



**BVB SERIES** 

The New Standard for Television & Film

## DIGITAL FULL HDTV LCD **VIDEO MONITORS**

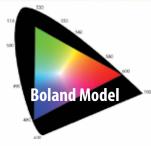




## Quality, New Technology, Worldwide Formats.

Standard Mod

You'll see amazing images with enhanced Ultra Pixel picture quality in varying light and viewing conditions. Boland is constantly pushing the boundaries in new technology, outfitting our LCD monitors with the exact color gamut and ultra deep blacks. Red, green, and blue stability is guaranteed by the All-Digital 10- and 12bit Processing. From the Full Resolution 72" monitors to the smallest and light-weight field monitors, you can count on Boland image precision. From Broadcast to Boardroom, we also provide custom work with multiple options, timely delivery, long warranty, and friendly customer service. See our growing line of LED models!





D65: x=0.313, v=0.329

R: x=0.640, y=0.330 G: x=0.300, y=0.600

B: x=0.150, y=0.060



 Extended Color Spectrum / Wide Color Gamut Most LCD Monitors have a span of only 40%. Boland monitors have Rec 709 primaries and

controlled SMPTE C / D65 white color temperature, providing deep rich colors against ultra deep blacks.

- All-Digital 10- & 12-bit Processing, 8-bit & 10-bit models
- Low Latency Processing for lip-sync control
- **Color Presets with Adjustable Whites & Blacks:**

Optional external Automatic Probe Calibration System • 9300° • 3200° • 6500° • 8000°



- Very Wide Viewing Angles, most are 178°
- High Resolution Digital Adaptive Comb Filters
- Aspect Ratios: 16:9, 4:3, and Variable Aspect ratio Images

- Wide-ranging Applications
- Remote and OB Vans
- Film & TV Field Production

- Museums Jibs, Viewfinders, & Cranes

Public Safety

- ENG Vans & Helicopters Control Rooms
- Lecterns, Lobbies, & Conf. Rooms
   Entertainment Systems



## • Full HD with built-in support for all video formats

- All standard HDTV, SDTV, & PC resolutions
- 3GSDI, Dual Link, HD SDI, SD SDI, DVI, HDMI Digital Inputs (SMPTE 259/274/292/296)
- Analog Video Inputs: Composite, Y/C, YPbPr/CrCb, PC VGA (EIA, CCIR, VESA)
- PC Video Resolution Modes: EGA up to WUXGA (640x ~ 1920x)





## • Diagonal Line Compensation Process Circuit using Emmy-Winning Directional Correlation DeInterlacing (DCDi)(Faroudja)

- Adjustable Scans: H&V Sizes, Positions, Calibrated Exact Scans
- Scan Reverse (H, V mirror images) (d, DHD)
- Under/Over Scan adjustable

## Waveform, Vector, Audio, Peaking Displays

**Individually Adjustable** Windows for WFM, VEC, and up to 16 Channels of Audio

- In Monitor Display (IMD)
- Closed Captioning
- Remote Controls: InfraRed (IR), TCP I/P, & RS-232
- Lamp and LED Life up to 50,000 Hours
- Stereo Audio Options; Audio Meter & De-Embed monitor (SE models)
- Native DC or AC Mains Power
- Rack, Desk stand, Wallmount, and other Mounting Options
- Many Special Options Available for special applications.

## **Series and Models**

- True Monitoring Performance from 3G Sources (SMPTE 372 & 425) (SE and 3G Series)
- Input Compliment Varies by Series, Please Check Series for Specific Inputs
- Models are Rec 709 Color Primaries in all Sizes (Hi-Color Gamut in 12" size)
- Screens are 10-bit and 12-bit Processing
- Multiple Frame Marker and Aspect Ratio Display Choices (AFD, WSS, Auto, Manual)
- Features: Most Features with Direct Access Front Panel Buttons
- Full Remote Controls (TCP/IP, RS-232, and IR all standard)
- Calibrated Displays, SMPTE RP166 Dimmable Brightness, Contrast > 1000:1 (most models)

## **SE Series Monitors**

All SE models include Dual 3G SDI, 8 and 10 bit panels, LED Backlights on some models. All have HD HDMI/DVI(+HDCP), HD VGA, Composite and Component\* with Audio Bar Graph, Waveform, Vectorscope, Focus-Pulling Peaking, Adjustable Frame Markers, plus lots more! Most models Rec 709 compliant.

## **VB Series Monitors**

3G SDI, plus Dual Link, 8 and 10 bit panels, some with LED Backlights, HD HDMI/DVI(+HDCP), HD VGA, Composite and Component\*, IMD, Closed Captioning, 3D LUT, along with Frame Markers, RS232, TCP/IP and IR remote controls. \*Most models Rec 709 compliant.

## **HX Series Monitors**

All HD models are Dual 3G SDI, 8 and 10 bit panels, LED Backlights (some models), HD HDMI/DVI(+HDCP), HD VGA, Composite and Component, along with Frame Markers, RS232 and TCP/IP and IR controls. Sizes 15" and up accept SFP (fiber). Most models Rec 709 compliant.

## **DVI Series Monitors**

The DVI Series includes Dual HD HDMI/DVI (+HDCP) inputs combined with 8 and 10 bit panels, LED Backlights on some models, HD VGA, Composite and Component\*, with Frame Markers, RS232, TCP/IP, and IR remote controls. Most models Rec 709 compliant.

## **DHD Series Monitors**

Dual HD/SD, SDI, DVI, HD VGA, Composite and Component\* are the standard inputs on the DHD Series of Monitors, this series offers 8 and 10 bit panels and LED Backlights on some models. This series comes with scan reverse standard, RS232, and IR remote controls. Most models Rec 709 compliant.

## d, xd, and vp Series Monitors

The d, xd and vp series are the standard definition range of our wide variety of monitors. Used in all types of new and legacy applications. Coming with VGA, Composite, and other inputs, both the d series and xd series includes Scan Reverse. Also with remote control options.

## **DayBrite Series Monitors**

Boland Communications offers a broad range of distinctly configured DayBrite (very high brightness) monitors for a multitude of field, outdoor, airborne and many more applications. These monitors are fully featured versions of each series above, but with LED Backlights drastically reducing the heat and power associated with conventional fluorescent lighting. Please inquire for more details. Now in 16", 20" and 23" wide sizes (16x9)!

<sup>\*</sup>Input compliment varies by size and configuration. Please consult individual data sheets.

## VB Series and OLED The New Standard for Film and Television

The Boland VB family of monitors is comprised of *three series in one*. All models feature full resolutions of 1920x1080, Outstanding off-axis viewing, LED Backlights, Safearea Frame Markers, and In Monitor Display (IMD), plus 3G SDI, Composite, DVI, HDMI, Component, and S video Inputs.



# new

## Highlights: BVB17, BVB24, BVB25-OLED, BVB32

- 10 bit
- 4-4-4
- Wide Viewing Angles 178 (degrees symbol here)
- Waveform, Vector scope, 16 channel audio meters with de-embedder and speakers
- Dual Scopes Option
- Accepts i/p/psf @23.97,24,25,29.97, 30,59.97,60
- Dual Link
- Closed Captioning
- 3D Lookup
- SMPTE 709, SMPTE 601, EBU, and D Cinema Standard
- 25" Model Grade One OLED

# new

## Highlights: PVB17, PVB24, PVB32, PVB47

- Wide Viewing Angles 178 (degrees symbol here)
- Waveform, Vector scope, 16 channel audio meters with de-embedder and speakers
- Dual Scopes Option
- Accepts i/p/psf @23.97,24,25,29.97, 30,59.97,60
- Dual Link
- Closed Captioning
- SMPTE 709, SMPTE 601, EBU, and D Cinema Standards



## \*Input compliment varies by size and configuration. Please consult individual data sheets.

## Highlights: LVB17, LVB23

- Accepts i/p/psf @23.97,24,25,29.97, 30,59.97,60
- 3G SDI, HDMI, DVI, Composite, Component, Y/C
- $\bullet \ \ \ Value \ Model, perfect for confidence \ monitoring \ in \ field \ or \ studio$
- Variable Color Temperature Settings
- 1920x1080
- · Pixel to Pixel Mapping

## Wayofrom Voctorscope Audio Par Graph Poaking Markers

**Waveform and Vectorscope** 

- Wavefrom, Vectorscope, Audio Bar Graph, Peaking, Markers
- 3G/HD/SD SDI, HD HDMI+HDCP Compatible Inputs, HD VGA, Composite and Component\*

of LCD Monitors that includes Audio Bargraph,

The Boland SE Series Is a Full Featured Line

- Rec 709 Primaries Most models
- 10-bit Screens / 12-bit Processing
- Multiple Aspect Ratios

**SE Series** 

- Frame Markers and Remote Controls are standard (TCP/IP, RS 232, and IR)
- LED Available in Many Different Models

## **SE Models**

Screen Sizes Range from 15" - 72"
Twins Available in 10"



## 1080p 3G SDI LCD Video Monitors

- Ultra High Contrast, True Blacks
- Individually Selectable Waveform, Vectorscope,
   Audio Meters for over or alongside picture display
- Metering and Monitoring of up to 16 Embedded Audio Channels
- Viewing Angles 178°
- Industry Leading Backlight Dimming Brightness Control
- Very Low Latency, Response Time 6 (G-G)
- Fully Adjustable Color Temps & Gray-Scale Tracking
- All Models containing "L" have LED Backlights
- Probe Connection for Auto Calibration

## **SE Stand Out Features:**

- Waveform and Vectorscope size & position
- Audio Bar Graph & Speaker/Phones (16 Channels)
- Peaking & Sharpness
- Markers & Aspects





Displays Above Show: Audio Bar Graph, Waveform, Vectorscope, Peaking and more!







## HX Series The Boland HX Series Features

- Full Monitoring Performance from 3G Sources (SMPTE 372 & 425)
- 3G Model Inputs are 3G/HD/SD-SDI, HD HDMI-DVI [with HDCP], HD VGA, 2x Composite & Component\*
- Most Models are Rec 709
- Screens are 10-bit with 12-bit Processing (8-bit screens under 26")
- Multiple Frame Marker and Aspect Ratio Display Choices
- Features: Most Features Accessable with Direct Access Front Panel Buttons
- Full Remote Controls (TCP/IP, RS-232, and IR all standard)
- Calibrated Displays, SMPTE RP166 Dimmable Brightness, Contrast > 1000:1



## **HX Series**

Screen Sizes Range from 15" - 72"

- 1920 x 1080 Full Definition
- Screen Brightness 100-500 cd/m<sup>2</sup>
- Very High Contrast 1400:1
- Response Time 5 ms
- Probe Connections for Auto Calibration

## **HX Stand Out Features**

- 3G, SDI, SFP (fiber)
- Digital 12-bit Processing
- Full digital 8, 10-bit Displays, up to 1.06 Billion Colors
- Exact Color Gamut, Rec 709 Primaries
- Very Low Latency





## **Additional Options**

- Twin Rackmounts Available in Sizes: 8.4", 9", & 10"
- Stands
- Customizable

## **DVI Series**High Image Quality Monitors for Signage and Utility (no SDI)

- 2x HD HDMI/DVI [+HDCP] Compatible Inputs, HD VGA, Composite and Component\*
- Rec 709 Primaries (or Hi Color Gamut for 12" sizes)
- 10 bit Screens / 12 bit Processing (8 bit for screens up to 26")
- Multiple Aspect Ratios and Multiple Frame Markers
- Full Remotes: TCP/IP, RS-232, and IR
- HDMI and DVI Functions Fully Interchangable (Including HDCP, using adaptor plugs or cables)



## **DVI Models**

Screen Sizes Range from 82" to 8.4" Twins Available in 10", 9", & 8.4"



## Full HD 1080p LCD Video Monitors

- High & Standard Definition
- Wide Viewing Angles
- Very Bright to Control Room Dim Adjustable
- Very Fast Response Time
- Digital 12-bit Processing
- Precise Color Gamut
- Rec 709 Primaries
- Factory Pre-Calibrated
- Full Two Year Warranty
- LED Backlights on most Models



- Dual HD HDMI/DVI [+HDCP] Compatible inputs
- Frame Markers
- Full Remote Controls (TCP/IP, 232, IR)



\*Input compliment varies by size and configuration. Please consult individual data sheets.

DVI SERIES

<sup>\*</sup>Input compliment varies by size and configuration. Please consult individual data sheets.

Features scan reverse for teleprompting. Boland Broadcast LCD video monitors boast support of all worldwide video formats with PC resolutions up to WUXGA, 100% Digital Processing and optional SD - SDI Digital inputs. Featuring Wide Viewing Angles and Rec 709 Color Gamut, these models deliver outstanding images. Most of these models are also available in DayBrite.

## **Standard Definition Models**

- Available sizes: 8", 10", 12", 15", 19"
- 4:3 aspect
- Scan Reverse for Telepromting
- Standard Definition Video Resolution, 450 TVL
- Full Wide-Aperture LCD for Superior 178° View Angles
- Digital 10-bit processing, 16.7 million colors
- Accurate Color, D65 Whites

Check out our brand new 7"x2 twin unit!

## ⊕boland)

**RACKMOUNT** 

HD, vp, HX, and BL Series

• Rec 709 primaries

 10 bit processing Multiple Aspect Ratios Safearea Frame Markers

LED Backlights





4x3

4x3: 8", 10", 12" 15", 19"

## 16x9 9", 15", 17", 18", 20!

7", 8", 9", and 10" available as single or twin units.

## **BL7 SDIx2 - Affordable Rackmount 7" Twin Monitors**

Available in multiple sizes and as single or twin units. Complete with 3G SDI, DVI, HDMI, Component, Composite, VGA, and or S Video inputs, these rack mounted monitors are perfect for all confidence monitoring

- 3G SDI, HDMI, YPbPr, AV
- Safearea Markers

needs. Available size: 7", 8", 9", 10", 12", 15", 17", 18", 19", and 20"

- Multiple Color Temperatures
- Red, Green, Blue Only
- Perfect Confidence Monitoring

xd084WVA & Twin d084WVA & Twin xv084 & Twin



## **Single and Dual Rackmount Monitors**

- Available in both 16x9 and 4x3 native aspect ratios
- Wide Viewing Angles H&V
- High Contrast Ratio
- Color Temperature Adjustments
- HD SDI, Composite, Component, DVI, and VGA inputs
- Optional: Scan Reverse Imaging

## **Camera Top Monitor**

## BL7 SDI - Affordable Lightweight 3G SDI monitor - 7"

- Carrying case, Hood, and Battery Plate included
- 3G SDI, HDMI, YPbPr, AV
- Peaking assist, False Color, Histogram and Exposure features
- 16x9 aspect ratio



- Available sizes: 8", 10", 12", 15", 19"
- SDI Inputs

TELEPROMPTING

- 4:3 aspect
- Scan Reverse for Telepromting
- Wide Viewing Angles; World-Wide TV & VESA Standards
- Digital 12 bit Processing,)
- Exact Native Rec 709 (Hi Color Gamut 12")
- Factory Calibrated D65 White & Grey Scales (Non-Volatile)
- Boland's Industry-Famous Very Low Latency



\*Input compliment varies by size and configuration. Please consult individual data sheets.

**boland** • 800-918-9090 • +1-949-465-9911 • www.bolandcom.com

## **Ultra-High Bright LCD Monitors for Direct Sunlight**

Boland DayBrite LCD Monitors with LED Backlights are ideal for all high ambient light conditions in challenging viewing environments. These monitors accept all worldwide video formats including PC resolutions up to WUXGA with 100% Digital Processing. Featuring excellent Viewing Angles and Color Gamut, these models deliver quality images outdoors. Rugged but lightweight with non-glare protective screens, Boland DayBrites meet your portable needs. Models dim 100:1 or more; LED Life>50,000 hours. Sizes: 47" to 8".

No Sun Shade Needed!

## 47", 23", 20", and 16" Widescreen DayBrite LED Monitors

- Available in HX and DVI Series Models
- 1920x1080 High & Standard Definition Video Monitors
- Ultra-High Bright 1500 nts (cd/m²), Dimming 100:1 (typical)
- High Contrast Ratios, 750~1400:1
- Viewing Angles 160°~178°
- Very High Speed Response Time: 2 ms
- LED Life 50,000+ Hours
- Very Low Latency
- Adjustable Color Temp (includes external Probe connection)





DHD121LDB

## 19", 15", 12" and 10" LED DayBrite LCD Monitors

- Under/Over Scanning; H/V Scan Reverse (mirror) (DHD & d Series)
- 19" 1280 x 1024 Hi Resolution 1250 nts, 2000:1, Wide Viewing Angle
- 15" 1024x768 Hi Resolution 1500 nts (cd/m<sup>2</sup>), 300:1 Dimming Viewing Angle 160+°, Contrast 700:1 High Speed Response Time, 2.3 ms
- 12" LED 1024x768 Hi Res Ultra-High Bright 1500 nts White LED B/L runs cool, ideal for battery use Contrast 700:1, Viewing Angles: 160°/160°
- 10" LED 1024x768 Hi Res Ultra-High Bright 1500 nts Contrast 1200:1, Viewing Angle 176°



## BOLAND



- · Rec 709 Color
- Best Selling!
- 3G / HD /SD /SDI
- Frame Markers
- Perfect for using Battery Power
- High Resolution 1024 x 768
- Ultra-High Bright 1500 nts (cd/m<sup>2</sup>), 600:1 Dimming
- High Contrast Ratio
- Viewing Angles: 170°!
- Lamp Life: 50,000+ Hours



HD84LDB-P

## **Custom Built Monitors** & Digital Video Walls

Built in America, Boland's custom-made models have been featured in such facilities as the Pentagon, the 911 Memorial, and the Smithsonian. Whatever the specifications call for, Boland will deliver exacting standards. Custom color, size, or extra-special technical request? No problem. Call any time to learn more

## Models PSM46, PSM55



## **Ultra Thin Bezel Video Walls**

Great for large video walls, our ultra thin bezel panels feature LED backlights (standard or high brightness), and can be configured in just about any pattern you dream up.

Sizes available are 46" and 55", both with an approximate bezel width of 2.7mm. Built -in software allows the user to scale / tile across up to 16 monitors without an expensive third party scaler.



## Custom models made in all sizes. colors, and configurations

- Many NVG compatible models for Rotor craft and ENG models
- Medical, ENG, Survey, Public Safety; Boland offers many flexible input configurations
- Standard and DayBrite
- 12 & 28 Volt Power (9-36v)



## **ACCESSORIES**

Boland has an array of accessories to compliment its line of LCD monitors for use in a host of contexts. Below are just a few applications that demonstrate the flexibility of Boland monitors. Full list of options are found in the price list.



**RACKMOUNT EARS, PLATES, & FRAMES** (up to 20")







PEDESTAL STANDS: All Sizes

## **boland** is dependable, delivering quality built with new technology, so reach for excellence.

Partial Client List: **Broadcast Networks & Stations** ABC TV Broadcast Ops & Engr Armed Forces Network USA (Europe, M. East, Asia) All Mobile Video (Sports) **CBC** Toronto **CBS Television Network** ESPN Network
Fox News, Sports, Studios
Inside NASCAR (Showtime)
KAKE TV KCBS TV KCRA TV KDFW TV KDRV TV KERA TV KETV TV KGTV TV KHSB TV KIFI TV KMOV TV KMTV TV **KOMO TV KRQE TV** 

**KUSA TV** KWTV TV Korean Broadcasting System MSNBC-TV Mutual Boasting System (Korea) National Broadcasting Co. NHK (Japan)
Television New Zealand Turner Broadcasting System **Univision Network** 

WBFS TV WFOR TV WBNS TV WBRC TV WCMH TV WCOL TV WCVB TV

KSHB TV

KTLA TV

KTTV TV

WRTV TV WTMJ TV WTOC TV **WUSA TV WXYZ TV ZDF Mainz** 

**Business Aviation Customers** A&R Jet

Aero Services Aeronautic Investments Aeronautica Industrial, Spain Aircraft Specialists Airshow Inc. Avionics Authority **Boeing Company** Bombardier Aerospace/Learjet Aerial Films Agusta Aerospace

Helicopter (news, surveilance, military) Airborne Energy Solutions

Airborne Systems, Japan Associated Air Center Atlanta Police Dept Bell Helicopters, Textron Corp FLIR Systems Wescam, Inc.

Industrial Acoustical Design Group Amerisource Bergen

**Analog Devices** Applied Kinetics Applied Materials Applied Minds
ASC Companies Aspect Communications Autonomous Solutions Bethlehem Steel Corp. Cisco Systems, Inc. Otis Elevator

**Film Production** Actual Vision Ltd American Society of Cinematograph

Athalys Media Belgium Kelly's Eye, Inc.

Panavision (world wide) Paramount Pictures Sony Pictures Jim Henson Productions Adam Sandler Productions Warner Brothers

Government, other Bureau of Land Managment County of Los Angeles Fire Dept Crash Rescue (Fire Trucks) US Department of Energy

Medical Airway Cam Technologies Boston Scientific

Video Production Admiral Video Ascent Media ATK Services (Academy Awards) Bank Of America

Law Enforcement Alachua Co Sheriff Arizona Dept Public Safety City of Miami City of Santa Monica Oránge Co. Sheriff, FL Orange Co. Sheriff, CA Alameda Co. Sheriff, CA Los Angeles Chief Police (LAPD)

MIKAT Surveill' Systems (Athens)

National Parks & Museums Albright Training Center Anitech Systems Army Corps of Engineers Bronx Zoo Disney Imagineering
Disney M.G.M. Attractions Guggenheim Museum Moscone Center NC Natural History Schedd Aquarium Smithsonian Institution (Air & Space, Natural Hist, etc)

Military Aerlyper, Spain Aeronautical Radio (ARINC) Airscan Aviation Svcs (private) Analytic Services (private) Anteon Corporation (gov't) Ball Aerospace General Dynamics GOI-MOD Rockwell Collins

Raytheon IDS, Flt Opts Joint Forces Staff College United States Air Force Arnold AFB United States Army

Aberdeen Test Center ARNC Rucker **US Strategic Command** 

## Video Equipment Dealers

**Major Shows** American Idol **Emmys** George Lopez Golden Globes Grammys Jay Leno Jimmy Kimmel Rikki Lake Rose Parade Super Bowl The Bachelor The Talk The View Wheel of Fortune)

Major Sports & Mobile F&F Game Creek MTV Supershooters NEP **Sweetwater Digital** Touring Video Video Equipment Rentals

709

WCG

3G

WVA

HDSDI

LED

**FHD** 

**EBU** 

SMPTEC

16:9

DB

HiCR

WUXGA

PiP

**HDCP** 

TCP/IP

IRS-232

IR

6500

AC/DC

**OB** 

**HDMI** 

10 bit

**Probe** 

**VESA** 

SR

DCDi





