

# User Manual

Audio  Authority®  
Model 1391 EQ / Extender

**HDMI**

[www.audioauthority.com](http://www.audioauthority.com)

**Model 1391  
HDMI EQ/Extender**

Audio  Authority®



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## **1.0 INTRODUCTION**

Thanks for purchasing this Model 1391 HDMI Equalizer/Extender from Audio Authority. This product is designed to allow a 1080i HDMI signal to be carried over cables up to a total of 45 meters from source to display, without signal degradation or loss of encryption. The 1391 is 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](http://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 1391 has many features that enable it to perform in a superior manner. Among those features you will find:

- Supports 480i, 480p, 720p, 1080i, 1080p
- Maximum distance, source to EQ: 40 meters
- Maximum distance, EQ to display: 5 meters
- HDMI certified by Silicon Images ATC Laboratory
- Rugged all-metal construction
- HDCP compliant, RoHS compliant

## 2.0 SPECIFICATIONS

<b>Performance</b>	
Resolutions Supported	480p, 720p, 1080i, 1080p
Maximum Cable Length*	Input: 40m max, Output: 5m max
Maximum Bandwidth	1.65GHz
HDMI Compliance	Version 1.1
HDCP Function	HDCP compliant
<b>I/O Connectors</b>	
Input	HDMI Type A x1
Output	HDMI Type A x1
<b>Mechanical</b>	
Dimensions (H-W-D)	0.9 x 1.6 x 2.1 (22 x 40 x 53.5mm)
Weight	1.2 lbs (550g)
<b>Warranty</b>	
Limited Warranty	1 Year Parts and Labor
<b>Environmental</b>	
Operating Temperature	0 to + 40° C (+32° to +104° F)
Operating Humidity	10% to 80% (Non-condensing)
Storage Temperature	-20° to +60° C (+20° to +140° F)
Storage Humidity	10% to 70% (Non-condensing)
<b>Power Requirements</b>	
Via Cable from Source	5 VDC@200mA
External Power Supply	5 VDC@2A
<b>Regulatory Approvals</b>	
EQ/Extender	FCC, CE, RoHS, HDMI ATC
Power Supplies	UL, CE, CSA, CEC, RoHS
<b>Accessories Included</b>	
AC Power Adapter	(USA)
User Manual	

\* Maximum cable length is possible only with premium cables. Greater distances may be possible, depending upon quality of the source signal, cable type and display capability.

### 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 EQ/Extender
- 5 VDC Power Adapter
- 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.

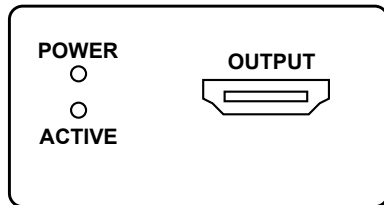
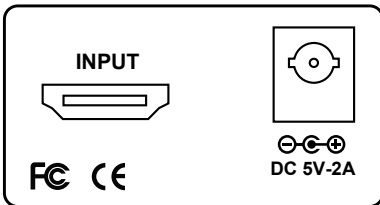
### 4.0 THE HARDWARE

Please study the panel drawings below and become familiar with the signal input, output and power input.

Model 1391 HDMI EQ/Extender, top view.



Model 1391 HDMI EQ/Extender, left and right views.



## 5.0 INSTALLING THE UNIT

- Turn off the HDMI source equipment and the HDMI display device.
- Connect an HDMI extension cable between the HDMI Source and the INPUT port of extender (no longer than 40 meters).
- Connect an HDMI extension cable between the display device and the OUTPUT port of extender (no longer than 5 meters).
- Connect the DC power cord from the AC Adapter\* to the unit and plug the AC adapter into an active AC socket.
- Turn on the HDMI Source and HDMI Display Device.

*\* The 1391 may be powered via the HDMI cable, however, the source device must supply a minimum of 200mA to the HDMI cable. Since this may be an unreliable power source, it is recommended that the AC Adapter provided with the unit be used.*

*\*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.*

## 6.0 TROUBLESHOOTING

- The input cable should be no more than 40 meters long and none of the output cables more than 5 meters long.
- Make certain that the 1391 is receiving power by looking at the power LED.
- Attempt to isolate the problem by first connecting the source device directly to the destination device using the same cables you are using with the expanded system.
- Premium cables are required for maximum distances; be sure the cables provide low loss, high bandwidth signal handling.
- Inspect the cables for damage.
- Try using a cable two meters or less to verify that the units work together under optimal circumstances. 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](mailto:support@audioauthority.com), or call 800-322-8346 or 859-233-4599.



# Notes

## **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 1391 EQ/Extender has 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](mailto:support@audioauthority.com)

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