VIVO CABLE-V010

VIVO CABLE-V010 Full Copper Cat6 Outdoor Direct Burial Ethernet Cable Instruction Manual

1. INTRODUCTION

This manual provides essential information for the VIVO CABLE-V010 Full Copper Cat6 Ethernet Cable. This cable is a 23 AWG unshielded twisted pair (UTP) bulk Ethernet cable, designed for robust outdoor and direct burial applications. It is supplied in a 1,000 ft roll, connector-free, allowing for custom length and termination.

The cable supports various Ethernet standards, including 10BASE-T, 100BASE-TX (Fast Ethernet), 1000BASE-T / 1000BASE-TX (Gigabit Ethernet), and 10GBASE-T (10-Gigabit Ethernet) over appropriate distances.

Image: VIVO CABLE-V010 Full Copper Cat6 Ethernet Cable on a wooden spool, ready for deployment.

2. PRODUCT FEATURES

- **Cable Type:** Cat6 bulk Ethernet cable, 1,000 ft roll, connector-free. Suitable for Fast, Gigabit, and 10-Gigabit Ethernet.

- **Material:** Solid Pure Copper 23 AWG conductors, ensuring reliable performance.

- **Shielding:** Waterproof outer jacket for outdoor direct burial applications.*Note: Not UV rated for prolonged direct sunlight exposure.*

- **Construction:** 4-pair unshielded twisted pair (UTP) design, conforming to TIA/EIA standards.

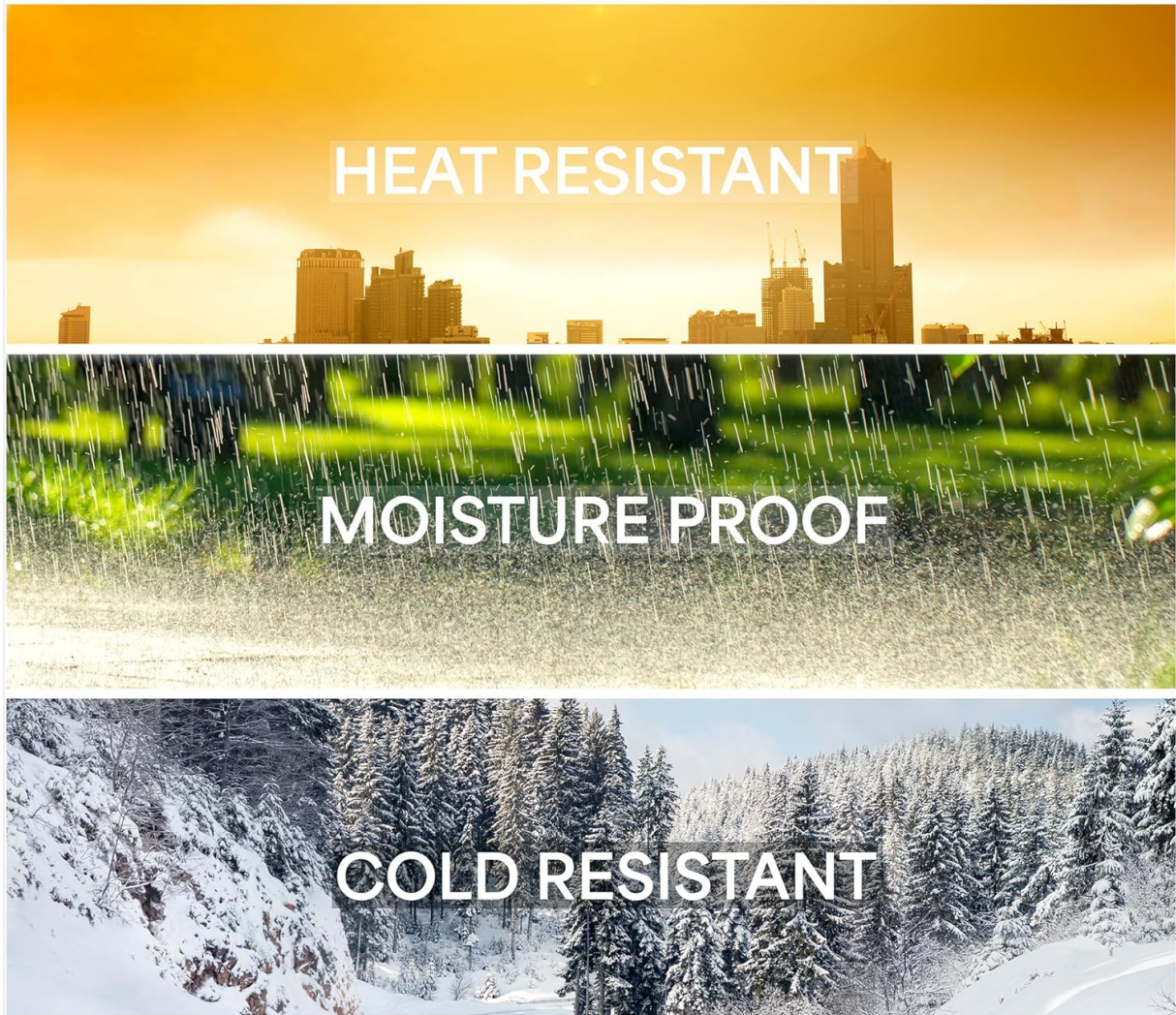- **Color:** Black outside jacket.

OUTDOOR CABLE

Image: Visual representation of the cable's outdoor durability, highlighting its heat resistance, moisture proofing, and cold resistance.

3. SETUP AND INSTALLATION

This cable is designed for direct burial and outdoor use. Proper installation is crucial for optimal performance and longevity.

3.1 Cable Preparation

- The cable is supplied on a spool. For easier deployment, place the spool on a rod suspended between two supports, or on its side in the box to prevent tangling.

- The cable features foot markings (starting at 1000 and counting down to 1) to indicate the remaining length on the roll.

- As this is a bulk cable, you will need to terminate the ends with RJ45 connectors. Use a crimping tool and ensure proper wiring according to TIA/EIA standards (T568A or T568B).

- The 23 AWG solid copper construction makes this cable thicker than some standard Ethernet wires. Ensure your chosen RJ45 connectors are compatible with 23 AWG cable. You may need to straighten individual pairs with pliers before insertion into the connector.
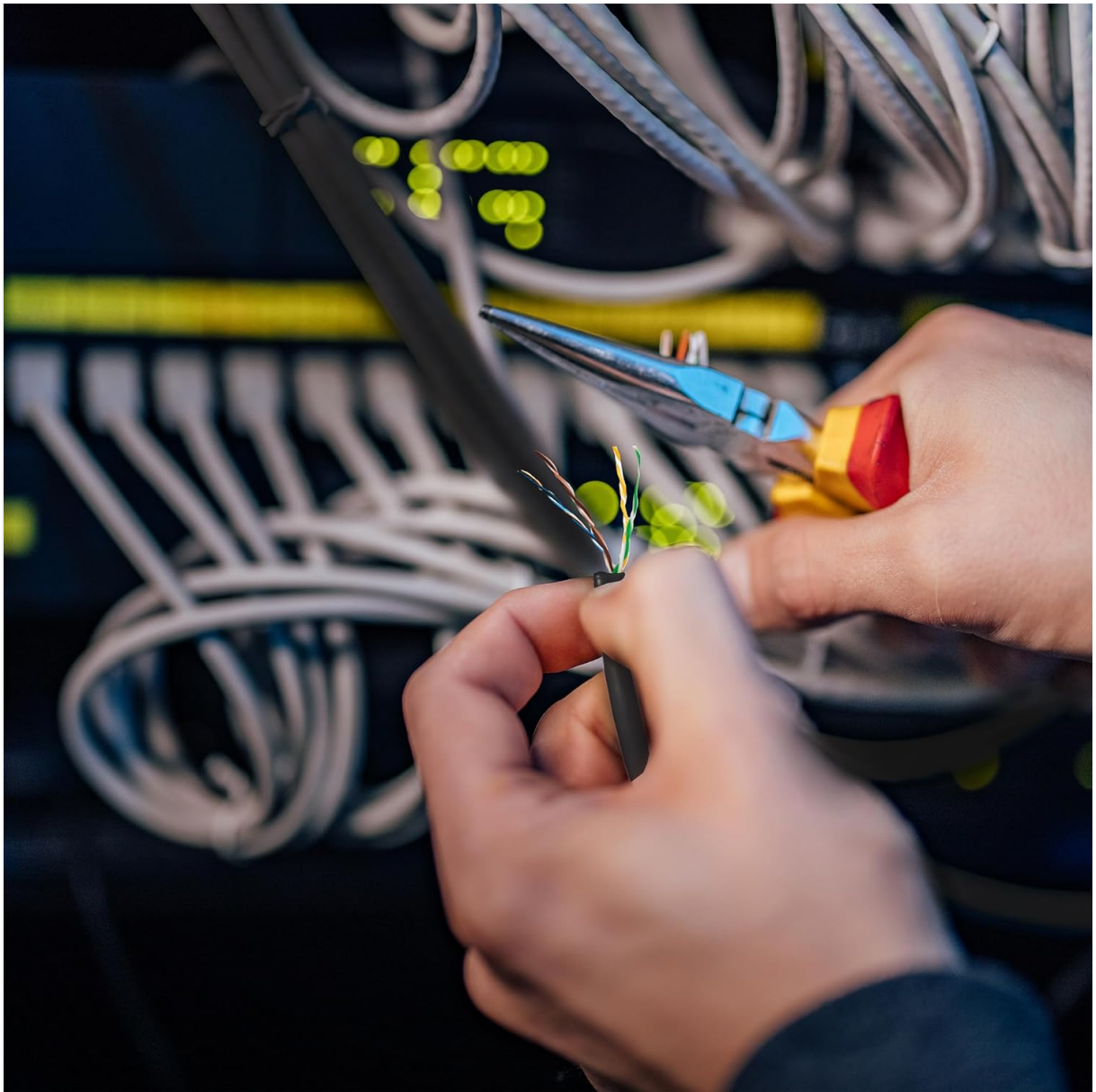
Image: A user stripping the outer jacket of the Ethernet cable to prepare the twisted pairs for termination.

Image: A user utilizing a crimping tool to secure an RJ45 connector onto the prepared Ethernet cable.

3.2 Outdoor and Direct Burial Guidelines

- This cable is suitable for direct outdoor burial. Dig a trench of appropriate depth to protect the cable from physical damage.

- While waterproof, the cable is **not UV rated**. Avoid prolonged exposure to direct sunlight, as this can degrade the outer jacket over time. Burying the cable or placing it in conduit is recommended for areas exposed to sun.

- When running the cable alongside power lines or near fluorescent lights, be aware that this is an unshielded twisted pair (UTP) cable. UTP cables are susceptible to electromagnetic interference (EMI). For environments with high EMI, consider using shielded twisted pair (STP) or foiled twisted pair (FTP) cables.

- The cable is robust but avoid excessive pulling tension during installation to prevent internal damage. The TIA/EIA specification for pull tension is 25 foot-pounds.
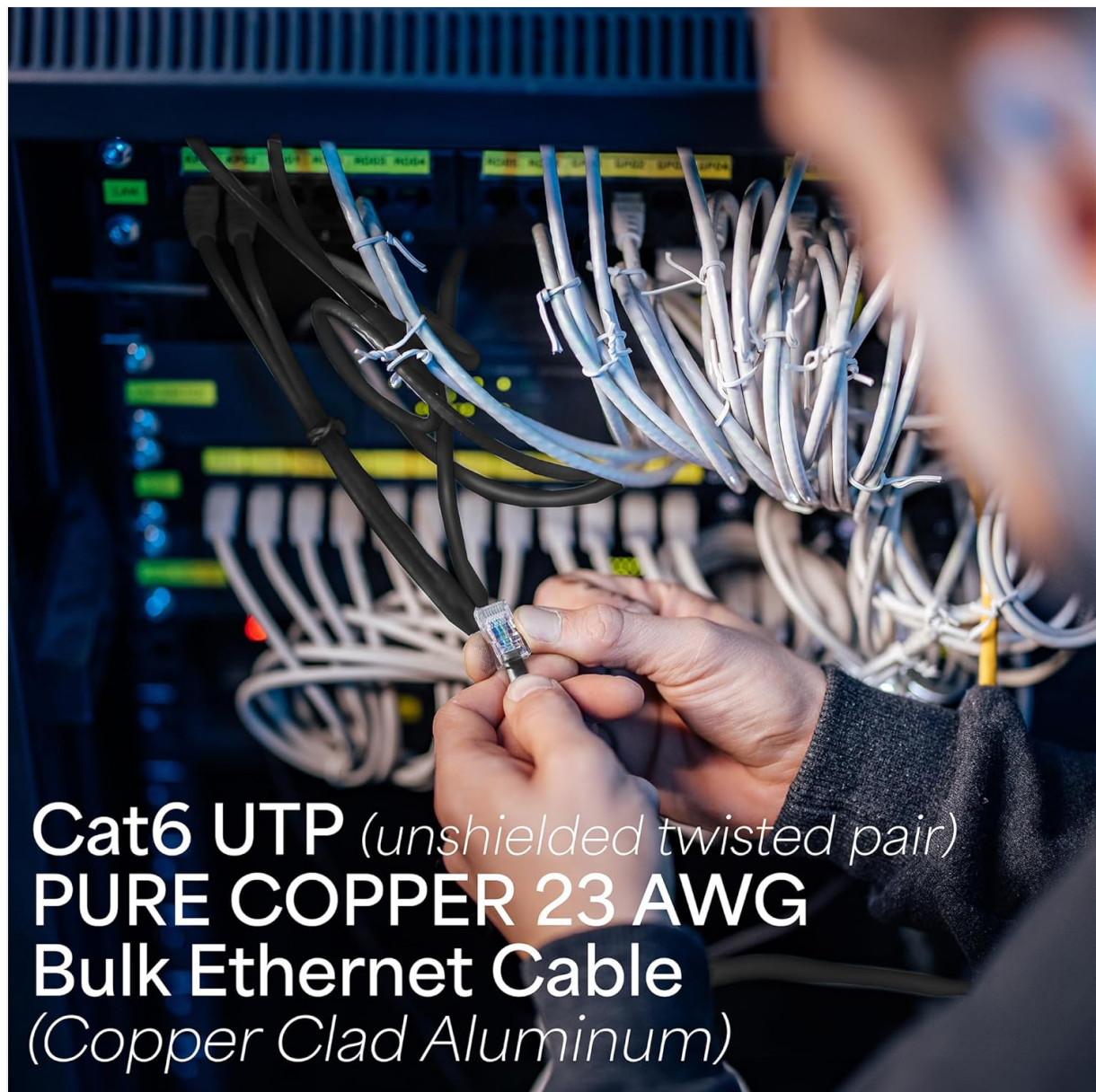
Image: A prepared trench in an outdoor setting, illustrating the method for direct cable burial.

4. OPERATING INSTRUCTIONS

Once properly installed and terminated, the VIVO CABLE-V010 Cat6 Ethernet cable facilitates high-speed data transfer between compatible devices.

- **Compatibility:** Connects computers, routers, switches, and other network devices.
- **Supported Speeds:**

  - 10BASE-T (10 Mbps)
  - 100BASE-TX (Fast Ethernet - 100 Mbps)
  - 1000BASE-T / 1000BASE-TX (Gigabit Ethernet - 1 Gbps)
  - 10GBASE-T (10-Gigabit Ethernet - 10 Gbps)

- **Distance Limitations:**

  - For Gigabit Ethernet (1 Gbps), the maximum recommended cable length is 100 meters (approximately 328 feet). For longer runs, an inline repeater or switch is required for every 100-meter segment.
  - For 10-Gigabit Ethernet (10 Gbps), the maximum recommended distance is 55 meters.

Image: A technician connecting a terminated Ethernet cable to a network patch panel, demonstrating typical usage.

5. MAINTENANCE

The VIVO CABLE-V010 is designed for durability in outdoor environments. Minimal maintenance is required once properly installed.

- **Inspection:** Periodically inspect exposed sections of the cable for any signs of physical damage, such as cuts or abrasions, especially after extreme weather conditions.
- **UV Protection:** As the cable is not UV rated, ensure any sections exposed to direct sunlight are protected, either by burying them or enclosing them in UV-resistant conduit.
- **Environmental Factors:** The cable is waterproof, heat-resistant, moisture-proof, and cold-resistant, making it suitable for various climates. However, extreme temperature fluctuations or prolonged submersion in water should be avoided if possible to maximize cable lifespan.

6. TROUBLESHOOTING

If you experience network connectivity issues after installation, consider the following troubleshooting steps:

- **Check Connections:** Ensure all RJ45 connectors are properly crimped and securely seated in their

respective ports. A faulty termination is a common cause of network problems.

- **Cable Length:** Verify that your cable run does not exceed the maximum recommended distances for your desired Ethernet speed (100 meters for Gigabit, 55 meters for 10-Gigabit). If it does, consider adding an inline repeater or switch.

- **Interference:** If the cable runs parallel to power lines or other sources of electromagnetic interference, this could affect signal quality. While the cable is UTP, rerouting or using shielded cables in such sections might be necessary.

- **Cable Integrity:** Use an Ethernet cable tester to check for continuity, open circuits, short circuits, or crossed pairs within the cable.

- **Spool Issues:** During installation, if the central rod of the spool becomes loose, it can make unrolling difficult. Ensure the spool is stable to prevent tangles or damage to the cable.

- **Wire Pair Order:** When terminating, ensure the correct wire pair order (e.g., orange and brown pairs) is maintained according to TIA/EIA standards, even if their physical arrangement within the cable jacket differs from expectations.

7. SPECIFICATIONS

Feature	Detail
Brand	VIVO
Model Number	CABLE-V010
Cable Type	Cat 6 Ethernet (UTP)
Conductor Material	Full Copper
Wire Gauge	23 AWG
Length	1,000 ft
Special Feature	Waterproof, Outdoor Direct Burial
Color	Black
Data Transfer Rate	Up to 1 Gigabits Per Second (100m), 10 Gigabits Per Second (55m)
Frequency	550 MHz
Compatible Devices	Computer, Router, Switch
Specification Met	EIA, TIA
Item Weight	35.2 pounds
Product Dimensions	13.5 x 13.5 x 11.5 inches (Spool)

8. WHAT'S IN THE BOX

- 1 x Black 1,000ft Cat6 Full Copper Outdoor Ethernet Cable (CABLE-V010)

9. WARRANTY AND SUPPORT

VIVO is a US-based company committed to providing quality products and customer support.

- **Return Policy:** This product is eligible for a refund or replacement within 30 days of purchase.
- **Customer Support:** Our Sales and Technical Support team members are based in the U.S. and are available to provide assistance.
- **Quality Assurance:** VIVO products are designed to meet high standards for performance and reliability.

Image: VIVO offers US-based support for product inquiries and assistance.

Image: An infographic detailing VIVO's commitment to customer satisfaction, including US-based support and a hassle-free return policy.