

# Linear®

*Building On Innovation.*

## 1:8 Distribution Amplifier For **HDMI™**

Model # HDMI-DA-1X8

USER MANUAL



**1080P**  
PROGRESSIVE

**HDMI**  
HIGH DEFINITION MEDIA INTERFACE

**GDTV**

**HD DVD**

**Blu-ray Disc™**

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





## ASKING FOR ASSISTANCE

---

**Technical Support:**

Telephone (800) 421-1587  
(760) 438-7000

Fax (760) 438-7199

**Technical Support Hours:**

6:30 AM - 4:30 PM PST Monday through Friday.

**Email:**

[techsupport@linearcorp.com](mailto:techsupport@linearcorp.com)

**Website:**

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

**Notice**

Linear LLC reserves the right to make changes in the hardware, packaging and any accompanying documentation without prior written notice.

## TABLE OF CONTENTS

---

1. Introduction / Operation Notes
2. Features
3. Panel Descriptions
4. Connecting and Operating the 1:8 Distribution Amplifier for HDMI For HDMI / Application Diagram
5. Rack Ears Installation Diagram
6. Wiring Diagram
7. Specifications
8. Warranty

## INTRODUCTION

---

The Linear 1:8 Distribution Amplifier for HDMI is the perfect solution for anyone who needs to send one source of digital high definition video to multiple displays at the same time. It supports HDMI equipment, such as DVD players, satellite set top boxes and HDMI displays. In operation, the digital video source is connected to the distribution amplifier's one input while eight HDMI outputs are available to be used in part or in full. Once the unit is connected and powered, your source can be distributed up to eight digital displays at the same time.

### How It Works

Simply connect your HDMI video source to the 1:8 Distribution Amplifier for HDMI's input using the supplied HDMI cable. Then connect up to eight HDMI displays to the unit's eight HDMI outputs. Once connected and powered, your source can be seen on all eight displays at the same time. When two or more 1:8's are connected together, you can create a larger distribution system.

## OPERATION NOTES

---

### **READ THESE NOTES BEFORE INSTALLING OR OPERATING THE 1:8 DISTRIBUTION AMPLIFIER FOR HDMI**

- **Display information (EDID) is sent from the display connected to HDMI Output Port 1 to the source connected to the 1:8 Distribution Amplifier for HDMI. If there is no display connected to HDMI Output Port 1, the remaining HDMI Output Ports will be scanned in succession and use the first EDID that it detects. (See note on page 4 for additional information)**
- HDMI/HDCP compliant
- Compatible with all HDMI and DVI\* displays

\*When used with a HDMI to DVI adapter

# FEATURES

---

## Features

- Connects up to eight HDMI/DVI\* displays at the same time to one video source
- Allows simultaneous display
- Supports resolutions up to 1080p, 2K, and 1920 x 1200
- Extends the range of HDMI compliant devices by equalizing and re-clocking the HDMI signal
- HDMI/HDCP compliant

## Includes:

- (1) 1:8 Distribution Amplifier For HDMI
- (1) 6 Ft HDMI cable (M-M)
- (1) 24V DC Power Supply
- (1) Set of Rack Ears
- (1) Users Manual



\*When used with a HDMI to DVI adapter

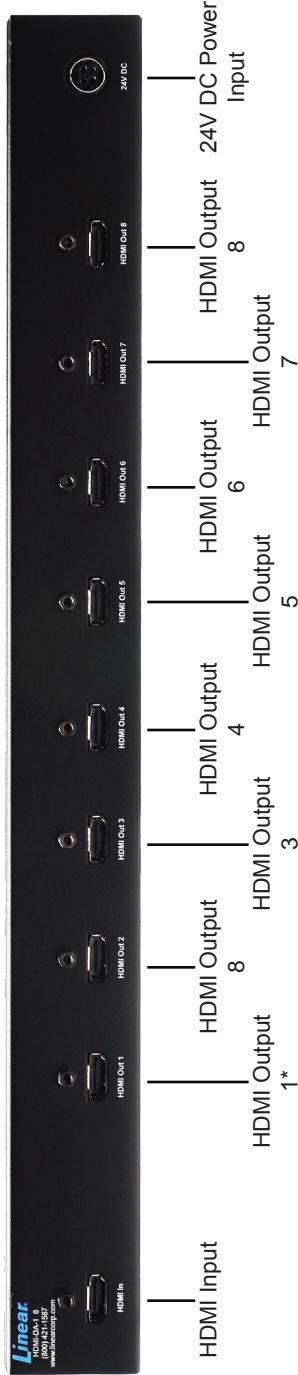
*Front Panel*



Power LED Indicator

3

*Back Panel*



\*See Note on page 4

# CONNECTING AND OPERATING THE 1:8 DISTRIBUTION AMPLIFIER FOR HDMI

---

## How to Connect the 1:8 Distribution Amplifier For HDMI

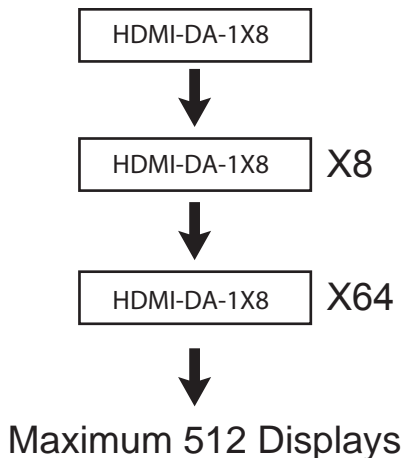
- 1 Connect the supplied cable from the HDTV HDMI source into the HDMI input port of the 1:8 Distribution Amplifier For HDMI.
- 2 Connect the user supplied cable(s) from your display(s) into the HDMI output port(s)\* of the 1:8 Distribution Amplifier For HDMI.
- 3 Plug the 24V DC power supply into the 1:8 Distribution Amplifier For HDMI.

**NOTE:** \*Display information (EDID) is sent from the display connected to HDMI Output Port 1 to the source connected to the 1:8 Distribution Amplifier for HDMI. If there is no display connected to HDMI Output Port 1, the remaining HDMI Output Ports will be scanned in succession and use the first EDID that it detects. The source will output resolutions and timings according to the EDID that is being fed by the 1:8 Distribution Amplifier for HDMI. Therefore, all of the connected displays must be capable of accepting the timings and resolution output by the source. It is recommended that the display with the lowest native resolution be connected to HDMI output port 1. This is to ensure that a compatible video signal will be able to be displayed on all connected monitors.

## APPLICATION DIAGRAM

---

Multiple HDMI-DA-1X8 devices can be daisy chained together to distribute a single HDMI signal to a maximum of 73 units, for a total of 512 displays.



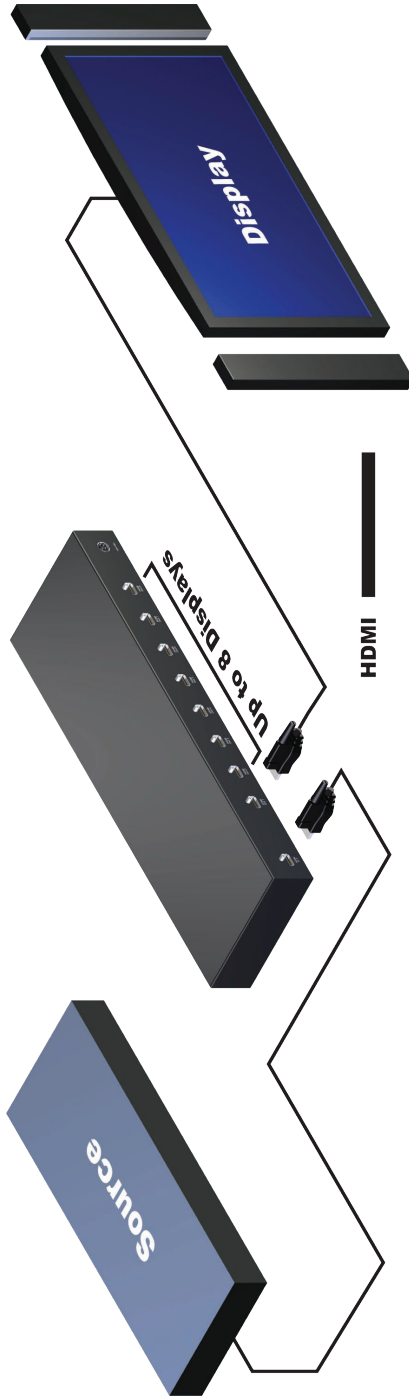
## RACK EARS INSTALLATION DIAGRAM

Rack mount ears are provided for installation of this unit into a 1U rack mount space.

1. Locate the side screws on the unit.
2. Remove the front 2 screws that are located closest to the front of the unit.
3. Using the removed screws, screw the rack mounting bracket into the unit.
4. Repeat the procedure on the opposite side of the unit.



# WIRING DIAGRAM



HDMI cable maximum distance is 15 ft at 1080p resolution without a HDMI-SB or HDMI-CAT5-EXT

## SPECIFICATIONS

---

Video Amplifier Bandwidth .....	165 MHz
Input Video Signal .....	1.2 Volts p-p
Input DDC Signal .....	5 Volts p-p (TTL)
Single Link Range .....	1080p / 1920 x 1200
Input Connector Type .....	HDMI Type A 19 Pin
Output Connector Type .....	HDMI Type A 19 Pin
Power Consumption .....	60 Watts (max.)
Power Supply .....	24V DC
Rack Mountable .....	1U Rack Space
Dimensions .....	17"W x 1.75"H x 5.5"D
Shipping Weight .....	6 Lbs

## WARRANTY

---

**Note: These products are designed to be installed and serviced by trained professional installation companies.**

Linear LLC warrants this product to be free from defects in material and workmanship. For the term of the warranty, see the list of products below. The Warranty Expiration Date is reflected by a date code that is affixed to all of Linear's products. This warranty extends only to wholesale customers who buy direct from Linear or through Linear's normal distribution channels. Linear does not warrant this product to consumers. Consumers should inquire from their selling dealer as to the nature of the dealer's warranty. There are no obligations or liabilities on the part of Linear LLC for consequential damages arising out of or in connection with use or performance of this product or other indirect damages with respect to loss of property, revenue, or profit, or cost of removal, installation or reinstallation. All implied warranties, including implied warranties for merchantability and implied warranties for fitness, are valid only until warranty expiration date as labeled on the product. This Linear LLC Warranty is in lieu of all other warranties express or implied. Some states and countries do not allow limitations or how long an implied warranty lasts or the exclusion or limitation or incidental or consequential damages, so the above exclusions may not apply. The Linear LLC warranty gives specific legal rights in addition to other rights, which may exist and vary from state to state and country to country.

All products returned for warranty service require a Return Product Authorization Number (RPA#). Contact Linear Technical Services at 1-800-421-1587 for an RPA# and other important details.

Consumers: If you have trouble locating your installing company, please contact Linear LLC at 1-800-421-1587 and we will assist you with locating a service and Installation Company.

The following warranty period applies to this set of Linear branded products.

1. Linear High Definition Video products — Two (2) years. There is no warranty offered on the batteries supplied with the IR remote Control.

**The warranty is limited to repair or replacement of products returned, freight prepaid, to Linear LLC. There is NO PROVISION FOR LABOR COST OR OTHER REIMBURSEMENTS OF ANY KIND.**

1. Failures due to product abuse, negligence, improper installation, improper use, and electrical surge including damage from lightning, water damage or other damage due to natural disasters are not covered by the warranty.
2. The warranty shall also be voided by any tampering with the date code, labels or other markings on the product.
3. Products that are damaged in transit to Linear LLC due to improper packaging or by the carrier (shipping company) will not be covered under the warranty. If the product was damaged or lost by the carrier, it is the sender's responsibility to create a claim against the carrier.
4. The user is responsible for all labor costs associated with removing, reinstalling and returning the product to Linear LLC.
5. Linear LLC, at its option, will repair or replace the defective product.
6. Replacements will be made from B-Stock. If an exact replacement is not available Linear LLC, at its option will select the nearest equivalent product. The user is responsible for freight charges to Linear LLC.
7. Linear LLC will return warranted repaired or replacements by UPS Ground or an equivalent service. A customer may pay the additional costs for second day or next-day service.







# HDMI-DA-1X8



(760) 438-7000  
(800) 421-1587 FAX (800) 468-1340  
[www.linearcorp.com](http://www.linearcorp.com)

Rev A