

Selecting the Correct Speaker Wire for the Application

- Determine the location that the speaker wire will be installed.
 - o Is the location indoor?
 - Plenum Select CMP or CL3P Rating.
 - Riser Select CMR or CL3R Rating.
 - o Is the location outdoor?
 - Select an Outdoor Direct Burial Cable.
 - o Is there any external interference?
 - No Select an Unshielded Cable.
 - Yes Select a Shielded Cable.
- What is the distance between your receiver/amplifier and speaker?
 - Use the table below to select the proper gauge size based on the following questions.
 - What is your speaker type $(4\Omega, 8\Omega \text{ or } 70\text{-volt})$?
 - What is the acceptable power loss (11%, 21%, 37% or 50%) for your speaker?
 - Move down the column to select the wire AWG size that meets your distance requirement in feet.

	4Ω Speaker				8Ω Speaker				70-Volt Speaker			
Wire	Power Loss (%) / Attenuation (dB)											
AWG	11%	21%	37%	50%	11%	21%	37%	50%	11%	21%	37%	50%
Size	0.5	1.0	2.0	3.0	0.5	1.0	2.0	3.0	0.5	1.0	2.0	3.0
	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB	dB
12	143	311	680	1173	291	622	1352	2331	6782	14592	31830	54880
14	92	199	437	755	189	403	876	1510	4400	9457	19473	33574
16	61	128	278	479	117	255	553	954	2783	5978	13045	22491
18	41	92	201	347	87	194	405	699	2029	4361	9504	16386
20	26	51	115	199	51	107	231	398	1147	2470	5400	9310
22	15	36	80	138	36	71	163	281	804	1735	3780	6517

Select part number in the following table based on your answers to the above questions

	Plenum Unshielded	Riser Unshielded	Plenum Shielded	Riser Shielded	Outdoor - OFC Unshielded	Outdoor Unshielded
22 AWG, 2 Conductor	SSU222P	SSU222R	SSS222P	SSS222R		
20 AWG, 2 Conductor	SSU202P	SSU202R	SSS202P	SSS202R		
18 AWG, 2 Conductor	SSU182P	SSU182R	SSS182P	SSS182R		
16 AWG, 2 Conductor	SSU162P	SSU162R	SSS162P	SSS162R	SSPUB162	SSUB162
14 AWG, 2 Conductor	SSU142P	SSU142R	SSS142P	SSS142R	SSPUB142	SSUB142
12 AWG, 2 Conductor	SSU122P	SSU122R	SSS122P	SSS122R		SSUB122
22 AWG, 4 Conductor	SSU224P	SSU224R	SSS224P	SSS224R		
20 AWG, 4 Conductor	SSU204P	SSU204R	SSS204P	SSS204R		
18 AWG, 4 Conductor	SSU184P	SSU184R	SSS184P	SSS184R		
16 AWG, 4 Conductor	SSU164P	SSU164R	SSS164P	SSS164R	SSPUB164	SSUB164
14 AWG, 4 Conductor	SSU144P	SSU144R	SSS144P	SSS144R	SSPUB144	SSUB142
12 AWG, 4 Conductor	SSU124P	SSU124R	SSS124P	SSS124R		SSUB122