# Marshall LCD Monitors

A/V · CCTV · Industrial · Machine Vision



# Marshall

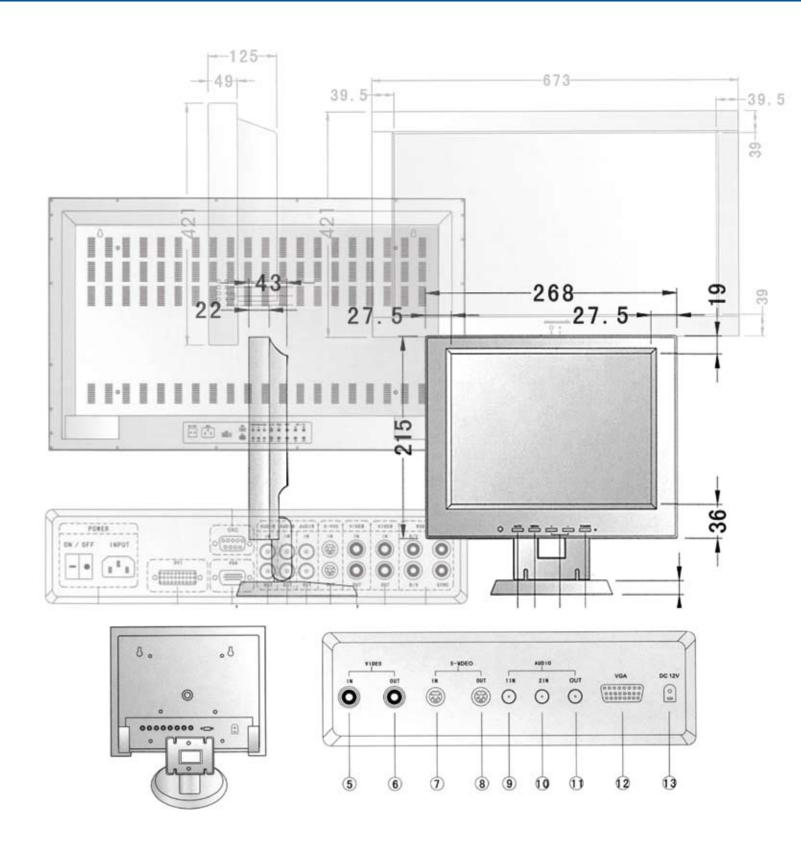
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Welcome to Marshall's Industrial Video & Security Division. The following pages include detailed information on our Lynx Universal Monitor Series and Portable ATSC Monitors.

Ranging in screen sizes from 7 to 26 inches, Marshall monitors offer an economic price point and high performance features for security and safety surveillance, CCTV, or any application requiring a high quality, professional-grade LCD monitor. Our new ATSC 16:9 field monitors comply with the Federal Communications Commission (FCC) mandate requiring the conversion of analog broadcast signals to digital. Not only do these monitors provide portable television, but they are perfect for mobile ENG / OB Vans requiring off-air monitoring.

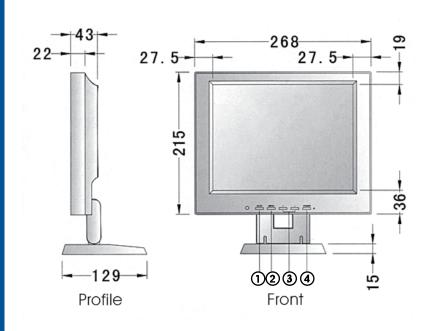
User-friendly OSD, low profile design, and multiple input and output options make our Lynx monitors an ideal fit for commercial and industrial use. Dynamic noise reduction removes unwanted artifacts in video material, and 2D & 3D comb filter technology minimizes ghosting in motion video. Ideal for high traffic public areas, Marshall monitors offer high resolution capability, as well as impressive contrast ratios and brightness levels so you'll experience crystal-clear images every time.

Marshall monitors are designed, engineered and manufactured for quality, reliability and affordability. We're confident you'll find a monitor that's right for you.



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M-Lynx-10





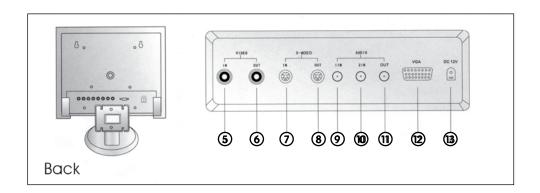
### **Features**

- ▶ 10" 4:3 LCD Monitor
- Brightness: 250cd/m<sup>2</sup>
- Contrast: 450:1
- Inputs: Composite, S-Video, VGA
- ▶ 2D Comb Filter
- Dynamic Noise Reduction

#### Summony

Ideal for mobile applications and tight spaces, Marshall's Lynx 10" LCD monitor offers 800 X 600 pixel resolution with digital image processing, a digital comb filter and clock-frequency auto correction for a crisp, clear picture. With a slim, portable design, the M-Lynx-10 is an excellent standard definition monitor for audio/visual, security, and industrial applications.

- 1. Power
- 2. OSD On/Off
- 3. a. OSD off: adjust volume (volume range: 0-100)
  - b. OSD on: select/forward/ backward
  - c. Changes current value or function of selected item
- 4. a. Input select: video, S-video and VGA channel
  - b. OSD on: confirm selected item



### Rear Pared Countrly I Apputs

5. Video IN

6. Video OUT

7. S-Video IN

8. S-Video OUT

9. Audio-1 IN

10. Audio-2 IN

11. Audio OUT

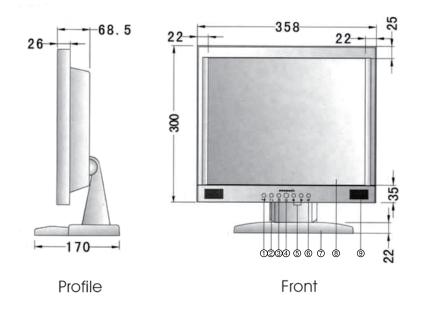
12. VGA-IN

13. VDC Power input

Model	WI-Llymx-10		
System	PAL, NTSC		
	Display Panel	LCD	
	Resolution	800 X 600	
VGA	Brightness	250CD/m <sup>2</sup>	
VGA	Contrast	450:1	
	Response Time	16ms	
	Viewing Angle	150°/140°	
	Composite Video Input	1 channel BNC input 1.0Vp-p 75 $\Omega$ , 1 channel output	
Video Input/Output	S-Video	1 channel input (Y/C), 1 channel looping output	
	VGA	1 channel input	
Audio	2 channel in, 1 channel out		
Menu	OSD (On Screen Display)		
Dimension	268 X 215 X 43 (mm)		
Weight	2.5kg		
Power Source	Voltage	AC 100 ~230V 50 ~ 60Hz	
	Power	Max: 10W	
Operating Environment	Temperature: 0 ~ 40° C; Operating Humidity: 10% ~ 85%		

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M-Lynx-15





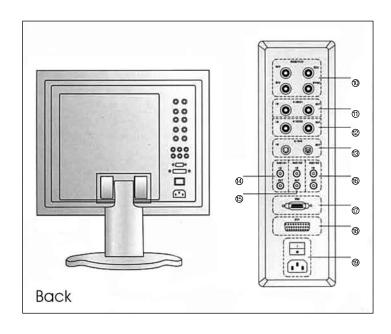
#### **Features**

- 15" 4:3 LCD Monitor
- Brightness: 350cd/m<sup>2</sup>
- Contrast: 450:1
- Inputs: Composite, S-Video, YPbPr, VGA, DVI
- 3D Comb Filter
- Dynamic Noise Reduction

#### Summary

The M-Lynx-15 delivers a stunning 1024 X 768 resolution picture in a 15" screen size. Using advanced video technologies such as 3D dynamic digital compensation, 3D comb filter, and bandwidth auto compensation, this sturdy workhorse is well suited for a variety of audio/visual, security and industrial applications. Additional features include auto-clock frequency phase correction, built-in speakers and a user-friendly OSD that makes set-up and operation quick and easy.

- 1. Remote IR
- 2. Input select: AV1, AV2, S-Video, YPbPr, PC, and DVI
- 3. OSD On/Off
- 4. Power
- 5. a. OSD off: adjust volume (range 1-100)
  - b. OSD on: select forward/backward
  - c. Change current value or function of item selected
- 6. Select current item
- 7. Monitor bracket
- 8. Display panel
- 9. Speakers



10. YUV: YPbPr IN

11. VIDEO1: VIDEO IN/OUT12. VIDEO 2: VIDEO 2 IN/OUT13. SVHS: S-Video IN/OUT

**14.** AUDIO1: VIDEO 1, S-VIDEO AUDIO IN/OUT **15.** AUDIO2: VIDEO2, YPbPr AUDIO IN/OUT

16. AUDIO3: VGA, DVI AUDIO IN/OUT

17. VGA: VGA IN18. DVI: DVI IN19. Power Switch

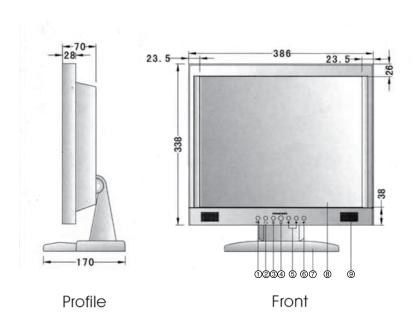
Note: Corresponding interface of YPbPr input: Y to R/Y, Pb

to G/U, Pr to B/V

Model	M-Lynx-15		
System	PAL, NTSC		
	Display Panel	LCD	
	Resolution	1024 X 768	
VGA	Brightness	350CD/m <sup>2</sup>	
	Contrast	450:1	
	Viewing Angle	170°/150°	
	Composite Video Input	2 channels BNC input 1.0V p-p, $75\Omega$ , 2 ch output	
	S-Video	1 channel input (Y/C), 1 channel looping outp	
Video Input/Output	YPbPr	1 channel input	
	DVI	1 channel input	
	VGA	1 channel input	
Audio	3 channel input, 2W, 3 channel output		
Menu	OSD		
Dimension	358 X300 X 68.5 (mm)		
Weight	4.5kg		
Dower Course	Voltage	AC 100~230v 50~60Hz	
Power Source	Power	Max 32W	
Operating Environment	Temperature: 0° C ~ 40° C; Operating Humidity:10% ~ 85%		

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M-Lynx-17





#### **Features**

17" 4:3 LCD Monitor

Brightness: 300cd/m<sup>2</sup>

Contrast: 1000:1

Inputs: Composite, S-Video, YPbPr, VGA, DVI

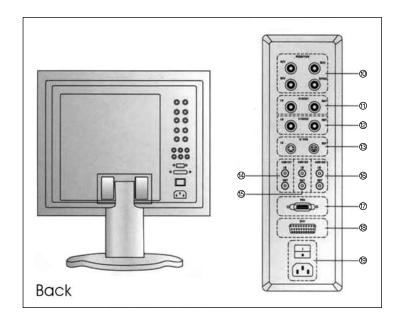
3D Comb Filter

Dynamic Noise Reduction

#### Summary

With 1280 X 1024 resolution, the M-Lynx-17 universal monitor is an excellent choice for audio/visual, security and industrial applications. Incorporating advanced video technologies such as 3D dynamic digital compensation, 3D comb filter, and bandwidth auto compensation, this 17" LCD offers clear and vibrant images in a thin, lightweight package. Additional features include autoclock frequency phase correction, built-in speakers and a userfriendly OSD that makes set-up and operation quick and easy.

- 1. Remote IR
- 2. Input select: AV1, AV2, S-Video, YPbPr, PC, and DVI
- 3. OSD On/Off
- 4. Power
- 5. a. OSD off: adjust volume (range 1-100)
  - b. OSD on: select forward/ backward
  - c. Change current value or function of item selected
- 6. Select current item
- 7. Monitor bracket
- 8. Display panel
- 9. Speakers



10. YUV: YPbPr IN

**11.** VIDEO1: VIDEO IN/OUT **12.** VIDEO 2: VIDEO 2 IN/OUT

13. SVHS: S-Video IN/OUT

**14.** AUDIO1: VIDEO 1, S-VIDEO AUDIO IN/OUT **15.** AUDIO2: VIDEO2, YPbPr AUDIO IN/OUT

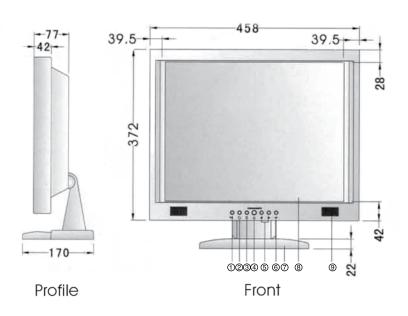
16. AUDIO3: VGA, DVI AUDIO IN/OUT

17. VGA: VGA IN18. DVI: DVI IN19. Power Switch

Note: Corresponding interface of YPbPr input: Y to R/Y, Pb to G/U, Pr to B/V  $\,$ 

Model	M-Lynx-17		
System	PAL, NTSC		
	Display Panel	LCD	
	Resolution	1280 X 1024	
VGA	Brightness	300cd/m <sup>2</sup>	
VGA	Contrast	1000:1	
	Viewing Angle	170°/160°	
	Composite Video Input	2 channel BNC input 1.0v p-p, $75\Omega$ , 2 channel output	
	S-Video	1 channel input (Y/C), 1 channel looping input	
Video Input/Output	YPbPr	1 channel input	
	DVI	1 channel input	
	VGA	1 channel input	
Audio	3 channel input, 2W, 3 channel output		
Menu	OSD		
Dimension	386 X 338 X70 (mm)		
Weight	5.0kg		
Daway Causas	Voltage	AC 100~230V 50~60Hz	
Power Source	Power	Max 32W	
Operating Environment	Operating Temperature: 0°	C~40° C: Operating Humidity: 10% ~ 85%	

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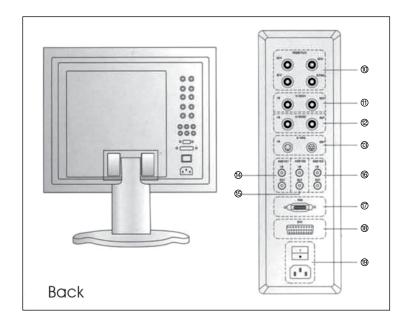
#### **Features**

- 19" 4:3 LCD Monitor
- Brightness: 450cd/m<sup>2</sup>
- Contrast: 1000:1
- Inputs: Composite, S-Video, YPbPr, VGA, DVI
- 3D Comb Filter
- Dynamic Noise Reduction

#### Summary

The M-Lynx-19 offers a stunning 1280 X 1024 resolution picture, making it the perfect choice for audio/visual, security and industrial applications. This universal monitor delivers a crystal clear high definition picture and includes advanced video technologies such as 3D dynamic digital compensation, RGB digital phase lock, and 3D comb filter. Additional features include auto-clock frequency phase correction, built-in speakers and a user-friendly OSD.

- 1. Remote IR
- 2. Input select: AV1, AV2, S-Video, YPbPr, PC, and DVI
- 3. OSD On/Off
- 4. Power
- 5. a. OSD off: adjust volume (range 1-100)
  - b. OSD on: select forward/ backwards
  - c. Change current value or function of item selected
- 6. Select current item
- 7. Monitor bracket
- 8. Display panel
- 9. Speakers



10. YUV: YPbPr IN

11. VIDEO1: VIDEO IN/OUT12. VIDEO 2: VIDEO 2 IN/OUT

13. SVHS: S-Video IN/OUT

**14.** AUDIO1: VIDEO 1, S-VIDEO AUDIO IN/OUT **15.** AUDIO2: VIDEO2, YPbPr AUDIO IN/OUT

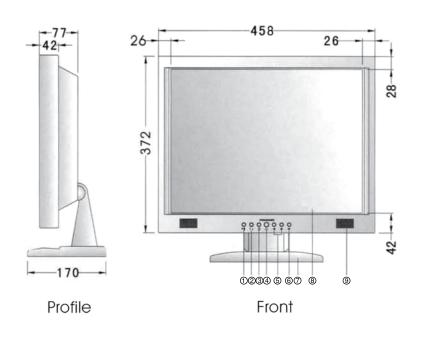
16. AUDIO3: VGA, DVI AUDIO IN/OUT

17. VGA: VGA IN18. DVI: DVI IN19. Power Switch

Note: Corresponding interface of YPbPr input: Y to R/Y, Pb to G/U, Pr to B/V  $\,$ 

Model	M-Lynx-19				
System	PAL, NTSC				
	Display Panel	LCD			
	Resolution	1280 X 1024			
VGA	Brightness	450cd/m <sup>2</sup>			
VGA	Contrast	1000:1			
	Viewing Angle	170°/160°			
	Composite Video Input	2 channel BNC input 1.0v p-p, 75 $\Omega$ , 2 channel output			
Video Input/Output	S-Video	1 channel input (Y/C), 1 channel looping input			
video iriput/Output	YPbPr	1 channel input			
	DVI	1 channel input			
	VGA	1 channel input			
Audio	3 channel input, 2W, 3 channel output				
Menu	OSD	OSD			
Dimension	458 X 372 X 77 (mm)				
Weight	6.7kg				
Power Source	Voltage	AC 100~230V 50~60Hz			
	Power	Max 40W			
Operating Environment	Operating Temperature: 0°	° C~40° C; Operating Humidity: 10% ~ 85%			

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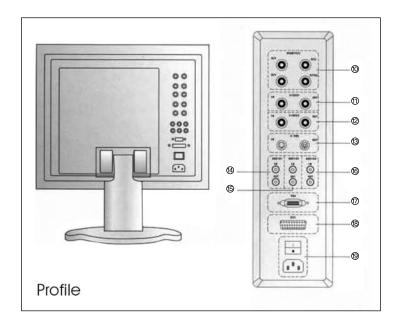
#### **Features**

- ▶ 20" 4:3 LCD Monitor
- Brightness: 450cd/m<sup>2</sup>
- Contrast: 1000:1
- Inputs: Composite, S-Video, YPbPr, VGA, DVI
- 3D Comb Filter
- Dynamic Noise Reduction

#### Summary

The M-Lynx 20" offers a beautiful 1600 X 1200 resolution picture, making it the perfect choice as a public view security monitor, as well as for CCTV and industrial applications. This universal monitor includes advanced video technologies such as 3D dynamic digital compensation, 3D comb filter, RGB digital phase lock, and 3D comb filter. The M-Lynx-20 also includes built-in speakers, user-friendly OSD, and a wide selection of inputs for greater flexibility.

- 1. Remote IR
- 2. Input select: AV1, AV2, S-Video, YPbPr, PC, and DVI
- 3. OSD On/Off
- 4. Power
- 5. a. OSD off: adjust volume (range 1-100)
  - b. OSD on: select forward/ backwards
  - c. Change current value or function of item selected
- 6. Select current item
- 7. Monitor bracket
- 8. Display panel
- 9. Speakers



10. YUV: YPbPr IN

11. VIDEO1: VIDEO IN/OUT12. VIDEO 2: VIDEO 2 IN/OUT13. SVHS: S-Video IN/OUT

**14.** AUDIO1: VIDEO 1, S-VIDEO AUDIO IN/OUT **15.** AUDIO2: VIDEO2, YPbPr AUDIO IN/OUT

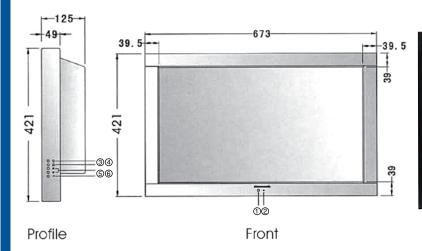
16. AUDIO3: VGA, DVI AUDIO IN/OUT

17. VGA: VGA IN18. DVI: DVI IN19. Power Switch

Note: Corresponding interface of YPbPr input: Y to R/Y, Pb to G/U, Pr to B/V  $\,$ 

Model	M-Lynx-20		
System	PAL, NTSC		
	Display Panel	LCD	
	Resolution	1600 X 1200	
VGA	Brightness	450cd/m <sup>2</sup>	
VGA	Contrast	1000:1	
	Viewing Angle	170°/160°	
	Composite Video Input	2 channel BNC input 1.0v p-p, $75\Omega$ , 2 channel output	
	S-Video	1 channel input (Y/C), 1 channel looping input	
Video Input/Output	YPbPr	1 channel input	
	DVI	1 channel input	
	VGA	1 channel input	
Audio	3 channel input, 2W, 3 channel output		
Menu	OSD		
Dimension	458 X 372 X 77 (mm)		
Weight	6.7kg		
Power Source	Voltage	AC 100~230V 50~60Hz	
rower source	Power	Max 50W	
Operating Environment	Operating Temperature: 0°	° C~40° C; Operating Humidity: 10% ~ 85%	

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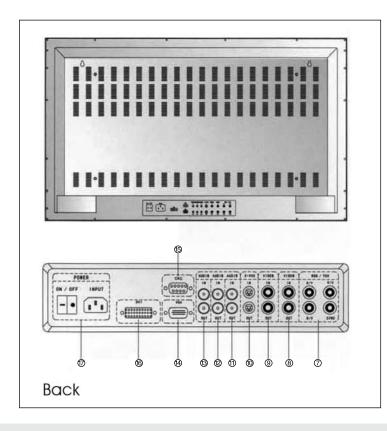
#### **Features**

- ▶ 26" 16:9 LCD Monitor
- Brightness: 500cd/m<sup>2</sup>
- Contrast: 1000:1
- Inputs: Composite, S-Video, YPbPr, VGA, DVI
- 3D Comb Filter
- Dynamic Noise Reduction

#### Summary

The M-Lynx 26" offers an eye-popping 1920 X 1080 resolution picture in a 16:9 format. Features like 3D comb filter technology help minimize ghosting in motion video, and the M-Lynx-26 includes inputs for composite video, S-Video, YPbPr, VGA, and DVI. Advanced video technologies ensure a crisp, clear picture quality, making the M-Lynx-26 ideal for audio/visual, security, as well as a variety of industrial applications.

- 1. Remote IR
- 2. Blue: on; Red: standby
- 3. Input select: AV1, AV2, S-Video, YPbPr, VGA and DVI
- 4. OSD On/Off
- 5. a. OSD off: adjust volume (range 1-100)
  - b. OSD on: select forward/ backwards
  - c. Change current value or function of item selected
- 6. Select current item



7. RGB/YUV: YPbPr In

8. Video 1: VIDEO 1 IN/OUT

9. Video 2: VIDEO 2 IN/OUT

10. SVHS: S-Video IN/OUT

11. AUDIO1: VIDEO 1, S-VIDEO AUDIO IN/OUT

12. AUDIO2: VIDEO2, YPbPr AUDIO IN/OUT

13. AUDIO3: VGA, DVI AUDIO IN/OUT

14. VGA: VGA IN

15. Central Keyboard Control (optional)

16. DVI: DVI IN

17. Power Switch

Model	M-Lynx-26		
System	PAL, NTSC	Auto Detect	
	Display Panel	LCD	
	Resolution	1920 X 1080	
VGA	Brightness	500cd/m <sup>2</sup>	
VUA	Contrast	1000:1	
	Viewing Angle	176°/176°	
	Composite Video Input	2 channel BNC input 1.0v p-p, $75\Omega$ , 2 channel output	
Video Input/Output	S-Video	1 channel input	
video iriput/Output	YPbPr	1 channel input	
	DVI	1 channel input	
	VGA	1 channel input	
Audio	3 channel input, 2W	3 channel output	
Menu	OSD (On Screen Display)		
Dimension	673 X 421 X 125 (mm)		
Weight	12kg		
Power Source	Voltage	AC 100~230V 50~60Hz	
	Power	Max 110W	
Operating Environment	Operating Temperature: 0°	° C~40° C; Operating Humidity: 10% ~ 85%	

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V-LCD110-ATSC



- ► A perfect choice for mobile field monitoring
- ► Bright, high resolution picture performance
- ► Two-channel stereo speakers provide precise sound
- ► Ideal for mobile ENG/OB Vans, surveillance, and security
- No digital-to-analog converter box required

#### Summary

he digital transition is here and Marshall has you covered. Marshall is pleased to offer three new portable LCD field monitors with built-in digital ATSC tuners. These new 16:9 monitors are available in 7", 10.2", and 11" sizes and comply with the Federal Communications Commission (FCC) mandate requiring the conversion of analog broadcast signals to digital. No digital-to-analog converter box required. Not only do these monitors provide portable television, but they are perfect for mobile ENG / OB Vans, surveillance, and security. These units can be integrated into fixed solutions and fed with a CATV or CCTV signal. Each unit also supports QAM (or ClearQAM) tuning, which allows viewing of non-encrypted digital channels.

Marshall's 7", 10.2", and 11" ATSC monitors offer a variety of features combined with bright, high resolution picture performance. Standard video adjustments include contrast, brightness, color, sharpness, and tint, along with four picture preset modes (Personal, Standard, Dynamic, and Soft). There are also three preset color modes (Normal, Warm, and Cool), along with three different Format modes (Auto, 4:3, and Wide). Four audio preset modes (Personal, Standard, Movie, and Music) provide clean and precise sound from two-channel stereo speakers. Other features include Closed Captioning, Clock, Auto Channel Scan, Electronic Program Guide (EPG), and the ability to edit and label individual Programs and Channels.

Each unit includes an adjustable stand and can be powered with included AC/DC power adapter or auto adapter. Low power consumption combined with great off-axis viewing makes these durable monitors the perfect choice for mobile field monitoring.

V-LCD70-ATSC		V-LC	V-LCD102-ATSC		V-LCD110-ATSC		
7" ATSC / Q	AM / NTSC LCD TV	10.2" ATSC /	QAM / NTSC LCD TV	11" ATSC / 6	DAM / NTSC LCD TV		
Resolution:	480 x 234	Resolution:	800 x 480	Resolution:	800 x 480		
Aspect ratio:	16:9	Aspect ratio:	16:9	Aspect ratio:	16:9		
Contrast:	300:1	Contrast:	400:1	Contrast:	500:1		
Brightness:	200cd/m <sup>2</sup>	Brightness:	180cd/m <sup>2</sup>	Brightness:	200cd/m <sup>2</sup>		
Video input:	1Vp-p 75 ohm (two route)	Video input:	1Vp-p 75 ohm (two route)	Video input:	1Vp-p 75 ohm (two route)		
Audio input:	2Vp-p two channels (left and right)	Audio input:	2Vp-p two channels (left and right)	Audio input:	2Vp-p two channels (left and right)		
Audio output:	Built-in loudspeaker (0.5W x 2)	Audio output:	Built-in loudspeaker (0.5W x 2)	Audio output:	Built-in loudspeaker (0.5W x 2)		
Input Resistance:	75 Ohm	Input Resistance:	75 Ohm	Input Resistance:	75 Ohm		
Input bit rate:	Max. 19.4Mbit/s	Input bit rate:	Max. 19.4Mbit/s	Input bit rate:	Max. 19.4Mbit/s		
Audio decoding:	AC-3	Audio decoding:	AC-3	Audio decoding:	AC-3		
Sound output:	Stereo/two-channel (left and right)	Sound output:	Stereo/two-channel (left and right)	Sound output:	Stereo/two-channel (left and right)		
QAM Modulation:	64-QAM 256-QAM 8-VSB	QAM Modulation:	64-QAM 256-QAM 8-VSB	QAM Modulation:	64-QAM 256-QAM 8-VSB		
Frequencies:	CATV (STD, IRC, HRC) AIR: CH2-69 CATV: CH2-125	Frequencies:	CATV (STD, IRC, HRC) AIR: CH2-69 CATV: CH2-125	Frequencies:	CATV (STD, IRC, HRC) AIR: CH2-69 CATV: CH2-125		
OSD menu language:	English, French, Spanish	OSD menu language:	English, French, Spanish	OSD menu language:	English, French, Spanish		
Power supply:	AC 110-240V DC 12V 10W	Power supply:	AC 110-240V DC 12V 10W	Power supply:	AC 110-240V DC 12V 10W		
Accessories:	Remote control, AC/DC adapter, support bracket, A/V cable and manual	Accessories:	Remote control, AC/DC adapter, 75 ohm antenna conversion cable (screw connector), U-shaped, support bracket, AV cable and manual	Accessories:	Remote control, AC/DC adapter, 75 ohm antenna conversion cable (screw connector), U-shaped, support bracket, AV cable and manual		

# Notes

# Notes

# Lynx/ATSC

### **Industrial Video/Security Division**

A division of Marshall Electronics

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