

Comprehensive[®]

A Division of Vcom International Multimedia Corporation



Instruction Manual

***CDA-HDMI20 & CDA-HDMI40
HDMI Distribution Amplifiers***

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1.0 INTRODUCTION

Thanks for purchasing this CDA-HDMI20 or CDA-HDMI40 HDMI Distribution Amplifier from Comprehensive. These Distribution Amplifiers are designed to provide a way to distribute up to 4 HDMI signals to other HDMI type devices without signal degradation or loss of encryption.

1.1 Liability Statement

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

Comprehensive 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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1.2 FEATURES

The Comprehensive CDA series of HDMI Distribution Amplifiers have many features that enable them to perform in a superior manner. Among those features you will find:

- Distributes 1 HDMI source to as many as 4 destinations
- Supports 480i, 480p, 720p, 1080i and 1080p resolution
- 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
Maximum Cable Distance	Input: 50 Ft Max, Outputs: 50 Ft Max
Maximum Bandwidth	1.65GHz
HDMI Compliance	Version 1.2a
I/O Connectors	
Input	HDMI, TMDS x1 (All models)
Outputs	CDA-HDMI20: HDMI, TMDS x2 CDA-HDMI40: HDMI, TMDS x4
Mechanical	
Dimensions (H-W-D)	CDA-HDMI20 1.1x7.6x3.6" (28x192x90.4mm) CDA-HDMI40 1.1x10.4x6" (28x264x153mm)
Weight	CDA-HDMI20 1.2 lbs (550g) CDA-HDMI40 2.4 lbs (1080g)
Warranty	
Limited Warranty	2 Years 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	+5V@2A (Locking DC)
Regulatory Approvals	
Distribution Amplifier	FCC, CE, RoHS, HDMI ATC
Power Supplies	UL, CE, CSA, CEC, RoHS
Accessories Included	
1x AC Power Adapter	US, UK or Euro Type
1x Instruction Manual	CDA Series
Remote Mtg. Kit	CDA-HDMI20, CDA-HDMI40
Product Item Number	
CDA-HDMI20	2x1 HDMI Distribution Amp
CDA-HDMI40	4x1 HDMI Distribution Amp

3.0 CHECKING PACKAGE CONTENTS

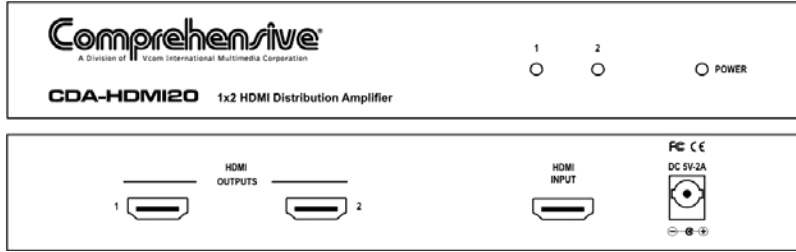
Before attempting to use this unit, please check the packaging and make certain the following items are contained in the shipping carton:

- 1 ea HDMI Distribution Amplifier
- 1 ea +5 VDC Power Adapter
- 1 ea Remote Mounting Kit
- 1 ea Instruction Manual

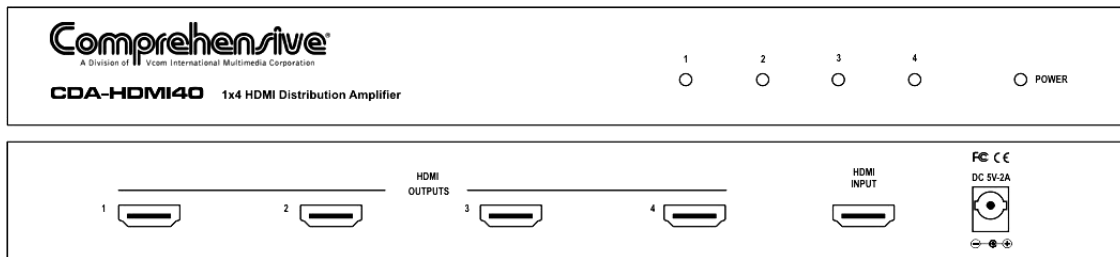
Note: Please retain the original packing material should the need ever arise to return the unit. If you find any items are missing, contact your reseller or Comprehensive immediately. Have the Model Number, Serial Number and Invoice available for reference when you call.

4.0 CONNECTING THE HARDWARE

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



CDA-HDMI20
Distribution Amplifier



CDA-HDMI40 Distribution Amplifier

The Comprehensive CDA series HDMI 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.

5.0 OPERATING THE UNIT

To use any of the Comprehensive CDA 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. Next, connect the outputs of the DA to their destination devices using HDMI approved cables no more than 50 feet long.* Lastly, connect the power adapter, first to the AC source and then to the DA. Turn on the HDMI source as well as the HDMI destination devices and you will see the source signal appear on the inputs of all of the destination devices and an LED will light indicating which outputs are active.

**Note: Proper operation of HDMI Distribution Amplifiers depends on the use of the highest quality cables available. The cable must provide low loss, high bandwidth signal handling and be used with all Comprehensive HDMI products. The distance specification cannot be guaranteed unless such cables are used throughout the system.*

5.1 Resolution Tracking

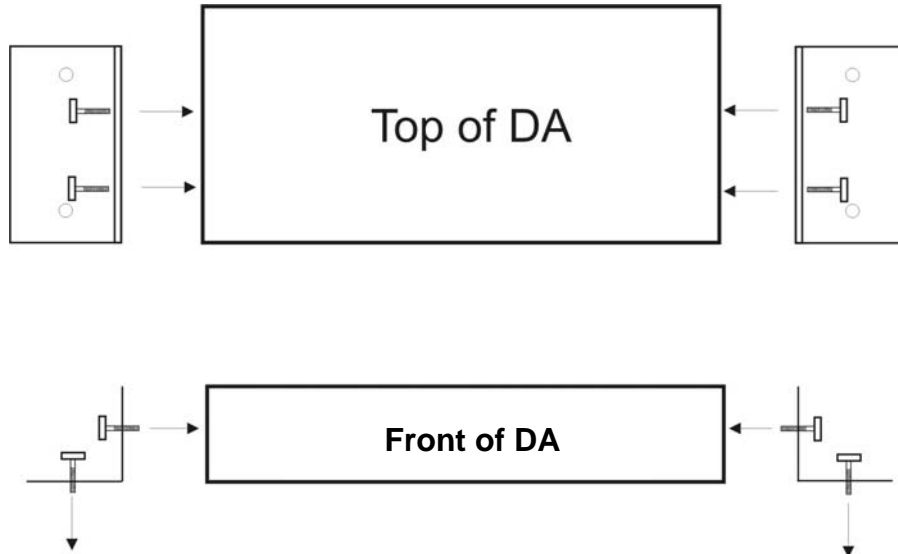
Since HDTV can be any of several different resolutions, the CDA series DA must be able to sense and process the various resolutions on both input and outputs. On the input, the DA will sense and accept any standard resolution however, on the outputs, the DA must sense the resolution capabilities of all of the display devices connected to it and then set the resolution of all outputs to the resolution of the display having the lowest 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 INSTALLATION OF MOUNTING COMPONENTS

The Comprehensive CDA-HDMI20 and CDA-HDMI40 HDMI DAs can be mounted on any flat surface using the included mounting kit.

Mounting the CDA-HDMI20 or CDA-HDMI40 HDMI 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.

7.0 TROUBLESHOOTING

In the event of problems, first make certain that the input cable is no more than 50 feet long, none of the output cables are more than 50 feet long and all cables are of premium construction.

Next, 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 adapter or low AC voltage being applied to the DC adapter's input.

If all is well in these areas, 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 additional processing which also is dependent on the equipment you have connected to both the source and destination devices. If you 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.

After trying the above suggestions should the problem persist, contact your dealer for additional suggestions before contacting Comprehensive. Should the dealer's technical personnel be unable to assist you, contact Comprehensive at 800-526-0242 or via Fax at 201-814-0510.

8.0 LIMITED WARRANTY

Comprehensive warrants that for a period of 2 years from date of original purchase, our products will be free from defects in material and workmanship under normal use and service. This warranty covers defective material or workmanship only and does not apply to misuse, use under extreme conditions, products that have been opened or serviced by anyone other than Comprehensive, products improperly used or installed, fire, flood damage or any acts of nature.

A Return Authorization (RA) number must be obtained from your place of purchase before the unit is returned and must be accompanied by a dated written proof of purchase. All material must be shipped at the expense and risk of the owner. Units under warranty deemed to be defective will be shipped back to the buyer or dealer freight paid. Contact Comprehensive customer service at 800-526-0242, or customerservice@comprehensiveinc.com.

Comprehensive's obligation under this warranty will be limited, at the sole discretion of Comprehensive, to either repair or replacement of defective unit, including free parts and labor. In no event shall Comprehensive be responsible for any incidental or consequential damages or loss of profits or goodwill.

9.0 REGULATORY COMPLIANCE

The Comprehensive CDA series 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, CEC and CSA rules and regulations and are also RoHS compliant.



**Comprehensive
55 Ruta Court
South Hackensack, NJ 07606**

**Phone: 800-526-0242
Fax: 201-814-0510**