

# ROSWELL

WAKE-BAR

## Hanging Speaker Wiring Instructions

### Tools Needed:

3/8" or 1/2" and 1/8" drill bits  
Drill  
Screw drivers  
Wire strippers  
Butt Splice connectors  
Allan wrench  
Countersink  
Thin wire (about 4' long) or fish tape  
1.25" Hole Saw or drill bit  
Wire:

Speaker Wire (NOT INCLUDED) for inside the boat:

A length of speaker wire to run from inside the boat from behind the passenger side (port) rear mount to your amp or deck

- You will need a way to connect this wire to either an amp or deck and it is your responsibility to provide these connections

LED Boat side wire-

A length of positive and a length of negative 18 Gauge wire to run from behind the passenger side (port) rear mount to your power source- We suggest hooking the LED's up to an ACC switch or courtesy lights but any 12v power source will do.

Tower Wire- If you did not purchase a master wiring harness from

Roswell you will need to provide speaker wire and LED wire for the tower.

### *Positioning*

We suggest mounting them on the rear crossbar of your tower facing backwards. Many people will also position them out as much to the sides of the tower to avoid them while walking around the boat.

If you have purchased the Vamp Spin Pro or Unison Pro you will want to consider the positioning of the tweeters. Some customers choose to mount the Pros on the front bar of the tower to keep the tweeter housings out of the way of the rope. It is NOT WARRANTY if you catch the rope on your tweeter. In the end positioning is up to you.

## Wiring

**BEFORE WIRING ANYTHING MAKE SURE BOAT, DECK and AMP ARE ALL TURNED OFF!**

### Speakers

Speakers are typically wired down the port (passenger) side

Because each tower/boat setup is different there are no specific instructions for wiring the tower; However most people will run the wires internally through their tower. To do this you need to drill a series of holes that will allow you to run the wiring harness inside the tower up to your desired mounting location. You can then fish the wires through using a fish tape.

Alternatively some people choose to run their wires outside the tower using zip ties or another attachment system. The choice is yours.

Each speaker comes with pre-wired RCA plugs and a 12" harness- See the charts below for further wiring instructions.

**If you have NOT purchased our MASTER wiring harness and will use your own wire here is the template for the wiring and a description of each wire's function:**

<b>PORT RCA</b>	<b>WIRE COLOR</b>	<b>FUNCTION</b>
Red	Red	Port Speaker +
	Brown	Port Speaker -
White	White	LED +
	Green	LED -
<b>STARBOARD RCA</b>	<b>WIRE COLOR</b>	<b>FUNCTION</b>
Red	Red	St. B. Speaker +
	Brown	St. B. Speaker -
White	White	LED +
	Green	LED -

**If you are using our MASTER wiring harness here is the template for wiring-You will need to connect the 12" RCA harness' to the master according to this chart:**

Before connecting the two harness' you should run the master harness up through the tower to avoid having to remove the speakon connector at the one end of the Master harness or the RCA plugs on the end of the speaker harness'.

<b>MASTER WIRING HARNESS</b>		
<b>TERMINAL</b>	<b>WIRE COLOR</b>	<b>FUNCTION</b>
1+	Red	Port Speaker +
1-	Black	Port Speaker -
2+	Orange	Starboard Speaker +
2-	Brown	Starboard Speaker -
3+	Yellow	LED +
3-	Blue	LED -
4+	White	Empty
4-	Green	Empty

## **(Boat Side)- You are responsible for all boat side wire**

Included with your Master wiring harness is a female 8-pole boat side speakon connector. (not exactly as shown)

To install this you will need to drill a hole with a hole saw through the deck of the boat. The hole should be between 2-4" aft or behind the rear mounts



1. Begin by marking the spot you want to drill and making sure the lip of the speakon will not touch the mount

*Before drilling check inside the gunnels of the boat to ensure that you will not be drilling into any electrical wires or cables!!!*

2. Drill the pilot hole carefully and just before the hole saw contacts the gel coat run the drill in reverse while slowly allowing the blade to contact the deck (this helps protect the gel coat from cracking)
3. You can now put the drill back into FWD and finish drilling the hole
4. Insert the female speakon into your new hole. Mark the 4 holes and remove the speakon. Using your 1/8" drill bit drill the 4 holes you just marked. Take your countersink and carefully run it in each of these holes to again help prevent gel coat cracking

### **For all UNISON AND VAMP SPEAKERS-**

Using stake on connectors attach your speaker wires to the corresponding poles on the backside of the female speakon and put the ends of the wire into the hole:

Speakon Wiring		
TERMINAL	WIRE COLOR	FUNCTION
1+	Red	Port Speaker +
1-	Black	Port Speaker -
2+	Orange	Starboard Speaker +
2-	Brown	Starboard Speaker -
3+	Yellow	LED +
3-	Blue	LED -

5. Using your lengths of 18 gauge wire for the led's connect them using stake on connectors to the corresponding poles on the backside of the female speakon- (+3 & -3) and put the ends of the wires into the hole:
6. Put the speakon (which now has all 6 wires attached) back into its hole.
7. You can now screw the speakon into the four 1/8" holes you previously drilled with the provided 1/8"screws
8. Run the speaker wires to your amp or deck and connect.

9. Run the two power wires to your chosen power source- We suggest running the wires to an open ACC switch or your courtesy lights.

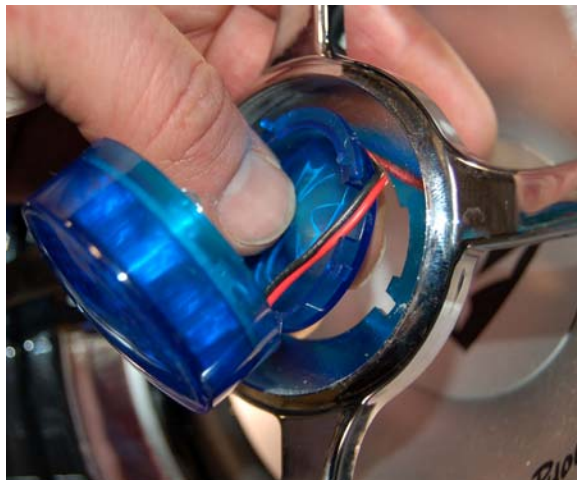
## LED LENS CHANGE OUT

1. Ensure that the power is off and the RCA connectors are unplugged before attempting to change out the LED lenses.
2. Begin by unscrewing the black LED bezel.



Note that during the entire change out you must be VERY careful when handling the LED's. They are somewhat delicate and without proper care and attention you may pull the wires off the board.

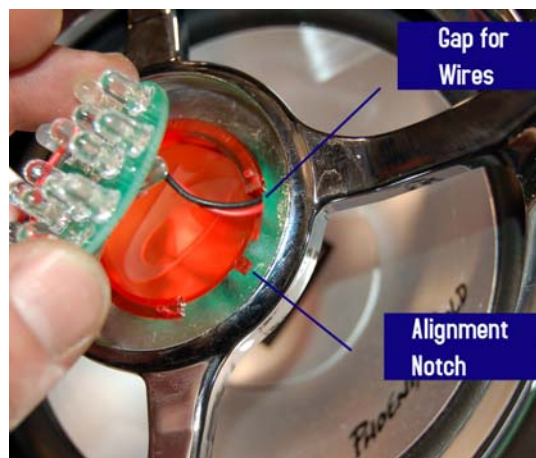
3. With the bezel removed the outer lens and LED circuit board should pull out freely- From behind the grill you can push the inner LED lens out.



4. Remove the LED circuit board from the outer lens. The board is pressure fitted into this lens to stop any rattling so you have to very carefully remove it.



5. Replace the inner lens (red or white) lining up the lens with the Alignment notch ensuring that the wires are in the gap.



6. Place the outer lens (red or white) over the LED circuit board and replace the bezel.



7. Be sure not to cross thread the bezel – It screws on with fine threads so caution is important.



8. Plug the RCA connectors back in and you should be up and running

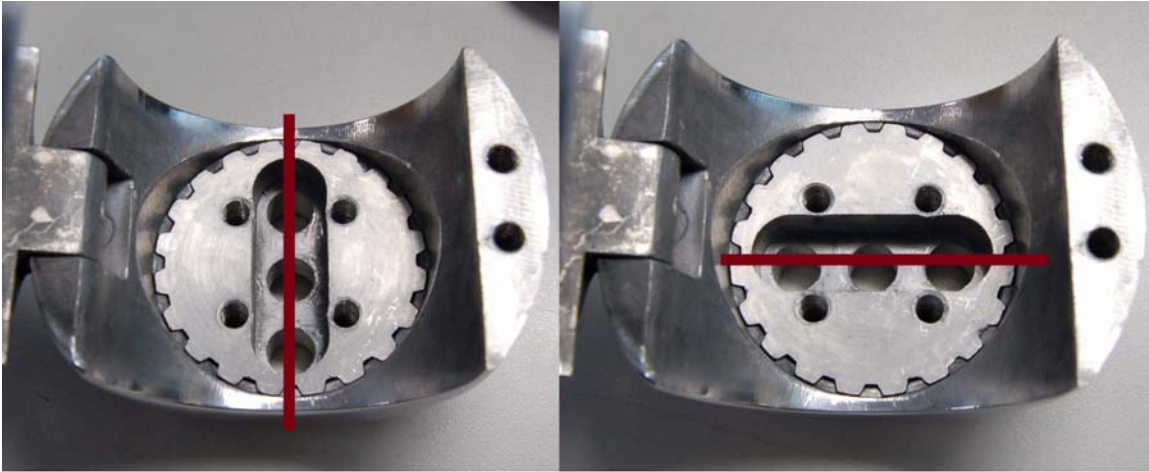
## Attaching the speakers to the tower



*\*Note\* it may be helpful to have a second person available to hold the speakers in place as you tighten the clamps*

1. Determine what size diameter the tower is and where the speakers will be going. This can be done by test fitting the supplied collars.

2. Insert internal disk at the selected angle.



**Internal disk will rotate through each position  
for perfect alignment**

3. Remove three bolts from speaker neck- Place clamp on speaker and tighten (use permanent lock-tite)
4. Insert appropriate internal collars into clamp.
5. Place clamp on tower and close.
6. Replace clamp hardware (2- ¼" bolts)and tighten (use permanent lock-tite)
7. With your stereo turned off you can now plug the RCA jacks into the speakers and the male speakon into the female on the deck. Insert the male speakon into the female and twist clockwise for engagement
8. Your speakers should now be fully operational

## Trouble shooting

If for some reason your speakers or lights are not working check the following:

- Do you have power at the switch you have wired into and is the switch flipped on?
- Is the speakon engaged?
- When you re-attached the male speakon after fishing the wire through the tower were all the connections solid and not touching each other?
- Are your connections at the amp and or deck secure and wired properly?
- Are the stake-on's firmly attached at the back of the female speakon connectors? (these sometimes get pulled off while fishing the wire to the amp/deck/switch)

**If you are still having problems you can reach us at:**

**780-490-7908 or [info@roswellwakeair.com](mailto:info@roswellwakeair.com)**