SOLUTIONS
TO EVOKE EMOTIONS

Martin®
by HARMAN

DYNAMIC ARCHITECTURAL LIGHTING

CREATING MEANINGFUL EXPERIENCES FOR PEOPLE IN THE CITY

My work and methods draw from multiple traditions and backgrounds. I trained as an architect, but see myself as an interaction designer. In any case, architecture has to do with space and people, and I am specialized in spatial and interactive design with and for people. We use drawings, 3D, functional software prototypes and lighting mock-ups as important tools in the design processes to understand, discuss and sometimes convince the different parties in play. Lighting and media need to be experienced to understand their full effect and truly evoke emotions from an audience.

At Kollision we always seek to design from multiple perspectives—i.e. to meet the needs of both clients and audiences. What is in it for you? What is in it for me? And most importantly, what can we get out of it together?

We aim to create facade solutions where lighting and media weave seamlessly into architecture and become an integrated part of the building and the cityscape. Architecture has always been a communication medium. By adding lighting to architecture, we enable people to connect, interact and communicate with each other and their surroundings. At the same time it blurs the line between sender and receiver by facilitating new means of interaction and co-creation.

> *"When designing digital facades it's not about designing for the individual. It is not just one device and one user. You need to grasp the complexity of the city and understand its dynamics in order to provide meaningful experiences for multiple types of spectators."*

Together with my colleagues at Kollision I explore how technology can enable designers to create interactive experiences for observers on an architectural scale. Lately, we have worked with a strategy for media facades that we call Enhanced Brand Ambience. This is when lights and media communicate the brand or organization, while at the same time giving spectators a relevant, meaningful experience and an understanding of how they are connected to that brand.

Bricks, steel, concrete and glass are built to last, while the nature of digital information is in rapid change. We download, upload, play, browse, search, find, book, pay, subscribe, communicate and interact in—and with—the city. We carry increasingly powerful devices and get more and more used to handling information. At the same time, our demand for experiences is on the rise; we want to be entertained and we want to be surprised.

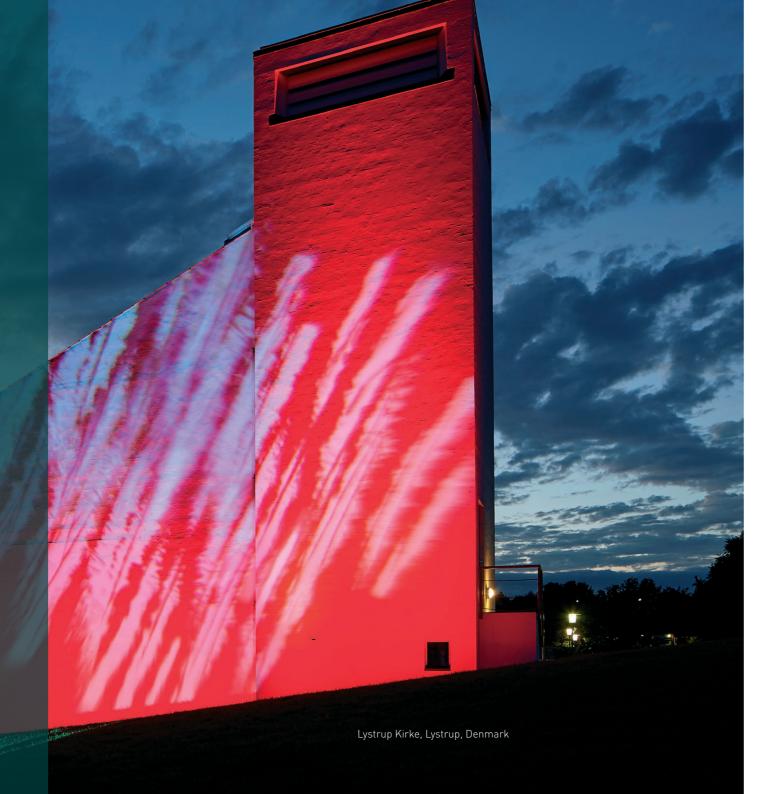**Rune Nielsen**
Architect, Kollision

EVOKING EMOTIONS WITH DYNAMIC ARCHITECTURAL LIGHTING SOLUTIONS

What is lighting to a city?
Why is lighting an essential part of architecture?

Imagine a city without lights. Unthinkable, right? After all, lights are the backbone of any city and our perception of a city is deeply connected to its lights. A city without lights would be like a forest without trees. Light means life. Light shapes the cityscapes and contributes to the creation of architectural wonders and iconic landmarks. Light is an immediate medium with the ability to instantly relay messages and communicate with people. By adding lights and video to a building's facade, you essentially enable the building to evoke emotions from observers.

Today, we witness how science, technology and creativity come together to form the ultimate dynamic architectural lighting solutions. As technology for lighting solutions evolves, complexity increases. To ensure a successful implementation and a functional solution requires careful selection of technology. To decrease complexity it is important to choose an intuitive solution which enables you to integrate lighting, video and interactive technologies and gives you the ability to control the entire solution simply and effectively. This way you prevent technology from becoming an obstacle to creativity.

Lystrup Kirke, Lystrup, Denmark

DYNAMIC ARCHITECTURAL LIGHTING SOLUTIONS FROM MARTIN

Martin by HARMAN's dynamic architectural lighting DNA is deeply embedded in performance and entertainment. With quality standards and high-end technology from our entertainment lighting range, our architectural lighting and LED video products consistently deliver creative versatility for permanent installations—interior and exterior.

"We have combined the lessons we've learned from entertainment and architectural installations and developed a comprehensive range of dynamic lighting and video products to help unfold your creativity and make your designs come to life."

We operate in global teams of highly skilled specialists to partner with designers, clients and project delivery teams alike. Our expertise in proof of concept, installation design, system architecture and persistent reliability ensure confidence, cost accuracy and intelligent coordination from concept initiation throughout the lifetime of the installation.

We relentlessly pursue and engage with emerging trends in technology and user interactivity to ensure HARMAN Professional Solutions remains at the forefront of innovation.

Northside Festival, Aarhus, Denmark

DIFFERENT SOLUTIONS FOR DIFFERENT NEEDS

From simple static light to advanced individual pixel-controlled solutions

STATIC LIGHT

Intensity control

Classic facade lighting enables a building to communicate to passersby throughout the day as well as during the night. The facade expression depends on the chosen color temperature or static color. Controlling the intensity of the lighting gives you the opportunity to adjust to changes in ambience settings and daylight conditions.

VARIABLE WHITE LIGHT

Color temperature control

Changing the color temperature from warm to cold is a subtle way of changing the expression of a facade. Temperatures ranging from cold blueish (6,500 K) to warm yellowish (2,700 K) are able to alter the appearance of a facade and create different expressions.

DYNAMIC COLORS

Color mixing control

Illuminating a facade in soft pastels or strong saturated colors can add dramatic effects. The lighting can be programmed to follow specific lighting schemes for weekdays, weekends and special events such as national holidays. Today's technology gives you the ultimate creative opportunities for selecting the desired color within a wide color gamut.

PROJECTION

Control of gobos and focus

Image or pattern projection is an effective way of communicating without changing the daytime appearance of your facade. It can be as simple as displaying a company logo or messages, or creating ever-changing dynamic patterns. By creating textures on large surfaces you can add another dimension to your lighting scheme.

CREATIVE LED

Individual pixel-controlled LEDs

Creative LED video products break free from the traditional rectangular format—allowing seamless integration of video elements into buildings and architecture. Facades use lighting to convey specific information. Each individual LED in a facade is individually controllable and can be used to display content such as images, films and text.

**SOLUTIONS
TO EVOKE EMOTIONS**

*Put on a face(ade)
...make people **smile***

KARA/NOVEREN

THE ENERGY TOWER THAT LIGHTS UP THE NIGHT SKIES

Credits
Architectural Concept: (designed by) Erick van Egeraat
Lighting Project: Gunver Hansen Tegnestue
Fixtures, light control, programming and installation: Martin Professional
Photo: Jeppe Sørensen

Danish waste management company KARA/NOVEREN set out to replace two furnaces with a state-of-the-art waste-to-energy incineration line. The incineration line, more popularly referred to as The Energy Tower, stands tall on the skyline of the Danish city of Roskilde.
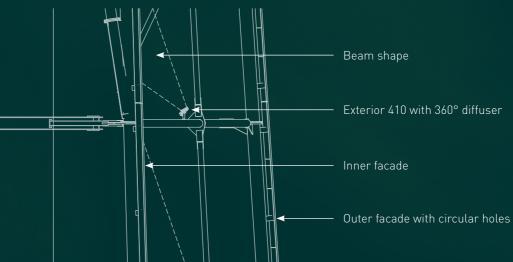
All fixtures had to be individually controllable to give the building a dynamic expression. It was crucial that the fixtures would be able to illuminate the relatively difficult projection surface, which was dark and very diverse. At the same time the lighting should be bright and powerful enough to be seen from a distance. Finally, there was also a desire for a low power consumption.

Martin Professional's Exterior range fixtures were chosen for the project due to their size, durability, and color reproduction capabilities.

The Architect, Erick van Egeraat's vision for the lighting was for it to be an aesthetic contribution to The Energy Tower as a new landmark, and that it should signal the processes that take place inside of the tower and portray the combustion and energy making process.

Part of the magic of KARA/NOVEREN's Energy Tower is its ability to alter its appearance with future lighting designs for special events, and that the lighting concept sends the message of waste-to-energy to spectators.

For full story go to **martin.com**

EQUIPMENT USED

112 pcs. Exterior™ 410
78 pcs. Tripix 1200
Control system: Martin M-PC,
RDM 5.5 splitter, Ether2DMX8

RECOMMENDED PRODUCTS

Exterior Linear 1200 Cove
Page 24

Exterior Wash 210
Page 23

Beam shape

Exterior 410 with 360° diffuser

Inner facade

Outer facade with circular holes

Mercedes-Benz Superdome
ILLUMINATED BY SOLOMON GROUP AND MARTIN PROFESSIONAL

Officials at the Mercedes-Benz Superdome "flipped the switch" to illuminate the Louisiana landmark with a truly magnificent Martin Professional lighting show designed by New Orleans-based multimedia production company Solomon Group. The lights wash the building's exterior in a spectrum of animated colors, patterns and images.
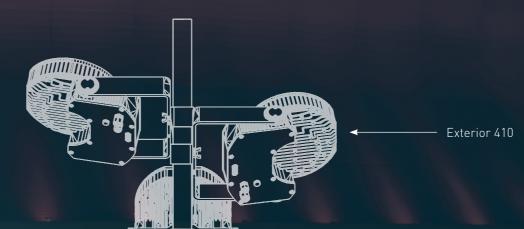
The design required the installation of 288 Martin Professional Exterior™ 410 lighting fixtures that are capable of reproducing every color of the rainbow on all 96 concave aluminum panels that ring the building's exterior. The Exterior 410 is a bright yet compact luminaire that uses pre-mixed LEDs and RGBW color mixing.

The four quadrants of the Superdome's exterior also feature Martin Professional Exterior™ 1200 Image Projectors. These powerful 1,200 W luminaires are designed to project animated images and effects. The lighting control system can also be operated remotely so that the color scheme can be managed and manipulated off site.

The LED lighting system contains more fixtures and can be programmed with a vast array of color options. The entire system is remarkably energy efficient. When operating in one color, it draws only 10 kW of electricity—the equivalent amount of energy used by a small home. The system is operated nightly and will feature many different colors and lighting patterns.

The design of the lighting system includes the capability to customize effects, images and color in order to celebrate specific events or commemorate occasions.

For full story go to **martin.com**

Credits
Solomon Group
Eskew+Dumez+Ripple/Ellerbe Becket
Frischertz Electric

Exterior 410

EQUIPMENT USED

288 pcs. Exterior™ 410
4 pcs. Exterior™ 1200 IP
4 pcs. Ether2DMX8

RECOMMENDED PRODUCTS

Exterior Wash 310
Page 23

Exterior Projection 1000
Page 27

The High Roller
ICONIC LAS VEGAS LANDMARK

Recently, the Las Vegas skyline was made even more exciting with the completion of the world's tallest observation wheel. The latest addition to Caesars Entertainment's exclusive The LINQ resort, The High Roller, now rises above the cityscape of Las Vegas. Shaped like a giant floating hoop, The High Roller is illuminated from sunset throughout the night by fixtures from Martin's Tripix range of lighting fixtures.
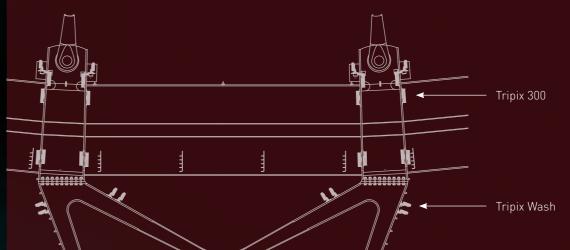
One of the project's initial challenges was to make the lighting design compelling from every possible angle, including accommodating the user experience from both inside the cabins and from various angles and viewing distances. As visitors would be able to see directly into the light source from the cabins, a traditional RGB light source was not an option. Therefore, the Tripix range with their converged light sources were chosen.

A key guideline for the lighting design was that it had to respect the beauty and simplicity of the structure, while at the same time embracing its kinetic qualities. These guidelines impacted every aspect of the lighting design, including how the patterns could run in subtle ways to emphasize the dimensionality of the wheel. The structure is large and very slim, so lighting can be programmed to give spectators a perception of 3D qualities.

Even though the fixtures are moving around with the rim it is possible to program them to make the wheel appear to be one color in the bottom half and another in the top half. The programming frequently returns to white to reestablish the pure form of the object.

The High Roller has become an integral part of the Las Vegas skyline with its beautiful shape and elegant lighting design, making it fully deserving of its status as the latest and greatest Vegas landmark.

For full story go to **martin.com**

EQUIPMENT USED

1,120 pcs. Tripix 300
1,008 pcs. Tripix Wash
560 pcs. Tripix Power IP66

The High Roller project also features a complete HARMAN audio solution provided by JBL, Crown and BSS.

RECOMMENDED PRODUCTS

Exterior Wash 110
Page 23

Exterior Linear 300 Graze
Page 24

Tripix 300

Tripix Wash

Confederation of Danish Industry
DYNAMIC MEDIA FACADE IN THE HEART OF COPENHAGEN

Martin Professional, Kollision and Transform Architects have wrapped the Confederation of Danish Industry building in an ever-changing LED media facade. In addition to the building's facade, new lighting schemes have also been developed for the reception, conference hall and elevators.

Content for the facade was created by Danish design firm Kollision in cooperation with Transform and allows the Confederation of Danish Industry to use the facade as a dynamic interface between their brand, the building, and the urban setting. The digital facade has transformed the exterior of the building, giving it a much more engaging and emotional presence.

The media facade incorporates 4,000 meters of VC-Strips in a customized outdoor version, forming a harlequin pattern across the entire facade on which a variety of graphical designs can be displayed. The LED strips are full-color RGB LED battens with each LED (over 90,000 in total) individually controllable in terms of color, brightness and intensity.

Various facade designs are run from a custom made player-system also developed by Kollision. The system gives the client's internal communication department the freedom to transmit any look or expression they wish onto the facade. The player-system also includes an integrated weather service app controlling the brightness of the facade. The client can also control and adjust the facade via a custom iPad app.

The DI media facade is the first of its size and kind in Denmark.

For the full story go to **martin.com**

EQUIPMENT USED

VC-Strips in a custom housing
P3 PowerPort 1500
P3-200 System Controller

RECOMMENDED PRODUCTS

Exterior PixLine 40
Page 31

VC-Strips in a custom housing

Bearing steel construction

**SOLUTIONS
TO EVOKE EMOTIONS**

*Bring out the **best** in people
...and in buildings*

M-SERIES CONTROLLER
family

The Martin M-Series controller family offers a comprehensive set of capabilities for any type of lighting installation. At the core of the M-Series family is the M-Series software, which makes it simple for designers to implement even their most dazzling visions.

All products in the M-Series family are based on the same controller philosophy and use the same core software. Additional M-Series modules can easily be connected to a system in a true plug-and-play fashion.
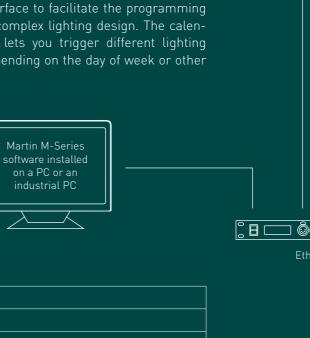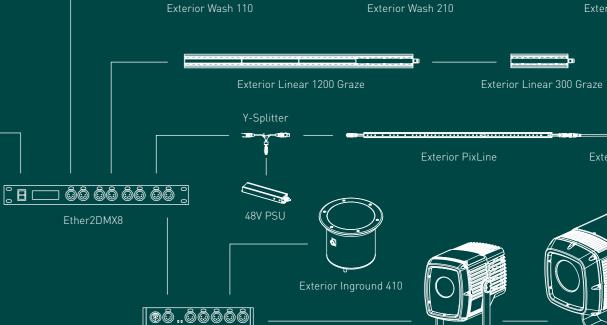
Danhostel Copenhagen Denmark

Easy programming and control
DYNAMIC ARCHITECTURAL LIGHTING CONTROL SOLUTIONS

Martin M-PC software

Martin M-PC offers the power and flexibility to control any type of facade lighting installation. It can control up to 128 DMX universes or 65,536 individual channels. It features a user-friendly software interface to facilitate the programming of the most complex lighting design. The calendar function lets you trigger different lighting schemes depending on the day of week or other variables.

Exterior Wash 110

Exterior Wash 210

Exterior Wash 310

Exterior Linear 1200 Graze

Exterior Linear 300 Graze

Y-Splitter

Exterior PixLine

Exterior Dot-HP

Martin M-Series software installed on a PC or an industrial PC

Ether2DMX8

48V PSU

Exterior Inground 410

M-PC	
	65,636
	Scheduler
	Astronomical clock
	HTTP, UDP, Telnet, DMX and RS-232
	Customizable user interface
	Any DMX-controllable fixtures

RDM 5.5 splitte

Exterior Projection 500

Exterior Projection 1000

EXTERIOR WASH family

Exterior Wash is a family of powerful, compact and energy-efficient LED light fixtures featuring a slick design and high-precision optics for even color mixing and flat fields. All models have built-in displays for ease-of-use as well as a functional and discreet snoot option which integrates seamlessly with the design of the fixtures. All fixtures are fully IP-rated for permanent outdoor use and have a wide selection of beam angles.

Each series is available in three variants: Exterior Wash (110/210/310) featuring standard configuration with premixed quadcolors for superior color mixing, Exterior Wash (100/200/300) for narrow beam configuration and Exterior Wash (120/220/320) as a variable white light from 2,700–6,500 K.

Dokk1, Aarhus, Denmark

Exterior Wash 100 series

Exterior™ Wash 100 is a series of fixtures designed to illuminate smaller structures, features of a building and landscaping.

Exterior Wash 200 series

Exterior™ Wash 200 is a series of outdoor lighting fixtures designed to illuminate midsized structures and building facades.

Exterior Wash 300 series

Exterior™ Wash 300 is a series of outdoor and very bright lighting fixtures designed to illuminate large structures, building facades and bridges.

Flexible solution with six different beam angle options

Functional and discreet optional snoot which integrates with the design of the fixtures

Control via DMX, RDM and OLED display

	100	110	120
☀	IP66	IP66	IP66
☀	1,750 lm	1,300 lm	2,400 lm
∠	7°, 12°, 21°, 40°, 60°, 12° x 60°	10°, 14°, 22°, 41°, 61°, 14° x 61°	7°, 12°, 21°, 40°, 60°, 12° x 60°
☀	R,G,B,W single-color LEDs	Quadcolor RGBW LED	2,700 K–6,500 K LED
⋮	DMX/RDM	DMX/RDM	DMX/RDM
⚡	100–277 V	100–277 V	100–277 V
▭	240 x 198 x 173 mm (9.4 x 7.8 x 6.8 in)	240 x 198 x 173 mm (9.4 x 7.8 x 6.8 in)	240 x 198 x 173 mm (9.4 x 7.8 x 6.8 in)
▥	5.5 kg (12.1 lb)	5.5 kg (12.1 lb)	5.5 kg (12.1 lb)

	200	210	220
☀	IP66	IP66	IP66
☀	6,800 lm	4,900 lm	9,600 lm
∠	7°, 12°, 21°, 40°, 60°, 60°, 12° x 60°	10°, 14°, 22°, 41°, 61°, 14° x 61°	7°, 12°, 21°, 40°, 60°, 12° x 60°
☀	R,G,B,W single-color LEDs	Quadcolor RGBW LED	2,700 K–6,500 K LED
⋮	DMX/RDM	DMX/RDM	DMX/RDM
⚡	100–277 V	100–277 V	100–277 V
▭	272 x 334 x 334 mm (10.7 x 13.1 x 13.1 in)	272 x 334 x 334 mm (10.7 x 13.1 x 13.1 in)	272 x 334 x 334 mm (10.7 x 13.1 x 13.1 in)
▥	15 kg (33 lb)	15 kg (33 lb)	15 kg (33 lb)

	300	310	320
☀	IP66	IP66	IP66
☀	10,300 lm	8,300 lm	15,100 lm
∠	7°, 12°, 21°, 40°, 60°, 12° x 60°	10°, 14°, 22°, 41°, 61°, 14° x 61°	7°, 12°, 21°, 40°, 60°, 12° x 60°
☀	R,G,B,W single-color LEDs	Quadcolor RGBW LED	2,700 K–6,500 K LED
⋮	DMX/RDM	DMX/RDM	DMX/RDM
⚡	100–277 V	100–277 V	100–277 V
▭	284 x 410 x 404 mm (11.2 x 16.1 x 15.9 in)	284 x 410 x 404 mm (11.2 x 16.1 x 15.9 in)	284 x 410 x 404 mm (11.2 x 16.1 x 15.9 in)
▥	20.5 kg (45.2 lb)	20.5 kg (45.2 lb)	20.5 kg (45.2 lb)

EXTERIOR LINEAR
family

The Exterior™ Linears are a family of LED color changing fixtures in a robust outdoor-rated housing. The fixtures provide high output and are available in both cove and graze light versions.

The fixtures are easy to install due to their integrated universal power supply. The fixtures connect via daisy chain using a combined power and data connector and are controlled by DMX. The Exterior Linears are available with full color mixing or as variable white versions.

Exterior Linear Cove

Exterior™ Linear 1200 Cove and Exterior™ Linear 300 Cove feature superb color mixing and a uniform light distribution at a beam angle of 120°, suitable for a wide range of indirect lighting applications such as cove lighting in ceilings, decorative wall lighting and other similar structures.

Exterior Linear Graze

The Exterior™ Linear 1200 Graze and the Exterior™ Linear 300 Graze are designed to illuminate any wall or any type of linear structure. They feature superb color mixing and uniform light distribution at four different beam angles, ideal for creating textured surfaces.

Linear LED fixture with uniform color mixing

Robust outdoor-rated fixture available in two lengths

Easy installation with integrated power supply

	300	320	1200	1220
	IP66	IP66	IP66	IP66
	760 lm	760 lm	3,040 lm	3,040 lm
	120°	120°	120°	120°
	R,G,B,W single-color LEDs	2,700 K–6,500 K LED	R,G,B,W single-color LEDs	2,700 K–6,500 K LED
	DMX/RDM	DMX/RDM	DMX/RDM	DMX/RDM
	100–277 V	100–277 V	100–277 V	100–277 V
	305x71x98 mm (12x2.8x3.9 in)	305x71x98 mm (12x2.8x3.9 in)	1,200x71x98 mm (47.2x2.8x3.9 in)	1,200x71x98 mm (47.2x2.8x3.9 in)
	1.5 kg (3.3 lb)	1.5 kg (3.3 lb)	6 kg (13.2 lb)	6 kg (13.2 lb)

	300	320	1200	1220
	IP66	IP66	IP66	IP66
	820 lm	820 lm	3,280 lm	3,280 lm
	10°, 15°, 60°, 15° x 60°	10°, 15°, 60°, 15° x 60°	10°, 15°, 60°, 15° x 60°	10°, 15°, 60°, 15° x 60°
	R,G,B,W single-color LEDs	2,700 K–6,500 K LED	R,G,B,W single-color LEDs	2,700 K–6,500 K LED
	DMX/RDM	DMX/RDM	DMX/RDM	DMX/RDM
	100–277 V	100–277 V	100–277 V	100–277 V
	305x71x98 mm (12x2.8x3.9 in)	305x71x98 mm (12x2.8x3.9 in)	1,200x71x98 mm (47.2x2.8x3.9 in)	1,200x71x98 mm (47.2x2.8x3.9 in)
	1.5 kg (3.3 lb)	1.5 kg (3.3 lb)	6 kg (13.2 lb)	6 kg (13.2 lb)

EXTERIOR INGROUND
family

The Exterior™ Inground family offers the benefits of dynamic light and discreet installation combined in a simple, easy-to-use system of color changing LED luminaires. The family is available in a number of configurations. The trim ring is available in a beveled and flush mount version which makes the recessed housing fit any type of surface, leaving the final installation discreet both day and night.

Exterior Inground 400 series

The Exterior™ Inground 400 series are perfect for installations with visible light sources. The Exterior™ Inground 410 blends all colors of the RGBW LED sources in the lenses, delivering perfectly pre-mixed colors. Finally, the Exterior™ Inground 420 features variable white light from 2,700–6,500 K color temperature.

High optical performance: Uniform distribution of light and color

Bright and efficient in-ground fixture with full LED color mixing

Durable and low maintenance

	400	410	420
	IP67	IP67	IP67
	TBA	3,500 lm	TBA
	7°, 14°, 31°, 57°, 7° x 60°	19°, 22°, 36°, 65°, 19° x 61°	7°, 14°, 31°, 57°, 7° x 60°
	R,G,B,W single-color LEDs	Quadcolor RGBW LED	2,700 K–6,500 K LED
	DMX/RDM	DMX/RDM	DMX/RDM
	100–277 V	100–277 V	100–277 V
	340 x 340 x 283 mm (13.4 x 13.4 x 11.1 in)	340 x 340 x 283 mm (13.4 x 13.4 x 11.1 in)	340 x 340 x 283 mm (13.4 x 13.4 x 11.1 in)
	9.5 kg (20.9 lb)	9.5 kg (20.9 lb)	9.5 kg (20.9 lb)

EXTERIOR PROJECTION
family

Image or pattern projection is an effective way of communicating without changing the daytime appearance of your facade. It can be as simple as displaying a company logo or messages, or creating ever-changing dynamic patterns. By creating textures on large surfaces you can add another dimension to your lighting scheme.

Bolig Beton, Løsning, Denmark

Exterior Projection 500

Powerful fixture for integrating textures, patterns and graphics in outdoor lighting designs. The fixture can be used for bright and dynamic logo projection as well as precision framing. Using advanced LED technology, it offers outstanding energy efficiency, compact size and unlimited creative possibilities.

Flat-field, high-contrast image projection

Fully weatherized for trouble-free use with low maintenance in outdoor installations

Feature-packed, allowing huge creativity in setting up exciting lighting effects

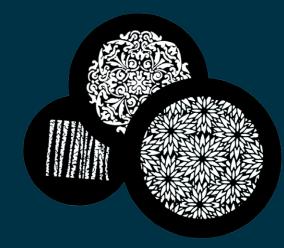|	
	White light 230 W LED
	IP66
	6,100 lm
	11°, 20°, 36°, 46°
	7 interchangeable colors + open
	Gobos, animation effect, prisms, frost, focus
	415 x 250 x 313 mm (16.3 x 9.8 x 12.3 in)
	20 kg (44 lb)

Exterior Projection 1000

The Exterior™ Projection 1000 is an outdoor-rated LED projector that offers sharp image quality, dynamic features and great reach over huge distances. It sports a wealth of rich, dynamic and creative control options with long LED lifetime, low power consumption and running costs.

Flat-field, high-contrast image projection with wide range zoom

Fully weatherized for trouble-free use with minimal maintenance in outdoor installations

Packed with features, including full CMY color mixing

	White light 440 W LED
	IP66
	16,800 lm
	10° – 40° zoom
	CMY plus additional 7 interchangeable colors + open
	Gobos, animation pattern, prisms, frost, focus
	702 x 374 x 380 mm (27.62 x 14.72 x 14.96 in)
	50 kg (110 lb)

Gobos

Gobos are thin masks used to create special lighting patterns, textures or effects and can also be used to project images and logos.

Gobos can be made of metal for simple black/white projections or glass for colored and high resolution image projection.
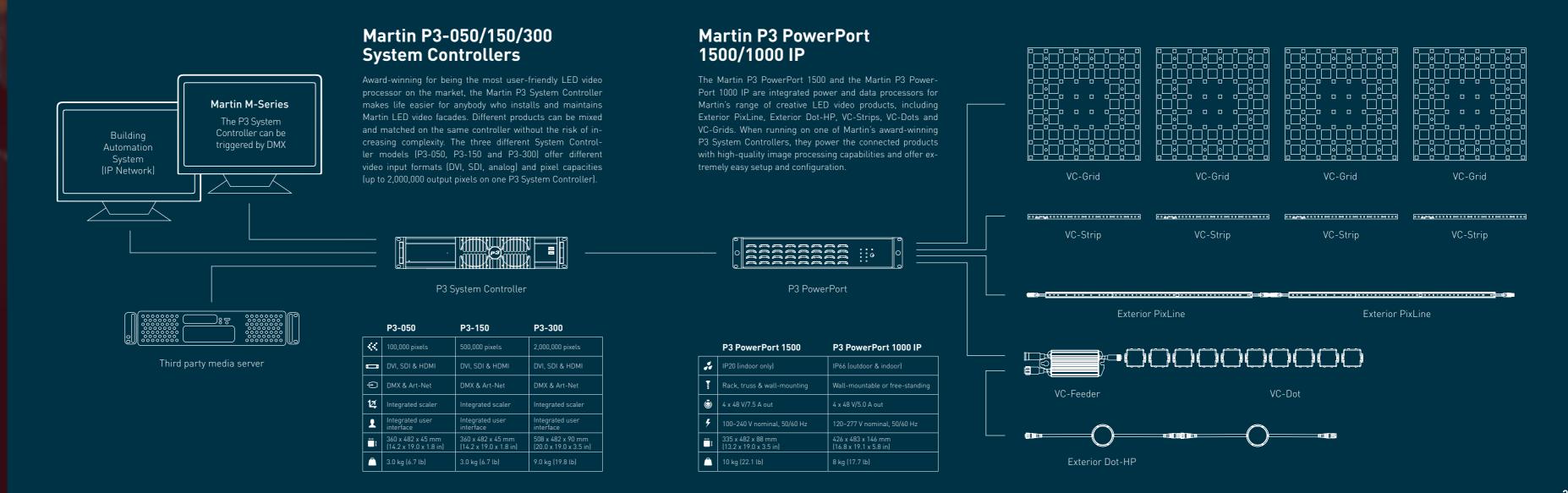
P3
CONTROL
solutions

All Martin LED video products can be driven with the Martin P3 System Controller. We offer P3 System Controllers in various sizes, but the key is always simplicity.

No matter how you mix and match different Martin LED video products, they can always be controlled by the same system. Installation and maintenance of any media facade solution become easier with the P3's remote management and monitoring capabilities.

Different products, **one** control solution

ARCHITECTURAL LED VIDEO CONTROL SOLUTIONS

Martin P3-050/150/300 System Controllers

Award-winning for being the most user-friendly LED video processor on the market, the Martin P3 System Controller makes life easier for anybody who installs and maintains Martin LED video facades. Different products can be mixed and matched on the same controller without the risk of increasing complexity. The three different System Controller models (P3-050, P3-150 and P3-300) offer different video input formats (DVI, SDI, analog) and pixel capacities (up to 2,000,000 output pixels on one P3 System Controller).

Martin P3 PowerPort 1500/1000 IP

The Martin P3 PowerPort 1500 and the Martin P3 PowerPort 1000 IP are integrated power and data processors for Martin's range of creative LED video products, including Exterior PixLine, Exterior Dot-HP, VC-Strips, VC-Dots and VC-Grids. When running on one of Martin's award-winning P3 System Controllers, they power the connected products with high-quality image processing capabilities and offer extremely easy setup and configuration.

Martin M-Series

The P3 System Controller can be triggered by DMX

Building Automation System (IP Network)

P3 System Controller

P3 PowerPort

Third party media server

VC-Grid | VC-Grid | VC-Grid | VC-Grid

VC-Strip | VC-Strip | VC-Strip | VC-Strip

Exterior PixLine | Exterior PixLine

VC-Feeder | VC-Dot

Exterior Dot-HP

	P3-050	P3-150	P3-300
	100,000 pixels	500,000 pixels	2,000,000 pixels
	DVI, SDI & HDMI	DVI, SDI & HDMI	DVI, SDI & HDMI
	DMX & Art-Net	DMX & Art-Net	DMX & Art-Net
	Integrated scaler	Integrated scaler	Integrated scaler
	Integrated user interface	Integrated user interface	Integrated user interface
	360 x 482 x 45 mm (14.2 x 19.0 x 1.8 in)	360 x 482 x 45 mm (14.2 x 19.0 x 1.8 in)	508 x 482 x 90 mm (20.0 x 19.0 x 3.5 in)
	3.0 kg (6.7 lb)	3.0 kg (6.7 lb)	9.0 kg (19.8 lb)

	P3 PowerPort 1500	P3 PowerPort 1000 IP
	IP20 (indoor only)	IP66 (outdoor & indoor)
	Rack, truss & wall-mounting	Wall-mountable or free-standing
	4 x 48 V/7.5 A out	4 x 48 V/5.0 A out
	100–240 V nominal, 50/60 Hz	120–277 V nominal, 50/60 Hz
	335 x 482 x 88 mm (13.2 x 19.0 x 3.5 in)	426 x 483 x 146 mm (16.8 x 19.1 x 5.8 in)
	10 kg (22.1 lb)	8 kg (17.7 lb)

EXTERIOR PIXLINE
family

The Exterior PixLine family consists of line-ar LED video fixtures for media facades and creative installations. The family comes in three pixel pitches (10, 20 and 40 mm) that can be combined with a wide variety of lenses and diffusers.

The fixtures are driven by the Martin P3 System Controller family for easy config-uration, mapping and setup and are also backward compatible with DMX. Length and color of the fixtures are fully custom-izable and the power source can be hidden from view.

Salling, Aarhus, Denmark

Creative possibilities with Exterior PixLine accessories

Easy mounting

The Exterior PixLine can be easily installed in the optional mounting profile, which also conceals the cables. The Exterior PixLine also includes an M6 bolt track for direct mounting on a surface or structure.
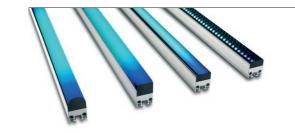
Dedicated graze version

A dedicated graze version has been designed to achieve an effective graze light and wall wash distribution. The lens provides a 25° x 85° beam angle with the light tilted 5° towards the wall.

Variety of diffusers for different looks

All Exterior PixLines are available with 4 different diffusers allowing for selecting the right look for the right application: Flat clear front, Flat diffused front, Square diffused front and Round diffused front.

| Exterior PixLine 10 | Exterior PixLine 20 | Exterior PixLine 40 |

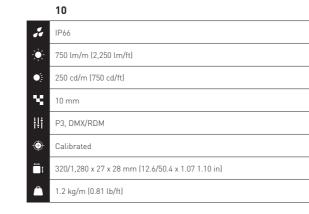The Exterior PixLine fixtures are pixel-level calibrated in terms of color and brightness.
This guarantees the best possible fixture to-fixture and pixel-to-pixel consistency, even if a single fixture on a facade had to be replaced.
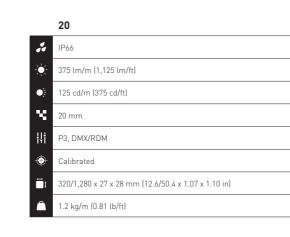The fixtures are fully sealed for outdoor installation, regardless of the weather conditions they will be facing.
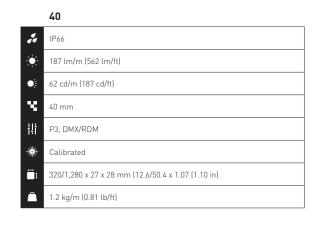
Wide variety of pixel pitch, lens and diffuser options for flexibility of look

Fully outdoor-rated and customizable in terms of length and color
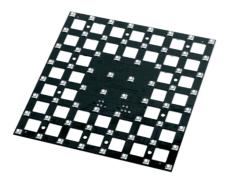
Easy setup and cabling for clean installation

10

IP66	
750 lm/m (2,250 lm/ft)	
250 cd/m (750 cd/ft)	
10 mm	
P3, DMX/RDM	
Calibrated	
320/1,280 x 27 x 28 mm (12.6/50.4 x 1.07 1.10 in)	
1.2 kg/m (0.81 lb/ft)	

20

IP66	
375 lm/m (1,125 lm/ft)	
125 cd/m (375 cd/ft)	
20 mm	
P3, DMX/RDM	
Calibrated	
320/1,280 x 27 x 28 mm (12.6/50.4 x 1.07 x 1.10 in)	
1.2 kg/m (0.81 lb/ft)	

40

IP66	
187 lm/m (562 lm/ft)	
62 cd/m (187 cd/ft)	
40 mm	
P3, DMX/RDM	
Calibrated	
320/1,280 x 27 x 28 mm (12.6/50.4 x 1.07 (1.10 in)	
1.2 kg/m (0.81 lb/ft)	

GRIDS, STRIPS & DOTS
range

Martin's range of creative LED video building blocks allows seamless integration for an appealing result without messy cabling. The compact size of the fixtures makes them suitable for any type of installation, while their color and brightness calibrated LEDs provide the most consistent and even output.

All fixtures are driven by the Martin P3 System Controllers for ease of setup, mapping and maintenance and are also compatible with DMX for smaller installations.

Suntech, Singapore

VC-Grid family

These compact rectangular LED video tiles can be integrated into lobbies, media facades, custom decorative elements and more. An optional mounting frame offers consistent installation.

Available in 15, 25, 30 and 60 mm pixel pitch

Easy cabling, mapping and configuration

Bright and fully calibrated for optimal consistency

	15	25	30	60
	IP20	IP20	IP20	IP20
	15.000 lm/m² – 161.000 lm/ft²	12.000 lm/m² – 129.000 lm/ft²	8.250 lm/m² – 89.000 lm/ft²	2.250 lm/m² – 24.000 lm/ft²
	-	-	-	-
	5,000 nt	4,000 nt	2,750 nt	750 nt
	15 mm	25 mm	30 mm	60 mm
	P3, DMX/RDM	P3, DMX/RDM	P3, DMX/RDM	P3, DMX/RDM
	Calibrated	Calibrated	Calibrated	Calibrated
	240x240x15 mm (9.4x9.4x0.6 in)	200x200x18 mm (7.9x7.9x0.7 in)	240x240x15 mm (9.5x9.5x0.6 in)	480x480x15 mm (18.9x18.9x0.6 in)
	311 g (0.69 lb)	140 g (0.3 lb)	157 g (0.35 lb)	500 g (1.1 lb)

VC-Strip family

The narrow design of the VC-Strips and their ability to be cut to a custom length on site make them perfect for integration into narrow spaces, media facades and more. Daisy chains of up to 30 meters can be created, requiring just a single cable.

	15	25	30	60
	IP20	IP20	IP20	IP20
	225 lm/m (675 lm/ft)	300 lm/m (900 lm/ft)	248 lm/m (744 lm/ft)	135 lm/m (405 lm/ft)
	75 cd/m (225 cd/ft)	100 cd/m (300 cd/ft)	83 cd/m (248 cd/ft)	45 cd/m (135 cd/ft)
	5,000 nt	4,000 nt	2,750 nt	750 nt
	15 mm	25 mm	30 mm	60 mm
	P3, DMX/RDM	P3, DMX/RDM	P3, DMX/RDM	P3, DMX/RDM
	Calibrated	Calibrated	Calibrated	Calibrated
	480x19x15 mm (18.9x0.8x0.6 in)	400x20x18 mm (15.8x0.8x0.7 in)	480x19x15 mm (18.9x0.8x0.6 in)	480x19x15 mm (18.9x0.8x0.6 in)
	54 g (0.12 lb)	43 g (0.1 lb)	51 g (0.12 lb)	53 g (0.12 lb)

VC-Dot family

The VC-Dots offer the most flexible integration of LED video pixels thanks to customizable pixel-to-pixel distance and a wide array of mounting and optical accessories, resulting in the most stunning designs in various applications such as large scale media facades.

Available in three different sizes/brightness variants

Easy cabling, mapping and configuration

Bright and fully calibrated for optimal consistency

	1	4	9
	IP65	IP65	IP65
	5,4 lm/dot	18,8 lm/dot	55,3 lm/dot
	2 cd/dot	6 cd/dot	18 cd/dot
	50–1,000 mm	60–2,000 mm	70–2,000 mm
	P3, DMX/RDM	P3, DMX/RDM	P3, DMX/RDM
	Calibrated	Calibrated	Calibrated
	28 x 23 x 11 mm (1.1 x 0.9 x 0.5 in)	36 x 30 x 13 mm (1.5 x 1.2 x 0.6 in)	48 x 40 x 13 mm (1.9 x 1.6 x 0.6 in)
	N/A	N/A	N/A

Exterior Dot-HP

Bright exterior LED dot designed for media facades and perimeter lighting on buildings and structures for long distance viewing. Available in RGB color mixing and cool white with various fronts for unique looks, this creative tool is driven by the P3 System Controller for easy setup and video display.

Easy setup and long cable runs for clean installation

High-intensity calibrated video dot

Rugged IP66 housing for permanent outdoor installation

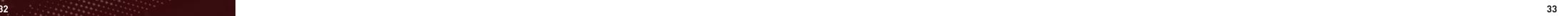|	
	IP66
	120 lm (RGB, clear front, uncalibrated)
	Direct dot-to-dot connection allows up to 0.5 m (19.6 in) pixel pitch
	125°, 103°, 22°
	P3, DMX/RDM
	Calibrated, RGB or Cool White
	Diameter: 72 mm (2.9 in) Height: 34 mm (1.4 in) clear front
	0.3 kg per meter (0.7 lb per ft)

Variety of diffusers

The Exterior Dot-HP comes with different diffusers for distinctively different looks.

- Clear front for a raw look and maximum brightness
- Diffused dome for a larger viewing angle and cleaner look at short distances
- Directional front with lens array for superior peak intensity and illumination of building sections and structural elements.

WORLDWIDE AVAILABILITY

Martin products are available across the globe through an extensive network of distributors. We make significant investments in ensuring compliance with international standards and regulations. With Martin, you can rest assured that there will be no compliance issues with your facility or venue.

TOTAL SOLUTIONS

We offer complete architectural lighting solutions. Because we are part of the HARMAN family, we offer you a one-stop-shopping experience with access to all of HARMAN Professional's exclusive range of audio and video equipment.

GLOBAL SERVICE, LOCAL SUPPORT

We offer you the industry's most elaborate service and support system across the globe. We have a 24-hour hotline and local specialists ready to support you in local languages. We also offer you peace of mind with extended service contracts.

LOW COST OF OWNERSHIP

Martin products are proven to give you a lower total cost of ownership due to limited installation and maintenance cost, energy efficiency, long product life and ease-of-use. We even offer you various attractive financing options to fit your demands.

FULL PROJECT SUPPORT

We guide you towards the solution that fits your needs and budget. Our highly specialized Design & Application team is ready to support you all the way through complex projects—from concept phase through to installation and commissioning. They assist you throughout product specification, technical project drawings and visualizations, and they are experts in customized solutions.

SCALABLE SOLUTIONS

The Martin product offering fits into all types of installations—from small installations all the way up to large-scale complex projects.

GLOBAL TRAINING

To ensure that your project is successful and your customers are delighted, we take great care to train you in the use, service and maintenance of your Martin products. We offer a wide selection of comprehensive product and technical training programs, both directly and via our local distributors—in English as well as in local languages.

UNBEATABLE TRACK RECORD

Martin is an established and respected player in the industry and a leading supplier of solutions for dynamic lighting. Our history and financial strength, combined with our long-standing industry relationships, give you that all-important peace of mind that you are selecting the right long-term business partner.

Martin®
by HARMAN

Icon legend

⬚	Size: L x W x H in mm/in	★	Effects	⤬	Pixel pitch	⎘	External inputs (trigger)	👤	User interface
⬚	Weight: kilos and pounds	⊕	Zoom range	⫲	Control	⊞	Customizable user interface	🔧	Mounting
☀	Light source type	⚡	Input voltage	◉	Calibrated	📖	Fixture library support	◉	Power & data output
☀	Lumen output	🌧	IP rating	⚥	Maximum control channels	⚹	Number of P3 pixels		
☀	Color system	☀	Candela	◷	Scheduler	▭	Video input		
◺	Beam angle	☀	Nits	☼	Astronomical clock	⤢	Video scaler		

As a world leader in creating dynamic lighting and video system solutions for the entertainment, architectural, and commercial sectors, Martin is a household name around the world. Martin also offers a range of advanced lighting controllers as well as a complete line of atmospheric fog machines as a complement to intelligent lighting. Martin operates the industry's most complete and capable distributor network with local partners in approx. 100 countries. Founded in 1987 and based in Aarhus, Denmark, Martin is the lighting division of HARMAN International Industries (harman.com).

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