Rear & Front Projection Films

Transform Your Transparent Surface MAKEITA VIDEO SCREEN





INDOOR

OUTDOOR

BENEFITS OF REAR PROJECTION FILMS

- All the equipment and cables etc. will also be nicely hidden behind the screen and out of the way
- Superior contrast/resolution
- Improved black levels
- No critical angle of projections
- Compatible with all LCD/DLP/DMD projectors

- Minimalist look using cable suspension system
- Can be used for window / outdoor applications
- Better performance in high ambient light environments than front projection screen.
- No shadows cast over the screen from a presenter or the audience
- Brighter images than conventional projection screens

WHAT IS REAR PROJECTION FILM?

Rear projection film is a paperthin projection surface with integrated application adhesive for installation on glass and acrylic surfaces. All Screen Solutions rear projection films are designed to be projected onto with any projector type other technology that may be used as a projection source.

WHAT IS REAR PROJECTION?

Rear projection means the projector is placed behind the screen, shooting straight towards the audience.

This allows the screen technology to control the light path distributing bright, sharp images into a predefined viewing zone.

When choosing a rear projector you are choosing one that presents the image from behind the actual screen. This also ensures that the image being viewed is not easily drowned out by light or subject to shadows and so on. Rear projectors create a crisp, clear image that is not easily disturbed.



Projector Types

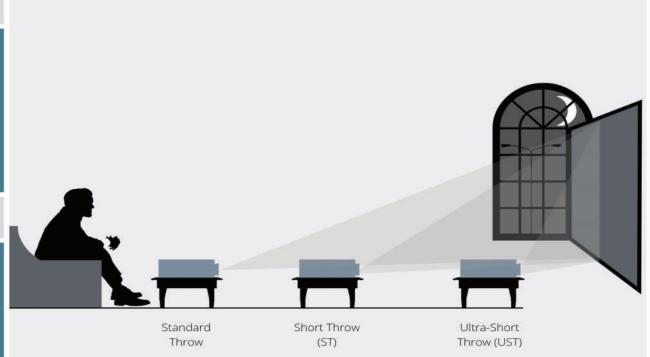
Standard (Normal)

This is the standard and most commonly used projector's type. The distance between the projector and the screen depends on screen size, projector's brightness and throw ratio. The lighter color the film is, the higher lumens projector is required.

Short Throw (ST)

Short throw projectors allow users to create big pictures in tight spaces, without concerns about shadows obstructing the image or light shining in the presenter's face. These projectors have very short throw ratios, the distance from projector to screen compared to the screen size.

Ultra-Short Throw (UST)



Ultra-short throw projectors allow users to create big pictures in a very tight spaces, a "regular" projector with a 1.5:1 throw ratio would have to be 230cm back to project a 60-inch wide image. An ultra short throw projector with a 0.37:1 throw ratio can project the same image from just 55cm away.



Screen Size Calculator

Screen Size Diagonal	Screen Size (cm) 16:9 aspect Ratio	Screen Size (cm) 16:10 aspect Ratio	Screen Size (cm) 4:3 aspect Ratio		
55"	121,8 x 68,5	121,8 x 68,5	121,8 x 68,5		
60"	132,8 x 74,7	132,8 x 74,7	132,8 x 74,7		
65"	143,9 x 80,9	143,9 x 80,9	143,9 x 80,9		
70"	155,0 x 87,2	155,0 x 87,2	155,0 x 87,2		
75"	166,0 x 93,4	166,0 x 93,4	166,0 x 93,4		
80"	177,1 x 99,6	177,1 x 99,6	177,1 x 99,6		
85"	188,2 x 105,8	188,2 x 105,8	188,2 x 105,8		
90"	199,2 x 112,1	199,2 x 112,1	199,2 x 112,1		
100"	221,4 x 124,5	221,4 x 124,5	221,4 x 124,5		
120"	265,7 x 149,4	265,7 x 149,4	265,7 x 149,4		
150"	332,1 x 186,8	332,1 x 186,8	332,1 x 186,8		
175"	387,4 x 217,9	387,4 x 217,9	387,4 x 217,9		
200"	442,8 x 249,1	442,8 x 249,1	442,8 x 249,1		
225"	498,1 x 280,2	498,1 x 280,2	498,1 x 280,2		
250"	553,5 x 331,3	553,5 x 331,3	553,5 x 331,3		
275"	608,8 x 342,4	608,8 x 342,4	608,8 x 342,4		
300"	664,1 x 373,6	664,1 x 373,6	664,1 x 373,6		
325"	719,5 x 404,7	719,5 x 404,7	719,5 x 404,7		
350"	774,8 x 435,8	774,8 x 435,8	774,8 x 435,8		
375"	830,2 x 467,0	830,2 x 467,0	830,2 x 467,0		
400"	885,5 x 498,1	885,5 x 498,1	885,5 x 498,1		
450"	996,2 x 560,4	996,2 x 560,4	996,2 x 560,4		
500"	1106,9 x 622,6	1106,9 x 622,6	1106,9 x 622,6		

(Specifications are subject to changes without prior notice)

What does aspect ratio mean?

An **aspect ratio** is a proportional relationship between an image's width and height. Essentially, it describes an image's shape. **Aspect ratios** are written as a formula of width to height, like this: 3:2. For example, a square image has an **aspect ratio** of 1:1, since the height and width are the same.

16:9, 16:10, & 4:3 are the most common aspect ratios most of the new projectors can project. The ultrawide (Cinematic) 21:9 aspect ratio is getting more trendy and popular by many users lately.



Screen size calculator:

A screen size is usually calculated in diagonal inch. For a quick access and information, we have created this screen size calculator that will help you convert screen diagonal size to width x height in centimeter.



Rear Projection Film Types

Transparent (Clear)

The rear projection transparent (Clear) film is an eye-catching holographic projection film with excellent image results. Using a standard projector placed behind the screen surface, this film provides high contrast and wide viewing angle, the film remains transparent when not illuminated, allowing for see-through the glass or acrylic surface. Transparent film is highly recommended to use in very low ambient light (Almost dark).

Light Grey

High quality light grey rear projection film, works perfect at low-to-medium intensity of ambient light. The light grey film produces high quality image when used in-door with controllable light brightness.

Dark Grey

Dark grey rear projection film is the most **popular** in the range offering high contrast, brightness and excellent color reproduction for HD quality images. This film works perfectly in high ambient lighting and can be used to create cost effective screens in comparison to conventional LCD or LED screens.

White

Wide viewing angle, brilliant image in high ambient lighting and superior contrast and resolution, works with front projector as well as the rear projector. The white rear projection film is ideal for high-end applications where image quality & color are of utmost importance.





Budget Series

Properties	Unit	White	Double White	Grey	Dark Grey	Clear	Ultra Black	Mirror
Thickness	μm	100	100	100	100	100	125	125
Film Width	mm	1524	1524	1524	1524	1524	1524	1524
Transmittance	%	92	72	81	54	88	21	13
Haze	%	93	98	93	95	33.5	98	96
Gain	-	6	5	4	3	5	3	3
Viewing Angle	0	150	180	120	120	150	150	150
Contrast	-	200:1	200:1	300:1	400:1		500:1	400:1
Hardness	н	2	2	2	2	3	2	2
Features	-	Normal	Wide Viewing Angle	High Contrast	High Contrast	Holographic, Wide Viewing Angle	Natural Color Expression	Mirror Effect
UV Cut	%	99	99	99	99	99	99	99
Applications	-	Indoor, Shops Window, Home Cinema, Presentation	Double Sided, Advertising	Shops Window, Pubs, Low brightness Indoor	High Brightness Indoor, Sun-Facing Windows, Outdoor	3D Hologram Effect, Advertising Windows, Low Brightness Indoor	Outdoor, Pubs, Home Cinema, High Brightness Indoor	Special Advertising Effect

(Specifications are subject to changes without prior notice)



VIDEOS ON WINDOWS

The use of communication on store front, shop windows, corporate buildings is increasing rapidly with the rise of digital signage, out of home advertising and dynamic communication. Rear projection appears as one of the leading technology in this area, thanks to its versatility and ease of use.

Rear projection films can turn any window or shop-window in a dynamic screen. The projection film is directly stuck on the glass, projector is installed inside the store and viewer can watch the pictures or video from outside.



TROL



Rear Projection Signage

Create your own advertising signage by pasting the self-adhesive rear projection film onto the transparent acrylic panel, and installing a projector on the rear side to get a wonderful lightweight and unbreakable signage with minimal maintenance and an economical cost.

This signage can be used in commercial centers, reception areas, commercial spaces, supermarkets, schools, hospitals and others public areas.

Multi-Screen remote central management system:

By attaching a mini PC to the projector and using the Internet, we can provide you with a central remote management system to manage the display content of several signages remotely.

MAKE YOUR OWN SCREEN







Making your own screen is simple and easy in no time.

- Define your screen size and get your transparent acrylic panel cut to the desired size.
- Select the film that will meet your application.
- Apply the film by pasting it on the acrylic panel.
- Use wire ceiling hanging kits if you are mounting the screen from the ceiling.
- Place the projector behind the film or on front of the film (Depends on the film's type) and you then have a wonderful screen

APPLICATIONS

- Advertising signage
- Home cinema/theatre
- Conference rooms
- Touchscreens

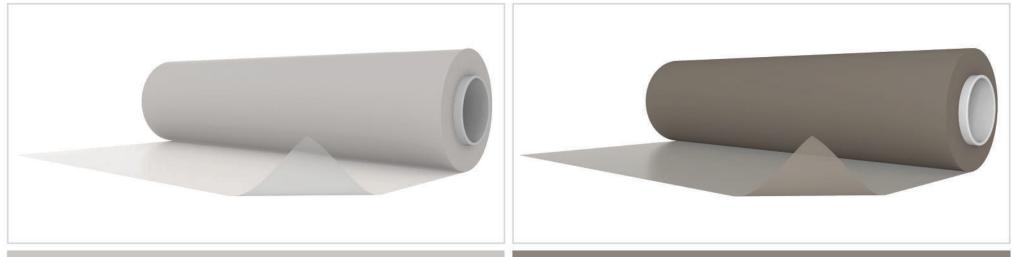
ADVANTAGES

- Cost effective
- Lightweight
- No fragile screen
- Minimum maintenance
- Easy to re-locate



UPGRADE FROM BUDGET TO UGO! PREMIUM SERIES

For high-end & corporate customers looking for a premium quality of rear projection films and able to spend little extra money, **UGO!** Rear projection films offer broad range of films with solutions for different environment. The made in Europe UGO! Films will amaze you with their high specifications that produce great images for immersive experiences.



FROST FILM

High quality matt **light grey** projection film. **FROST** for **rear projection** displays projects content very well at **medium intensity of ambient light**. Contrast projection film has all the features of a high-quality rear projection film.

If you need accurate, high quality display of your product in large format, the **FROST** film is the ideal solution when combined with a projector with higher light output, maximum effect can be achieved.

DUST FILM

The **DUST** projection film for **rear projection** is a highcontrast film used primarily **for projections in daylight and in high parasitic light**. This unique film offers exceptional brightness and high-quality display of black and white on the projected image.

High contrast, true color and use with up to 4K projection.



MILKY FILM

This projection film for **rear projection** has gained its name, thanks to the MILKY color it has when it is not illuminated by the projector's light cone. It is intended primarily for design solutions in office buildings, where a great emphasis is put on a comprehensive color design.

CLEAR FILM

The transparent **holographic rear projection** film **CLEAR** is an eye-catching holoprojection with a surprisingly excellent image result. The sheer **CLEAR** film offers high contrast and a wide viewing angle, it remains transparent when not illuminated, allowing for continued vision through the projection area after application (**92% diffuse transmission**).

UGO!



	UGO! Self-Adhesive Rear Projection Film Specifications & Applications										
Film Type Gain	6 a i a	Viewing	Projector	Thickness	Diffuse Transmission	Applications					
	Gain	Angle	Projection Type	Film Roll Size	Ambient Light	Арі	plications				
Frost Film	Frost Film Light Grey 4,1 140			Standard	100microns	81%	Store Windows (In-malls)	Information Displays			
Light Grey		140°	Rear	Rear 30m x 1,540m	For medium brightness	 Indoor glass Partitions POS Displays & Promotions 	Exhibitions & Live EventsPresentation Screens				
Dust Film	3,9	160°	Standard	100microns	60%	 Store Window Displays Glass Walls & Partitions 	 Information Displays Exhibitions & Conferences 				
Brown	100	Rear	30m x 1,540m	For very high brightness	Advertising Screens	Shopping Centre & Malls					
Milky Film					140° -	Standard	100microns	88%	• POS	Office buildings	
Milky 4	140° —	Rear	30m x 1,540m	For standard brightness	 Interior & designs Business presentations 	Receptions & Meeting RoomsInformation Displays					
			Standard	100microns	92%	 Hologram, theatres concert Glass Walls & Partitions 					
Clear Film Transparent 7,9	9 120°	Rear	30m x 1,540m	For very low brightness	 Glass Walls & Partitions Store Window Displays Interior & design 	& Visitor Attractions Exhibitions & Live Events 					

(Specifications are subject to changes without prior notice)



Turn your store window into a hologram display

M

G

11

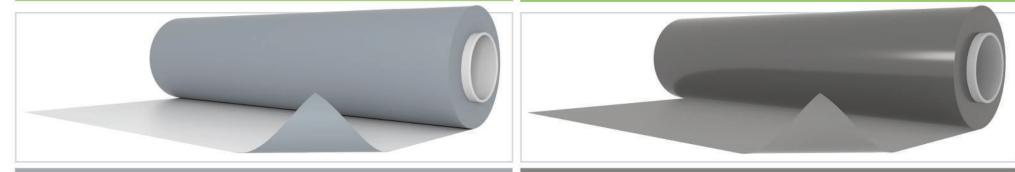
If you are looking to impress audience by creating a holographic video display on your store window, UGO CLEAR transparent rear projection film is the most economical solution to create an amazing hologram screen right on your store's glass window. The 3D holographic Projection Screens are a powerful tool to drive visitors to your store. The system works with a see-through film (92% diffuse transmission) pasted on the store window glass, that has the capability of transforming the black into transparent, the video image comes from a projector installed at the back of the screen. MAGICVIU 3D production artists can help you create the WOW factor and develop out of the box 3D holographic contents making you stand out of the crowd.



UGO! Front, ST, UST Projection Films

Make sure no one mislead you. The standard rear projection films may not work or may not perform well if used for front projection or with short-throw & ultrashort throw projectors. Front projection requires films with special properties capable of absorbing or rejecting ambient light.

Short-throw or ultra-short throw projectors require special projection surfaces that have the necessary features to produce a high-quality image as in standard projector. **UGO** films have the right film for every use and application.



DARK GREY MATT UST FRONT PROJECTION

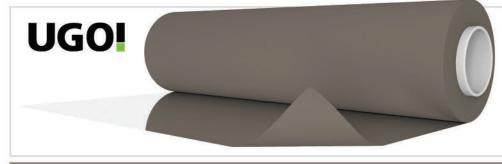
DARK GREY MATT projection film is a high contrast cinema **front** projection film made with multi reflective material layers and diffusers. It boasts 2x higher brightness compared to a standard matt white projection screen while maintaining an incredible wide viewing angle of 180°. DARK GREY MATT film is the right one for true reproduction of the entire color spectrum – including black and white. **This film supports short throw & ultra-short throw projectors** enabling user to create a large screen with minimal space.

GREY FILM UST REAR PROJECTION

The **ULTRASHORT GREY** film sets the trend of the current use of projectors with ultra-short throw rear projection. High-quality contrast image in all positions and the possibility of use on large projection screens with 4K quality display.

The purchasing cost of a set containing a projection screen of over 100" and a FHD or 4K projector is considerably lower compared to large-format displays or TVs, and the projection can be completely frameless





DUAL MIRROR FILM 2 SIDES VIEWING

The **DUAL MIRROR** projection solution with a mirror effect, which is based on the installation of a special projection film on a clear base (glass or plexiglass) and its installation within the space of your interior. The result is a two-sided projection screen (**viewable from both sides**) with great display parameters.

In addition, when the projector is turned off, **the screen acts as a mirror**. Using a high-quality projector, you can for example create a unique, large-format projection screen for customer presentations or a unique shape projection.

BRIGHT FILM UST FRONT PROJECTION

If you are looking for a film that is almost transparent and the image screened on it incredibly contrasting? In that case, **UGO** new **BRIGHT transparent film**, which has already been tested by a number of prestigious clients, is your right choice.

Front or Ultrashort Front

Novelty in our offer is unique for its ability to realistically display projected content even in low light conditions. However, it can also be used for **ultra-short** projection, where no image blur occurs at any point during the projection.



- +-

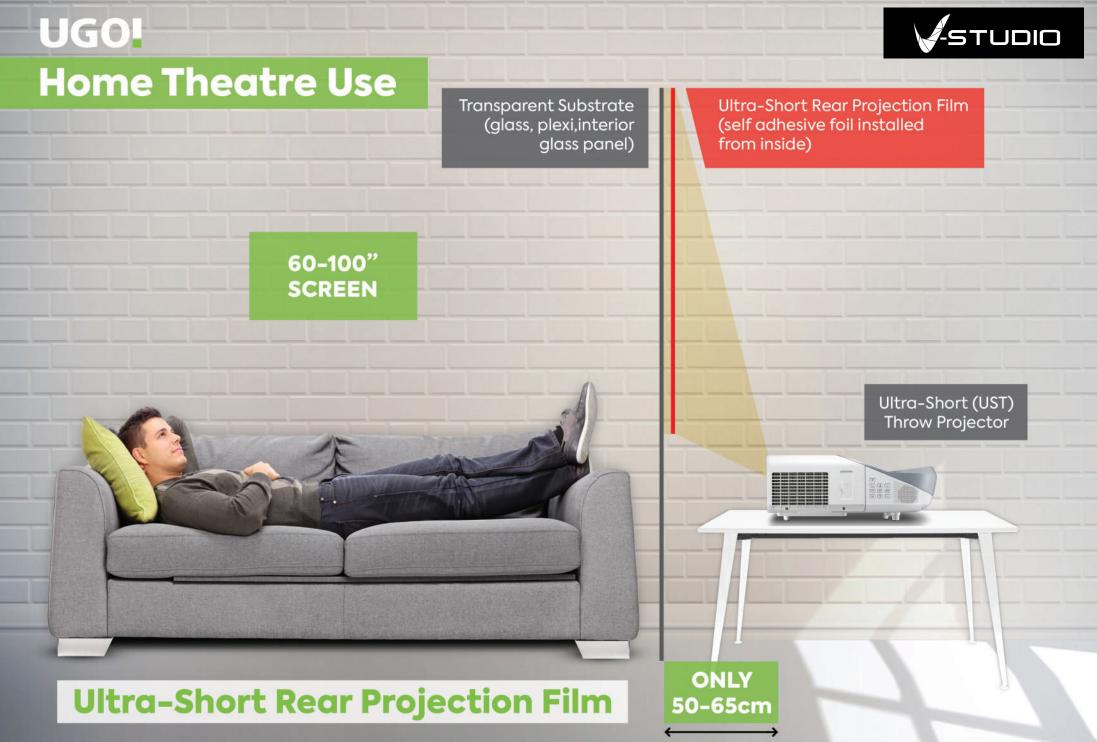
UGOI Front, ST & UST Self-Adhesive Film Specifications & Applications								
Film Type Gain	Viewing Angle	Projector	Thickness	Diffuse Transmission				
		Projection Type	I FIIM ROII SIZE I AMDIENT LIGHT I		Applications			
UST Grey Film	Film 4.2 4000	4,2 180°	Standard/ ST/UST	200microns	51%	Home Cinema Business Presentation Seamless Video Wall Exhibitions & Live Events		
(Dark Grey) 4,2 10	180	Rear	20m x 1,5m	For high brightness	Advertising Screens Conference Rooms			
Dark Grey	Grey 7 1900	7 180°	Standard/ ST/UST	150microns	15%	Home Cinema Interior & design Conference Rooms Information & Advertising		
Matt	100	Front	30m x 1,540m	For very high brightness	 Music Venues & Events Exhibitions & Trade Shows Hotels, offices, Pops & Clubs 			
Dual Mirror Film Mirror Bronze		6,8 160°	160%	Standard/ ST	150microns	13%	POS & Advertising Museums & Visitor Attractions Showrooms	
(2 sides viewing)	180	Rear/Front	30m x 1,540m	For high brightness	Exhibitions & Live Events			
Clear Film		70 1200	7.9 120°	1200	Standard/ ST	100microns	92%	 Hologram, theatres concert Glass Walls & Partitions Shops window
(Transparent) 7,9	120	Rear	30m x 1,540m	For very low brightness	 Glass Walls & Partitions Exhibitions & Live Events Shops window 			
Bright Film	Bright Film		Standard/ ST/UST	150microns	88% front 92% rear	Hologram, theatres concert Museums & Visitor Attractions		
(Transparent) 7,9	150°	Front	10m x 1,26m	For very low brightness	 Glass Walls & Partitions Exhibitions & Live Events 			

(Specifications are subject to changes without prior notice)



UGO DUAL MIRROR FILM FOR BRANDING

PERFECT SUPPORT









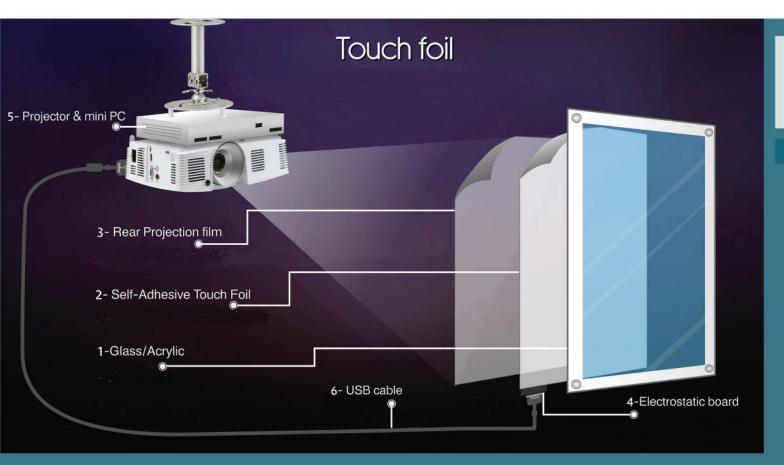


UGO

Create 120" seamless (0,00mm bezel) video wall at ¼ the price of conventional LCD video wall

1





Turn Your Rear Projection Film Screen Into Multi-Touch Screen

Add Touch Foil:

Now with a **touch foil** you can transform any standard rear projection film glass screen into an interactive touchscreen. Interactive touch foils are made up of a clear polymer material with a micro wire sensor grid.

Touch foils let you use your finger as a mouse for pinch, drag, swipe, zoom, and other basic touch gesture commands without any hassle.

Add IR Frame:

Alternatively **IR frame** can be used to turn any rear projection screen into multi-touchscreen.

Infrared (IR) touch screens are based on light-beam interruption technology. Instead of an overlay on the surface, a frame surrounds the display. The frame has light sources, or light emitting diodes (LEDs) on one side and light detectors on the opposite side, creating an optical grid across the screen.



Rear Projection Virtual Presenter

What is virtual presenter?

Virtual presenter or sometimes called Promoter is a construction made of a special glass/acrylic with maximum thickness of 1 cm. An image of a man/woman is projected on the construction. The intensive artificial lamination makes the image naturally bright and clear. The usage of accessory equipment allows addition of voice to the image. The hugeness of the scope of Virtual Promoter multimedia system usage is amazing: it can be used in frames of exhibitions. crowded events, workshops and presentations, in specialized stores and service centers, in business and trading centers. Virtual Presenter can easily and correctly present the product, consult clients and visitors. The advantages of Virtual Presenter are: It attracts visitors, It takes up little space, It operates 24/7, It eliminates the possibility of providing incorrect information due to pre-set content, It increases brand awareness, It positions your company as walking in line with the technological developments.

Making the virtual presenter

The process of the virtual presenter starts with creating a script, find the right presenter (Model), film a video/ shoot photos in a studio, create a cutting profile from the presenter's outline in acrylic, paste the right **MAGICVIU** rear projection film and then mask the video with the cutting & use a rear projector to display the video image on the mannequin outliner. **MAGICVIU** can supply a full production virtual presenter or simply supply the acrylic outline based on materials provided by the client and guide you on how to complete your project.

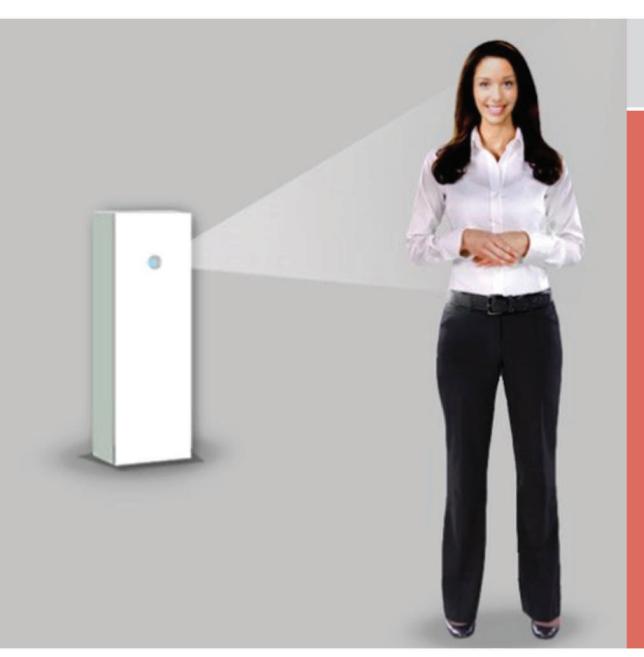
Real or animated character

MAGICVIU can supply the virtual presenter for a real person or animated character video image on the acrylic outliner.





Select Your Virtual Presenter Type



MV-VP01 (Standard) with looped message

J-STUDIO

The Virtual Presenter MV-VP01 (Standard) is simple and cost effective solution, it includes 2 parts, the acrylic outliner and the rear projector housing stand (Stand by customer).

Innovative and engaging, and attracts attention as people approach. Absolutely customized, the hologram can be any presenter, a celebrity and a mascot, even a product! And for Legacy and Vanity clients, the MV-VP01 is a personal representation of them and their story.

Messages will **be looped** (i.e. automatic repeat), your MV-VP01 can deliver any number of different messages, languages, presentations, depending on your objectives. In this image, the projection technology is housed in the tower behind the MV-VP01. This specialized projector can also be ceiling or wall-mounted to reduce the floor footprint where needed, like in retail environments. The equipment consists of two separate components: an acrylic laser-cut silhouette plus the unique multimedia and projection combination within the enclosure. Easy to transport, it is suitable for any location, with minimal set-up. If the installation is permanent, the projector system enclosure can be mounted off the floor, reducing the space requirement.



MV-VP02 with motion detection

The Virtual Presenter MV-VPO2 is a motion detecting unit. The MV-VPO2 is constructed as a one-piece unit (Acrylic outliner & rear projector housing stand), the video plays as soon as the motion sensor detects a close by motion. Unit is designed for areas of higher traffic. This stand-alone unit offers the same customization of content, interactivity where desired, image clarity and, most important, audience engagement.

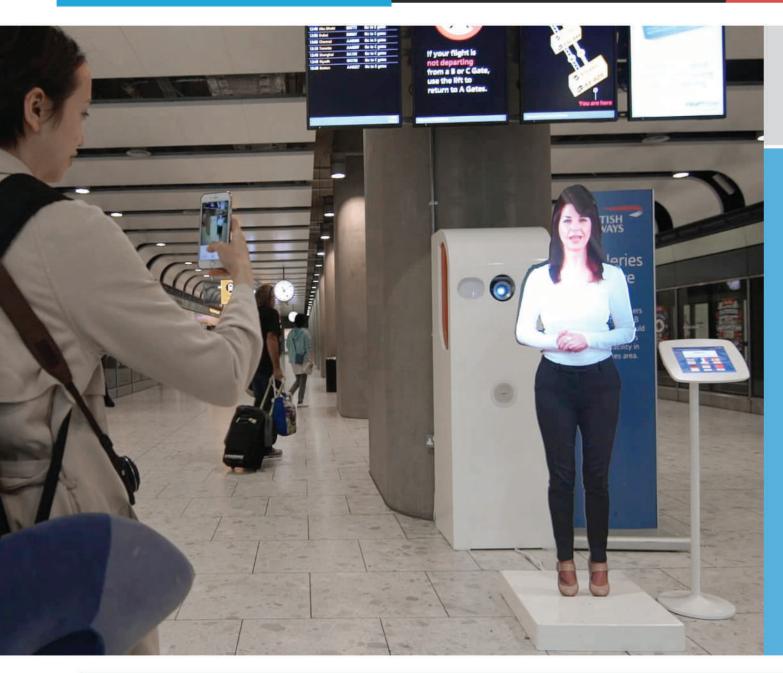
The rear projector housing stand contains a projector, mini PC, motion detection software and hardware.

3D Holographic effect i.e. messages or images can be added to the video synchronized with the voice message for more attraction .

MAGICVIU can supply a complete solution or only the hardware and software, however we always recommend fabricating the projector housing stand at client's end to save shipping cost.







MV-VP03 Interactive Virtual Presenter

MV-VP03 type consists of 1 unit including the acrylic Outliner, the projector, mini PC, with enclosed stand hardware, touchscreen or tablet with software and application enables user to interact with the virtual presenter.

The interactive virtual presenter is the state- Of-art technology, interacts with audience and programed to provide specific information or answer questions on demand.

The front touchscreen or tablet will include an App and specific questions or required information, up on clicking on the question or required info, the MV-VPO3 will reacts with information or answer to that specific question.

MAGICVIU can supply a complete solution including software, App, and programming.



Mini Virtual Promoter for Merchandise Shelves



Mini virtual promoter from **MAGICVIU** using the holographic rear projection technology is an outstanding eye level marketing tool in supermarkets or stores. This tool can be shaped to your product and project your video/image or flashing marketing message turning the crowds head.

This amazing advertisement tool from **MAGICVIU** is a one week return on investment Advertising tool.

Available in 2 shapes:

- A. Standard shape for any beverage can 330ml.
- B. Custom designed shape to match customer's product.

The system is supplied with 700 lumens projector with LED lighting projecting high resolution image, mostly used as an eye's level advertising tool on supermarket's shelf.

Our services including the video production of the client's product.

Gesture Holographic e-book



E-book system from MAGICVIU is a gesture holographic new way of **rear projection** to show off your book in bookstores, at conventions, and in shopping malls, as well as your products catalogue or video. The system uses a projector and computer which are placed on the floor. The projector reads the book or catalogue from the computer, and then displays it on a clear acrylic screen. This makes it an attractive and eye catching display that can bring in new audiences for your book or catalogue and increases both exposure and sales.

Specifications

Book Stand 1.2m high with book model (50cm×40cm)

STUDIO

Projector

Product Type: mini projector Projection technology: DLP Display chip: 0.45 inches Brightness uniformity value :> 90% Contrast Ratio: 2000:1 Standard Resolution: WXGA (1280 x 800) Lamp life: more than 20,000 hours Projection parameters

Interface Parameters

Input terminal: AV: 1 x 3.5mm audio and video triple interface, support PAL / NTSC system VGA: 1 × 15-pin D-type interface HDMI: 1 x Type A type interface, version V1.4, support 480P, 720P, 1080P TF card: 1 x Micro SD file system format: FAT32, FAT, NTFS, supports a maximum capacity:32G DC jack: 1 × outer diameter of 5.5mm internal diameter 2.5mm; 19V/2.1A or 15V/2.6A Output terminals: 1 x 3.5mm headphone jack Control terminals: USB: 1 x USB type A ports, file system format: FAT32, FAT, NTFS

PC

CPU: Intel(R) Core(TM) i3-2130 Memory: 2GB Hard disk: 500GB Graphic card: Intel HD integrated graphic card Video capture USB card:USB MiINE Vcap2860 Video capture camera (image available within 300 inches) Power: 100-240V 5-3A 250W



www.v-studio.co info@v-studio.co Tel: +966 12 206 8155 54 993 3387