

**A510023**  
**BLUE BUS**

**A510024**  
**BLUE BUS RX**

**MODULO DI COMANDO E CENTRALIZZAZIONE  
PER AVVOLGIBILI**

**I**

**CONTROL AND CENTRALIZATION MODULE  
FOR ROLLING SHUTTERS**

**GB**

**STEUER- UND ZENTRALISIERUNGSMODUL  
FÜR ROLLADEN**

**D**

**MODULE DE COMMANDE ET DE CENTRALISATION  
POUR VOLETS ENROULABLES**

**F**

**MÓDULO DE MANDO Y CENTRALIZACIÓN  
PARA PERSIANAS ENROLLABLES**

**E**



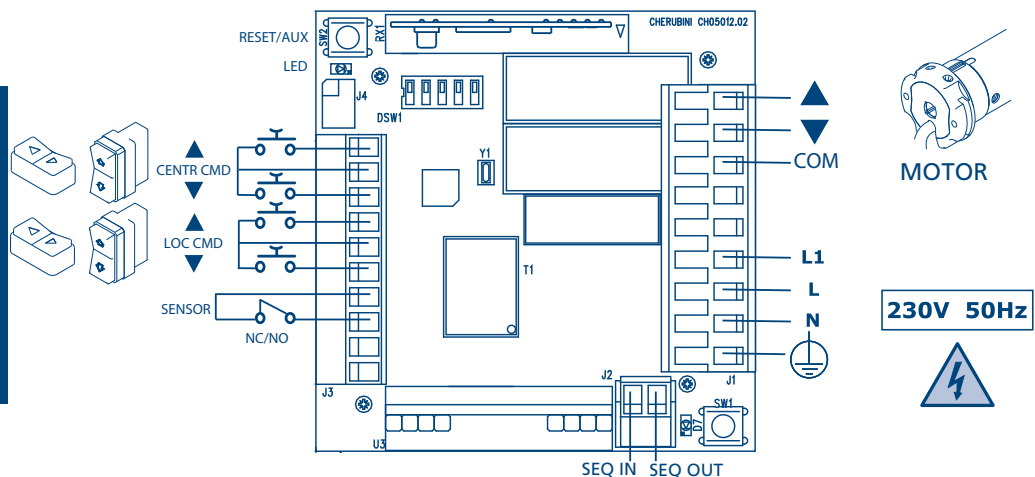
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## PRODUCT FEATURES

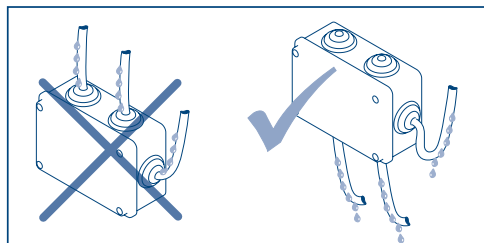
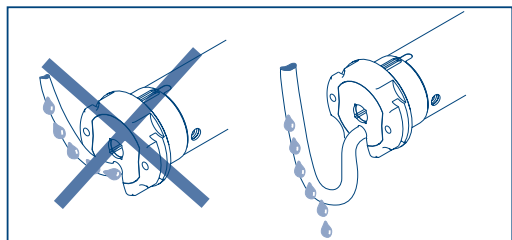
The Blue Bus control and centralisation module is indicated for the control of Cherubini mechanical and electronic motors intended for rolling shutters applications.

## ELECTRICAL CONNECTIONS




## INSTALLATION NOTES

- Only professional technicians must perform installation, complying with all safety instructions, especially those regarding electrical connections.
- To avoid short circuits, arrange an automatic bipolar switch with opening distance of the contacts of at least 3 mm before the circuit.
- We recommend reading the instructions attached to the motors you are using carefully, before using the Blue Bus module.

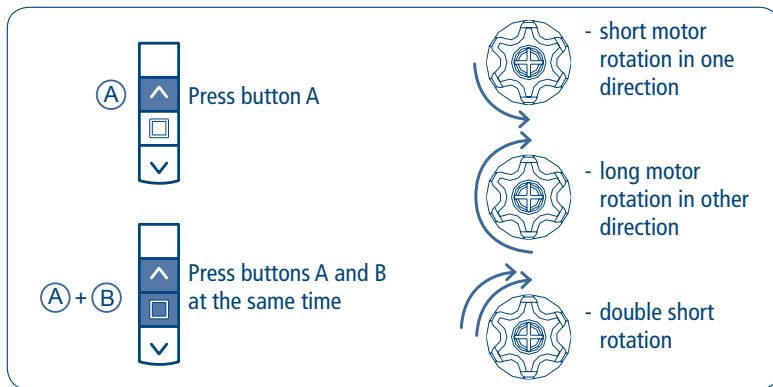


## NOTES FOR THE USER

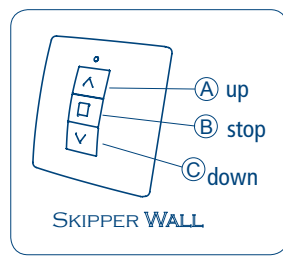
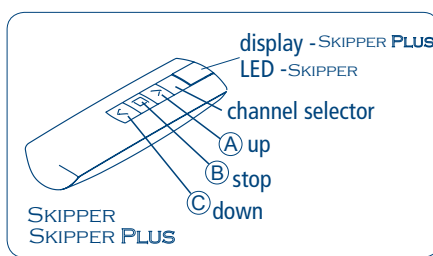
- This unit should not be used by children or persons with reduced psycho-physical capacity unless supervised or instructed by an adult on its use and operation.
- Inspect the system regularly for any signs of damage or wear. Do not use the unit if it is in need of repair.
- **ATTENTION:** keep this instruction manual and comply with all important safety regulations herein. Failure to comply with these regulations could cause harm and serious accidents.

Legend	
RESET/AUX	Reset/Aux key (resets alarm /reverses motor rotation direction/clears remote control memory)
LED	Led warning lamps
CENTR CMD	Input push buttons for centralised motor control
LOC CMD	Input push buttons for local motor control
SENS IN	Sensor input signal
SENS COM	Sensor common signal
+12V	+12 V DC output
0V	Reference 0V output
SEQ IN	Cherubini wire BUS input signal
SEQ OUT	Cherubini wire BUS output signal
▲	Motor ascent control clean output contact
▼	Motor descent control clean output contact
COM	Motor control common signal
L1	Phase voltage power output from the integrated current sensor
L	Phase voltage power input
N	Neutral voltage power input
	Power input earth connection

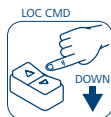
### KEY TO SYMBOLS ON THE REMOTE CONTROL



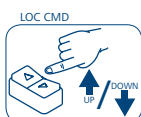
### COMPATIBLE REMOTE CONTROLS (BLUE BUS RX)



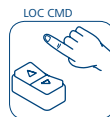
## KEY TO SYMBOLS ON THE CONTROL SWITCH



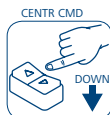
- press the DOWN button on the LOC CMD switch



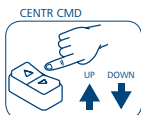
- press the UP or DOWN button on the LOC CMD switch



- release the button formerly pressed on the LOC CMD switch



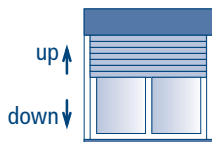
- keep the DOWN button pressed for 1 second on the CENTR CMD switch



- press the UP and DOWN button on the CENTR CMD switch quickly one after the other (0.5 seconds)

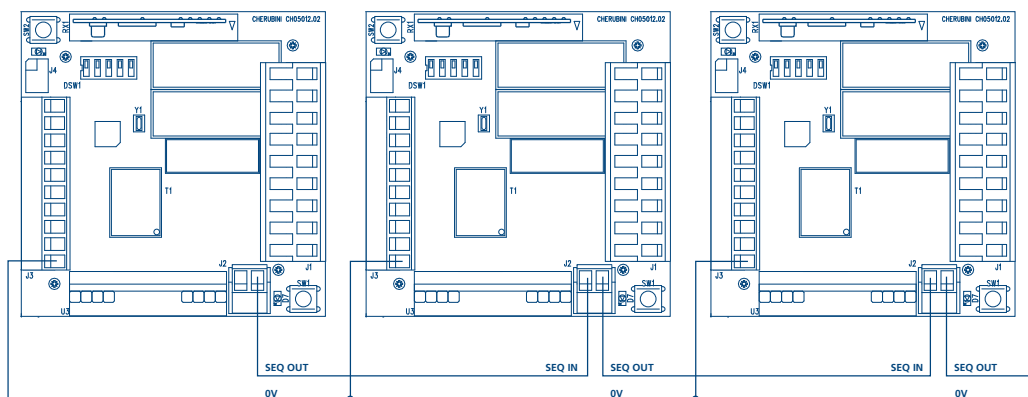


- send a DOWN command (automatically) from the SEQ OUT connector (centralized command)



Control unit type	Product Code
Blue Bus	A510023
Blue Bus RX	A510024

## CONNECTION TO THE CHERUBINI 2-WIRE BUS

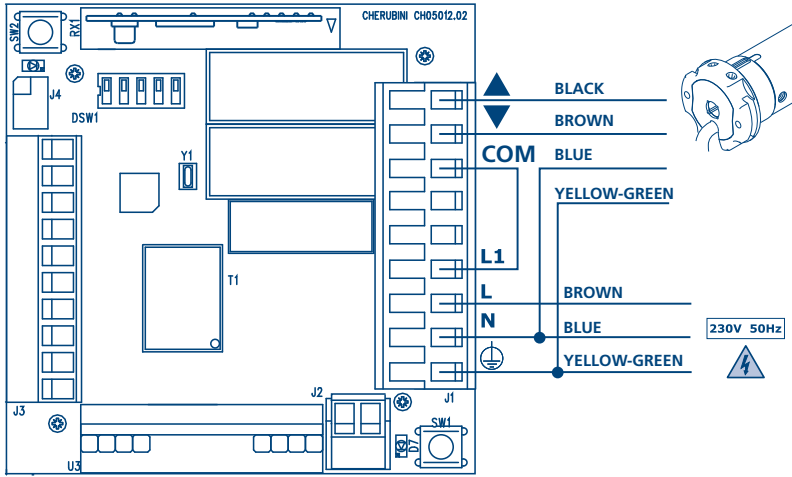


Note: centralised control is transmitted from one Blue Bus module to the other by the Cherubini 2-wire BUS.

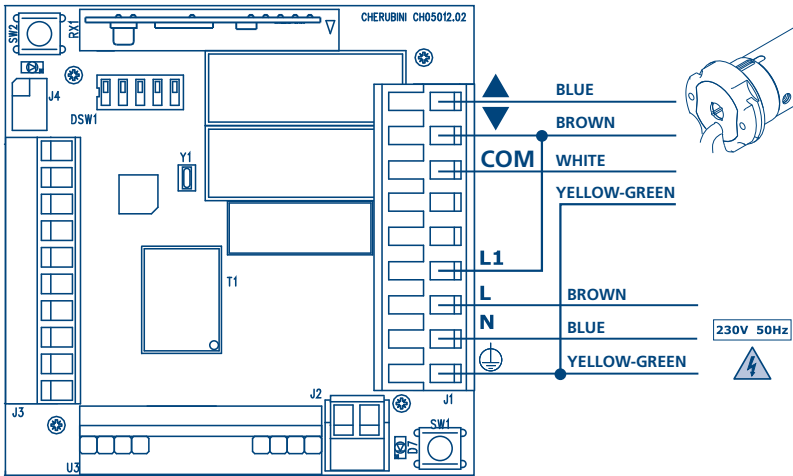
### Maximum length of the wire from one card to the other

Unshielded wire	10 m
Shielded or twist wire	50 m

## BLUE BUS MODULE CONNECTION TO MOTORS WITH STANDARD WIRING



## BLUE BUS MODULE CONNECTION TO WHITE-WIRE MOTORS



Note 1: for complete installation examples refer to the diagrams at the back of the manual.

Note 2: the output connection from L1 is used to propagate the centralised control and the alarms signals through the Cherubini 2-wire BUS for the purposes of motor movement.

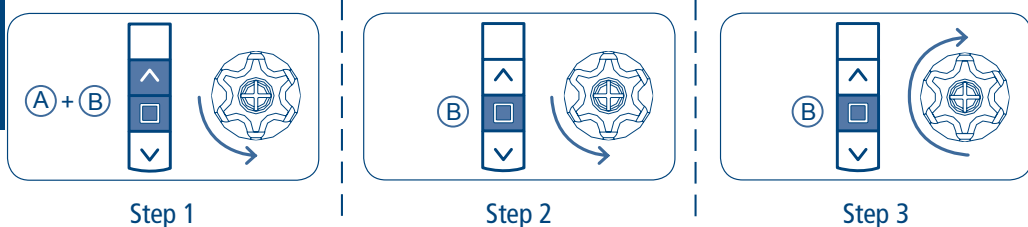
## COMMANDS FROM A REMOTE CONTROL (BLUE BUS RX)

It is possible to control the Blue Bus RX control unit by means of a Cherubini remote control. Follow the instructions shown in the following pages for programming. As far as all programming sequences are concerned, we recommend also consulting the remote control instruction leaflet.

### COMMAND SEQUENCES EXAMPLES (BLUE BUS RX)

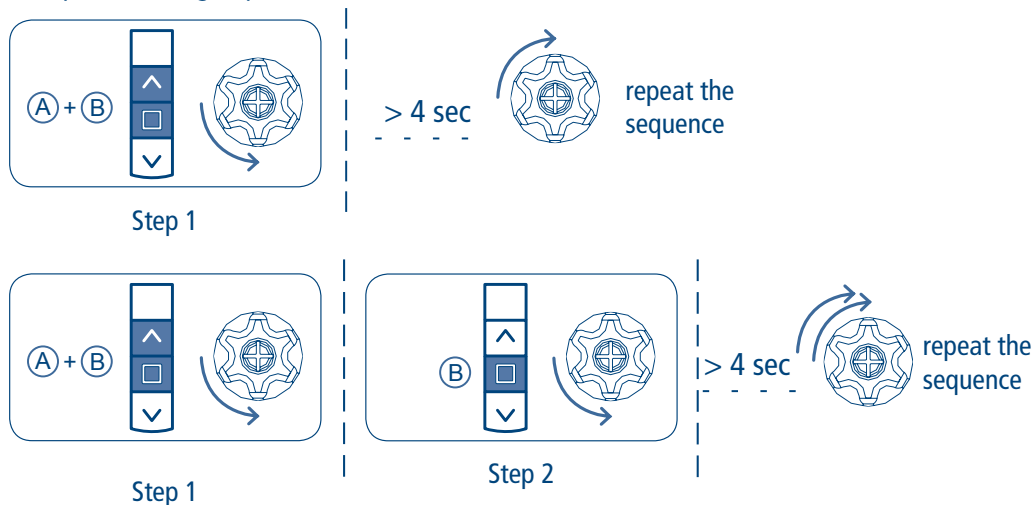
Most of the command sequences have three distinct steps, at the end of which the motor indicates if the step has been concluded positively or not, by turning in different ways. This section is provided to demonstrate the motor indications. The buttons must be pressed as shown in the sequence, without 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:



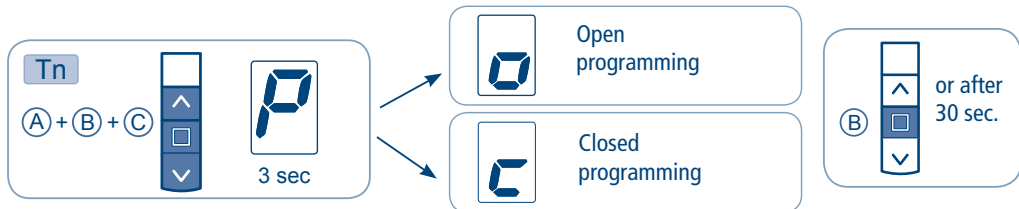


# FUNCTION OPEN/CLOSE PROGRAMMING

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

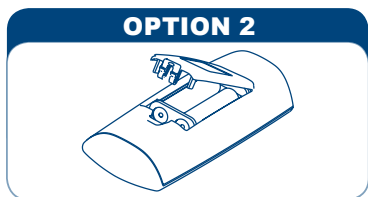
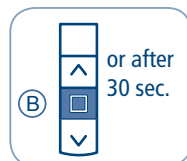
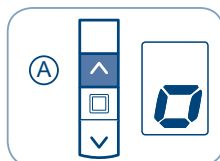
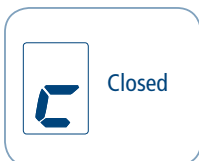
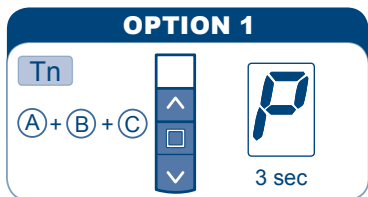
To prevent accidental changes to the programming of the motor during the daily use of the remote control, the possibility of programming is disabled automatically 8 hours after sending the last sequence (A+B or B+C).

### CHECKING THE STATUS OF THE FUNCTION



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

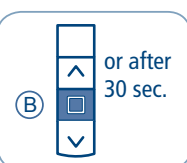
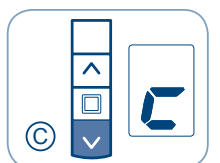
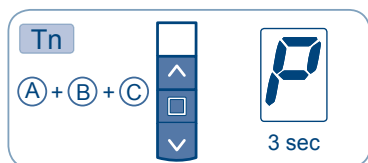
### ENABLE PROGRAMMING



Remove and replace a battery

Proceed with programming as the instructions booklet

### DISABLE PROGRAMMING

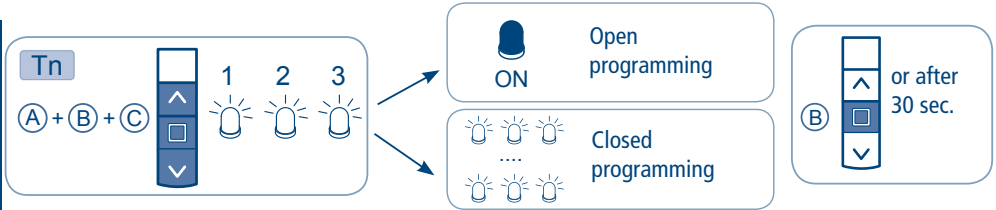


# FUNCTION OPEN/CLOSE PROGRAMMING

## REMOTE CONTROL SKIPPER - SKIPPER WALL

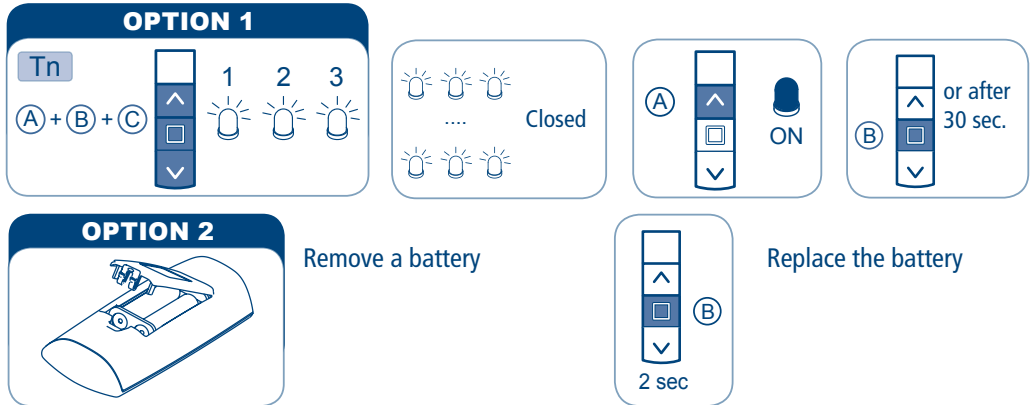
To prevent accidental changes to the programming of the motor during the daily use of the remote control, the possibility of programming is disabled automatically 8 hours after sending the last sequence (A+B or B+C).

### CHECKING THE STATUS OF THE FUNCTION



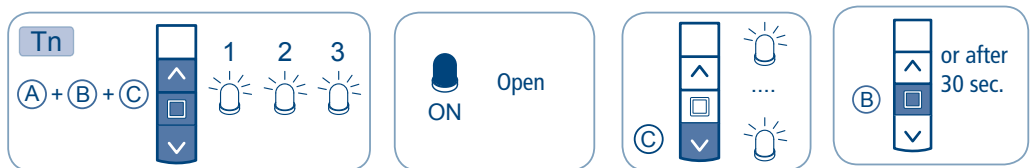
To change the status of the function, see the sequences "ENABLE/DISABLE PROGRAMMING"

### ENABLE PROGRAMMING



Proceed with programming as the instructions booklet

### DISABLE PROGRAMMING

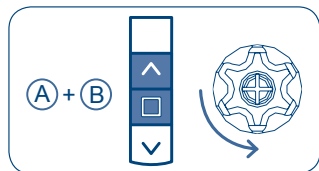


## SETTING THE FIRST REMOTE CONTROL (BLUE BUS RX)

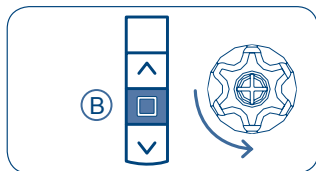
This operation can only be performed when the control unit is new, or after a total delete of the memory.

**During this step, power up only one control unit at time!**

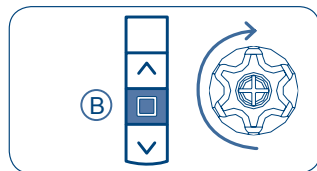
T1: First remote control to be set.



T1



T1



T1 (2 sec)

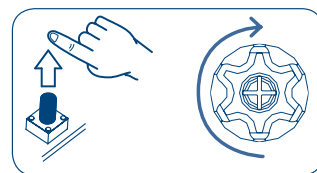
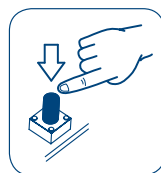
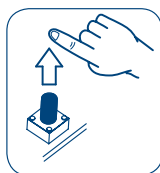
### AUTOMATIC DISABLING OF THE FIRST REMOTE CONTROL SETTING FUNCTION

Every time you connect the power supply to the control unit, you have 3 hours to store the first remote control. After this time, the ability to store the remote control is disabled. To reset the timer of the function you have to disconnect and reconnect the power supply to the control unit.

## SETTING THE ROTATION DIRECTION OF THE MOTOR

This operation is necessary if the rotation direction of the motor does not match to the UP and DOWN buttons of the remote control or of the control switch.

Setting the rotation direction using the button **RESET/AUX**:



max 2 sec

Interchanging the **BROWN** and **BLACK** motor wire on the terminals of the control unit, will also reverse the rotation direction.

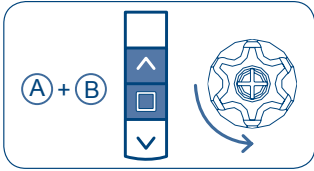
**The control unit will keep this setting even after complete memory clearing!!**

# SETTING OF ADDITIONAL REMOTE CONTROLS (BLUE BUS RX)

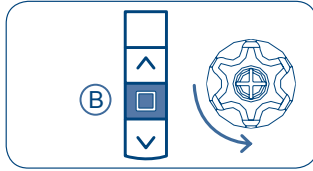
Up to 15 remote controls can be set.

Tn: Already programmed remote control

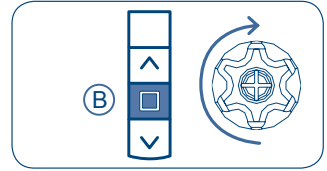
Tx: Additional remote control



Tn



Tn

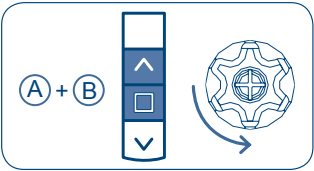


Tx (2 sec)

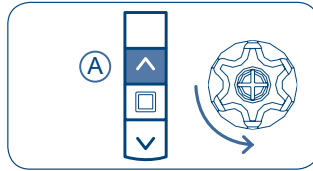
## REMOTE CONTROL MEMORY CLEARING (BLUE BUS RX)

It is possible to delete each memorized remote control individually. As the last one is deleted the control unit initial condition is restored. The same applies to the single channels of a multichannel remote control: just select the channel to cancel.

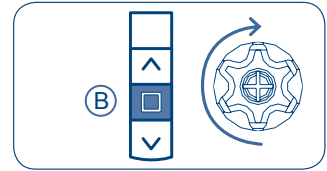
Tn: Remote control to be cleared



Tn



Tn



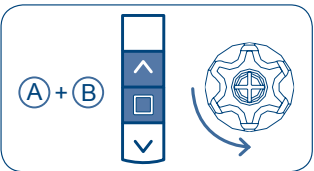
Tn (2 sec)

## FULL MEMORY CLEARING (BLUE BUS RX)

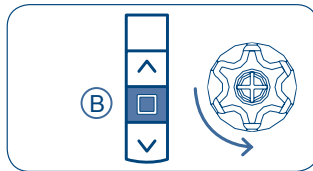
The full memory clearing can be performed in two ways:

1) WITH THE REMOTE CONTROL

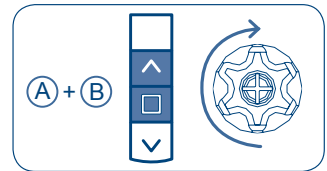
Tn: Already programmed remote control



Tn

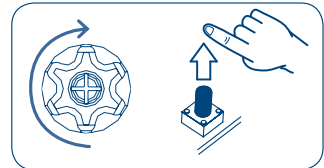
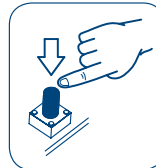


Tn



Tn (4 sec)

2) WITH THE BUTTON RESET/AUX:



about 8 sec

## SPECIAL FUNCTIONS (BLUE BUS RX)

### SHORT-TERM SETTING OF A REMOTE CONTROL

This function makes it possible to store a remote control temporarily, for example, with the purpose of setting the limit switches during assembly in the factory. A later final saving of the remote control will be possible using the appropriate command sequence (see: "SETTING THE FIRST REMOTE CONTROL").

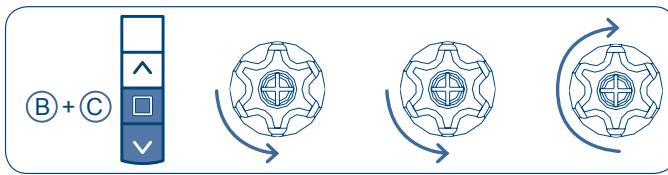
The operations described below can be carried out only when the control unit has just come out of the factory or after a full memory clearing (see: "FULL MEMORY CLEARING"). The control unit makes the following operations possible only within the time limits described in order to make sure that the short-term setting is used only in the installation or factory setting phase and not during daily use.

Power up the control unit, make sure that no other control units having an empty memory are powered up in the same operating range.

**Within 30 seconds after start**, press the B and C buttons simultaneously until the motor gives a confirmation signal.

**The remote control will remain stored for 5 minutes**, while the control unit is powered up. After 5 minutes or when the control unit has its power cut off, the remote control will be cancelled.

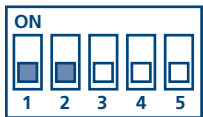
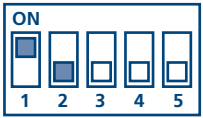
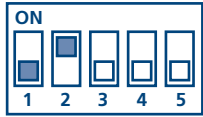
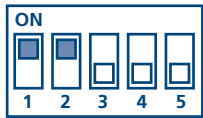
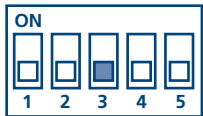
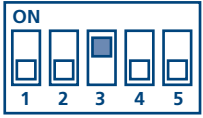
T1: First remote control to be set



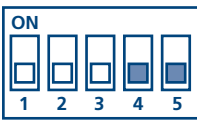
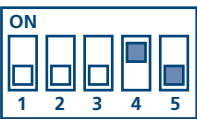
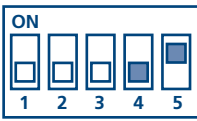
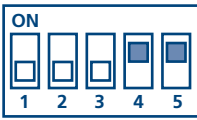
T1

## CONFIGURATION OF THE BLUE BUS MODULE

The Dip Switch present on the module makes it possible to configure some functions.

Configuring the local command and setting the type of motor	
<p>Motor command "dead man"</p>  <p>Dip Switch 1 OFF 2 OFF</p>	<p>The motor operates in the "dead man mode". This means that it moves as long as one of the LOC CMD push buttons is kept pressed.</p>
<p>Motor command "continuous mode"</p>  <p>Dip Switch 1 ON 2 OFF</p>	<p>The motor works in the "continuous mode". This means that it keeps moving even after one of the LOC CMD push buttons has been released. To stop the movement of the motor it is necessary to press any LOC CMD push button once again or the STOP push button on the remote control.</p>
<p>Setting for Blue Tronic RX V32 (orientable rolling shutters type Peryroll/Solomatic)</p>  <p>Dip Switch 1 OFF 2 ON</p>	<p>The board can control the Blue Tronic RX V32 motor having electronic limit switches, with the possibility of tilting the slats of orientable rolling shutters of the Peryroll or Solomatic type.</p> <p>Pressing UP/DOWN in rapid sequence within the CENTR CMD initiates the tilting mode of the motor and signals the same command to the following module (see Blue Tronic RX V32 manual).</p>
<p>Setting for Blue Tronic RX V32 (orientable rolling shutters of the BBC type)</p>  <p>Dip Switch 1 ON 2 ON</p>	<p>The board can control the Blue Tronic RX V32 motor having electronic limit switches WITHOUT the possibility of tilting the slats of orientable rolling shutter of the BBC type.</p> <p>Pressing UP/DOWN in rapid sequence within the CENTR CMD makes the movement of the motor with the slats completely open and signalling the same command to the following module (see the Blue Tronic RX V32 manual) possible.</p>
Configuration of the centralized command	
<p>Timed or automatic transmission of the centralized command</p>  <p>Dip Switch 3 OFF</p>	<p>The board which has received a centralized command from the control switch or through the BUS controls its own local motor and re-transmits the command to the following board after 10 seconds (or earlier, if the movement of the local motor has ended).</p>
<p>Exclusively automatic transmission of the centralized command</p>  <p>Dip Switch 3 ON</p>	<p>The board which has received a centralized command from the control switch or through the BUS controls its own local motor and re-transmits the command to the following board only after the movement of the local motor has ended.</p>

**Configuration of the auxiliary "Sensor" input** for connection of a clean normally closed contact (NC), e.g. an emergency push button or the NC contact of a safety sensor).

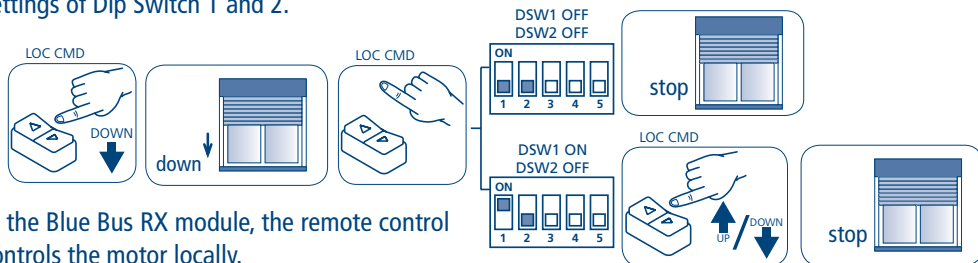
<p>Non-managed "sensor" input</p>  <p>Dip Switch 4 OFF 5 OFF</p>	<p>The auxiliary "sensor" is not managed.</p>
<p>Generation of alarms</p>  <p>Dip Switch 4 ON 5 OFF</p>	<p>When the NC contact is opened, an alarm is generated and the LED on the Blue Bus module blinks. The module controls the UP direction. Over the whole duration of the alarm, it is not possible to control the module from the control switch. The alarm ends when the NC contact is closed.</p>
<p><b>UP/DOWN commands of the module</b></p>	
 <p>Dip Switch 4 OFF 5 ON</p>	<p>When the NC contact is opened, the module controls the DOWN direction without generating an alarm.</p>
 <p>Dip Switch 4 ON 5 ON</p>	<p>When the NC contact is opened, the module controls the UP direction, when it is closed, the module controls the DOWN direction and no alarm is generated.</p>

## COMMANDS FROM THE CONTROL SWITCH

The Blue Bus and the Blue Bus RX control units make it possible to control the motor both locally and centrally, when the instructions shown in the following pages are followed. The switches must be interlocked mechanically and electrically to avoid the UP and DOWN arriving at the same time. Both commands must be of the unstable type (push button). When the push buttons are released, the contacts open. Should the rotation direction of the motor not correspond with the push buttons of the switch (for example, if you press "UP" and the rolling shutter goes down), carry out the operation described on the paragraph SETTING THE ROTATION DIRECTION OF THE MOTOR.

## OPERATION OF LOCAL COMMANDS

The motor can be controlled locally by means of a switch connected with the LOC CMD terminals of the J3 connector of the control unit, by means of three wires (up, down, common) or by using a remote control, if the module is of the Blue Bus RX type. By pressing one of the LOC CMD push buttons, the motor moves in the desired direction, until the limit switch is reached and stops according to the settings of Dip Switch 1 and 2.



In the Blue Bus RX module, the remote control controls the motor locally.

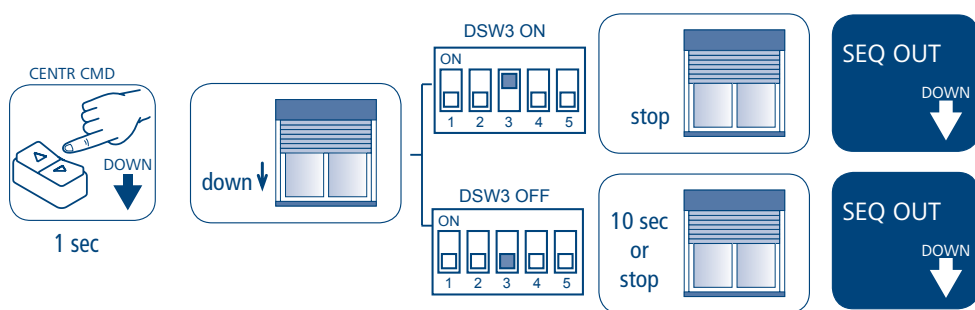
## OPERATION OF CENTRALIZED COMMANDS

The module can be controlled centrally by means of a switch connected with the CENTR CMD terminals of the J3 connector of the control unit through three wires (up, down, common) and by bringing the switch to a level parallel to all the boards one wishes to control. Otherwise it is possible to centralize modules in a sequence using the CHERUBINI 2-wire BUS present on the J2 connector.

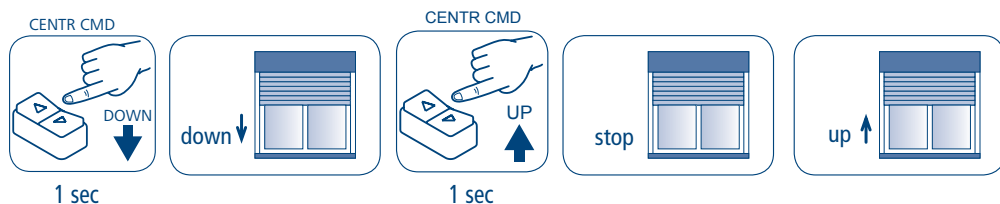
Centralized commands are delayed by 1 second, have priority over local commands, can move the motor only UP or DOWN and make an entry sequence involving the tilting of the slats in a motor of the V32 type possible, if the setting of the related Dip Switch allows it (page 34 - CONFIGURATING THE LOCAL COMMAND AND SETTING THE TYPE OF MOTOR).

If one of the two push-buttons of the CENTR CMD is kept pressed for at least 1 second, the motor moves in the desired direction, until the limit switch is reached.

The command is signalled to the following module through the SEQ OUT signal of the J2 connector according to the settings of Dip Switch 3.



If during the movement of a centralized command a push-button corresponding to an opposite direction is pressed, the motor reverses the direction of rotation.



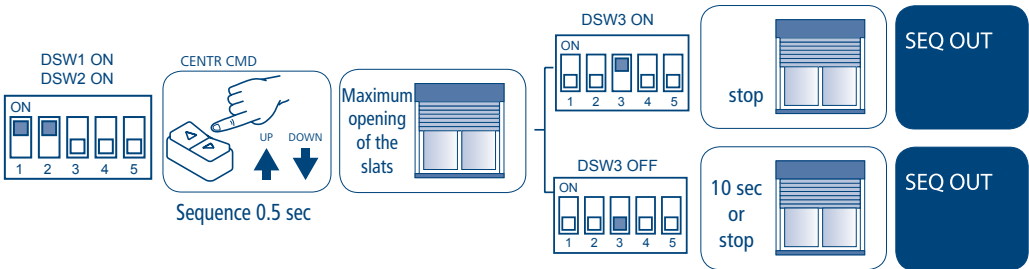


# SPECIAL COMMANDS (using BLUE TRONIC RX V32)

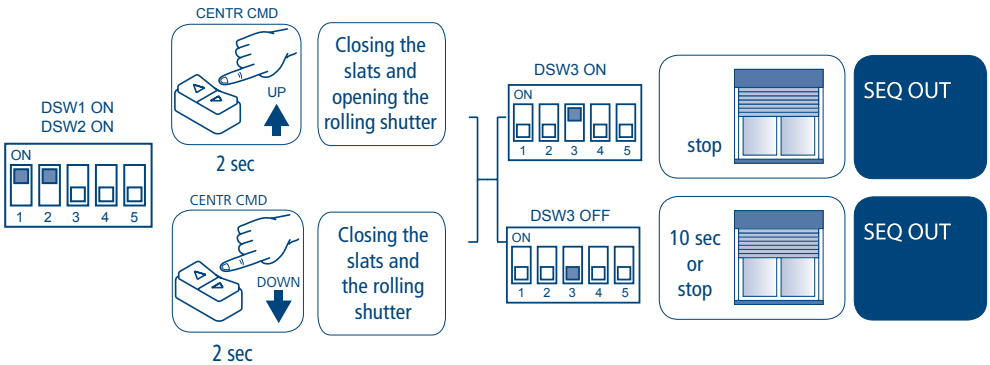
If the module is connected with a Blue Tronic RX V32 motor, it is possible to control the start of the tilting mode and to determine its orientation according to the settings of Dip Switch 1 and Dip Switch 2. The commands are signalled to the following module through the SEQ OUT signal of the J2 connector according to the settings of Dip Switch 3.

## BBC CONFIGURATION

### OPENING THE SLATS

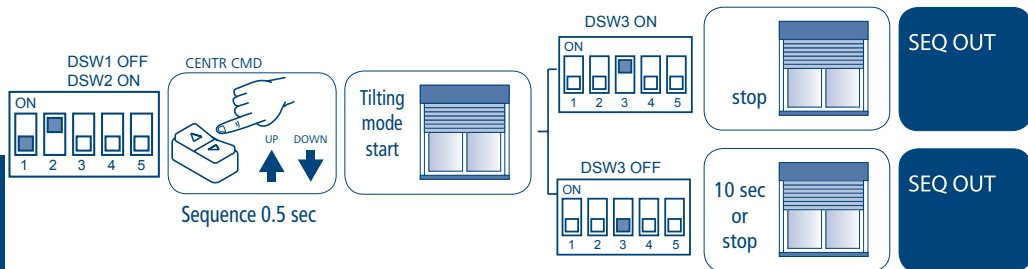


### IN THE TILTING MODE: CLOSING THE SLATS

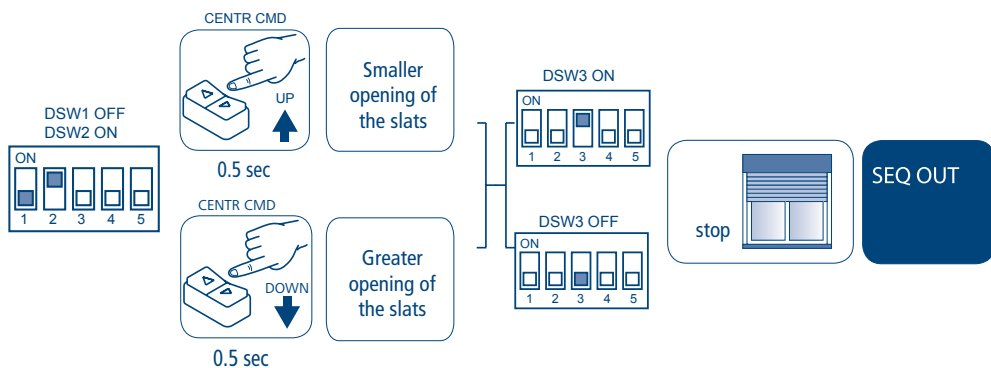


# CONFIGURATION OF THE PERSYROLL/SOLOMATIC

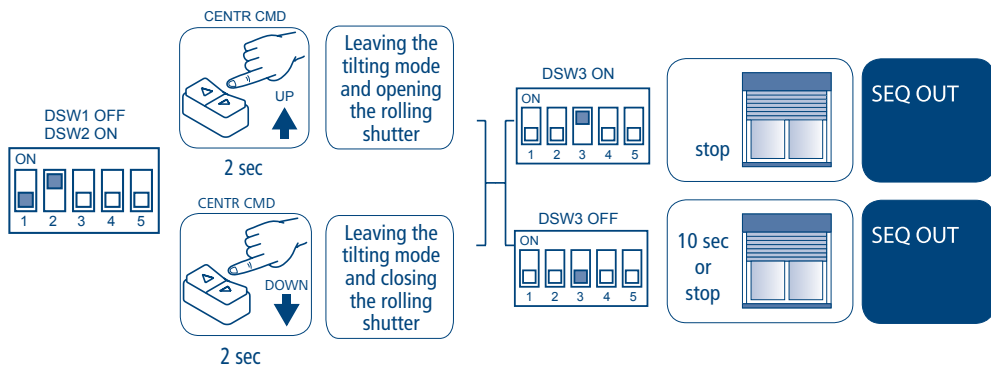
## TILTING MODE START



## IN THE TILTING MODE: ADJUSTMENT OF THE SLATS



## LEAVING THE TILTING MODE



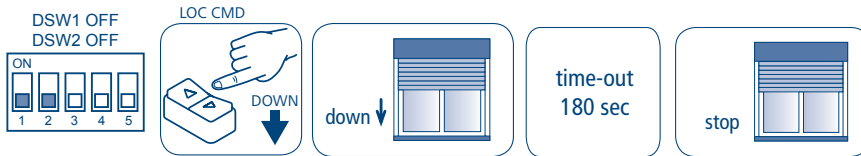
## SPECIAL COMMANDS (using MODULES A510008)

This operation mode is useful when one intends to use the Blue Bus module to control one or more Cherubini A510008 expansion modules (see, for example, connection on page 42).

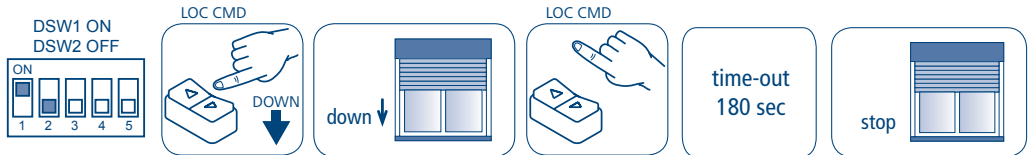
The Blue Bus module is equipped with a current sensor able to manage switching off the exits when the connected motor reaches the limit switch or stops because of an obstacle. To use this management mode, the L1 terminal of the J1 connector must be connected. If this management mode is not being used, the module controls the exits designed for the motor with a standard time-out of 180 seconds. "TIME-OUT" refers to the operation time of the control unit from the moment in which the command is given (opening or closing). The opening/closing time of all the rolling shutters connected must always be shorter than the time-out time.

The time-out is set to zero only after a set time has elapsed or after a stop.

### OPERATION MODE "DEAD MAN":



### OPERATION MODE "CONTINUOUS MOVEMENT":



## TECHNICAL FEATURES

- Power supply 110 V - 230 V AC
- Power consumption 2 W
- Max. motor power 500 W
- Operating temperature -10°C +55°C
- Dimensions 80 x 80 x 45 mm (plastic case)
- Weight 300 g
- Degree of protection IP44 (plastic case)

### Additional features for **BLUE BUS RX**

- Radio Frequency 433,92 MHz
- Decoder system Rolling Code
- Modulation AM/ASK
- Max number storable transmitters 15

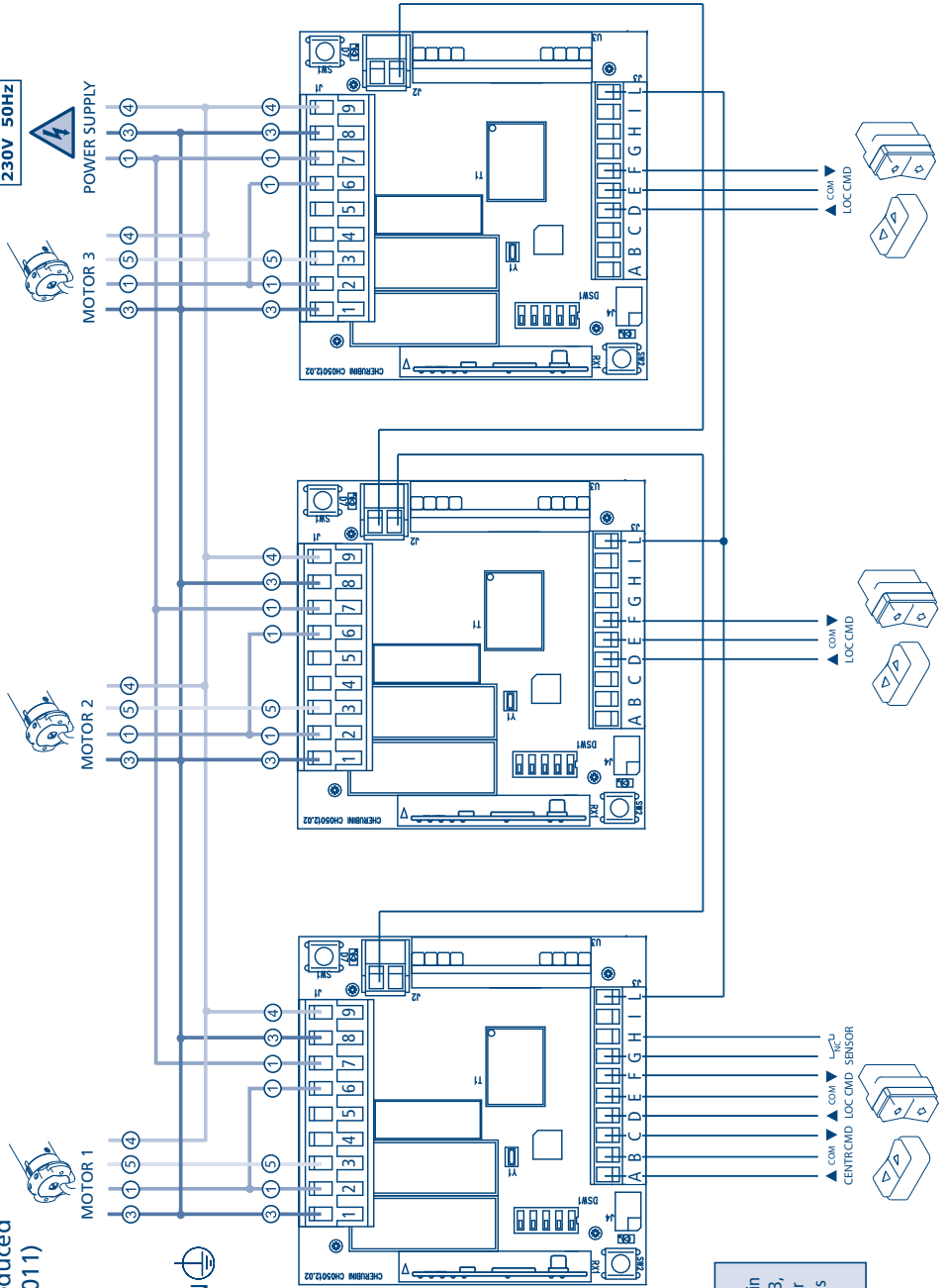


# CENTRALIZATION OF BLUE BUS MODULES IN A SEQUENCE WITH A 2-WIRE BUS FOR WHITE WIRE MOTORS (BLUE TRONIC RX\*\* - BLUE TRONIC WIRE - BLUE TRONIC RX V32)

(\*\* Motors produced starting from 2011)

## LEGEND

- ① BROWN
- ② BLACK
- ③ BLUE
- ④ YELLOW-GREEN
- ⑤ WHITE



**ATTENTION**  
the motors will move in a sequence from 1 to 3, after a CENTR CMD or a SENSOR command is given.



## **GARANZIA**

La garanzia è di 24 mesi dalla data di fabbricazione apposta all'interno. Durante tale periodo se l'apparecchiatura non funziona correttamente a causa di un componente difettoso, essa verrà riparata o sostituita a discrezione del fabbricante. La garanzia non copre l'integrità del contenitore plastico. La garanzia viene prestata presso la sede del fabbricante.

Il prodotto è conforme ai requisiti essenziali di Sicurezza, Compatibilità Elettromagnetica e utilizzo dello spettro Radiofrequenza della Direttiva 1999/05/CE.

## **GUARANTEE**

This product is guaranteed for 24 months from the date of manufacture indicated inside. If, during that period, the equipment does not work properly due to a defective component, it will be repaired or replaced at the discretion of the manufacturer. The warranty does not cover the integrity of the plastic container. The warranty will be honoured at the manufacturer's facilities.

The product fulfills the essential requirements of Safety, Electromagnetic Compatibility and use of the spectrum allocated to Radiocommunication of the Directive 1999/05/EC.

## **GARANTIE**

Die Garantiedauer beträgt 24 Monate ab dem im Innenbereich angegebenen Herstellungsdatum. Wenn das Gerät in diesem Zeitraum aufgrund einer fehlerhaften Komponente nicht korrekt funktioniert, wird diese nach Ermessen des Herstellers entweder repariert oder ausgetauscht. Die Garantie umfasst nicht die Unversehrtheit des Kunststoffbehältnisses.

Es wird erklärt dass das Produkt die einschlägigen Anforderungen der EU-Richtlinien 1999/05/EG (Sicherheit, elektromagnetische Verträglichkeit, Verwendung des radioelektrischen Spektrums) erfüllt.

## **GARANTIE**

La garantie a une validité de 24 mois à partir de la date de fabrication figurant à l'intérieur. Durant cette période, si l'appareil ne fonctionne pas correctement à cause d'un composant défectueux, il sera réparé ou remplacé au choix du fabricant. La garantie ne couvre pas l'intégrité du boîtier en plastique. La garantie est exécutée au siège du fabricant.

Le produit est en conformité avec les exigences essentielles de Sécurité, Compatibilité et utilisation du spectre radioélectrique de la Directive Européenne 1999/05/CE.

## **GARANTÍA**

La garantía es de 24 meses a partir de la fecha de fabricación indicada en el interior. Durante dicho período, si el aparato no funcionase correctamente a causa de un componente defectuoso, el fabricante está obligado a repararlo o sustituirlo. La garantía no cubre la integridad del contenedor de plástico. La garantía se prestará en la sede del fabricante.

El producto es conforme con las exigencias esenciales de Seguridad, Compatibilidad Electromagnética y uso correcto del Espectro Radioeléctrico de las Normas europea 1999/05/CE.



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