

# PCR43302P

2-Channel, 433MHz Penta Receiver with Open Collector Output

## Features

- Frequency hopping between 433.10 to 434.70MHz
- Coding using 12-way dipswitch or encrypted codes
- Momentary and Latching modes are user selectable
- Antenna diversity for robust link with extended range
- Unlimited remotes can be programmed to the receiver
- Compatible with PentaFOB® and PentaCODE® remotes
- Wide operating supply voltage and low current consumption
- Add, edit and delete individual PentaFOB remotes with programmer
- On-board diagnostic LED's to indicate correct power, reception and relay activation



## Applications

- Automatic gates and garage doors
- Wireless Security activation / deactivation of domestic or industrial alarms
- Easily integrated into custom designs with 6WHP and 6WLP PCB Connector

## Description

This receiver is compatible with “PentaFOB®” and “PentaCODE®” remotes. One of our smallest receivers measuring 55 x 44 x 13 mm. Small but still very powerful using the latest Mosfet technology to give you two outputs with high switching current of 2 Amps at 40VDC each.

The PentaCODE® dual coding system gives the installer the option to use the classic 12-way dip switch coding or one of over 17 billion encrypted codes.

With the 12-way dip switch, just match the keyring remotes and the receiver's dip switch and it's coded. With the encrypted code you switch all the 12-way dip switches OFF and the remote and receiver automatically goes into the encrypted coding.

The receiver is available as a plug in type with the standard 6-pin connector. This connector allows you to integrate the receiver into your design. Use 6WHP or 6WLP connector.

## Output Modes

Each output on the PCR43302P receiver can function independently in either momentary or latching mode. By default the modes are set to momentary. To change it to latching, turn off the corresponding dip switch on the 2-way mode selection dip switch.

### Factory Default = Momentary





**Momentary** - Output is active for as long as the transmitter button is pressed.  
*This is a standard mode on most automatic gates or garage door openers.*

**Latching** - Output remains active until next press of the transmitter button.  
*Similar to switching "on" and "off" a light.*

## Customised Software

Custom output modes can be programmed to do special functions. Call Elsema for more details.

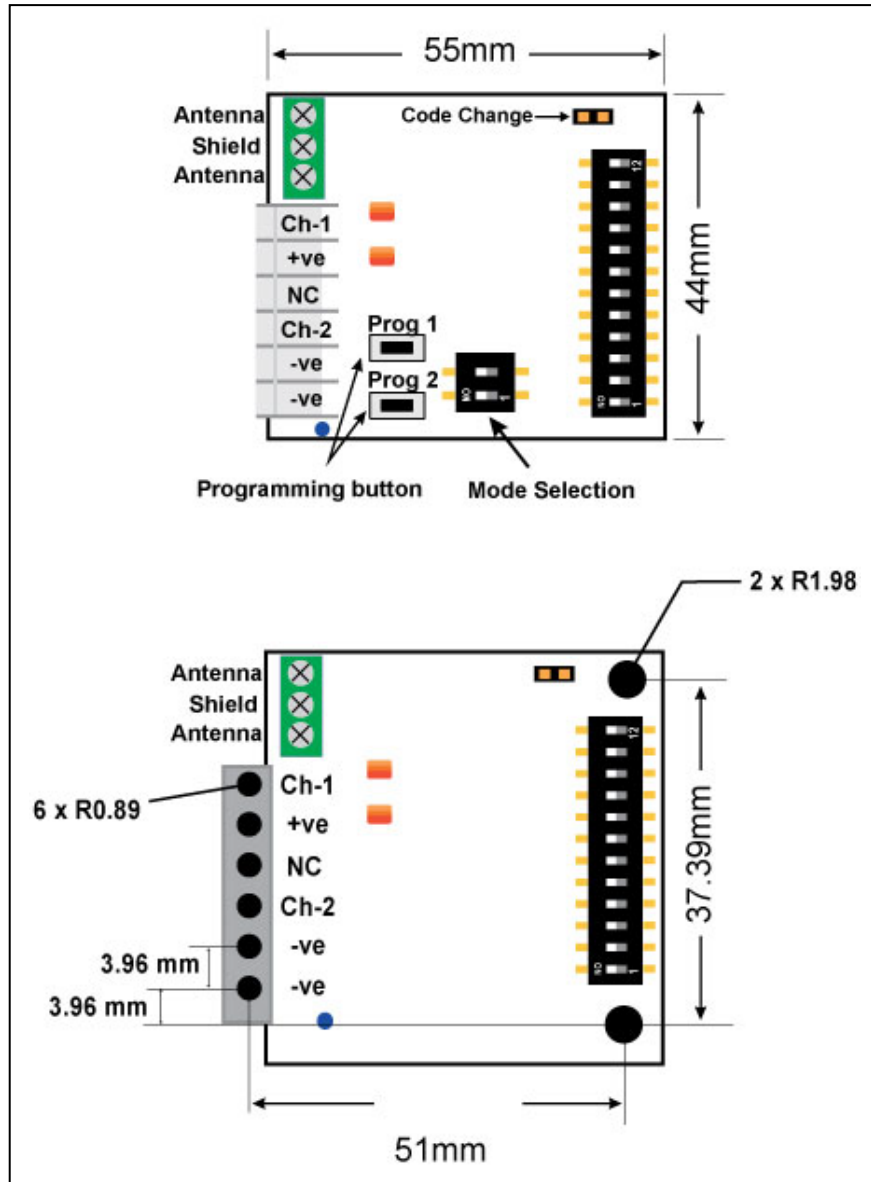
## Products in the Range

			
<p><b>PCR43301RE</b> 1-Channel Receiver with Relay Output. Enclosed in a case</p>	<p><b>PCR43302P</b> 2-Channel Plug in type Receiver with Open Collector Output</p>	<p><b>PCR43302R</b> 2-Channel Receiver with Relay Outputs</p>	<p><b>PCR43302RE</b> 2-Channel Receiver with Relay Outputs. Enclosed in a case</p>
			
<p><b>PCR43301240R</b> 1-Channel Receiver with 240VAC mains supply</p>	<p><b>PCR43301240RE</b> 1-Channel Receiver enclosed in an IP66 case</p>	<p><b>PCR43302240R</b> 2-Channel Receiver with 240VAC mains supply</p>	<p><b>PCR43302240RE</b> 2-Channel Receiver enclosed in an IP66 case</p>
			
<p><b>PCR43304R</b> 4-Channel Receiver with Relay Outputs</p>	<p><b>PCR43304RE</b> 4-Channel Receiver enclosed in an IP66 case</p>	<p><b>PCR43305R</b> 5-Channel Receiver with Relay Outputs</p>	<p><b>PCR43305RE</b> 5-Channel Receiver enclosed in an IP66 case</p>

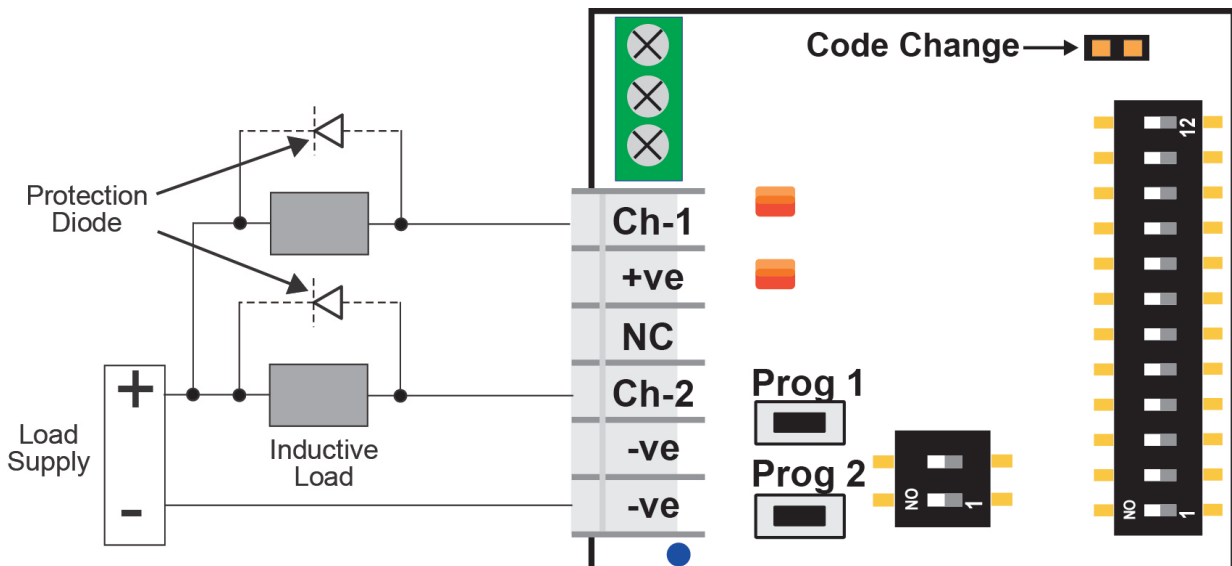
**Technical Data**

Supply Voltage	7 to 36 Volts DC
Standby Current	20mA stand by at 12VDC
Frequency Band	433.100 to 434.700MHz
Operating Temperature Range	-5 to 50°C
Receiver Memory Storage	Unlimited Remotes
Decoding System	Encrypted 17 billion codes combinations or On board 12-way code switch
Outputs	Open Collector: Mosfet output maximum-switching 2Amps/40VDC
Connections	Supply & output: 6-way female connector
Antenna 1	ANT433 series for long range applications. Antenna wire for short range applications
Antenna 2	Use second antenna for extended range
Operating Range	Refer to the remote control or transmitter datasheet
Dimensions	55mm x 44mm x 13mm
Weight	20 grams
Useable Transmitters	FOB433 series and PCK series

## Block Diagram



## Wiring Diagram



# **PentaFOB® Programming Instructions**

Coding the PentaFOB® remotes and receivers can be done in 2 different ways.

1. Remote to Receiver
2. Remote to Remote

## **Remote to Receiver**

1. Check that all switches are “OFF” on the receivers 12-way dip switch
2. Press and hold the program button on the receiver
3. Press the remote button for 2 seconds, receiver LED will flash and then turn Green
4. Release the button on the receiver and the remote
5. Press remote control button to test the receiver output

## **Remote to Remote (you should be near the receiver for this procedure)**

1. Open the case of a remote control that is already programmed and press and release the program button on the back of the board (The receiver enters learning mode)
2. Press the button of the remote in step 1 which activates the receiver
3. Press the button on the new remote which needs to be programmed for 2 seconds
4. Press the program button again of the remote in step 1(The receiver exits learning mode)
5. Press the new remote control button to test the receiver output

## **Deleting Receivers Memory**

Short the Code Reset pins on the receiver for 10 seconds. **This will delete all the remotes from the receiver's memory.**

## **PentaFOB® Programmer**

This programmer allows you to add and delete certain remotes from the receiver memory. This is used when a remote control is lost or a tenant moves from the premises and the owner wants to prevent un-authorised access.

## **PentaFOB® Backup Chips**

This chip is used to backup or restore the contents of a receiver. When there are 100's of remotes programmed to a receiver the installer normally backups the receiver memory in case the receiver is damaged.

# PentaCODE® Programming Instructions

## 12- Way Dip Switch Coding

1. Set a random code on the receiver dip switch by flicking the dip switches "On" or "Off".  
(DO NOT USE THE DEFAULT FACTORY SETTING FOR THE 12-WAY DIP SWITCH AS THIS IS A COMMON CODE)
2. Open the battery cover in the PentaCODE® remote.
3. Match the 12-way dip switch to the receivers 12-way dip switch.
4. Press button 1 on the remote and the receiver output should activate. This is indicated by the receiver LED.

To program the same PentaCODE® remote buttons 2, 3 or 4 to another receiver change dip switch 11 and 12 in the 2nd, 3rd and 4th receivers. For example:

	Receivers Dip Switch 11	Receiver Dip Switch 12
Receiver 1	Off	Off
Receiver 2	On	Off
Receiver 3	Off	On
Receiver 4	On	On

Dip switches 1 to 10 should all be the same in the remotes and the receivers.

## Encrypted Coding - (All 12-Way Dip Switches must be "Off")

Coding the PentaCODE® remotes and receivers can be done in 3 different ways.

1. Receiver to a Remote
2. Remote to a Receiver
3. Remote to a Remote

### ➤ Receiver to a Remote

1. Press and hold the program button 1 on the receiver.
2. Press the remote button you want to program for 2 seconds, receiver LED will flash Green
3. Release the button on the receiver and the remote.
4. The LED on the PentaCODE® remote will flash to confirm the coding has been successful.

### ➤ Remote to a Receiver / Remote to a Remote

Set one of the remotes or receivers to broadcast its code. The broadcaster's code will be programmed to the other units.

- To broadcast the remotes code make sure all 12 dip switches are "off". Then press and hold button 1 and flick dip switch 12 "on" and then "off". This is confirmed by the LED's being on for 10 seconds. You can release the remotes button 1.

- To broadcast the receivers code make sure all 12 dip switches are "off" and then flick dip switch 12 "on" and then "off". This is confirmed by the green LED being on for 10 seconds.

While broadcasting the code press button 1 on a different remote or receiver for 1 second and then release the button. The LED will flash twice to confirm successful programming.

*Broadcasting will be latched on for 10 seconds or stop if any dipswitch is turned on.*

## Deleting Receivers Memory

Short the CC pin on the receiver for 10 seconds. **This will delete all the remotes from the receiver's memory.**

