

Exterior PixLine 20

The Exterior PixLine 20 is a linear LED video fixture for media facades and creative installations. The Exterior PixLine 20 can be combined with a wide variety of lenses and diffusers for the right look for every application. The Exterior PixLine 20 is driven by the Martin P3 System Controller family for easy setup and video display, and it is also backwards compatible with DMX for smaller setups. The fixtures can be fully customized in terms of length and color to match every installation requirement, while the power source is hidden.

[How processing works for LED video](#)

Wide range of pixel pitch, lens and diffuser options for flexibility of look

Fully outdoor-rated and customizable in terms of length and color

Easy setup and cabling for clean installation

FEATURES

- 20 mm pixel pitch
- 125 cd per meter calibrated
- 80 lumen per foot 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 standard length of 1280 mm and 320 mm (customized lengths also available)

TECHNICAL SPECIFICATIONS

Physical

Length: Available in 310 mm and 1270 mm length versions*

**Fixtures must be installed with a 10 mm gap to allow for thermal expansion*

Custom lengths are available to special order on project basis as follows:

Minimum custom length: 300 mm (11.9 in.)

Maximum custom length: 2000 mm (78.8 in.)

Custom length increments: 20 mm (0.8 in.)

NB: To allow for thermal expansion, fixtures are 10 mm shorter than the nominal lengths given above

Width: 27 mm (1.1 in.)

Height with flat diffuser / clear front: 32 mm (1.3 in.)

Height with flat diffuser / clear front in mounting profile: 74 mm (3.0 in.)

Height with graze (asymmetric wallwasher) lens: 42 mm (1.7 in.)

Height with asymmetric wallwasher lens in mounting profile: 84 mm (3.4 in.)

Height with round diffuser: 42 mm (1.7 in.)

Height with round diffuser in mounting profile: 84 mm (3.4 in.)

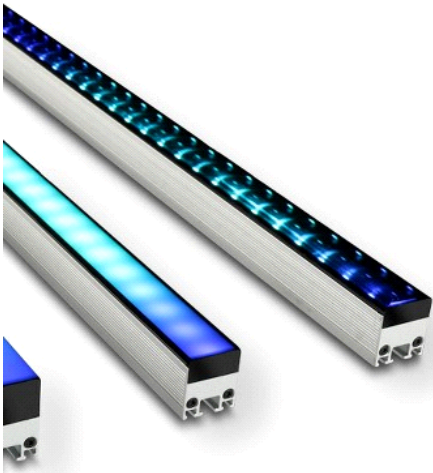
Weight: 1.2 kg / m (0.9 lbs. per foot)

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



GALLERY



DMX channels: 3/10/13/31/55/199
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

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

Flat diffuser
Round Diffuser
Square Diffuser
Clear Front
Linear Asymmetric Lens (Graze version)
Minimum LED lifetime: 50 000 hours (to >70% luminous output)*
LED manufacturer: Osram
**Figure obtained under manufacturer's test conditions*

Photometric Data

Color resolution: 16 bits per color (48 bit per pixel)
Viewing angle: 120° x 120°
Pixels per meter: 50
Pitch (pixel center-to-center): 20.00 mm
Luminous intensity, calibrated mode: 125 cd per meter*
Total output, calibrated mode: 375 lumens per meter*
Total output, calibrated mode: 4 166 nits (modules spaced 30 mm center-to-center)*
**Preliminary data, figures are approximate*

Video Processing

Brightness control
Gamma correction and control
Color temperature control
Color space control
Calibration processing
Synchronization

Signal Protocol

P3 (via Martin P3™ PowerPort) or DMX

Construction

Base: Extruded aluminum profile
Color: Clear anodized (customized colors available on project basis)
Protection rating: IP66
Impact resistance: IK05
Corrosion resistance: C5-M (very high corrosivity/marine, ISO 2944)
RoHS compliant

Installation

Orientation: Any
Mounting: Slot for locking nuts on back of profile (M6) and/or installation mounting profile

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: 48V DC +/- 4%
Power supply options: Martin P3™ PowerPort 1500, Martin P3™ PowerPort 1000 IP or generic 48 VDC PSU
Max. total power consumption: 17 W per meter (at max. intensity, full white)
Surge protection: 4 KV

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%): 55 BTU/hr per meter

Approvals

EU safety: EN 60950-1, EN 60950-22
EU EMC: EN 55022, EN 55024, 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

Mounting hardware

Exterior PixLine™ 20 Mounting Profile, 310 mm (12.2 in.), aluminum: P/N 91611700
Exterior PixLine™ 20 Mounting Profile, 1270 mm (50.0 in.), aluminum: P/N 91611710
Exterior PixLine™ Mounting Profile Locks, set of 10: P/N 91611725

Cables

Power + Data Input Cable, 4-pin male XLR (for P3 PowerPort 1500) to fem. BBD, 0.25 m (0.9 ft.): P/N 91616046
Power + Data Input Cable, 5-pin male XLR + wire tails (for PSU) to female BBD, 0.25 m

(0.9 ft.): P/N 91616048
Power + Data Input Cable, 5-pin male XLR + male Triplex IP66 PSU to fem. BBD, 0.25 m
(0.9 ft.): P/N 91616050
Power + Data Extension Cable, Installation type CMX, BBD-BBD 1 m (3.3 ft.): P/N
91616055
Power + Data Extension Cable, Installation type CMX, BBD-BBD, 2.5 m (8.2 ft.): P/N
91616056
Power + Data Extension Cable, Installation type CMX, BBD-BBD, 5 m (16.4 ft.): P/N
91616057
Power + Data Extension Cable, Installation type CMX, BBD-BBD, 10 m (32.9 ft.): P/N
91616058
Power + Data Extension Cable, Installation type CMX, BBD-BBD, 25 m (82.1 ft.): P/N
91616059
Power + Data Extension Cable, Installation type CMX, without connectors, 100 m
(328.1 ft.): P/N 91616060
Blanking caps for unused female BBD connectors, set of 10: P/N 91616052
DMX Leadout Adapter, male BBD to 5-pin female XLR, 0.25 m (0.9 ft.): P/N 91616051
Power+Data Adapter BBD-XLR4 0.25 m (0.9 ft.): P/N 91616047
Power+Data Adapter XLR5+XLR4-BBD 0.25 m (0.9 ft.): P/N 91616049

Connectors

Power + Data Cable Connector, BBD, male: P/N 91611750
Power + Data Cable Connector, BBD, female: P/N 91611751

Related Items

Martin P3™ PowerPort 1500: P/N 90721040
Martin P3™ PowerPort 1000 IP Installation: P/N 90721080
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

Exterior PixLine™ 20 RGB, 310 mm, Clear Front, Aluminum: P/N 90356835
Exterior PixLine™ 20 RGB, 1270 mm, Clear Front, Aluminum: P/N 90356830
Exterior PixLine™ 20 RGB, 310 mm, Diffuser Front, Aluminum: P/N 90356825
Exterior PixLine™ 20 RGB, 1270 mm, Diffuser Front, Aluminum: P/N 90356820
Exterior PixLine™ 20 RGB, 310 mm, Round Diffuser Front, Aluminum: P/N 90356815
Exterior PixLine™ 20 RGB, 1270 mm, Round Diffuser Front, Aluminum: P/N 90356810
Exterior PixLine™ 20 RGB, 310 mm, Square Diffuser Front, Aluminum: P/N 90356805
Exterior PixLine™ 20 RGB, 1270 mm, Square Diffuser Front, Aluminum: P/N 90356800
Exterior PixLine™ 20 RGB, 310 mm, Graze (Asymmetric Lens), Left, Aluminum: P/N
90356795
Exterior PixLine™ 20 RGB, 1270 mm, Graze (Asymmetric Lens), Left, Aluminum: P/N
90356790
Exterior PixLine™ 20 RGB, 310 mm, Graze (Asymmetric Lens), Right, Aluminum: P/N
90356785
Exterior PixLine™ 20 RGB, 1270 mm, Graze (Asymmetric Lens), Right, Aluminum: P/N
90356780

For graze models, Left or Right = direction of light output when looking from male to female connector

