

P3 System Controllers™ Capacity Information Note

As of P3 System Controller software release 5.2.0.

Processing & Output Capacity

The number of LED video panels/fixtures that can be driven by a single P3 System Controller is defined by following limits:

| | P3-050 | P3-100 | P3-150 | P3-200 | P3-300 | P3-PC |
|-----------------------------------|---------|---------|---------|---------|-----------------------------------|--------|
| Pixels | 100.000 | 520.000 | 520.000 | 520.000 | 2.080.000 (520.000 per output) | 20.736 |
| LED Video Panels | 1.000 | 500 | 1.000 | 500 | 1.000 | 1.000 |
| Creative LED Video Modules | 2.000 | 1.000 | 2.000 | 1.000 | 2.000 | 2.000 |
| Flexible LED Video Modules | 500 | 500 | 500 | 500 | 500 | 500 |
| Free Pixel Type Pixels | 50.000 | 50.000 | 50.000 | 50.000 | 50.000 | 50.000 |

This means that the following numbers of products can be driven by one single P3 System Controller:

| Product | P3-050° | P3-100 | P3-150° | P3-200 | P3-300° | P3-PC |
|--|--------------------|--------------------|---------------------|--------------------|--------------------------------------|------------------|
| LC2140 Panels (with P3 Upgrade Kit) | 80 (= 160 sqm) | 416 (= 832 sqm) | 416* (= 832 sqm) | 416 (= 832 sqm) | 1.000 ^{3*} (= 2.000 sqm) | 16 (= 32 sqm) |
| LC1140 Panels (with P3 Upgrade Kit) | 160 (= 160 sqm) | 500 (= 500 sqm) | 832* (= 832 sqm) | 500 (= 500 sqm) | 1.000 ² (= 1.000 sqm) | 33 (= 33 sqm) |
| LC2140+ Panels | 80 (= 160 sqm) | 416 (= 832 sqm) | 416* (= 832 sqm) | 416 (= 832 sqm) | 1.000 ^{3*} (= 2.000 sqm) | 16 (= 32 sqm) |
| EC-20 Panels | 115 (= 40 sqm) | 500 (= 173 sqm) | 601* (= 208 sqm) | 500 (= 173 sqm) | 1.000 ² (= 346 sqm) | 24 (= 8 sqm) |
| EC-10 Panels | 28 (= 10 sqm) | 150 (= 52 sqm) | 150* (= 52 sqm) | 150 (= 52 sqm) | 600 ^{4*} (= 207 sqm) | 6 (= 2 sqm) |
| VDO Face 5 HB Panels | 9 (= 2,5 sqm) | 50 (= 14 sqm) | 50* (= 14 sqm) | 50 (= 14 sqm) | 200 ^{4*} (= 56 sqm) | 2 (= 0,5 sqm) |

| | | | | | | |
|---------------------------------|----------------------|----------------------|-----------------------|----------------------|----------------------|---------------------|
| VDO Face 5 HC Panels | 9 (= 2,5 sqm) | 50 (= 14 sqm) | 50* (= 14 sqm) | 50 (= 14 sqm) | 200* (= 56 sqm) | 2 (= 0,5 sqm) |
| VC-Grid 8x8 60 Modules | 1.562 (= 360 sqm) | 1.000 (= 230 sqm) | 2.000 (= 461 sqm) | 1.000 (= 230 sqm) | 2.000 (= 461 sqm) | 324 (= 75 sqm) |
| VC-Grid 4x4 60 Modules | 2.000 (= 115 sqm) | 1.000 (= 58 sqm) | 2.000 (= 115 sqm) | 1.000 (= 58 sqm) | 2.000 (= 115 sqm) | 1.296 (= 75 sqm) |
| VC-Grid 8x8 30 Modules | 1.562 (= 90 sqm) | 1.000 (= 58 sqm) | 2.000 (= 115 sqm) | 1.000 (= 58 sqm) | 2.000 (= 115 sqm) | 324 (= 19 sqm) |
| VC-Grid 8x8 25 Modules | 1.562 (= 62 sqm) | 1.000 (= 40 sqm) | 2.000 (= 80 sqm) | 1.000 (= 40 sqm) | 2.000 (= 80 sqm) | 324 (= 13 sqm) |
| VC-Grid 16x16 15 Modules | 390 (= 22 sqm) | 1.000 (= 58 sqm) | 2.000* (= 115 sqm) | 1.000 (= 58 sqm) | 2.000 (= 115 sqm) | 81 (= 5 sqm) |
| VC-Strip 8x1 60 Modules | 2.000 (= 960 m) | 1.000 (= 480 m) | 2.000 (= 960 m) | 1.000 (= 480 m) | 2.000 (= 960 m) | 2.000 (= 960 m) |
| VC-Strip 4x1 60 Modules | 2.000 (= 480 m) | 1.000 (= 240 m) | 2.000 (= 480 m) | 1.000 (= 240 m) | 2.000 (= 480 m) | 2.000 (= 480 m) |
| VC-Strip 16x1 30 Modules | 2.000 (= 960 m) | 1.000 (= 480 m) | 2.000 (= 960 m) | 1.000 (= 480 m) | 2.000 (= 960 m) | 1.296 (= 622 m) |
| VC-Strip 8x1 30 Modules | 2.000 (= 480 m) | 1.000 (= 240 m) | 2.000 (= 480 m) | 1.000 (= 240 m) | 2.000 (= 480 m) | 2.000 (= 480 m) |
| VC-Strip 16x1 25 Modules | 2.000 (= 800 m) | 1.000 (= 400 m) | 2.000 (= 800 m) | 1.000 (= 400 m) | 2.000 (= 800 m) | 1.296 (= 518 m) |
| VC-Strip 8x1 25 Modules | 2.000 (= 400 m) | 1.000 (= 200 m) | 2.000 (= 400 m) | 1.000 (= 200 m) | 2.000 (= 400 m) | 2.000 (= 400 m) |
| VC-Strip 32x1 15 Modules | 2.000 (= 960 m) | 1.000 (= 480 m) | 2.000 (= 960 m) | 1.000 (= 480 m) | 2.000 (= 960 m) | 648 (= 311 m) |
| VC-Strip 16x1 15 Modules | 2.000 (= 480 m) | 1.000 (= 240 m) | 2.000 (= 480 m) | 1.000 (= 240 m) | 2.000 (= 480 m) | 1.296 (= 311 m) |
| VDO Sceptron 40 1000mm | 2.000 (= 2.000 m) | 1.000 (= 1.000 m) | 2.000 (= 2.000 m) | 1.000 (= 1.000 m) | 2.000 (= 2.000 m) | 829 (= 829 m) |
| VDO Sceptron 40 320mm | 2.000 (= 640 m) | 1.000 (= 320 m) | 2.000 (= 640 m) | 1.000 (= 320 m) | 2.000 (= 640m) | 2.000 (= 640 m) |
| VDO Sceptron 20 1000mm | 2.000 (= 2.000 m) | 1.000 (= 1.000 m) | 2.000 (= 2.000 m) | 1.000 (= 1.000 m) | 2.000 (= 2.000 m) | 414 (= 414 m) |
| VDO Sceptron 20 320mm | 2.000 (= 640 m) | 1.000 (= 320 m) | 2.000 (= 640 m) | 1.000 (= 320 m) | 2.000 (= 640m) | 1.296 (= 415 m) |
| VDO Sceptron 10 1000mm | 1.000 (= 1.000 m) | 1.000 (= 1.000 m) | 2.000 (= 2.000 m) | 1.000 (= 1.000 m) | 2.000 (= 2.000 m) | 207 (= 207 m) |
| VDO Sceptron 10 320mm | 2.000 (= 640 m) | 1.000 (= 320 m) | 2.000 (= 640 m) | 1.000 (= 320 m) | 2.000 (= 640m) | 648 (= 207 m) |
| VDO Fatron 20 1000mm | 500 (= 500 m) | 1.000 (= 1.000 m) | 2.000* (= 2.000 m) | 1.000 (= 1.000 m) | 2.000 (= 2.000 m) | 103 (= 103 m) |
| VDO Fatron 20 320mm | 1.562 (= 500 m) | 1.000 (= 320 m) | 2.000 (= 640 m) | 1.000 (= 320 m) | 2.000 (= 640 m) | 324 (= 104 m) |
| VDO Dotron Fixtures | 2.000 | 1.000 | 2.000 | 1.000 | 2.000 | 2.000 |

| | | | | | | |
|-----------------------------|--|--|--|--|--|-------------------------------------|
| Exterior PixLine 40 1280mm | 2.000 (= 2.560 m) | 1.000 (= 1.280 m) | 2.000 (= 2.560 m) | 1.000 (= 1.280 m) | 2.000 (= 2.560 m) | 648 (= 829 m) |
| Exterior PixLine 40 320mm | 2.000 (= 640 m) | 1.000 (= 320 m) | 2.000 (= 640 m) | 1.000 (= 320 m) | 2.000 (= 640m) | 2.000 (= 640 m) |
| Exterior PixLine 20 1280mm | 1.562 (= 1.999 m) | 1.000 (= 1.280 m) | 2.000 (= 2.560 m) | 1.000 (= 1.280 m) | 2.000 (= 2.560 m) | 324 (= 415 m) |
| Exterior PixLine 20 320mm | 2.000 (= 640 m) | 1.000 (= 320 m) | 2.000 (= 640 m) | 1.000 (= 320 m) | 2.000 (= 640m) | 1.296 (= 415 m) |
| Exterior PixLine 10 1280mm | 781 (= 1.000 m) | 1.000 (= 1.280 m) | 2.000 (= 2.560 m) | 1.000 (= 1.280 m) | 2.000 (= 2.560 m) | 162 (= 207 m) |
| Exterior PixLine 10 320mm | 2.000 (= 640 m) | 1.000 (= 320 m) | 2.000 (= 640 m) | 1.000 (= 320 m) | 2.000 (= 640m) | 648 (= 207 m) |
| Exterior Dot-HP Fixtures | 2.000 | 1.000 | 2.000 | 1.000 | 2.000 | 2.000 |
| VC-Dot 1 Strings | 500 (number of Dots per string not important) | 500 (number of Dots per string not important) | 500 (number of Dots per string not important) | 500 (number of Dots per string not important) | 500 (number of Dots per string not important) | 500 (up to 20.736 Dots in total) |
| VC-Dot 4 Strings | 500 (number of Dots per string not important) | 500 (number of Dots per string not important) | 500 (number of Dots per string not important) | 500 (number of Dots per string not important) | 500 (number of Dots per string not important) | 500 (up to 20.736 Dots in total) |
| VC-Dot 9 Strings | 500 (number of Dots per string not important) | 500 (number of Dots per string not important) | 500 (number of Dots per string not important) | 500 (number of Dots per string not important) | 500 (number of Dots per string not important) | 500 (up to 20.736 Dots in total) |
| VDO Atomic Dot CLD Fixtures | 2.000 | 1.000 | 2.000 | 1.000 | 2.000 | 1.219 |
| VDO Atomic Dot WRM Fixtures | 2.000 | 1.000 | 2.000 | 1.000 | 2.000 | 1.219 |
| MAC Allure Profile Fixtures | 2.000 | 1.000 | 2.000 | 1.000 | 2.000 | 2.000 |
| MAC Allure Wash PC Fixtures | 2.000 | 1.000 | 2.000 | 1.000 | 2.000 | 2.000 |
| MAC Aura PXL | 312 | 1.000 | 312 | 1.000 | 312 | 129 |

² Fixtures to be split over at least 2 outputs of the P3-300 System Controller.

³ Fixtures to be split over at least 3 outputs of the P3-300 System Controller.

⁴ Fixtures to be split over at least 4 outputs of the P3-300 System Controller.

* When a fixture is rotated on the canvas, it (internally) consumes double the amount of pixels. This can limit the amount of products marked with *, when rotated.

° When fixtures with different pixel pitch are mixed onto a P3-050/150/300 System Controller, the fixtures with lower pixel pitch consume the equivalent of their surface in the native pixel pitch of the showfile. Examples:

- When placed in a 20mm showfile, an EC-20 panel “consumes” 864 pixels
- When placed in a 10mm showfile, an EC-20 panel “consumes” 3.456 pixels
- When placed in a 40mm showfile, an LC2140+ panel “consumes” 1.250 pixels
- When placed in a 10mm showfile, an LC2140+ panel “consumes” 20.000 pixels

This is only applicable for the P3-050/150/300 System Controllers.

If you need to drive more products than listed in the table above, you can simply add more P3 System Controllers as described in their user manuals.

DMX, Art-Net & K2 Capacity

The Light & Motion Controls on the P3 System Controllers are subject to following limits:

| | Global Control | Light Controls | Motion Controls |
|---------------|-------------------------------|-----------------------------------|-------------------------------------|
| P3-050 | DMX or 1 universe of Art-Net* | DMX plus 128 universes of Art-Net | DMX or 1 universe of Art-Net* or K2 |
| P3-100 | DMX or 1 universe of Art-Net* | DMX plus 4 universes of Art-Net | DMX or 1 universe of Art-Net* or K2 |
| P3-150 | DMX or 1 universe of Art-Net* | DMX plus 128 universes of Art-Net | DMX or 1 universe of Art-Net* or K2 |
| P3-200 | DMX or 1 universe of Art-Net* | DMX plus 4 universes of Art-Net | DMX or 1 universe of Art-Net* or K2 |
| P3-300 | DMX or 1 universe of Art-Net* | DMX plus 64 universes of Art-Net | DMX or 1 universe of Art-Net* or K2 |
| P3-PC | 1 universe of Art-Net* | 128 universes of Art-Net | 1 universe of Art-Net* or K2 |

* Global Control & Motion Controls must use same universe of DMX or Art-Net.