SUNIX

DisplayPort to Dual DisplayPort Graphics Splitter

Quick Installation Guide

Second Edition

www.sunix.com

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Driver & Manual Download :

Please visit SUNIX website *http://www.sunix.com* by searching keyword "DPD2001" for detail information.

Introduction

SUNIX DPD2001 DisplayPort graphics splitter is an innovative, external multi-display adapter that allows end users to enjoy multiple monitors from a single digital DisplayPort source for each application, such as gaming, graphics design or spreadsheet analysis. Users can choose to dedicate each monitor to a separate application.

SUNIX DisplayPort graphics splitter lets you combine two DisplayPort monitors as one display, at a maximum resolution of 3840x1200, to make the ultimate wide screen desktop. This graphics expansion module can also clone your primary display and function as a 2 Port DisplayPort Video Splitter.

Compatible with a DisplayPort video card, SUNIX DisplayPort graphics splitter dongle requires no software installation for multi-display applications, plug-n-play, simplifying configuration and saving time. It works for standard Microsoft Windows PC with DisplayPort connectivity.

Features

- Ideal for multi-display and TV-Wall application.
- Works with any desktop or notebook computer which has DisplayPort output connectivity.
- Enable 2 DisplayPort monitors working simultaneously with video mirror or extension mode.
- Fully HD compatible and provides full display performance with virtually zero latency.
- Compatible with DisplayPort™ v1.2 / 1.1a, VESA DDM, and EDID v1.4 Standards.
- Supports exceptional Secured Content Protection with HDCP 1.3 for digital content.
- DisplayPort link rates of 5.4Gbps (HBR2), 2.7Gbps (HBR) and 1.62Gbps (RBR).
- Supports kinds of DisplayPort video dongles converting to HDMI, DVI, or VGA output connectivity.
- Driver Free, Plug & Play without configuration.
- Certified by CE, FCC, VCCI, BSMI, C-Tick, and RoHS.

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Specification

Model	DPD2001
Description	DisplayPort to Dual DisplayPort Graphics Splitter
Interface	DisplayPort™ v1.2 / 1.1a
Video Input Connectivity	DisplayPort™ v1.2 / 1.1a Female (Left Side)
Reserve Power Input	USB Micro B +5VDC@500mA (Right Side)
Video Output Connectivity	DisplayPort™ v1.2 / 1.1a Female x 2
Audio Output Connectivity	Digital Audio output over DisplayPort (Audio channel selected over Windows Audio control panel)

Resolution Support	Two Monitors	
	Computer Settings	Each Monitor
	3840 x 1200	1920 x 1200
	3840 x 1080	1920 x 1080
	3360 x 1050	1680 x 1050
	3200 x 1200	1600 x 1200
	2800 x 1050	1400 x 1050
	2880 x 900	1440 x 900
	2560 x 1024	1280 x 1024
	2048 x 768	1024 x 768
	1600 x 600	800 x 600
	1280 x 480	640 x 800
	* Notes	

Power Consumption	1.45W +3.3VDC DisplayPort Bus Power
Case Material	ABS
Weight	65g ± 2g (2.3oz)
Dimensions	92.5x60.5x22.0mm
Regulatory Approvals	EUR: CE, EN55022 Class B, EN55024, EN61000-3-2, EN61000-3-3 US: FCC Part 15 Class B TAIWAN: BSMI: CNS13438 AS/NZS: C-Tick: CISPR22 JAPAN: VCCI
O.S. Support	Windows XP/2003/Vista/7/2008/8/8.1 (32/64-bit)
Environment	Operation temperature: 0 ℃ ～ 40 ℃ (32-104°F) Operation humidity: < 85% non-condensing Storage temperature: -10 ℃ ～ 85 ℃ (14~176°F)

Note:
* Based on a Vertical Refresh Rate of 60Hz.
* GPU dependent. EDID (Extended Display Identification Data) maximum resolution capabilities may differ from GPU capability.

Package Checklist

Check if the following items are attached and in good condition while receving this package. Contact your retailer if any item is damaged or missing.

1. DisplayPort to Dual DisplayPort Graphics Splitter x 1
2. Quick Installation Guide
3. DisplayPort Male to DisplayPort Male cable 200mm (8.0 ft.) x 1 (Optional)
4. Mini-DisplayPort Male to DisplayPort Male cable 100mm (4.0 ft.) x 1 (Optional)

System Requirements

1. Intel PC base computer with at least one available DisplayPort.
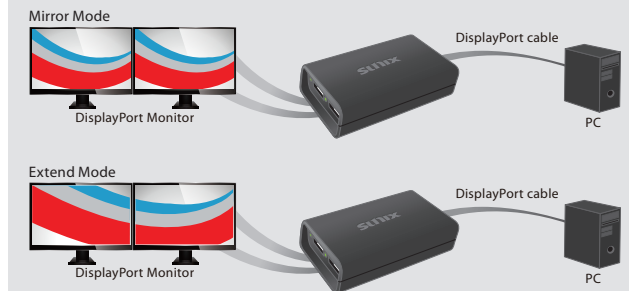2. Monitors with DisplayPort connections.

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Hardware Guide
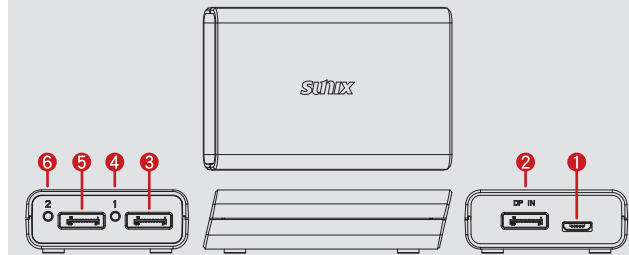
① USB Micro B type external power Input: Connecting to external power source.
When you are not using enclosed cable or graphics output source power is not enough, be sure to connect external +5VDC power from AC/DC Adapter or power cable from PC USB port.
② DisplayPort Input : Connecting to PC graphics source.
③ DisplayPort graphics output port 1: Connecting with DisplayPort enable monitor.
④ DisplayPort graphics output port 1 LED: To indicate linking status with DisplayPort monitor.*
⑤ DisplayPort graphics output port 2: Connecting with DisplayPort enable monitor.
⑥ DisplayPort graphics output port 2 LED: To indicate linking status with DisplayPort monitor.*

Note:
The LED indicator:
* GOOD: The Green indicator LED = ON; working normally.
* BAD: The Green indicator LED = DIM; the DisplayPort power output is insufficient on this port.
* BAD: The Green indicator LED = FLASH; the graphics card is not working properly.

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Installation

Follow the steps to install DisplayPort graphics splitter. It is recommended that to use the same size, type and resolution monitors for connecting. Same type monitor means the monitors have the same native resolution and display refresh rate.

Mirror Mode

DisplayPort cable
DisplayPort Monitor
PC

Extend Mode

DisplayPort cable
DisplayPort Monitor
PC

Step 1: Connecting graphics splitter, DisplayPort input with cable to graphics source, such as Desktop or Notebook PC DisplayPort graphics output connector.
Step 2: Connecting graphics splitter DisplayPort output to monitor.
Maximum connection: 2 different types of DisplayPort monitors.
Step 3: Power on PC and monitors. Select monitors' to correct input source.
Step 4: Changing the display to clone mode, change the output display resolution on your computer.

After installation, you will see the same image on all monitors (clone mode) or a single image spread across multiple monitors. To change the display setting, simply change the graphic card output resolution via the Display Properties page.

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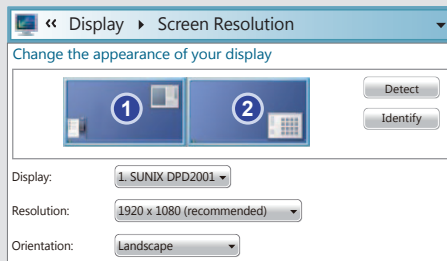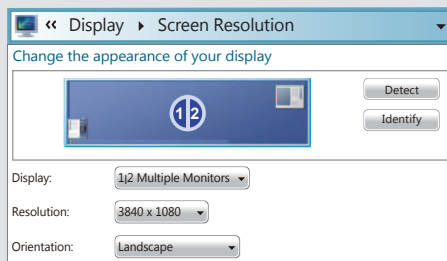## Display Setting

User can set mirror or extension mode via Windows display resolution setting. Right click your mouse on the desktop and select "scree resolution". Here is the example when using two 1920 x 1080 Full HD standard displays with single DisplayPort graphics splitter.
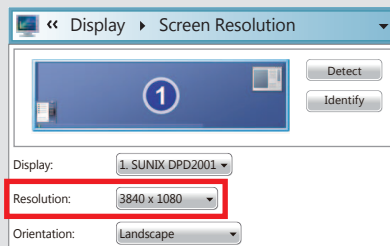
Graphics Options
New
Screen resolution
Gadgets
Personalize

« Display ▸ Screen Resolution ▾

Change the appearance of your display

Detect
Identify

Display: 1. SUNIX DPD2001 ▾
Resolution: 1920 x 1080 (recommended) ▾
Orientation: Landscape ▾
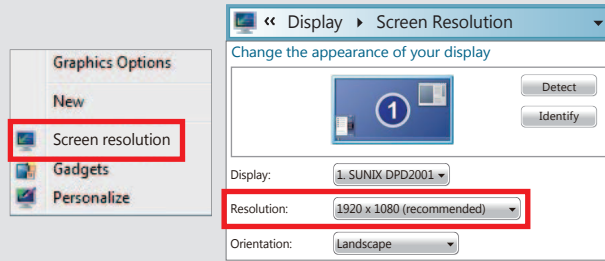
DisplayPort 1.2 MST Mode:

« Display ▸ Screen Resolution ▾

Change the appearance of your display

Detect
Identify

Display: 1. SUNIX DPD2001 ▾
Resolution: 1920 x 1080 (recommended) ▾
Orientation: Landscape ▾

DisplayPort 1.2 MST Mode with Collage Display Mode:

« Display ▸ Screen Resolution ▾

Change the appearance of your display

Detect
Identify

Display: 1|2 Multiple Monitors ▾
Resolution: 3840 x 1080 ▾
Orientation: Landscape ▾

Note: Under DisplayPort 1.1 SST mode environment, when display resolution is greater than 1920x1080(1920x1200) pixels, DisplayPort graphics splitter runs "Extension" mode, such as 3840x1080 (3840x1200) pixels. When display resolution is equal or lesser than 1920x1080 pixels (1920x1200), DisplayPort graphics splitter runs "Mirror" mode.

« Display ▸ Screen Resolution ▾

Detect
Identify

Display: 1. SUNIX DPD2001 ▾
Resolution: 3840 x 1080 ▾
Orientation: Landscape ▾

Troubleshooting

Question 1:
I am not able to set these modes; Multi-Stream Transport (MST) or Single-Stream Transport (SST) mode.

Solution:
1. Please check if your DisplayPort output port is DisplayPort 1.1 or 1.2 specifications. Multi-Stream Transport mode only available on DisplayPort 1.2 specification or later.
2. Please contact your graphics card manufacturer for more details.

Question 2:
There are no audio output through the DisplayPort graphics splitter.

Solution:
1. The DisplayPort graphics splitter supports digital audio stream over standard DisplayPort port. Please select audio output at Control Panel > Sound > Playback setting.
2. Digital audio stream will only accept one (1) monitor for audio output at a time.

Question 3:
There is no display on the monitor, and the green indicator LED is OFF when using video dongle adapter, such as HDMI-to-VGA adapter, with the DisplayPort to Dual HDMI graphics splitter.

Solution:
1. Please use the enclosed cable for the connection, and make sure all connections are secured. The cable used for the connection must meet DisplayPort standard specification.
2. The graphics card port might not able to provide sufficient power to the DisplayPort splitter. You will need to provide external power to the DisplayPort if this is the case. Please connect a +5VDC power source. You may use a standalone AC/DC power adapter or simply using a standard USB Type-A to Micro-USB Type-B cable connection to the computer or power adapter.

Question 4:
There is no display when connecting the DisplayPort graphics splitter to my monitors.

Solution:
1. Please use the enclosed cable for the connection. If connection has been established, the green indicator LED light should be ON. If there is still no display on the monitor, and the green LED light is dark. Please make sure the cable that you are using meet DisplayPort standard specification.
2. If the green indicator LED light is dim, there might be insufficient power from the DisplayPort source. Please connect external +5VDC power from AC/DC Adapter or PC USB port over reserved USB Micro B connector.
3. If the green indicator LED flashes, the unit is not fully functioning. Please "Restart" the computer, and "Un-Plug" then "Re-Plug" the connection with this DisplayPort splitter. If problems still persist, please contact the graphics card manufacturer for an updated software drivers for this graphics card.
4. There might be multiple display output ports on your computer such as VGA, DVI, HDMI or DisplayPort, please make sure you have set the primary output (at the BIOS) to DisplayPort for our graphics splitter.

Question 5:
How many monitors can I connect to the DisplayPort graphics splitter and what are the maximum supported resolutions?

Solution:
1. Basically, it will depend on your graphics card maximum bandwidth display frame rate and supported resolutions. For example, high-end AMD/ATI graphics card can support up to six (6) monitors with maximum resolution at 5760 x 2160 with the use of two (2) DisplayPort graphics splitters (with DisplayPort 1.2 specification source).
2. Please contact your graphics card manufacturer for more details information on such limitation and supported specifications.
3. For Intel Haswell chipset graphics platform, please see below supported information:

Display Resolution (60 frames per second refresh rate)	Maximum Number of Monitors based on DisplayPort 1.2 Bandwidth
1680 x 1050 (WSXGA)	5
1920 x 1080 (1080p) or 1920 x 1200	4
2560 x 1600 (WQXGA)	2
3840 x 2160 (UltraHD, 4K) or 4096 x 2160 (4K x 2K)	1

Question 6:
The monitor screen image/display is garbled or unstable on one of the monitor (such as, blank screen, rolling or overlapping screen images).

Solution:
1. These monitors may be different brands and models, and have different supported resolution and refresh rate modes under the DisplayPort 1.1 standard interface.
2. Please try to set all monitors with the same resolution, or uses identical brand/model monitors.

Question 7:
The computer desktop display does not stretched across to multiple monitors.

Solution:
1. There may be other display outputs on your computer, and its display setting has set to "Clone Mode". In clone mode, the highest resolution is limited by the maximum capability of the primary display.
2. Please change the port that you have connected the DisplayPort graphics splitter to, and make sure the DisplayPort output is active.
3. Please set the DisplayPort graphics splitter as "Primary Display". If problems still persist, please contact the graphics card manufacturer for more details on how to change and set primary display, and possible with an updated software drivers.

Question 8:
Why there are no display on my monitors that connected to the unit? Does the unit require any power to work?

Solution:
1. Generally, when connecting to one to two monitors, the power supplied from the computer should be enough to power the unit and to have a stable connection between the monitors and this unit.
2. Sometimes the unit may need more power in order to function properly, such as when connecting to more than two monitors, or when the monitors require too much power then what can be provided from the connection from your PC alone. In this regards, the unit has a reserve power connection. The power connection is for a Micro-B USB port +5VDC cable, such as those to power Android products.

P.S. This product requires power to operate. Additional power can be provided to the unit via Micro-B USB port +5VDC connection. Micro-B USB cable is NOT provided with the unit.

Regulatory Compliance

FCC Conditions
This equipment has been tested and found to comply with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

1. This device may not cause harmful interference
2. This device must accept any interference received. Including interference that may cause undesired operation.

Important! Changes or modifications not expressly approved by the manufacturer responsible for compliance could void the user's authority to operate the equipment. Use an approved phone set.

CE
This equipment is in compliance with the requirements of the following regulations: EN 55022: CLASS B

WEEE Information
For EU (European Union) member users: According to the WEEE (Waste electrical and electronic equipment) Directive, do not dispose of this product as household waste or commercial waste. Waste electrical and electronic equipment should be appropriately collected and recycled as required by practices established for your country. For information on recycling of this product, please contact your local authorities, your household waste disposal service or the shop where you purchased the product.

Contact Information
Customer satisfaction is our number one concern, and to ensure that customers receive the full benefit of our products, SUNIX services has been set up to provide technical support, driver updates, product information, and user's manual updates.

Made in China
771-DPD2001Q1-S01

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