

## Video Processor – VP6



The VP6 Video Processing Module provides direct connection from analog video sources to a wide range of commercial digital AMLCD display modules.

**Features:** Based on state-of-the-art image processing technology, the VP6 capabilities include:

- digitization of computer-generated video sources with separate syncs or sync-on-green
- programmable image position within larger background area for both input and output
- incoming video gain and offset adjustments
- programmable power sequencing to panel
- fine phase clock adjustment for pixel sampling
- interfaces to most common inverters
- remote interface for both set-up and operational control

**One size fits all?** Your customers have a wide range of video formats and special video requirements. You want a single video adapter that you can configure to work across a wide range of applications, minimizing new design work and sparing requirements.

**Westar has the Solution! Our customers receive Westar's powerful VP6 Configuration utility. This utility allows you to:**

- configure a VP6 for a unique application,
- change the Built-In Operating System (BIOS) to account for a new video requirement or a new target display,
- make adjustments to optimize the VP6 for a particular installation,
- and much more (see reverse side for more details)

- **Digitizes computer-generated video sources**
- **Drives commercial AMLCD's and Inverters**
- **Adjustments and re-configuration in-the-field via utility software**
- **Supports up to UXGA displays**
- **Supports windowing, contrast/brightness adjustments**
- **Output Pixel clock and frame rate must equal input**
- **Small form factor, 5" x 4"**
- **Standard Inputs: Analog RGB**
- **Standard Outputs: Parallel Digital or LVDS (single and dual channel)**
- **and much more!**

*If this sounds confusing, don't worry, our support team will help you master the configuration utility, or we can set up the VP6 for you at the factory!*

### VP6 Operation

Typically, the VP6 operates as follows:

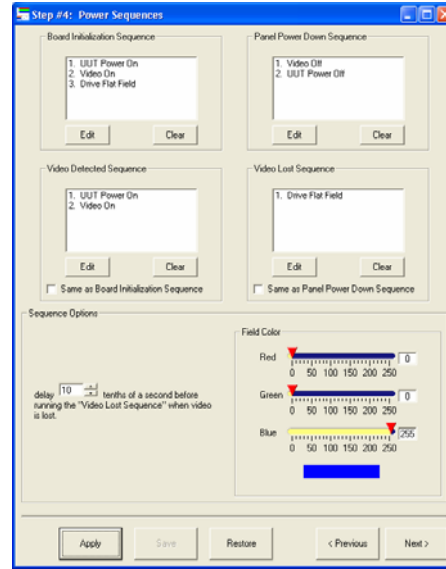
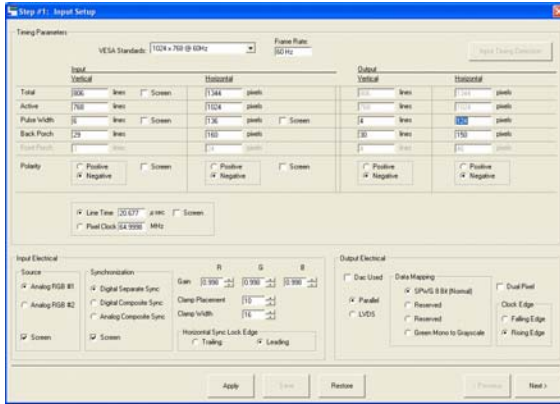
1. Upon power up, the VP6 configures itself based on its internal BIOS
2. When a valid video signal is detected, the VP6 applies power to the display per the power sequencing defined in the set-up BIOS.
3. When loss of video is detected, the display can: power down, drive a pre-defined color (blue-screen), or some other function as defined in the BIOS created with the configuration utility.

### How to get started

Please contact us at (636) 300-5164. We will discuss your requirements and respond with a quotation

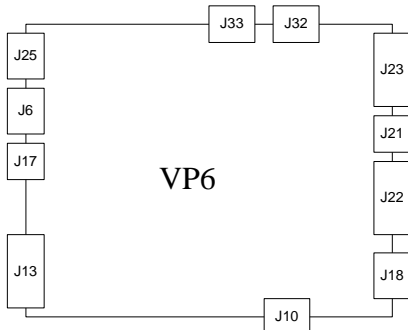


**VP6 Configuration Utility:** The VP6 Configuration utility is supplied to VP6 customers. VP6 Configuration is installed on Windows XP platforms, and connects to the VP6 via an available RS-232 serial cable. The utility uses a 5-step process to set up the VP6.



Step	Function	Sets up...
1	I/O (see above)	The input and output timing and electrical definitions
2	AOI (see above)	The area of interest in the input, and its position in the output
3	Sequencing (see above)	The desired power sequences and operation when video is lost
4	Contrast / Brightness	The control mechanism for brightness and contrast adjustments
5	Input adjustments	Adjustments to analog-to-digital conversion and active area

<b>Physical Dimensions</b>	5" x 4" x 0.8" (approx)
<b>Temperature Range</b>	Operating: 0° C to +50° C; Storage: -20° C to +70° C
<b>Video Inputs</b>	Computer - Up to UXGA resolutions @ 60Hz - Analog Input (162 MHz) DVI Input (165 MHz) - Standard and custom timing - Syncs (Digital Separate, Digital Composite, Analog Composite)
<b>Video Outputs</b>	single (24 bit) or dual (48 bit) bus panels single or dual LVDS outputs Pixel rate single = 108 MHz; Pixel rate dual = 162 MHz
<b>Input Power</b>	+12 VDC, 1.5 Amp typical when driving XGA panel and inverter
<b>Control Interface</b>	RS-232
<b>Ordering Information</b>	VP6 (Standard Configuration)



J6	10 Pin Hirose DF11 for RS-232 Control
J10	14 Pin Hirose DF11 for Backlight Inverter Control
J13	22 Pin Hirose DF11 for Power and Contrast
J17	10 Pin Hirose DF11 for Input Analog Video
J18	16 Pin Hirose DF11 for discrete i/o to display
J21	10 Pin Hirose DF11 for control to display
J22	32 Pin Hirose DF11 for digital data to display
J23	32 Pin Hirose DF11 for digital data to display
J25	12 Pin Hirose DF11 for TMDS input
J32	14 Pin Hirose DF11 for LVDS output
J33	14 Pin Hirose DF11 for LVDS output