

SAMPLE WIRE RUNS								
<b>Project Name #1: "21 Ft Center Console".</b>			<b>Using ABYC standards (3% Voltage Drop)</b>			<b>DC Wire Sizer Results</b>		
Wire Description	Volts	Inside Engine Rm	Amps/Watts	Positive Length	Negative Length	Size	VD	Ampacity
1 VHF Radio	12v	No	5 A	+ 3 ft	- 3 ft	18 AWG	1.70%	20 Amps
2 Chart Plotter / Fish Finder	12v	No	2 A	+ 1 ft	- 1 ft	18 AWG	0.20%	20 Amps
3 1500 GPH Bilge pump	12v	No	5 A	+ 12 ft	- 12 ft	14 AWG	2.60%	35 Amps
4 Wash down pump	12v	No	6 A	+ 8 ft	- 8 ft	14 AWG	2.10%	35 Amps
5 Main power feed to fuse block	12v	<b>Yes</b>	30 A	+ 14 ft	- 14 ft	6 AWG	2.90%	102 Amps
<b>Project Name #2: "28 Ft Cabin Cruiser".</b>			<b>Using ABYC standards (3% Voltage Drop)</b>			<b>DC Wire Sizer Results</b>		
Wire Description	Volts	Inside Engine Rm	Amps/Watts	Positive Length	Negative Length	Size	VD	Ampacity
6 VHF Radio	12v	No	5 A	+ 15 ft	- 15 ft	12 AWG	2.10%	45 Amps
7 Chart Plotter	12v	No	2 A	+ 16 ft	- 16 ft	16 AWG	2.20%	25 Amps
8 750 GPH Bilge pump (mounted low)	12v	No	5 A	+ 17 ft	- 17 ft	12 AWG	2.30%	45 Amps
9 2000 GPH Bilge pump (mounted high)	12v	No	8.5 A	+ 17 ft	- 17 ft	10 AWG	2.50%	60 Amps
10 Pressurized water system pump	12v	<b>Yes</b>	4 A	+ 6 ft	- 6 ft	18 AWG	2.70%	17 Amps
11 Wash down pump	12v	No	6 A	+ 18 ft	- 18 ft	12 AWG	3.00%	45 Amps
12 Windlass	12v	No	45 A	+ 14 ft	- 13 ft	4 AWG	2.60%	160 Amps
13 Solar Panel 150 W (12 Volt)	12v	No	9 A	+ 14 ft	- 14 ft	10 AWG	2.20%	60 Amps
14 MPPT Solar Charge Controller	12v	No	20 A	+ 8 ft	- 9 ft	10 AWG	2.90%	60 Amps
15 Inverter / Charger	12v	No	2000 Watt(170A)	+ 5 ft	- 4 ft	2 AWG	2.10%	210 Amps
<b>Project Name #3: "39 Ft Cruising Sailboat".</b>			<b>Using ABYC standards (3% Voltage Drop)</b>			<b>DC Wire Sizer Results</b>		
Wire Description	Volts	Inside Engine Rm	Amps/Watts	Positive Length	Negative Length	Size	VD	Ampacity
16 VHF Radio	12v	No	5 A	+ 2 ft	- 4 ft	18 AWG	0.60%	20 Amps
17 Multifunction GPS Display	12v	No	7 A	+ 1 ft	- 1 ft	18 AWG	0.30%	20 Amps
18 HD Radar Dome	12v	No	10 A	+ 20 ft	- 20 ft	14 AWG	2.90%	35 Amps
19 Networked Instruments	12v	No	5 A	+ 20 ft	- 20 ft	16 AWG	2.30%	25 Amps
20 Liner Drive Autopilot	12v	No	40 A	+ 10 ft	+ 10 ft	10 AWG	2.30%	60 Amps
21 750 GPH Bilge pump (mounted low)	12v	No	5 A	+ 22 ft	- 22 ft	16 AWG	2.50%	25 Amps
22 3700 GPH Bilge pump (mounted high)	12v	No	16 A	+ 22 ft	- 22 ft	10 AWG	2.00%	60 Amps
23 Refrigeration	12v	No	15 A	+ 16 ft	- 17 ft	12 AWG	2.30%	45 Amps
24 Water-maker	12v	No	8 A	+ 23 ft	- 24 ft	14 AWG	2.70%	35 Amps
25 Pressurized water system pump	12v	No	4 A	+ 26 ft	- 5 ft	18 AWG	2.30%	20 Amps
26 Wash down pump	12v	No	6 A	+ 24 ft	- 22 ft	14 AWG	2.00%	35 Amps
27 Windlass	12v	No	85 A	+ 25 ft	- 25 ft	2 AWG	1.90%	210 Amps
28 Inverter / Charger	12v	<b>Yes</b>	3000 Watt/85A	+ 3 ft	- 4 ft	6 AWG	0.70%	102 Amps
29 MPPT Solar Charge Controller	12v	<b>Yes</b>	60 A	+ 6 ft	- 4 ft	8 AWG	1.10%	68 Amps
30 Solar Panel 400 W (72 Volts)	<b>72v</b>	<b>Yes</b>	8 A	+ 30 ft	- 30 ft	16 AWG	2.80%	21 Amps
<b>Project Name #4: "Canadian 21 Ft Center Console".</b>			<b>Using ABYC standards (3% Voltage Drop)</b>			<b>DC Wire Sizer Results</b>		
<b>CHANGE SETTINGS: go into Setting via the Action Menu and select "Meters" instead of "Feet" and "mm2" instead of "AWG"</b>								
Wire Description	Volts	Inside Engine Rm	Amps/Watts	Positive Length	Negative Length	Size	VD	Ampacity
"31 VHF Radio"	12v	No	5 A	+ 3 meters	- 3 meters	1.5 mm <sup>2</sup>	3.0%	25 Amps
"32 Chart Plotter / Fish Finder"	12v	No	2 A	+ 2 meters	- 1 meters	.75 mm <sup>2</sup>	1.2%	18 Amps
"33 1500 GPH Bilge pump"	12v	No	5 A	+ 2 meters	- 2 meters	1 mm <sup>2</sup>	3.0%	19 Amps
"34 Wash down pump"	12v	No	6 A	+ 7 meters	- 7 meters	6 mm <sup>2</sup>	2.1%	60 Amps
"35 Main power feed to fuse block"	12v	<b>Yes</b>	30 A	+ 1 meters	- 1 meters	4 mm <sup>2</sup>	2.2%	38 Amps
<b>Project Name #5: "French 22 Ft Barge Boat".</b>			<b>Using ISO standards (1% Voltage Drop)</b>			<b>DC Wire Sizer Results</b>		
<b>CHANGE SETTINGS: go into Setting via the Action Menu and select "ISO" for the Marine Standard, "mm2" for gauge and "Meters" for unit of measure.</b>								
Wire Description	Volts	Inside Engine Rm	Amps/Watts	Positive Length	Negative Length	Size	VD	Ampacity
"36 VHF Radio"	12v	No	5 A	+ 3 meters	- 3 meters	6 mm <sup>2</sup>	0.7%	60 Amps
"37 Chart Plotter / Fish Finder"	12v	No	2 A	+ 2 meters	- 1 meters	1 mm <sup>2</sup>	0.8%	20 Amps
"38 1500 GPH Bilge pump"	12v	No	5 A	+ 2 meters	- 2 meters	4 mm <sup>2</sup>	0.7%	45 Amps
"39 Wash down pump"	12v	No	6 A	+ 7 meters	- 7 meters	16 mm <sup>2</sup>	0.7%	130 Amps
"40 Main power feed to fuse block"	12v	<b>Yes</b>	30 A	+ 1 meters	- 1 meters	10 mm <sup>2</sup>	0.8%	77 Amps