

81CR-V5 Top Security Rolling Code Receiver

January 2011

This sophisticated one channel receiver, Model 81CRV5, has been specially designed to operate any control panel of gates or garage doors.

Selecting operation voltage 12V or 24V AC/DC

The receiver is made to suit 12- 24V Ac / Dc voltage. You can select the operation voltage by the **Voltage Selector Jumper** in the receiver. See the location of this Jumper in the receiver's picture below.

LEARNING CODES

Each button of the TR4-RS remote control transmits a different code. Therefore, each remote control can operate four different receivers. The receiver 81CR can learn up to 170 different codes (buttons) of the remote control TR4-RS, and all the four buttons can even be taught into one receiver.

There are two ways to teach the receiver a new remote control code (button).

The first method allows to teach the receiver new remote controls, by using the original remote control of the receiver (which already operates the receiver), without having to access the receiver. The second method is to be used when the receiver's memory has been erased or none of the remote controls of the receiver is available.

First Method: "Service – Free" Teaching Method

This wireless method of teaching will allow the end user to teach and program new remote controls into the receiver's memory without the need of neither a technician nor accessing the receiver box. Use the operational remote control of the unit, (a remote control that operates the receiver) to teach a new remote control into the receiver's memory as follows:

Take the **operational remote control** of the unit and stand about 2m' from the receiver. Press and hold both the buttons (III) and (I) simultaneously for 10 seconds or till the program LED turns ON to indicate that the receiver is ready to learn the new remote control's button. **Choose**, press and hold the one of the buttons (I), (II), (III) or (IV) of the **NEW remote control** for 10 seconds or till the program LED turns off. The LED light will turn off to indicate that the remote control's button has been learned into the receiver's memory.

Second method: Teaching a new remote control by the jumper in the receiver.

1. Remove the jumper "Teach / Clear" in the receiver and the program LED light will turn on.
2. Choose, press and release the button on the new remote control, which you would like to operate the receiver till the LED light turns off, (about **two** seconds).
3. Return the "Teach / Clear" jumper to its place.
4. Repeat steps 1- 4 for teaching more remote controls.

MULTI ONE-CHANNEL REMOTE CONTROL

The transmitter has four buttons, which can control up to four different receivers.

Each receiver can learn one of the buttons of the remote (TR-4RS).

PULSE FUNCTION

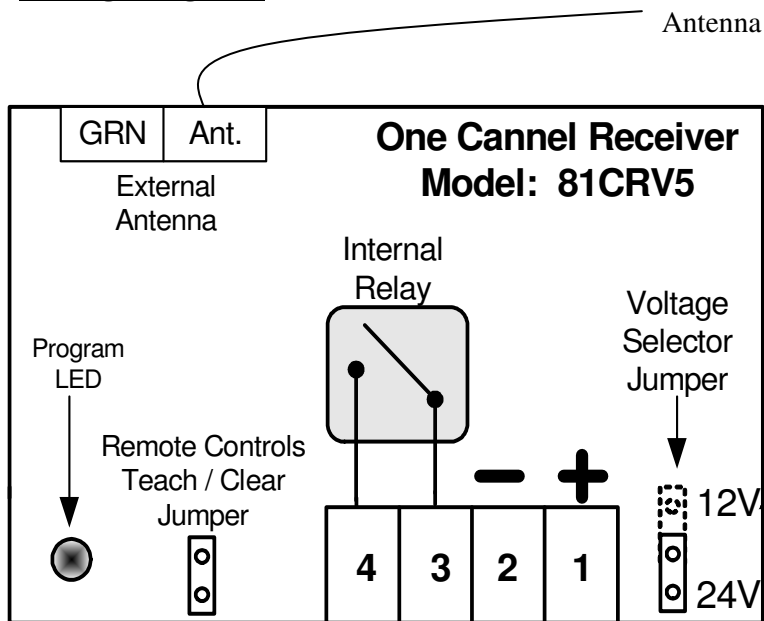
Whenever the button on the remote control is pressed, the relay in the receiver will change its status from N.O. to N.C. and hold this position for a period of half second – Pulse Function.

DELETING ALL THE CODES FROM THE RECEIVER'S MEMORY

To delete *all the codes* from the receiver's memory, do as follows:

1. Disconnect the power supply from the receiver and remove the "Teach / Clear" Jumper in the receiver.
2. Wait for 5 seconds and reconnect the power supply. The program LED light will turn on in the receiver.
3. Return the jumper "Teach / Clear " to its place immediately before the LED light turns off.
4. The LED will flash twice to indicate that all remote controls were deleted from the receiver's memory.

Wiring Diagram



External Antenna

In case the receiver is installed in a metal enclosure or for underground car-park, an *External Antenna* should be used for better reception and longer operation range of the remote controls.

This special External Antenna is made by ECA Electronic Engineering for the best results and operation range up to 150m'. Model No. EX-ANT-433.

Receiver specifications:

Operating radio frequency : 433.92MHz Super Regenerative.
Operating voltage : 12-24V DC AC / selectable by jumper.
Current consumption : 5mA on standby.
Relay contact ratings : 5A / 12V DC ; 2A / 30V AC.
Type of receiver : Micro-controlled.
Functions of operation : Pulse Function (pulse of 0.5 Sec.)
Coding combinations : hopping code – changes with each transmission.
Type of coding : Learning codes up to 170 different remote controls.

Remote control specifications:

Operating range : 100m. (Open air)
Battery type : GP Battery, type 23A.

CONNECTIONS

PIN NO. 1 : Connect it to the positive wire.
PIN NO. 2 : Connect it to the negative wire.
PIN NO. 3 : Normally Open contact of the internal relay.
PIN NO. 4 : Common contact of the relay.

Manufactured By:

ECA Electronic Engineering P/L.
465 Hawthorn Rd. Sth. Caulfield Vic. 3162
AUSTRALIA www.gatesonsolar.com
Tel: 03-95 720 535 Fax: 95 720 536



N345

