

# GENERIC SYSTEM DIAGRAM – EXTERIOR DOT-4 PRO WITH EXTERIOR DC-FEEDER (POWERPORT 2000)



## Light Controller



(PROVIDED BY OTHERS)

- 170 Exterior Dot-4 Pro per DMX universe (RGB Mode)

## P3 System Controllers



**P3-PC System Controller**  
Free download

- Up to 20.736 pixels
- Supports input resolutions up to 1920x1080
- Up to 2000 Feeders



**P3-175 System Controller**  
Video signal processor  
P/N 90721100

- Up to 520.000 pixels
- Supports input resolutions up to 1920x1080
- Up to 2000 Feeders



**P3-275 System Controller**  
Video signal processor  
P/N 90721101

- Up to 1.040.000 pixels
- Supports input resolutions up to 3840x2160
- Up to 6000 Feeders

Media Server (Provided by others)

NDI or ScreenCapture Input

HDMI or NDI Input

HDMI or NDI Input

Art-Net / sACN

P3

Maximum 100m Ethernet Cable between Controller and PowerPort (extendable via Gigabit Switch or conversion to fiber)

## Exterior Dot-4 generic layout

**Martin P3 PowerPort 2000**  
P/N MAR-90721200

N To next P3 PowerPort 2000

### Power + Data Extension Cable, Install Type, DCE to DCE

- |                         |   |
|-------------------------|---|
| P/N MAR-91700100 (1m)   | P/N MAR-91700105 (100m raw cable)       |
| P/N MAR-91700101 (2,5m) | P/N MAR-91700106 (100m LSZH raw cable)  |
| P/N MAR-91700102 (5m)   | P/N MAR-91700107 (DCE Male Connector)   |
| P/N MAR-91700103 (10m)  | P/N MAR-91700108 (DCE Female Connector) |
| P/N MAR-91700104 (25m)  |   |

### Exterior DC-Feeder

with DCE Connector  
P/N MAR-90580004

**Exterior Dot-4**  
P/N MAR-90580001

Standard Exterior Dot-4 config.:  
LED color: RGBW  
Pitch: 200 mm  
No. of Dots: 64 pcs.  
Lead-in: 2 m

### DCE DataSplitterBooster IP

P/N MAR-90721204  
(Optional: For distance extension and or splitting the signal into two chains of fixtures)

### Hybrid Power+Data Cable DCE-DCE

(Not required if Exterior DC-Feeder are mounted next to each other (<35cm))

### Exterior DC-Feeder

with DCE Connector  
P/N MAR-90580004

### Active Lead-in Cable Extender, 5m

P/N MAR-90580023  
(Max 1 per Exterior DC-Feeder)

### Double String Cable Adapter

P/N MAR-90580024  
(Sum of two Exterior Dot-4 strings, should be limited to Pitch/Dot table)

### Hybrid Power+Data Cable DCE-DCE

(Not needed if DC-Feeder are mounted next to each other (<35cm))

### Caps for Connector DCE Female

P/N MAR-91700110

Max. distance between source (P3 PowerPort) and last Ext DC-Feeder in daisy-chain: Please consult **Limitation Page: Number of Exterior Dot Pro's vs. Cable length**  
Maximum 16 DC-feeders in a daisy-chain

Install blanking caps on all unused female connectors at end of chains

**Numbers based on max. 28m from P3 PowerPort to last DC-Feeder** (for other configurations see *Limitation Page: Number of Exterior Dot Pro's vs. Cable length*)

Up to 4 daisy-chains per P3 Powerport 2000 (one per output)

Maximum Exterior Dot-4 per P3 PowerPort 2000  
Up to 1024 Exterior Dot-4's per P3 PowerPort 2000

Maximum Exterior Dot-4 per output  
Up to 256 Exterior Dot-4's per daisy-chain

Examples:

- 4 strings of 64 Exterior Dot-4's or
- 5 strings of 51 Exterior Dot-4's or
- 6 strings of 42 Exterior Dot-4's or ...

### Accessories:

**Glare Shield Ext. Dot 4, Set of 10**  
P/N MAR-90580006 (Grey Version)  
P/N MAR-90580030 (Black Version)

**White Diffuser Dome Ext. Dot-4, Set of 10**  
P/N MAR-90580012 (Grey Version)  
P/N MAR-90580015 (Black Version)

**Mounting Bracket Ext. Dot-4, Set of 10**  
P/N MAR-90580009 (Grey Version)  
P/N MAR-90580033 (Black Version)

**Mounting Profile Ext. Dot-4, 2m, Alu**  
P/N MAR-90580018 (Grey Version)  
P/N MAR-90580027 (Set of End Caps)



**Exterior Dot-4**  
P/N MAR-90580001

Dot Spacing [mm]	2m Lead-in Cable	5m Lead-in Cable	5m Lead-in Cable + 5m Active Lead-in Cable Extender
	Max. Number Of Dots per String/Ext. DC-Feeder [Pcs] (Max. length of the Ext. Dot-4 string)	Max. Number Of Dots per String/Ext. DC-Feeder Pcs] (Max. length of the Ext. Dot-4 string)	Max. Number Of Dots per String/Ext. DC-Feeder [Pcs] (Max. length of the Ext. Dot-4 string)
155	64 (L: 11,8m)	64 (L: 14,8m)	64 (L: 19,8m)
200 std.	64 (L: 14,6m)	64 (L: 17,6m)	64 (L: 22,6m)
300	64 (L: 20,9m)	64 (L: 23,9m)	64 (L: 28,9m)
400	64 (L: 27,2m)	64 (L: 30,2m)	64 (L: 35,2m)
500	64 (L: 33,5m)	64 (L: 36,5m)	64 (L: 41,5m)
600	64 (L: 39,8m)	64 (L: 42,8m)	64 (L: 47,8m)
700	64 (L: 46,1m)	64 (L: 49,1m)	62 (L: 52,7m)
800	64 (L: 52,4m)	62 (L: 53,8m)	59 (L: 56,4m)
900	62 (L: 56,9m)	59 (L: 85,1m)	57 (L: 60,4m)
1000	59 (L: 60,0m)	57 (L: 61,0m)	55 (L: 64,0m)
1100	56 (L: 62,5m)	54 (L: 63,3m)	53 (L: 67,2m)
1200	54 (L: 65,6m)	52 (L: 66,2m)	51 (L: 70,0m)
1300	52 (L: 68,3m)	51 (L: 70,0m)	49 (L: 72,4m)
1400	50 (L: 70,6m)	49 (L: 72,2m)	47 (L: 74,4m)
1500	48 (L: 72,5m)	47 (L: 74,0m)	45 (L: 76,0m)
1600	47 (L: 75,6m)	46 (L: 77,0m)	44 (L: 78,8m)
1700	46 (L: 78,5m)	45 (L: 79,8m)	43 (L: 81,4m)
1800	45 (L: 81,2m)	44 (L: 82,4m)	42 (L: 83,8m)
1900	44 (L: 83,7m)	43 (L: 84,8m)	41 (L: 86,0m)
2000	43 (L: 86,0m)	42 (L: 87,0m)	41 (L: 90,0m)

### Configuration limitations (One pixel = one Dot):

Maximum number of pixels per string:	64 pcs.
Standard pixel spacing (pitch):	200 mm (7.9 in.)
Minimum pixel spacing (pitch):	155 mm (6.1 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.)**

\*\* Can be extended 5m by using Active Lead-in Cable Extender

### Modification of strings:

Strings can be shortened by removing dots from the end of the string only and adding a string termination cap. Cut-way string parts cannot be used. Pixel-pitch between dots can be reduced or extended using splice connectors respecting the min/max pixel pitch limitation

- String termination cap – set of 2: P/N MAR-90580021
- Splice connector – set of 3: P/N MAR-90580020
- Loose ribbon cable (10 meter): P/N MAR-90580022

Please contact your local sales person for customized Exterior Dot-4 strings.  
Minimum order qty. for customized strings: 800 dots.

# GENERIC SYSTEM DIAGRAM – EXTERIOR DOT-4 PRO WITH EXTERIOR DC-FEEDER (POWERPORT 500 IP)



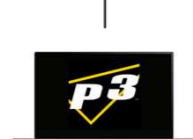
## Light Controller



(PROVIDED BY OTHERS)

- 170 Exterior Dot-4 Pro per DMX universe (RGB Mode)

## P3 System Controllers



**P3-PC System Controller**  
Free download

- Up to 20.736 pixels
- Supports input resolutions up to 1920x1080
- Up to 2000 Exterior Feeders



**P3-175 System Controller**  
Video signal processor  
P/N 90721100

- Up to 520.000 pixels
- Supports input resolutions up to 1920x1080
- Up to 2000 Exterior Feeders



**P3-275 System Controller**  
Video signal processor  
P/N 90721101

- Up to 1.040.000 pixels
- Supports input resolutions up to 3840x2160
- Up to 6000 Exterior Feeders

Media Server (Provided by others)

Art-Net / sACN

P3

Maximum 100m Ethernet Cable between Controller and PowerPort (extendable via Gigabit Switch or conversion to fiber)

## Exterior Dot-4 generic layout

**Martin P3 PowerPort 500 IP**  
P/N MAR-90721202



To next P3 PowerPort 500 IP

### Power + Data Extension Cable, Install Type, DCE to DCE

- |                         |   |
|-------------------------|---|
| P/N MAR-91700100 (1m)   | P/N MAR-91700105 (100m raw cable)       |
| P/N MAR-91700101 (2,5m) | P/N MAR-91700106 (100m LSZH raw cable)  |
| P/N MAR-91700102 (5m)   | P/N MAR-91700107 (DCE Male Connector)   |
| P/N MAR-91700103 (10m)  | P/N MAR-91700108 (DCE Female Connector) |
| P/N MAR-91700104 (25m)  |   |

### Exterior DC-Feeder

with DCE Connector  
P/N MAR-90580004

**Exterior Dot-4**  
P/N MAR-90580001

Standard Exterior Dot-4 config.:  
LED color: RGBW  
Pitch: 200 mm  
No. of Dots: 64 pcs.  
Lead-in: 2 m

### DCE DataSplitterBooster IP

P/N MAR-90721204  
(Optional: For distance extension and or splitting the signal into two chains of fixtures)

### Hybrid Power+Data Cable DCE-DCE

(Not required if Exterior DC-Feeder are mounted next to each other (<35cm))

### Exterior DC-Feeder

with DCE Connector  
P/N MAR-90580004

**Active Lead-in Cable Extender, 5m**  
P/N MAR-90580023  
(Max 1 per Exterior DC-Feeder)

**Double String Cable Adapter**  
P/N MAR-90580024  
(Sum of two Exterior Dot-4 strings, should be limited to Pitch/Dot table)

### Hybrid Power+Data Cable DCE-DCE

(Not needed if DC-Feeder are mounted next to each other (<35cm))

**Caps for Connector DCE Female**  
P/N MAR-91700110

Max. distance between source (P3 PowerPort) and last Ext DC-Feeder in daisy-chain: Please consult **Limitation Page: Number of Exterior Dot Pro's vs. Cable length**  
Maximum 16 DC-feeders in a daisy-chain

Install blanking caps on all unused female connectors at end of chains

**Numbers based on max. 28m from P3 PowerPort to last DC-Feeder** (for other configurations see *Limitation Page: Number of Exterior Dot Pro's vs. Cable length*)

1 daisy-chains per P3 Powerport 500 IP

Maximum Exterior Dot-4 per output  
Up to 256 Exterior Dot-4's per daisy-chain

Examples:

4 strings of 64 Exterior Dot-4's or  
5 strings of 51 Exterior Dot-4's or  
6 strings of 42 Exterior Dot-4's or ...

### Accessories:

**Glare Shield Ext. Dot 4, Set of 10**  
P/N MAR-90580006 (Grey Version)  
P/N MAR-90580030 (Black Version)

**White Diffuser Dome Ext. Dot-4, Set of 10**  
P/N MAR-90580012 (Grey Version)  
P/N MAR-90580015 (Black Version)

**Mounting Bracket Ext. Dot-4, Set of 10**  
P/N MAR-90580009 (Grey Version)  
P/N MAR-90580033 (Black Version)

**Mounting Profile Ext. Dot-4, 2m, Alu**  
P/N MAR-90580018 (Grey Version)  
P/N MAR-90580027 (Set of End Caps)



**Exterior Dot-4**  
P/N MAR-90580001

Dot Spacing [mm]	2m Lead-in Cable	5m Lead-in Cable	5m Lead-in Cable + 5m Active Lead-in Cable Extender
	Max. Number Of Dots per String/Ext. DC-Feeder [Pcs] (Max. length of the Ext. Dot-4 string)	Max. Number Of Dots per String/Ext. DC-Feeder [Pcs] (Max. length of the Ext. Dot-4 string)	Max. Number Of Dots per String/Ext. DC-Feeder [Pcs] (Max. length of the Ext. Dot-4 string)
155	64 (L: 11,8m)	64 (L: 14,8m)	64 (L: 19,8m)
200 std.	64 (L: 14,6m)	64 (L: 17,6m)	64 (L: 22,6m)
300	64 (L: 20,9m)	64 (L: 23,9m)	64 (L: 28,9m)
400	64 (L: 27,2m)	64 (L: 30,2m)	64 (L: 35,2m)
500	64 (L: 33,5m)	64 (L: 36,5m)	64 (L: 41,5m)
600	64 (L: 39,8m)	64 (L: 42,8m)	64 (L: 47,8m)
700	64 (L: 46,1m)	64 (L: 49,1m)	62 (L: 52,7m)
800	64 (L: 52,4m)	62 (L: 53,8m)	59 (L: 56,4m)
900	62 (L: 56,9m)	59 (L: 85,1m)	57 (L: 60,4m)
1000	59 (L: 60,0m)	57 (L: 61,0m)	55 (L: 64,0m)
1100	56 (L: 62,5m)	54 (L: 63,3m)	53 (L: 67,2m)
1200	54 (L: 65,6m)	52 (L: 66,2m)	51 (L: 70,0m)
1300	52 (L: 68,3m)	51 (L: 70,0m)	49 (L: 72,4m)
1400	50 (L: 70,6m)	49 (L: 72,2m)	47 (L: 74,4m)
1500	48 (L: 72,5m)	47 (L: 74,0m)	45 (L: 76,0m)
1600	47 (L: 75,6m)	46 (L: 77,0m)	44 (L: 78,8m)
1700	46 (L: 78,5m)	45 (L: 79,8m)	43 (L: 81,4m)
1800	45 (L: 81,2m)	44 (L: 82,4m)	42 (L: 83,8m)
1900	44 (L: 83,7m)	43 (L: 84,8m)	41 (L: 86,0m)
2000	43 (L: 86,0m)	42 (L: 87,0m)	41 (L: 90,0m)

**Configuration limitations** (One pixel = one Dot):

Maximum number of pixels per string:	64 pcs.
Standard pixel spacing (pitch):	200 mm (7.9 in.)
Minimum pixel spacing (pitch):	155 mm (6.1 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.)**

\*\* Can be extended 5m by using Active Lead-in Cable Extender

**Modification of strings:**  
Strings can be shortened by removing dots from the end of the string only and adding a string termination cap. Cut-way string parts cannot be used. Pixel-pitch between dots can be reduced or extended using splice connectors respecting the min/max pixel pitch limitation  
String termination cap – set of 2: P/N MAR-90580021  
Splice connector – set of 3: P/N MAR-90580020  
Loose ribbon cable (10 meter): P/N MAR-90580022

Please contact your local sales person for customized Exterior Dot-4 strings.  
Minimum order qty. for customized strings: 800 dots.



# GENERIC SYSTEM DIAGRAM – EXTERIOR DOT-4 PRO WITH EXTERIOR DC-FEEDER (MARTIN IP66 PSU)



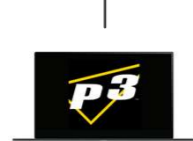
## Light Controller



(PROVIDED BY OTHERS)

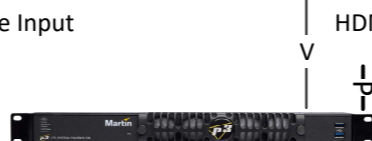
- 170 Exterior Dot-4 Pro per DMX universe (RGB Mode)

## P3 System Controllers



**P3-PC System Controller**  
Free download

- Up to 20.736 pixels
- Supports input resolutions up to 1920x1080
- Up to 2000 Exterior Feeders



**P3-175 System Controller**  
Video signal processor  
P/N 90721100

- Up to 520.000 pixels
- Supports input resolutions up to 1920x1080
- Up to 2000 Exterior Feeders



**P3-275 System Controller**  
Video signal processor  
P/N 90721101

- Up to 1.040.000 pixels
- Supports input resolutions up to 3840x2160
- Up to 6000 Exterior Feeders

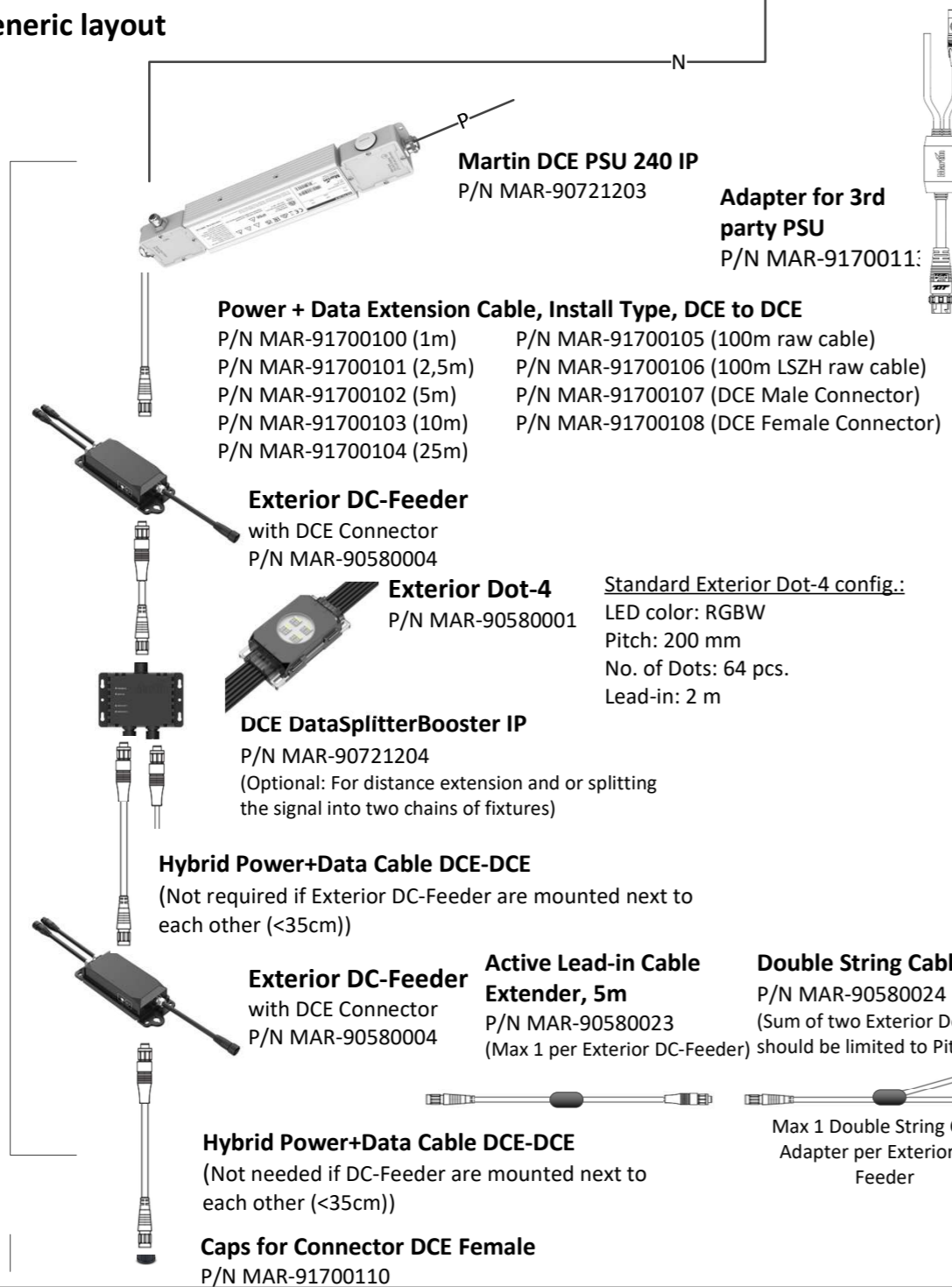
Media Server (Provided by others)

Art-Net / sACN

P3

Maximum 100m Ethernet Cable between Controller and PowerPort (extendable via Gigabit Switch or conversion to fiber)

## Exterior Dot-4 generic layout



Max. distance between Martin DCE PSU and last Ext. DC-Feeder in daisy-chain: Please consult **Limitation Page: Number of Exterior Dot Pro's vs. Cable length** Maximum 16 DC-feeders in a daisy-chain

Install blanking caps on all unused female connectors at end of chains

**Numbers based on max. 60m from Martin IP66 PSU to last DC-Feeder** (for other configurations see *Limitation Page: Number of Exterior Dot Pro's vs. Cable length*)

1 daisy-chains per Martin IP66 PSU 240W

**Maximum Exterior Dot-4 per output**  
Up to 128 Exterior Dot-4's per daisy-chain

Examples:

- 2 strings of 64 Exterior Dot-4's or
- 4 strings of 32 Exterior Dot-4's or
- 8 strings of 16 Exterior Dot-4's or ...

### Accessories:

**Glare Shield Ext. Dot 4, Set of 10**  
P/N MAR-90580006 (Grey Version)  
P/N MAR-90580030 (Black Version)

**White Diffuser Dome Ext. Dot-4, Set of 10**  
P/N MAR-90580012 (Grey Version)  
P/N MAR-90580015 (Black Version)

**Mounting Bracket Ext. Dot-4, Set of 10**  
P/N MAR-90580009 (Grey Version)  
P/N MAR-90580033 (Black Version)

**Mounting Profile Ext. Dot-4, 2m, Alu**  
P/N MAR-90580018 (Grey Version)  
P/N MAR-90580027 (Set of End Caps)



**Exterior Dot-4**  
P/N MAR-90580001

Dot Spacing [mm]	2m Lead-in Cable	5m Lead-in Cable	5m Lead-in Cable + 5m Active Lead-in Cable Extender
	Max. Number Of Dots per String/Ext. DC-Feeder [Pcs] (Max. length of the Ext. Dot-4 string)	Max. Number Of Dots per String/Ext. DC-Feeder [Pcs] (Max. length of the Ext. Dot-4 string)	Max. Number Of Dots per String/Ext. DC-Feeder [Pcs] (Max. length of the Ext. Dot-4 string)
155	64 (L: 11,8m)	64 (L: 14,8m)	64 (L: 19,8m)
200 std.	64 (L: 14,6m)	64 (L: 17,6m)	64 (L: 22,6m)
300	64 (L: 20,9m)	64 (L: 23,9m)	64 (L: 28,9m)
400	64 (L: 27,2m)	64 (L: 30,2m)	64 (L: 35,2m)
500	64 (L: 33,5m)	64 (L: 36,5m)	64 (L: 41,5m)
600	64 (L: 39,8m)	64 (L: 42,8m)	64 (L: 47,8m)
700	64 (L: 46,1m)	64 (L: 49,1m)	62 (L: 52,7m)
800	64 (L: 52,4m)	62 (L: 53,8m)	59 (L: 56,4m)
900	62 (L: 56,9m)	59 (L: 58,1m)	57 (L: 60,4m)
1000	59 (L: 60,0m)	57 (L: 61,0m)	55 (L: 64,0m)
1100	56 (L: 62,5m)	54 (L: 63,3m)	53 (L: 67,2m)
1200	54 (L: 65,6m)	52 (L: 66,2m)	51 (L: 70,0m)
1300	52 (L: 68,3m)	51 (L: 70,0m)	49 (L: 72,4m)
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1800	45 (L: 81,2m)	44 (L: 82,4m)	42 (L: 83,8m)
1900	44 (L: 83,7m)	43 (L: 84,8m)	41 (L: 86,0m)
2000	43 (L: 86,0m)	42 (L: 87,0m)	41 (L: 90,0m)

### Configuration limitations (One pixel = one Dot):

Maximum number of pixels per string:	64 pcs.
Standard pixel spacing (pitch):	200 mm (7.9 in.)
Minimum pixel spacing (pitch):	155 mm (6.1 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.)**

\*\* Can be extended 5m by using Active Lead-in Cable Extender

### Modification of strings:

Strings can be shortened by removing dots from the end of the string only and adding a string termination cap. Cut-way string parts cannot be used. Pixel-pitch between dots can be reduced or extended using splice connectors respecting the min/max pixel pitch limitation

String termination cap – set of 2: P/N MAR-90580021

Splice connector – set of 3: P/N MAR-90580020

Loose ribbon cable (10 meter): P/N MAR-90580022



Please contact your local sales person for customized Exterior Dot-4 strings.

Minimum order qty. for customized strings: 800 dots.

# GENERIC SYSTEM DIAGRAM – EXTERIOR DOT-4 PRO WITH EXTERIOR AC-FEEDER



## Light Controller



(PROVIDED BY OTHERS)

- 170 Exterior Dot-4 Pro per DMX universe (RGB Mode)

## P3 System Controllers



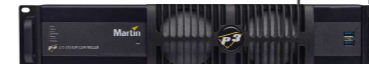
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Video signal processor  
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**P3-275 System Controller**  
Video signal processor  
P/N 90721101

- Up to 1.040.000 pixels
- Supports input resolutions up to 3840x2160
- Up to 6000 Exterior Feeders

Media Server (Provided by others)

NDI or ScreenCapture Input

HDMI or NDI Input

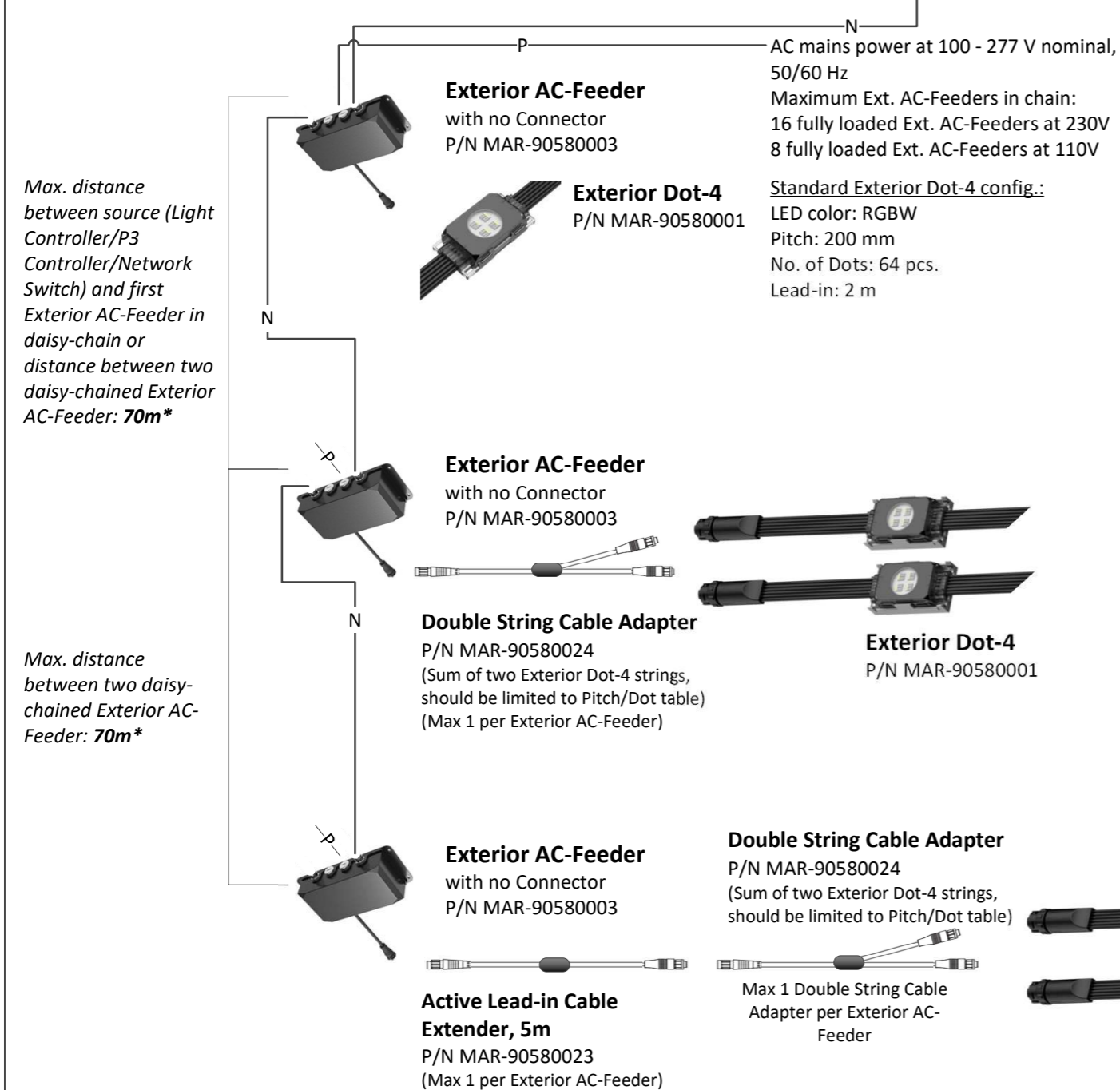
HDMI or NDI Input

Art-Net / sACN

P3

Maximum 100m Ethernet Cable between Controller and PowerPort (extendable via Gigabit Switch or conversion to fiber)

## Exterior Dot-4 generic layout



Max. distance between source (Light Controller/P3 Controller/Network Switch) and first Exterior AC-Feeder in daisy-chain or distance between two daisy-chained Exterior AC-Feeder: **70m\***

Max. distance between two daisy-chained Exterior AC-Feeder: **70m\***

### Maximum Exterior Dot-4 per Exterior AC-Feeder

Up to 64 Exterior Dot-4's

2 strings summing up to maximum 64 Exterior Dot-4's can be applied by using Double String Cable Adapter

### Accessories:

**Glare Shield Ext. Dot 4, Set of 10**  
P/N MAR-90580006 (Grey Version)  
P/N MAR-90580030 (Black Version)

**White Diffuser Dome Ext. Dot-4, Set of 10**  
P/N MAR-90580012 (Grey Version)  
P/N MAR-90580015 (Black Version)

**Mounting Bracket Ext. Dot-4, Set of 10**  
P/N MAR-90580009 (Grey Version)  
P/N MAR-90580033 (Black Version)

**Mounting Profile Ext. Dot-4, 2m, Alu**  
P/N MAR-90580018 (Grey Version)  
P/N MAR-90580027 (Set of End Caps)



	2m Lead-in Cable	5m Lead-in Cable	5m Lead-in Cable + 5m Active Lead-in Cable Extender
Dot Spacing [mm]	Max. Number Of Dots per String/Ext. DC-Feeder [Pcs] (Max. length of the Ext. Dot-4 string)	Max. Number Of Dots per String/Ext. DC-Feeder Pcs] (Max. length of the Ext. Dot-4 string)	Max. Number Of Dots per String/Ext. DC-Feeder [Pcs] (Max. length of the Ext. Dot-4 string)
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200 std.	64 (L: 14,6m)	64 (L: 17,6m)	64 (L: 22,6m)
300	64 (L: 20,9m)	64 (L: 23,9m)	64 (L: 28,9m)
400	64 (L: 27,2m)	64 (L: 30,2m)	64 (L: 35,2m)
500	64 (L: 33,5m)	64 (L: 36,5m)	64 (L: 41,5m)
600	64 (L: 39,8m)	64 (L: 42,8m)	64 (L: 47,8m)
700	64 (L: 46,1m)	64 (L: 49,1m)	62 (L: 52,7m)
800	64 (L: 52,4m)	62 (L: 53,8m)	59 (L: 56,4m)
900	62 (L: 56,9m)	59 (L: 85,1m)	57 (L: 60,4m)
1000	59 (L: 60,0m)	57 (L: 61,0m)	55 (L: 64,0m)
1100	56 (L: 62,5m)	54 (L: 63,3m)	53 (L: 67,2m)
1200	54 (L: 65,6m)	52 (L: 66,2m)	51 (L: 70,0m)
1300	52 (L: 68,3m)	51 (L: 70,0m)	49 (L: 72,4m)
1400	50 (L: 70,6m)	49 (L: 72,2m)	47 (L: 74,4m)
1500	48 (L: 72,5m)	47 (L: 74,0m)	45 (L: 76,0m)
1600	47 (L: 75,6m)	46 (L: 77,0m)	44 (L: 78,8m)
1700	46 (L: 78,5m)	45 (L: 79,8m)	43 (L: 81,4m)
1800	45 (L: 81,2m)	44 (L: 82,4m)	42 (L: 83,8m)
1900	44 (L: 83,7m)	43 (L: 84,8m)	41 (L: 86,0m)
2000	43 (L: 86,0m)	42 (L: 87,0m)	41 (L: 90,0m)

Configuration limitations (One pixel = one Dot):	
Maximum number of pixels per string:	64 pcs.
Standard pixel spacing (pitch):	200 mm (7.9 in.)
Minimum pixel spacing (pitch):	155 mm (6.1 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.)**

**Modification of strings:**  
Strings can be shortened by removing dots from the end of the string only and adding a string termination cap. Cut-way string parts cannot be used. Pixel-pitch between dots can be reduced or extended using splice connectors respecting the min/max pixel pitch limitation  
String termination cap – set of 2: P/N MAR-90580021  
Splice connector – set of 3: P/N MAR-90580020  
Loose ribbon cable (10 meter): P/N MAR-90580022

Please contact your local sales person for customized Exterior Dot-4 strings.  
Minimum order qty. for customized strings: 800 dots.

\* distances can be extended via Gigabit Switch or conversion to fiber



# GENERIC SYSTEM DIAGRAM – EXTERIOR DOT-4 PRO WITH EXTERIOR AC-FEEDER (HYBRID CABLE)



## Light Controller



(PROVIDED BY OTHERS)

- 170 Exterior Dot-4 Pro per DMX universe (RGB Mode)

## P3 System Controllers



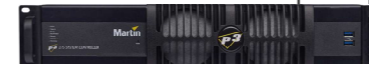
**P3-PC System Controller**  
Free download

- Up to 20.736 pixels
- Supports input resolutions up to 1920x1080
- Up to 2000 Exterior Feeders



**P3-175 System Controller**  
Video signal processor  
P/N 90721100

- Up to 520.000 pixels
- Supports input resolutions up to 1920x1080
- Up to 2000 Exterior Feeders



**P3-275 System Controller**  
Video signal processor  
P/N 90721101

- Up to 1.040.000 pixels
- Supports input resolutions up to 3840x2160
- Up to 6000 Exterior Feeders

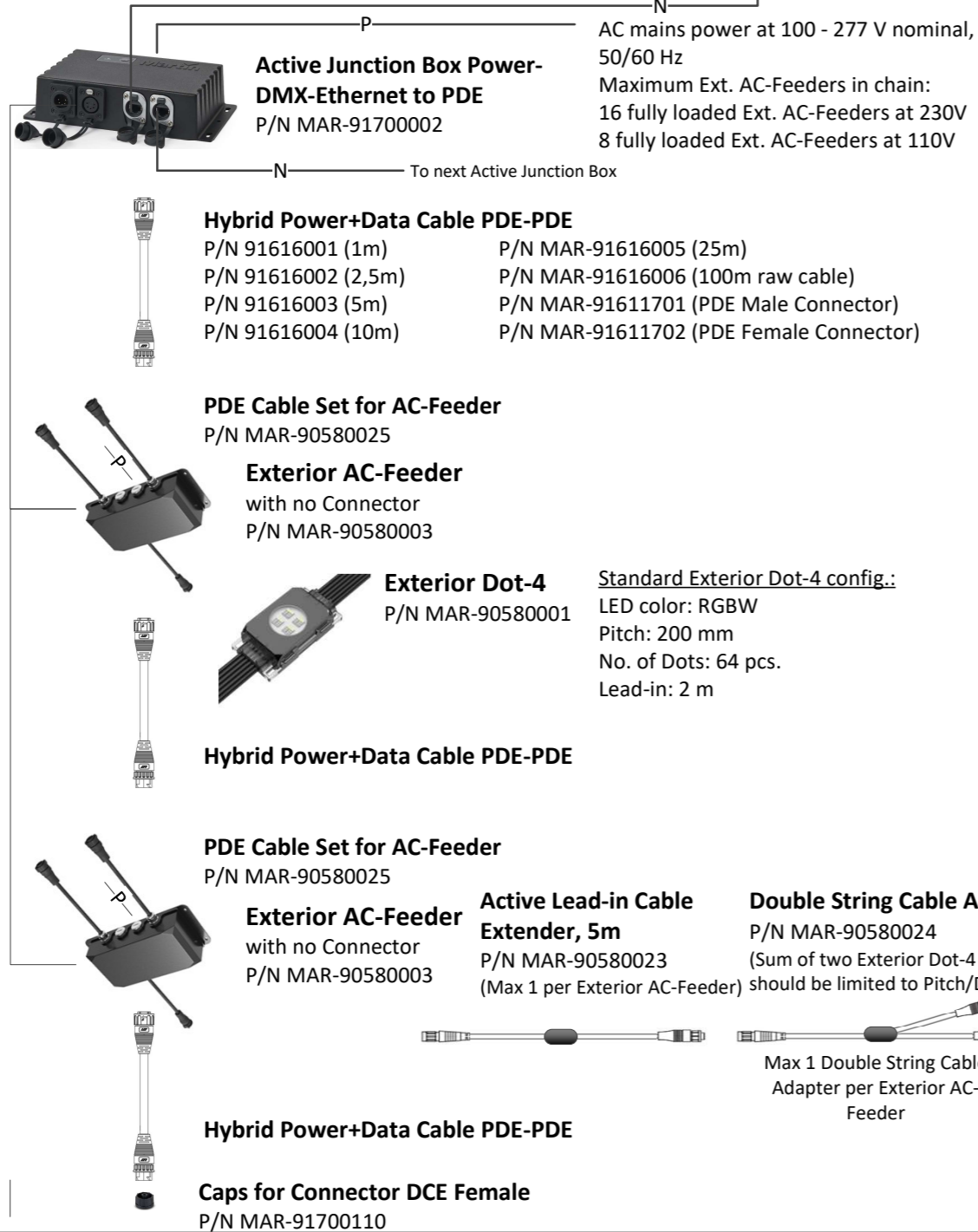
Media Server (Provided by others)

Art-Net / sACN

P3

Maximum 100m Ethernet Cable between Controller and PowerPort (extendable via Gigabit Switch or conversion to fiber)

## Exterior Dot-4 generic layout



Max. distance between source (Active Junction Box) and first Exterior AC-Feeder in daisy-chain or distance between two daisy-chained Exterior AC-Feeder: **70m**

Max. distance between two daisy-chained Exterior AC-Feeder: **70m**

Install blanking caps on all unused female connectors at end of chains

**Maximum Exterior Dot-4 per Exterior AC-Feeder**  
Up to 64 Exterior Dot-4's

2 strings summing up to maximum 64 Exterior Dot-4's can be applied by using Double String Cable Adapter

### Alternative to Active Junction Box:



### Accessories:

**Glare Shield Ext. Dot 4, Set of 10**  
P/N MAR-90580006 (Grey Version)  
P/N MAR-90580030 (Black Version)

**White Diffuser Dome Ext. Dot-4, Set of 10**  
P/N MAR-90580012 (Grey Version)  
P/N MAR-90580015 (Black Version)

**Mounting Bracket Ext. Dot-4, Set of 10**  
P/N MAR-90580009 (Grey Version)  
P/N MAR-90580033 (Black Version)

**Mounting Profile Ext. Dot-4, 2m, Alu**  
P/N MAR-90580018 (Grey Version)  
P/N MAR-90580027 (Set of End Caps)



**Exterior Dot-4**  
P/N MAR-90580001

	2m Lead-in Cable	5m Lead-in Cable	5m Lead-in Cable + 5m Active Lead-in Cable Extender
Dot Spacing [mm]	Max. Number Of Dots per String/Ext. DC-Feeder [Pcs] (Max. length of the Ext. Dot-4 string)	Max. Number Of Dots per String/Ext. DC-Feeder Pcs] (Max. length of the Ext. Dot-4 string)	Max. Number Of Dots per String/Ext. DC-Feeder [Pcs] (Max. length of the Ext. Dot-4 string)
155	64 (L: 11,8m)	64 (L: 14,8m)	64 (L: 19,8m)
200 std.	64 (L: 14,6m)	64 (L: 17,6m)	64 (L: 22,6m)
300	64 (L: 20,9m)	64 (L: 23,9m)	64 (L: 28,9m)
400	64 (L: 27,2m)	64 (L: 30,2m)	64 (L: 35,2m)
500	64 (L: 33,5m)	64 (L: 36,5m)	64 (L: 41,5m)
600	64 (L: 39,8m)	64 (L: 42,8m)	64 (L: 47,8m)
700	64 (L: 46,1m)	64 (L: 49,1m)	62 (L: 52,7m)
800	64 (L: 52,4m)	62 (L: 53,8m)	59 (L: 56,4m)
900	62 (L: 56,9m)	59 (L: 85,1m)	57 (L: 60,4m)
1000	59 (L: 60,0m)	57 (L: 61,0m)	55 (L: 64,0m)
1100	56 (L: 62,5m)	54 (L: 63,3m)	53 (L: 67,2m)
1200	54 (L: 65,6m)	52 (L: 66,2m)	51 (L: 70,0m)
1300	52 (L: 68,3m)	51 (L: 70,0m)	49 (L: 72,4m)
1400	50 (L: 70,6m)	49 (L: 72,2m)	47 (L: 74,4m)
1500	48 (L: 72,5m)	47 (L: 74,0m)	45 (L: 76,0m)
1600	47 (L: 75,6m)	46 (L: 77,0m)	44 (L: 78,8m)
1700	46 (L: 78,5m)	45 (L: 79,8m)	43 (L: 81,4m)
1800	45 (L: 81,2m)	44 (L: 82,4m)	42 (L: 83,8m)
1900	44 (L: 83,7m)	43 (L: 84,8m)	41 (L: 86,0m)
2000	43 (L: 86,0m)	42 (L: 87,0m)	41 (L: 90,0m)

### Configuration limitations (One pixel = one Dot):

Maximum number of pixels per string:	64 pcs.
Standard pixel spacing (pitch):	200 mm (7.9 in.)
Minimum pixel spacing (pitch):	155 mm (6.1 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.)**

\*\* Can be extended 5m by using Active Lead-in Cable Extender

### Modification of strings:

Strings can be shortened by removing dots from the end of the string only and adding a string termination cap. Cut-way string parts cannot be used. Pixel-pitch between dots can be reduced or extended using splice connectors respecting the min/max pixel pitch limitation

String termination cap – set of 2: P/N MAR-90580021

Splice connector – set of 3: P/N MAR-90580020

Loose ribbon cable (10 meter): P/N MAR-90580022

Please contact your local sales person for customized Exterior Dot-4 strings.

Minimum order qty. for customized strings: 800 dots.

**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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# Limitation Page: Number of Exterior Dot Pro's vs. Cable length

Full Power Mode:			
Number of Exterior Dot Pro's vs. Cable length for P3 PowerPort 2000 and P3 PowerPort 500 IP			
Max. distance between P3 PowerPort and last Exterior DC-Feeder in daisy-chain[m]*	Exterior Dot-1 Pro	Exterior Dot-4 Pro	Exterior Dot-9 Pro
	Max. Number Of Dots per P3 PowerPort output [Pcs]	Max. Number Of Dots per P3 PowerPort output [Pcs]	Max. Number Of Dots per P3 PowerPort output [Pcs]
28	400	256	144
30	392	252	142
40	372	236	133
50	347	220	124
60	318	203	117
70	275	177	98
80	243	157	85
90	217	137	76
100	193	124	69
110	179	114	63
120	162	104	57
130	150	97	54
140	138	90	50
150	128	83	47
160	119	78	43
170	112	73	40
180	106	68	38
190	100	64	36
200	94	61	34

Half Power Mode:			
Number of Exterior Dot Pro's vs. Cable length for P3 PowerPort 2000 and P3 PowerPort 500 IP			
Max. distance between P3 PowerPort and last Exterior DC-Feeder in daisy-chain[m]*	Exterior Dot-1 Pro	Exterior Dot-4 Pro	Exterior Dot-9 Pro
	Max. Number Of Dots per P3 PowerPort output [Pcs]	Max. Number Of Dots per P3 PowerPort output [Pcs]	Max. Number Of Dots per P3 PowerPort output [Pcs]
15	800	512	288
20	780	501	285
28	762	478	272
30	740	475	270
40	694	448	255
50	658	423	243
60	610	398	228
70	525	334	197
80	454	302	170
90	400	266	151
100	355	240	136
110	322	218	126
120	290	197	114
130	263	181	106
140	240	166	98
150	220	153	90
160	202	140	84
170	184	130	78
180	172	122	74
190	160	113	69
200	144	105	65

\*Max. distance between source (P3 PowerPort) and first Ext DC-Feeder in daisy-chain: 70m. Use DCE DataSplitterBooster IP to be able to extend the 70m.  
Maximum 16 DC-feeders in a daisy-chain

Full Power Mode:			
Number of Exterior Dot Pro's vs. Cable length for Martin DCE PSU 240 IP			
Max. distance between P3 PowerPort and last Exterior DC-Feeder in daisy-chain[m]**	Exterior Dot-1 Pro	Exterior Dot-4 Pro	Exterior Dot-9 Pro
	Max. Number Of Dots per P3 PowerPort output [Pcs]	Max. Number Of Dots per P3 PowerPort output [Pcs]	Max. Number Of Dots per P3 PowerPort output [Pcs]
50	200	128	72
60	200	128	72
70	196	125	70
80	190	121	68
90	184	118	66
100	178	115	64
110	172	111	62
120	165	108	60
130	159	104	59
140	153	100	57
150	145	93	54
160	132	86	50
170	125	82	47
180	117	77	44
190	110	72	42
200	100	68	40

Half Power Mode:			
Number of Exterior Dot Pro's vs. Cable length for Martin DCE PSU 240 IP			
Max. distance between P3 PowerPort and last Exterior DC-Feeder in daisy-chain[m]**	Exterior Dot-1 Pro	Exterior Dot-4 Pro	Exterior Dot-9 Pro
	Max. Number Of Dots per P3 PowerPort output [Pcs]	Max. Number Of Dots per P3 PowerPort output [Pcs]	Max. Number Of Dots per P3 PowerPort output [Pcs]
40	400	256	144
45	398	256	144
50	390	253	144
60	380	240	136
70	370	234	133
80	358	228	129
90	348	221	126
100	338	215	122
110	325	209	119
120	315	203	116
130	305	197	112
140	295	192	108
150	280	175	99
160	260	163	94
170	245	154	88
180	225	145	83
190	215	137	78
200	200	128	72

\*\*Max. distance between source (Martin DCE PSU 240 IP) and first Ext DC-Feeder in daisy-chain: 70m. Use DCE DataSplitterBooster IP to be able to extend the 70m.  
Maximum 16 DC-feeders in a daisy-chain