

EZwindowHR™ High resolution Video Windowing Device

- (1) Hi-res input (up to 2560x1600 @ 60 Hz)
- (1) to (5) Std-res inputs (up to 1920x1200 @ 60 Hz)

Inputs:

- o Hi-res: Dual DVI-I (dual TMDS and Analog RGB)
- o Std-res: DVI-I (TMDS and Analog RGB), NTSC/PAL
- o Analog RGB inputs can be interlaced (RS-170, RS-343) or non-interlaced

Outputs: Dual DVI-I standard (dual TMDS, Analog RGB)

EZwindowHR™ configuration utility supports user-defined:

- o input timing, output timing, electrical formats
- o window sizes, priorities, keying scheme

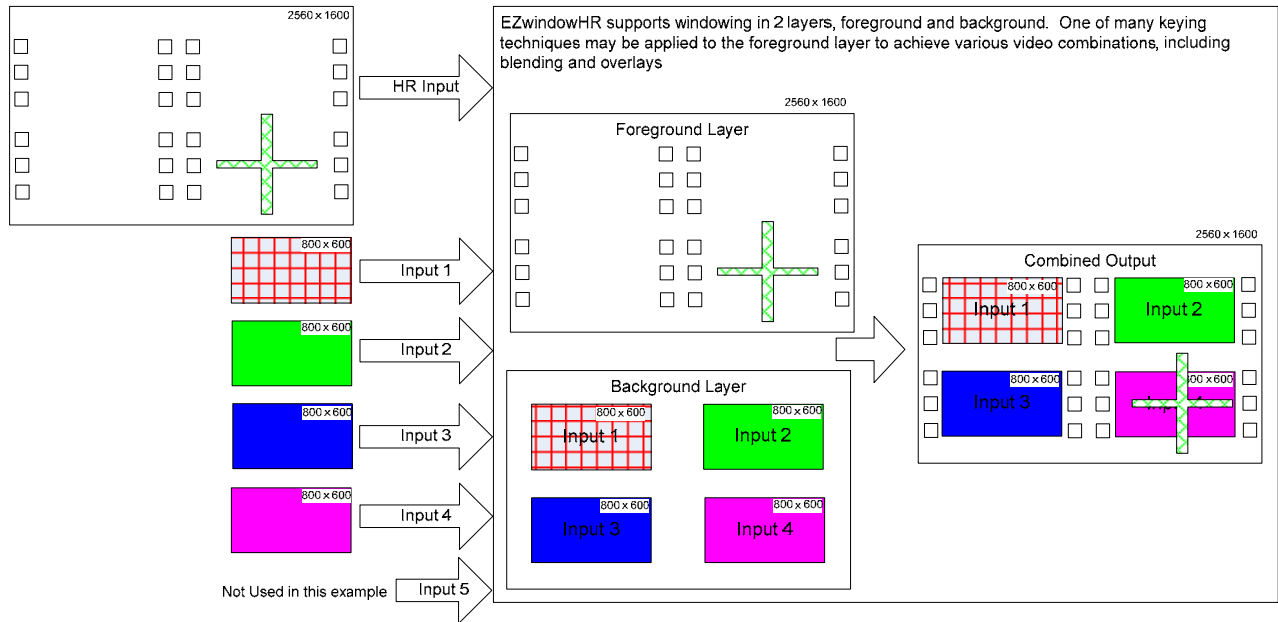
Each input is mapped to either foreground or background layer

If Hi-res input is used, output timing is slaved to Hi-res input. Otherwise free running Hi-res output timing is generated on-board.

Video processing occurs between foreground and background layer

- o “Key” processing (RGB, Luma, chroma) is performed on foreground layer
- o Programmable fill colors for foreground and background layers

1U rackmount enclosure



The EZwindowHR™ provides a wide range of video windowing functions for one high resolution input channel, and from 1 to 5 standard resolution input channels. The actual number of standard resolution input channels is specified directly in the part number, as follows:

EZwindowHR-3 has 3 standard resolution input channels;

EZwindowHR-5 has 5 standard resolution input channels.



EZwindowHR is delivered with uninstalled rackmount ears and feet.

Standard Resolution Input Features:

- digitization of computer-generated video sources with separate sync, composite sync, or sync-on-green
- digitization and de-interlacing of interlaced video formats, including RS170, RS343, NTSC and PAL
- resolutions up to WUXGA with pixel rates up to 162MHz
- incoming video gain and offset adjustments
- fine phase clock adjustment for pixel sampling

High Resolution Input Features:

- accepts RGBHV analog or DVI video at the desired output resolution.
- Supports single link or dual link DVI
- Resolutions up to 2560x1600 with pixel rates up to 330 MPixels/sec

Output Features:

- Single or Dual link DVI (TMDS) and RGBHV
- resolutions up to 2560x1600 with pixel rates up to 330 MPixels/sec
- digital contrast and brightness adjustments on output

Windowing Features:

- Each input is mapped to rectangular area in foreground or background layer, max width is 1280 pixels
- Each input is assigned a priority for overlapping regions.
- "Overlay" and blending applications use keying logic to combine the foreground and background layers.
- Where active foreground windows are defined, the resulting output image is a combination of foreground and background, per the key definition. One alpha value applies within the key, and another alpha value applies outside the key.
- Where active foreground windows are not defined, the resulting output image is a programmable alpha combination of background and foreground layers, typically 100% background.
- Both foreground and background layers have programmable fill colors for unmapped regions.

EZwindowHR configuration utility

- Used to set up device for your application!

Please contact us at (636) 300-5164 to discuss your application

Std Resolution Input Specifications (Subject to change without notice) 1 to 5 per Unit

Video Type	Analog RGB (0.7 Volt levels, Interlaced or Non-Interlaced), TMDS, NTSC/PAL
Pixel Rate	Up to 162 MHz
Clocks per Line	Up to 4096
Lines per frame	Up to 2048
Sync Type	HV, Composite Sync, or Sync-on-Green
Phase Adjustments	Sample clock can be adjusted to ensure center sampling
Connectors	DVI-I (DVI to HD15 adapters included in delivery), S-Video, BNC

High Resolution Input Specifications (Subject to change without notice) 1 Per Unit

Video Type	Analog RGB (0.7 Volt levels, Interlaced or Non-Interlaced), TMDS
Pixel Rate	Up to 330 MHz
Clocks per Line	Up to 4096
Lines per frame	Up to 2048
Sync Type	HV, Composite Sync, or Sync-on-Green
Phase Adjustments	Sample clock can be adjusted to ensure center sampling
Connectors	DVI-I (Dual Link)

Output Specifications

Video Type	Standard: Analog RGB (0.7 Volt levels, Interlaced or Non-Interlaced), TMDS
Pixel Rate	Up to 330 MHz
Clocks per Line	Up to 4096
Lines per frame	Up to 2048
Sync Type	HV, Composite Sync, or Sync-on-Green
Connectors	DVI-I (Dual Link)

Electro Mechanical

Input Power	IEC Connector, 100-240 VAC, 47-63 Hz, less than 60 Watts
Control	RS-232 or USB
Size	Width: 17.5" Benchtop or 19" Rackmount Height: 1U Rackmount (add 0.5" for feet in Benchtop) Depth: 13.75"
Weight	Less than 7 lbs.

Control Port

Environmental

Temperature	Operating 0°C to +50°C; Storage -20°C to +70°C
Relative Humidity	0 to +95%, non-condensing

Warranty

Functional

Specialty Features	One year Multiple video inputs are combined to a single output, supporting multiple windows, and keying between foreground and background layers.
Color processing depth	8 bits per color processing
Re-sizing limits	none