Installation manual for an RJ45 plug on CAT6 cable

Step 1: Strip the cable with Stripper gently and make sure that the inner wire should not cut.

Step 2: Prepare the core sequence as per TIA / EIA 568.B

Step 3: Bring the core conductors together and cut the core in stright line in way that all cores are have same stripping length. Use the proper cutting tool for cutting cable.

Step 4: Insert the cores in the RJ45 modular connector for CAT 6 cable only.

Step 5: Crimp the RJ45 Connector with the appropriate crimping tool.

Step 6: Follow the above instruction defined in step 1 to step 5 to make the connector at other end also.

Step 7: Test the patch cable using the cable tester (LAN Tester) to ensure the proper connectivity of the cable at both ends.

Step 8: Test the patch cable using Fluke Tester (Data Analyzer) to check the all electrical parameters like RL, IL & NEXT.
ANCHOR 23 AWG UTP CAT6 LAN Cable

In today’s bandwidth hungry climate with rapidly-emerging technology trends, never before has the need for a high speed been more critical. Anchor’s shielded twisted pair (UTP) LAN Cables Category 6 is designed to support an optimum speed offering superior performance for streaming video and multimedia, faster data transmission over the local area networks (LAN). Anchor CAT 6 cable is targeted as preferred cable for use in many home and business-based Ethernet networks where speed, reliability are the best for transmitting data over local area networks (LAN). The Cables are verified and exceed performance requirements specified by the TIA/EIA-568-C.2-1. The cable consist of four balunco twisted-pairs of 23 AWG thermoplastic insulated solid conductors enclosed in thermoplastic jacket. Each pair is twisted to prevent interference from other devices on the network. These cables are simple, cost-effective and support high-speed transmission performance, digital and analog voice and voice (R/G/B) signals on LANs. They support a higher signal-to-noise ratio, providing better reliability for current applications and higher data rates for future applications operating at a bandwidth up to 250 MHz.

CAT6 UTP Cable supports Gigabit Ethernet (1000 Base-T) standard. Operates at a bandwidth up to 250 MHz.

Features
- Comply with Cat6 specifications & ANSI / TIA - 568 - C.2
- Tinted as per ISO / IEC 11801
- 4-pair unshielded twisted pair (UTP) cable
- 23 AWG solid copper conductor for superior conductivity
- HOPE insulation
- PC separator
- AW PVC Jacket
- Verified compliant with TIA standards
- RoHS Compliant
- High ACR value—providing low BER (Bit Error Rate)
- Extremely high-pain-balance—providing excellent EMC (Electromagnetic compatibility)
- Minimum radiation and maximum noise immunity.
- High speed data access
- Unshielded Twisted Cable
- Cable supports frequencies up to 250 MHz.
- Cable supports data transfer speeds up to 1000Mbps - Gigabit
- Packaged in an easy-to-pull box for easier installation

Colour Code – No. of Pairs - 4
Pair 1: White and Blue
Pair 2: White and Orange
Pair 3: White and Green
Pair 4: White and Brown

Available in 305Mtr(1000 ft) Box packaging

Specifications
- Category: Category 6 - 4 Pairs Unshielded Twisted Pair (UTP) Cable
- Conductor Metal: > 99.9 % pure Solid Bare Copper
- Colour: Light Grey
- Conductor Diameter: 0.5733mm Nominal, 23 AWG
- Insulation Diameter: 1.53 mm max.
- Insulation Material: HOPE
- Outer Jacket Material: Flame Retardant (FR) PVC compound
- Cable Diameter: 6.5 +/− 0.50 mm
- Spacing: PE

Technical Details
- Mutual Capacitance: Max. 5.5 pf/100mtrs.
- Characteristic Impedance: 100 ± 15 Ohms.
- Nominal Velocity of Propagation: Min. 65% @260 MHz.
- Conductor Resistance: Max. 7.2 Ohms at 100mtrs. @ 20 deg.C
- Resistance Unbalance: Max 2%
- Capacitance Unbalance: 160 PF/100mtrs.
- Delay Skew: Max 45nS / 100 mtrs. @ 20 deg.C
- Bending Radius: 4 X Cable Diameter
- Breaking Strength: 1000 N
- Operating Environment: Indoor

TRANSMISSION CHARACTERISTICS PER 100M

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