

Cable Length

- Find the row which is equal to or greater than the total number of Current Units needed for the equipment on the cable run.

- Find where this row crosses the column for the wire gauge that will be used for the run.

- The number in the cell where these cross is the maximum cable length for that run.

Example: When 37 Current Units are to be used on a 24-Gauge Wire, the maximum usable cable length will be 88 feet.

Note: It may be necessary to increase the wire size (smaller gauge numbers) or split the speaker runs to shorten the wire run lengths if they exceed the chart maximums.

		WIRE GAUGE (AWG)					
		26	24	22	20	18	16
Total CU (Current Units) on cable run	10	220'	351'	557'	887'	1413'	2237'
	20	110'	175'	279'	443'	706'	1118'
	30	73'	117'	186'	296'	471'	746'
	40	55'	88'	139'	222'	353'	559'
	50	44'	70'	111'	177'	283'	447'
	60	37'	58'	93'	148'	235'	373'
	70	31'	50'	80'	127'	202'	320'
	80	28'	44'	70'	111'	177'	280'
	90	24'	39'	62'	99'	157'	249'
	100	22'	35'	56'	89'	141'	224'
110	20'	32'	51'	81'	128'	203'	

Indicates maximum cable length (in feet)

Connecting wire pairs together, in parallel in a cable, effectively reduces the gauge and lowers resistance. The chart below shows how the gauge decreases with paralleled pairs.

REDUCING GAUGE		
WIRE GAUGE (AWG)	PARALLEL 2 PAIR	PARALLEL 3 PAIR
26	24	22
24	22	20
22	20	18
20	18	16
18	16	14
16	14	12