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2012 CORPORATE LANE, SUITE 116 NAPERVILLE, IL 60563 TOLL FREE: 888-888-8045

**Part #: AVCRESCTD-60/00**

**For use with CRESTRON Systems**

**Description:** Three component composite Avalanche cable.  
Component #1: 2 conductor 18 AWG unshielded and 1 pair 22 AWG shielded with overall PVC jacket  
Components #2 and #3: (2) Category 5E cables.  
All components are pulled in parallel and overall jacketed with PVC for systems control / data communications applications manufactured in the USA and listed (UL) CL3 or CM c(UL)us, 75°C.

**COMPONENT #1:**

**Element 1: (Power/Control) 18 AWG, 1 Pair PVC Insulated Unshielded Component**

**1. Conductor**

- 1.1 AWG & Stranding: 18 AWG, Class B 7 Strands
- 1.2 Material: Annealed Bare Copper
- 1.3 Conductor Count: 1 Pair

**2. Insulation**

- 2.1 Material: Polyvinylchloride (PVC)
- 2.2 Wall Thickness: 0.007"
- 2.3 Code: Black x Red

**3. Assembly**

- 3.1 Cable Lay Length: Per UL Standard
- 3.2 Cable Binder: N/A
- 3.3 Cable Shield: N/A
- 3.4 Cable Drain Wire: N/A

**Element 2: (Data Communications) 22 AWG, 1 Pair Cellular PE Insulated Shielded Component**

**1. Conductor**

- 1.1 AWG & Stranding: 22 AWG, Class B 7 Strands
- 1.2 Material: Annealed Tinned Copper
- 1.3 Conductor Count: 1 Pair

**2. Insulation**

- 2.1 Material: Cellular Polyethylene (FMPE)
- 2.2 Wall Thickness: 0.020"

3.1 Color Code: Blue x White

### 3. Assembly

3.1 Cable Lay Length: Per UL Standard  
3.2 Cable Binder: N/A  
3.3 Cable Shield: Aluminum/Mylar Tape - 100% coverage  
3.4 Cable Drain Wire: 24 AWG, 7 Strand Tinned Copper

### 4. Electricals

4.1 Impedance: 100  $\Omega$ /M'  
4.2 Capacitance: 12.5 pF/ft. +/-10%  
4.3 DC Resistance: 14.8  $\Omega$ /Mft. @ 20°C

### 5. Assembly - Elements 1 & 2

5.1 Cable Lay Length: 3.50" LHL Nominal  
5.2 Cable Fillers: N/A  
5.3 Cable Binder: N/A  
5.4 Cable Shield: N/A  
5.5 Cable Drain Wire: N/A

### 6. Jacket

6.1 Material: Polyvinylchloride (PVC)  
6.2 Wall Thickness: 0.035"  
6.3 Diameter: 0.245"  
6.4 Color: Teal/Yellow  
6.5 Weight: 35 lbs./Mft.

### 7. Markings

7.1 Type: Cable shall be permanently identified via surface inkjet print  
7.2 Legend: AVALANCHE HOME AUTOMATION NETWORK CABLE ROOM A B C D E  
0 1 2 3 4 5 6 7 8 9 E171197 22AWG 1PAIR SHIELDED DATA  
18AWG 2C (UL) CM C(UL)US OR (UL) CL3 75°C (WORK ORDER# ) "ROHS"

### 8. Standards

8.1 UL listed as Type CL3 or CM c(UL)us, 75°C  
8.2 All materials used in the manufacture of this cable are RoHS compliant

## COMPONENT #2:

4 Pair Category 5E Cable - White Jacket

## COMPONENT #3:

4 Pair Category 5E Cable - Gray Jacket

### 9. Nominal Electrical Characteristics

9.1. Impedance: 100 +/- 15 $\Omega$  (0.772 to 100 MHz)  
9.2. Max Conductor Resistance: 9.8  $\Omega$ /100 Meters @ 20°C  
9.3. Max Resistance Unbalance: 5%  
9.4. Max Capacitance Unbalance: 330 pF/100 Meters  
9.5. Max Delay Skew: 45 ns/100 Meters  
9.6. Max Propagation Velocity: 68%

## Transmission Specifications

Freq (MHz)	Ins. Loss (dB/100m)	NEXT Loss (dB)	PSNEXT Loss (dB)	ACR (dB)	PSACR (dB)	ELFEXT (dB)	PSELFEXT (dB)	Return Loss (dB)
1	2.0	65.3	62.3	63.3	60.3	63.8	60.8	20.0
4	4.1	56.3	53.3	52.2	49.2	51.8	48.8	23.0
8	5.8	51.8	48.8	46.0	43.0	45.7	42.7	24.5
10	6.5	50.3	47.3	43.8	40.8	43.8	40.8	25.0
16	8.2	47.2	44.2	39.0	36.0	39.7	36.7	25.0
31.25	11.7	42.9	39.9	31.2	28.2	33.9	30.9	23.6
62.5	17.0	38.4	35.4	21.4	18.4	27.9	24.9	21.5
100	22.0	35.3	32.3	13.3	10.3	23.8	20.8	20.1
155	28.1	32.4	29.4	4.3	1.3	20.0	17.0	18.8
200	32.4	30.8	27.8	-	-	17.8	14.8	18.0
250	36.9	29.3	26.3	-	-	15.8	12.8	17.3
400	48.5	26.3	23.3	-	-	11.8	8.8	15.9

TIA/EIA-568-b.2 Category 5e Compliant  
ISO/IEC 11801, 2<sup>nd</sup> Ed. Class D Compliant

### Overall Cable:

#### 9. Assembly - Components 1, 2 & 3

- 9.1 Cable Lay Length: **(3) Components are pulled in parallel at the jacketing operation**
- 9.2 Cable Fillers: N/A
- 9.3 Cable Binder: N/A
- 9.4 Cable Shield: N/A
- 9.5 Cable Drain Wire: N/A

#### 10. Jacket

- 10.1 Material: Polyvinylchloride (PVC)
- 10.2 Wall Thickness: 0.040"
- 10.3 Diameter: 0.432"
- 10.4 Color: Teal/Black
- 10.5 Weight: 119 lbs./Mft.

#### 11. Markings

- 11.1 Type: Cable shall be permanently identified via surface inkjet print
- 11.2 Legend: AVALANCHE BY NETWORK CABLE 18AWG 1PR & 22AWG 1PR SHIELDED LOW CAP DATA & (2) 24AWG 4PR CAT5E DATA E171197 (UL) CM C(UL)US OR (UL) CL3 75'C (WORK ORDER #) "ROHS"

#### 12. Standards

- 12.1. Refer to NEC (NFPA 70) article 800 and article 720 for installation guidelines
- 12.2. UL listed as Type CL3 per UL Standard 13 or as type CM c(UL)us 75'C per UL Standard 444
- 12.3. All materials used in the manufacture of this cable are RoHS compliant
- 12.4. Recommended Operating Voltage: 300V
- 12.5. Made in the USA

**ALL SPECIFIED PARAMETERS ARE NOMINAL AND SUBJECT TO VERIFICATION**