# Crestron DM-CBL-NP

CRESTRON DigitalMedia™

## DigitalMedia™ Cable, non-plenum

Crestron DM-CBL-NP cable provides a high-performance, single-cable wiring solution for DigitalMedia (DM) systems. Within a single jacket, DM-CBL-NP contains one high-bandwidth/low-crosstalk shielded 4-twisted pair (STP) cable, one CAT5e unshielded 4-twisted pair (UTP) cable, and one DMNet cable.

The STP "Video Data" cable, which connects to the 'D' port of a DigitalMedia device, is of a specialized construction designed to allow the longest possible cable lengths* for transporting high-definition digital video and audio. The Cat5e "Data Management" cable, which connects to the 'M' port, carries high-speed Ethernet and other data, plus 5V DC power. Finally, the DMNet cable carries additional proprietary control signals and 24V DC power.

Wiring a DigitalMedia system using DM-CBL-NP is simple, requiring just one cable to be run to each DM receiver (i.e. Room Controller) and transmitter location*. Foot markers are printed on the outer jacket making it easy to determine the exact length of each cable run when commissioning the installed system.

Termination of a DM cable is accomplished using one standard RJ45 (not provided) for 'M', one detachable terminal block (provided with each DM device) for DMNet, and one Crestron DM-CONN shielded RJ45 (sold separately) for 'D'. The DM-CONN connector enables fast and reliable termination of the shielded twisted-pair cable without requiring any special tools.

## AVAILABLE MODELS

**DM-CBL-NP-SP500**
DigitalMedia™ Cable, non-plenum, 500 ft spool

## SPECIFICATIONS

### 'D' Video Data

**Construction:** Four twisted pair, each pair isolated by an internal spline within an inner jacket, shield, braid, and overall jacket

**(4) Twisted Pairs:** Colors: Blue/white, orange/white, green/white, brown/white;
Conductors: 24 AWG x8 solid copper;
Insulation: 0.0055 inch thick HDPE;
Outer Diameter (per conductor): 1.028 ±0.02 mm;
Shield: Aluminum/Mylar tape w/aluminum on the outside;
Braid: Tin/copper (45% coverage);
Mutual Capacitance: 5600 pF / 100 m;
Capacitance Unbalance: 330 pF / 100 m;
Characteristic Impedance: 100 ohms ±15% (1-250 MHz)

**Inner Jacket:** Color: Natural;
Material: PVC;
Thickness: 0.015 inch

**Jacket:** Color: Blue;
Material: PVC;
Thickness: 0.018 inch;
Outer Diameter: 7.62 ±0.38 mm

### 'M' Data Management (CAT5E)

**(4) Twisted Pairs:** Colors: Blue/white, orange/white, green/white, brown/white;
Conductors: 24 AWG x8 solid copper;
Insulation: 0.0077 inch thick Polyethylene;
Shield: none;
Mutual Capacitance: 14 pF / ft nominal;
Capacitance Unbalance: 330 pF / 100 m maximum;
Characteristic Impedance: 100 ohms ±15% (0.772 to 100 MHz);
Velocity of Propagation: 70%;

Conductor DC Resistance: 28.6 ohms / 1000 ft maximum;
DC Resistance Unbalance: 3% maximum

**Jacket:** Color: Yellow;
Material: PVC;
Ripcord: yes;
Thickness: 0.018 inch;
Outer Diameter: 0.185 inch nominal

### 'DMNet' Control & Power

**Construction:** (1) 22 AWG shielded pair (control) and (1) 18 AWG pair (power) w/overall jacket

**Control Pair:** Colors: Gray/orange;
Conductors: 22 AWG x2 stranded copper;
Insulation: 0.025 inch thick foam Polyolefin;
Shield: Aluminum/Polyester (100% coverage) w/aluminum on the inside;
Drain: 24 AWG tinned stranded copper;
Capacitance: 12.5 pF / ft, nominal;
Impedance: 100 ohms, nominal

**Power Pair:** Colors: Red/black;
Conductors: 18 AWG x2 stranded copper;
Insulation: 0.01 inch thick PVC;
Shield: none

**Jacket:** Color: Gray;
Material: PVC;
Ripcord: yes;
Thickness: 0.0325 inch;
Outer Diameter: 0.25 inch nominal

### Outer Jacket

**Composite Construction:** All wires contained in a Mylar wrap w/overall outer jacket
**Material:** PVC, flexible, flame retardant
**Ripcord:** yes
**Outer Diameter:** 0.58 inch (14.73 mm) nominal
**Color:** Blue w/red stripe

### Rating

NEC Article 800; UL Subject 444, Type CM; CSA Type CMG

## AVAILABLE ACCESSORIES

**DM-CONN**
DigitalMedia™ Cable Connector

* The maximum allowable cable length depends on multiple factors. One or more DM Repeaters (Model DM-DR) may be required. Refer to the Crestron DigitalMedia Design Guide, Doc. #4789 for complete wiring guidelines.

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*Specifications subject to change without notice. Doc.4764 01/09*