



# Switch Between Two HDMI Sources On One Display



EXT-HDMI-241N

## Easily Switch Between Two HDMI Devices Using One HDMI Display

The 2x1 HDMI Switcher enables effortless HDMI source switching using a single high definition display. A simple and reliable solution, the 2x1 HDMI Switcher links any two HDMI sources (DVD players and satellite set tops) to one HDMI display. It completely eliminates the need to disconnect then reconnect multiple HDMI sources, saving time by providing a fundamental tool that brings it all together behind the scenes. When all three devices (the display plus the two sources) are connected to the 2x1 HDMI Switcher and powered on, you simply select which source you want to view on the display using the Switcher, the IR remote that comes with it, or any universal remote you program to work with the Switcher.

### Features:

- Switch easily between any two HDMI sources
- Extends the range of HDMI compliant device by equalizing and reclocking the HDMI signal
- Maintains high resolution video - beautiful, sharp HDTV resolutions up to 1080p, 2k, and computer resolutions up to 1920 x 1200 are easily achieved
- Discrete IR remote included
- Front panel button switching
- HDMI pass-through
- HDCP passthrough

## How It Works

Simply connect your HDMI display to the Switcher's display output. Then connect both HDMI sources to the Switcher's inputs using the HDMI cables that come with the Switcher. Once the sources, the Switcher and the display are all powered on and connected, you simply select which source you want to view with the included remote.

### 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
- HDMI Connector: Type A 19 Pin Female
- Power Supply: 5V DC
- Power Consumption: 5 Watts (max)
- Dimensions: 4"W x 1"H x 4"D
- Shipping Weight: 4 lbs.



**HDMI Switcher**  
USER MANUAL

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

## ASKING FOR ASSISTANCE

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### Technical Support:

Telephone (818) 772-9100  
(800) 545-6900

Fax (818) 772-9120

### Technical Support Hours:

8:00 AM to 5:00 PM Monday through Friday.

### Write To:

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C/O Customer Service  
20600 Nordhoff St.  
Chatsworth, CA 91311

[www.gefen.com](http://www.gefen.com)  
[support@gefen.com](mailto:support@gefen.com)

### Notice

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

**HDMI Switcher** is a trademark of Gefen Inc.

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# INTRODUCTION

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Congratulations on your purchase of the Gefen HDMI Switcher. Your complete satisfaction is very important to us.

Gefen's line of HDMI switches, extenders, and splitters are designed to make your A/V equipment use more comfortable, more productive and less expensive.

The HDMI Switcher allow access to multiple HDMI devices, using a single HDMI display while the HDTV extender product line can extend HD video signal up to 1640 feet (500 meters).

Gefen products offer solutions for noise, space and security concerns, data center control, information distribution, conference room presentation, school and corporate training environments.

## Our Commitment

Gefen will always offer the finest quality product at the best possible price. Included in that price is a lifetime of support from a team of outstanding engineers.

The Gefen HDMI Switcher allows two HDMI devices to be switched easily in to one HDMI compatible monitor or projector. The HDMI Switcher can also be placed at the end of a long HDMI cable to regenerate the HDMI signal.

# FEATURES

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## Features

- Switches easily between any two HDMI sources
- Maintains 480i, 480p, 720p, 720i, and 1080i, 1080p resolutions
- Extends any HDMI compliant device by regenerating the HDMI signal
- Maintains high resolution video—beautiful, sharp HDTV resolutions up to 1080P are easily achieved. For computer users, the 2x1 HDMI Switcher conforms with HDMI specifications for resolutions up to 1920 x 1200.
- Supports DDWG standard for HDMI compliant monitors
- Supports HDCP compliant devices
- Optional RMT-2 remote control
- Installs in seconds

## Includes:

- (1) HDMI Switcher
- (2) 6' HDMI cables (M-M)
- (1) 5V DC Power Supply
- (1) RMT2-IR
- (1) Manual

# PANEL DESCRIPTIONS



Connects to IR extender      IR eye      Indicates if port 1 or port 2 is selected      Selects port 1 or port 2



Connects to 5VDC power supply      HDMI In 1      HDMI In 2      HDMI Out

# CONNECTING AND OPERATING THE HDMI SWITCHER

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## How to Connect the HDMI Switcher to your devices

- 1 Connect the supplied HDMI to HDMI cables from the HDMI sources into the HDMI Switcher Input.
- 2 Connect the cable from your display (monitor or projector) into the HDMI Out of the HDMI Switcher.
- 3 Plug the 5VDC power supply into the HDMI Switcher.

## How to Operate the HDMI Switcher

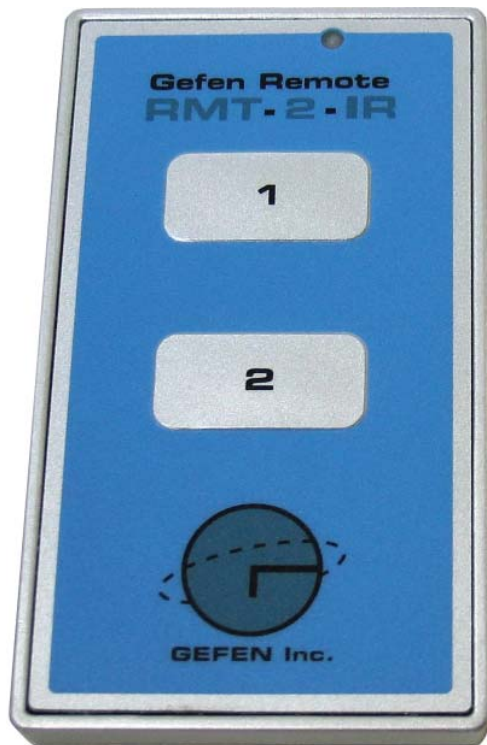
- 1 Use the front panel push button to switch between sources.
- 2 Alternatively, use the RMT2-IR remote control port to remotely toggle between sources.

## RMT2-IR INSTALLATION

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1. Remove battery cover from the back of the RMT2-IR remote.
2. Verify that dip switches 1 & 2 are in the down (OFF) position.
3. Insert the battery, hold the battery so that you can see the positive side facing up. The side that is not marked must be facing down.
4. Test the RMT2-IR remote by pressing ONLY one button at a time. The indicator light on the remote will flash once each time you press a button. **WARNING:** Do not press multiple buttons simultaneously and do NOT press buttons rapidly. These actions will cause the remote to reset and steps 1-4 will have to be repeated.

Note: The RMT2-IR ships with two batteries. One battery is required for operation, the second battery is complimentary.



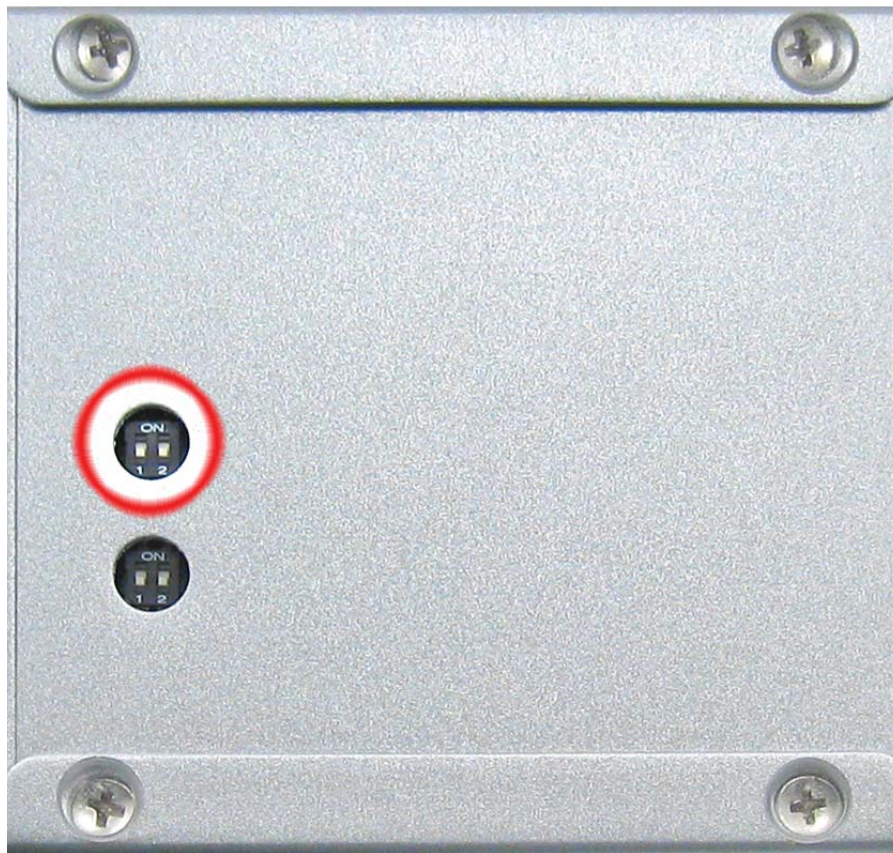
The optional IR extender allows you to re-locate your HDMI Switcher and still have IR control of the HDMI Switcher

# IR CODE CONFLICTS

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## How to Resolve IR Code Conflicts

There are matching pairs of dip switches underneath the Switcher unit (outlined below) and under the remote battery cover. Each has two switches which need to be matched for the remote to work. 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.



# IR EXTENDER INSTALLATION

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## How to Connect the IR Extender

- 1 Plug the IR extender into the Remote port on the front of the Switcher Unit
- 2 Flip the Dip Switch #1 underneath the unit from the set that is not outlined on the previous page to the ON position

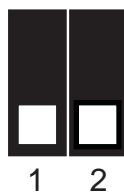
## IR CODES

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In the event of IR conflicts, please do the following:

1. Remove the battery cover from the back of the RMT4-IR remote.
2. Locate the Dip Switches above the batteries.
3. Switch the Dip Switches on the RMT4-IR to any of the combinations pictured below.
4. Dip Switches 1 and 2 in the RMT4-IR correspond with Dip Switches 3 and 4 on the bottom of the 4x1 DVI Switch respectively. Switch the switches on the bottom of the 4x1 DVI Switch to match the dip switches on the RMT4-IR. The 4x1 DVI Switcher is now set to a new IR Code.

Remote Channel 0:



Remote Channel 1:



Remote Channel 2:



Remote Channel 3:



## SPECIFICATIONS

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Video Amplifier Bandwidth .....	1.65 Gbps
Input Video Signal .....	1.2 volts p-p
Input DDC Signal .....	5 volts p-p (TTL)
Single Link Range .....	1920 x 1200
HDMI Input/Output Connector Type .....	Type A (19 pin) female
Power Consumption .....	15 Watts (max.)
Power Supply .....	5V DC
Dimensions .....	4"D x 1"W x 4"H
Shipping Weight .....	4 lbs.

## WARRANTY

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Gefen Inc. warrants the equipment it manufactures to be free from defects in material and workmanship.

If equipment fails because of such defects and Gefen Inc. is notified within two (2) year from the date of shipment, Gefen Inc. will, at its option, repair or replace the equipment, provided that the equipment has not been subjected to mechanical, electrical, or other abuse or modifications.

Equipment that fails under conditions other than those covered will be repaired at the current price of parts and labor in effect at the time of repair. Such repairs are warranted for ninety (90) days from the day of reshipment to the Buyer.

This warranty is in lieu of all other warranties expressed or implied, including without limitation, any implied warranty or merchantability or fitness for any particular purpose, all of which are expressly disclaimed.

1. Proof of sale may be required in order to claim warranty.
2. Customers outside the US are responsible for shipping charges to and from Gefen.
3. Copper cables are limited to a 30 day warranty and cable must be free from any scratches, markings, and neatly coiled.

The information in this manual has been carefully checked and is believed to be accurate. However, Gefen Inc. assumes no responsibility for any inaccuracies that may be contained in this manual. In no event will Gefen Inc., be liable for direct, indirect, special, incidental, or consequential damages resulting from any defect or omission in this manual, even if advised of the possibility of such damages. The technical information contained herein regarding HDMI Switcher features and specifications is subject to change without notice.