VDO Sceptron 40

The VDO Sceptron 40 is a linear outdoor-rated LED video fixture for the rental market with 40 mm pixel pitch and an extensive range of optical accessories for a wide variety of looks. The VDO Sceptron 40 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

FE A T U R E S

- 40 mm pixel pitch
- 62 cd per meter calibrated
- 187 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

T E C H N I C A L  S P E C I F I C A T I O N S

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: 3/10/13/22/31/82

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
- 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

*Figure obtained under manufacturer's test conditions
All options can be interchanged at any time.

**Photometric Data**
- Viewing angle: 120° x 120°  
- Pitch (pixel center-to-center): 40.00 mm
- Total output, calibrated mode: 2,083 nits (modules spaced 30 mm center-to-center)*
- Total output, calibrated mode: 187 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, Triplex™
- Power or generic 48 VDC PSU
- Total power consumption (at max. intensity, full white): 8.5 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%): 30 BTU/hr per meter

**Approvals**
- EU safety: EN 60950-1, EN 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™ Linear (End-to-End) Couplers, set of 10: P/N 91610126
- 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
- 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

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### 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™ Tube Diffuser, 320 mm: P/N 91611630
- VDO Sceptron™ Tube Smoked Diffuser, 320 mm: P/N 91611650
- VDO Sceptron 40™ NoBlend Diffuser, 320 mm: P/N 91610134
- VDO Sceptron 40™ NoBlend Smoked Diffuser, 320 mm: P/N 91610136
- 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 40™ NoBlend Diffuser, 1000 mm: P/N 91610135
- VDO Sceptron 40™ NoBlend Smoked Diffuser, 1000 mm: P/N 91610137
- 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

### 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 40™, 320 mm, in cardboard box: P/N 90357670
- VDO Sceptron 40™, 1000 mm, in cardboard box: P/N 90357675