

## x4 Display Controllers

Accepts dual-link DVI, single-link DVI or HDMI input

Supports both DVI and analog RGB output monitors

Supports image overlapping

Available in two model sizes



### PRODUCT OVERVIEW

The Datapath x4 is a stand alone display wall controller that accepts a standard single or dual-link DVI input and can flexibly display this across four output monitors.

Each output can be driven as DVI or analog RGB, and can represent an arbitrary crop region of the original input image. The output resolution and frame rate does not need to be related to that of the input, as the Datapath x4 display controller will optionally upscale and frame rate convert each cropped region independently.

The x4 is now available in 1U rack mount format (438 x 172 x 40mm).

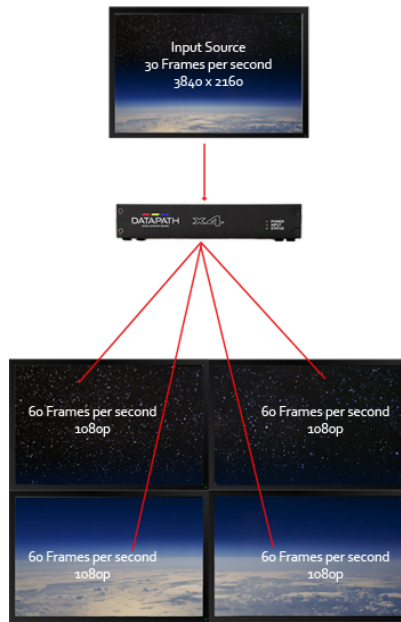
### Supports Creative Monitor Arrangements

Each output monitor can take its input from any region of the DVI image, since all the required cropping, scaling, rotation and frame rate conversion is handled by the x4 hardware. These regions can overlap to allow any output to replicate another, or they can be configured to support any creative splice of the source material.

This allows the support of many non-rectangular screen arrangements with uneven gaps, and any mix of orientations. [Click on here](#) to view examples of creative video wall arrangements using multi displays, within our product gallery for the x4 display



controller.



## Dual-link DVI Input Supports High Resolutions

Dual-link video input will support high resolution pixel-perfect source images for display. The Datapath x4 display wall controller can additionally present a default native resolution to the source to allow still higher custom resolutions at reduced frame rate, but still remain within the capabilities of the dual-link video interface. Most standard graphics card sources will output at this native resolution. Since the x4 will scale and frame rate convert, using a triple buffered capture architecture, the output monitors can still be driven at their preferred frame rates and resolutions.

At high resolution, DVI signals cannot normally be guaranteed beyond 5m cables, due to the nature of the signal losses inherent in the DVI cables and connectors. Datapath have added active equalization hardware on the input to the x4, which is able to compensate for these losses and support cable lengths of up to 20m, even at full dual-link resolutions (330Mhz pixel clocks). Lower resolutions will allow even longer cable lengths.

Additionally, Datapath x4 display controller control application allows user configuration of the equalization levels to guarantee that any combination of input cable length and cable type can be adjusted for optimum quality.

## Wall Designer

Datapath's Wall Designer is the perfect solution for creating and managing an entire video wall project. Created to work seamlessly with the x4, Wall Designer allows project builders to select their monitors by manufacturer/model and arrange them onto a canvas. Select the required source and resolution and finally add a range of x4s ready for auto-configuration. Visit the [Wall Designer](#) page for more information and to download your copy.

## Genlock

The Datapath x4 display wall controller will auto-sense input and output frame rates, automatically genlocking when

possible. Four identical output monitors will automatically be driven genlocked and if the input timings match they are additionally genlocked and clock-locked to the source signal.

The Datapath x4-1U has been developed with an "Output Framelock" button situated on the front of the unit. This button enables the user to set up the unit with all four outputs set to exactly the same timings, quickly and everytime. this will allow the 4 monitors connected to be synchronised to provide the user with smooth clear video.