NUMBER 0.25 Watts 0.5 Watts 1 Watts 2 Watts 4 Watts 8 Watts 15 Watts (WATTS) (FEET) (dB) (FEET) (OHMS) 1S1 8 10 5 4 0 0 20.00 Watts 825 ft. -1.99 dB 1,323 ft. 8.1 Ohn CKT# 0 0 0 0 0.00 Watts 0 ft. 0.00 dB 0 ft. 0.00 Ohn CKT# 0 0 0 0 0 0.00 Watts 0 ft. 0.00 dB 0 ft. 0.00 Ohn CKT# 0 0 0 0 0.00 Watts 0 ft. 0.00 dB 0 ft. 0.00 Ohn			PROJECT:		DATE:			Wire Resist	tance At 75	Degrees Celsi	us, 167	Degrees Fahrenh	neit
VIRE GAUGE: 16 Sid. CIRCUIT VOLTAGE: 25 14GA = 0.00307										Ohms / ft			
VIRE GAUGE: 16 Sid. CIRCUIT VOLTAGE: 25 14GA = 0.00307	SAMPLE SPEAKER CALCULATION 12GA = 0.00193												
WIRE GAUGE: 16 Sid. CIRCUIT VOLTAGE: 25 16GA = 0.00489													
AMPLIFIER SIZE: 95 WATTS		4 4											
AMPLIFIER SIZE: 95 WATTS AUDIO CIRCUIT CALCULATION MAXIMUM -3 dB DROP PER CIRCUIT	WIRE GAUGE:	16 Sld.	CIRCUIT VOL	TAGE: 25					16GA =	0.00489			
AUDIO CIRCUIT CALCULATION MAXIMUM -3 dB DROP PER CIRCUIT MAXIMUM TOTAL ESTIMATED CIRCUIT CI	(18,16,14,12)	(25 OR 70 VRMS) 18GA							18GA =	0.00777			
AUDIO CIRCUIT CALCULATION MAXIMUM -3 dB DROP PER CIRCUIT MAXIMUM TOTAL ESTIMATED CIRCUIT CI													
AUDIO CIRCUIT CALCULATION MAXIMUM -3 dB DROP PER CIRCUIT MAXIMUM TOTAL ESTIMATED CIRCUIT CI	AMP-1		AMPLIFIER SI	ZE: 95	WATTS								
APPLIANCES QUANTITIES / TAP VALUES SPEAKER CIRCUIT CIRCUIT CIRCUIT ACTUAL ALLOWABLE CKT. LENGTH REISTANCE CKT. LENGTH CKT. LENGT							T 0 4 1 0 1 11	A T. O. N. I					
APPLIANCES QUANTITIES / TAP VALUES SPEAKER SPEAKER SPEAKER SPEAKER SPEAKER SPEAKER TAPPED AT TAP					AUL	IIO CIRCUI	I CALCULA	AHON					
APPLIANCES QUANTITIES / TAP VALUES SPEAKER SPEAKER SPEAKER SPEAKER SPEAKER SPEAKER TAPPED AT TAP													
SPEAKER TAPPED AT TAPPED										MAXIMUM -3 dB DROP PER CIRCUIT			
CIRCUIT NUMBER TAPPED AT 0.25 Watts TAPPED AT 1 Watts TAPPED AT 2 Watts TAPPED AT 3 Watts TAPPED AT 4 Watts TAPPED AT 4 Watts TAPPED AT 4 Watts TAPPED AT 5 Watts TAPPED AT 4 Watts TAPPED AT 5 Watts TAPPED AT 6 Watts TAPPED AT 6 WATTS UMATTS UMATTS </td <td></td> <td colspan="8">APPLIANCES QUANTITIES / TAP VALUES</td> <td>ESTIMATED</td> <td></td> <td>MAXIMUM</td> <td>TOTAL</td>		APPLIANCES QUANTITIES / TAP VALUES								ESTIMATED		MAXIMUM	TOTAL
NUMBER 0.25 Watts 0.5 Watts 1 Watts 2 Watts 4 Watts 8 Watts 15 Watts (WATTS) (FEET) (dB) (FEET) (OHMS) 1S1 8 10 5 4 0 0 20.00 Watts 825 ft. -1.99 dB 1,323 ft. 8.1 Ohr CKT # 0 0 0 0 0 0.00 Watts 0 ft. 0.00 dB 0 ft. 0.00 Ohr CKT # 0 0 0 0 0 0.00 Watts 0 ft. 0.00 dB 0 ft. 0.0 Ohr CKT # 0 0 0 0 0 0.00 Watts 0 ft. 0.00 dB 0 ft. 0.0 Ohr CKT # 0 0 0 0 0 0.00 Watts 0 ft. 0.00 dB 0 ft. 0.0 Ohr		SPEAKER	SPEAKER	SPEAKER	SPEAKER	SPEAKER	SPEAKER	SPEAKER	CIRCUIT	CIRCUIT	ACTUAL	ALLOWABLE	CIRCUIT
1S1 8 10 5 4 0 0 20.00 Watts 825 ft. -1.99 dB 1,323 ft. 8.1 Ohr CKT # 0 0 0 0 0 0 0.00 Watts 0 ft. 0.00 dB 0 ft. 0.00 Ohr CKT # 0 0 0 0 0 0.00 Watts 0 ft. 0.00 dB 0 ft. 0.0 Ohr CKT # 0 0 0 0 0 0.00 Watts 0 ft. 0.00 dB 0 ft. 0.0 Ohr CKT # 0 0 0 0 0.00 Watts 0 ft. 0.00 dB 0 ft. 0.0 Ohr	CIRCUIT	TAPPED AT	TAPPED AT	TAPPED AT	TAPPED AT	TAPPED AT	TAPPED AT	TAPPED AT	LOAD	LENGTH	WIRE/LOSS	CKT. LENGTH	RESISTANCE
CKT # 0 0 0 0 0 0 0.00 Watts 0 ft. 0.00 dB CKT # 0 0 0 0 0 0.00 Watts 0 ft. 0.00 dB 0 ft. 0.00 Ohn	NUMBER	0.25 Watts	0.5 Watts	1 Watts	2 Watts	4 Watts	8 Watts	15 Watts	(WATTS)	(FEET)	(dB)	(FEET)	
CKT # 0 0 0 0 0 0 0.00 Watts 0 ft. 0.00 dB 0 ft. 0.00 Ohn CKT # 0 0 0 0 0 0 0.00 Watts 0 ft. 0.00 dB 0 ft. 0.00 Ohn CKT # 0 0 0 0 0 0.00 Watts 0 ft. 0.00 dB 0 ft. 0.00 Ohn	1S1	8	10	5	4		0	0	20.00 Watts	825 ft.	-1.99 dB	1,323 ft.	8.1 Ohms
CKT # 0 0 0 0 0 0 0.00 Watts 0 ft. 0.00 dB 0 ft. 0.0 Ohn CKT # 0 0 0 0 0 0 0.00 Watts 0 ft. 0.00 dB 0 ft. 0.0 Ohn	CKT#	0	0	0	0	0	0	0	0.00 Watts	0 ft.	0.00 dB	0 ft.	
CKT # 0 0 0 0 0 0 0 0 0 0 0 0.00 Watts 0 ft. 0.00 dB 0 ft. 0.00 Ohn	CKT #	0	0	0	0	0	0	0	0.00 Watts	0 ft.	0.00 dB	0 ft.	
ONT II ON THE ONE OF T	OICI #						<u> </u>	•	0.00 14/-44-	O 44	0.00 ID		
Annliance Summers		0	0	0	0	0	U	U	0.00 watts	υπ.	0.00 dB	0 ft.	0.0 Ohms
Appliance Summary Total Load (Walts)	CKT#				0		•						0.0 Ohms 0.0 Ohms

80% OF MAX AVAILABLE= 76 WATTS

AMPLIFIER RESERVE CAPACITY BASED ON 80% MAX = 56 WATTS

ACTUAL AMPLIFIER RESERVE CAPACITY BASED ON 100% OF AVAILABLE POWER = 75 WATTS

Format shown is a sample format, the contractor may format calculations as they like as long as the the following information is clearly indicated in the calculations:

SEE SHADED ITEMS ABOVE FOR EXAMPLES OF EACH NUMBERED ITEM BELOW

- 1. Clearly indicate the amplifier the calculation is for.
- 2. Clearly indicate wire gauge and type (solid or stranded)
- 3. Clearly indicate speaker voltage, 25 or 70.
- 4. Clearly indicate amplifier size, 20W, 40W, 100W etc...
- 5. Clearly indicate total length of speaker circuit cable.
- 6. Clearly indicate units for calculations.
- 7. Clearly indicate total load on amplifier.
- 8. Clearly indicate 80% of maximum amplifier capacity and excess capacity available based on this and the total speaker load connected to amplifier.
- 9. Clearly show the progression of the caclulation.