

ZMUIPNG ZM0218

ZMUIPNG 14-in-1 USB C Docking Station User Manual

Model: ZM0218

1. INTRODUCTION

This user manual provides detailed instructions for the ZMUIPNG 14-in-1 USB C Docking Station, Model ZM0218. This versatile docking station expands a single USB-C port into multiple connectivity options, enhancing productivity for various laptops including Dell, Lenovo, HP, and others. Please read this manual thoroughly before use to ensure proper operation and to maximize the benefits of your device.

2. PRODUCT FEATURES

The ZMUIPNG 14-in-1 USB C Docking Station offers a comprehensive set of features designed to streamline your workspace:

- **Extensive Port Expansion:** Converts one USB-C port into 14 distinct ports.
- **Dual 4K HDMI & Triple 1080P VGA Display:** Supports simultaneous dual 4K HDMI output and triple 1080P VGA output for multi-monitor setups.
- **Gigabit Ethernet:** Provides stable and high-speed wired network connectivity (10/100/1000Mbps).
- **High-Speed USB Data Transfer:** Includes 3 x USB 3.0 ports (up to 5Gbps) and 2 x USB 2.0 ports (for keyboard/mouse).
- **USB-C Power Delivery (PD):** Supports up to 100W power pass-through charging for your laptop.
- **USB-C Data Port:** Dedicated USB-C port for data transfer (5Gbps).
- **SD/Micro SD Card Readers:** High-speed card reading capabilities (up to 104MB/s).
- **3.5mm Audio/Mic Jack:** For connecting headphones or microphones.



Figure 2.1: Overview of the 14-in-1 docking station ports and their functions.

3. PACKAGE CONTENTS

Please verify that all items are present and in good condition upon opening the package:

- 1 x ZMUIPNG 14-in-1 USB C Docking Station (Model: ZM0218)
- 1 x User Manual



Figure 3.1: The ZMUIPNG 14-in-1 USB C Docking Station with various cables and storage devices, illustrating its connectivity options.

4. SETUP GUIDE

4.1 Compatibility Check

Before connecting the docking station, ensure your laptop's built-in USB-C port supports the necessary functions. The full functionality of this docking station, especially multi-monitor display, requires a USB-C port that supports Data Transfer, Video Display (DisplayPort Alternate Mode), and Power Delivery (PD charging).

- **Fully Functional USB-C Port Types:** Thunderbolt 3, USB Type C 3.1 Gen 2 with Power Delivery & DisplayPort, USB Type C 3.2 Gen 2 with Power Delivery & DisplayPort.
- If your laptop's USB-C port only supports charging or data transfer, certain features like video output or audio may not function.



Figure 4.1: Understanding USB-C port functions: Only fully functional ports support all docking station features.

4.2 Initial Connection

1. Connect your laptop's power adapter to the USB-C PD port (max 100W) on the docking station. This is recommended, especially when connecting external hard drives or multiple devices, to ensure stable power delivery.
2. Connect the integrated USB-C cable from the docking station to a fully functional USB-C port on your laptop.
3. Allow a few moments for your operating system to detect and install the necessary drivers. This process is typically automatic.

5. OPERATING INSTRUCTIONS

5.1 Display Configuration

The docking station supports various display modes for Windows and macOS. Ensure your monitors are connected to the HDMI and/or VGA ports on the docking station.

5.1.1 Windows Display Modes

Windows laptops support both Extended Mode and Mirror Mode for dual and triple monitor setups.

- **Dual Display:**
 - HDMI1: Up to 4K@30Hz
 - HDMI2: Up to 4K@30Hz (or 1080P@60Hz depending on laptop DP version)
 - VGA: Up to 1080P@60Hz
- **Triple Display:** When HDMI and VGA work simultaneously, the resolution of monitors may be limited to 1080P/60Hz. The final resolution depends on laptop configurations and connected monitors.

Mutliple Display Modes

Windows

Extended Mode



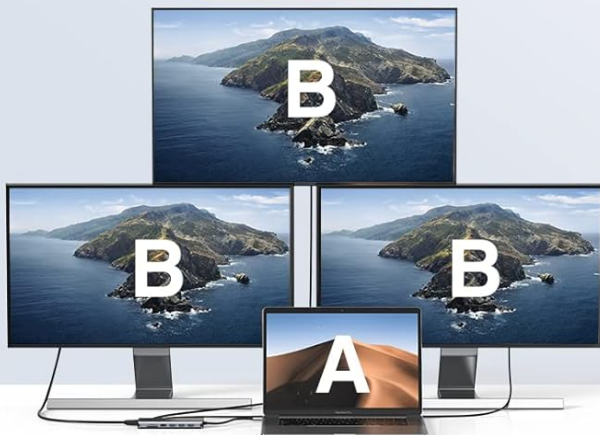
Mirror Mode



MacOS

MacOS does not support Multi-Stream Transport (MST)

Extended Mode



Mirror Mode

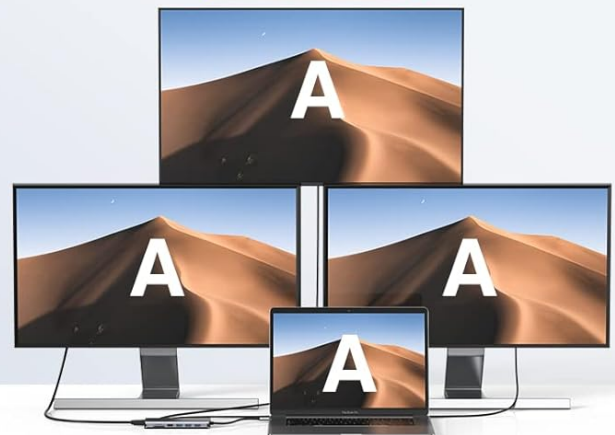


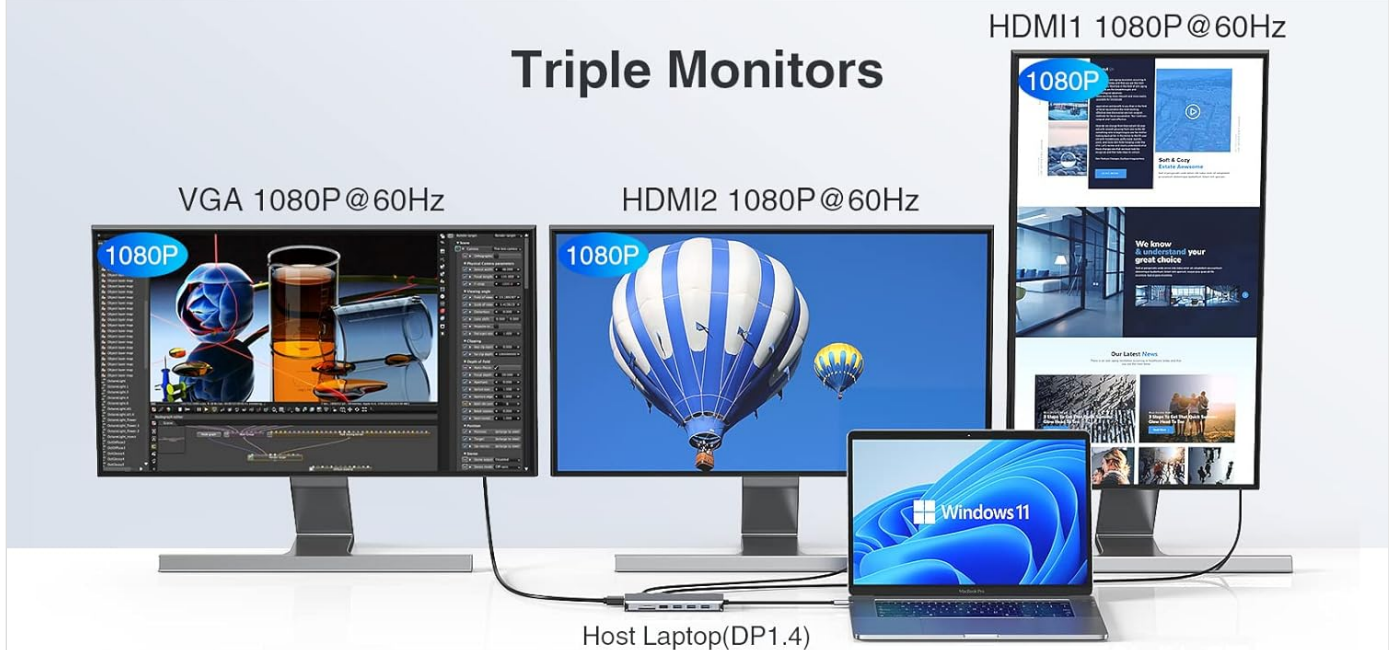
Figure 5.1: Illustration of multiple display modes for Windows (Extended and Mirror) and macOS (Extended and Mirror).

Max Resolution for Windows Laptop

Dual Display



Triple Monitors



For Windows laptop on DP1.2, due to laptop's limited bandwidth, one of the monitors resolution will be lower than 1080P when connect 2/3 monitors, and the final resolution depends on different laptop configurations and connected monitors.

Figure 5.2: Detailed resolution capabilities for Windows laptops in dual and triple display setups.

5.1.2 macOS Display Modes

Due to Apple system restrictions, macOS only supports Mirror Mode (all external displays show the same content) or Extended Mode (one external display extends the desktop, others mirror it). It does not support Multi-Stream Transport (MST) for independent extended displays across multiple external monitors.

Windows

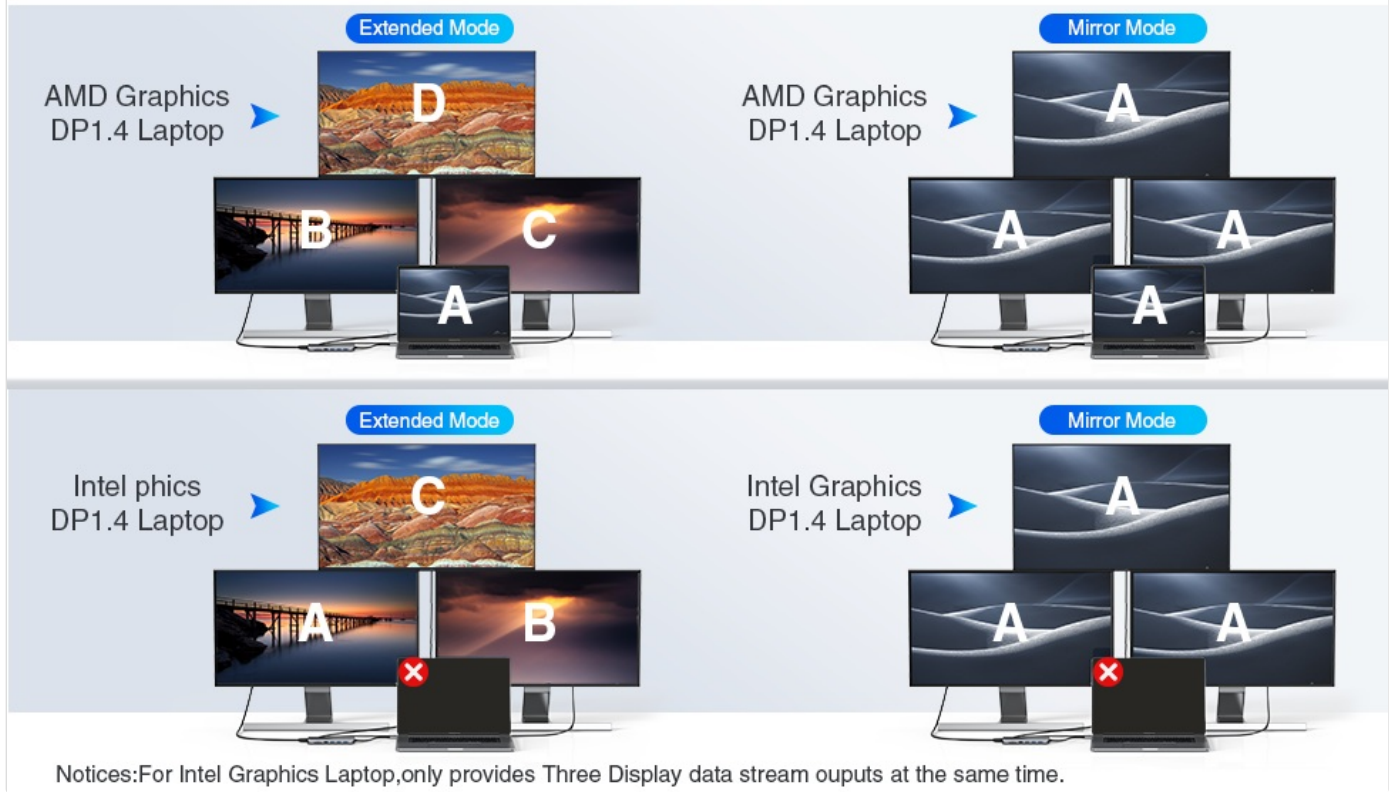


Figure 5.3: Windows display modes for AMD and Intel graphics, showing extended and mirror configurations.

Triple Display

Windows Supports

4K@60Hz resolution monitor while extending from only one HDMI & the source is DP1.4.



Mac OS does not support Triple display



Figure 5.4: Mac OS display capabilities, highlighting that triple extended display is not supported.

5.2 Data Transfer

Utilize the high-speed USB ports for efficient data transfer:

- **USB 3.0 Ports (x3):** Transfer speeds up to 5Gbps. Ideal for external hard drives, USB flash drives, and other high-bandwidth devices.
- **USB 2.0 Ports (x2):** Transfer speeds up to 480Mbps. Suitable for connecting peripherals like keyboards, mice, and

printers.

- **USB-C Data Port (x1):** Transfer speeds up to 5Gbps.
- **SD/Micro SD Card Readers:** Supports UHS-I with speeds up to 104MB/s for quick photo and file transfers.

Note: Only one HDD/SSD can be connected at the same time via the USB ports.

Transfer Files in Seconds

Speed up to 5Gbps, connect more peripherals



5 Gbps

3 x USB-A 3.0



480 Mbps

2 x USB-A 2.0



104 MB/s

TF ▶ SD ▶ UHS-I



Figure 5.5: Visual representation of data transfer speeds for various ports on the docking station.

5.3 Power Delivery (PD)

The USB-C PD port supports up to 100W power pass-through. Connect your laptop's original USB-C power adapter to this port to charge your laptop while using the docking station and its connected peripherals.

Note: This docking station's USB-C charging function may not work with laptops that require proprietary AC charging adapters (e.g., some Dell/HP/ThinkPad models) that do not allow third-party chargers.



Figure 5.6: The USB-C PD port for power delivery and the USB-C data port for high-speed data transfer.

5.4 Network Connectivity

The Gigabit Ethernet port (RJ45) provides a stable and fast wired internet connection, supporting 10/100/1000BASE-T LAN networks. This helps avoid Wi-Fi instability and interference.

Enjoy Fast Network Speeds

Speed up to 1000 Mbps



RJ45 Gigabit Ethernet

Up to 1000Mbps, stable wired access



3.5mm Mic/Audio

Provides HD lossless sound quality

Figure 5.7: The RJ45 Gigabit Ethernet port for stable network access and the 3.5mm audio/mic port.

5.5 Audio Connectivity

The integrated 3.5mm Audio/Mic port allows you to connect wired headsets, speakers, or microphones for high-definition sound quality.

6. TROUBLESHOOTING

• No Display on External Monitors:

- Ensure your laptop's USB-C port is a fully functional port supporting video output (DisplayPort Alt Mode).
- Check all HDMI/VGA cables for secure connections and ensure they are not damaged.
- Connect the laptop's power adapter to the docking station's USB-C PD port before connecting external displays or multiple devices.
- For Windows, try updating your graphics drivers. For macOS, remember that only one external monitor can extend the display, others will mirror.

- **Laptop Not Charging via Docking Station:**
 - Verify that your laptop supports charging via its USB-C port and is not restricted to proprietary AC adapters.
 - Ensure the power adapter connected to the docking station's PD port is sufficient (up to 100W).
- **Intermittent Network Connection:**
 - Check the Ethernet cable and router connection.
 - Ensure the docking station is receiving adequate power.
 - Try updating network drivers on your laptop.
- **USB Devices Not Recognized:**
 - Ensure the docking station is properly connected to your laptop and receiving power.
 - Try connecting the USB device to a different port on the docking station.
 - If connecting an HDD/SSD, ensure only one is connected at a time.
- **Overheating:**
 - Ensure adequate ventilation around the docking station. Avoid placing it in enclosed spaces.
 - Reduce the number of high-power devices connected if overheating persists.

7. SPECIFICATIONS

Feature	Specification
Model	ZM0218
Brand	ZMUIPNG
Dimensions	1.5 x 9 x 17 cm
Weight	100 g
HDMI Output 1	Up to 4K@30Hz
HDMI Output 2	Up to 4K@30Hz (or 1080P@60Hz)
VGA Output	Up to 1080P@60Hz
USB 3.0 Ports	3 (5Gbps data transfer)
USB 2.0 Ports	2 (480Mbps data transfer)
USB-C Data Port	1 (5Gbps data transfer)
USB-C PD Port	1 (Up to 100W Power Delivery)
Ethernet Port	RJ45 Gigabit (10/100/1000Mbps)
Card Readers	SD/Micro SD (UHS-I, up to 104MB/s)
Audio Port	3.5mm Audio/Mic Jack



Feature	Specification
Compatible OS	Windows, macOS

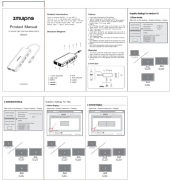

8. WARRANTY AND SUPPORT

ZMUIPNG products are designed for reliability and performance. For warranty information and technical support, please refer to the contact details provided with your purchase or visit the official ZMUIPNG website. For common questions, refer to the FAQ section in the product's A+ content, which addresses compatibility and display issues.

- **Common FAQ:**
 - **Compatibility:** "Please check which Functions supports by your Laptop's built-in USB C port first, only if your laptop's built-in USB C port is fully funcitonal port which support Data transfer & Video Display & PD charging, you can use the full functions of our docking station."
 - **No External Monitor Display:** "First, please check which functions supports by Your Laptop's Built-in USB C Port, if the type of the built-in USB C port of your laptop isn't the Fully Funcitonal port, then the HDMI,VGA, 3.5mm Jack of the hub doesn't work for your laptop. Check your HDMI cable. Plugin the Laptop's power adapter to the USB-C PD port before connecting external hard drives or multiple devices to the hub."
 - **Mac Display Extension:** "For Mac OS, due to apple system restrictions the docking station could only support to extend one monitor, the other monitors could only copy the monitor you extend."
 - **Dell/HP Laptop Charging:** "The USB C Power Charging function of our docking staion doesn't works for laptop own a AC charging adapter. Those Laptop (Dell/HP/ThinkPad...) do not allow 3rd party charger to charge their laptop in other ways."

Related Documents - ZM0218

	<p>ZMUIPNG 13-in-1 USB C Hub User Guide and Troubleshooting</p> <p>A comprehensive user guide for the ZMUIPNG 13-in-1 USB C Hub, detailing compatibility, troubleshooting common issues like heat and connectivity, and explaining display resolution capabilities for both Windows and Mac operating systems.</p>
	<p>ZMUIPNG XJ038 14-in-1 USB-C Hub Instruction Manual</p> <p>This document is the instruction manual for the ZMUIPNG XJ038 14-in-1 USB-C Hub. It details the product's features, specifications, connection diagram, and provides guidance on graphics settings for Windows 10 and macOS, storage conditions, and frequently asked questions. The hub offers expanded connectivity for laptops, including multiple display outputs (HDMI, DP), USB ports, Ethernet, and card readers.</p>

	<p>ZMUIPNG ZM3310 USB-C Hub with Triple Display: User Manual</p> <p>User manual for the ZMUIPNG ZM3310, an 11-in-1 USB-C extension hub featuring triple display support (HDMI, VGA), Ethernet, USB 3.1, USB 2.0, and PD charging.</p>
	<p>USB-C Hub Instruction Manual - 7-Port 10Gbps Data and 20W Charging</p> <p>Instruction manual for the 7-port USB-C Hub, detailing its specifications, package contents, and troubleshooting tips for data transfer and charging.</p>