# **Audio Cables**



Caleb Cable's audio range is covering the needs of high-demanding analog and digital signals: for indoor and outdoor applications, for fixed and mobile applications and for balanced signals or sound system wiring;

Audio cables are highly-flexible and resistant to mechanical stress. Shielded version is ensuring protection against environment's electro-magnetic noise; Audio cables are designed to be plugged to various connectors like XLR, RCA, Jacks and RJ45.

# **Audio Cables**

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# Analog Patch Cable 🌞







#### Technical data

• Operating temperature: -20 °C to +85 °C

Minimum bending radius: Fixed station: 22 mm Mobile station: 45 mm

#### Cable structure

• Conductors: tin plated copper

• Insulation: PE

• Drain wire: tin plated copper • Shield: Al-PET or copper spiral

Sheath: PVC

# **Product advantages**

- High flexibility
- Compactness
- Excellent ease of use
- 100% shielding
- Allows for easy connection
- Audio transmissions over long distances

# **Application**

The cable is mainly used as the balanced analog audio link for the internal wiring for the audio equipments.

No. of Pairs	Section mm²	Screen	Outer Diameter mm	Cable Weight kg/km
1	0.14	Bare copper braiding	2.65	13
1	0.22	AI-PET	2.90	15
1	0.22	AI-PET	4.00	22
1	0.34	Tinned copper braiding	4.45	25

# Speaker Cable 🌞







### **Technical data**

• Operating voltage: 300 V

• Operating temperature: -20 °C to +70 °C

• Minimum bending radius: Fixed station: 5 x outer diameter Mobile station: 10 x outer diameter

#### Cable structure

• Conductors: multi-strand bare copper

• Insulation: PVC • Sheath: PVC

# **Product advantages**

Robustness

Flexibility

# **Application**

The cable is mainly used as the connecting cable for the amplifiers and the speakers and suitable for the wiring of the sound systems.

No. of Pairs	Section mm²	Outer Diameter mm	Cable Weight kg/km
1	1.5	6.2	60
1	2.5	7.4	87
1	4.0	10.2	130

# **Highly Flex Speaker Cable**







#### Technical data

• Operating voltage: 300 V

• Operating temperature: -20 °C to + 70 °C

Minimum bending radius:
 Fixed station: 5 x outer diameter
 Mobile station: 10 x outer diameter

#### Cable structure

• Conductors: multi-strand bare copper

Insulation: PVCSheath: PVC

# **Product advantages**

 Oxygen-free copper for better sound quality and longer life span

 High flexibility thanks to 0.10 mm core conductors and ultra flexible PVC jacket

Easy to wind

# **Application**

The cable is mainly used as the connecting cable for the amplifiers and the speakers and suitable for the wiring of the sound systems. The flexible feature makes it good for the mobile application.

No. of Pairs	Construction No. x mm	Section mm²	Outer Diameter mm	Cable Weight kg/km	
1	182 x 0.1	1.5	6.2	60	
1	310 x 0.1	2.5	7 4	87	



# Multi-core Speaker Cable 🌞







#### Technical data

• Operating voltage: 300 V

• Operating temperature: -20 °C to +70 °C

• Minimum bending radius: Fixed station: 5 x outer diameter Mobile station: 10 x outer diameter

#### Cable structure

• Conductors: multi-strand bare copper

• Insulation: PVC Sheath: PVC

# **Product advantages**

Robustness

 Available in versions with 4, 5, 6 and 8 conductors for multi-channel sound systems

# **Application**

The cable is mainly used as the connecting cable for the amplifiers and the speakers and suitable for the wiring of the sound systems.

No. of Cores	Section mm <sup>2</sup>	Outer Diameter mm	Cable Weight kg/km
4	2.5	10.25	160
4	4.0	12.20	260
6	2.5	13.00	260
8	2.5	15.80	350
8	4.0	17.00	450



# Flat Speaker Cable





#### Technical data

• Operating voltage: 100 V

Operating temperature:
 Fixed station: -30 °C to +70 °C
 Mobile station: -10 °C to +70 °C

• Minimum bending radius:

8 x outer diameter

# **Product advantages**

- Oxygen-free copper
- Double identification of conductors
- High flexibility

#### Cable structure

• Conductors: multi-strand bare copper

• Sheath: Transparent PVC

# **Application**

The cable is mainly used as the connecting cable for the speakers and suitable for the wiring of the sound systems.

No. of Cores	Section	Outer
	mm²	Diameter
		mm
2	1.5	$3.40 \times 7.80$
2	2.0	3.50 x 8.00
2	2.5	3.80 x 8.60
2	4.0	4.60 x 9.60

# **Microphone Cable**







### **Technical data**

• Operating temperature: -10 °C to +70 °C

Minimum bending radius:
 Fixed station: 35 mm
 Mobile station: 50 mm

#### Cable structure

Conductors: bare copper

Insulation: PVC

 Shielding: bare copper braiding Sheath: PVC

# **Product advantages**

- Excellent price/quality ratio
- Great performance

# Application

The cable is mainly used as the connecting cable for the microphones and audio equipments.

No. of Pairs	Section mm <sup>2</sup>	Outer Diameter mm	Cable Weight kg/km
1	0.22	5.00	35
1	0.40	6.30	55

# Quad Microphone Cable







#### Technical data

• Operating temperature: -5 °C to +70 °C

Minimum bending radius:
 Fixed station: 35 mm
 Mobile station: 50 mm

#### Cable structure

• Conductors: tin plated copper

• Insulation: PE

• Shielding: double tin plated copper spiral

• Sheath: PVC

# **Product advantages**

- 100% shielding thanks to double copper spiral shielding
- Low microphone noise
- High resistance to background noise
- Immune to electromagnetic interference thanks to a double shielding and star-quad assembly

# **Application**

The cable is mainly used as the balanced analog audio link for the wiring of the microphones and audio equipments.

No. of cores	Section mm <sup>2</sup>	Outer Diameter	Cable Weight
		mm	kg/km
4	0.22	6.80	82

# **Instrument Cable**







### **Technical data**

- Operating temperature: -5 °C to +70 °C
- Minimum bending radius:
   Fixed station: 30 mm
   Mobile station: 55 mm

# **Product advantages**

- High flexibility
- Very robust
- Easy to wind
- 100% shielding thanks to the combination of a copper spiral shielding and a conductive carbon layer
- Good resistance to tensile strength
- Designed to be coiled, uncoiled, bend and crushed

### Cable structure

- Conductors: bare copper
- Insulation: foam PE
- Shielding: conductive carbon layer + bare copper spiral
- Sheath: PVC

# **Application**

The cable is mainly used as the unbalanced analog audio link for the wiring of the guitar and other instrument.

No. of Cores	Section mm <sup>2</sup>	Outer Diameter	Cable Weight
		mm	kg/km
1	0.22	6.00	40

# **Analog Audio Multi-pair Cable**







#### Technical data

• Operating temperature: -30 °C to +80 °C

Minimum bending radius:
 5 x outer diameter

#### Cable structure

• Conductors: tin plated copper

Insulation: PE

• Drain wire pair: tin plated copper

Pair shielding: Al-PETPair sheath: PVC

• Overall shielding: Al-PET

• Overall drain wire: tin plated copper

• Sheath: PVC

# **Product advantages**

- Individually shielded and sheathed pairs
- Overall shielding
- Excellent protection against static and electromagnetic interference

# **Application**

The cable is mainly used as the analog audio link for the wiring of professional sound studios.

No. of Pairs	Section mm <sup>2</sup>	Outer Diameter mm	Cable Weight kg/km
2	0.22	7.90	92
4	0.22	9.10	145
8	0.22	12.20	207
12	0.22	15.20	308
16	0.22	17.00	388
20	0.22	20.00	505
24	0.22	22.00	577
32	0.22	24.60	732



# Digital Patch Cable (Solid)







#### Technical data

• Operating temperature: -20 °C to +70 °C

Minimum bending radius:
 Fixed station: 5 x outer diameter
 Mobile station: 10 x outer diameter

Impedance: 110 Ohm±10Attenuation(dB/100m):

1 MHz : 3.60 10 MHz : 9.40 20 MHz : 13.00

#### Cable structure

• Conductors: 1 x 0.40 mm tin plated copper

• Insulation: PE

• Drain wire pair: 1 x 0.40 mm tin plated copper

Shielding: Al-PETSheath: PVC

# **Product advantages**

• 100% shielding

• Digital link over long distances

# **Application**

The cable is mainly used as the balanced digital audio link for the wiring of audio equipments.

No. of Pairs	AWG-no.	Outer Diameter mm	Cable Weight kg/km	
1	26	3.00	12.50	

# **Digital Patch Cable (Stranded)**







#### **Technical data**

• Operating temperature: -20°C to +70°C

Minimum bending radius:
 Fixed station: 5 x outer diameter
 Mobile station: 10 x outer diameter

• **Impedance**: 110 Ohm ± 10

• Nominal capacitance 800 / 1000 Hz: 46 pF / m

• Attenuation(dB/100 m):

1 MHz : 2.10 10 MHz : 10.50 20 MHz : 16.00

# Product advantages Star

• High flexibility

Compactness

Excellent ease of use

Available with LSZH jacket

# **Cable structure**

• Conductors: 7 x 0.20 mm tin plated copper

Insulation: PE

• Drain wire pair: 7 x 0.20 mm tin plated copper

Shielding: Al-PETSheath: PVC/LSZH

#### Standards for LSZH version

Flame retardant: IEC 60332-1Determination of acidity level of

gasses: IEC 60754-2

• Smoke density: IEC 61034-1 and -2

### **Application**

The cable is mainly used as the balanced digital audio link for the wiring of audio equipments. The flexible feature makes it suitable for both fixed and mobile application.

No. of Pairs	Section mm <sup>2</sup>	Outer Diameter mm	Cable Weight kg/km
1	0.22	4.60	27
1	0.22	4.20	29

# Digital Multi-pair Audio Cable







### Technical data

• Operating temperature: -30 °C to +70 °C

Minimum bending radius:
 Fixed station: 5 x outer diameter
 Mobile station: 10 x outer diameter

• Impedance: 110 Ohm ± 10

• Nominal capacitance 800 / 1000 Hz: 46 pF / m

• Attenuation(dB/100 m):

0.1 MHz: 0.55 1 MHz: 2.10 4 MHz: 5.80 10 MHz: 10.50 20 MHz: 16.00 • Next (dB):

> 0.1 MHz: 70 - 80 1 MHz: 60 - 65 4 MHz: 53 - 55 10 MHz: 48 - 48 20 MHz: 45 - 45

#### Cable structure

• Conductors: 7 x 0.20 mm bare copper

Insulation: foam PE

Drain wire pair: 7 x 0.20 mm tin plated copper
 Shielding of pairs: bare copper spiral shielding Identification of pairs: by number

 Pair sheath: PVC Sheath: PVC

# **Product advantages**

- Highly effective shielding against electrical interferences.
- Highly flexible and easy to coil/uncoil thanks to ultra supply PVC jacket

#### **Application**

The cable is mainly used as the digital audio link for the wiring of audio equipments. The flexible feature makes it suitable for both fixed and mobile application.

No. of Pairs	Section mm²	Outer Diameter mm	Cable Weight kg/km
2	0.22	10.20	95
4	0.22	11.50	159
8	0.22	14.90	265
10	0.22	17.30	324
12	0.22	18.40	371
16	0.22	21.00	477
20	0.22	23.60	585
24	0.22	26.80	702
32	0.22	29.30	889

# **Digital Sound Cable**







### Technical data

Max. voltage: 300 VImpedance: 110 Ohm±10

• Conductor resistance: 60.60 Ohm/km

#### Cable structure

• Conductors: 7 x 0.25 mm tin plated copper

• Insulation: PE

• Drain wire pair: 7 x 0.25 mm tin plated copper

• 1st shielding: Al-PET

• 2nd shielding: tin plated copper braid

• Sheath: PVC

# **Product advantages**

• Transmission over long distances

High flexibility

 Very good resistance to interferences thanks to double shielding.

# **Application**

The cable is mainly used as the digital audio link for the wiring of audio equipments. The flexible feature makes it suitable for both fixed and mobile application.

No. of Pairs	Section mm <sup>2</sup>	Outer Diameter mm	Cable Weight kg/km
1	0.22	5.00	42
1	0.34	7.00	110



# **Audio LAN Cable**







#### **Technical data**

• Operating temperature: - 30 °C +70 °C

• Bend radius:

Fixed station: 35 mm Mobile station: 70 mm

Resistance of conductors: 132 Ohm / km
 Impedance (1 to 100 MHz): 100 Ohm ±15

• Attenuation(dB/100 m) :

1 MHz : 3.00 10 MHz : 9.80 100 MHz : 33.00

#### Cable structure

• Conductors: flexible bare copper – AWG 26

• Insulation: PE

• Drain wire pair: Multi-strand tin plated copper

Shielding: Al-PETSheath: PVC

### **Product advantages**

- High flexibility
- Black jacket
- Easy to wind

# **Application**

The cable is mainly used as the digital audio and video link for the wiring of audio and video equipments. The flexible feature makes it suitable for both fixed and mobile application.

#### **Tests results**

Туре	Error-free tested length	Practical length
F/UTP	85 m	75 m

No. of Pairs	AWG-no.	Outer Diameter	Cable Weight
		mm	kg/km
4	26	5.90	40