# **User Manual**

Audio Authority*	2	1	POWER	
Model 1392 1 x 2 Distribution Amplifier	0 0 0			

Model 1392, 1394, and 1398 HDMI Distribution Amplifiers



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## 1.0 INTRODUCTION

Thanks for purchasing this Model 1392, 1394 or 1398 distribution amplifier from Audio Authority. These distribution amplifiers are designed to provide a way to distribute an HDMI signal to multiple HDMI display devices without signal degradation or loss of encryption. The 1392, 1394 and 1398 are HDCP compliant. Audio Authority also offers an extensive line of audio and video switchers, converters and distribution amps available for purchase online at www.audioauthority.com.

## 1.1 Liability Statement

Every effort has been made to ensure that this product is free of errors. Audio Authority 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.

Audio Authority 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.

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HDMI, the HDMI logo and High-Definition Multimedia Interface are trademarks or registered trademarks of HDMI Licensing LLC.

#### 1.2 FEATURES

The 1392, 1394 and 1398 have many features that enable them to perform in a superior manner. Among those features you will find:

- Distributes one HDMI source to multiple destinations
- Supports 480i, 480p, 720p, 1080i, 1080p
- HDMI Certified by Silicon Images ATC Laboratory
- Supports DDWG standard for HDMI compliant monitors
- HDCP compliant, RoHS compliant

# 2.0 SPECIFICATIONS

Performance				
Resolutions Supported	480i, 480p, 720p, 1080i, 1080p and others			
Maximum Cable Distance	Input: 50 ft. max, Outputs 50 ft. max			
Maximum Bandwidth	1.65GHz			
HDMI Compliance	Version 1.2a			
HDCP Function	HDCP compliant			
I/O Connectors				
Input	HDMI, TMDS x1 (All models)			
Outputs	Model 1392: HDMI, TMDS x2 Model 1394: HDMI, TMDS x4 Model 1398: HDMI, TMDS x8			
Mechanical				
Dimensions (H-W-D)	Model 1392 1.1 x 7.6 x 3.6 (28 x 192 x 90.4mm) Model 1394 1.1 x 10.4 x6 (28 x 264 x 153mm) Model 1398 1.1 x 11.2 x 7 (44 x 284 x 175mm)			
Weight	Model 1392 1.2 lbs (550g) Model 1394 2.4 lbs (1080g) Model 1398 3.2 lbs (1470g)			
Warranty				
Limited Warranty	1 Year Parts and Labor			
Environmental				
Operating Temperature	0 to +50° C (+32° to +104° F)			
Operating Humidity	15% to 80% (Non-condensing)			
Storage Temperature	-20° to +60° C (-20° to +140° F)			
Storage Humidity	15% to 70% (Non-condensing)			
Power Requirements				
External Power Supply	+5 VDC@2A			
Regulatory Approvals				
Distribution Amplifier	FCC, CE, RoHS, HDMI ATC			
Power Supplies	UL, CE, CSA, CEC, RoHS			
Accessories Included				
AC Power Adapter	(USA)			
User Manual				

## 3.0 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:

- HDMI Distribution Amplifier
- 5 VDC Power Adapter
- Remote Mounting Kit
- User Manual

Note: Please keep the original packing material in case the unit ever needs to be returned. If you find any items are missing, contact Audio Authority immediately. Have the Model Number, Serial Number and Invoice available for reference when you call.

## 4.0 CONNECTING THE HARDWARE

Please study the front and rear panel drawings below and become familiar with the signal input, outputs and power inputs.

The 1390 series Distribution Amplifiers are functionally identical with the exception of the number of outputs. All have a single HDMI input and a 5 VDC power input socket. These connectors as well as the outputs connectors are arrayed on the rear panel. There are no controls or switches on any of the units; however all units have LEDs that indicate when the DA is furnishing a signal to an HDMI compliant device. Finally, there is no power switch. The unit will begin to function as soon as the AC adapter is connected to the unit and an AC supply.

Model 1392 HDMI Distribution Amplifier, front view. Models 1394 and 1398 are similar.



Model 1392 HDMI Distribution Amplifier, rear view. Models 1394 and 1398 are similar.



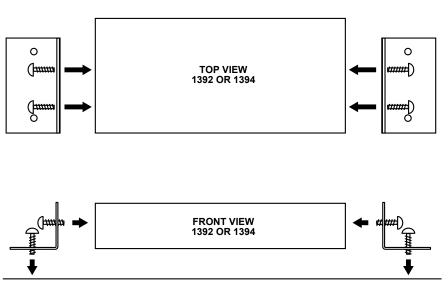
## 4.1 Installation of Mounting Components

The 1392 and 1394 DAs can be mounted on any flat surface and the 1398 DA can be mounted in a standard 19" rack.

## Mounting the 1392 or 1394 DAs

Attach the two "L" shaped mounting brackets to the product using the furnished hardware and then attach the combined assembly to the desired location.

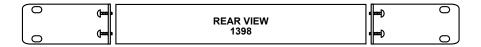
Note that the holes on the brackets are offset to allow easier mounting to the flat surface after you've attached the brackets to the switcher.



**FLAT SURFACE** 

## Mounting the 1398 DA

To mount the rack mounting brackets to the 1398 Distribution Amplifier, attach the brackets to the 1398 and then attach the combined assembly to the equipment rack using the furnished hardware.



## 5.0 OPERATING THE UNIT

- To use any of the 1390 series HDMI Distribution Amplifiers, connect an HDMI approved cable, no more than 50\* feet in length, from the HDMI source to the input of the DA.
- Connect the outputs of the DA to their destination devices using HDMI approved cables no more than 50 feet long.\*
- Connect the power adapter to the AC source and then to the DA.
- Turn on the HDMI source as well as the HDMI destination devices and observe the source signal on the inputs of all of the destination devices. The DA's front panel LEDs will light indicating which outputs are active.

\*Note: Proper operation of HDMI Distribution Amplifiers depends on the use of high quality HDMI cables that provide low loss, high bandwidth signal handling. The distance specification cannot be guaranteed unless cables used throughout the system meet these high standards.

## 5.1 Resolution Tracking

Since HDTV can be any of several different resolutions, the distribution amplifier must be able to sense and process the various resolutions on both input and outputs. On the input, the DA will sense and accept any standard resolution however, on the outputs, the DA must sense the resolution capabilities of all of the display devices connected to it and then set the resolution of all outputs to the resolution of the display having the <u>lowest</u> resolution response characteristics. To do otherwise would mean that some display devices would not produce a picture. The user is advised to use display devices having the same resolution to avoid the DA's processing circuitry assuming the lowest common denominator status on all monitors with respect to display image resolution.

## 6.0 TROUBLESHOOTING

- First make certain that the input cable is no more than 50 feet long and none of the output cables are more than 50 feet long.
- Make certain that the Distribution Amplifier is receiving power by looking at the power LED. It should be illuminated and not flickering or intermittently going on and off. Intermittent operation generally means a problem with the DC power adapter or low AC voltage being applied to the DC adapter's input.
- If you still experience problems using the Distribution Amplifiers,
  you should attempt to determine what is wrong by first attaching
  the source device directly to each of the destination devices in turn
  using the same cables you are using with the expanded system.
  This is a way of determining if the problem is due to bad cables
  or a problem with the other devices. If you are unable to obtain
  a signal using this simplified path, suspect the cables, the source
  device or the destination device.
- Remember that HDMI devices communicate with one another so the source device and all destination devices must be fully HDMI capable. In addition, HDCP encryption requires processing dependent on the equipment you have connected to both the source and destination devices.

If the problem still persists after trying the above suggestions, contact the Audio Authority Technical Service department via email: support@audioauthority.com, or call 800-322-8346 or 859-233-4599.

## 7.0 LIMITED WARRANTY

Should any consumer use product from Audio Authority fail due to defects in materials or workmanship within one year from the date of the original sale to the end-user, Audio Authority guarantees that we will replace the defective product at no cost. Freight charges for the replacement unit will be paid by Audio Authority (Ground service only). A copy of the invoice showing the item number and date of purchase (proof-of-purchase) must be submitted with the defective unit to constitute a valid in-warranty claim.

Units that fail after the warranty period has expired may be returned to the factory for repair at a nominal charge, if not damaged beyond the point of repair. All freight charges for out-of-warranty returns for repair are the responsibility of the customer. Units returned for repair must have a Return Authorization Number assigned by the factory.

This is a limited warranty and is not applicable for products which, in our opinion, have been damaged, altered, abused, misused, or improperly installed. Audio Authority makes no other warranties either expressed or implied, including limitation warranties as to merchantability or fitness for a particular purpose. Additionally, there are no allowances or credits available for service work or installation performed in the field by the end user.

## **Warranty Service Procedures**

If you suspect a product defect, contact Audio Authority's Technical Service Department at 800-322-8346 or 859-233-4599 for assistance in verifying the problem. If a defect or potential defect is suspected, a replacement unit will be shipped immediately on a defect-exchange basis and a Return Authorization Number will be issued for the return of the defective product. Replacement units are sent out at the Manufacturer's Suggested Retail Price which is debited to the Customer's Credit Card at the time of shipment. Once we receive the defective unit back at the factory, it will be evaluated under the conditions of this warranty and if found to be in-warranty, a full credit will be issued to the Customer's Credit Card. Return freight charges for the defective unit are the customer's responsibility. Please contact our Technical Service Department for complete details concerning all in and out of warranty service matters.

We appreciate your confidence in our products and services and will always strive to meet or exceed your needs.

## 8.0 REGULATORY COMPLIANCE

The 1392, 1394, and 1398 Distribution Amplifiers have been tested for compliance with appropriate FCC and CE rules and regulations and are also RoHS compliant.

The Power Adaptor/Supplies have been tested for compliance with UL, CE and CSA rules and regulations and are also RoHS compliant.

## 9.0 CONTACT INFORMATION

Should you have questions or require assistance with this product in areas not covered by this manual, please contact Audio Authority using the information below.

Audio Authority Technical Service 800-322-8346 M-F 8:30 AM to 5:00 PM, EST International: 859-233-4599 Fax: 859-233-4510 Send email to: support@audioauthority.com

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