Monster Tower Light Bar Installation Instructions and Owners Manual

Monster Tower, Inc.
1704 Henry G. Lane Street
Maryville, TN 37801

Phone: 877 -77-Tower
Fax: 877 -232-6538
www.MonsterTower.com
Support@MonsterTower.com

THANK YOU FOR YOUR BUSINESS. IF YOU ARE NOT COMPLETELY SATISFIED IN ANY WAY WITH YOUR NEW LIGHT BAR, PLEASE CONTACT US. Our entire purpose as a company is to offer great products at affordable prices that our customers love.

Please take a few minutes to read the installation instructions and become familiar with the wiring and installation before beginning to ensure a high quality, trouble free installation and use. If you have any questions during your installation give us a call at 877 -77-Tower or e -mail Support@MonsterTower.com

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 online at bulbs.com and 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 countl ess 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.

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Monster Beam Tower Lights Parts List

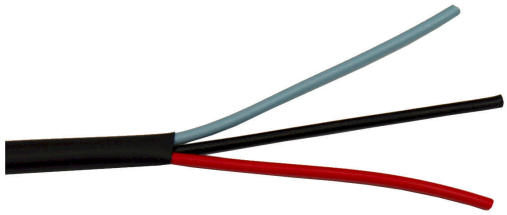
Item	Qty	Description
1	2	Tower Collar Bracket
2	4	Delrin Collar Inserts
3	1	Tower Light Bar with Four Lights
4	4	M8x25 Socket Head Cap Screws



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

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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).

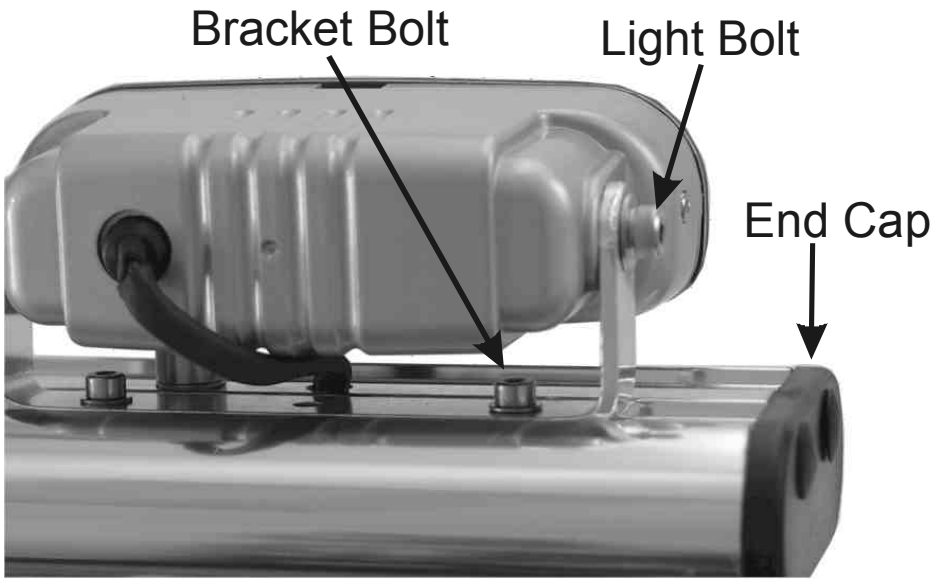


Turning the lights to all face the same direction

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**

<u>IMPORTANT – Tighten bracket bolts BY HAND, then ¼ of a turn ONLY or the threads may be stripped.</u>



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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, Radio Shack, and online at www.PartsExpress.com (part number 330-070) and cost under $5 each. Parts Express also has an excellent technical support department. There are many sources and links for wiring 12V lights at www.diyTower.com that you may want to reference.

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.

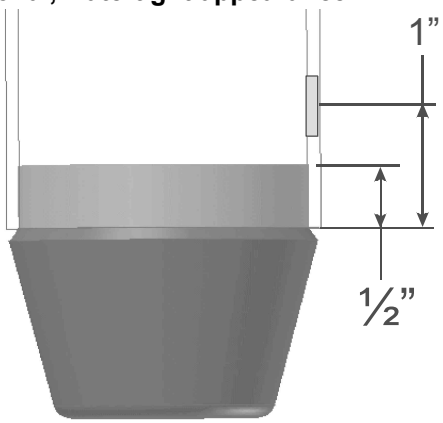
See diagrams and wiring size chart at the end of this document for options & details.

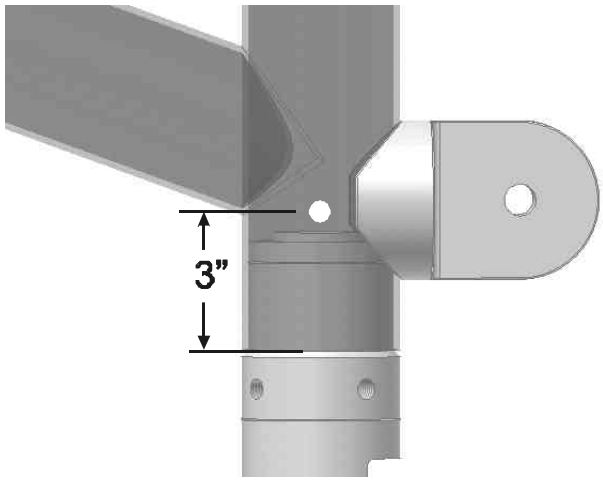
Running Wires Through The Tower

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 ½" 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 ½" but normally smaller is all that is needed.

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





For learning more about tower accessories, we highly encourage you to visit the "Boats and Accessories" discussion boards at www.Wakeboarder.com and www.WakeWorld.com and www.diyTower.com.

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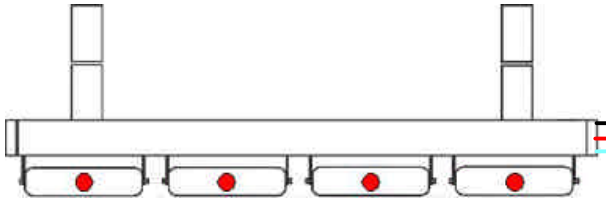
Monster Tower, Inc Warranty

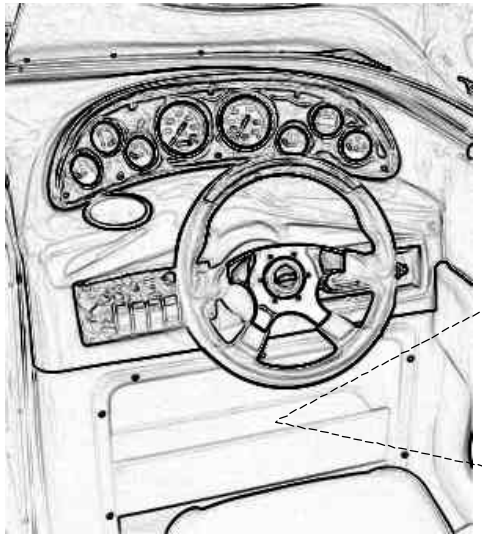
Monster Tower warrants this product (not including the bulbs) against manufacturers defects for a period of five (5) years. Anodized surfaces are specifically excluded, as their care and use cannot be controlled by the manufacturer. Any modifications or improper use, not approved in writing by Monster Tower, shall void this warranty. Monster Tower is not responsible for personal injury or damage to the boat caused by the use of this product. Monster Tower's obligation under this warranty shall not include any transportation charges or costs of installation or any liability for direct, indirect or consequential damages resulting from delay or improper installation. Your time would be better spent wakeboarding then reading warranty details. If you need to make a warranty claim contact Monster Tower at 877-77-Tower or email Support@MonsterTower.com before returning any items. Defects must be reported within 30 days of discovery.

Wiring Option Diagrams and Wire Sizing Chart Follows

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Option 1
Single Switch w/ Relay





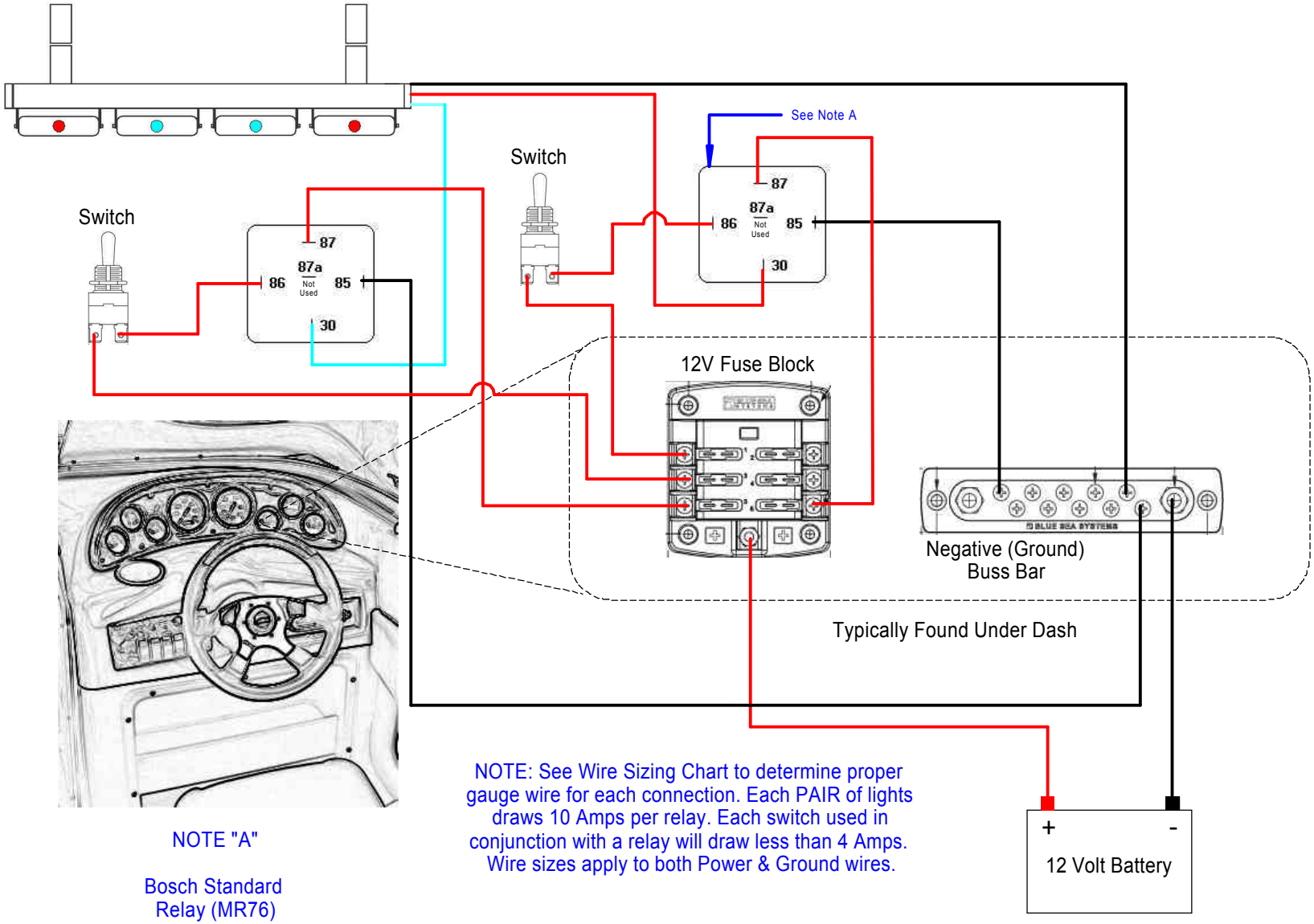
NOTE "A"

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

NOTE: See Wire Sizing Chart to determine proper gauge wire for each connection. Each PAIR of lights draws 10 Amps (20 Amps total for single relay). Each switch used in conjunction with a relay will draw less than 4 Amps. Wire sizes apply to both Power & Ground wires.

NOTE: In this configuration, use 20 Amp Fuse for Relay & 4 Amp Fuse for Switch.

Option 2
Dual Switches w/ Relays



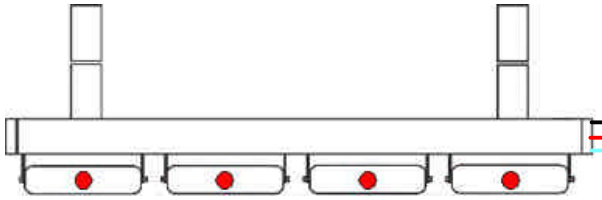
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Bosch Standard
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NOTE: See Wire Sizing Chart to determine proper gauge wire for each connection. Each PAIR of lights draws 10 Amps per relay. Each switch used in conjunction with a relay will draw less than 4 Amps. Wire sizes apply to both Power & Ground wires.

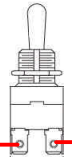
NOTE: In this configuration, use 10 Amp Fuse for Relays & 4 Amp Fuse for Switches.

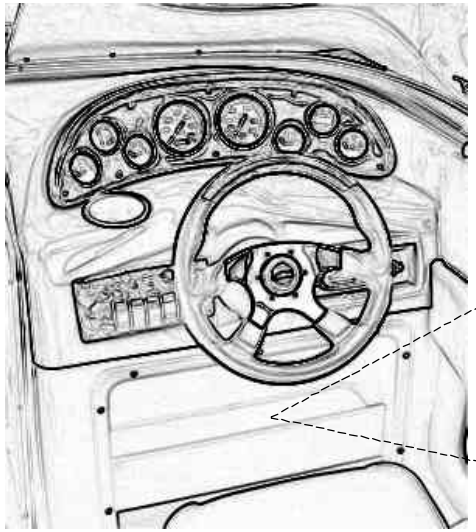
Option 3
Single Switch w/o Relay



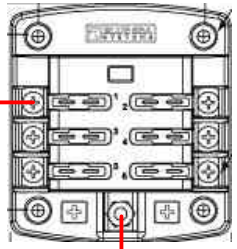
Wire Nut

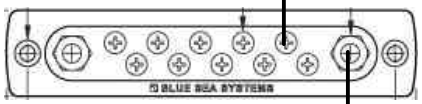
Switch
Rated for 20+ Amps





12V Fuse Block





Negative (Ground)
Buss Bar

Typically Found Under Dash

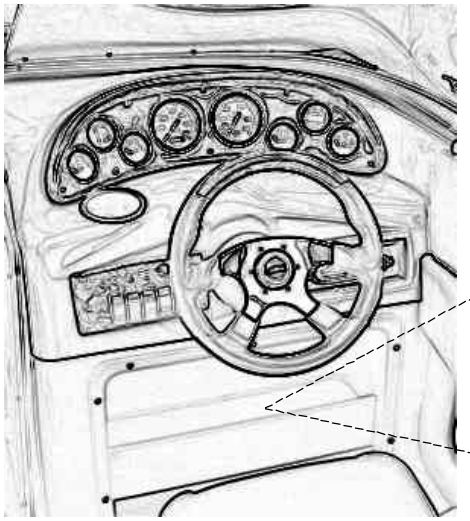
NOTE: See Wire Sizing Chart to determine proper gauge wire for each connection. Each PAIR of lights draws 10 Amps therefore, each single switch used without a relay will draw up to 20 Amps. Wire sizes apply to both Power & Ground wires.

NOTE: In this configuration, use 20 Amp Fuse for Switch.

\+ -

12 Volt Battery

Option 4
Dual Switches w/o Relays



NOTE: See Wire Sizing Chart to determine proper gauge wire for each connection. Each PAIR of lights draws 10 Amps therefore, each switch used without a relay will draw up to 10 Amps. Wire sizes apply to both Power & Ground wires.

NOTE: In this configuration, use 10 Amp Fuse for each Switch.

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