

Test of
Epson EH-TW6000 Projector
Distributed by AV-Connection



Flight simulation is constantly under development and flightsimmers around the world continuously tries to optimize their virtual experience, primarily by upgrading their computer, buying more complex add-ons and various different modules and control systems.

Next step for the flightsimmer is to expand the virtual cockpit to contain up to three screens instead of the original one screen, hereby creating a virtual panorama view as in a real cockpit. This solution has however some limitations in regards to screen sizes, but now the technology within projecting images to a screen has reached a quality level that will fit even the most demanding flightsimmers.

Today you have the possibility to connect a projector to your computer, and I have actually seen both three and four projectors connected to a computer which hereby created a sensational panorama view. The fourth projector was used for the view upwards which increases the virtual experience greatly when flying e.g. a military fighter or a glider.

The quality in projectors today is very high and you can easily get a screen image in 120" in full HD quality – then think the idea of connecting three or four of these projectors to your computer and switch over to 3D projection, that has to be very close to the ultimate flight simulation experience that the known technology today can provide.

I have had the pleasure of testing and reviewing the EH-TW6000 projector from Epson, which is a very powerful projector with 2,200 ANSI lumens, a contrast ratio 40,000:1 and built-in 3D technology which hereby secures the flightsimmers virtual experience within the near future for e.g. Lockheed's P3D.

I received this projector from AV-Connection in Sønderborg, Denmark who is a distributor of Epson projectors in Denmark. Shortly after the tradeshow where the projector was displayed, I received it by postal service. The packaging was very good so there were no issues with damages or similar. The installation / connection of the projector was very easy, but if you do encounter problems, then there is of course a very user friendly manual included. Power cable and HDMI high speed cable was also included together with one pair of active 3D glasses from Epson and a remote control.

The EH-TW6000 projector from Epson is one of Epson's newer developments for the home-cinema, but it can easily be used for more than just the home-cinema. I have tested this projector for both 2D and 3D movies on both DVD and Blue-Ray quality, which by the way was a superb experience, but I have also tested the projector for various computer platforms and games as:

Flightsimulator FSX (PC)

Medal of Honor – Tier 1 (PC)

Medal of Honor – Warfighter (PC)

Call of Duty – Modern Warfare 3 (PC)

Grand Turismo (PS)

Mario Kart (Wii)

Wii Sports (Wii)



The conclusion for these was that the projector managed to project the image from all platforms perfectly in a superb high resolution. I was very amazed by the quality that I experience when testing the projector on the Flightsimulator FSX. The scenery quality and the virtual cockpit quality was just as perfect as if I used my standard computer screen – now just bigger and this really did increase the flightsim experience greatly.

Playing the Mario Kart, the Wii Sports and the Grand Turismo was also a perfect experience and I will most certainly recommend the use of a good quality projector for these games also. In regards to the FPS games for PC, then the projector did a really good job, but I found it to be quite difficult to control, because now your enemies was enlarged to also real size, and when changing your view direction as quickly as you do in FPS games, I lost track of where I was aiming quite a few times – I am positive that this is of course just because I was not used to it, and I am also positive that when trying this more often, it will not be an issue anymore.

The contrast ratio is high – 40,000:1, but this has also been improved by the Epson's 3LCD-technology and the result is stunning, a 100% completely superb picture quality. Furthermore I didn't experience any issues when using the projector during the day (in daylight) and this is because of the White & Color Light Output of 2,200 ANSI Lumens.

The EH-TW6000 has a shiny plastic cover and features a design that states power and high quality, it has aggressive looking vents which most of all looks like the air intake of a Ferrari or other super car, which compliments this projector very well.



Connection of the projector can be made either with the use of the VGA port and cable or the HDMI port and cable. The sound can be connected through the phono ports and hereby using the built-in speakers that is a part of this projector. The built-in speakers are of an OK quality, but I would recommend diverting the sound output through other medias.

I have tested the sound on both 8.1 surround sound home-cinema setup, 7.1 surround sound and stereo headset and also 2.1 stereo front speakers connected to an active subwoofer (Creative). All setups worked perfectly but I will of course recommend the use of the 8.1 surround sound home-cinema setup if you use the projector for movies, but if you on the other hand want to use the projector for gaming, I would recommend the Logitech G930 surround sound headset or similar.

I tested the projector in both a light and a dark room. The light room was an office with huge windows and during the day to get the daylight and the dark room was a home cinema without any windows at all. No matter which room I chose I had absolutely no problems with the picture quality. The image was perfect with no flicker, clear and bright and with natural warm colors.

Hereafter I tested the projector on various backgrounds as e.g. a professional projector screen, a standard brick wall painted with white paint and a standard brick wall covered with gypsum boards that was painted with professional projector screen paint. The very best solution was of course the professional projector screen which gave the ultimate image quality, however this is a quite expensive solution, so the gypsum boards is indeed a good and cheaper alternative. The raw brick wall is not something I can recommend.



My test also included enjoying a Blue-Ray movie in 3D, and this I was very surprised about. The quality that I here saw was awesome. I have not previously seen such a fantastic 3D quality in any projectors, and the fact that the 3D glasses that was included was active glasses, just made it even better.

The aspect ratio that I used in my test was 16:9 where the high of the picture was app. 1,6 meter high and the width of the pictures was app 2,95 meters wide.

My conclusion for this projector is that this most certainly is a high end projector that will be perfect for both home-cinema enthusiasts and flightsimmers on all levels. The projector is a mid-level projector pricewise and you get a lot of technology for a reasonable price. If you as a flightsimmer are looking for the ultimate solution for your home cockpit, then this is a projector I would recommend for you.

If you on the other hand is a simmer looking for a cheaper solution to expand your home cockpit with a projector, and are willing to make compromises on the image quality, then I would recommend a cheaper LED Full HD projector.

I rate this projector from Epson with 5/5 stars and thank AV-Connection for contributing to the flightsim community with this superb and ultimate solution for all home cockpit builders.

Rays Aviation



Details

Part Code	V11H422040LU
Review Date	15 November 2012
Price	App. £1,349
Details	www.epson.co.uk
Rating	5/5

Specifications

Projector technology	LCD
Lamp brightness	2,200 ANSI lumens
Lamp life	4,000
Lamp life in economy mode	5,000
Contrast ratio	40,000:1 dynamic

Picture

Native resolution	1,920x1,080
Max compressed resolution	1,600x1,200
Aspect ratio	16:9
Other aspect ratios	4:3
Max diagonal at 7ft	59in
Throw ratio	1.32:1 to 2.15:1
Optical zoom	1.6x
Projection distance	1.2m to 10m
Mirror image	✓
Invert image	✓
Lens shift horizontal	0%
Lens shift vertical	0%
HD Ready	✓
Special view	Natural, Living Room, Cinema, Dynamic
Inputs/Outputs	
VGA input	✓
DVI input	✗
Sound inputs	phono stereo
Composite input	✓

S-video input	✓
HDMI input	✓
Component input	via VGA
PAL support	✓
SECAM support	✓
NTSC support	✓
Audio output	none
Video output	VGA
Others inputs/outputs	USB mass storage port, USB service port, RS232, 3D Emitter input

Other

Noise (in normal use)	32dB(A)
Size	137x420x365mm
Weight	63.0kg
Internal speakers	yes (2x 10W)
Extras	remote, cables (power, VGA, composite)
Remote special features	aspect ratio, zoom, freeze, colour mode, 3D mode
Power consumption standby	1W
Power consumption on	295W
Lamp	
Lamp cost (inc VAT)	£215
Lamp supplier	www.projectorpoint.co.uk
Lamp cost per hour of use	£0.05
Lamp cost per hour of use (economy)	£0.04