

ORICO ORICO-TB3-S3-US-GY-NEW

ORICO Thunderbolt 3 Docking Station User Manual

Model: ORICO-TB3-S3-US-GY-NEW

1. INTRODUCTION

This manual provides detailed instructions for the setup, operation, maintenance, and troubleshooting of your ORICO Thunderbolt 3 Docking Station. This 15-in-1 docking station is designed to expand the connectivity of your Thunderbolt-enabled laptop, offering high-speed data transfer, multiple display outputs, and power delivery.

2. PRODUCT OVERVIEW

2.1. Device Layout

The ORICO Thunderbolt 3 Docking Station features a comprehensive array of ports to enhance your workstation. Below are diagrams illustrating the front and rear panels with their respective connections.



Figure 1: Front and Rear View of the Docking Station

40Gbps Transfer Speed

2.5G File transfer in 1 Seconds

2.5G/s

Thunderbolt 3

1.0G/s

USB 3.1 Gen2

0.4G/s

USB 3.1 Gen1



*Thunderbolt 3 requires a Thunderbolt device to reach 40Gbps speeds

*The above data are theoretical values and are for reference only

Figure 2: 15-in-1 Port Diagram

2.2. Port Descriptions

- **Thunderbolt 3 Ports (x2):** One port provides up to 60W Power Delivery (PD) to the host laptop and 40Gbps data transfer. The second Thunderbolt 3 port provides 15W PD to downstream devices and 40Gbps data transfer.
- **USB 3.1 Gen 2 Type-C (x2):** 10Gbps data transfer speed.
- **USB 3.1 Gen 2 Type-A (x1):** 10Gbps data transfer speed.
- **USB 3.1 Gen 1 Type-A (x2):** 5Gbps data transfer speed.
- **USB 2.0 Type-A (x2):** 480Mbps data transfer speed, suitable for keyboards, mice, and other low-bandwidth

peripherals.

- **DisplayPort 1.4 (DP 1.4):** Supports 4K@60Hz video output.
- **Gigabit Ethernet (RJ45):** Provides stable 1000Mbps network connectivity.
- **SD/TF Card Reader:** For reading and writing to SD and TF (MicroSD) memory cards.
- **3.5mm Audio In & Out:** Combined port for headphones and microphone.
- **S/PDIF OUT:** Optical digital audio output for high-quality audio.
- **DC-IN (20V/3.25A):** Power input for the docking station.

3. SETUP GUIDE

3.1. Package Contents

Before proceeding, please verify that all items are present in your package:

- ORICO Thunderbolt 3 Docking Station
- Power Adapter (20V/3.25A)
- Thunderbolt 3 Cable
- User Manual

3.2. Connecting the Docking Station

1. **Connect Power:** Plug the included power adapter into the DC-IN port on the docking station, then connect the adapter to a power outlet.
2. **Connect to Host Laptop:** Use the provided Thunderbolt 3 cable to connect the docking station's 60W Thunderbolt 3 port (indicated by a computer icon) to a Thunderbolt 3/4 port on your laptop.
3. **Connect Peripherals:** Connect your external monitors, USB devices, Ethernet cable, and audio devices to the corresponding ports on the docking station.

Your browser does not support the video tag.

Video 1: Demonstrates the setup and connectivity of the ORICO Thunderbolt 3 Docking Station, showing how to connect the power, host laptop, and various peripherals.

4. OPERATING INSTRUCTIONS

4.1. Power Delivery

The docking station provides efficient power delivery:

- **Laptop Charging:** The primary Thunderbolt 3 port delivers up to 60W Power Delivery to charge your connected laptop.
- **Downstream Device Charging:** The secondary Thunderbolt 3 port provides up to 15W of power for charging other devices like smartphones or tablets.

Charge Rapidly Rapid Preparation



Figure 3: Power Delivery Capabilities

4.2. Data Transfer

Experience high-speed data transfer across various ports:

- **Thunderbolt 3:** Up to 40Gbps for ultra-fast data transfer with compatible devices.
- **USB 3.1 Gen 2 (Type-C & Type-A):** Up to 10Gbps.
- **USB 3.1 Gen 1 (Type-A):** Up to 5Gbps.
- **USB 2.0 (Type-A):** Up to 480Mbps.

Extended and Mirrored Modes

Extended Mode:

Notebook and two monitors: three screens display different pictures



Mirror Mode:

Laptop screen and two monitors showing different images



Mirror Mode:

Laptop screen and two monitors, showing the same picture



NOTE: Macbooks with M1 chip only can extend one monitor due to limitations of the Apple chip.

Figure 4: Data Transfer Speeds

4.3. Display Configuration

The docking station supports various display setups:

- **Single Monitor:** Up to 5K (5120 x 2880 @ 60Hz) via the Thunderbolt 3 downstream port, or 4K (3840 x 2160 @ 60Hz) via the DP 1.4 port.
- **Dual Monitors:** Up to 4K (3840 x 2160 @ 60Hz) via both the Thunderbolt 3 downstream port and the DP 1.4 port.
- **Triple Monitors:** Possible by daisy-chaining a Thunderbolt 3 to dual HDMI adapter to the Thunderbolt 3

downstream port, achieving 4K@60Hz via DP 1.4 and two 4K@30Hz displays via the adapter.

Note: MacBooks with M1 chips can only extend one external display due to Apple chip limitations.



Support Multi-Stream Transport with Daisy Chain

NOTE: Apple M1 only supports the expansion of one HD video output

Figure 5: Extended and Mirrored Display Modes

4K

4K@60Hz
Expand Your Display Options

Figure 6: Multi-Stream Transport with Daisy Chain

Widely Compatible

Mac OS



Windows



DP/Thunderbolt 3 Display Device



Projector



Television



Monitor



Figure 7: 4K@60Hz Display Expansion

4.4. Audio and Ethernet

- **Audio:** The 3.5mm audio jack supports headphone and microphone connections. The S/PDIF OUT port provides high-quality digital audio output, supporting PCM, Dolby, and DTS audio signals.
- **Ethernet:** The RJ45 Gigabit Ethernet port ensures a stable and fast wired network connection.

Your browser does not support the video tag.

Video 2: Highlights the various features of the ORICO Thunderbolt 3 Docking Station, including its audio output capabilities and Ethernet connectivity, demonstrating its use in a professional setup.

4.5. SD/TF Card Reader

The integrated SD and TF card slots allow for convenient access to data from memory cards, supporting various formats for quick file transfers.

5. COMPATIBILITY

The ORICO Thunderbolt 3 Docking Station is compatible with laptops featuring Thunderbolt 3 or Thunderbolt 4 ports. It supports the following operating systems:

- macOS 10.12 or later (including MacBook Air, MacBook Pro, iPad Pro with Thunderbolt)
- Windows 8, 8.1, 10, or later (including various laptops with Thunderbolt ports)

Ensure your laptop is equipped with a Thunderbolt 3 or Thunderbolt 4 port for full functionality.

Aluminum Alloy

Fast Heat Dissipation



Test Environment:

Room Humidity: 35%
Room Temperature: 26°C

— Surface temperature of others

— Surface Temperature of this product

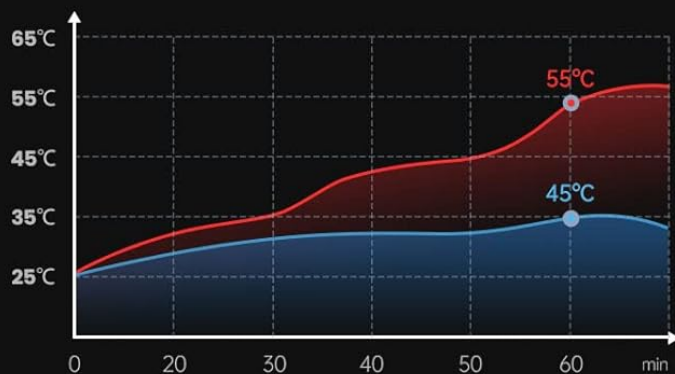


Figure 8: Wide Compatibility

6. MAINTENANCE

6.1. Cleaning

To maintain optimal performance and appearance, clean the docking station regularly. Use a soft, dry cloth to wipe the exterior. Avoid using liquid cleaners or solvents, as these may damage the device.

6.2. Heat Dissipation

The ORICO Thunderbolt 3 Docking Station is constructed with an aluminum alloy casing, which aids in efficient heat

dissipation. During high-speed data transfer or charging, it is normal for the device to feel warm. Ensure adequate ventilation around the docking station to prevent overheating.



Figure 9: Aluminum Alloy for Fast Heat Dissipation

7. TROUBLESHOOTING

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

- **Dock feels warm:** This is normal during charging or high-speed data transfer due to the aluminum alloy's heat dissipation properties. Ensure proper ventilation.

- **Charging is slower than original laptop charger:** The dock provides up to 60W PD. If your laptop requires higher wattage (e.g., 87W/96W MacBook charger), charging may be slower but will still occur.
- **Screen loss, black screen, or flickering:** Initial flickering after connecting is normal and should disappear. If issues persist, try reconnecting the dock or connecting it to a different Thunderbolt port on your laptop. Ensure all display cables are securely connected.
- **Dock does not enter sleep mode when laptop is off:** The dock may consume low power if still connected after the laptop is powered off. It is recommended to disconnect the host laptop from the dock when not in use to avoid continuous power consumption.
- **Peripherals not recognized or inconsistent connection:** Ensure all cables are securely connected. Try connecting the dock to a different Thunderbolt port on your laptop. Verify that your laptop's Thunderbolt drivers are up to date.

8. TECHNICAL SPECIFICATIONS

Feature	Specification
Model Number	ORICO-TB3-S3-US-GY-NEW
Product Dimensions	5.75"L x 4.22"W x 1.87"H (or 2.26 x 1.66 x 0.74 inches)
Item Weight	2.01 pounds
Number of Ports	15
Total USB Ports	7
Total HDMI Ports	1 (via DP 1.4, or additional via daisy-chain adapter)
Wattage (Power Delivery)	60W (Host), 15W (Downstream)
Data Transfer Speed	Up to 40Gbps (Thunderbolt 3)
Video Output	Single 5K@60Hz, Dual 4K@60Hz
Network Interface	Gigabit Ethernet (RJ45)
Card Reader	SD/TF
Audio Ports	3.5mm Audio In & Out, S/PDIF OUT
Compatible Devices	Laptops with Thunderbolt 3/4 ports (MacBook Air, MacBook Pro, etc.)
Operating System Support	macOS 10.12+, Windows 8/8.1/10+

9. WARRANTY AND SUPPORT

9.1. Warranty Information

The ORICO Thunderbolt 3 Docking Station typically comes with a 1-year limited warranty from the date of purchase. This warranty covers manufacturing defects and malfunctions under normal use. Please retain your proof of purchase for warranty claims.

9.2. Customer Support

For technical assistance, troubleshooting beyond this manual, or warranty inquiries, please visit the official ORICO website or contact their customer support directly. Contact information can usually be found on the product packaging or the ORICO official website.