VDO Dotron

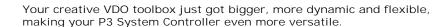Your creative VDO toolbox just got bigger, more dynamic and flexible, making your P3 System Controller even more versatile.

VDO Dotron is a compact and powerful outdoor-rated video pixel with many faces that truly sparks creativity for 3D stage setups. A wide variety of lenses and diffusers offers a wealth of different looks - or go with no front for a raw look. Easy video-mapping and creative mix 'n' match with other Martin LED video products via the P3 System Controller. It uses the same integrated power and data cabling as VDO Sceptron and VDO Fatron, making installation a breeze. Be creative.

The perfect expansion of your creative VDO toolbox for exciting 3D stage setups

Extensive range of field-exchangeable diffusers and lenses for a great variety of looks

Easy setup, mapping and configuration via P3 System Controller

FEATURES

- Supported by integrated power and data processor (P3 PowerPort 1500 or P3 PowerPort 1000 IP) and a simplified cabling system

- Combined power and data cabling (compatible with other products such as VDO Sceptron and VDO Fatron)

- P3/DMX/RDM controllable (automatic protocol detection)

- Extensive range of built-in pixelated effects

- Intuitive mapping and addressing via P3 System Controller

- Fully color and brightness calibrated for optimal cross-product consistency (colors match with VDO Sceptron and VDO Fatron)

- High-quality 16-bit per color image processing technology

- 100 lumen per dot calibrated

- 4 different diffuser options plus 1 narrow lens array (all field-exchangeable)

- IP65 rated for outdoor use

- Versatile rigging accessories

TECHNICAL SPECIFICATIONS

Physical
Diameter: 72 mm (2.9 in.)
Height: 34 mm (1.4 in.), without diffuser/lens installed
Weight: 0.3 kg (0.7 lbs.), without diffuser/lens installed

Control and Programming
Control options: Martin P3™ System Controller via Martin P3™ PowerPort 1500 / Martin P3™ PowerPort 1000 IP and/or DMX
Protocol detection: Automatic
Control modes: RGB and basic
DMX channels: 3/10
Setting and addressing: Martin P3™ System Controller or RDM-compliant controller
Control resolution: 16-bit (P3) or 8-bit (DMX) control of each color
Calibration: Color and intensity of entire dot
DMX compliance: USITT DMX512-A
RDM compliance: ANSI/ESTA E1.20
Firmware update: Via Martin P3™ System Controller

Control/User Interface
Device status: Multi-color visual indication
Device test and reset: Magnetic pushbutton to call up local test patterns and reset device

Optics
Options
Open Front
Flat Diffuser
Flat Smoked Diffuser
Dome Diffuser (supplied standard with fixture)
Dome Smoked Diffuser
Lens Array Narrow
Minimum LED lifetime: : 50 000 hours (to >70% luminous output)*
 *Figure obtained under manufacturer's test conditions
All options can be interchanged at any time

Photometric Data
Color resolution: 16 bits per color (48 bits per pixel)
Luminous intensity, calibrated mode: 40 cd
Total output, calibrated mode: 4 000 nits (fixtures placed in array at 100 mm center-to-center)
Total output, calibrated mode: 100 lumens

Viewing Angle
Open Front: 103° x 103° (half-peak)
Flat Diffuser: TBA
Dome Diffuser: 125° x 125° (half-peak)
Lens Array: TBA

Video Processing
Brightness control
Gamma correction and control
Color temperature control
Color temperature control
Calibration processing
Synchronization

Signal Protocol
Martin P3 (via Martin P3™ PowerPort) or DMX/RDM (direct)

Construction
Housing: Cast aluminium
Color: Matt black
Protection rating: IP65
RoHS compliant

Installation
Orientation: Any
Mounting: Optional flange bracket and other accessories
Mounting options: Flat surface at any angle, pedestal or other suitable support

Connections
Power and data input: 6-pin custom (BBD) IP66-rated
Power and data thru: 6-pin custom (BBD) IP66-rated
Hot plugging compatible

Electrical
Nominal input voltage: 48 VDC +/- 4%
Power supply options: Martin P3™ PowerPort 1500, Martin P3™ PowerPort 1000 IP, Martin IP66 PSU 240W or generic 48 VDC PSU
Total power consumption (at max. intensity, full white): 5 W

Thermal
Cooling: Convection
Maximum ambient temperature (Ta max.): 55° C
Minimum ambient temperature (Ta min.): -20° C
Total heat dissipation (calculated, +/- 10%): 20 BTU/hr

Approvals
EU safety: EN 60950-1, EN 60950-22
EU EMC: EN 55024, EN 55032 (Class A), EN 61000-3-2, EN 61000-3-3
US safety: UL 60950-1, UL 60950-22
US EMC: FCC Part 15 Class A
Canadian safety: CSA C22.2 No. 60950-1, No. 60950-22
Canadian EMC: ICES-003 Class A
Australia/NZ: RCM

Accessories
Magnetic Test Tool, set of 10: P/N 91610139

Hardware
VDO Dotron™ Flange Bracket: P/N 91611803
VDO Dotron™ Half Coupler: P/N 91611802
VDO Dotron™ to VDO Sceptron™/Fatron™ Coupler: P/N 91616071
VDO Dotron™ to VDO Sceptron™/Fatron™ Pivot Coupler: P/N 91616072
VDO Dotron MultiRig Bar, 1000 mm: P/N 91616100

Optical
VDO Dotron™ Flat Diffuser: P/N 91611804
VDO Dotron™ Flat Smoked Diffuser: P/N 91611805
VDO Dotron™ Dome Diffuser: : P/N 91611806
VDO Dotron™ Dome Smoked Diffuser: P/N 91611807
VDO Dotron™ Lens Array Narrow: P/N 91611808

Combined DC power and data cables
Power + Data Input Cable, 4-pin male XLR (for P3 PowerPort) to female BBD, 0.25 m (9.8 in.): P/N 91616046

Power + Data Input Cable, 5-pin male XLR (for DMX) + wire tails (for PSU) to female BBD, 0.25 m (9.8 in.): P/N 91616048
Power + Data Input Cable, 5-pin male XLR (for DMX) + 4-pin male XLR (for P3 PowerPort) to female BBD, 0.25 m (9.8 in.): P/N 91616049
Power + Data Input Cable, 5-pin male XLR (for DMX) + male Tripix type (for Martin IP66 PSU 240W) to female BBD, 0.25 m (9.8 in.): P/N 91616050
Power + Data Output Cable, male BBD to 4-pin female XLR, 0.25 m (9.8 in.): P/N 91616047
DMX Lead-out Cable, male BBD to 5-pin female XLR, 0.25 m (9.8 in.): P/N 91616051

BBD extension cables
Power + Data Extension Cable, Rental Type, BBD to BBD, 1 m (3.3 ft.): P/N 91616041
Power + Data Extension Cable, Rental Type, BBD to BBD, 2.5 m (8.2 ft.): P/N 91616024
Power + Data Extension Cable, Rental Type, BBD to BBD, 5 m (16.4 ft.): P/N 91616042
Power + Data Extension Cable, Rental Type, BBD to BBD, 10 m (32.8 ft.): P/N 91616043
Power + Data Extension Cable, Rental Type, BBD to BBD, 25 m (82.1 ft.): P/N 91616044
Power + Data Cable, Rental Type, 100 m (328 ft.) bulk without connectors: P/N 91616045

Connectors
Power + Data Cable Connector, BBD, Male: P/N 91611750
Power + Data Cable Connector, BBD, Female: P/N 91611751
Blanking Caps for unused female BBD connectors, set of 10: P/N 91616052

Related Items
Martin P3 PowerPort 1500™: P/N 90721040
Martin P3 PowerPort 1000 IP™ Rental: P/N 90721070
Martin™ IP66 PSU 240 W external power supply unit: P/N 90760330
Martin P3-050™ System Controller: P/N 90721090
Martin P3-100™ System Controller: P/N 90721010
Martin P3-150™ System Controller: P/N 90721015
Martin P3-200™ System Controller: P/N 90721020
Martin P3-300™ System Controller: P/N 90721060
Martin P3-PC™ System Controller: P/N 90721030

Ordering Information
Flightcase for 24 x VDO Dotron™: P/N 91515043
Flightcase Extender for 24 x VDO Dotron™: P/N 91515044
VDO Dotron™, in cardboard box: P/N 90357690