

# CABLE SIZING GUIDE 50 HZ

# NIGHT GLOW LIGHTING SYSTEM

## HALOGEN LIGHTS

MAXIMUM RECOMMENDED TOTAL CABLE LENGTH FOR 5% VOLTAGE DROP

3 Conductor				Copper Wire Gauge Size								
Watts Per Fixture	# of Fixtures	Volts	Approx Amps	#14	#12	#10	#8	#6	#4	#2		
75	2	220	0.7	773	1197	1996	3070	4487	7725	11974		
75	3	220	1.1	492	762	1270	1954	3110	4916	4620		
75	4	220	1.4	286	599	998	1535	2444	3863	5987		
75	6	220	2.1	258	399	665	1023	1629	2575	3991		
75	8	220	2.8	193	299	499	768	1222	1931	2994		
150	2	220	1.4	386	599	998	1535	2444	3863	5987		
150	3	220	2	270	419	699	1075	1711	2704	4191		
150	4	220	2.7	200	310	517	796	1267	2003	3104		
150	6	220	4.1	132	204	341	524	834	1319	2044		
150	8	220	5.5	--	152	254	391	622	983	1524		
250	2	220	2.3	235	364	607	934	1487	2351	3644		
250	3	220	3.4	159	247	411	632	1006	1591	2465		
250	4	220	4.5	120	186	310	478	760	1202	1863		
250	6	220	6.8	80	123	205	316	503	795	1233		
250	8	220	9.1	59	92	154	236	376	594	921		
500	4	220	9.1	59	92	154	236	376	594	921		
500	6	220	13.6	--	62	103	158	252	398	616		
500 *	8	220	18.2	Requires 2 runs of cable								
		2 runs at:	--	14	23	36	57	91	141			

\* 2 runs of cable required

## LED LIGHTS

MAXIMUM RECOMMENDED TOTAL CABLE LENGTH FOR 5% VOLTAGE DROP

3 Conductor				Copper Wire Gauge Size		
Watts Per Fixture	# of Fixtures	Volts	Approx Amps	#14	#12	#10
12	2	220	0.089	6076	9418	1567
12	3	220	0.1335	4051	6279	10464
12	4	220	0.178	3038	1709	7848
12	6	220	0.267	2025	3139	5232
12	8	220	0.356	1519	2355	3924
18	2	220	0.202	2677	1450	6916
18	3	220	0.303	1785	2766	4611
18	4	220	0.404	1339	2075	3458
18	6	220	0.606	892	1383	2305
18	8	220	0.808	669	1037	1729
18	12	220	1.212	446	692	1153
21	2	220	0.202	1677	4150	6916
21	3	220	0.303	1785	2766	4611
21	4	220	0.404	1339	2075	3458
21	6	220	0.606	892	1383	2305
21	8	220	0.808	669	1037	1729
21	12	220	1.212	446	692	1153

### IMPORTANT-

AquaMaster recommends consulting a Licensed Electrician to properly size any cable from the main power source to our control panel.

Cable runs to the panel located away from main power source requires recalculating voltage drop to insure proper cable sizing. For cable runs exceeding 800 feet consult AquaMaster to insure proper GFCI selection. Please contact AquaMaster if assistance is required.