**GENERIC SYSTEM DIAGRAM – EXTERIOR PIXLINE WITH P3 CONTROL (PowerPort 1500)**

**P3 Controllers**

- Up to 20,736 pixels
- On-screen grabber for video-capture
- Maximum 2000 Ext. Pixline

**Media Server (Provided by others)**

- DVI Video input

**Martin P3-050 Controller™**

- Video signal processor
- P/N 90721090
- Up to 100,000 pixels
- Supports input resolutions up to full HD (1920x1080)
- Maximum 2000 Ext. Pixline

**Martin P3-150 Controller™**

- Video signal processor
- P/N 90721015
- Up to 520,000 pixels
- Supports input resolutions up to full HD (1920x1080)
- Maximum 2000 Ext. Pixline

**Martin P3-300 Controller™**

- Video signal processor
- P/N 90721060
- Up to 2,080,000 pixels
- Supports input resolutions up to full HD (1920x1080)
- Maximum 2000 Ext. Pixline

Maximum 100m Ethernet Cable between any 2 devices (extendable via Gigabit Switch or conversion to fiber)

**Ext. PixLine generic layout**

- 4-pin XLR-BBD Adaptor
  - P/N 91616046
- Hybrid Power+Data Cable CMX BBD-BBD
  - 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)
- Hybrid Power+Data Cable CMX BBD-BBD
  - (Not required if Exterior PixLine are mounted next to each other (<50cm))

**External PixLine**

<table>
<thead>
<tr>
<th></th>
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</thead>
<tbody>
<tr>
<td>P/N 90356895</td>
<td>P/N 90356835</td>
<td>P/N 90356775</td>
<td>310/320mm*</td>
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</tr>
</tbody>
</table>

**Exterior PixLine**

- To next P3 PowerPort

**Maximum permitted length Ext. PixLine per PowerPort 1500 output**

<table>
<thead>
<tr>
<th>Fixture type</th>
<th>Maximum total length of fixtures in chain</th>
<th>Maximum total length of chain (fixtures and cables)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exterior PixLine 10</td>
<td>10m*</td>
<td>50m</td>
</tr>
<tr>
<td>Exterior PixLine 20</td>
<td>20m*</td>
<td>50m</td>
</tr>
<tr>
<td>Exterior PixLine 40</td>
<td>40m*</td>
<td>50m</td>
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</tbody>
</table>

*Each output of a P3 PowerPort 1500 can drive a maximum of 63 fixtures regardless of the length of the fixtures.

**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)

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**Generic System Diagram – Exterior PixLine with P3 Control (PowerPort 1000)**

**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)**
- DVI Video input
- DVI or 3G-SDI Video input

**Maximum permitted length Ext. PixLine per PowerPort 1000 output**

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<td>Exterior PixLine 20</td>
<td>14m*</td>
<td>50m</td>
</tr>
<tr>
<td>Exterior PixLine 40</td>
<td>27m*</td>
<td>50m</td>
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* Each output of a P3 PowerPort 1000 can drive a maximum of 63 fixtures regardless of the length of the fixtures.

**Ext. PixLine Generic Layout**

Ext. PixLine and Martin P3- PowerPort 1000 IP65™
- P/N 90721080

**Hybrid Power+Data Cable CMX BBD-BBD**
- P/N 91616055 (1m)
- P/N 91616050 (2.5m)
- P/N 91616057 (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)

**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)

**External PixLine**

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**Hybrid Power+Data Cable CMX BBD-BBD**
- *Ext. PixLine 10 come in the length 320mm and 1280mm (Not required if Ext. PixLine are mounted next to each other (<50cm))

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DMX Source

**GENERIC SYSTEM DIAGRAM – EXTERIOR PIXLINE WITH DMX CONTROL**

**DMX limitations with Pixel-level control (1 universe)**
- Exterior PixLine 10 (RGB Mode): 1.7m
- Exterior PixLine 20 (RGB Mode): 3.4m
- Exterior PixLine 40 (RGB Mode): 6.8m

**DMX limitations with segment-level control (1 universe)**
- Exterior PixLine 10, 20, 40 (Segment Mode*): 20.5m

* In segment mode each fixture is divided into segments of 160mm

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**Ext. PixLine generic layout**

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

**Hybrid Power+Data Cable CMX BBD-BBD**
P/N 91616055 (1m)
P/N 91616050 (2.5m)
P/N 91616058 (10m)
P/N 91616059 (25m)
P/N 91616060 (100m raw cable)
P/N 916161750 (BBD Male Connector)
P/N 916161751 (BBD Female Connector)

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

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**Maximum total length of fixtures in chain and chain (fixtures and cables)**

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**CABLES:**
- DMX Cable
- Fiber Optic Cable (Provided by Others)
- Hybrid Cable (Provided by Martin)
- Power Cable
- Video Cable (Provided by Others)
- CAT5E STP Cable (Provided by Others)

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**GENERIC SYSTEM DIAGRAM – EXTERIOR PIXLINE WITH DMX CONTROL (DMX PowerPort 375)**

**DMX limitations with Pixel-level control (1 universe)**
- Exterior PixLine 10 (RGB Mode): 1.7m
- Exterior PixLine 20 (RGB Mode): 3.4m
- Exterior PixLine 40 (RGB Mode): 6.8m

**DMX limitations with segment-level control (1 universe)**
- Exterior PixLine 10, 20, 40 (Segment Mode*): 20.5m

*In segment mode each fixture is divided into segments of 160mm

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### Ext. PixLine generic layout

- **DMX Source**
  - [Generic System Diagram](#)

- **Ext. PixLine**
  - [Generic System Diagram](#)

- **DMX PowerPort 375**
  - P/N 90721094

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

- **Hybrid Power+Data Cable CMX BBD-BBD**
  - 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 91616060 (100m raw cable)
    - P/N 91611750 (BBD Male Connector)
    - P/N 91611751 (BBD Female Connector)

- **Maximum permitted length Ext. PixLine per DMX PowerPort 375**
  - **240V input**
    - Exterior PixLine 10: 10m
    - Exterior PixLine 20: 20m
    - Exterior PixLine 40: 40m
  - **120V input**
    - Exterior PixLine 10: 7m
    - Exterior PixLine 20: 14m
    - Exterior PixLine 40: 27m

- **Fixtures**
  - P/N 90356895
  - P/N 90356890
  - P/N 90356865
  - P/N 90356860
  - P/N 90356855
  - P/N 90356850
  - P/N 90356845
  - P/N 90356840

- **Diffuser**
  - 310/320mm
  - 1270/1280mm

- **Graphs**
  - Ext. PixLine 10
  - Ext. PixLine 20
  - Ext. PixLine 40

- **Cables**
  - 4-pin XLR-BBD Adaptor
  - Hybrid Power+Data Cable CMX BBD-BBD

- **Set of 10 Caps for Connector BBD Female**
  - P/N 91616052

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