

**MIR5000-M3P**

**Quick guide for installation and use**

**UM036EN01**



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# 1 INTRODUCTION

This document aims at explaining the steps to follow to achieve a quick and effective installation of the MIR5000 buoy reception system with M3P and M3P-T models.

The new longline location system designed by Marine Instruments includes transmitters (M3P and M3P-T buoys) which will send positions of several points of the lines configured, the buoy reception system via radio (MIR5000) and MSB Palangre software, which displays the data received by MIR5000.

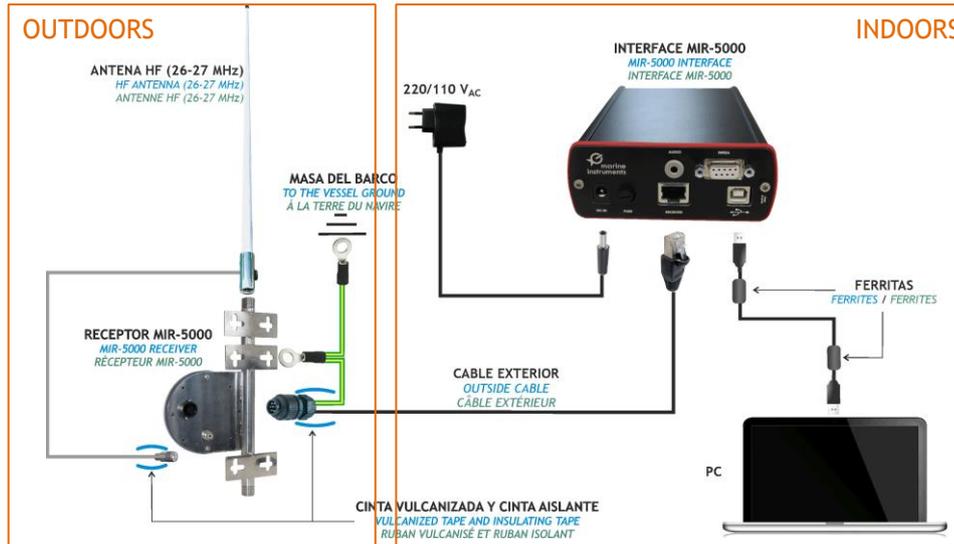
In this document we will explain how the system is installed and how you can easily start receiving buoys in order to manage the longlines deployed.

## 2 INSTALLATION OF MIR5000 RECEPTION SYSTEM

### 2.1 INSTALLATION DIAGRAM



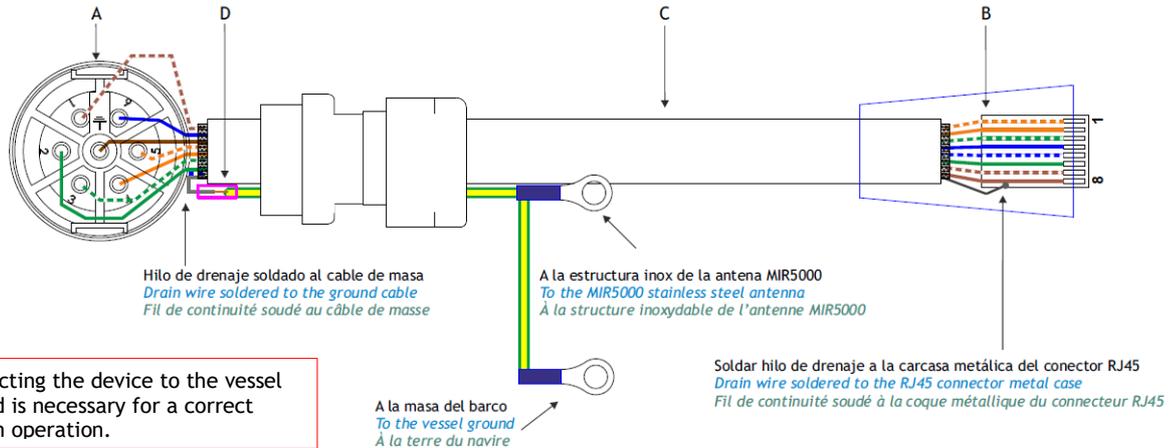
**WARNING:** MIR5000 must be supplied with the 220V<sub>AC</sub> transformer provided with the device.  
**Supply at 24 V<sub>DC</sub> is not allowed.**



## 2.2 RECEIVER -INTERFACE CABLE ASSEMBLY

Hirschmann	RJ45
1	Marrón-Blanco / <i>Brown-White</i> / <i>Marron-Blanc</i>
2	Verde / <i>Green</i> / <i>Vert</i>
3	Verde-Blanco / <i>Green-White</i> / <i>Vert-Blanc</i>
4	Naranja / <i>Orange</i> / <i>Orange</i>
5	Naranja-Blanco / <i>Orange-White</i> / <i>Orange-Blanc</i>
6	Azul / <i>Blue</i> / <i>Bleu</i>
TIERRA / <i>GROUND</i> / <i>TERRE</i>	Marrón / <i>Brown</i> / <i>Marron</i>
Cortado / <i>Cut</i> / <i>Coupé</i>	Azul-Blanco / <i>Blue-White</i> / <i>Bleu-Blanc</i>

OBSERVACIONES / NOTES / NOTES
A - Hirschmann CA6LS
B - RJ45 Apantallado. Estándar conexión T568B / <i>Shielded RJ45. T568B Standard connection</i> / RJ45 Blindé. Câblage selon le standard T568B
C - Manguera FTP Cat5e (15 m) / <i>Cat5e FTP Cable (15 m)</i> / Câble FTP Cat5e (15 m)
D - Funda termorretráctil / <i>Heat shrink tubing</i> / Gaine thermo-rétractable



Connecting the device to the vessel ground is necessary for a correct system operation.

## 3 MSB PALANGRE AND MIR5000 DRIVERS INSTALLATION

### 3.1 PC MINIMUM REQUIREMENTS

	Minimum requirements	Recommended
Operating System	XP SP3 or later	XP SP3 or later
Processor	1.5 GHz	2 GHz or later
Memory	1 GB RAM	2 GB RAM
Resolution	1024 x 768 minimum display resolution	

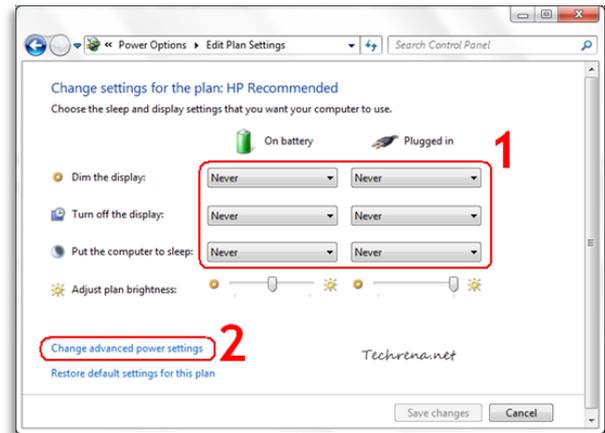
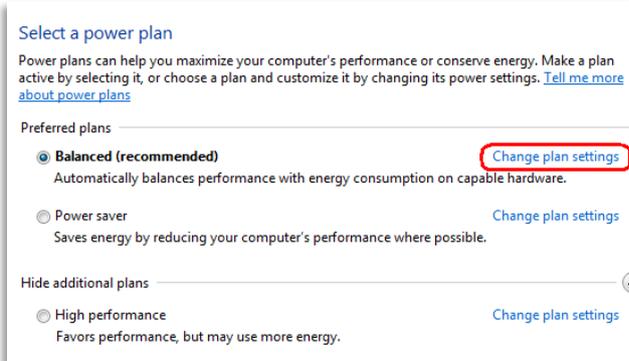
### 3.2 SOFTWARE AND DRIVERS INSTALLATION

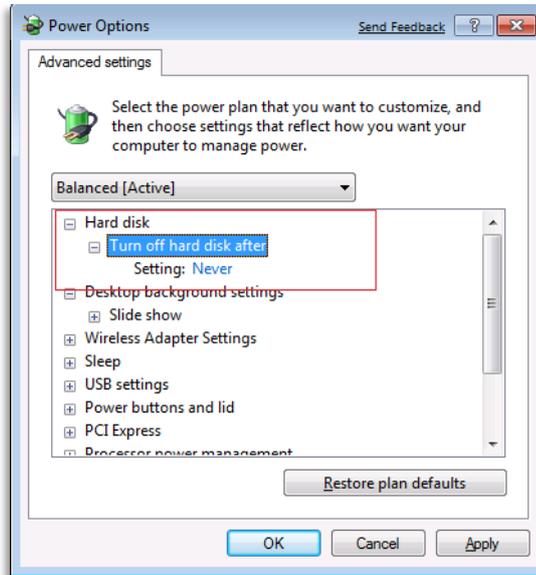
Install MSB Palangre following the instructions in chapter *MSB Palangre Software Installation* of the MSB Palangre User's Manual.

Next, install MIR5000 drivers following the instructions in chapter *FTDI Drivers Installation* of the MSB Palangre User's Manual (FTDI drivers can be downloaded at: [www.ftdichip.com/FTDrivers.htm](http://www.ftdichip.com/FTDrivers.htm)).

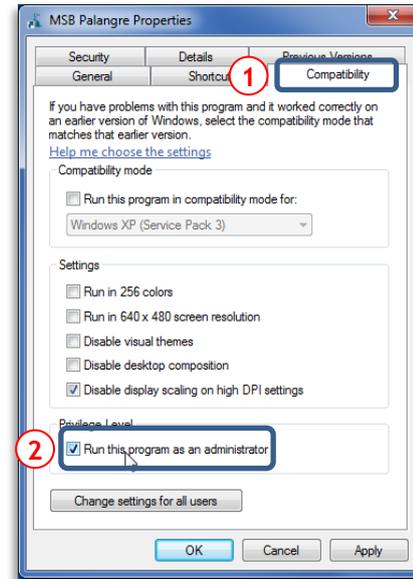
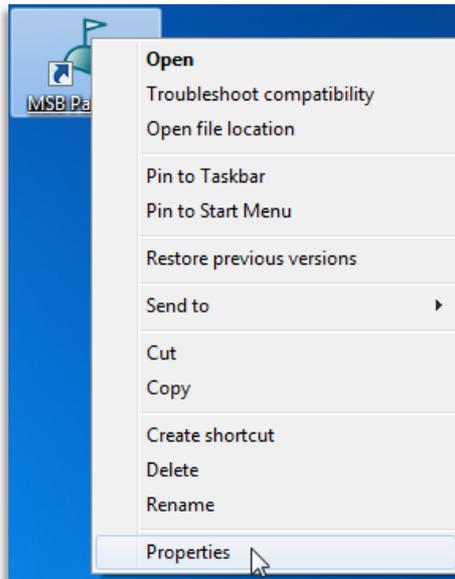
### 3.3 WINDOWS CONFIGURATION

NEVER TURN OFF HARD DISKS NOR DISPLAY: *Control Panel* ⇒ *All control panel items* ⇒ *Power Options* ⇒ *In your computer power plan, Change plan settings* ⇒ (1) *Turn off the Display: NEVER; Put the computer to sleep: NEVER; (2) *Change advanced power settings* ⇒ *Turn off Hard Disk after: NEVER.**





WHEN MSB-PALANGRE IS FINALLY INSTALLED: *Right click on MSB-Palangre* ⇒ *Properties* ⇒ (1) *Compatibility tab* ⇒ (2) *Run this program as an administrator.*



## 4 STARTING THE SYSTEM

### 4.1 SWITCHING ON

Switch MIR5000 on:



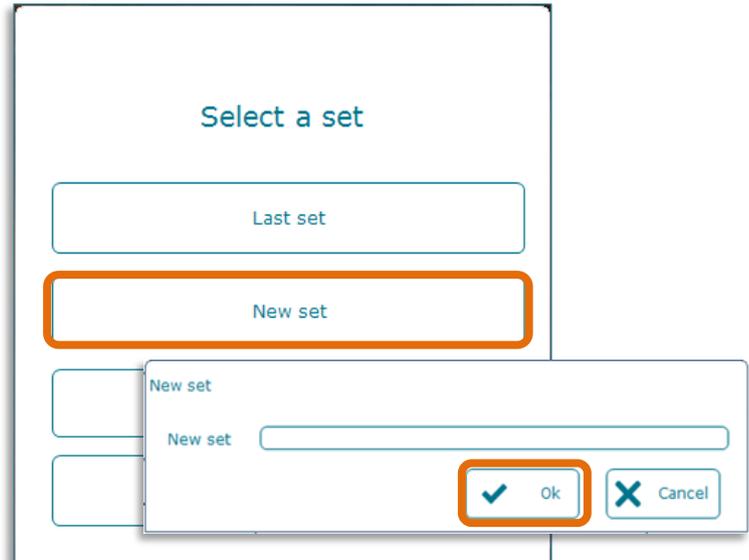
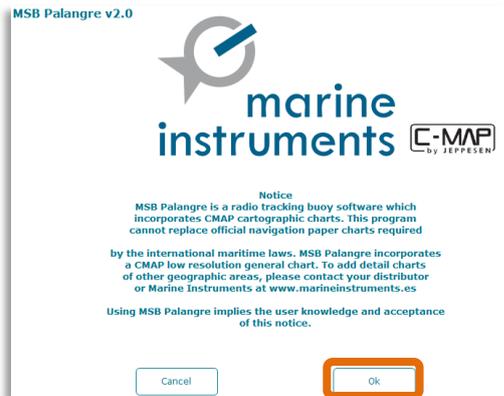
Check the device has been successfully installed.



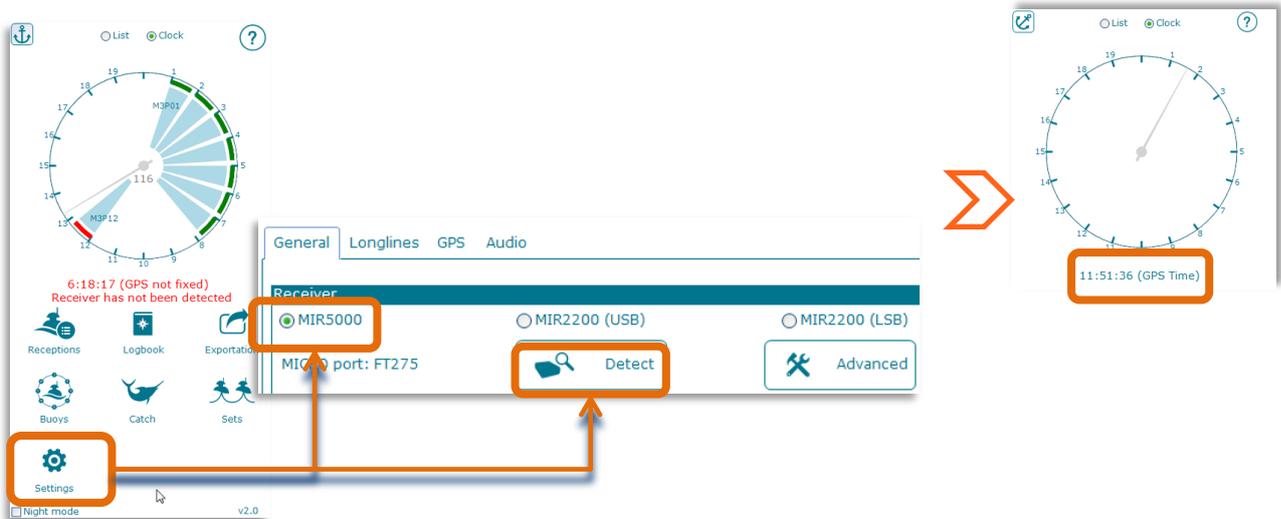
Restarting is recommended.

## 4.1 DETECCIÓN DE PUERTOS EN MSB PALANGRE

Run MSB-Palangre, double-clicking on  in Windows Desktop and create a new set. When a new fishing journey starts, it is recommended creating a new set, so MSB Palangre will save all the data of the trip.



To detect the ports, click on Settings and, in the “General” tab, select MIR5000. Next, click on Detect. The GPS will take several seconds in being fixed.



## 4.2 CHECKING SETTINGS PARAMETERS

In Settings:

General

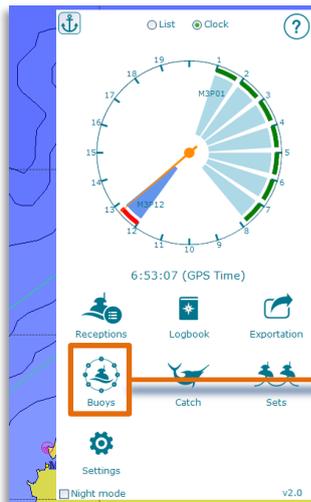
GPS	Audio
Delay <input type="text" value="3"/>	<input checked="" type="radio"/> Internal
<input checked="" type="radio"/> Use internal GPS	<input type="radio"/> External
<input type="radio"/> Use external GPS	

## 5 ENTERING BUOY DATA

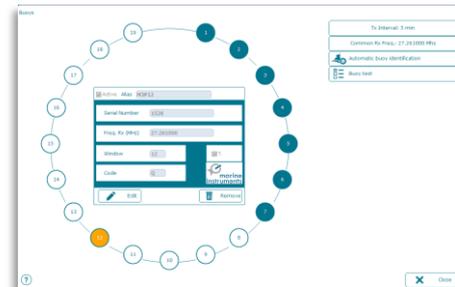


Depending on the buoy model, its data can be entered automatically (M3P or later) or they must be entered by hand (M2P, MBP or older). For further information, consult User Manual UM023.

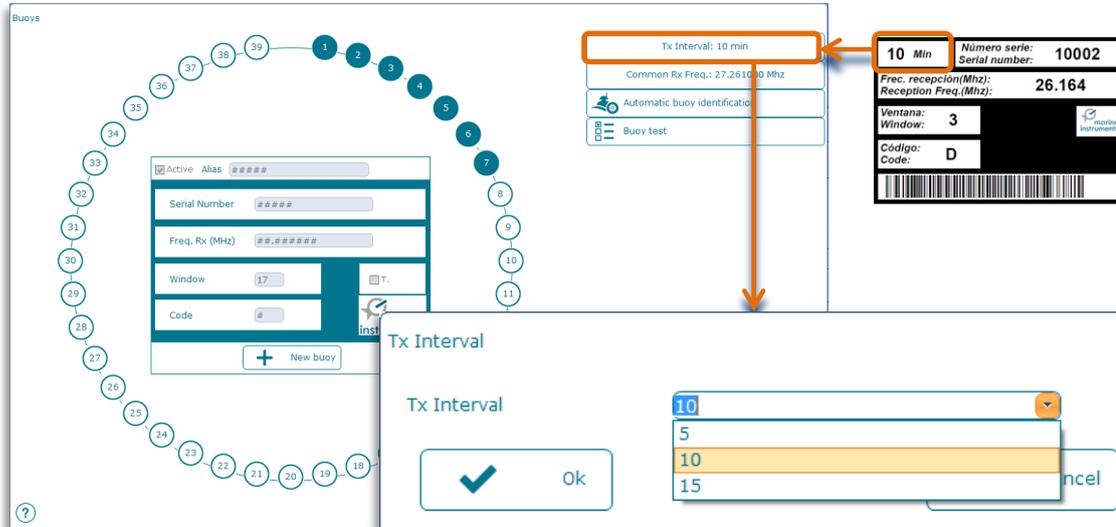
To enter buoy data, open the Buoy window.



In the MAIN PANEL, Buoy icon.



Select the buoys transmission interval:



The screenshot shows the 'Buoy' configuration software interface. On the left, a circular arrangement of buoys numbered 1 through 39 is displayed. A configuration window is open, showing fields for 'Active', 'Alias', 'Serial Number', 'Freq. Rx (MHz)', 'Window', and 'Code'. A 'New buoy' button is visible at the bottom of this window. To the right, a 'Tx Interval' dialog box is shown, with a dropdown menu set to '10' and an 'Ok' button. An orange arrow points from the '10 Min' label in the 'Tx Interval' dialog to the '10 Min' label in the 'Tx Interval' field of the buoy configuration window. To the right of the buoy configuration window, a label for 'Tx Interval: 10 min' is shown, with an orange arrow pointing to the '10 Min' label in the 'Tx Interval' dialog. Further to the right, a label for '10 Min' is shown, with an orange arrow pointing to the '10 Min' label in the 'Tx Interval' dialog. Below the '10 Min' label, a table of buoy parameters is displayed:

10 Min	Número serie: 10002
	Serial number: 10002
Freq. recepción(Mhz):	
Reception Freq.(Mhz): 26.164	
Ventana: 3	
Window: 3	
Codigo: D	
Code: D	

Below the table, a barcode is visible. The 'Tx Interval' dialog box also shows a dropdown menu with options 10, 5, 10, and 15, and an 'Ok' button.

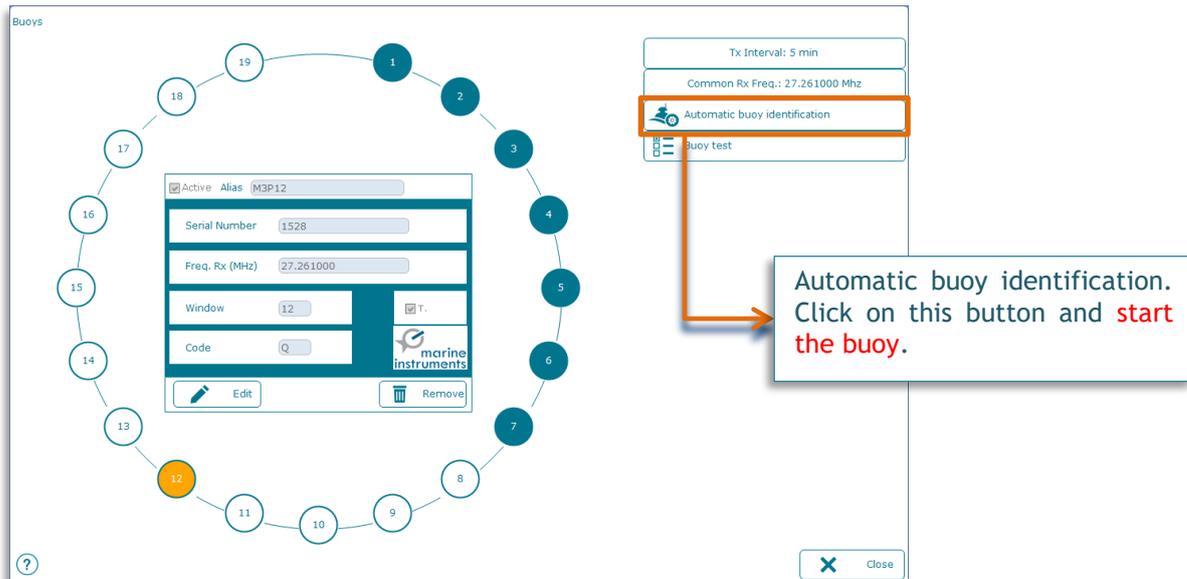


EVERY buoy must transmit with the same transmission interval (every 5, 10 or 15 minutes). If a buoy transmits with a different interval, it has to be programmed.

## 5.1.1 AUTOMATIC BUOY IDENTIFICATION



ONLY M3P BUOYS OR NEWER CAN BE IDENTIFIED AUTOMATICALLY BY MSB PALANGRE.



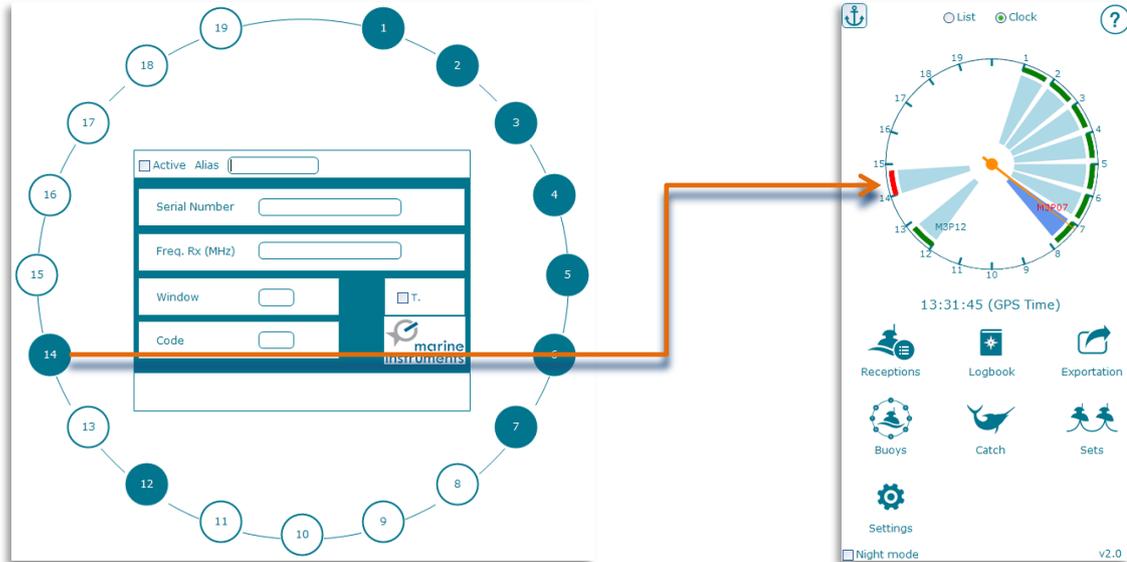
The screenshot displays the 'Buoy' configuration screen. A circular menu on the left contains 19 numbered buoys, with buoy 12 highlighted in orange. A configuration panel for buoy 12 is open, showing the following details:

- Active:  Alias: M3P12
- Serial Number: 1528
- Freq. Rx (MHz): 27.261000
- Window: 12
- Code: Q

Buttons for 'Edit' and 'Remove' are visible at the bottom of the configuration panel. A callout box highlights the 'Automatic buoy identification' button in the configuration panel, with an arrow pointing to a text box that says: "Automatic buoy identification. Click on this button and **start** the buoy."

Buoy data will be entered automatically. This process will last just a few minutes:





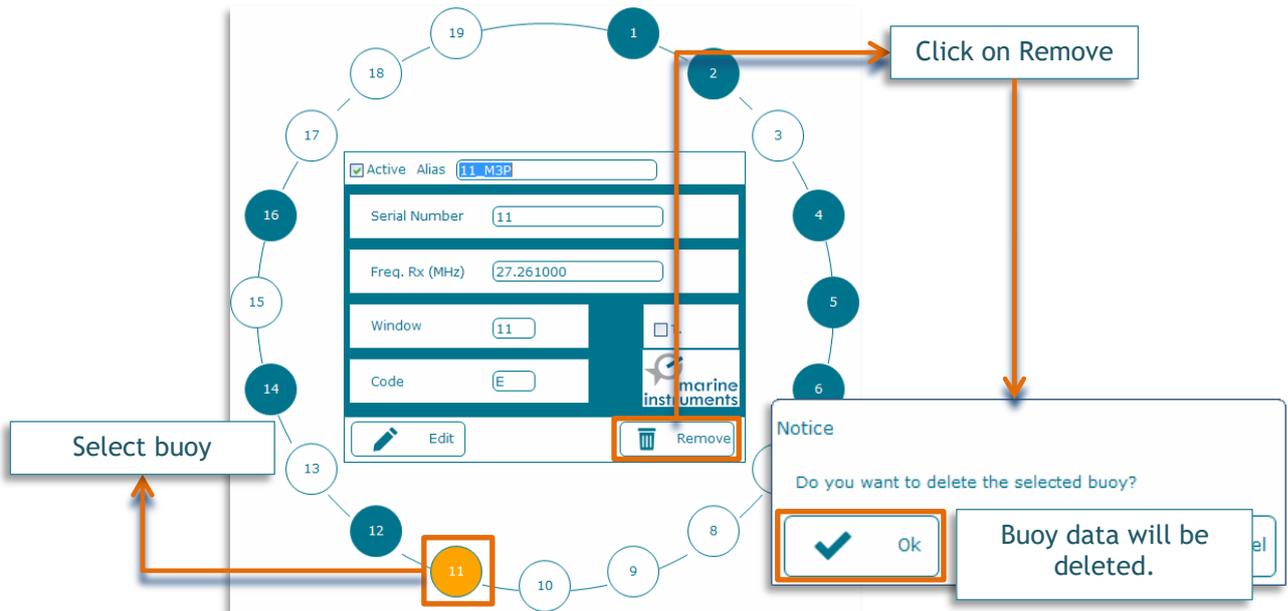
IN CASE THE WINDOW IS ALREADY FULL, OVERWRITE CONFIRMATION WILL BE REQUIRED. TO USE THE NEW BUOY, IT MUST BE REPROGRAMMED WITH OTHER DATA.



IF YOU ARE TRYING TO ENTER AN ALREADY EXISTING BUOY DATA IN ITS WINDOW, A NOTICE WILL BE DISPLAYED AND THE OPERATION WILL BE DISCARDED.

## 5.1.2 HOW TO DELETE BUOYS

To remove a buoy, select it and then click on . A message of confirmation will be displayed:



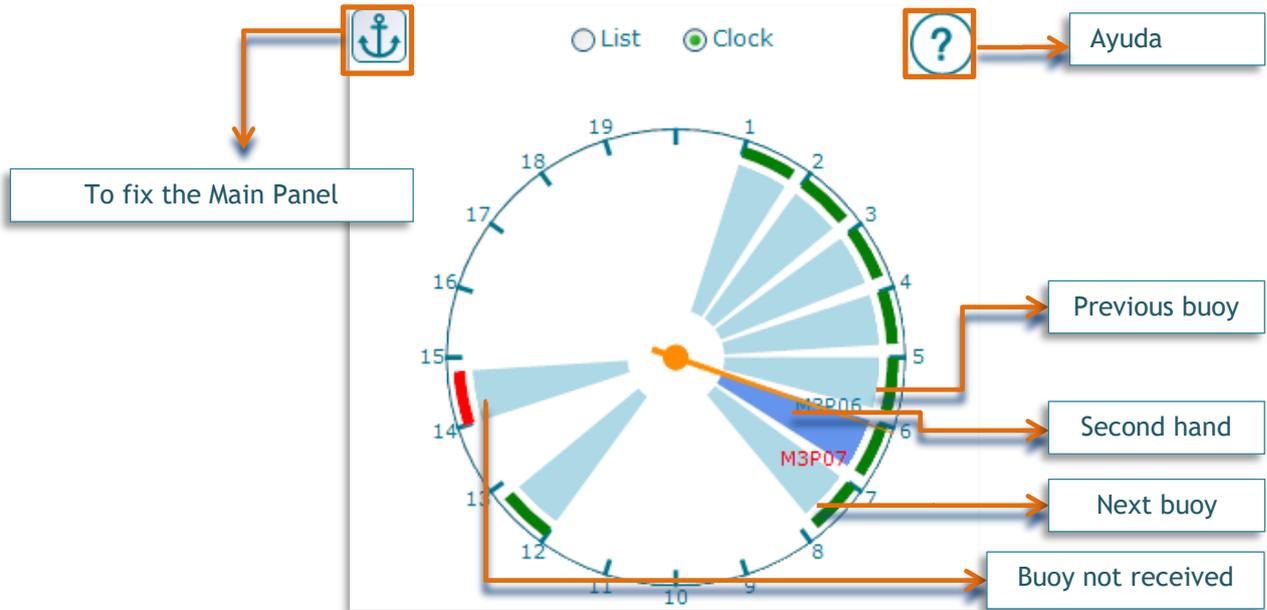


Two buoys CANNOT transmit in the same window. In this case one of the buoys must be reprogrammed.



Before deploying the buoy, check that at least one position has been received in the software and that the buoy is displayed on the chart.

## 6 BUOY RECEPTION CHECK



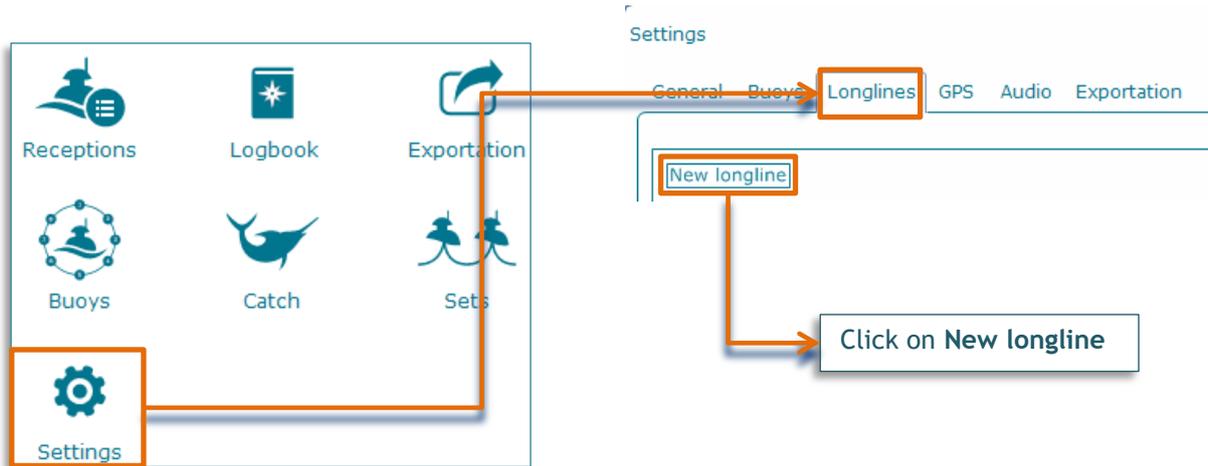
The buoy takes about 15 minutes in sending its first position. Then, it will be displayed on the chart.

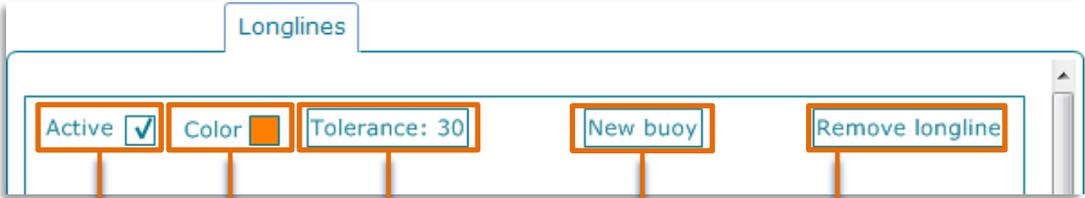


## 7 LONGLINE CONFIGURATION

### 7.1 ACCESS AND CONFIGURATION

After having entered the buoys in MSB Palangre, you can configure the longlines according to the actual order the buoys are deployed, so that the line will be correctly displayed.





The screenshot shows the 'Longlines' configuration window. It contains several controls: an 'Active' checkbox with a checkmark, a 'Color' button with an orange square, a 'Tolerance: 30' text field, a 'New buoy' button, and a 'Remove longline' button. Arrows point from these controls to explanatory text boxes.

**Active**  Enabled to have the longline displayed.

**Color**  To change the longline color.

**Tolerance: 30** This percentage is applied to the distance between buoys and it determines when MSB Palangre warns of **line breaks**.

**New buoy** To add buoys to the longline.

**Remove longline** To remove a longline. Confirmation is required.

The 'New buoy' dialog shows a list of buoys:

New buoy	
Buoy	
04_M3P	
12_M3P	
14_M3P	
02_M3P	
01_M3P	
05_M3P	
06_M3P	

Buttons:  Ok  Cancel

Settings

General Buoy Longlines GPS Audio Exportation

### CONFIGURED LONGLINES

Active  Color ■ Tolerance: 30

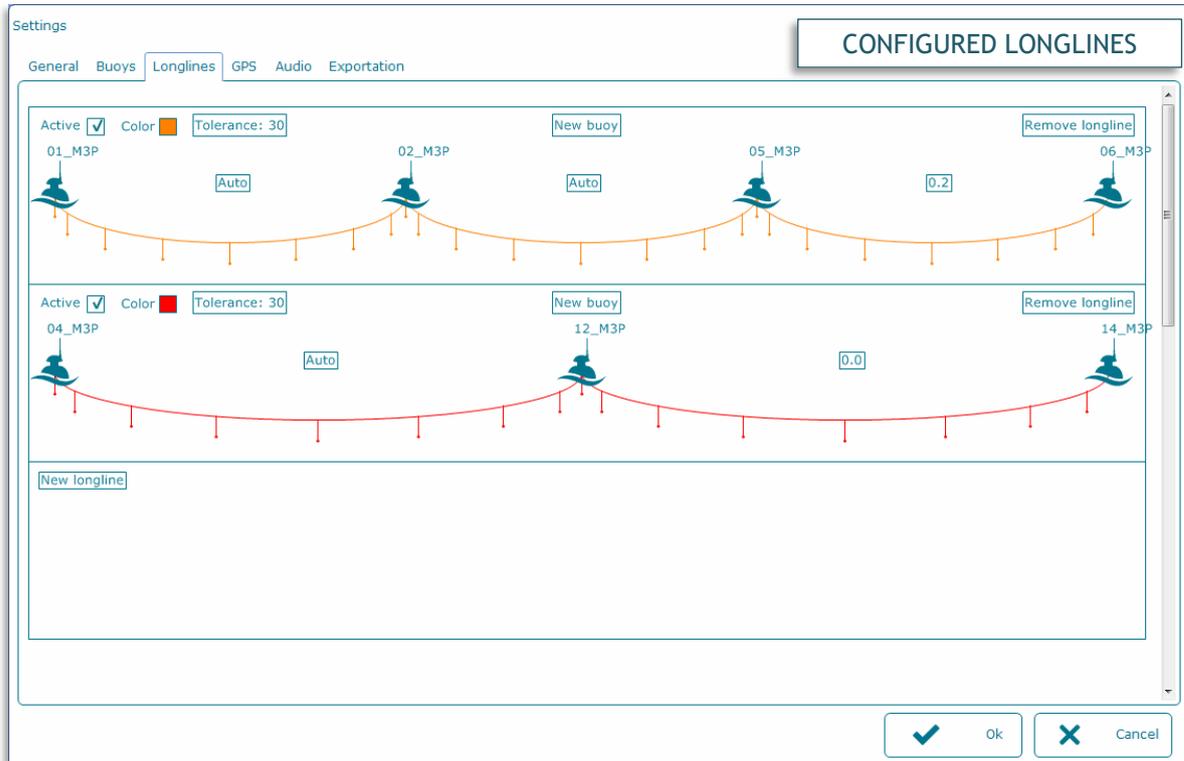
01\_M3P 02\_M3P 05\_M3P 06\_M3P

Auto Auto 0.2

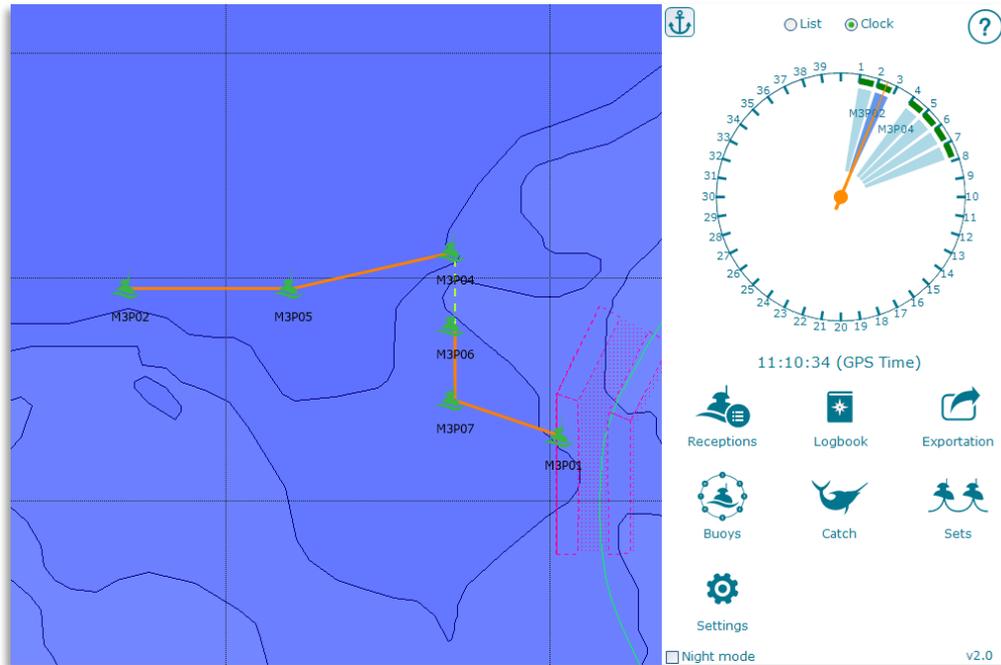
Auto 0.0

New longline

Ok  Cancel



## 7.2 LONGLINE DISPLAYED ON THE CHART



This product guarantee conditions are available in Marine Instruments website.



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