



More Video Inputs for Horizon-4VW

This document discusses how to obtain more composite video inputs for the Horizon4VW when using either a single card or multiple cards as used in a video/data wall application.

The Horizon4VW graphics adapter combined with the VIM module allows for 4 composite video inputs. This is generally adequate for most applications, but some systems may require many composite inputs. If you are using multiple Horizon4VW's to construct a data/video wall, the Horizon offers support for multiple video overlays. (i.e. 1 overlay per display channel). As standard using a single VIM module the system would offer 4 composite video inputs and each overlay would be able to view any of these 4 inputs. The VIM is connected to each Horizon in the system in this configuration. An alternative approach would be to use a VIM module for each Horizon giving more composite inputs but also imposing restrictions on where each input can be positioned on the video wall. The following examples show the two configurations and limitations.

Example: Using 3 Horizon-4VW to create a data wall configured as a 4x3 array of displays.

Standard configuration using a single VIM bussed to each Horizon, the system would provide:

- 12 Video overlays each overlay can view 1 of 4 possible inputs. (Total inputs = 4).
- Each overlay can be maximised across all displays.
- Each overlay can be positioned anywhere on the video wall.
- Only one overlay per screen is allowed.

Configuration using 3x VIM modules. Each VIM is connected to 1 Horizon-4VW:

- 12 video overlays each overlay can view 1 of 4 possible inputs (Total inputs = 12).
- Each overlay can only be maximised across 4 displays. i.e The 4 displays connected to the Horizon card which the input is connected to.
- Each overlay can be positioned anywhere across the same 4 screens.
- Only one overlay per screen is allowed.

There is also a third possibility that requires an external video switch or the Datapath [Vision Switch](#). In this configuration each Horizon is connected to it's own VIM as in example 2. This gives a total of 12 composite inputs. If we used 'say' a 16x12 external video switch. The 12 outputs from the switch are connected to the 12 VIM inputs. The Horizon video overlay drivers can be configured to control the external video switch and once the system is setup and installed then VisionTV software will recognise 16 composite video inputs as provided by the video switch. In this configuration the system would provide:

Configuration using 3x VIM modules and an external video switch:

- 12 Video overlays each overlay can view 1 of 16 possible inputs. (Total inputs = 16).
- Each overlay can be maximised across all displays.
- Each overlay can be positioned anywhere on the video wall.
- Only one overlay per screen is allowed.

The Horizon software supports the Extron range of video switches. Contact Datapath sales for details of your requirement and recommended video switches.