

Cliff RJ45 Feedthrough Connectors: Overview and Use Cases

Cliff RJ45 feedthrough connectors, made by Cliff Electronic Components, are widely used in professional audio-visual, networking, and broadcast installations where reliability and clean panel mounting are essential. These connectors are designed as female-to-female RJ45 couplers, meaning they allow you to pass an Ethernet connection straight through a panel without terminating cables. This makes installation faster, neater, and more modular compared to traditional punch-down or crimped terminations.

A key feature of Cliff RJ45 feedthrough connectors is their compatibility with standard D-size panel cutouts. This format is commonly used in pro AV equipment racks, stage boxes, and wall plates, allowing RJ45 connectors to sit alongside XLR, HDMI, or power connectors in a uniform layout. Because of this, they are often chosen for installations where both durability and aesthetics matter, such as live sound rigs, studio patch panels, or conference room AV systems.

Most Cliff RJ45 feedthrough models support Cat6a performance, enabling data rates up to 10 Gigabit Ethernet over appropriate cabling. Many versions are also shielded, which helps reduce electromagnetic interference (EMI). This is particularly important in environments with lots of electrical equipment, such as stages or server racks, where interference could degrade network performance. The metal housing of shielded versions also improves durability and grounding.

Compared to standard keystone couplers, Cliff connectors are generally more robust. Keystone couplers are designed to snap into plastic wall plates or patch panels and are commonly used in home or office networking. While they are cost-effective and flexible, they lack the rugged construction of Cliff connectors. In contrast, Cliff's products are built for repeated use, physical stress, and professional environments where connectors may be plugged and unplugged frequently.

When selecting a Cliff RJ45 feedthrough connector, there are a few important considerations. First, ensure the connector matches your cable type—shielded connectors should be used with shielded (STP or FTP) cables to maintain proper grounding. Second, check the category rating (Cat5e, Cat6, or Cat6a) to ensure it meets your bandwidth requirements. Finally, confirm that your panel or enclosure supports D-size cutouts, as this is essential for proper mounting.

In summary, Cliff RJ45 feedthrough connectors provide a reliable and professional solution for panel-mounted Ethernet connections. Their ease of installation, compatibility with standard panel formats, and robust construction make them well suited for AV, broadcast, and networking applications where performance and durability are key.

