured in kilobytes. The more pixels an image uses, the more detail it will contain.
- Dots per inch (dpi): The number of electronic dots per inch that a printer can print — or that a digital image contains.
- Lines per inch (lpi): The number of lines of dots per inch in a halftone screen.
- Resolution: The quality of detail in a digital image, depending upon its number of dots per inch (dpi).
- Tiff: One of the most common formats for saving and printing scans (an abbreviation of Tagged Image File Format).
- EPS: Another common format for saving and printing images, especially illustrations (short for Encapsulated PostScript).
- Moire (mor-ray) pattern: A funky dot pattern that's formed when a previously screened photo is copied, then reprinted using a new halftone screen.

scanning rules of thumb

■ Name and store your scans carefully. Think about it this way: When you import an image into a page-layout program, you might think you're looking at the actual scan when you see it on your screen — but you're not. You're looking at a low-resolution rendering of the original scan.

■ When you finally decide to print that page, however, your computer traces a path back to its original images and uses that information for printing. This means two things: You need to store all scans until they're finally printed, and you need to store them in a consistent place, so that your computer will be able to find them when it's time to print.

■ Allow for dot gain. Images often print darker than they appear on your monitor. Ask your printer how your screen dots will behave when the ink hits the paper — and learn to compensate consistently every time you scan. Printing on newsprint tends to yield a dot gain of approximately 30%.

■ Crop and scale images as you scan. You can save memory by scanning only that part of the image you plan to print. Remember, too, that if you plan to enlarge an image when you import it, you should scan it at a higher resolution; if you plan to reduce it, scan at a lower resolution.

Consider using low-resolution scans for big jobs. If your computer's a little slow, you might save time if you scan those complicated images twice: a low-resolution version that won't slow you down while you work on the page, and a high-resolution scan that you can import when you're ready to print.

Keep your file sizes as small as possible. Unnecessarily large scans waste memory, slow down your software, take longer to print — and don't always mean higher quality output, anyway. As a rule of thumb, the dpi of a grayscale image (the resolution you scan it at) should be twice its lpi (the resolution you print it at). In other words, if you print at 100 lpi, you should scan at 200 dpi.

Yes, image resolution can get confusing — all those dpi's and lpi's are tough to keep straight. If you're unsure how to measure "high" or "low" resolution when you're scanning or printing, consult the chart on the bottom of page 3.

— Adapted from Tim Harrower

Turley Publications, Inc.
commercial printing
newspaper publishing

24 Water Street, Palmer, MA 01069
800-824-6548 • Fax 413-289-1977

turley tech sheets

photo tips

color correction by the numbers

If you're color correcting numerically rather than visually, you'll need to start with target CMYK values. You can also use these values to check whether your corrected color values displayed in Photoshop's "INFO" palette are within range of target printing values. Remember that the values in this chart are only guidelines and that color percentages may vary significantly based upon the ink, paper and press used. Also keep in mind that the relationship, or ratio between the color components is more important than the individual values. For example, to produce a lighter Caucasian flesh tone, be sure to reduce the C, M, Y, and K values by an equal amount.

	C	M	Y	K
Neutral Highlights	5	3	3	0
Neutral Shadow	95	85	85	80
Neutral Shadow (newsprint)	65	55	55	75
Deep Violet	100	65-75	10	25
Deep Purple	85	95	10	0
Sky Blue	60	23	0	0
Aqua	60	0	25	0
Kelly Green	100	0	100	0
Lemon Yellow	5	15-20	95	0
Gold	5	15-20	65-75	0
Orange Red	10	100	100	0
Orange	5	50	100	0
Deep Red	25	100	80	20
Pink	5	40	5	0
Beige	5	5	15	0
Caucasian Flesh	15-20	45	50	0
Asian Flesh	15	40	55	0
African American Flesh	35	45	50	25-35
Chocolate Brown	45	65	100	35-40
Grey	55	42	42	15
Silver	20	15	14	0

production tips

- Border all photos (.5 pt - 1 pt)
- Choose your photos carefully; the right photo can say it all & a bad photo can ruin a good page
- All photos should have interesting cutlines
- Faces in photos should be at least the size of a dime
- Eyes should look into the page, not off the page
- Hands that are pointing, should point into the page, not off the page
- Consider running a progression or sequence of photos for variety
- Vary the photo size on your pages
- Crop out the parts of the photo that aren't necessary
- Whenever possible, don't crop out body parts
- When in doubt, lighten your photo for better quality newspaper reproduction
- Make sure your photos are scanned in and set at the proper printing resolution

Turley Publications, Inc.
commercial printing
newspaper publishing

24 Water Street, Palmer, MA 01069
800-824-6548 • Fax 413-289-1977