

Stereo Cards Techniques & Tools

**Using tools to simplify
making stereo cards**

**A workshop by Steve & Suzanne Hughes of
GA-3D
presented for the**

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Types of Cards



Through the years, cards have been made in many different ways and sizes.

Holmes format cards



We will be focussing on the Holmes format cards, but these techniques and tools will work with any size if constructed properly.

Full image cards

- Front of card is a single print.
- Back of the card can be a single print.
- Lots of room for graphic design.
- Can be assembled without tools but it's not easy.

The full image card became popular when photo printers became affordable making a 7" wide print cost similar to a 4x6".

Separate or single chips

- Front of card may or may not have a graphic.
- Paper other than card stock may be used.
- Back of card can be in another format.
- Can be assembled without tools but it's not easy.

Separate chips or a single chip can take advantage of commercial printers 4x6" or 3x3" pricing.

Making 'tissue' cards

- Replicate the effect of antique 'tissue' cards.
- Use very thin 5-6 mil paper with glossy front and plain paper back.
- Front image is in B/W with a color back image.
- Back of paper is made waterproof with "workable fixative."

'Tissue' cards were magical. They were in black and white until they were lit from behind, then color magically appeared.

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Making curved cards

- Use 100% Rag for the backing board, pre-cut and cornered.
- Wipe the board with a damp paper towel, water should be warm, then wrap the blank around a curved card using rubber bands or small clamps.
- When the board dries, it will be curved and stay that way.
- Use locator marks or a jig to paste in the image.

Older cards have a curve in them. Does it really enhance the 3D effect or just make it harder to replicate?

Tools to Use



There are many ways to apply glue to the back of the image. The Xyron 900 applies an even layer of glue on one side and a clear film on the other.



The 15 inch RotaTrim Professional trimmer does a wonderful job for all our straight line cuts even 4 ply mat board.



A simple alignment frame can help get the front and back images squarely placed on the card.



A precision alignment frame can really simplify applying separate or single chips to the front of the card.



A vacuum table can eliminate most of the skill involved in placing a print or chips on the front, but cutting becomes important.



The Lassco Model 20 corner rounder with 1/4 inch die easily rounds the corners which makes it easier to slide into a sleeve.

The Vacuum Table



The vacuum table with no top.

The vacuum table

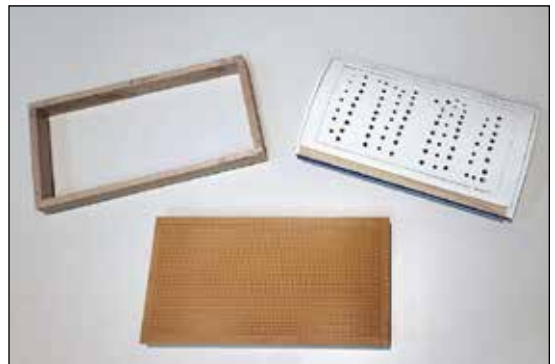
- Two 80mm computer fans for suction, curved cards may need more power.
- 12 volt power supply.
- Aluminum 'L' brackets that are removeable.

Cost about \$15 for fans and power.

Interchangeable tops

- Smooth perforated phenolic board which won't scratch prints.
- A curved top to match Keystone cards.
- A riser to allow the top to be above the 'L' brackets if need be.

You can build whatever you want depending on your needs.



The interchangeable tops.



A side view showing the curvature for the Keystone curved cards.

Constructing a vacuum table

If you are interested in building a vacuum table as described here, please contact

Steve Hughes
steve@shughes.com

Plans may be made available if there is significant interest.

Plans will need to be drawn up since this was a design as you go project.



The above image is the front of our 'tissue' card. When you hold the page to the light, you will see the image in color. This is how 'tissue' cards worked. This pamphlet was printed on Hammermill Premium Color Copy 28 lb. paper using the HP Color LaserJet Pro 4201 printer in standard mode. The images were prepped using PhotoShop and aligned using InDesign.

Cost of Preferred Tools

Item	Example Source	~ Cost
15 inch RotaTrim Professional trimmer	Art & Craft stores, photo stores	\$250
Lassco Model 20 corner rounder with 1/4 inch die	speedpress.com or specialty office store	\$290
Xyron 900	wilde-ideas.com or craft store	\$90
Alignment Frame	You build it	\$40
Precision Alignment Frame	You build it	\$40
Vacuum Table	You build it	\$15+



Constructing an Alignment Frame

Material List

Item	Source
12 x 12 inch 3/8 inch plastic square	Home Depot or Lowe's
3/16 inch thick yard stick	Wal-Mart
12x12 inch sheet of Mylar	Craft Store
4 feet of 1/8 inch or thicker 1 inch wide self adhesive felt	Home Depot or Lowe's
(6) 6-32 or 8-32 stainless steel machine screws 1/2 to 5/8 inch long with nuts	Home Depot or Lowe's

1. Home Depot or Lowe's both sell clear plastic sheet under a range of trade names like "Lucite", "Plexiglas" or "Lexan". You will have to buy a bigger sheet so go on a less busy day and get them to cut it to size for you. Get at least 3/8 inch thick material. Thicker is better but 3/8 is fine. Sand the edges of the sheet.
2. Buy a yard stick from Wal-Mart. It needs to be at least 3/16 inch thick. Cut two pieces 10 3/8 inches long out of it.
3. Place one piece of the yard stick on the plastic square and clamp it down tightly against the bottom and left edges. Then drill three evenly spaced holes though the yard stick and the plastic square. Remove the yard stick piece.

4. Place the Mylar square, it's used by quilters and easy to find at craft stores, on the plastic square. Drill or cut matching holes in the Mylar. Then put the yard stick back on. Put the screws through the plastic, Mylar and yard stick piece with the screw heads on the bottom of the plastic square. Tighten them down.
5. Place the other piece of yard stick on the plastic square and use a carpenter's square or artist's triangle to get it square with the first piece. Clamp it down.
6. Drill three holes through the second piece. Secure it with the other three screws.
7. Glue down the two corner guides (wood or aluminum) using command adhesive.
8. Place the felt all the way around the outside bottom edge of the plastic square. You may need to cut out small pieces to clear the screw heads.
9. Check to make sure the two pieces of ruler are square and adjust them if necessary.



Constructing a Precision Alignment Frame

Material List

Item	Source
12 x 12 or 8 x 12 inch 3/8 inch plastic square	Home Depot or Lowe's
8x12 steel Carpenter's Square	Home Depot or Lowe's
"C Thru" Graph Ruler 18 inch long and 2 inch wide. Thick is good!	Craft Store
4 feet of 1/8 inch or thicker 1 inch wide self adhesive felt	Home Depot or Lowe's
3 1/4-20 5/8 inch Pan head screws	Home Depot or Lowe's
3 1/4 nylon or plastic wing nuts or threaded knobs	Home Depot or Lowe's

1. Home Depot or Lowe's both sell clear plastic sheet under a range of trade names like "Lucite", "Plexiglas" or "Lexan". You will have to buy a bigger sheet so go on a less busy day and get them to cut it to size for you. Get at least 3/8 inch thick material. Thicker is better but 3/8 is fine. Sand the edges of the sheet.
2. Using a round file, file out a notch in the inside corner of the square if it doesn't already have one.
3. Then drill three, 13/64 holes through the long arm of the carpenter's square about .4 inch from the inside edge. Place them at 2 inches, 6 inches and 10 inches from the left outside edge. Use the grid ruler to measure for these holes.

4. Use a 1/4-20 tap to put threads in the three holes in the square. If you have to buy this, buy a drill and tap set. It costs about the same as just the tap and guarantees they will match. Note: be careful to get the holes threaded straight.

5. Drill slightly larger holes through the plastic square using the holes in the square as a guide. Make sure all the holes line up!

6. Take the steel carpenter's square and glue it to the lower left corner of the plastic sheet using framing glue or its equivalent. This is the paper thin glue that comes with a removable paper backing. Make sure none of the glue shows.

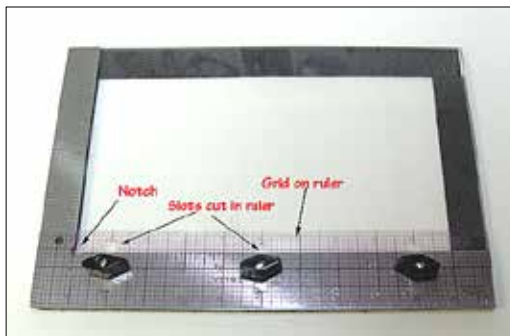
7. Place the grid ruler on top of the carpenters' square with the left end even with the left outside edge of the square and mark the three holes. Starting .3 inch from the inside edge cut three rectangular slots a little over .2 inch wide by 1.3 inches long. This is hard to do and requires a sharp X-acto knife and a lot of patience!

8. Drill holes half way into the back side of the plastic sheet for the heads of the screws. You can skip this step if you use thick felt to protect the screw heads. If you use thick felt, you may need to use longer 4-20 screws.

9. Insert the 3 4-20 screws from the back of the plastic sheet and screw them into the ruler. Be careful not to over tighten them or you will break the plastic. Just snug is good.

10. Place the felt around the outside edge on the bottom of the plastic sheet.

11. Place the grid ruler over the screws on the front and use the wing nuts to hold it on. It should move freely when the wing nuts are loose. If it does not, open up the slots a little.



Websites for Groups Sharing Images

- **Digital Stereoview Exchange Club (DSEC)** - Stereo view exchange club for 'digital format' <http://www.skep.com/3D/exchange.htm>
- **Groups Email Request to Join APEC/DSEC** - Email group to exchange ideas and information about the current exchanges <https://groups.io/g/APEC>