



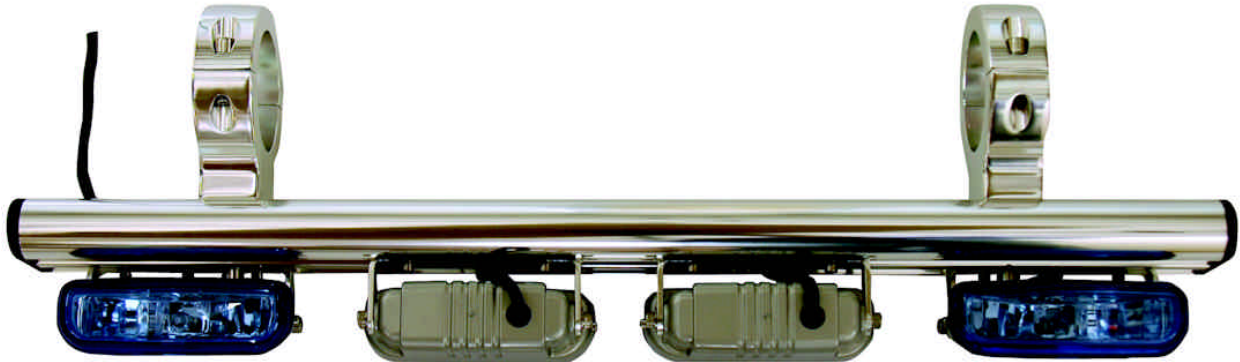
Monster Tower Light Bar Installation Instructions and Owners Manual

NOTES ON INSTALLING AND USING YOUR NEW TOWER LIGHTS

- Tower lights will reach a high temperature when operating. Do not touch or wash the lights for 10 minutes after use.
- Only use "H3 55W 12V" Halogen light bulb and fuse for replacement. These are available at most auto parts stores. Anything exceeding 55W/15Amp could result in damage to your boat wiring.
- Use appropriate gauge wire for all connections. Consult wiring diagrams & wire sizing chart for details.
- Use of a relay is highly recommended unless you confirm your switch can support a 20 amp load. An inline fuse is required (see wiring diagram)
- Tower lights are not for wakeboarding at night, which is illegal in every state.
- There are countless methods of wiring lights. Please contact a marine wiring specialist if you need assistance. We have provided the most complete information we have found within this document.
- It is highly recommended that you use a relay and a fuse with each set of lights.

Monster Beam Tower Lights Parts List

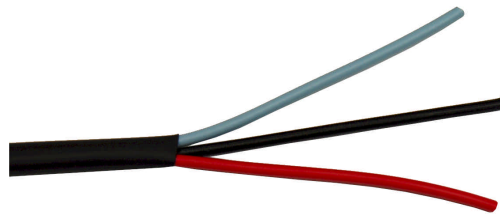
Item	Qty	Description
1	2	Tower Collar Bracket
2	4	Delrin Collar Inserts
3	1	Tower Light Bar with Four Lights
4	4	M8x25 Socket Head Cap Screws



Standard "Two plus two" light bar with two facing forward and two facing rear



Light bar with four lights facing the same direction by turning around the end lights



Lead wires with common ground (Black) and Red and Blue Power leads

Attaching the light bar to the tower

Attach the Collar Bracket (Item 1) to the tower using M8x25 bolts (Item 4) and the Collar Inserts (Item 2) that matches your size tower (2-1/2" are provided for Monster Towers and a universal kit with 1-1/2", 1-5/8", 1-3/4", 1-7/8", 2" and 2-1/4" are provided for other towers).

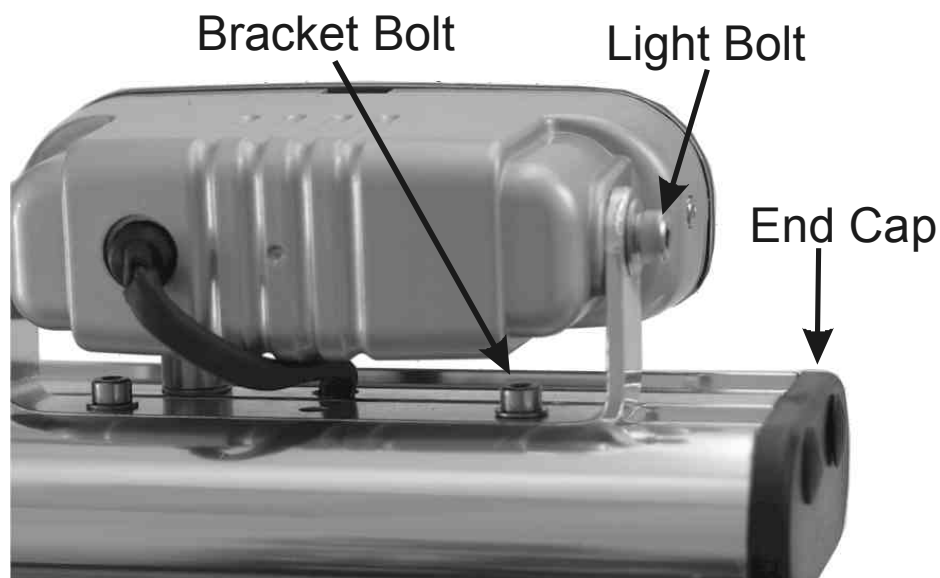


Turning the lights to all face the same direction

You can easily turn the outside lights so all four lights face in the same direction.

- 1) Remove Light Bolts on each end of the light
- 2) Remove End Cap
- 3) Remove Bracket Bolts to remove the bracket
- 4) Remove threaded bar and insert into the opposite railing
- 5) Re-assemble and align the center hole of the bracket where the wire exits the tube

IMPORTANT – Tighten bracket bolts BY HAND, then 1/4 of a turn ONLY or the threads may be stripped.



Wiring Recommendations

We recommend using a SPST relay (Single Pole Single Throw) with your switch and appropriate gauge wiring. Relays are readily available at auto parts stores.

Not using a relay could cause excessive heat in the wiring and switch and create a risk of fire because of the amount of power being drawn by the high output lights. A relay works by using a switch to run 12 volts to the relay. The relay acts as an electrical switch that activates and draws power straight from the battery connection and sends it to the lights or accessory. The power actually going to the switch never gets routed to the lights.

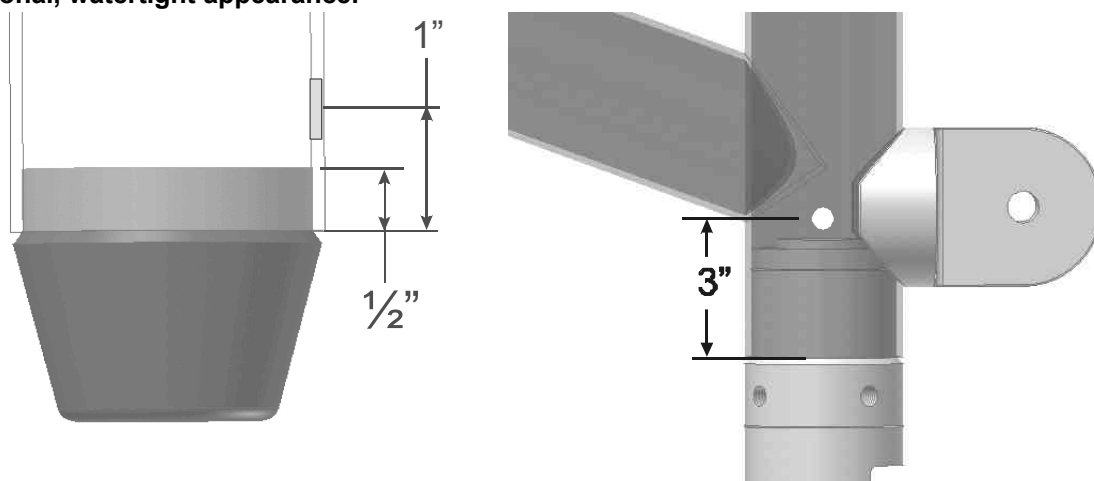
See diagrams and wiring size chart at the end of this document for options & details.

Running Wires Through The Tower

The following is specific to running wires on a Monster Tower, otherwise consult your tower installation manual or provider for instructions on running wire inside your tower.

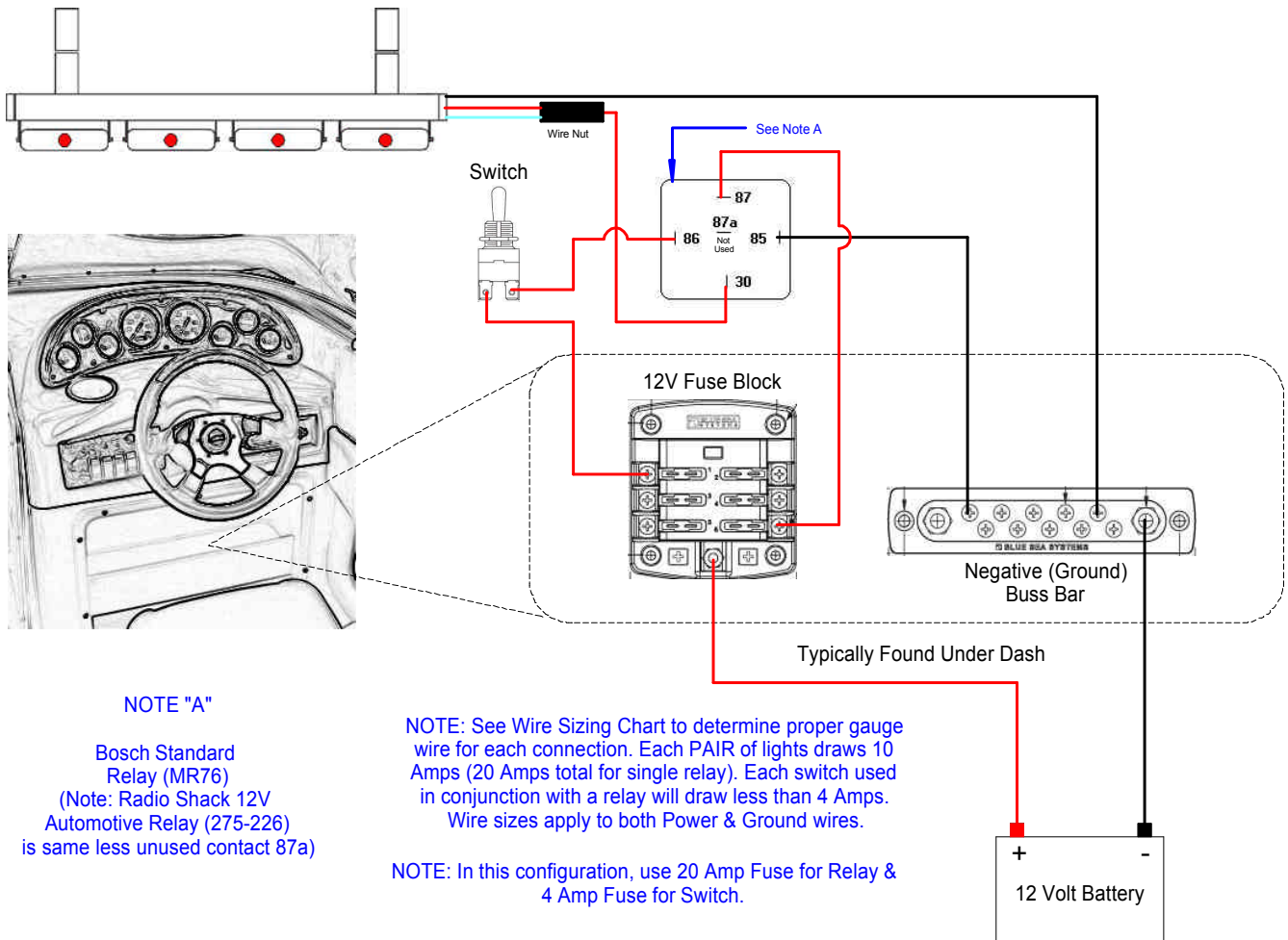
When you add speakers or lights to your Monster Tower, you can hide the wires inside of the rear legs of the tower as well as in the straight cross member of the top section. Since the mating parts insert $\frac{1}{2}$ " inside each end of the rear leg you can drill 1" away from the weld lines. For the top section cross member you will need to place the hole 3" from the weld line to clear the rotating collar assembly. The hole size will depend on what size wire you are running and how many items you need to wire. The maximum hole size we recommend is $\frac{1}{2}$ " but normally smaller is all that is needed.

We recommend covering the exposed wiring with $\frac{3}{8}$ " or $\frac{1}{2}$ " wiring loom and electrical tape for a professional, watertight appearance.



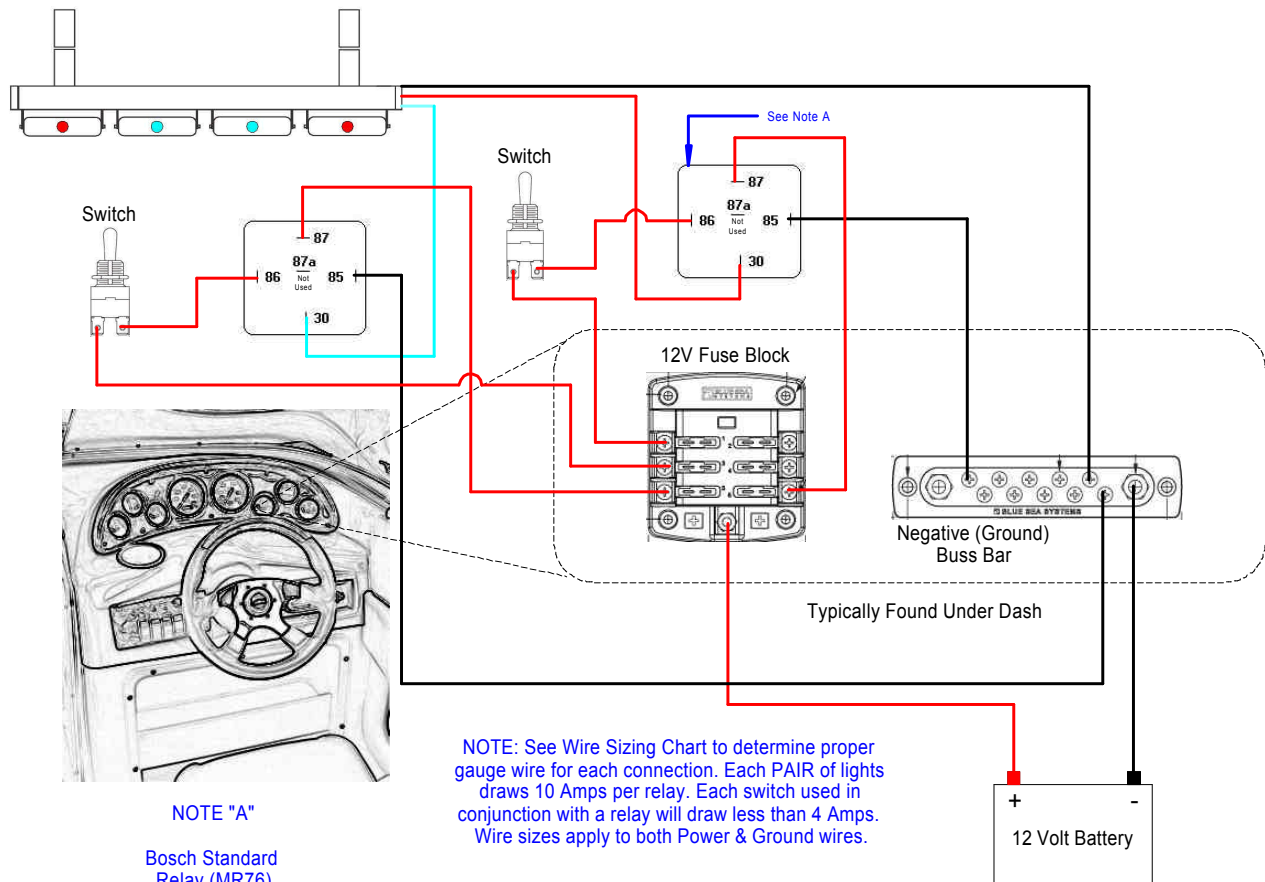
- Wiring Option Diagrams and Wire Sizing Chart Follows -

Option 1 Single Switch w/ Relay



Option 2

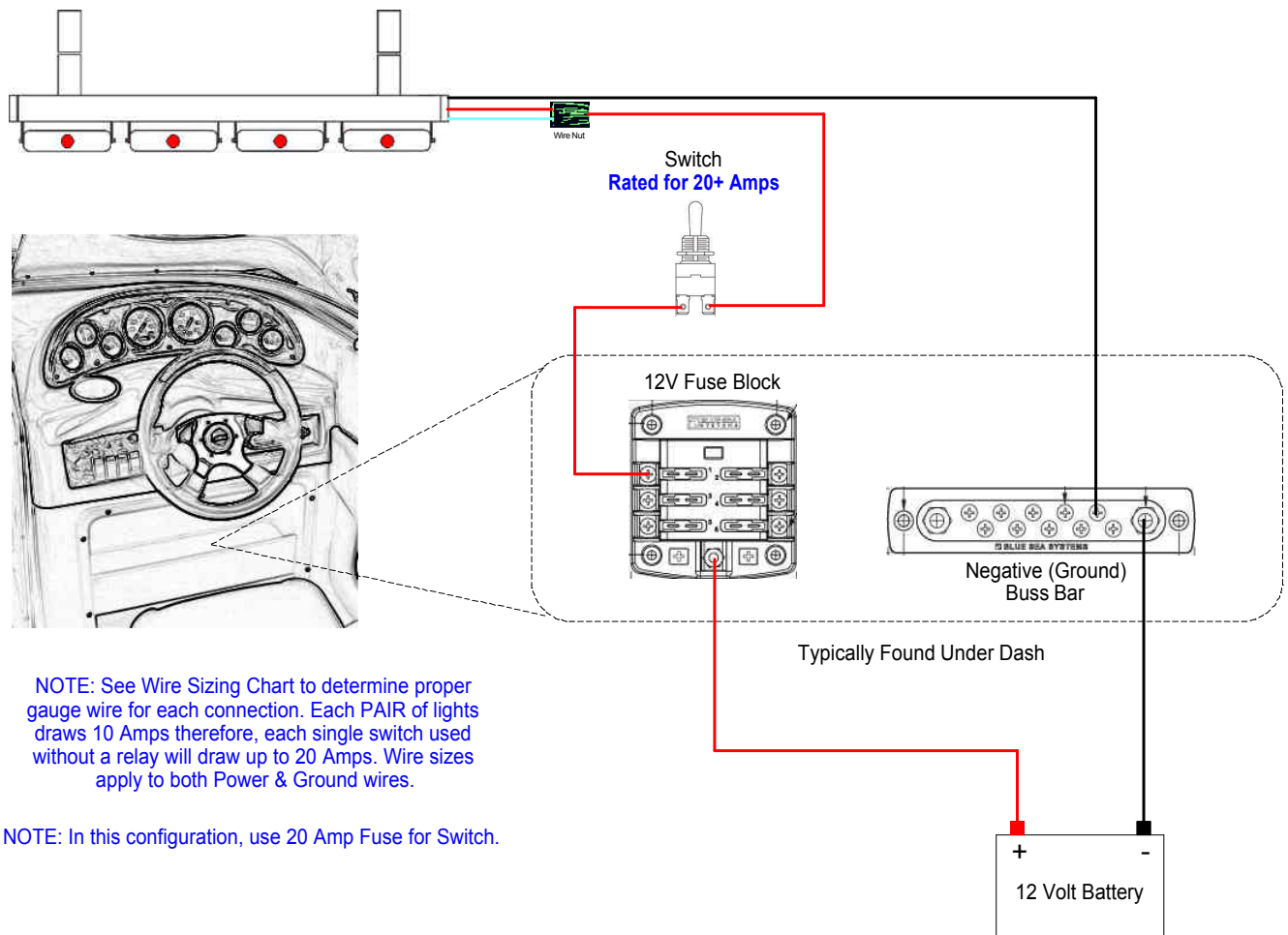
Dual Switches w/ Relays



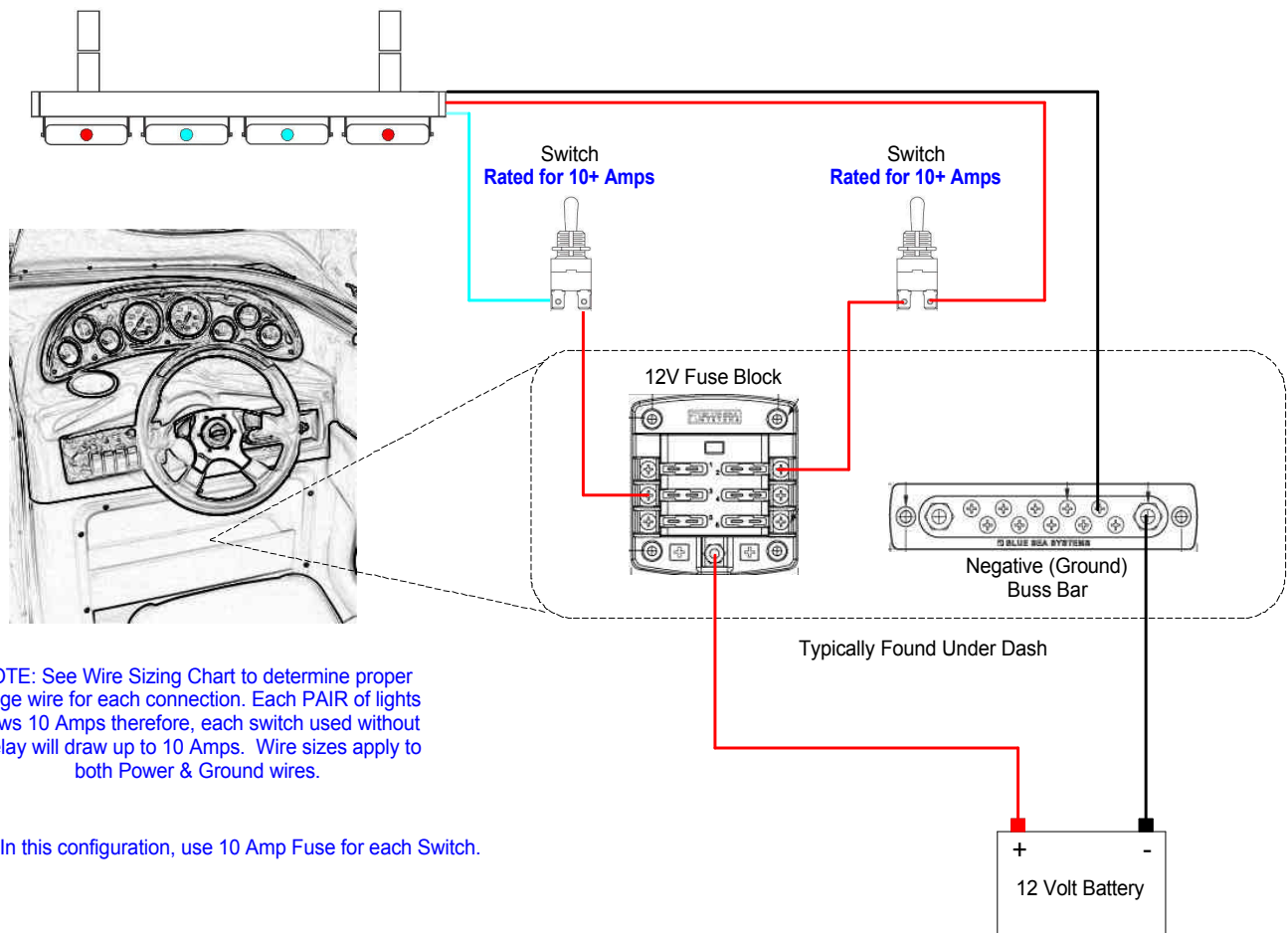
Bosch Standard
Relay (MR76)
(Note: Radio Shack 12V
Automotive Relay (275-226)
is same less unused contact 87a)

NOTE: In this configuration, use 10 Amp Fuse for Relays & 4 Amp Fuse for Switches.

Option 3 Single Switch w/o Relay



Option 4 Dual Switches w/o Relays



1. — On the left, locate the current you will be dealing with (either array or load current.) 2. — Move across to locate distance to be traveled. 3. — Move up to locate size of wire to be used.

Wire Sizing Chart 12 Volt System

Maximum one-way distance (feet) for 5% voltage loss in 12 volt systems. Wire Size (AWG)

Amps	14	12	10	8	6	4	2	1	0	00	000	0000
1	106	169	269	427	679	1080	1717	2166	2730	3444	4342	5475
2	53	85	134	214	340	540	859	1083	1365	1722	2171	2738
4	27	42	67	107	170	270	429	542	682	861	1086	1369
6	18	28	45	71	113	180	286	361	455	574	724	913
8	13	21	34	53	85	135	215	271	341	430	543	684
10	11	17	27	43	68	108	172	217	273	344	434	548
15	7	11	18	28	45	72	114	144	182	230	289	365
20	—	8	13	21	34	54	86	108	136	172	217	274
25	—	—	11	17	27	43	69	87	109	138	174	219
30	—	—	9	14	23	36	57	72	91	115	145	183
35	—	—	—	12	19	31	49	62	78	98	124	156
40	—	—	—	—	17	27	43	54	68	86	109	137
45	—	—	—	—	15	24	38	48	61	77	96	122
50	—	—	—	—	14	22	34	43	55	69	87	110