



## AUTOMATIC VOLUME CONTROL FOR BOAT STEREOs

WS 1107 Wired Controller for MB Quart Marine Stereos



# Installation & Operation Instructions



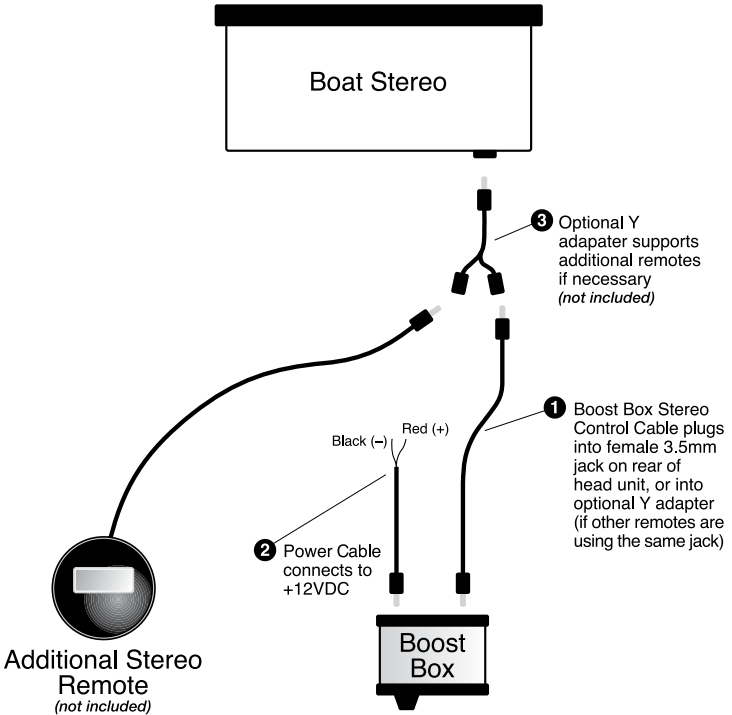
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Read through all instructions before installing. The Boost Box is designed to install easily on almost any boat with little or no wiring modifications. Simply attach the Control Unit to the boat with the enclosed Velcro tape, connect the Power Cable to the boat's 12-volt power, and route the Stereo Control Cable to the back of the boat's stereo.

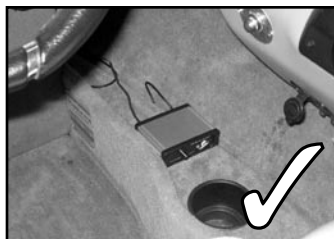
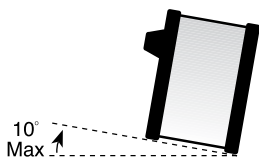


To prevent electric shock hazard, disconnect the boat battery prior to installation.

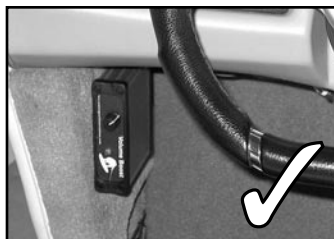


## Step 1 – Control Unit Installation

The Control Unit must be mounted with the control knob facing the driver, and **the unit must be mounted within 10° of level with respect to the boat's waterline**. The unit can be mounted either horizontal or vertical (see figures below). Attach the Control Unit to the boat with the enclosed Velcro tape, in a convenient location near the driver.




✓ **CORRECT horizontal mounting.** Knob is facing the driver, unit is parallel to the floor of the boat, and the centerline of the Control Unit is parallel with the centerline of the boat (bow to stern).




✓ **CORRECT verticle mounting.** Knob is facing the driver, and the centerline of the Control Unit is parallel with the boat's waterline.

**NOTE:** *If the unit is not mounted properly, it will not properly sense the boat's acceleration. Below are some examples of INCORRECT mounting of the Control Unit.*



 **INCORRECT!** Knob is facing up but should be facing the driver. Centerline (front to back) of the Control Unit is perpendicular, but should be parallel, to the boat's waterline.

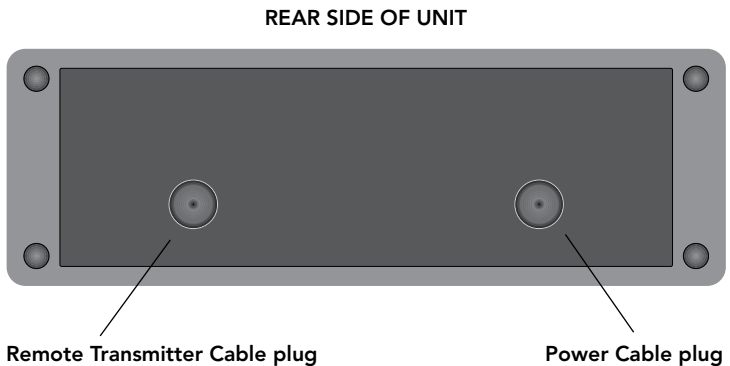


 **INCORRECT!** Knob is facing the driver, but Control Unit is not parallel with the boat's waterline, and the Control Unit is not parallel with the boat's center axis (bow to stern).

## Step 2 – Power Cable Installation

The Power Cable plugs into the back of the Control Unit, as shown below, and the free end is wired into the boat's 12-volt power. Connect the red wire to power and the black wire to ground. Connect the Power Cable to a circuit protected by a fuse rated at 10 amps or less that is powered only when the boat's ignition switch is in the "ON" or "ACCESSORY" position.

An alternate cigarette lighter adapter is available if wiring directly to the boat is not desired. Unplug the cigarette lighter for extended storage, as the Boost Box continues to draw a very slight current even when turned off. To order these adapters, visit the Watersport Innovations website at [www.watersportinnovations.com](http://www.watersportinnovations.com).



**CAUTION:** *The Boost Box must be connected to a circuit protected by a circuit breaker or fuse rated at 10 amps or less. Do not wire directly to the battery. The Control Unit is protected by a self-healing fuse and will restart after cooling down in the event of short-circuit. The external power cable wiring is not protected by the Control Unit fuse and may overheat or cause a fire in the event of short-circuit, unless properly protected by a fuse or circuit breaker.*

### Step 3 – Stereo Control Cable Installation

The Stereo Control Cable plugs into the back of the Control Unit, and into the back of the MB Quart stereo head unit. Both ends of the cable are male 3.5mm jacks and the ends of the cable are labeled. The proper ends must be connected to the Control Unit and the stereo. ***The Boost Box will not function if the Control Cable is reversed.***

If there are additional MB Quart remotes (not included) to be connected to the 3.5mm jack on the rear of the stereo head unit, then use the optional Y adapter. Plug the Boost Box and the MB Quart remotes into the female ends of the Y adapter, and plug the male end of the Y adapter into the stereo head unit. (See figure on page 1)



**IMPORTANT NOTE:** *The Stereo Control Cable end labeled "Boost Box" MUST be plugged into the back of the Boost Box Control Unit. If the optional Y adapter is used, the end of the Stereo Control Cable labeled "Stereo" must be plugged into the Y adapter.*

The Boost Box is designed to adjust the stereo volume when pulling riders. When installed properly, the device sends remote control commands to the boat's stereo. The Boost Box automatically increases stereo volume when it senses six seconds of continuous acceleration, and automatically decreases volume when the boat slows to pick up a fallen rider.

### CONTROL UNIT



**NORMAL OPERATION:** The driver can select the amount of the rise in volume by adjusting the selector knob on the front of the Control Unit. To increase the amount of volume boost, turn the knob clockwise. To decrease the amount of volume boost, turn the knob counter-clockwise. Maximum volume boost is indicated on the control face (Max Boost).



**CAUTION:** *The Boost Box can produce major changes in stereo volume. Do not set the control unit selector knob to a position past the mid-point until the unit has been tested in conjunction with the boat's stereo. Undesirable or damaging volume levels may occur! Some stereo brands may require operation at higher levels.*

The red LED on the front of the Control Unit will illuminate when the unit is on and functioning. The LED will flicker when the Boost Box is changing the stereo volume (increasing or decreasing).

To turn the unit off, simply turn the volume control knob to the off position. The LED will turn off and the unit will enter a power-saving mode. The boat's stereo will continue to function normally.

**CALIBRATION:** The Control Unit automatically calibrates (resets) its internal sensors every time it is turned on. This precisely calibrates the sensors to the boat's level position in the water.

**To calibrate the Boost Box:**

1. Ensure the boat is in flat water with no rolling waves.
2. Turn the unit on and ensure the LED is steadily illuminated for 2 seconds.
3. Rotate the selector knob all the way to the off position (LED should go out) and then rotate clockwise until the LED begins to flash.
4. The LED will flash slowly, then more quickly. When the LED is steadily illuminated, the Control Unit is successfully calibrated.

The Control Unit has an internal memory circuit and will remain calibrated when the boat power is switched off or if the unit is unplugged. The unit will re-calibrate only when the selector knob is rotated off and then turned back on.



**IMPORTANT NOTE:** *For best performance, re-calibrate the unit after adding or removing significant amounts of ballast from the boat, as this may change the way the boat sits in the water.*

Do not turn the Boost Box on when the boat is moving or is in rough water. The Control Unit will improperly reset its calibration, and the system will not function properly.

Below are some possible conditions and solutions.

CONDITION	SOLUTION
<b>Unit will not turn on.</b>	Check to ensure Power Cable is firmly plugged into Control Unit. Ensure power cable is properly wired to battery's 12-volt DC power.
<b>Unit turns on, but boat volume does not change when boat pulls a rider and LED does not flash.</b>	The Control Unit is not sensing the boat's acceleration. It is either mounted improperly (see pages 2-3, Installation) or needs to be re-calibrated. To re-calibrate, wait until the boat is in relatively flat water (no rolling waves) and turn the unit off and back on.
<b>LED flashes when boat pulls a rider, but stereo volume does not increase.</b>	Ensure Stereo Control Cable is installed correctly. Check the connection to the Control Unit, and ensure the male end of the Control Cable is firmly plugged into the stereo.
<b>Volume is slow to return to normal volume when boat slows down.</b>	Unit may need to be re-calibrated. Turn the unit off and back on. <i>This should be necessary only if the unit was turned on in rough water or if the boat's load changes significantly (loading fat-sacks, etc.).</i>
<b>Boat stereo volume is increased when boat is not pulling a rider.</b>	Unit may need to be re-calibrated. Turn the unit off and back on. <i>This should be necessary only if the unit was turned on in rough water or if the boat's load changes significantly (loading fat-sacks, etc.).</i>

**NOTE:** *The Boost Box is intended for use controlling the boat stereo when pulling waterskiers, wakeboarders, or wakesurfers. Because the Boost Box works by sensing the boat's acceleration and deceleration, it may turn down inadvertently if used during aggressive deceleration when towing tube riders. This is normal and is a limitation of the system.*

If you are still having trouble with your Boost Box, please call Watersport Innovations technical support at (808) 809-9909 or send an email to: [support@watersportinnovations.com](mailto:support@watersportinnovations.com)

### IMPORTANT – YOU MUST READ THIS

The Boost Box is a high performance mechanism designed solely for use with water ski and wakeboard boats operating under ideal, calm conditions utilizing a spotter and all other safety crew and requirements of tournament water skiing. The Boost Box should not be used for any other purpose or under any other conditions.

**YOUR USE OF YOUR BOOST BOX AUTOMATIC VOLUME CONTROLLER IS CONDITIONAL UPON YOUR ASSUMING ALL RISKS, LOSSES AND DANGERS RELATING TO USE OF THIS DEVICE.**

Both purchaser and/or anyone utilizing the Boost Box acknowledges that their purchase and/or use of this device is conditional upon purchasers and users releasing and forever discharging Watersport Innovations, Inc., its directors, officers, employees, agents and/or dealers **from any and all liability for personal injury or property loss** and from any other claims, demands, losses or causes of action, whether occurring prior to, during, or subsequent to or directly or indirectly connected with the use of the Boost Box device **and whether caused by any persons negligence or otherwise.**

The purchaser hereby agrees to inform any subsequent purchasers or anyone using the Boost Box of the conditions of this Release of Liability - Assumption of Risk agreement. It is agreed that there shall be absolutely no alterations to this agreement whether by implication or otherwise.



**CAUTION:** *The Boost Box must be connected to a circuit protected by a circuit breaker or fuse rated at 10 amps or less. Do not wire directly to the battery. The Control Unit is protected by a self-healing fuse and will restart after cooling down in the event of short-circuit. The external Power Cable wiring is not protected by the Control Unit fuse and may overheat or cause a fire in the event of short-circuit, unless properly protected by a fuse or circuit breaker.*



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## LIMITED WARRANTY

During the first 12 months from date of original retail purchase, any Boost Box component that fails due to defects in materials or workmanship will be repaired or replaced at the option of Watersport Innovations at no charge.

Warranty excludes components damaged by improper installation or improper use of boat. The Control Unit is water resistant, but not waterproof and should never be submerged.

Please include a copy of the original sales receipt with any warranty claim.

### **Warranty Service:**

1. If your Boost Box was installed by the factory, any warranty issues should be addressed to your manufacturer's authorized service center.
2. If your Boost Box was installed by a dealer, you may contact your dealer directly or initiate a warranty claim directly with Watersport Innovations at your choice.
3. If you purchased your Boost Box directly from the Company, contact us at the number or address below.

### **Warranty Service / Technical Support WATERSPORT INNOVATIONS**

P.O. Box 772

LaFollette, TN 37766

(888) 809-9909

[support@watersportinnovations.com](mailto:support@watersportinnovations.com)



ENJOY THE RIDE!