### LIGHTING TECHNOLOGY

# Martin's Newly-Engineered RGBW Light Engine Propults Compact, Brighter Wash Light Series



Martin Lighting's team was on a mission to introduce a universal wash light that would be an ideal fit for all verticals of the pro lighting market. In this article, Mark Mercer-Buss, Martin Global Product Line Manager of Entertainment Lighting, delves deep into the core technology behind the Martin ELP PAR/ELP PAR IP and Martin ERA 150 Wash Lights and reveals the real reason behind their creation, how they elevate the Martin Lighting portfolio, and what makes these essential fixtures stand out in the competitive market.

Mark Mercer-Buss, Martin Global Product

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Line Manager of Entertainment Lighting

he Martin lighting team set out on their endeavour to introduce a staple wash light, a new set of complementing PARs to suit all corners of the market. The aim was to design them with versatility and sturdiness for touring/ rental to add value to their client's inventories. Harnessing the power of over 35 years of Martin's technical genius, the team borrowed key features – tried, tested and loved, by lighting professionals the world over – from none other than the Martin MAC Aura family.

The result delivers an incredibly understated workhorse that's elevating wash light benchmarks. The static Martin ELP PAR/ELP PAR IP and moving head Martin ERA 150 Wash lights feature full-color calibration, allowing creatives to match rich saturated colors in their fleet like never before. From rigging improvements and implementing smart industrial design to cable management clean-up and the choice of optical systems for creating intense beams; these wash lights are incredibly capable of handling the heavy lifting when setting the perfect stage.

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tainment Lighting, delves deep into the core technology behind the Martin ELP PAR/ELP PAR IP and Martin ERA 150 Wash Lights to reveal how they are poised to offer something newer, better, and brighter to the pro lighting industry.

## What was the objective behind creating these new PARs?

We wanted to solve common issues our clients face with other fixtures. These lights are built for the rigors of the road. They include a lightweight yet durable design that has been thoroughly scrutinized through Martin's extensive and rigorous product testing program. We've really focused not only on outstanding illumination capabilities but also the day-to-day rigging and handling to ensure an even smoother user experience.

We've significantly raised the bar for brightness in the compact class, producing up to twice the lumen output of these fixtures' predecessors. We've added new

features such as full-gamut color calibration, enhanced optics for narrow beam projection, and a wide uniform wash field, offering lighting designers toolkits previously only found in larger-format fixtures. With these fixtures, we have really focused on elevating the expectations of PARs. The ELP PAR IP addresses a requirement our clients have been requesting for some time – a trusted Martin PAR, weatherproofed for outdoor use. And the sealed design also means fewer maintenance cycles.

## How do these PARs fit into the latest generation of LED Martin lights?

The goal for the PARs is to feel and operate just like our premium fixtures such as the MAC Aura PXL and MAC Aura XIP. On-board color calibration delivers consistent color reproduction but also the same color mixing control experience used by the MAC Aura family to create a seamless experience between Martin fixture types.

In the ERA 150 Wash and ELP PARs, we've incorporated patented light rod technology from the MAC Aura family that allows the fixtures to deliver a high-quality wash experience as well as a tight and punchy beam effect to deliver a very familiar user experience.

## Now that this technology has become standard in ERA fixtures, where and how does the ERA family sit in the Martin portfolio?

To better understand how ERA products fit into the Martin portfolio, we break it down like this: the MAC range is essentially designed to push the boundaries, think exceptional innovation, shattering expectations and exceeding market benchmarks; with that comes increased cost due to the exceptional engineering, pioneering R&D and premium finish. In essence, MAC offers high features and high performance. The ERA range represents affordability with a great balance between performance and features. It adapts the MAC light rod and calibration technology and manufactures at a price-conscious point to meet current market requirements. This ultimately results in a range that combines high-quality products with reliable technology and a brilliant Martin feel.

## Let's talk color, what is so important about the

#### Photometric Report ERA 150 - Wide MARTIN PROFESSIONAL R&D OPTICAL LABORATORY **GENERAL SPECIFICATIONS** Total Fixture Output Light Engine Output 15 lm/W Efficacy: Lens Option: Beam Angle (50%): Field Angle (10%): N/A 4.3-36.0" 4,3-36,0 5,3-55,2 5,9-66,2 Field Angle [10%]: Cut-off Angle [3%]: CR1: CQ5: TM-30 Rf: TM-30 Rg: TLC1: Color Temperature 70+ 83 77 117 SAMPLE MEASUREMENT POLAR PLOT Catalog Number: Measured Output MAR-90290000 3631 lm 90 90 Measured Pea 10042 cd 235 W 15,5 lm/W umed Power 75 75 Efficacy m Angle (50% 60 60 Field Angle (10%): Cut-off Angle (3%) 55,2° 66,2° 45 45 30 30 15 15 25" +/- 5" C ent Temperature AC Supply: Fan Mode: Regulated 30 minutes Fixture Warm-up Tim SPECTRAL DISTRIBUTION 4

Martin

### way these fixtures are calibrated?

Martin's factory calibration of colors offers superior consistency. The ERA 150 Wash and ELP PARs all include RGBW color mixing and utilize an onboard full gamut color calibration hardware solution which enables the fixture to be shipped with an optimum useable color space built around the LED light engine. In simple terms, these Martin fixtures offer incredible color consistency from fixture to fixture and also deliver an accurate CTC control channel that follows the black body curve for fine-tuning the white point. There are 48 color presets and virtual color wheel effects.

Some calibration systems can prevent a user from obtaining full saturated colors, but with the Martin Extended Color Mode, the calibration system extends into the full RGB space giving lighting designers access to the full color pallet offering of the light engine. They are also equipped with electronic dimming of 0 - 100%, offering four dimming curve options. Color temperature control is variable from 1,800-12,850 K.



## What makes these PARs a market favorite?

With the rigging improvements on these fixtures, we've attempted to hone in on areas that can be time-consuming for our clients and have increased efficiency. These fixtures include time-saving solutions and options such as omega-bracket-connectivity, a quick-focus system and bright angle of projection indicator marks for quick and repeatable installation. With the push of a button, the fixture temporarily switches to full-power/open-white/adjustable-zoom settings to instantly confirm projection and focus.

Another underrated feature is the newly introduced input angle of the data and power cables which helps to keep cable management cleaner.

## Both ELP 150 Wash and ELP PAR IP are pivotal fixtures. Which features from the products stand out for you the most?

They have an impressive very narrow and intense beam. It's a clean beam look with outstanding control of light, delivering a sharp and round beam.

With a wide zoom range of 4.2–58 degrees, the ERA 150 Wash and ELP PAR excel at producing broad washes and high-intensity mid-air effects.

I'm also quite proud of the ELP PAR IP and how we've managed to achieve weatherproofing/IP rating without the usual penalties to size and weight – these are only 1 mm longer than their indoor counterparts and only 1 kg(2.2 lbs) heavier.

## Rumor has it that these are the new PAR 2 Zoom and MH6, is that right?

In essence, yes these would be a suitable upgrade for most applications bringing modern technology to our clients' inventories.

The Martin ERA 150 Wash is the successor to the iconic Martin RUSH MH 6 moving-head LED. It delivers a whopping 3,900 lumens—twice the brightness of its predecessor—thanks to its 7 x 40W RGBW light engine and optical system. It's ideal for covering larger stages that require longer throw distances.

The ELP PAR is a successor to the best-selling RUSH PAR 2 static LED and outputs 3,500 lumens, twice the output of the previous model, again, thanks to the new powerful light engine and optical system.

Additionally, with onboard color calibration and smart rigging solutions, the ELP PAR raises the bar for the static wash fixture category.