



Scanning Settings

*Wouldn't you like a nickel for each time you've been asked...
"What settings should I scan at?"*

That depends on what you are scanning, but more importantly what you are doing with the scan!

Scanning for Digital Printing

There are lots of charts and formulas used to calculate what resolution is needed for a digital print.
REMEMBER that viewing distance is a significant factor in every print!

- Here is an easy method for a quick "off of the top of your head" answer: *4MB for each square foot of finished print.*
 - So if you will be making a poster 2 feet x 3 feet (6 square feet) your file should be 24 MB in size.
 - Almost every scanner today shows you the file size resulting from the resolution you have chosen.
 - Crop the area of the original you want, and then increase the scan resolution until your file size is close.
- Another method is for to calculate the image as the final print size, and set the image dpi to ¼ of the printer's resolution.
 - So if I want to print a 24"x 36" print on my 600dpi printer, my 24" x 36" image needs to be at least 150 dpi.
 - Image resolution can be increased after scanning through the software's "RESAMPLE" command
- Finally you might like the chart method. Pick the image size you have now, the final print resolution, and get the final file size.
 - The charts are readily available on the internet for different specific applications. Here is one example:

IMAGE SIZE	SQ. INCHES	50 dpi	75 dpi	100 dpi	150 dpi	200 dpi	300 dpi	450 dpi	600 dpi	1000 dpi	1200 dpi	2000 dpi	4000 dpi
35 mm	1.4	11k	23k	40k	91k	160k	359k	808k	1.4	3.9	5.6	15.6	62.2
2.25	5.1	38k	84k	149k	335k	594k	1.3	2.9	5.2	14.5	20.9	57.9	231.7
3x5	15	110k	248k	440k	989k	1.7	3.9	8.7	15.5	42.9	61.8	171.7	686.7
4x5	20	147k	330k	586k	1.3	2.3	5.2	11.6	20.6	57.2	82.4	228.9	915.5
4x6	24	176k	396k	704k	1.6	2.8	6.2	13.9	24.7	68.7	98.9	274.7	1098.6
5x7	35	257k	577k	1.0	2.3	4.0	9.0	20.3	36.1	100.1	144.2	400.5	1602.2
6x8	48	352k	792k	1.4	3.1	5.5	12.4	27.8	49.4	137.3	197.8	549.3	
7x9	63	462k	1.0	1.8	4.1	7.2	16.2	36.5	64.9	180.3	259.6	721	
8x10	80	586k	1.3	2.3	5.1	9.1	20.6	46.4	82.4	228.9	329.6	915.5	
8x11	88	645k	1.4	2.5	5.7	10.1	22.7	51.0	90.6	251.8	362.6	1001.1	
10x10	100	733k	1.6	2.9	6.4	11.4	25.8	57.9	103.0	286.1	412.0	1144.4	
10x12	120	879k	1.9	3.4	7.7	13.7	30.9	69.5	123.6	343.3	494.4	1373.3	
10x14	140	1.0	2.3	4.0	9.0	16.0	36.1	81.1	144.2	400.5	576.9	1602.2	
10x16	160	1.1	2.6	4.6	10.3	18.3	41.2	92.7	164.8	457.8	659.2	1716.6	
12x12	144.0	1.0	2.3	4.1	9.3	16.5	37.1	83.4	148.3	412.0	593.3	1648.0	
12x14	168	1.2	2.7	4.8	10.8	19.2	43.3	97.3	173.0	480.7	692.1	1922.6	
12x16	192	1.4	3.1	5.5	12.4	22.0	49.5	111.2	197.8	549.3	791.0		

Scanning for Vectorizing / Tracing ... for Cut Vinyl and Routing

Unfortunately, this "artwork" often comes in the form of a business card or 10th generation fax.

- Rule of thumb here is: the smaller the artwork, the greater scan resolution needed to give you the details you so desperately need.
 - "Real" artwork, like a 3x5 black and white slick might only need to be scanned at 300 dpi
 - A logo from a business card will probably need to be scanned at 800 dpi
 - On occasion a higher resolution may yield fair results, but generally best to get a larger, better artwork
- The real magic happens in your Trace Settings after the scan.
 - Since the tracing routine is so fast, trace the image several times each with different settings
 - Between the different vectors, choose the most accurate, with the least number of points.

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