

# SP-4102Z-PT

1x2 Mini DisplayPort 1.2 to DisplayPort MST Hub/Splitter  
with Pigtail Cable

User Manual



rev: 190704  
Made in Taiwan

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## INTRODUCTION

The **SP-4102Z-PT 1x2 Mini DisplayPort 1.2 to DisplayPort MST Hub/Splitter with Pigtail Cable** provides the most cost effective and advanced Mini DisplayPort to DisplayPort splitter solution on the market, by which the high definition video and high quality audio can be transmitted to 2 different locations without losing quality. **SP-4102Z-PT** can extend the laptop or desktop to additional displays and stream independent content to each individual display to make multitasking easier and increase your productivity. Besides, SP-4102Z-PT can mirror the same image or split an image to multiple displays for digital signage applications.

## FEATURES

- DisplayPort 1.2 compliant
- Supports 4K2K@60 4:4:4 8bits
- HDCP 1.3 compliant
- Video bandwidth: 21.6Gbps
- Supports SST or MST (Multi-Stream Transport)
- Supports xvYCC, x.v.Color & Deep Color
- Easy installation

## PACKAGE CONTENTS

- 1x SP-4102Z-PT
- 1x Micro-USB to USB cable
- 1x User Manual

# SPECIFICATIONS

Model Name		SP-4102Z-PT
<b>Technical</b>		
Role of usage		1x2 MST Hub/Distribution Amplifier (Splitter)
DP compliance		DisplayPort 1.2
HDCP compliance		HDCP 1.3
Video bandwidth		21.6Gbps
Video support		4K2K@60 (4:4:4 8bits)
Audio support		LPCM, AC3, DTS
ESD protection		Human body model — ±15kV [air-gap discharge] & ±8kV [contact discharge]
PCB stack-up		4-layer board [impedance control — differential 100Ω; single 50Ω]
Input		1x Mini DP
Output		2x DP
DP connector		Normal & Mini Type
<b>Mechanical</b>		
Housing		Metal enclosure
Dimensions [L x W x H]	Model	88 x 58 x 23mm [3.5 x 2.3" x 0.9"]
	Package	165 x 111 x 42mm [6.4" x 4.4" x 1.7"]
	Carton	490 x 426 x 352mm [1'6" x 1'4" x 13.8"]
Weight	Model	108g [3.8 oz]
	Package	196g [6.9 oz]
Fixedness		Wall-mounting case
Power supply		5V 1A DC
Power consumption		2 Watts [max]
Operation temperature		0~40°C [32~104°F]
Storage temperature		-20~60°C [-4~140°F]
Relative humidity		20~90% RH [no condensation]

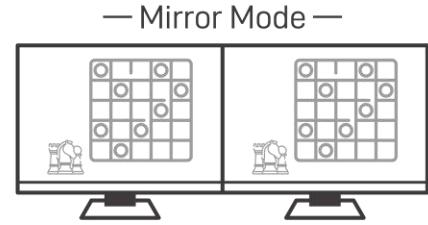
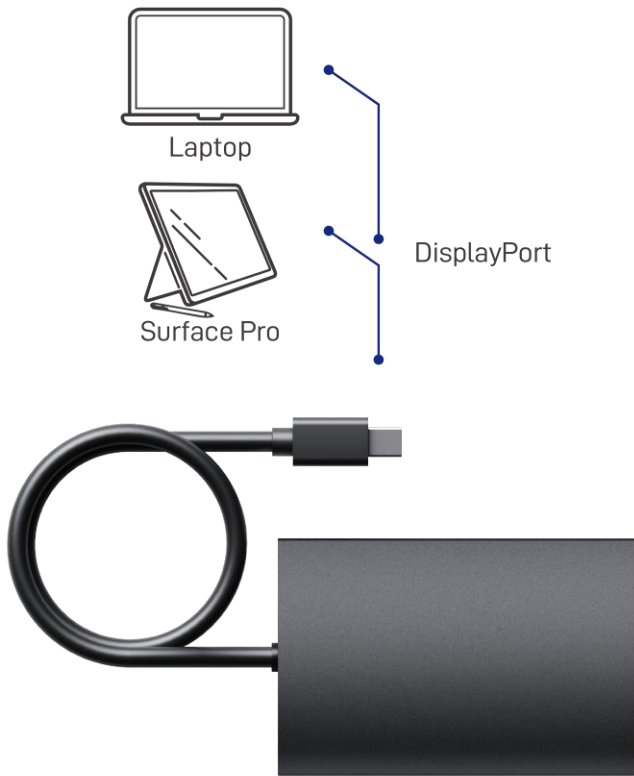
## PANEL DESCRIPTIONS



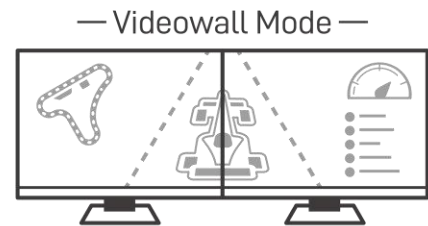
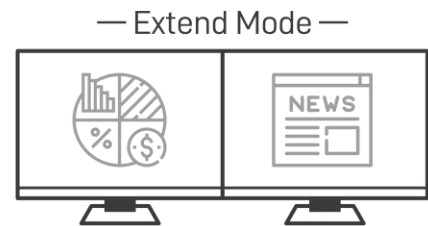
1. DisplayPort output 1
2. Output 2 LED Indicator
3. Output 1 LED Indicator
4. DisplayPort output 2
5. Mini DisplayPort input
6. Power LED Indicator
7. +5V power (Micro-USB)
8. Link LED Indicator

# CONNECTION DIAGRAM

SP-4102Z-PT allows user to connect two displays to the Mini DisplayPort enabled laptop, Ultrabook, or PC. Configure these added monitors anyway you want; works as a splitter with the same content on each monitor, extended mode with independent monitors, or video wall mode joining multiple monitors together as one display.



NOTE: Mirror Mode using Windows Display Utility and NVIDIA Utility is limited to 2 displays.



NOTE: Video Wall Mode (e.g., Panoramic) requires either an AMD Eyefinity, Intel, or NVIDIA Surround technology graphics adapter.

## Notes:

1. Total bandwidth is 21.6Gbps\* (under MST mode)

Resolution	% of total bandwidth(21.6Gbps)
3840x2160@60	80%
3840x2160@30	40%
1920x1200@60	30%
1920x1080@60	22%

\*The total combined bandwidth among all connected displays must NOT exceed 21.6Gbps

2. Supports UHD video resolutions up to 3840x2160@30, and 7.1ch surround audio to deliver high quality video and audio.
3. Driver or software is NOT required.
4. Existing video card can be used to minimize the use of system resources.
5. MacOS does NOT support MST technology and will only mirror each display

## NOTICE

### Notes

1. It is limited to two displays under mirror mode using Windows Display Utility & NVIDIA Utility.
2. It requires either an AMD Eyefinity, Intel, or NVIDIA Surround technology graphics adapter under Video Wall mode (e.g., Panoramic).
3. Intel CPUs with HD Graphics are limited to three external monitors altogether.
4. A DisplayPort v1.2 output or later is recommended to enable full functionality. If the source DisplayPort output doesn't support DP 1.2, the MST function is disabled and becomes a Splitter, mirroring your video source across all displays.

### About Compatible Device

1. Systems with an available DisplayPort (DisplayPort v1.2 or later recommended)
2. Compatible OS: Windows 10 / 8.1 & 8 / 7
3. MacOS does NOT support MST technology and will only mirror each display

## WARRANTY

The SELLER warrants the **SP-4102Z-PT 1x2 Mini DisplayPort 1.2 to DisplayPort MST Hub/Splitter with Pigtail Cable** free from defects in the material and workmanship for 1 year from the date of purchase from the SELLER or an authorized dealer. Should this product fail to be in good working order within 1 year warranty period, The SELLER, at its option, repair or replace the unit, provided that the unit has not been subjected to accident, disaster, abuse or any unauthorized modifications including static discharge and power surge. This warranty is offered by the SELLER for its BUYER with direct transaction only. This warranty is void if the warranty seal on the metal housing is broken.

Unit 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 90 days from the day of reshipment to the BUYER. If the unit is delivered by mail, customers agree to insure the unit or assume the risk of loss or damage in transit. Under no circumstances will a unit be accepted without a return authorization number.

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

Proof of sale may be required in order to claim warranty. Customers outside Taiwan are responsible for shipping charges to and from the SELLER. Cables and power adapters are limited to a 30 day warranty and must be free from any markings, scratches, and neatly coiled.

The content of this manual has been carefully checked and is believed to be accurate. However, The SELLER assumes no responsibility for any inaccuracies that may be contained in this manual. The SELLER will NOT be liable for direct, indirect, incidental, special, or consequential damages resulting from any defect or omission in this manual, even if advised of the possibility of such damages. **Also, the technical information contained herein regarding the SP-4102Z-PT features and specifications is subject to change without further notice.**