



**2x8 DVI DA**  
USER MANUAL

## ASKING FOR ASSISTANCE

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### Notice

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# INTRODUCTION

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Congratulations on your purchase of the 2:8 DVI Distribution Amplifier. The 2:8 DVI distribution amplifier is an innovative solution for anyone with more complex computer system requirements, like studios and presentation venues where multi-viewing is essential. The 2:8 DVI distribution amplifier accommodates various system scenarios. Most commonly, two video sources (either DVI-equipped computer, DVD player or satellite set top box) are connected to the distribution amplifier on one side. On the output side, eight video outputs are available to be used in part or in full. Once the unit is connected and powered, each source can be routed to multiple displays. All DVI displays are driven by the two DVI sources with each source or computer capable of driving eight displays at one time. For home theater applications, the unit is HDCP (high definition content protection) compliant, making it effective for use with all DVI displays.

## **How it works:**

Gefen's Gefen 2:8 DVI distribution amplifier is an expandable distribution hub that sends the same DVI graphics source to eight DVI based digital screens (flat panels or projectors). It is a flexible solution that accommodates multiple DVI displays. You can switch from source one and two via the RMT-2IR remote control. The 2:8 DVI distribution amplifier is also equipped with an auto sensing feature to switch between whatever source is active. When one source is inactive it will automatically switch to the active source.

The Gefen 2:8 DVI distribution amplifier is connected with a DVI (male to male) cable from the DVI graphic source to the distribution amplifier input. There are eight DVI outputs in each module. DVI output one is the primary connection and is used for the main display. DVI output 2 thru 8 follow the main display. The 2:8 DVI distribution amplifiers is using a unique DVI Bus™ technology to connect multiple amplifiers without sacrificing a DVI output connection. The ninth output is an expansion output used to daisy chain an additional 2:8 DVI Distribution Amplifier. The 2:8 DVI Distribution Amplifier is expandable to 256 outputs (32 DVI DA's).

## **Contents:**

The 2:8 DVI Distribution Amplifier consists of:

- (1) 2x8 DVI Distribution Amplifier
- (1) DVI 6ft Male to Male Cables
- (1) 24VDC Power Supply
- (1) RMT-2 IR Remote
- (1) User Manual

## OPERATION NOTES

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### READ THESE NOTES BEFORE INSTALLING OR OPERATING THE 2:8 DVI DISTRIBUTION AMPLIFIER SYSTEM

- All the monitors connected to the 2:8 DVI Distribution Amplifier must be able to run at the same native resolution. The 2:8 DVI Distribution Amplifier does not scale the video.
- The 2:8 DVI Distribution Amplifier units are housed in a metal box for better RF shielding.
- You must connect the sources and displays prior to applying power to the unit.

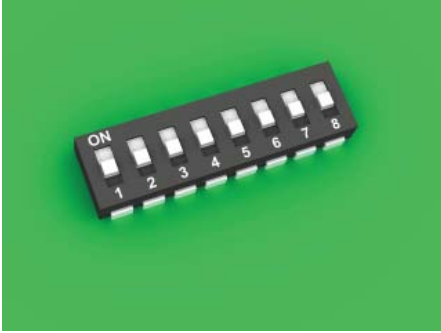


## 2:8 DVI DISTRIBUTION DA FRONT PANEL DESCRIPTION



## DIP SWITCH SELECT SETTINGS

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### DIP SWITCH EDID GUIDE

Extended display identification data (EDID) is a data structure provided by a display to describe its capabilities to any source that asks for it. The EDID includes manufacturer name, product type, timings supported by the display, display size, luminance data, (for digital displays only) pixel mapping data, supported audio channels and formats. This information is used by the source to cater its output to resolutions and audio formats that are supported by the display.

Additional EDID modes are available and configured using a combination of dip switches 1, 2, and 5. Please refer below for the different EDID modes.

To access the Dip Switches, remove all screws from the bottom and sides of the Gefen unit. Remove the hex screw heads from each side of the rear DVI & RS-232 ports. Carefully slide the unit apart. The 8 Bank of Dip Switches are located on the main PCB. Once adjustments are complete, slide the unit back together and replace all removed screws.

EDID Mode 0 (Switch 1=OFF Switch2=OFF Switch5=ON)

-EDID is copied from the first HDMI port

EDID Mode 1 (Switch 1=ON Switch2=OFF Switch5=ON)

-Same as Mode 0 and adds basic audio support

EDID Mode 2 (Switch 1=OFF Switch2=ON Switch5=ON)

-Same as Mode 0 and adds full audio support

EDID Mode 3 (Switch 1=ON Switch2=ON Switch5=OFF)

-EDID is generated based on the common video and audio features of all of the connected devices

EDID Mode 4 (Switch 1=OFF Switch2=ON Switch5=OFF)

-Same as Mode 3 and adds basic audio support

EDID Mode 5 (Switch 1=ON Switch2=OFF Switch5=OFF)

-Same as Mode 3 and adds full audio support

EDID Mode 6 (Switch 1=OFF Switch2=OFF Switch5=OFF) **DEFAULT**

-EDID is generated based on the common video features of all of the connected devices and the combined audio features of all of the connected devices

# IR CODE CONFLICTS

## How to Resolve IR Code Conflicts

There are matching pairs of dip switches underneath the 2x8 DVI DA unit and under the remote battery cover. Switch 1 & 2 on the Remote and Switch 3 & 4 inside the unit are the matching switches. These switches need to be matched for the remote to communicate with the switcher. There are 4 possible sets of IR codes and at least one of these sets should be able to resolve any IR conflicts with other home theater devices.

Remote



Remote Channel 1:



Remote Channel 2:



Remote Channel 3:

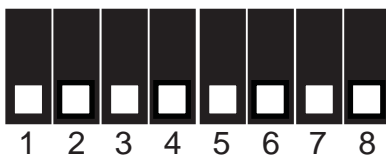


Remote Channel 4:



2:8 DVI Distribution Amplifier

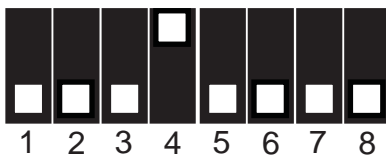
Remote Channel 1:  
Default



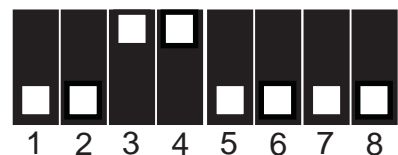
Remote Channel 2:



Remote Channel 3:

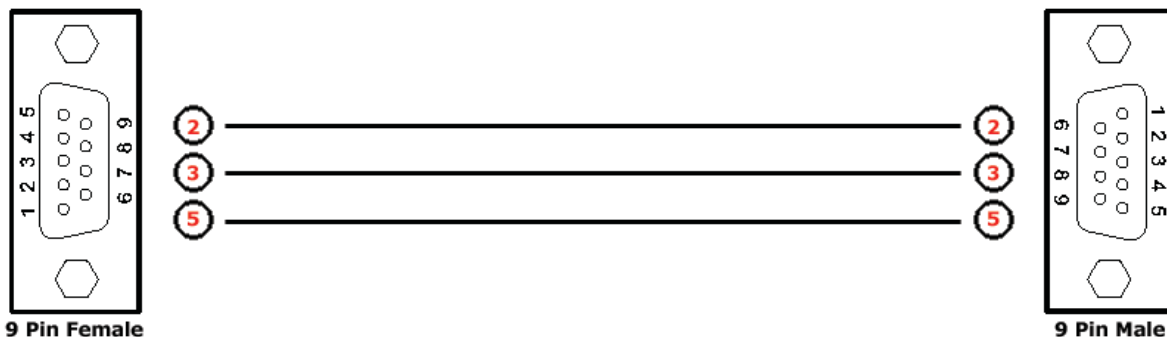


Remote Channel 4:





# RS-232 INTERFACE



## Binary Table

ASCII	Input	Binary
1	1	0011 0001
2	2	0011 0010

Additional control of the EDID modes and IR channel are possible using the RS-232 interface. For any of these modes to be successfully written to the EEPROM, all Dip Switches must be in the OFF position.

ASCII	EDID Mode
m0	0
m1	1
m2	2
m3	3
m4	4
m5	5
m6	6

ASCII	Remote Channel
r1	1
r2	2
r3	3
r4	4

OK is printed out on screen when a mode has successfully been changed.

## Terminal Settings

Bits per second ..... 19200

Data bits ..... 8

Parity ..... None

Stop bits ..... 1

Flow Control ..... None

## SPECIFICATIONS

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Video Amplifier Bandwidth .....	1.65 GHz
Single Link Range .....	1920 x 1200
Vertical Frequency Range .....	60 Hz
DVI Input/Output Connector Type .....	DVI-I (Digital Only)
Power Consumption .....	60 Watts (max.)
Power Supply .....	24VDC
Dimensions .....	17"W x 1.75"H x 7.5"D
Rackmountable .....	1 Rack Space
Shipping Weight .....	8 Lbs