

# Wiegand Output Penta Receiver

433MHz Penta Receiver with Wiegand Output

PCR433WG

## Features

- Easy to add remote controls to any Wiegand input access control panel
- Remotes are added like cards or RFID tags with no software changes
- Wireless keyless entry offers convenience, security and safety for accessing gates, doors and boom gates
- Wide operating supply voltage and low current consumption
- Easy way to facilitate for handicapped access
- Compatible with PentaCODE® remotes
- Easy to use dipswitch coding

## Applications

- Keyless access control for automatic gates, doors and boom gates



## Description

This receiver allows you to add wireless remote controls to your existing access control systems by connecting the PCR433WG receiver to the access system. The remote controls have a range of up to 200 metres (650 feet) and are available with 2 or 4 buttons. The extra buttons can be used as a panic button allowing a single remote to allow access control and panic alert system.

The receivers Wiegand output interfaces to virtually any commercial access control panel. Remote controls are added as easily as Wiegand cards or RFID tags without any software changes. The ID and facility codes can be matched to the system requirements.

The receiver has a bi-colour LED to act as a status display. Red LED indicates that AC or DC power is "On" and Green LED indicates remote control signal has been received.

## Setup Instructions

The Penta receiver has a 12-way dipswitch, where switches 1-8 sets the site code. Dip Switch 10, 11 & 12 selects the button that the PCR433WG receives from the PentaCODE® Remote.

Remote Button	Receiver dip-switch setting		
	10	11	12
All	Off	Off	Off
1	Off	Off	On
2	Off	On	Off
3	Off	On	On
4	On	Off	Off

The user code is set by the 12-way dipswitch on the remote. Each remote should have a unique code to identify each user. Remotes are programmed into the access controller in the same way as RFID tags. When programming instead of swiping the RFID tags, the remote button is pressed. On the PentaCODE® remotes you need to have at least 1 of the 12 switches "On" for the remote to work.

The receiver comes pre-wired in a small 70 x 55 x 25 mm enclosure and a supply of 12 to 24 Volts AC or DC can be connected.

The 26 bit Wiegand data output from the PCR433WG is as shown below.  
You can change the 12 way Dip Switch on the transmitter to change the serial code.  
However each button on the transmitter will send a different code.

Site Code: Dip Sw 1-8 on Receiver (PCR433WG)

Serial Code: Dip Sw 1-12 on Tx + Button Pressed

Bit 1 = Leading Parity Bit

Bit 2 = Receiver Dip Switch 8

Bit 3 = Receiver Dip Switch 7

Bit 4 = Receiver Dip Switch 6

Bit 5 = Receiver Dip Switch 5

Bit 6 = Receiver Dip Switch 4

Bit 7 = Receiver Dip Switch 3

Bit 8 = Receiver Dip Switch 2

Bit 9 = Receiver Dip Switch 1

Bit 10 = Transmitter Button 4

Bit 11 = Transmitter Button 3

Bit 12 = Transmitter Button 2

Bit 13 = Transmitter Button 1

Bit 14 = Transmitter Dip Switch 12

Bit 15 = Transmitter Dip Switch 11

Bit 16 = Transmitter Dip Switch 10

Bit 17 = Transmitter Dip Switch 9

Bit 18 = Transmitter Dip Switch 8

Bit 19 = Transmitter Dip Switch 7

Bit 20 = Transmitter Dip Switch 6

Bit 21 = Transmitter Dip Switch 5

Bit 22 = Transmitter Dip Switch 4

Bit 23 = Transmitter Dip Switch 3

Bit 24 = Transmitter Dip Switch 2




Bit 25 = Transmitter Dip Switch 1

Bit 26 = Trailing Parity Bit

**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>

**LED Indicator**

Led color	Status
 RED Flashing	Power up
 RED On	Receiver is ready
 Green ON	PentaCODE transmitter code received

**Technical Data**

Supply Voltage	12 – 24 Volts AC or DC. Can use Elsema’s AC power pack (12PP-1000)
Standby Current	28mA stand by at 24VDC
Wiegand Format	26 bits, other formats available upon request
Frequency Band	433.100 to 434.700MHz
Operating Temperature Range	-5 to 50°C
Connections	50cm Flying leads for supply and Wiegand output. See block diagram
Antenna	ANT433 series for long range applications. Antenna wire for short range applications
Dimensions	70mm x 55mm x 25mm.
Weight	70 grams
Operating Range	up to 200 metres depending on building structure and receiver antenna
Useable Transmitters	PCK series “PentaCODE®” remotes

**Block Diagram**

