

VDO ATOMIC™ BOLD

BLINDER. STROBE. STAGE WASH. EYE CANDY.

SPEC SHEET



The Martin VDO Atomic Bold is an incredibly versatile creative LED hybrid fixture and the newest addition to the VDO Atomic family. It includes a wide range of functionality to support a myriad of applications as an audience blinder, strobe light, creative LED pixelmapping surface, eye-candy effect light and stage wash – all in a single, compact fixture.

Including many of the benefits that made its sibling, the VDO Atomic Dot a popular hybrid fixture, the VDO Atomic Bold retains the same interlocking mechanics, same cabling and a similar look but is a larger fixture with higher, full color lumen output to offer lighting designers even more creative potential.

It features a unique octagonal-shaped design with simple connections to work as a single light or in multiples to form a large array. In addition to industry-standard protocols such as Art-Net, sACN and DMX, Martin P3 control unleashes creative freedom to mix video mapping with DMX control.

The VDO Atomic Bold is ideal for rental customers and set and lighting designers working in concert/touring and TV shows but is also a perfect fit for corporate and customers in the higher end nightclub market.

KEY MESSAGES

DUAL LAYER FIXTURE

A high lumen output, full color beam combined with a pixel-controllable RGB Aura backlight enables truly, unique effects. Both layers can be controlled individually via P3, DMX, Art-Net, sACN or a mix.

COMPACT AND ROBUST

For such a compact fixture, the VDO Atomic Bold packs a mighty punch and its robust and IP65-rated housing enables it to be used in any application – indoors or outdoors.

BEAUTIFUL TUNGSTEN EFFECT

The VDO Atomic Bold's beam and aura work together to provide an authentic looking tungsten emulation, providing color shift and dimming decay.

EASILY COMBINE MULTIPLE FIXTURES IN ARRAYS

The smart interlocking mechanics allow fixtures to be combined into battens, arrays or creative shapes - creative imagination is your only limit. Or go extra creative and combine the VDO Atomic Bold with the smaller VDO Atomic Dot in a mixed array.

HYBRID DATA AND POWER CABLE

The hybrid power and data cable carries all power and data for the fixtures, allowing them to be daisy-chained very easily in large quantities.

FRONT-ACCESSORY HOLDER

The industry-standard PAR64-sized front-accessory holder can hold a diffuser to widen the beam-angle of the fixture. It also fits standard barndoors to give the fixture an artistic look on stage.

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FEATURES

- High power, full color strobe/blind/wash/eye-candy fixture
- 13,000 lumen boost/strobe
- 8,000 lumen continuous
- Beam angle of 12 degrees
- Field angle of 26 degrees
- Pixel-controllable RGB Aura backlight with 72 LEDs
- Compact form-factor
- Built-in power supply (100-240V)
- Power and Data IN & THRU via hybrid cable (PDE system)
- P3, DMX, Art-Net & sACN compatible
- Built-in pixel-FX on backlight and beam
- Front-accessory holder for barndoors and/or diffuser/lens
- Detachable yoke-assembly which can also be used as floor-stand
- Smart interlocking mechanics to build battens, arrays and creative shapes
- Compatible with Martin VDO Atomic Dot interlocking mechanics for mixed arrays
- IP65 rated



ORDERING INFORMATION

- VDO Atomic Bold in cardboardP/N MAR-90357703

ACCESSORIES

JUNCTION BOXES

- Passive Junction Box Power-DMX-Ethernet to PDE... P/N 91610001
- Active Junction Box Power-DMX-Ethernet to PDE.....P/N MAR-91700002

ADAPTER CABLES

- BreakIn Cable Power-DMX-Ethernet to PDEP/N MAR-91700000
- BreakOut Cable PDE to Power-DMX-Ethernet...P/N MAR-91700001

OPTICAL ACCESSORIES

- VDO Atomic Bold Diffuser 60 Degrees.....P/N MAR-91616119
- VDO Atomic Bold Diffuser 30 Degrees.....P/N MAR-91616120

MECHANICAL ACCESSORIES

- Super Lightweight Half Coupler Rigging Clamp, black..... P/N 91602018
- G-clamp (vertical hanging installation only)..... P/N 91602003
- Half-coupler clamp..... P/N 91602005
- Quick trigger clamp (vertical hanging installation only) P/N 91602007
- Safety Cable, SWL 60 kg, BGV C1 / DGUV 17, black P/N 91604006
- Safety Cable, SWL 60 kg, BGV C1 / DGUV 17, silver P/N 91604007
- VDO Atomic Bold Interlock Doubler.....P/N MAR-91616122
- Set of 10 VDO Atomic Couplers P/N 91610003
- VDO Atomic Half Coupler..... P/N 91610004
- VDO Atomic Interlock Adapter..... P/N 91610006
- VDO Atomic Pivot Coupler P/N 91610007
- VDO Atomic Spigot Adapter 28mmP/N MAR-91616118
- VDO Atomic Bold Double Width Bracket.....P/N MAR-91616121

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PRE-ASSEMBLED HYBRID PDE CABLES

- Power+Data Cable Rental PDE-PDE 1m P/N 91616001
- Power+Data Cable Rental PDE-PDE 2,5m P/N 91616002
- Power+Data Cable Rental PDE-PDE 5m P/N 91616003
- Power+Data Cable Rental PDE-PDE 10m P/N 91616004
- Power+Data Cable Rental PDE-PDE 25m P/N 91616005

BULK HYBRID PDE CABLE AND CONNECTORS

- Power+Data Connector PDE Male P/N 91611701
- Power+Data Connector PDE Female P/N 91611702
- Power+Data Cable Power-DMX-Ethernet Rental 100m..... P/N 91616006

RELATED ITEMS

- Martin P3-050™ System Controller P/N 90721090
- Martin P3-150™ System Controller P/N 90721015
- Martin P3-300™ System Controller P/N 90721060
- Martin P3-PC™ System Controller:
Free download www.martin.com
- Martin Companion Cable P/N 91616091
(for firmware update over DMX)
- Martin Companion Software (for firmware update over DMX):
Free download from www.martin.com

FLIGHTCASE

- Flightcase for 6 x VDO Atomic BoldP/N MAR-91515056



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TECHNICAL SPECIFICATIONS

DYNAMIC EFFECTS

Beam Dimmer/Shutter	0 - 100% continuous dimming, variable flash rate and duration, and atomic effects
Beam Dimming options	Choice of four dimming curves
Beam Color mixing	RGB, independently variable 0 - 100%
Beam Color temperature control	Variable 2000 - 11000 K
Beam Virtual Color wheel	48 color presets, continuous rotation & random color
Beam P3 Mix	Videomapping of fixture with variable crossfade between DMX control and video control
Aura Dimmer/Shutter	0 - 100% continuous dimming, regular and random strobe effects
Aura Dimming options	Choice of four dimming curves
Aura Color mixing	RGB, independently variable 0 - 100%
Aura Color temperature control	Variable 2000 - 11000 K
Aura Virtual Color wheel	48 color presets, continuous rotation & random color
Aura PixelMapping	Individual RGB control of each Aura pixel
Aura P3 Mix	Videomapping of fixture with variable crossfade between DMX control and video control
Built-in FX	Various pre-programmed FX on Beam, Aura and combination of both

CONTROL AND PROGRAMMING

Control Protocols	DMX, RDM, Art-Net, RDM over Art-Net, sACN and P3
Protocol Detection	Automatic
DMX Modes	1-channel, 3-channel, 4-channel, Compact, Basic, Extended
DMX Channels	1, 3, 4, 10, 27, 243
Setting and Addressing	RDM, RDM over Art-Net or P3
Fixture identification	User-settable ID number
DMX Compliance	USITT DMX512-A
RDM Compliance	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 5.1.0 or newer
DMX/RDM Transceiver	RS-485
Ethernet Transceiver	10/100Mbit (with fail-safe bypass)
Firmware Update	via DMX using Martin Companion or via Ethernet using P3 System Controller

P3 VIDEO PROCESSING

Color Resolution	16 bit per color (48 bit per pixel) (Beam & Aura)
Color Temperature Control	2000-11000 K (Beam & Aura)

Color Gamut Control	Full spectrum control (Beam & Aura)
Synchronization	System-wide
Frame Rate	Up to 75 frames/sec
Brightness Control	0-100% (maintaining full color depth)
Gamma Correction and Control	Fully controllable (Beam & Aura)

CONTROL/USER INTERFACE

Device Status	Multi-color status LED
Device test and reset	Pushbutton to call up local test patterns and reset device

OPTICS AND PHOTOMETRIC DATA

Lens Diameter	200 mm
Front Accessory Holder	PAR64 size

BEAM/STROBE LED

LED Type	RGBW
Max. total lumen output	13,000 lumens (boost/strobe mode)
Max. total lumen output	8,000 lumens (continuous mode)
Center intensity	170,000 cd (boost/strobe mode)
Center intensity	103,000 cd (continuous mode)
Beam Angle	12 Degrees (half peak)
Field Angle	26 Degrees (one-tenth peak)
Binning	Tight color and flux binning
Calibration	Full Gamut Color Calibration
Color Modes	Extended Mode and Calibrated Mode
CRI (Color Rendering Index)	>83 (at 6500 K mixed white)
CQS (Color Quality Scale)	>87 (at 6500 K mixed white)
TM-30 Rf	>83 (at 6500 K mixed white)
(IES TM-30-15 Fidelity Index)	
TM-30 Rg	>106 (at 6500 K mixed white)
(IES TM-30-15 Gamut Index)	
TLCI	>85 (at 6500 K mixed white)
(Television Lighting Consistency Index)	
Color Temperature	variable (2,000 - 11,000 K)
Resolution	16-bit per color
Minimum LED lifetime	50,000 hours (to >70% luminous output)

AURA BACKLIGHT LEDS

LED Type	RGB
LED Quantity	72
Binning	Tight color and flux binning
Calibration	Full Gamut Color Calibration
Color Modes	Extended Mode and Calibrated Mode
Color Temperature	Variable (2,000 - 11,000 K)
Resolution	16-bit per color per pixel
Minimum LED lifetime	50,000 hours (to >70% luminous output)

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CONSTRUCTION

Color.....Black
Housing Material.....Aluminum
Protection Rating.....IP65
RoHS.....Compliant
REACH.....Compliant

INSTALLATION

Mounting Options hanging from bracket, hanging from clamp attached directly to fixture, hanging from other fixture using interlock mechanism, floor standing using integrated double bracket

Clamp attachment to hanging bracket.....M12

Clamp attachment directly to fixture.....M8

Maximum vertical column height.....4 fixtures

Orientation.....Any

Minimum distance to combustible materials.....0.1 m

Minimum distance to illuminated surfaces.....0.5 m

Location.....indoor or temporary outdoor use

CONNECTIONS

AC Power, DMX and Network input cable tail with PDE hybrid connector (IP65)

AC Power, DMX and Network thru..... chassis-mount PDE hybrid connector (IP65)

All connections hot plugging compatible

ELECTRICAL

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

Power Supply Unit.....Auto-ranging electronic switch mode

Maximum power consumption.....400W

Typical half-cycle RMS inrush current at 230 V, 50 Hz.....3.0A

Typical earth-leakage current.....0.80mA

TYPICAL POWER AND CURRENT

100V, 60Hz358 W, 3.58 A, PF 0.99
120V, 60Hz353 W, 2.96 A, PF 0.99
208V, 60Hz350 W, 1.73 A, PF 0.97
230V, 50Hz349 W, 1.59 A, PF 0.96
240V, 50Hz351 W, 1.55 A, PF 0.95

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

PF = power factor.

ACOUSTIC DATA

Sound Pressure Level (LpA) @ 1 m.....25.9 dB(A) (default regulated fan mode, full output)

Sound Pressure Level (LpA) @ 1 m.....19.2 dB(A) (constant fan mode ultra low)

THERMAL

Cooling.....Forced air (temperature regulated, low noise)

Maximum Ambient Temperature (Ta max).....40 C

Minimum Ambient Temperature (Ta min).....0 C

Typical Heat Dissipation (calculated, +/- 10%).....1365 BTU/hr

APPROVALS

EU safety.....EN 60598-2-17 (EN 60598-1), EN 62471, EN62493

EU EMC.....EN 55015, EN 55032 Class B, EN 55035, EN 61000-3-2, EN 61000-3-3, EN 61547

US safety.....UL1573

US EMC.....FCC Part 15 Class A

Canadian safety.....CSA 22.2 No. 166

Canadian EMC.....ICES-003 Class A; ICES-005 Class A

Australia/NZ.....RCM

United Kingdom.....UKCA



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DIMENSIONS

PHYSICAL

Width excluding hanging bracket 288 mm (11.3 in.) (identical to 2x VDO Atomic Dot locked together)

Width including hanging bracket 371 mm (14.6 in.)

Height excluding hanging bracket 288 mm (11.3 in.) (identical to 2x VDO Atomic Dot locked together)

Height including hanging bracket 394 mm (15.5 in.)

Horizontal fixture spacing 300 mm (11.8 in.) center-to-center (using interlock couplers)

Vertical fixture spacing 300 mm (11.8 in.) center-to-center (using interlock couplers)

Depth 161 mm (6.3 in.)

Weight including hanging bracket 9.32 kg (20.5 lbs.)

Weight excluding hanging bracket 7.65 kg (16.9 lbs.)

