

VDO Sceptron 20

The VDO Sceptron 20 is a linear outdoor-rated LED video fixture for the rental market with 20 mm pixel pitch and an extensive range of optical accessories for a wide variety of looks. The VDO Sceptron 20 is driven by the Martin P3 System Controller family for easy configuration, mapping and setup, and is also backwards compatible with DMX for smaller setups. The integrated power and data cabling allows for long daisy-chains with many fixtures per cable-run, while the power supply can be located backstage (up to 50 m away) for a clean setup avoiding messy cabling and several driver boxes.

Extensive range of field-exchangeable optical accessories for a wide variety of looks

Easy setup, mapping and configuration

Bright and fully calibrated for optimal consistency

FEATURES

- 20 mm pixel pitch
- 125 cd per meter calibrated
- 375 lumen per meter calibrated
- High-quality 16-bit per color image processing technology
- Pixel-level brightness and color calibration for optimal image quality
- P3/DMX controllable (automatic protocol detection)
- Intuitive mapping and addressing via P3 System Controller
- Combined power/data input (single cable for power and data input)
- Supported by integrated power and data processor (P3 PowerPort 1500 or P3 PowerPort 1000 IP) and simple cabling system
- Available in lengths of 1000 mm and 320 mm

TECHNICAL SPECIFICATIONS

Physical

Length: Available in 320 mm (12.6 in.) and 1000 mm (39.4 in.) versions

Width: 27 mm (1.07 in.)

Height: 28 mm (1.10 in.)

Weight: 1.2 kg / m (0.81 lbs. per foot)

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, basic, segment and pixel-level

Setting and addressing: Martin P3™ System Controller or RDM-compliant controller

Control resolution: 16-bit (P3) or 8-bit (DMX) control of each color

Color and intensity calibration: Pixel-level

DMX compliance: USITT DMX512-A

RDM compliance: ANSI/ESTA E1.20

Firmware update: Via Martin P3™ System Controller

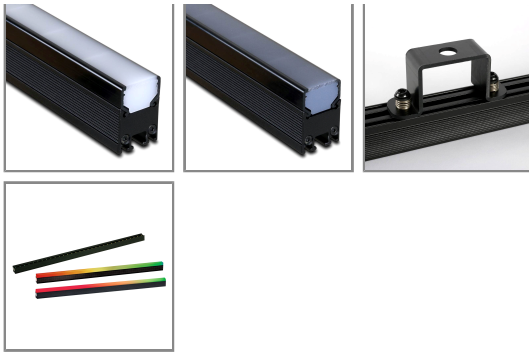
DMX channels: 3/10/13/22/55/157

Control/User Interface



GALLERY





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

Round Diffuser

Round Smoked Diffuser

Square Diffuser (supplied as standard with fixture)

Square Smoked Diffuser

Tube Diffuser

Tube Smoked Diffuser

NoBlend Diffuser

Smoked NoBlend Diffuser

Asymmetric (Wall-Washing) Lens

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)

Viewing angle: 120° x 120°

Pixels per meter: 50

Pitch (pixel center-to-center): 20.0 mm

Luminous intensity, calibrated mode: 125 cd per meter*

Total output, calibrated mode: 4 166 nits (modules spaced 30 mm center-to-center)*

Total output, calibrated mode: 375 lumens per meter*

**Preliminary data, figures are approximate*

Video Processing

Brightness control

Gamma correction and control

Color temperature control

Color space control

Calibration processing

Synchronization

Signal Protocol

Martin P3 (via Martin P3™ PowerPort) or DMX

Construction

Base: Extruded aluminum profile

Color: Matt black

Protection rating: IP65

RoHS compliant

Installation

Orientation: Any

Mounting: Slot for locking nuts on back of profile (M6) and optional sliding bracket for

M12 bolt

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, P3™ PowerPort 1000 IP, Tripix™

Power or generic 48 VDC PSU

Total power consumption (at max. intensity, full white): 17 W per meter

Thermal

Cooling: Convection

Maximum ambient temperature (Ta max.): 55° C (131° F)

Minimum ambient temperature (Ta min.): -30° C (-22° F)

Total heat dissipation (calculated, +/- 10%): 60 BTU/hr per meter

Approvals

EU safety: EN 60950-1, 60950-22, EN 62471

EU EMC: EN 55032, EN 55024

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

VDO Sceptron™ Diffuser Lens Removal Jaws: P/N 91611836

Hardware

VDO Sceptron™/Fatron™ Sliding Brackets, set of 10: P/N 91610123

VDO Sceptron™ Parallel Couplers, 30/40/50 mm, set of 10: P/N 91610125

VDO Sceptron™ Parallel Couplers, 60/70/80 mm, set of 10: P/N 91610138

VDO Sceptron™ Linear (End-to-End) Couplers, set of 10: P/N 91610124

Super Lightweight Half Coupler Rigging Clamp, black: P/N 91602018

Low Profile VDO Sceptron™/Fatron™ Half Coupler: P/N 91611790

VDO Sceptron™/Fatron™ Spigot Adapter, 28 mm (1.1 in.): P/N 91611791

VDO Sceptron™/Fatron™ Floorstands, set of two: P/N 91611792

VDO Sceptron™ Pivot Coupler: P/N 91611793

Optical

320 mm modules

VDO Sceptron™ Flat Diffuser, 320 mm: P/N 91610111
VDO Sceptron™ Flat Smoked Diffuser, 320 mm: P/N 91610113
VDO Sceptron™ Round Diffuser, 320 mm: P/N 91610115
VDO Sceptron™ Round Smoked Diffuser, 320 mm: P/N 91610117
VDO Sceptron™ Square Diffuser, 320 mm: P/N 91610119
VDO Sceptron™ Square Smoked Diffuser, 320 mm: P/N 91610121
VDO Sceptron™ Tube Diffuser, 320 mm: P/N 91611630
VDO Sceptron™ Tube Smoked Diffuser, 320 mm: P/N 91611650
VDO Sceptron 20™ NoBlend Diffuser, 320 mm: P/N 91610130
VDO Sceptron 20™ NoBlend Smoked Diffuser, 320 mm: P/N 91610132
VDO Sceptron 40™ NoBlend Diffuser, 320 mm: P/N 91610134
VDO Sceptron 40™ NoBlend Smoked Diffuser, 320 mm: P/N 91610136
VDO Sceptron 20™ Lens Array Narrow, 320 mm: P/N 91610140
VDO Sceptron™ Asymmetric Lens, 320 mm: P/N 91611670

1000 mm modules

VDO Sceptron™ Flat Diffuser, 1000 mm: P/N 91610112
VDO Sceptron™ Flat Smoked Diffuser, 1000 mm: P/N 91610114
VDO Sceptron™ Round Diffuser, 1000 mm: P/N 91610116
VDO Sceptron™ Round Smoked Diffuser, 1000 mm: P/N 91610118
VDO Sceptron™ Square Diffuser, 1000 mm: P/N 91610120
VDO Sceptron™ Square Smoked Diffuser, 1000 mm: P/N 91610122
VDO Sceptron™ Tube Diffuser, 1000 mm: P/N 91611640
VDO Sceptron™ Tube Smoked Diffuser, 1000 mm: P/N 91611660
VDO Sceptron 20™ NoBlend Diffuser, 1000 mm: P/N 91610131
VDO Sceptron 20™ NoBlend Smoked Diffuser, 1000 mm: P/N 91610133
VDO Sceptron 40™ NoBlend Diffuser, 1000 mm: P/N 91610135
VDO Sceptron 40™ NoBlend Smoked Diffuser, 1000 mm: P/N 91610137
VDO Sceptron 20™ Lens Array Narrow, 1000 mm: P/N 91610141
VDO Sceptron™ Asymmetric Lens, 1000 mm: P/N 91611680

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, 0.25m (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, 0.25m (9.8 in.): P/N 91616050
Power + Data Output Cable, male BBD to 4-pin female XLR, 0.25m (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 10 x VDO Sceptron™ 1000 mm / 30 x VDO Sceptron™ 320 mm: P/N 91515030
Flightcase Extender for 10 x VDO Sceptron™ 1000 mm / 30 x VDO Sceptron™ 320 mm: P/N 91515031
VDO Sceptron 20™, 320 mm, in cardboard box: P/N 90357660
VDO Sceptron 20™, 1000 mm, in cardboard box: P/N 90357665

