

# Marshall Electronics

Model No. **M-LYNX-702**

Dual 7" High Resolution Rack Mount Display



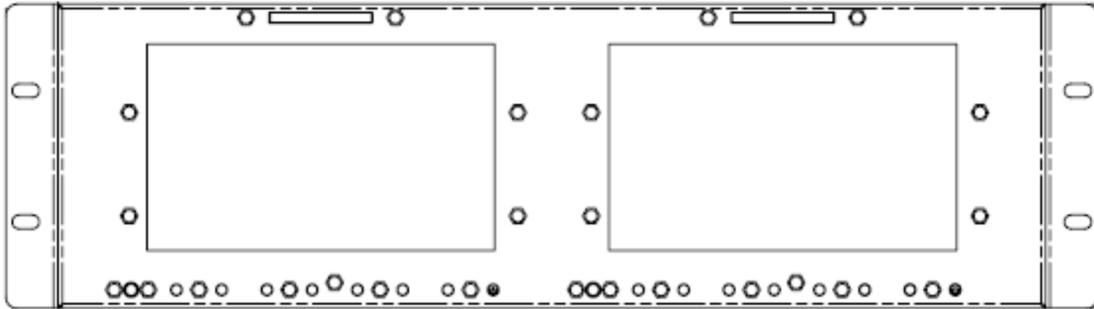
## Operating Instructions

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# Installation and Accessories

## Unpacking



Carefully unpack the M-LYNX-702 monitor and verify that the following items are included:

- M-LYNX-702 Monitor
- Power Supply
- Operating Instructions

## Control Panel Area



### Headphone Jack

The Headphone jack on the front panel takes two channels of embedded audio from HDMI or SDI sources. When analog component or composite video inputs are selected, the headphone audio comes from the source that is connected to the two RCA connectors on the rear panel. Audio volume can be quickly adjusted by pressing the Left/Right arrow keys on the front panel.

### Ratio Button

Each press of the Ratio button cycles through the available aspect ratio options for that screen.

### Input Button

Each press of the Input button cycles between the available inputs for that screen.

### Menu Button

Press the menu button to access the On Screen menus. Press the menu button a second time to clear the screen or wait several seconds and it will clear itself.

### Arrow Keys (up/down and left/right)

The arrow keys have two modes:

#### When the Menu is not on screen:

Left or Right arrow keys will adjust the Headphone volume.

Up arrow key will bring up the Brightness adjustment function.

Down arrow key will bring up the Contrast adjustment function.

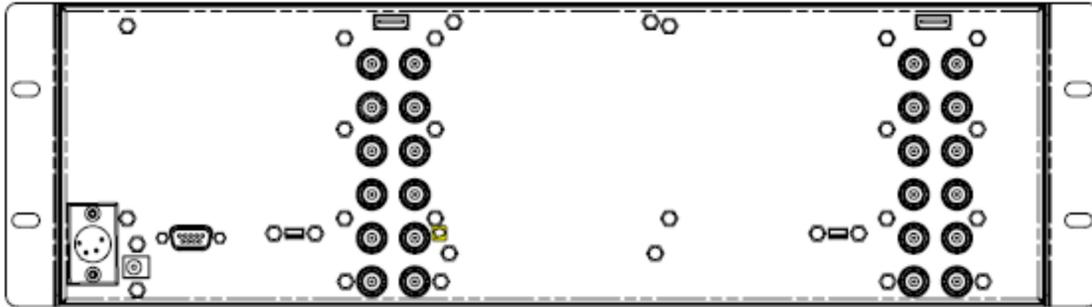
#### When the Menu is on screen:

The Up/Down and Left/Right keys are used to select or change menu items.

### Power Button

Controls power going to the front panel.

## Rear Connections



### **Power Input**

Connect the power input connector here. Power can be supplied from the included power supply, or from a variety of common DC sources (such as a camera power supply) as long as provides the voltage and current listed on the silkscreen label.

### **TALLY**

The 9-pin D-Sub connector on the back panel is used to control the colored tally lights above each display. The Red, Green or Yellow lights can be turned on by connecting the appropriate pin on this connector to ground pin via “dry contact” or “open collector” type source.

Caution: Power should not be supplied to the 9-pin port.

### **USB port**

The USB port is used for service functions. Contact Marshall Electronics for further information.

### **HDMI Input**

Connect a standard HDMI source here. For details, see the Compatible Input Formats section below.

### **Y, Pb, Pr Inputs**

Connect three wire component analog source here. Passive loop outs allow daisy-chaining to other devices.

### **Video Input**

Connect standard NTSC or PAL composite analog video source here. This source appears on the display when “AV” is selected with the Input button. Passive loop out allows daisy-chaining to other devices.

### **Audio Input**

Connect Left (white) and Right (red) analog line level audio source here. This audio will be available at the front headphone connector whenever AV or Component source is selected with the Input button.

### **3G/SDI Input**

Connect serial digital source here. It is compatible with SDI, HD SDI or 3G SDI sources. Active loop out allows daisy-chaining to other devices.

## On Screen Menu

Access the main menu by pressing the Menu button on the front panel.

Use the Up/Down arrow keys to move within a menu.

Use the Right arrow key to access a sub-menu and the left arrow key to move back out of the sub-menu

Once in a sub-menu, use the Up/Down arrow keys to select an item to adjust and use the Left/Right keys to change values within their range.

Pressing the Menu button is also a quick way to exit from a menu area or menu function

### ■ **Main Menu Categories**

**Video – Brightness, Contrast, Color and other picture quality settings**

**Audio – Volume and Balance**

**Setting – Picture Size, Position, Frame Markers and other related functions**

**OSD – On-Screen Display controls for position, transparency, etc.**

### ■ **Sub-Menu Descriptions**

The default settings shown are the values the unit comes with out-of-the-box. In most cases, these are the mid-range settings for a given function and are not intended as “ideal” values or choices. Best settings will depend on the application.

#### ■ **Video**

**Contrast** (0 – 100, 50 = default)

**Brightness** (0 – 100, 50 = default)

**Saturation** (0 – 100, 50 = default)

**Tint** (0 – 100, 50 = default)

**Sharpness** (0 - 100, 0 = default)

(Adding sharpness is normally only necessary with standard definition pictures. Adding sharpness to a high-definition picture may be useful when checking camera focus).

**Color Temp** (6500K = default)

**6500K** (approximates white balance defined for REC 601, REC 709 standards)

**7300K**

**9300K**

**User** (0 – 255, 128 = default)

(Allows fine-tuning display white balance)

#### **Picture Mode**

##### **Standard**

(Contrast, Brightness, Saturation and Tint = 50)

##### **Soft**

(Contrast = 40, Brightness and Saturation = 45)

##### **User**

(Returns display to current user settings for Contrast, Brightness, Saturation and Tint)

##### **Vivid**

(Contrast = 60, Brightness = 55, Saturation = 75)

## Aspect Ratio

### **16:9**

(Display is set to exact 16:9 aspect ratio)

### **14:9**

(Display is set to exact 14:9 aspect ratio)

### **Zoom1**

(The picture is expanded)

### **Zoom2**

(The picture is expanded twice as much as Zoom1)

### **Panorama**

(Display is set for wide aspect ratio)

### **Pixel to Pix**

(Incoming video pixels are mapped 1:1 to display pixels. This may result in an apparent shrinking or expansion of the image depending on the incoming format. The resultant image will appear in native resolution without scaling. This is useful for checking focus and detail)

### **Full Screen**

(Picture is sized to fit the display area)

## Check Field (Off = Default)

### **Off**

### **Mono**

(Picture will be black & white, all color is removed)

### **Red**

(Only red color information is seen)

### **Green**

(Only green color information is seen. Can be useful for checking green screen lighting on set).

### **Blue**

(Only blue color information is seen. Can be useful for checking blue screen lighting on set. Also useful for setting Color amount when viewing SMPTE split color bars).

## H/V delay (Off = Default)

### **Off**

### **On**

(Picture is shifted horizontally and vertically to check for the presence of horizontal and vertical ancillary data, HANC and VANC in an SDI or HDSDI signal).

## Scan Mode

### **Standard**

(Normal picture size)

### **Overscan**

(Expands picture by 5%)

### **Underscan**

(Shrinks picture by 5%)

## ■ **Audio**

**Volume** (0 – 100, 50 = default)

**Balance** (-10 - +10, 0 = default)

## ■ **Setting**

**Screen Markers** (OFF = Default)

**OFF**

**96%**

**93%**

**90%**

**85%**

**80%**

**Center Marker** (OFF = Default)

**OFF**

**ON** (Places red cross-hairs in middle of screen)

**Horizontal Position** (0 - 10, 5 = default)

(Shifts picture left or right)

**Vertical Position** (0 - 10, 5 = default)

(Shifts picture up or down)

**Horizontal Size** (0 - 10, 5 = default) --- steps are 0, 3, 5, 7, 10

(Adjusts picture width)

**Vertical Size** (0 - 10, 5 = default) --- steps are 0, 3, 5, 7, 10

(Adjusts picture height)

### **PIP (Picture-in-Picture)**

(PIP mode allows placing two pictures on one screen at the same time. Various combinations are possible).

**PIP Mode** (Off = Default)

**Off**

**Small**

(Small picture in the corner)

**Medium**

(Medium picture in the corner)

**Large**

(Larger picture in the corner)

**PBP**

(Pictures appear side-by-side in two 4:3 windows)

**POP**

(Pictures appear side-by-side and fill the screen top to bottom. The aspect ratio will be distorted)

**PIP Source** (AV = Default)

(Note: Two digital pictures, HDMI and SDI, cannot be combined in PIP mode. When a digital source is the main picture, the secondary picture must be from an analog input either AV or Component)

**AV**

(Composite video input is selected as the 2<sup>nd</sup> picture)

**Component**

(Component video input is selected as the 2<sup>nd</sup> picture)

**Upper Left**

(2<sup>nd</sup> picture appears in the upper-left corner of the screen)

**Upper Right**

(2<sup>nd</sup> picture appears in the upper-right corner of the screen)

**Lower Right**

(2<sup>nd</sup> picture appears in the lower-right corner of the screen)

**Lower Left**

(2<sup>nd</sup> picture appears in the lower-left corner of the screen)

**PIP Swap**

(Press right arrow to swap main and 2nd picture sources)

**Image Flip** (OFF = Default)

**OFF**

**ON**

(image is flipped upside down and left to right)

**Language**

**English**

**Español**

**Reset** (Selecting OK, will reset the unit to factory default values and choices)

Do you want to reset function values: **OK / Cancel**

Press the front panel **INPUT** button to accept "OK"

Press the **Menu** button to cancel

**■ OSD (On-Screen Display)**

**OSD Horizontal Position** (0 – 100, 50 = default)

**OSD Vertical Position** (0 – 100, 50 = default)

**Menu Transparency** (0 – 10, 1 = default)

**OSD Timeout** (5 seconds – 60 seconds, 10 = default) steps 5s, 10s, 15s, 60s

# Compatible Input Formats

## *SDI / HDSDI*

**480i** 59.94

**576i** 50

**720p** 25, 29.97, 30, 50, 59.94, 60

**1080p** 23.98, 23.98sF, 24, 24sF, 25, 29.97, 30

**1080i** 50, 59.94, 60

## *HDMI*

**480i** 59.94,

**480p** 59.94

**576i** 50

**576p** 50

**720p** 23.98, 24, 25, 29.97, 30, 50, 59.94, 60

**1080i** 50, 59.94, 60

**1080p** 23.98, 23.98sF, 24, 24sF, 25, 29.97, 30, 50, 59.94, 60

## *Component Analog*

**480i** 59.94

**576i** 50

**720p** 50, 59.94, 60

**1080i** 50, 59.94, 60

**1080p** 50, 59.94, 60

## *Composite Analog*

**480i** 59.94 (NTSC 525)

**576i** 50 (PAL 625)

# Monitor Specifications

## Panel Specifications

|                   |                             |
|-------------------|-----------------------------|
| Screen Size       | <b>2 x 7"</b>               |
| Screen Resolution | <b>1024 x 600</b>           |
| Brightness        | <b>250 cd/m<sup>2</sup></b> |
| Contrast Ratio    | <b>700:1</b>                |
| Viewing Angle     | <b>150°</b>                 |

### Burn-In Warning

The M-LYNX-702 uses a high quality TFT LCD panel. However, if a static image is left on the screen for 48 hours, there may be a 10 to 20 minute recovery period for the panel. During recovery, a very faint image may be retained on the display. You may put up a white image for 30 minutes to eliminate the retained image.

## Connectors

### Digital Inputs

**1 x 3GSDI BNC Type with Active Loop Out  
(Compatible with HDSDI and SDI)**

**1 x HDMI**

### Analog Inputs

**1 x Component 3 BNC Connectors with Loop Out  
(Supports Y, Pb, Pr Type Signal)**

**1 x Composite BNC Connector with Loop Out  
(Supports NTSC, PAL Signals)**

### Power Input

**4-Pin XLR**

### Tally / GPI Interface

**D-Sub 9-pin socket**

### Service Port

**1 x USB Mini**

## Electrical

Voltage Requirement **12 VDC**

Power Consumption **3.0 A**

(Included power supply meets this requirement)

Customer-supplied power supply, if used, should be rated at 3 Amps or higher.

## Tally / GPI Connector

| TALLY    |   |   |   |
|----------|---|---|---|
|          | G | R | Y |
| 1        | 1 | 6 | 9 |
| 2        | 3 | 4 | 7 |
| GRN 5, 8 |   |   |   |

Connect the corresponding pins (listed under G,R,Y), using a "dry" contact closure by connecting it to either of the GRN (ground) pins (5,8) listed.

Caution: Do not apply external power to any of these pins.

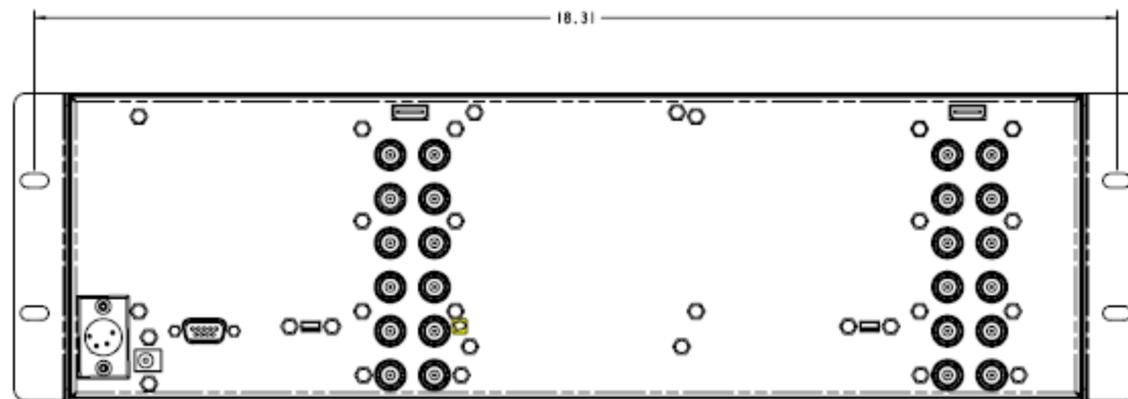
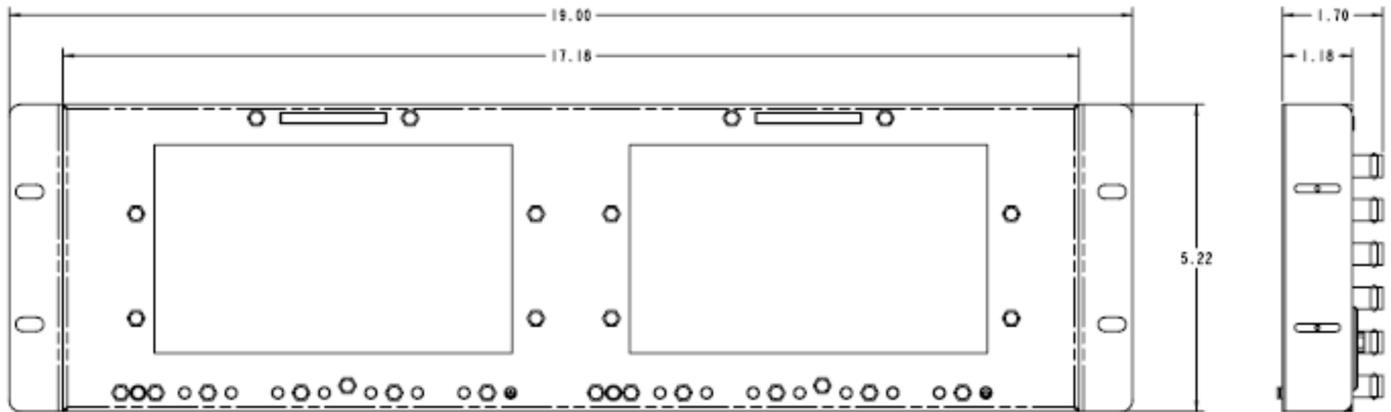
## Mechanical

Weight **2.27 Kg / 5 Lbs**

Operating Temperature **0°–35° C / 32°–104° F**

Storage Temperature **10°–50° C / 14°–122° F-  
10° C – 50° C**

# Dimensions



## Warranty

Marshall Electronics warrants to the first consumer that this M-LYNX-702 LCD monitor will, under normal use, be free from defects in workmanship and materials, when received in its original container, for a period of one year from the purchase date. This warranty is extended to the first consumer only, and proof of purchase is necessary to honor the warranty. If there is no proof of purchase provided with a warranty claim, Marshall Electronics reserves the right not to honor the warranty set forth above. Therefore, labor and parts may be charged to the consumer. This warranty does not apply to the product exterior or cosmetics. Misuse, abnormal handling, alterations or modifications in design or construction void this warranty. It is considered normal for a minimal amount of pixels, not to exceed three, to fail on the periphery of the display active viewing area. Marshall Electronics reserves the option to refuse service for display pixel failure if deemed unobtrusive to effective use of the monitor by our technicians. No sales personnel of the seller or any other person is authorized to make any warranties other than those described above, or to extend the duration of any warranties on behalf of Marshall Electronics, beyond the time period described above. Due to constant effort to improve products and product features, specifications may change without notice.

**Marshall Electronics**

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