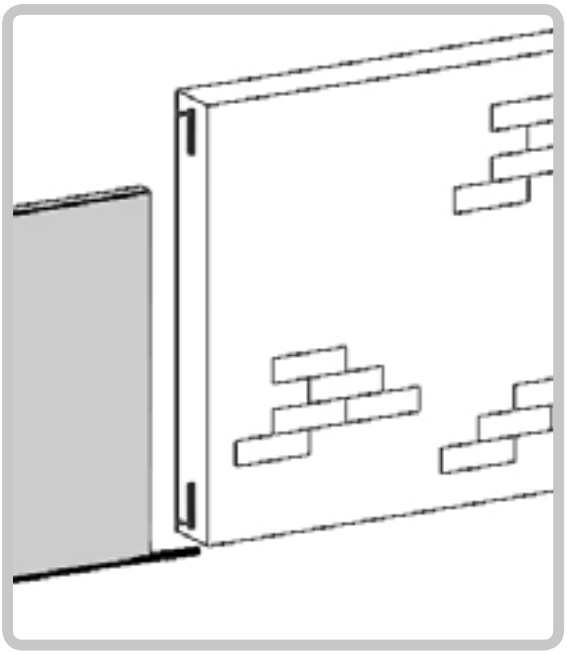
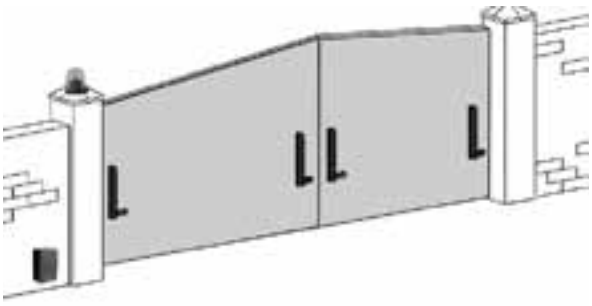
# VERTIGO WIRELESS

Brevettato - Patent VR2012U000024

**VERTIGO WIRELESS 8 code ACG8061**
**VERTIGO WIRELESS 10 code ACG8062**





**È possibile ruotare di 90° in 90° il gruppo soffietto in modo da orientare il raggio d'uscita infrarosso come desiderato.**

**On peut faire pivoter de 90° à 90° l'ensemble soufflet afin de diriger le faisceau de sortie infrarouge comme souhaité.**

**The bellows assembly which includes the lens, can be rotated by 90° in 90° so to adjust the direction of the ray as per installation need.**

**Sie können um 90° in 90° zu drehen die Balgbaugruppe, um den Strahl von Infrarot-Licht zu lenken, wie gewünscht.**

**Se puede girar de 90° en 90° el conjunto de fuelle con el fin de dirigir el rayo de salida de luz infrarroja como se desee.**

## I ISTRUZIONI DI SICUREZZA IMPORTANTI PER L'INSTALLAZIONE

### - ATTENZIONE -

**PER LA SICUREZZA DELLE PERSONE É IMPORTANTE CHE VENGANO SEGUITE TUTTE LE ISTRUZIONI**

1° - **Questo libretto d'istruzioni è rivolto esclusivamente a personale specializzato** che sia a conoscenza dei criteri costruttivi e dei dispositivi di protezione contro gli infortuni per i cancelli, le porte e i portoni motorizzati (attenersi alle norme e alle leggi vigenti).
2° - L'installatore prima di procedere con l'installazione deve prevedere l'analisi dei rischi della chiusura automatizzata finale e la messa in sicurezza dei punti pericolosi identificati (seguendo le norme EN 12453/EN 12445).
3° - Prima di eseguire qualsiasi operazione di installazione, regolazione, manutenzione dell'impianto, togliere la tensione agendo sull'apposito interruttore magnetotermico collegato a monte dello stesso.

LA DITTA RIB NON ACCETTA NESSUNA RESPONSABILITÀ per eventuali danni provocati dalla mancata osservanza nell'installazione delle norme di sicurezza e delle leggi attualmente in vigore.

### CONSERVARE CON CURA QUESTE ISTRUZIONI

I dati descritti nel presente manuale sono puramente indicativi.
RIB si riserva di modificarli in qualsiasi momento.
Realizzare l'impianto in ottemperanza alle norme ed alle leggi vigenti.

### CURA E MANUTENZIONE

Deve essere effettuata solo da personale autorizzato in accordo con le regole di sicurezza e con le istruzioni del fabbricante, con frequenza semestrale.
- I dispositivi di sicurezza devono essere mantenuti in condizioni di lavoro efficienti e in accordo con le istruzioni del fabbricante.
- Verificare la presenza e la leggibilità della marcatura iniziale del prodotto.
- Sostituire le batterie quando richiesto dal sistema (vedere tabella "IN CASO DI DIFFICOLTÀ").
- Pulire le lenti presenti sul trasmettitore e ricevitore, usando un panno umido.
- Verificare l'integrità dei contenitori e dei soffietti. Se sono danneggiati devono essere sostituiti.
- Verificare l'elasticità dei soffietti piegandoli e constatando che ritornino nella posizione iniziale.


## F INSTRUCTIONS DE SECURITE IMPORTANTES POUR L'INSTALLATION

### - ATTENTION -

**POUR LA SECURITE DES PERSONNES IL EST IMPORTANT QUE TOUTES LES INSTRUCTIONS SOIENT SUIVIES**

1° - **Ce livret d'instructions est adressé exclusivement à un personnel spécialisé** qui connaît les critères de construction et les dispositifs de protection contre les accidents concernant les portails, les portes et les grandes portes motorisés (s'en tenir aux normes et aux lois en vigueur).
2° - L'installateur avant de procéder à l'installation, doit prévoir l'analyse des risques de la fermeture automatisée finale et la mise en sécurité des points identifiés dangereux (en suivant les normes EN 12453/EN 12445).
3° - Avant l'exécution de toute opération d'installation, de réglage, d'entretien de l'installation, couper le courant en agissant sur l'interrupteur magnétothermique à cet effet, branché en amont de l'installation.

LA SOCIETE RIB N'ACCEPTE AUCUNE RESPONSABILITE pour d'éventuels dommages provoqués par la non-observation dans l'installation, des normes de sécurité et des lois actuellement en vigueur.

### CONSERVER SOIGNEUSEMENT CES INSTRUCTIONS

Les données figurant dans le présent manuel sont fournies à titre purement indicatif.
RIB se réserve le droit de les modifier à tout moment, sans aucun préavis.
Effectuer l'installation en conformité avec les normes et les lois en vigueur.

### CONTROLES ET ENTRETIEN

Il doit être effectué seulement de personnel autorisé en accord avec les règles de sûreté et avec les instructions du fabricant, avec la fréquence semestrielle.
- La dispositifs de sécurité doivent être maintenus en condition de travail efficace en respectant les instructions du fabricant.
- Vérifier la présence et la lisibilité du marquageinitial du produit.
- Substituer les batteries lorsque demandé du système (voir tableau EN CAS DE DIFFICULTÉ).
- Nettoyer à l'aide d'un chiffon humide les lentilles sur l'émetteur et le récepteur.
- Vérifier l'intégrité des boîtiers et des soufflets. En cas de dommages, ces derniers devront être remplacés.
- Vérifier l'élasticité des soufflets en les pliant et en constatant le retour dans leur position initiale.

## C B IMPORTANT SAFETY INSTRUCTIONS FOR THE INSTALLATION

### - ATTENTION -

**FOR THE SAFETY OF THE PEOPLE IT IS IMPORTANT TO FOLLOW ALL THE INSTRUCTIONS.**

1° - **This handbook is exclusively addressed to the specialized personnel** who knows the constructive criteria and the protection devices against the accidents for motorized gates, doors and main doors (follow the standards and the laws in force).
2° - Before proceeding with the installation, the installer must forecast the risks analysis of the final automatized closing and the safety of the identified dangerous points (following the standards EN 12453/EN 12445).
3° - Before carrying out any installation, regulation or maintenance operation of the system, take off the voltage by operating on the special magnetothermic switch connected upstream it.

THE RIB COMPANY DOES NOT ACCEPT ANY RESPONSIBILITY for possible damages caused by the non observance during the installation of the safety standards and of the laws in force at present.

### KEEP THESE INSTRUCTIONS WITH CARE

Data described by this manual are only Indicative.
RIB reserves to modify them at any time.
Install the system complying with current standards and regulations.

### MAINTANANCE

Must be carried out every six months, only by authorized personnel in agreement with the safety rules and with the manufacturer's instructions.
- The safety accessories must be maintained in good and efficient conditions in accordance with the manufacturer's instructions.
- Verify the presence and readability of the original markings on the product.
- Replace the batteries when requested by the system (see the chart "IN CASE OF DIFFICULTIES").
- Clean the lenses on the transmitter and the receiver using a wet cloth.
- Check that the packaging containers and the bellows are intact. If they are damaged, they must be replaced.
- Check the elasticity of the bellows by folding them and observing whether they return to their original position.


## D WICHTIGE SICHERHEITS ANLEITUNGEN FÜR DIE INSTALLATIONEN

### - ACHTUNG -

**FÜR DIE SICHERHEIT DER PERSONEN IST ES WICHTIG, DASS ALLE ANWEISUNGEN GENAU AUSGEFÜHRT WERDEN**

1° - **Diese Betriebsanleitung dient ausschließlich dem Fachpersonal**, welche die Konstruktionskriterien und die Sicherheits-Vorschriften gegen Unfälle für Tore, Türen und automatische Tore kennt (geltende Normen und Gesetze beachten und befolgen).
2° - Vor der Installierung muss für die automatische Schließung und zur Sicherheitsgewährung der identifizierten kritischen Punkte, eine Risiko Analyse vorgenommen werden mit der entsprechenden Behebung der identifizierten, gefährlichen Punkte. (die Normen EN 12453/EN 12445 befolgend).
3° - Vor jeglichem Eingriff, sei es Installation, Regulation oder Wartung der Anlage, muss vorher die Stromzufuhr unterbrochen werden, den dafür bestimmten Magnetthermo-Schalter drücken, der am Eingang der Anlage installiert ist.

DIE FIRMA RIB ÜBERNIMMT KEINE VERANTWORTUNG für eventuelle Schäden, die entstehen können, wenn die Installierungsvorschriften die den gültigen Sicherheitsnormen entsprechen, nicht eingehalten werden.

### INSTALLATIONSVORSCHRIFTEN BEACHTET WERDEN

Die in diesem Handbuch aufgeführten Daten sind ausschließlich empfohlene Werte. RIB behält sich das Recht vor, das Produkt zu jedem Zeitpunkt zu modifizieren.
Die Anlage muss in Übereinstimmung mit den gültigen Normen und Gesetzen montiert werden.

### PFLEGE UND WARTUNG

Das darf nur von autorisiertem Personal, in Übereinstimmung mit Sicherheits-Vorschriften und Anweisungen des Herstellers, alle sechs Monate gemacht.
- Die Sicherheitsvorrichtungen müssen in einwandfreiem Zustand gehalten und gemäß den Anweisungen des Herstellers verwaltet werden.
- Überprüfen Sie das Vorhandensein und die Lesbarkeit der ersten Markierung des Produktes.
- Wechseln Sie die Batterien, wenn das System fragt (siehe Tabelle "IM FALLE VON SCHWIERIGKEITEN").
- Reinigen Sie die Linsen auf Sender und Empfänger mit einem feuchten Tuch.
- Überprüfen Sie die Unversehrtheit der Gehäuse und Bälge. Falls sie beschädigt sind, müssen sie ausgewechselt werden.
- Prüfen Sie die Bälge auf ihre Biegsamkeit und stellen Sie sicher, dass sie in ihre ursprüngliche Position zurückkehren.

VERTIGO WIRELESS conforms to standards EN12978 and EN13849-2 (2008) when used with a RIB electronic control panel it is a Class 2 protection device for protecting persons/things from collisions caused by mechanical moving parts such as automatic gates or doors.
The obstacle is detected for the whole distance between the infrared transmitter and receiver which constitute the VERTIGO WIRELESS product.

When using RIB electronic control panels you can run auto-tests on the system.
With RIB actuators, RIB electronic control panels having the auto-test function and RIB safety devices you can create an installation that conforms to the European Directives and Norms in force.
After completing the system, you must make sure it conforms to standard EN13241-1.
RIB shall not be liable for any damages caused by improper, incorrect or unreasonable use of the product.

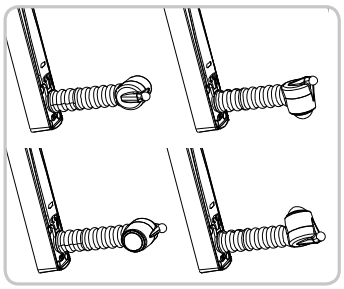
The VERTIGO WIRELESS photocells cannot be used on devices excluded by the application of the EN12978, such as:
- Protection devices for the installation on doors used for a different purpose to those ones used for pedestrian or veheicle access, covered by the norm which principal intent is that of allowing a safe access to industrial, commercial, public and commercial sites. Some examples of excluded accesses can be: sluice gates, dams, lift doors, vehicles' doors, doors used mainly to restrain animals, theatre curtains, railways barriers, barriers used only for vehicles.
- Devices used only fo the standard control and for the stopping, including the emergency stopping, of motorized doors.
- Safety systems and safety devices used on machineries different from doors.

Any possible modification of the device, or of the configuration of the same cannot be carried out without the clear authorization by the manufacturer or, by the local authorized dealer.
The installer of the safety device must make sure that the end user know the following:
- That the safety devices must be made known to all appropriate people.
- That the passages to reach the devices must be kept clear from any obtsacle.
- About the procedures for cleaning so to avoid the dangerous building up of material.
- The possible details for a restart of the system after an emergency or accidental stop caused by the control system.

Any modification of the project or, of the configuration of the device, without discussing it first with the manufacturer or with the local autorized dealer can cause dangerous situations.

VERTIGO WIRELESS are produced in wall-type versions:
code ACG8061
code ACG8062
to be fasten to the primary and/or secondary borders (mobile or fixed) made of iron or other smooth material.

- If necessary, rotate the bellows assembly which includes the lens by 90°, so to direct the infrared ray as per need (VERTIGO WIRELESS comes with the infrared ray set as per Fig. 6). It is possible to direct the ray according to the needs:



## APPLICATION

| | MAX GATE WEIGHT | MAX DISPLACEMENT SPEED |
|---|---|---|
| VERTIGO WIRELESS 8 | 150 kg<br>300 kg | 13 m/min.<br>10 m/min. |
| VERTIGO WIRELESS 10 | 500 kg<br>1000 kg | 13 m/min.<br>10 m/min. |

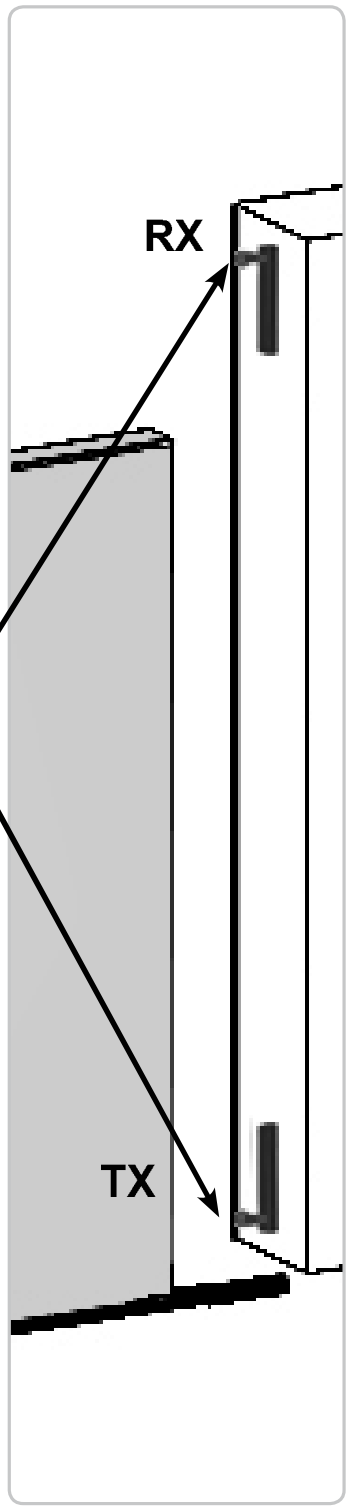
## MOUNTING

**VERY IMPORTANT!**

**When installing the VERTIGO WIRELESS photocell, besides following the instructions in the chapter "APPLICATION", verify that when using a NOT RIB control panel, this one must be complying with the reaction time (inversion) requested by the Norm EN12453 (requirements of safety devices used on motorized gates/doors).**

**PLACE THE RECEIVER OF THE PHOTOCELL ON THE TOP OF THE COLUMNS OF THE GATE.**

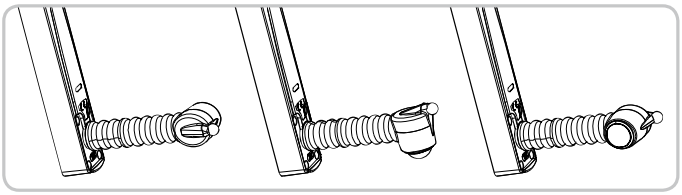
**THE VERTIGO WIRELESS TRANSMITTER MUST BE APPLIED TO THE BOTTOM OF THE COLUMNS OF THE GATE.**



# INFRARED SIGNAL TRANSMITTER - TX

## ASSEMBLY OF THE INFRARED TRANSMITTER

- Separate the cover with the rubber support **(1)** from the base **(2)** and remove the electronic board **(3)** (Fig. 2).
- Place the base **(2)** on the lower border of the leaf of the gate and fasten it immediately using 2 self-tapping screws TCCR3,5X16 supplied **(4)**.
- Check that the gasket is present and it is intact within the cover **(1)**.
- If necessary, rotate the bellows assembly which includes the lens by 90°, so to direct the infrared ray as per need (VERTIGO WIRELESS comes with the infrared ray set as per Fig. 2). It is possible to direct the ray according to the needs:



- Insert the electronic board **(3)**, linked to the cover with the bellow, in the special rails on the base **(2)**.
- Insert the batteries paying attention to the polarity (Fig. 4).
- When the batteries are inserted into the transmitter the DLTX green led (Fig. 1) lights on for 10 seconds, indicating the proper functioning. The led then switches off to avoid consuming the batteries energy, but the transmission of the infrared signal remains active.
- Assemble the cover **(1)** attaching it to the base **(2)** on the top part using the special tooth and then close the cover.
- Once the cover is closed, check that it is parallel to the base. Otherwise, open it again and check that the circuit and the connection wires are correctly fitted in their seats.
- Fasten the cover **(1)** to the base **(2)** with the 4 self-tapping screws TCCR2,9X9,5 supplied **(5)**.

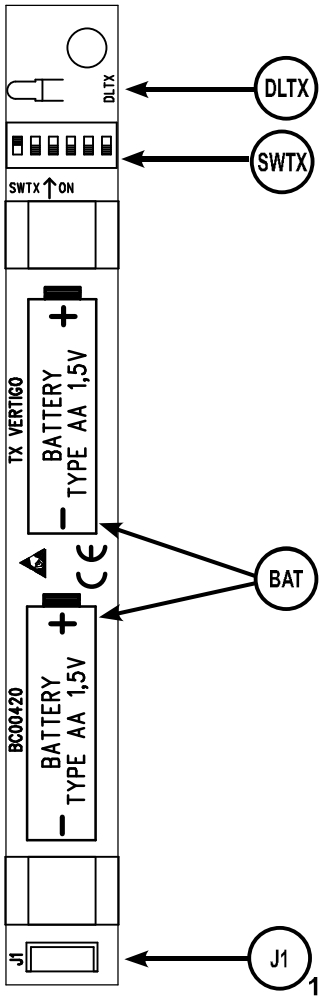
## TRANSMITTER SETTINGS AND CONNECTIONS

**DLTX** Green LED function indicator

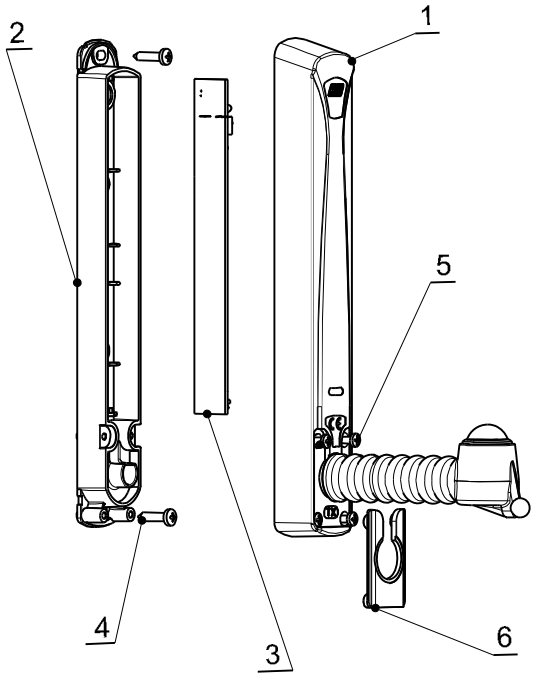
**SWTX** **DIP 1 ON**
**DIP 2-6 OFF**

**BAT** Alkaline batteries 2 x AA 1,5V

**J1** Connector for connecting the transmitter diode




1

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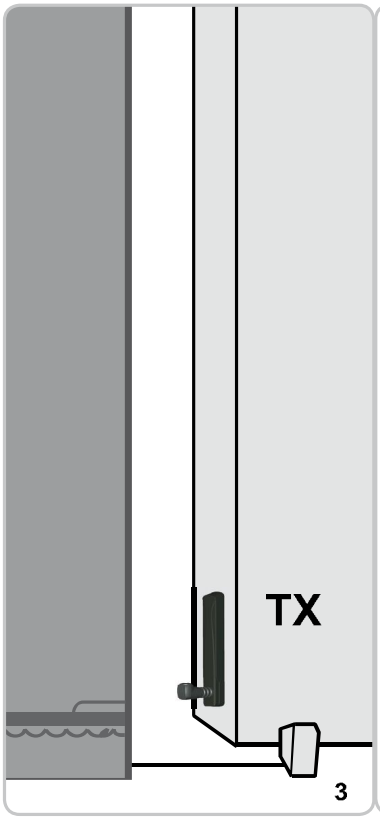


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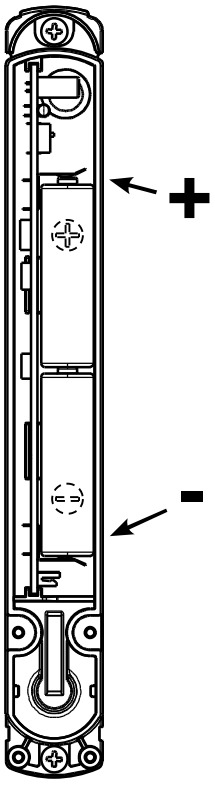


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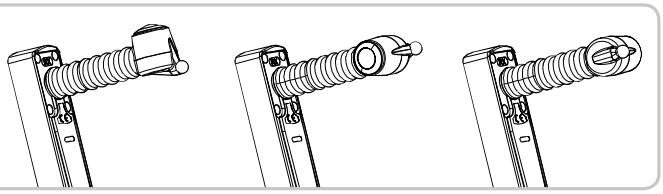
## ASSEMBLY OF THE INFRARED RECEIVER

- Separate the cover with the rubber support **(7)** from the base **(8)** and remove the electronic board **(9)** (Fig. 5).
- Remove the lid doing pressure with a screwdriver and insert the conduit supplied.
- Place the base **(8)** on the upper border of the leaf of the gate (at a maximum distance of 3 metres from the transmitter).
- Fasten it immediately using 2 self-tapping screws TCCR3,5X16 supplied **(10)**.
- Check that the gasket is present and it is intact within the cover **(7).**
- If necessary, rotate the bellows assembly which includes the lens by 90°, so to direct the infrared ray as per need (VERTIGO WIRELESS comes with the infrared ray set as per Fig. 5). It is possible to direct the ray according to the needs:



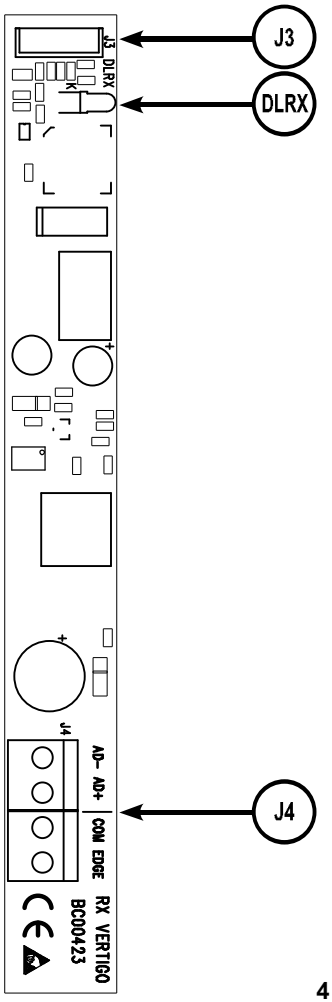
- Insert the electronic board already mentioned, linked to the cover with the bellow, in the special rails on the base.
- As power supply is given to the receiver the DLRX red led (Fig. 4) lights on indicating the proper functioning.

## RECEIVER SETTINGS AND CONNECTIONS RX

**J3** Connector for connecting the receiver diode

**DLRX** Red LED indicating correct power and infrared signal alignment

**J4** Terminal block
**AD+** Power Supply 12-24V ac/dc
**AD-** Power Supply 12-24V ac/dc
**COM** Contacts' common
**EDGE** Normally closed contact NC

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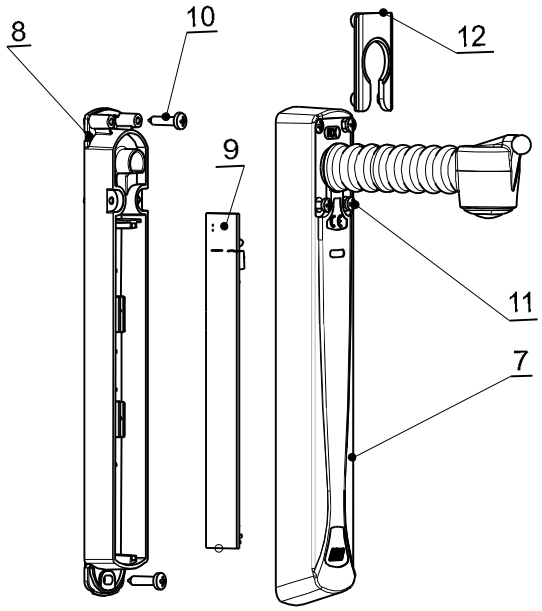


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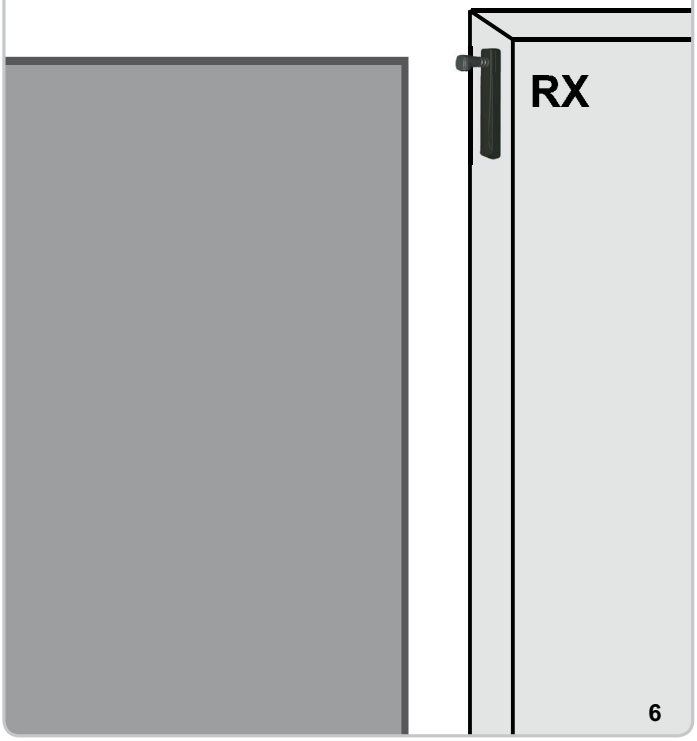


6

## SYSTEM CHECK

After finishing the mounting procedure, check the correct working order by doing the following:

- Check on the infrared receiver RX VERTIGO WIRELESS that the red led is on. If it is not so, align transmitter and receiver to turn the red led on.
- Place an object between them and check that the red LED turns OFF and that at the same time on the control panel the corresponding LED EDGE is OFF and a while the object is present.
- Repeat the process on the other VERTIGO WIRELESS photocells installed.
- Then perform a system check of all the photocells installed by activating the movement of the automation and checking that when an object is present the automation stops/reverses when closing, or stops/continues to open when opening.

## CLOSING THE VERTIGO WIRELESS CONTAINERS

Lastly, place the screw cover caps **(6) (12)** both on the TX and on the RX of the VERTIGO WIRELESS (Fig. 2-5), by inserting them into the 4 holes so that they are perfectly attached.

## CHANGING THE BATTERIES

The duration of the batteries used for VERTIGO WIRELESS photocells is about 2 years.

- To identify which VERTIGO transmitter has empty batteries, it is enough to check the red led present on the receiver. It should be turned off in presence of no obstacles between transmitter and receiver.
- Replace the batteries of the transmitter checking that the polarity is correct.

The automation is now ready to begin safe operation once more.

**ATTENTION: Please remember that batteries must be disposed of properly according to current standards. In case of disposal of the photocells please remember to remove and dispose of the batteries properly.**

## OPTIONAL


**AA ALKALINE BATTERIES**
4 X 1,5V
battery life with VERTIGO WIRELESS 2 years.
code ACG9519

**AA LITHIO BATTERIES**
2 X 1,5V - (buy 2 pieces)
battery life with VERTIGO WIRELESS 3 years.
For extreme temperatures -40÷+60°C.
code ACG9509

## TECHNICAL SPECIFICATIONS

**VERTIGO WIRELESS RECEIVER**

| | |
|---|---|
| - POWER | 12/24V ac/dc |
| - MAXIMUM ABSORPTION | 25 mA |
| - OPERATING TEMPERATURE | -20°C ÷ +60°C |
| - COVER | in polycarbonate |
| - BASE | in ABS |
| - BELLOW | in silicon |
| - PROTECTION LEVEL | IP55 |
| - WEIGHT | 0,135 kg |

**VERTIGO WIRELESS TRANSMITTER**

| | |
|---|---|
| - POWER | alkaline batteries 2 x AA 1,5V(>2,7Ah) |
| - POWER ABSORBED | 3 µA |
| - MODULATION TYPE | FSK |
| - BATTERY LIFE | about 3 years |
| - OPERATING TEMPERATURE | -20°C ÷ +60°C |
| - COVER | in polycarbonate |
| - BASE | in ABS |
| - BELLOW | in silicon |
| - PROTECTION LEVEL | IP55 |
| - WEIGHT | 0,130 kg |

**TX INFRARED SIGNAL TECHNICAL DETAILS**

| | |
|---|---|
| - RANGE | 3 m |
| - WAVELENGTH | 850 nm |
| - DIMENSION OF THE DETECTION AREA | Ø 20 mm |

| SELF-TEST-ENABLED RIB ELECTRONIC BOARD CHART | | |
|---|---|---|
| **RIB ELECTRONIC BOARD** | **CONNECT A/D+ TEST TERMINAL TO TERMINAL** | **ENABLE SELF-TEST FUNCTION THROUGH** |
| K2007 / K2007 CRX | A+ TEST | DIP 10 |
| S1 | A+ TEST | DIP 12 |
| T2 - T2 CRX | D+ TEST | DIP 13 |
| T2 24V - T2 24V CRX | A+ TEST | DIP 12 |

## APPLICATION

| | MAX GATE WEIGHT | MAX DISPLACEMENT SPEED |
|---|---|---|
| **VERTIGO WIRELESS 8** | **150 kg<br>300 kg** | **13 m/min.<br>10 m/min.** |
| **VERTIGO WIRELESS 10** | **500 kg<br>1000 kg** | **13 m/min.<br>10 m/min.** |

## TROUBLESHOOTING

| PROBLEM | CHECK |
|---|---|
| The green LED DLTX of the TX does not turns on as you give power supply. | - Check batteries onTX. |
| The red LED DLRX of the RX does not turns on as you give power supply. | - Check that on RX terminals is present the power supply 12/24V ac/dc<br>- Check batteries onTX.<br>- Check the correct allignment between TX and RX |
| The gate does not open. | VERTIGO WIRELESS is not aligned or stuck (red led on RX turned OFF). Check alignment between TX and RX up to obtain red led turned on on RX. |
| The gate does not close. | AUTOTEST failed.<br>VERTIGO WIRELESS is not aligned or stuck (red led on RX turned OFF). Check alignment between TX and RX up to obtain red led turned on on RX. |