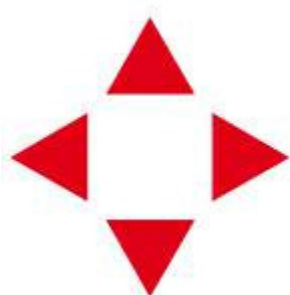


**Micro Device S.r.l.**



**YACHT  
CONTROLLER**

**User's manual**  
**Dual Band model**

**Version 1.1**

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**WARNING:**

THIS INSTRUCTION MANUAL MUST BE CAREFULLY REVIEWED PRIOR TO USING YACHT CONTROLLER DUAL BAND, IT IS THE OBLIGATION OF THE PURCHASER TO CONTACT THE SELLER OF THE YACHT CONTROLLER S.R.L. COMPANY, OR MICRO DEVICE S.R.L. DIRECTLY IN THE EVENT THERE IS ANY DOUBT WHATSOEVER CONCERNING THE USE OR OPERATION OF THE DEVICE.

MICRO DEVICE S.R.L. DO NOT TAKE ANY RESPONSIBILITY OR LIABILITY FOR INJURY OR DAMAGE TO PEOPLE OR PROPERTY DUE TO IMPROPER INSTALLATION MADE BY NOT QUALIFIED TECHNICIANS.

MICRO DEVICE S.R.L. DO NOT TAKE ANY RESPONSIBILITY OR LIABILITY FOR INJURY OR DAMAGE TO PEOPLE OR PROPERTY DUE TO IMPROPER USE OF THE YACHT CONTROLLER DUAL BAND DEVICE.

### **Safety Precautions**

This manual contains information highlighted by symbols, which must be followed for the safe and proper use of the Yacht Controller Dual Band.



**IMPORTANT:**

Important information regarding the proper use of the Yacht Controller.



**SUGGESTION:**

Information that assists in facilitating the use of your Yacht Controller.



**WARNING:**

Information concerning the proper use of the Yacht Controller which must be followed in order to avoid product malfunction or breakdown.



**DANGER:**

Information concerning the proper use of the Yacht Controller which must be followed exactly in order to avoid injury and damage to property or people.

The information contained in this manual is subject to change or modification without notice: in the event of any differences or ambiguity, please ask the reseller or Micro Device.

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# Summary

<b>SUMMARY .....</b>	<b>3</b>
<b>1. INTRODUCTION .....</b>	<b>4</b>
1.1. GENERAL FEATURES OF THE TRANSMITTER .....	5
1.2. GENERAL FEATURES OF THE RECEIVER .....	6
<b>2. YACHT CONTROLLER DUAL BAND .....</b>	<b>7</b>
2.1. WARNINGS .....	7
2.2. ACTIVATION PROCEDURE.....	9
2.3. DEACTIVATION PROCEDURE .....	11
<b>3. HOW TO USE YACHT CONTROLLER DUAL BAND .....</b>	<b>12</b>
3.1. STERN DOCKING "MED" STYLE.....	12
3.1.2 <i>Tieing stern to the dock</i> .....	12
3.2. ANCHORING AND HOOKING TO MOORING BUOYS.....	13
3.2.1 <i>Dropping the anchor</i> .....	13
3.2.2 <i>Weighing anchor</i> .....	13
3.2.3 <i>Hooking to a mooring buoy</i> .....	13
3.3. OTHER SITUATIONS .....	14
<b>4. MAINTENANCE .....</b>	<b>15</b>
4.1. REPLACEMENT OF BATTERIES.....	15
4.2. HOW TO CLEAN THE TRANSMITTER.....	17
4.3. PROBLEMS AND MALFUNCTIONS.....	18
<b>5. TECHNICAL SPECIFICATIONS .....</b>	<b>20</b>
<b>6. WARRANTY .....</b>	<b>21</b>
<b>7. FCC - CE MARK.....</b>	<b>22</b>

# 1. Introduction

Yacht Controller Dual Band, developed by Micro Device S.r.l., is an electronic wireless remote control, able to control a boat in the basic maneuvering and mooring functions.

The first prototype, was developed in 1998, and since then "Yacht Controller" has undergone a continuous evolution: in 2003 has been launched the first model, replaced in 2007 by the Evolution (EVO) version.

To increase even more the operational safety, in May 2010 has been launched the Dual Band version that exploits two different bands of transmission of the commands and that satisfies the most rigid naval norms in its components, as for example the switches of the transmitter or the relays of the receiver.

The system uses special proprietary microprocessors programmed directly in Micro Device S.r.l.'s laboratory so interference with gangways or anchor radio controls which may be available and in use on the market that, on the contrary use standard electronic components, are impossible.

The range of control of Yacht Controller Dual Band's Transmitter is limited to about ten meters and the transmission protocol, makes interference between the same or different systems working in the same area, impossible.

Severe tests made on various types of vessels, have proven the resistance and the reliability of Yacht Controller Dual Band in the marine environment.

Moreover, before its launch on the Market, Yacht Controller Dual Band, has been subjected to a many laboratory tests in order to further ensure proper operation.

With Yacht Controller Dual Band is possible to easily control, the bow thruster, stern thruster, both engines, anchor winch using simple switches and buttons.

"Yacht Controller Dual Band" is safe because, it is linked in parallel with the existing controls, thereby allowing uninterrupted full manual control of them should the need arise.



## **IMPORTANT:**

Further information concerning the complete system, including the transmitter and the correspondent receiver, are available in the installation manual.

---

Yacht Controller is a Worldwide Patented Product. Patents: EP 1 544 097 B1 - US n° 7.104.212.B2 - PCT / EP2010 / 000846

## 1.1. General features of the transmitter

On the transmitter, there are always two levers to control the engines forward and reverse, two levers to control the bow and the stern thrusters right and left, two buttons to control the anchor winch up and down the button to engage the command and the button of switching on/off.

It is normal that the levers or the buttons of the transmitter corresponding to options not purchased, don't work because the receiver is configured only with the electronic command boards requested.

It is possible anyway to order and install afterwards the options not purchased at the beginning.

Each transmitter has an unique code programmed in factory that is different from the others and selected among over 65.000 combinations.

The electronics of the transmitter is contained in a silver colored ABS box that combines ergonomics and functionality with a protection degree IP68. Removing the cover on the back of the transmitter, it is possible to access to the batteries for their replacement.

The unit has three bright led indicators:

- The red led placed in the lower part on the left, points out the condition of battery next to the limits of discharge.
- Two yellow led, one for each band, placed in the lower part on the right, points out the transmission of the control signals toward the receiver.

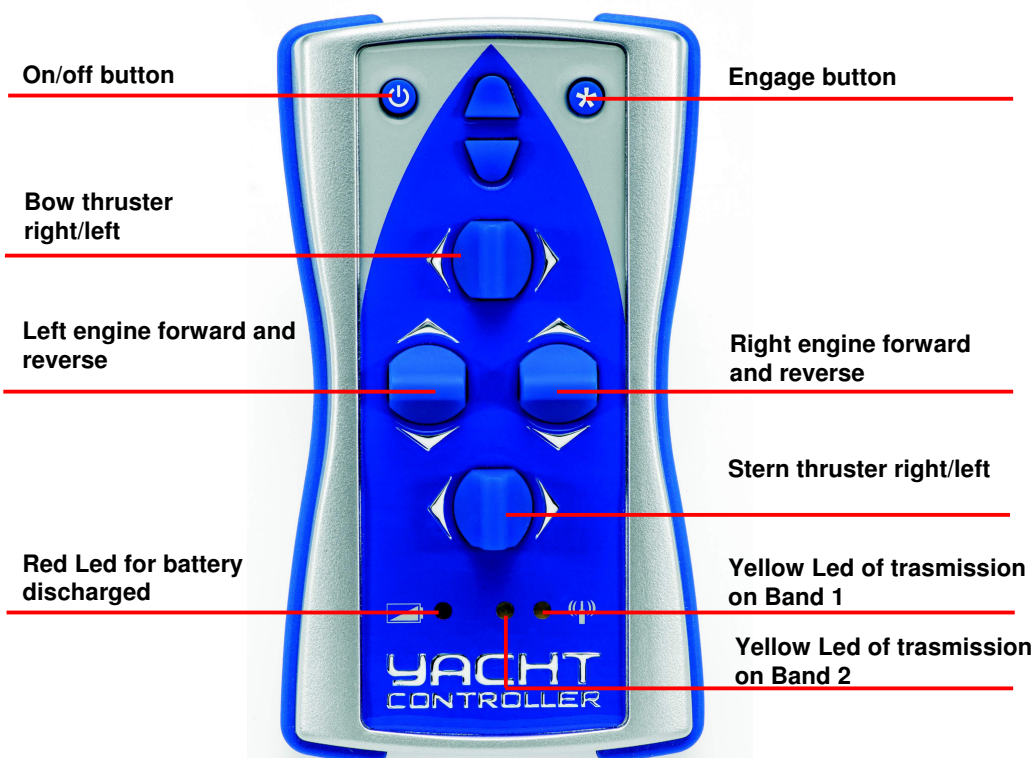


Figure 1: Description of the transmitter

## 1.2. General features of the Receiver

The receiver is housed in a polycarbonate box, placed inside and out of view of the chosen helm station. The receiver is turned on by a separate switch installed by the technician normally nearby the helm station.

The receiver acquires the commands of the transmitter and activates the functions of the boat accordingly.

If configured by the installer, it is possible to install an individual receiver so that it can communicate with more than one transmitter (not simultaneously).

The system is designed for commanding only marine engines supplied with electronic unit of control. The helm station connected to the receiver, must be activated to control the boat using Yacht Controller Dual Band.

In the event of failure of communication between the transmitter and receiver, the receiver automatically deactivates the outputs and activates the acoustic signal.

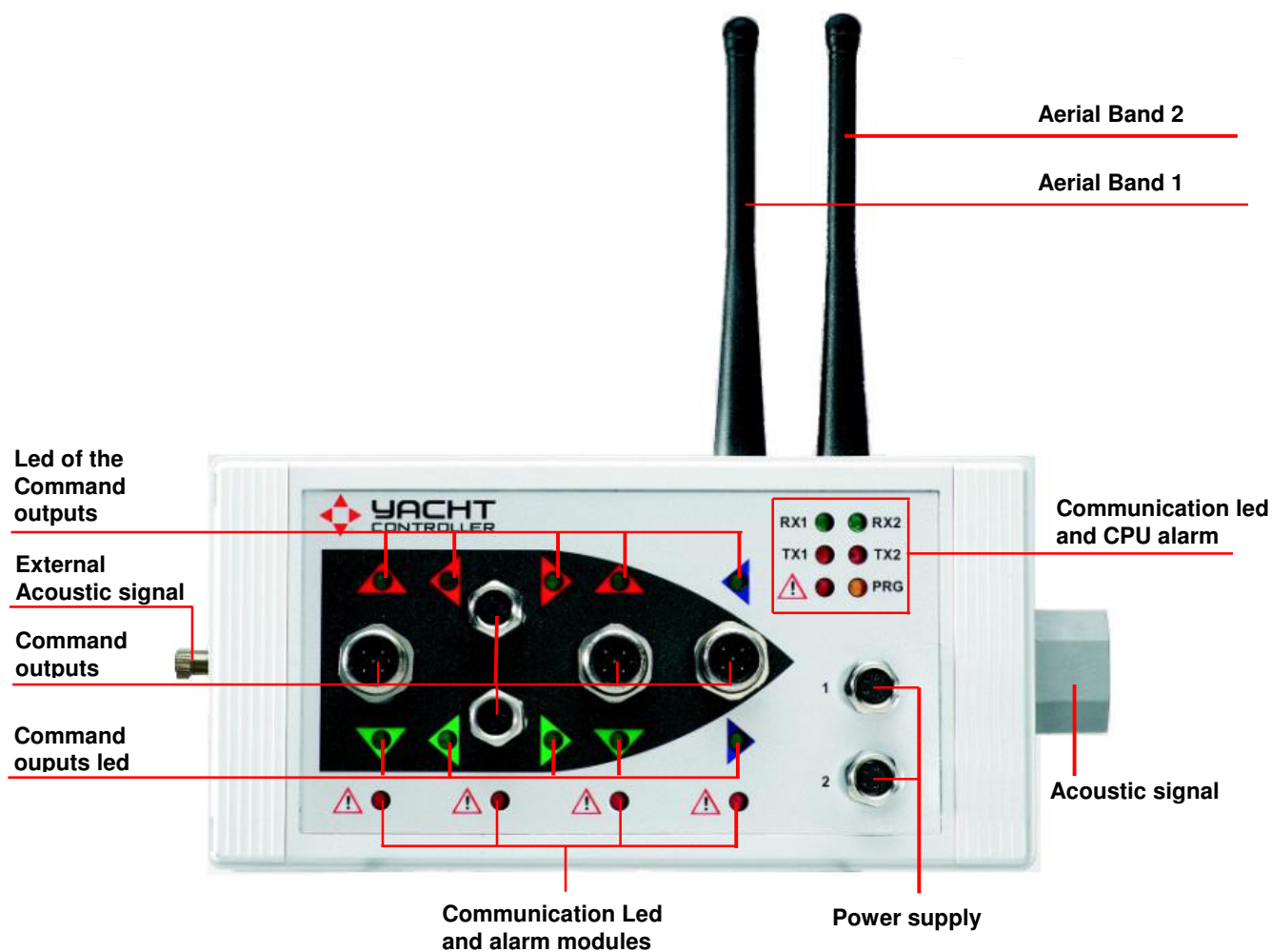


Figure 2: Description of the receiver

## 2. Yacht Controller Dual Band operation

The commands on the receiver are activated by the respective switches placed on the transmitter. The transmitter cyclically transfers the state of the switches and of the buttons to the receiver.

The command will remain active as long as the corresponding switch is pressed.

In the event of failure of communication between the transmitter and receiver, the receiver is automatically deactivated and activates the acoustic signal.



### IMPORTANT:

It is not possible to command **simultaneously** the same receiver from several transmitters. In fact, the periodic transmissions of the radio controls would cause interferences and improper activation of the commands.

---

### 2.1. Warnings



#### DANGER:

- The Yacht Controller Dual Band should only be used by adults with all the qualifications necessary for the proper operation and management of the boat.
  - The Yacht Controller Dual Band transmitter must always be secured outside the range of children on board.
  - Do not use Yacht Controller Dual Band if the transmitter has been immersed in the water (see also the paragraph dedicated to the maintenance).
  - During the use of Yacht Controller Dual Band, pay the maximum attention that the bow of the boat reproduced on the face of the transmitter, **always coincides** in direction with the bow of the boat. Failure to do so will result in commands exactly contrary to the desired ones.
- 



#### WARNING:

- The communication between the transmitter and the receiver can be disturbed by radio-frequency transmission devices in operation nearby.

If such event should occur on both bands, receiver activates the acoustic signal for short periods, signalling the interruption of communication with the transmitter.

**This must not worry because**, thanks to the communication protocol safety, it is not possible that the system accepts wrong commands.

- Also in the nearby presence of other Yacht Controllers, operating at the same time on adjacent boats, improper activations are not possible because the transmitters continuously modify the communication frequency with the receivers.

- **Never use the transmitter if you are not on board the boat which you are commanding. Remember that the abandon of a vessel in Italy and in other Countries is illegal and it is a punishable crime.**
- In the event the LED signals low battery replace **both batteries** within short time.



**WARNING:**

The YACHT CONTROLLER Dual Band transmitter has a new innovativs system of siliconic levers that guarantees more than 250.000 switch uses instead of the 10.000 of a mechanical switch.

This technology need a particular attention in its use because an eccessive pressure on the levers or a wrong direction (see right figure) can break them. The engines levers move just forward and reverse while the bow and stern thrusters levers move just right and left (see left figure).

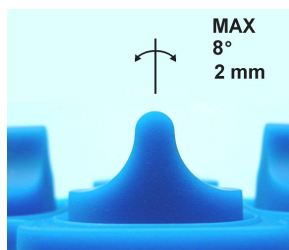


**Correct use**

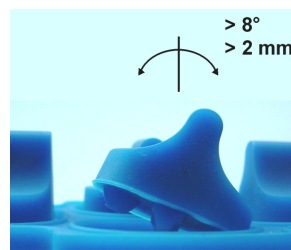


**Wrong use**

The pressure to move the lever, must be reduces to the minimum and must be interrupted as soon as you head the click on the lever itself.



**Correct use**



**Wrong use**

**IMPORTANT:** Such breakage due to the move of the levers in wrong direction, (more than 8° (around 2 mm) or excessive pressure, **WILL NOT BE REPAIRED UNDER WARRANTY** because it is considered improper use.



## 2.2. Activation procedure

In order to activate Yacht Controller, follow step by step the procedure described in this paragraph.

- Start the main engines in accordance with the usual procedure.
- Enable the boat helm station to which the **Yacht Controller Dual Band receiver** is connected to.



**DANGER:**

IT IS ABSOLUTELY REQUIRED THAT THE ELECTRONIC CONTROL LEVERS REMAIN IN THE NEUTRAL POSITION DURING THE USE OF THE YACHT CONTROLLER SYSTEM.

---

- Activate the Yacht Controller RECEIVER using the proper on/off switch installed on the boat. The activation is signalled by the six communications leds and CPU alarm (see figure 2) for two seconds. After about three seconds, the acoustic signal of the device, will start emitting the acoustic signal of danger which means that the receiver is operating but it has not established yet the radio connection with the transmitter.
- Once turned ON the receiver, the red leds associated to each command module start to flash, signalling the correct operativity of the system. In case of error or malfunction, instead, the red led of the alarm module will remain fixed and not flashing.
- Turn the transmitter ON, by pressing the proper on/off button and holding it down more than three seconds (security time to avoid accidental misuse). It is also possible to active the transmitter by pressing at the same time the ON/OFF switch and the engage button. The confirmation of the activation is confirmed by activation of the transmission LED.



**Figure 3: Transmitter ON/OFF button and Engage button.**

- If the operation has had a good result, to the danger acoustic signal of the receiver takes the place the waiting signal of the engagement. This last signal, characterized by a bip about every two seconds, shows that there is the connection between the receiver and the transmitter and that the system, not yet operational, is waiting for the engagement. During the waiting period for the engagement, the levers and the buttons are not in operations yet.
- To make Yacht Controller Dual Band operating, it is necessary to press twice the engage button, within 5 seconds between the first pressure and the second one.
- At this point if the operation has had a good result, the acoustic signal of the receiver stops and the system is completely operating. The two yellow leds will flash signalling to the receiver the transmission on the two bands. It will now be possible to control the engines, the thrusters and the anchor winch, simply pressing the corresponding levers and buttons switches of the transmitter.

- Every activation of the outputs is signalled by the lighting of the correspondent green leds associated to each of the command modules on the receiver.



**WARNING:**

From now on, the system is operating. You must pay the maximum attention, because the involuntary pressure on any of the lever or button switches, will cause the activation of the related command output.

---

- When the transmitter is OFF, on the receiver the red alarm led is fixed and the acoustic signal is activated. Contrarily, in presence of a correct receipt from the transmitter, the red led of alarm switches off, while the green leds of receipt RX1 and RX2 flash. The acoustic signal of the receiver has four states of operation as illustrated in the following chart.

Type of acoustic signalling	State of the receiver	State of the outputs
Continuos	Lack of reception from the transmitter	Outputs deactivated
Bip every two seconds	Correct reception from the transmitter but waiting for the engagement.	Outputs deactivated
Absent	Correct reception with engagement.	Activated
A bip continuous bip of 5 seconds followed by a variable number of bips.	Receiver on alarm (see chapter "Operational problems") in the installers' manual.	Deactivated the output of the function in alarm, activated the others.



**IMPORTANT:**

The transmitter automatically turns OFF after approximately four minutes from the last pressure of any lever switch.

---

## 2.3. Deactivation procedure

To deactivate Yacht Controller Dual Band, follow the procedure described in this paragraph:

- Turn the transmitter OFF by pressing the proper button until all leds switch ON (security time longer than 3 seconds to avoid accidental misuse). It is moreover possible to deactivate immediately the transmitter pressing contemporarily the ON/OFF button and the engage button. Sopping the pressure on the ON/OFF button the transmitter switch OFF definitively. The confirmation of the deactivation is given by the switching OFF of the leds and by the activation of the acoustic signal of the receiver, caused by the lack of communications between the transmitter and receiver.



Figure 4: ON/OFF switch of the transmitter.

- Deactivate the receiver by pressing the appropriate ON/OFF switch installed on the boat by the installer.



**WARNING:**

In emergency it is possible to deactivate the Yacht Controller receiver pressing the ON/OFF switch installed on the boat without turning the transmitter OFF.

## 3. How to use Yacht Controller Dual Band

The Yacht Controller Dual Band allows you to operate certain functions of the boat in a simple and safe way.

By pressing the related switches of the transmitter, it is possible to action, from any point of the boat, engines, bow or stern thrusters, anchor winch.  
The small size of the transmitter allow you to keep it in you hand or around your neck etc..

As an example, the following describes how one may use the Yacht Controller Dual Band during the operations of mooring, anchorage and hooking to buoys. These suggestions are of course modified in the actual use by each user depending on their experience and the situation at hand.

### 3.1. Stern docking “Med” Style

#### 3.1.1 Untieing

After properly activating the Yacht Controller Dual Band as previously described, and **with the control levers strictly in neutral position**, begin unmooring from the dock by going to the stern to release the lines which are holding the boat held to the dock.

Next go to the bow and raise the anchor taking advantage of the perfect visibility obtained by using Yacht Controller Dual Band correcting the movement of the boat with the help of the engines (or the bow and stern thruster if installed), if necessary due to the wind or the wave-motion.

At this point it is possible to bring in the fenders; before going out of the harbour, go back to the normal driving position, take the manual control again and turn the receiver of the Yacht Controller Dual Band OFF, following the deactivation procedure previously described.

#### 3.1.2 Tying stern to the dock

Once inside the Marina, **put the levers control in the neutral position** and properly activate the Yacht Controller as previously described in the paragraph 2.2.

After positioning the fenders and arriving in proximity of the assigned boat place, go to stern and begin the entrance manoeuvre in full visibility.

Retrieve by the boathook the mooring line and go to the bow to fix it, take care to advance the boat of some meters by a short command of “engines forward” to avoid hitting against the dock. During the manoeuvre, thanks to Yacht Controller Dual Band, you will always have the chance to instantaneously correct possible shiftings of the boat due to the wind or to the wave-motion. In case of mooring to the pylons, fix the lines to the pylons and then go back to stern.

At this point, it is possible to move to the stern and provide a *short command to reverse* the engines in order to tie the stern to the dock helped by people on the dock or from a member of the crew.



#### **SUGGESTION:**

To put in tension on the stern lines without an electric winch, you can use Yacht Controller by providing some short orders of *engines ahead or engine back* according to the situation. You then will be able to fix the lines to the dock with very little effort, before the boat puts strain on the lines.

---

When you are finished tying the boat, deactivate Yacht Controller Dual Band following the deactivation procedure described previously.

## 3.2. Anchoring and hooking to mooring buoys

### 3.2.1 Dropping the anchor

Once you have selected the optimal position for the anchorage, **put the control levers in neutral position**, and properly activate the Yacht Controller Dual Band as previously described in the paragraph 2.2.. Go to bow and, after checking the depth of sea and the possible presence of other anchors or chains, control the descent of the anchor. After lowering the anchor to the proper depth and providing the necessary scope of line or chain, use the Yacht Controller Dual Band to reverse the engines to check the hold on the bottom and the direction of the anchor chain. Once the maneuver is completed deactivate the Yacht Controller Dual Band following the deactivation procedure described previously.

### 3.2.2 Weighing anchor

When weighing anchor, **put the levers control in neutral position**, and properly activate the Yacht Controller Dual Band as previously described in the paragraph 2.2. Go to bow to check that the line or chain freely rises and, with short commands of *engines forward or propeller right/left*, avoid excessive tension on the anchor winch. Once the anchor is raised, deactivate the Yacht Controller Dual Band following the deactivation procedure described previously.

### 3.2.3 Hooking to a mooring buoy

Before starting the manoeuvre, **put the levers control in neutral position** and properly activate the Yacht Controller Dual Band as previously described in the paragraph 2.2.

Contrary to the usual procedure which generally requires a person's presence at the bow with a boat hook to catch the mooring buoy, using Yacht Controller Dual Band, you will be able to maneuvering staying at the stern.



#### **SUGGESTION:**

If there's wind the maneuvering is easier if once passed the buoy, you leave the boat drifting in reverse, resisting to the action of the wind with short commands of the engines, in a way to stop exactly closed to the buoy.

---

From this position it will be safe and easier to thread the line into the buoy and then bring it to the bow and fix it to the mooring post.

Once finished, deactivate "Yacht Controller Dual Band" following the deactivation procedure described previously.

### 3.2.4 Unhooking from a mooring buoy

Before starting the manoeuvre, **put the levers control in neutral position** and properly activate the Yacht Controller Dual Band as previously described in the paragraph 2.2.

Go to bow and release the line from the mooring post and slip it OFF from the buoy. In the presence of wind it will be possible to counteract the drifting, with short commands to the engines, thereby avoiding collisions with other boats.

Once you have completed the manoeuvre, deactivate Yacht Controller Dual Band following the deactivation procedure described previously.

### 3.3. Other situations

In addition to what has been already described, the Yacht Controller Dual Band will be useful in many other situations:

- During tying up to a dock for fuel or supplies, especially in confined places you will be able to easily control the boat from greater visibility points without risking collisions and screaming at your mates.
- In presence of low water, submerged rocks or other obstacles, you will be able to control the boat from bow, thereby helping you to avoid unpleasant stranding damage to propellers, shafts and other underwater gear.
- When docking or approaching another boat, you can control the boat from the sides, at stern or bow thereby, helping you to properly estimate the distance.
- Each time that moving from the helm station give you the chance to value better the situation, you can exploit all the potentialities of the Yacht Controller Dual Band.

## 4. Maintenance

### 4.1. Replacement of batteries

When the battery discharge LED flashes, it is necessary to replace within two/three hours of operation both batteries of the transmitter. It's a good rule to keep always on board three first quality alkaline batteries of 1,5V type AAA (LR06).



---

**DANGER:**

Before working on the transmitter, make sure that the receiver is OFF. Accidental pressure on a transmitter switch could in fact activate a boat function and cause a dangerous situation.

---

To access the batteries, remove the back cover of the transmitter unscrewing the screws.



**Figure 5: Replacement of batteries.**

Once the cover is removed, extract the old batteries and replace them with new ones, which must be of the type indicated at the beginning of this paragraph, paying attention to the polarity indicated on the back of the cover.



---

**WARNING:**

Do not modify the position of the dip-switch placed under the battery because configured for the options onboard.

---

Check if the waterproof gasket is ok. Replace it if damaged to avoid that the electronics of the transmitter has damages in case of washing or fall in water.

Once finished screw the cover again.



**WARNING:**

- This device contains batteries. Attention: exhausted batteries must be discarded in accordance with local and federal regulations.
  - In the event the batteries have had some leakage, clean it up and replace all them immediately, taking care to properly clean your hands to avoid skin problems.
-



## 4.2. How to clean the transmitter

After using your Yacht Controller Dual Band, remove any salt residue by wiping with a soft cloth using fresh water. **ALWAYS avoid soaking it.**

In case the transmitter has fallen into salt water, immediately turn OFF the receiver following the procedure described in this manual. Once the transmitter is recovered, remove the back cover and remove the batteries. If salt water has entered inside the transmitter dip it momentarily in distilled water (or in lack of this, pure water) to remove salt residuals. Dry the transmitter using a hair-dryer (or, in the sun ) until all moisture is completely evaporated.

Before replacing the batteries, check that everything is absolutely dry, otherwise short circuits may occur that would irreparably damage the transmitter.



**WARNING:**

**If the transmitter is turned on when it falls into the water it may have irrevocable damage. Before using it again TEST IT COMPLETELY TIED UP AT DOCKSIDE OR IN A SECURE AREA.**

If you notice ANY anomalies, contact the retailer or Micro Device Customer Service.

---

## 4.3. Problems and malfunctions

This paragraph describes a series of problems and malfunctions which could happen in using the Yacht Controller Dual Band system, the possible cause, and possible solutions to the problem. For further assistance please contact your installer or Micro Device.

Problem	Possible cause	Remedy
The receiver does not turn ON.	The control station of the boat to which the Yacht Controller receiver is connected to has not been activated.	Enable the control station and turn ON the switch of the Yacht Controller receiver.
	The button of switching ON has not been turned ON.	With the transmitter switched OFF, activate the button of switching ON and wait for the acoustic signal as confirmation of the operativity.
	The tension does not arrive to the receiver.	Check (or ask the installer to check) that the receiver has power supply. Verify in this order: - The presence of the tension of the battery. - The possible presence of broken fuses. - The operation of the switching on button.
The transmitter does not turn ON.	The tension does not arrive to the transmitter.	Verify in this order: - That the batteries and the back cover are inserted in their right way. - The power supply of the batteries.
The acoustic signal of the receiver is always ON.	The transmitter is turned OFF.	Turn the transmitter ON by keeping the button pressed at least three seconds.
	None of the codes of the receiver corresponds to the one of the transmitter.	See the Installer's manual or ask your Installer.

Problem	Possible cause	Remedy
The acoustic signal of the receiver emits intermittent signals.	The wireless transmission is interfered by radio-frequency sources nearby	<ul style="list-style-type: none"> <li>- remove, if possible, the source of disturbance.</li> <li>- if the functionality of the system is compromised, take manual control at the helm station.</li> </ul>
	The distance between the receiver and the transmitter has exceeded the signal range.	<ul style="list-style-type: none"> <li>- go closer to the receiver to reduce the distance between the two devices.</li> <li>- the range of communication of the transmitter also depends on the charge of the batteries. Check the charge.</li> </ul>
The transmitter activates the low batteries signal LED.	Batteries are near exhaustion.	Replace the batteries within short time.
The transmitter has fallen in water.		Remove batteries immediately and proceed as described in the paragraph dedicated to the maintenance

If you encounter problems which are not contemplated in this table or if the possible malfunction is repeated, contact the Dealer Micro Device's Customer Service directly.

## 5. Technical specifications

<b>Power:</b>	3 alkaline 1,5 batteries AAA (LR03) type
<b>Cover:</b>	In ABS with protection degree IP68.
<b>Number of channels:</b>	10
<b>Transmission code:</b>	16 bit digital
<b>Dimensions (LxAxP)</b>	70 x 123 x 43 mm
<b>Weight:</b>	with batteries in, 145 g
<b>Power of transmission:</b>	10mW (30-50 mt. max)
<b>Frequencies:</b>	433.92 and 868.3 MHz
<b>Operating temperature:</b>	from 0 °C to +50 °C

## 6. Warranty

Each Yacht Controller Dual Band system is warranted for 24 months, as from the date of sale to the first user . The warranty on the Micro Device S.r.l.'s devices is for all the possible defects of material and breakdowns not caused by the customer.

Regarding the installation and the possible maintenance operations, these are responsibility of the installer. This warranty explicitly does not include faults due to maintenance, improper installation and customer misuse.

The warranty is given on the following conditions: the equipment is effective for all the possible faults of manufacture, material and for breakdowns not caused by the customer. All breakdowns imputable to the customer or due to force majeure, natural events and all faults caused by improper use of the equipment, are not covered by the Manufacturer's warranty.

Manufacturer's Warranty is valid in accordance with following conditions:

- Installation must be made by a certified installer.
- Electronic Components must be integral, not disassembled, tampered or modified in any manner.
- Warranty excludes equipment damaged by water.
- Defective equipment must be returned properly packaged to avoid shipping damage and complete of all the accessories.
- Package must include a brief description of the problem.
- Package must clearly show, near the address of the sender, the Number of Authorization to the Re-entry "NAR" given by Micro Device S.r.l. Phone. +39.02.6131001.
- Return transportation charges are at the expense of the Sender
- All the packages sent without "NAR" or at the manufacturer's expense, will be refused.
- The Manufacturer's responsibility is limited to the substitution or repair of equipment which, in its sole judgment, has a manufacture defect.
- Purchaser agrees that the manufacturer and and seller's liability for any accident and/or damage to property and/or personal injury which occurs during the use of this equipment is solely limited to the purchase price of this equipment regardless of the incident or circumstances.
- The repair or replacement of equipment, during the warranty period, does not have the effect of extending the original warranty period.
- These conditions do not intend to void the effects of laws or rules for protection of the customer.
- "Yacht Controller Dual Band" can be subjected to changes without warning: if differences or ambiguity were found, consult the retailer.

## 7. FCC - CE Mark



YACHT CONTROLLER DUAL BAND IS A SYSTEM IN COMPLIANCE WITH THE FOLLOWING CE DIRECTIVES:

### DIRECTIVE R&TTE

- EN 300 220-1 V2.1.1
- EN 301 489-1 (V1.8.1) + EN 301 489-3 (V1.4.1)
- EN 60950-1 (2006)

### ELECTROMAGNETIC COMPATIBILITY DIRECTIVE

- EN 60945 (2002)

## FCC ID: R86TX001YCDB

YACHT CONTROLLER DUAL BAND IS A SYSTEM IN COMPLIANCE WITH THE FCC DIRECTIVE.



*Position of the FCC mark on the receiver (above) and on the transmitter (right)*



Verification according to § 15.19 (a) (3):

This device complies with Part 15 of the Rules.

Operation is subject to the following two conditions: 1) this device may not cause harmful interference, and 2) this device must accept any interference received, including interference that may cause undesired operation.

YACHT CONTROLLER DUAL AND IS A SYSTEM IN COMPLIANCE WITH CE DIRECTIVES FOR TRANSMITTERS IN NAUTICAL ENVIRONMENTS AND THE DIRECTIVES FOR ELECTROMAGNETIC COMPATIBILITY AND IMMUNITY TO ELECTROMAGNETIC DISCHARGES

## Conformity Declaration

The manufacturer:

**Micro Device S.r.l.**

Declares that the product:

**Yacht Controller**

Is in compliance with the qualifications and with the pertinent dispositions established from the Directive 1999/5/CE.

This device complies with Part 15 of the Rules.

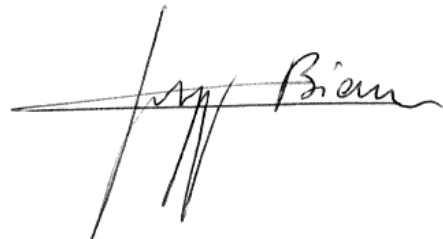
Operation is subject to the following two conditions: 1) this device may not cause harmful interference, and 2) this device must accept any interference received, including interference that may cause undesired operation.

**FCC ID: R86TX001YCDB**

Cusano Milanino, 11 May 2010

The Legal Representative

Giuseppe Brianza

A handwritten signature in black ink, appearing to read 'Giuseppe Brianza', written over a horizontal line.