

Image blending and warping processor

# A Powerful Performer



Powerful and intuitive blending and warping



Black level adjustment



Multi region colour correction



Geometric correction for off-axis projection and stacking



High resolution image blending (up to 1920x1200 per output)



Dual channel output







#### **CHAMELEON GB-200**

Is a powerful and intuitive image blending and warping processor that provides the ability to merge overlapping edges of two or more projected images creating a seamless single image.

The outputs can be warped vertically and horizontally. Each processor is equipped with two channels and are positioned inline between the input source (PC) and the projector.

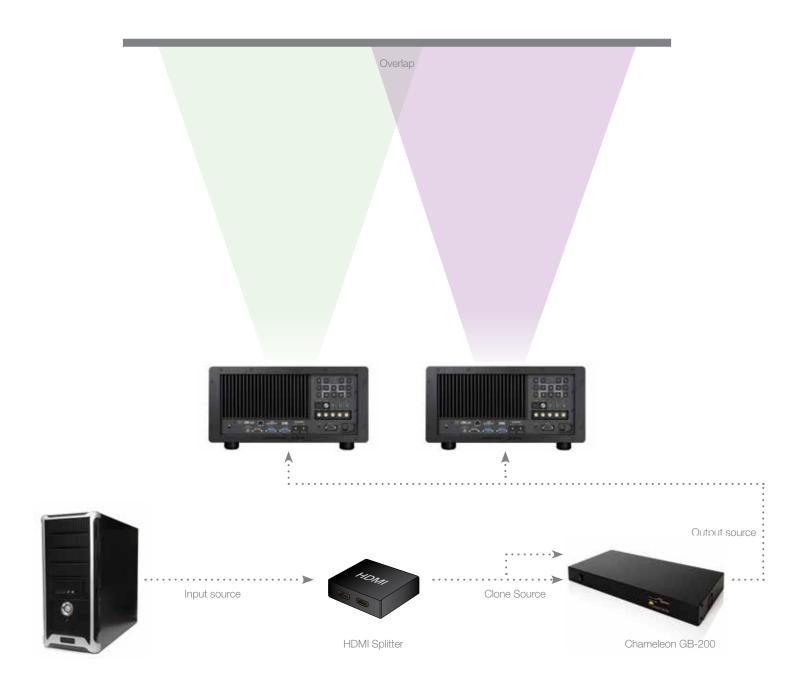
Optoma's Chameleon has the ability to pre-cut a single image to form a seamless picture of up to a 2x2 projection array, making your installation quicker and easier. More complex arrays are not a barrier for the Chameleon, they can be done with the help of a multi output graphic card.

Resolutions including 1080p and WUXGA are supported via VGA, DVI and HDMI connections. Colour, black level and gamma correction are engaged to compensate for the challenges faced when blending projectors.



## **CHAMELEON GB-200 STRUCTURE**

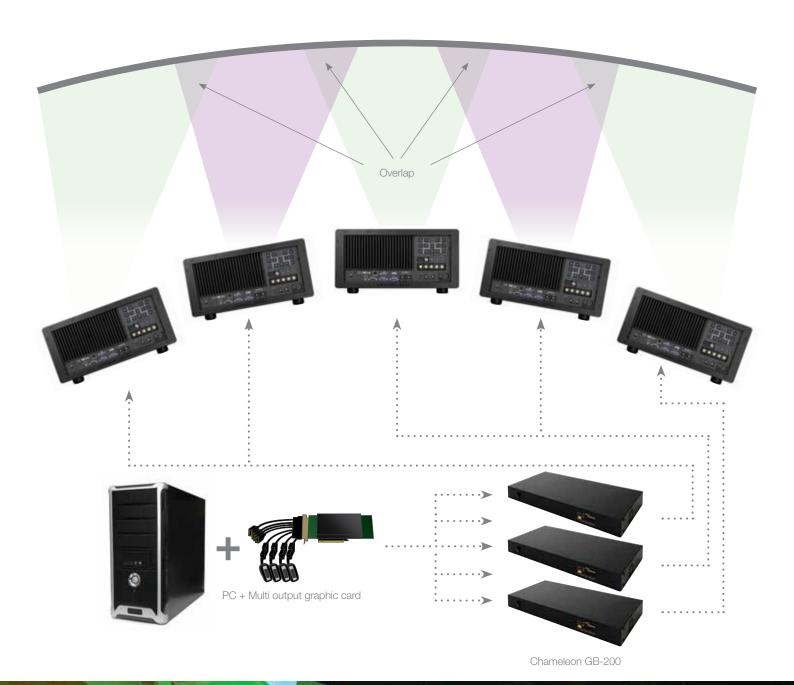
Edge blending using GB-200 to pre-cut the image





## **CHAMELEON GB-200 STRUCTURE**

Edge blending using multi-output graphic card to pre-cut the image



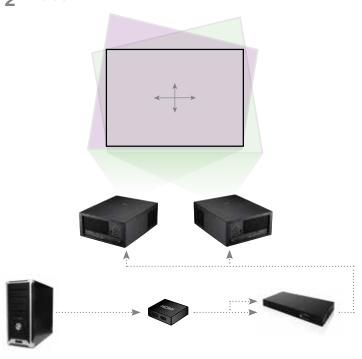


## **IMAGE STACKING**

Increase your image brightness at a low cost by using two or more projectors. With warp adjustment, you can achieve any brightness you want.

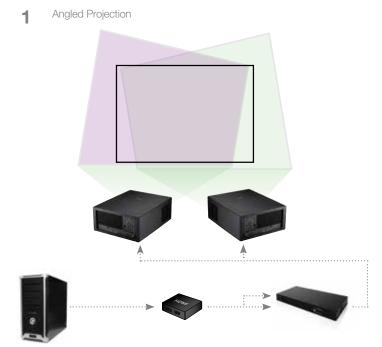
Image stacking permits flexible installations and easy maintenance, aiding an image to be displayed without interruption when swapping lamps. In addition, you can realign two images to be perfectly square when no lens shift is available.



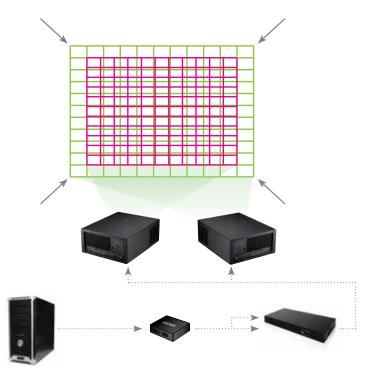


4 Final Image



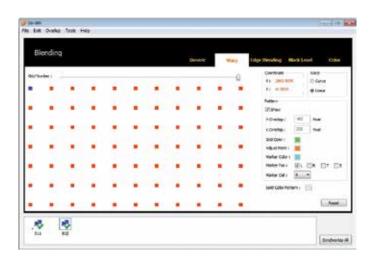


3 Warping



ADVANCED GRID WARP ADJUSTMENT FOR FLAT AND CURVED SURFACES.

Software tool 17 x 17 grid warp



2 Advanced warp adjustment

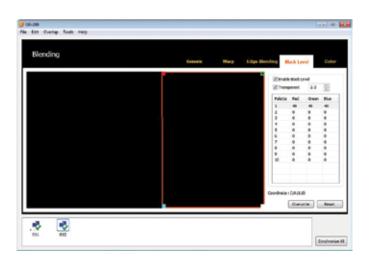




## ADVANCED BLACK LEVEL UPLIFT

Black level uplift with RGB and HSL correction, allows you to make an accurate matching between the outside and overlapped areas in order to achieve a perfect seamless image when the lighting environment is very low.

Software tool black level uplift



2 Edge blending without blackl level uplift



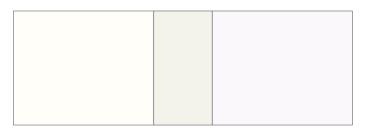
3 Edge blending with black level uplift



## **ADVANCED MULTI REGION COLOUR CORRECTION**

Multi region colour correction allows you to adjust the white points of two projected images to make a full white seamless image.

2 Edge blending without white balance correction







4 Edge blending without colour correction



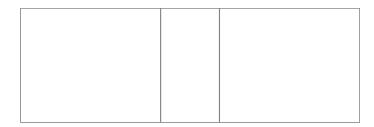




Software tool multi region colour correction



3 Edge blending with white balance correction







5 Edge blending with colour correction







## **GB-200 + OPTOMA AUTO BLENDING TOOL**

Auto blending is a simple and easy method to achieve a seamless image in just minutes, using a camera to capture two projected images the Optoma auto blending tool calibrates and synchronize GB-200 processor to perform a blend in less than 7 minutes.

2 Place the camera in the middle of the screen to auto calibrate the overlap area and the corners of the screen.



**Save the file, remove camera and PC/Software.** 



1 Use zoom and lens shift and focus to position the image of the projectors to cover the entire screen area



3 Edge blending set up is finished between 5 to 7 minutes



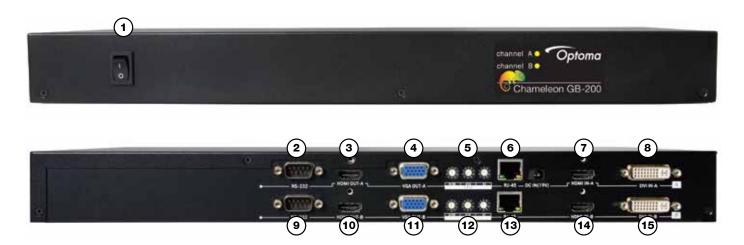
#### **GB-200 SPECIFICATIONS**

Supported PC timing:	XGA 60Hz, WXGA 60Hz,1080P 30/50/60Hz*
	and WUXGA 60Hz
	AP: Support Win 7 OS
I/O Connectors:	Power Switch
	HDMI Input x 2, DVI-D x 2 (Supporting HDCP)
	HDMI Output x 2,VGA Output x 2
	Control Interface: LAN control x 2 ports, via LAN hub
	and static IP address
	RS-232 connection x 2 (For debugging only)
	Power supply interface: DC 19V power port x1
Operating Noise	26 dB (typical) / 28 dB (Max )
Power Consumption	AC 100 ~ 240V 50/60Hz / 32W -110VAC (Power Adapter)
Dimensions (W x D x H)	4300mm x 195mm x 44mm
Weight	1.95kg
Auto blending cameras	Logitech C920 Pro, Canon 500D, 650D, 40D, 60D.
Auto blending tool	30 days trial license will be provided. For the full
	version log in to our website and contact your Optoma
	representative.

<sup>\*</sup>Accessories manual blending tool included on the CD

#### GB-200 I/O

- 1 Power Switch
- 2 RS232 1 (for service only)
- 3 HDMI Out 1
- 4 VGA Out 1
- 5 IP address adjustment 1
- 6 RJ45 connection 1
- 7 HDMI In 1
- 8 DVI In 1
- 9 RS232 2
- **10** HDMI Out 2
- **11** VGA Out 2
- 12 IP address adjustment 2
- 13 RJ45 connection 2
- **14** HDMI ln 2
- **15** DVI In 2



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 $<sup>^{*}1080</sup>p$  timing will vary depending on the set-up, when using GB-200 to pre-cut the image it will only support 1080p 30Hz.

<sup>\*</sup>Rack mount ears are included