



## Description:

24 AWG stranded (7x32) tinned copper conductors, Datalene® insulation, twisted pairs, overall Beldfoil® shield (100% coverage), 24 AWG drain wire, PVC jacket.

## Physical Characteristics (Overall)

### Conductor

#### AWG:

| # Pairs | AWG | Stranding | Conductor Material | Dia. (in.) |
|---------|-----|-----------|--------------------|------------|
| 1       | 24  | 7x32      | TC - Tinned Copper | .024       |

### Insulation

#### Insulation Material:

| Insulation Trade Name | Insulation Material                    | Dia. (in.) |
|-----------------------|--|------------|
| Datalene®             | FHDPE - Foam High Density Polyethylene | .068       |

### Outer Shield

#### Outer Shield Material:

| Outer Shield Trade Name | Type | Outer Shield Material        | Coverage (%) |
|-------------------------|------|------------------------------|--------------|
| Beldfoil®               | Tape | Aluminum Foil-Polyester Tape | 100          |

#### Outer Shield Drain Wire AWG:

| AWG | Stranding | Drain Wire Conductor Material |
|-----|-----------|-------------------------------|
| 24  | 7x32      | TC - Tinned Copper            |

### Outer Jacket

#### Outer Jacket Material:

| Outer Jacket Material    |
|--------------------------|
| PVC - Polyvinyl Chloride |

### Overall Cabling

Overall Nominal Diameter: 0.177 in.

### Pair

#### Pair Color Code Chart:

| Number | Color       |
|--------|-------------|
| 1      | Red & Black |

## Mechanical Characteristics (Overall)

Operating Temperature Range: -30°C To +60°C

UL Temperature Rating: 60°C

Bulk Cable Weight: 18.300 lbs/1000 ft.

Max. Recommended Pulling Tension: 16.500 lbs.

Min. Bend Radius (Install)/Minor Axis: 1.750 in.

## Applicable Specifications and Agency Compliance (Overall)

### Applicable Standards & Environmental Programs

NEC/(UL) Specification: CMG

CEC/C(UL) Specification: CMG

## 1800B Multi-Conductor - Single-Pair Cable

|                                       |            |
|---------------------------------------|------------|
| EU CE Mark:                           | Yes        |
| EU Directive 2000/53/EC (ELV):        | Yes        |
| EU Directive 2002/95/EC (RoHS):       | Yes        |
| EU RoHS Compliance Date (mm/dd/yyyy): | 01/01/2004 |
| EU Directive 2002/96/EC (WEEE):       | Yes        |
| EU Directive 2003/11/EC (BFR):        | Yes        |
| CA Prop 65 (CJ for Wire & Cable):     | Yes        |
| MII Order #39 (China RoHS):           | Yes        |
| Other Specification:                  | AES/EBU    |

### Flame Test

|                   |     |
|-------------------|-----|
| C(UL) Flame Test: | FT4 |
|-------------------|-----|

### Plenum/Non-Plenum

|                |       |
|----------------|-------|
| Plenum (Y/N):  | No    |
| Plenum Number: | 1801B |

## Electrical Characteristics (Overall)

### Nom. Characteristic Impedance:

|                 |
|-----------------|
| Impedance (Ohm) |
| 110             |

### Nom. Inductance:

|                    |
|--------------------|
| Inductance (µH/ft) |
| .18                |

### Nom. Capacitance Conductor to Conductor:

|                     |
|---------------------|
| Capacitance (pF/ft) |
| 12                  |

### Nom. Capacitance Cond. to Other Conductor & Shield:

|                     |
|---------------------|
| Capacitance (pF/ft) |
| 26                  |

### Nominal Velocity of Propagation:

|        |
|--------|
| VP (%) |
| 76     |

### Nom. Conductor DC Resistance:

|                          |
|--------------------------|
| DCR @ 20°C (Ohm/1000 ft) |
| 23.7                     |

### Nom. Attenuation:

| Freq. (MHz) | Attenuation (dB/100 ft.) |
|-------------|--------------------------|
| .384        | .69                      |
| .7056       | .93                      |
| .768        | .96                      |
| 1.024       | 1.07                     |
| 1.4112      | 1.19                     |
| 1.536       | 1.21                     |
| 2.048       | 1.31                     |
| 2.8224      | 1.41                     |
| 3.072       | 1.45                     |
| 4.096       | 1.57                     |
| 5.6448      | 1.76                     |
| 6.144       | 1.83                     |
| 8.192       | 2.01                     |
| 11.2896     | 2.24                     |
| 12.288      | 2.30                     |
| 24.576      | 3.08                     |

## 1800B Multi-Conductor - Single-Pair Cable

**Max. Operating Voltage - UL:**

|                |
|----------------|
| <b>Voltage</b> |
| 300 V RMS      |

**Max. Recommended Current:**

|                                |
|--------------------------------|
| <b>Current</b>                 |
| 2.75 Amps per conductor @ 25°C |

### Notes (Overall)

**Notes:** For cross-connect use with 1803F (et al.) Digital Audio Snake Cables. The jacket and shield are bonded so both can be removed with automatic stripping equipment.

### Put Ups and Colors:

| Item #         | Putup    | Ship Weight | Color    | Notes | Item Desc           |
|----------------|----------|-------------|----------|-------|---------------------|
| 1800B T5XU1000 | 1,000 FT | 17.000 LB   | GRAY T5X |       | #24 FHDPE FS PR PVC |
| 1800B T5X1000  | 1,000 FT | 16.000 LB   | GRAY T5X | C     | #24 FHDPE FS PR PVC |
| 1800B T5X500   | 500 FT   | 8.000 LB    | GRAY T5X | C     | #24 FHDPE FS PR PVC |
| 1800B 007U1000 | 1,000 FT | 17.000 LB   | VIOLET   |       | #24 FHDPE FS PR PVC |
| 1800B 0071000  | 1,000 FT | 16.000 LB   | VIOLET   | C     | #24 FHDPE FS PR PVC |

**Notes:**

C = CRATE REEL PUT-UP.

# AES/EBU Digital Audio Cable

Single- and Double-Pair Cables



19 • Brilliance® Broadcast

| Description | Part No. | UL NEC/ C(UL) CEC Type | No. of Pairs | Color Code | Standard Lengths |   | Standard Unit Weight |    | Nom. DCR |        | Nominal OD |    | Nom. Imp. (Ω) | Nom. Vel. of Prop. | Nom. Capacitance |         |            |          |
|-------------|----------|------------------------|--------------|------------|------------------|---|----------------------|----|----------|--------|------------|----|---------------|--------------------|------------------|---------|------------|----------|
|             |          |                        |              |            | Ft.              | m | Lbs.                 | kg | Cond.    | Shield | Inch       | mm |               |                    | * pF/ Ft.        | * pF/ m | ** pF/ Ft. | ** pF/ m |

**110 Ohm • 26 AWG** Stranded (7x34) .018" TC Conductors • Twisted Pair • Beldfoil® Shield (100% Coverage) • 26 AWG Stranded TC Drain Wire  
**Datalene® Insulation • Chrome or Purple PVC Jacket**

|   |             |                          |   |              |      |       |      |     |          |          |      |      |     |     |    |    |    |    |
|---|-------------|--------------------------|---|--------------|------|-------|------|-----|----------|----------|------|------|-----|-----|----|----|----|----|
| 2-Conductor Digital Video Time Code Cable<br>75°C | <b>9180</b> | NEC: CMR<br>CEC: CMG FT4 | 1 | Black, White | 1000 | 304.8 | 10.0 | 4.5 | 37.3Ω/M' | 23.1Ω/M' | .144 | 3.66 | 110 | 76% | 13 | 43 | 26 | 85 |
|---|-------------|--------------------------|---|--------------|------|-------|------|-----|----------|----------|------|------|-----|-----|----|----|----|----|



Shorting Fold

For cross-connect use with 7891A (et al.) Digital Audio Snake Cables, see page 19.28.

**24 AWG** Stranded (7x32) Tinned Copper Conductors • Twisted Pairs • Overall Beldfoil Shield (100% Coverage) • 24 AWG Drain Wire  
**Datalene Insulation • Gray or Purple PVC Jacket**

|      |              |                          |   |            |        |         |      |      |          |          |      |      |     |     |    |    |    |    |
|------|--------------|--------------------------|---|------------|--------|---------|------|------|----------|----------|------|------|-----|-----|----|----|----|----|
| 60°C | <b>1800B</b> | NEC: CMR<br>CEC: CMG FT4 | 1 | Black, Red | 500*   | 152.4   | 8.0  | 3.6  | 23.7Ω/M' | 18.9Ω/M' | .177 | 4.57 | 110 | 76% | 12 | 39 | 26 | 85 |
|      |              |                          |   |            | U-1000 | U-304.8 | 17.0 | 7.7  | 77.7Ω/km | 62.0Ω/km |      |      |     |     |    |    |    |    |
|      |              |                          |   |            | 1000   | 304.8   | 16.0 | 7.3  |          |          |      |      |     |     |    |    |    |    |
|      |              |                          |   |            | 5000*  | 1524.0  | 90.0 | 40.8 |          |          |      |      |     |     |    |    |    |    |



For cross-connect use with 1803F (et al.) Digital Audio Snake Cables, see page 19.28.  
 For Plenum version of 1800B, see 1801B.

\*500 ft. put-up available in Gray only. 5000 ft. put-up available in Purple only.  
 The jacket and shield are bonded so both can be removed with automatic stripping equipment.

**24 AWG** Stranded (42x40) HC BC Conductors • Conductors Cabled with Fillers • TC "French Braid" Shield (95% Coverage) • BC Drain Wire  
**Datalene Insulation • Matte PVC Jacket** (Available in Red, Yellow, Green, Blue, Gray or Black)

|                                     |              |           |   |            |        |         |      |      |          |          |      |      |     |     |    |    |    |    |
|-------------------------------------|--------------|-----------|---|------------|--------|---------|------|------|----------|----------|------|------|-----|-----|----|----|----|----|
| Digital Mic Cable High-Flex<br>60°C | <b>1800F</b> | NEC: CL2R | 1 | Black, Red | 500*   | 152.4   | 12.0 | 5.5  | 23.7Ω/M' | 5.0Ω/M'  | .211 | 5.36 | 110 | 76% | 12 | 39 | 26 | 85 |
|                                     |              |           |   |            | U-1000 | U-304.8 | 26.0 | 11.8 | 77.7Ω/km | 16.4Ω/km |      |      |     |     |    |    |    |    |
|                                     |              |           |   |            | 1000*  | 304.8   | 24.0 | 10.9 |          |          |      |      |     |     |    |    |    |    |



French Braid

\*500 ft. and 1000 ft. put-ups available in Black only.

**24 AWG** Stranded (7x32) TC Conductors • Twisted Pairs • Overall Beldfoil Shield (100% Coverage) • 24 AWG TC Drain Wire  
**Plenum • Foam FEP Teflon® Insulation • Flam arrest® Jacket** (Available in Natural White or Purple)

|                   |              |                          |   |            |        |         |      |     |          |          |      |      |     |     |    |    |    |    |
|-------------------|--------------|--------------------------|---|------------|--------|---------|------|-----|----------|----------|------|------|-----|-----|----|----|----|----|
| 75°C, Non-conduit | <b>1801B</b> | NEC: CMP<br>CEC: CMP FT6 | 1 | Black, Red | 500    | 152.4   | 6.0  | 2.7 | 23.7Ω/M' | 18.9Ω/M' | .165 | 4.19 | 110 | 78% | 12 | 39 | 26 | 85 |
|                   |              |                          |   |            | U-1000 | U-304.8 | 14.0 | 6.4 | 77.7Ω/km | 62.0Ω/km |      |      |     |     |    |    |    |    |
|                   |              |                          |   |            | 1000   | 304.8   | 12.0 | 5.5 |          |          |      |      |     |     |    |    |    |    |



**24 AWG** Stranded (7x32) TC Conductors • Dual Twisted Pairs • Overall Beldfoil Shield (100% Coverage) • 24 AWG TC Drain Wire  
**Datalene Insulation • Purple PVC Jacket in Zip-Cord Construction**

|      |              |                          |   |            |        |         |      |      |          |          |      |      |     |     |    |    |    |    |
|------|--------------|--------------------------|---|------------|--------|---------|------|------|----------|----------|------|------|-----|-----|----|----|----|----|
| 60°C | <b>1802B</b> | NEC: CMR<br>CEC: CMG FT4 | 2 | Black, Red | 500    | 152.4   | 16.5 | 7.5  | 23.7Ω/M' | 18.9Ω/M' | .180 | 4.57 | 110 | 76% | 12 | 39 | 26 | 85 |
|      |              |                          |   |            | U-1000 | U-304.8 | 35.0 | 15.9 | 77.7Ω/km | 62.0Ω/km | x    | x    |     |     |    |    |    |    |
|      |              |                          |   |            | 1000   | 304.8   | 37.0 | 16.8 |          |          | .360 | 9.14 |     |     |    |    |    |    |



The jacket and shield are bonded so both can be removed with automatic stripping equipment.

**22 AWG** Stranded (7x30) TC Conductors • Twisted Pair with Fillers • Overall Beldfoil + TC Braid Shield (90% Coverage) • 24 AWG Drain Wire  
**Datalene Insulation • Black High-Flex Matte PVC Jacket**

|                               |              |   |   |             |        |         |      |      |          |          |      |      |     |     |    |    |    |    |
|-------------------------------|--------------|---|---|-------------|--------|---------|------|------|----------|----------|------|------|-----|-----|----|----|----|----|
| DMX512 Type High-Flex<br>60°C | <b>1696A</b> | — | 1 | Blue, White | 250    | 76.2    | 8.0  | 3.6  | 17.8Ω/M' | 4.6Ω/M'  | .234 | 5.94 | 110 | 76% | 13 | 43 | 26 | 85 |
|                               |              |   |   |             | 500    | 152.4   | 14.5 | 6.6  | 48.5Ω/km | 15.2Ω/km |      |      |     |     |    |    |    |    |
|                               |              |   |   |             | U-1000 | U-304.8 | 30.0 | 13.6 |          |          |      |      |     |     |    |    |    |    |
|                               |              |   |   |             | 1000   | 304.8   | 32.0 | 14.5 |          |          |      |      |     |     |    |    |    |    |



Z-Fold®

BC = Bare Copper • DCR = DC Resistance • FEP = Fluorinated Ethylene Propylene • HC = High-conductivity • TC = Tinned Copper

\*Capacitance between conductors.

\*\*Capacitance between one conductor and other conductors connected to shield.

Teflon is a DuPont trademark.