

Marshall Lynx LCD Universal Monitors

User Manual





Marshall

Industrial Video/Security Div.

For more information, contact Marshall Electronics, Industrial Video & Security (800) 800-6608

www.mars-cam.com

	CAUTION RISK OF ELECTRIC SHOCK DO NOT OPEN	
Caution: To reduce the risk of electric shock, do not remove the back. There are no user-serviceable parts inside. Always refer servicing to qualified personnel.		

Graphic Symbol Explanation



The lightening flash symbol inside the triangle is intended to alert the user to the presence of un-insulated and dangerous voltage within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock.



The exclamation point within the triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions.

Warning– To Prevent Fire or Shock Hazard, DO NOT Expose this Monitor to Rain or Moisture

This product must be grounded.

Product specifications are subject to change without notice.

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IMPORTANT SAFEGUARDS

Caution

Please comply with warning regarding power requirements. The power source contains high voltage parts. If the cover is removed, it may cause fire or electric shock. Do NOT remove the cover.

- 1. Read the Instructions:** All safety and operating instructions should be read before the monitor is operated.
- 2. Follow the Instructions:** All operating and user instructions should be followed.
- 3. Cleaning:** Unplug the monitor from the wall outlet before cleaning. Do not use liquid aerosol cleaners. Use only a damp, soft cloth.
- 4. Water and Moisture:** Do not use the monitor in damp environments. For example, do not operate the monitor in bathrooms, sinks, laundry rooms, wet basements or near a swimming pool. Lynx monitors are not recommended for outdoor use.
- 5. Accessories:** Always ensure that the monitor is placed on a solid, steady surface/stand. To avoid any possible danger and/or damage, do not place the monitor on an unsteady stand, stool, or other surface that could result in the monitor falling.
- 6. Ventilation:** Slots and openings in the monitor's cabinet are provided for ventilation and ensure reliable operation of the monitor and to protect it from over-heating. These openings must never be blocked. The monitor should never be placed near or over a radiator or head register. This monitor should not be placed or built in to a rack or bookshelf unless proper ventilation is provided and supplier instructions have been adhered to.

- 7. Object and Liquid Entry:** Never push any kind of object into this monitor through an opening as it may touch dangerous voltage points or short out parts that would result in fire or electric shock. Never spill liquid of any kind into the monitor.
- 8. Repair (Servicing):** Do not attempt to repair this monitor yourself by opening or removing covers. This may expose you to dangerous voltage or other hazards. Refer to a qualified service technician if servicing is necessary. If monitor is opened by anyone other than a factory authorized service center, the warranty is voided. If serial number is removed or tampered with, the warranty is voided.
- 9. Parts Replacement:** When part replacement is required, make sure it is performed by a qualified technician and that the parts are supported by the manufacturer.
- 10. Safety Check:** Upon completion of any service or repair to the monitor, ask the service technician to perform a safety check to ensure that the monitor is in proper operating condition.
- 11. Keep the Instructions:** The safety and operating instructions should be kept for future reference.

INTRODUCTION

Thank you for purchasing the Marshall Lynx LCD Monitor. The Lynx Series of Universal Monitors offers high performance features and excellent picture quality for use in a variety of industrial/commercial applications.

The information contained in this instruction manual covers the installation and operation of the monitors, and we encourage you to read it carefully. All the installation materials, wire/cables must pass quality inspections in accordance with international electrical rules and laws. When installing your monitor, remember to always adhere to local ordinances and laws concerning wire and cable installation.

Note: A/V inputs/outputs as well as optimal resolution will vary by screen size. Refer to Specifications section for more in-depth details.

SPECIFICATIONS

Display Unit	15" 4:3 TFT/LCD
Video Input/Output	1-channel s-video input/output 2-channel multiple video BNC input/output 1-channel VGA input, 1 channel DVI input 1-channel YPbPr input.
Audio Input/Output	3-channels RCA input/output
Front Panel Controls	Menu, Volume, Channel, and Stand-by Power
Power Input	AC100V ~ 230V 50 ~60Hz
Power Consumption	Max: 32W
Dimensions (W x H x D)	10" x 11.7" x 2.6" / 256mm x 298mm x 67mm
Weight	9.9 lbs/4.5kg
Maximum Vertical Resolution	Max 1080 lines
Video System	NTSC/PAL
VGA/DVI connector	Resolution: 1024 x 768
Speakers	Max: 2 x 1.0W
Maximum Brightness	300cd/m ²
Maximum Contrast	450:1
Response Time	8ms
Viewing Angle	170°/150°
Operating Environment	Temperature: 0° C ~ 40° C Humidity: 10% ~ 85%

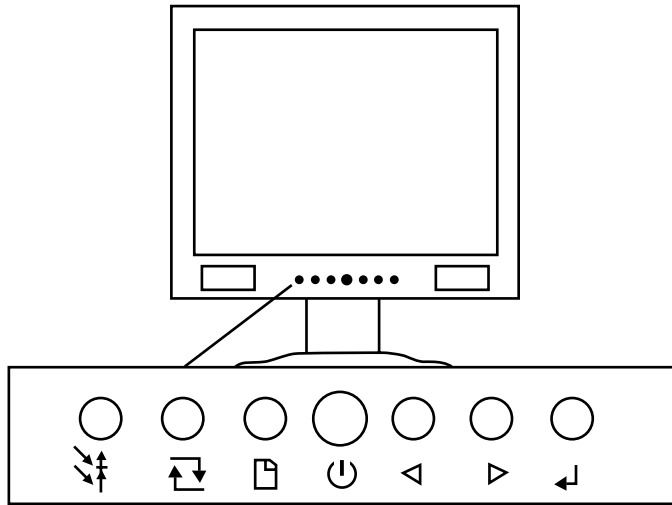
Display Unit	17" 4:3 TFT/LCD
Video Input/Output	1-channel s-video input/output 2-channel multiple video BNC input/output 1-channel VGA input, 1 channel DVI input 1-channel YPbPr input.
Audio Input/Output	3-channels RCA input/output
Front Panel Controls	Menu, Volume, Channel, and stand-by Power
Power Input	AC100V ~ 230V 50 ~60Hz
Power Consumption	Max: 32W
Dimensions (W x H x D)	15.2" x 13.3" x 2.6" / 387mm x 338mm x 67mm
Weight	11 lbs/5.0kg
Maximum Vertical Resolution	Max 1080 lines
Video System	NTSC/PAL
VGA/DVI connector	Resolution: 1280 x 1024
Speakers	Max: 2 x 1.0W
Maximum Brightness	300cd/m ²
Maximum Contrast:	1000:1
Response Time	8ms
Viewing Angle	170°/160°
Operating Environment	Temperature: 0° C ~ 40° C Humidity: 10% ~ 85%

Display Unit	19" 4:3 TFT/LCD
Video Input/Output	1-channel s-video input/output 2-channel multiple video BNC input/output 1-channel VGA input, 1 channel DVI input 1-channel YPbPr input.
Audio Input/Output	3-channels RCA input/output
Front Panel Controls	Menu, Volume, Channel, and stand-by Power
Power Input	AC100V ~ 230V 50 ~60Hz
Power Consumption	Max: 40W
Dimensions (W x H x D)	18" x 14.6" x 3" / 458mm x 373mm x 77mm
Weight	11 lbs/5.0kg
Maximum Vertical Resolution	Max 1080 lines
Video System	NTSC/PAL
VGA/DVI connector	Resolution: 1280 x 1024
Speakers	Max: 2 x 1.0W
Maximum Brightness	300cd/m ²
Maximum Contrast:	1000:1
Response Time	8ms
Viewing Angle	170°/160°
Operating Environment	Temperature: 0° C ~ 40° C Humidity: 10% ~ 85%

Display Unit	20" 4:3 TFT/LCD
Video Input/Output	1-channel s-video input/output 2-channel multiple video BNC input/output 1-channel VGA input, 1 channel DVI input 1-channel YPbPr input.
Audio Input/Output	3-channels RCA input/output
Front Panel Controls	Menu, Volume, Channel, and stand-by Power
Power Input	AC100V ~ 230V 50 ~60Hz
Power Consumption	Max: 50W
Dimensions (W x H x D)	18" x 14.6" x 3" / 458mm x 373mm x 77mm
Weight	15.8 lbs/7.2kg
Maximum Vertical Resolution	Max 1080 lines
Video System	NTSC/PAL
VGA/DVI connector	Resolution: 1600 x 1200
Speakers	Max: 2 x 1.0W
Maximum Brightness	450cd/m ²
Maximum Contrast:	1000:1
Response Time	8ms
Viewing Angle	178°/178°
Operating Environment	Temperature: 0° C ~ 40° C Humidity: 10% ~ 85%

Display Unit	26" 16:9 TFT/LCD
Video Input/Output	1-channel s-video input/output 2-channel multiple video BNC input/output 1-channel VGA input, 1 channel DVI input 1-channel YPbPr input.
Audio Input/Output	3-channels RCA input/output
Front Panel Controls	Menu, Volume, Channel, and stand-by Power
Power Input	AC100V ~ 230V 50 ~60Hz
Power Consumption	Max: 110W
Dimensions (W x H x D)	26.4" x 16.5" x 4.9" / 673mm x 421mm x 125mm
Weight	27.5 lbs/12.5kg
Maximum Vertical Resolution	Max 1080 lines
Video System	NTSC/PAL
VGA/DVI connector	Resolution: 1600 x 1200
Speakers	Max: 2 x 1.0W
Maximum Brightness	500cd/m ²
Maximum Contrast:	1000:1
Response Time	8ms
Viewing Angle	176°/176°
Operating Environment	Temperature: 0° C ~ 40° C Humidity:10% ~ 85%

FRONT PANEL COMPONENTS AND CONTROLS



 **Power button (stand-by)**


 **Exit Menu**

With menu off, adjust volume (0 ~100).

 **With menu on, use to scroll through menu**

With menu on, use to select or change menu functions

 **When menu is off, selects video input: Video 1, Video 2, S-video, YPbPr, VGA, DVI**

 **Select item**

SETTING UP THE MONITOR

Carefully unpack the items from the box and take a moment to ensure that the following items are included:

1. Lynx monitor
2. Power cord
3. VGA cable
4. Remote control (Lithium battery included)


If any of these items are missing, contact customer support at 800 800-6608.

Next, take a few moments to familiarize yourself with the front and rear panel controls and inputs. The front panel of the Lynx Monitor includes hard-button controls for Menu, Volume, Channels and Power (stand-by).


The rear panel of your Lynx monitor includes S-video inputs, 2-channel multiple video BNC input/outputs, and 1 channel YPbPr input.

After finding a suitable and secure location for the monitor, plug the power cord into the rear panel and then to an AC power source. Turn the Power Switch on.

VOLUME CONTROL

To adjust the volume on the Lynx monitor, press the  on the front panel of the monitor. Use the left and right arrow keys on the remote or front panel to adjust the volume.

VIDEO MAIN MENU

To access the Main Menu features, press Menu on the remote control or the  button on the front panel.

The Image Settings screen will appear along with three icons on the left-hand side: Image Settings, Display Settings, and Setup. See Figures 1, 2 and 3. Use the arrow buttons on the remote control or front panel to scroll through the settings.

Adjust the Image Settings

In the Image Settings Screen, you can adjust Brightness, Contrast, Sharpness, as well as more Advanced Settings like Noise Reduction and Flesh Tone. To select, press the **↵** button on the front panel or Enter on the remote control. The settings will be highlighted (see Figure 4). Use **◀▶** arrow keys on the front panel or the remote control to scroll through the settings. Press Enter on the remote or **↵** on the front panel to access the settings. When finished making adjustments (**◀▶**), press the **↵** or Enter on the remote. Press Menu button on the remote or the **☐** button on the front panel to exit Image Settings menu.

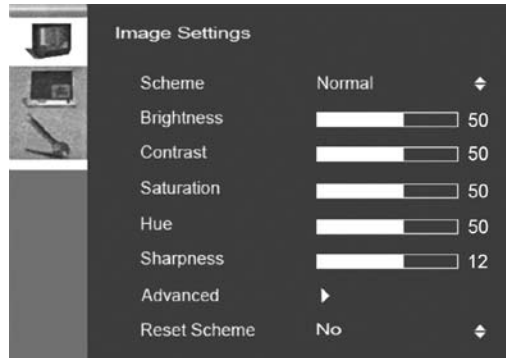


Figure 1. The Image Settings screen allows you to adjust picture settings such as brightness, contrast, sharpness, etc.



Figure 2. The Setup screen allows you to select language and reset to factory settings.

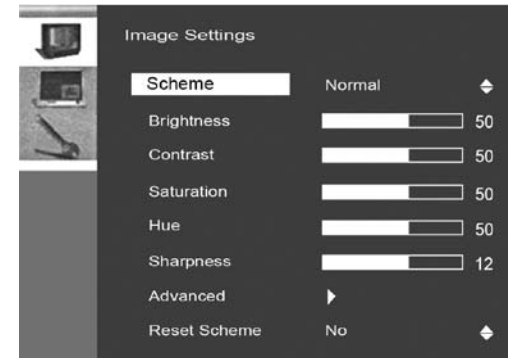


Figure 3. Pressing the **↵** button on the front panel or Enter on the remote will highlight the feature presets you want to adjust.

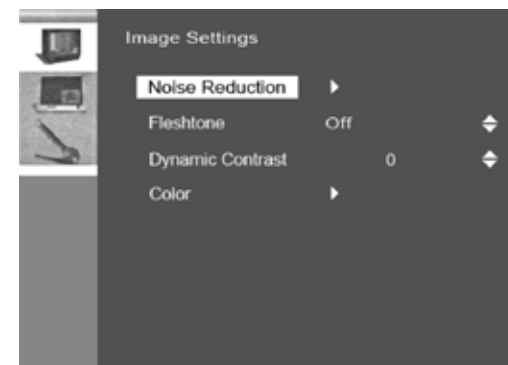
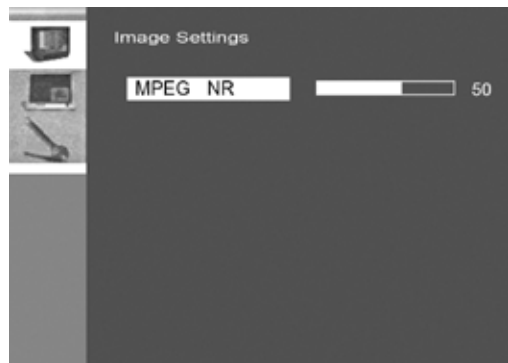


Figure 4. Advanced settings like Noise Reduction and Dynamic Contrast can also be adjusted.



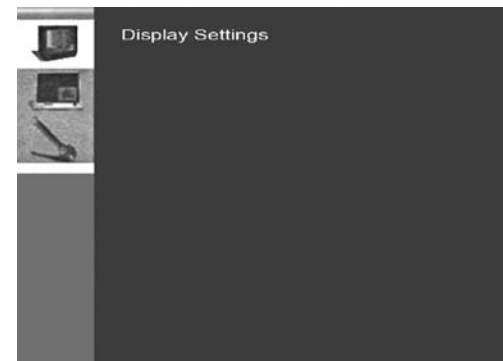
Figures 5 & 6. Other features that can be accessed in Image Settings include MPEG Noise Reduction (MPEG NR).



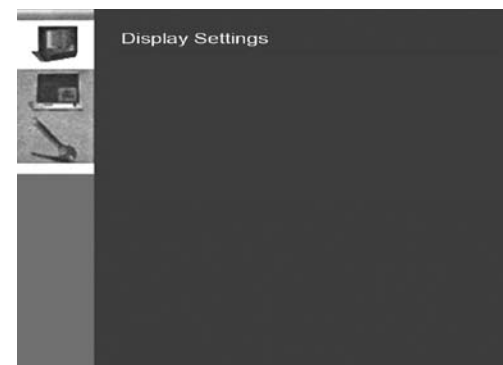
Figure 7. Advanced features in Image Settings allow you to adjust the Red, Green and Blue Color Scheme.

Adjust the Display Settings

To select, press the **↵** button on the front panel or Enter on the remote control. The settings will be highlighted (see Figure 9). Use **◀▶** arrow keys on the front panel or the remote control to scroll through the settings. Press Enter on the remote or **↵** on the front panel to access the settings. When finished making adjustments (**◀▶**), press the **↵** or Enter on the remote. Press Menu button on the remote or the **☐** button on the front panel to exit Display Settings menu.



Figures 8 & 9. Display Settings allow you to make adjustments to the screen. (Note: PIP mode disabled)



Adjust the Setup Up Menu

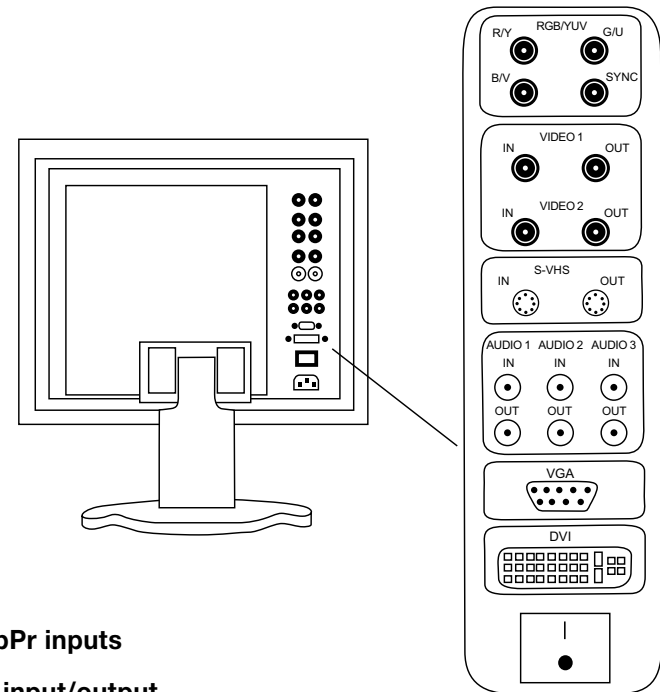
To access Setup Menu, press the **↵** button on the front panel or Enter on the remote control. The settings will be highlighted (see Figure 11). Use **◀▶** arrow keys on the front panel or the remote control to scroll through the settings. Press Enter on the remote or **↵** on the front panel to access the settings. When finished making adjustments (**◀▶**), press the **↵** or Enter on the remote. Press Menu button on the remote or the **☰** button on the front panel to exit the Setup menu.



Figure 10. The Set up menu allows you to set the language of preference as well as factory presets.

Audio/Video Inputs

The rear panel of the Lynx monitor includes inputs for connection to devices such as computer networks, DVD players, cameras, etc. These inputs include:



1. YUV/YPbPr inputs
2. Video 1: input/output
3. Video 2 input output
4. S-Video input/output
5. Audio 1, Audio 2, Audio 3
6. VGA input
7. DVI input

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

VGA Input

This 15-pin VGA cable (included) connects the monitor to computers and other devices that support VGA. The 15-pin VGA is a common connection found on most video cards, computer monitors, and high definition televisions that support VGA, etc.

YPbPr

Sometimes called component video, YPbPr is commonly used in video electronics. Proper connection to monitor is as follows: Y to R/Y, Pb to G/U, Pr to B/V (Y = green, Pb = Blue, Pr = Red.)

S-Video 1

S-Video input and 1 loop-through S-video output

DVI Input

(digital video interface)

Video 1 and Video 2

Two composite BNC video inputs and loop-through outputs

Audio 1, Audio 2, Audio 3

Three mono audio inputs, 3 mono loop-through audio outputs via RCA connectors

TROUBLESHOOTING

1. No picture on the screen

Make sure the power cord is securely connected and that the front LED is green.

2. Unable to read menu on screen.

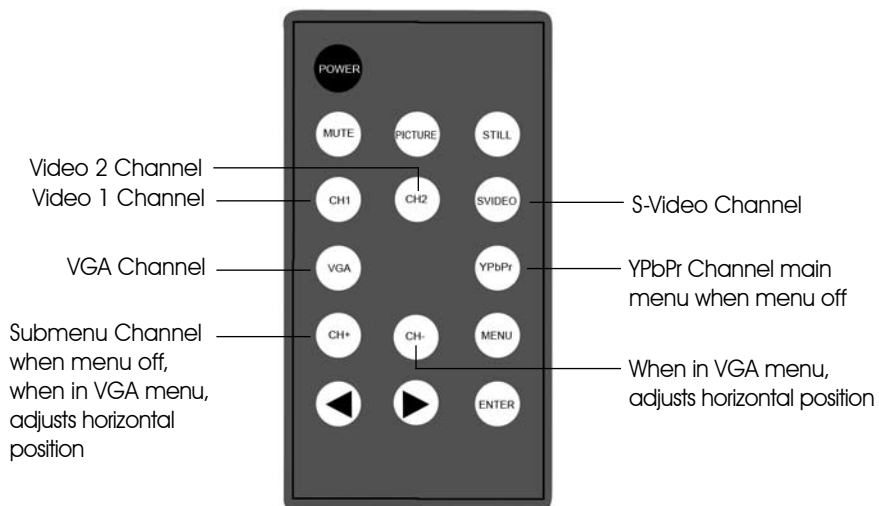
Adjust the resolution of the VGA Card to 1024 X 768 (15"), 1280 x 1024 (17"/19"), 1600 x 1200 (20")

3. Color Deviation

Check that the signal cables are securely tightened. The pins in the cable could be loose and causing a bad connection.

REMOTE CONTROL FUNCTIONS

Note: Remove the plastic tab in the remote to initiate contact with the battery.



This device complies with Part 15 of the FCC Ruled. Operation is subject to the following two conditions: 1) this device may not cause harmful interference, and 2) this device must accept any interference received, including interference that may cause undesired operation.

Lynx Monitors VGA Resolution Chart

√ = Resolution Supported x = Not Supported

MONITOR	15"	17"	19"	20"	26"
RESOLUTION					
800x600					
60Hz	√	√	√	√	
70Hz	x	x	x	x	
72Hz	√	√	√	√	
75Hz	√	√	√	√	
85Hz	√	√	√	√	
1024x768					
60Hz	√	√	√	√	
70Hz	√	√	√	√	
72Hz	√	√	√	√	
75Hz	√	√	√	√	
85Hz	√	√	√	√	
1152x864					
60Hz	x	x	x	x	
70Hz	x	x	x	x	
72Hz	x	x	x	x	
75Hz	√	√	√	√	
85Hz	x	x	x	x	
1280x720					
60Hz	x	x	x	x	
70Hz	x	x	x	x	
72Hz	x	x	x	x	
75Hz	√	√	√	√	
85Hz	x	x	x	x	
1280x800					
60Hz	x	x	x	x	
70Hz	x	x	x	x	
72Hz	x	x	x	x	
75Hz	x	x	x	x	
85Hz	x	x	x	x	
1280x960					
60Hz	√	√	√	√	
70Hz	x	x	x	x	
72Hz	x	x	x	x	
75Hz	x	x	x	x	
85Hz	x	x	x	x	
1280x1024					
60Hz	√	√	√	√	
70Hz	√	√	√	√	
72Hz	x	x	x	x	
75Hz	√	√	√	√	
85Hz	x	√	x	x	
1600x1024					
60Hz	√	√	√	√	
70Hz	√	√	√	√	
72Hz	x	x	x	x	
75Hz	√	√	√	√	
85Hz	x	x	x	x	
1600x1200					
60Hz	x	√	√	√	
70Hz	x	x	x	x	
72Hz	x	x	x	x	
75Hz	x	x	x	x	
85Hz	x	x	x	x	