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## European Union Declaration of Conformity

We      ROCK CITY MARINE LLC  
          636 Kensington  
          Ferndale Michigan  
          USA

Declare under our own responsibility that the product ROCKBOX AMPD

To which this declaration refers conforms with the relevant standards or other standardising documents:

EN 300 220-2 V2.1.1 (2006-04)  
EN 301 489-03 V1.4.1 (2002-08)  
EN 55022:1998  
EN 60950:2001 AND A11:2004 (1ST EDITION)

According to the regulations in:

89/336/EEC for EMC  
1999/5/EC for R&TTE  
72/23/EEC for LV AS AMENDED BY 93/68/EEC BASED ON USING HARMONIZED STANDARDS

The ROCKBOX AMPD does not contain any user serviceable components.

The ROCKBOX AMPD is RoHS compliant.

The above named company keeps all records and will confirm the compliance to the standards.

  
Christopher M. Jablonski, Authorized Agent

Wyandotte, 03/21/2008

## RockBox AMPD Description

- The RockBox AMPD is a mobile GPS based performance indicator, it can be temporarily mounted on any flat surface to provide speed, VMG, heading, and/or location information.

## Important Warnings

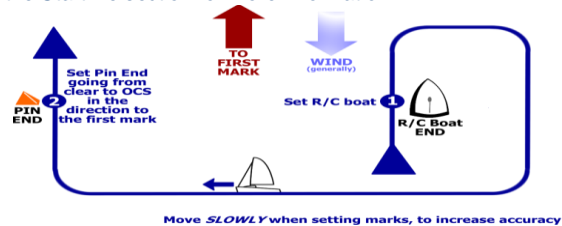
- The RockBox AMPD is not to be used as a primary source for navigational information
- The RockBox AMPD is not to be used in motorized vehicles

## Important Information

- Never open your RockBox case when it is wet or there is a possibility that water can get onto the internal components
  - Always dry the case before opening to change batteries.
  - Change your batteries in an area safe from rain, spray, and rogue waves.
- Remove the batteries if you will not be using your RockBox for an extended time
  - The internal touch sensor is always on when batteries are present, this will discharge your batteries even without use. Also, removing the batteries eliminates the possibility of electrolytic corrosion on the circuit board.

## What's new in firmware 3.5

- Button lock
  - Countdown functions now have an automatic button lock, to prevent accidental stopping or changing of the countdown timer
  - See the Countdown section for more information
- Countdown sync and change
  - In the countdown functions, you can now sync the timer to the nearest whole minute with a single button click, and also easily go back to the timer set level to make larger changes to the timer
  - See the Countdown section for more information
- Startline distance changes
  - You can reset one or both of the line ends without having to shutdown the RockBox
  - A plus or minus symbol is shown to tell you which side of the line you are on
  - The distance to the line is whole numbers only now, eliminating confusion with reading tenths
  - The marks for either end of the line are now labeled R/C end and Pin end
  - Move Away/Closer text added to Startline tuning screen
  - Distance to line is now shown before timer is set in Startline/Countdown doublevision
  - Logic added to automatically change function X distance OCS of line
  - Startline marks setting sequence changed to avoid traffic at the marks
  - See the Startline section for more information



- New Commander software
  - Added full reset capability as well as some debugging functionality to help us fix issues faster in the future

## RockBox Features

- Easy to use menu based system for selecting functions
- Remote control!
- Huge graphic screen
- Huge numbers
- Scrolling histogram graphs
- Tactical waypoint capability
- 34 functions
- Data logging
- USB port to transfer data to a PC using RockBox Commander software
- Twice the battery life of other systems
- Runs on easy to replace and inexpensive AA batteries (alkaline or rechargeable)
- Upgradeable firmware
- High performance WAAS enabled Sirf III chipset GPS with tuned antenna for maximum signal reception
- Modular design with manufacturer serviceable replacement parts available

## Warranty

- The RockBox AMPD has a twenty four (24) month limited warranty from the date of purchase, details of the limited warranty are shown at the end of the instructions

## Disposal after end of using life

- Batteries and electronic devices of all kinds must not be disposed through regular household waste disposal but should be turned into a collection point for proper recycling. Please check with your local requirements



## Powering up your RockBox

- Rub the outside of the case near the "R" in RockBox on the side decal
  - There is a sensor inside that will detect your finger

OR

- Open the case and press the white button marked "ON"

## Quick Start

- Navigate through the menus by pressing UP ▲, DOWN ▼, LEFT ◀, and RIGHT ▶
- When the function you want to use is shown, press MIDDLE ● to start that function
- Press ● to return to the menu system
- **FUNCTION TOGGLE:** While using most functions, you can press ◀ to toggle back and forth to the last function used and the current function

## Powering down your RockBox

- Press ▲ or ▼ to navigate to the POWER DOWN menu screen
- Press ◀ or ▶ to shut off the RockBox
- Press ● to verify this is what you want to do

*NOTE: Under some conditions the RockBox will restart on its own, this is due to the touch sensor getting a false reading. If this happens, no action is necessary. The RockBox will automatically turn off after 15 minutes on the main select function screen with no activity and once the false reading has cleared.*

## Changing the batteries in your RockBox

- Use the supplied screwdriver or any #0 Phillips screwdriver to remove the 4 screws on the rear of the RockBox
- Touch a nearby piece of metal (bolt, mast, etc...) to remove any static charge in your body
- Remove the rear cover
- Remove the batteries and replace
- Inspect the gasket for damage
- Reinstall the rear cover
- Replace and tighten the 4 screws until they just touch the rear cover
- Tighten each screw an additional 1/8 turn (**do not over tighten**)

*NOTE: Double check the first screw you tightened, as it may have loosened as the gasket was compressed*

## Acquiring a signal

- Before the RockBox can display information, a valid GPS signal must be received
- When you turn your RockBox on, it immediately begins to acquire a signal
- A red light will be visible on the internal GPS, it will be solid while acquiring and begin to flash once a valid signal is received
- If you select a function before a signal is acquired you will see the "finding satellites" screen until a valid signal is received, once this happens the RockBox will automatically go to the function you selected

*TIP: When you turn your RockBox on for the first time, it may take 10-15 minutes to acquire a signal. After this first acquisition, it will take at most a few minutes, usually a few seconds. The further you are from where you turned the RockBox off, the longer the acquisition time will be*

## Remote control protection

- **Rain and spray:** No additional protection is necessary for your remote control
- **Potential immersion:** Protect your remote control by securing it inside the included waterproof bag

*TIP: For a dry ride on a keelboat you'll be OK, for dinghies where there is the possibility that you will go swimming with the remote control, use the waterproof bag*

*TIP: Remove the carabineer from the remote before placing it in the bag, attach the carabineer to the plastic hole in the top of the bag and attach both to you!*

## Using the RockBox remote control

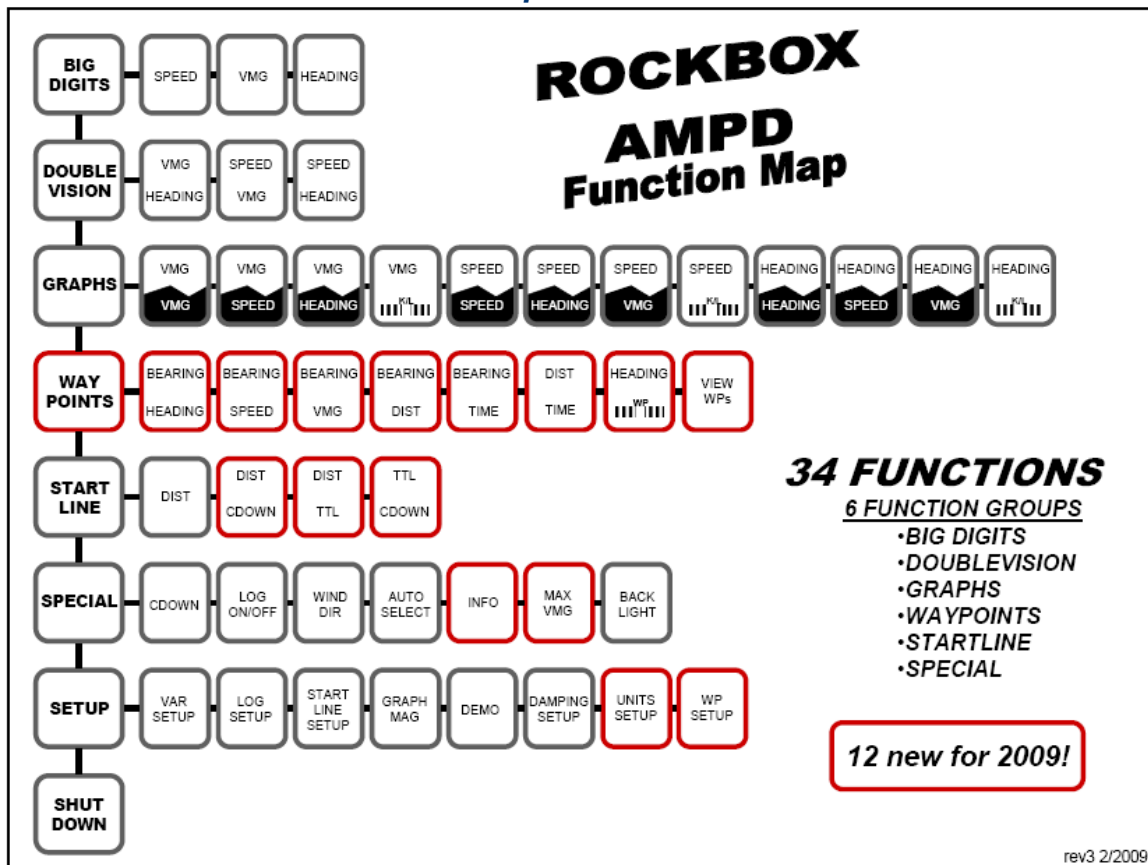
- Press a button and hold until you see the screen change, release immediately

*TIP: The RockBox has a delay built into the remote control logic. This is to prevent accidental changes in case the remote control is bumped. Always press AND hold the button when using the remote*

## Navigating and selecting functions

- Using either the remote control or the buttons located on the main circuit board, press ▲ or ▼ to navigate through the main function type menu
  - **Big Digits** – The largest digits for easy viewing
  - **DoubleVision** – View two functions at the same time
  - **Graphs** – View a function with another graphed below
  - **WP** – Waypoint functions
  - **Startline** – Starting line functions
  - **Special** – Special functions; Timer, maxVMG, Wind Direction, etc...
  - **Setup** – RockBox Settings
  - **Power Down**
- At the main menu for the type of function desired, press ◀ or ▶ to display the desired function
- Press the ● button to use that function

## RockBox AMPD function menu map



## Use of each function

### Big Digits



#### Big Digits – Speed



Displays the current speed in knots, using large digits

- Press ● to select and use the function
- Press ● to return the select function menu
- Press ◀ to toggle the display to the previous function
- Press ▶ to save a new waypoint at your current location

*TIP: When (if) you get above 10 knots, a third digit for the tens place will appear where the trend arrows are. You'll still get arrows, just smaller ones above the number*

#### Big Digits – VMG



Displays the current VMG in knots, using large digits

- Press ● to select and use the function
- Press ▲ or ▼ to change the heading used to calculate VMG
- Once the desired heading is shown, press ● to return to the VMG display

*TIP: The VMG heading is automatically set to your current heading the first time a VMG function is selected*

- Press ● to return the select function menu
- Press ◀ to toggle the display to the previous function
- Press ▶ to save a new waypoint at your current location

*TIP: When (if) you get above 10 knots, a third digit for the tens place will appear where the trend arrows are. You'll still get arrows, just smaller ones above the number*

#### Big Digits – Heading



Displays the current heading in degrees, using large digits

- Press ● to select and use the function
- Press ● to return the select function menu
- Press ◀ to toggle the display to the previous function
- Press ▶ to save a new waypoint at your current location

*TIP: By default, the RockBox, like all GPS units, displays heading in degrees true. To see your heading in degrees magnet, set your local magnetic variance in Setup-Variance*

*TIP: To find your local variance, use this link: <http://www.rockcitymarine.com/RBplusDECLINATION.html>*

## DoubleVision



### DoubleVision - VMG/Heading



Displays the current VMG in knots and current heading in degrees at the same time, using medium digits

- Press ● to select and use the function
- Press ▲ or ▼ to change the heading used to calculate VMG
  - Once the desired heading is shown, press ● to return to the VMG display

*TIP: The VMG heading is automatically set to your current heading the first time a VMG function is selected*

- Press ● to return the select function menu
- Press ◀ to toggle the display to the previous function
- Press ▶ to save a new waypoint at your current location

### DoubleVision - Speed/VMG



Displays the current speed in knots and current VMG in knots at the same time, using medium digits

- Press ● to select and use the function
- Press ▲ or ▼ to change the heading used to calculate VMG
  - Once the desired heading is shown, press ● to return to the VMG display

*TIP: The VMG heading is automatically set to your current heading the first time a VMG function is selected*

- Press ◀ to toggle the display to the previous function
- Press ● to return the select function menu
- Press ▶ to save a new waypoint at your current location

### DoubleVision - Speed/Heading



Displays the current speed in knots and current heading in degrees at the same time, using medium digits

- Press ● to select and use the function
- Press ◀ to toggle the display to the previous function
- Press ▶ to save a new waypoint at your current location
- Press ● to return the select function menu

## Graphs



### Graphs - VMG/VMG graph



Displays the current VMG in knots and a graph of VMG below

- Press ● to select and use the function
- Press ▲ or ▼ to change the heading used to calculate VMG
- Once the desired heading is shown, press ● to return to the VMG display

*TIP: The VMG heading is automatically set to your current heading the first time a VMG function is selected*

- Press ◀ to toggle the display to the previous function
- Press ▶ to save a new waypoint at your current location
- Press ● to return the select function menu

### Graphs - VMG/Speed graph



Displays the current VMG in knots and a graph of speed below

- Press ● to select and use the function
- Press ▲ or ▼ to change the heading used to calculate VMG
- Once the desired heading is shown, press ● to return to the VMG display

*TIP: The VMG heading is automatically set to your current heading the first time a VMG function is selected*

- Press ◀ to toggle the display to the previous function
- Press ▶ to save a new waypoint at your current location
- Press ● to return the select function menu

### Graphs - VMG/Heading graph



Displays the current VMG in knots and a graph of heading below

- Press ● to select and use the function
- Press ▲ or ▼ to change the heading used to calculate VMG
- Once the desired heading is shown, press ● to return to the VMG display

*TIP: The VMG heading is automatically set to your current heading the first time a VMG function is selected*

- Press ◀ to toggle the display to the previous function
- Press ▶ to save a new waypoint at your current location
- Press ● to return the select function menu

### Graphs - VMG/Knock-Lift graph



Displays the current VMG in knots and a bar graph showing knock/lift below

- Press ● to select and use the function
- Press ▲ or ▼ to change the heading used to calculate VMG
- Once the desired heading is shown, press ● to return to the VMG display

*TIP: The VMG heading is automatically set to your current heading the first time a VMG function is selected*

- Press ▶ to set the base heading for the knock-lift graph
- NOTE: Until the base heading is set, the lower screen will not display a graph
- Press ◀ to toggle the display to the previous function
- Press ▶ to save a new waypoint at your current location
- Press ● to return the select function menu

*Tip: the knock-lift graph can also be used at night to keep you steering a straight course when there are no visual references available. Simply lock the base heading to your desired course and keep the graph in the middle*

### Graphs - Speed/Speed graph



Displays the current speed in knots and a graph of speed below

- Press ● to select and use the function
- Press ◀ to toggle the display to the previous function
- Press ▶ to save a new waypoint at your current location
- Press ● to return the select function menu

### Graphs - Speed/Heading graph



Displays the current speed in knots and a graph of heading below

- Press ● to select and use the function
- Press ◀ to toggle the display to the previous function
- Press ▶ to save a new waypoint at your current location
- Press ● to return the select function menu

### Graphs - Speed/VMG graph



Displays the current speed in knots and a graph of VMG below

- Press ● to select and use the function
- Press ▲ or ▼ to change the heading used to calculate VMG
- Once the desired heading is shown, press ● to return to the VMG display

*TIP: The VMG heading is automatically set to your current heading the first time a VMG function is selected*

- Press ◀ to toggle the display to the previous function
- Press ▶ to save a new waypoint at your current location
- Press ● to return the select function menu

### Graphs - Speed/Knock-Lift graph



Displays the current speed in knots and a bar graph showing knock/lift below

- Press ● to select and use the function
- Press ▶ to set the base heading for the knock-lift graph
- NOTE: Until the base heading is set, the lower screen will be blank
- Press ◀ to toggle the display to the previous function
- Press ▶ to save a new waypoint at your current location
- Press ● to return the select function menu

*Tip: the knocklift graph can also be used at night to keep you steering a straight course when there are no visual references available. Simply lock the base heading to your desired course and keep the graph in the middle*

### Graphs - Heading/Heading graph



Displays the current heading in degrees and a graph of heading below

- Press ● to select and use the function
- Press ● to return the select function menu
- Press ◀ to toggle the display to the previous function

### Graphs - Heading/Speed graph



Displays the current heading in degrees and a graph of speed below

- Press ● to select and use the function
- Press ◀ to toggle the display to the previous function
- Press ▶ to save a new waypoint at your current location
- Press ● to return the select function menu

### Graphs - Heading/VMG graph



Displays the current heading in degrees and a graph of VMG below

- Press ● to select and use the function
- Press ▲ or ▼ to change the heading used to calculate VMG
- Once the desired heading is shown, press ● to return to the VMG display
- *TIP: The VMG heading is automatically set to your current heading the first time a VMG function is selected*
- Press ◀ to toggle the display to the previous function
- Press ▶ to save a new waypoint at your current location
- Press ● to return the select function menu

### Graphs - Heading/Knock-Lift graph



Displays the current heading in degrees and a bar graph showing knock/lift below

- Press ● to select and use the function
- Press ▶ to set the base heading for the knock-lift graph
- NOTE: Until the base heading is set, the lower screen will be blank
- *TIP: The RockBox will also automatically set the base heading when it is stable, however it can be changed manually at any time*
- Press ◀ to toggle the display to the previous function
- Press ▶ to save a new waypoint at your current location
- Press ● to return the select function menu

*Tip: the knocklift graph can also be used at night to keep you steering a straight course when there are no visual references available. Simply lock the base heading to your desired course and keep the graph in the middle*

## WP – Waypoint Functions



### Saving Waypoints while on the water

- In all functions except those with the countdown timer, press ► to save a waypoint of your current location
- The waypoint number will be displayed on the screen briefly for your reference as it is saved
- An F will be displayed if all waypoints are full

### WP – Current heading and bearing to WP



Displays the bearing to the selected waypoint and the current heading

- Press ● to select and use the function
- Press ▲ or ▼ to select a waypoint to use
  - Press ● to return
- Press ► to save a new waypoint at your current location
- Press ● to return the select function menu

*TIP: Bearing to WP will display a T when set to true, and a R when set to relative bearing. See the SetUp instructions for more information*

### WP – Current speed and bearing to WP



Displays the bearing to the selected waypoint and the current speed

- Press ● to select and use the function
- Press ▲ or ▼ to select a waypoint to use
  - Press ● to return
- Press ► to save a new waypoint at your current location
- Press ● to return the select function menu

*TIP: Bearing to WP will display a T when set to true, and a R when set to relative bearing. See the SetUp instructions for more information*

### WP – WP VMG and Bearing to WP



Displays the bearing to the selected waypoint and the current VMG

- Press ● to select and use the function
- Press ▲ or ▼ to select a waypoint to use
  - Press ● to return
- Press ► to save a new waypoint at your current location
- Press ● to return the select function menu

*TIP: Bearing to WP will display a T when set to true, and a R when set to relative bearing. See the SetUp instructions for more information*

### WP – Bearing to WP and distance to WP



Displays the bearing and the distance to the selected waypoint

- Press ● to select and use the function
- Press ▲ or ▼ to select a waypoint to use
  - Press ● to return
- Press ► to save a new waypoint at your current location
- Press ● to return the select function menu

*TIP: Select the units to use for distance in the SETUP – UNITS function*

### WP – Bearing to WP and time to WP (TTWP)



Displays the bearing and the time to the selected waypoint

- Press ● to select and use the function
- Press ▲ or ▼ to select a waypoint to use
  - Press MIDDLE to return
- Press ► to save a new waypoint at your current location
- Press ● to return the select function menu

### WP – Distance to WP and time to WP (TTWP)



Displays the distance and the time to the selected waypoint

- Press ● to select and use the function
- Press ▲ or ▼ to select a waypoint to use
  - Press MIDDLE to return
- Press ► to save a new waypoint at your current location
- Press ● to return the select function menu

*TIP: Select the units to use for distance in the SETUP – UNITS function*

### WP – Heading and WP lift/knock graph



Displays the current heading and a bar graph showing whether your current heading is higher or lower than that of the bearing to the waypoint

- Press ● to select and use the function
- Press ▲ or ▼ to select a waypoint to use
  - Press MIDDLE to return
- Press ► to save a new waypoint at your current location
- Press ● to return the select function menu

### WP – WP Info



Displays waypoint information and allows deletion of unused waypoints

- Press ● to select and use the function
- Press ▲ or ▼ to select a waypoint
- Press ► to delete a waypoint
- Press ● to return the select function menu

*TIP: Waypoints with valid data will display an F next to the waypoint number*

## Startline Functions



### Startline – Startline distance

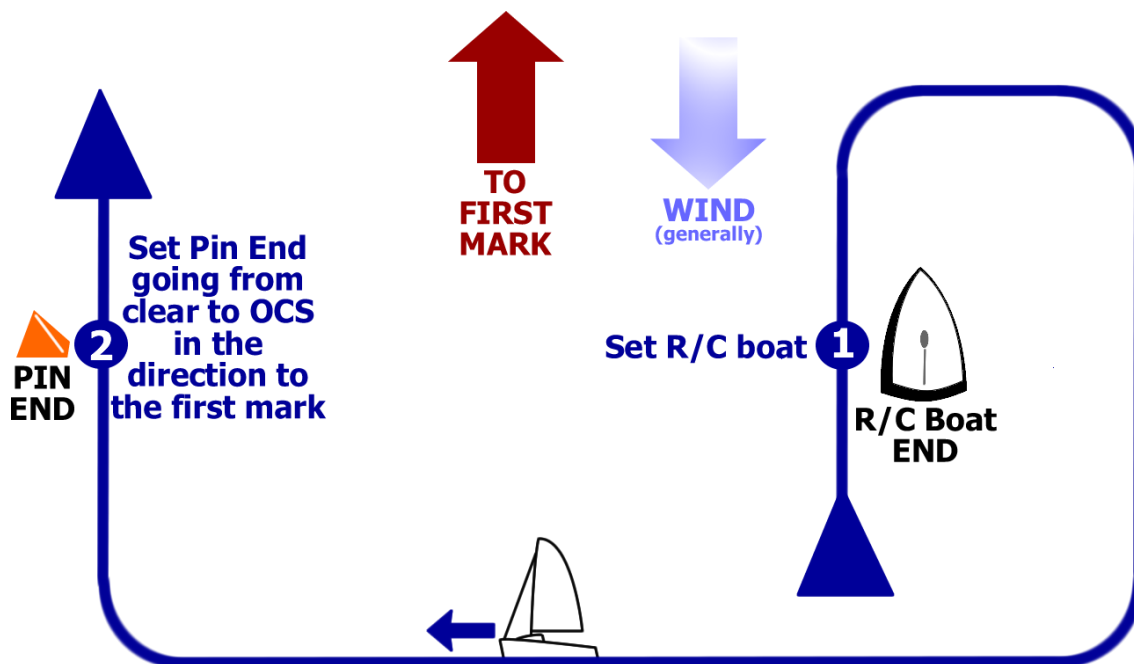


Displays the distance to the starting line  
Startline distance resolution: 1 meter or foot

- Press ● to select and use the function
- Press ▲ to set the R/C Boat end of the line
- Press ▼ to set the Pin End of the line
- Press ● to return the select function menu

Side of line symbol:

- + = OCS, - = Not OCS



**Move *SLOWLY* when setting marks, to increase accuracy!**

### Tuning the distance

- While on a practice run to the starting line, if you notice that the distance to the starting line is offset, the RockBox allows you to tune the distance rather than having to reset both marks.
- Press ▲ if you are at the starting line and the distance is showing greater than zero
- Enter the amount that it is off by
- Press ● to return to the starting line distance display
- Press ▼ if you are not at the starting line yet and the distance is showing zero
- Enter the amount that it is off by
- Press ● to return to the starting line distance display

*TIP:* Next to the distance, a T will be display when set to true and a P will be displayed when set to perpendicular distance

*TIP:* If a distance is set in the Special: AutoChange menu, at the distance set the function will automatically change to the last function used before you selected the Startline function

**Startline – Startline distance and countdown timer**



Displays the distance to the starting line and the countdown timer concurrently  
Resolution: 1 meter or foot

- Press ● to select and use the function
- Press ▲ to set the first mark (as close to one end of the starting line as possible)
- Press ▼ to set the second mark (as close to one end of the starting line as possible)
- Press ▲ or ▼ to set the count down timer duration
- Press ● to start the timer and view startline distance
- Press and hold ● whenever the seconds digit of the countdown time is a 1 to return to the function menu

*NOTE: To ensure the integrity of the count down timer, startline tuning is not available in this function*

*TIP: Next to the distance, a T will be display when set to true and a P will be displayed when set to perpendicular distance*

*TIP: If a distance is set in the Special: AutoChange menu, at the distance set the function will automatically change to the last function used before you selected the Startline function*

Button lock:

Once the timer is started, the buttons will automatically lock to prevent accidental changing of the timer value

- Press ◀ then ▶ to unlock the buttons
  - L = Prelock/Preunlock (first button in the sequence)
  - Ⓛ = Buttons locked indicator

Timer Sync: (use while the buttons are unlocked)

- Press ▲ to sync time to nearest whole minute
- Press ▲ then immediately press ▼ to get back to set timer

Side of line symbol:

- + = OCS, - = Not OCS

**Startline – Startline distance and time to line (TTL)**



Displays the distance to the starting line and the time to the line concurrently

Startline distance resolution: 1 meter or foot

- Press ● to select and use the function
- Press ▲ to set the first mark (as close to one end of the starting line as possible)
- Press ▼ to set the second mark (as close to one end of the starting line as possible)
- Press ● to return to the function menu

*NOTE: Startline tuning is not available in this function*

*TIP: The time to line is based on your current speed, whether away or toward the startline. Use this function while going away from the startline to determine when to tack and make your run to the start, and use while heading toward the startline to estimate when you will arrive.*

*TIP: Next to the distance, a T will be display when set to true and a P will be displayed when set to perpendicular distance*

*TIP: If a distance is set in the Special: AutoChange menu, at the distance set the function will automatically change to the last function used before you selected the Startline function*

Side of line symbol:

- + = OCS, - = Not OCS

**Startline – Time to line (TTL) and countdown timer**



Displays the time to the line and the countdown timer concurrently

Startline distance resolution: 1 meter or foot

- Press ● to select and use the function
- Press ▲ to set the first mark (as close to one end of the starting line as possible)
- Press ▼ to set the second mark (as close to one end of the starting line as possible)
- Press ▲ or ▼ to set the count down timer duration
- Press ● to start the timer and view the time to the line
- Press and hold ● whenever the seconds digit of the countdown time is a 1 to return to the function menu

*TIP: The time to line is based on your current speed, whether away or toward the startline. Used while going away from the startline to determine when to tack and make your run to the start, and use while heading toward the startline to estimate when you will arrive.*

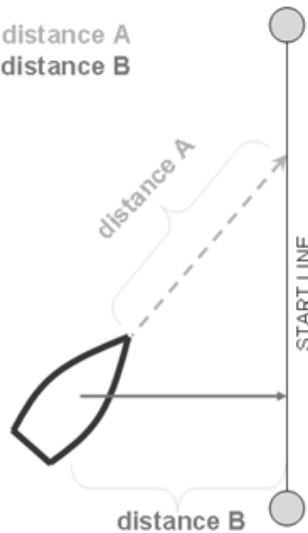
*TIP: Synchronize the TTL and countdown timer for a perfect start! (Assuming you are traveling at a perfectly constant speed...)*

**Your RockBox will display**

**With S/L type set to TRUE: distance A**

**With S/L type set to PERP: distance B**

NOTE: To ensure TRUE distance displays correctly, always make sure you have your yacht's J dimension entered in StartLine settings



**When to use each type:**

**TRUE:** when you anticipate your run to the line will be without large amounts of maneuvering. This distance will change with changes in course, however it is a more accurate description of the distance from your bow to the line.

**PERP:** When you anticipate a lot of maneuvering prior to the start, as this distance does not depend on your heading and will provide a more consistent distance.

**Button lock:**

Once the timer is started, the buttons will automatically lock to prevent accidental changing of the timer value

- Press ◀ then ▶ to unlock the buttons
  - L = Prelock/Preunlock (first button in the sequence)
  - Ⓞ = Buttons locked indicator

**Timer Sync: (use while the buttons are unlocked)**

- Press ▲ to sync time to nearest whole minute
- Press ▲ then immediately press ▼ to get back to set timer

## Special



### Special – Countdown



- Press ● to select and use the function
- Press ▲ or ▼ to select the count down duration
- Press ● to start the timer
- Once the timer has started:
  - Press ▲ to add 1 minute to the timer
  - Press ▼ to subtract 1 minute from the timer
  - Press ● to cancel the countdown and return to the function menu
  - When the timer equals zero the screen with flash and then automatically go to the last function used prior to the countdown timer

Button lock:

Once the timer is started, the buttons will automatically lock to prevent accidental changing of the timer value

- Press ◀ then ▶ to unlock the buttons
  - L = Prelock/Preunlock (first button in the sequence)
  - Ⓞ = Buttons locked indicator

Timer Sync: (use while the buttons are unlocked)

- Press ▲ to sync time to nearest whole minute
- Press ▲ then immediately press ▼ to get back to set timer

### Special - DataLOG on/off



- Press ● to select this function
- Press ▲ or ▼ to select On, Off, or Auto
- Press ● to return to the function menu

*TIP: Auto setting is used in conjunction with the countdown timer. When set to Auto, the data logging will begin as soon as the timer has reached zero.*

### Special – Wind direction



Calculates the wind direction based on two close hauled headings, eliminating the need to sail head to wind

- Press ● to select this function
- Sail a close hauled tack, current heading will be shown on the lower portion of the screen
- When the screen flashes and says "TACK", tack to the opposite close hauled tack
- Sail a close hauled tack, current heading will be shown on the lower portion of the screen
- Once your heading stabilizes, the direction the wind is coming from will be shown on the upper portion of the screen

### Special – Auto function change



- Press ◀ or ▶ to turn heading base AutoChange ON
  - Automatically toggles between two function based on the difference between the current heading and the VMG heading
  - The first function you choose after turning auto-change ON will be shown when the current heading is within 90 degrees to either side of the VMG heading
  - The second function you choose will be shown when the current heading is greater than 90 degrees from either side of the VMG heading
- Set a StartLine change distance using the ▲ or ▼ buttons
  - This is the distance past the starting line that the RockBox will automatically change to the last function used before the Startline function

### Special – Info screen



Displays the current:

- Latitude
- Longitude
- Distance traveled
- Maximum speed
- Maximum speed over 20 seconds
- Press ▲ to reset all values
- Press ● to return the select function menu

### Special – Max VMG



Displays the current heading on the bottom, and the heading resulting in the maximum VMG on the top

- Press ● to select this function
- Press ▲ or ▼ to change the VMG heading
- Press ● to return the select function menu

### Special – Backlight



- Press ● to select this function
- Press ▲ or ▼ to change the backlight level
- Press ● to save that level and return to the select function menu

## Setup



### Setup – Variance



- Press ● to select this function
- Press ◀ or ▶ to change the variance to East or West
- Press ▲ or ▼ to set the amount of variance, in degrees
- Press ● to save and return to the select function menu

TIP: To find your local variance, use this link: <http://www.rockcitymarine.com/RBplusDECLINATION.html>

### Setup – DataLog



- Press ● to select this function
- Press ◀ or ▶ to change the rate units to seconds or minutes
- Press ▲ or ▼ to select the rate data will be saved at
- Press ● to save and return to the select function menu

### Setup – Startline



- Press ● to select this function
- Press ◀ or ▶ to select the startline distance type:
  - PERP: The distance from the startline to your RockBox, always perpendicular to the startline
  - TRUE: The distance from your RockBox to the startline, along a line parallel with your current heading
- Press ▲ or ▼ to enter the J dimension of your boat in the same units as selected in SETUP-UNITS

TIP: The J dimension is used when type is set to TRUE, it is the distance from your bow to the location of the RockBox on your boat. (This will equal the J dimension if you have your RockBox mounted to the mast)

- Press ● to save and return to the select function menu

### Setup - Graphs Magnification



- Press ● to toggle graph magnification on or off

OFF: The graphs will display from 0 to the maximum reading, automatically scaled

ON: the graphs will display only from the minimum reading to the maximum reading, allowing smaller changes to be viewed, automatically scaled

### Setup – Demo



- Press ● to toggle demo mode on or off

TIP: Demo mode feeds speed and heading data into your RockBox. This can be useful while getting familiar with the functions while indoors or not moving. Position data is not included in the demo data

### Setup – Damping



- Press ● to select this function
- Press ▲ or ▼ to set the damping rate
- Press ● to save and return to the select function menu

TIP: Setting the rate to 0 will turn damping off

TIP: Increasing the damping rate will smooth the readings

### Setup – Units



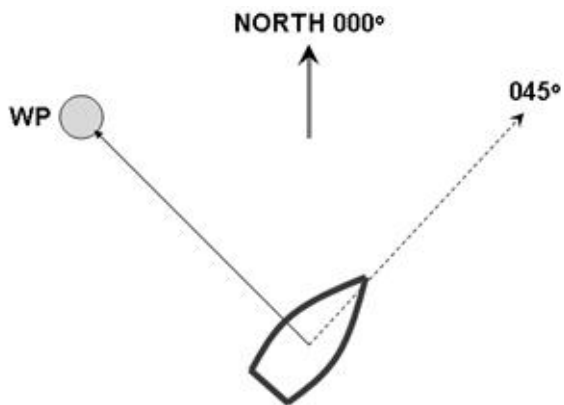
- Press **●** to select this function
- Press **◀** or **▶** to change the distance units to English (FT) or metric (M)
- Press **●** to save and return to the select function menu

### Setup – WP



- Press **●** to select this function
- Press **◀** or **▶** to change the waypoint bearing type
- Press **●** to save and return to the select function menu

TIP: REL is relative to your bow, TRUE is based on North = 0 degrees




**Your RockBox will display**  
With WP bearing set to TRUE: 315°  
With WP bearing set to REL: 90°

## Things to know about your RockBox

- Battery life is approximately 24 hours, usually more
- If you don't like the idea of throwing away alkaline batteries, the RockBox will run fine using rechargeable batteries, Look for batteries with over 2000 mAh capacity
- The battery life for the remote control is approximately 5 years, and it is replaceable
- If your remote is lost or damaged, it can easily be replaced. Contact us for details
- Duplicates of the remote buttons are located on the RockBox circuit board, you can still set your RockBox to your favorite function using the internal buttons
- As new functions and software improvements are added to the RockBox, you can update yours by using the RockBox Commander PC software to update the firmware

## Low Battery Indicator

- When you see the low battery symbol  in the upper right corner of the screen, you have approximately 3 hours of battery life left

## Using the internal buttons

- If your remote control is damaged or lost, you can still select functions by using the internal buttons mounted on the circuit board
- Use them just like the buttons on the remote control (◀▶▲▼●)
- Touch a nearby piece of metal (bolt, mast, etc...) to remove any static charge in your body before touching the internal buttons

## Remote control code learning

- If your remote control stops working, you can have it re-learn its unique code to communicate with your RockBox by following this procedure:
  - 1) Turn your RockBox on
  - 2) Take your remote and hold all four outside buttons (◀▶▲▼) down at the same time for approximately 2 to 3 seconds.
  - 3) Press the center button (●). You should be back up and functioning. If the remote did not relearn then repeat the process.

*NOTE: Be sure to perform steps 1 & 2 within approximately 10 seconds, as these first few seconds are when the two pieces begin to communicate with each other and can be retrained easily*

## Caring for your RockBox

- Avoid using harsh chemical cleaners on the RockBox, use mild soap and water to clean off the outside
- Keep an eye out for sand or other debris in the o-ring groove. It could cut or damage the seal and water could get in. Inspect the seal for damage whenever changing batteries
- Take the batteries out if you're not going to use it for a while, to prevent the batteries from draining and also prevent electrolytic corrosion on the circuit board
- Ground yourself out by touching something metal before changing batteries, if you shock something, it just might not work anymore...
- Only change your batteries in a dry place, away from rain, spray and rogue waves
- If you do get some water in the case, take the batteries out as fast as possible! then dry it out and let it sit for a few days with the case open, it may still work. Water will only damage the circuit board if electrical current is present



## Warranty Details

This Limited Warranty applies to the Rock City Marine LLC-branded hardware products sold by or leased from Rock City Marine LLC, its worldwide subsidiaries, affiliates, authorized resellers, or country distributors (collectively referred to in this Limited Warranty as "Rock City Marine LLC") with this Limited Warranty ("Rock City Marine LLC Product").

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### Warranty Period

The warranty period for this Rock City Marine LLC Product is twenty four (24) months from the date of product purchase. The Limited Warranty Period starts on the date of purchase or lease from Rock City Marine LLC. Your dated sales or delivery receipt, showing the date of purchase or lease of the product, is your proof of the purchase or lease date. You may be required to provide proof of purchase or lease as a condition of receiving warranty service.

### Warranty Coverage

Rock City Marine LLC warrants that the Rock City Marine LLC Product and all the internal components of the product that you have purchased or leased from Rock City Marine LLC are free from defects in materials or workmanship under normal use during the Limited Warranty Period. You are entitled to warranty service according to the terms and conditions of this document if a repair to your Rock City Marine LLC Product is required within the Limited Warranty Period. This Limited Warranty extends only to the original purchaser or lessee of this Rock City Marine LLC Product and is not transferable to anyone who obtains ownership or use of the Rock City Marine LLC Product from the original purchaser or lessee.

### Repair or Replacement

Rock City Marine LLC products are manufactured using new materials or new and used materials equivalent to new in performance and reliability. Spare parts may be new or equivalent to new. Spare parts are warranted to be free from defects in material or workmanship for 24 months or for the remainder of the Limited Warranty Period of the Rock City Marine LLC Product in which they are installed, whichever is longer.

During the Limited Warranty Period, Rock City Marine LLC will repair or replace the defective component parts or the Rock City Marine LLC Product. All component parts or hardware products removed under this Limited Warranty become the property of Rock City Marine LLC. The replacement part or product takes on either the Limited Warranty status of the removed part or product or the 24 month limited warranty of the spare part. In the unlikely event that your Rock City Marine LLC Product has a recurring failure, Rock City Marine LLC, at its discretion, may elect to provide you with a replacement unit of Rock City Marine LLC's choosing that is at least equivalent to your Rock City Marine LLC Product in hardware performance. Rock City Marine LLC reserves the right to elect, at its sole discretion, to give you a refund of your purchase price or lease payments (less interest) instead of a replacement. THIS IS YOUR EXCLUSIVE REMEDY FOR DEFECTIVE PRODUCTS. HOWEVER YOU MAY ALSO HAVE OTHER RIGHTS THAT MAY VARY FROM STATE TO STATE OR FROM COUNTRY TO COUNTRY.

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- (b) Any product from which the serial number has been removed or altered;
- (c) Cosmetic damage or ordinary wear and tear;
- (d) Damage or non-functionality that results from (i) failure to follow the instructions that came with the product; (ii) accident, misuse, abuse, or other external causes; (iii) operation outside the usage parameters stated in the then current user documentation for the product; or (iv) use of parts not manufactured or sold by Rock City Marine LLC; or
- (e) Damage or non-functionality due to modifications or service by anyone other than (i) Rock City Marine LLC, (ii) a Rock City Marine LLC authorized service provider, or (iii) your own installation of end-user replaceable Rock City Marine LLC or Rock City Marine LLC-approved parts.
- (f) Any products purchased outside of the United States, Canada or France.



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#### Software Technical Support

Software technical support is defined as assistance with questions and issues about the software that was either preinstalled by Rock City Marine LLC on the Rock City Marine LLC Product or that was included with the Rock City Marine LLC branded product at the time of your purchase or lease of the product. Technical support for software is available for the duration of your warranty period. Your dated sales or delivery receipt, showing the date of purchase or lease of the product, is your proof of the purchase or lease date. You may be required to provide proof of purchase or lease as a condition of receiving software technical support. After the first ninety (90) days, technical support for software that was either preinstalled by Rock City Marine LLC on the Rock City Marine LLC Product or included with the Rock City Marine LLC Product at the time of your purchase or lease of the product may be available for a fee.

#### Warranty Transfer to Another Country

Rock City Marine LLC is not responsible for any handling fees, tariffs, or import duties that may be incurred in transferring the Products. Products and software may be covered by export controls issued by the United States or other governments.

#### Contact Rock City Marine LLC

You may contact Rock City Marine LLC at [www.RockCityMarine.com](http://www.RockCityMarine.com). Current user documentation for Rock City Marine LLC Products is also available from this site.

## ***Revision History***

- 3.5 -Added changes for firmware 3.5
  - Button lock
  - Countdown sync and change
  - Startline distance changes
- 3.0 - Added waypoint instructions
- 2.0 - Added maxVMG, and startline instructions
- 1.2 - Added CE Declaration of Conformity
  - Added disposal instructions
  - Moved and bolded screw tightening instructions
- 1.1 - Added instructions for Heading AUTOCHANGE and AUTO WIND heading
- 1.0 - Initial Release