

USER MANUAL

move SERIES RADIOCONTROLS



Transmitter units:

- T_{3,5,7} move
- BRICK move
- PAIL move
- GENESIS move

Receiver units:

- RUBYBOX move
- ECOBOX move
- DIN move

EN

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WARNING!

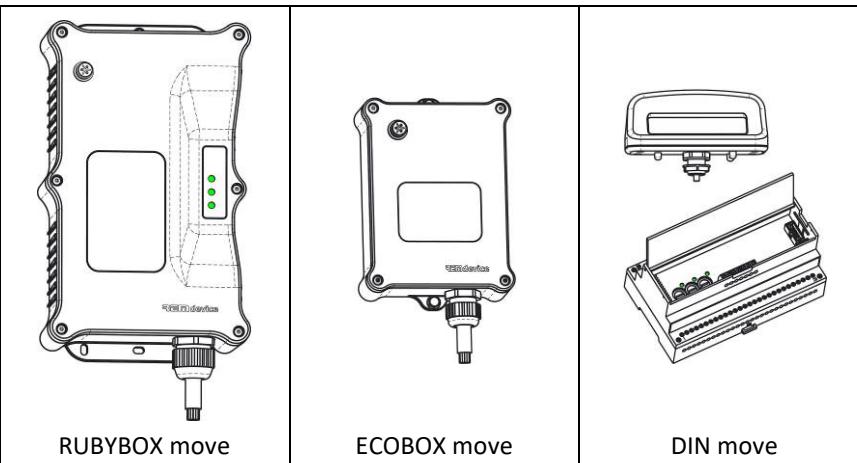
The remote control is to be **installed**, and subsequently **used**, by suitably **authorized** and **qualified personnel** only; incorrect installation or use can result in serious injury or damage to property. Before using the REmdevice move series radiocontrols, **read carefully** this instruction manual and comply with the instructions herein.

DESCRIPTION

The **move** radio control system consists of one or more transmitter units:



and of one or more receiver units:

**How TO USE the DEVICE CORRECTLY and SAFELY**

The remote control has been designed strictly for **use** by qualified operators only, who are required to first read the instructions on how to use the device and comply with the safety standards prescribed by the law in the area where work is carried out.

REMdevice shall not be liable for any bodily injury or damage to property resulting from:

- misuse or inexpert use of the device
- incorrect wiring or electrical connections
- tampering
- changes to the radiocontrol's design features
- replacement of parts with non-original spare parts
- failure to perform maintenance
- failure to replace worn, faulty or defective parts
- the device being used with its intrinsic safety features disabled or its original features altered in any way.

Warning: This device works using radio signals; it can operate the machinery it is connected to even if barriers are blocking its line of sight, such as brick walls, metal or wooden panels, other machinery, equipment, buildings, vehicles; it is important operators exercise the utmost care when activating the controls in order to avoid uncontrolled movements.

Activating the radiocontrol

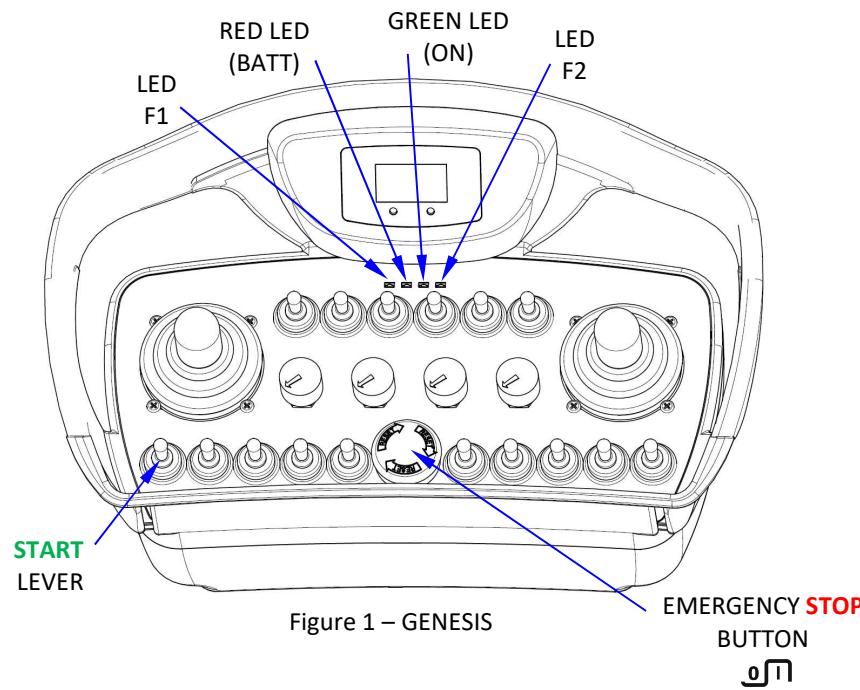
- Stand with the transmitter unit so that there is a perfectly clear full line of sight between it and the machinery
- do not linger under overhead loads
- do not operate from an unstable position
- take proper note of the control's identification plates located next to each button or actuator
- do not press any button or actuator if you do not know exactly what it does

Transmitter units

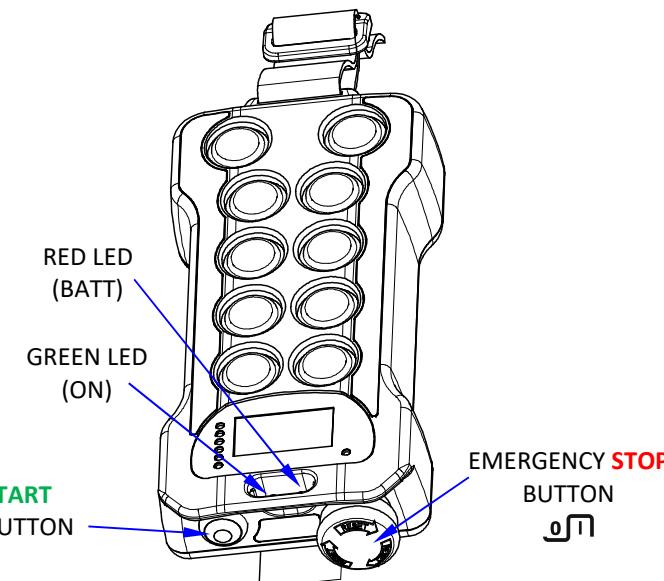
Transmitter units are made so as to comply with the control functions of the machine they control. The figures shown are generic.

For your model, please refer to the datasheet attached to this manual.

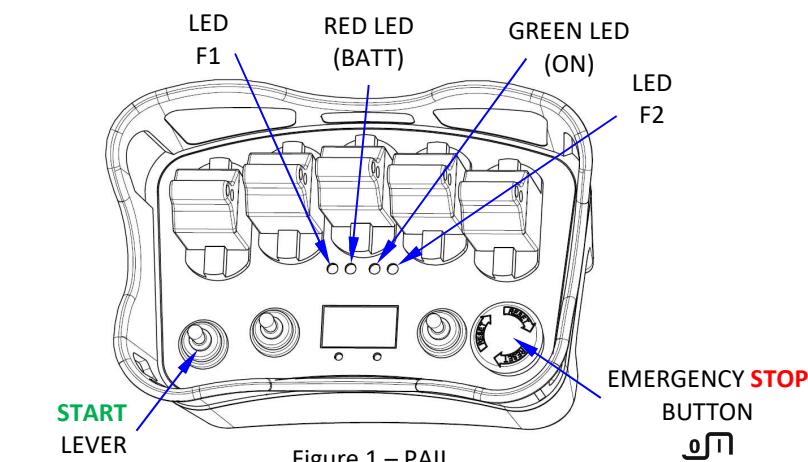
GENESIS move transmitter unit



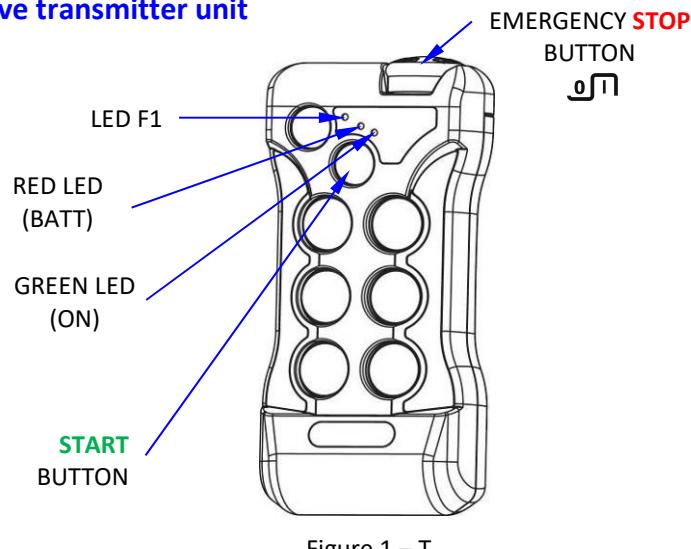
BRICK move transmitter unit



PAIL move transmitter unit



T move transmitter unit



Switching on, Activation, Use, Automatic shutdown

Switching on

If not otherwise stated in the datasheet, the mushroom EMERGENCY **STOP** BUTTON  is used to switch the transmitter on and off. To switch on, rotate and disconnect the mushroom EMERGENCY **STOP** BUTTON  Check that the GREEN LED (ON) flashes (just once), indicating that the unit is switched on (see Figure 1, corresponding model).

Activation

Press the **START** BUTTON or activate the **START** LEVER or turn the key to **START**, depending on the model. The GREEN LED (ON) flashes quickly to indicate that the unit has been activated.

If, on the other hand, the transmitter beeps and the RED LED (BATT) comes on, check no controls are on via the other buttons or actuators that prevent activation. At the same time, the audible warning of the operating machine can be heard (if any).

Use

Press the relevant buttons or operate the relevant control actuators for the operation you want to perform, paying attention to how the machine behaves.



If you experience any kind of trouble controlling the machine (for mechanical or electrical reasons or if it is not performing as you intended in any way), press the EMERGENCY **STOP** BUTTON straight away.

Never leave the transmitter unit unattended when it is switched on, even for just a few seconds. Always switch off the transmitter unit at the end.

Put the transmitter unit away in a safe place where it cannot be reached by unauthorized personnel; never allow inexperienced personnel to use the transmitter unit.

Automatic shutdown

If this function is enabled (default factory setting), the transmitter unit will switch off automatically after approx. 4 minutes of inactivity.

To restart the unit, press the **START** actuator.

LAYOUT and DESCRIPTION of CONTROLS

The various models differ in terms of the number of controls available and how they are arranged. A different **appendix** is associated with each configuration (see page 27) and is an integral part of this manual.

Note: on the GENESIS, PAIL, BRICK and T transmitters, the symbols of the respective controls are featured on the plates on the product and/or provided with the unit. If labels or plates other than the ones provided are used, the symbols must match the machine's functions and movements exactly and must comply with current regulations.

SERVICE FUNCTIONS

Electronic key

It is possible to prevent unauthorized staff to use the transmitter via the function:

LOCKING and UNLOCKING the transmitter unit

In page **I** of the appendix (see page 27 of this manual) the actuators assigned to this function are shown.



To **lock** the use of the transmitter, identify actuator **Sp3** (or **U1**) as specified in the appendix and follow the following instructions:

- power up the transmitter using the mushroom EMERGENCY **STOP** BUTTON (or using the key selector, where applicable);
- operate **Sp3** (or **U1**) and operate the **START** at the same time; keep on and **count** 5 beeps and flashes of the F1 LED (if applicable); after exactly 5 beeps and flashes, release the **START** and **Sp3** (or **U1**);
- the GREEN LED (ON) will produce a long flash accompanied by a beep to confirm that the procedure has been performed correctly.

If the procedure is not performed in this exact sequence or the controls are held any longer, the operation will be aborted and you will need to repeat the sequence from the beginning.

If you attempt to activate the transmitter following this operation, the indicator lights (LEDs) will flash in turn and the transmitter unit's audible alarm will sound (ring).



To **unlock** the transmitter, repeat the sequence.

If the transmitter is locked out, you will hear a long ring; if the transmitter is unlocked, it will play a short melody.

On models with a display, the count will come up on the display.

TWIN auxiliary transmitter unit

TWIN systems are constituted by two transmitting units: a **main** and an **auxiliary**. To use the system correctly:

- o switch on the operating or lifting machine powering the receiver unit;
- o switch on **one** of the two transmitters provided (primary or auxiliary) and send the **START** command for approx. 10 seconds.

Once the receiver (RUBYBOX move or ECOBOX move) recognizes the transmitter, it starts the machine, which sounds:

- **ONCE** (**primary** transmitter);
- **THREE TIMES** (**auxiliary** transmitter).



From now on, the machine can be controlled **only** by this transmitter until power to the receiver unit (RUBYBOX move, ECOBOX move or DIN move) is cut off or until the **FREE** command (described in the next paragraph) is activated.



The other transmitter unit will never be able to take control of the machine.

The Twin system complies with the EN 60204-32 standard (Safety of machinery) and **does not allow using the two transmitters simultaneously**.

There are available two different ways to transfer the machine control from one transmitter unit to another:

- 1) Activate the **FREE** function (as described in the following paragraph)
- 2) **Turn** the receiver unit **off** and **on** again after a few seconds (normally the receiver unit is powered by the operating machine: in that case you may power off and on again after a few seconds directly the machine).

ATTENTION: The machinery may lose **power** for reasons outside the operator's control.



In this case, it is possible for a second operator with one of the two transmitters to take control of the machine if he happens to press the **START** button when power is resumed. The different **audible alarm** sounds to warn the operators.

FREE function

Only the unit controlling the machine can perform the FREE function that is freeing the receiver to accept control of the other unit.



In page **I** of the appendix (see page 23 of this manual) the actuators assigned to this function are shown.

To carry out the **FREE** command, identify the **Sp4** (or **D1**) actuator as specified in the appendix and follow the following procedure:

- a) power up the transmitter using the mushroom **EMERGENCY STOP** **BUTTON** (or using the key selector, where applicable);
- b) operate **Sp4** (or **D1**) and operate the **START** at the same time; keep that position, paying attention that the beep and the F1 LED (if any) are activated only once; after just one flash (or beep), release the **START** and **Sp4** (or **D1**);
- c) the **GREEN** LED (ON) will produce a long flash accompanied by a short melody to confirm that the procedure has been performed correctly.

If the procedure is not performed in this exact sequence or the controls are held any longer, the operation will be aborted and you will need to repeat the sequence from the beginning.

In case of error, the LEDs will flash alternately and the transmitter will sound.

On models with a display, all stages are shown on the display and the message "FREE" comes up to confirm the operation.

CHANGING transmitter FREQUENCY

There is no need to open either the transmitter unit or receiver unit to change frequency. Locate actuator **Sp4** (or lever **D1**, as specified in greater detail on page **I** of the appendix on page 19 of this manual) and proceed as follows:

- a) power up the transmitter using the mushroom **EMERGENCY STOP** **BUTTON** (or using the key selector, where applicable);
- b) operate **Sp4** (or **D1**) and operate the **START** at the same time; keep on and count 5 beeps and flashes of the F1 LED (if applicable, on the left); after exactly 5 beeps and flashes, release **START** and **Sp4** or **D1**;
- c) the **Green** LED flashes accompanied by a short melody to confirm that you have entered the band/frequency change menu;
- d) activate **Sp4** or **D1** again together with **START**; keep on and count 3 beeps and flashes of the F1 LED (if any, on the left); after exactly 3 beeps and flashes, release **START** and **Sp4** or **D1**;

e) the Green LED flashes accompanied by a short melody to confirm that you have entered the menu via which you can change the channel.

If you stay in state **b** or **d** for anything other than the stated time, the operation is aborted and you will need to repeat the sequence from the beginning.

On models with a display, the display will show the count, the number of the set channel and advise you that you have entered the various menus.

From the channel change menu, you can:

- Activate **Sp4** or **D1** to get to the **CHANNEL -** function (unit);
- Activate **Sp3** or **U1** to get to the **CHANNEL +** function (unit);
- Activate **START + Sp4** or **D1** to get to the **CHANNEL -10** function (tens);
- Activate **START + Sp3** or **U1** to get to the **CHANNEL +10** function (tens);
- Once you have set the value you want for the frequency, press the **EMERGENCY STOP** BUTTON and reset it;
- Hold the **START** button down for **a few seconds** and keep holding it down until the machine starts.

The set channel is shown with the tens first (number of times the red LED flashes) and then the units (number of times the green LED flashes).



The frequency band to be set varies depending on the laws and standards in the country where the product is due to be used.

In order to operate, the radio control system with the remote-controlled machine, must **respect the laws and the regulations** in the country where it is used.

REMdevice S.r.L **can not be held responsible** if the radio controls are set to prohibit frequencies in the country of use.

Models: **EC**

Band 433.050 – 434.790 MHz RF power < 1 or 10 mW (e.r.p.)					
CH1 433,0625	CH2 433,0875	CH3 433,1125	CH4 433,1375	CH5 433,1625	CH6 433,1875
CH7 433,2125	CH8 433,2375	CH9 433,2625	CH10 433,2875	CH11 433,3125	CH12 433,3375
CH13 433,3625	CH14 433,3875	CH15 433,4125	CH16 433,4375	CH17 433,4625	CH18 433,4875
CH19 433,5125	CH20 433,5375	CH21 433,5625	CH22 433,5875	CH23 433,6125	CH24 433,6375
CH26 433,6875	CH27 433,7125	CH28 433,7375	CH29 433,7625	CH25 433,6625	CH30 433,7875
Band 434.040 – 434.790 MHz RF power < 10 mW (e.r.p.)					
CH31 434,0625	CH32 434,0875	CH33 434,1125	CH34 434,1375	CH35 434,1625	CH36 434,1875
CH37 434,2125	CH38 434,2375	CH39 434,2625	CH40 434,2875	CH41 434,3125	CH42 434,3375
CH43 434,3625	CH44 434,3875	CH45 434,4125	CH46 434,4375	CH47 434,4625	CH48 434,4875
CH49 434,5125	CH50 434,5375	CH51 434,5625	CH52 434,5875	CH53 434,6125	CH54 434,6375
CH55 434,6625	CH56 434,6875	CH57 434,7125	CH58 434,7375	CH59 434,7625	CH60 434,7875

Models: **EC** (...continues)

Band 869.700 – 870.000 MHz RF power < 5 mW (e.r.p.)				
CH61 869,7125	CH62 869,7375	CH63 869,7625	CH64 869,7875	CH65 869,8125
CH66 869,8375	CH67 869,8625	CH68 869,8875	CH69 869,9125	CH70 869,9375
CH71 869,9625	CH72 869,9875			

Models: FCC-IC

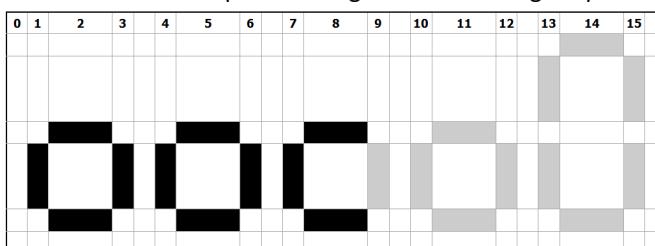
Band 902 – 928 MHz RF power complies with FCC and IC standards					
CH1 902,500	CH2 903,000	CH3 903,500	CH4 904,000	CH5 904,500	CH6 905,000
CH7 905,500	CH8 906,000	CH9 906,500	CH10 907,000	CH11 907,500	CH12 908,000
CH13 908,500	CH14 909,000	CH15 909,500	CH16 910,000	CH17 910,500	CH18 911,000
CH19 911,500	CH20 912,000	CH21 912,500	CH22 913,000	CH23 913,500	CH24 914,000
CH25 914,500	CH26 915,000	CH27 915,500	CH28 916,000	CH29 916,500	CH30 917,000
CH31 917,500	CH32 918,000	CH33 918,500	CH34 919,000	CH35 919,500	CH36 920,000
CH37 920,500	CH38 921,000	CH39 921,500	CH40 922,000	CH41 922,500	CH42 923,000
CH43 923,500	CH44 924,000	CH45 924,500	CH46 925,000	CH47 925,500	CH48 926,000
CH49 926,500	CH50 927,000	CH51 927,500			

Models: CN

Band 418.950 – 419.275 MHz RF power < 20 mW (e.r.p.)					
CH1 418,950	CH2 418,975	CH3 419,000	CH4 419,025	CH5 419,050	CH6 419,075
CH7 419,100	CH8 419,125	CH9 419,150	CH10 419,175	CH11 419,200	CH12 419,250

Signalling the signal level received

Available only for models with the display option (GENESIS, PAIL and BRICK), reporting shows the signal intensity that the base unit receives the transmitter with and takes place through 15 bars that light up in sequence.



To activate this function:

- power up the transmitter using the mushroom EMERGENCY **STOP** BUTTON (or using the key selector, where applicable);
- activate **Sp3** or **U1** together with **START**; keep on and count 2 beeps and flashes of the F1 LED (if any);

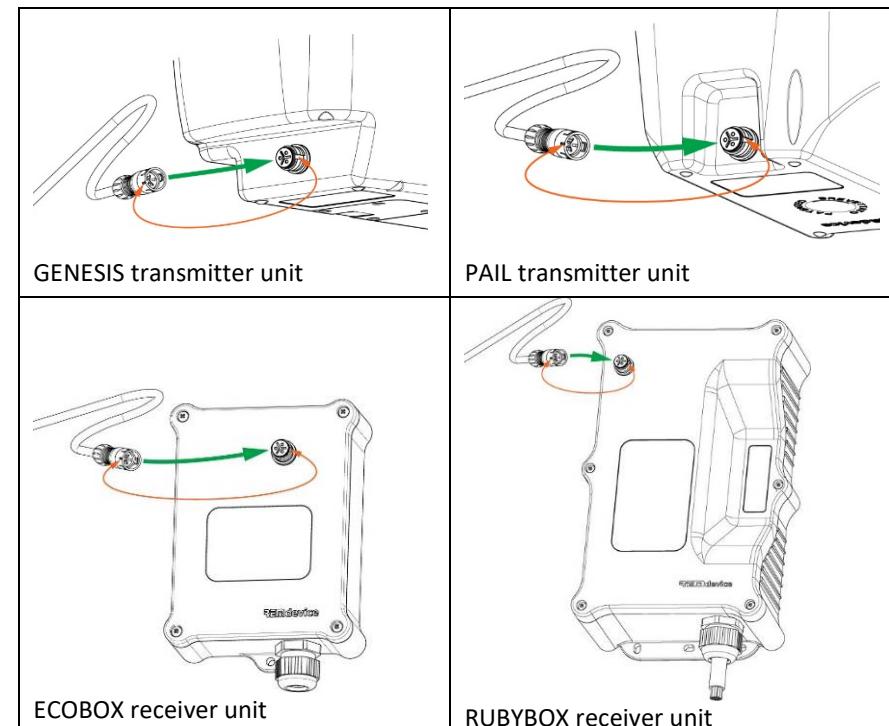
If no signalling takes place, "FAIL" is displayed.

Wired control option

The wired control connection is an option available only for transmitters GENESIS and PAIL with receivers ECOBOX and RUBYBOX.

Activating the wired control

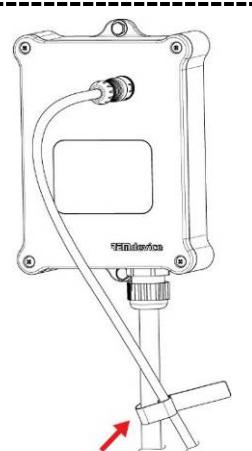
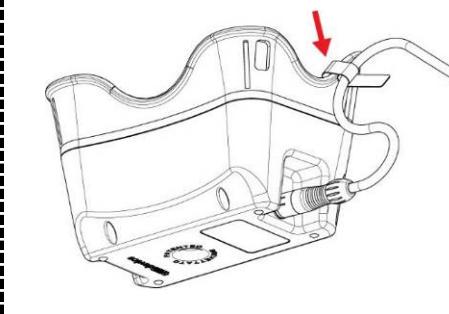
- Switch off both the transmitter (GENESIS or PAIL) and receiver (ECOBOX or RUBYBOX).
- Remove the protection caps from the connectors.
- Connect the cable supplied paying attention to the white mark on the connectors.



- Fix the cable using the Velcro strap supplied:
 - on the transmitter handle
 - on the receiver output cable

Example of the fixed cable on:

- PAIL transmitter unit
- ECOBX receiver unit



- Power the receiver and start the transmitter.

Wired control operation

When the wired control is working, radio transmission is disabled and data is transmitted via the wire in both directions (control and data feedback functions) as per normal operation.

Supply of the transmitter takes place via the power cable that recharges the internal accumulators too.

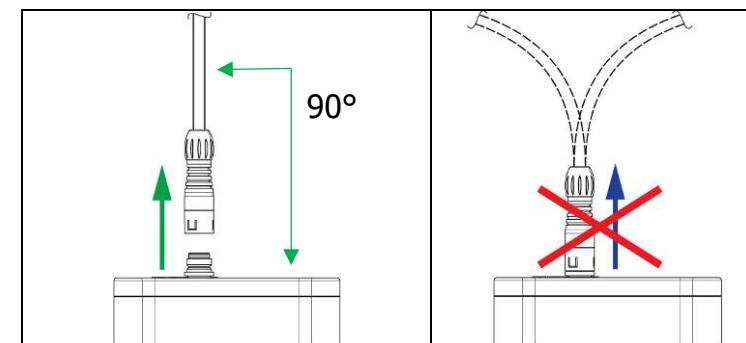
Deactivating the wired control

- Switch off both the transmitter (GENESIS or PAIL) and receiver (ECOBX or RUBYBOX).
- Disconnect the cable supplied removing the Velcro straps.
- Reposition the protection caps on the connectors.
- Power the receiver and start the transmitter.

WARNING:

Pull the plugs with the cable perpendicular to the socket. If the cable is bent in any direction, the plug does not separate from the socket!

(See the figure on the next page)



MAINTENANCE

Transmitter supply

The transmitter supply varies according to the models and version purchased.

Model	Power supply types
GENESIS	Internal accumulators with induction recharge or rechargeable removable battery
PAIL	Internal accumulators with induction recharge
BRICK	Internal accumulators with induction recharge
T3,5,7	Long-life non-rechargeable internal lithium battery



The transmitting unit verifies the correct operation of both contacts of the emergency button and emits beeps accompanied by the lighting up of the RED LED (BATT) to signal the presence of a fault.

If this happens, contact the repair service.



WARNING: after the replacement of components (i.e. batteries, emergency button, ...) or after the batteries have been completely discharged, the transmitting unit could give 3 times an error signal before allowing the START.

Recharging the induction accumulators

In the GENESIS, PAIL and BRICK models, the accumulators are housed inside the transmitter device and are recharged using an exclusive **patented** electromagnetic induction system involving no metal electrical contacts or connecting cables.

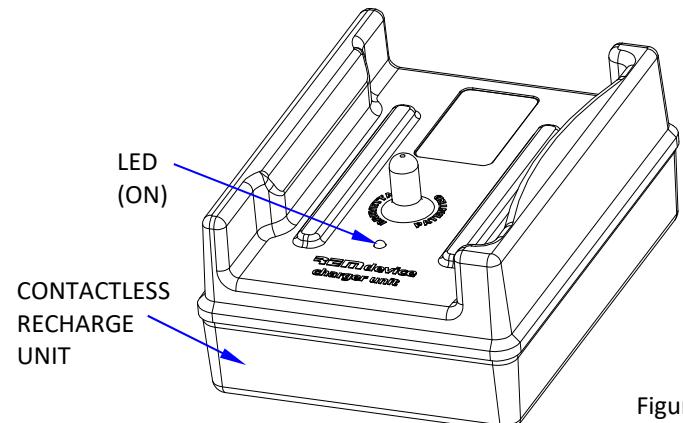


Figure 2



ATTENTION: the contactless charger the system comes with must be located in a safe, dry place out of direct sunlight and sheltered from rain; it must be plugged into the mains so that the outlet is easy to reach at all times.

The transmitter shows the accumulator discharge limit value has been reached when the GREEN LED (ON), the RED LED (BATT) and a long sound are activated all at the same time. Recharge the batteries as soon as possible:

- check that the (ON) LED is lit on the charger (see Figure 2 on page 9), (it means it is being powered correctly);
- switch the transmitter off as described above;
- place the transmitter in the appropriate housing on the contactless recharge unit, paying attention the peg in the centre of the recharge base enters the hole in the bottom of the transmitter;
- if ON, the transmitter automatically deactivates when resting on the recharge base;



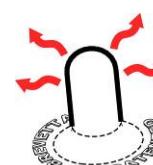
the RED LED (BATT) on the transmitter unit flashes to indicate that the accumulators are being charged properly
recharging is controlled electronically:
the recharge time is controlled automatically

- when the RED LED (BATT) on the transmitter unit is steadily lit, it means the batteries have finished charging.

With new and fully charged batteries, the transmitter unit has a runtime (for continuous duty) of around 30 hours at 20°C.

Under normal operating conditions, you will only need to charge the batteries once a week (during the weekend, for example).

The electronic charge status control means you can leave the device on the charger base for long periods of time without doing any damage to the batteries.



It is normal for the peg sticking out of the charger and the hollow on the underside of the transmitter unit to heat up while the batteries are charging.

If the accumulators are completely discharged but efficient, 30 minutes' recharge time will be enough to guarantee the radio control operation for 8 hours.

Do NOT open the charger to attempt repairs: if there is a fault, use the services of authorized personnel or contact REMdevice directly.



Unplug the charger when it is not in use.

GENESIS transmitter with removable battery

The innovative 24/7 non-stop system guarantees continuous operation also during the replacement of the removable external battery.

The radio control is fitted with two external and a group of internal batteries. The external removable battery gives about 20 hours' operation autonomy, while the internal group gives autonomy for 1.5 hours.

Therefore, the internal group allows the unit to work without the removable battery while this recharges. The removable battery can then be replaced when the RED LED (BATT) lights up, without interrupting the radio control operation.

Indications

The RED LED (BATT) on the transmitter flashes when:

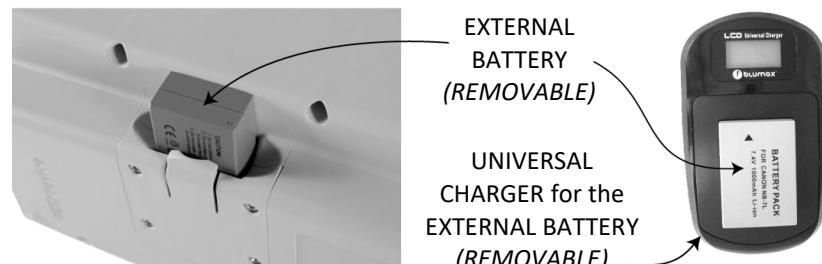
- the external battery is low
- the external battery has been removed or reinserted incorrectly
- the contacts of the external battery are dirty, oxidized or damaged



NOTE

This happens also when the radio control is OFF and for about 20 days, that is until the internal group is fully discharged.

If the internal group is completely discharged, the removable external battery must be inserted for the whole time required for the recharge; during this time the radio control can anyway be used.



For further information on the Universal Charger, **check the Instruction Manual** supplied with this product.

Attention: this charger is NOT waterproof; keep it in a cool and dry place and recharge at ambient temperature.



The **external** (removable) battery lasts \approx 22 hours at 20°C

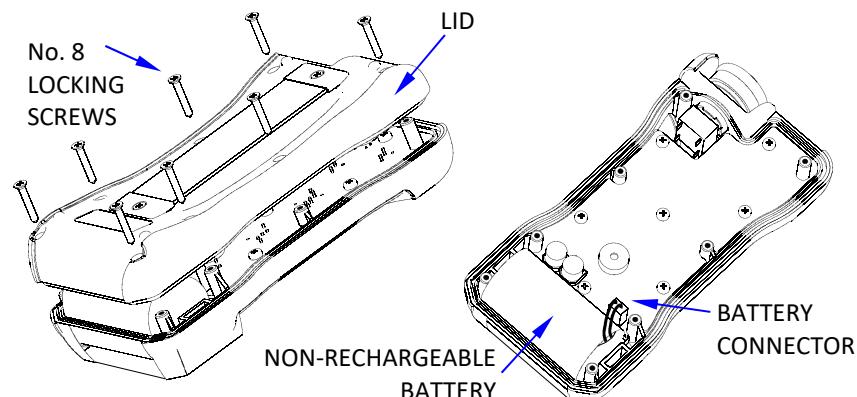
The **internal** battery lasts: \approx 1 hour at 20°C

The charge of the internal battery is sufficient to completely recharge and replace the external battery.

T transmitter: replacing the lithium battery

The battery is inside the transmitter: to replace it, it is necessary to open the unit. This operation must be carried out in a clean place, with no humidity and only by specialized personnel, authorized by REMdevice.

- Remove the 8 screws and open the transmitter lid
- Remove the connector and replace the battery with a new one



- Use the sticker applied to the battery body peeling off the protective film and removing the residues of the old adhesive.
- Before closing the keypad, be careful in folding the red and black wires back against the battery and prevent them from being crushed while closing.



Strong shocks to the transmitter and its battery can permanently damage the battery.

Risk of fire, explosion and serious burns.

The lithium battery is not rechargeable: do not dismantle, recharge, apply voltage, short-circuit, expose to high temperatures or flames, do not burn or immerse in water.



If the unit is not used for over 3 months, proceed to "awake" the battery by repeating the transmitter's START procedure until stabilized, that is until the transmitter is stabilized and remains ON without showing any error of low battery. The operation normally lasts a few minutes.

The life expectancy of the battery can be reduced if subjected to extreme temperatures. Batteries must be stored in cool, clean and ventilated rooms with a temperature of between 10°C and 30°C.

If batteries are stored for over 8 years they might experience a loss of performance.



Spent batteries must not be disposed of in the environment or together with the normal domestic waste. Batteries must be disposed of in compliance with local regulations, using the waste disposal service available in the area.

Keeping the radio control system in proper working order

Preventive maintenance and routine checks

Clean the transmitter unit at regular intervals to stop sediment building up and becoming extremely hard to remove later on and/or obscuring graphic symbols showing what functions are assigned to the control buttons. Should symbols become illegible or come off, you must replace them with new labels.



In induction recharge models, clean the cavity at the bottom of the units periodically to prevent debris build-up. Do not use solvents to clean the devices. Do not immerse the transmitter unit in water.

Check that the transmitter unit's seal is perfectly watertight, check for cracks in the housing and make sure the rubber on buttons or control actuators is not damaged in any way. The ingress of liquid can seriously damage or compromise the proper operation of the electrical circuits inside the radio control.

Non-routine maintenance and any repairs needed must be carried out only by specialist personnel authorized by REMdevice.

Above all, replacing accumulators with unsuitable parts can result in a risk of explosion.

Checking that the EMERGENCY STOP BUTTON and all functions are working properly

Press the EMERGENCY **STOP** BUTTON (see Figure 1) and check the radio control has switched off and deactivated.

To carry on with the testing procedure, **reset** the EMERGENCY **STOP** BUTTON by turning it roughly a $\frac{1}{4}$ turn until it clicks, then activate the **START** control on the transmitter unit again.

Press a button or operate a machine control actuator associated with a movement and, keeping it held down, press the EMERGENCY **STOP** BUTTON at the same time: the machine must stop immediately!

Reset the EMERGENCY **STOP** BUTTON to continue.

Once you have reactivated the transmitter unit, press one button or actuator at a time and check that the machine performs the operation indicated by the relevant symbol.

NEVER use the device if the EMERGENCY STOP BUTTON is not in working order. This pushbutton has to be working properly to ensure that all machine operations are stopped immediately and the remote control system is disabled. If this pushbutton is not in perfect working order, or even if it is only partially broken, system safety is compromised, meaning the unit is no longer complying with the regulations and operators are exposed to serious danger.

TECHNICAL SPECIFICATIONS

Conformity

All **move** series radio controls operating in the frequency band 433.050 - 434.790 MHz and/or 869.700 - 870 MHz comply with the essential requirements set in directive 2014/53/EU (RED). The declaration of conformity (DoC) is available at the internet address: www.remdevice.com/doc

All the **move** series radio controls operating in the frequency band 902 - 928 MHz comply with the essential requirements of the following standards:

- FCC (Federal Communication Commission) Part 15
- IC (Industry Canada) RSS-102

Transmitter Unit	BRICK move	FCC ID = RTF-BRBPM6 IC number = 11555A-BRBPM6
	PAIL move	FCC ID = RTF-PABPM6 IC number = 11555A-PABPM6
	GENESIS move	FCC ID = RTF-GEGM6 IC number = 11555A-GEGM6
	T move	FCC ID = RTF-TTM6 IC number = 11555A- TTM6

Receiver Unit	ECOBOX move	FCC ID = RTF-EBEBM6 IC number = 11555A-EBEBM6
	RUBYBOX move	FCC ID = RTF-RBRBM6 IC number = 11555A-RBRBM6
	DIN move	FCC ID = RTF-DDM6 ISED = 11555A-DDM6 HVIN = DDM6

Federal Communications Commission (FCC)

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.

Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Industry Canada (IC)

This device complies with Industry Canada's licence-exempt RSSs

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.



Place the antenna of the receiving unit in a position that ensures a minimum separation distance of 20 cm with all the people that can be in the working area.

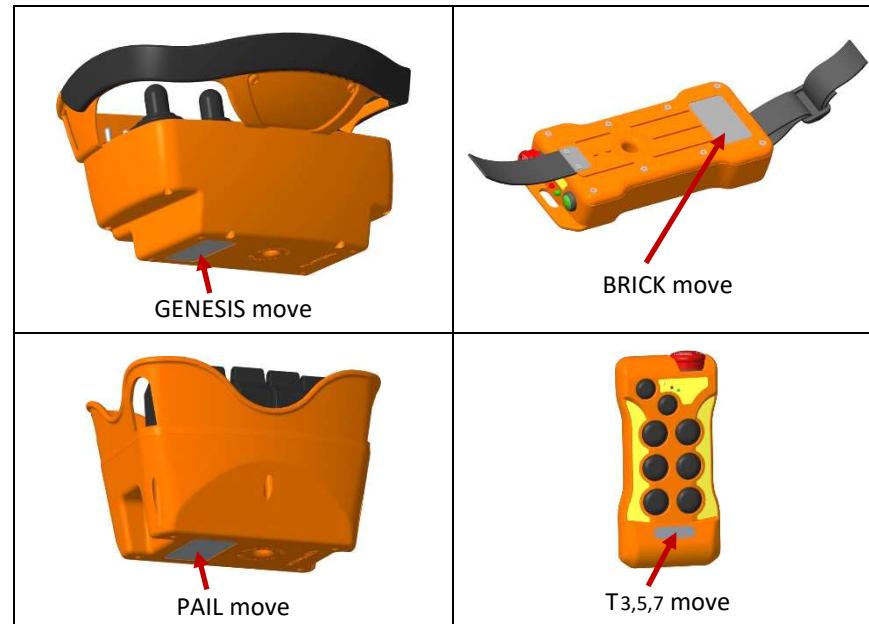


This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate 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:

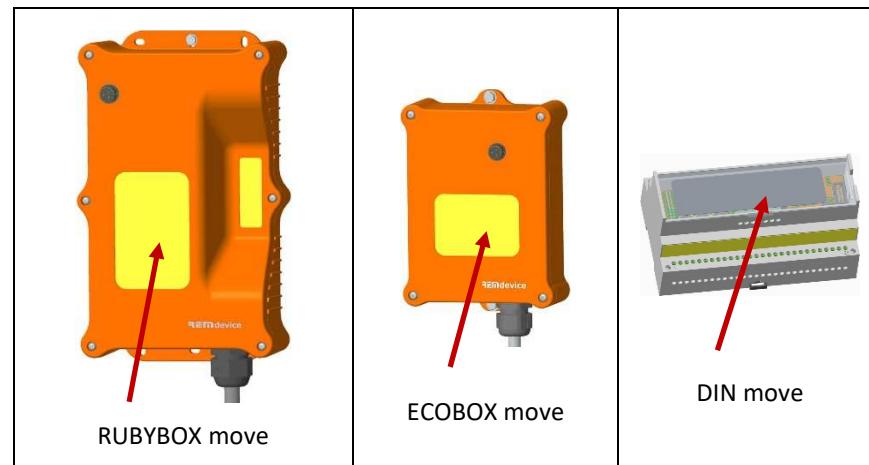
- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help

Serial Number

It appears on the ID plates of the receiver units:



and on the receiver units:



TECHNICAL SPECIFICATIONS

Multi-band operating frequency (according to model):

433.050 – 434.790 MHz / Channel spacing 25kHz / No of channels **30**

Radio Frequency power < 1 or 10 mW (e.r.p.)

434.040 – 434.790 MHz / Channel spacing 25kHz / No of channels **30**

Radio Frequency power < 10 mW (e.r.p.)

869.700 – 870.000 MHz / Channel spacing 25kHz / No of channels **12**

Radio Frequency power < 5 mW (e.r.p.)

902 – 928 MHz / Channel spacing 500kHz / No of channels **51**

Radio Frequency power complies with FCC and IC standards

418.950 – 419.275 MHz / Channel spacing 25kHz / No of channels **12**

Radio Frequency power < 20mW (e.r.p.)



The frequency band varies depending on the standards in the country where the product is due to be used.

Hamming code distance: > 4

Response time to commands: 20 ms min, 80 ms max (according to the model)

Active emergency stop command response time: 20 ms

Command passive emergency response time: 1 s

Command	PL	Category	SIL
STOP	e	4	3
Button/Lever (UMFS)	c	2	1
Joystick (UMFS)	d	3	2

Range: 100 m (=330 ft)

Operating and storage temperature: -20°C to +70°C (-4°F to +158°F)

Transmitter unit

Housing protection rating: IP 65 - Material: PA6 GF

Model	Dimensions [mm] [in] (LxHxP) (LxWxH)	Weight [g] [lb] (depending on the configurations)
GENESIS	310 x 193 x 163 (12.2 x 7.6 x 6.42)	1580 3.48
PAIL	200 x 135 x 130 (7.87 x 5.31 x 5.12)	930 2.05
BRICK	97 x 210 x 44 (3.82 x 8.27 x 1.73)	470 1.04
T 3,5,7	83 x 174 x 42 (3.27 x 6.85 x 1.65)	350 0.77



Battery low advance warning and operating autonomy at 20°C (68°F)

Model	Advance warning time	External battery (removable)	Internal battery (rechargeable)	Internal battery (not rechargeable)
GENESIS non-stop 24/7	≈ 20 mins	≈ 22 hrs Type: NB-7L – Li-Ion 7.4V 1000 mAh	≈ 1 hour Type: 3 x Size AAA 1.2V Ni-MH	NOT available
GENESIS	≈ 30 mins	NOT available	≈ 30 hrs Type: 3 x Size AA 1.2V Ni-MH	NOT available
PAIL	≈ 30 mins	NOT available	≈ 30 hrs Type: 3 x Size AA 1.2V Ni-MH	NOT available
BRICK	≈ 30 mins	NOT available	≈ 30 hrs Type: 3 x Size AA 1.2V Ni-MH	NOT available
T 3,5,7	≈ 30 hrs	NOT available	NOT available Type: Size D Lithium 3.6V 19 Ah	≈ 900 hrs

Receiver unit

Radiofrequency receiver: Single Chip

Antenna (according to model):

integrated or external (with automatic selection)

Rp1, Rp2 relay contact capacity: 8A (DC1/AC1)* / 115V (RUBYBOX and ECOBOX)

Command relay contact capacity: 4A (DC1/AC1)* / 115V (RUBYBOX and DIN)

Stop relay contact capacity: 4A (DC1/AC1)* / 115V

* the same current can be supported also in category DC13 (inductive load) connecting a diode in parallel to the load. For use in category AC15, we recommend connecting a suitable RC circuit in parallel to the load for extra voltage damping. (Ref. IEC/EN60947).

Power supply (depending on model):

DC 12-24V ±25% or **AC** 24-115V ±10% max current 25 VAmp

RUBYBOX move: waterproof enclosure for external installation

Material: PA6 GF V0 - Degree of protection: IP65

Dimensions: 166 x 279 x 91 mm (LxWxH) 6.53 x 10.98 x 3.58 in

ECOBOX move: waterproof enclosure for external installation

Material: PA6 GF V0 - Degree of protection: IP65

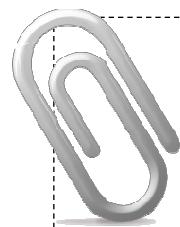
Dimensions: 129 x 178 x 51 mm (LxWxH) 2.08 x 7.01 x 2.01 in

DIN move: ModulBox housing to be fitted on DIN EN 50022 rail

Material: ABS - Degree of protection: IP20

Dimensions: 158 x 90 x 75 mm (LxWxH) 6.22 x 3.54 x 2.95 in

NOTES:



INSERT HERE
THE ANNEXES
WITH THE
REMOTE CONTROL
SPECIFICATIONS

WARRANTY TERMS

REMdevice covers the device with a 12-month warranty.

The date of the transport document is used as the start date of the warranty period.

The warranty is valid only for devices affected by defects in manufacturing. The radio control must NOT have undergone attempted repairs, been tampered with or had parts replaced by personnel who have not been authorized by REMdevice.

The warranty shall be voided in the event of misuse or incorrect installation.

Devices under warranty must be repaired at an authorized support centre or at REMdevice's own facility.

Parts affected by defects in manufacturing will be replaced free of charge; this does not include transport costs for sending and returning the device.

The warranty does not cover wear parts and batteries.

REMdevice shall not accept claims for compensation for downtime since machinery is required to have its own manual controls.

REMdevice shall not be liable for damage, loss or theft to/of new or repaired devices, or devices due to be repaired, while in transit.

REMdevice shall not perform work (under warranty or outside warranty) on devices with missing serial numbers or without previous arrangements having been made with the person requesting the work.

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