

## QNAP QSW-2104-2T-A-US

# QNAP QSW-2104-2T-A-US Unmanaged Network Switch User Manual

Model: QSW-2104-2T-A-US

## 1. INTRODUCTION

The QNAP QSW-2104-2T-A-US is an unmanaged network switch designed to provide high-speed network connectivity for desktop environments. It features two 10GbE BASE-T ports and four 2.5GbE ports, supporting multi-gigabit speeds and auto-negotiation for seamless integration into existing networks. This manual provides essential information for setting up, operating, and maintaining your device.

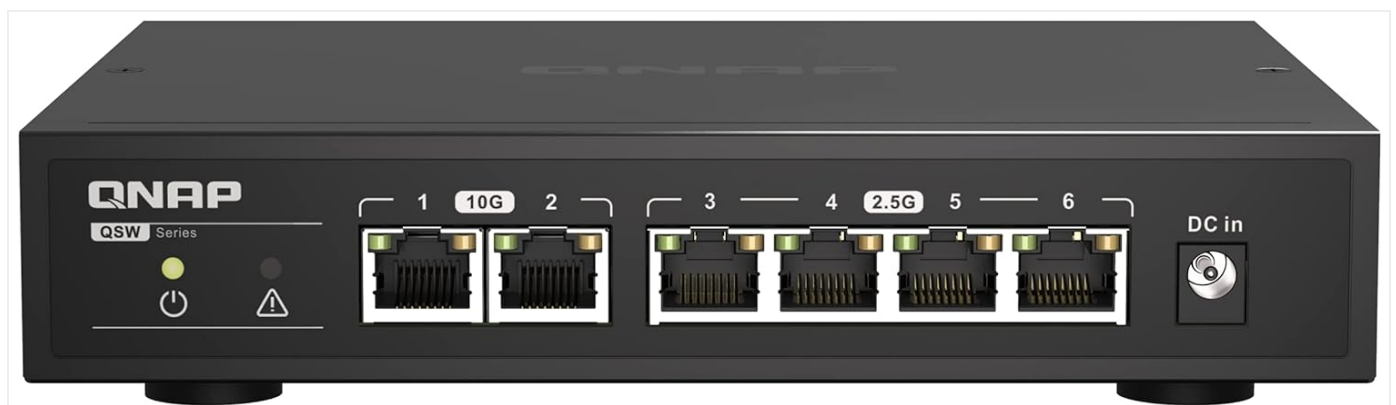
## 2. PACKAGE CONTENTS

Verify that all items are present in the package:

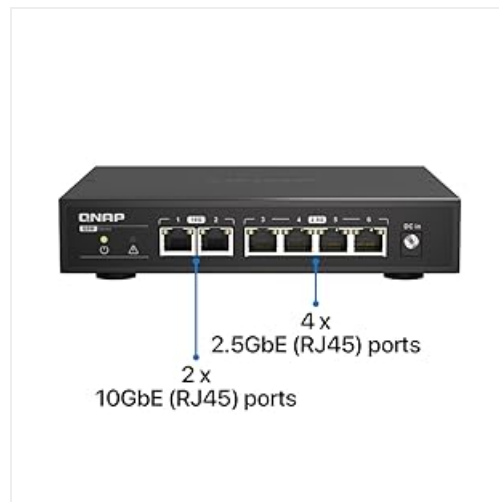
- QNAP QSW-2104-2T-A-US Network Switch
- Power supply
- Bracket screws
- Anchors
- Foot pads

## 3. PRODUCT OVERVIEW

The QSW-2104-2T-A-US switch provides multiple high-speed Ethernet ports for connecting various network devices.



**Figure 3.1:** Front view of the QNAP QSW-2104-2T-A-US network switch, showing all six Ethernet ports, power input, and LED indicators.



**Figure 3.2:** Detailed view of the switch ports. Ports 1 and 2 are 10GbE BASE-T ports, and ports 3, 4, 5, and 6 are 2.5GbE ports.

### 3.1. Port Configuration

- **Ports 1-2:** 10GbE BASE-T (RJ45) ports with 5-speed auto-negotiation (10G/5G/2.5G/1G/100M).
- **Ports 3-6:** 2.5GbE (RJ45) ports with auto-negotiation (2.5G/1G/100M).

### 3.2. LED Indicators

The switch features LED indicators to display device status and port activity:

- **Power LED:** Indicates the power status of the device.
- **Port Link/Activity LEDs:** Located on each RJ45 port.
  - **10GbE Ports (1-2):** Green for 10GbE link, Amber for 2.5G/1G link. Blinking indicates activity.
  - **2.5GbE Ports (3-6):** Green for 2.5GbE link, Amber for 1G/100M link. Blinking indicates activity.

## 4. SETUP

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The QSW-2104-2T-A-US is an unmanaged switch, designed for plug-and-play operation. No software configuration is required.

1. **Placement:** Place the switch on a stable, flat surface. Ensure adequate ventilation around the device. Avoid placing it near heat sources or in enclosed spaces.
2. **Connect Power:** Connect the provided power adapter to the "DC in" port on the switch and then to a power outlet. The Power LED will illuminate.
3. **Connect Network Devices:**
  - Connect your 10GbE-capable devices (e.g., NAS, workstation) to ports 1 or 2 using Cat 6a or better Ethernet cables for optimal performance.
  - Connect your 2.5GbE or standard Gigabit Ethernet devices (e.g., computers, printers, access points) to ports 3, 4, 5, or 6 using Cat 5e or better Ethernet cables.

The switch will automatically detect the speed of the connected devices and establish a link. The corresponding port Link/Activity LED will light up.



**Figure 4.1:** Example network setup demonstrating the QSW-2104-2T-A-US connecting a router, NAS, workstation, laptop, printer, and TV.

## 5. OPERATING INSTRUCTIONS

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Once connected, the QSW-2104-2T-A-US operates automatically. It functions as a layer 2 unmanaged switch, forwarding Ethernet frames between connected devices based on MAC addresses.

### 5.1. Auto-Negotiation

Each port on the switch supports auto-negotiation, which automatically detects the speed and duplex mode of the connected device. This ensures compatibility with various Ethernet standards (100Mbps, 1Gbps, 2.5Gbps, 5Gbps, 10Gbps) without manual configuration.

### 5.2. Fanless Design

The switch features a fanless design for silent operation, making it suitable for quiet environments such as homes and offices.

## 6. MAINTENANCE

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To ensure optimal performance and longevity of your QSW-2104-2T-A-US switch, follow these maintenance guidelines:

- **Cleaning:** Use a soft, dry cloth to clean the exterior of the switch. Do not use liquid or aerosol cleaners.
- **Ventilation:** Ensure that the ventilation holes on the sides of the switch are not obstructed. Proper airflow helps dissipate heat.
- **Cable Management:** Organize network cables to prevent strain on ports and to maintain a tidy setup.
- **Power Supply:** Use only the power supply provided with the device.

## 7. TROUBLESHOOTING

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If you encounter issues with your QSW-2104-2T-A-US switch, refer to the following common troubleshooting steps:

- **No Power:**
  - Check if the power adapter is securely connected to both the switch and a working power outlet.
  - Verify that the power outlet is functional.
- **No Link Light on Port:**
  - Ensure the Ethernet cable is securely plugged into both the switch port and the connected device.
  - Try a different Ethernet cable.
  - Connect the device to a different port on the switch.
  - Verify that the connected device is powered on and its network adapter is functioning correctly.
- **Slow Network Speed:**
  - Ensure you are using appropriate Ethernet cables (Cat 6a or better for 10GbE, Cat 5e or better for 2.5GbE).
  - Check the Link/Activity LED color to confirm the negotiated speed (Green for 10GbE/2.5GbE, Amber for lower speeds).
  - Verify that the connected devices' network adapters support the desired speeds.
- **Intermittent Connectivity:**
  - Ensure all cable connections are firm and not loose.
  - Avoid moving the switch frequently once set up, as this can sometimes dislodge cables.
  - Consider restarting the switch by unplugging and replugging the power adapter.

## 8. SPECIFICATIONS

Key technical specifications for the QNAP QSW-2104-2T-A-US network switch:

Feature	Detail
Model Number	QSW-2104-2T-A-US
Number of Ports	6 (2 x 10GbE BASE-T, 4 x 2.5GbE)
Interface Type	RJ45
Data Transfer Rate	10Gbps, 5Gbps, 2.5Gbps, 1Gbps, 100Mbps (auto-negotiation)
Case Material	Metal
Product Dimensions (H x W x D)	34 x 180 x 145 mm (1.34 x 7.09 x 5.71 inches)
Item Weight	2.31 pounds (1.05 kg)
Voltage	12 Volts (DC)
Upper Temperature Rating	104 Degrees Fahrenheit (40 Degrees Celsius)
UPC	885022024049
Date First Available	September 15, 2022



Figure 8.1: Physical dimensions and net weight of the QSW-2104-2T-A-US switch.

## 9. WARRANTY AND SUPPORT

For warranty information, please refer to the warranty card included with your product or visit the official QNAP website. Technical support and additional resources can be found on the QNAP support portal. You can also visit the [QNAP Store on Amazon](#) for product information and updates.



**Related Documents - QSW-2104-2T-A-US**



QSW-1105-5T  
Quick Installation Guide

[illegible]

Quick installation guide for the QNAP QSW-1105-5T, a 5-port 2.5GbE unmanaged network switch. Learn how to set up and connect your device with this comprehensive overview.