HE-1920 ✓ RoHS
Harsh Environment LCD Controller

The HE-1920 is a fully buffered multi-sync interface controller for providing analog and digital connection for a wide range of TFT LCD panels up to WUXGA resolution. Featuring full screen image expansion of lower resolutions, image flip and invert function and onscreen PIP functions, the HE-1920 also supports an optional High-Definition Serial Digital Interface (HD-SDI) adaptor for professional and broadcast video applications. The HE-1920 is part of DigitalView's "Professional Class" video controller family featuring advanced capabilities, support and custom development paths for OEM clients.

PANEL CONNECTIVITY

TFT :		
1920x1200	1440x900	1024x768
1920x1080	1366x768	800x480
1680x1050	1280x1024	800x600
1600x1200	1280x768	640x480

INPUT

Analog RGB: 60Hz at UXGA
75Hz at SXGA, WXGA, XGA, SVGA, VGA

With auto detect of Digital Separate Sync, Sync-On-Green & Composite Sync. Auto detects VGA-UXGA, interlaced & non-interlaced.

DVI-D 60Hz at WUXGA
60Hz at UXGA
75Hz at SXGA, WXGA, XGA, SVGA, VGA

Video: NTSC / PAL / SECAM (Interlaced)
Composite Video, S-video, RGB Video
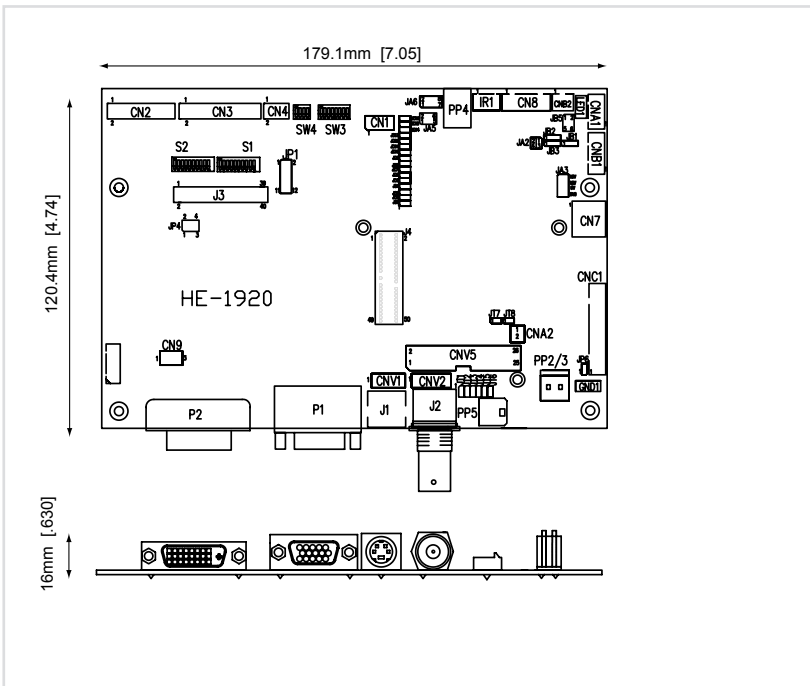SD Component (YCrCb)

OPTIONS

HD-SDI Daughter board, Infra-Red Remote handset, 2W per channel Audio amplifier.

RELIABILITY

Calculated Mean Time Between Failures
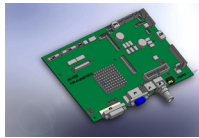In excess of 100,000 hours. Warranty - 3 years.

FEATURES

Colors :	Up to 8-bit per color, 16.7 million colors.
Functions :	On Screen Display (OSD) menu.
Function Controls :	External buttons, Infra-Red Controls, Serial Port Control.
Image Scaling :	Up scaling to fit input to panel resolution.
Image Control :	Auto configuration, Brightness, Contrast, Clock, Phase, Color temperature, Image position, Saturation, Hue, Gamma.
Other Features :	System Information, OSD position, Scaling to fill screen and fill to aspect ratio, OSD timeout, Factory reset, OSD menu transparency, Horizontal & Vertical image inversion, Picture in Picture.
Power Requirements : Panel Power :	+12VDC ±25%, 10W (controller only) Supports 3.3V, 5V, 12V & 18V panels.
Panel Signal :	Dual Channel TTL & LVDS Support.
Inverter Support :	DPMS Enable pin (3.3V or 5V), Analog or PWM brightness control, serial port controller brightness.
Plug & Play:	DDC 1,2/b compatible
Status Indicator :	Dual color LED support.
Operating Temperature: Storage Temperature:	-40°C to +80°C** -40°C to 85°C
Coating:	Silicone resin conformal coating. (MOD) DEF-STAN 59/47 Issue 4 & UL QMJU2 compliant

179.1mm [7.05]

120.4mm [4.74]

HE-1920

16mm [.630]

CONNECTOR DEFINITIONS

CN2	TTL Panel Signal
CN3	TTL Panel Signal
CN4	TTL Panel Signal
CN7	Audio Board Connector
CN8	RS-232 Serial Control
CN9	Ambient Light Sensor Connector
CNA1	Auxiliary Power Output
CNA2	Auxiliary +5VDC output
CNB1	Backlight Inverter
CNB2	Backlight status input connector
CNC1	OSD Function Controls
CNV1	Alternate Video-In
CNV2	Component Video-In
CNV5	Auxiliary Video-Input
J1	S-Video In
J2	Composite Video-In
J3	Panel Signal for LVDS Panel
J4	HD-SDI Adaptor Board Interface Connector
IR1	Infra-Red Sensor Connector
LED1	Dual color LED connector
P1	VGA analog input
P2	DVI-D input
PP2/PP3	Power Input (alternative)
PP4	External Panel Power Input
PP5	Main Power Input **

Ready-made 3D drawing files
Save time and effort for your system volumetric analysis design. Includes jpg file previews.
http://www.digitalview.com/controllers/products.php

ACCESSORIES

416013310-3 / 416013410-3	HD-SDI Adaptor Board (HD-2000/HD-1000)
Kit 60110-3:	OSD Digital Button Board Kit
Kit 60121-3:	OSD Vertical Membrane Kit
Kit 60125-3:	OSD Horizontal Membrane Kit
416040010-3:	Inverter Interface board
416940020-3:	Audio Amplifier
559000104-3:	IR remote control

*See accessories page on website for details.
** Available upon request.
*** Laboratory certification report available at
http://www.digitalview.com/controllers/support.php

Overall suitability for usage in critical applications must be independently tested and verified by the user.

AVAILABLE DOCUMENTATION

Instruction Manual
Serial Port Programming Manual**
Firmware Upgrade Manual**
MTBF Analysis**
Certified Laboratory test results***

MECHANICAL DRAWING

Dimensions:	179mm x 120.4mm (7" x 4.74")
Form Factor:	DV standard & mounting holes