



2 CHANNEL MULTI-PURPOSE RECEIVER



| Rhino Part N°. | Description |
|----------------|--|
| RCX | <ul style="list-style-type: none">• 2 Channel receiver• Keyless Entry |
| RCXi | <ul style="list-style-type: none">• Keyless Entry with immobilisation relay (includes automotive installation parts) |

• Hardware Version: CLX Version 4.00 • Software Version: CL2000 •

Instructions



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16 Pages Total

Introduction

This product is designed to be **simple and easy to use**. It has simple wiring connections and can be used in a **variety of applications**. Primarily, this product can be used to remote control your car, garage door, home alarm system, or your electric gate. The list of items you can interface into is almost endless.

The unit is supplied with 2, dual button remote controls which have an **operating range of approximately 80 metres** (line of sight – subject to environmental conditions).

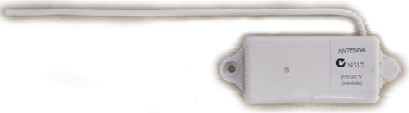









The remote controls for this unit operate using **code hopping technology**. This is otherwise known as anti code grabbing or anti scanning type. This leading edge technology prevents unauthorised copying of your remote control. This technology sends a unique and different code each time any of the remote control buttons is pressed.

Other features include:

- ✓ Long life lithium batteries included with the remote controls.
- ✓ Compact receiver module, which can fit in the smallest of spaces.
- ✓ High performance and reliable super-heterodyne receiver. This ensures there is no frequency drift.
- ✓ SSR™ Solid State Remote controls – no tuning capacitor. More durable and reliable.
- ✓ New modular design. Plug in module. Easy to install, replace or service.
- ✓ Learning code receiver. Can store up to 15 remote controls in total.

Packing List

Following, is a list of the parts included with your receiver.

| Description | Appearance | Re-order code | RCX | RCXi |
|---|---|---------------|-----|------|
| RCX Receiver module |  | RCXTH | Yes | Yes |
| 8 way wiring harness |  | HARNESS08 | Yes | Yes |
| 2 button remote controls (2 pieces) |  | GTTX | Yes | Yes |
| Instruction booklet |  | INSTRUCTIONS | Yes | Yes |
| Warranty Cards |  | WTYCARD | Yes | Yes |
| 1 Amp diode |  | 1N4007 | No | Yes |
| 40 Amp relay |  | 40ARELAY | No | Yes |
| LED, Loom and Bezel |  | LEDLOOM5 | No | Yes |
| Toggle Switch and Loom |  | TOGSWLOOM | No | Yes |
| Special Indicator Flash Relay (pre wired) |  | REL01LOOM | No | Yes |

Operation

Normal Operation (Automotive – RCXi)

Red button



Press button 1 to **lock and unlock** the vehicle.

When the vehicle is locked this will immobilise the vehicle. The dash LED light will begin flashing and the indicators will flash once.

Unlock Lock

When the vehicle is unlocked the dash LED light will stop flashing. The indicators will flash twice and vehicle can now be started.

Green button



Press button 2 to open the **boot** (if connected). This operates independently and will not lock or unlock the doors. It will not enable the vehicle to be started if the vehicle is already immobilised.



Normal operation (general purpose – RCX)

As this receiver may be wired to many different devices, we suggest that you fill in the spaces below.

Red button

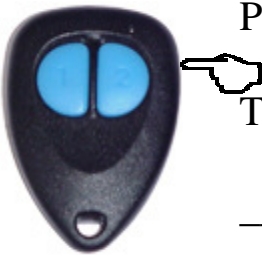
Press button 1 to operate Channel 1.



This will _____

Green button

Press button 2 to operate Channel 2.

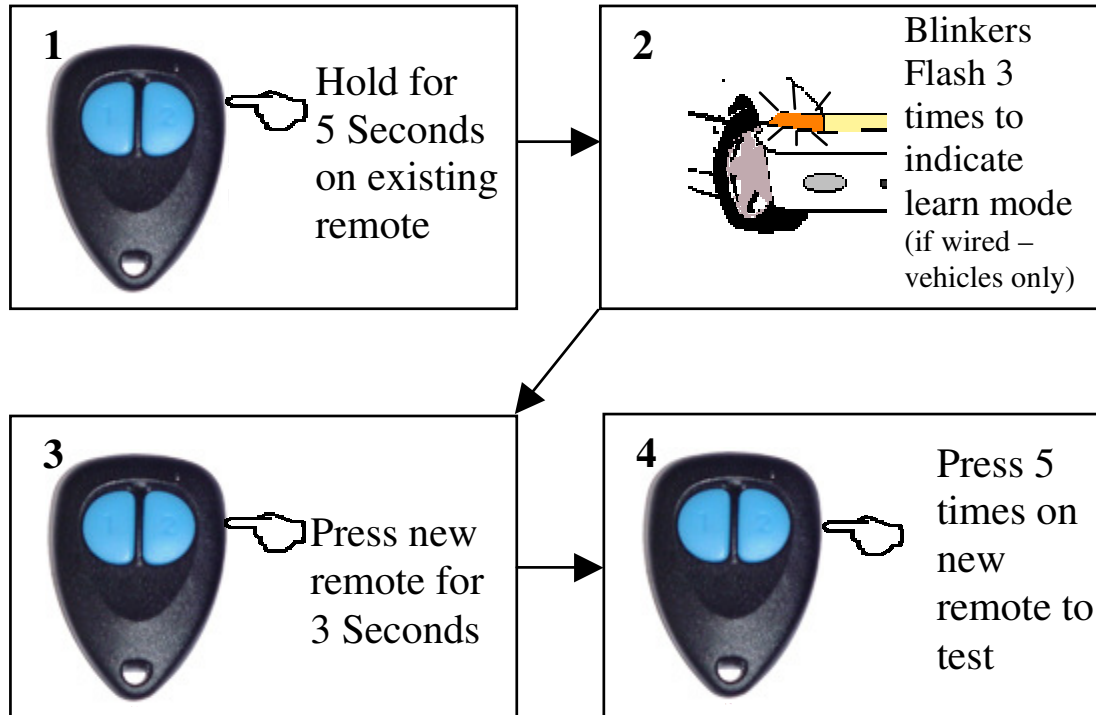


This will _____

Installers notes to the user

Adding remote controls

Your RCX / RCXi incorporates a unique code learning system. This enables extra remotes to be added with ease if necessary. You can utilise a **maximum of 15 remote controls** if required.



To learn in a new remote control press and hold button 1, of an existing (learnt in) remote control, for approximately 5 seconds or until the blinkers begin to flash again. Immediately after the blinkers begin flashing or after holding the button 1 of the existing remote control, release that button. Immediately after releasing the button of the existing remote control press button 1 of the new remote control for 3 seconds then 5 times for a 1 second duration each time. The new remote control should now work. If this doesn't work the first time re-try this procedure from the beginning.

Over-ride



If you have no working remote controls to operate your system because they have been lost or are not working then you may over-ride the RCXi system (if the over-ride switch has been fitted). The switch should be in a hidden position and switched in the opposite direction to enable you to start the vehicle.

The RCX, if wired to a control panel, can usually be overridden by using the hardwired keypad. It is important with any installation to ensure that an override procedure is in place in the event that all remote controls for the system are lost or are not operating.

Lost Remotes?

If you are unable to find lost remotes you should have the system sent back to the Rhino Service Department for resetting. This is important to ensure that no unauthorised entry can occur from someone using the lost remote control(s).

Contact the qualified installer for removal and refitting of the system. For technical assistance contact Rhino Technical Support (details below).

Testing & Specifications

- We recommend using a multi-meter to test any wires.
- All outputs are open collector switching negative.

NORMAL OPERATION RATINGS

| PARAMETER | MINIMUM | TYPICAL | MAXIMUM |
|----------------------------|---------|---------|---------|
| Supply current @ Vcc = 12V | - | 7mA | 13mA |
| Supply voltage (Vcc) | 10V | 12V | 14V |
| Operating Temperature (°C) | -20 | +25 | +85 |

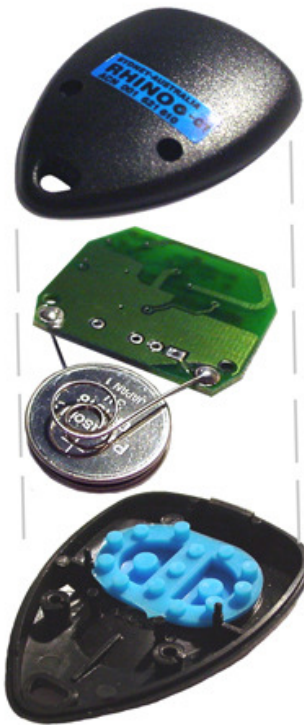
ABSOLUTE MAXIMUM RATINGS

| PARAMETER | MINIMUM | MAXIMUM |
|--------------------------|---------|---------|
| Storage Temperature | -55 | +150 |
| Supply Voltage, Vcc Max. | 0V | +16V |

Service and Technical Support

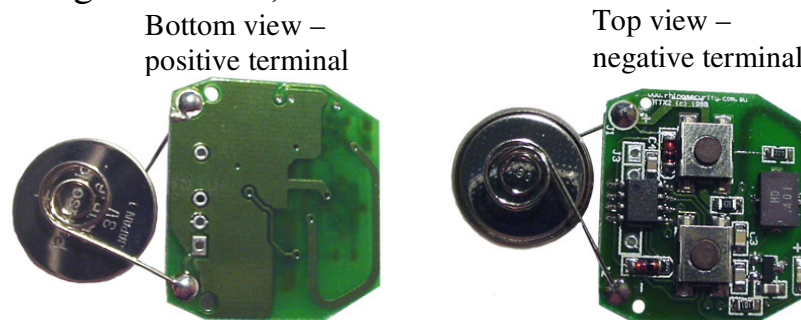
Replacing the remote control batteries

The diagram shows how the remote control is assembled. This may help when it comes time to replace the batteries in your remote control.



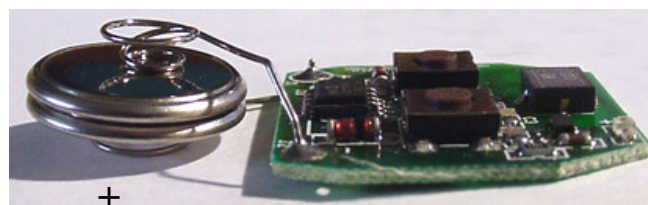
A small philips head (#1) screw driver is required to remove the 2 screws that hold the case together. Once the screws are removed you can then disassemble the case and replace the batteries.

The batteries must be installed the correct way (see diagram below).



Both batteries are placed between the 2 terminals. The positive side of each battery faces the bottom. The positive side of each battery is indicated by a + symbol. Be sure not to touch the face of the new batteries with your fingers. Handle only from the edge so that the batteries make good contact with each other and the terminals.

Side view with
batteries installed



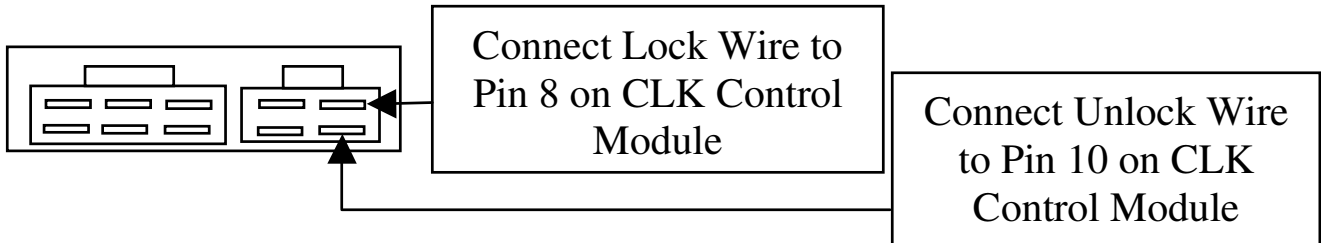
Replacement batteries are available from Rhino Electronic Security. Contact Rhino Technical Support on the number below.

| Rhino Part # | Battery type | Description |
|--------------|--------------|------------------------------------|
| TX3V | CR1616 | 3 Volt button cell Lithium battery |

Additional Diagrams

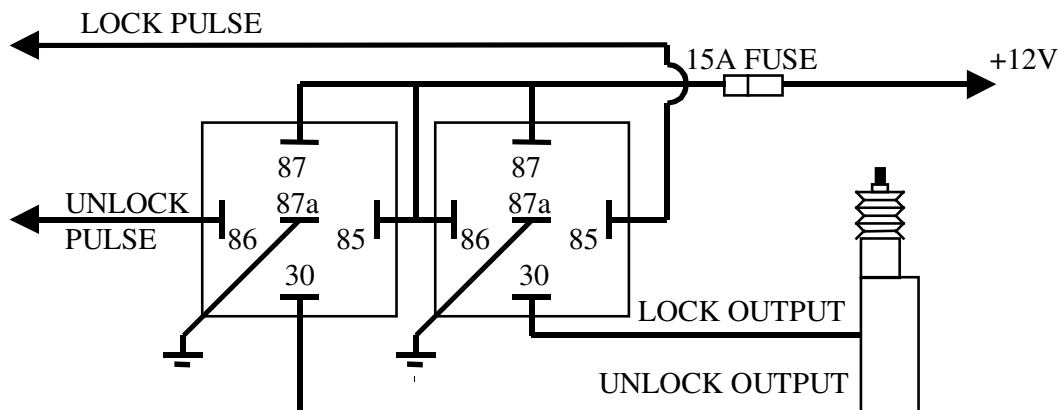
All relays depicted are changeover type.

Connecting to a Rhino Central Locking Kit (CLK)

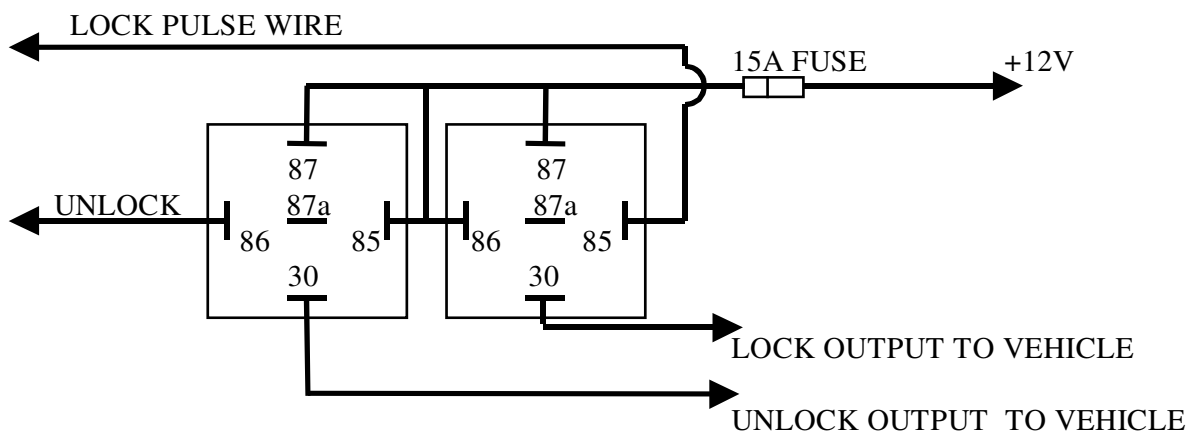


Installing a New Motor

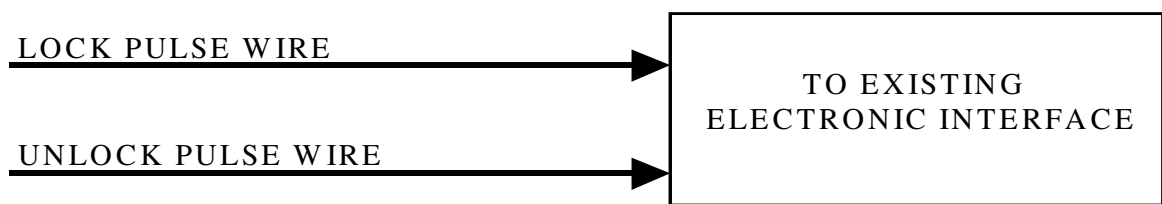
(Often required in vehicles that has factory locking but have no motor in the driver's door, or you would like "keyless entry" on driver's door)



Interfacing to "Positive Pulse" Central Locking Systems

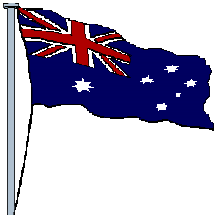


Negative Trigger Existing Central Locking System (low current)



Additional Central Locking hookup diagrams available from Rhino Technical Support

- Secure unlocking (similar to VS/VT central locking system).
- Positive at rest then going negative or negative at rest then going positive.
- Other various central locking hookups.
- Wiring colours and locations for various model vehicles.



We thank you for buying an Australian designed and engineered product from an Australian company



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