

Marshall Electronics



Advanced 6.5" and 7"
Portable Camera-Top / Field Monitors

Introduction

For almost three decades, **Marshall Electronics** has specialized in the development, manufacturing, and distribution of leading edge technology products for a wide range of professional Audio / Video applications. Marshall introduced one of the world's first LCD Broadcast monitors at NAB in 1999, when many of our competitors were nonexistent or unknown. Since then, Marshall's product offerings have grown to meet the demands of customers worldwide. We continue to offer the widest lineup of professional rack-mount and stand-alone LCD monitors in the industry.

Our products are designed, engineered, and assembled in the United States. Marshall's corporate office, R&D Center, and Production facilities are located within a few miles of Hollywood, Burbank, and Universal City, which make Los Angeles the "Entertainment Capital of the World." These products are designed specifically for the end-user *by end-users*, without compromise on service, quality, and innovation.

Marshall Electronics and its employees are dedicated to providing the highest quality and most technically advanced products with unparalleled customer service. Whether you're professional or just getting started, we hope you will continue to look to Marshall for all of your Audio / Video needs.

- ▶ **Quality**
- ▶ **Innovation**
- ▶ **Experience**
- ▶ **Customer Service**
- ▶ **Designed, Engineered, and Assembled in the USA**

This brochure features our advanced 6.5" and 7" Portable Field / Camera-Top monitors. These high-tech monitors are a great alternative to small-sized LCD screens and/or electronic viewfinders found on today's cameras. We understand that it's important to have the ability to monitor what you're capturing during the filmmaking process. This is why we designed and engineered these fully-featured monitors to offer portability, flexibility, and affordability. At Marshall, good things come in all sizes.

V-LCD70P-HDA 7" Lightweight High Resolution Portable Field / Camera-Top Monitor



The **V-LCD70P-HDA** is the latest addition to Marshall's successful and popular line of portable field / camera-top monitors. This monitor introduces a new durable and lightweight design, weighing in at only 1.3 pounds. It also features our completely digital TFT-MegaPixel high resolution LCD screen with 1.2 million pixels, 4-pin XLR power jack, and optical grade polycarbonate screen protection. Analog signals are digitized using advanced 10-bit processing with 4x oversampling and adaptive 5-line comb filter. This monitor also includes a variety of screen formats and markers, four user-configurable front panel function buttons, RGB Check Field / Field Detect and RGB gain and bias control. Two other major features include Marshall's new False Color and Peaking filters. A variety of battery adapters are available for each configuration*.

- High resolution 800 x 480 LCD panel
- Durable, thin, and lightweight construction
- 250 cd/m² brightness, 400:1 contrast ratio
- 4 user-configurable function buttons
- Scratch Resistant Protective Screen
- RGB gain and bias control
- False Color On/Off
- Peaking Filter On/Off
- RGB Check Field/Field Detect
- 15:9, 16:9, 4:3, Pixel-to-Pixel modes
- Variety of Markers
- Variety of User-Replaceable Battery Adapters available*

**1.2 TFT
MEGAPIXEL**

Specifications	Display (Viewing Area)	7.0-inch Diagonal (6.496" x 4.118") (165mm x 104.6mm)	Dimensions	6.84" w x 5.67" h x 1.57" d (173mm x 143 mm x 40 mm)
	Resolution (Pixels)	800 x 480	Power Consumption	Approx. 12W (12V @ 3.3A power supply included)
	Viewing Angle	L/R: 140° / U/D: 100°	Weight (approx.)	1.3 lbs. (0.590 kg)
	Pixel Pitch (mm)	0.1905mm(H) x 0.1905mm(V)	User-Replaceable Battery Adapters	
	Brightness (cd/m ²)	250	"CM" - (Canon), "JM" - (JVC), "PM" - (Panasonic), "PV" - (Panasonic)	
	Contrast Ratio	400:1	Available Battery Adapter Configurations*	
	Inputs	Composite x 1, Component x 1	"SB" - (Sony B series), "SL" - (Sony L series), "SM" - (Sony M series)	
	Loop-through outputs	Composite x 1, Component x 1	Non User-Replaceable Battery Adapters*	
			"AB" - (Anton/Bauer) / "VM" - (V-Mount)	

*V-Mount ("VM") and Anton/Bauer ("AB") battery configurations require factory installation and are NOT user-replaceable. There is also a cost difference with larger batteries.

V-LCD70P-HDMI 7" Lightweight High Resolution Portable Field / Camera-Top Monitor



The **V-LCD70P-HDMI** offers the same great features found in our entry level HDA model, but provides an HDMI input for added flexibility. It also features our completely digital TFT-MegaPixel high resolution LCD screen with 1.2 million pixels, 4-pin XLR power jack, and optical grade polycarbonate screen protection. Analog signals are digitized using advanced 10-bit processing with 4x oversampling and adaptive 5-line comb filter. This monitor also includes a variety of screen formats and markers, four user-configurable front panel function buttons, RGB Check Field / Field Detect and RGB gain and bias control. Two other major features include Marshall's new False Color and Peaking filters. A variety of battery adapters are available for each configuration*.

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	Viewing Angle	L/R: 140° / U/D: 100°	Weight (approx.)	1.3 lbs. (0.590 kg)
	Pixel Pitch (mm)	0.1905mm(H) x 0.1905mm(V)	User-Replaceable Battery Adapters	
	Brightness (cd/m ²)	250	"CM" - (Canon), "JM" - (JVC), "PM" - (Panasonic), "PV" - (Panasonic)	
	Contrast Ratio	400:1	Available Battery Adapter Configurations*	
	Inputs	Composite x 1, Component x 1, HDMI x 1	"SB" - (Sony B series), "SL" - (Sony L series), "SM" - (Sony M series)	
	Loop-through outputs	Composite x 1, Component x 1	Non User-Replaceable Battery Adapters*	
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V-LCD70P-3GSDI 7" Lightweight High Resolution Portable Field / Camera-Top Monitor



The **V-LCD70P-3GSDI** offers the same great features found in our entry level HDA model, but adds a 3G/HD/SD input for compatibility with uncompressed 1080p digital cinema and television formats. It also features our completely digital TFT-MegaPixel high resolution LCD screen with 1.2 million pixels, 4-pin XLR power jack, and optical grade polycarbonate screen protection. Analog signals are digitized using advanced 10-bit processing with 4x oversampling and adaptive 5-line comb filter. This monitor also includes a variety of screen formats and markers, four user-configurable front panel function buttons, RGB Check Field / Field Detect and RGB gain and bias control. A variety of battery adapters are available for each configuration*.

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- 4 user-configurable function buttons
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- False Color On/Off
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- RGB Check Field/Field Detect
- 15:9, 16:9, 4:3, Pixel-to-Pixel modes
- Variety of Markers
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	Viewing Angle	L/R: 140° / U/D: 100°	Weight (approx.)	1.3 lbs. (0.590 kg)
	Pixel Pitch (mm)	0.1905mm(H) x 0.1905mm(V)	User-Replaceable Battery Adapters	
	Brightness (cd/m ²)	250	"CM" - (Canon), "JM" - (JVC), "PM" - (Panasonic), "PV" - (Panasonic)	
	Contrast Ratio	400:1	Available Battery Adapter Configurations*	
	Inputs	Composite x 1, Component x 1, 3G/HD/SDI x 1	"SB" - (Sony B series), "SL" - (Sony L series), "SM" - (Sony M series)	
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SUPER TRANSPARENT

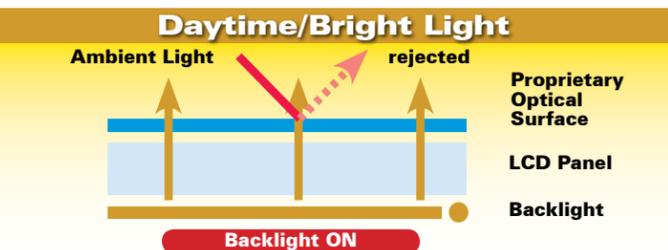
OUTDOOR MONITORS



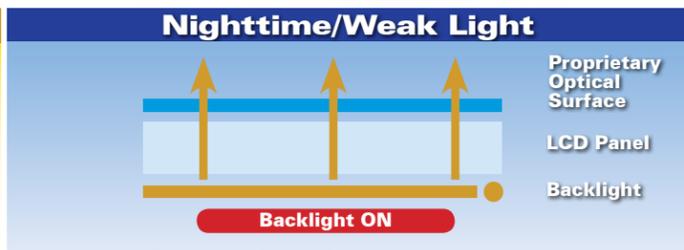
Designed specifically for outdoor applications and challenging viewing environments

Proprietary Optical Surface technology passes backlight, but rejects ambient light while minimizing surface reflection

Marshall Electronics offers a full line of Super Transflective Outdoor Monitors, designed specifically for outdoor applications with high ambient light. Our technology minimizes surface reflection of both outdoor and indoor light, while featuring a much wider color reproduction range than typical transflective/reflective LCDs or even those with increased backlight performance. These outdoor super-transmissive LCDs provide improved visibility by producing high-contrast images and a wider viewing angle, even under diverse and challenging lighting environments. This innovative technology dramatically boosts the efficiency of the LCD backlight's light utilization, while maintaining extended temperature ratings and low power consumption for outdoor operation.



Proprietary Optical Surface passes backlight, but rejects ambient light.



Proprietary Optical Surface passes backlight.

V-LCD651ST-HDA 6.5" Lightweight High Resolution Super Transflective Portable Field / Camera-Top Monitor



The V-LCD651ST-HDA base model introduces a new durable and lightweight design, weighing in at only 1.3 pounds. It also features our completely digital TFT-MegaPixel high resolution LCD screen with 2.4 million pixels, 4-pin XLR power jack, and optical-grade polycarbonate screen protection. Analog signals are digitized using advanced 10-bit processing with 4x oversampling and adaptive 5-line comb filter. This monitor also includes a variety of screen formats and markers, four user-configurable front panel function buttons, RGB Check Field / Field Detect and RGB gain and bias control. Two other major features include Marshall's new False Color and Peaking filters. A variety of battery adapters are available for each configuration.*

- Super Transflective 1024 x 768 LCD panel
- Durable, thin, and lightweight construction
- 650 cd/m² brightness, 500:1 contrast ratio
- 4 user-configurable function buttons
- RGB gain and bias control
- Optional Heavy-Duty Protective Shield
- False Color On/Off
- Peaking Filter On/Off
- RGB Check Field/Field Detect
- 16:9, 4:3, Pixel-to-Pixel modes
- Variety of Markers
- Variety of User-Replaceable Battery Adapters available*

Specifications	Display (Viewing Area)	6.5-inch Diagonal (132.096mm x 99.072mm)	Dimensions	6.8" w x 6.0" h x 1.9" d
	Resolution (Pixels)	1024 x 768	Power Consumption	Approx. 15W (12V @ 5A power supply included)
	Viewing Angle	L/R: 160° / U/D: 140°	Weight (approx.)	1.3 lbs. (0.590 kg)
	Pixel Pitch (mm)	0.129mm(H) x 0.129mm(V)	User-Replaceable Battery Adapters	
	Brightness (cd/m ²)	650	"CM" - (Canon), "JM" - (JVC), "PM" - (Panasonic), "PV" - (Panasonic)	
	Contrast Ratio	500:1	Available Battery Adapter Configurations*	
	Inputs	Composite x 1, Component x 1	"SB" - (Sony B series), "SL" - (Sony L series), "SM" - (Sony M series)	
	Loop-through outputs	Composite x 1, Component x 1	Non User-Replaceable Battery Adapters*	
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V-LCD651ST-HDMI 6.5" Lightweight High Resolution Super Transflective Portable Field / Camera-Top Monitor



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	Viewing Angle	L/R: 160° / U/D: 140°	Weight (approx.)	1.3 lbs. (0.590 kg)
	Pixel Pitch (mm)	0.129mm(H) x 0.129mm(V)	User-Replaceable Battery Adapters	
	Brightness (cd/m ²)	650	"CM" - (Canon), "JM" - (JVC), "PM" - (Panasonic), "PV" - (Panasonic)	
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Feature Explanation

False Colors

The **False Color** filter is used to aid in the setting of camera exposure.

As the camera Iris is adjusted, elements of the image will change color based on the luminance or brightness values. This enables proper exposure to be achieved without the use of costly, complicated external test equipment.

To best utilize this feature, you must understand the color chart and have a basic understanding of camera exposure. Normally, when shooting subjects like people, it is common practice to set exposure of faces to the equivalent of approximately 56 IRE. The False Color filter will show this area as the color PINK on the monitor. Therefore, as you increase exposure (open the IRIS), your subject will change color as indicated on the chart: PINK, then GREY, then a few shades of YELLOW. Overexposed subjects (above 101 IRE) on the monitor will be shown as RED. In addition, underexposed subjects will show as DEEP-BLUE to DARK-BLUE, with clipped-blacks indicated with a FUCHSIA-like color. Lastly, the color GREEN is used to indicate elements of the image that are approximately 45 IRE. This represents a "neutral" or "mid-level" exposure commonly used for objects (not people).



CAMERA FEED WITHOUT FILTER	WITH FALSE COLOR FILTER	
		OVEREXPOSED Overexposed objects will display as RED
		UNDEREXPOSED Underexposed objects show as DEEP-BLUE to DARK-BLUE
		PROPERLY EXPOSED Properly exposed objects will display elements of GREEN and PINK

Peaking Filter (Focus Assist)

The **Peaking Filter** is used to aid the camera operator in obtaining the sharpest possible picture. When activated, all color will be removed from the display and a black-and-white image will remain. The internal processor will display RED color on the screen where sharp edges appear. When the camera operator adjusts (or "racks") the focus control (on the camera lens), different parts of the image will have RED colored edges. This indicates that this portion of the image is sharp or in focus. Final focus is achieved by racking the camera lens focus control back and forth until the desired portion of the image has RED colored edges. Please note that this feature is most effective when the subject is properly exposed and contains enough contrast to be processed.

SUBJECT OUT-OF-FOCUS WITH FILTER OFF	SUBJECT IN-FOCUS WITH FILTER OFF
SUBJECT OUT-OF-FOCUS WITH FILTER ON	SUBJECT IN-FOCUS WITH FILTER ON

Accessories



Optional Heavy-Duty 6.5" Protective Shield
V-LCD-PS65



Camera Hot Shoe Mount
V-LCD-MT-01



Camera Mounts
V-NF1105
V-DG1108-CA
V-MG1106



HDMI Extender
V-X-HDMI

6.5" and 7" Monitor Battery Compatibility

MARSHALL MOUNTING PLATE ADAPTER	BATTERY TYPE	RECOMMENDED BATTERY / VOLTAGE
Field-Interchangeable Battery Adapter Options		
 CM Part # 0071-1307-A	 Canon	Canon BP-970G 7.2V
 JM Part # 0071-1308-A	 JVC	JVC BN-V438U 7.2V
 PM Part # 0071-1306-A	 Panasonic	Panasonic CGA-D54 7.2V
 PV Part # 0071-1309-A	 Panasonic	Panasonic VW-VBG6 7.2V
 SB Part # 0071-1305-A	 Sony B Series	Sony BP-460 14.4V
 SM Part # 0071-1304-A	 Sony M Series	Sony NP-QM91 7.2V
 SL Part # 0071-1303-A	 Sony L Series	Sony NP-F970 7.2V
Factory Configured Battery Adapter Options*		
 AB <i>(Uses Anton Bauer Gold Mount plate)</i> Part # V-ABA-02	 Anton Bauer	Anton Bauer Hytron 50 14.4V
 VM <i>(Uses IDX plate with riser)</i> Part # IDX-M-EB-RAW	 V-Mount	IDX E75 14.4V

Features, specifications, pricing and dimensions are subject to change without notice. Physical appearance of products may vary slightly from images shown in this brochure. Please visit LCDRACKS.com for updates and information.

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