

HISTORY of 3D

3D or three dimensional can be defined as an object having or appearing to have width, height, and depth. The simplest forms of 3D movie projection use color filters to separate the left eye and right eye images.

The simplest forms of 3D movie projection used color filters to separate the left eye and right eye images. Traditionally, the image for the left eye is printed in red ink and the right eye image is printed in green ink. This process is known as anaglyph 3D.

The development of this 3D was further develop from use of polarized glasses, where light can be polarized or give different orientations. For example, one image can be projected in a horizontal direction while the second in a vertical direction. The corresponding glasses would allow horizontal polarization in one eye and vertical polarization in the other.

Around year 2000, implementation of digital cinema began. It use digital technology to create, distribute and project motion pictures to theaters, home and public. And a result, film *Avatar* was produced shot with Fusion Camera System as the best 3D film to date.

Most of the 3D Technology today requires viewers to wear special 3D glasses to make it more precise and clear. 3D glasses work by providing a separate image to each eye. The brain then combines the two images into a single image with 3D characteristics. The 3D process fools your brain into thinking it is seeing a 3D image, so it creates one for you.

Below is the chronology of 3D development.

1844	David Brewster introduces the Stereoscope, a device for taking stereo photographs.
1851	A 3D photo of Queen Victoria is displayed at The Great Exhibition.
1855	The Kinematoscope (Stereo Animation Camera) is invented.
1915	The first anaglyphic movie is produced.
1922	The first anaglyphic movie is shown in theatres (<i>The Power of Love</i>).
1935	The first color 3D movie is produced.
1947	The first Russian 3D movie, <i>Robinson Crusoe</i> , is produced.
1952	Touted as the world's first feature-length 3D movie, <i>Bwana Devil</i> is released in the USA. The film was shot using a process called Natural Vision.
1953	Two ground-breaking 3D movies are released: <i>Man in the Dark</i> and <i>House of Wax</i> . The latter is the first 3D movie released with stereo sound, and is directed by André De Tot who has only one eye.
1960	<i>The Bubble</i> movie released. It use new technology called Space-Vision 3D. This technology took two images and printed them over each other on a single strip. Unlike previous 3D technologies, it required a single projector with a special lens. This new technology removed the need to use two cameras to display 3D movies
1981	<i>Comin at Ya!</i> Is released in anaglyphic format using the "over and under" process (where two views are printed on a single frame, one above the other). This film launches the 3D boom of the 1980s that includes <i>Amityville 3-D</i> , <i>Friday the 13th Part III</i> and <i>Jaws 3-D</i> .
2009	James Cameron's film <i>Avatar</i> , shot with the Fusion Camera System he helped develop, is hailed as the best 3D film to date and helps push 3D towards the mainstream.
2010	The world's first dedicated 3D television channel, South Korea's <i>SKY 3D</i> , launches with side-by-side 1920x1080i resolution.

THE POWER OF BEAM SPLITTER

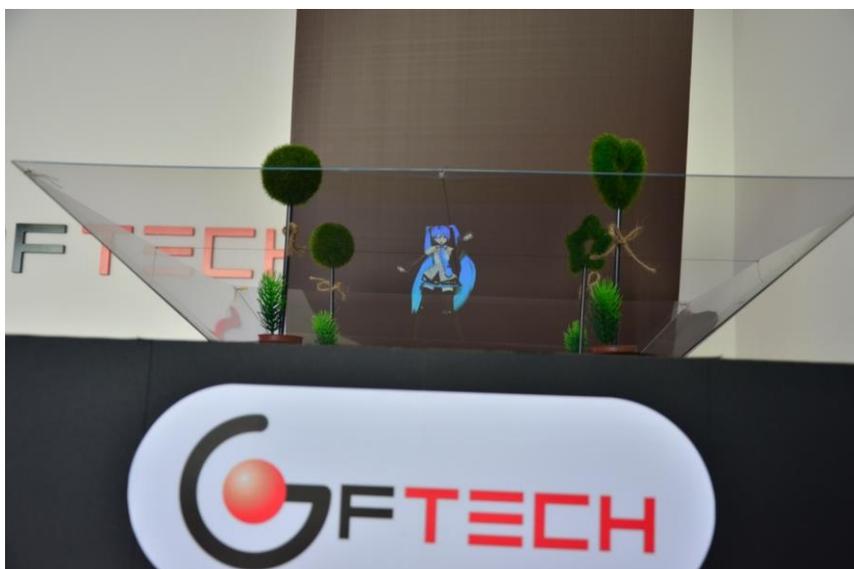
FIRST GENERATION (AIR PROJECTOR)

GF Technology Sdn Bhd have developed a 3D viewer on the basis of a 3D Technology. The ever first generation of beam splitter was introduced in 2010 by GF Technology Sdn Bhd. Formally, beam splitter is used to split a beam of light into two. The image of the reflection display is shown in holographic box. It reflects 3D images sharply. In addition, GF Technology used high quality of high reflective coating. The application can be use in glasses and lenses.



SECOND GENERATION (AIR PROJECTOR)

In year 2013, the second generation of Beam Splitter been born. It uses the beam splitter principles and produce even sharper 3D images with the second generation High Reflective Coating Technology with High Spec Beam Splitter that makes the image hover in mid-air. The more interesting in this second generation air projector compared to the first one is where the image can be seen in 360° of angle and at different side. The image also can display with clear view even though in bright environment.



Why choose GF Technology Air Projector?

We provide the best 3D image quality which is user friendly. 3D screens flash two sets of images, one for each eye. One image is intended to be seen only by the left eye, while the other image is intended to only be seen by the right eye.

In order to view this image properly, the viewer must wear glasses that are specially designed to send the left and right eye images properly to the left and right eye. When viewing the overlapping images through these glasses, the image appears to be in 3D.

There are mostly two types glasses used for viewing image by 3D which are Passive Polarized glass and Active Shutter Glasses. Sometimes, users need to match this glass to the TV or Video Projector.

If you use the polarized glasses you are required to keep your head still. Tilting your head can distort how the waves get to your eyes, messing with the color and 3D effect. It is not cool.

Mostly people use anaglyph 3D to view the image. This technique however, didn't allow for a full range of color and have the once-distinct images bleed into one another. It also not cool.

In addition, you must spend money due to the expensive glasses. But with GF Technology 3D Air Projector; we can view it with naked eyes. You can view 3D effect without needing any glasses and make viewers feel comfortable.

Besides this, you don't have to worry about the projector bulb blow. It does not require the complicated screen setting.

Our air projector does not need screen projection.

A projection screen is an installation consisting of a surface and a support structure used for displaying a projected image for the view of an audience.

Basic idea for different markets exist for screens mostly targeted is very much the same where the projection screens work on diffusely reflecting the light projected on to them .

With our 3D Air Projector, the displaying will be more interesting as the 3D Air Projector uses the high spec beam splitter to makes the image hover in the mid-air and does not need any screen display to project the image

You do not need to think on how to identify in selecting a suitable projection screen for 3D viewing. This is because you need to know what technology your 3D projector uses to separate the projected right and left images and if the projected light is polarized or not.

Beside this, our 3D Air Projector can be viewed from different side of angle and it also give the different feel of 3D.

You can apply GF Technology 3D Air Projector not to only games and entertainment, but you can implementation it in your PC, Show case, and industry as well as in education too!