



### Wireless Key Fob Kit

The key fob kit may be used in many different applications to control various pieces of security equipment e.g: CCTV cameras, garage doors, floodlights, security gates, and bell boxes. The Kit consists of 2 key fob type transmitters and one 12V DC operated receiver.

You can use the receiver to operate many electrical devices as the receiver uses voltage free contacts on its output. Each channel has a separate relay that has both normally open and normally closed contacts. There are 2 "modes" that the receiver can function these being Mimic and Toggle.

Please Note - To control mains voltages, the receiver will need an additional mains rated contractor or relay. Each receiver can learn the codes from 15 key fobs on each channel, therefore enabling a maximum of 30 key fobs per receiver.

#### **Receiver Modes**

#### 1 Mimic Mode

Press the key fob button and the receiver relay will be energised whilst the button is held down. Release the button and the relay drops out.

## (2) Toggle Mode

Press the key fob button and the receiver relay will be energised and stay energised until the button is pressed again – ideal for use with alarming/ disarming burglar alarms.

## **Getting Started**

#### Positioning The Receiver

Obviously you first need to site the receiver. If for example you were using the receiver in a home then some central location would give the best chance for the key fob to operate from most places in the home. In this instance the loft may be a good place. Remember that solid walls and similar objects will "attenuate" (reduce) the key fob's signal so use some thought when positioning the receiver. You don't have to put the receiver next to the

#### **Features**

- Multi-purpose
- Two Independent Channels
- 2 Output Modes: Mimic & Toggle
- Easy To Re-program
- Relay Contacts On Each Channel (14V DC 12A)
- Normally Open (NF), Normally Closed (NA) Contacts
- Screw Terminals For Easy Connection
- High Rejection Of Unwanted Rf Signals
- High Sensitivity For Increased Range (Up To 100m)
- Simple To Set Up And Use
- 12V DC Input

#### **Specification**

FUNCTION	SPECIFICATION
Frequency	433.92Mhz
Transmission Range	Up To 100m
Channels	2 Independent
Receiver Connections	Screw Terminals
Output Type	2 Separate NO/NC Relays
Max Load	14V DC, 12A
Operating Current	15mA 12V DC Standby, 70mA 12V DC Per Channel Activated
Receiver Size	62 x 58 x 30mm
Key Fob Battery	A23 (Supplied)

#### **Options Available**

PART CODE	DESCRIPTION
WIR250	2 Channel Key Fob kit
WIR255	Extra Key Fob
WIR260	Extra Receiver

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This symbol on the products and/or accompanying documents means that used electronic equipment must not be mixed with general household waste For treatment, recovery and recycling please return this unit to your trade supplier or local designated collection point as defined by your local council.



equipment you are trying to operate; you could in fact use an extension cable and have it a distance away that is better for receiving the key fob's signal.

#### **Powering The Receiver**

The receiver needs 12V DC to power it. This may be able to come off the equipment you are connecting it to or you may need a separate power supply. The receiver has two terminals for the power and the ground.

#### **Programming The Receiver**

With the receiver powered up and the antenna connected you can now program which button controls which action.

To program the receiver you will need to remove the upper casing by unscrewing the two small screws on the back of the receiver.

On the top left corner of the PCB you will see two small buttons labelled 'P1' and 'P2' along with a small LED. The WIR250 is programmed using these two buttons. P1 is used for setting commands and P2 is used to removing commands.

The amount of times you press P1 determines which mode and channel is selected. Your can the assign this function to a button on one of the key fobs. The table below shows how many presses are required for choosing each function.

P1	Function
1 Press	Channel 1 Mimic
2 Presses	Channel 2 Mimic
3 Presses	Channel 1 Toggle
4 Presses	Channel 2 Toggle

#### Assigning A Function To A Button

Each key fob has 2 buttons, 'A' and 'B'. Each button can only be assigned 1 function per receiver. If a button already has a function assigned to it on the receiver you are programming and a new function is assigned, the old function for that button will be forgotten. However, a button can be assigned a different function when used with a different receiver. To assign a function to a button just follow the steps below:

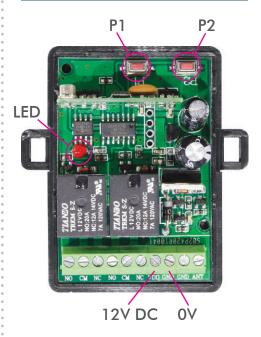
- 1 Press P1 between 1 and 4 times in succession depending on the function you wish to assign. The LED will light up after the first press.
- 2 After a few seconds the LED will flash the same amount of times the button was pressed indicting the new function is ready to be assigned to a key fob button.
- 3 Press and hold the key fob button that you want to control this function.
- 4 You will hear the relay click and the LED will turn off when successfully programmed.

Please Note - If the LED flashes for 10 seconds then the programming has failed.

#### **Version 1**



#### **Version 2**





#### Removing A Function From A Button

If you no longer require a button to activate a function you can remove the function assigned to a button by the following the steps below:

- 1) Press and hold P2 for about 4 seconds on release the LED will turn on.
- Press and hold the button assigned to the function you want to remove.
- The LED will flash and then turn off when removed successfully.

#### **Removing All Functions**

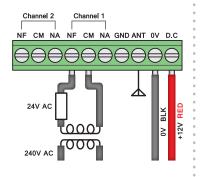
If you wish to remove all functions assigned to key fobs just follow the steps below:

- 1) Press and hold P2 for about 8 seconds.
- When the LED lights up, release P2 an all functions will have been removed.

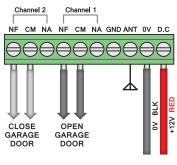
### Connecting Equipment To The Receiver (Version 1)

Many different types of equipment can be connected to the receiver. Some examples of use are shown in the following diagrams:

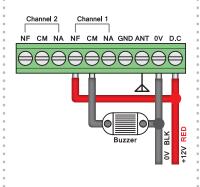
# Operating An Electronic Door Release



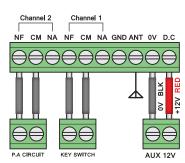
### Opening And Closing An Electronic Garage Door



### Opening And Closing An Operating A 12V Buzzer



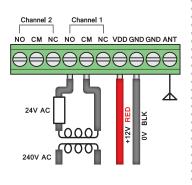
# Operating An Alarm Panel



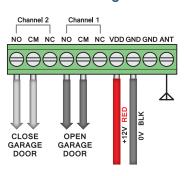
Using button 'A' to arm/disarm alarm. Using button 'B' as a P.A. alarm.

# Connecting Equipment To The Receiver (Version 2)

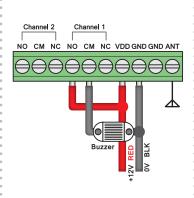
# Operating An Electronic Door Release



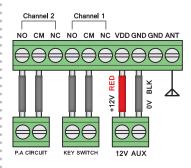
# Opening And Closing An Electronic Garage Door



#### Operating A 12V Buzzer



# Operating An Alarm Panel



Using button 'A' to arm/disarm alarm. Using button 'B' as a P.A. alarm.



## Compatibility With Other R.F Equipment

The WIR260 Receiver is backwards compatible with System Q Itd's discontinued 2-button key fob model CCT895. However the old style receiver CCT895 is not compatible with the new WIR255 key fobs.





### **Fault Finding**

Both the Key fob and receiver are very reliable and if you experience a problem installing or using either device it is quite likely a simple installation error rather than faulty equipment. Please try and use the following notes to aid your fault finding. Try all these solutions with the key fob near the receiver to eliminate distance problems and to see and hear the receiver operate when you press the key fob button.

Problem		Answer
The receiver won't learn a new key	Answer 1	This may happen if too much time is taken when following the programming instructions. Try and follow the instructions swiftly as the receiver will abandon learning after 8 seconds of inactivity.
fob code	Answer 2	Check the key fob LED lights up indicating it is working and has a good battery.
Key fob operates receiver intermittently	Answer 1	This is probably because the two devices are too far apart or there is something in-between them that stops the signal. Try moving the receiver to a more central location or indeed adding the dipole antenna that boost it reception signal. Remember that "foil backed" plasterboard will greatly reduce RF signals and therefore the range of key fobs.
	Answer 2	The key fob battery is low, please swap.

## Dimensions Of The 'Ultra-Compact' WIR260 Receiver

