

YOUR OWN DECALS
ON
YOUR OWN COMPUTER
By
JOHN DUNNEWIND

Making simple decals using your own computer and printer is not really difficult. Most any thing that you place on your screen can be turned into a decal although there are a few restrictions mostly having to do with certain colors. Fancier or more complex decals can be done though more challenging, how challenging depends on the software you have. how well you know it, your artistic skills and how innovative you are.

For modelers, making your own decals frees you to make signs, logos, etc that are not available or a best mean an expensive one of a kind custom job by a commercial supplier. Once you've placed something on your screen printing it on some kind of paper, making it into a decal, an overhead, a tee-shirt iron on, your own railroad letterhead, box labels, bad order forms, car cards etc is predominately a matter of the media you print it on. If a commercial decal is available I would use it, as it saves time and potentially money.

We will start with Media & Printers, then Software, then Making Decals and Other Things, followed by live creations. My suggestions will mostly be based on DOS based products, HP printers and software that I have. There are other software packages, printer and media suppliers that are suitable for these purposes. You probably don't have the same things I have so look for similar programs, features, and tools on your system.

MEDIA & PRINTERS

Again, the type product you end up with is dependent upon the media you choose to print on. Excluding the quality of your artwork, the quality of printing depends not only on the quality of printing you chose from print commands but on the type of media you use, the quality of the media you use, and the compatibility of the printer, ink and media. All affect the quality of the final print. I worked for Hewlett Packard and prior to that a major manufacturer of chart recorders. I know from experience that the printer characteristics, ink characteristics and media characteristics need to be selected as a system. When you chose to buy ink and/or paper from other than the printer manufacturer you become the *system engineer*. This is not to say you can not get good or acceptable results from someone else's paper and/or ink but the results are primarily your responsibility and risk.

Decal Paper

Available for ink and laser jet type printers. Other types for silk screening etc are available but not relevant to the scope of this article

Available in Clear and White. The clear allows the color of surface on which the decal is applied to show through. Most printers/programs assume that you are printing on a white back ground so white is not needed nor normally available. The white decal background provides a nontransparent background that blocks any thing behind it. As such the white decal film is not suitable for making white lettering where the car color needs to show through. Except for the old Alps printer for which white ink was (? is) available, there is no good, easy way to create, for example, white car data decals. Black car data can be done on clear film leaving the car color show through. A red "COKE" sign with white lettering or a black sign with white lettering will work on white decal paper but not on clear file unless applied on a white surface. Metallic colors are also an issue and I have not heard of a source for HP or other brands of printers.

Sources [This information is subject to change so check the source(s) before you make any decisions]
Also note your are interested in what is called "*water-slide decal paper*" if you want the traditional decal that is soaked in water and slides off on to the model. At least one source also offers rub on i.e. dry transfer type decals.

Micro-Mark
340 Snyder Ave
Berkeley Heights, NJ 07922-15922
1-888-263-7076 Customer questions
1-800-225-1066 Orders only
<http://www.micromark.com/>

They have ink jet and laser jet paper in clear and white.
The fixative they sent under part #82858 was Krylon Crystal Clear acrylic coating.

Bare-Metal Foil Co.
P.O. Box 82
Farmington, MI. 48332
<http://www.bare-metal.com/>

They have ink jet and laser jet paper in clear and white.
They recommend using Microscale Liquid Decal Film to fix/seal the decal after printing.

Bel Incorporated
10913 NW 30th Street Suite105
Miami, FL 3172
305-593-0911
<http://www.beldecal.com/> tow other web addresses will take you to the same site
<http://www.modeldecal.com/> and <http://www.decalspaper.com/>

They have ink jet and laser jet paper in clear and white.
They also offer dry transfer film that is printable, decals for wood, ceramic, porcelain, soap, candles, glass and other variations. They also offer aids in making up your own design for them to print or for you to do on your own printer.

Evan Designs
P.O. Box 2004
Broomfield, CO, 80038
<http://www.modeltrainssoftware.com/>

They have ink jet paper. They claim the non printed area dries white and should be if you want protected with a *WATER BASE CLEAR COAT*. They also say that if you want non printed areas to be clear to apply an oil base varnish or Dullcoate

HPS a.k.a. hemmi papilio supplies
P.O. Box 855
Rhome TX, 76078-0885
T 817-489-5249
F 817-489-3650
<http://www.papilio.com/>
e-mail sales@papilio.com

They have ink jet and laser jet paper in clear and white. They also offer other types of decal media and offer the use of software to set up printing your own decals at home. They also said their ink jet film thickness was .0015"

You do, in general, need a fixative to prevent water from causing the ink to run except there now some exceptions such as Evans Designs as mentioned above. See cautions under printing decals below. Also several sights said that due to shipping restrictions they would no longer ship Krylon Crystal Clear acrylic coating, suggesting you get it at a local hardware or paint store.

I have used Micro-Mark's ink jet decal paper. My only issue was the decal film came out relatively thick, so on small models it leaves a thick edge that is hard to eliminate. I recently measured the film and found it to be less than .001" thick so I suspected the Krylon Crystal Clear acrylic spray left a thick coating. Where you can let the film go to, for example, the edges of a sign the film edge is not really noticeable.

For other media you need to buy, iron on transfer media for Tee Shirts, Transparency Film for overheads, Photo Paper which comes in glossy, mat or other finish. There are other types of media available such as for business cards, labels ceramic etc, etc.

Printing

Lets start by getting familiar with printer controls. In the following printer set up I refer to *MS Word*, however, most all programs that run on *MS* based operating systems from *Windows 98* on, have the same or nearly the same printer control arrangements

In *MS Word* click on File—Page Setup Here you have 4 Tabs.

Margins you may want to change them to smaller values to maximize the use of relatively expensive decal film.

Paper Size you can reduce the dimensions as you use up the sheet. **NOTE I start by printing at the bottom edge so that when I insert the paper the next time the starting upper edge is straight, even and square.** You may possibly want to change from *Portrait* to *Landscape* orientation depending on what you are doing.

You may or may not want to do something under *Paper Source* and *Layout*. Note it is a good idea to set the top, bottom and side margins to the minimum so as to use as much of the decal paper as possible since it runs about \$.80 to \$1.20/sheet.

In *MS Word* click on File—Print Preview This is a good place to review you work prior to printing. Try each of the icons which are fairly self-explanatory.

In *MS Word* click on File—Print In the first block select the printer you want – if you have a photo printer use it as you can usually select a higher dip than the typical office document printer that has only 300dpi. You will get a sharper image, which is important, where small print is involved,

Click on *Properties*.

Select the *Layout* tab. Things are fairly self-explanatory. Again set the margins to a minimum.

Select the *Paper/Quality* tab. In the first block you can select the *Paper Source* if your printer has more than one tray.

Under *Media* use the pull down tab to specify the media you will be using. For decal paper use the setting recommended by the supplier. This is an important step as it helps the printer match the printer and ink to the media so you get the best results.

In the next block *Quality Settings* it is best to first select *Draft* then print a draft copy which is a fast print at low quality –use regular paper or scrap from left-overs-verify the layout, position, size and check for errors. Once you are happy with the draft go back to the same point and change from draft to *Best* and print the final copy on the decal paper. Note: if you are printing black and white it would be best to select that rather than color.

Once you are finished with quality settings, click *OK* which will return you to the *Print* window. Most times you will print only one page of decal paper at time so other setting on the print page can be normally left in their default settings.

2

PRINTING the FINAL DECAL; ALWAYS check the back side of the decal paper to make sure that you have chosen either the clear film or white film as needed.

The GLOSSY side of the decal paper is the side you print on, so on most ink jet printers you need to insert the decal sheet glossy side down. If you are sure your decal has no errors, is the size you want and is at the bottom of the page then click on *File—Print* and then on the print window click on *OK*. Once the ink has dried, I wait about 30min, then cut out the area around the decal(s) saving the unused portion for future use. Seal the decal(s) using a clear glossy spray such as, Testors *Gloss Clear Coat* or other spray that you know is compatible with decal film. To prevent the ink from bleeding it is best to use several light coats rather than one heavy coat. Allow the final coat time to thoroughly dry and then apply the decal as you would most any other decal. At least one manufacturer recommends using Microscale *Liquid Decal Film* to fix/seal the decal after printing.

SOFTWARE:

Chances are somewhere in your computer there is a software program that can be used to make decals, in fact there is a good chance there is more than one. Some will be better than others and which one is best may change depending on the nature of the project. You may use several different programs to generate a single decal. Among the programs that can be used to generate decals are *MS Works*, *MS Office/Word*, *The Label Factory*, *The Print Shop*, and the list goes on. A variety of photo programs, CAD programs, Art/Drawing programs are available from many different suppliers. Most any of these can be used to create signs, labels, artwork, etc to make decals, overheads etc. Label making programs while having some restrictions can also be used—the good news being they are often free or available at very low cost to get you to buy their media. These often have a variety of designs included such as labels for canning that could be used for the road side fruit stand that you just built. Just select the clip art, place and size it. Then choose the style, size, and color of type. You can even vary these characteristics. Usually it takes a few adjustments to get things balanced. Once you ready print a sample on regular paper and check everything. Then instead of inserting a sheet of labels insert your decal paper. .

In doing any of the following you need to respect copyrights, registered trademarks etc.

Your digital camera can be used to take pictures of signs, rugs or other things that will form all or part of your artwork. Using a photo program you can crop out unwanted portions of the image, adjust colors, add special effects etc then save the image and later import the image into *MS Word* for example and then adjust the image to its final size.

Your scanner can be used to scan photos, images of signs, rugs or other things that will form all or part of your artwork. Save the image in a photo format such as TIF or Jpeg and then use a photo program to crop out unwanted portions of the image, adjust colors, add special effects etc. Save the image and later import the image into *MS Word* etc and then adjust the image to its final size.

CAD programs can be used to layout very neatly done mechanical layouts. I made my own private model railroad logo using a cad program which stores the image only one way. I printed a large image at "Best " quality then used my scanner to save it as a Jpeg file at the highest setting. This file is now being used to create decals for cars, letterhead, bad order cards, car cards etc all with a common company logo.

If you are artistic you can create drawings in various programs such as *Paint* to create the entire decal or some portion of it.

Programs for making labels, business cards, forms etc can also help layout decals etc.

MAKING DECALS AND OTHER THINGS:

Lets start with a simple sign in *MS Word*. To prepare the page click *View* on the menu bar, then select *Page Layout* and click Ruler to on. Under Toolbars I would suggest you have Standard Formatting and Drawing selected and others off so there is less clutter.

Lets become more familiar with some of the tools we have available.

Under *Insert* there are three tools that are quite useful in creating our artwork.

Under *Picture* you will find 4 choices that are the most useful.

Clip Art will permit you to select from a variety of items in your *Clip Art* file. You can also find in many software stores clipart programs that will add many choices to your selection-there are also some advertised in model railroad magazines

From File is a good way to insert a photo of what ever you have in your computer files.

Auto Shapes Gives you several categories of shapes to chose from with each category having s number of choices. You can shrink or stretch the object by clicking on one of the small squares and dragging it.

Word Art gives you a choice of a variety of word shapes/stiles that can help create some neat signs and logos.

Text Box gives you a way to place a box, adjust its length and width as well as the position of the box on the paper. You can type with in the box and then move the box as a whole on the paper.

Object permits you to bring in something you created in another program such as a CAD drawing and place it on your paper in WORD

Under *Format* there are three items that are especially helpful.

Font is the one you will probably use the most. It is where you chose the type or style of type from a drop down. In choosing a Font select one that is with in the period you are modeling and appropriate for the signs usage. A funeral parlor sign would not use flashy lettering or colors - save them for **JOE'S USED CAR LOT!!!** You can also select Font Style from a drop down as being Regular, **Bold**, *Italic*, or **Bold, Italic** Since this applies to everything, it is often better to use the tool bar if you want to frequently switch styles. You can set the size here or from the tool bar which I find handier if I will be using multiple sizes and or fonts such as when I did the title of this article.

You can from the tool bar Underline or under *FONT* use the Underline drop down to select among a variety of underline effect.

You can also set the front color here or do it from the tool bar.

Effects permit you to apply one or more special effects although some are mutually exclusive. Among the more useful ones are

SHADOW, OUTLINE, EMBOSS, and ENGRAVE

Borders and Shading - Guess what one of the things you can do in this section is. You can also select the color of the border as well as line style i.e. solid, dotted, dashed, etc. You can also control the line weight and apply the box to the whole page or to a section – this last is handy for signs.

In addition you can apply a shadow and you can add shading control the color density and the shading style. This gives you the ability to "soften" the background color of you sign.