P3-PC System Controller
FREE PC-BASED P3 SYSTEM CONTROLLER

OVERVIEW

The P3-PC System Controller is a PC-based solution driving video and DMX controls into the entire Martin range of Creative LED products and P3-enabled MAC moving heads. It controls systems of up to 20,736 pixels, takes screen-capture input, NDI video input, video input from a Green Hippo media server (when installed on the same machine), Art-Net input and sACN input. P3-PC can also be used as an off-line editor for the entire range of P3 System Controllers to preprogram shows anywhere on a PC, and as a tool for firmware uploads and addressing/testing of Martin P3-enabled fixtures.

KEY MESSAGES

MIX DMX AND VIDEO CONTROL

Gives the lighting designer the freedom to create unique looks by entering parameters or by sending content to fixtures to ultimately create the ideal look that the designer envisions.

TIME-SAVING MVR INTEGRATION

Mapping and patches can be exported to third-party lighting consoles, visualizers and CAD programs. There is no need to re-create a system repeatedly using different software packages.

REMOTE ADDRESSING AND SETTING

Eliminates the need to physically access fixtures to address and configure each one locally via the display.

REAL-TIME MONITORING

Offers a complete view of your entire system to diagnose any issues.

SYSTEM-WIDE SYNCHRONIZATION

Deliver perfect performance across the entire system, without visible lag and latency issues.

LIVE PREVIEW

Visualize results during pre-programming without connecting actual fixtures.

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FEATURES

- Off-Line Editor for all P3 System Controllers

- Stand-Alone P3 System Controller software for smaller setups

- Full HD video input compatible (NDI, Hippo Integration & Screen Capture)

- 256 universes of Art-Net / sACN input

- Outputs up to 20,736 pixels on 2,000 fixtures

- Installs on any Windows computer

- Map a mix of Martin fixtures onto one visual canvas

- Patch, address and configure Martin fixtures, without having to directly address and configure each fixture

- Export mapping and patch to third-party lighting controllers, CAD programs and visualizers via MVR

- Import mapping and patch from third-party lighting controllers, CAD programs and visualizers via MVR

- Export mapping mask to third-party media servers

- Provides real-time feedback and monitoring of Martin fixtures

ORDERING INFORMATION

- Martin P3-PC™ System Controller....Free download from martin.com

RELATED ITEMS

- Martin P3-175 System Controller......................P/N MAR-90721100

- Martin P3-275 System Controller................... P/N MAR-90721101

P3 SYSTEM CONTROLLER COMPARISON

	P3-175 System Controller	P3-275 System Controller	P3-PC System Controller
Video Input	1x HDMI up to 1920x1080 1x NDI up to 1920x1080	1x HDMI up to 4096x2160 1x NDI up to 4096x2160	NDI, Screen-capture or Media Server Integration
DMX Input	256 universes Art-Net / sACN	1024 universes Art-Net / sACN	256 universes Art-Net / sACN
P3 Output	1 network with up to 520,000 pixels worth of fixtures Maximum 2,000 fixtures	2 networks with up to 1,040,000 pixes worth of fixtures Maximum 6,000 fixtures	1 network with up to 20,736 pixels worth of fixtures Maximum 2,000 fixtures
Form-Factor	1U 19" rackmount	2U 19" rackmount	Software installed on customer-supplied Windows computer
Remote Management	Yes, internal webpages and syslog	Yes, internal webpages and syslog	No

Please consult P3 System Controller Capacity Info Note for more details

P3-PC System Controller
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TECHNICAL SPECIFICATIONS

CONTROL/USER INTERFACE
Determined by machine onto which the P3-PC System Controller software is installed.

MINIMUM SYSTEM REQUIREMENTS
Computer running Windows 10 or 11 (64 bit only)
Intel Core i3 or better processor
4 GB RAM
250 MB available hard disk space
Display with Full HD or better resolution
Full administrator rights on PC
Gigabit Ethernet port for P3 output
Separate Ethernet port for Art-Net / sACN input (if used)
Separate Ethernet port NDI input (if used)

SCREEN CAPTURE VIDEO INPUT
Real-time capture of any section (up to 1920x1080) of screen on machine on which P3-PC is installed
Capturing frame rate configurable up to 50 Hz
No direct support for third-party capture cards

NDI VIDEO INPUT
Standard: NDI & NDI HX
Resolution: Supporting all standard resolutions up to 1920x1080 (Full HD)
Framerate: Supporting frame rates up to 75fps

HIPPO SHARE VIDEO INPUT
Direct capture of any Hippotizer viewport when P3-PC is installed on a Hippo V4 (or newer) media server
Support for flipping image upside down

VIDEO PROCESSING
Controller pixel processing capacity: .... 20,736 pixels*
Controller fixture capacity: .... 2,000 fixtures*
Maximum workspace area:......................... 8,847,360 pixels
Maximum active capture area: .... 2,073,600 pixels
System processing depth:........................... 16 bits per colour (48 bits per pixel)
System latency: .... 3 frames
Latency between first and last fixture:....... None
Scaling: ....Yes, global and mixed pixel pitch
Gamma Curve Control: .... Yes, adjustable
Image Control Parameters: .... Hue, Saturation, Brightness, Contrast & Lowlight
Mapping: .... Real-time
Colour Temperature Control: .... Real-time
Colour Space Control: .... Real-time
Preview: .... Real-time (incoming video & mapping onto fixtures)

*See also P3 System Controller Capacity Info Note on Downloads page

DMX CONTROLS
Up to 256 universes of Art-Net or sACN input*

Control of intensity and colours

Control of colour temperature

Merge video input with DMX controls towards fixtures

Cross-fade or toggle between video and DMX controls

Freeze, blackout or activate testpatterns on video engine

Recall video presets (video settings, fixture positions and more)

*See also P3 System Controller Capacity Info Note on Downloads page

MOTION CONTROLS
One universe of Art-Net, sACN or Kinesys K2 input*

Compatible with Kinesys K2/Vector, Tait Navigator and others

Control fixture or group position on video canvas

Control fixture or group rotation on video canvas

*See also P3 System Controller Capacity Info Note on Downloads page

P3 SIGNAL PROTOCOL
Signal type ....Gigabit Ethernet
Protocol..Proprietary Martin P3
Hot pluggable ....Yes, electrically isolated at all connections
Cable type ....Ethernet, shielded, Cat 5e or better
Cable length..Up to 100 m between any 2 devices, extendable with Ethernet switch
Maximum number of fixtures per daisy-chain..50, extendable with Ethernet switch

INSTALLATION
Any standard PC running Windows 10 or 11 (64 bit only)

CONNECTIONS
P3 data in/out ....Gigabit Ethernet network port
EtherDMX Network (Art-Net, sACN & Kinesys K2/Vector) ....100/1000Mbit Ethernet network port
NDI Video in..100/1000Mbit Ethernet network port