

**WARNING:** BE CAREFUL **PLEASE BEFORE** INSTALLATION AND READ THE INSTRUCTIONS AND RECOMMENDATIONS GIVEN IN MANUAL. THE DEVICE MUST BE INSTALLED AND USED IN ACCORDANCE WITH THIS GUIDE. THE DEVICE IS INTENDED FOR INSTALLATION IN ALL MOTOR VEHICLES WITH 12/24V **ELECTRICAL NETWORK. THE DEVICE MUST BE CONNECTED TO** 12/24V AND GROUNDED WITH NEGATIVE POLE. NEITHER THE MANUFACTURER NOR THE SELLER ARE RESPONSIBLE FOR ANY DAMAGES RESULTING FROM IMPROPER INSTALLATION, **USE OR OPERATION IN A DIFFERENT WAY THAN WRITTEN IN** THIS MANUAL. UNPROFESSIONAL INTERVENTION IN THE **DEVICE OR ITS MODIFICATION BRINGS THE RISK OF DAMAGE** TO THE DEVICE ITSELF, OR THE ELECTRICAL NETWORK OF THE CAR AND LOSS OF WARRANTY. FOR CORRECT AND ERROR-FREE OPERATION OF THE PRODUCT, WE RECOMMEND TO GET THE INSTALLATION DONE BY A PROFESSIONAL INSTALLER.

### I. SYSTEM DESCRIPTION

Keetec RIDER is an immobilizer intended for blocking the start/stop button or other circuits in vehicles with 12/24V supply voltage. It serves to prevent the use of the vehicle by an unauthorized person. User authorization is made contactlessly using the RC SMART 2 controller, which is automatically recognized in the system coverage zone. Part of the system is the owner's card with PIN code used for emergency deactivation and entry into the service mode.

ATTENTION: The PIN code from the owner's card cannot be changed or issued a duplicate, so we recommend keeping the card in a safe place.

# **II. SYSTEM INSTALLATION**

Remove the plastic covers from the vehicle dashboard. Find the wires to which the immobilizer shall be connected. Only use a digital multimeter to verify the function of the wires in the vehicle, even if you are sure you know the function of the wire. After determining the wires, disconnect the battery and connect the immobilizer wiring harness to the wires necessary for proper functionality, according to the attached wiring diagram. Solder and insulate all connections. After completing the installation of the immobilizer, connect the battery from the vehicle and insert the fuse into the fuse box of the immobilizer. Test the correct functionality of the system and the vehicle. Return the plastic dashboard covers to their place.

#### LOCATION OF THE CONTROL UNIT AND SERVICE BUTTON

The control unit should be placed in a hidden and hard-to-reach place, for example in the original wiring of the vehicle. Place the service button in an accessible place.

### **III. AUTHORIZATION OF THE OWNER**

- Authorization by the RC SMART 2 remote control is automatic based on the presence of the remote control in the vehicle.
- Emergency authorization using the service button in the absence of the remote control. (See Chapter V. - EMERGENCY DEACTIVATION).

# **IV. SERVICE MODE**

The service mode can be activated with the service button or the remote control.

CONDITION: To activate the service mode, at least one of the conditions for a valid authorization must be met:

- 1. Remote control is present in the vehicle.
- 2. System was authorized in an emergency by entering the PIN code from the owner's card (see chapter V. EMERGENCY DEACTIVATION).

#### Activation of service mode by remote control



Turn on the ignition or start the vehicle, press and hold the button on the remote until the LED on the remote goes out. The activation of the service mode is announced by the buzzer beeping 5 times.

#### Activation of service mode with service button



PIN code entry procedure:

- Press and hold the service button until the LED indicator lights up (approx. 2 seconds).
  - Release the button.
  - Press the service button as many times as the value of the first digit of the PIN code, the LED indicator will flash 3 times.
- Press the service button as many times as the value of the second digit of the PIN code, the LED indicator will flash 3 times
- Press the service button as many times as the value of the third digit of the PIN code, the LED indicator will flash 3 times
- Press the service button as many times as the value of the fourth digit of the PIN code, the LED indicator will flash 3 times
- The activation of the service mode is announced by the buzzer beeping 5 times. The PIN code is indicated on the owner's card.

The active service mode is signaled by the permanently lit service button LED while the ignition is on.

### Deactivation of service mode by remote control



Turn on the ignition or start the vehicle, press and hold the button on the remote until the LED on the remote goes out. The deactivation of the service mode is announced by the buzzer beeping 5 times.

## Deactivation of service mode with service button



Enter the service PIN code using the service button in the same way as for activation. Deactivation of the service mode is announced by 5 beeps of the buzzer.

# **V. EMERGENCY DEACTIVATION**

Emergency deactivation is used for one-time authorization of the driver in the event the absence of the remote control (loss of the remote control, discharge of the battery in the remote control).

**NOTICE:** Validity of the emergency deactivation is limited to 1 minute. For this reason, it is necessary to start the vehicle within one minute from the successful emergency deactivation.

# **Deactivation procedure:**

- Press and hold the service button until the LED indicator lights up (approx. 2 seconds).
- Release the button.
- Press the service button as many times as the value of the first digit of the PIN code, the LED indicator will flash 3 times.
- Press the service button as many times as the value of the second digit of the PIN code, the LED indicator will flash 3 times.
- Press the service button as many times as the value of the third digit of the PIN code, the LED indicator will flash 3 times.
- Press the service button as many times as the value of the fourth digit of the PIN code, the LED indicator flashes 3 times, the system is deactivated once and the buzzer beeps 2 times briefly.

# **VI. PROGRAMMING OF REMOTE CONTROLS**

The system allows you to program up to 10 remote controls. Activation of the remote control programming mode is possible during the first minute after entering into service mode.

NOTE: By starting the pairing process and pairing of new drivers, the existing paired remote controls will be automatically removed from the system, therefore pair also the original remote controls again.

# Remote control programming procedure:

- Enter the service mode (see chapter IV. SERVICE MODE)
- Turn on the ignition and press the service button 5 times within one
- Entering the remote control pairing mode is announced by a long beep of the buzzer and quick periodic flashing of the LED on the service button.
- Press and hold the button on the remote control until the LED turns
- Pair all the controllers you want to use one by one.
- To exit the pairing mode, turn off the ignition. The end of the mode is signaled by 2 x long beeps of the buzzer.

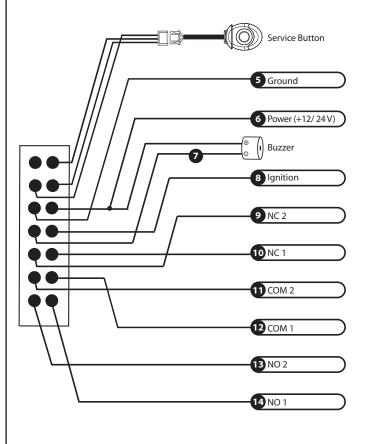
Note: In case of unsuccessful programming new remote controls, the original remote control remain in the device's memory.

# **VII. CHANGING BATTERY IN REMOTE CONTROL**

A critical battery voltage level is signaled by the buzzer beeping 3 times when the ignition is switched on or the engine is started.

Carefully open the remote control cover with a flat screwdriver. Remove the dead battery and insert a new one, pay attention to the polarity of the battery when replacing. Use CR2450 type only.

# **VIII. WIRING DIAGRAM**



# **IX. SIGNALING OF THE SYSTEM**

### Acoustic signaling by buzzer

5x short beeps	Activation/deactivation of service mode, ignition on when activated service mode	
4x short beeps	Remote control is out of reach	
3x short beeps	Critical remote control battery voltage level	
2x short beeps	Confirms emergency deactivation	
1x long beep	Enter remote control pairing mode	
2x long beeps	Exit remote control pairing mode	

#### Optical signaling of the LED service button

Constantly lit	Indication of service mode when the ignition is on	
Fast flashing	Indication of pairing mode of new remote controls	
3 flashes	Confirmation of digit entry PIN code	
1 flash in 3 sec.	Remote control is not in the system coverage area	

# X. TECHNICAL PARAMETERS

Voltage	12/24 V
Operating temperature of the device	-40°C to +80°C
Consumption at idle	4,7 mA
Max current for immobilizer relay	1 A/24 V
Dimensions	14 x 20 x 67 mm

### **MARKING OF WIRES**

- Ground
- Power Supply (+12/24 V) Buzzer (-150mA)
- Ignition (+)
- NC 2 blocking relay contact
- NC 1 blocking relay contact
- COM 2 blocking relay contact (11)
- COM 1 blocking relay contact (12) NO 2 blocking relay contact
- NO 1 blocking relay contact

The immobilizer follows the NC blocking logic. With a valid authorization, the contacts NC 1 are connected to COM 1 and NC 2 to COM 2.

Warning: Keep the maximum permissible current load of the blocking relay 1A! To control a larger current load, use additional equipment!