Tecmojo 12U Open Frame Network Rack & 24 Port Patch Panel

Tecmojo 12U Open Frame Network Rack & 24 Port Patch Panel User Manual

Model: 12U Open Frame Network Rack & 24 Port Patch Panel

1. Introduction

This manual provides detailed instructions for the proper assembly, installation, operation, and maintenance of your Tecmojo 12U Open Frame Network Rack and 24 Port Patch Panel. Please read this manual thoroughly before installation and use to ensure safe and efficient operation of your equipment.

2. Safety Information

Always observe the following safety precautions:

- Ensure the rack is installed on a stable, level surface or securely mounted to a wall stud capable of supporting the total weight of the rack and all installed equipment.
- Do not exceed the maximum load capacity: 260 lbs (floor-mounted) or 130 lbs (wall-mounted).
- Distribute equipment weight evenly within the rack to prevent tipping.
- Use appropriate tools for assembly and installation.
- Keep children and pets away from the installation area.
- Ensure proper ventilation around the rack to prevent overheating of equipment.

3. Package Contents

Verify that all components are present before beginning assembly:

- 1x Tecmojo 12U Open Frame Network Rack
- 1x Tecmojo 24 Port Cat6 Patch Panel
- Rack shelf supports
- Mounting hardware (screws, nuts, washers)

- Mounting hole drilling template
- Cable management bar (for patch panel)
- Instruction Manual (this document)

4. Setup and Installation

4.1. Rack Assembly

Assemble the 12U open frame network rack according to the included hardware. Ensure all screws are tightened securely for stability.
The rack features an open-frame layout with a top panel for additional space and grommet holes for convenient cable pass-through. Tapped holes are clearly marked and numbered for easy rack-mount space identification.

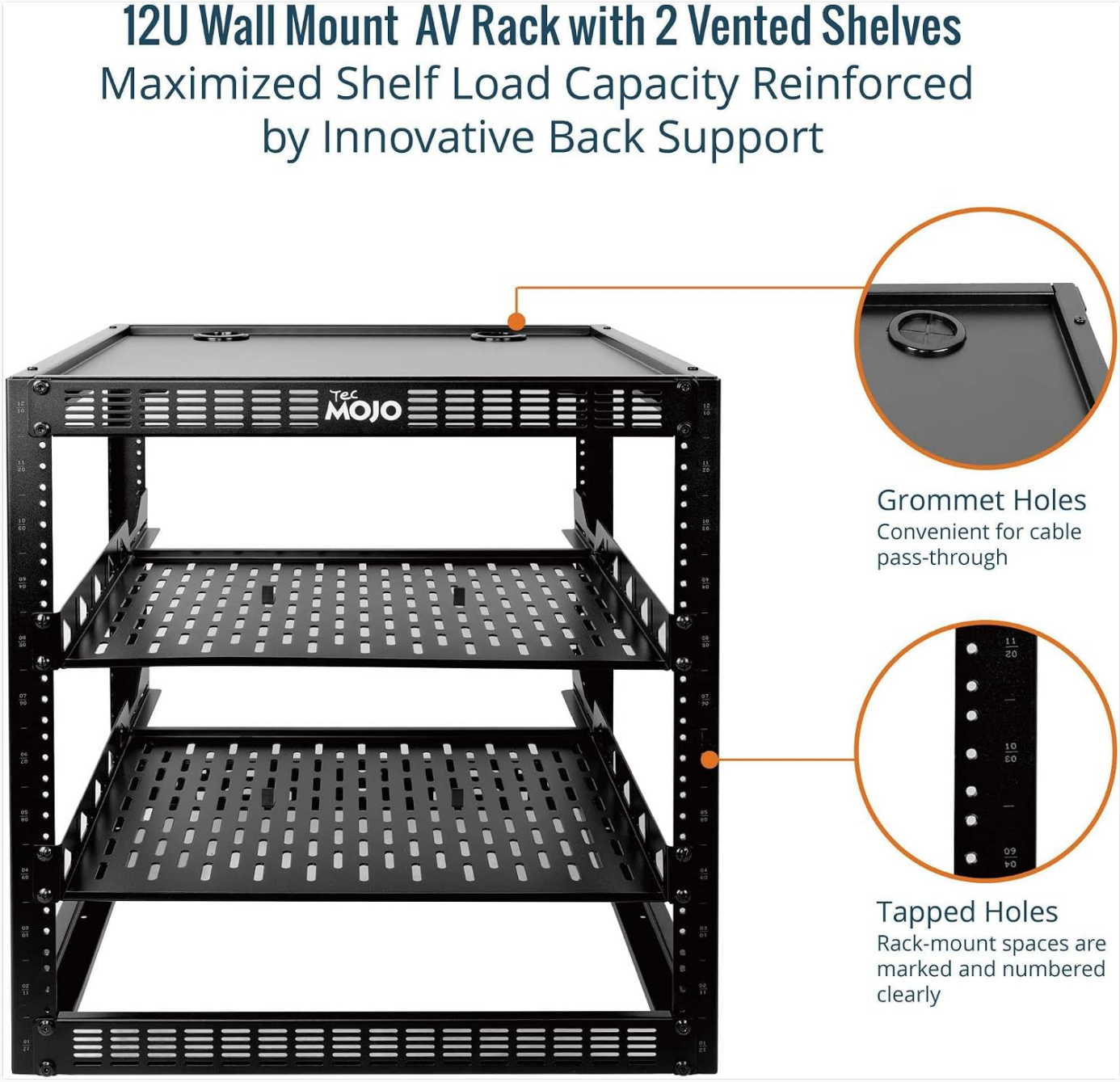

Image: The 12U rack showing grommet holes for cable routing and clearly numbered tapped holes for equipment mounting.

4.2. Mounting Options

The Tecmojo 12U rack supports both wall-mount and floor-mount configurations.

- **Wall Mount:** Use the provided drilling template to mark and drill holes. The template ensures 16-inch mounting holes apart to accommodate standard stud placement. Securely fasten the rack to wall studs using appropriate hardware. The wall-mounted capacity is 130 lbs.
- **Floor Mount:** Place the rack on a stable, level floor. The floor-mounted capacity is up to 260 lbs.

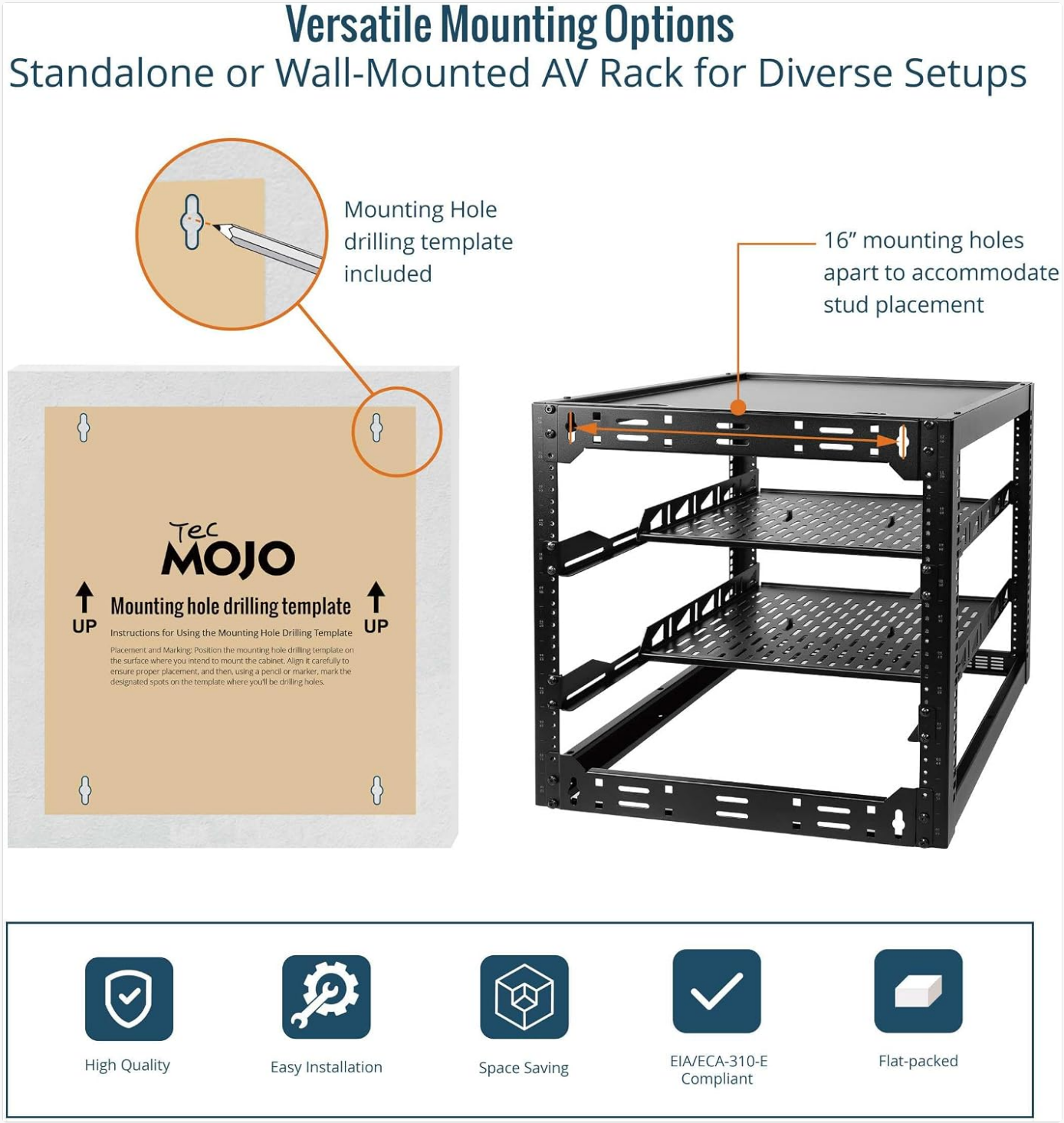

Image: Illustration of the mounting hole drilling template and how it aligns with the rack for wall installation.

4.3. Installing Equipment and Shelves

Install your network devices, servers, and other equipment into the rack using appropriate rack-mount screws. The rack includes anti-slip shelf stops to prevent devices from slipping off the rack shelves and rack shelf back supports to enhance stability for heavier equipment.

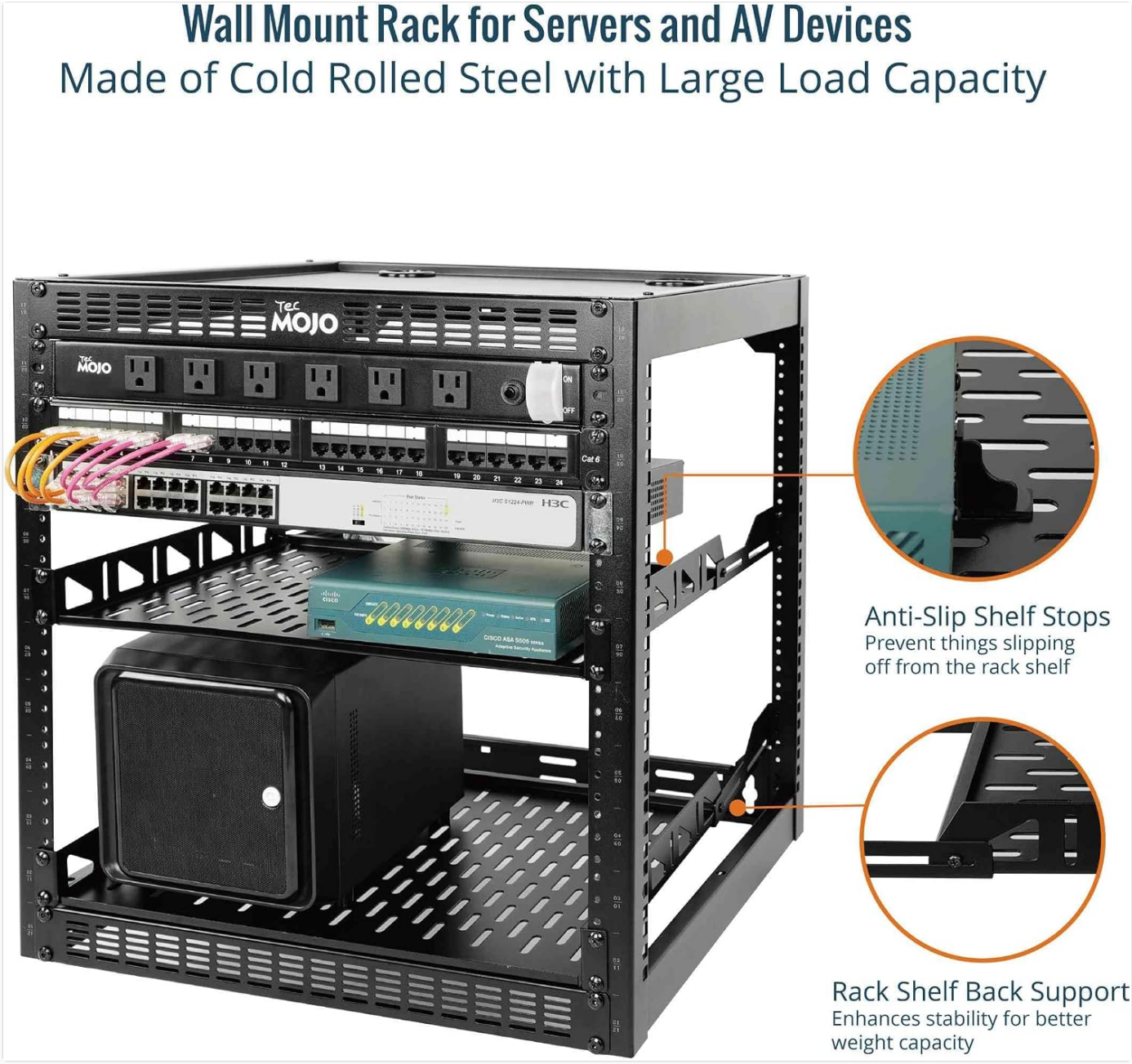

Image: A fully equipped rack demonstrating the anti-slip shelf stops and rack shelf back support features.

4.4. Patch Panel Installation

The 24-port Cat6 patch panel is designed for standard 1U rack mounting. Secure it into an available 1U space on your network rack using the provided rack screws.

The patch panel features Cat6 grade Krone connectors and 110 IDC type terminals for reliable connections. It includes a cable management bar to reduce cable strain and 24 Gigabit RJ-45 ports.

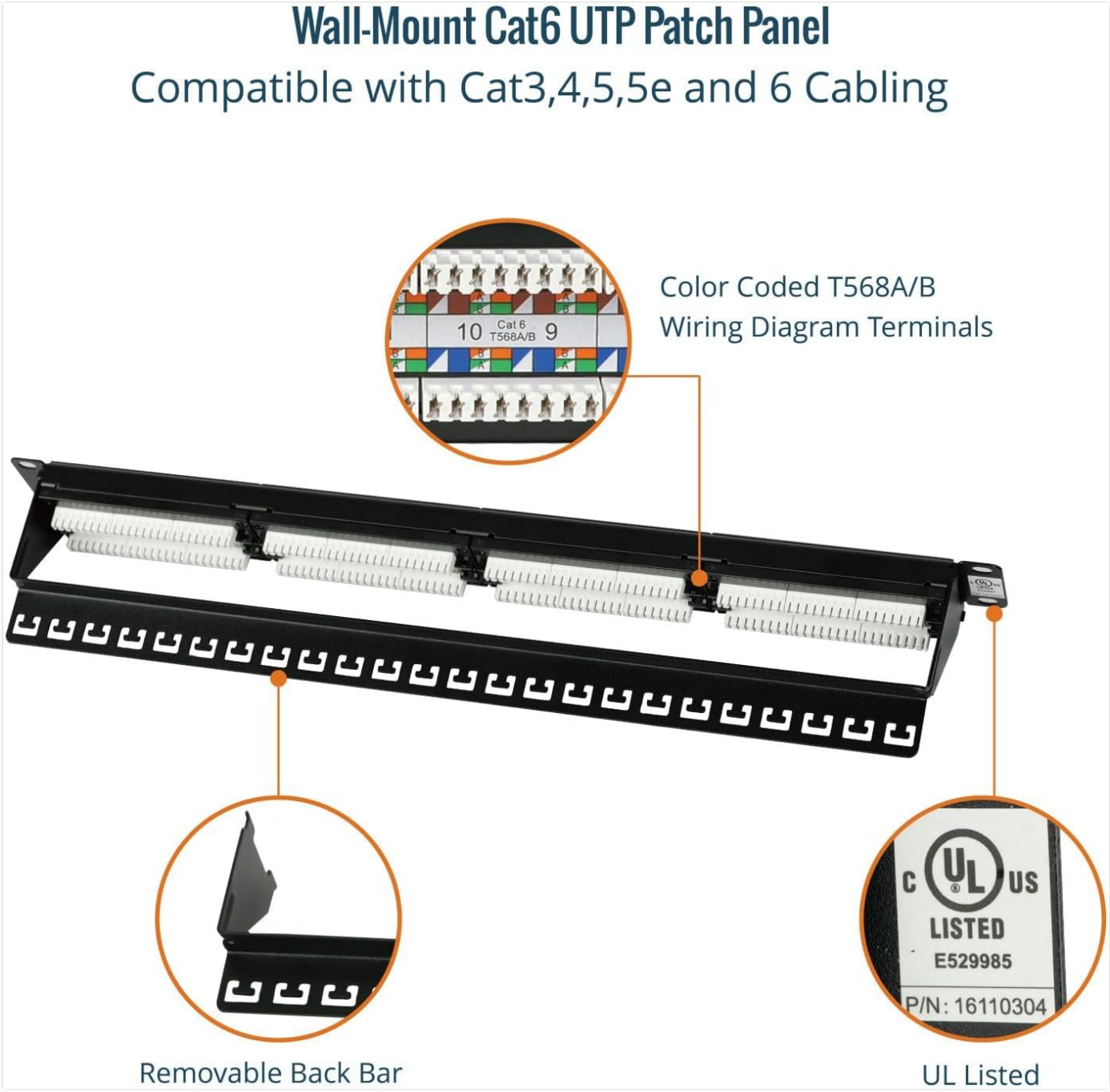

Image: Close-up of the 24-port Cat6 patch panel, highlighting the cable management bar, Krone connectors, and RJ-45 ports.

The patch panel is compatible with Cat3, Cat4, Cat5, Cat5e, and Cat6 cabling. It features color-coded T568A/B wiring diagram terminals for easy and correct wiring. A removable back bar is included for flexible installation.

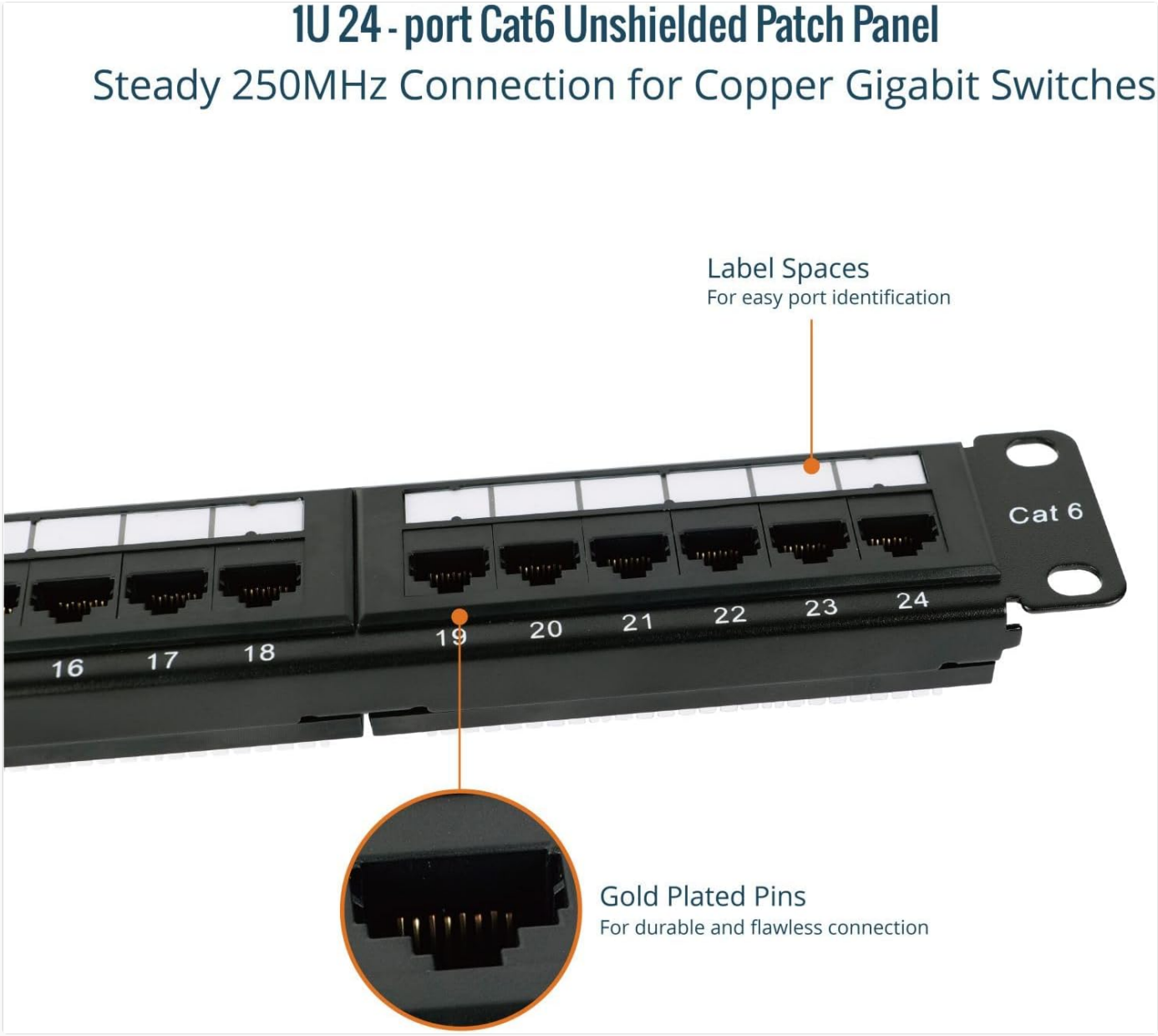

Image: The patch panel showing the color-coded T568A/B wiring diagram, removable back bar, and UL listing.

5. Operating Instructions

5.1. Connecting Devices to the Rack

Once the rack is assembled and mounted, install your network switches, routers, servers, and other rack-mountable equipment. Ensure proper airflow by leaving adequate space between devices if possible, especially for equipment with active cooling.

5.2. Using the Patch Panel

The 24-port Cat6 patch panel provides a centralized point for network cable termination. Terminate your horizontal cabling (e.g., from wall outlets) to the IDC terminals on the back of the patch panel, following either the T568A or T568B wiring standard consistently. Use the color-coded diagram on the panel for guidance.

Connect your network devices (e.g., switches, servers) to the RJ-45 ports on the front of the patch panel using standard Ethernet patch cables. The patch panel features gold-plated pins for durable and flawless connections and label spaces for easy port identification.

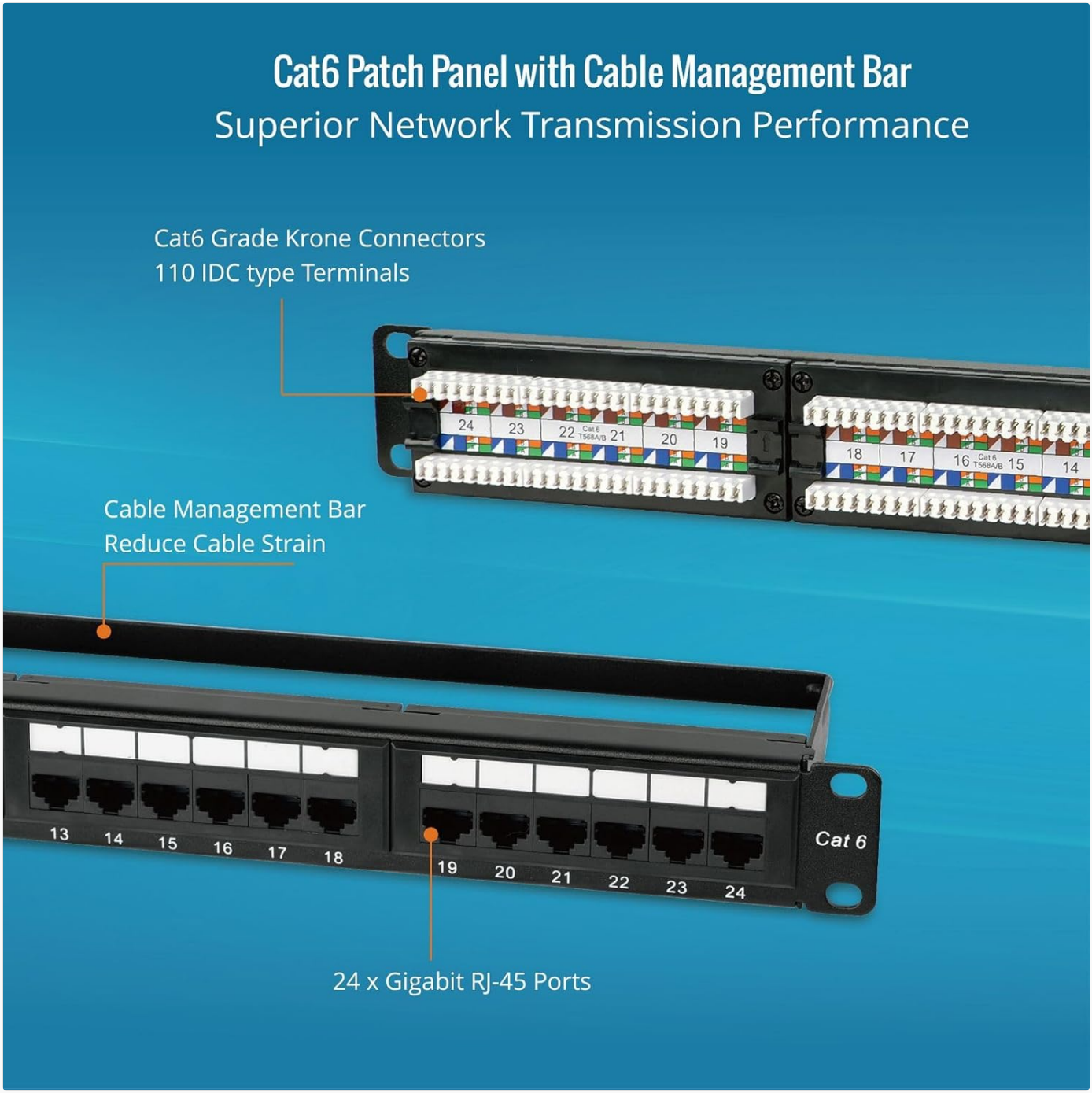

Image: The 24-port Cat6 patch panel highlighting gold-plated pins for connectivity and label spaces for organization.

5.3. Cable Management

Utilize the integrated cable management features of the rack and patch panel. Route cables through the grommet holes in the rack's top panel and use the cable management bar on the patch panel to organize and secure cables, reducing strain and maintaining a tidy setup. This helps improve airflow and simplifies future maintenance.

6. Maintenance

Regular maintenance ensures the longevity and optimal performance of your Tecmojo network rack and patch panel.

- **Cleaning:** Periodically wipe down the rack and patch panel with a soft, dry cloth to remove dust. For stubborn dirt, a slightly damp cloth can be used, followed by drying. Avoid abrasive cleaners or solvents.
- **Inspection:** Regularly check all mounting hardware and rack screws to ensure they remain tight. Inspect cables for any signs of wear or damage.

- **Cable Management:** Re-evaluate cable routing periodically to ensure cables are not pinched or excessively strained, especially after adding or removing equipment.

7. Troubleshooting

This section addresses common issues you might encounter.

- **Rack Instability:** If the rack feels unstable, ensure all assembly screws are fully tightened. For wall-mounted racks, verify that it is securely fastened to wall studs. For floor-mounted racks, ensure it is on a level surface and weight is evenly distributed.
- **Equipment Slipping:** Ensure that anti-slip shelf stops are correctly installed and positioned to secure equipment on shelves.
- **Network Connectivity Issues (Patch Panel):**
  - Verify that cables are correctly terminated to the IDC terminals on the patch panel, following the T568A or T568B standard consistently.
  - Check patch cables connecting devices to the front of the patch panel for damage or improper seating.
  - Ensure the network equipment connected to the patch panel is powered on and functioning correctly.
- **Overheating Equipment:** Ensure adequate space for airflow around equipment. Utilize the open-frame design and any available ventilation features. Consider adding active cooling solutions if necessary.

8. Specifications

8.1. 12U Open Frame Network Rack Specifications

SPECIFICATIONS

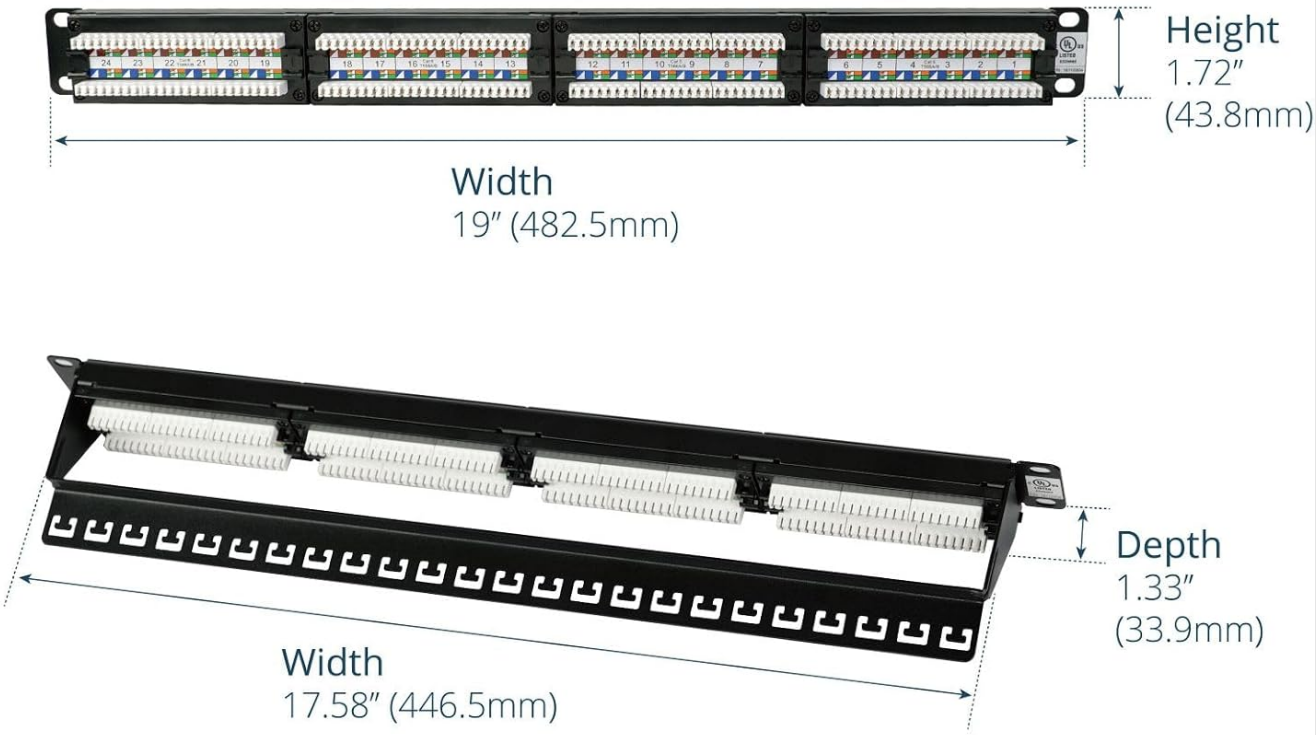

Image: Visual representation of the 12U rack's dimensions (width, height, depth) and key specifications.

Feature	Detail
Brand	Tecmojo
Rack Units	12U
Dimensions (W x D x H)	20.47" x 20.15" x 21.02" (520mm x 512mm x 534mm)
Material	Cold Rolled Steel
Mounting Type	Rack Mount, Wall Mount, Floor Mount
Weight Capacity (Wall)	130 lbs
Weight Capacity (Floor)	260 lbs
Compatible Devices	CPU, Server, Network Equipment
Compliance	EIA/ECA-310-E Compliant

8.2. 24 Port Cat6 Patch Panel Specifications

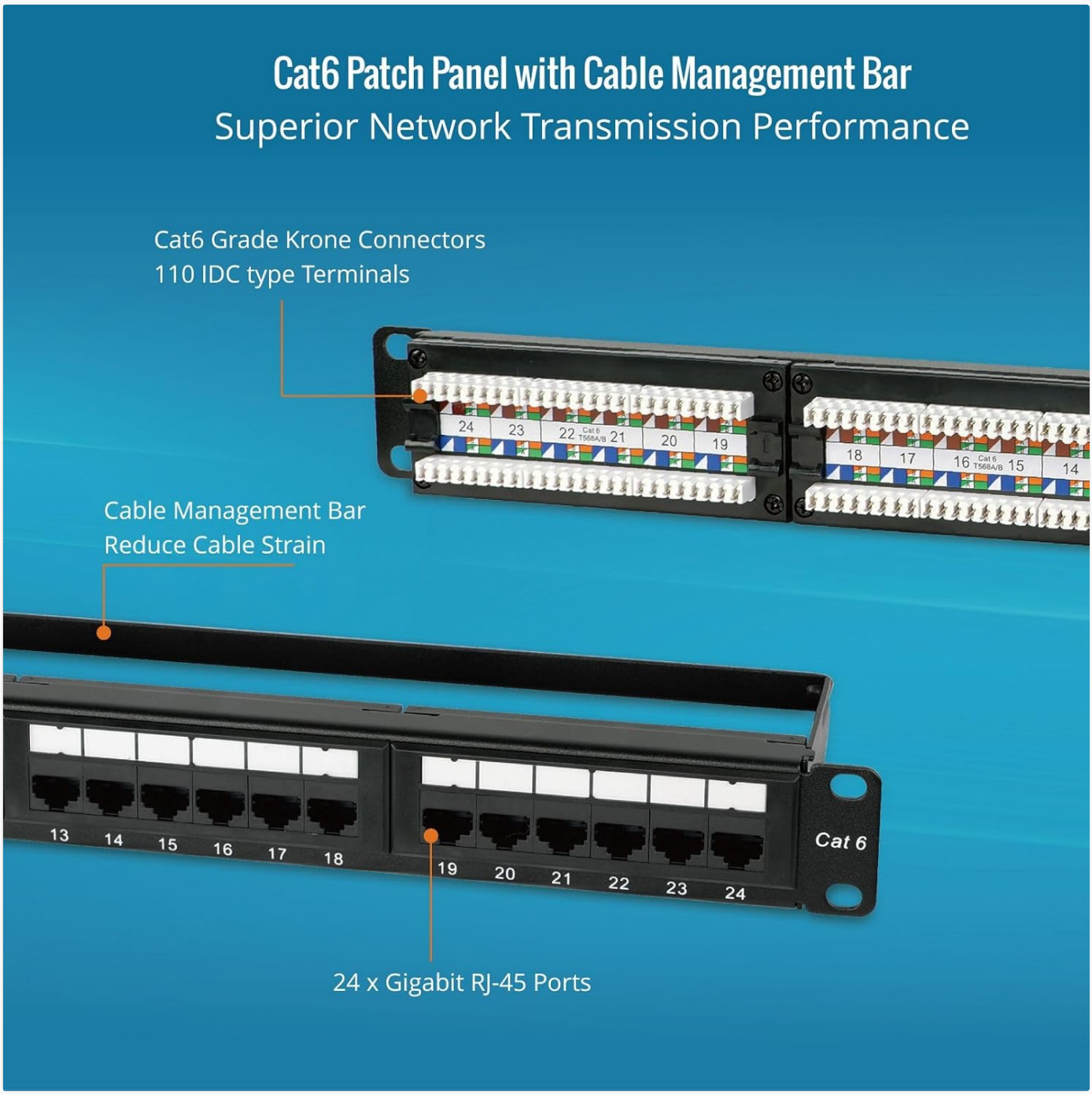

Image: Visual representation of the 24-port Cat6 patch panel's dimensions (width, height, depth) and key specifications.

Feature	Detail
Ports	24
Category	Cat6 (compatible with Cat3, 4, 5, 5e)
Dimensions (W x D x H)	19" x 1.33" x 1.72" (482.5mm x 33.9mm x 43.8mm)
Terminals	110 IDC Type, Krone Connectors
Wiring Standard	T568A/B Color Coded
Construction	Cold-rolled steel with corrosion-resistant, gold-plated contacts
Compliance	ANSI/TIA-568.2-D-2018, UL Listed (E529985)

9. Warranty Information

Tecmojo products are manufactured to high-quality standards. For specific warranty terms and conditions, please refer to the warranty card included with your product or visit the official Tecmojo website. Keep your proof of purchase for warranty claims.

10. Support

If you encounter any issues or have questions regarding the Tecmojo 12U Open Frame Network Rack or 24 Port Patch Panel that are not covered in this manual, please contact Tecmojo customer support through the retailer's platform or the official Tecmojo website for assistance.

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Ask about setup, troubleshooting, compatibility, parts, safety, or missing instructions. Manuals+ will review the question and use this page's manual context to help answer it.

Name

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Question

Example: How do I reset this device or fix this error?

Details

Model number, symptoms, what you tried, or the section of the manual you are using.

Submit question