



## Switch between 4 HD-SDI sources

### 4x1 HD-SDI Switcher

#### 4 Sources + 1 Display = Cost Effective Multi-Tasking

The 4x1 HD-SDI Switcher is unique in its ability to connect one HD-SDI display to four HD-SDI sources. You select from multiple sources using the IR remote control that comes with the unit or RS232. Source switching is completed swiftly and high definition video up to 1080p is supported.

#### SDI

SDI (serial digital interface), used primarily in broadcasting, converts and transmits digital video through SDI connectors. It enables video sources to process high definition, high quality video.

#### How It Works

Connect your HD-SDI sources and the one HD-SDI display to the 4x1 HD-SDI Switcher. When all the equipment is powered and connected, switching can begin.

#### Features:

- Use one display to access four sources
- Eliminates unnecessary hardware while increasing efficiency
- Discrete IR remote (included)
- Discrete RS232 switching

#### Specifications:

- Input/Output: SDI - SMPTE 259M-C (270Mbps); HD-SDI - SMPTE 292M (1.485, 1.485/1.001 Gbps)
- Supports NTSC, PAL & all HD formats
- 2048x1024 maximum input/output resolution
- Power Consumption: 10 watts (max)
- Dimensions: 7.5"W x 1.1"H x 3.5"D
- Power Supply: 5V DC
- Shipping Weight: 4 lbs.

#### Package Includes:

- 4x1 HD-SDI Switcher
- One 5v Power Supply
- RM-4IR Remote Control



EXT-HDSDI-441N



**HD-SDI 4x1**  
**Switcher**  
USER MANUAL

## 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 thru Friday.

### Write To:

Gefen, Inc.  
c/o Customer Service  
20600 Nordhoff Street  
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.

**4x1 HD-SDI Switcher** is a trademark of Gefen Inc.

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# INTRODUCTION

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Congratulations on your purchase of the 4x1 HD-SDI Switcher. Your complete satisfaction is very important to us.

Switches between four HD-SDI Sources to one HD-SDI display.

The 4x1 HD-SDI Switcher is unique in its ability to connect one HD-SDI display to four HD-SDI sources. You select from multiple sources using the IR remote control that comes with the unit or RS232. Source switching is completed swiftly and high definition video up to 1080p is supported.

## **SDI**

SDI (serial digital interface), used primarily in broadcasting, converts and transmits digital video through SDI connectors. It enables video sources to process high definition, high quality video.

## **How it works**

Connect your HD-SDI sources and the one HD-SDI display to the 4x1 HD-SDI Switcher. When all the equipment is powered and connected, switching can begin.

# FEATURES

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## Features

- Use one display to access four sources
- Eliminates unnecessary hardware while increasing efficiency
- Discrete IR remote (included)
- Discrete RS232 switching

## Includes:

- (1) 4x1 HD-SDI Switcher
- (1) 5v Power Supply
- (1) RMt-4IR Remote Control
- (1) User's Manual



# PANEL DESCRIPTIONS

## Front



IR Eye

Channel LED Indicator

Power LED Indicator

## Back



HDSDI Out 1-4

HDSDI Out

RS-232 Input

5V Power Supply Input

# CONNECTING AND OPERATING THE 4x1 HD-SDI SWITCHER

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## How to connect the HD-SDI 4x1 Switcher to your devices

- 1 Connect your HD-SDI inputs into one of the Inputs on the HD-SDI 4x1 Switcher.
- 2 Connect your display into output 1.
- 3 Connect the 5VDC power supply into the 4x1 HD-SDI Switcher.



## RMT4-IR INSTALLATION

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1. Remove battery cover from the back of the RMT4-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 RMT4-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 RMT4-IR ships with two batteries. One battery is required for operation, the second battery is complimentary.



## DIP SWITCH GUIDE

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if you are experiencing Infrared interference, you can change the IR code on the Remote and the 4x1 HD-SDI Switcher itself.

To change the IR code on the RMT4-IR, simply remove the battery cover and find the 2 dip switches just above the batteries. These switches correspond to a set of switches on the 4x1 HD-SDI Switcher.

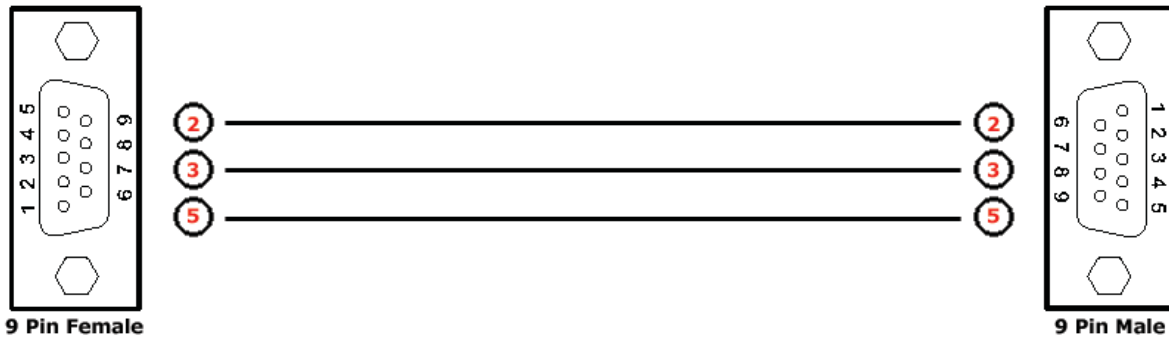
To change the IR code on the 4x1 HD-SDI Switcher, look under the unit and find a silver sticker. Beneath this sticker is a group of 4 dip switches. The first 2 switches (labelled 1 and 2) correspond to the 2 switches found on the RMT4-IR remote control.

The following are the 4 Infrared channels possible for both the RMT4-IR and the 4x1 HD-SDI Switcher. The dip switches on both the remote and the switcher itself must match in order to be operational.



# RS-232 INTERFACE

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**Binary Table**

ASCII	Corresponding RMT4-IR Button	Binary
1	1	0011 0001
2	2	0011 0010
3	3	0011 0011
4	4	0011 0100

## RS-232 Settings

Bits per second ..... 19200

Data bits ..... 8

Parity ..... None

Stop bits .....1

Flow Control ..... None

# SPECIFICATIONS

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Input/Output.....SDI - SMPTE 259M-C (270Mbps)  
Input/Output.....HD-SDI - SMPTE 292M (1.485, 1.485/1.001 Gbps)  
Power Supply.....5V DC  
Power Consumption.....10 watts (max)  
Dimensions.....7.5"W x 1.1"H x 3.5"D  
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 4x1 HD-SDI Switcher features and specifications is subject to change without notice.