

THX cloth



The ClearPix Ultimate White 0.75 shows deviations of 0.3 percent in the green (right) compared to our reference screen (left). This is within typical measurement repeats.

	Gain 1,0	Gain 0,81
x: CIE31	0,3126	0,3128
y: CIE31	0,3294	0,3287
Y cd/m ²	111,5688	90,3483
Y fL	32,5629	26,3694
CCT	6506,0000	6504,0000

The projector achieves 111.56 cd/m² on our Gain 1.0 reference screen. The Ultimate White 0.75 produces 90.34 cd/m² before calibration, which corresponds to a gain factor of 0.81 with optimal colour representation at 6,504 Kelvin.

The ClearPix Ultimate White 0.75 fabric from Screen Research is the first projection surface in our test to be ISF, THX and PVA certified. This of course made us curious about the quality.

▶ All Screen Research projection screens are made to the wished dimensions according to the requirements of each customer.

For a fixed frame screen, there is a choice of three frames and a wide range of cloths. We decided for the following variant: the FS3 frame made of aluminium and covered with black velvet, and the acoustically transparent ClearPix Ultimate White 0.75 fabric and its StopLight black backing. For such a screen with visible viewing area of 320 x 134 cm, Screen Research suggested retail price is EUR 4900 (excluding VAT and shipping).

Assembly and installation

The delivery time is 10 days. We received the individual parts of the screen well packed on a pallet in two large cardboard boxes, of which the

Screen Research ClearPix Ultimate White 0.75

- ⊕ very good acoustic transparency
- ⊕ excellent colour reproduction
- ⊕ odourless
- ⊖ high price

top and footboards were reinforced with wood. Included come two different wall brackets, steel bars, tension springs and all the necessary tools (and even gloves). The relatively heavy aluminium profiles are plugged together and screwed with the connecting bars. The fabric is stretched tightly on the frame, followed by the black backing. A provided hook to be used to attach the tight springs proves to be practical. Two vertical struts give the frame additional stability. These can be freely attached to the frame. This is especially helpful so that such struts are not placed in front of the drivers of the speakers installed behind the screen.

Finally, the canvas is hung in the desired place, like a picture frame. We find it particularly pleasant that the cloth is odourless, allowing us to begin with the testing procedure immediately.

To ensure that the visual and acoustic properties of the Screen Research surface material meet the requirements of THX, the ClearPix fabric was tested in California. This included chrominance, luminance and uniformity of illumination. In addition, the ClearPix cloth must meet the required sound permeability so that the loudspeakers placed behind the screen are not impaired in terms of sound.

Technology and measurements

The Screen Research ClearPix Ultimate White 0.75 is a very tightly woven sound-permeable fabric, the structure of which we no longer consider disturbing at 1.5 meters of distance. The StopLight black backing behind it stops projected light travelling through the screen fabric and reflecting off elements behind it (such as speakers or a white back wall). In this way, the in-image contrast increases because the Ultimate is not brightened from behind.

EUROPEAN BRAND PRODUCT

Screen Research was founded in France in 2001 as a supplier of projection screens and has set itself the goal of creating a perfect fusion of image and sound. In October 2010, Screen Research was acquired by Adeo Group from Italy. The production facility was relocated to Poland in mid-2011 under the company name Adeo Screen.

On a building area of 4,500 square meters, the factory in Złotoryja uses modern and innovative production tools to manufacture screens with European quality standards.



Adeo Screen building is located in Złotoryja, Poland, less than 100 km from the German border.



This shot from the movie "Elvis" in HDR from the 4K Blu-ray is reproduced on the Screen Research projection screen with true-to-the-original colours.



In the A/B comparison with our reference screen (left), you can see that the Ultimate White 0.75 (right) reproduces the film around 19 percent darker.



On the Ultimate White 0.75, even a close look hardly reveals any structure of the fabric cloth.

The luminance factor is given by the manufacturer as 0.75 gain. Our measurement even slightly exceeds the value with 0.81 gain. This means that the screen only reduces the luminance by 19 percent instead of the 25 percent stated by the manufacturer. The picture is moiré-free and evenly illuminated right to the edge without any discernible hotspot. The colour reproduction is at reference level: Red (100 %), green (99.7 %) and blue (100 %) as well as the white point 6,504 Kelvin (D65) are hit precisely.

The frequency response remains even. From 1,000 to 20,000 hertz, the acoustic attenuation is just 1.5 decibels at peak. In practice, this is hardly audible and can easily be compensated for in the AV receiver. We have never experienced better acoustic transparency with any other screen.

Image and sound

The perfect colour reproduction and uniform white field display without hotspot ensures natural images, without any visible structure. UHD pixel resolution details are fully mapped on the ClearPix Ultimate. We sit 2.8 meters from the 3.2 meters wide screen in Cinemascope format. The image has a surprising depth and

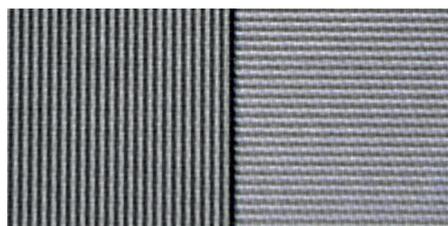


Sturdy aluminium rods are inserted into the canvas. They allow the fabric to be tightly stretched against the frame.

plasticity, because dark contents are not brightened from behind. In "Elvis" (2022) already the title credits look exciting. We have rarely seen the small gems in golden, green, blue and red colours so finely revealed. Daylight shots with a homogeneous sky are free of disturbances that can be attributed to the canvas. The colour uniformity is outstanding across the entire screen. Up to the edge, the brightness is evenly distributed. Even on extremely sideways seats, the picture impression is maintained because there is no shadowing. In direct comparison with a vinyl projection surface, no resolution deficits are discernible. The impression of sharpness is outstanding. Another advantage of this woven fabric over a vinyl cloth comes to light when using RGB laser projectors. There are no unsightly speckle effects on the ClearPix Ultimate. The good picture impression is not let down by the acoustic transparent properties. There are no comb-filter effects. Voices sound clear and distinct. Trebles and mid-tones arrive finely at the listener. The FS3 frame and the ClearPix surface are not affected by deep bass. Nothing resonates or causes disturbing noises.



The ClearPix StopLight is a black backing layer, that also helps to increase the contrast in the image by reducing a reflection of the original light.



Our macro shot proves it: black and white lines in UHD pixel resolution are fully reproduced by the ClearPix Ultimate White cloth.



On the bottom right corner of the 10 cm wide FS3 velvet screen frame, logos indicate compliance with ISF and THX standards.

Conclusion

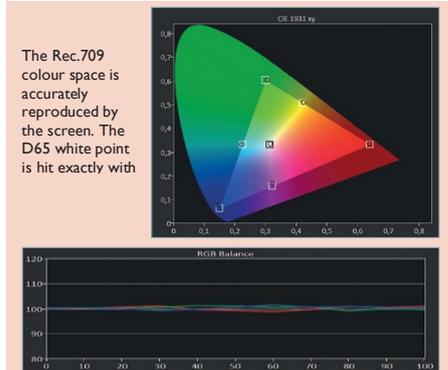
Screen Research's ClearPix Ultimate White 0.75 offers the best acoustic transparency we have tested to date in sound-permeable screens. The picture quality is also at reference level.

Screen Research ClearPix Ultimate

Equipment	
Price	EUR 4900
Screen type	Frame canvas
Screen material	Acoustic woven fabric
Sound-permeable	Yes
Dimensions (WxH)	340 x 154 cm
Weight	45 kg
Warranty	5 years
Determined gain factor	0.81

Appraisal

Image quality	very good 76 / 80
Sharpness and detail resolution	20 / 20
Brightness	16 / 20
Uniformity of illumination	20 / 20
Colour	20 / 20



The entire greyscale is displayed flawlessly on the Screen Research ClearPix Ultimate White 0.75.

Material & processing	very good 10 / 10
Equipment	very good 10 / 10

Rating very good **96** from 100
Reference class