



P3-300 System Controller

The P3-300 System Controller combines the award-winning and intuitive P3 workflow with a brand new high-performance video processing engine. It can control the entire range of Martin LED Video products, ranging from traditional video panels to creative elements such as strips and dots. The P3-300 is equipped with a DVI input, a component video input and two SDI input ports (up to 3G). The output capacity of 2.000.000 pixels allows even more products to be driven from a single controller.

Powerful and ergonomic LED Video Controller

Compatible with all Martin LED video products (panels and creative products)

Integration with lighting controls (DMX, Art-NET) and automation systems

GALLERY



FEATURES

- Drives up to 2.000.000 pixels
- Built-in scaler and mapper
- DVI-D input up to 1920x1080
- 2x 3G-SDI input up to 1920x1080
- Analog video input up to 1920x1080
- Dedicated bi-level and tri-level sync input for genlock
- Built-in GUI (Graphical User Interface) including easy setup wizards
- Real time visualization of the video mapping within the GUI (Graphical User interface)
- Most user-friendly LED Video processor on the market
- Compatible with all Martin LED Video products (panels and creative products)
- Integration with lighting controls (DMX & Art-NET) and automation systems
- All connected products report status and problems back to the controller for easy monitoring and maintenance
- Showfiles compatible with all products within the P3 System Controller family (including the P3-PC offline editor)

TECHNICAL SPECIFICATIONS

Physical

Depth: 508 mm (20.0 in.)

Width: 482 mm (19.0 in.)

Height (rackmount 2U): 90 mm (3.5 in.)

Weight: 9.0 kg (19.8 lbs.)

Control/User Interface

User interface: SXGA (1280 x 1024) or better monitor (VGA, DVI, HDMI or DP), USB keyboard, USB mouse

Device status: Status indicator LEDs

DVI Video Input

Supports all resolutions up to 1920x1080

Supports both RGB and YCbCr, progressive scan only

Component Video Input

Via DVI-I breakout cable (not supplied)

Supports all resolutions up to 1920x1080

Supports progressive and interlaced scan
 10-bit color sampling
 Supports composite NTSC/PAL/Secam, S-Video (Y/C) and component YPbPr w/Sync-on-G (Y)
 Supports tri-level sync

SDI Video Input
 2 x SD-SDI 525/60 (NTSC) or 625/50 (PAL) per SMPTE 259M
 2 x HD-SDI 720p per SMPTE 296M or 1080i per SMPTE 292M
 1 x dual-link HD-SDI per SMPTE 372M
 2 x 3G-SDI per SMPTE 424M (compatible with level A and level B sync)

Genlock Input
 Supports bi-level and tri-level sync

Video Processing
 Controller pixel processing capacity: 2 080 000 pixels (expandable by adding P3-300s)
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 Controller fixture capacity: 2000 fixtures (expandable by adding P3-300s)*
 Maximum workspace area: 2 073 600 pixels
 Maximum active capture area: 2 073 600 pixels
 System processing depth: 16 bits per color (48 bits per pixel)
 System latency, DVI: 2 frames
 System latency, SDI/component progressive: 2 frames
 System latency, SDI/component interlaced: 3 frames
 Latency between first and last panel: None
 Image rotation
 Scaling (global and mixed pixel pitch)
 De-interlacing
 Gamma curve selection and adjustment
 Real-time panel content remapping
 Real-time color temperature and color space control
 Real-time preview of video input and mapped canvas

DMX 512 / Art-Net real-time controllable parameters
 Up to 32 universes of Art-Net input*
 Global intensity
 RGB intensity
 Color temperature
 X-Y video image position
 Video image rotation
 Freeze
 Blackout
 Test pattern selection
 Preset recall (incl. video input selection and scaling)

Kinesys K2 / Tait Navigator real-time controllable parameters
 X-Y video image position
 Video image rotation
**See also P3 System Controller Capacity Info Note on Support & 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 (328.1 ft.) between any 2 devices, extendable with Ethernet switch
 Max. number of panels per line: 50, extendable with Ethernet switch

Construction
 Housing: Steel and aluminum
 Color: Matt black
 Protection rating: IP20

Installation
 Mounting: 19-inch rackmount (2U) or free-standing

Connections
 Power input: IEC socket with integrated power switch
 P3 data in/out: 4 x etherCON socket
 DVI/component video in: DVI-I (component via BNC-to-DVI-A adapter cable, not supplied)
 DVI/component video thru: DVI-I
 SDI video in: 2 x BNC
 SDI video thru: 2 x BNC
 Genlock in: 1 x BNC
 Genlock thru: 1 x BNC
 Management network: etherCON socket
 EtherDMX / motion network (Art-Net, Kinesys K2/Vector): etherCON socket
 DMX in: 5-pin locking XLR
 DMX thru: 5-pin locking XLR
 Peripherals and USB memory devices: 4 x USB 2.0 ports
 User interface monitor: DisplayPort++ (compatible with adapters to DVI, HDMI and VGA, not supplied)

Electrical
 AC power: 100-240 V nominal, 47-63 Hz
 Power supply unit: Integrated, universal multi-voltage

Thermal
 Cooling: Forced air
 Maximum ambient temperature (Ta max.): 50° C (122° F)
 Minimum ambient temperature (Ta min.): 0° C (32° F)
 Total heat dissipation*: 685 BTU/hr.
**calculated, +/- 10%:*

Approvals

EU safety: EN 60950-1
EU EMC: EN 55022, EN 55024, EN 61000-3-2, EN 61000-3-3, EN 6100-4-2, EN 6100-4-3, EN 6100-4-4, EN 6100-4-5, EN 6100-4-6, EN 6100-4-11
US safety: ANSI/UL 60950-1
Canadian safety: CAN/CSA C22.2 No. 60950-1

Included Items

EU-type power cable with Schuko connector
US-type power cable
UK-type power cable

Related Items

Martin P3-100™ System Controller: P/N 90721010
Martin P3-200™ System Controller: P/N 90721020
Martin P3-PC™ License on One-Key™ USB stick: P/N 90721030
Martin P3-PC™ License only: P/N 39808028

Ordering Information

Martin P3-300™ System Controller: P/N 90721060

