

# E2 series

## 4K screen management systems



Raising the bar for live screen management, the E2 presentation system provides superior image quality, exceptional input and output density, great expandability and durability. Supporting native 4K input and output, it is the first and only screen management system on the market that can manage a 4K projector blend with refresh rates up to 60Hz. A truly versatile system, it offers eight mixable PGM outputs and four scaled Aux Outputs for full show control with a single box.

### Native 4K input and output

With native 4K input and output, the E2 provides impressive pixel processing power. Whether native or scaled inputs, two connectors or four, this HDCP-compliant system manages it all. With 28 inputs and 14 outputs (eight PGM, two Multi-viewer and four scaled Aux outputs), the E2 system offers full show control, including eight independent PIP mixers and a dedicated Multiviewer. Thanks to its linkable chassis, it can easily expand beyond these eight outputs without the need for additional external processing and routing to distribute the signals. And as its inputs and layers can also be expanded, the E2 will be capable of managing a blended screen with up to 32 4K projectors in the future.

### Simple servicing and control

The E2 comes with a straightforward cross-platform user interface that provides touchscreen ergonomics. As the presets are stored on the chassis it enables easy control via third-party systems. Multiple users can control the system simultaneously, and the API allows third-party developers to create custom control programs and interfaces. Thanks to its modular design, users can simply add a new input or output card to support future signal interfaces. This modularity also ensures great serviceability, as users can easily swap a specific input or output card in the case of damage, without needing to ship or replace the entire box.

**BARCO**

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### Designed for life on the road

Designed for the live event industry, the rugged E2 features a steel chassis that's able to withstand the challenging conditions of life on the road. What's more, it offers screen control in a compact form factor of only four rack units, which makes it easy to ship and install. And thanks to its modular cards and dual redundant power supplies, the E2 is extremely reliable and easy to service in the field.

### Layers, layers, layers

The E2 offers an extremely flexible layer management system. The E2 starts with a pixel perfect, full resolution, unscaled background layer that is the same resolution as the screen destination. As an unscaled mixing background layer it does not use any of the valuable scaling layers. With up to 32 layers available in HD, the E2 can customize the layer configuration to meet the needs of your application. The layers provide either pip or key effects, and can be configured for HD, Dual Link (2560x1600 or 3840x1200 max), or 4K resolutions. Each destination gets dedicated layers, so you know exactly how many resources are available. The layers can also be configured as single layers with cut transitions, or two of the scalers can be combined to create a mixing layer. Each destination can support a combination of mixers, single layers, pips, keys, and various sizes of layers, all to create a single composited image on the screen.



### E2 Jr

Bringing the same performance and features as the E2, the E2 Jr model is ideally suited for applications that do not require the full capacity of the E2. Offering 16 inputs, 8 outputs, and 8 mixers (or 16 single layers), the E2 Jr features the same 4 RU form factor as its bigger E2 brother. E2 grows with your shows so you can easily upgrade the E2 Jr to a fully loaded E2 system at any time. Simply purchase and install additional cards into your system.



## Product specifications

## E2 series

### Video inputs

#### HDMI

- per HDMI 1.4a specification
- on HDMI connector (Type A)
- formats up to 2,560x1,600@60 and 3,840x1,200@60 (30 bits)
- 4K/UHD Supported:
  - 3,840x2,160/23.98/24/25/29.97/30 input via 1x HDMI, 2x HDMI (L and R half) or 4x HDMI (quadrants)
  - 3,840x2,160/50/59.94/60 input via 2x HDMI (L and R half) or 4x HDMI (quadrants)
  - 4,096x2,160/23.98/24/25/29.97/30 input via 1x HDMI, 2x HDMI (L and R half) or 4x HDMI (quadrants)
  - 4,096x2,160/50/59.94/60 input via 2x HDMI (L and R half) or 4x HDMI (quadrants)
- EDID version 1.3 compatible
- HDCP version 1.4 compatible

#### Display port

- per Displayport 1.1a specification
- on Displayport connector
- formats up to 2,560x1,600@60 and 3,840x1,200@60 (30 bits)
- 4K/UHD Supported:
  - 3,840x2,160/23.98/24/25/29.97/30 via 1x DP, 2x DP (L and R half) or 4x DP (quadrants)
  - 3,840x2,160/50/59.94/60 via 2x DP (L and R half) or 4x DP (quadrants)
  - 4,096x2,160/23.98/24/25/29.97/30 via 1x DP, 2x DP (L and R half) or 4x DP (quadrants)
  - 4,096x2,160/50/59.94/60 via 2x DP (L and R half) or 4x DP (quadrants)
  - 4,096x2,400/23.98/24/25/29.97/30/50/59.94/60 via 2x DP (L and R half) or 4x DP (quadrants)
- EDID version 1.3 compatible
- HDCP version 1.4 compatible

#### DVI

- DVI 1.0 specification
- DVI Digital video on DVI-I connector
- All single-link DVI formats up to 165 MHz
- All dual-link DVI formats up to 330 MHz
- Maximum H Active: 4,096, Maximum V Active: 3,072
- 4K/UHD Supported:
  - 3,840x2,160/23.98/24/25/29.97/30 input via 1x DVI-DL, 2x DVI-SL (L and R half) or 4x DVI-SL (quadrants)
  - 3,840x2,160/50/59.94/60 input via 2x DVI-DL (L and R half) or 4x DVI-SL (quadrants)
  - 4,096x2,160/23.98/24/25/29.97/30 input via 2x DVI-SL (L and R half) or 4x DVI-SL (quadrants)
  - 4,096x2,160/50/59.94/60 input via 2x DVI-DL (L and R half) or 4x DVI-SL (quadrants)
  - 4,096x2,400/23.98/24/25/29.97/30 input via 2x DVI-SL (L and R half) or 4x DVI-SL (quadrants)
  - 4,096x2,400/50/59.94/60 input via 2x DVI-DL (L & R half) or 4x DVI-SL (quadrants)
- EDID version 1.3 compatible
- HDCP version 1.4 compatible

#### SDI

- SD/HD/3G SDI (6G ready) on BNC connector
- Formats:
  - SD Formats: SD-SDI per SMPTE 259M-C (NTSC/PAL resolution)
  - HD Formats: HD-SDI per SMPTE 274M, 296M, 2048
  - 3G Formats: 3G-SDI per SMPTE 424M, Barcolink
- 6G Ready (via future firmware upgrade)
- 4K/UHD Supported:
  - 3,840x2,160/23.98/24/25/29.97/30 input via 4x HD-SDI (quadrants)
  - 3,840x2,160/50/59.94/60 input via 4x 3G-SDI (quadrants)
  - 4,096x2,160/23.98/24/25/29.97/30 input via 4x HD-SDI (quadrants)
  - 4,096x2,160/50/59.94/60 input via 4x 3G-SDI (quadrants)

**Video outputs**
**HDMI**

- per HDMI 1.4a specification
- formats up to 2,560x1,600@60 and 3,840x1,200@60 (30 bits)
- 4K/UHD Supported:
  - 3,840x2,160/23.98/24/25/29.97/30 output via 1x HDMI, 2x HDMI (L and R half) or 4x HDMI (quadrants)
  - 3,840x2,160/50/59.94/60 output via 2x HDMI (L and R half);or 4x HDMI (quadrants)
  - 4,096x2,160/23.98/24/25/29.97/30 output via 1x HDMI, 2x HDMI (L and R half) or 4x HDMI (quadrants)
  - 4,096x2,160/50/59.94/60 output via 2x HDMI (L and R half);or 4x HDMI (quadrants)
- EDID version 1.3 compatible
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**Other**
**Genlock**

Genlock: Reference Input/Loop on BNC connectors; Analog Bi-level and Blackburst at SD and Tri-level at HD  
S3D Sync: 4x Input Din connector, 2x Output Din connector

**Communication**

Ethernet RJ-45, 1000/100/10 Mbps autosense

**Dimensions**

- Height: 17.8 cm (7.0 in) - 4 RU Rackmount
- Width: 43.2 cm (17.0 in)- without chassis handles, 48.3 cm (19 in) with chassis handles attached
- Depth: 56.9 cm (22.4 in) from front panel to rear panel, 62.2 cm (24.5 in) overall

**Weight**

31 kg (68 lbs)

**Input power**

Power 100-240 VAC, 47-63 Hz, auto-selecting 8.8A at 100 VAC

**Environmental temperature**

0-40° Celsius

**Environmental humidity**

0-95% noncondensing

**Warranty**

Full three year parts and labor standard, extended warranty and support available.