



# Instruction Manual

**LM-401M**  
**Color LCD Monitor**



## Table of Contents

<b>1.0</b>	<b>Introduction</b>	<b>2</b>
<b>2.0</b>	<b>Safety Instructions</b>	<b>3</b>
<b>3.0</b>	<b>Intellectual Property</b>	<b>3</b>
<b>4.0</b>	<b>Specifications</b>	<b>4</b>
<b>5.0</b>	<b>Checking Package Contents</b>	<b>5</b>
<b>6.0</b>	<b>Connecting the Hardware</b>	<b>5</b>
<b>7.0</b>	<b>Operating the Unit</b>	<b>6</b>
<b>8.0</b>	<b>Troubleshooting</b>	<b>6</b>
<b>9.0</b>	<b>Limited Warranty</b>	<b>6</b>
<b>10.0</b>	<b>Regulatory Compliance</b>	<b>7</b>
<b>11.0</b>	<b>Contact Information</b>	<b>8</b>

## **1.0 INTRODUCTION**

Thanks for purchasing this LM-401M LCD Monitor from TV One. The LM-401M LCD Color Monitor's Active Matrix technology offers a sharp, high contrast display. They can be universally applied, e.g. in surveillance systems, in reverse monitoring car systems or for multimedia applications. Moreover, an audio input enables sound monitoring via headphones. Our professional video conversion products have been serving the industry for over twenty years. TV One offers a full line of high quality Seamless Switchers, Video Scalers, Up/Down/Cross Converters, Analog-Digital Converters (SD/HD-SDI, HDMI, DVI), Format Converters, Standards Converters, TBC/Frame Synchronizers, Matrix Routing Switchers, Signal Distribution Amplifiers and Cat.5 Transmission Systems.

### **1.1 Liability Statement**

Every effort has been made to ensure that this product is free of errors. TV One cannot be held liable for the use of this hardware or any direct or indirect consequential damages arising from its use. It is the responsibility of the user of the hardware to check that it is suitable for his/her requirements and that it is installed correctly. All rights reserved. No parts of this manual may be reproduced or transmitted by any form or means electronic or mechanical, including photocopying, recording or by any information storage or retrieval system without the written consent of the publisher.

TV One reserves the right to revise any of its hardware and software following its policy to modify and/or improve its products where necessary or desirable. This statement does not affect the legal rights of the user in any way.

All third party trademarks and copyrights are recognised. The TV One logo, TV One-task and CORIO are the registered Trademarks of TV One. All other trademarks are the property of their respective holders.

### **1.2 Features**

The LM-401M Color LCD Monitor has many features that enable it to perform in a superior manner. Among those features you will find:

- Rugged Metal Case
- Two Composite Video Inputs
- High Brightness – 250 cd/m<sup>2</sup>
- 12VDC Operation
- Flexible Mounting Arrangements

## **2.0 IMPORTANT SAFETY INSTRUCTIONS**

To insure the best from this product, please read this manual carefully. Keep it in a safe place for future reference. To reduce the risk of electric shock, do not remove the cover from the unit. No user serviceable parts inside. Refer servicing to qualified personnel.

### **2.1 Power and Connections**

This unit is not disconnected from the AC power source as long as it is connected to the wall outlet. The off state for this unit is called standby mode. In standby mode the unit is designed to consume a reduced quantity of power compared to normal operating modes. When not using the unit for a long period of time, insure that the AC power cord is disconnected from the wall outlet. The AC wall outlet should be installed near to the unit and be easily accessible. Do not plug in or attempt to operate an obviously damaged unit.

### **2.2 Water and Moisture**

To reduce the risk of fire, do not expose the unit to rain, water or excessive moisture.

### **2.3 General Care**

Do not force switches or external connections. When moving the unit, disconnect the serial port connections first then the power cable and finally the interconnecting cables to other devices. Do not attempt to clean the unit with chemical solvents or aerosol cleaners, as this may damage the unit. Use a clean dry cloth.

### **2.4 Location**

The unit is only suitable for indoor use.

### **2.5 Ventilation**

The heat being generated in the unit has to be removed via air circulation. Therefore, the circulation vents at the housings must not be covered with any objects. Do not insert or drop anything into the air vents, as this could result in a short-circuit.

## **3.0 INTELLECTUAL PROPERTY**

Some IC chips in this product include confidential and/or trade secret property. Therefore you may not copy, modify, adapt, translate, distribute, reverse engineer, reverse assemble, or decompile the contents thereof.

## 4.0 SPECIFICATIONS

<b>Display</b>	
Display Size	4.0" (10cm)
Panel Resolution	480x234
Active Area	82.1x61.8mm
Left/Right View Angle	45°
Up/Down View Angle	10°/30°
<b>Inputs</b>	
Composite Video	2x via RCA Connectors
Mono Audio	1x via RCA Connector
<b>General</b>	
Display Element	Active Matrix TFT
Brightness	250 cd/m <sup>2</sup>
Contrast Ratio	200:1
TV Standards	NTSC-PAL Auto-detect
Vertical Frequency	NTSC:60Hz, PAL:50Hz
Horizontal Frequency	NTSC:15.75KHz, PAL:15.625KHz
Video Monitoring	Via RCA Connector
Audio Monitoring	Via 3.5mm Jack
<b>Controls</b>	
Image Reverse	Via Switch
Image Adjustments	LM-401M=Knobs
OSD Menu Display	Switch (LM-701M Only)
Video Input	Video 1-Video 2 Switch
Power	On/Off Switch
<b>Mechanical</b>	
Size (H-W-D)	115x139x36mm (4.5"x5.5"x1.4")
Weight (Net)	450 g (1 lb)
LM-401 Mounting	Tripod Thread Hole
<b>Environmental</b>	
Operating Temperature	0° to +60° C (+32° to +140° F)
Operating Humidity	10% to 85%, Non-condensing
Storage Temperature	-20° C to +70 ° C (-4° to +158° F)
Storage Humidity	10% to 85%, Non-condensing
<b>Power Requirement</b>	
External Power Supply	+12VDC
<b>Regulatory Approvals</b>	
Monitors	FCC, CE, RoHS
Power Supplies	UL, CUL, CE, PSE, GS, RoHS
<b>Accessories Included</b>	
1x Operations Manual	
1x Power Adapter	US, UK or Euro
<b>Limited Warranty</b>	
Unit, except LCD Panel	1 Year Parts and Labor
LCD Panel	Panel Manufacturer's Terms

## 5.0 CHECKING PACKAGE CONTENTS

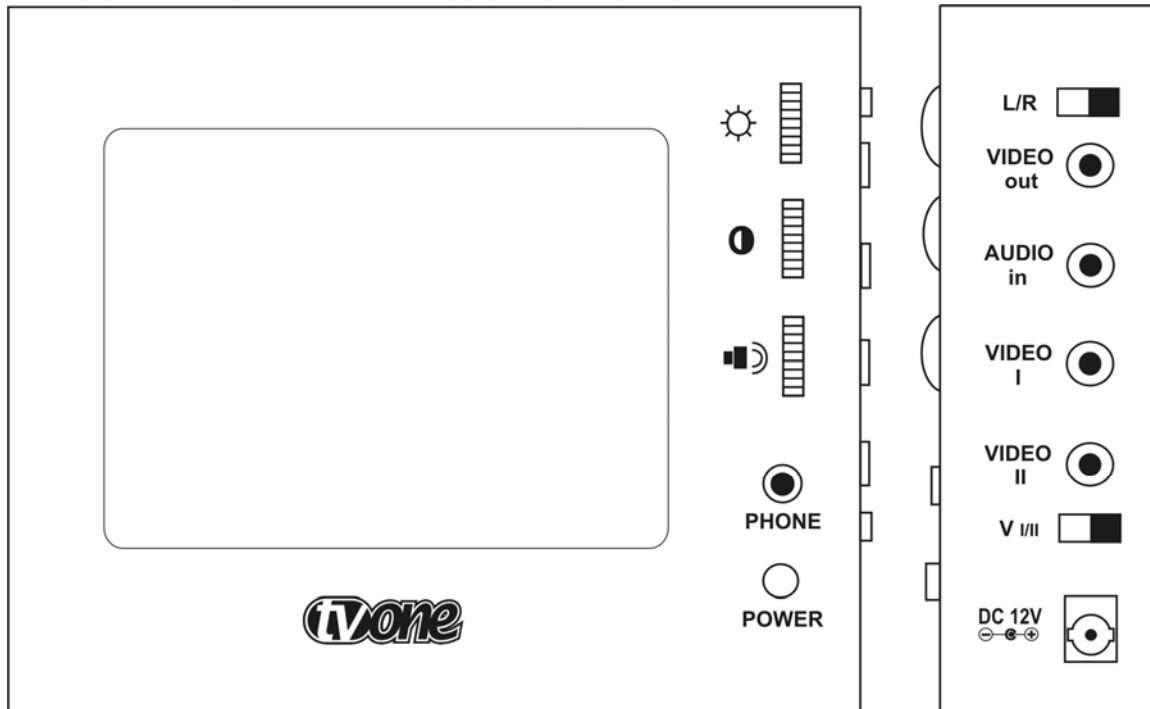
Before attempting to use this unit, please check the packaging and make certain the following items are contained in the shipping carton:

- 1x LCD Monitor
- 1x Universal AC Input Power Supply with 12VDC@4A Output
- 1x Operations Manual

**Note:** Please retain the original packing material should the need ever arise to return the unit. If you find any items are missing, contact your reseller or TV One immediately. Have the Model Number, Serial Number and Invoice available for reference when you call.

## 6.0 CONNECTING THE HARDWARE

Please study the panel drawings below and become familiar with the signal input, outputs, power requirements/inputs plus any controls present.



Connect the Video Input I or II to the output of signal source, then select the correct Video Input source by switching the control marked V I/II. Connect the Audio Input and the headphones to the 3.5mm Jack located on the front of the monitor. Lastly connect an electronically regulated 12V Power Supply. Note: The positive pin must be connected to the center contact.

**Warning:** If the supplied AC cable is incorrect for your country, contact TV One immediately for a replacement. Do Not Attempt to Use An Incorrect AC Cable.

## 7.0 OPERATING THE UNIT

- 1) Switch on the device with the Power Switch
- 2) Adjust the Brightness control and Contrast in order to obtain an image as clear and sharp as possible
- 3) Adjust the Volume control for the headphones to the desired level
- 4) Select the Left/Right Reverse Image if needed

**CAUTION:** When using headphones do not adjust to a high volume. Permanent high volumes may damage a person's hearing.

## 8.0 TROUBLESHOOTING

The major cause of difficulty with the 401M monitor is use of faulty or low quality cables, attempting to use cables over to long a distance and selecting the wrong source for what is actually connected to the monitor. A second problem is misadjusting the monitor through improper use of the various setup menus. Before contacting TV One's technical support personnel, please make certain that your problem is not due to one of the above issues.

After trying the above suggestions should the problem still persist, contact your dealer for additional suggestions before contacting TV One. Should the dealer's technical personnel be unable to assist you, contact TV One via our support website: ***<http://tvone.crmdesk.com>***. Create a technical support request on the site and our support team will respond within a short period of time.

## 9.0 LIMITED WARRANTY

LIMITED WARRANTY – With the exceptions noted in the next paragraph, TV One warrants the original purchaser that the equipment it manufactures or sells will be free from defects in materials and workmanship for a period of two years from the date of purchase. Should this product, in TV One's opinion, prove defective within this warranty period, TV One, at its option, will repair or replace this product without charge. Any defective parts replaced become the property of TV One. This warranty does not apply to those products which have been damaged due to accident, unauthorized alterations, improper repair, modifications, inadequate maintenance and care, or use in any manner for which the product was not originally intended.

Items integrated into TV One products that are made by other manufacturers, notably computer hard drives and liquid crystal display panels, are limited to the term of the warranty offered by the respective manufacturers. Such specific warranties are available upon request to TV One. If repairs are necessary under this warranty policy, the original purchaser must obtain a Return Authorization Number from TV One and return the product to a location designated by TV One, freight prepaid. After repairs are complete, the product will be returned, freight prepaid.

LIMITATIONS - All products sold are "as is" and the above Limited Warranty is in lieu of all other warranties for this product, expressed or implied, and is strictly limited to two years from the date of purchase. TV One assumes no liability to distributors, resellers or end-users or any third parties for any loss of use, revenue or profit.

TV One makes no other representation of warranty as to fitness for the purpose or merchantability or otherwise in respect of any of the products sold. The liability of TV One with respect to any defective products will be limited to the repair or replacement of such products. In no event shall TV One be responsible or liable for any damage arising from the use of such defective products whether such damages be direct, indirect, consequential or otherwise, and whether such damages are incurred by the reseller, end-user or any third party.

## **10.0 REGULATORY COMPLIANCE**

The LM-401M monitor has been tested for compliance with appropriate FCC and CE rules and regulations. The Power Adaptor/Supply has been tested for compliance with appropriate UL, CUL, CE, PSE, GS Rules, Regulations and/or Guidelines. This Product and Power Adapter is RoHS Compliant.

## 11.0 CONTACT INFORMATION

Should you have questions or require assistance with this product in areas not covered by this manual, please contact TV One at the appropriate location shown below:

### **TV One USA**

2791 Circleport Drive  
Erlanger, KY 41018  
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End of Manual