# RXPROR4

Proudly Designed in Australia
Made in Taiwan

## Multi-Function Receiver / Transmitter Set

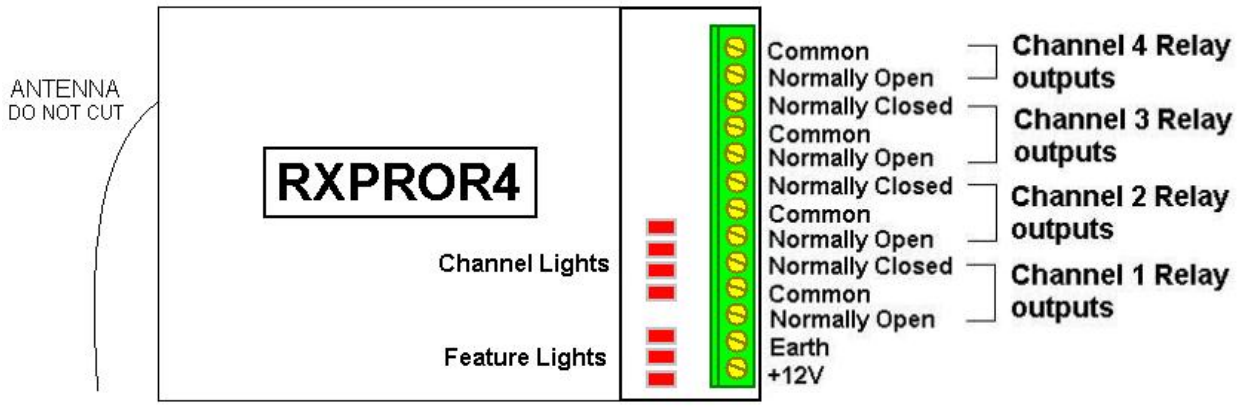
N517

## OVERVIEW

The RXPROR4 is an advanced multi-purpose 4-channel narrow-band UHF receiver/transmitter set with fully programmable relay outputs (1 Amp relays). It is supplied as
standard with 2 x Code Hopping, 4 Button Remote Controls.

| | |
|---|---|
| ▪ | All outputs are individually programmable to suit almost any application (momentary, latched, timed or pulsed). |
| ▪ | High Security Code Hopping Remotes (anti-scan, anti-code grabbing) |
| ▪ | Compatible with Rhino Wireless Alarm Detectors |
| ▪ | Up to 200 meters radio frequency range (line of sight) |
| ▪ | Up to 5 Code Hopping remote controls can be used |
| ▪ | Up to 4 Wireless Detectors can be used |
| ▪ | Step by Step Programming via remote control |
| ▪ | Power Supply Requirement: 12VDC @ 500mA |

RXPROR4 - 4 Channel Receiver – Wiring Diagram




Remote Control – 4 Channel Code Hopping Transmitter (Individual Part No RCTX4-U)

| Remote Button | Output Activated |
|---|---|
| 1 | Channel 1 |
| 2 | Channel 2 |
| 3 | Channel 3 |
| 4 | Channel 4 |

NOTE: By default, all channels are 2-second pulsed outputs (i.e. pressing the button will turn the output on for 2 seconds and then turn off). See PROGRAMMING for modifying to suit your application.

**Antenna Mounting:** For maximum operational range the antenna must be made vertical and straight.

## Optional Programming

The following features are programmable for each individual channel. A description of each feature is included. For programming each feature see the relevant page number in the PROGRAMMING section of this manual.

| Feature | Description | Page |
|---|---|---|
| **Adding New Remotes** | Allows additional Code Hopping Remote Controls to be learnt into the system<br>i.e. Use this for learning in additional remote controls. | 4 |
| **Latched or Pulsed Output**<br>**(Note: The Default Factory Setting For Each Channel is a 1 Second Pulsed Output)** | Latched – activating the channel activates the output, activating the channel again deactivates the output.<br>e.g. If a light was connected to the output, pressing the button once would turn the light on, pressing the button again would turn the light off. | 5 |
| | Pulsed Output – Activating the channel will activate the output for only 2 seconds.<br>e.g. If a light was connected to the output, pressing the button would turn the light on for 2 seconds, the light will then turn off. | |
| **Normally Open or Normally Closed Outputs** | Normally Open – output switches to closed when the channel is activated. | 6 |
| | Normally Closed – output switches to open when the channel is activated.<br>i.e. Use on channel 4 when a normally closed circuit is required. Channels 1, 2, and 3 have connections for both normally open and normally closed outputs. | |
| **Timed Output** | Output will activate only for a programmed time when the channel is activated.<br>e.g. If a light was connected to the output, pressing the button would turn the light on for the programmed time, the light will then turn off. | 7 |
| **Momentary Output Enable** | Output is activated while button on remote control is held down and deactivates when button is released.<br>e.g. If a light was connected to the output, while pressing the button the light would be on, releasing the button will turn the light off. | 8 |
| **Adding Wireless Detectors** | Allows Wireless Detectors to be learnt into the system to trigger one of the output channels.<br>i.e. Use this for learning in wireless detectors | 9 |
| **Reed Mode Enable** | Output is activated on open and deactivated on close of wireless reed switch.<br>i.e. Use when using wireless reed switches. | 10 |
| **Low Battery output from Wireless Detector** | Output is activated when a wireless detector learnt into any channel transmits a low battery signal.<br>i.e. When the battery in the wireless detector goes low, the output will activate. | 11 |

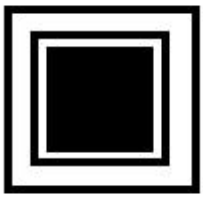
# Programming

During normal operation the display lights on the unit are scrolling from right to left. When the display lights are not scrolling, this indicates the unit is in programming mode.

## MANUAL SYMBOLOGY

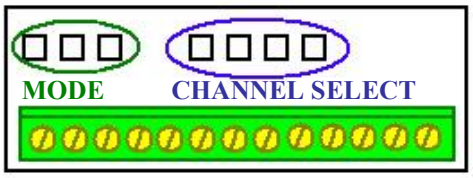
Light is **OFF**

Light is **ON** and not flashing



Light is **FLASHING**

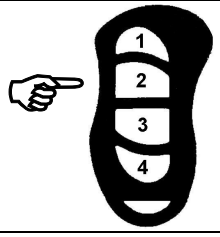
Lights are **SCROLLING**




When looking at the receiver with the terminal strip at the bottom:
The group of 3 LED Lights on the left are the **FEATURE** lights.
The group of 4 LED Lights on the right are the CHANNEL Lights.

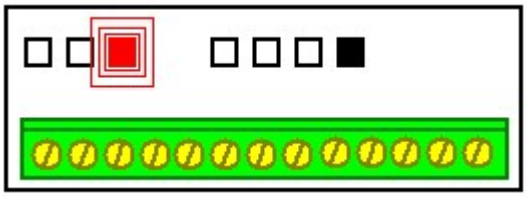
## ENTERING PROGRAMMING MODE

1. Disconnect 12VDC power from the unit.

2. 

Press and hold button 2 on the remote control.

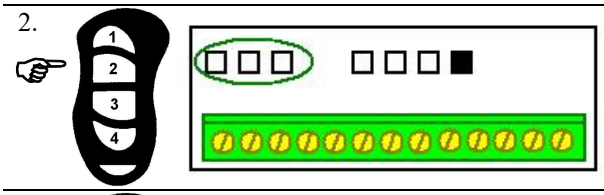
3. Reconnect 12VDC Power to the unit.

4. 
Keep holding the button 2 until the display lights stop scrolling and the feature 1 light is flashing. You are now in programming mode.

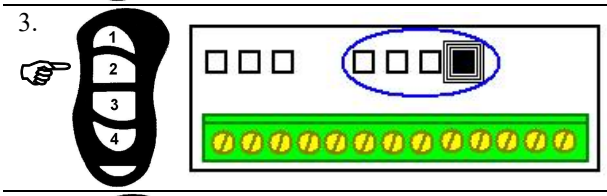
## ADDING NEW REMOTES (Your RXPROR4 can utilize a maximum of 5 remotes)

### Enter Programming Mode

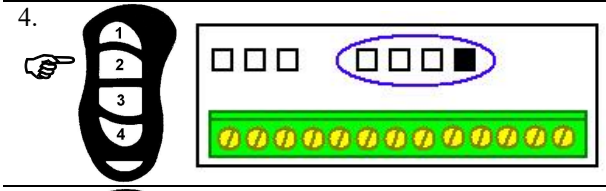
1. See ENTERING PROGRAMMNG MODE (page 3).

2. 

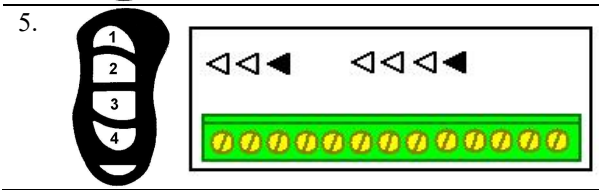

Press button 2 until the feature lights are on as shown.

3. 


Press and hold button 1 until the channel lights(s) begin to flash.
Release button 1, then

4. 


Immediately press button 1 repeatedly on the **new** remote control you wish to learn in until the channel light(s) stop flashing.

5. 

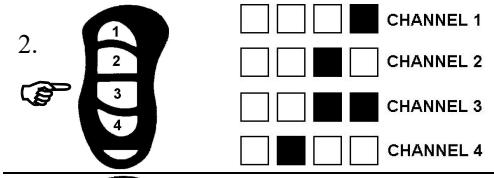

Press and hold button 2 on the new remote control until the lights start scrolling.
The new remote control has now been learnt in.

**Erasing Lost Remote Controls:** If you lose a remote control or perhaps have your car keys stolen, you can simply erase the lost/stolen remotes by repeating the procedure above 6 times. This will fill the system memory with remotes that only you have in your possession.

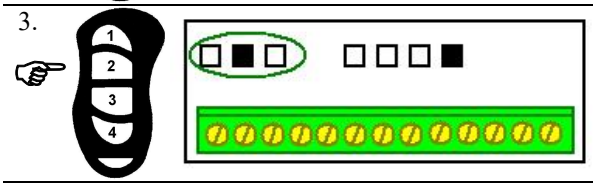
## LATCHED OR PULSED OUTPUT

### Enter Programming Mode

1. See ENTERING PROGRAMMNG MODE (page 3).

2. 


Press button 3 repeatedly until the channels lights indicate the output channel you wish to program.

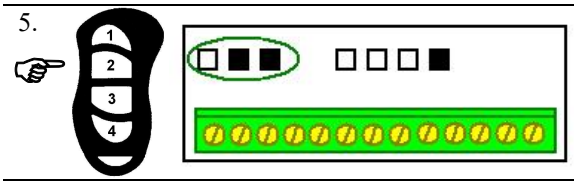
3. 


Press button 2 repeatedly until the feature lights are on as shown.

4.


Press button 1 to swap the feature light(s) between flashing and not flashing.

| Flashing | Not Flashing |
|---|---|
| Latched Output. | Pulsed Output. If Timed Output is turned on then the output will pulse for the programmed time. See Timed Output. |

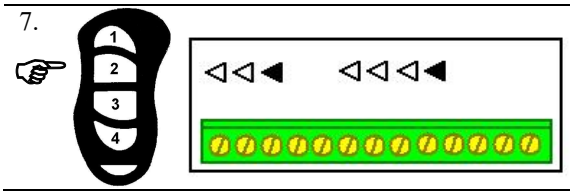
5. 


Press button 2 once, the feature lights should appear as shown.

6.


Press button 1 to swap the feature light(s) between flashing and not flashing.

| Flashing | Not Flashing |
|---|---|
| This will enable latched mode to latch for an infinite time or until retriggered. | Pulsed output. See Timed Output. |

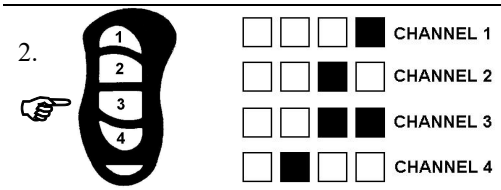
7. 


Press and hold button 2 on the remote control until the lights start scrolling.
The output has now been programmed.

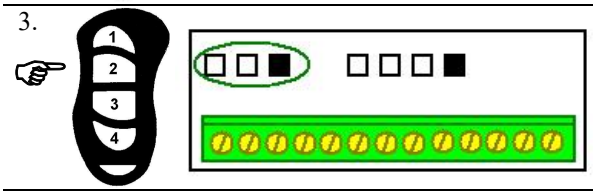
## NORMALLY OPEN OR NORMALLY CLOSED OUTPUTS

### Enter Programming Mode

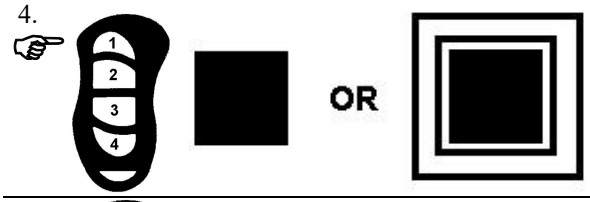
1. See ENTERING PROGRAMMNG MODE (page 3).

2. 


Press button 3 repeatedly until the channels lights indicate the output channel you wish to program.

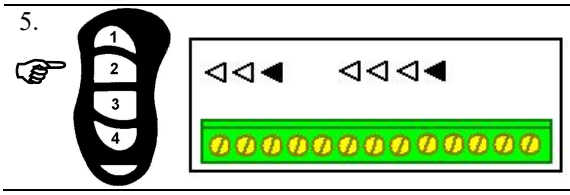
3. 


Press button 2 repeatedly until the feature lights are on as shown.

4. 


Press button 1 to swap the feature light(s) between flashing and not flashing.

| Flashing | Not Flashing |
|---|---|
| Normally Open Output | Normally Closed Output |

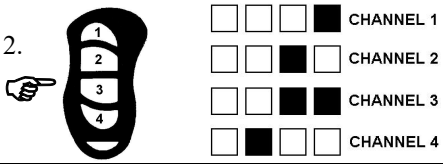
5. 


Press and hold button 2 on the remote control until the lights start scrolling.
The output has now been programmed.

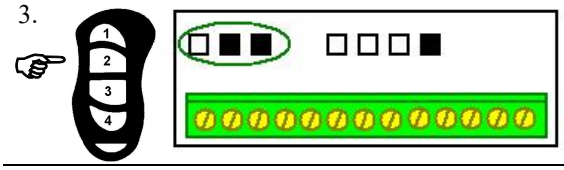
## TIMED OUTPUT

### Enter Programming Mode

1. See ENTERING PROGRAMMNG MODE (page 3).

2. 


Press button 3 repeatedly until the channels lights indicate the output channel you wish to program.

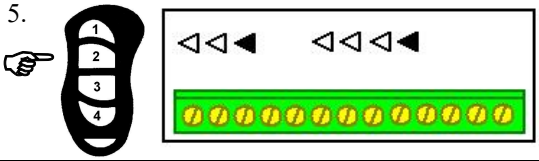
3. 

Press button 2 repeatedly until the feature lights are on as shown.

4.


Press button 1 will swap the feature light(s) between flashing and not flashing.

| Flashing | Not Flashing |
|---|---|
| Timed Output Off. | Timed Output On. Default 0.5 seconds. See Timed Output Programming. |

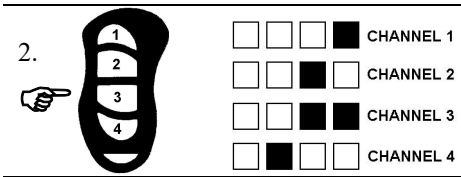
5. 

Press and hold button 2 on the remote control until the lights start scrolling
The output has now been programmed.

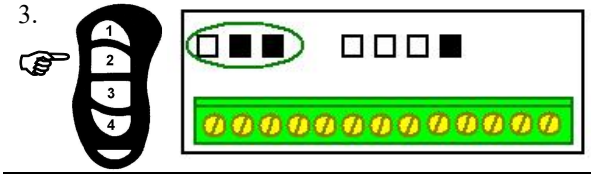
## TIMED OUTPUT PROGRAMMING

### Enter Programming Mode

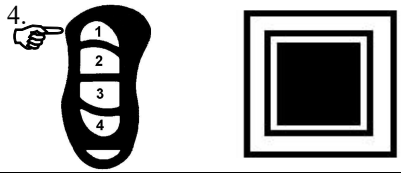
1. See ENTERING PROGRAMMNG MODE (page 3).

2. 


Press button 3 repeatedly until the channels lights indicate the output channel you wish to program.

3. 

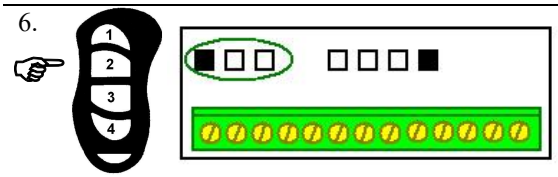
Press button 2 repeatedly until the feature lights are on as shown.

4. 

Press button 1 repeatedly (either once or twice) to set the feature light(s) to flashing.

5.

To begin recording the desired output time press button 1. The feature light(s) will stop flashing to indicate recording.

6. 

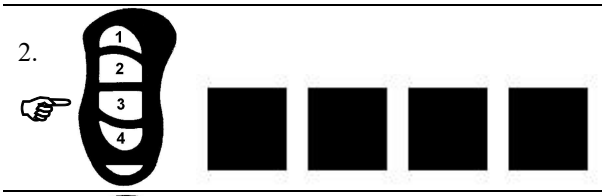
Once the desired output time has elapsed press button 2 to stop recording. The feature lights will appear as shown to indicate the recording has been confirmed.

## MOMENTARY OUTPUT ENABLE

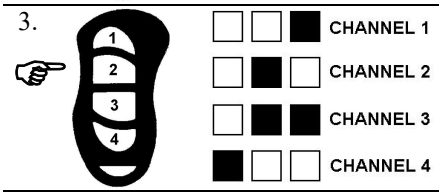
**For this feature to function correctly, firstly you must enable the *Pulsed Output* feature and *Latched feature* (see page 5), then configuration this mode as shown below:**

### Enter Programming Mode

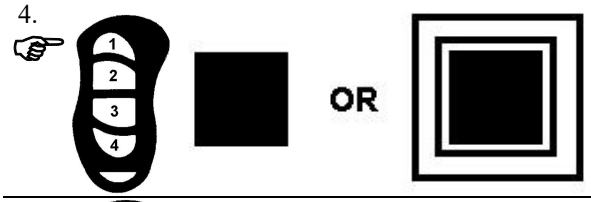
1. See ENTERING PROGRAMMNG MODE (page 3).

2. 


Press button 3 repeatedly until the channels lights are all on as shown (CHANNEL 15).

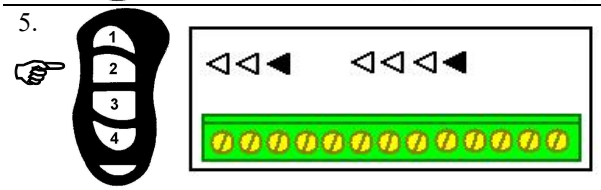
3. 


Press button 2 repeatedly until the feature lights indicate the desired channel for momentary operation.

4. 


Press button 1 to swap the feature light(s) between flashing and not flashing.

| Flashing | Not Flashing |
|---|---|
| Momentary Output off. | Momentary Output on. |

5. 

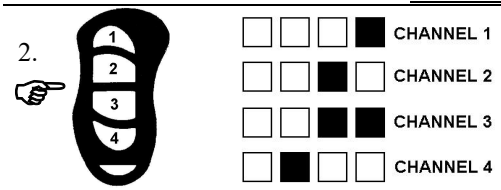

Press and hold button 2 on the remote control until the lights start scrolling.
The output has now been programmed.

## ADDING WIRELESS DETECTORS

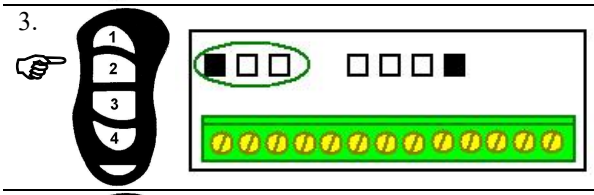
**WIRELESS PIR, REED, SMOKE DETECTOR, EMERGENCY PENDANT.**

### Enter Programming Mode

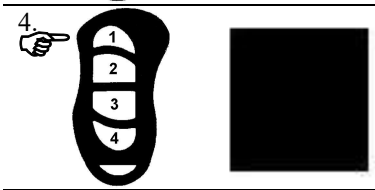
1. See ENTERING PROGRAMMNG MODE (page 3).

2. 

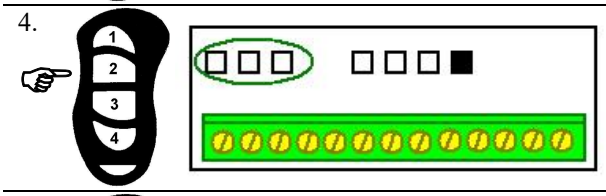

Press button 3 repeatedly until the channels lights indicate the output channel you wish to program. Select the channel that you wish to be activated by the detector.

3. 

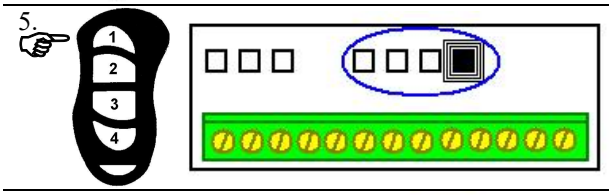

Press button 2 repeatedly until the feature lights are on as shown.

4. 

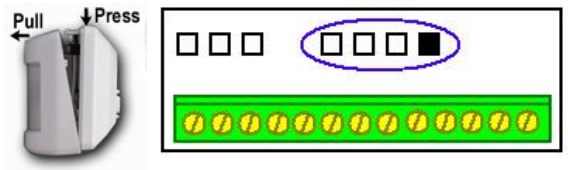

Press button 1 to set the feature light(s) to not flashing.
NOTE: By default, the feature light(s) will be flashing, if not do not press button 1.

4. 

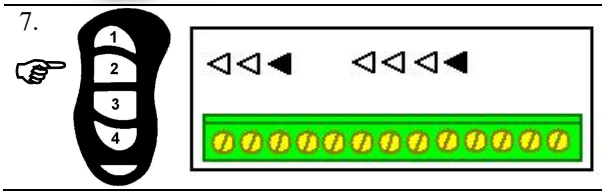

Press button 2 repeatedly until the feature lights are off as shown.

5. 


Press and hold button 1 until the channel light(s) begin to flash.

6. 


Now trigger the new detector; the channel light(s) should stop flashing. Note that detectors are high-powered and should be triggered at least 5 meters away from the unit.

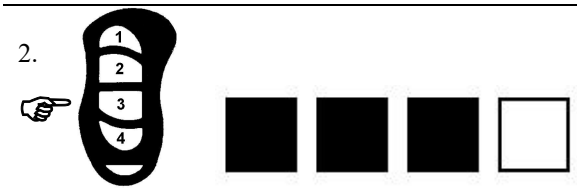
7. 


Press and hold button 2 on the remote control until the lights start scrolling.
The detector has now been learnt in.

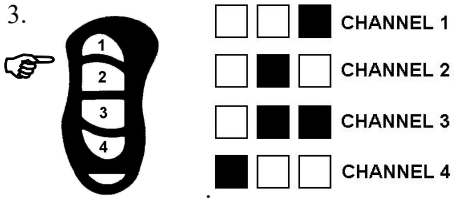
**REED MODE ENABLE – if using Wireless Reed Switches this mode should be enabled. When the wireless reed switch sends "open" i.e. when your door or window is opened, then the channel output will be latched on. When door is closed the output turns off.**

## Enter Programming Mode

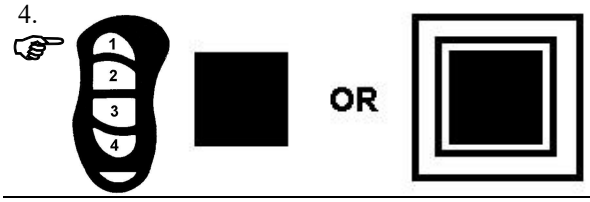
1. See ENTERING PROGRAMMNG MODE (page 3).

2. 


Press button 3 repeatedly until the channels lights are on as shown.

3. 

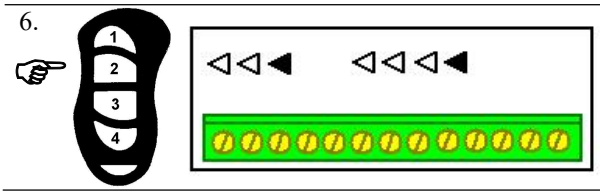

Press button 2 repeatedly until the feature lights indicate the desired channel for reed operation.

4. 


Press button 1 to swap the feature light(s) between flashing and not flashing.

| Flashing | Not Flashing |
|---|---|
| Reed Switch Mode disabled. | Reed Switch Mode enabled. |

5. **Enable Latch Mode**
See LATCHED OR PULSED OUTPUT (page 5)

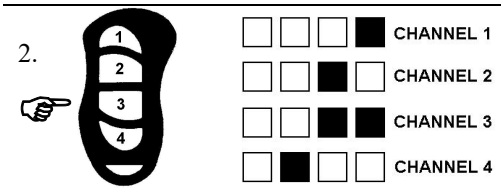
6. 


Press and hold button 2 on the remote control until the lights start scrolling.
Reed mode has now been programmed.

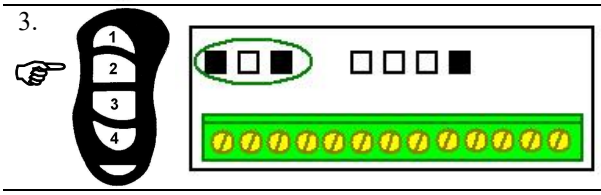
**LOW BATTERY OUTPUT FROM WIRELESS DEVICES If this mode is enabled, if ANY wireless detector programmed into ANY channel sends a low battery signal then the selected channel output will be activated.**

## Enter Programming Mode

1. See ENTERING PROGRAMMNG MODE (page 3).

2. 


Press button 3 repeatedly until the channels lights indicate the output channel you wish to program. The channel you select will activate whenever a low battery signal is transmitted by any of the learnt in detectors.

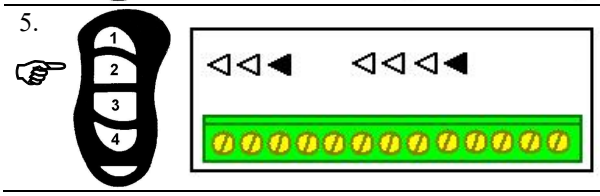
3. 


Press button 2 repeatedly until the feature lights are on as shown.

4.

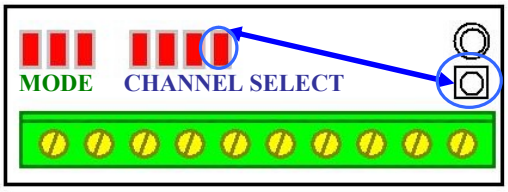
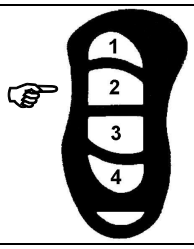
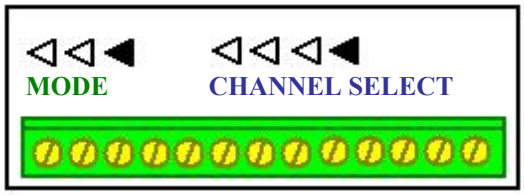

Press button 1 to swap the feature light(s) between flashing and not flashing.

| Flashing | Not Flashing |
|---|---|
| No Output on low battery. | Output on low battery. |

5. 


Press and hold button 2 on the remote control until the lights start scrolling

**RESETTING THE RXPROR4 – This erases all remotes and detectors and returns the programming settings to the factory defaults i.e. 1 sec pulse output for all channels.**

| | | |
|---|---|---|
| 1. | | Disconnect power from the unit. |
| 2. |  | Using a piece of wire or metal tweezers, link (bridge) the top solder pad on the far-right channel LED to the square bottom solder pad on the bottom right hand corner of the circuit board as shown. Keep the bridge on. |
| 3. |  | Press and hold button 2 on the remote control. |
| 4. | | Power up the unit and then remove the short. |
| 5. |  | When the lights of the channel select start flashing once then scrolling, release the button on the remote control. The device has now been reset, and the first remote control is learnt in. You may now learn additional remotes as per the standard procedure. |

**The table below shows the button conversion if you wish to utilize other styles of Rhino Code Hopping Remotes with your RXPROR4.**

| PRE-DEFINED CHANNELS FOR RHINO CODE HOPPING REMOTE CONTROLS | | | |
|---|---|---|---|
| **Output Channel** | | | |
| | GTTX | RCTX3-T | RCTX4-U |
| 1 | 1 | Bottom | 1 |
| 2 | 2 | Left | 2 |
| 3 | NA | Right | 3 |
| 4 | 1+2 | Bottom + Left | 4 |

## Optional Extras Available

- Wireless PIR Detectors - for detecting the movement of humans inside your building (PIRW3)
- Wireless Reed Switches - for detecting the opening of doors or windows (WREEDi)
- Wireless Smoke Detectors - for detecting a fire (SMODETW)
- Wireless Emergency Pendants - worn around the neck, this special remote device needs to be pressed on both sides to activate the alarm system. Particularly suited for the elderly, ill, or incapacitated user. (WPANIC)
- Additional Code Hopping Remote Controls – if more than the standard two remote controls are required, 3 additional remotes can be added i.e. 5 x Code Hopping remotes in total can be used with the RXPROR4.
- Remote Control a Rhino Car Alarm or Engine Immobiliser via your RXPROR4 remote control. Various models are available, so please contact your Rhino Dealer for further information.
- Use your Rhino Model JAG/RAVx car alarm remote control to open your garage door via your RXPROR4.