

p r e l i m i n a r y

professional projector series

**3D stereo
visualization**

true passive 3D stereo

DLP® technology

non-polarizing



professional grade 3D visualization

projectiondesign stereo visualization solutions utilize INFITEC Wavelength Multiplex Imaging to reproduce outstanding passive 3D stereoscopic images of virtually any desired object. 3D stereoscopic visualization is used in various applications to dramatically improve upon the visualization and understanding and accuracy of complex objects. In addition, as for instance in the oil and gas industry, better understand visual geological data. 3D stereoscopic imaging is used throughout the CAD/CAM design industry, in oil and gas exploration, medical, and various other markets to improve on profitability and shortening decision processes within projects.

Why use stereoscopic projection?

Stereoscopic projection is used in many industries to wipe out the borders between illusion and reality, and to enhance understanding of graphically presented data. The principle is simple, two images, each with a slightly different angle for the left and right eye, are projected onto a screen at the same time, but presented to one eye only. The human brain combines them as if they were one single image, and interprets the result as a three dimensional picture.

Wavelength Multiplex Imaging

Wavelength Multiplex Imaging (WMI) describes a whole new way of rendering passive stereoscopic images. Unlike most systems, using polarized light as the left and right eye separator, WMI uses the colour spectrum to separate data to each eye. The benefit is obvious, as solutions using polarized light alter the stereoscopic experience with the angle of the head of the viewer, and completely loses 3D if the head is tilted 90° to the projected image. In addition, polarized light solutions require special silver coated projection screens, in order not to alter the polarizing of the light. Not so with WMI. Using the colour spectrum makes the viewer's head angle irrelevant, and displays perfect stereo rendition at any one angle and with any one projection screen, even a blank wall.

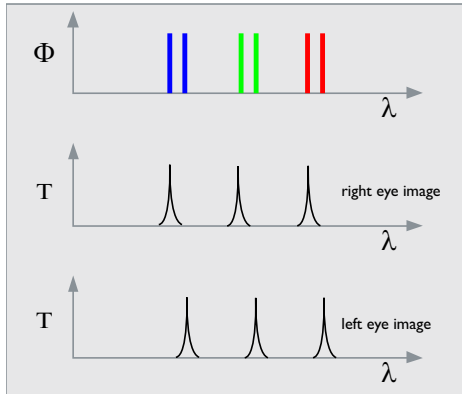
Passive versus active stereo solutions

With active stereo solutions, the audience uses active LCD shutter glasses synchronized with the projector to see 3D, alternating which eye sees the image, and by sequentially alternating between left and right eye information on screen. The shutter glasses switch on and off to let each eye see a 60Hz picture. Needless to say, everybody in the audience must have a set of expensive glasses connected to the projector. With passive stereo projection, it is enough to have simple, inexpensive glasses for everyone in the audience, easily enabling large auditorium classes to see 3D at a really low cost.

Available INFITEC stereo configurations

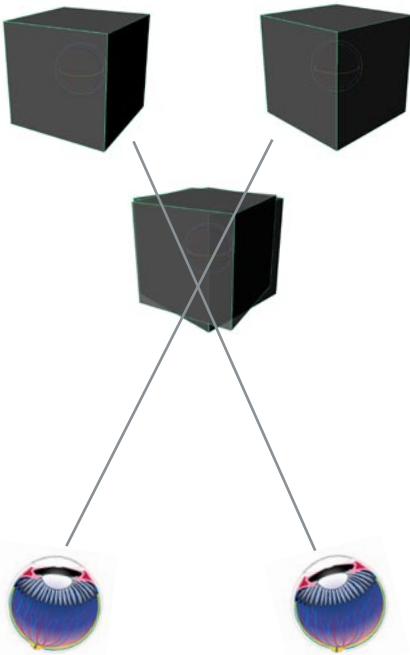
Built-in INFITEC filters are available for our all of our projector platforms, and at all resolutions, all the way up to 1920 x 1080. With the F3x platform series, filters can be inserted or removed from the light path directly from the remote control, easily enabling monoscopic or stereoscopic projection with a single set of projectors. With the F1x and F2x series of projectors, filters are inserted permanently.

Wavelength Multiplex Imaging



Wavelength Multiplex Imaging depends on sending different colour spectrum to each eye, and integrating the two by using compatible glasses.

Principles of operation



Stereo visualization depends on each eye seeing a slightly different angle of a projected object, just like in real life. By leading the brain to believe it sees the object from two different angles, a virtual, real 3D image is visualized, enabling for instance designers, and physicists to understand and better interpret data.

Technical specifications

F3x series	
projector	resolution matched L / R projector sets optimum image size switchable mono / stereo projection included stereo visualisation glasses recommended set up warranties
	1080p, SXGA+ or XGA DLP® digital projector yes, colour and brightness optimized n/a – depending on application requirements yes, from remote control six pairs delivered as standard top / bottom stack, side by side 2 years parts and labour. 3rd year optional, conditions apply.

F2x series	
projector	resolution stereo filter technology matched L / R projector sets optimum image size switchable mono / stereo projection included stereo visualisation glasses recommended set up warranties
	SXGA+ or DLP® digital projector INFITEC Wavelength Multiplexing yes, colour and brightness optimized n/a, depending on application requirements no six pairs delivered as standard top / bottom stack 2 years parts and labour. 3rd year optional, conditions apply.

F1x series	
projector	resolution stereo filter technology matched L / R projector sets optimum image size switchable mono / stereo projection included stereo visualisation glasses recommended set up warranties
	1080p, SXGA+ DLP® digital projector INFITEC Wavelength Multiplexing yes, colour and brightness optimized > 220cm image width no six pairs delivered as standard top / bottom stack 2 years parts and labour. 3rd year optional, conditions apply.



A single stack of two projectors, including any one of the models above, and simple pairs of glasses, make up the INFITEC model pairs.



Passive stereo visualization is perfect for larger groups in auditoriums and theatres, due to the low cost of adding equipment for a larger audience



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