

# PANIO UW3440\_W

## 4×4 USB 3.2 Gen 1 Matrix Switch

Support 5Gbps Data Rate, Multi-Host KVM Sharing, IR / RS-232 / TCP/IP / Web GUI Control

### Product Overview

---

The UW3440\_W is a high-performance 4×4 USB 3.2 Gen 1 matrix switch, engineered to enable 4 host computers to stably share 4 USB 3.2 Gen 1 devices simultaneously. Compliant with USB 3.2 Gen 1 standards, it delivers a data transfer rate of up to 5 Gbps and is backward compatible with USB 2.0 / 1.1 protocols. With plug-and-play operation, multi-mode control, and a compact metal enclosure, the UW3440\_W provides a tidy, efficient, and flexible USB sharing solution for office desktops, conference rooms, and industrial control environments.

Typical applications include office desktop USB peripheral sharing (mouse, keyboard, USB storage, docking stations), conference room equipment control (HD camera, conference microphone, soundbar), industrial control and laboratory test equipment sharing, and multi-host centralized management scenarios. With its 4×4 matrix architecture, built-in over-current protection (5V / 1.5A per device port), USB Multiple Transaction Translator support, and cross-platform compatibility (Windows, Linux, macOS), the UW3440\_W ensures stable, deterministic operation across a wide range of professional B2B deployments.

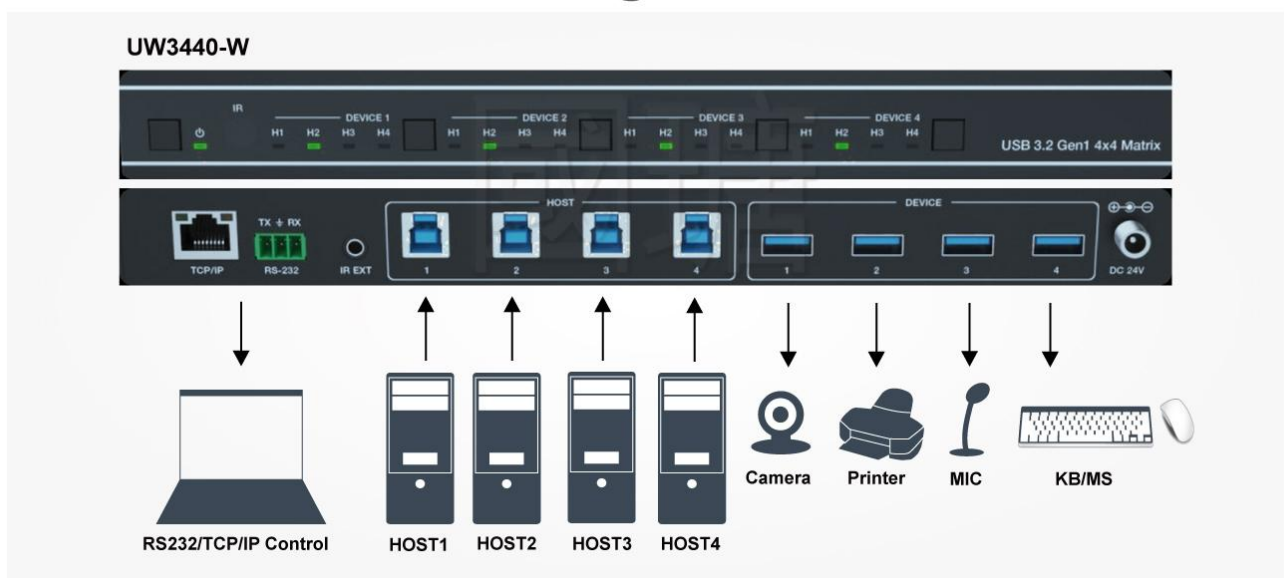
### Product Features

---

- **4×4 USB Matrix Architecture:** Routes 4 USB hosts to 4 USB devices with flexible signal mapping; enables multi-user simultaneous operation and centralized peripheral sharing without manual cable swapping.
- **USB 3.2 Gen 1 Compliant – 5 Gbps High-Speed Data Transmission:** Delivers up to 5 Gbps SuperSpeed throughput in full compliance with the USB 3.2 Gen 1 specification; backward compatible with USB 2.0 / 1.1 for legacy peripherals.
- **Built-in Over-Current Protection:** Each USB device port outputs 5V / 1.5A with hardware-level over-current protection, safeguarding connected peripherals against short circuits and current spikes.
- **USB Multiple Transaction Translator (MTT):** MTT architecture preserves bandwidth integrity when mixing USB 3.2 Gen 1, USB 2.0, and USB 1.1 devices on the same matrix — no full-bandwidth degradation across the link.

- **Plug-and-Play – No Driver, No External Power Adapter Required:** Recognized natively by host operating systems with zero driver installation; bus-powered hosts and a single included 24V/2A locking adapter eliminate complex wiring.
- **Cross-Platform Compatibility:** Verified operation on Windows, Linux, and macOS, supporting heterogeneous office and industrial environments without OS-specific constraints.
- **Comprehensive Multi-Mode Control:** Front panel buttons, IR remote, RS-232, TCP/IP, Web GUI, and ASCII API commands — covering manual, remote, network, and automated control system integration (Crestron / AMX / custom).
- **Real-Time LED Status Indicators:** Per-port LEDs report active host-to-device routing status at a glance; power LED indicates power-on (green) and standby (red) states.
- **Compact Rack-Mountable Metal Housing:** Black metal enclosure (270 × 166 × 30 mm, 1.16 kg) with included mounting ears for tidy 19-inch rack deployment or desktop placement.
- **Robust Durability & Protection**
  - ESD protection: ±8 kV (Air-gap discharge) / ±4 kV (Contact discharge) shields against electrostatic damage in dry or industrial environments.
  - Compact dimensions and rack-mountable design simplify integration into existing AV racks, control consoles, and industrial cabinets.

## Diagram



# Specification

## System Specifications

Parameter	Specification
Model Name	UW3440_W
Product Type	4×4 USB 3.2 Gen 1 Matrix Switch
USB Protocol	USB 3.2 Gen 1 (backward compatible with USB 2.0 / 1.1)
Data Rate	Up to 5 Gbps
Architecture	4×4 matrix; USB Multiple Transaction Translator (MTT) supported
Device Port Output	5V / 1.5A per port (hardware over-current protection)
IR Performance	5 Vp-p, fixed 38 kHz carrier frequency
Control Modes	Front panel buttons, IR remote, RS-232 (115200 8N1), TCP/IP, Web GUI, ASCII API
OS Compatibility	Windows, Linux, macOS (driver-free plug-and-play)
Web GUI Defaults	IP 192.168.0.100   Account: Admin   Password: 1234
Preset Storage	8 routing preset groups (storable / recallable)
ESD Protection	Human body model — ±8 kV (Air-gap) / ±4 kV (Contact discharge)

## Front Panel Interface

Interface	Description
Power Button & LED	Short press: power on (green)   Long press 3 s: standby (red)
IR Receiver	Receives signals from the supplied IR remote control
Device 1–4 Buttons	Cycle host connection (H1–H4) for each USB device port
Status LEDs	Indicate the active host currently routed to each device port

## Rear Panel Interface

Interface	Description
HOST 1–4	4× USB 3.2 Gen 1 Type-B (host) for connecting PCs / hosts
DEVICE 1–4	4× USB 3.2 Gen 1 Type-A (device) for USB peripherals (DP Alt Mode / PD not supported)
TCP/IP	1× RJ45 100M LAN port for Web GUI / TCP/IP control
RS-232	1× 3-pin 3.81 mm Phoenix serial port for third-party control system integration
IR EXT	1× 3.5 mm extended IR receiver port for shielded installations
DC 24V	1× DC barrel input for the supplied 24V / 2A locking power adapter

## Mechanical & Environmental

Parameter	Specification
Dimensions	270 × 166 × 30 mm (W × D × H)
Weight	1.16 kg (net)
Housing	Metal enclosure, black
Power Supply	AC 100–240V 50/60 Hz input   DC 24V / 2A output (locking adapter)
Max Power Consumption	13.2 W
Operating Temperature	0 °C – 40 °C
Storage Temperature	–20 °C – 60 °C
Operating Humidity	20% – 80% RH (non-condensing)
Storage Humidity	10% – 90% RH (non-condensing)
Mounting	19-inch rack mount (with included ears) or desktop placement

## Connection Diagram

The UW3440\_W deploys as a centralized 4×4 USB matrix. Up to four host computers connect to the rear-panel USB-B HOST ports, while up to four shared USB peripherals connect to the rear-panel USB-A DEVICE ports. Routing is controlled locally via front panel buttons or IR remote, and

remotely via RS-232, TCP/IP, Web GUI, or ASCII API commands — enabling fully automated multi-host KVM workflows.

Section	Connections
<b>Host Side (Inputs)</b>	<ul style="list-style-type: none"> <li>• PC / Workstation 1 → HOST 1 (USB 3.2 Gen 1 Type-B)</li> <li>• PC / Workstation 2 → HOST 2 (USB 3.2 Gen 1 Type-B)</li> <li>• PC / Workstation 3 → HOST 3 (USB 3.2 Gen 1 Type-B)</li> <li>• PC / Workstation 4 → HOST 4 (USB 3.2 Gen 1 Type-B)</li> </ul>
<b>Device Side (Outputs)</b>	<ul style="list-style-type: none"> <li>• Keyboard / Mouse → DEVICE 1 (USB 3.2 Gen 1 Type-A)</li> <li>• USB Storage / Docking Station → DEVICE 2 (Type-A)</li> <li>• HD Camera / Microphone → DEVICE 3 (Type-A)</li> <li>• Soundbar / Test Equipment → DEVICE 4 (Type-A)</li> </ul>
<b>Control &amp; Power</b>	<ul style="list-style-type: none"> <li>• Front Panel Buttons / IR Remote → Local routing control</li> <li>• RS-232 (3-pin Phoenix) ↔ AV Control System (Crestron / AMX / API)</li> <li>• TCP/IP (RJ45 100M) ↔ Network Management (Web GUI / API)</li> <li>• DC 24V / 2A Locking Adapter → Rear-panel DC input</li> </ul>

**Routing & Presets:** Each device port can be independently routed to any of the four hosts via front panel, IR, RS-232, TCP/IP, Web GUI, or API. Up to 8 routing preset groups can be stored and recalled, supporting rapid switching between predefined multi-host workflows.

## Package Contents

- 1× UW3440\_W 4×4 USB 3.2 Gen 1 Matrix Switch
- 1× DC 24V / 2A Locking Power Adapter (100–240V AC, with regional plug options)
- 1× IR Remote Control
- 1× IR Wideband Receiver Cable (1.5 m)
- 4× USB 3.0 A-to-B Cables (1.8 m)
- 1× 3-pin 3.81 mm Phoenix Connector
- 4× KM3×4 Machine Screws
- 2× Mounting Ears
- 1× User Manual

**PANIO International Co., Ltd.**

Web: [www.panio.com.tw](http://www.panio.com.tw) Email: [sales@panio.com.tw](mailto:sales@panio.com.tw)