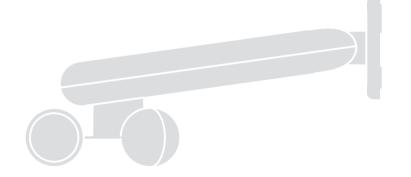
# Domi

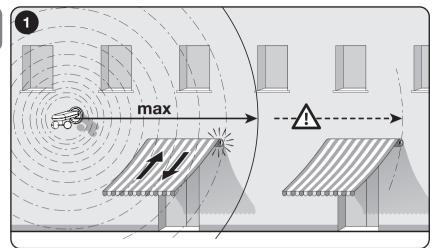
WS WSC WSR

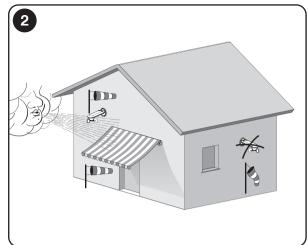


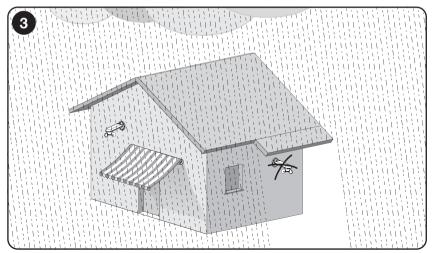
EN - Instructions and warnings for installation and use

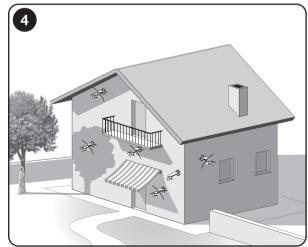




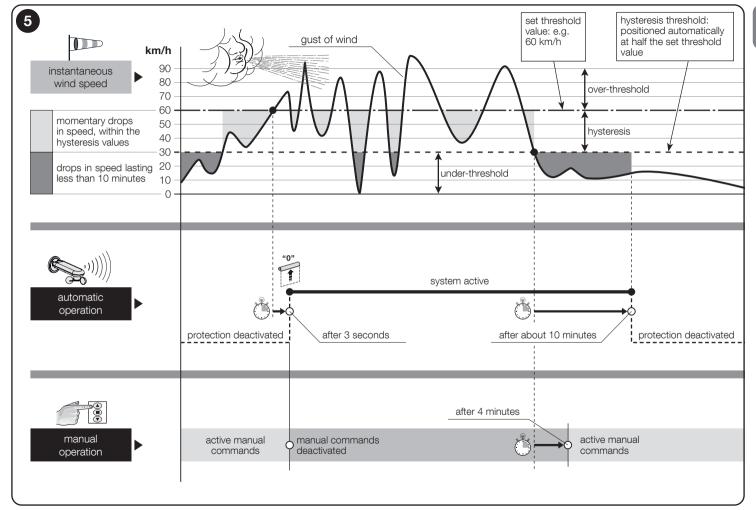


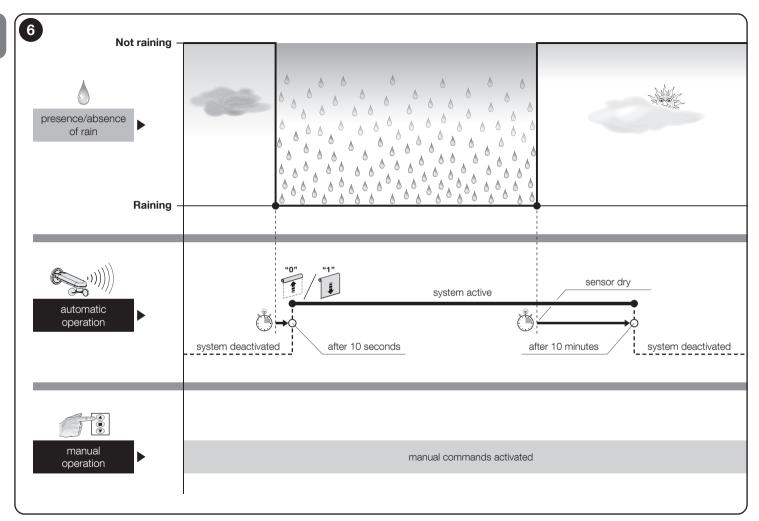


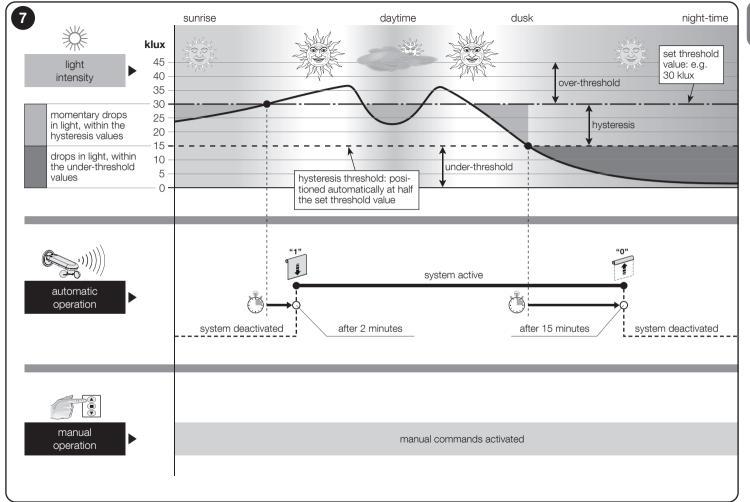




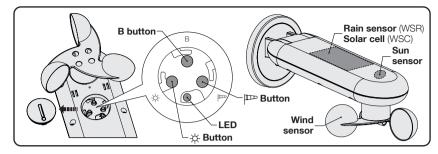
2 - English

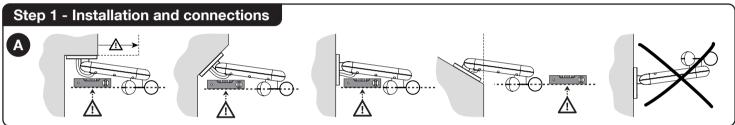


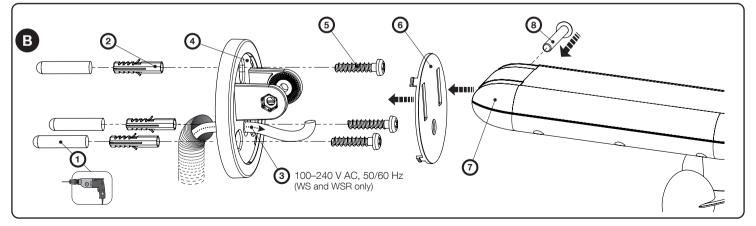


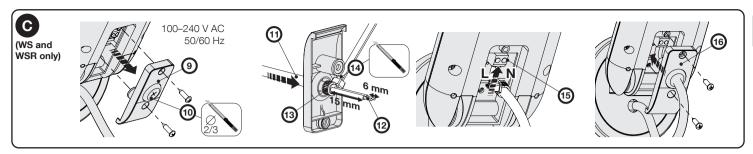


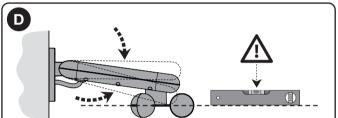
## Quick reference guide

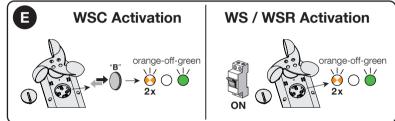




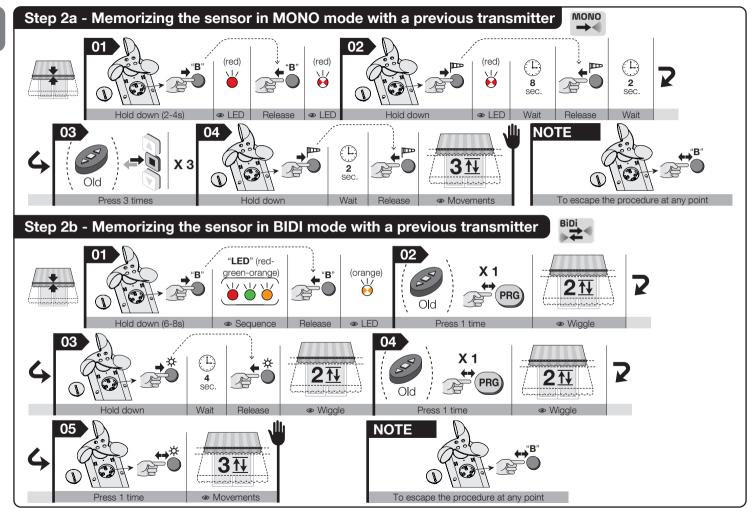




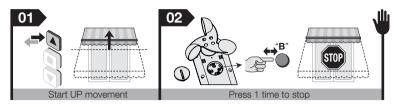




LEGEND					
0	LED OFF	<b>\</b>	LED ON		Press and hold the button
	Green LED	¥	LED flash	<b>*</b> 0	Release the button
•	Orange LED	<b>₩ %</b>	Multiple LED flashes		Press and release the button
•	Red LED		Wait	<b>③</b>	Observe / Check



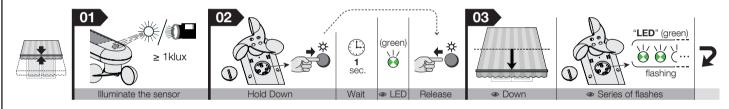
#### **Step 3 - Confirming memorization**

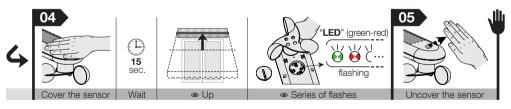


Step 4 - Testing the "Sun" sensor

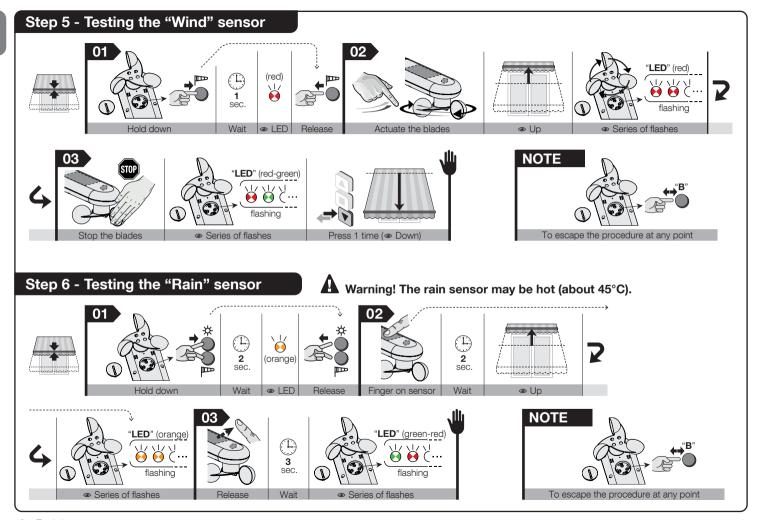


A The "Sun" feature must be activated in the motor.

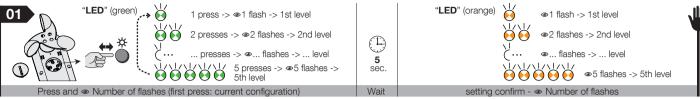






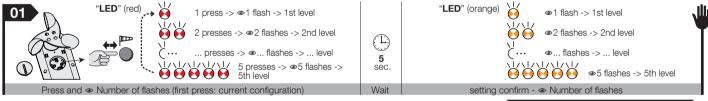


#### Step 7 - Setting "Sun" threshold



Available "Sun" thresholds				
N°	LED signal	Threshold		
1	1 flash	5 klux (default)		
2	2 flashes	15 klux		
2 3	3 flashes	30 klux		
4 5	4 flashes	45 klux		
5	5 flashes	60 klux		

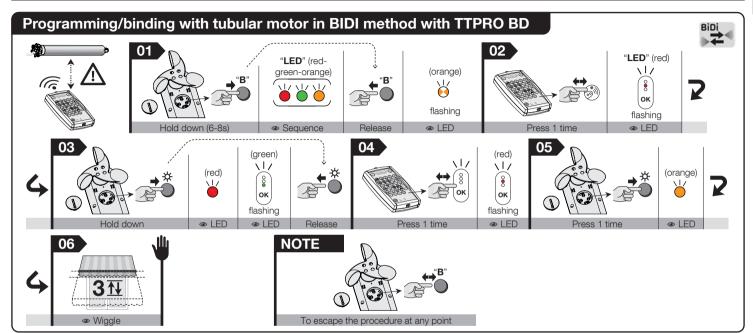
#### Step 8 - Setting "Wind" threshold

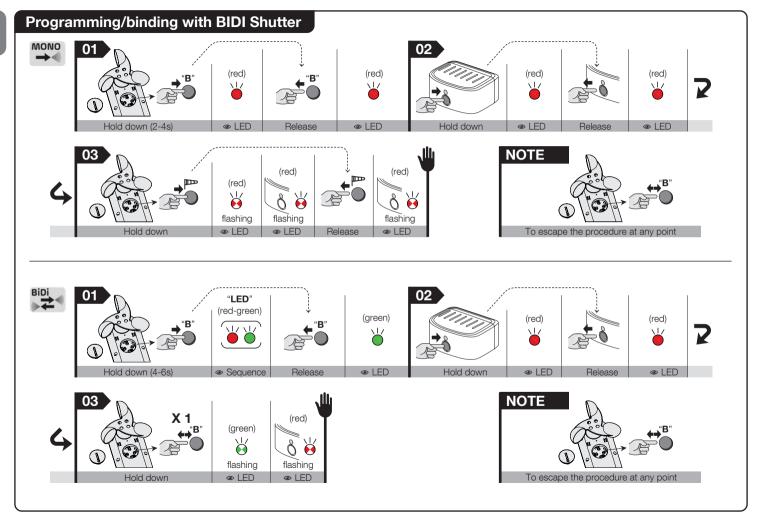


Available "Wind" thresholds				
N°	LED signal	Threshold		
1	1 flash	20 kph (default)		
2	2 flashes	40 kph		
3	3 flashes	60 kph		
2 3 4 5	4 flashes	80 kph		
5	5 flashes	100 kph		

#### Fig F - Factory reset 01 "LED" (red) "LED" (orange) **2** sec. 8 flashing sec. flashing Hold down Wait Wait Release (\*) Only WSR. "LED" (red) 10 sec. (green) 10 sec. ď After factory reset default protocol is BIDI. flash LED OFF

### **Addendum**

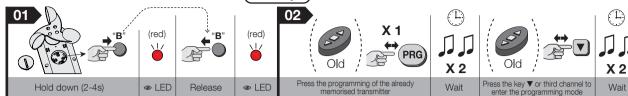


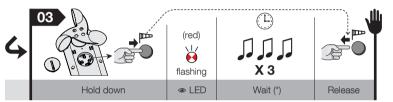


#### Programming/binding with BIDI Awning





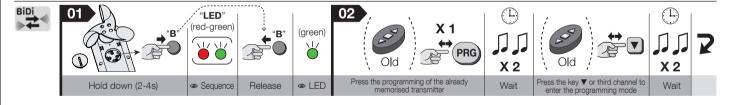


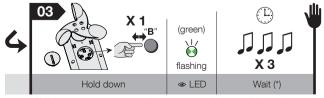


NOTE

To escape the procedure at any point

(\*) If the memorisation procedure is successful, you will hear 3 beeps.





 $(\mbox{\ensuremath{^{\prime}}})$  If the memorisation procedure is successful, you will hear 3 beeps.



#### **ENGLISH**

#### **GENERAL WARNINGS**

#### IMPORTANT

- Important safety instructions: observe these instructions - improper installation can result in serious injury.
- For personal safety it is important to observe these instructions.
- · Keep these instructions.
- All installation procedures, connections, programming and maintenance of the product must be performed exclusively by a qualified technician!
- The sensor is not a safety device capable of eliminating damage to the awning due to strong winds (indeed, a simple power failure can prevent the awning being automatically retracted).
   The sensor is rather part of an automation capable of protecting the awning and facilitating its use.
- The manufacturer is not responsible for damage due to atmospheric events undetected by the device's sensors.
- Do not open the device protection housing as it contains non-serviceable electrical circuits.
- Never apply modifications to any part of the device.
   Operations other than as specified can only cause malfunctions. The manufacturer declines all liability for damage caused by makeshift modifications to the product.
- Never place the device near sources of heat and never expose to naked flames. This may damage it and cause malfunctions.
- The product is not intended for use by persons (including children) with reduced physical, sensory or mental capacities, nor by anyone with insufficient experience or familiarity.

- Make sure that children do not play with the product.
- Handle the product with care, making sure not to crush, strike or drop it.
- WS and WSR only: On the power line to the system, install a device for disconnection from the power mains with a gap between contacts that assures complete disconnection in the conditions of overvoltage category III.
- WSR only: Make sure that the surface of the rain sensor is clean and clear of leaves, snow and other objects: clean it with a soft damp cloth, do not use alcohol, benzene, solvents or other agents when cleaning it.
- WSR only: The rain detection the sensor is heated, so heat emanating from it is not a sign failure.
- WSC only: The unit is solar powered. The photovoltaic cell must be exposed to sunlight throughout the day; make sure that its photosensitive surface is always clean and unobstructed by leaves, snow or other matter: clean it with a soft damp cloth, do not use alcohol, benzene, solvents or other agents when cleaning it.
- In case of conflicting readings from different sensors, the device prioritizes the conditions in the following order (from the highest to lowest priority): wind, rain, sun

## 1 - PRODUCT DESCRIPTION AND INTENDED USE

This product is a climatic sensor with integral radio transmitter; intended for use in automation systems for awnings, shutters, skylights, etc. with Nice tubular motors and control units. Any other use is to be considered improper and is strictly prohibited! Nice declines all liability for damage resulting from improper use of the product and other than as specified in this manual.

The WS and WSR versions of the sensor are mains powered and WSC version is solar powered. The other components are indicated in the Quick reference guide (Step 1 - fig. A and B).

Product operation is based on real-time readings of variations in wind speed, sunlight intensity and the presence of rain (WSR only). When the climatic sensor readings exceed their thresholds (either above or below), the sensor transmits a radio signal to the motor's automation receiver, which in turn activates an Up or Down manoeuvre, depending on the type of signal received (above or below the threshold).

## 2 - PRELIMINARY INSTALLATION CHECKS AND PRODUCT APPLICATION LIMITS

- Read the technical specifications provided in the chapter "Product technical specifications" to check the application limits of the sensor.
- (fig. 1) In favourable conditions (unobstructed field), the transmission range of the sensor is 100 m, however, since the sensor is intended to protect the awning, it is advisable to install it at most 10-20 m away from the motor. We also recommend checking that the zone is clear of other wireless devices transmitting on the same frequency, such as alarms, wireless headsets, etc.: they can further reduce the range or even block the transmissions of the device to the motor.
- Make sure that the sensor's installation zone satisfies the following requisites:
  - (fig. 2) it must allow for full and direct sunlight exposure of the sun sensor surface or solar panel; never install the product in zones subject to shade from awnings, trees, balconies etc. or below a source of intense artificial light;
- (fig. 3) the area must ensure exposure of the wind sensor blades to the same ventilation as that applied on the sun awning to be automated;
- (fig. 4) it must permit direct exposure of the rain sensor to the rain (WSR only).
- Since the sensor's body is jointed and can be oriented as desired, it can also be installed to sloping surfaces. The tilt range is given in the Quick reference guide (Step 1 phase 1).
- Ensure that the surfaces selected for installation are

- solid and guarantee a stable fixture.
- Make sure that the sensor is protected against accidental impact.

#### 3 - PRODUCT INSTALLATION

For installation, fix the various parts of the product in numerical order as shown in the Quick reference guide (Step 1 - **fig. B**). When installing WS and WSR sensors, connect the power supply (Quick reference guide - Step 1 - **fig. C**). Then adjust the sensor body as shown in the Quick reference guide and make sure that the wind sensor blades are horizontal (Quick reference guide - Step 1 - **fig. D**).

#### 3.1 - Activation of WSC sensor

The WSC sensor is shipped in standby mode. To activate the sensor: press the B Button once, the LED will flash orange twice, turn off, then light up green for 2 seconds (Quick reference guide - Step 1 - **fig. E**).

#### 3.2 - Activation of WS/WSR sensor

To activate the sensor: turn the power supply on, the LED will flash orange twice, turn off, then light up green for 2 seconds (Quick reference guide - Step 1 - fig. E).

#### 3.3 - Re-activation of WS/WSC/WSR sensor

During the subsequent startups, the LED flashing color is based on to the selected protocol:

- flashing orange orange red monodirectional,
- flashing orange orange green bidirectional.

#### 4 - MEMORIZING THE SENSOR IN THE MO-TOR RECEIVER

As for any other transmitter, the climatic sensor's radio code must be memorized in the receiver of the motor it controls, so that the sensor can send wireless commands. To memorise the sensor follow the "Mode I" procedure described in the manual of the tubular motor or associated receiver. Alternatively the following memorization procedure can be used.

**Caution!** – Memorize only one type of the transmitter: monodirectional or bidirectional. Do not mix the types.

## 4.1 - Memorising climatic sensor using an already memorised transmitter in Monodirectional mode (Quick reference guide - Step 2a)

- Before performing the procedure, move the awning to the middle position.
- To escape the procedure at any point, press the B button.
- Press and hold the B Button for 2 to 4 seconds, release when the LED changes to red.
- 2. Press and hold the Button for at least 10 seconds (the LED should be flashing red).
- Press the button of a previously memorized transmitter 3 times (slowly).
- Press and hold the Button for at least 2 seconds for the sensor to be memorized and check that the motor performs 3 movements (= memorization successful).
- 5. Press the B Button once to end the procedure.

## 4.2 - Memorising climatic sensor using an already memorised transmitter in Bidirectional mode (Quick reference guide - Step 2b)

- Before performing the procedure, move the awning to the middle position.
- To escape the procedure at any point, press the B button.
- Press and hold the B Button for 6 to 8 seconds, release when the LED changes to orange.
- Press the PRG/P button of a previously memorized transmitter once (confirmed with 2 motor movements).
- Press and hold the \* Button for at least 4 seconds (confirmed with 2 motor movements).
- Press the PRG/P button of a previously memorized transmitter once (confirmed with 2 motor movements).
- Press the 
   Button for the sensor to be memorized
   and check that the motor performs 3 movements (=
   memorization successful).
- 6. Press the B Button once to end the procedure.

#### 4.3 - Memorisation through the "Enable Code"

- 1. Press and hold the B Button for 8 to 10 seconds, release when the LED changes to green.
- 2. The device should blink green once, then 3 times fast, showing the current state of each group:
  - green free space,
  - red space used,
  - orange not bound with any devices.
- - 1x to select 1st group (LED blinks orange 1x),
  - 2x to select 2nd group (LED blinks orange 2x),
  - 3x to select 3rd group (LED blinks orange 3x).
- Turn on the remote, select group, then press the Button on the climatic once. The LED should be flashing orange.
- 5. The device should blink green once, then 3 times fast, showing the current space of each group:
  - green free space,
  - red space used,
  - orange not bound with any devices.
- 6. Press and hold the B Button for 1 to 3 seconds to bind with devices from the copy group.
- 7. Press the B Button once to end the procedure.

## 4.4 - Confirming memorisation (Quick reference guide - Step 3)

- Press the button of a previously memorized transmitter to start UP movement.
- Press the B button and check that the motor stops.
- B button stops the motor only if not in the procedure or programming menu.

#### 5 - MEMORIZING THE SENSOR IN THE HC3 / YUBII

- In Gateway HC3 / Yubii Choose +Add Device -> Nice Device.
- Choose Pairing Mode: "Pairing with BiDi Multisensor or MyNice alarm sensors" (4<sup>th</sup> position from top) press Next.
- 3. In Climatic Sensor (all variants) press and hold but-

- ton "B" until 6<sup>th</sup> MENU position LED Sequence = RED -> GREEN -> ORANGE -> GREEN -> ORANGE -> RED release "B" button (RED LED will be slowly blinking).
- 4. In HC3 / Yubii press "Bind Mode".
- 5. In Climatic Sensor short press again "B" button to start binding (RED LED will start fast blinking).
- 6. Climatic Sensor is adding to Gateway.

#### 6 - TESTING THE SENSORS

Once the sensors have been memorized, they must be tested as follows

## 6.1 - Testing the sun sensor (Quick reference guide - Step 4)

- Before performing the procedure, move the awning to a middle position.
- To escape the procedure at any point, press the B button.
- Illuminate the sun sensor with bright sunlight; if the day is very cloudy, use a lamp. The brightness of the light striking the sensor must be at least 1 klux.
- 2. Press and hold the 🛠 Button for at least 1 second, release when the LED starts flashing green.
- Check that, the motor lowers the awning and the green LED flashes briefly several times (= threshold exceeded).
- Obscure the sun sensor with a hand or a black cloth which lets no light through, and check:
   a) the LED briefly flashes red and green alternately several times (= threshold not exceeded);
   b) the motor rises the awning.
- 5. Remove your hand or the cloth.
- 6. Press the B Button to end the procedure.

## 6.2 - Testing the wind sensor (Quick reference guide - Step 5)

- Before performing the procedure, move the awning to a middle position.
- To escape the procedure at any point, press the B button.

- 1. Press and hold the Button for at least 1 second, release when the LED starts flashing red.
- Rotate the wind sensor blades and check: a) the motor must raise the awning; b) the sensor must prevent the motor receiving any other commands (thus protecting the awning against the wind); c) the LED must flash red several times (= threshold exceeded).
- Now stop the blades and check: a) the LED briefly flashes red and green alternately several times (= threshold not exceeded); b) the sensor must deactivate the protection function: send a transmitter command to the motor, the awning should respond.
- 4. Press the B Button to end the procedure.

## 6.3 - Testing the rain sensor (Quick reference guide - Step 6)

- Before performing the procedure, move the awning to a middle position.
- To escape the procedure at any point, press the B button.
- Warning! The rain sensor may be hot (about 45°C).
- Press and hold the ☆ Button and P Button for at least 2 seconds, release when the LED starts flashing orange.
- Place a finger on the rain sensor, hold it there and check: a) after 2 second the motor must raise the awning; b) the LED must flash orange several times (= rain detected).
- Take your finger off the sensor and check: after 3 seconds the LED briefly flashes red and green alternately several times.
- 4. Press the B Button to end the procedure.

## 7 - SETTING THE CLIMATIC SENSOR TRIP VALUE

You can set the "trip value" of the climatic sensors, i.e. a value above (or below) which the sensor trips and sends a wireless command to the receiver in which it is memorized.

#### 7.1 - Operation of the "Wind" threshold (fig. 5)

The wind sensor measures the wind speed in real time; when it exceeds the threshold for at least 3 seconds, the sensor sends the "Wind over-threshold" status and suspends sending commands for other sensors.

When the wind speed drops below half of the threshold for at least 4 minutes, the sensor sends the "Wind under-threshold" status. After 10 minutes (about) the sensor resumes sending other commands.

#### 7.2 - Operation of the "Rain" sensor (fig. 6)

The rain sensor operates in ON/OFF mode and has no threshold adjustment. When it starts to rain the sensor sends the "Presence of rain" status.

When the rain or snow stops, the sensor sends the "Absence of rain" status.

#### 7.3 - Operation of the "Sun" threshold (fig. 7)

The sun sensor measures the brightness of the sunlight in real time; when it exceeds the threshold for at least 2 minutes, the sensor sends the "Sun over-threshold" status.

When the brightness drops below half of the threshold for at least 15 minutes, the sensor sends the "Sun under-threshold" status.

## 7.4 - Setting the "Sun" threshold (Quick reference guide - Step 7)

- During the procedure, the green LED indicates current threshold (see Table 1) every 1 second.
- 3. Press the 🔆 Button to cycle to the next position.
- 4. To terminate the procedure, press the B Button or wait for the green flashing to stop.
- 5. Orange LED will indicate saved threshold position.

Table 1 - available "Sun" thresholds				
N°	LED signal	Threshold		
1	1 flash	5 klux (default)		
2	2 flashes	15 klux		

Table 1 - available "Sun" thresholds				
3	3 flashes	30 klux		
4	4 flashes	45 klux		
5	5 flashes	60 klux		

## 7.5 - Setting the "Wind" threshold (Quick reference guide - Step 8)

- 1. Press the PButton once.
- 2. During the procedure, the red LED indicates current threshold (see Table 2) every 1 second.
- 3. Press the Button to cycle to the next position.
- 4. To terminate the procedure, press the B Button or wait for the green flashing to stop.
- 5. Orange LED will indicate saved threshold position.

Table 2 - available "Wind" thresholds				
N°	LED signal	Threshold		
1	1 flash	20 kph (default)		
2	2 flashes	40 kph		
3	3 flashes	60 kph		
4	4 flashes	80 kph		
5	5 flashes	100 kph		

#### 8 - DIAGNOSTICS

You can enable "DIAGNOSTICS mode" at any time to check whether the weather conditions at the time are above or below the threshold values and to identify malfunctions. To enable diagnostics:

- Now watch the LED and check the sequence of flashes against Table 3.

**Caution!** – Diagnostics mode can only be used for reading signals off the LED, not for operating the awning.

**Note** – To check whether the device is really faulty, run the testing procedures given in chapter 5.

**Note** – If more than one weather condition is detected, the LED will signal them in order: wind > rain > sun.

## Table 3 - LED diagnostics signals 1 6 alternate Red/Green flashes = No thresholds have been exceeded 2 3 Red flashes = The wind threshold has been exceeded

- 3 Orange flashes = The rain has been detected
- 4 3 Green flashes = The sun threshold has been exceeded

#### 9 - RESTORING FACTORY DEFAULTS (FIG. F)

The reset procedure will restore default values of thresholds:

- Press and hold the 

  Button and 
  Button for 9
  to 11 seconds, release when the LED starts flashing red.
- 2. The LED:
  - turns RED for 10 seconds;
  - turns OFF for 10 seconds;
  - flashes GREEN 1 time to confirm reset.

#### 10 - STORING CLIMATIC SENSOR FOR LONG-ER PERIOD OF TIME

If Climatic Sensor Solar (DOMI WSC) device is going to be stored in dark place - there is need to put device in "Ship Mode".

To do this please perform below procedure:

- 1. Press and hold "B" button.
- 2. Wait approx. 20 seconds. LED sequence: RED -> GREEN -> ORANGE -> GREEN -> ORANGE ->

- $\mbox{RED -> NOTHING -> RED release immediately}.$
- 3. Device will not react to "Wind" and "Sun" buttons (leds will not blink). Pressing "B" button will wake up device.

#### 11 - BATTERY PROTECTION

To protect the battery the WSC sensor will enter the sleep mode, when battery level is too low. The LED signals low battery level with three short red flashes. The unit may enter sleep mode if mounted in a location that does not receive sufficient exposure to light. When the unit is in sleep mode, it does not control automation.

#### 12 - OPERATING THE MENU

	Time	LED	Action
<b>茶</b> ·	<1s (click)	green blink normal	Sunlight Level Threshold (number of blinks show the set level threshold)
<b>Button</b> ☆	2-4s	green blink normal	Sunlight test
	4-6s	orange blink normal	Diagnostic proce- dure
	>6s	led off	Menu end
	<1s (click)	red blink normal	Wind Level Thresh- old
Button	2-4s	red blink normal	Wind test
Butt	4-6s	orange blink normal	Diagnostic proce- dure
	>6s	led off	Menu end

	Time	LED	Action	
	2-4s	red on	Memorising MONO (see 4.1)	
	4-6s	green on	Memorising BIDI (see 4.3)	
	6-8s	orange on	Memorising BIDI (see 4.2)	
Button B	8-10s	green on	Memorisation through the "Enable Code"	
But	12-14s	red on	Binding with the gateway	
	20-26s (WSC)	red blink normal	Enter ship mode or software update	
	20-26s	red Enter software update		
	>26s	led off	Menu end	
<u>+</u>	2-4s (WSR)	orange blink normal	Rain test	
Button ☆ + 🖺	9-11s	red blink normal	Device factory reset	

## TECHNICAL CHARACTERISTICS OF THE PRODUCT

■ Power supply:

WS and WSR: 100-240 V AC, 50/60 Hz

WSC: autonomous solar power with 100 mWp photovoltaic cell

■ Frequency: 433.92 MHz with integral antenna

■ Radiated power(\*):

WS and WSR: approx. 4.5 mW (erp).

WSC: approx. 0,5 mW (erp).

In optimal conditions this corresponds to a range of approx. 100 m in open field or 20 m inside buildings.

■ Protection rating(\*\*): IP55

■ Operating temperature:

WS and WSR: - 20°C to + 60°C

WSC: - 10°C to + 60°C

■ **Dimensions mm:** (volume) 114 x 225 x 85 (H)

■ Number of motors that can be combined:

MOMODIRECTIONAL motors: no limits BIDIRECTIONAL Motors: 2 motors

"Sun" sensor

■ Range: 0 to 83 klux

■ Threshold: 5 to 60 klux

• "Rain" sensor (WSR only)

■ Range: Presence / absence of drops of water

• "Wind" sensor

■ Range: 10 to 120 kph ■ Threshold: 20 to 100 kph

#### NOTES ON TECHNICAL SPECIFICATIONS:

- (\*) The transmitter's range may be affected by other devices operating nearby and at the same frequency (e.g. wireless headsets, alarm systems, etc.), which interfere with it. In the event of strong interference, Nice cannot guarantee the effective range of their devices.
- (\*\*) WS and WSR: Only the correct installation of the cable in the seal and tightening the cable cover screws ensures proper sealing of the device.
- All technical specifications stated herein refer to an ambient temperature of 20° C (± 5° C).
- The device is equipped with an NFC module. For more information, please contact the support.
- Nice S.p.A. reserves the right to apply modifications to the product at any time when deemed necessary, maintaining the same intended use and functionality.

#### **EU DECLARATION OF CONFORMITY**

Hereby, NICE S.p.A., declares that the radio equipment types Domi WS, Domi WSC and Domi WSR are in compliance with Directive 2014/53/EU. The full text of the EU declaration of conformity is available at the following internet address: http://www.niceforyou.com/en/support

#### PRODUCT DISPOSAL

• This product is an integral part of the automation and must therefore be scrapped together with it, in the same way as indicated in the automation's instruction manual. • Dispose of the product packaging material in compliance with established local legislation.

