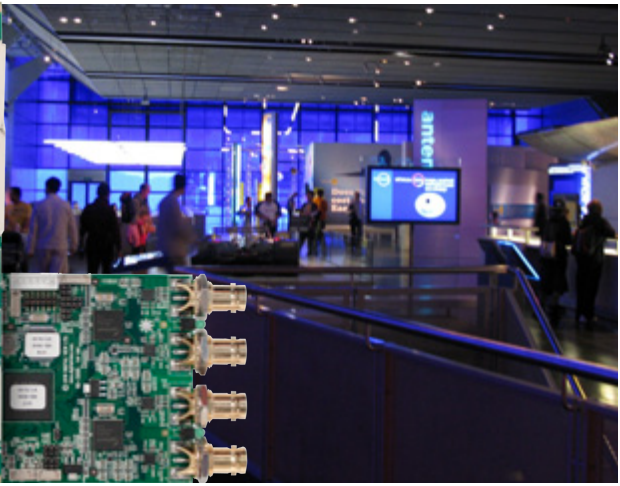


DIGITALVIEW®

Display Builder
Product Guide AUG 2011

LCD Interface Controllers
Media-Player Boards
Accessories
Integre Chassis

www.digitalview.com

Table of Contents

Introduction 3

Application Examples 4

Product Comparison Table 8

Multi-Purpose LCD Controllers

» SGX-1920 10

» SGX-1920L 12

» SVX-1920 14

» SVH-1920+ 16

» ALR-1920 18

» SP-1600 20

» DVS-1600 22

» AVP-1600 24

» ALR-1400 26

Harsh Environment LCD Controllers

» HX-1920 28

» HE-1600 30

» HE-1400 32

Media Player Boards

» M3-310 34

» M3-300 36

» RM-DN5 38

Accessories 40

Integre Chassis 44

Coming Soon 46

Terminology 47

Digital View

Since 1995 Digital View has been designing and producing LCD display sub-systems and related accessories for leading display product manufacturers around the globe.

Digital View interface controllers have been used in virtually every conceivable LCD display related application and the media player boards used extensively in the growing signage market.

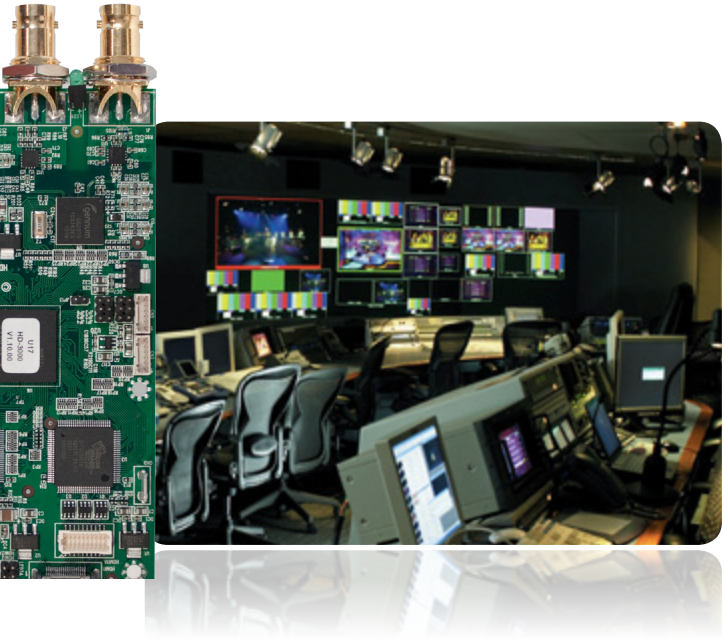
Typical display applications using Digital View boards include:

- Robust Industrial Displays
- Harsh Environment Displays
- Defense and Security
- Avionics, Marine and Rail
- Healthcare Imaging Systems
- Video Broadcast & Studios
- Digital Signage for Retail, Advertising & Information

Why Digital View...

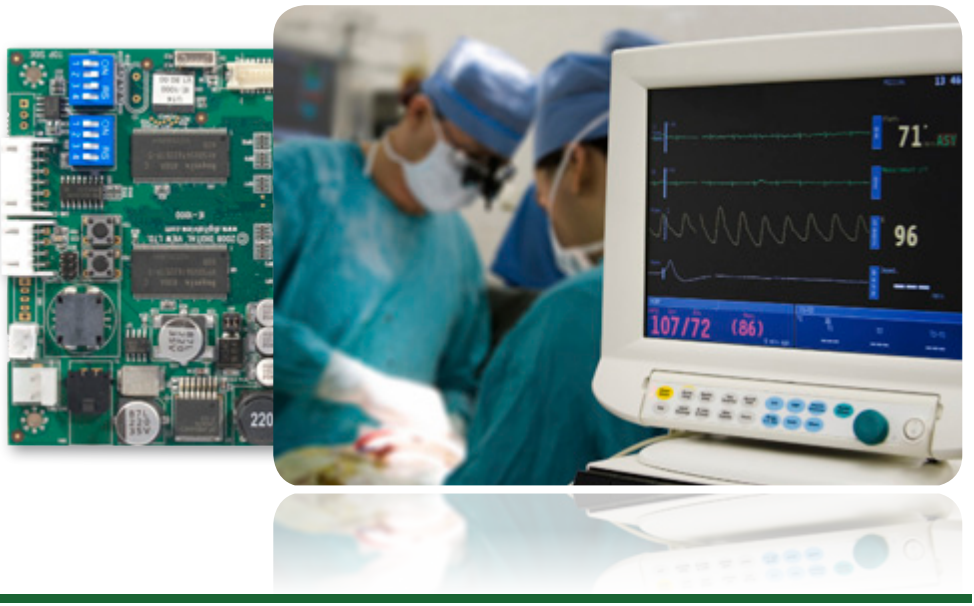
Take advantage of 16 years of consistent performance as a leading controller developer, manufacturer and reliable company. Having pioneered the development of specialty LCD interface controllers, Digital View provides a highly skilled, passionate engineering team with customization and support services, including a wide range of accessories to complement core products. Digital View:

- Provides the engineering expertise and technological bridge to the changes and future trends within the industry.
- Brings cost effective products to market, so companies don't have to develop the expertise themselves while focusing on meeting their own goals.
- Reduces time to market and increases ROI.
- Tests the controller solution 100% on the Manufacturing line.
- Meets MIL standards and UL, CUL, CE, TUV safety and compliance criteria for systems engineering.



Control Rooms

Medical

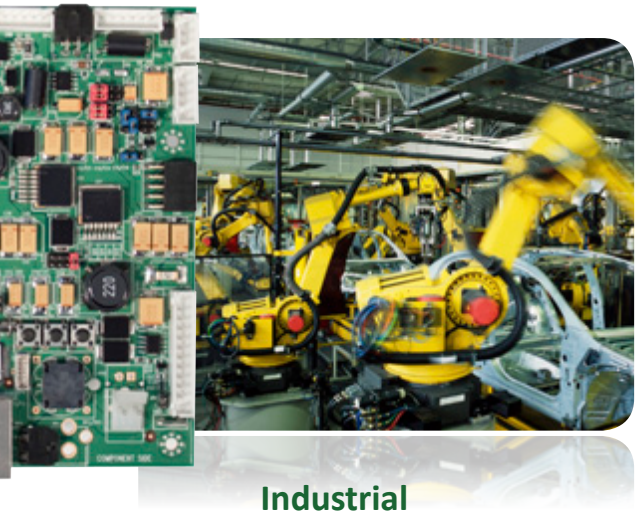


In-Flight

Demanding Environments

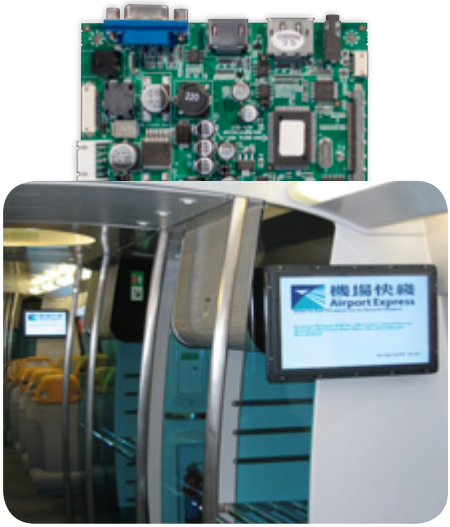
Aviation

Marine



Industrial

Signage



LCD Panels Supported

SAMSUNG · NEC · SHARP · LG Life's Good

CMO · AUO · TOSHIBA Leading Innovation · OPTREX

KYOCERA · FUJITSU · HITACHI · HYUNDAI

Litmax · Mitsubishi

Selecting An LCD Controller

Digital View LCD controllers are suitable for large, medium and small displays. Some of the key criteria are:

» **LCD Panel Resolution**

We typically support everything from 640x480 through to 1920x1200 with common as well as some unusual resolutions in between. If you are looking for a controller to match a panel a good place to start is the Controller Solution Generator at www.digitalview.com/csg

» **Signal Inputs**

This comprises signal formats, resolutions and connectors such as HDMI, DVI, DisplayPort, 3G-SDI & HD-SDI, Component, VGA - ARGB, Composite together with legacy system support such as Sync-On-Green.

» **Features & Functions**

After 16 years of provide LCD controllers for nearly every type of display application there is an extensive list. Some are listed in the controller summary pages that follow otherwise please contact your nearest Digital View office or authorized reseller as listed on www.digitalview.com/display-builder-home for assistance.

» **User Interface**

Buttons, joysticks, hot-buttons, auto-switching and remote control are just some of the display control options available. Typically these are enabled by Digital View Accessories or via the extensive RS-232 command sets built into our controllers.

» **Harsh Environments :**

Heat, vibration, dust and other airborne contaminants are catered for with the Harsh Environment models. If this is not required then the General Purpose models should be suitable.

Custom Engineering & Prototyping

Digital View provide extensive custom engineering services
Contact us for details.

Multi-Purpose LCD Controller Range

Model	Photo	Panel Resolutions	Color	Panel Voltage	Input Signals	Command + Control	Other
SGX-1920 179cm x 120cm		upto 1920 x 1200 LVDS	upto 10-Bit	3.3v 5v 12v 18v	HDMI x1 DVI-D x1 VGA x1 HD/SD Component x2 Composite x2 S-Video x2	» OSD Buttons » IR Remote » Ethernet » RS-232	» Dual Digital PiP » 3G/HD/SD-SDI* » Screen Marker » 12/24V DC Input
SGX-1920L 137cm x 112cm		upto 1920 x 1200 LVDS	upto 10-Bit	3.3v 5v 12v	HDMI x2 VGA x2 Composite x4	» OSD Buttons » IR Remote » RS-232	» Dual Digital PiP » 3G/HD-SDI* » Screen Marker » Separate PSU**
SVX-1920 179cm x 120cm		upto 1920 x 1200 LVDS	upto 10-Bit	3.3v 5v 12v 18v	HDMI x1 DVI-D x1 VGA x1 HD/SD Component x2 Composite x2 S-Video x2	» OSD Buttons » IR Remote » Ethernet » RS-232	» PiP » 3G/HD/SD-SDI* » Screen Marker » 12/24V DC Input
SVH-1920+ 179cm x 120cm		upto 1920 x 1200 LVDS, TTL	upto 10-Bit	3.3v 5v 12v 18v	DVI-D x1 VGA x1 HD/SD Component x2 Composite x2 S-Video x2	» OSD Buttons » IR Remote » RS-232	» PiP » HD/SD-SDI* » 12/24V DC Input
ALR-1920 108cm x 92cm		upto 1920 x 1200 LVDS	upto 8-Bit	3.3v 5v 12v 18v	HDMI x1 DisplayPort x1 VGA x1	» OSD Buttons » IR Remote » RS-232	» 12/24V DC Input
SP-1600 179cm x 120cm		upto 1600 x 1200 LVDS, TTL	upto 8-Bit	3.3v 5v 12v 18v	DVI-I x1 VGA x1 HD/SD Component x2 Composite x1 S-Video x1	» OSD Buttons » IR Remote » RS-232	» 12/24V DC Input
DVS-1600 142cm x 92cm		upto 1600 x 1200 LVDS, TTL	upto 8-Bit	3.3v 5v 12v 18v	DVI-D x1 VGA x1 Composite x1 S-Video x1	» OSD Buttons » IR Remote » RS-232	» 12/24V DC Input
AVP-1600 142cm x 92cm		upto 1600 x 1200 LVDS, TTL	upto 8-Bit	3.3v 5v 12v 18v	Composite x2 S-Video x2 or S-Video x1 Composite x4	» OSD Buttons » IR Remote » RS-232	» 12/24V DC Input
ALR-1400 108cm x 92cm		upto 1366 x 768 LVDS, TTL	upto 8-Bit	3.3v 5v 12v 18v	DVI-D x1 VGA x1	» OSD Buttons » RS-232	» 12/24V DC Input

* Requires optional add-on board - see Accessories HD-1000, HD-2000, HD-3000
** Requires add-on board PR-1200 or PR-2400

Harsh Environment LCD Controller Range

Model	Photo	Panel Resolutions	Color	Panel Voltage	Input Signals	Command + Control	Other
HX-1920 179cm x 120cm		upto 1920 x 1200 LVDS	upto 10-Bit	3.3v 5v 12v 18v	HDMI x1 DVI-D x1 VGA x1 HD/SD Component x2 Composite x2 S-Video x2	» OSD Buttons » IR Remote » Ethernet » RS-232	» PiP » 3G/HD/SD-SDI* » Screen Marker » 12V DC Input
HE-1600 179cm x 120cm		upto 1600 x 1200 LVDS, TTL	upto 8-Bit	3.3v 5v 12v 18v	DVI-I x1 VGA x2 HD/SD Component x2 Composite x1 S-Video x1	» OSD Buttons » IR Remote » RS-232	» 12V DC Input
HE-1400 108cm x 92cm		upto 1366 x 768 LVDS, TTL	upto 8-Bit	3.3v 5v 12v	DVI-D x1 VGA x1	» OSD Buttons » RS-232	» 12V DC Input

*Requires optional add-on board - see Accessories HD-1000, HD-2000, HD-3000

Media Player Boards

Page 34

Accessories

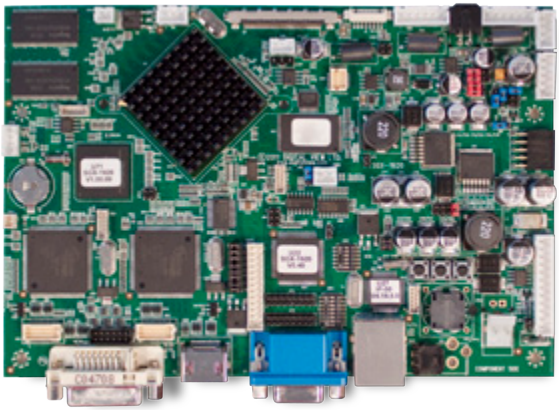
Page 40

Integre Chassis

Page 44

SGX-1920

Part No : 4172500xx-3



The SGX-1920 is an advanced controller with dual digital input and an ideal compliment to the HD-3000 dual channel 3G-SDI input adaptor

Applications include:

Broadcast video, Digital Signage, Medical imaging, Gaming systems.

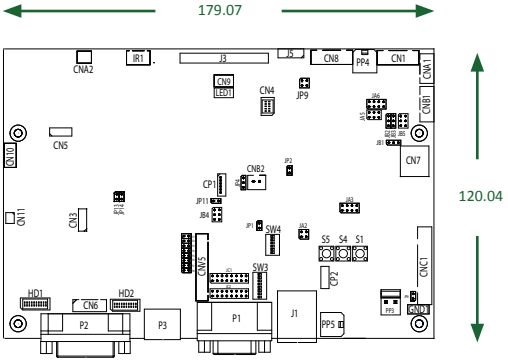
Features:

- 10-Bit, 1920 x 1200
- RS-232 & Ethernet Command & Control
- Dual Digital Picture-in-Picture

Accessories:

OSD Digital Button Board	Kit 60110-3
OSD Vertical Membrane	Kit 60121-3
OSD Horizontal Membrane	Kit 60125-3
Inverter Interface Board	P/N 416040010-3
Audio Amplifier	P/N 416940020-3
IR Remote Control	P/N 559000106-3

HD-SDI Adaptors :	
Single Channel (HD-1000)	P/N 4160134xx-3
Dual Channel (HD-2000)	P/N 4160133xx-2
3G HD-SDI Adaptors :	
Single Channel (HD-3000S)	P/N 4160164xx-3
Dual Channel (HD-3000)	P/N 4160160xx-3



For More Details

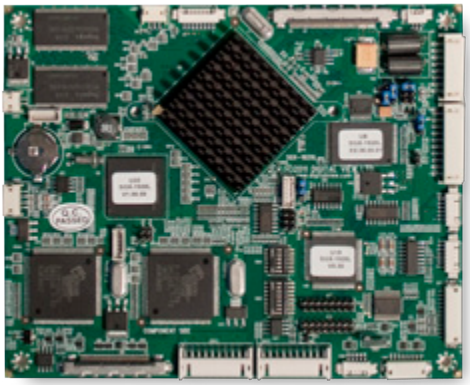
digitalview.com/products/sgx-1920-lcd-controller

Input Types: Analog RGB, DVI, HDMI, Video
Max Resolution: 1920 X 1200
Panel Signal: Dual channel LVDS support
Power: +12VDC / +24VDC ±5%,10W
RS-232 Support: Yes
Panel Power Support: 3.3V, 5V, 12V & 18V panels
Inverter Support: DPMS Enable pin (3.3V or 5V)
Color Depth: 10-Bit
MTBF: 100k Hours
RoHS compliant: Yes
Warranty: 3 Years Manufacturer

Analog RGB: 60Hz at WUXGA, UXGA 75Hz at SXGA, WXGA, XGA, SVGA, VGA With auto detect of Digital Separate Sync, Sync-On-Green & Composite Sync. Auto detects VGA-WUXGA, interlaced & non-interlaced
DVI-D / HDMI: 60Hz at WUXGA, UXGA 75Hz at SXGA, WXGA, XGA, SVGA, VGA 480p, 576p, 720p, 1080i, 1080p
Video: NTSC /PAL/SECAM (Interlaced) Composite Video, S-video HD/SD Component (YPbPr / CbCr)
Resolutions Supported 1920 x 1200 1920 x 1080 1680 x 1050 1600 x 1200 1440 x 900 1366 x 768 1280 x 1024 1280 x 800 1280 x 768 1024 x 768 800 x 600 800 x 480 640 x 480

SGX-1920L

Part No : 4172600xx-3



The SGX-1920L is a low profile, header based controller with 2 x ARGB, 4x Composite and 2x HDMI input support for a wide range of TFT LCD panels up to WUXGA resolution

Applications include:

Pro-AV, Visualization Systems

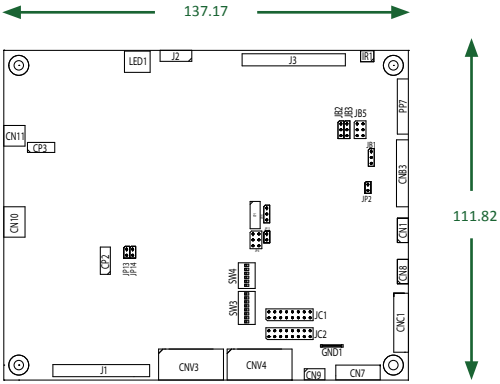
Features:

- 10-bit, 1920 x 1200
- RS-232. Ethernet Control
- Dual Digital Picture-In-Picture
- Low Profile

Accessories:

PR-1200 (12V Power Board)	P/N 41601961X-3
PR-2400 (24V Power Board)	P/N 41601951X-3
OSD Digital Button Board	Kit 67110-3
OSD Vertical Membrane	Kit 67134-3
OSD Horizontal Membrane	Kit 67135-3
Audio Amplifier	P/N 416940020-3
IR Remote Control	P/N 559000106-3

Dual HDMI Input Cable	P/N 426300900-3
VGA + Composite Cable	P/N 426301400-3
3G HD-SDI Adaptors :	
Single Channel (HD-3000S)	P/N 4160164xx-3
Dual Channel (HD-3000)	P/N 4160160xx-3



For More Details

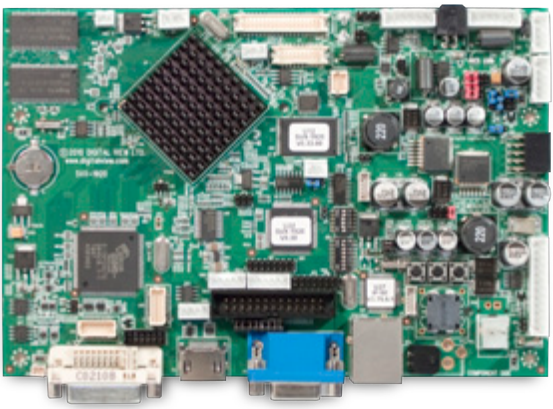
digitalview.com/products/sgx-1920l-lcd-controller

Input Types: Analog RGB, HDMI, Composite
Max Resolution: 1920 x 1200
Panel Signal: Dual channel LVDS support
Power: +12VDC ±5%,10W
RS-232 Support: Yes
Panel Power Support: 3.3V, 5V & 12V
Inverter Support: DPMS Enable pin (3.3V or 5V)
Color Depth: 10-Bit
120 Hz Support Option: IE-1000
MTBF: 100k Hours
RoHS compliant: Yes

Input Analog RGB: 60Hz at WUXGA, UXGA 75Hz at SXGA, WXGA, XGA, SVGA, VGA With auto detect of Digital Separate Sync, Sync-On-Green & Composite Sync. Auto detects VGA-WUXGA, interlaced & non-interlaced
Input HDMI: 60Hz at WUXGA 75Hz at SXGA, WXGA, XGA, SVGA, VGA 1080p, 1080i, 720p, 576p, 480p
Input Composite: NTSC /PAL/SECAM (Interlaced) Composite Video, S-video SD Component (YCbCr) HD Component (YPbPr)
Resolutions Supported 1920x1200 1280x1024 1920x1080 1280x768 1680x1050 1024x768 1600x1200 800x600 1440x900 800x480 1366x768 640x480
Warranty: 3 Years Manufacturers

SVX-1920

Part No : 4172100xx-3



The SVX-1920 is a professional class High Definition controller supporting display modes up to 1080p on 1920x1200 resolution panels and can reproduce 1.06 billion colors

Applications include:

Broadcast video, Digital Signage, Medical imaging, Gaming systems.

Features:

- Full 10-bit panel support via HDMI, DVI-D and HD Component Inputs
- Full screen image expansion of lower resolutions, on-screen PIP functions
- OSD menu transparency, PIP - variable position, any input combinations (16 sizes)
- Programmable hot keys, RS-232 Serial port protocol, Ambient light sensor control
- Supports optional High-Definition Serial Digital Interface (HD-SDI)
- Complete display management via Ethernet or RS-232

Accessories:

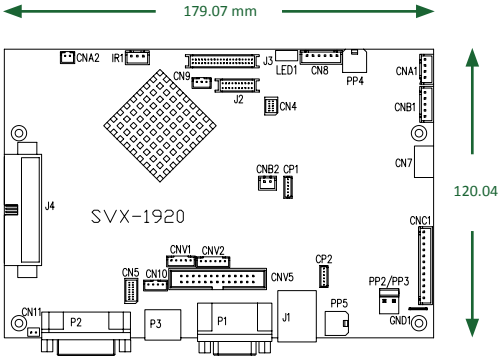
OSD Digital Button Board	Kit 60110-3
OSD Vertical Membrane	Kit 60121-3
OSD Horizontal Membrane	Kit 60125-3
Inverter Interface Board	P/N 416040010-3
Audio Amplifier	P/N 416940020-3
IR Remote Control	P/N 559000106-3
IE-1000	P/N 4171900xx-3

HD-SDI Adaptors :

Single Channel (HD-1000)	P/N 4160134xx-3
Dual Channel (HD-2000)	P/N 4160133xx-3
HD-SDI to HDMI Adapter	P/N 4160167xx-3

3G HD-SDI Adaptors :

Single Channel (HD-3000S)	P/N 4160164xx-3
Dual Channel (HD-3000)	P/N 4160160xx-3



For More Details

digitalview.com/products/svx-1920-lcd-controller

Input Types: Analog RGB, DVI-D, Video

Max Resolution: 1920 x 1200

Panel Signal: Dual channel TTL & LVDS

Power: 12V DC/24 V DC +/- 5%, 4W

RS-232 Support: Yes

Panel Power Support: 3.3V, 5V, 12V, 18V

Inverter Support:
DPMS, Analog or PWM brightness control, serial port controller brightness

Color Depth: 10-Bit / 1.06 Billion Colors

120 Hz Support Option: IE-1000

MTBF: 100K hours

RoHS compliant: Yes

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

Input DVI-D / HDMI:
60 Hz at WUXGA, UXGA
75 Hz at SXGA, WXGA, XGA, SVGA, VGA

Video:
NTSC/PAL/SECAM (Interlaced)
Composite Video, S-Video, RGB Video,
SD Component Video (YCbCr)
HD Component Video (YPbPr)

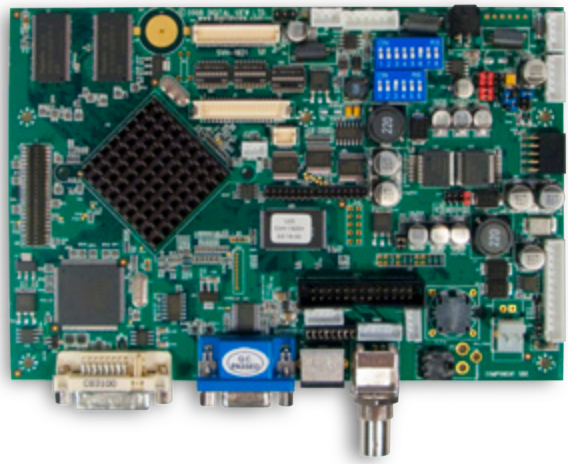
Resolutions Supported

1920 x 1200	1280 x 800
1920 x 1080	1280 x 768
1680 x 1050	1024 x 768
1600 x 1200	800 x 600
1440 x 900	800 x 480
1366 x 768	640 x 480
1280 x 1024	

Warranty: 3 Years Manufacturers

SVH-1920+

Part No : 4171700xx-3



The SVH-1920+ is a fully buffered, multi-sync interface controller providing direct analog and digital connection to a wide range of TFT LCD panels up to WUXGA (1920x1200)

Applications include:

Broadcast video, Digital Signage, Medical imaging, Gaming systems.

Features:

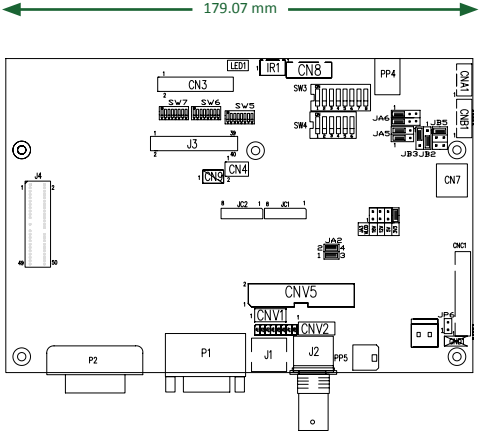
- Full screen image expansion of lower resolutions, On-Screen PIP
- OSD Menu Transparency, PIP - Variable Position
- Programmable Hot Keys, RS-232 Serial Port Protocol, Ambient Light Sensor Control
- Supports Optional High-Definition Serial Digital Interface (HD-SDI)

Accessories:

OSD Digital Button Board	Kit 60110-3
OSD Vertical Membrane	Kit 60121-3
OSD Horizontal Membrane	Kit 60125-3
Inverter Interface Board	P/N 416040010-3
Audio Amplifier	P/N 416940020-3

HD-SDI Adaptors :

Single Channel (HD-1000)	P/N 4160134xx-3
Dual Channel (HD-2000)	P/N 4160133xx-3
IR Remote Control	P/N 559000106-3



For More Details

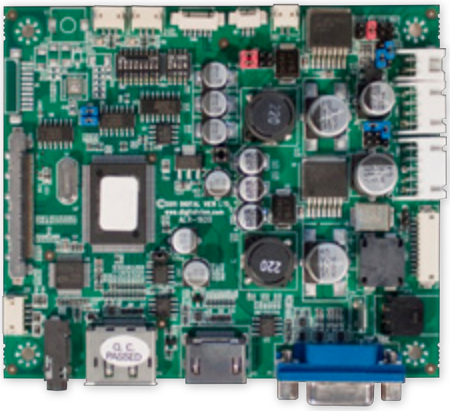
digitalview.com/products/svh-1920+-lcd-controller

Input Types: Analog RGB, DVI-D, Video
Max Resolution: 1920 x 1200
Panel Signal: Dual channel TTL & LVDS
Power: 12V DC/24 V DC +/- 5%
RS-232 Support: Yes
Panel Power Support: 3.3V, 5V, 12V, 18V
Inverter Support: DPMS Enable Pin (3.3v or 5v), Analog or PWM brightness control via serial port controller brightness
Color Depth: 10-Bit / 1.06 Billion Colors
120 Hz Support Option: IE-1000
MTBF: 100K hours
RoHS compliant: Yes

Input Analog RGB: 60 Hz at WUXGA, UXGA 75 Hz at SXGA, WXGA, XGA, SVGA, VGA
Input DVI-D: 60 Hz at WUXGA, UXGA 75 Hz at SXGA, WXGA, XGA, SVGA, VGA
Video: NTSC/PAL/SECAM (Interlaced) Composite Video, S-Video, RGB Video, SD Component Video (YCbCr) HD Component (YPbPr)
Resolutions Supported 1920 x 1200 — 1280 x 800 1920 x 1080 — 1280 x 768 1680 x 1050 — 1024 x 768 1600 x 1200 — 800 x 600 1440 x 900 — 800 x 480 1366 x 768 — 640 x 480 1280 x 1024
Warranty: 3 Years Manufacturer

ALR-1920

Part No : 4172700xx-3



The ALR-1920 is the entry level controller for driving the panel up to 1920x1200 resolution. This controller supports HDMI, Analog RGB and DisplayPort input.

Applications include:

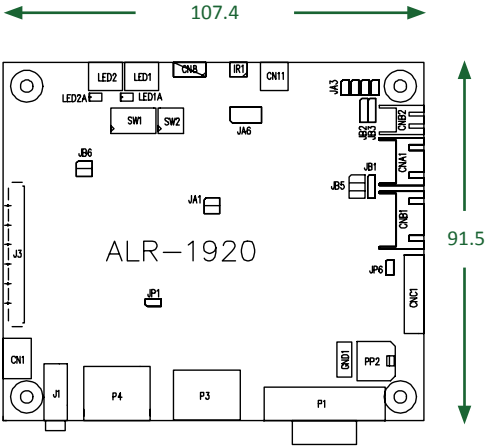
General display applications

Features:

- Compact Design
- Supports HDMI, ARGB & DisplayPort Inputs
- 1080p 1920x1200 Resolution
- Upscaling & Downscaling
- RS-232 Command & Control

Accessories:

OSD Digital Button Board	Kit 67110-3	Inverter Interface board	P/N 416040010-3
OSD Vertical Membrane	Kit 67134-3	IR Remote Control	P/N 559000106-3
OSD Horizontal Membrane	Kit 67135-3		



For More Details

digitalview.com/products/alr-1920-lcd-controller

Input Types: DisplayPort, HDMI, Analog RGB
Max Resolution: 1920 x 1200
Panel Signal: LVDS
Power: +12V/+24VDC ±5%, 4W
Panel Power Support: 3.3V, 5V, 12V & 18V panels
Inverter Support: DPMS Enable pin (5V or 12/24V)
MTBF: 200,000 hours
RoHS compliant: Yes
Warranty: 3 Years Manufacturer

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

HDMI 1.3: 60Hz at WUXGA, UXGA, SXGA, WXGA, XGA, SVGA, VGA 1080p, 1080i, 720p, 576p, 480p

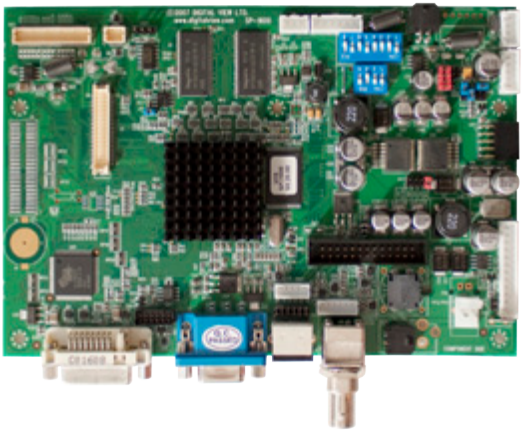
DisplayPort 1.1a: 60Hz at WUXGA, UXGA, SXGA, WXGA, XGA, SVGA, VGA, 1080p, 1080i, 720p, 576p, 480p

Resolutions Supported :

1920x1200	1280x768
1920x1080	1024x768
1680x1050	1024x600
1600x1200	800x600
1440x900	800x480
1366x768	640x480
1280x1024	480x640
1280x800	

SP-1600

Part No : 4169900xx-3



The SP-1600 is a fully buffered, multi-sync interface controller providing direct analog and digital connection to a wide range of TFT LCD panels up UXGA resolution (1600 x 1200).

Applications include:

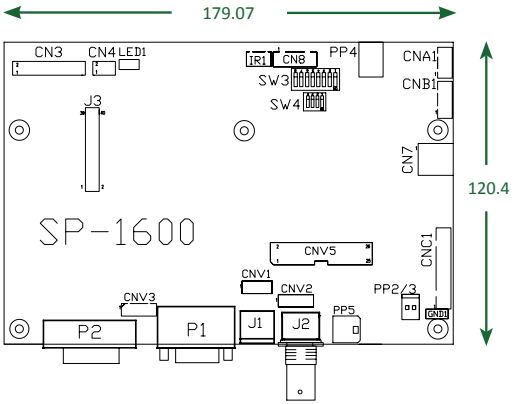
General purpose display integration (15.4" - 40"), legacy and current SUN compatible display design. Great for demanding 3D graphics. Customizeable with exceptional flexibility.

Features:

- Inputs for DVI, Dual ARGB channels, Composite, S-Video, Component Video
- Supports a wide variety of 4:3 & 16:9 format panels
- Built-in TTL & LVDS support
- Auto Picture Setup, Auto Color Gain, Auto Source Seek, OSD Menu Timeout, Gamma Adjustment, Color Temperature, Programmable Hot-Keys

Accessories:

OSD Digital Button Board	Kit 60110-3
OSD Vertical Membrane	Kit 60121-3
OSD Horizontal Membrane	Kit 60125-3
Inverter Interface Board	P/N 416040010-3
Audio Amplifier	P/N 416940020-3
IR Remote Control	P/N 559000106-3



For More Details

digitalview.com/products/sp-1600-lcd-controller

Input Types: Analog RGB, DVI-I, Video
Max Resolution: 1600 x 1200
Panel Signal: TTL (single pixel) & LVDS
Power: 12v / 24v DC +/- 5%, 4W
RS-232 Support: Yes
Panel Power Support: 3.3v, 5v, 12v, 18v
Inverter Support: DPMS enable pin (5v or 12v/24v), Analog Control via Serial Port Control Brightness
Color Depth: 8-Bit/16.7M colors
MTBF: 100K hours
RoHS compliant: Yes
Warranty: 3 Year Manufacturer's

Input Analog RGB:
60 Hz at UXGA
75 Hz at SXGA, WXGA, XGA, SVGA, VGA
66 Hz, 76 Hz at 1152 x 900 (SUN)
76 Hz at 1280 x 1024 (SUN)

Input DVI-I:
60 Hz at UXGA, SXGA, WXGA, XGA, SVGA, VGA

75 Hz at SXGA, WXGA, XGA, SVGA, VGA

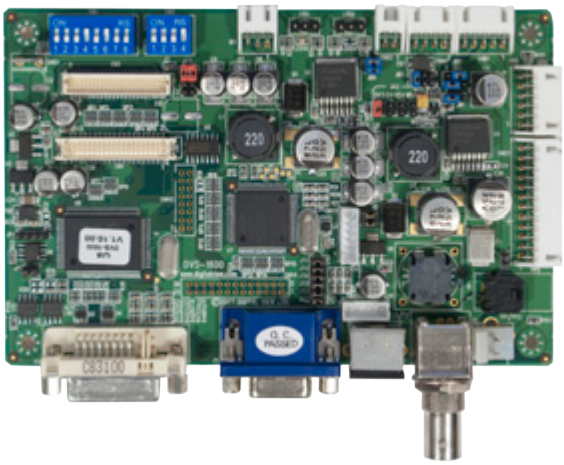
Video:
NTSC/PAL/SECAM (Interlaced)
Composite Video, S-Video, RGB Video, SD Component Video (YCbCr), Component Video (YPbPr)

Resolutions Supported:

1680 x 1050	1280 x 1024
1600 x 1200	1280 x 800
1440 x 900	1280 x 768
1400 x 1050	1024 x 768
1366 x 768	800 x 600
	640 x 480

DVS-1600

Part No : 4171400xx-3



The DVS-1600 is a cost effective, highly integrated controller for a wide range of TFT LCD panels up to UXGA (1600 x 1200) resolution.

Applications include:

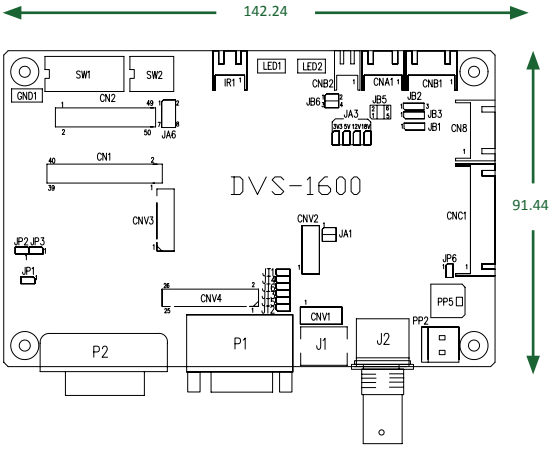
General purpose multimedia display integration, standard definition digital signage.

Features:

- Inputs for DVI-D, ARGB, 1 x Composite, 1 x S-Video
- Supports wide variety of 4:3, 5:4, 16:9 and 16:10 format panels
- Built-in TTL & LVDS support
- Auto Setup, Auto RGB Calibration, Auto Source Seek, Gamma Adjustment, OSD Position, Input Source Select

Accessories:

OSD Digital Button Board	Kit 60110-3
OSD Vertical Membrane	Kit 60121-3
OSD Horizontal Membrane	Kit 60125-3
Inverter Interface Board	P/N 416040010-3
Audio Amplifier	P/N 416940020-3
IR Remote Control	P/N 559000106-3



For More Details

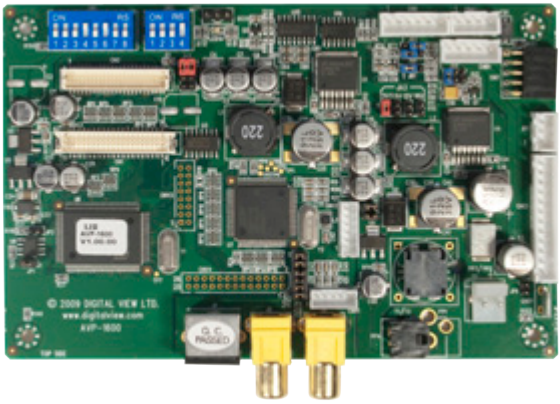
digitalview.com/products/dvs-1600-lcd-controller

Input Types: Analog RGB, DVI-D, Video
Max Resolution: 1600 x 1200
Panel Signal: TTL (single pixel) & LVDS
Power: 12V/24V DC +/- 5%, 4W
RS-232 Support: Yes
Panel Power Support: 3.3V, 5V, 12V, 18V
Inverter Support: DPMS enable pin (3.3 V or 5V)
Color Depth: 8-Bit/16.7M colors
MTBF: 260K hours
RoHS compliant: Yes
Warranty: 3 Year Manufacturer's

Input Analog RGB: 60 Hz at UXGA 60 Hz at SXGA, WXGA, XGA, SVGA, VGA
Input DVI-D: 60 Hz at UXGA 60 Hz at SXGA, WXGA, XGA, SVGA, VGA
Video: NTSC/PAL/SECAM (Interlaced) Composite Video, S-video
Resolutions Supported: 1680 x 1050 — 1280 x 800 1600 x 1200 — 1280 x 768 1440 x 900 — 1024 x 768 1400 x 1050 — 800 x 600 1366 x 768 — 800 x 480 1280 x 1024 — 640 x 480

AVP-1600

Part No : 4172200xx-3



The AVP-1600 is a compact, easy to use high quality Composite and S-Video input video interface for LCD panels up to UXGA 1600 x 1200 resolution.

Applications include:

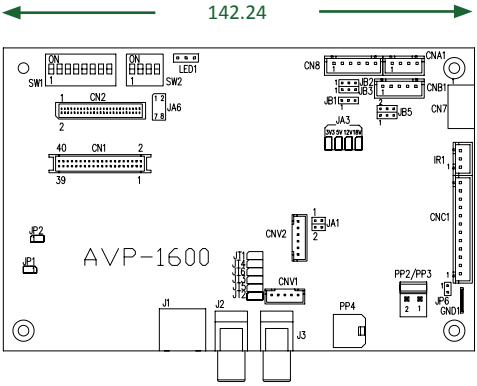
Video surveillance, exploratory medical equipment, industrial.

Features:

- Four NTSC/PAL/SECAM inputs. Two via external RCA jacks, two via header connection
- System information, run-time counter, OSD menu position, audio control, power down option, user setting, OSD menu position, gamma adjustment, saturation, Hue
- Function Controls: Buttons, Infrared, RS-232 serial protocol

Accessories:

OSD Digital Button Board	Kit 60110-3
OSD Vertical Membrane	Kit 60121-3
OSD Horizontal Membrane	Kit 60125-3
Inverter Interface Board	P/N 416040010-3
Audio Amplifier	P/N 416940020-3
IR Remote Control	P/N 599000106-3



For More Details

digitalview.com/products/avp-1600-lcd-controller

Input Types: Composite, S-Video
Max Resolution: 1600 x 1200
Panel Signal: TTL (single pixel) & LVDS
Power: 12v 24v DC ±5%
Panel Power Support: 3.3v, 5v, 12v, 18v
Inverter Support: DPMS enable pin (3.3v or 5v)
MTBF: 260K hours
RoHS compliant: Yes
Warranty: 3 Years Manufacturer

Video:
NTSC/PAL/SECAM (Interlaced)

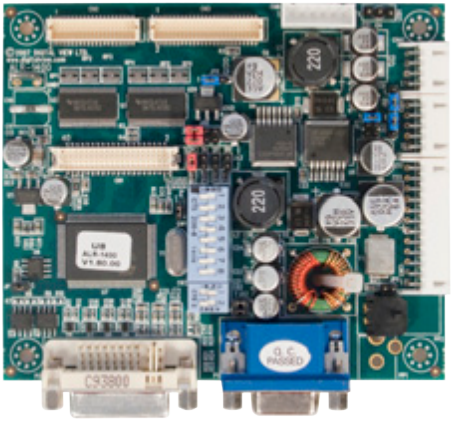
Jumper Selectable
(A) 2x Composite Video & 2x S-Video
(B) 4x Composite Video & 1x S-Video

Resolutions Supported:

1680 x 1050	1280 x 800
1600 x 1200	1280 x 768
1400 x 1050	1024 x 768
1400 x 900	800 x 600
1366 x 768	800 x 480
1280 x 1024	640 x 480

ALR-1400

Part No : 4171000xx-3



The ALR-1400 is a small footprint, highly integrated controller with both Analog RGB and DVI-D inputs.

Applications include:

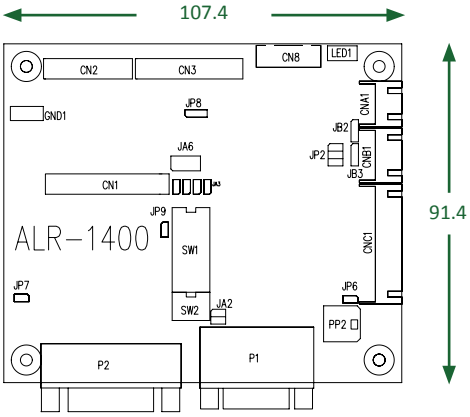
General purpose display integration, portable test equipment, mobile computing.

Features:

- Small footprint, high value
- Supports 4:3 format panels up to SXGA, 16:9 format panels up to WXGA
- Built-in LVDS support
- Dual or single pixel TTL interfaces
- Auto Setup, Auto RGB calibration, Auto source seek, Gamma Adjustment, OSD position,
- Input Source Select

Accessories:

OSD Digital Button Board	Kit 60110-3
OSD Vertical Membrane	Kit 60121-3
OSD Horizontal Membrane	Kit 60125-3
Inverter Interface Board	P/N 416040010-3



For More Details

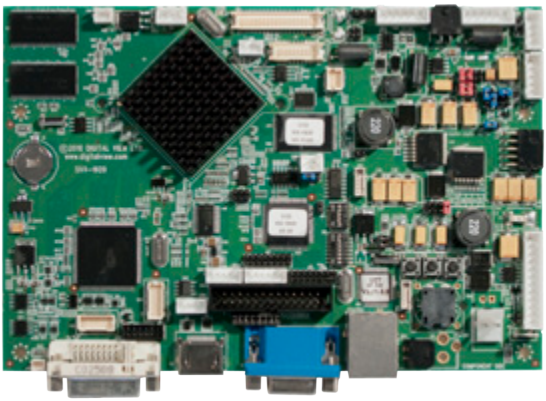
digitalview.com/products/alr-1400-lcd-controller

Input Types: Analog RGB, DVI-D
Max Resolution: 1366 x 768
Panel Signal: TTL & LVDS
Power: 12V/24V DC +/- 5%, 4W
RS-232 Support: Yes
Panel Power Support: 3.3V, 5V, 12V, 18V
Inverter Support: DPMS enable pin (5v or 12v / 24v), Analog control via serial port controller brightness
Color Depth: 8-Bit/16.7M colors
MTBF: 200K hours
RoHS compliant: Yes

Input Analog RGB: 60 Hz at SXGA, WXGA, XGA, SVGA, VGA
Input DVI-D: 60 Hz at SXGA, WXGA, XGA, SVGA, VGA
Resolutions Supported: 1366 x768 1280 x 1024 1280 x 800 1280 x 768 1024 x 768 1024 x 600 800 x 600 800 x 480 640 x 480
Warranty: 3 Year Manufacturer's

HX-1920

Part No : 4172101xx-3



The HX-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.

Applications include:

Outdoor digital signage, Mass Transit installations, high resolution Military displays, Marine displays.

Features:

- 10-Bit, 1920 x 1200
- RS-232 Ethernet Control
- HDMI, DVI, VGA Video
- 120Hz & 3G-SDI (Option)

Accessories:

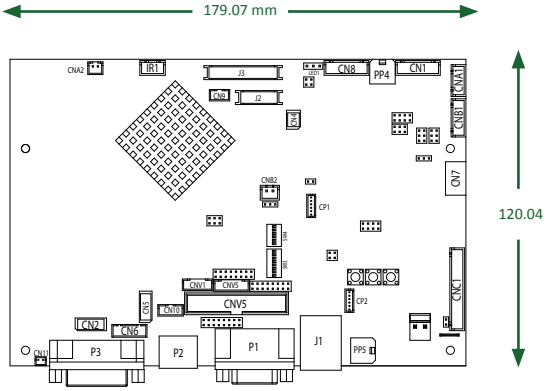
OSD Digital Button Board	Kit 60110-3
OSD Vertical Membrane	Kit 60121-3
OSD Horizontal Membrane	Kit 60125-3
Inverter Interface Board	P/N 416040010-3
Audio Amplifier	P/N 416940020-3
IR Remote Control	P/N 559000106-3

HD-SDI Adaptors :

Single Channel (HD-1000)	P/N 4160134xx-3
Dual Channel (HD-2000)	P/N 4160133xx-2
HD-SDI to HDMI Adapter	P/N 4160167xx-3

3G HD-SDI Adaptors :

Single Channel (HD-3000S)	P/N 4160164xx-3
Dual Channel (HD-3000)	P/N 4160160xx-3



For More Details

digitalview.com/products/hx-1920-lcd-controller

Harsh Environment Features

- Low-Mass Tantalum Capacitors
- Locking Connectors for Vibration Tolerence
- Operating Compliance from -40°C to 80°C
- Humidity Resistant Silicon Resin Confromal Coating

Input Types: Analog RGB, DVI-D, Video

Max Resolution: 1920 x 1200

Panel Signal: Dual channel TTL & LVDS

Power: 12V DC +/- 25%, tolerance 10W

RS-232 Support: Yes

Panel Power Support: 3.3V, 5V, 12V

Inverter Support:
DPMS Enables Pin (3.3v or 5v), Analog or PWM brightness control via serial port controller brightness

Color Depth: 10-Bit / 1.06 Billion colors

120 Hz Support Option: IE-1000

MTBF: 100K hours

RoHS compliant: Yes

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

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

Video:
NTSC/PAL/SECAM (Interlaced)

Composite Video, S-Video, RGB Video,
SD Component Video (YCbCr)
HD Component Video (YPbPr)

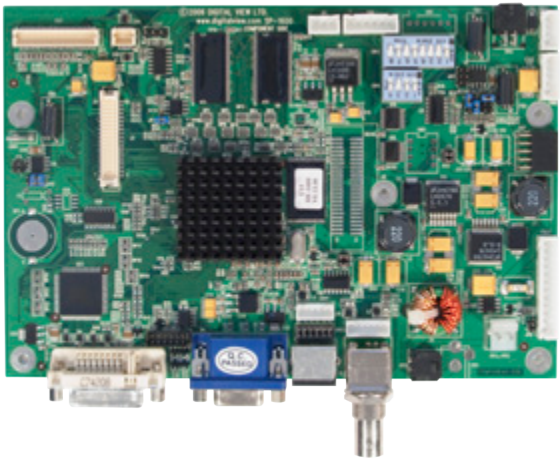
Resolutions Supported:

1920 x 1200	1280 x 768
1920 x 1080	1280 x 800
1680 x 1050	1024 x 768
1440 x 900	800 x 600
1366 x 768	800 x 480
1280 x 1024	640 x 480

Warranty: 3 Year Manufacturer

HE-1600

Part No : 4169901xx-3



The HE-1600 is a fully buffered, multi-sync interface controller providing direct analog and digital connection to a wide range of TFT LCD panels up to UXGA (1600 x 1200).

Applications include:

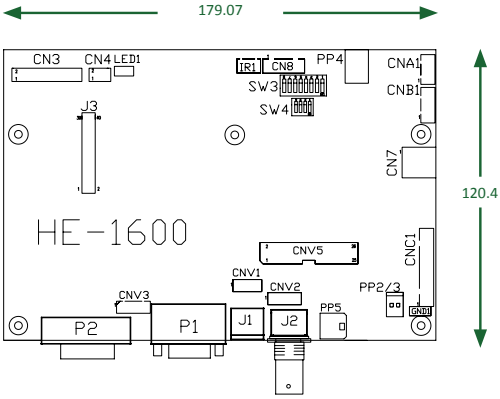
Mobile Military displays, Marine electronics, outdoor signage (7”- 40”).

Features:

- Flexible port architecture that provides inputs for DVI, dual ARGB, Composite, S-Video, Component Video across 4:3 and 16:9 format panels
- Embedded 3D Comb filter on video decoder to display excellent video picture quality
- Auto Picture Setup, Auto Color Gain, Auto Source Seek, OSD Menu Timeout, Gamma Adjustment, Color Temperature, Programmable Hot-Keys
- Broad SUN Support

Accessories:

OSD Digital Button Board	Kit 60110-3
OSD Vertical Membrane	Kit 60121-3
OSD Horizontal Membrane	Kit 60125-3
Inverter Interface Board	P/N 416040010-3
Audio Amplifier	P/N 416940020-3
IR Remote Control	P/N 559000106-3



For More Details

digitalview.com/products/he-1600-lcd-controller

Harsh Environment Features

- Low-Mass Tantalum Capacitors
- Locking Connectors for Vibration Tolerence
- Operating Compliance from -40°C to 80°C
- Humidity Resistant Silicon Resin Confromal Coating

Input Types: Analog RGB, DVI-I, Video

Max Resolution: 1600 x 1200

Panel Signal: TTL (single pixel) & LVDS

Power: 12V DC +/- 25% tolerance, 10W

RS-232 Support: Yes

Panel Power Support: 3.3V, 5V, 12V

Inverter Support:
DPMS Enables Pin (5v or 12v), Analog brightness control via serial port controller brightness

Color Depth: 8-Bit/16.7M colors

MTBF: 150K hours

RoHS compliant: Yes

Warranty: 3 Year Manufacturer's

Input Analog RGB:
60 Hz at UXGA
75 Hz at SXGA, WXGA, XGA, SVGA, VGA
66 Hz, 76 Hz at 1152 x 900 (SUN)
76 Hz at 1280 x 1024 (SUN)

Input DVI-I:
60 Hz at UXGA, SXGA, WXGA, XGA, SVGA, VGA
75 Hz at SXGA, WXGA, XGA, SVGA, VGA

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

Resolutions Supported:

1680 x 1050	1280 x 1024
1600 x 1200	1280 x 800
1440 x 900	1280 x 768
1400 x 1050	1024 x 768
1366 x 768	800 x 600
	640 x 480

HE-1400

Part No : 4171001xx-3

The HE-1400 is a small footprint, highly integrated controller with both Analog RGB and DVI-D inputs. Supports TTL & LVDS panels up to SXGA (1280 x 1024) or WXGA (1366 x 768).

Applications include:

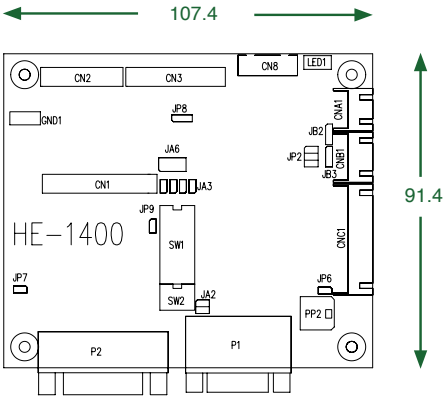
Mobile PC video, handheld Military & Industrial panels, rack mount monitors, and transportation.

Features:

- Small footprint, high value
- Supports 4:3 format panels up to SXGA; 16:9 format panels up to WXGA
- Built-in TTL & LVDS support
- OSD position, timeout, factory reset, input source select
- Harsh Environment Features (see next page)

Accessories:

OSD Digital Button Board	Kit 60110-3
OSD Vertical Membrane	Kit 60121-3
OSD Horizontal Membrane	Kit 60125-3
Inverter Interface Board	P/N 416040010-3



For More Details

digitalview.com/products/he-1400-lcd-controller

Harsh Environment Features

- Low-Mass Tantalum Capacitors
- Locking Connectors for Vibration Tolerence
- Operating Compliance from -40°C to 80°C
- Humidity Resistant Silicon Resin Confromal Coating

Input Types: Analog RGB, DVI-D
Max Resolution: 1366 x 768
Panel Signal: TTL & LVDS
Power: 12V DC +/- 25% tolerance, 10W
RS-232 Support: Yes
Panel Power Support: 3.3V, 5V, 12V
Inverter Support: DPMS Enables Pin (5v or 12v / 24v) Analog control via serial port controller brightness
Color Depth: 8-Bit/16.7M colors
MTBF: 200K hours
RoHS compliant: Yes

Input Analog RGB: 60 Hz at SXGA, WXGA, XGA, SVGA, VGA
Input DVI-D: 60 Hz at SXGA, WXGA, XGA, SVGA, VGA
Resolutions Supported: 1366 x 768 1280 x 1024 1280 x 800 1280 x 768 1024 x 768 1024 x 600 800 x 600 800 x 480 640 x 480
Warranty: 3 Year Manufacturer's

M3-310

Part No : 4172000xx-3

Signage Developer Program

The M3-310 is a board-level solid-state digital video/audio player integrated with a LCD interface for driving a LCD panel directly. Videos and pictures are stored and played directly from a Compact Flash memory card.

Applications :

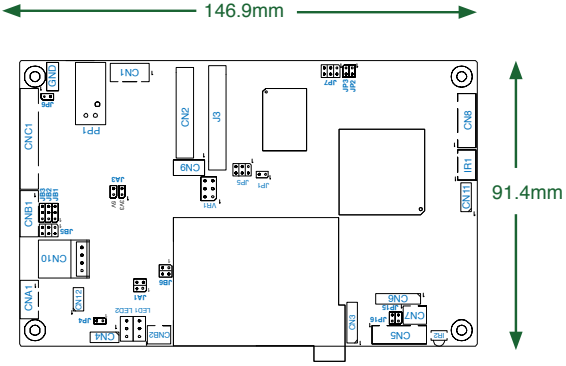
Stand-Alone Media Display Systems

Features :

- Direct LCD drive
- Compact Flash Storage
- Interactive Options
- Content is Programmable using free DV Studio Software

Accessories:

IR sensor kit	P/N 446010401-3	Volume control knob	P/N 426890500-3
IR Remote Handset	P/N 559000106-3	Remote Ex. cable	P/N 426450110-3
USB Extend Cable	P/N 426894600-3	8-button switchmount	P/N 416101300-3



For More Details

digitalview.com/products/ m3-310-digital-media-player

Video Format :
MPEG-4 + MPEG-2 (720x576) PAL (720x480) NTSC
MPEG-1 (352 x 288) PAL , (352 x 240) NTSC

Video Output :
Composite / S-Video / VGA / YPbPr

Still Image Format : JPEG (1280x720)

Audio : 44.1kHz Stereo, 224 kbit/s
Audio Output : Speaker Out

Storage Media : Compact Flash Memory Card

LEDs : Power / Status

Watchdog : System Reset

Real Time Clock : Battery Backup RTC

Power Requirement: DC 12v Input
Aux Power Out : 5v DC & 12v DC
Power Consumption : 560mA @12v

Operating Temperature : 0°C to 50°C
Relative Humidity : 5% - 95% Relative Humidity

Panel Signal :
TTL(single pixel) and LVDS

Panel Connectivity :
1600x1200 / 1366x768 / 1280x768 / 1024x768
800x480 / 640x480

Playback Functions :
Play / Stop / Pause / Repeat / Previous Track
Next Track / Volume / Mute / Loop Playback /
Sequence Play / Startup Mode / Sleep Mode

OSD Functions :
Set Date / Time / Set ID / Volume / Data Logging /
OSD Display

External I/O Ports :
RS-232 (9600, N-8-1)
USB (Content Upload)
Infra-Red (For DV IR Remote)
Remote Ext (For Button & Touch Interactivity)

Dimensions (mm) : W:147 x D:92 x H:18
Weight (net) : 135g

Warranty : 3 Year Manufacturer

M3-300

Part No : 4171600xx-3

Signage Developer Program

The M3-300 is a digital video and audio player designed for video and high resolution still pictures on TV and LCD monitors in commercial environments. The M3-300 also supports 720p up-scaling on VGA and Component video (YPbPr) output.

Applications Include :

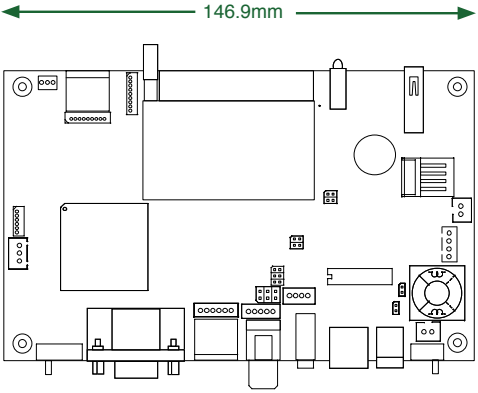
Stand-Alone Media Display Systems

Features:

- Interactivity
- Update via USB
- Audio Support
- Compact Flash Storage

Accessories:

IR sensor kit	P/N 446010401-3	On/Off switch cable	P/N 426680401-3
IR Remote Handset	P/N 559000106-3	Volume control knob	P/N 426890500-3
RJ-11 to RS-232 cable	P/N 426894301-3	Remote Ex. cable	P/N 426450110-3
VGA to YPbPr cable	P/N 426004800-3	8-button switchmount	P/N 416101300-3



For More Details

digitalview.com/products/
m3-300-digital-media-player

Video Format :
MPEG-4 + MPEG-2 (720x576) PAL, (720x480) NTSC
MPEG-1 (352x288) PAL, (320 x240) NTSC
Video Output :
Composite / S-Video / VGA / YPbPr

Still Image Format : JPEG (1280x720)

Audio : 44.1kHz Stereo, 224 kbit/s
Audio Output : Stereo Phone Jack

Storage Media : Compact Flash Memory Card

LEDs : Power / Status

Watchdog : System Reset

Real Time Clock : Battery Backup RTC

Power Requirement: DC 12v Input
Aux Power Out : 5v DC & 12v DC
Power Consumption : 500mA @12v

Operating Temperature : 0°C to 50°C
Relative Humidity : 5% - 95% Relative Humidity

Playback Functions :
Play / Stop / Pause / Repeat / Previous Track
Next Track / Volume / Mute / Loop Playback /
Sequence Play / Startup Mode / Sleep Mode

OSD Functions :
Set Date / Time / Set ID / Volume / Data Logging /
OSD Display

External I/O Ports :
RS-232 (9600, N-8-1)
USB (Content Upload)
Infra-Red (For DV IR Remote)
Remote Ext (For Button & Touch Interactivity)

Dimensions (mm) :
W:146.9 x D:91.4 x H:18

Weight (net) : 135g

Warranty : 3 Years Manufacturer

RM-DN5

Part No : 4171800xx-3

Signage Developer Program

The RM-DN5 is a full HD board-level digital video player designed for OEM integrators of networked signage systems. It supports the HD playback of video on HDTV and LCD monitors in commercial environments.

Applications include:

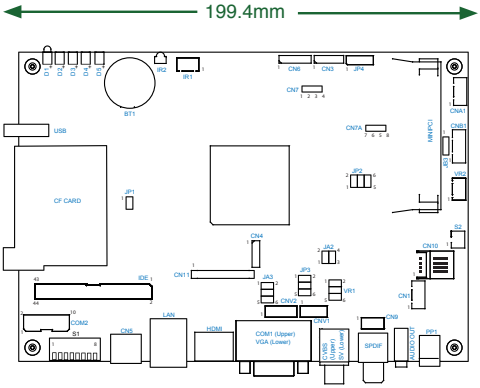
Networked signage display sytems

Features:

- HD 1080p/60
- Solid State / Compact Flash Storage
- Low Temperature & Low Power
- Content is Programmable using free DV Studio Software

Accessories:

IR remote handset	P/N 559000106-3	8-button switchmount	P/N 416101300-3
VGA to YPbPr cable	P/N 426004800-3	Audio cable	P/N 420001400-3
On/Off switch cable	P/N 426680401-3	HDMI cable	P/N 420000900-3
Volume control knob	P/N 426890500-3	DVI adapter	P/N 212201190-3
Remote Ex. cable	P/N 426450110-3		



For More Details

digitalview.com/products/
rm-dn5-digital-media-player

Video Format :
MPEG-2 (PS, TS) / MPEG-4 (AVC / H.264)
For seemless HD playback .ts format is required.

Video Output :
HDMI / VGA / YPbPr / Composite / S-Video

Still Image Format : JPEG (1920x1080)

Audio : 44.1kHz Stereo, 224 kbit/s
Audio Output : Stereo Phone Jack / Digital Coaxial

Storage Media : Compact Flash Memory Card

LEDs : Power / CF (Read/Write) / Network

Watchdog : System Reset

Real Time Clock : Battery Backup RTC

Power Requirement: DC 12v Input
Aux Power Out : 5v DC & 12v DC
Power Consumption : 500mA @12v

Operating Temperature : 0°C to 50°C
Relative Humidity : 5% - 95% Relative Humidity

Network :
RJ-45 LAN connector

Playback Functions :
Play / Stop / Pause / Repeat / Previous Track
Next Track / Volume / Mute / Loop Playback /
Sequence Play / Startup Mode / Sleep Mode

OSD Functions :
Set Date / Time / Set ID / Volume / Data Logging /
OSD Display

External I/O Ports :
RS-232 (9600, N-8-1)
USB (Content Upload)
Infra-Red (For DV IR Remote)
Remote Ext (For Button & Touch Interactivity)

Dimensions (mm) :
W:217 x D:148 x H:52

Weight (net) :
240g

Warranty : 3 Years Manufacturer

Accessories

Digital View provides a comprehensive range of accessories to complement most controllers. We provide solutions to enhance user interface, aid in remote problem solving, enable system differentiation and customization. More importantly, these accessories enable customers to build a better product solution.

Please see more information at www.digitalview.com/products/lcd-controller-accessories

IE-1000

The IE-1000 is a HD image enhancer interface board capable of driving 10-bit, 120 Hz LCD panels up to 1920 x 1200. Benefits include elimination of film judder and reduced blur caused by latent LCD response times via fast motion compensation frame interpolation. The IE-1000 is an add-on board that can be used with the SVH-1920+ LCD Controller, as well as the SVX-1920

The DisplayMark Controller provides independent validation that a monitor is currently displaying the requested video images. Utilizing a combination of pattern recognition coupled with signal validation, the DisplayMark controller provides positive confirmation on a timed or interrogation basis.

The DisplayMark controller works only as an add-on through the SVH-1920+ & SVX-1920 display controller's RS-232 port including custom firmware, and a tiny display photo sensor (<0.5 cm wide).

This exciting NEW SOLUTION is ideal for Digital Signage applications such as Public Information and Digital Advertising. Remote compliance verification of the networked system provides validation proof, higher up time, and peace of mind resulting in a better ROI.

HD-1000 & HD-2000

Hi-Definition - Serial Digital Interface adaptors enable the Digital View SVH-1920 LCD controller to support single or dual HD-SDI connections, thus providing a highly featured alternative to expensive HD-SDI monitors or external adaptor devices. Fully compliant with the SMPTE 259M-C and SMPTE 292M standards.

Single Channel	HD-1000	P/N 4160134xx-3
Dual Channel	HD-2000	P/N 4160133xx-3

HD-3000S & HD-3000

Single & Dual Channel HD-SDI Adapter
1. Supports 1.5Gbits & 3Gbits bit rate
2. Single channels input port supported
3. HD-SDI re-clock loop through output
4. HDMI (v1.3) x 1 output port
5. Stereo embedded audio support
6. On-board power on/off switch
7. AFD (Active Format Description) support

Single Channel	HD-3000S	P/N 4160164xx-3
Dual Channel	HD-3000	P/N 4160160xx-3

HD-SDI to HDMI Adaptor

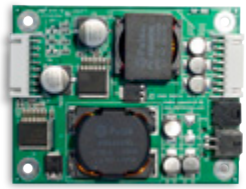
Adaptor for use with the HD-2000 and SVX-1920

Board Only P/N 4160167xx-3
Kit 70601-3

Inverter interface Board

The Inverter interface board provides interface to drive up the high current consumption panel inverter in excess of 3.5A. This board enables current of up to 8 Amps to be managed safely while retaining the capability for inverter dimming and management of the inverter enable signal according to VESA DPMS standards. Additionally, the inverter interface board provides over voltage protection via a resettable fuse when the input voltage exceeds 13V, and reverse polarity protection against accidental misconnection.

P/N 416040010-3



Power Converter Board

Enable a single power supply to support a large format LCD panel. Accepts 24v DC input and provides selectable outputs to drive the controller and LCD panel.

P/N 416013900-3

IP-50

Provides easy and direct connection to products using networks and the Internet. The IP-50 comes with a standard Ethernet connection, RS-232 interface and on-board fully programmable and customizable web server. It can be used to remotely control and monitor any Digital View RS-232 device.

P/N 586013600-3

IR Remote Control

The Digital View Remote control unit is compatible with all DV controller products. It is provided with universal control buttons that enable the control of OSD functions plus TV and media playback on DV media products. The IR sensor and cable kit are required.

P/N 559000106-3

Sensors

Ambient Light Detector

The kit provides the controller with the ability to monitor ambient light conditions and to automatically adjust the light output of the display accordingly.

Kit 70220--3 (works with SVH-190 only)

Temperature Monitor

Works with any Digital View controller that provides serial port protocol to provide remote temperature reporting (ALR/HE-1400, DVS/SP/HE-1600, SVH/HE-1920, AVP-1600 & SVX-1920). Intended for digital signage monitors to gather feedback on the operating temperature of various components within the product, but is easily adaptable for many related applications.

One sensor	Kit 70011-3
Two sensors	Kit 70012-3
Three sensors	Kit 70013-3

Audio

Audio Add-on board

A 2-watt per channel audio board with volume control via the OSD. This board is compatible with the AVP-1600, SP-1600, SVH-1920, HE-1600, HE-1920 & SVX-1920.

P/N 416940020-3

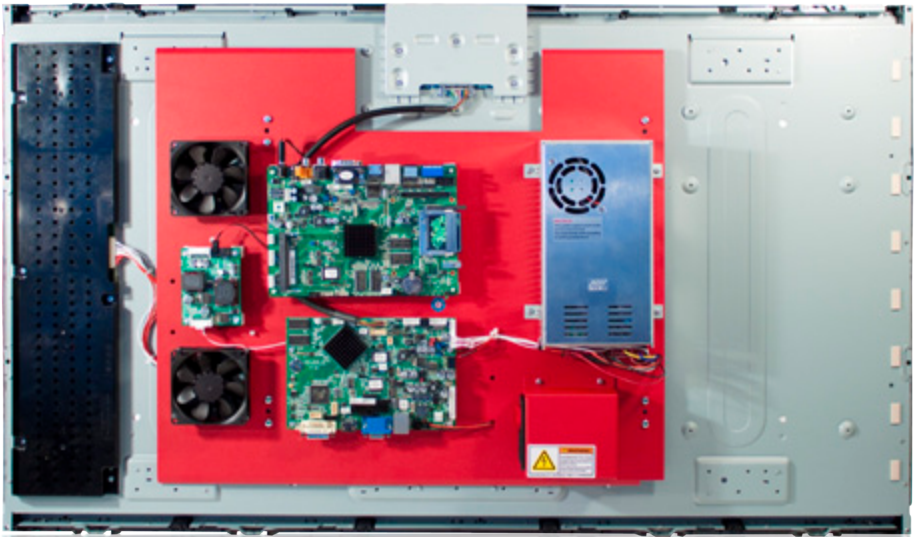
Audio Add-on board

Compatible with all DV controllers as an independent amplifier with an external potentiometer for volume adjustment.

P/N 416950001-3

Integre™

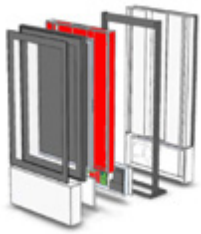
Display Chassis



Integre™ Turns an LCD Panel into a Display System

As an All-in-One chassis system for 26”-82” Samsung LCD Panels, Integre simplifies the integration and deployment of large format displays. Integre offers the reliability, flexibility and quality critical to public displays

- Accelerates display system design and deployment
- Designed for 24/7 reliability
- Provides monitoring, control and feedback
- Offers customization options to meet specific needs



Speeds Up Design And Time To Market

- Integre™ + panel = complete working open-frame display
- Designed for standards compliance
- Suitable for portrait or landscape installations

Designed For Reliability

- High capacity high quality power supplies with options for 2nd supply with load balancing and fail-over protection
- Temperature & airflow management
- Professional grade electronics
- Manufactured and supported in USA

Customization

- A range of LCD controllers and digital media players available
- RS-232 and Ethernet connection with a comprehensive command set for system monitoring, control and feedback
- Aluminum base plate heavy gauge option

Peace Of Mind

- Integre is a consistent and proven platform designed for professional applications
- 3 year warranty
- Endorsed by Samsung

Use For...

- Digital Signage
- Video-Walls
- Telepresence
- Broadcast
- Hospitality
- Medical
- Multi-Viewer
- Command & Control Centers
- Military

Coming Soon

ALR-1920-SDI
Single Board controller solution for HDMI, DisplayPort, VGA and 3G-SDI (with loop-through) inputs for LCD panels up to 1920 x 1200

ALR-1920-120
Single board controller support for 120Hz panels providing HDMI, DisplayPort and VGA inputs.

IE-1010
Controller adaptor board for 120Hz panels.

M3-320
Network enabled media-player supporting standard definition video including wide-screen at 720x400

Support for
> DDC-Ci
> Closed Caption

Terminology

Aspect Ratio
The ratio of the horizontal to the vertical measurement or resolution of the display. 1:1, 4:3, 16:9 and 16:10 are the most common aspect ratios but with new aspect ratios are being introduced with banner and custom cut panels.

Bar or Banner Displays
These are also sometimes called stretch or super-wide displays and provide an aspect ratio of greater than 4:1.

BLU
Simply an abbreviation for Backlight Unit. The market is progressively moving from CCFT/CFL type backlights to LED.

Connection Diagram
A one page diagram showing how to connect and set a controller for a specific LCD panel. These are available for free download from the Digital View Controller Solution Generator at www.digitalview.com/csg.

Controller
In this context it is the interface electronics between a video signal and an LCD panel, it is typically used for signal conversion, image adjustment, scaling and other image control functions.

Cut panel or Cut LCD
These are larger panels that have been custom cut to meet size or aspect ratio requirements.

Fully-buffered
This is a term we use for a controller design that passes the video through a full page (screen) memory buffer for processing before being output to the panel. It is generally important when advanced image processing is required.

Hot buttons
Buttons set to perform a specific function without having to go through on-screen menus, for example switching to a different input signal.

PiP (Picture-in-Picture)
The ability to show two input signals on the display at the same time, for example one input shown full screen and the other in a window. Depending on the controller the transparency of the top window can be altered. Variations on this include Picture-beside-Picture so both inputs are shown side by side without overlapping.

PWM inverter control
This is Pulse Width Modulation and refers to a method for adjusting the brightness on a CCFT/CFL type backlight.

Scaling
When an input signal resolution is larger or smaller than the target panel it may be scaled to match the panel resolution.

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