

## HE-1400v2 LCD Controller for Industrial Monitors

Based on the ALR-1400v2 and as a successor to the HE-1400 the HE-1400v2 is a small footprint - designed for industrial LCD monitors and display applications in harsher environments.

### Key Features:

- » Up to 1440 x 900 input / Up to 1440 x 900 LCD panels
  - » DVI, VGA (ARGB)
  - » LVDS and TTL panel connection @60Hz
  - » Auto EDID setting (*new feature*)
  - » Low latency (input to output)
  - » Custom splash-screen option
  - » RS-232 (USB\*) for commands & control
  - » HE specific: Conformal coating, wider temperature rating.
- » Part number: 4175801xx-3

### Panel Connectivity

<b>TTL (dual channel):</b>	up to 1440 x 900 @60Hz
<b>LVDS (dual channel):</b>	up to 1440 x 900 @60Hz
<b>Panel resolutions:</b>	Supports common panel resolutions and timings from 640 x 480 up to 1440 x 900 selected by dip switch. Customization available for other resolutions.

### Input / Sources

<b>DVI:</b>	60Hz VESA standard inputs VGA to SXGA Widescreen modes: 1280/1360, 1366/1368 CVT modes - coming soon
<b>VGA (ARGB):</b>	60Hz VESA standard inputs VGA to SXGA Widescreen modes: 1280/1360, 1366/1368 CVT modes - coming soon
<b>EDID note:</b>	The EDID preferred timing data is automatically set by reference to the LCD panel resolution settings (VESA data). Custom EDID data programming is available as an OEM option.

### Reliability

<b>Calculated MTBF:</b>	In excess of 100,000 hours
<b>Warranty:</b>	3 years

### Features

<b>Colors:</b>	Up to 8 bit per color, ie 16.7m colors
<b>Function Display:</b>	On Screen Display (OSD) menu
<b>Function Controls:</b>	External buttons, Serial Port (USB*) commands
<b>Image Scaling:</b>	Up scaling to fit input to panel resolution
<b>Image Control:</b>	Brightness, Contrast, Sharpness, Clock, Phase, Color temperature, Image position, Gamma
<b>Other Features:</b>	Auto Image Adjust, Color Auto Adjust, Auto source seek, OSD timeout, OSD menu position, OSD menu transparency, Input select source, Aspect ratio, Backlight brightness adjustment, Language select
<b>Power:</b>	+12VDC / +24VDC ±5%, 2.5W (controller only)
<b>Panel Power:</b>	Supports 3.3V, 5V, 12V & 18V panels
<b>Inverter Support:</b>	PWM, D/A DPMS Enable pin (3.3V or 5V)
<b>Plug &amp; Play:</b>	DDC 1,2/b compatible
<b>Status Indicator:</b>	Dual color LED support
<b>Dimensions:</b>	107mm x 92mm (4.2" x 3.6")
<b>Operating Temp:</b>	-20°C to +80°C**

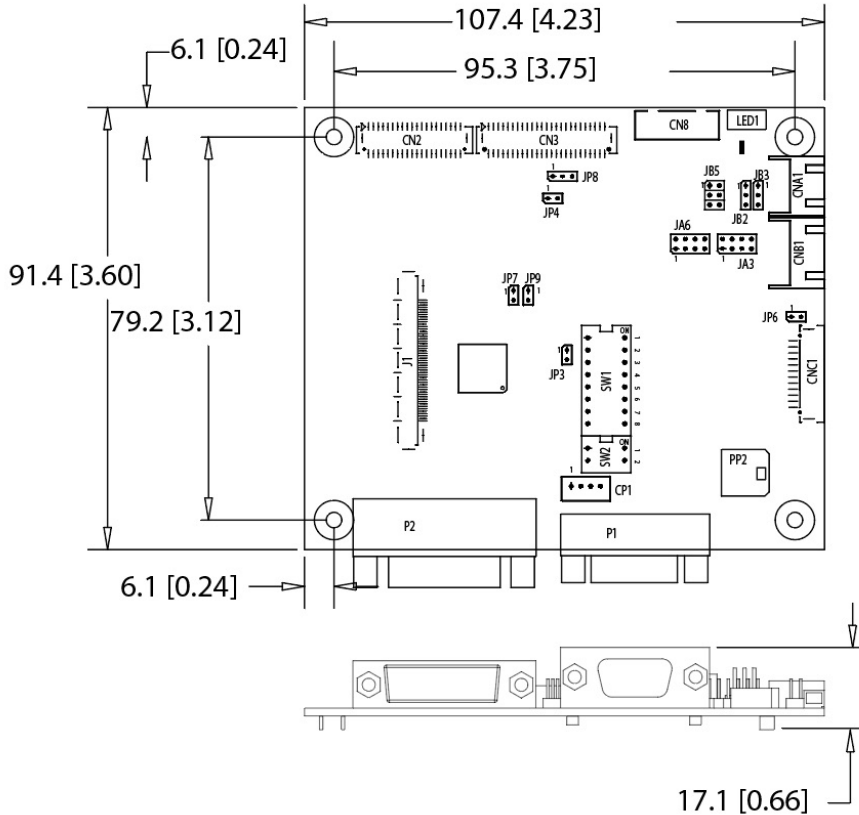
**Custom Splash-screen:** The HE-1400v2 supports a custom splash-screen when powering on. This requires custom firmware.

**Firmware Update:** The firmware version of the HE-1400v2 can be updated using a dedicated USB programming interface available from Digital View, this connects to the DVI input on the HE-1400v2 therefore enabling firmware upgrade on assembled monitors.

\*requires a converter for USB to RS-232, not included  
\*\*Project & environment suitability must be verified by the user.

# HE-1400v2 LCD Controller for Industrial Monitors

## Mechanical Drawing



## Connector Definitions

<b>J1</b>	LVDS Panel Signal
<b>CN2</b>	TTL Panel Signal
<b>CN3</b>	TTL Panel Signal
<b>CN8</b>	Serial control
<b>CNA1</b>	Auxiliary Power Output
<b>CNB1</b>	Backlight Control connector
<b>CNC1</b>	OSD Function Controls
<b>LED1</b>	Dual color status LED connector
<b>P1</b>	VGA input
<b>P2</b>	DVI-D input
<b>PP2</b>	Main Input Power

## Ordering Options

<b>HE-1400v2</b>	<b>P/N: 4175801xx-3</b>
OSD digital button board	Kit 67110-3
OSD membrane kit - Vertical	Kit 67135-3
OSD membrane kit - Horizontal	Kit 67134-3
Inverter interface	P/N 416040010-3

## Drawings

- » 2D (dwg)
- » 3D (SLDPRT and IGS)

### Download at:

<http://www.digitalview.com/products/he-1400v2-lcd-controller>

## Available Resources

- » Instruction manual
  - » Revision control documentation
  - » Firmware upgrade manual\*\*
  - » Mechanical drawings
  - » Custom engineering: Splash screen, OSD menu, coatings, & more...
- \*\* Available on request

### Controller Solution Generator

<http://www.digitalview.com/csg>

### USA

18440 Technology Drive, Morgan Hill, CA 95037, USA  
t: +1 (408) 782-7773

### EUROPE

The Lake House, Knebworth Park, Herts, SG3 6PY, UK  
t: +44 (0) 20-7631-2150

### ASIA

705-708 Texwood Plaza, 6 Hong Ming St, Kwun Tong, Hong Kong  
t: (852) 2861-3615