M.I50

SIM2
Multimedia

We work for Excellence

We work for Excellence

Made in Italy

The "Made in Italy" mark represents the production quality, the creativity and the style for which Italy is famous all over the world. For a product to carry such a prestigious mark, it must be truly representative of the very best in Italian design, technology and production values. SIM2 is an Italian company that wears its "Made in Italy" mark with pride. For fifteen years the company has designed and manufactured products that are truly deserving of this world-recognized symbol of excellence. For Italian brands like SIM2, success is built on a tradition and history of designer brands, successful ideas, design and product culture, and Italy's own inimitable style.

"Made by SIM2"

Standing proud in the home theater and digital cinema landscape, dominated by the multinational giants, is an Italian company recognized as the epitome of excellence: SIM2. A business that has been taking on and overcoming the challenges laid down by the market and new technologies time and again during the last 15 years, earning an outstanding reputation worldwide for the innovation, performance, quality, design and comprehensive coverage of our product range. SIM2 is the reference standard brand for motion picture and visual communication professionals, as well as home theater enthusiasts who demand the best. Every day, we commit our extensive resources and efforts in the pursuit of a single objective: absolute excellence. This is what makes the SIM2 brand synonymous with a level of performance, passion and prestige that no other brand can offer - rewarding you with not only superior viewing quality, but also an improved quality of life.

Innovative vision

Since 1996, SIM2 has devoted 20% of its human resources and 10% of its turnover to research and development: and the results speak for themselves. Year after year, SIM2 has set new standards in performance and design, with unprecedented innovations and international patents, such as ALPHAPATH™, a masterpiece of precision optics in a compact package, or enhanced DynamicBlack™ technology, which controls black level adjustments with microsecond accuracy, for incredible detail and depth even in the darkest scenes. We are the people who brought DLP® technology into professional movie theaters and homes alike. Used by the Hollywood Studios, this technology from Texas Instruments offers extraordinary image clarity that brings out the smallest details, even in high-speed sequences, delivering exceptional long-lasting performance.

Awards for Excellence: SIM2's commitment to continuous improvement, along with the exceptional content of our products in terms of both technology and design, has earned us international acclaim. Over the course of 15 years, SIM2 has picked up 45 Products of the Year Awards, 34 Reference Product Awards and 40 Best Product Awards from special interest magazines and trade shows.

Worldwide success

Italian style and personality, allied to visions and strategies on a world scale: this sums up SIM2 Multimedia today. From our Pordenone headquarters – located in one of Europe's main industrial districts, just a few miles from Venice – to sales offices in the US, UK, Germany and China, we are a group of companies engaged in five sectors of operation (Home Theater, Command & Control, Professional Venue, Digital Signage and Electronic Cinema), who are now joined by the historic Brionvega brand - one of the greatest protagonists of Italian design and technology. We have a business that spans over 60 countries, either directly or through strategic partnerships with leading distributors, to offer customers the world over the same level of excellence in both products and services.

SIM2 Multimedia Headquarters
Pordenone - Italy
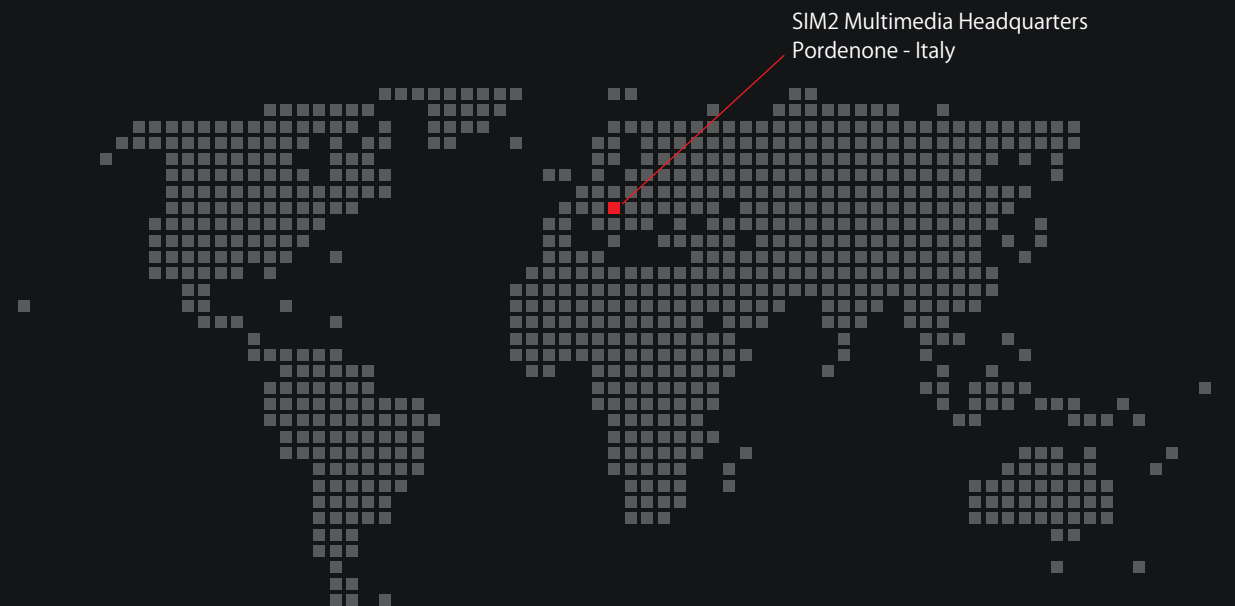
Clear and positive values

The success enjoyed by SIM2 is also a reflection of its ethical vision based on values that know no boundaries: transparency, responsibility and sustainability. SIM2 technology, quality and design all come together in a positive, healthy and environmentally-conscious workplace. From 1999 to 2008, our Pordenone facility has cut its electricity consumption by 25% and water consumption by 80%: what's more, the plan is to have a photovoltaic system up and running to meet all the company's energy needs. In the meantime, all external lighting is provided by new LED lights, which have been developed and installed by a SIM2 subsidiary (Solight SpA). SIM2's commitment to sustainability starts as early as the research and development stage, with an assessment of the products' environmental impact during the course of their total life cycle (LCA). Our company favors the use of green, recyclable materials and puts all raw materials through certified laboratory testing to rule out harmful substances and reduce the use of potentially pollutant substances, such as lead, mercury, cadmium, chromium, PBB and PBDE. Our company has adopted a "printless" program to reduce paper consumption and organizes regular courses for our personnel on issues related to the environment and sustainability, in collaboration with the University of Padua, one of the most prestigious universities in Europe.

SIM2's Super PureLED Technology

Image accuracy of a projector is governed by the quality of the optical engineering within. A delicate balance is required between light engine, DLP® chipset and video processing in order to optimize the performance of the projector.

To meet these requirements, SIM2 has implemented a wide range of features into one all-encompassing technology: SIM2 SUPER PureLED. First, a trio of RGB high-power Phlatlight LEDs by Luminus (one for each primary color R, G and B) replace both the lamp and the color wheel found in conventional designs. The LEDs' brightness is precisely controlled by an 8-bits-per-channel high speed current driver. A sophisticated color sensor - positioned in the light engine - allows the driver to accurately adjust the light intensity coming from the three different LED modules, as well as precisely controlling their color output. Indeed, one of the advantages of LEDs is that they can be pulsed very rapidly, achieving an impressive active color cycle of 20x per frame of content.

This eliminates sequential color artefacts, while improving contrast ratio, color saturation and grayscale accuracy. Second, the combination of the DLP® chipset with this new lighting technology makes the M. Series a true all-digital design, the benefits of which are: exceptional color reproduction, excellent contrast ratio and precise frame-by-frame image control. Third, the new light engine has a high-efficiency optical layout, capable of delivering more light where it is needed most – on-screen.

SIM2's SUPER PureLED technology implements video processing with enhanced i/p conversion algorithms that allow the M. projectors to deinterlace and scale both standard and HD signals and reproduce them at Full HD resolution.

SIM2 Core technologies

Latest high-power LED technology

SIM2 has a close relationship with the world's leading LED manufacturers. The modules used in the M. line are the result of the most recent innovations in the design and production of high-power LEDs. These newly developed LEDs are able to produce 30% more light output than their predecessors and have a considerable increase in efficiency.

In addition, a great deal of attention has been paid to collect and direct the light fluxes in the direction of the DLP modulator, yielding an LED projector with an output value among the highest on the market.

Extraordinary performances from SUPER PureLED technology

The eco-friendly, lamp-free SUPER PureLED light source technology allows the output of a pure and narrow light spectrum (one for each primary color) and delivers an incredible brightness (up to 1000 ANSI Lumens). The use of three separate light elements of red, green and blue provides wider and more consistent color reproduction - an unbelievable 28% wider than NTSC, ADOBE RGB and CINEMA - with richer and more saturated color images. At the same time, it stays consistent over its entire lifetime with an average lumen decay of less than 5% after 2000 hours and an expected lifetime of around 30.000 hours. Also, LEDs light up very quickly, achieving full brightness in microseconds and offer near-immediate start-up and shut-down. This means that the projector doesn't require a lengthy warm-up or cool-down period when in use.
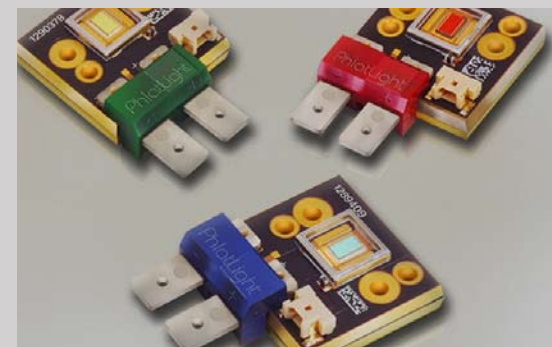
3D Technology Overview

It is now unquestionable: the era of 3D has officially started. Today, new technologies allow the delivery of images with a strong emotional impact, where the spectator feels completely immersed and involved.SIM2 has embraced this new technological 'wager', and today is among the first in the world to offer a series of products for home use, with characteristics that are the same as those at the cinema. How we perceive in 3D: the simple reason why we perceive in 3D is because we have two forward facing eyes with which we observe the world around us (binocular vision). Our eyes are separated from each other by about 6cm (3 inches). As a result, one eye perceives a slightly different image to the other eye, a different shifted perspective. The human brain is wired so that it can combine these two different images.

To simulate 3D vision we must therefore 'trick' the brain by sending a different image for each eye (stereoscopy). In other words, in order to see a 3D image, one eye must see a different image than the one seen by the other eye. The brain then 'recombines' the information related to these two different images, giving the observer a sense of 'depth' and therefore a sense of 3D vision. And DLP® technology provides an image latency time equal to zero, which means perfect 3D images without any annoying crosstalk effect (Ghosting).

•**Active systems** are based on the use of suitably controlled glasses (thereby active) that alternatively block the vision of each eye in quick succession, through the use of shutters. The glasses, which are synchronized with the projector, will view two different images on the screen in a sequential manner (sequential frames), permitting each eye to see only the image dedicated to it.

SIM2's PureMovie & PureAction

SIM2's engineers have designed the 3D active system models with three user modes, each optimized for the various demands of movie, sports and 3D viewing:

• **PureMovie (2D):** allows a pure presentation of the signal coming from your source: all but the most basic circuitry is bypassed in order to ensure a more "film-like" viewing experience. SIM2's PureMovie allows the delivery of the widest contrast ratio and deepest black level performance from the projector.

• **PureAction (2D):** has been specifically designed for fast-motion video material, resulting in smooth motion, free from the 'smear' or 'judder' that can affect the image. The PureAction mode is particularly suited to fast-action sports viewing, where the ability to easily follow the action, regardless of its intensity, is paramount.

• **PureAction 3D:** is SIM2's implemententation of the next level in reality reproduction: 3D video visualization. PureAction includes the state-of-the-art of 3D technologies (120 Hz) in order to ensure 3D viewing free of flickering, ghosting and motion "shudder" suffered by most 3D displays.
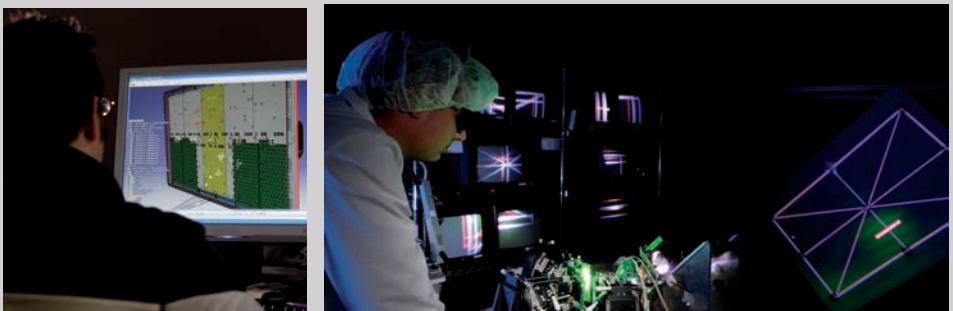
Complete color control
New Live Colors Calibration 2.0 Software

To aid calibration, the M. Line projectors feature the new SIM2's advanced Live Colors Calibration 2.0 software that enables professional calibration of all projection parameters such as complete adjustment of the primary, secondary and white point color coordinates. This PC-based software gives calibration experts unprecedented control over the projector image quality. The image can be further optimized by using one of the four sets of gamma curves available. These can be used to correct for variations in the source material, differing levels of ambient lighting or simply to allow for individual viewing preferences.

LCC2 New Features:
• 2 memories per 2D/3D mode – Total of four
• Target gamut and white point information
• Color probe feedback from X-rite Hubble
• Automatic colors adjustments with feedback from color probe X-rite Hubble
  - Auto-Adj. Coordinate x,y
  - Auto-Adj. Gains
• Projector status alignment
• Native projector colors measure and update
• Available commands to pre-adjusting projector image (bright., contrast and gamma)
• 2 user gamma customization for 2D/3D mode
• More powerful color management panels
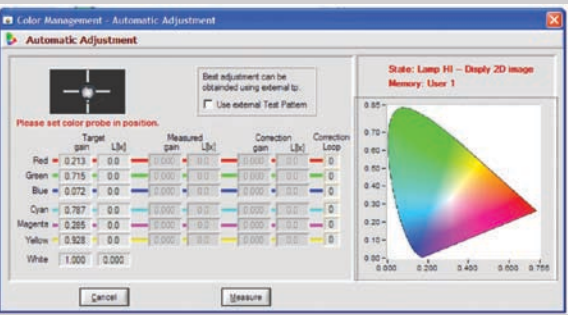
Introducing
M.Line

**Inspire
creativity!**

The M. active 3D (*) LED Full HD DLP-based Video Interior Design System is the result of years of intense research and passion offering a new concept, integrating entertainment with interior design.

The concept is simple: inspire creativity and add vitality to the home by painting with light and images. Whether it's personal photographs, art, mood lighting, or movies, this system delivers stunning visual pleasure, and ignites the senses.

TYPICAL APPLICATIONS

Medium/large media rooms and family/games room with moderate ambient light

Key Points:

- World 1st Multipurpose and "Green" solid state projector line: lamp and color-wheel free
- High performance, long-lasting components
- Long-life, high efficiency LEDs: 30,000 hours or years of silent uncompromised 2D/3D viewing
- Unique 3D, smooth (120 Hz), and long-lasting images in a luxury design
- SIM2 SUPER PureLED™ Technology
- Advanced LED liquid cooling for long term reliability
- Ultra-fast ON/OFF, high speed commuting
- Ultra-wide color space
- Best colorimetry: digital cinema quality straight out of the box

As the world's first 3D active LED video interior design system, the M.150 projector is a one-of-kind solution for discerning customers who desire a unique way to enhance the beauty of their home: a window of light created with cutting-edge projection technology.

Key Points:

- 0.95" 1080p DC4 Single chip DMD (1920 x 1080 resolution)
- SIM2's SUPER PureLED technology
- LED lifetime (estimated) 30,000 hours
- DynamicBlack technology
- Contrast ratio up to 100,000:1 with DynamicBlack
- Luminance 1,000 ANSI Lumens
- SIM2 active 3D(*) technology 120 Hz
- SIM2 PureFilm, PureAction and PureAction 3D(*)
- Color space: >128% NTSC, >180% Rec. 709, Adobe RGB, CINEMA
- EasyLED 2.0 software
- Lens Auto-centering function
- Motorized Lens shift: Vertical Up 60%/Down 25%, Horizontal +/-8%
- Advanced LED liquid cooling
- 2 x HDMI (1.4a with Deep Color)

Introducing M.150 Video Interior Design System

(*) A SIM2 3D emitter and glasses pack is required to initiate this feature (sold separately).

M.150
Paint with
light!

Designed for discerning customers, M.150 utilizes 0.95" DarkChip4 DLP® chipset, SUPER PureLED and active 3D(*) technologies.

SUPER PureLED technology is a true all-digital system, with a trio of LEDs (red, green and blue) acting as both light and color source for the DLP® chipset.

The projector's ability to render 3D images and a variety of more-consistent color gamuts, over and above those used in home theater, means that color space specifications for a wide variety of applications can be fulfilled. Indeed, the M.150 can deliver an unbelievable 128% NTSC and HDTV (REC. 709) color standards, as well as:
• Adobe RGB, which is an extended color space used in critical viewing applications where exacting color reproduction is required. Such applications include: professional photography, graphics and printing, CAD/CAM labs.
• CINEMA color space that responds to the highly specialized needs of post-production houses.

The M.150 projection system produces images with amazing clarity and realism, delivering 1,000 lumens light output and a contrast ratio of 100,000:1 with DynamicBlack™ technology. In the M.150 the

DynamicBlack technology is completely electronic and operates on a frame-by-frame basis and at a frequency of 120 Hz.

SIM2 has made 3D vision the most natural attainable, avoiding the fatigue and perception of the 'artificial' image quality that is typical of other competing 3D systems.

The video processing - the same as that used in SIM2's high-end LUMIS 3D-S 3-chip series - ensures that the image is correctly separated so that each eye (right and left) sees only the view dedicated to it. Also, the system has been endowed with three user modes, each optimized for the varying demands of sports and 3D viewing: PureFilm, PureAction and PureAction 3D (120 Hz).

The M.150 gives the viewer a totally new experience in terms of picture quality with the bonus that the user is free from lamp replacement. The typical life of the LED modules is estimated at around 30,000 hours.

Connecting Full HD 2D and 3D video sources to the M.150 is simplicity itself: the projector's input panel has two HDMI 1.4a inputs, available to use for direct digital connection to these devices.

For ease of installation, a choice of three lenses is available, giving the projector a total throw ratio of 1.5-3.9:1 and 0.675:1.

The latest EasyLED software (version 2.0) enables professional calibration of all projection parameters, giving experts unprecedented control over the final image quality. And, a built-in sensor in the optical path allows the projector to maintain a constant color gamut post-calibration. The sensor is coupled with both the image processing and the firmware that controls the most important parameters, and is always active.

The stunning design of the M.150 takes cues from Italian classics, such as the legendary Brionvega's CUBO TV, and features bold, straight edges with a contemporary appearance that immediately convey the look and feel of luxury. The M.150 is offered in crystal-glass surfaced black.

(*) A SIM2 3D emitter and glasses pack is required to initiate this feature (sold separately).

SIM2's M.150 Key technical specifications

DISPLAY

Technology: 1 x 0,95"chip DMDs

Resolution: Full-HD - 1920 x 1080 pixels

Super PureLED technology

Light source: SUPER PURELED

3D features

SIM2's PureAction 2D/3D technology

SIM2's PureMovie 2D technology

SIM2 DynamicBlack™ Technology (electronic only)

BrilliantColor™ Technology

Contrast ratio (Full ON/ Full OFF): >100,000:1 with DynamicBlack™

Brightness(1): up to 1,000 Ansi Lumens

Expected LED lifetime: 30,000 hours

INSTALLATION

Lens Options (throw ratio):

1.5-2.1:1 with +/- 5% tolerance (type T1)

2.1-3.9:1 with +/- 5% tolerance (type T2)

0.675:1(short-throw)

Optical shift: Motorized Vertical up to +60%, down -25%, horizontal +/-8%

Digital Keystone: Vertical and horizontal

Picture size (inches diagonal): 65-200

Aspect ratio: 4:3, 16:9, Anamorphic, Letterbox, Panoramic, pixel-to-pixel, subtitle + 3 custom-user adjustments

ELECTRONICS AND CONNECTIVITY

Horizontal & Vertical scan freq.: 15-80 kHz/48-120 Hz

Color System: PAL (B,G,H,I,M,N,60); SECAM; NTSC 3.58; NTSC 4.43

PC graphic standards: VGA, SVGA, XGA,SXGA, UXGA, WUXGA

SDTV: 480i/p, 576i/p,

HDTV: 720p 50/60, 1080i 50/60, 1080p 24/50/60 + 576p

Color Space selection: HDTV - EBU - SMPTE-C - ADOBE RGB - CINEMA

Color Temperature: D65 - D75 - High - Low - Medium - User

Inputs/outputs: 2x HDMI (v.1.4 with Deep Color), 1x Composite Video, 1x Graphic RGBHV, 1x Component - YCbCr/RGBs, 1x RS-232, 1x USB (B type), 3D Sync Out, 3x 12V 100mA output

(1) ANSI Lumens specification: This is the typical projector brightness specification found in most sales literature. This measurement allows for direct comparison with other manufacturer's projectors. Measurements are taken in a totally dark test room with brand new LEDs at full power, internal test pattern (full white) and in compliance with ANSI IT7.228-1997 specification.

GENERAL AND ACCESSORIES

Software control: upgradable via RS-232 serial interface or USB

Power supply: 100-240 VAC +/-10% (48/62 Hz)

Projector weight: 20 Kg. (44 lbs)

Projector dimensions (WxHxD): 420x202x532 mm (16.5"x8"x21")

Installation and user manual, AC power cords (2m-6.6 ft); backlit remote control and batteries; EasyLED 2.0 software (BluRay)

SIM2 VISUS Active glasses, IR emitter (optional)(*)

Ceiling bracket (optional)

SIM2 Universal Ceiling Bracket

(*) A SIM2 3D emitter and glasses pack is required to initiate this feature (sold separately).

Due to constant product development, specifications are subject to change without notice.

Italian design and color palette

For many, the cabinet design of a product is almost as important as its performance, particularly when it will be placed in the middle of a living room. The SIM2 products are is elegance exemplified; these are projectors that deserve to be placed on full view. They feature contemporary cabinet designs by Giorgio Revoldini to create the perfect combination of form and function.

Matte Black finish with
crystal accents

M.

M.150
Standard color:
soft-touch matte black finish

Product aesthetic designer Giorgio Revoldini

Photo
Alessandro Bon
SIM2 Archive (Euro Rotelli - Alan Gelati)
Luciano Gaudenzio (nature)
Paper (FSC - Forest Stewardship Council)

Due to constant product development, specifications and design might be subjedct to change without notice.
SIM2 M. Series catalog - ROW - August 2012

SIM2 Multimedia