## Reusable Slide-in-Mats

If you belong to a Camera Club, you probably have slide and print competition/evaluation. After you have shown your slides and prints and bring them home, you need a place to store them. Slides are easy to store, but those prints that are mounted and matted take up a lot of space. This article will show you how to make a reusable Slide-in-Mat.

All of us like to show our 4 X 6 prints to our friends, and sometimes we will take our favorite prints and mat them to make a better display. I would make a new mat for each print. Then one day, about five years ago, I got the idea to make a Reusable Slide-in-Mat. Since I have been cutting my own mats for 8 X 10 and 11 X 14 prints, I had some scrap material laying around. I figured that an overall mat size of 6 X 8 would do fine for my 4 X 6 prints. I made some drawings and sketches and constructed my first prototype Slide-in-Mat that is shown in Figure-1.


Figure 1

Since I now make my prints on an Ink Jet printer, I enter more prints at my Camera Club. My spare bedroom has become a storage for all those matted prints.
So, I set out to make larger versions of the Slide-in-Mats. I came up with two new designs. One for 8 X 10 prints and a separate design for 11 X 14 prints.

Since my Epson Ink Jet Printer takes both $81 / 2$ X 11 and 11 X 17 inch paper, a design was needed to handle the overall paper size. This would save me cutting and trimming the prints. I liked this idea since trimming prints is not one of my favorite things to do.

The overall size of the mount and mat for the $81 / 2$ X 11 inch paper would be made 12 X 16 inches. The overall size of the mount and mat for the 11 X 17 inch paper would be 16 X 20 inches.

I double mat my prints because I like the white border around the image. I picked black for my top mat and white for my bottom mat since most all prints would work with these basic colors. My next challenge was to decide how large to make the opening for the print.

Remember, us guys who print on Ink Jet Printers do not always make prints that are 8 X 10 or 11 X 14 inches. Since most of the prints are made from 35 mm slides or negatives, that are scanned into the computer, the aspect ratio is 3:2. I usually make my small prints anywhere between 7 X $10 \& 7.5 \mathrm{X} 10$ inches.
The larger prints, that I make on 11 X 17 inch paper, are usually made 10.5 X 15.75 inches.
The opening in the mats would have to be about $1 / 4$ inch smaller in each dimension. As mentioned above, the actual print dimensions may be a little different from time to time. Therefore, two or three different mat openings may be needed. This is the opening where you view the picture, not the slot opening where you insert the picture.

Listed below are recommended openings for two different size mats:

| $\underline{12 \times 16 ~ \mathrm{mat}}$ | $\underline{16 \times 20 \mathrm{mat}}$ |
| :--- | :--- |
| $6.75 \times 9.75$ inches | $10.25 \mathrm{X} \mathrm{15.5}$ inches |
| $7.25 \times 9.75$ | 10.25 X 15.0 |
| $7.75 \times 9.75$ | 10.25 X 14.5 |

Here is a description of the design. The Slide-in-Mat is made up of four layers:

1. Top black mat
2. Bottom white mat
3. Cardboard spacers
4. Mount board


The top and bottom mats are bonded together to form a double mat. (See Figure-3). The cardboard spacers are arranged and bonded on three sides of the mount board. (See Figure-6. The cardboard spacers provide the space necessary for the print to slide in between the mats and the mount board. This forms the slot opening. All the parts are then bonded together to make the finished product.

Figure-2 shows the two separate black and white mats. The black mat is bonded to the top of the white mat as shown in Figure-3. This forms our standard double mat.

Figure 4 shows a thin white cardboard strip that will be used as a spacer.
This thin cardboard is part of the packing material that Epson uses in their packs of Ink Jet paper. I have been saving them from the Ink Jet paper that I buy, and they are now coming in handy.


The cardboard material is 11 X 17 and is about 20 mils thick. I found that this thickness is just right for making spacers that fit between the top mats and the mount board. The spacers are cut out and pieced together as necessary to meet the size required, as shown in Figure-6.

The Epson Glossy Photo Paper is about 10 mils thick. This enables you to slide the print into the slot opening produced by the spacers. It will be a loose fit and the print will tend to shift if the mat is tilted. To overcome this problem, a couple of sheets of paper are inserted behind the print to hold it in place. The mat and extra paper will now be reusable whenever you put in your next print.


Figure- 5 shows the black mount board that is $3 / 16$ inch thick and is used for the backing. A $1 / 4$ inch thick mount board can be used if desired.

The spacers are arranged in a U-Shape to a dimension that matches the print paper that will be used. A clearance of about $1 / 8$ inch is provided around the print paper on three sides. The dimensions and position of the spacers are designed so that the print will be in the center of the mount board. The spacers are permanently attached to the mount board with bonding spray or glue. (See Figures-6 \& 7).


To complete the design, the black-white mat combination is also permanently bonded to the top of the spacers as shown in Figure-8.

Figure-9 shows an exploded view of the components (layers), that make up the Slide-in-Mat:

- Black mat
- White Mat
- Mount Board with its Cardboard Spacer Strips. (The two bottom Layers combined into one)

Figure-10 shows the Slide-in-Mat fully assembled. The slot opening for the print can be seen on the edge of the assembly.
Figure - 11 Shows a 10.5 X 15.75 inch print on 11 X 17 paper, being inserted into the Slide-in-Mat.


If you don't have a mat cutter, you can have an Art Framing store make the mats to your dimensions. You can also use the standard size single or double mats available in Art Supply stores.

But you must remember that the off-the-shelf mats are usually made to the standard dimensions for 8 X 10 or 11 X 14 prints. To complete the design, all you need to do is make the spacers, buy a mount board and bond everything together.


Figure-12
Figure-12 shows a cross section (end view), of the $16 \times 20$ inch Slide-in Mat. The slot opening in this mat is 11.25 inches wide to accommodate 11 X 17 inch paper.

SUMMARY:
There will be an initial cost; but, the Slide-in-Mat can be used over and over again as long as you keep it clean and take good care of it. Try making the first one for your 10 inch prints on 12 X 16 inch mount board. Give it a try; its not that difficult. It will save you work in the long run.
You will not have to mount and mat the print with bonding spray or adhesive, each time you submit it for judging. The Ink Jet photo paper is kept surprisingly flat in the Slide-in-Mat. Another big advantage of this design is that it works just as well with monochrome or color prints.
Your prints can be easily removed and stored in a lot less space than prints that are mounted and matted. If, at a later date, you need one of the prints for another competition or showing, you can easily insert it into the reusable Slide-in Mat and you are ready to go.

Since this article was published, I have designed a Slide-in-mat for 13 X 19 inch paper. The overall mat size is $16 \times 20$ inch which is made from the standard mat size of $32 \times 40$. The $32 \times 40$ inch mat is cut into four $16 \times 20$ inch mats. I have made two different openings: $12.5 \times 17.0$ and 12.5 X 17.5 inches.

I have also made a couple of Slide-in-mats with colored mats for the top mat, instead of using black.

