

# CHERUBINI

A520028  
A520029

MISTRAL USA



MISTRAL VIBRATION WIND SENSOR  
FOR AWNINGS

EN



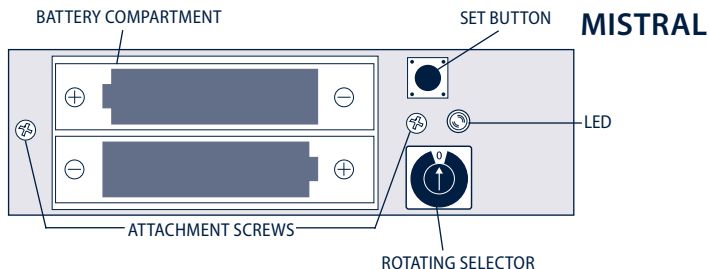
ISTRUZIONI  
INSTRUCTIONS

## PRODUCT FEATURES


The Mistral vibration wind sensor detects wind caused stresses on the structure of arm awnings, which then become vibrations of the terminal bar.

The sensor indicates an alarm status, by radio, to the motor (or the radio receiver), which then closes the awning.

ENGLISH



## FUNCTION DIAGRAM

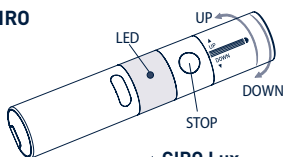
COMPATIBILITY	 CLOSING BY WIND ALARM	AUTOMATIC REOPENING
WAVE RX / SENSO RX	✓	✓
A510020 TDS GOLD	✓	
A510036 RX MINI	✓	
A510038 TDS COMPACT	✓	
A510062 MYROLL	✓	

## GUARANTEE

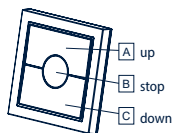
Failure to comply with these instructions annuls CHERUBINI's responsibilities and guarantee.

# COMPATIBLE REMOTE CONTROLS

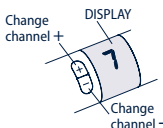
## GIRO



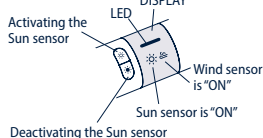
## GIRO Wall



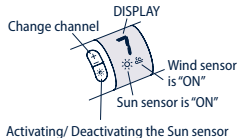
## GIRO Plus



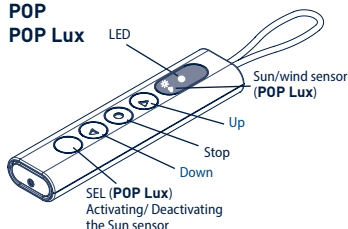
## GIRO Lux



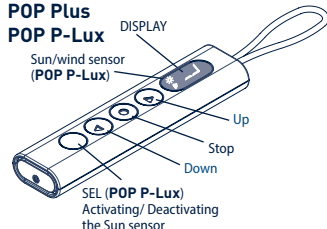
## GIRO P-Lux



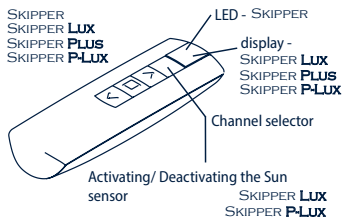
## POP POP Lux



## POP Plus POP P-Lux



## SKIPPER SKIPPER Lux SKIPPER Plus SKIPPER P-Lux

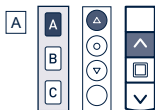
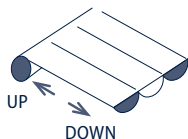


## SKIPPER LCD SKIPPER SENSO

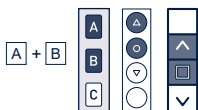


Check the specific instruction book

# KEY TO SYMBOLS



Press button A



Press buttons A and B at the same time



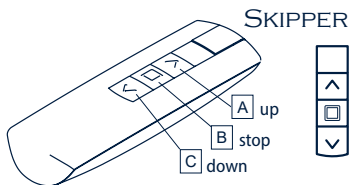
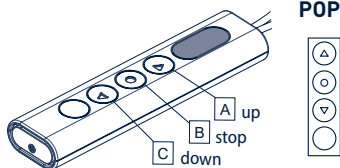
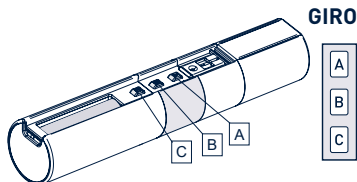
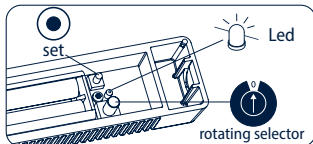
short motor rotation in one direction



long motor rotation in other direction



double short rotation



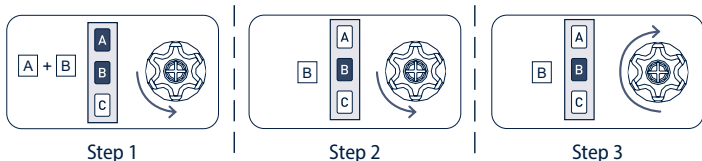
## TECHNICAL FEATURES

- Battery powered: LR03 (AAA)
- Dimensions: 140x38x26 mm
- Weight: 100 g
- Degree of protection: IP44
- Carrier frequency: 433.92 MHz
- Irradiated RF power (ERP): 1 mW
- Operating range in open space: max. 10 m
- Vibration threshold adjustment range: 1-9 m/s<sup>2</sup>

## COMMAND SEQUENCES EXAMPLE

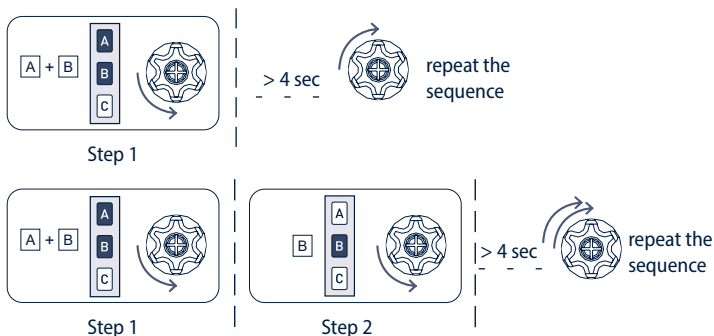
Most of the command sequences have three distinct steps, at the end of which the motor indicates if the step has been concluded positively or not, by turning in different ways. This section is provided to demonstrate the motor indications. The buttons must be pressed as shown in the sequence, without taking more than 4 seconds between one step and the next. If more than 4 seconds are taken, the command is not accepted and the sequence must be repeated.

Command sequence example:



As we can see from the example, when the sequence ends positively, the motor returns to its starting position in one long rotation. In fact, two short rotations in the same direction correspond to one long rotation in the opposite direction. The motor returns to the starting position even when the sequence is not completed; in this case by performing one or two short rotations.

Example of a wrong sequence:



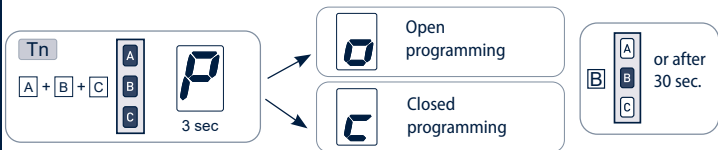
## FUNCTION OPEN/CLOSE PROGRAMMING

### REMOTE CONTROL SKIPPER PLUS - SKIPPER LUX - SKIPPER P-LUX

### REMOTE CONTROL POP PLUS - POP LUX - POP P-LUX

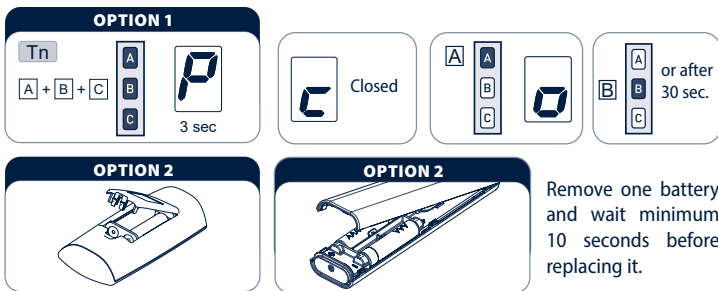
To prevent accidental changes to the programming of the motor during the daily use of the remote control, the possibility of programming is disabled automatically 8 hours after sending the last sequence (A+B or B+C).

#### CHECKING THE STATUS OF THE FUNCTION



To change the status of the function, see the sequences "ENABLE/DISABLE PROGRAMMING".

#### ENABLE PROGRAMMING



Proceed with programming as the instructions booklet.

#### DISABLE PROGRAMMING

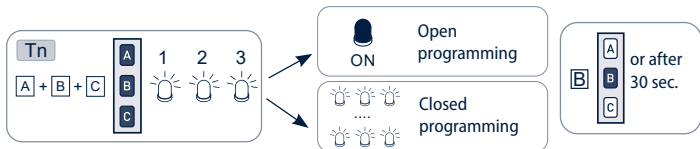


## FUNCTION OPEN/CLOSE PROGRAMMING

### REMOTE CONTROL SKIPPER - SERIES GIRO - REMOTE CONTROL POP

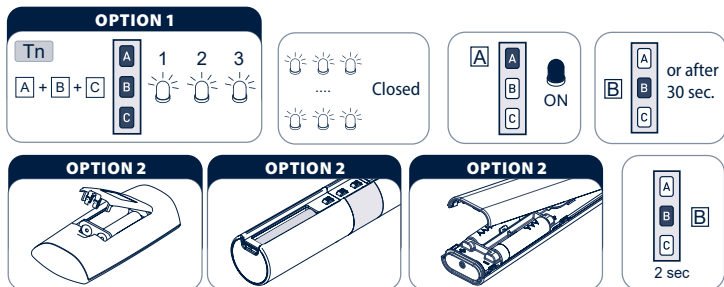
To prevent accidental changes to the programming of the motor during the daily use of the remote control, the possibility of programming is disabled automatically 8 hours after sending the last sequence (A+B or B+C).

#### CHECKING THE STATUS OF THE FUNCTION



To change the status of the function, see the sequences "ENABLE/DISABLE PROGRAMMING".

#### ENABLE PROGRAMMING



Remove one battery and wait minimum 10 seconds before replacing it.

Proceed with programming as the instructions booklet.

#### DISABLE PROGRAMMING

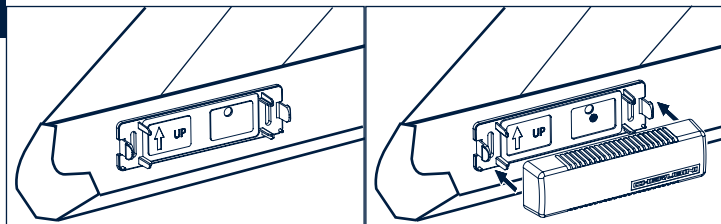
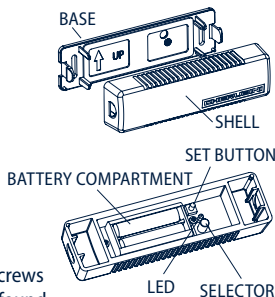


# INSTALLATION

The sensor is housed in a plastic container made up of two parts: a base attached to the terminal bar and a snap-on shell.

The shell contains the sensor processor board, the battery compartment and the programming commands.

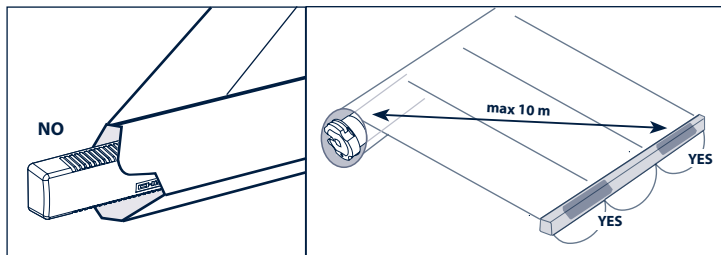
The base is attached to the terminal bar with M4 screws (not included) or the double-sided adhesive already found on the back. Inside of the base, there is an arrow that enables the identification of the proper direction for assembly of the sensor: put arrow upwards.



Best Position: **internal side** of the bar.

The sensor must be assembled parallel with the end bar.

**Attention: do not insert the sensor inside of the end bar profile** but install the sensor on the **internal side** of the end bar, at the end closest to the motor or to the control unit or in any event within 10 metres.





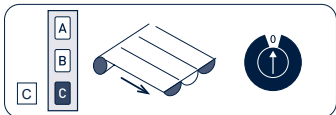
## SETTING THE SENSOR

To associate the sensor to a motor, a remote control must be already memorised on the motor. The setting sequence is the following:

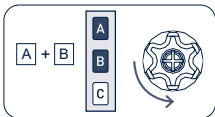
**At this point, do not assemble the sensor shell on the base.**

- Insert the batteries provided;
- Open the awning completely (button C);
- Rotate the selector to the 0 position;

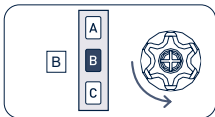
Tn: already programmed remote control



- Press the buttons on the remote control in this sequence: A+B and B, and then the SET button for 2 seconds on the Mistral sensor; until the motor performs the confirmation movement (around 2 second).



Tn

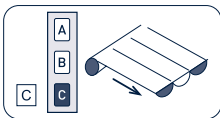
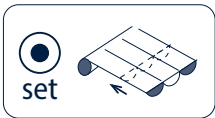


Tn



2 sec

Note: to check proper memorisation, press the SET button briefly again: the awning should move about half way through its path. When the check is completed, open the awning once again.



## VIBRATION THRESHOLD

The vibration detection threshold is set by choosing one of the positions on the rotating selector, from 1 (light vibrations) to 9 (strong vibrations). The proper threshold setting for each type of awning must be determined, through trial and error. Start out by setting a middle value (e.g. 5) and then activate the sensor. After activation it will be possible to perform tests to find the best threshold.

## SENSOR ACTIVATION

### Before assembling the shell on the base:

- Rotate the selector to a middle value from 1 to 9 (e.g. 5).
- Activate the sensor by pressing the SET button for at least 4 seconds until the LED flashes twice quickly.



SELECTOR

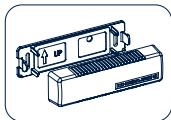


4 sec



### ► PROCEDURE

- Snap the shell onto the base.
- Stand by for 10 seconds until the sensor detects the rest position and the motor makes its confirmation movements\*.



10 sec.

.....



Within three minutes proceed with the SENSOR TEST OPERATION.

**\*Note:** for Wave RX motors manufactured before 01/2013 and TDS Gold control units manufactured before 04/2013 the procedure ends **without** confirmation movements.

## SENSOR TEST OPERATION

When the sensor has detected its rest position it will run in test mode for the first three minutes of operation: in case of alarm the awning will close but without application of the eight-minute period when reopening is disabled, which is what occurs in normal operational mode.

During these 3 minutes it is necessary to:

- Verify the alarm threshold for wind caused vibrations;
- Verify the absence of alarms when opening the awning.

### VERIFY WIND ALARM THRESHOLD

Open the awning completely. Apply a vibration to the end bar, gradually increasing its amplitude, until the motor closes the awning.

If the awning closes even with slight vibrations, then the threshold set is too low.

If the awning does not close, even when applying large amplitude vibrations, then the threshold set is too high, or there is a malfunction in the radio communications between the sensor and the motor.

Whilst the awning is closing, it is possible to use the remote control to stop it and open it back again.

Note: to properly check the wind alarm threshold, the vibrations have to be applied constantly for at least 5 seconds.

### VERIFY ABSENCE OF ALARMS

To complete the checks, make sure that the sensor detects no alarms from vibrations or changes in the slope that might be caused by the awning's structure when moving.

If the end bar vibrates notably when opening or closing the sensor could detect an unwanted alarm condition.

Close the awning completely and wait at least 15 seconds. Give the open command and verify that the awning opens completely.

If the awning stops and closes may be due to excessive vibrations on the end bar: in this case, increase the vibration detection threshold.

**To change the thresholds set, unsnap the shell, deactivate the sensor and then reactivate it.**

**ATTENTION!!! To avoid any hazardous situations, before unsnapping the shell, see the proper procedure in the section: "DISABLE THE SENSOR".**

## AUTOMATIC REOPENING

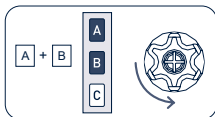
- only with Wave RX and Senso RX motors -

Following a wind alarm, the motor closes automatically the awning, overriding user commands until the wind alarm passes (8 minutes). If the automatic reopening function is active, after 8 minutes the awning returns to the position it was before the alarm. This waiting time is set to ensure the awning protection and to prevent continuous motor movement in the event of sporadic gusts of wind.

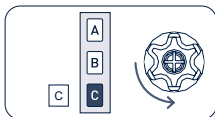
### ACTIVATING AUTOMATIC REOPENING

With the automatic reopening system, at the end of the wind alarm, the awning opens again. From factory this function is not activated in the motor, but can be easily activated with the following command sequence:

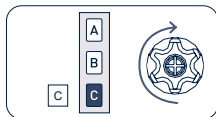
Tn: Already programmed remote control



Tn



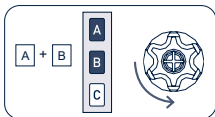
Tn



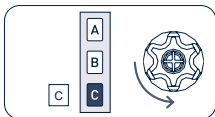
Tn (2 sec)

### DEACTIVATING AUTOMATIC REOPENING

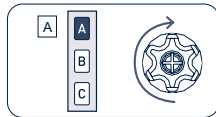
The automatic reopening function can be deactivated at any moment with the following command sequence:



Tn



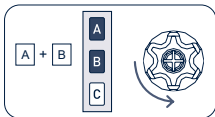
Tn



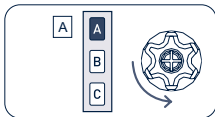
Tn (2 sec)

### DELETING THE SENSOR

To delete the Mistral sensor from the motor, an already programmed remote control must be used. The deleting sequence is the following:



Tn



Tn



2 sec

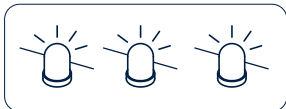
## DISABLE THE SENSOR

To deactivate the MISTRAL proceed as following:

- Open the awning completely and wait for at least ten seconds after the terminal bar has stopped moving before beginning to unsnap the sensor.
- Press both snap hooks sideways at the same time while pulling the shell downward, until it comes away from its base. Use no tools for this procedure (screwdrivers, or similar items).
- As soon as the shell has been unsnapped, rotate the selector to the 0 position: the LED will then flash three times slowly (0.5 seconds ON - 0.5 seconds OFF), to confirm the fact that the sensor has been deactivated and cannot trip an alarm.



SELECTOR



**To enable the sensor once again, follow the activation procedure as indicated on page 10.**

## MAINTENANCE

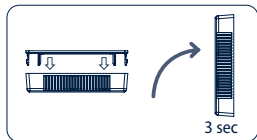
To make any changes to the alarm trip thresholds, to change the batteries or to perform any other programming operation, the shell must be unsnapped from its base. To perform this procedure, without the sensor tripping an alarm that will close the awning, creating a potentially hazardous situation for persons in the vicinity, it's necessary to disable the MISTRAL (check paragraph DISABLE THE SENSOR).

## CHANGING BATTERIES

When the batteries are almost drained, the LED will flash regularly every two seconds. Change the batteries.

**When changing the batteries, it's possible to use the Automatic Deactivation of the sensor:**

- **Unsnap the shell from the base**
- **Rotate the shell and keep it vertical for around 3 seconds**
- **The sensor will automatically deactivate.**



When the new batteries are placed, the sensor will reactivate automatically: just snap again the shell on the base.

Under normal use conditions, the batteries should last over two years. In any event, it is suggested that the batteries be changed at the beginning of each new season.

## WHAT TO DO IF....

Symptom	Cause	Remedy
The awning closes even without any wind blowing.	Low batteries.	Open the sensor shell and deactivate it: if the LED flashes, the batteries are almost drained. If the LED is OFF and it does not come back on, the batteries are dead. Change the batteries.
	Problems with radio communications.	Check that the sensor is not too far from the motor or the radio receiver. Change the position of the sensor.
	Sensor deactivated.	The sensor is not active. Perform the activation procedure again.
The awning motor does not make its activation confirmation movements, when the shell is snapped onto the base.	The sensor was not able to detect a stable position.	Check the sensor attachment. Check that the terminal bar is not vibrating.
	The sensor detected a stable position before being snapped into place.	Repeat the activation procedure, taking care to attach the sensor within ten seconds of the confirmation flash.
	<b>*Note:</b> for Wave RX motors manufactured before 01/2013 and TDS Gold control units manufactured before 04/2013 the procedure ends <b>without</b> confirmation movements.	
By swinging the awning, the sensor does not activate closing.	The awning has just been opened and the stabilization time is still active.	Open the awning and wait a few minutes before performing the test.

## REGULATORY COMPLIANCE INFORMATION FOR MISTRAL

### FCC ID: 2AOG9MISTRAL

This device complies with part 15 of the FCC 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.

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help

Changes or modifications not expressly approved by the party responsible for compliance voids the user's authority to operate this equipment.

### IC: 23480-POP2023

This device contains licence-exempt transmitter(s)/receiver(s) that comply with Innovation, Science and Economic Development Canada's licence-exempt RSS(s).

Operation is subject to the following two conditions:

- 1 - This device may not cause interference.
- 2 - This device must accept any interference, including interference that may cause undesired operation of the device.

*L'émetteur/récepteur exempt de licence contenu dans le présent appareil est conforme aux CNR d'Innovation, Sciences et Développement économique Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes :*

- 1 - L'appareil ne doit pas produire de brouillage;*
- 2 - L'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.*

This equipment complies with FCC/ISED radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.

*L'appareil est conforme aux limites d'exposition aux rayonnements spécifiées par la FCC/ISED pour les environnements non contrôlés. La distance entre le radiateur et le corps doit être d'au moins 20 cm lors de l'installation et du fonctionnement de l'appareil.*

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