IVANKY VCD21B

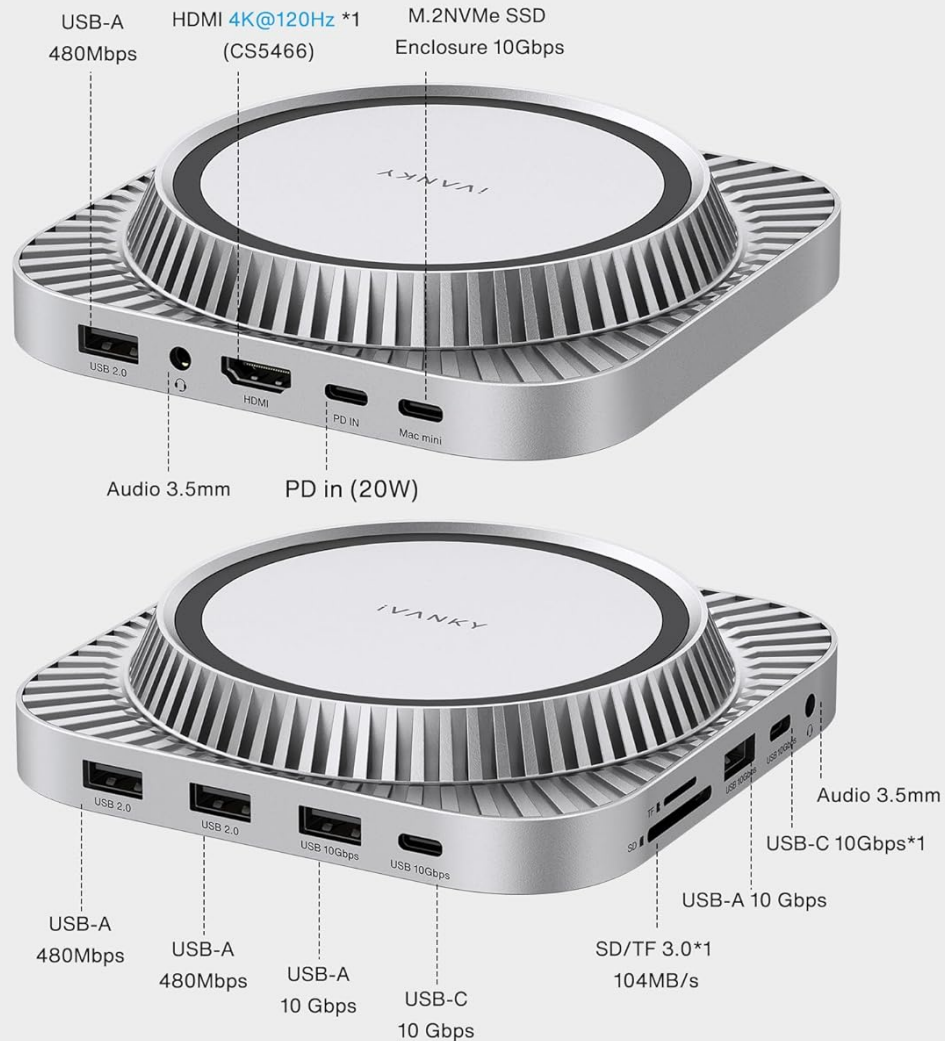# iVANKY VCD21B 13-in-1 Docking Station for Mac mini M4 User Manual

Model: VCD21B

INTRODUCTION

Thank you for choosing the iVANKY VCD21B 13-in-1 Docking Station. This device is specifically designed to expand the connectivity and storage capabilities of your Mac mini M4, transforming it into a versatile workstation. It integrates multiple essential ports and an M.2 SSD enclosure, providing a comprehensive solution for your peripheral needs.

This manual provides detailed instructions for the proper setup, operation, maintenance, and troubleshooting of your docking station. Please read it carefully before use to ensure optimal performance and longevity of the product.

Ultra 13-in-1 Dock
for Mac MINI M4/M4 PRO

USB-A
480Mbps

HDMI 4K@120Hz *1
(CS5466)

M.2 NVMe SSD
Enclosure 10Gbps

USB 2.0

HDMI

PD IN

Mac mini

Audio 3.5mm

PD in (20W)

iVANKY

USB 2.0

USB 2.0

USB 10Gbps

USB 10Gbps

TF

SD

USB 10Gbps

USB 10Gbps

USB-C

Audio 3.5mm

USB-C 10Gbps*1

USB-A 10 Gbps

USB-A
480Mbps

USB-A
480Mbps

USB-A
10 Gbps

USB-C
10 Gbps

SD/TF 3.0*1
104MB/s

An overhead view of the iVANKY VCD21B docking station, highlighting its 13-in-1 port configuration including USB-A, USB-C, HDMI, Audio, PD In, and an M.2 NVMe SSD enclosure.

SETUP GUIDE

1. Package Contents

- iVANKY VCD21B 13-in-1 Docking Station
- Mini screwdriver and screws (for SSD installation)
- User Manual

2. Installing an M.2 SSD (Optional)

The docking station supports M.2 NVMe PCIe and NGFF SATA SSDs (2230, 2242, 2260, 2280 sizes) for storage expansion up to 8TB. SSDs are not included with this product.
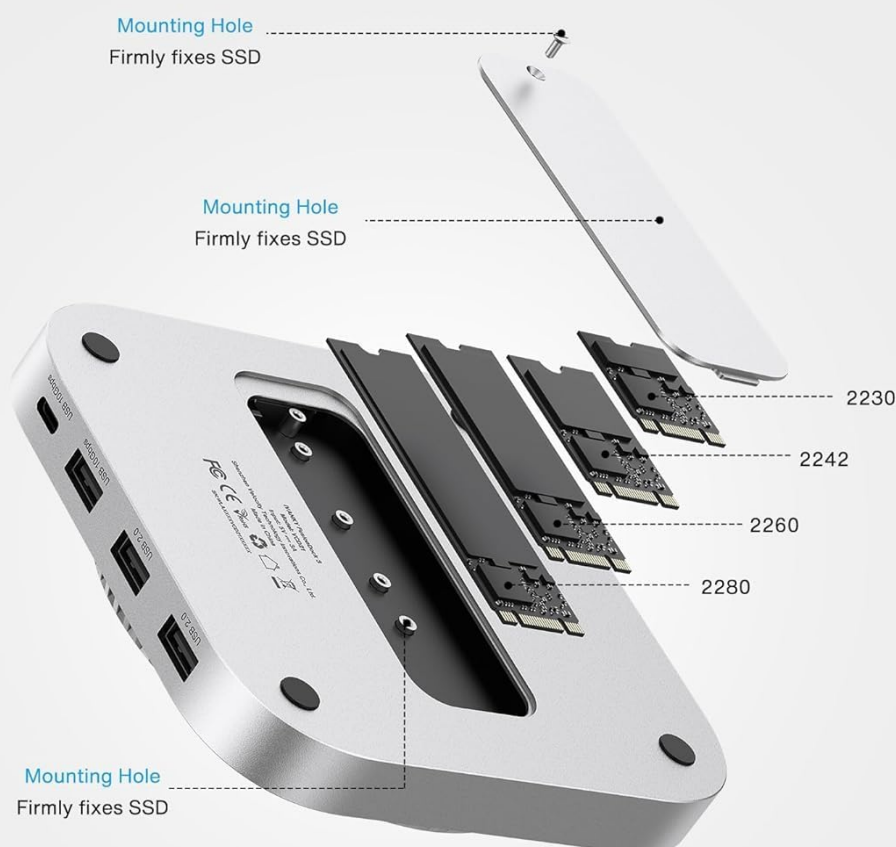
1. Carefully open the bottom cover of the docking station.

2. Locate the M.2 slot(s).

3. Insert your M.2 SSD into the slot at a 45-degree angle.

4. Gently push down the SSD and secure it with the provided screw using the mini screwdriver.

5. Replace the bottom cover, ensuring it clicks into place.

Fits M.2SSD(NVMe Pcie/NGFF SATA)

Supports 10Gbps Speed

Storage Expansion UP TO 8TB

Mounting Hole
Firmly fixes SSD

Mounting Hole
Firmly fixes SSD

2230

2242

2260

2280

Mounting Hole
Firmly fixes SSD

*SSDs are not included with this product   *Comes with Miniscrewdriver and screw

An exploded view illustrating how to install M.2 2230, 2242, 2260, and 2280 NVMe PCIe/NGFF SATA SSDs into the docking station for up to 8TB storage expansion. Mounting holes for secure fixation are visible.

3. Connecting to Mac mini M4

1. Place your Mac mini M4 securely on top of the iVANKY VCD21B docking station.

2. Connect the integrated USB-C cable from the docking station to a Thunderbolt/USB4 port on your Mac mini M4.

3. For optimal performance and to power connected peripherals, connect a 20W (or higher) USB-C Power Delivery (PD) adapter to the 'PD IN' port on the docking station.

OPERATING INSTRUCTIONS

1. Connecting Peripherals

Once connected to your Mac mini, the docking station provides the following ports:

- **USB-A Ports:** Connect USB-A devices such as keyboards, mice, external hard drives, or USB flash drives. The dock features both USB 2.0 (480Mbps) and USB 3.0 (10Gbps) ports.
- **USB-C Ports:** Connect USB-C devices for data transfer (10Gbps).
- **HDMI Port:** Connect an external monitor using an HDMI cable for video output up to 4K@120Hz.
- **Ethernet Port:** Connect an Ethernet cable for a stable wired network connection.
- **3.5mm Audio Jack:** Connect headphones, speakers, or a microphone.
- **SD/TF Card Slots:** Insert SD or TF (MicroSD) cards for data transfer up to 104MB/s.

2. Display Setup

The iVANKY VCD21B supports high-resolution external displays:

- **Single Display:** Connect an HDMI cable from the docking station's HDMI port to your monitor. The dock supports up to 4K resolution at 120Hz.
- **Dual Display:** For an extended dual-screen experience, connect one monitor to the HDMI port on the iVANKY dock and another monitor to the HDMI port directly on your Mac mini M4.
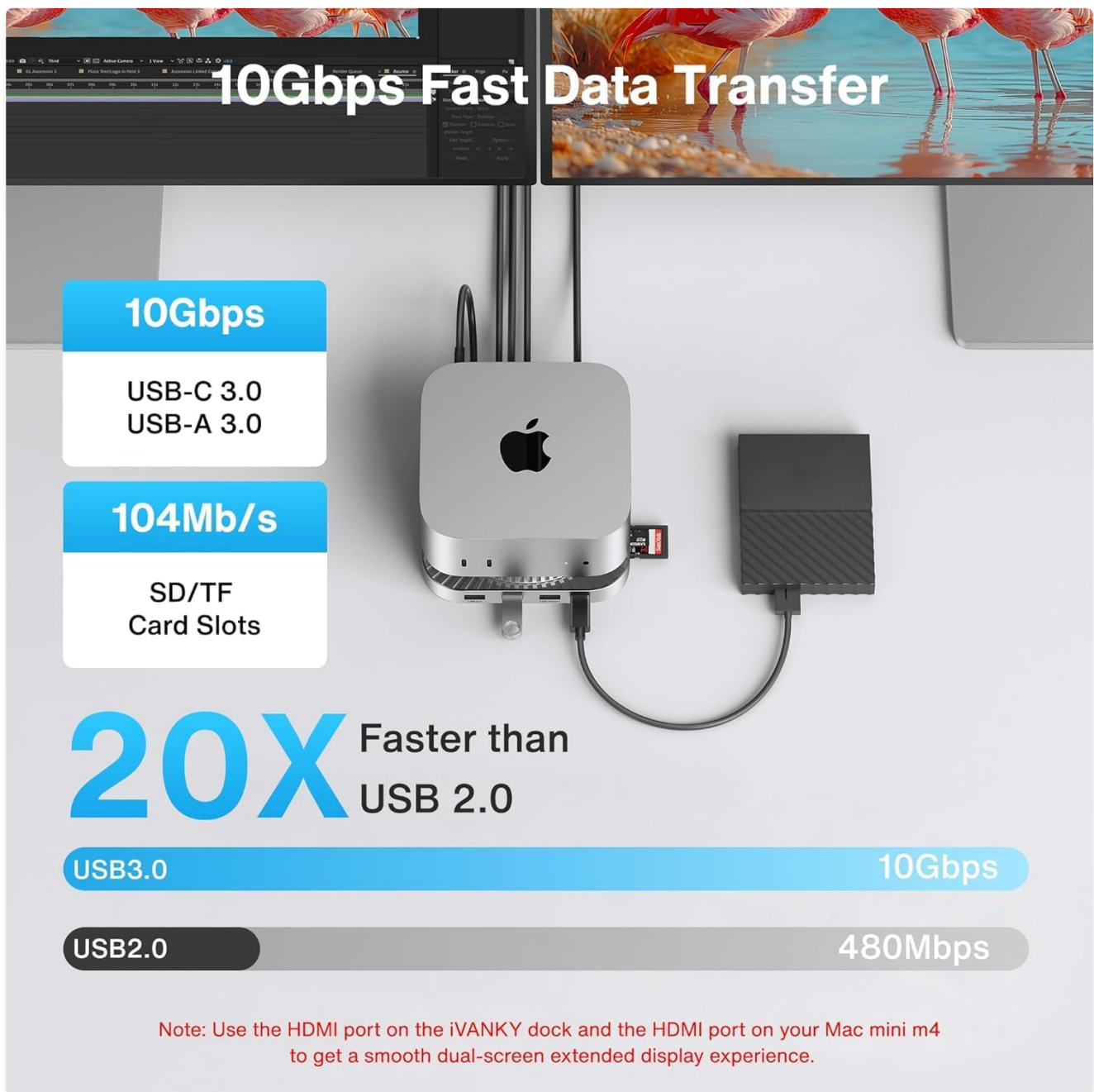
A user is shown utilizing the iVANKY VCD21B docking station with a Mac mini M4, showcasing its ability to support a 4K@120Hz external display, enhancing productivity and visual experience.

3. Data Transfer

Utilize the high-speed ports for efficient data transfer:

- **USB 3.0 (10Gbps):** Ideal for transferring large files to and from external SSDs or high-speed USB drives. These ports offer significantly faster speeds compared to USB 2.0.
- **USB 2.0 (480Mbps):** Suitable for connecting standard peripherals like keyboards, mice, or printers.
- **SD/TF Card Slots (104MB/s):** Quickly transfer photos and videos from your camera's memory cards.

10Gbps Fast Data Transfer

10Gbps

USB-C 3.0
USB-A 3.0

104Mb/s

SD/TF
Card Slots

20X Faster than USB 2.0

| USB3.0 | 10Gbps |
| USB2.0 | 480Mbps |

Note: Use the HDMI port on the iVANKY dock and the HDMI port on your Mac mini m4 to get a smooth dual-screen extended display experience.

This image shows the Mac mini connected to the iVANKY VCD21B, illustrating 10Gbps fast data transfer via USB-C 3.0 and USB-A 3.0, and 104MB/s from SD/TF card slots. It also highlights the capability for a dual-screen extended display experience.

MAINTENANCE

1. Cleaning

To maintain the performance and appearance of your docking station:

- Ensure the device is disconnected from power and your Mac mini before cleaning.
- Use a soft, dry, lint-free cloth to wipe the exterior surfaces.
- Avoid using liquid cleaners, aerosols, or solvents, as they may damage the finish or internal components.
- Periodically check the cooling vents for dust accumulation and gently clean them with compressed air if necessary.

Optimized Cooling Solution for Mac Mini M4

A detailed view of the docking station's base, showing the optimized cooling solution designed to dissipate heat efficiently from the Mac mini M4, ensuring stable performance.

2. Storage

When not in use for extended periods, store the docking station in a cool, dry place away from direct sunlight and extreme temperatures.

TROUBLESHOOTING

If you encounter issues with your iVANKY VCD21B docking station, please refer to the following common solutions:

- **No Power/Device Not Recognized:**
  - Ensure the docking station's integrated USB-C cable is firmly connected to your Mac mini.
  - Verify that a power adapter is connected to the 'PD IN' port of the docking station and that it is receiving power.
  - Try connecting the docking station to a different Thunderbolt/USB4 port on your Mac mini.

- Restart your Mac mini.

- **External Display Not Working:**

  - Check the HDMI cable connection between the dock and the monitor.
  - Ensure your monitor is set to the correct input source (HDMI).
  - Test the HDMI cable with another device or use a different HDMI cable.
  - Go to System Settings > Displays on your Mac mini to detect and configure the display.

- **Slow Data Transfer Speeds:**

  - Ensure you are using the 10Gbps USB-A or USB-C ports for high-speed devices.
  - Verify that your connected device (e.g., external SSD) supports USB 3.0/3.1/3.2 Gen 2 speeds.
  - Avoid connecting too many power-hungry devices simultaneously without external power to the dock.

- **SSD Not Appearing:**

  - Ensure the SSD is correctly installed and secured within the enclosure.
  - For new SSDs, you may need to format them using Disk Utility on your Mac mini before they appear in Finder.
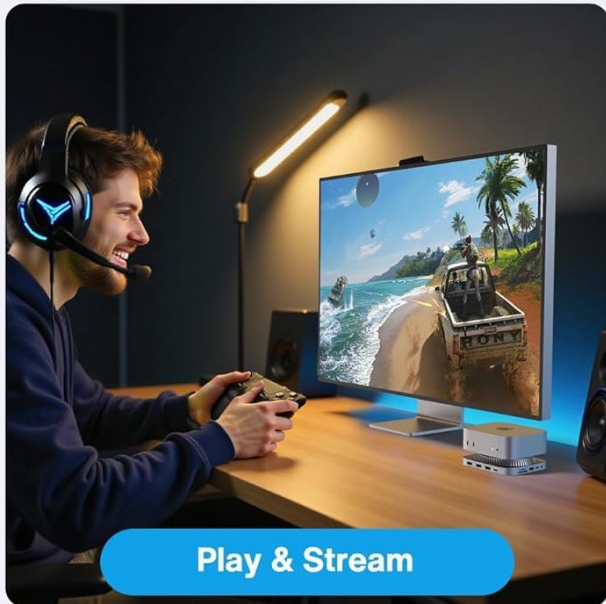 - Check the SSD for compatibility (NVMe PCIe or NGFF SATA).

SPECIFICATIONS

Model	VCD21B
Brand	IVANKY
Compatibility	Mac mini M4, MacBook series (2016 onwards)
Total Ports	13
USB-A Ports	2 x USB 2.0 (480Mbps), 2 x USB 3.0 (10Gbps)
USB-C Ports	1 x USB-C (10Gbps)
HDMI Port	1 x HDMI (4K@120Hz)
Ethernet Port	1 x Gigabit Ethernet
Audio Jack	1 x 3.5mm Audio
Card Reader	SD/TF Card Slots (104MB/s)
SSD Enclosure	M.2 NVMe PCIe/NGFF SATA (2230, 2242, 2260, 2280), up to 8TB
Power Input	PD IN (20W recommended)
Weight	294.84 g

WARRANTY AND SUPPORT

iVANKY products are designed for reliability and performance. For warranty information, technical support, or any

inquiries regarding your VCD21B docking station, please refer to the official iVANKY website or contact our customer support team directly. Please have your product model number (VCD21B) and purchase details ready when contacting support.

A collage demonstrating the versatility of the iVANKY VCD21B docking station in different scenarios: powering creative workflows, optimizing office setups, enhancing gaming and streaming experiences, and serving as a central family hub.