Airflex5D is a professional 2D/3D multi-projector stacking processor designed to provide a user-friendly experience across a wide variety of features. Its proprietary Q-Stack™ technology precisely aligns the images of multiple projectors into one single picture with amplified brightness. In addition, the Airflex5D processor is equipped with projector stacking, image scaling, image warping (geometric correction), edge blending, video wall display and theater-grade passive 3D capabilities. Available in a multitude of formats, the Airflex5D processor is designed to meet the specific needs of CE Retail, Professional AV, Home Cinema, House of Worship, Government and Education sales channels. No matter if it’s for business or residential applications, the Airflex5D is the best solution for getting top-dollar commercial performance at a fraction of the cost.
• Precise digital alignment of projected images creates 2X (4X, 8X, 16X . . . ) the brightness, no matter the combination of projector brands.
• Theater-grade passive 3D image system includes polarized glass and filter.
• Supports up to 3840*1080P & 2560*1600 @60Hz input signals without compression via Dual Link DVI and DisplayPort input ports.
• Supports HDMI 1080P frame-packed, line-interleaved, side-by-side, top-bottom, and PC frame sequential @100/120Hz active 3D signals for passive 3D display.
• Geometric adjustment supports a variety of aspect ratios, shapes and sizes of projected images.
• Compatible with both curved and dome projection formats.
• Supports multiple inputs and controls – VGA, DVI, HDMI, Display Port, IR, RS232 and Ethernet.
• Easy operation & alignment via full-function remote control and/or front panel controls.
• Optional AirBright 3D2 polarized screen material, ChromaFlux Projection Screen Paint, and/or Multi-Projector Stacking Mount available separately.

QStack™
The QStack™ technology allows you to precisely align multiple projector image(s) on the screen for added brightness and clarity regardless of projector brand(s).

Edge Blending
Elite’s Airflex 5D eliminates the need to use a computer and camera to calibrate projector edge blending. Our stand-alone product sets up quickly and easily for every edge blending application.

Warping
The warp function allows you to shape images to fit precisely on a curved screen with features that include pincushion and barrel adjustment, image flip and rotation, and keystone correction. For irregular curve adjustment, the eWarp PC tool is also available.

Video Wall
The Airflex 5D processor is perfect for video wall display. Built-in technology not only sets the video wall (up to 15x15), but can also adjust the bezel size. The video wall function supports uncompressed WQXGA or 3840*1080 input with dual 1080p outputs for two full high resolution video wall displays.

Full HD Passive 3D
Decodes the most common 3D formats directly from Blu-ray players or computers, including 1080p/24Hz Frame packed, line-interleaved, side-by-side, top-bottom, PC 1080p @120Hz active 3D formats and Sony 1080i/60Hz frame packed.

Aspect Ratio Manipulation
Adjust your 16:9 projection image to fit on your 2:35:1 screen or vice versa while eliminating the usual black borders found at the top and bottom of the picture.

2D to 3D
Advanced real time 2D to 3D conversion brings your existing media content to another dimension. Get the “Wow!” effect from all of your favorite movies and enjoy them again like never before.

2D 3D
20 to 3D
Full HD 3D
2D 3D
**AFLEX 3D**

**Features**
- Full HD input and output
- DVI loop back for stacking two projectors
- Patented warp technology for precise geometric alignment & seamless edge blending
- Multi-view display card to provide a super high resolution output seamless edge blended image from a single PC source
- De-multiplexing HDMI 1.4a standard 3D formats from Blu-ray and PC...
- DVI-I input port to support VGA, DVI & HDMI (with audio) input signals
- DVI-D output port to support DVI and HDMI (with audio) output
- 3D demultiplexer into RH or LH for passive 3D display (required 2x AF5D-20)
- User friendly OSD and IR remote control.
- IR extender & RS-232 control
- Support curved screen 3D display

**MODEL: AF5D-20**

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**Features**
- 3840*1080 input & 2k x 1k (2048x1080) output
- Support HDMI 1.4 standard 3D formats from Blu-ray, game, PC and Nvidia 3D Vision 1080P 100/120Hz 3D format
- DVI-D input port connects to DVI & HDMI signals
- Dual DVI-D output ports to support DVI & HDMI connections
- Embedded audio input and output via HDMI connection
- 10-bits scaler with high performance de-interlace and scaling
- 3D demultiplexer decodes RH/LH for passive 3D display
- “Perfect Sync” algorithm for zero latency between RH/LH channels in 3D mode
- User friendly OSD and IR remote control.
- Video wall function supports up to 15x15 matrix displays with pixel base bezel adjustment
- Support uncompressed 3840*1080 input with dual 1080p outputs for 2 full HD TV video wall display.
- Supports Blu-ray 1080p 24Hz frame packed and PC 1080P 100/120Hz Nvidia 3D for 720p/XGA 100/120Hz active 3D display.

**MODEL: AF5D-21**

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**Features**
- Format conversion up to WUXGA (full HD) input and output resolution
- Designed with HDMI loop back output for daisy chain connection.
- Supports image stacking for up to three projectors to amplify display brightness
- Pixel based geometry adjustment for precise image overlap and curved screen displays
- Converts 2D signal for passive 3D display
- Converts 3D signal for 2D display for single projector or TV
- Integrated with high speed HDMI to support HDMI 1.4a mandatory 3D formats
- Decode 3D formats into left or right eye signal for Full HD 3D display in projection system. High brightness 3D stereoscopic display can be implemented through 2 low cost projectors and polarized glasses
- 3 input ports support input signals from PCs, Blu-ray, DVD, Media Players and/or STB to increase flexibility in end-user applications

**MODEL: AF5D-30**
AFLEX5D™

3D | Stacking | Warping | Blending | Video Wall

**MODEL: AF5D-40***

**Features**
- Full HD input and output
- Loop-out for stacking up to three projectors
- Precise geometric adjustment for easy system installation
- New 2D to 3D conversion technology
- Converts 3D for 2D for TV display
- Dual channel flat screen edge blending, perfect for less experienced users
- Supports HDMI 1.4 standard 3D formats from Blu-ray, PCs, etc.
- Multiple input ports
- 3D demultiplexer into RH/LH for passive 3D display
- User friendly OSD and IR remote control - no PC is required
- IR extender & RS-232 control
- Allows for same setup between 3D display and high-brightness 2D stacking
- Supports curved screen 3D display

**MODEL: AF5D-41***

**Features**
- Patented warp technology for precise geometric alignment & edge blending
- Designed with dual warp engines for independent warp/geometric adjustment and edge blending
- Supports image flip and rotation at 90°, 180°, and 270°
- Supports edge blending with vertical projector to increase image height
- Supports edge blending prior to geometric adjustment for optimum image output
- Curved screen edge blender eliminates the need for a PC and software tools
- Reliable and durable construction for long-term industrial and commercial applications
- Designed with internal grid pattern for easy geometric adjustment
- Supports 360° cylindrical screen edge blending
- 10-bit high end processor with 3D motion adaptive de-interlace, low angle, smooth algorithm and 3:2/2:2 movie mode detection and recovery
- Picture-in-Picture function (PIP) at any location of the image up to XGA resolution
- Video wall function allows for image splitting, cropping and magnification with pixel-based overlap regional adjustment
- Optional eWarp PC tool for irregular curve warp adjustment
- Supports PC active 3D frame sequential 1080p 100/120Hz input from DualLink DVI port without compression for active or passive 3D display

**MODEL: AF5D-5**

**Features**
- High end 10-bits video processing and 3D motion adaptive de-interlace
- Intelligent, in-depth color adjustment
- Edge-oriented adaptive algorithm for smooth low-angle edges
- Automatic 3:2 & 2:2 pull-down detection and recovery
- Up to 2560x1600 & 3840x1080 inputs without compression
- Supports HDMI 1.4 standard 3D formats from Blu-ray, game and PC, including 1080P frame packed, line interleaved, side by side, top-bottom, and PC 1080P @100/120Hz Nvidia 3D Vision 3D formats
- Supports Blu-ray 1080P 24Hz frame packed and PC 1080P 100/120Hz Nvidia 3D Vision 3D formats for 720p/XGA 100/120Hz active 3D display
- Six inputs for flexible input source connection
- Pixel-based warp technology for precise image alignment
- Designed with IR extender for convenient system installation and control
- RS232, 5V trigger signals and optional Ethernet control
- Stand-alone hardware - no computer or other software required

*AVAILABLE Q2 ’14
Features

- High end 10-bits video processing with 3D motion adaptive de-interlace, edge-oriented adaptive algorithm for smooth low-angle edge and automatic 3:2 & 2:2 film mode detection and recovery
- Supports up to 2560x1600 & 3840x1080 inputs without compression
- Supports HDMI 1080P frame-packed, line-interleaved, side-by-side, top-bottom, and PC frame sequential @100/120Hz active 3D signals for passive 3D display
- Supports Blu-ray 1080P 24Hz frame packed and PC frame sequential @100/120Hz active 3D signals for active 3D 720p/XGA 100/120Hz display
- Flat screen edge blending function includes multiple fine-tune parameters for best edge blending result possible
- Supports up to 15x15 video wall displays with seamless edge blended images from multiple projectors
- Six input ports for flexible input source connections
- Supports 16:9 and 2.35:1 aspect ratio format conversion to fit the screen
- Pixel-based warp technology for precise image alignment
- IR, IR extender, RS232, 5V trigger signals and optional Ethernet for system control
- Stand-alone hardware processor - no PC or software required

MODEL: AF5D-60

AF5D ACCESSORIES

- Mobile Cart
- Polarized Filters
- Passive 3D Glasses
- Mounting Brackets

MODEL COMPARISON

<table>
<thead>
<tr>
<th>Feature</th>
<th>AF5D-20</th>
<th>AF5D-21</th>
<th>AF5D-30</th>
<th>AF5D-40</th>
<th>AF5D-41</th>
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Note: Specifications are subject to change without prior notice
For better and more stable image quality, Airflex5D suggests the use of digital signal, DVI or HDMI as output.
Airflex5D edge blending processor can work without almost any projector. Result will vary depending on projector(s), screen and environment.
Case Study: Flight Simulation
Processor: AF5D-41 x 2
Projector: Panasonic PT-EX600US x 2
Resolution: XGA
Brightness: 6,000 Ansi Lumen
Screen: Half dome curve 7m x 3m

Case Study: Marine Science Museum (3 projector edge blending)
Processor: AF5D-60 x 2
Projector: Panasonic PT-DX-610 x 3
Resolution: XGA
Brightness: 6,500 Ansi Lumen
Screen: 20m x 5.5m

Case Study: Concert (2 projector edge blending)
Processor: AF5D-41 x 2
Projector: Christie LX1200 x 2
Resolution: XGA
Brightness: 12,000 Ansi Lumen
Screen: 14m x 6m
Case Study: 360° Screen
Processor: AF5D-41 x 6
Projector: BENQ SX-914 x 6
Resolution: XGA
Brightness: 6,000 Ansi Lumen
Screen: 6m diameter x 2.8m (H)

Case Study: School Lecture Hall (4 projectors 3D edge blending on flat screen)
Processor: AF5D-60 x 2
Projector: BenQ SX914 x 4
Resolution: XGA
Brightness: 6,000 Ansi Lumen
Screen: 8.5m x 3.6m

Case Study: Commercial Show Room (4 projector 3D edge blending on curve screen)
Processor: AF5D-41 x 4
Projector: BenQ SH940 x 4
Resolution: 1080P
Brightness: 4,000 Ansi Lumen
Screen: 6m x 2.5m
FAQ

Q: What are the main features for Airflex5D System?
A: Airflex5D Systems are designed to offer flexibility in increasing brightness for projection image by stacking 2, 4, 6 or more projectors. Furthermore, Airflex5D System also supports passive 3D when used with polarizing filters. Airflex5D uses the same filters found in commercial cinemas. Other features include geometry correction and dome/curved screen projection and multiple projector edge blending.

Q: What is the exact method that Airflex5D uses to align two projector images to increase the brightness?
A: Airflex5D System is a digital multi-projector stacking system. It precisely aligns 2 or more images both vertically and horizontally. When aligned perfectly, 2 images will become one, pixel for pixel and double the brightness.

Q: Do I need a computer to setup the stacking or 3D function?
A: With Airflex5D System, you can stack multiple images without any pc system. For 3D display, all you need are AF5D, polarized filters, 2 projectors and a polarized silver screen (ex. AirBright 3D2 screen material from Elite Screens)

Q: Do I need a “3D Projector” or special projectors to achieve 3D effect?
A: No, all you need is 2 regular projectors. “3D Ready” Projectors utilize active shutters, these shutters close and open rapidly to control what your left eye and right eye see. Most viewers experience dizziness and/or ghosting. With Airflex5D System, you are getting commercial-grade passive 3D. When paired with full 1080P projectors, what you see is cinema-grade 3D in the comfort of your own home.

Q: What is the major difference between AF5D with other passive 3D system?
A: AF5D passive 3D system is designed with high end video processor with “Zero Latency” RH/LH synchronization algorithm is the key to get comfortable cinema-grade 3D display. Besides HDMI 1.4 3D formats, it can support Sony 1080i 60Hz frame packed special 3D format from TD 20/30 3D Camcorder and PC frame sequential active 3D 1080p 100/120Hz 3D formats which most of other competitor can’t. Most of AF5D devices are also designed with multiple inputs for directly connection with PC and multiple consumer products. It can also serve a processor for active 3D to support 1080p/24Hz frame packed 3D from Blu-ray.

Q: What’s the benefit of stacking multiple projectors?
A: Airflex5D is an image processor that allows you to stack multiple projectors to create one single image. By using multiple projectors, Airflex5D effectively increases the brightness of the image. This not only increases the performance of any projection system, it is also very cost effective (See how Airflex5D saves cost HERE). Compared to typical high lumen projectors, Airflex5D can create high lumen projection system at a fraction of the cost. In addition, Airflex5D provides flexibility and control over the brightness of image. Use one at night, or two (or more) in high ambient light environments. In case of a malfunctioning projector, other projector(s) will remain operational to keep your theater operational.

Q: Will contrast ratio change if I am stacking projectors ?
A: Stacking Multiple Projectors to amplify lumens (brightness) will not change the Projection Image Contrast Ratio. (Ex. if you stack 2pcs of 2500 Lumens, 10,000 Contrast Ratio Projectors, you should get 5000 Lumens and same 10,000 Contrast Ratio).

Q: Can Airflex5D scale 2D materials to 3D? If so, are there any limitations?
A: AF5D-3D is capable of scaling 2D material to 3D. Please note, the input source frame rate should not be 24Hz or 30Hz. We recommend users apply 60Hz input source.

Please visit www.airflex5D.com for the complete list of FAQ’s