

G-602 Dual Channel 4K Curve Edge Blending Processor

G-602 is a dual channel professional curved screen edge blending processor designed for sophisticated edge blending as well as image warping, stacking, projection mapping, irregular video wall and passive 3D...etc.

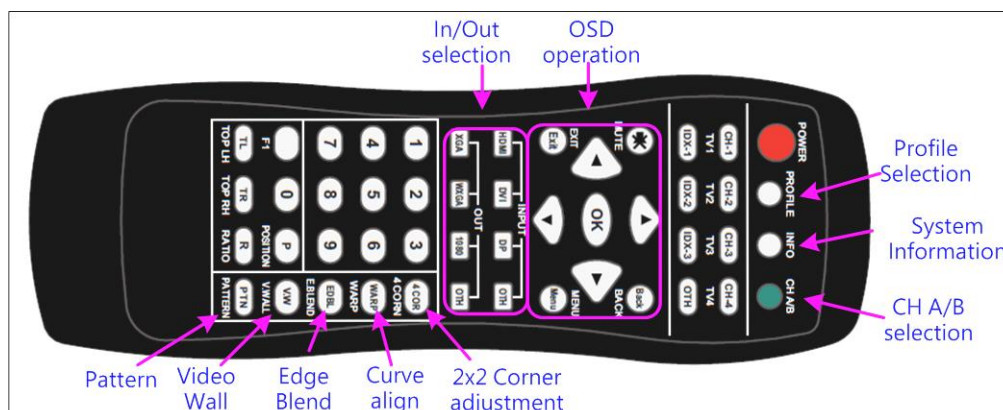
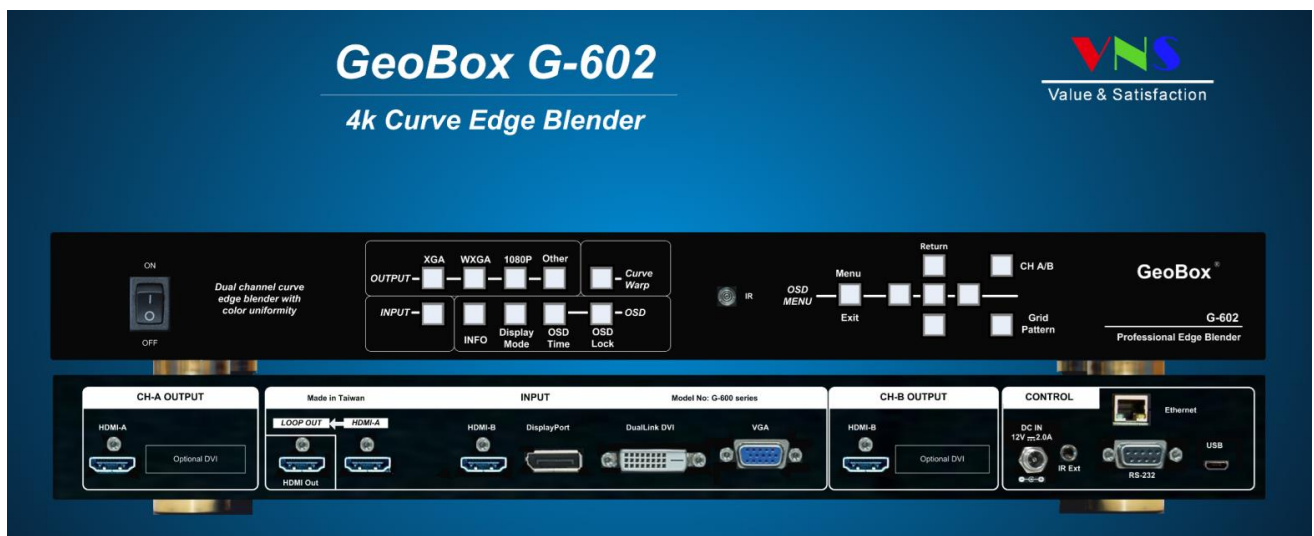
5 inputs (2x HDMI, 1x DP, 1x DualLink DVI, 1x VGA) and 2x HDMI outputs with optional DVI connectors are integrated in G-602. Input supports up to 2560x1600 / 3840x1080 @60Hz and 4k UHD @30Hz resolution with 4:4:4 full color sampling. It is integrated with 10-bit high end processor with motion adaptive de-interlace, low angle smooth algorithm (similar to DCDi), 3:2/2:2 pull-down and supports non-VESA standard input timing

Advanced warp technology is embedded in G-602. User can use front panel keypad, IR controller or PC to perform edge blending and sophisticated geometry alignment up to 9x5 grids through remote controller and 17x17 grids through Gwarp PC tool. It can perform color and white balance adjustment in individual projector. Edge blending region color uniformity and non-edge blending area black level uplift are also standard function in G-602. Users can see real time geometry and colour adjustment to get optimized result.

HDMI loop out supports daisy chain connection up to 3840x1080 @60Hz or 4k/2k @30Hz and allows large display with multiple G-602 cascaded. Video wall function in G-602 is to crop and allocate source image for each projector. Complete curved edge blending can be achieved without PC, video distributor and splitter.

G-602 is designed to support programmable EDID and non-VESA standard input. User can create any EDID timing in the range between 1024x768 and 3840x2160 in order to optimize video performance.

With G-602, users can replace high end projector with low cost projector without lens shift, warp and edge blending. It provides easy configuration, low entry barrier, cost effective, reliable and flexible solution.



Function and features:

A. Input and output:

1. Input ports: 2x HDMI, 1x DualLink DVI, 1xVGA, 1x DisplayPort °
 - ✓ HDMI、DualLink DVI & DisplayPort support 1920x1200、4k/2k @30Hz, WQXGA & 3840x1080 @60Hz with 4:4:4 sampling without compression.
 - ✓ Connect with all kinds of video sources and support none VESA standard input resolution.
2. Output ports: 2x HDMI (optional DVI). Selectable output resolutions: 720x480、XGA、WXGA、1280x1024、1366x768、1400x1050、1600x1200、1920x1080 & 1920*1200 °
3. Loop out port: 1x HDMI (supports 3840*2160@30Hz or 3840x1080@60Hz)

B. Image warp, geometry alignment and edge blending

1. With full functions for quick 4 corner alignment, vertical and horizontal keystone correction, Pincushion & Barrel adjustment, image warp and image 180 degrees flip.
2. Each unit controls dual projectors and can be expanded with multiple G-602 to support unlimited number of projectors.
3. Integrated with full function front panel keypads and IR remote controller. Manual geometry alignment up to 9*5 grid patterns and 600 pixels adjustment range in horizontal direction in full HD output. It can meet most of the curved screen edge blending requirements.
4. PC software tool is available for warp and geometry alignment up to 17x17 grid patterns with 1200 pixels adjustment range in horizontal direction in full HD output. After finishing geometry alignment, the parameters can be stored inside G-602 and no more PC is needed.
5. Execute 4 directions edge blending up to 1000 overlapped pixels.
6. Provide complete function for edge blending gamma selection and color fine-tune.
7. Precise black level uplift at selectable area to compensate light leakage in the projector.
8. White balance and individual color correction for each projector.
9. One PC tool can control dual processing channels simultaneously.
10. Optional Ethernet for system control and geometry alignment by mobile phone through WiFi.
11. Able to perform flat & curved screen seamless edge blending, including irregular double curved screen and 360 degrees curved screen.

C. Passive and active 3D

1. Auto decode 3D signals for passive 3D display, including signal source from Blue Ray, STB, game console, media player and PC.
2. Auto decode Stereoscopic Player/ Nvidia 3D Vision 1080p @120Hz 3D formats and Blue Ray 1080p 24Hz 3D signal into 720p/XGA 120Hz signal for active 3D display.
3. Support standard HDMI 1.4a 3D format, including 1080p/24Hz full HD, Side by Side, Top-Bottom, frame sequential & Line interleaved.
4. Support 3840x1080 Full HD Side by side 3D format and SONY 1080i/60Hz frame packed 3D..
5. "Perfect Sync" algorithm for Zero latency in RH/LH eye image to get the most comfortable 3D.
6. 3D display can be on curved screen and be enlarged by multi-projector stacking or edge blending.

D. High end 10-bit video processor

1. Designed 10-bit high end processor with 3D motion adaptive de-interlace, low angle smooth algorithm and 3:2/2:2 film mode detect and recovery function.
2. Complete colour adjustment function, including brightness, contrast, hue, saturation, preset colour mode and independent RGB color adjustment.

E. Edge mask

Edge Mask at any edge up to 500 pixels with black background without changing image position and aspect ratio. It is convenient to trim out unnecessary content from the display.

F. Video wall function

1. Image split and assign location
2. Overlap pixel adjustments up to 900 pixels for image position shift, bezel compensation and creating overlap region for edge blending.
3. Connect with 4k/2k input signal and split the image for display devices without additional PC, image splitter or other devices.
4. Serve as video wall controller for irregular video wall display up to 15x15 matrix display from single signal input source.

G. Image rotation and flip

Image 180 degrees mirror and flip.

H. System control

1. 1U housing for easy rack installation. Professional design and reliable.
2. Replace high price projector with low cost projector and achieve the same functionality.
3. Full function front panel keypads, IR remote controller and RS232.
4. Optional Ethernet control. User can control the system and do geometry alignment through wired or WiFi by PC or mobile phone.
5. USB interface for code update and PC tool operation.
6. Internal grid pattern for easy geometry alignment.
7. Programmable EDID for user to create any EDID with timing between 1024x768 and 3840x2160.
8. BOX ID for convenient multiple units control at the same time.
9. Five preset Profiles to save user settings and can be recalled at any time.
10. Automatic power ON/OFF through input signal control. While no input signal is detected, it will shut down output so that user can power ON/OFF complete system through the control in signal source.
11. Dimension and weight: 440x189x45mm, 2.4kg (Body only)

Application:

1. Pro-AV installation
2. Immersive 3D theater
3. Hospital 3D training room
4. Advertising displays

5. Staging and special events
6. Houses of worship
7. Conference room
8. Lecture halls
9. Trade show display

4K daisy chain connection

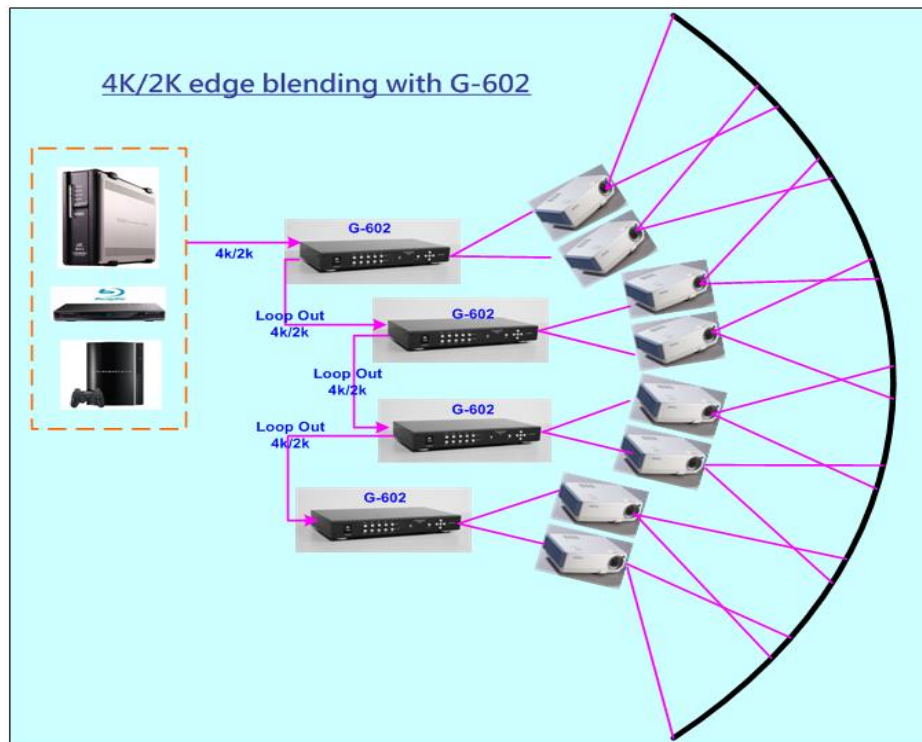


Image geometry alignment and warp

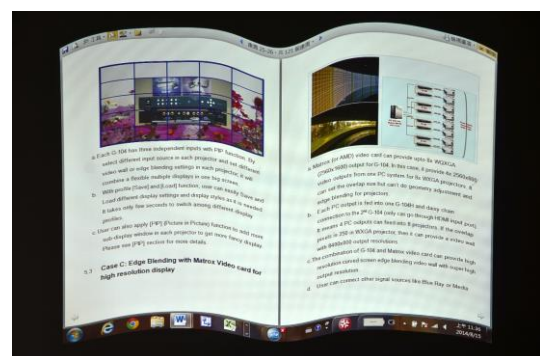
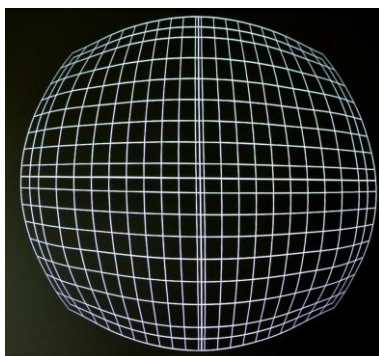
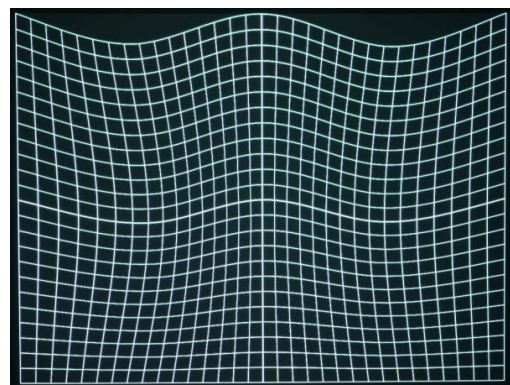
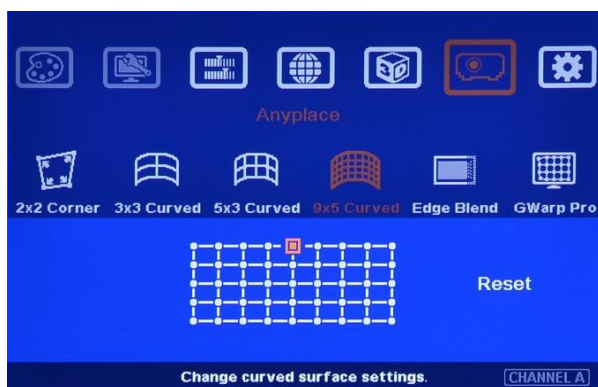


Image mask

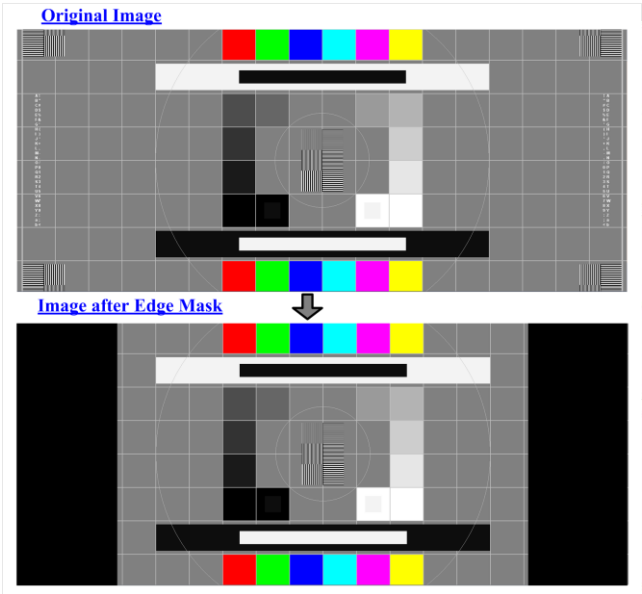
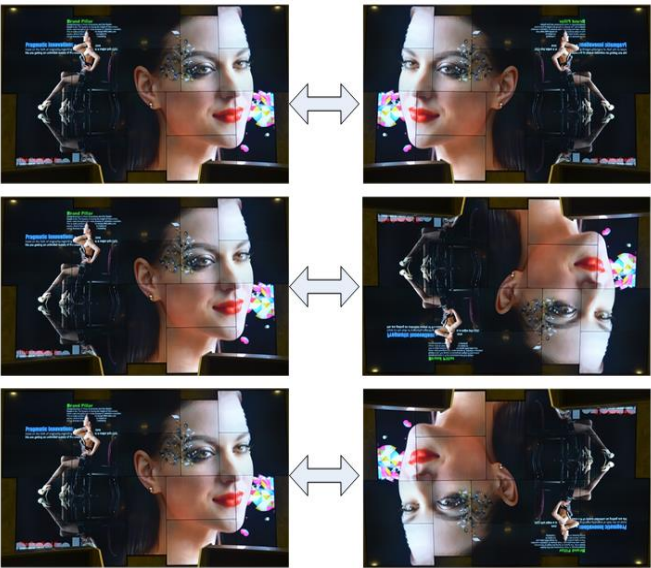


Image flip

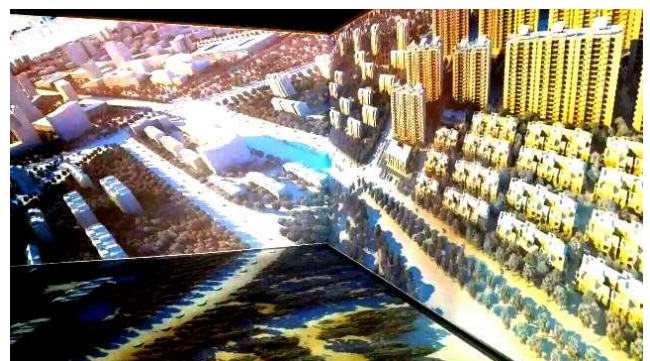


Edge blending on flat and curved screen





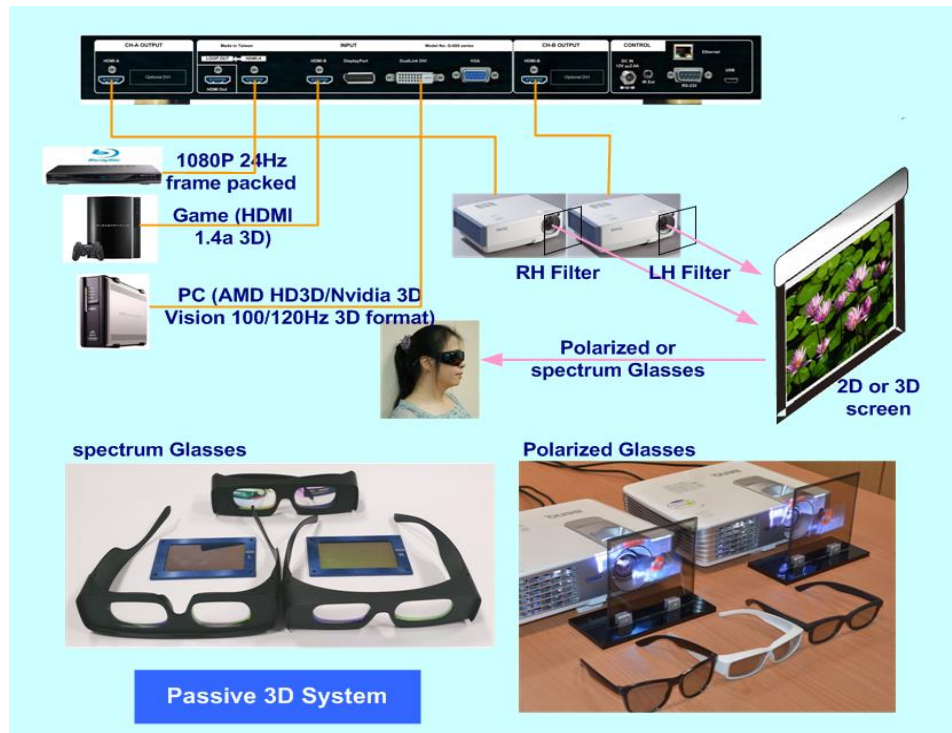
Corner wall display



White balance & Color correction



Professional Passive 3D



Black level uplift

