"It really changes how you think."

– LD Travis Shirley

Martin®
by HARMAN

Creative simplicity

The Martin MAC 101 is a remarkably small and simple LED moving head wash light that pioneers all new possibilities in creative lighting. It features a tight and very bright beam, rapid movement and calibrated colors with a low price tag that allows for revolutionary set, stage and decorative lighting designs.

Utilizing cost-efficient, high-volume production and featuring an ultra-compact design that promotes use in larger quantities, the MAC 101 is ideal for easy-to-produce, high-impact looks like large wall matrices or as a dynamic replacement for static PAR cans.

Even in smaller numbers the MAC 101 is a highly effective and versatile wash light, useful for visual effect in a wide variety of applications like concerts, events, exhibitions, clubs, television studios, bars, restaurants and more.

Video wall of MACs
Imagine pixelmapping video content across a large video wall of MACs – each MAC 101 essentially a pixel in a dynamic graphic.

PAR can replacement
Replace PAR cans with creativity and versatility - color, movement and beam effects that are dynamic instead of ordinary.

Line a stage, truss, or set piece with 101's for more creative looks, or supplant walls of PAR cans for more dynamic washes of color that consume less power. Whatever imaginative look a designer comes up with, the MAC 101 gives greater flexibility when creating organic designs.

Bang for the buck!
With superior power for such a small fixture (2400 lumens) and an exceptional lumen to price ratio, the MAC 101 provides plenty of bang on a tight budget.

Surprisingly small, super light, and exceptionally simple to rig (power can easily be daisy chained between fixtures), the MAC 101 can be placed virtually anywhere.

Tight and bright
The MAC 101 projects a tight beam with a soft yet defined edge that is surprisingly bright for such a compact, energy-saving fixture. Beam angle is 13° with a wide angle option available for greater design possibilities.

Color and effects
A calibrated RGB color mixing system plus color wheel effect provides a full spectrum of color choices. The 101 is capable of smooth dimming from 0-100% and strobe effects such as pulse and random effects are possible.

Super fast
Helped by its small size and exceptionally low weight, the MAC 101 is Martin's fastest moving head ever, enabling it to reposition quickly or even follow a song's beats per minute tempo.

Light 'n' lovable
With an attractive design and weighing in at just 3.7 kg (8.1 lb), the 101 can be rigged virtually anywhere or can easily be hidden away for more discreet looks.

Low power consumption
The MAC 101 consumes a low 125 watts of power (0.6 A @ 230V / 1.2 A @ 110V), saving on energy and eliminating the need to run thick cables for big rigs.

Easy set up
Exceptionally easy to rig, power can be daisy chained between fixtures with PowerCon cables for less cable mess and hassle.

All the benefits of LED
The MAC 101 provides all the benefits of LED technology like greater reliability, less maintenance and increased energy efficiency for a smaller carbon footprint and lower cost of ownership.

Martin quality
Made of durable materials, the MAC 101 meets Martin's high standards for quality and reliability. A no nonsense design with easy-to-access components makes for easy service and maintenance.

Flightcase
For complete protection and convenient transport, the MAC 101 is available in a durable, 8-unit flightcase.

> **"It was the fixture everyone was asking me about. They could not believe the light output from such a small light."**
> *– LD Carlos Colina*

James Blunt, "Some Kind of Trouble" World Tour, 2011
Lighting Designer: Paul Normandale
Lighting Director: Glen Johnson

"**Rarely do you get the colors that we get out of these. Across the board I've never seen such good saturated colors.**"

– LD Travis Shirley

Enrique Iglesias, "Euphoria" Tour, 2011

Production/Lighting Designer: Travis Shirley

MAC 101™ – pure white LED wash

The MAC 101 is available in three white light versions that expand its use to applications where high quality, pure white light is needed. The white light variants incorporate cold and/or warm LEDs instead of RGB for a better white light quality and greater output.

They are ideal for highlighting skin tones, textiles, or set pieces in touring applications, TV studios, car and fashion shows, showrooms, corporate events and exhibition environments.

MAC 101 CT™

Incorporating both cold and warm white LEDs, the MAC 101 CT allows for easy changes in color temperature from crisp cold looks to warm shades and features simple intensity control. Each MAC 101 CT is color temperature calibrated (2800 - 6200K) to ensure a high quality of white light and visual consistency across fixtures.
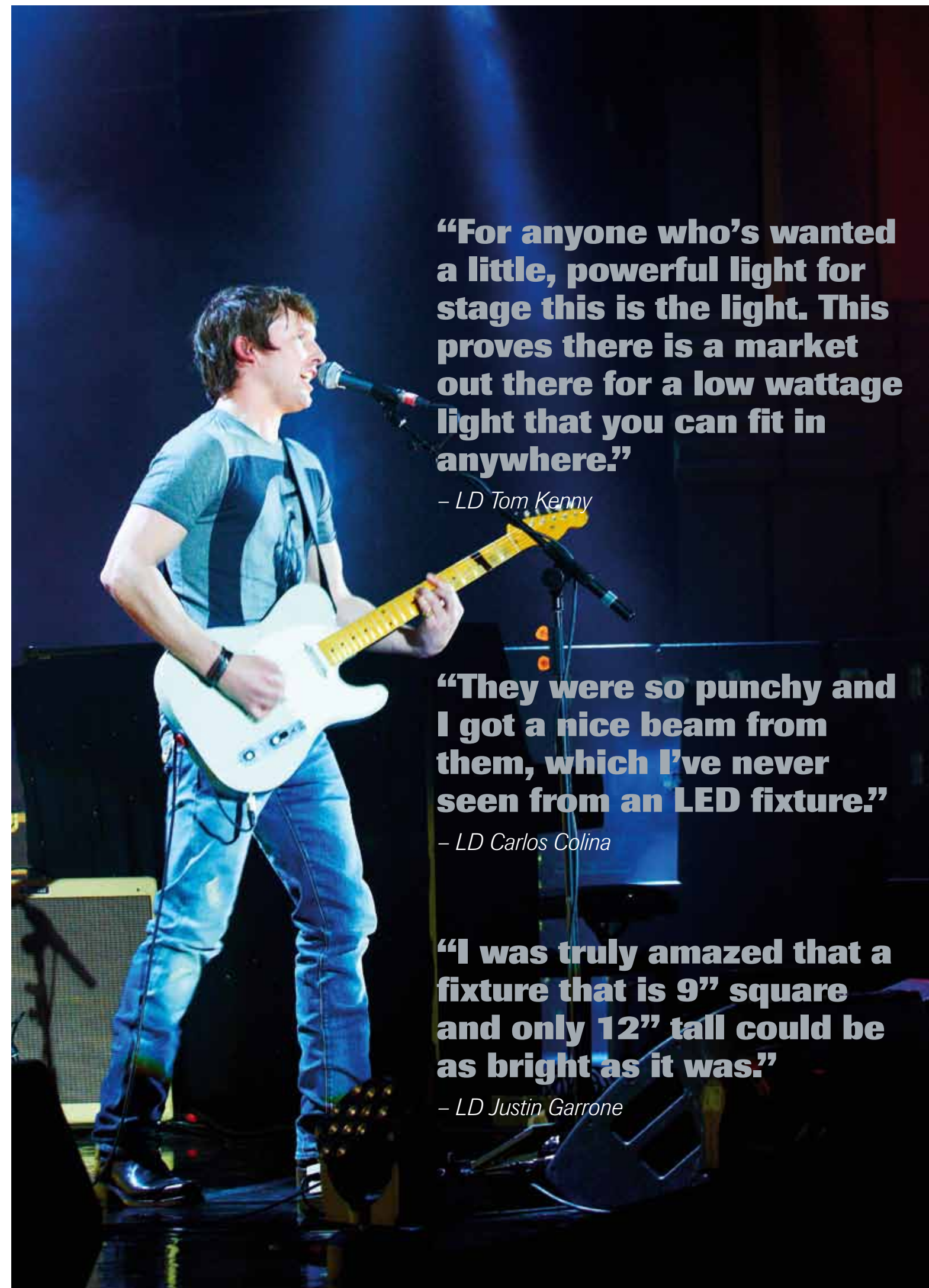
MAC 101 WRM™

The MAC 101 WRM uses pure warm LEDs to mimic the warmth of tungsten halogen and is intensity controllable.

MAC 101 CLD™

The MAC 101 CLD uses pure cold LEDs for applications where only higher color temperatures are required and is also intensity controllable.

- High quality LED white light
- Tungsten replacement
- Ideal for highlighting skin tones, textiles or set pieces
- Variable color temperature
- Tight and punchy beam effects, long throw
- Multiple field angle options for a perfect wash
- Incredibly fast and precise movement
- Ultra-compact, low weight design (3.7 kg)
- Power and data daisy-chain
- Less than 125 watt total power requirement

"For anyone who's wanted a little, powerful light for stage this is the light. This proves there is a market out there for a low wattage light that you can fit in anywhere."

– LD Tom Kenny

"They were so punchy and I got a nice beam from them, which I've never seen from an LED fixture."

– LD Carlos Colina

"I was truly amazed that a fixture that is 9" square and only 12" tall could be as bright as it was."

– LD Justin Garrone

Specifications MAC 101

Physical

Length: 241 mm (9.5 in.) across yoke

Width: 241 mm (9.5 in.) across yoke

Height: 304 mm (12.0 in.)

Weight: 3.7 kg (8.2 lbs.)

Dynamic Effects

MAC 101 RGB

Electronic color wheel effect: 33 LEE-referenced colors plus white, color wheel rotation effect

Color mixing: RGB

Red: 0 - 100%

Green: 0 - 100%

Blue: 0 - 100%

Color temperature control: Variable 10 000 - 2500 K

MAC 101 CT

Color temperature control: Variable 2800 - 6200 K

All models

Shutter effect: Electronic, with pulse and random effects

Electronic dimming: 0 - 100%, four dimming curve options

Pan: 540°

Tilt: 240°

Pan/tilt speed: Adjustable

Optics and Photometric Data

MAC 101 RGB

Light source: 12 red, 12 green and 12 blue Cree XP-E high power emitters

Total luminous output: 2400 lm

MAC 101 CT

Light source: 12 cold white and 24 warm white Cree XP-E high power emitters

Total luminous output: 4400 lm

MAC 101 WRM

Light source: 36 warm white (2800 K) Cree XP-E high power emitters

Total luminous output: 3800 lm

MAC 101 CLD

Light source: 36 cold white (6700 K) Cree XP-E high power emitters

Total luminous output: 5900 lm

All models

Minimum LED lifetime: 50 000 hours (to >70% luminous output)*

Manufacturer´s figure obtained under manufacturer´s test conditions

Control and Programming

MAC 101 RGB

DMX control options: 3 control modes (RGB raw/calibrated, RGB + CTC enabled/disabled)

DMX channels: 8/12

MAC 101 CT

DMX channels: 10

MAC 101 WRM and MAC 101 CLD

DMX channels: 7

All models

Control protocol: USITT DMX512/1990

Control resolution: 8-bit, with 16-bit control of pan & tilt

Setting and addressing: Control panel with backlit graphic display

Transceiver: RS-485

Firmware update: Via DMX with Martin USB Duo DMX Interface

Construction

Color: Black

Housing: High-impact flame-retardant thermoplastic

Protection rating: IP 20

Installation

Mounting points: One M12 threaded hole for rigging clamp

Location: Indoor use only, must be fastened to surface or structure

Orientation: Any

Minimum distance to combustible materials: 100 mm (3.9 in.) from head, no min. distance from base

Minimum distance to illuminated surfaces: 200 mm (7.9 ins.)

Location: For indoor use only

Connections

AC power input: Neutrik PowerCon NAC3MPA input socket (blue)

AC power throughput: Neutrik PowerCon NAC3MPB output socket (grey)

DMX data in/out: 5-pin locking XLR

Electrical

AC power: 100-240 V nominal, 50/60 Hz

Typical total power consumption: 123 W

Power supply unit: Auto-ranging electronic switch mode

Standby power: <25 W

Typical Power and Current

100 V, 50 Hz.: 122 W, 1.3 A, PF 0.991

120 V, 60 Hz.: 121 W, 1.1 A, PF 0.987

208 V, 60 Hz.: 123 W, 0.7 A, PF 0.938

230 V, 50 Hz.: 123 W, 0.6 A, PF 0.915

240 V, 50 Hz.: 123 W, 0.6 A, PF 0.900

PF = power factor. Measurements made at nominal voltage with all LEDs at full intensity. Allow for a deviation of +/- 10%.

Thermal

Cooling: Forced air (temperature-regulated, low noise, user-definable levels)

Maximum ambient temperature (Ta max.): 40° C (104° F)

Minimum ambient temperature (Ta min.): 5° C (41° F)

Total heat dissipation (calculated, +/- 10%): 420 BTU/hr.

Approvals

EU safety: EN 60598-2-17, EN 62471, EN 62031, EN 61347-2-13

EU EMC: EN 55103-1, EN 55103-2, EN 55015, EN 61547

US safety: UL 1573

US EMC: FCC Part 15 Class A

Canadian safety: CAN/CSA E598-2-17

Canadian EMC: ICES-003 Class A

Australia/NZ: C-TICK N4241

Included Items

User manual: P/N 35000246

M12 bolt suitable for use with Martin rigging clamps

Accessories

Set of 8 x medium-angle diffusers for MAC 101: P/N 91616018

Set of 4 x top hats for MAC 101: P/N 91611358

91616023 Narrow field angle diffuser (8 pcs) for MAC 101

Set of 5 x quick-mount surface mounting brackets for MAC 101: P/N 91606017

Neutrik PowerCon NAC3FCA power input connector, cable mount, blue: P/N 05342804

Neutrik PowerCon NAC3FCB power output connector, cable mount, light grey: P/N 05342805

G-clamp: P/N 91602003

Half-coupler clamp: P/N 91602005

Quick trigger clamp: P/N 91602007

Safety wire, 50 kg safe work load: P/N 91604003

8-unit flightcase for 8 x MAC 101: P/N 91515010

Related Items

Martin USB Duo DMX Interface Box: P/N 90703010

Ordering Information

MAC 101 (RGB model) in cardboard box: P/N 90231600

MAC 101 (RGB model) in 8-unit flightcase: P/N 90231610

MAC 101 CT in cardboard box: P/N 90231620

MAC 101 CT in 8-unit flightcase: P/N 90231625

MAC 101 WRM in cardboard box: P/N 90231650

MAC 101 WRM in 8-unit flightcase: P/N 90231640

MAC 101 CLD in cardboard box: P/N 90231670

MAC 101 CLD in 8-unit flightcase: P/N 90231660

Specifications subject to change without notice.
For the latest product specifications, see www.martin.com

About Martin by Harman

As a world leader in the creation of dynamic lighting solutions for the entertainment, architectural, and commercial sectors, Martin lighting and video systems are renowned the world over. Martin also offers a range of advanced lighting controllers and media servers, as well as a complete line of smoke machines as a complement to intelligent lighting. Martin operates the industry's most complete and capable distributor network with local partners in nearly 100 countries. Founded in 1987 and based in Aarhus, Denmark, Martin is the lighting division of global infotainment and audio company HARMAN International Industries.

For more information please visit

HARMAN (www.HARMAN.com) designs, manufactures and markets a wide range of audio and infotainment solutions for the automotive, consumer and professional markets — supported by 15 leading brands, including AKG®, Harman Kardon®, Infinity®, JBL®, Lexicon® and Mark Levinson®. The Company is admired by audiophiles across multiple generations and supports leading professional entertainers and the venues where they perform. More than 25 million automobiles on the road today are equipped with HARMAN audio and infotainment systems. HARMAN's highly competent workforce is employed across the Americas, Europe and Asia.