VC-Dot 4

VC-Dot 4 is a lightweight string of individually controllable, bright Dots useful in creating customized LED video solutions with maximum artistic flexibility and a minimum of effort. Fully customizable and controllable via the award-winning P3 System Controller™ family and/or DMX512, it is a perfect solution for integrating LED video technology into façades, stage designs, ceilings or any other structure, indoors or out.

Mapping video onto VC-Dots goes quickly and intuitively via the P3 System Controller. No need for complex setups and time-consuming addressing. VC-Dot 4 contains four LEDs and is available in an RGB color mixing version or cool, medium, or warm white single-color versions.

Creative LED Video element for building and stage integration

Customizable pixel-pitch

Bright and fully calibrated for optimal consistency

FEATURES

- Can assume any form for creative freedom

- Individually controllable Dots

- Bright at 7.5 cd per Dot (raw mode)

- Maximum 64 Dots per string

- Each Dot features calibrated brightness and colors

- Various Dot spacings available

- Customizable string length

- P3 or DMX controllable

- Intuitive mapping and addressing via P3 System Controller family

- Efficient and long-lasting

- IP67 rated for permanent outdoor or indoor use

- Perfect for façade or stage integration

- Supported by integrated power and data processor (P3 PowerPort 1500™) and simple cabling system

TECHNICAL SPECIFICATIONS

Physical
Pixel dimensions: 36 x 30 x 13 mm (1.5 x 1.2 x 0.6 in.)
Pixel dimensions with dome: 36 mm x 30 mm x 27 mm (1.5 x 1.2 x 1.1 in.)
Weight: 1.8 kg (4.0 lbs.) for 64 Dots, 200 mm (7.9 in.) spacing, with 2 m (6.6 ft.) lead-in cable and connector
Maximum number of pixels per string: 64
Standard pixel spacing (pitch): 200 mm (7.9 in.)
Minimum pixel spacing (pitch): 60 mm (2.4 in.)
Maximum pixel spacing (pitch): 2000 mm (78.8 in.)
Standard lead-in cable length: 2000 mm (78.8 in.)
Maximum lead-in cable length: 5000 mm (196.9 in.)
One pixel = one Dot:

Control and Programming
Control options: Martin™ P3 System controller and/or DMX
DMX channels: 3 per RGB Dot, string or group, 1 per WW, MW or CW Dot, string or group

Control modes: Calibrated and raw
Setting and addressing: P3 System Controller or RDM-compliant controller
Control resolution: 16-bit (P3) or 8-bit (DMX) control of each color
Color and intensity calibration: Dot-level
DMX compliance: USITT DMX512-A
RDM compliance: ANSI/ESTA E1.20

Optics
Minimum LED lifetime: 50 000 hours (to >70% luminous output)*
*Figure obtained under manufacturer´s test conditions:

Photometric Data
Light source: Four RGB, WW, MW or CW LEDs
Color temperature, WW: 3500 K
Color temperature, MW: 6000 K
Color temperature, CW: 11 000 K
Luminous intensity, RGB, calibrated mode: 6 cd
Luminous intensity, RGB, raw mode: 7.5 cd
Total output, RGB, calibrated mode: 18.8 lm
Red output, RGB, calibrated mode: 5.2 lm
Green output, RGB, calibrated mode: 12.3 lm
Blue output, RGB, calibrated mode: 1.4 lm
Luminous intensity, WW, calibrated mode: 12 cd
Luminous intensity, WW, raw mode: 15 cd
Total output, WW, calibrated mode: 37.7 lm
Luminous intensity, MW, calibrated mode: 12 cd
Luminous intensity, MW, raw mode: 15 cd
Total output, MW, calibrated mode: 37.7 lm
Luminous intensity, CW, calibrated mode: 12 cd
Luminous intensity, CW, raw mode: 15 cd
Total output, CW, calibrated mode: 37.7 lm
Viewing angle: 120° x 120°
Viewing angle with dome: 180° x 180°
Preliminary data, figures are approximate:

Construction
Dot: Clear polycarbonate, clear silicone filled
Diffuser dome: White translucent polycarbonate
Mounting clip: White polycarbonate
Interconnecting cable: 6 x 20 AWG, black
Minimum cable bend radius: 26 mm (1.1 in.)
Protection rating: IP67
RoHS compliant

Installation
Orientation: Any

Connections
Power & data input to VC-Dot string from VC-Feeder™: Custom 8-pin connector, IP67-rated

Electrical
Operating voltage: 15 VDC
Power and data converter: Martin VC-Feeder™
Peak power consumption (at full intensity, full white): 1.50 W per Dot
Typical power consumption (with typical video content): 0.50 W per Dot
Figures for typical video content are indicative only and will vary:

Thermal
Cooling: Convection
Maximum ambient temperature (Ta max.): 55° C
Minimum ambient temperature (Ta min.): -20° C
Peak heat dissipation (calculated, at full intensity, full white): 6.5 BTU/hr.
Typical heat dissipation (calculated, with typical video content): 2.5 BTU/hr.
Figures for typical video content are indicative only and will vary:

Approvals
EU safety: EN 60950-1
EU EMC: EN 55022, EN 55024, EN 61000-3-2, EN 61000-3-3
US safety: ANSI/UL 60950-1
US EMC: FCC Part 15 Class A
Canadian safety: CSA C22.2 No. 60950-1
Canadian EMC: ICES-003 Class A
Australia/NZ: C-TICK N4241

Accessories
VC-Dots ribbon cable extension, 10 m (32.8 ft.): P/N 90357230
Quick splice connectors for VC-Dots ribbon cable extension, set of 15: P/N 90357240
VC-Dots ribbon cable termination cap, set of 10: P/N 91611400
VC-Dot 4™ Diffuser Domes, set of 10: P/N 90357190
VC-Dot 4™ Diffuser Domes, Smoked, set of 10: P/N 91610109
VC-Dot 4™ Mounting Clips, set of 10: P/N 90357220
VC-Dot 4™ Truss Clips, set of 10: P/N 91611372
VC-Dot 4™ Aluminum Mounting Profile, Black, 2 m (6.6 ft.): P/N 91611378
VC-Dot 4™ Mounting Profile Cover, Black, 2 m (6.6 ft.): P/N 91611379
VC-Dot 4™ Mounting Profile End Caps, Black, set of 10: P/N 91611380
VC-Dot 4™ Mounting Profile Cable Entry End Caps, Black, set of 10: P/N 91611381
VC-Dot 4™ Aluminum Mounting Profile, Grey, 2 m (6.6 ft.): P/N 91611390
VC-Dot 4™ Mounting Profile Cover, Grey, 2 m (6.6 ft.): P/N 91611391
VC-Dot 4™ Mounting Profile End Caps, Grey, set of 10: P/N 91611392
VC-Dot 4™ Mounting Profile Cable Entry End Caps, Grey, set of 10: P/N 91611393
VC-Dot 4™ Plastic Mounting Profile, Black, 1.2 m (4.0 ft.): P/N 91611450
VC-Dot 4™ Plastic Mounting Profile Cover, Black, 1.2 m (4.0 ft.): P/N 91611470
VC-Dot 4™ Plastic Mounting Profile, White, 1.2 m (4.0 ft.): P/N 91611460
VC-Dot 4™ Plastic Mounting Profile Cover, White, 1.2 m (4.0 ft.): P/N 91611480

Related Items
Martin VC-Feeder™: P/N 90357040

Martin P3 PowerPort 1500™: P/N 90721040
Martin P3-100™ System Controller: P/N 90721010
Martin P3-200™ System Controller: P/N 90721020
Martin P3-PC™ System Controller: P/N 90721030
Martin M-PC V3™ Pro (up to 64 DMX universes) incl. Martin USB Duo™: P/N 90732010
Martin RDM 5.5 Splitter™: P/N 90758150

Ordering Information
VC-Dot 4™ RGB, 200 mm (7.9 in.) pitch, 64 pcs., 2 m (6.6 ft.) lead-in: P/N 90357100
VC-Dot 4™ WW, 200 mm (7.9 in.) pitch, 64 pcs., 2 m (6.6 ft.) lead-in: P/N 90357130
VC-Dot 4™ MW, 200 mm (7.9 in.) pitch, 64 pcs., 2 m (6.6 ft.) lead-in: P/N 90357120
VC-Dot 4™ CW, 200 mm (7.9 in.) pitch, 64 pcs., 2 m (6.6 ft.) lead-in: P/N 90357110
Strings with custom Dot pitch and lead-in length can be manufactured to special order: