



## 75Ω Digital Video Coaxial Cable

L-CFB precision digital video cable, offers the professional Broadcaster a high performance, 100% Sweep Tested, low cost, low loss coax that meets the demands of today's facility migration trends toward Serial Digital Video and HDTV standards.

### Applications

- SD-SDI/HD-SDI
- Satellite headends
- Broadband facilities

### Features

1. 75 Ohm impedance
2.  $\geq 20$ dB return loss to 2GHz
3. Solid annealed copper center conductor
4. Tinned copper braid shield, aluminum foil, foam polyethylene dielectric

### Benefits

1. Professional standard
2. Superior performance
3. Specifically designed for digital and HDTV facilities
4. Extremely low signal loss

### L-2.5CFB

25 AWG  
Micro coax type

### L-3CFB

22 AWG  
Mini coax type

### L-4CFB

20 AWG  
RG59 type

### L-5CFB

18 AWG  
RG6 type

### L-7CFB

15 AWG  
RG11 type

## Serial Digital Cable

Serial Digital video signals are transmitted at very high data bit rates and should be handled quite differently than traditional baseband analog video lines. Typical digital frequency platform bandwidths range from 143 MHz for Composite digital video, 270 MHz for Component digital video and 360 MHz for the proposed HDTV rate.

Commonly used 75Ω coaxial cables like RG59 and 8281 are generally acceptable for analog baseband video and may even be used for short runs of digital video transmission. But, in a modern facility system design, where new **SERIAL DIGITAL** equipment installations require long tie lines and multiple I/O's, it is important to consider the 75Ω Coaxial Cable selection along with **"Impedance Matching" BNC Connectors and Patchbays** to maximize the overall electrical length and achieve optimum results.

| Mechanical Specifications |            |                        |                    |                         |                     |                |                      |                      |                          | Electrical Performance       |                               |                           |                   |                            |
|---------------------------|------------|------------------------|--------------------|-------------------------|---------------------|----------------|----------------------|----------------------|--------------------------|------------------------------|-------------------------------|---------------------------|-------------------|----------------------------|
| Model                     | Std. Lng.  | Wt/Std. Lng. lbs (kgs) | Nom O.D. Inch (mm) | PVC Jkt Thick Inch (mm) | Brittle Point °F °C | Cond Mat AWG   | Insul O.D. Inch (mm) | Cond. O.D. Inch (mm) | Shield Coverage          | Cond. D.C.R. Ω/1000ft Ω/100m | Shield D.C.R. Ω/1000ft Ω/100m | Nom Cap (1KHz) pF/ft pF/m | Velocity of Prop. | SD Trans Lng@270 Mb/s*     |
| L-2.5CFB                  | 984ft 300m | 17                     | 0.157              | 0.020                   | -22<br>-30          | Bare Copper 25 | 0.094                | 0.094                | TAC >92%<br>AL Foil 100% | <28.35<br><9.3               | <7.3<br><2.4                  | 17<br>55                  | 79%               | 470 ft min<br>614 ft max   |
| L-3CFB                    |            | 29                     | 0.217              | 0.035                   |                     | Bare Copper 22 | 0.122                | 0.122                | TAC >91%<br>AL Foil 100% | <16.8<br><5.5                | <4.3<br><1.4                  |                           |                   | 650 ft min<br>830 ft max   |
| L-4CFB                    |            | 33                     | 0.240              | 0.035                   |                     | Bare Copper 20 | 0.146                | 0.146                | TAC >93%<br>AL Foil 100% | <11.0<br>>3.6                | <3.0<br><1.0                  |                           |                   | 710 ft min<br>920 ft max   |
| L-5CFB                    |            | 49                     | 0.303              | 0.043                   |                     | Bare Copper 18 | 0.192                | 0.192                | TAC >93%<br>AL Foil 100% | <7.0<br><2.3                 | <2.1<br><0.7                  |                           |                   | 940 ft min<br>1210 ft max  |
| L-7CFB                    |            | 86                     | 0.402              | 0.039                   |                     | Bare Copper 15 | 0.287                | 0.287                | TAC >96%<br>AL Foil 100% | <3.1<br><1.0                 | <1.4<br><0.5                  |                           |                   | 1280 ft min<br>1660 ft max |
|                           |            | 7                      | 4.0                | 0.5                     |                     |                | 2.4                  | 2.4                  |                          |                              |                               |                           |                   |                            |
|                           |            | 13                     | 5.5                | 0.9                     |                     |                | 3.1                  | 3.1                  |                          |                              |                               |                           |                   |                            |
|                           |            | 15                     | 6.1                | 0.9                     |                     |                | 3.7                  | 3.7                  |                          |                              |                               |                           |                   |                            |
|                           |            | 22                     | 7.7                | 1.1                     |                     |                | 4.9                  | 4.9                  |                          |                              |                               |                           |                   |                            |
|                           |            | 39                     | 10.2               | 1.0                     |                     |                | 7.3                  | 7.3                  |                          |                              |                               |                           |                   |                            |

Foam Polyethylene dielectric insulation. Dielectric strength = 1000V AC / 1min.  
Insulation resistance/3Mft = >1000MegaOhms. \*For reference only.

| Nominal Attenuation Value |           |        |          |         |         |         |         |         |         |       |         |
|---------------------------|-----------|--------|----------|---------|---------|---------|---------|---------|---------|-------|---------|
|                           |           | 10 MHz | 67.5 MHz | 135 MHz | 270 MHz | 360 MHz | 750 MHz | 1.0 GHz | 1.5 GHz | 2 GHz | 2.4 GHz |
| L-2.5CFB                  | dB/100 ft | 1.3    | 3.5      | 4.9     | 7.0     | 8.1     | 11.1    | 12.8    | 15.7    | 18.1  | 19.9    |
|                           | dB/100 m  | 4.4    | 11.4     | 16.2    | 22.9    | 26.4    | 36.4    | 42.0    | 51.5    | 59.4  | 65.1    |
| L-3CFB                    | dB/100 ft | 1.0    | 2.7      | 3.8     | 5.4     | 6.2     | 8.5     | 9.8     | 12.0    | 13.8  | 15.2    |
|                           | dB/100 m  | 3.4    | 8.8      | 12.5    | 17.7    | 20.4    | 27.7    | 32.0    | 39.2    | 45.2  | 49.6    |
| L-4CFB                    | dB/100 ft | 0.9    | 2.3      | 3.3     | 4.6     | 5.3     | 7.7     | 8.9     | 10.8    | 12.5  | 13.7    |
|                           | dB/100 m  | 2.9    | 7.5      | 10.7    | 15.1    | 17.4    | 25.1    | 29.0    | 35.5    | 41.0  | 44.9    |
| L-5CFB                    | dB/100 ft | 0.7    | 1.7      | 2.5     | 3.5     | 4.0     | 5.8     | 7.2     | 8.9     | 10.6  | 11.6    |
|                           | dB/100 m  | 2.2    | 5.7      | 8.1     | 11.4    | 13.2    | 19.1    | 23.7    | 29.0    | 34.8  | 38.1    |
| L-7CFB                    | dB/100 ft | 0.5    | 1.3      | 1.9     | 2.7     | 3.1     | 4.5     | 5.2     | 6.3     | 7.3   | 8.0     |
|                           | dB/100 m  | 1.7    | 4.4      | 6.2     | 8.8     | 10.2    | 14.6    | 16.9    | 20.6    | 23.8  | 26.1    |