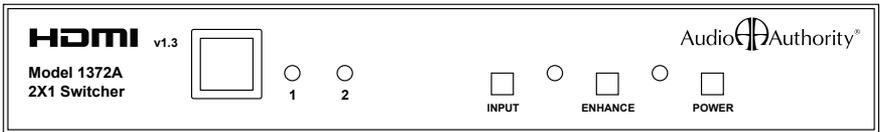


User Manual



Model 1372A and 1374A HDMI Switchers

Audio  Authority®

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Liability Statement

Every effort has been made to ensure that this product is free of defects. 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.

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1.0 INTRODUCTION

Thank you for purchasing this HDMI switcher from Audio Authority. The Model 1372A and 1374A switchers are designed to allow selection of 2 or 4 inputs respectively for display on an HDMI compliant television or signal distribution system. These version 1.3 HDMI switchers support all standard HDTV formats, PC formats from 1024x768 through 1920x1200, and embedded HD-Audio. The switchers can be controlled via the front panel, the included infrared remote control and/or RS-232 control.

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 FEATURES

- HDMI 1.3, HDCP 1.1 and DVI 1.0 compliant
- Allows switching of 2 or 4 inputs
- Supports 10/12 bit color depth display
- PC resolutions through 1920x1200
- HDTV resolutions through 1080p@60Hz
- SDTV resolutions 480i and 576i
- Supports embedded high bit rate audio: Audio Dolby® Digital TrueHD, DTS-HD, and LPCM
- Signal enhancement feature enables longer cable runs
- Accepts HDMI locking cables
- Infrared remote control included
- RS-232 control capable

2.0 GETTING THE BEST RESULTS

Many factors influence the quality and reliability of HDMI switcher installations. Consider the following and take basic precautions suggested below to ensure the best possible performance.

- **Output display device.** The quality of the output signal depends largely upon the type and quality of the HDMI display device used; some televisions simply look better than others.
- **Distance between the sources and the display.** Long distances are possible, but premium quality cables and advanced HDMI extenders with DDC correction may be necessary for the longest runs.
- **Input/output connection cables.** HDMI cable design and quality are extremely important in long cable runs where capacitance can severely degrade performance. Cables should be of the best quality; low quality cables are susceptible to interference. Always use locking cables or good strain relief methods to prevent cables from becoming loose over time.
- **Interference from nearby electrical devices** can have an adverse effect on signal quality. For example, older computer monitors often emit a very high electromagnetic field that can interfere with the performance of video equipment in its proximity.

3.0 CHECKING PACKAGE CONTENTS

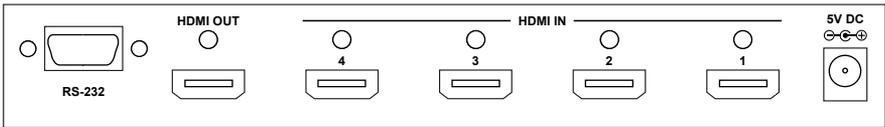
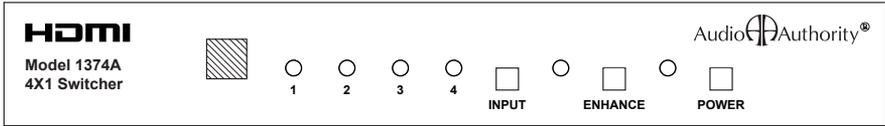
Before attempting to use this switcher, please check the packaging and make certain the following items are contained in the shipping carton:

- HDMI Switcher
- Infrared Remote Control
- 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 and invoice available for reference when you call.

4.0 CONNECTING THE HARDWARE

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



- Connect HDMI approved cables from the HDMI sources to the inputs of the switcher. Cable length can be up to 30 meters – preferably shorter.
- Connect the output of the switcher to the destination device using HDMI approved cables no more than 30 meters long.
- Connect the power adapter to the AC source and then to the switcher.
- Turn on the HDMI sources and HDMI destination device
- Turn on the switcher by pressing the power button on the front panel or on the IR remote control, or use an RS-232 command. Observe the source signals on the input of the destination device. The switcher's front panel LEDs indicate the active input.
- Make certain that the HDMI cables are securely plugged into the source and display devices as well as the HDMI switcher. Always use high quality cables, and the shortest length possible, for best results.

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.

4.1 Using the Locking Cable Securing Feature

If HDMI cables are used that are equipped with locking type connectors, remove the Philips head screws from the rear of the unit just above the HDMI connectors and replace them with the hex jackscrews included with the accessory pack. After screwing these into the threaded holes vacated by the Philips head screws, the jackscrew provides a threaded receptacle for the screw that is part of the locking HDMI connector on the cable. Plug in the cable's locking HDMI connector and secure it to the unit with its integral screw.

5.0 OPERATING THE UNIT

5.1 Front Panel Controls

- Enhance Switch

If the cable run length is excessive and the quality of the display is less than optimum, press the Enhance switch on the front panel. The switcher's low noise amplifier may allow the system to work with longer input and output cables if there is enough signal for the amplifier to recover the HDMI bitstream. An LED indicates that the amplifier is in use.

- Input Select Switch

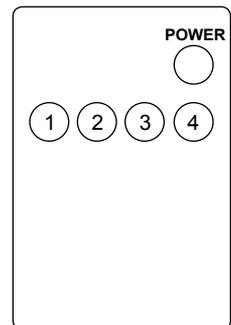
This switch is pressed to select the desired input. Each time the switch is pressed, the next input in sequence (from left to right) is selected. LED displays indicate which input is active.

- On/Off Power Switch

Use this switch to turn the unit on or off, or use the IR remote control or RS-232 command. An indicator LED shows when the unit is turned on.

5.2 IR Remote Control

- The unit can be turned on and off and the inputs can be selected simply by pressing the appropriate button on the remote.
- Selection of Enhance mode is not possible from the IR Remote.
- Note: When unpacking the HDMI switcher, remove the insulator from the battery compartment of the remote in order for the remote to receive power. The battery compartment slides out from the bottom of the unit.



5.3 Switcher Operation via RS-232 Machine Control

The 1372 and 1374 HDMI Switchers may be operated using RS-232 protocols. The technical information needed is provided in the two charts below. A system using RS-232 control should be wired and programmed by a qualified custom integrator.

Pin Definitions

HDMI Switcher	
<i>PIN</i>	<i>Definition</i>
1	NC
2	Tx
3	Rx
4	NC
5	GND
6	NC
7	NC
8	NC
9	NC

Control Unit	
<i>PIN</i>	<i>Definition</i>
1	NC
2	Rx
3	Tx
4	NC
5	GND
6	NC
7	NC
8	NC
9	NC

5.2.1 RS-232 Commands

<i>Command</i>	<i>Action</i>
"I" + "1"	Port 1 On
"I" + "2"	Port 2 On
"I" + "3"	Port 3 On
"I" + "4"	Port 4 On
"S" + "1"	Enable Signal Enhance
"S" + "0"	Disable Signal Enhance
"P" + "1"	Power On
"P" + "0"	Power Off

6.0 TROUBLESHOOTING

- For higher resolutions such as 1080p, first make certain that the input cable is as short as possible and none of the output cables are more than 15 meters long. HDMI cable design and quality are extremely important in long cable runs where capacitance can severely effect performance. Our 1391A Extender/DDC Corrector may be a necessary accessory to use in extreme length applications.
- Make certain that the switcher is receiving power by looking at the power LED. It should be illuminated and not flickering 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 switcher, you should attempt to determine what is wrong by first attaching each source device in turn directly to the destination device 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 and HDCP compliant.

If a 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 SPECIFICATIONS

Video Inputs	
1372A	2x HDMI via Type A HDMI Connector
1374A	4x HDMI via Type A HDMI Connector
Video Output	
Both Models	1x HDMI via Type A HDMI Connector
General	
Frequency Bandwidth	2.25Gbps (Single Link)
Color Depth	10/12 bit color depth display
Supported PC Resolution	Up to 1920x1200
Supported TV Formats	480i, 480p, 576i, 576p, 576p, 720p, 1080i and 1080p
Audio I/O (Embedded)	HD-Audio, including Dolby® TrueHD & DTS-HD
Compliance	HDMI V1.3, HDCP V1.1, DVI V1.0
Signal Enhancement	Switchable on/off
Maximum Distances	
Source to Switcher	20m (60') for 1080p/8-bit, 15m (45') for 1080p/12-bit
Switcher to Display	15m (45') for 1080p/8-bit, 10m (30') for 1080p/12-bit
Control Methods	
Local Control	Front panel via push button switches
Remote Control	Infrared and RS-232 via DB-9 connector
Warranty	
Limited Warranty	1 Year parts and labor
Mechanical	
Size (H-W-D)	1.2"x7.9x3.5" (30x200x89mm)
Weight (Net)	1.88lbs (0.85kg)
Environmental	
Operating Temperature	0° to +50°C (+32° to +122°F)
Operating Humidity	10% to 90%, non-condensing
Storage Temperature	-10° to +50°C (+32° to +122°F)
Storage Humidity	10% to 90%, non-condensing
Regulatory Approvals	
HDMI Switchers	FCC, CE, RoHS
Power Supply	UL, CUL, CE, PSE, GS, RoHS
Accessories Included	
	AC Power Adapter External Power Supply 5VDC@2A
	Instruction Manual
	IR Remote Control
Product Model Numbers	
1372A	2x1 HDMI Switcher
1374A	4x1 HDMI Switcher

8.0 LIMITED WARRANTY

If any consumer product from Audio Authority fails 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.

8.1 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.

9.0 REGULATORY COMPLIANCE

The 1372A, and 1374A switchers 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.

10.0 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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