



# DisplayPort Booster

**EXT-DP-141B**  
**User Manual**



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



## ASKING FOR ASSISTANCE

---

### 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, Pacific Time

### Write To:

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

**DisplayPort Booster** is a trademark of Gefen LLC

© 2012 Gefen, LLC. All rights reserved.  
All trademarks are the property of their respective owners.

**Rev A2**

# CONTENTS

---

- 1 Introduction
- 2 Operation Notes
- 3 Features
- 4 Panel Layout
- 5 Panel Descriptions
- 6 Connecting the DisplayPort Booster
  - 6 Wiring Diagram
- 7 Operating the DisplayPort Booster
  - 7 Signal Adjustment
- 8 Specifications
- 9 Warranty

# INTRODUCTION

---

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

## **Gefen**

Gefen delivers innovative, progressive computer and electronics add-on solutions that harness integration, extension, distribution and conversion technologies. Gefen's reliable, plug-and-play products supplement cross-platform computer systems, professional audio/video environments and HDTV systems of all sizes with hard-working solutions that are easy to install and simple to operate.

## **The Gefen DisplayPort Booster**

The Gefen DisplayPort Booster allows extension of DisplayPort up to 150 feet (45 meters) at 1920 x 1200 (WUXGA) and 100 feet (33 meters) at 2560 x 1600 (WQXGA), using high-quality copper DisplayPort cables. The Gefen DisplayPort Booster improves the reliability of HDCP and DPCP handshaking EDID transmission over long distances of copper cable.

## **How It Works**

Connect a DisplayPort cable between the DisplayPort source and the Gefen DisplayPort Booster input. Connect a short DisplayPort cable from the DisplayPort Booster output to the display. Connect the included 5V DC power supply to the power receptacle on the DisplayPort Booster and connect the plug to an available electrical outlet.

## OPERATION NOTES

---

THIS PAGE LEFT INTENTIONALLY BLANK

# FEATURES

---

## Features

- Extends DisplayPort up to 150 feet (45 meters)
- Supports 1080p Full HD at 120Hz and dual-link resolutions up to 2560 x 1600 (WQXGA)
- EQ trim-switch for optimal signal quality at varying distances
- External 5V DC power supply
- HDCP, DPCP, and DDC pass-through
- DisplayPort 1.1-compliant
- Compact design

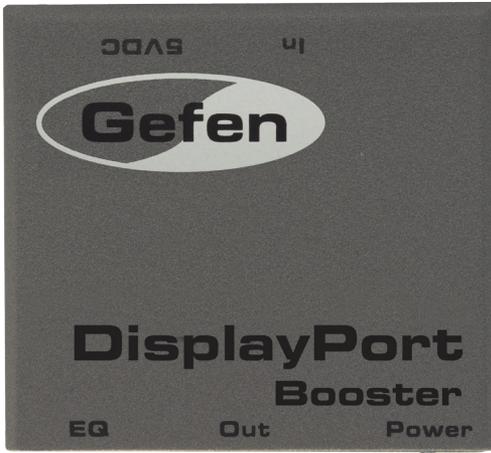
## Package Includes

- (1) DisplayPort Booster
- (1) 5V / 1A DC Power Supply
- (1) Quick-Start Guide

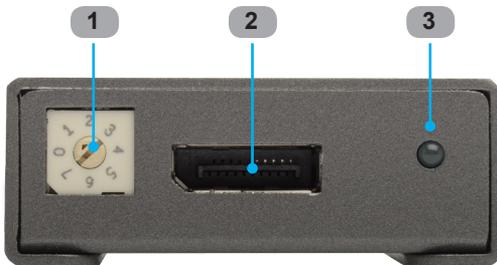
# PANEL LAYOUT

---

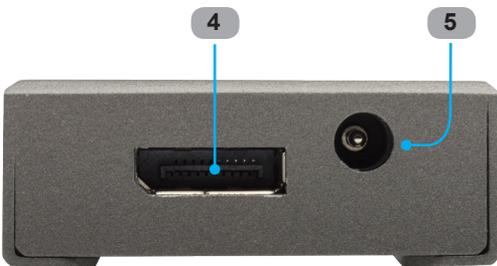
Top



Front



Back



## PANEL DESCRIPTIONS

---

**1 EQ**

Provides fine-tuning for optimal signal quality at varying distances. See page 7 for more information

**2 Out**

Connect a DisplayPort cable from this output to the display.

**3 Power**

This LED indicator will glow bright blue when the included power supply is connected to the DisplayPort Booster.

**4 In**

Connect a DisplayPort cable from this port to the DisplayPort source.

**5 5V DC**

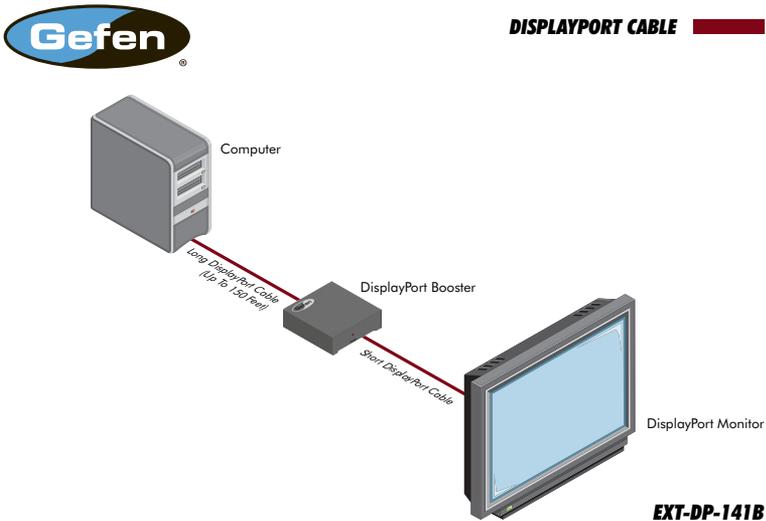
Connect the included 5V DC power supply to this power receptacle and connect the power cord to an available electrical outlet.

# CONNECTING THE DISPLAYPORT BOOSTER

## How to Connect the DisplayPort Booster

1. Connect a DisplayPort cable between the DisplayPort source and the In port of the *DisplayPort Booster*.
2. Connect a DisplayPort cable from the Out port on the *DisplayPort Booster* to the display.
3. Connect the included 5V DC power supply to the power receptacle on the *DisplayPort Booster* and connect the plug to an available electrical outlet.

## Wiring Diagram for the DisplayPort Booster



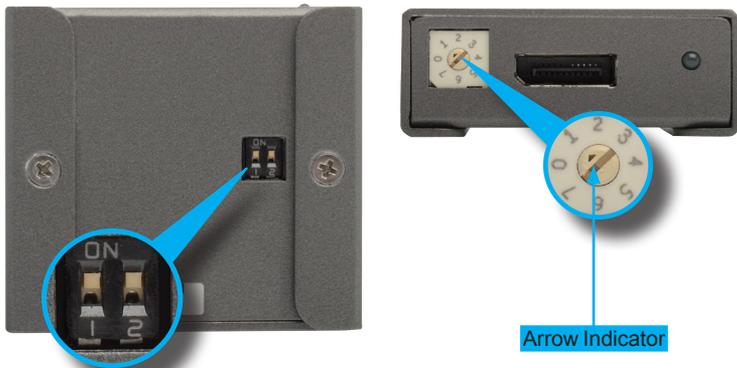
# OPERATING THE DISPLAYPORT BOOSTER

## Signal Adjustment

The bottom of the DisplayPort Booster has a bank of DIP switches. These DIP switches are used for course adjustment of the signal, based on the resolution and distance.

Use the EQ trim-pot on the front of the DisplayPort Booster to fine-tune to the signal quality. Use the Arrow Indicator for positioning the EQ setting.

The default DIP switch settings: DIP1 = ON, DIP2 = ON.



Use the table below as a general guide for using the DIP switch / EQ settings, based on distance, resolution, and cable width (AWG).

| Cable Length / Width                | EQ | DIP 2 | DIP 1 | Resolution (max.) |
|-------------------------------------|----|-------|-------|-------------------|
| 50 ft / 23 AWG                      | 0  | n/a   | n/a   | 2560 x 1600       |
| 50 ft / 28 AWG                      | 0  | n/a   | n/a   | 2560 x 1600       |
| 100 ft / 23 AWG                     | 3  | ON    | n/a   | 2560 x 1600       |
| 50 ft / 23 AWG +<br>50 ft / 28 AWG  | 0  | n/a   | n/a   | 1920 x 1200       |
| 100 ft / 23 AWG +<br>50 ft / 28 AWG | 1  | n/a   | OFF   | 1920 x 1200       |
| 100 ft / 23 AWG +<br>50 ft / 23 AWG | 2  | OFF   | n/a   | 1920 x 1200       |

 = cascaded DisplayPort cables

## SPECIFICATIONS

---

|                              |                                       |
|------------------------------|---------------------------------------|
| Video Input Connector.....   | (1) DisplayPort, 20-pin, female       |
| Video Output Connector.....  | (1) DisplayPort, 20-pin, female       |
| Coarse EQ adjustment.....    | (2) DIP Switches                      |
| Fine EQ trim adjustment..... | (1) 8-position rotary switch          |
| Power Indicator.....         | (1) LED, blue                         |
| Power Supply.....            | 5V / 1A DC                            |
| Power Consumption.....       | 5W (max.)                             |
| Dimensions (W x H x D).....  | 2.2" x 0.8" x 2" (55mm x 20mm x 50mm) |
| Shipping Weight.....         | 1 lb (0.45 kg)                        |

## WARRANTY

---

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

If equipment fails because of such defects and Gefen is notified within two (2) years from the date of shipment, Gefen 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 cables must be in their original condition.

The information in this manual has been carefully checked and is believed to be accurate. However, Gefen assumes no responsibility for any inaccuracies that may be contained in this manual. In no event will Gefen 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 the features and specifications is subject to change without notice.

For the latest warranty coverage information, refer to the Warranty and Return Policy under the Support section of the Gefen Web site at [www.gefen.com](http://www.gefen.com).

## PRODUCT REGISTRATION

**Please register your product online by visiting the Register Product page under the Support section of the Gefen Web site.**







**20600 Nordhoff St., Chatsworth CA 91311**  
**1-800-545-6900 818-772-9100 fax: 818-772-9120**  
**www.gefen.com support@gefen.com**



This product uses UL or CE listed power supplies.