

## Anaglyph (Red / Cyan)

In order to obtain even more 3-D depth, the "Anaglyph" method is used. Instead of placing the left and right images side by side, they are placed on top of one another. The left image is **red** and the right image is **cyan** (blue/green).



The red / cyan glasses only allow the proper eye to see the corresponding image.



USE RED/CYAN 3-D GLASSES TO VIEW

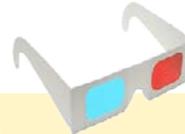
Notice how the skateboarder seems to float in front of the picture frame and the guy sitting on the bench seems to be back behind the picture frame.  
Cool isn't it?

## Phantograms

The newest and most exciting 3-D photographs today are known as "Phantograms." These images are specially produced Anaglyphs that when placed flat on a table seem to rise straight up off the page.



USE RED/CYAN 3-D GLASSES TO VIEW



### Phantogram

1. Place on a Flat, Horizontal Surface
2. Use Red /Cyan 3-D Glasses
3. View at a 45 degree angle w/your body square to the bottom of the page
4. The image will rise up like a Phoenix
5. Try placing your fingers around the printed object. This will give a reference to the height of the illusion.

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## 3-D

## PHOTOGRAPHY & BEYOND

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## 3-D Photography

### How does 3-D Stereo Work?

One of the ways that humans perceive depth is that each eye "sees" a slightly different angle of the same object. Your brain puts these two images together and wow- your world is in 3-D!

Stereo Photography uses the same principal by taking two pictures of the same object from slightly different angles. This can be done in a variety of ways. I have designed a two-camera rig that allows the cameras to be synchronized. This synchronization is especially important when capturing moving objects.



My Stereo 3- D Rig  
Note the 2 cameras. Flash and  
Microprocessor Controller  
(on the right side)

### Putting the Two Images Together

After shooting I will have a left and a right image of the same object. Once placed together, they create a "Stereo Pair." In the post-production phase I can control the 3-D depth. In order for your brain to merge the two images into 3-D, it is important to have the left eye only look at the left image and the right eye only see the right image.

### Stereo Cards

You may be surprised to learn that 3-D stereo photography has been around almost as long as photography itself. Originally, the two images were placed side by side on a card then viewed through a viewer (stereoscope or stereopticon) which allowed each eye to see the corresponding image. These 3-D cards were popular entertainment from the late 1800's to the early 1900s.



The device above is called a "Holmes" viewer as it was invented by Supreme Court Justice Oliver Wendell Holmes in the 1800's. Try a few cards using the following instructions:

- 1) Remove the Viewer from the Stand
- 2) Hold the Viewer by the Lower Handle
- 3) Place the Card between the wire metal Holders on the Cross Bar
- 4) Look into the Viewer and slowly Slide the Cross Bar back & forth for Focus –You may a need to move the cross bar a tiny bit right or left. Stop when the image is in focus
- 5) Close one eye - you will see regular 2-D, then open the eye and the 3-D will pop out at you