

SWITCHABLE SMART GLASS SOLUTIONS





"CUTTING EDGE TECHNOLOGY"

"DARE TO BE DIFFERENT"





"DARE TO BE UNIQUE"

SWITCHABLE SMART GLASS TECHNOLOGY FOR YOUR HOME AND BUSINESS





Retro-fit Self Adhesive Smart Film for Existing Windows and Glass



Our standard and most cost effective smart glass solution for any glazing application



Our premium smart glass solution designed for wet rooms and high traffic areas



Our energy efficient insulated smart glass units for window applications



HISTORY

Paul Beswick, the founder and visionary of the Pro Display Group in the United Kingdom has established VISIONAIR-E in the USA, in response to a high demand for the very latest screen technology in North & South America.

Pro Display is an award winning technology company with a rich heritage of innovation in the visual display industry, this stretches right back to when the founder introduced the first full colour LED Screens into Europe in the early 1990's. Pro Display continues to make substantial investment in R&D, developing its range of optical screen, glass and film technologies.

PRO DISPLAY GROUP





OPTICAL SCREEN TECHNOLOGIES SWITCHABLE SMART GLASS TECHNOLOGY

intouch

Platinum Vision

TOUCH SCREEN TECHNOLOGIES

INTEGRATED DISPLAY SOLUTIONS

BRANDS & PATENTS

The Pro Display Group consists of a set of globally recognisable brands and technologies which sell to numerous industry sectors around the world. This includes the development by the founder of a number of 'patented' technologies and unique manufacturing processes for their range of switchable smart glass solutions.

DID YOU KNOW?

Pro Display have over 25 years worth of Research & Development experience in optical screen technology. Resellers and integrators specify our products for some of the world's leading brands:



















Harrods











MONT[©] BLANC



Microsoft























THE TECHNOLOGY

VISION Switchable Smart Glass and Smart Film is designed to offer instant and controllable privacy at the flick of a switch. The Polymer Dispersed Liquid Crystal (PDLC) technology allows an electric current to travel through via a simple ON/OFF function to switch the glass from frosted to clear (CE Approved Technologies).





When switched ON (clear state) the presence of an electrical current causes the liquid crystals within the film to align, allowing light to pass through the layer. The function of VISION smart glass technology is to act as an 'electronic blind' providing privacy and security in any environment.

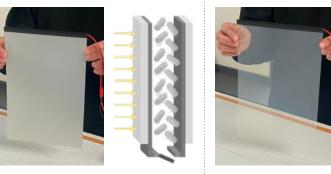
When switched OFF (frosted state) the liquid crystals are scattered in a way that causes light waves to refract and reflect away from the surface, in this state the film still allows around 60% of light to pass through so that natural light is still present in the room without the glare and providing increased protection against UV light.

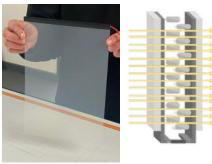




THE SCIENCE

The illustrations below demonstrate PDLC (polymer dispersed liquid crystal) technology in both the ON/OFF state. The presence of an electrical current causes the switchable film to turn clear/transparent. In its ON (transparent) state the liquid crystals align, allowing light to pass through the layer. When the power is switched OFF the liquid crystals are scattered causing the light waves to refract and reflect away from the surface (frosted appearance).





POWER OFF

POWER ON

ACCESSORIES

VISION Switchable Smart Glass products require a 50V-65V power supply to switch from frosted to clear. They are supplied with a step down transformer which can be plugged directly into a 110V mains power supply. VISIONAIR-E supply a stylish range of wireless infrared switches for a smooth operation in any environment. Our Smart Glass Technologies can also be controlled by phone apps, automation systems and smart plugs with voice control (Amazon Alexa).



ABOUT SMART GLASS | 7

6 | THE TECHNOLOGY

MARKETS

RESIDENTIAL





COMMERCIAL





HOSPITALITY





MARINE





MARKETS

TRANSPORT





MEDICAL





RETAIL

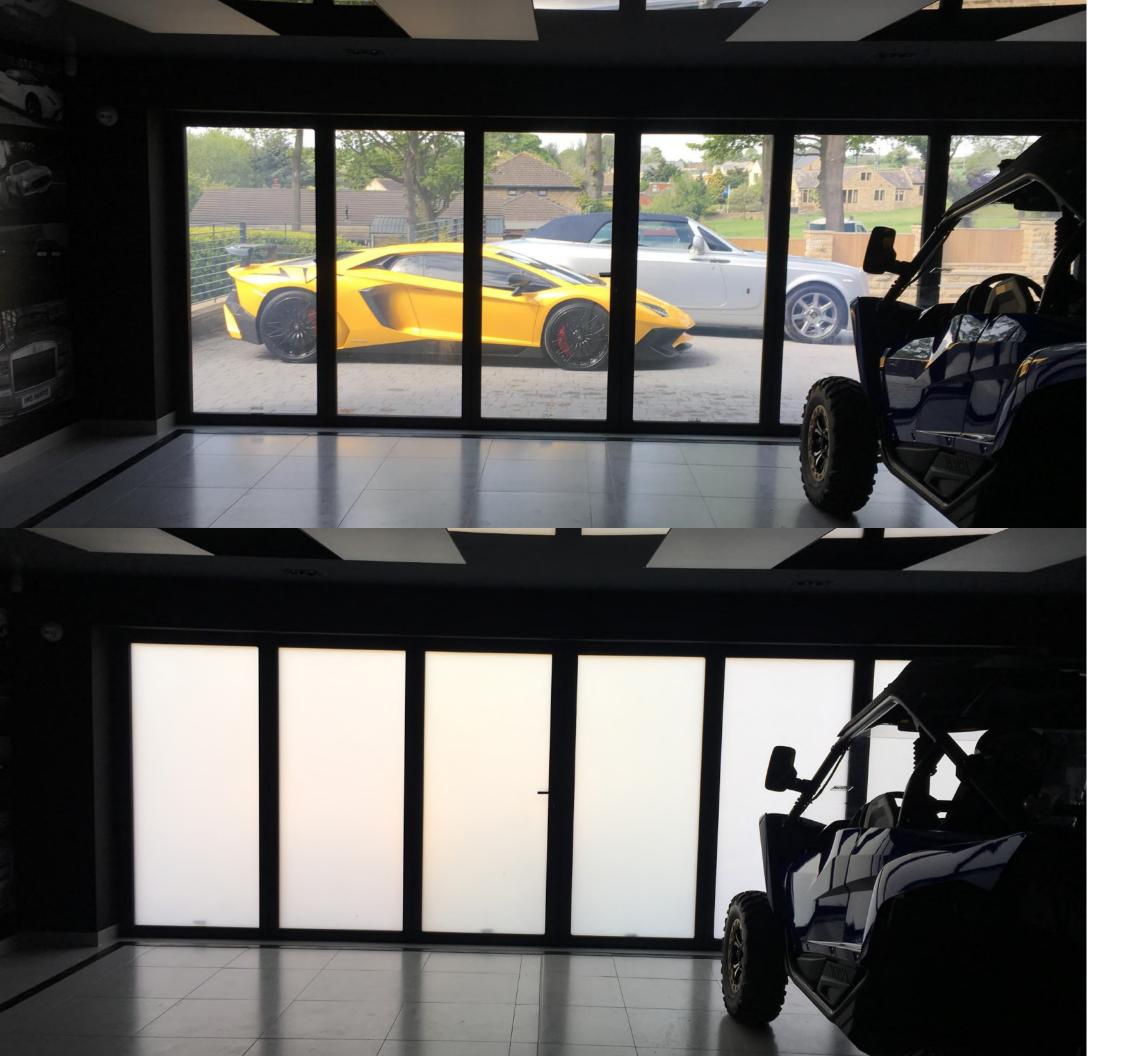




VISITOR ATTRACTIONS









VISION SMART FILM

Designed to retro-fit to existing glass and other transparent surfaces like plexiglass, our Self-Adhesive Switchable Smart Film provides a simple and cost effective alternative to other switchable smart glass technologies. It is manufactured with a self-adhesive cling layer on one side (peel and stick) which makes it easy to apply to both new and existing glass surfaces, no specialist installation equipment required (CE Approved Technologies).

VISION Self Adhesive Switchable Smart Film is available in three standard roll widths 47.24" (1200mm), 59" (1500mm) and 70.86" (1800mm) which can be cut to any size and sold by the square foot. Custom shapes and sizes are available and multiple pieces can be joined together to create large switchable panels or partitions. This truly innovative product is now available to everyone, giving your home or business the added WOW factor.

VISION Switchable Smart Film is operated by a simple electrical ON/ OFF switch to control the opacity of the film, turning it from clear (ON) to frosted (OFF). It can easily be integrated into home automation systems too, giving you even more control. This unique film technology also transforms any glass into high-definition rear projection screen, which when combined with a video projector you can display 4K images for TV / Movies, Corporate Presentations and Digital Advertising The key function of Smart Film is to act as an 'Electronic Blind' giving privacy and security, but it also provides thermal, solar and sound insulation benefits, helping to keep a room cool, comfortable and quiet. For more features see below.

'Simple Installation Guide' and training made available to our Partners / Resellers.

BENEFITS











Privacy on demand

Shading reduced glare

Clinically

Save on heating & cooling

Feel good technology













Environmentally friendly

protection

Added safety & security

resistant layer

HD projection surface

VISION SMART FILM | 11



VISION SMART GLASS

VISION Smart Glass is our most popular glass option worldwide, offering a costeffective solution where the polymer dispersed liquid crystal and multiple optical layers are machine coated / laminated directly onto the glass surface. Smart Glass, also known as Switchable Glass, changes from frosted to clear at the flick of a switch. This process means that the PDLC switchable coating can be applied to any type or thickness of glass including fire-rated glass, creating a high-quality solution with optimum clarity and performance. VISION Smart Glass is perfect for any number of switchable applications, with the benefit of reduced lead times, making it ideal for all time-critical projects. (CE Approved Technologies).

A simple ON/OFF mode switches the glass from being clear (transparent) to frosted (opaque). In its frosted state, the switchable layer acts as an 'Electronic Blind' providing privacy and security for any glass, window or partition. VISION Smart Glass Panels can be manufactured to any size in widths up to 70.86" (1800mm) as standard, but larger sizes and custom shapes are also available. Multiple panels can be seamlessly joined together to create large switchable glazed walls/partitions. VISIONAIR-E can coat any type or thickness of glass, but our standard tempered Smart Glass Panels are available in thicknesses 3/16" (5mm), 1/4" (6mm), 3/8" (10mm) and 1/2" (12.5mm). Other options include low iron, tinted/colored glass, fire rated glass and lightweight Plexiglas.

VIDEO PROJECTION SCREEN

This unique glass technology can also be used as a high-definition rear projection screen to display Corporate Presentations, TV/Video Images and Advertising. A truly innovative product, making smart glass technology accessible to everyone while giving your home and business the added WOW factor.

BENEFITS



Privacy on

demand









Clinically



Save on heating



& cooling







Environmentally friendly



protection









Vandal



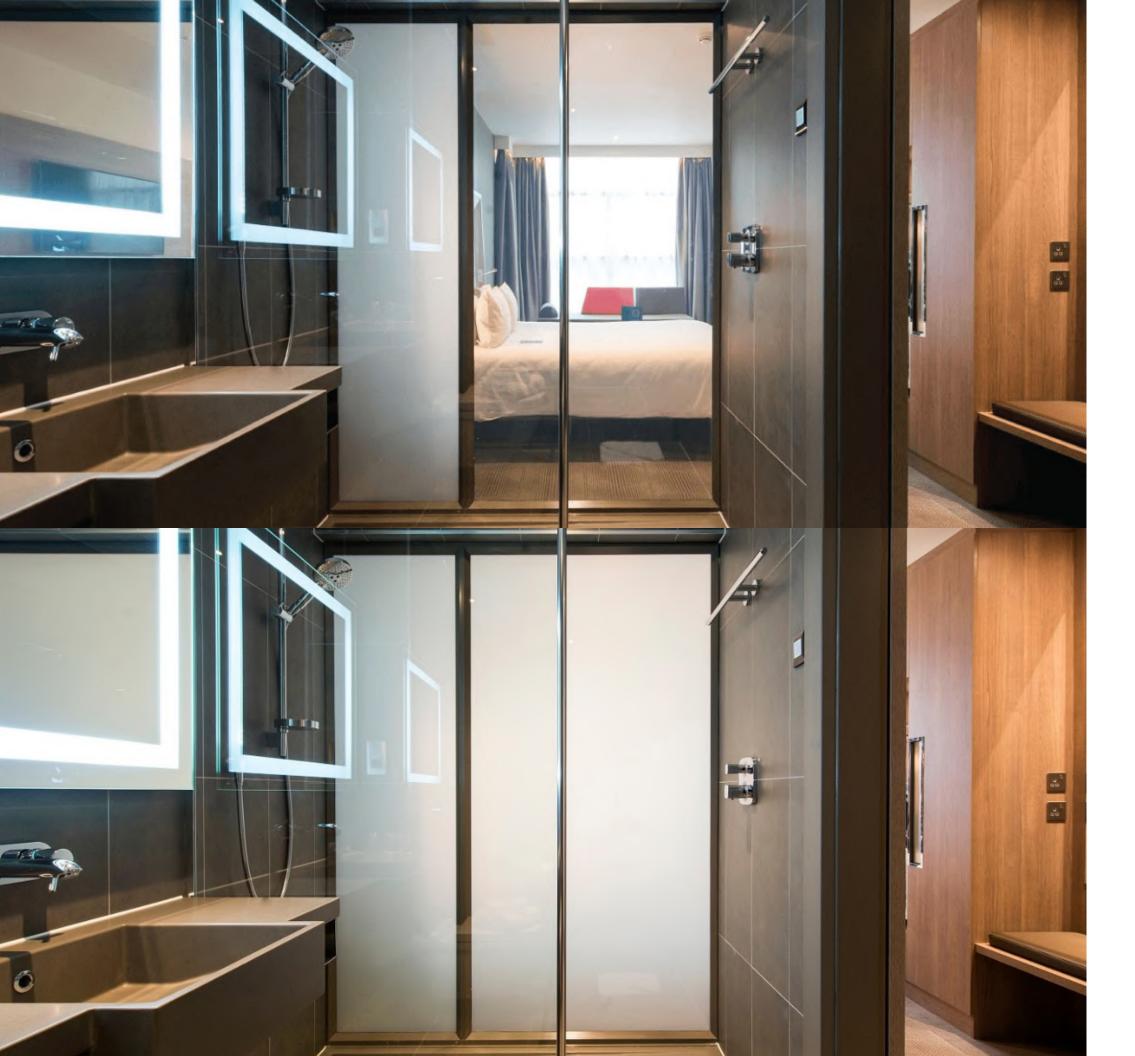


HD projection











VISION X SMART GLASS

VISION X Smart Glass is designed for more robust applications offering increased safety and security in both the workplace and the home. It is our premium priced product and more suitable for wet room/bathroom applications, spa's/pool areas, hospitals/clinics and any high traffic areas that need regular cleaning or sanitation. VISIONAIR-E has also developed a fully sealed IP rated Smart Glass Panel for frameless glass shower walls and cubicles. The seamless nature of VISION X Smart Glass means panels can be positioned side by side making them ideal for glass walls and partitions, creating a very minimal and contemporary look (CE Approved Technologies).

VISION X Smart Glass uses a switchable inter-layer bonded between two sheets of glass for complete protection. This durable solid-state technology replaces the need for old-fashioned blinds or curtains, making specific areas easier to clean / sanitize while offering greater control and comfort within

A simple ON/OFF mode switches the glass from being clear (transparent) to frosted (opaque). In its frosted state, the switchable layer acts as an 'Electronic Blind' providing privacy and security for any glass, window or partition. The switching function can be controlled using a manual switch, remote control, phone app, automation system and ALEXA voice activation.

The standard thickness of VISION X Smart Glass is 1/2" (12.5mm), other thicknesses and glass options are available including bulletproof glass and lightweight polycarbonate panels.

BENEFITS



Privacy on

demand









clean

Energy efficent Feel good technology technology





reduced glare







Environmentally friendly

protection

resistant layer

& security

Added safety Save on heating & cooling



VISION XL SMART GLASS

VISION XL Smart Glass is an energy-efficient insulated double or triple glazed unit (IGU) with integral switchable layer for both homes and commercial buildings. The latest generation of switchable smart glass windows combines the benefits of improved thermal performance with the immediate control over privacy/security. This durable solid-state technology replaces the need for old-fashioned blinds or curtains offering greater control and comfort within any room. The (PDLC) switchable layer is coated down on the inner surface of one panel of glass, then this is combined with a second panel of glass to form a sealed unit. VISIONAIR-E's Switchable IGU panels utilise a warm edge spacer bar with an argon-filled air gap in between to offer greater insulation and performance, with optional low iron/low E coatings to provide the most energy-efficient smart glass windows on the market today.

VISION XL Smart Glass offers many benefits including privacy, noise reduction, energy efficiency and they are an environmentally friendly option for any home or commercial building. These Switchable glass units offer thermal, solar and sound insulation benefits, regulating the room's temperature while keeping it comfortable and quiet. Not only do they remove the need for fiddly, awkward privacy blinds or curtains, VISION XL Smart Glass Panels still allow natural light to flow into the room whilst maintaining the privacy within your environment (CE Approved Technologies).

This product is simple to install just like any standard double-glazed window. Enjoy the benefits of insulated glass making your room warmer in the winter and cooler in the summer. VISION XL double-glazed IGU's are manufactured to order in panel widths up to 70.86" (1800mm) and available in two standard thicknesses 0.7" (18mm) and 1.1" (28mm) custom sizes are also available.

BENEFITS







Save on heating & cooling





Energy efficent technology



Feel good technology



Environmentally friendly



protection

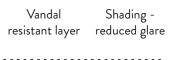










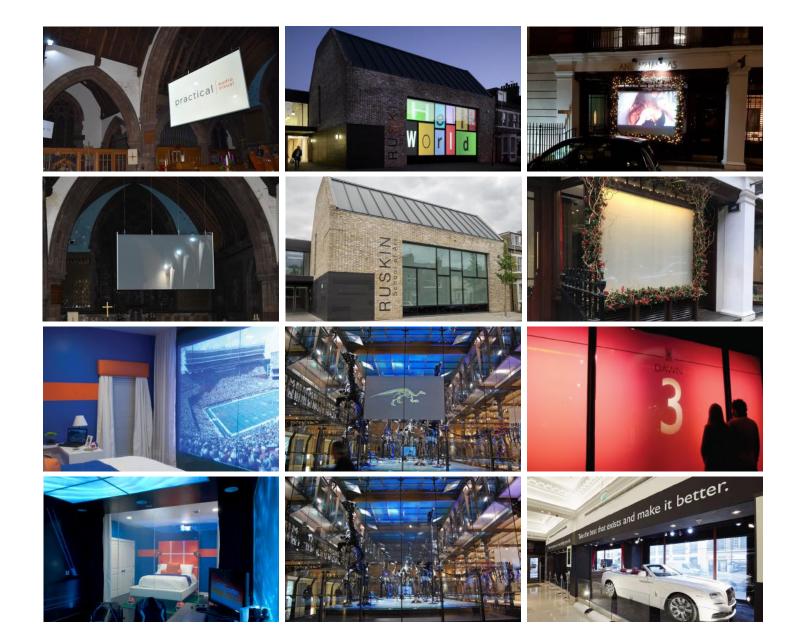




PRIVADO SWITCHABLE PROJECTION GLASS

PRIVADO is the brand name for our 'Switchable Projection Glass' which turn instantly from a clear transparent glass panel into a 4K projection surface at the touch of a button. Our next generation switchable projection glass is the ultimate screen for any visual display solution. This technology works on an electrical principle transforming the liquid crystal glass from clear (transparent) to frosted (opaque) with a simple ON / OFF mode, creating a high-definition rear projection screen. Imagine having a clear glass window that can suddenly switch into a video advertising solution. Both VISION Smart Film and our standard VISION Smart Glass are a suitable for video projection.

We also produce a range of PRIVADO Switchable Smart Glass Screens in standard sizes (16:9) and they come with a cable suspension system, transformer and RF remote control. VISIONAIR-E can also manufacture custom glass panels to fit within a standard window frame or partition wall system. If you already have fixed glass panels, walls or partitions in place there's no need to worry, our VISION Smart Film offers you the perfect solution for retro-fit installations. Switchable Smart Film comes complete with a self-adhesive static cling liner meaning the film can be easily installed onto existing glass surfaces, creating the same high-definition rear projection screen.



TRADE PARTNER PROGRAMS

VISION Smart Film at wholesale price





Learn how to handle, measure and cut VISION Smart Film







Learn how to install, trim and wire VISION Smart Film







Contact us for more information about our Reseller Programs and Training Facilities

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