



*Innovation in Mobility*

# Keychain Radio Remote Control System

[PRINT](#)

## Operator Manual



**This RICON product must be installed and serviced by authorized RICON service technicians.**

**The operator must refer to this manual for operating instructions, and retain it for future reference.**

Customer Name: \_\_\_\_\_

Installing Dealer: \_\_\_\_\_

Date Installed: \_\_\_\_\_

Serial Number: \_\_\_\_\_

**REVISION RECORD**

REV	PAGES	DESCRIPTION OF CHANGE	ECR/ECO
32DRC01. A	All	New release, in two-book format.	
<b>END OF LIST</b>			

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**I. INTRODUCTION**

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The RICON Keychain Radio Remote Control System provides handheld, wireless control of wheelchair lifts and power door operators. It can be operated by a person in a wheelchair or by an attendant. The system consists of a receiver with antenna, a keychain transmitter, and wiring harnesses. The signal sent from each transmitter is encoded with one of approximately one million identifying signals. Signal encoding greatly reduces the possibility that other transmitters will interfere with your system

This manual contains installation, operation, service, and maintenance instructions for the Keychain Radio Remote Control System. The installation instructions must be followed exactly; no steps should be eliminated nor should product be modified. It is important to user safety that installation is thorough and correct. It is equally important that Ricon sales/service staff be completely familiar with Operating Instructions chapter of this manual to demonstrate and explain proper use of product to user. Once the receiver is installed, it is very important that it be properly maintained by following Ricon inspection instructions.

It is equally important that Ricon sales/service staff be completely familiar with the Operating Instructions section of this manual so they may instruct customer in proper use of the Keychain Radio Remote Control System. Be sure the customer receives this material.

If there are questions about this manual, or additional copies are needed, please contact Ricon Product Support at one of the following locations:

**Ricon Corporation**  
**7900 Nelson Road**  
**Panorama City, CA 91402.....(818) 267-3000**  
**Outside (818) Area Code .....(800) 322-2884**  
**World Wide Website ..... www.riconcorp.com**

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**Ricon U.K. Ltd.**  
**Littlemoss Business Park, Littlemoss Road**  
**Droylsden, Manchester**  
**United Kingdom, M43 7EF ..... (+ 44) 161 301 6000**

**A. RICON ONE-YEAR LIMITED WARRANTY (refer to following page)**

## RICON CORPORATION ONE-YEAR LIMITED WARRANTY

**Ricon Corporation (Ricon)** warrants to the original purchaser of this product that Ricon will repair or replace at its option any parts that fail by reason of defective material or workmanship as follows:

- Repair or replace parts for a period of one year from date of purchase. A complete list of parts covered by this warranty can be obtained from a Ricon authorized dealer.

**If You Need to Return a Product:** Return this Ricon product to your installing dealer. Please give as much advance notice as possible and allow a reasonable amount of time for repairs.

**If You are Traveling:** All authorized Ricon dealers will honor this warranty. Consult a telephone directory or call Ricon Product Support for the name of nearest authorized Ricon dealer.

**This Warranty does not Cover:**

- Labor or service charges (these may be covered separately by the installing dealer).
- Malfunction or damage to product parts caused by accident, misuse, lack of proper maintenance, neglect, improper adjustment, modification, alteration, the mechanical condition of vehicle, road hazards, overloading, failure to follow operating instructions, or acts of Nature (i.e., weather, lightning, flood).

**Note:** Ricon recommends that this product be inspected by an authorized Ricon service technician at least once every six months, or sooner if necessary. Any required maintenance should be performed at that time.

**This Warranty is Void if:**



**THIS PRODUCT HAS BEEN DESIGNED AND MANUFACTURED TO EXACT SPECIFICATIONS. MODIFICATION OF THIS PRODUCT IN ANY RESPECT CAN BE DANGEROUS.**

- The product has been installed or maintained by someone other than an authorized Ricon service technician.
- The product has been modified or altered in any respect from its original design without written authorization by Ricon.

*Ricon disclaims liability for any personal injury or property damage that results from operation of a Ricon product that has been modified from the original Ricon design. No person or company is authorized to change the design of this Ricon product without written authorization by Ricon.*

*Ricon's obligation under this warranty is exclusively limited to the repair or exchange of parts that fail within the applicable warranty period.*

*Ricon assumes no responsibility for expenses or damages, including incidental or consequential damages. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply.*

*Important: The warranty registration card must be completed and returned to Ricon within 20 days after installation of this Ricon product for the warranty to be valid. The warranty is not transferable.*

*The warranty gives specific legal rights, and there may be other rights that vary from state to state.*

## **B. SHIPMENT INFORMATION**

Ricon does not sell directly to the user because of the specialized nature of the product. The product is distributed through a worldwide network of authorized Ricon dealers who perform actual installation.

- When the product is received, unpack it and check for freight damage. Claims for any damage should be made to freight carrier immediately.
- Be sure installation kit contains all items listed on kit packing list. Please report any missing items immediately to the Ricon Service Department. The warranty and owner's registration cards must be completed and returned to Ricon within 20 days for the warranty to be valid.

NOTE: The Sales/Service Personnel must review the Warranty and this Operator Manual with the user to be certain that they understand safe operation of product. Instruct the user to follow operating instructions without exception.

## **C. GENERAL SAFETY PRECAUTIONS**

The following general safety precautions must be followed during installation, operation, service and maintenance:

- To avoid injury, always exercise caution when operating remote control and/or lift and be certain that hands, feet, legs, and clothing are not in path of any moving lift parts.
- Read and understand operating instructions before attempting to operate remote control and/or lift.
- Inspect vehicle lift before operating remote control. Do not use lift if an unsafe condition, unusual noises or movements exist.
- Stand clear of vehicle doors and platform during operation of lift, and keep others clear also.
- Never load or stand on lift platform while operating remote control system until lift installation is verified.
- Dry remote control transmitter or receiver immediately if contacted by liquid.
- Check area around lift for objects that could interfere with lift operation before activating remote control. Do not activate system unless operator can clearly see that it is safe to do so.
- Turn off receiver power before working on system. Always disconnect remote system before doing system maintenance to prevent unintentional operation of wheelchair lift or accessories.
- Note the presence of nearby vehicles that may have radio controlled components. Unintentional operation of another lift is improbable due to the short operating range of remote transmitter and the use of security codes. However, if another system does have same code as yours and both vehicles are in close proximity, both systems could be activated by either transmitter.

## II. OPERATING INSTRUCTIONS

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A thorough understanding of lift operation is important for safe use of the RICON Radio Remote Control System with keychain transmitter. Please read and understand all operating instructions and safety precautions for lift and accessories (e.g., power door operators) before attempting to operate the key-chained Radio Remote Control System.

### A. SAFETY PRECAUTIONS

The following safety precautions must be complied with at all times:

- Vehicle must be **SAFELY** parked with engine turned off before using remote control. To enable remote control when engine is running, be certain that transmission is in "**PARK**" and parking brake is set.
- Perform a visual inspection of lift and/or door operators prior to each use. If any unsafe condition exists, **DO NOT** use equipment. Contact an authorized Ricon dealer
- Unusual lift noises or movements should be checked immediately by an authorized Ricon dealer
- Keep others clear of equipment that is controlled by remote control.
- Wheelchair lift and accessories **MUST** be in full view when operating remote control. Operating remote control when equipment is not in full view can be dangerous to persons in immediate area.
- Do not leave platform unattended when it is deployed outside of vehicle. Always return platform to stowed position and close vehicle doors after use.
- Do not allow **ANYONE** to play with remote control.
- Use close supervision if remote control is used by or near children.
- Do not place your arms or legs in or near any folding parts of lift or accessories.
- Thoroughly read and understand all operating instructions for all equipment being controlled by remote control.

Be sure you have read and understood each of these safety precautions. Review them periodically and ask any attendants, or other wheelchair users who operate your lift, to read them as well. If you have any questions, please contact your installing Ricon dealer, or call Ricon Product Support.



## B. KEYCHAIN TRANSMITTER OPERATION

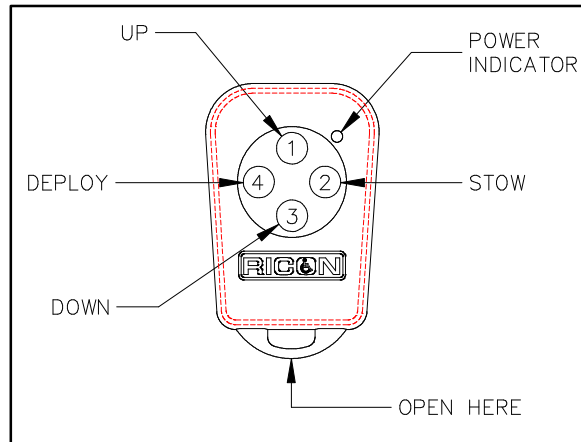
All remote control functions are controlled by push-button switches located on hand held transmitter. The transmitter sends a command signal to the receiver when a button is pressed, and will continue sending a signal until button is released.

**NOTE:** A DIAGRAM OF BUTTON FUNCTIONS IS PRINTED ON BACK OF TRANSMITTER HOUSING.

### CAUTION!

YOU MUST BE IN **DIRECT VIEW** OF VEHICLE AND WITHIN 25-FEET WHEN OPERATING RADIO TRANSMITTER. **NEVER** PRESS TRANSMITTER BUTTONS UNDER ANY OTHER CONDITIONS.

- Sporadic operation of lift, due to electrical interference, may occur if user is **BEYOND** a distance of approximately 25 feet. When operating transmitter **WITHIN** 25 feet of vehicle the transmitter power should be sufficient to overcome interference and smooth operation can be expected.
- Always set vehicle parking brake before using Radio Remote Control System.
- The lift passenger and attendant should **always** follow *LIFT OPERATION* instructions (described in your wheelchair lift Service/Owner Manual) when entering or leaving vehicle.
- Refer to **Figure 2-1**. To operate lift with transmitter, **PRESS AND HOLD** desired button. Continue holding button until function is completed. Release button to interrupt function.
  1. To deploy platform, press and hold **DEPLOY** button until platform is fully deployed.



**FIGURE 2-1: KEYCHAIN TRANSMITTER**

2. To lower platform, press and hold **DOWN** button until platform is fully lowered to ground and rollstop opens completely.
3. To raise platform, press and hold **UP** button until platform is raised to floor level.
4. To stow platform, press and hold **STOW** button until platform is fully stowed.

### III. MAINTENANCE

Maintenance of the RICON Keychain Radio Remote Control System consists of transmitter battery replacement, transmitter reprogramming, and routine inspection.

#### A. MAINTENANCE INFORMATION

Additional maintenance information is available in the Keychain Radio Remote Control System Service manual, part number 32DRC02. This manual is available from Ricon in printed hard copy, or at the Ricon website in PDF format. The website is located at [www.riconcorp.com](http://www.riconcorp.com).

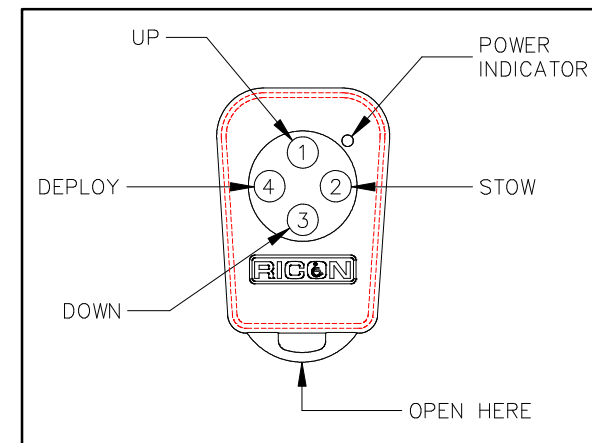
#### B. REPLACING TRANSMITTER BATTERY



#### CAUTION!

USE only 3.0 volt lithium batteries, type cr2032, or exact equivalent. Replace batteries in pairs; do not replace one battery. Service life is approximately one year, depending on usage. Standard, or re-chargeable, batteries are not recommended.

1. Refer to **Figure 3-1**. Remove small screw from back of transmitter housing. Insert small, flat bladed screw driver, or similar object, between housing halves at location shown. Twist screw driver to pop halves apart.

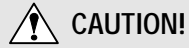


**FIGURE 3-1: KEYCHAIN TRANSMITTER**

2. Note how circuit board is positioned in housing half, then lift circuit board out. Use a tooth pick, or similar non-conductive device, to push both batteries out of their holders.
3. Insert two **NEW** batteries into holders, with their positive sides facing away from circuit board. Place circuit board back in housing half in same position it was removed from.
4. Position empty housing half on mating half and snap pieces together. Replace screw and tighten lightly.

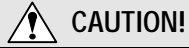
## C. PROGRAMMING RECEIVER FOR NEW TRANSMITTER

### 1. ADDING NEW TRANSMITTER



PROGRAMMING SHOULD BE PERFORMED BY AN AUTHORIZED RICON DEALER.

- a. Receivers are not programmed to recognize **new transmitters**, and must be programmed when a new transmitter is added to system.



APPLYING POWER TO SYSTEM WITH PROGRAMMING JUMPER INSTALLED WILL DELETE ALL STORED SECURITY CODES!

- b. Verify that +12 volt power is connected to system.
- c. Refer to **Figure 3-2**. Install 2-pin programming jumper on 2-pin receiver connector.

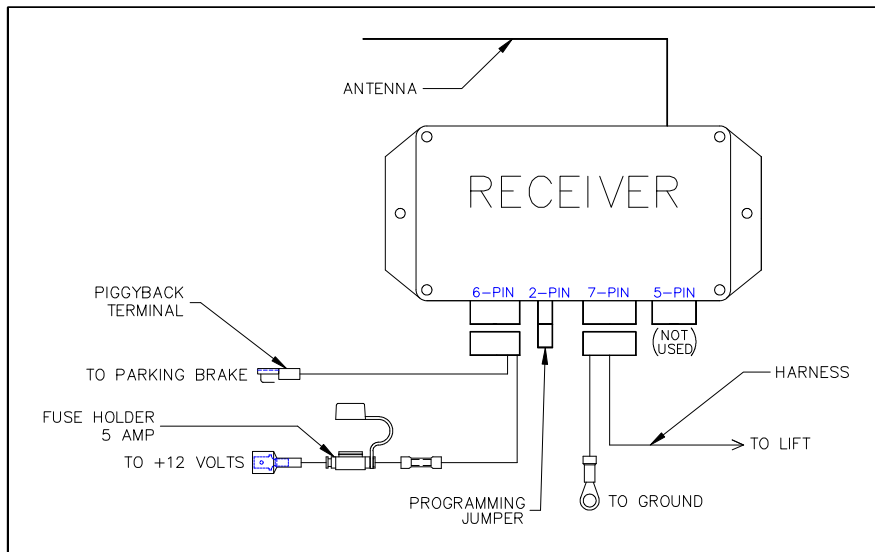


FIGURE 3-2: REMOTE CONTROL WIRING DIAGRAM

- d. Locate one **new** transmitter near receiver. Listen to receiver and press any transmitter button. Two relay "clicks" from within receiver indicates that receiver has stored code from this new transmitter.
- e. Repeat process for additional new transmitters.

**NOTE:** Receiver has capacity to recognize a maximum of six transmitter codes. If a seventh transmitter is programmed it will delete the security code for the transmitter first programmed.

## 2. DELETING LOST OR STOLEN TRANSMITTER CODES

- a. Lost or stolen transmitters can have their security codes deleted from memory to prevent unauthorized use. Remaining transmitters must be on hand when performing this procedure.
- b. Disconnect system from +12 volt source.
- c. Install 2-pin programming jumper on 2-pin receiver connector.



### CAUTION!

APPLYING POWER TO SYSTEM WITH PROGRAMMING JUMPER INSTALLED WILL DELETE ALL STORED SECURITY CODES!

- d. Reconnect system to +12 volt source.
- NOTE:** Locate one remaining transmitter near receiver. Listen to receiver and press any transmitter button. Two relay "clicks" from within receiver indicates that receiver has stored security code from this transmitter.
- e. Repeat process for any remaining transmitters, including any new replacement transmitters.
- NOTE:** Receiver has capacity to recognize a maximum of six transmitter codes. If a seventh transmitter is programmed it will delete the security code for the transmitter first programmed.
- f. Remove programming jumper.

## D. INSPECTION

Ricon recommends that the Radio Remote Control System be checked by an authorized Ricon dealer at least once every six months, or sooner if necessary, depending on usage. Any required maintenance or repairs should be performed at that time.

## E. TROUBLESHOOTING

Refer to **Table 3-1** on the following page. The troubleshooting guide provides a logical starting point to correct most problems that might occur with the RICON Keychain Radio Remote Control System. Symptoms for some problem may not be listed here.

**TABLE 3-1: TROUBLESHOOTING GUIDE**

COMPONENT	SYMPTOM	POSSIBLE CAUSE	REMEDY
Radio Control System	No functions are working	Faulty cable connection	Examine cable connection from receiver to lift.
		Faulty connection to power source	Verify that wire is properly connected to a 12 VDC power source.
		Improper grounding	Check connection of lift harness black wire to ground.
		Lift inoperable	Verify proper lift operation by referring to Service manual.
	Spontaneous operation	Water has entered receiver	Dry receiver thoroughly and install in a location protected from water or other liquids.
Keychain Transmitter	Transmitter operates Intermittently	Poor transmitter range	Check antenna location.
			Move receiver to another location, away from lift motor or wires leading to lift assembly.
			Replace both transmitter batteries (3V lithium).
			Install noise suppressors on lift motors.
	Transmitter does not operate	Receiver does not recognize transmitter	Refer to <b>Section B, Programming Receiver</b> .
		Transmitter or receiver may be defective	Place transmitter near receiver and press any button several times. Listen carefully to receiver for a relay "click". If a click is heard when a button is pressed, the problem may be in interconnection to lift assembly. If no click is heard, transmitter or receiver may be defective. Replace transmitter and/or receiver.
		Parking brake not set	Set parking brake.
		Interlock circuit disconnected	Contact Ricon dealer for repair.
	One or more transmitter functions do not work	Transmitter may be defective	Listen for "click", as in above step. If click is heard, check lift-to-receiver connections; if no click is heard, replace transmitter.

**END OF TABLE**