

EXTERIOR DOT-9 PRO

OUTDOOR-RATED, STRING-BASED RGBW LED DOTS - LARGE

SPEC SHEET



OVERVIEW

The Martin **Exterior Dot-9 Pro** is a lightweight string of individually-controllable RGBW-based Dots, useful in creating customized LED video solutions with maximum artistic flexibility and minimal effort. Each Exterior Dot is color- and brightness-calibrated for superior visual consistency across the entire installation. **Exterior Dot-9 Pro** is controllable via Martin P3 System Controllers or any sACN or Art-Net-based controller.

It is the perfect solution for integrating LED video technology into facades, landmarks, architectural elements or any other structure, indoors or out. **Exterior Dot-9 Pro** strings are fully configurable in terms of number of Dots, pixel pitch, and length of lead-in cable for perfect integration into architectural elements.

Mapping video onto Exterior Dots is quick and intuitive via the P3 System Controller, eliminating the need for complex setups and time-consuming addressing. **Each Exterior Dot-9 Pro** includes nine RGBW LEDs with a total luminous intensity of 70 candela.

Unifying unparalleled performance, adaptability, and intuitive operation, the Exterior Dot Pro family doesn't just enable lighting designers and professionals to surpass the limitations of traditional systems, it inspires them to redefine the boundaries of creative video design.

FEATURE HIGHLIGHTS

HIGHER OUTPUT

Exterior Dot Pro models deliver premium brightness and extraordinary light quality, based on highly efficient RGBW LEDs.

EFFICIENT COLOR BOOST

Exterior Dot Pro color boost technology is extremely efficient, resulting in higher lumen output on saturated and mixed colors than traditional systems.

SMART DESIGN KIT

The Exterior Dot Pro solution includes a variety of smart accessories to empower lighting designers with a smart design kit of creative options to support a wide array of applications.

MULTIPLE CONTROL OPTIONS

Exterior Dot Pro simplifies control by integrating industry standard Art-Net and sACN control protocols, or Martin's award-winning P3 control protocol. A smart, stand-alone mode via Martin Companion is also included.

SIMPLE YET ROBUST INFRASTRUCTURE

Exterior Dot Pro utilizes a simple, yet robust flexible infrastructure to deliver more cost-effective system solutions and easier installs, allowing for longer daisy-chains and high fixture runs.

DESIGNED FOR PERMANENT, OUTDOOR USE

The Exterior Dot Pro family meet rigorous environmental standards and are backed by a 5-year warranty. This family is designed for permanent outdoor and outdoor installations.

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PRODUCT FEATURES

- Flexible, string-based, direct-view LED lighting
- Powered via Exterior AC-Feeder or Exterior DC-Feeder
- Fully-weatherized housing (IP67, IK08 and C-5 High corrosion rating)
- Martin P3/Art-Net/sACN compatible (automatic protocol detection)
- Setup and Addressing via RDM over Art-Net or Martin P3
- Real-time status feedback via RDM over Art-Net and Martin P3
- Individually-controllable RGBW Dots
- Color boost for bright, saturated, and mixed colors
- Dedicated color temperature control channel
- In-built Effect Macros (FX) for easy creation of stunning looks
- Up to 36 Dots per string
- Reduced power mode for cost-effective systems
- Configurable number of dots, pixel pitch, and lead-in cable length
- Superior color and brightness consistency based on factory calibration
- Stand-alone programming with up to 20 scenes
- Intuitive mapping and addressing via P3 System Controller family
- Smart accessories such as diffused dome and glare shield
- Easy and safe mounting options using brackets or profiles
- Hot-pluggable string connector
- Shipped in FSC-certified cardboard packaging
- 5-year warranty

ORDERING INFORMATION

- Exterior Dot-9, 400mm, 36pcs, 2m lead P/N MAR-90580002

Other configurations available upon request

RELATED ITEMS

- Exterior AC-Feeder..... P/N MAR-90580003
- Exterior DC-Feeder P/N MAR-90580004
- Double string cable adapter P/N MAR-90580024
- Martin P3 PowerPort 2000 P/N MAR-90721200
- Martin P3 PowerPort 500 IP Rental P/N MAR-90721201
- Martin P3 PowerPort 500 IP Install..... P/N MAR-90721202
- Martin DCE PSU 240 IP..... P/N MAR-90721203
- DCE DataSplitterBooster IP P/N MAR-90721204
- Martin P3-175 System Controller P/N MAR-90721100
- Martin P3-275 System Controller P/N MAR-90721101
- Martin P3-PC System Controller . Free download from martin.com
- Martin Companion Software.. Free download from martin.com

ACCESSORIES

- Glare kit Dot-9 Pro, grey, set of 10..... P/N MAR-90580007
- Glare kit Dot-9 Pro, black, set of 10 P/N MAR-90580031
- Dome kit Dot-9 Pro, grey, set of 10 P/N MAR-90580013
- Dome kit Dot-9 Pro, black, set of 10 P/N MAR-90580016
- Mnt bracket Dot-9 Pro, grey, set of 10 P/N MAR-90580010
- Mnt bracket Dot-9 Pro, black, set of 10 P/N MAR-90580034
- Mounting profile Dot-9 Pro, 2 meter.....P/N MAR-90580019
- End cap mounting profile Dot-9 Pro, set of 2 P/N MAR-90580028
- Splice connector, set of 3 P/N MAR-90580020
- String termination cap, set of 2.....P/N MAR-90580021
- Loose ribbon cable (10 meter) P/N MAR-90580022
- Active Lead-In Cable Extender, 5 meterP/N MAR-90580023



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TECHNICAL SPECIFICATIONS

CONTROL AND PROGRAMMING

Control protocols Martin P3, Art-Net or sACN
 Protocol detection Automatic
 RDM Compliance (over Art-Net) ANSI/ESTA E1.20
 Art-Net Compliance Art-Net 1, 2, 3 and 4; including RDM over Art-Net
 sACN Compliance ANSI E1.31 – 2016
 Martin P3 Compliance P3 System Controller Software 6.1.0 or newer
 Control resolution 16-bit (P3) or 8-bit (DMX) control of each color
 DMX Modes Standard, Extended, Raw, PixelMap (6 pixel modes)
 DMX Channels 6, 12, 4, 3, 9, 15, 27, 54, 108

OPTICS

Light source 9 RGBW LEDs
 Min LED lifetime 100,000 hours (to >70% luminous output)*
 LED manufacturer Lumileds
 Binning Tight color and flux binning
 Calibration Full Gamut Pixel Calibration
 *Figure obtained under manufacturer's test conditions at Ta = 25° C

PHOTOMETRIC DATA

Viewing angle Clear front 150°
 Cut-off angle glare shield 130°
 Viewing angle Diffused dome 180°

LUMINOUS INTENSITY

	Clear front	Diffused dome
Full@6500K	70 cd	15 cd

LUMINOUS OUTPUT*

	Clear front	Diffused dome
Full@6500K:	189 lm	84 lm
Red:	63 lm	30 lm
Green:	185 lm	83 lm
Blue:	42 lm	16 lm

* All Photometric Data measured in steady state (30 minutes warm-up time) at 25°C ambient.

CONSTRUCTION

Dot Clear polycarbonate, clear silicone filled
 Diffuser dome White translucent polycarbonate
 Glare shield and bracket Traffic grey RAL 7042 polycarbonate
 Interconnecting cable 6 x 20 AWG, black
 Min cable bend radius 15 mm (0.59 in.)
 Protection rating IP67
 Corrosion resistance C5 High (ISO 12944-6)
 Vibration resistance 1.0g, Sinusoidal (IEC 60068-2-6), 0.7g RMS Random (IEC 60068-2-64), 3.0g (ANSI C136-31)

INSTALLATION

Mounting Points Mounting bracket, mounting profile, four integrated mounting holes for cable ties
 Orientation Any

CONNECTIONS

Power & data input to string from Feeder Custom 8-pin connector, IP67-rated

ELECTRICAL

Power and data converter Exterior AC-Feeder or Exterior DC-Feeder
 Operating voltage 15 VDC

POWER CONSUMPTION

Max 2.75 W per Dot
 Typical 0.9 W per Dot
 Idle Refer to Exterior Feeder

* Measurements made at nominal voltage. Allow for a deviation of +/- 10%. Idle: all LEDs at zero intensity
 Max at full intensity, full white, Typical at video content, Idle at zero intensity

THERMAL

Cooling Convection
 Max ambient temperature [Ta max.] 55° C (131° F)
 Min operating temperature [Ta min] -30° C (-22° F)
 Peak heat dissipation (calculated, at full intensity, full white) 10.2 BTU/hr.
 Typical heat dissipation (calculated, with typical video content) 3.4 BTU/hr.*

Figures for typical video content are indicative only and will vary.

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TECHNICAL SPECIFICATIONS (Cont.)

ENVIRONMENTAL

RoHS	Compliant
REACH.....	Compliant
WEEE.....	Compliant
Proposition 65.....	Compliant
Packaging	FSC certified cardboard inlay and outer box
Efficacy (max output).....	68 lm/W
LWR*	2475 lm/kg (945 lm/lb)

*LWR = Lumen-to-Weight Ratio

APPROVALS

Global CB Certification/IECEE	IEC 62368-1
EU Safety.....	EN62638-1
EU EMC	EN 55032, EN55035, EN 61000-3-2, EN 61000-3-3
US safety	UL 62638-1
US EMC	47 CFR Part 15 Class A
Canadian safety	CSA C22.2 No. 60238-1
Australia/NZ	RCM
United Kingdom	UKCA
India	BIS IS 10322 (Part5/section7)



DIMENSIONS

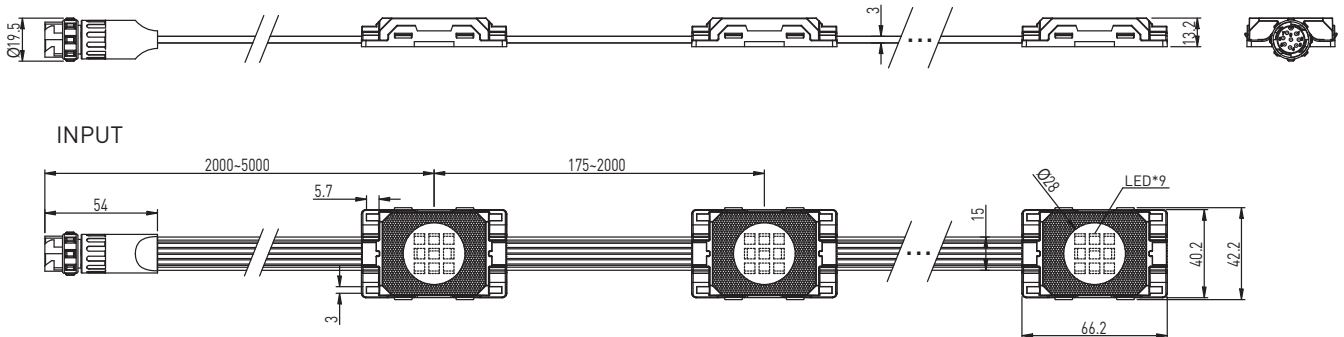
PHYSICAL

Pixel dimensions	66.2 x 42.2 x 13.6 mm (2.6 x 1.7 x 0.54 in.)
Pixel dimensions with dome	66.2 mm x 42.2 mm x 34 mm (2.6 x 1.7 x 1.34 in.)
Weight	2.75 kg (6.1 lbs.) for 36 Dots, 400 mm (15.7 in.) spacing, with 2 m (6.6 ft.) lead-in cable and connector

CONFIGURABLE STRING-BASED DOTS*

Max number of pixels per string	36
Standard pixel spacing (pitch).....	400 mm (15.7 in.)
Min pixel spacing (pitch).....	175 mm (6.9 in.)
Max pixel spacing (pitch).....	2000 mm (78.8 in.)
Standard lead-in cable length.....	2 m (78.8 in.)
Max lead-in cable length.....	5 m (196.9 in.) **

* Refer to system diagram for configuration details
 **Up to 10 m using Active Lead-In Cable Extender



All dimensions are in mm

