**Generic System Diagram – VC-Dot 1 with P3 Control (PowerPort 1500)**

**P3 Controllers**
- Internal Video input
- DVI Video input
- Martin P3-050 Controller™
  - Video signal processor
  - P/N 90721090
- Martin P3-150 Controller™
  - Video signal processor
  - P/N 90721015
- Martin P3-300 Controller™
  - Video signal processor
  - P/N 90721060

**Media Server (Provided by others)**
- Internal Video input
- DVI Video input
- DVI or 3G-SDI Video input

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**VC-Dot 1 Generic Layout**

- 4-pin XLR-BBD Adaptor
  - P/N 91616046
- Hybrid Power+Data Cable CMX BBD-BBD
  - P/N 91616055 (1m)
  - P/N 91616056/57 (5m)
  - P/N 91616058 (10m)
  - P/N 91616059 (25m)
  - P/N 91616060 (100m raw cable)
  - P/N 91611750 (BBD Male Connector)
  - P/N 91611751 (BBD Female Connector)

**VC-Feeder™**
- with BBD Connector
  - P/N 90357060

**VC-Dot 1™**
- P/N 90357060
  - Standard VC-Dot 1 configuration:
  - LED color: RGB
  - Pitch: 100 mm (4.0 in.)
  - No. of Dots: 100 pcs.
  - Lead-in: 2 m (6.6 ft.)

**Hybrid Power+Data Cable CMX BBD-BBD**
- (Not required if VC-Feeders are mounted next to each other (<20cm))

**VC-Feeder™**
- with BBD Connector
  - P/N 90357041

**VC-Dot 1™**
- Hybrid Power+Data Cable CMX BBD-BBD
  - (Not required if VC-Feeders are mounted next to each other (<20cm))
  - Set of 10 Caps for Connector BBD Female
  - P/N 91616052

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**Configuration Limitations:**

- Maximum number of pixels per string:
  - Standard pixel spacing: 1000 mm (39.4 in.)
  - Maximum pixel spacing: 2000 mm (78.8 in.)
  - Maximum lead-in cable length: 5000 mm (196.9 in.)

- One pixel = one Dot

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**CABLES:**
- D - DMX Cable
- F - Fiber Optic Cable (Provided by Others)
- H - Hybrid Cable (Provided by Martin)
- P - Power Cable
- V - Video Cable (Provided by Others)
- N - CAT5e STP Cable (Provided by Others)

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**Generic System Diagram – VC-Dot 1 with P3 Control (PowerPort 1000 IP65)**

### P3 Controllers
- Internal Video input
- DVI Video input
- Martin P3-050 Controller™ Video signal processor
  - P/N 90721090
- Martin P3-150 Controller™ Video signal processor
  - P/N 90721015
- Martin P3-300 Controller™ Video signal processor
  - P/N 90721060
- DVI or 3G-SDI Video input

### Media Server (Provided by others)
- Up to 20,736 pixels
- On-screen grabber for video-capture
- Maximum 500 VC-Dot 1
- Up to 100,000 pixels
- Supports input resolutions up to full HD (1920x1080)
- Maximum 500 VC-Dot 1
- Up to 520,000 pixels
- Supports input resolutions up to full HD (1920x1080)
- Maximum 500 VC-Dot 1
- Up to 2,080,000 pixels
- Supports input resolutions up to full HD (1920x1080)
- Maximum 500 VC-Dot 1

### VC-Dot 1 Generic Layout

#### Martin P3-050 Controller™ Video signal processor
- P/N 90721090

#### Martin P3-150 Controller™ Video signal processor
- P/N 90721015

#### Martin P3-300 Controller™ Video signal processor
- P/N 90721060

### Configuration Limitations:
- Maximum number of pixels per string:
  - Standard pixel spacing (pitch):
    - Maximum lead-in cable length:
    - One pixel = one Dot

### Cables:
- D - DMX Cable
- F - Fiber Optic Cable (Provided by Others)
- H - Hybrid Cable (Provided by Martin)
- P - Power Cable
- V - Video Cable (Provided by Others)
- N - CAT6e STP Cable (Provided by Others)

### Table: 2m Lead-in Cable vs 5m Lead-in Cable (Max)

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### Notes:
- Maximum 100m Ethernet cable between any 2 devices (extendable via Gigabit Switch or conversion to fiber)

### Examples:
- Up to 4 daisy-chains per PowerPort (one per output)
- Maximum VC-Dot 1 per PowerPort
- Up to 800 VC-Dot 1’s per P3 PowerPort
- Maximum VC-Dot 1 per output
- Up to 200 VC-Dot 1’s per daisy-chain

### D - DMX Cable
- F - Fiber Optic Cable (Provided by Others)
- H - Hybrid Cable (Provided by Martin)
- P - Power Cable
- V - Video Cable (Provided by Others)
- N - CAT6e STP Cable (Provided by Others)

### Please contact your local sales person for customized VC-Dot strings.
**DMX Source**

**GENERIC SYSTEM DIAGRAM – VC-DOT 1 WITH DMX CONTROL**

**DMX limitations with Pixel-level control (1 universe)**

VC-Dot 1: 170 dots

**VC-Dot 1 generic layout**

- **Adapter for 3rd party PSU**
P/N 91616048

- **Low Smoke Zero Halogen (LSZH) version:**
  - P/N 91616012 (1m)
  - P/N 91616013 (2.5m)
  - P/N 91616014 (5m)
  - P/N 91616015 (10m)
  - P/N 91616016 (25m)
  - P/N 91616017 (100m raw cable)

- **Max. Number Of Dots per String/VC-Feeder [Pcs]**

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<th>Dot Spacing [mm]</th>
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- **Examples:**
  - 2 strings of 100 VC-Dot 1’s or
  - 4 strings of 50 VC-Dot 1’s or
  - 8 strings of 25 VC-Dot 1’s or ...

- **2m Lead-in Cable**

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- **5m Lead-in Cable (max)**

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- **Configuration limitations:**

  - Maximum number of pixels per string:
    - Standard pixel spacing (pitch):
    - Minimum pixel spacing (pitch):
    - Maximum pixel spacing (pitch):
    - Standard lead-in cable length:
    - Maximum lead-in cable length:

  - One pixel = one Dot

- **Cables:**

  - D - DMX Cable
  - H - Hybrid Cable
  - P - Power Cable
  - V - Video Cable
  - N - CAT5e STP Cable

Please contact your local sales person for customized VC-Dot strings.

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**DMX Source**

**VC-Dot 1 generic layout**

- **DMX PowerPort 375**
  - P/N 90721094
- **DMX THRU To next DMX PowerPort 375**

**4-pin XLR-BBD Adaptor**
- P/N 91616046

**Hybrid Power+Data Cable CMX BBD-BBD**
- P/N 91616055 (1m)
- P/N 91616056 (2.5m)
- P/N 91616057 (5m)
- P/N 91616058 (10m)
- P/N 91616059 (25m)
- P/N 91616060 (100m raw cable)
- P/N 91611751 (BBD Male Connector)
- P/N 91611751 (BBD Female Connector)

**VC-Feeder™** with BBD Connector
- P/N 90357041

**VC-Dot™**
- P/N 90357060
- **Standard VC-Dot 1 configuration**
  - LED color: RGB
  - Pitch: 100 mm (4.0 in.)
  - No. of Dots: 100 pcs.
  - Lead-in: 2 m (6.6 ft.)

**Hybrid Power+Data Cable CMX BBD-BBD**
- (Not required if VC-Feeders are mounted next to each other (<20cm))

**VC-Feeder™** with BBD Connector
- P/N 90357041

**VC-Dot™**
- P/N 91616052

**Set of 10 Caps for Connector BBD Female**
- P/N 91616059

**Configuration limitations:**

- **Maximum number of pixels per string:**
  - Standard pixel spacing (pitch): 100 Pcs.
  - Minimum pixel spacing (pitch): 100 mm (4.0 in.)
  - Maximum pixel spacing (pitch): 1000 mm (39.4 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**

Please contact your local sales person for customized VC-Dot strings.

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**2m Lead-in Cable**

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**5m Lead-in Cable (max)**

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**Maximum VC-Dot 1 per DMX PowerPort 375**

- **[240V input]**
  - Up to 300 VC-Dot 1’s per daisy-chain
  - Examples:
    - 3 strings of 100 VC-Dot 1’s or
    - 4 strings of 75 VC-Dot 1’s or
    - 5 strings of 60 VC-Dot 1’s or ...

- **[120V input]**
  - Up to 200 VC-Dot 1’s per daisy-chain
  - Examples:
    - 2 strings of 100 VC-Dot 1’s or
    - 4 strings of 50 VC-Dot 1’s or
    - 8 strings of 25 VC-Dot 1’s or ...

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