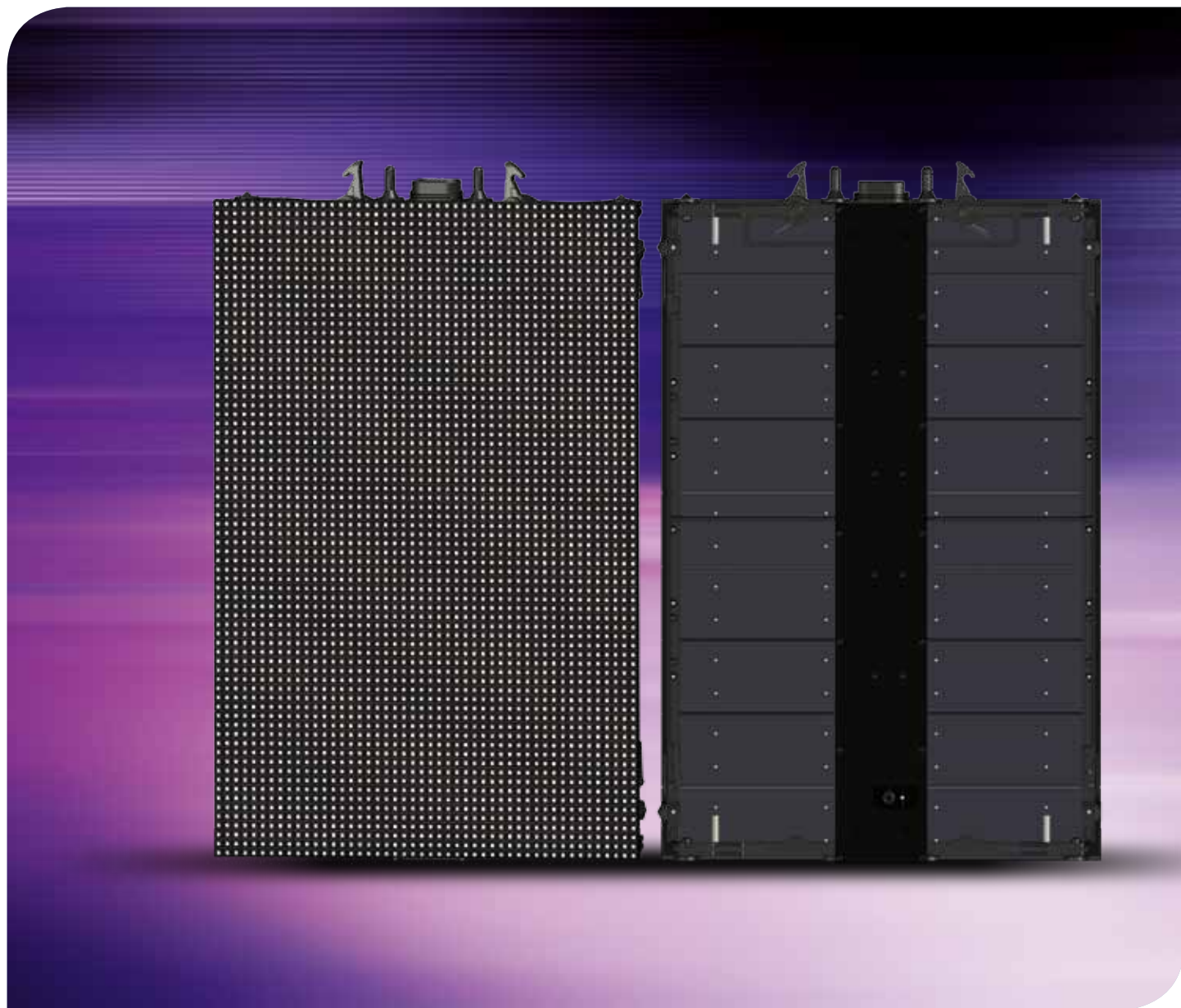


EC-10™



EC-10™

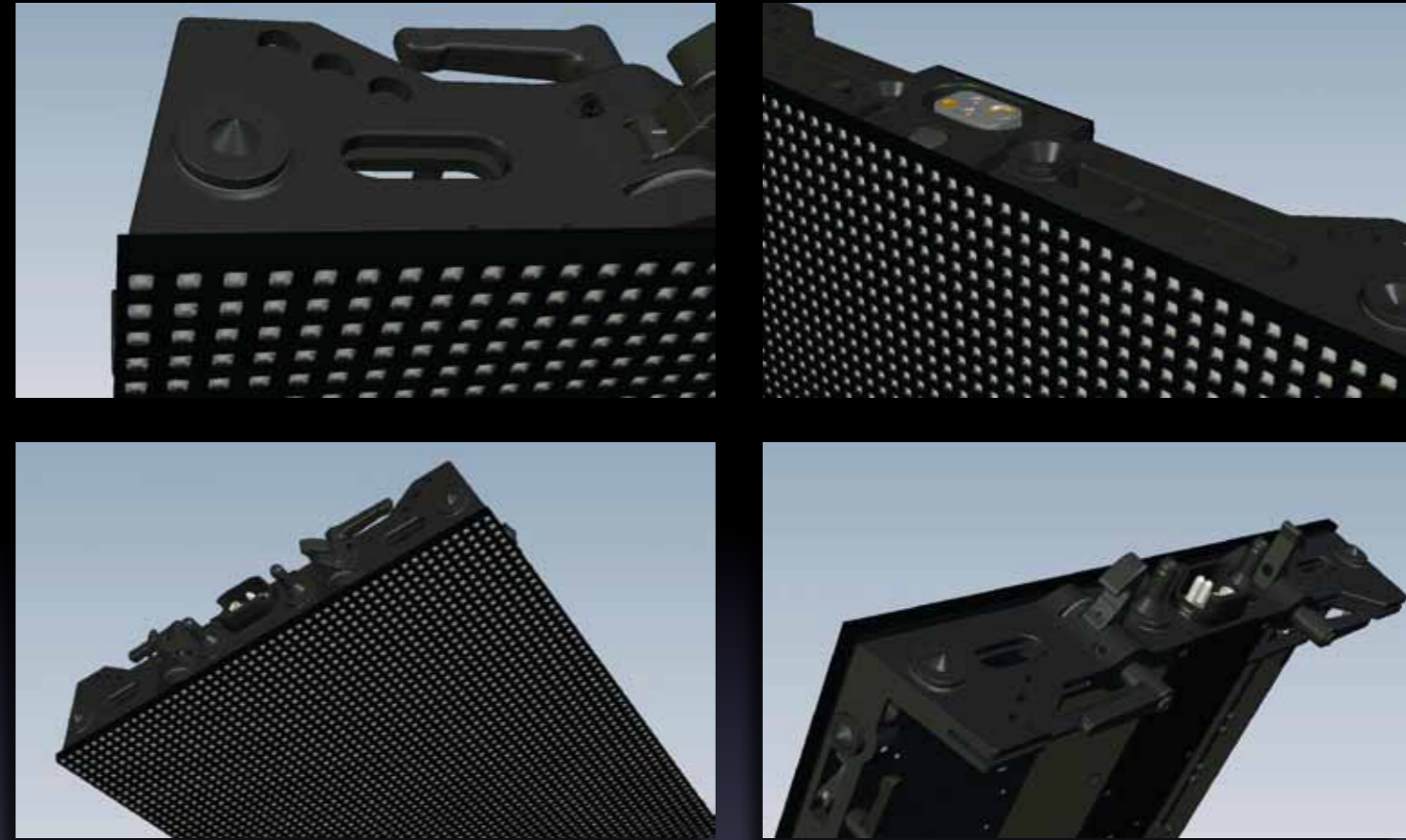
The new EC-10 is a high performance, true 10.00 mm pixel pitch LED display panel that teams with Martin's EC-20 to form a fully compatible EC family of LED displays that can be mixed and matched for ultimate design creativity.

Featuring the same award-winning, lightweight and cable-free design for rapid deployment, the EC-10 is 100% compatible with the EC-20 in terms of brightness, color, setup, curving, and control and processing, even accessories, allowing for seamless, mixed resolution visuals in one system.

- **Full compatibility with EC-20**
- **Outstanding image quality**
- **High contrast and brightness (4000 Nit)**
- **High refresh rate (3000 Hz)**
- **Wide viewing angles (140°)**
- **Fast and easy to assemble, no tools, no cables**
- **Modular for easy serviceability**
- **P3 system processor, easy setup**
- **IP65 protection**

10mm

pixel pitch



The EC-10 features an exceptionally stable and precise frame that ensures pixel perfect alignment in all directions, regardless of the size or shape of the screen.

The frame also incorporates a tool-free locking system for savings in time and labor during setup and tear down.

Preliminary Specifications EC-10

Physical

EC-10 Video Display Panel

Width: 480 mm (18.9 in.)

Depth: 100 mm (3.9 in.)

Height: 720 mm (28.3 in.)

Weight: 11.3 kg (24.9 lbs.)

EC Series Single Header

Width: 480 mm (18.9 in.)

Depth: 85 mm (3.3 in.)

Height: 120 mm (4.7 in.)

Weight: 4.7 kg (10.4 lbs.)

EC Series Double Header

Width: 960 mm (37.8 in.)

Depth: 100 mm (3.9 in.)

Height: 130 mm (5.1 in.)

Weight: 15.4 kg (34.0 lbs.)

EC Series Triple Header

Width: 1440 mm (56.7 in.)

Depth: 100 mm (3.9 in.)

Height: 130 mm (5.1 in.)

Weight: 23.1 kg (50.9 lbs.)

Control/user interface

Device status: Status indicator LED

Setup testing: Local test patterns

Video processing

Video signal processor: Martin P3-100, P3-200 or P3-PC System Controller

Processor capacity: 500 000 pixels

System latency: Digital 1 frame, analog 3 frames

Latency between first and last panel: None

DVI video input: Up to 1280 x 1024, 50/60/75 Hz

SDI video input: Up to 1920 x 1080, 50/60 Hz

Analog video input: Composite, component and S-video, PAL, NTSC and SECAM

Frame synchronization to analog signal: Yes, integrated in P3 System Controller

Image rotation: Yes, integrated in P3 System Controller

Scaling: Yes, integrated in P3 System Controller

De-interlacing: Yes, integrated in P3 System Controller

Gamma curve selection and adjustment: Yes, integrated in P3 System Controller

Real-time panel content remapping: Yes, integrated in P3 System Controller

P3 signal protocol

Signal type: Gigabit Ethernet

Protocol: Proprietary Martin P3

Hot pluggable: Yes, electrically isolated at all connections

Cable type: Ethernet, CAT 5e or better

Cable length: Up to 100 m (328.1 ft.) between any 2 devices, extendable with Ethernet switch

Photometric data

Pitch (pixel center-to-center): 10.0 mm (0.4 in.)

Total output (max.): 4000 Nit (calibrated)

Color resolution: 16 bits per color

Resolution, one panel: 48 x 72 pixels

Pixels per panel: 3456

Color and intensity calibration: Pixel-level

Construction

Panel frames: Aluminum

LED modules per panel: 18

Color: Matt black

Protection rating: IP65, NEMA 4

Installation

Orientation: Individually mounted panel any angle; suspended column vertical only

Max. suspended in one column: Max. sixteen EC Series panels

Panel interlocking: Quick-release mounting system

Connections

Power input to Header: 1.5 m (4.9 ft.) cable tail w/o power plug

P3 data input to Header: Accepts an Amphenol IP67-rated Ethernet cable connector

Panel power and data interconnection: Integrated connector system

Electrical

AC power: 200-240 V nominal, 50/60 Hz

Power supply unit: Integrated, auto-sensing multi-voltage

Main fuse: 2 x 3.15 AT

Peak power consumption (approx., at full intensity, full white): 270 W per panel

Typical power consumption (with typical video content): 100 W per panel

Thermal

Cooling: Convection

Maximum ambient temperature (at full intensity, full white): 40° C (104° F)

Minimum ambient temperature (T_a min.): 0° C (32° F)

Approvals

EU safety: EN 60950-1, EN 60529

EU EMC: EN 55022, EN 55024, EN 61000-3-2, EN 61000-3-3

US safety (pending): ANSI/UL 60950-1

Canadian safety (pending): CAN/CSA 60950-1

Included items

Included with EC-10 panel:

1 x EC-10 video display panel

Included with 8-unit EC Series Flightcase:

Safety and installation guide

Included with Single Header:

1 x EC Series Header

1 x 5.0 m (16.4 ft.) Ethernet patch cable with IP67-rated RJ-45 connectors

1 x EC Series Header Installation & Safety Guide

Included with Double Header:

2 x EC Series Headers assembled in Double Header Connection Bracket

1 x Header joining set (2 x joining plates and 16 x M12 bolts)

2 x 5.0 m (16.4 ft.) Ethernet patch cable with IP67-rated RJ-45 connectors

1 x EC Series Header Installation & Safety Guide

Included with Triple Header:

3 x EC Series Headers assembled in Triple Header Connection Bracket

1 x Header joining set (2 x joining plates and 16 x M12 bolts)

3 x 5.0 m (16.4 ft.) Ethernet patch cable with IP67-rated RJ-45 connectors

1 x EC Series Header Installation & Safety Guide

Accessories

1.5 m (4.9 ft.) Ethernet CAT 5e data cable with IP67-rated RJ-45 connectors: P/N 11840147

2.5 m (8.2 ft.) Ethernet CAT 5e data cable with IP67-rated RJ-45 connectors: P/N 11840148

5 m (16.4 ft.) Ethernet CAT 5e data input cable with IP67-rated connectors: P/N 11840152

30 m (98.4 ft.) Ethernet CAT 5e data input cable with IP67-rated connectors: P/N 11840145

All EC Series and P3 System Controller Series user documentation is available for download free of charge from the Product Support area at www.martin.com

Related items

Martin™ EC-20™ Video Display Panel: P/N 90354230

Martin™ Maxedia Compact™ System RM*: P/N 90732570

Martin™ Maxedia PRO™ System RM*: P/N 90732580

Martin™ Maxedia PRO™ System with flightcase, I/O box and keyboard tray: P/N 90732520

Martin™ Maxedia Broadcast™ System RM*: P/N 90732590

Martin™ Maxedia Broadcast™ System with flightcase, I/O box and keyboard tray: P/N 90732550

*RM devices are 19-inch rackmount versions and do not include flightcase or I/O box

Ordering information

1 x EC-10™ Video Panel, calibrated (supplied in separately ordered flightcase): P/N 90354320

Flightcase for 8 x EC Series panels (flightcase and panels are ordered separately): P/N 91515008

EC Series Single Header in Cardboard Box: P/N 90354240

EC Series Double Header (supplied in separately ordered flightcase): P/N 90354250

Flightcase for EC Series Double Header (order at same time as Header): P/N 91515006

EC Series Triple Header (supplied in separately ordered flightcase): P/N 90354260

Flightcase for EC Series Triple Header (order at same time as Header): P/N 91515007

EC Series Curving Installation Kit (50 locking knobs, 25 'bananas') in cardboard box: P/N 90354270

Martin™ P3-100™ System Controller: P/N 90721010

Martin™ P3-200™ System Controller: P/N 90721020

Martin™ P3-PC™ System Controller: P/N 90721030

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About Martin by Harman

As a world leader in the creation of dynamic lighting solutions for the entertainment, architectural, and commercial sectors, Martin lighting and video systems are renowned the world over. Martin also offers a range of advanced lighting controllers and media servers, as well as a complete line of smoke machines as a complement to intelligent lighting. Martin operates the industry's most complete and capable distributor network with local partners in nearly 100 countries. Founded in 1987 and based in Aarhus, Denmark, Martin is the lighting division of global infotainment and audio company HARMAN International Industries.

For more information please visit



HARMAN (www.HARMAN.com) designs, manufactures and markets a wide range of audio and infotainment solutions for the automotive, consumer and professional markets – supported by 15 leading brands, including AKG®, Harman Kardon®, Infinity®, JBL®, Lexicon® and Mark Levinson®. The Company is admired by audiophiles across multiple generations and supports leading professional entertainers and the venues where they perform. More than 25 million automobiles on the road today are equipped with HARMAN audio and infotainment systems. HARMAN's highly competent workforce is employed across the Americas, Europe and Asia.

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