

ONE

Speaker Cable Guide

kordz®

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Speaker Cable Options				Available jacket colours		
Model	Configuration	Cross Section to scale	Spool Length metre-marked	Indoor		Outdoor
				LSZH	PVC	UV resistant PE
ONE-SP122	12AWG (65/30) 2 core OFC 7.5±0.2mm OD		152.5m 500ft			—
ONE-SP142	14AWG (82/33) 2 core OFC 7.5±0.2mm OD		152.5m 500ft			
ONE-SP144	14AWG (82/33) 4 core OFC 8.8±0.2mm OD		152.5m 500ft			
ONE-SP162	16AWG (65/34) 2 core OFC 6.0±0.2mm OD		305m 1000ft			—
ONE-SP164	16AWG (65/34) 4 core OFC 7.0±0.2mm OD		152.5m 500ft			—

Internal Conductor Colours

2 core



4 core



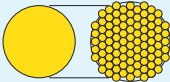
- All models in plastic spool box 340H x 265W x 335D (mm).
- 12 cartons per pallet layer, maximum 3 layers per pallet.

Speaker Cable Reference

Selected American Wire Gauge (AWG) Conductor Sizes						Formulae $d = 0.127\text{mm} \times 92^{\frac{36-\text{AWG}}{39}}$ $A = \pi \times (d/2)^2$ For inches, substitute 0.127mm with 0.005in
Solid Conductor	10AWG	12AWG	14AWG	16AWG	18AWG	
Cross-section (actual size)						
Diameter (mm)	2.588	2.053	1.628	1.291	1.024	
Area (mm ²)	5.261	3.309	2.081	1.309	0.823	

Stranded Cores vs. Solid Cores

Speaker cable is often labelled with solid core AWG sizes while actually being constructed with multiple smaller conductor strands to improve flexibility and handling. The combined strands have the same cross-sectional area of conductor material as the equivalent solid core.

Solid Core	Stranded Equivalent	Common Labelling	Area (mm ²)	Real-World Measurements Stranded diam. $\approx$ 105% solid diam. Stranded area $\approx$ 110% solid area 
12AWG	65 × 30AWG	12AWG 65/30	3.309	
14AWG	82 × 33AWG	14AWG 82/33	2.081	
16AWG	65 × 34AWG	16AWG 65/34	1.309	

ONE-SP Electrical Characteristics - Power loss by cable length

Cable Gauge	4Ω Speaker				8Ω Speaker				16Ω Speaker			
	10m 32ft	20m 65ft	40m 131ft	80m 262ft	10m 32ft	20m 65ft	40m 131ft	80m 262ft	10m 32ft	20m 65ft	40m 131ft	80m 262ft
16AWG	6%	12%	22%	35%	3%	6%	12%	22%	2%	3%	6%	12%
14AWG	4%	8%	15%	26%	2%	4%	8%	15%	1%	2%	4%	8%
12AWG	3%	5%	10%	18%	1%	3%	5%	10%	<1%	1%	3%	5%

Above figures are based on copper resistivity at 20°C (68°F). Resistivity and cable power loss both increase with temperature. For example, driving a 4Ω speaker over 80m of 16AWG cable loses 35% power (-1.9dB) at 20°C (68°F) and 39% (-2.1dB) at 75°C (167°F).

16AWG $\leq$ 13.7 Ω/km

14AWG $\leq$ 8.62 Ω/km

12AWG $\leq$ 5.64 Ω/km

Power loss % to dB conversion	5%	10%	15%	20%	25%	30%	35%	40%
	-0.2dB	-0.5dB	-0.7dB	-1.0dB	-1.2dB	-1.5dB	-1.9dB	-2.2dB