

Pro A/V Innovator

DB-EBC2

Hardware Based Edge Blending Solution



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Introduction

EBC2 is new generation, hardware based edge blending controller, which support flat, wave curved and 3D blending with up to 4k capturing and 1080P @60Hz output.



Applications



Release Event



Exhibition



Conference



Show

Features

▼ Advanced Blending Technology

Color and brightness adjustment

By adjustment of the color and brightness of each output signal, to eliminate the discrepancy of different projectors.



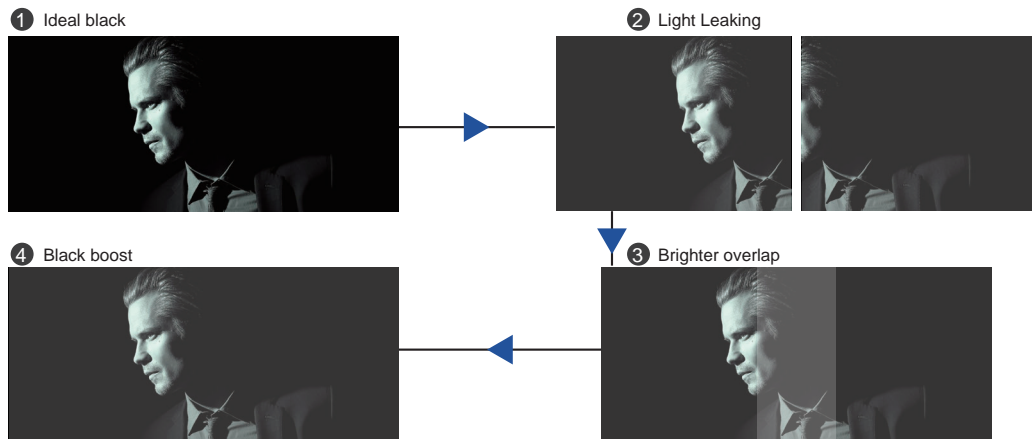
Default Color Discrepancy



Consistency

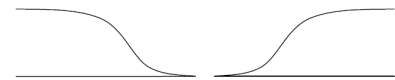
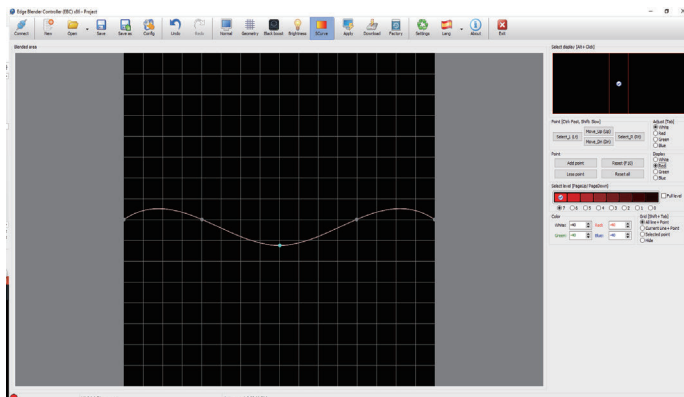
Features

Black Boost

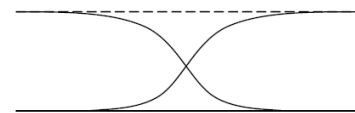


SCurve adjustment

The 'blend' is basically an S-shaped curve that is applied to gradually reduce the brightness of the image at the edge.



S-curves for two projectors, with edge blended.

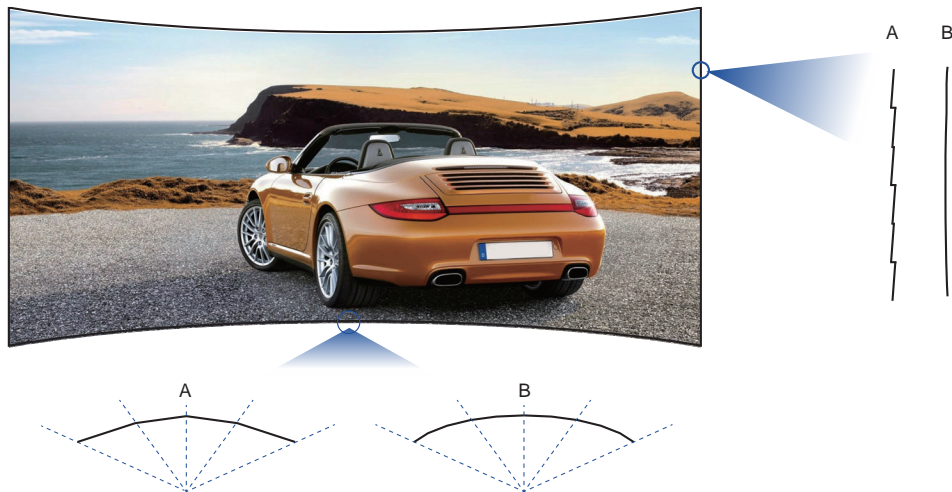


S-curves together to result in full brightness when properly overlapping.

Features

NURBS (Non-Uniform Rational B-Splines)

NURBS enable the smoothly edge transition.

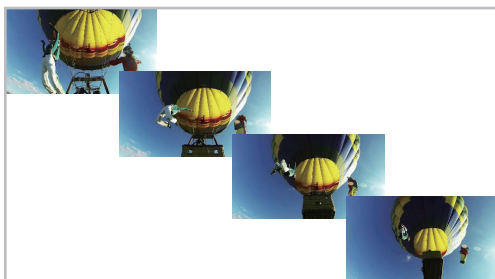


▼ Powerful Processing

Full HD lossless processing

A: Traditional technology is processing the signal on 1080P/30 fps and result in signal loss.

B: DigiBird EBC supports 1080P/60 fps processing without signal loss and free of scratch when playing fast move video.



A: 1080P/30 fps



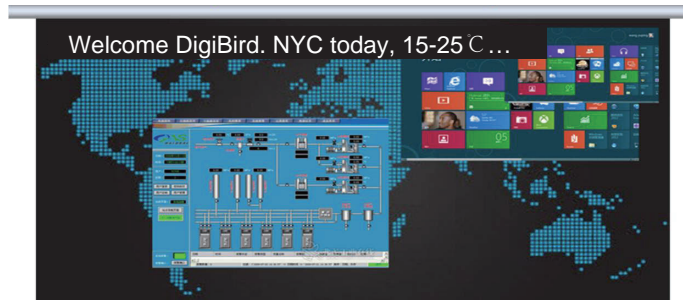
B: 1080P/60 fps

Features

Flexible Display

Up to 4x layers per output, support PIP and arbitrary zooming

Scrolling Text: user defined font, color, background and scrolling speed.



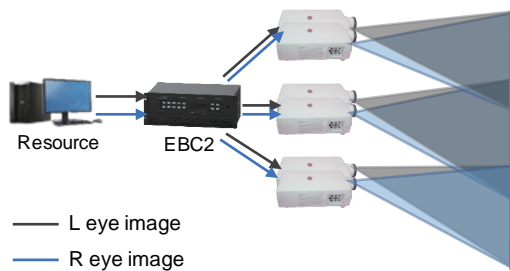
4K UHD capture

Support 4k capturing and customized resolution.



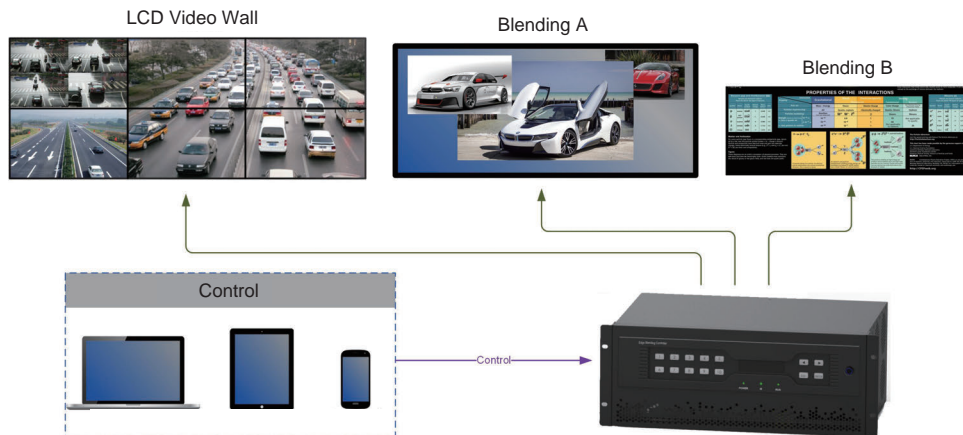
Passive 3D

Supports passive 3D display with polarized glasses.



Features

Control Edge Blending and Video Wall Concurrently



Web based control

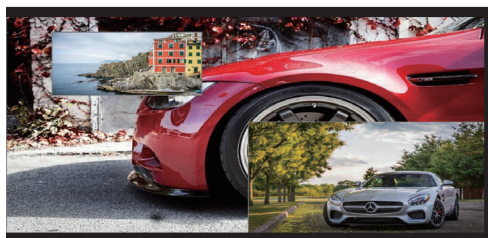
TCP/IP Control

Web-based, no need software installation



Previewing

Real time preview of input source and all operation.



Blending display



PC control



Tablet/ Smart phone control

Features

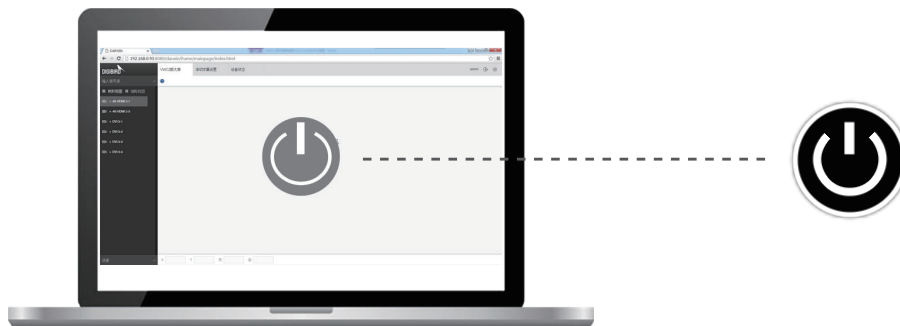
Dual Control Cards

Support Control Card back up.

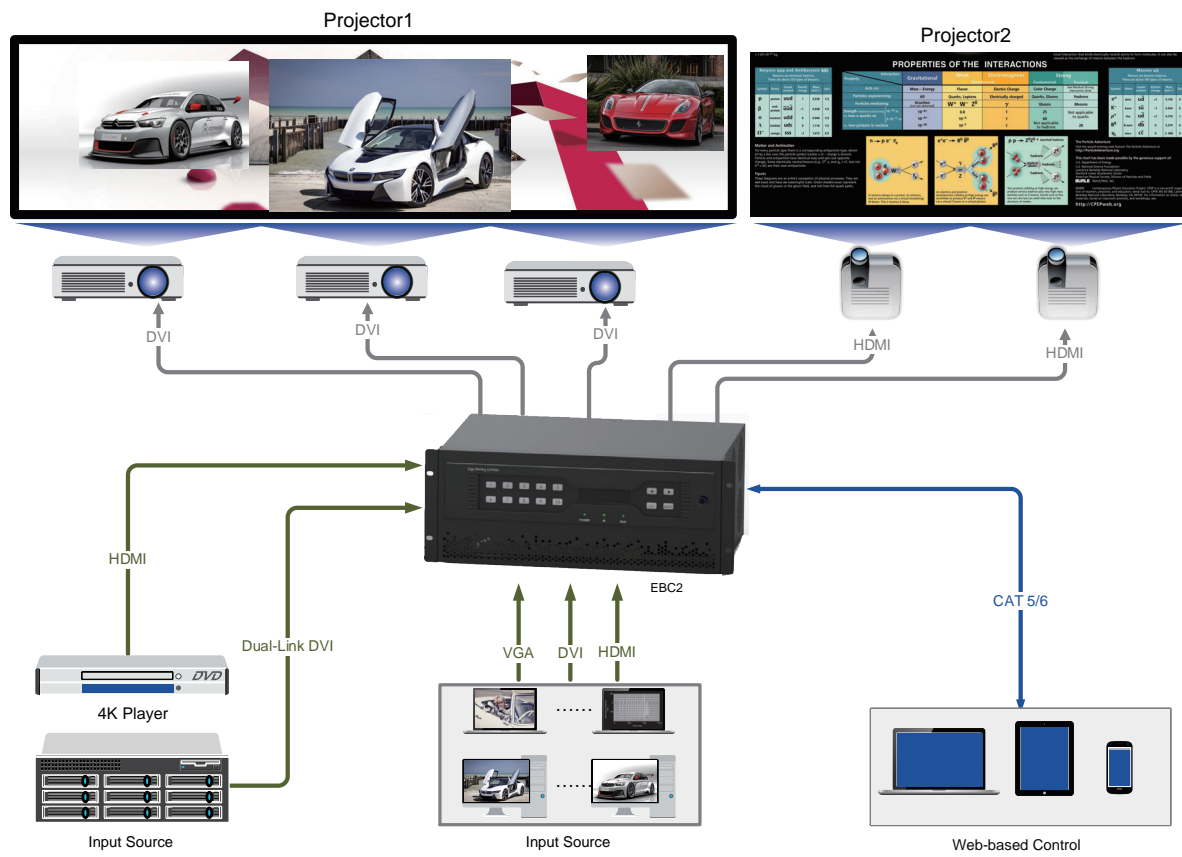


Remote standby and wakeup

One-Touch Operation to Standby and Wakeup.



Diagram



Specification

Model	Max. Input Ports	Max. Output Ports	Power (W)	Default+Redundant PSU
EBC2-H4-2000	8x FHD/4x 4k	4x FHD	35	1
EBC2-H4-4000	32x FHD/16x 4k	6x FHD	41	1+1
EBC2-H4-6000	56x FHD/28x 4k	10x FHD	56	1+1
EBC2-H4-8000	60x FHD/30x 4k	20x FHD	170	1+1
EBC2-H4-14000	116x FHD/58x 4k	20x FHD	170	1+3
EBC2-H4-19000	148x FHD/74x 4k	40x FHD	260	1+3
Input Card	Number/Signal Type	Connector	Max. resolution	Power (W)
4k HDMI	2x HDMI 1.4	HDMI Type A Female	3840*2160@30	11.3
DVI	4x DVI	(24+5)-pin DVI Female	1920*1200@60	11.3
Dual Link DVI	2x DL-DVI	(24+5)-pin DVI Female	3840*2160@30	11.3
HDMI	4x HDMI 1.3	HDMI Type A Female	1920*1200@60	12.3
SDI	4x SDI	BNC Female	1920*1080@60	13
CVBS	4x NTSC/PAL	BNC Female	720*480/720*576	15
YPbPr	4x YPbPr	BNCx3 Female	1920*1080@60	15
VGA	4x VGA	15-pin D-sub Female	1920*1200@60	15
DP	4x DP1.0	DP Female	1920*1200@60	14
4k DP	2x DP1.1	DP Female	3840*2160@30	14
IP	2x IP	RJ45	2048*1536@25	26
Output Card	Number/Signal Type	Connector	Max. resolution	Power (W)
DVI output card	2x DVI	(24+5)-pin DVI Female	1920*1200@60	33
HDMI output card	4x HDMI 1.3	HDMI Type A Female	1920*1200@60	31
HDBaseT output card	4x HDBaseT	RJ-45	1920*1200@60	39
Network preview card	1x IP	RJ-45	N/A	26
Video Processing				
Hardware Structure		Yes		
Parallel Processing Architecture		Yes		
Digital Sampling		24bit, 8 bits per color		
Colors		8 bit processing, 4:4:4		
Resolution		Up to 4k input (3840*2160@30) and FHD output		
Data Rate		20Gbps per input slot, 80Gbps per output slot		
Source Switching Response		≤20ms		
Window Creating Response		≤16ms		
Scenario Recalling Response		≤16ms		
Communications				
RS232		via D9 Female Connector		
IP interface		IP/TCP, via RJ45 port		
General				
Operating Temperature		0° to +40° C		
Storage Temperature		minus 10° to 70° C		
Operating Humidity		10% to 85%, Non-condensing		
Storage Humidity		10% to 90%, Non-condensing		
MTBF		50,000 hrs		