

# 1 CHANNEL TRANSMITTERS & RECEIVERS

## Installation Manual

### TRANSMITTERS & RECEIVERS FOR GENERAL SWITCHING

Single Channel pre-coded Sets  
Receivers have an open collector or relay output

- PTX001/PRX001 – Open Collector Output Set (1 Key Fob + 1 Receiver)
- PTX001/PRX001R – Relay Output Set (1 Key Fob + 1 Receiver)
- PTX001 – Additional Key Fob Transmitters
- PTX001L – Additional Key Fob Transmitters with Large Button
- PRX001 – Additional Open Collector Output Receiver
- PRX001R – Additional Relay Output Receiver



#### Applications:

- Emergency/Panic/Intrusion
- System Arm/Disarm or On/Off
- Lighting Control
- Garage Door Control
- Electric Shutter/Awning Control
- General Switching

#### Features:

- Low cost – excellent performance
- Highly functional – multiple purpose
- 433.92 MHz – ETSI 300/220
- Learn up to 20 Transmitters to each Receiver
- Typical range between 30 to 70M depending upon the Environment in which it is being used
- Receivers can be selected as having a momentary Output or a toggle latching output

#### Receiver Connections:

Each Receiver is supplied with two screws to secure the Housing to a suitable surface. There are 4 wires protruding from the PRX001 and 5 from the PRX001R (relay version). The connections are:

<b>GREEN</b>	-	ANTENNA – DO NOT SHORTEN
<b>RED</b>	-	POSITIVE VOLTAGE CONNECTION (10 – 16V)
<b>BLACK</b>	-	0V CONNECTION
<b>BLUE</b>	-	OUTPUT
<b>WHITE</b>	-	COMMON OUTPUT FOR PRX001R RELAY VERSION

#### PRX001 Receiver Output

The PRX001 has a single wire open collector output that goes High on activation. The Drive output is a maximum of 500mA. Do not overload the output.

#### PRX001R Receiver Output

The PRX001R has a relay output that goes from closed to open on activation. The Drive output is a maximum of 1A. Do not overload the output

#### Technical Specifications:

**Colour:** PTX001 & PRX001 – Black  
PTX001L - White

**Receiver Voltage Supply:** 10-16VDC

**Transmitter Battery:** 1 x GP23A (12V)

**Transmitter Current Consumption:**  
**Operating:** 5mA **Stand-by:** 0mA

**Receiver Current Consumption:**  
**Operating:** 7mA **Stand-by:** 6mA

**Operating Temperature:** -10 to + 65C

**Receiver Circuit:** Super-regenerative

**Drive Output:** 1A (Relay) .5A (Transistor)

#### Size:

PTX001	58 x 35 x 13mm
PRX001	65 x 60 x 25mm

## **Coding your PTX001/PRX001 or PTX001/PRX001R Sets**

To match a Transmitter to a Receiver, carefully proceed as follows. Remember that you can match a maximum of 20 different Transmitters to each Receiver:-

1. Power up to Receiver to a 12VDC supply
2. Locate the small push button on the side of Receiver
3. Push down on the button and the adjacent Red LED will light up, you are now in "Learning Mode"
4. Cause a transmission from one of the Transmitters you wish to learn to the Receiver. If successful, the LED will turn off and the Receiver will exit the self-learn mode. That Transmitter has now been learnt to that Receiver. Repeat the process from Step 2 above to learn additional Transmitters to that Receiver (max of 20). Note that you can learn the same Transmitter to different Receivers.
5. If the Transmitter code is already in the Receiver's memory, the LED will flash twice and stay in self-learn mode.
6. If the memory is full, the LED will flash 5 times.
7. If no Transmitter is activated within 120 seconds, the Receiver will automatically exit the self-learn mode.
8. To exit the self-learn mode manually, press the button again for at least 3 seconds.
9. To clear the Receiver memory completely of all Transmitters, power off the Receiver, then depress the push button. With the button still depressed, reconnect power to the Receiver. The LED will flash twice and the self-learn mode will automatically be entered.

## **Range Testing your Transmitter**

With power connected to the Receiver, cause a transmission from the Transmitter. The RED LED on the side of the Receiver will light up indicating successful receipt of that transmission. Note that if the Receiver has been selected as having a Momentary Output, then the LED will light up briefly. If the Receiver has been selected as having a Toggle Latching Output, the LED will remain lit until a subsequent successful transmission.

## **Selecting a Momentary or Toggle Latching Output**

Using a small Phillips screwdriver, unscrew the 2 screws on the bottom of the Receiver Housing. Carefully prize the two sections apart and turn the printed circuit board over. Locate the black 2 Pin Jumper marked J1 just above and to the left of the push button. If the Link on this Jumper is just connected to one of the Pins, then the Receiver has been selected for a momentary Output (factory default setting). If the Link is connected to both Pins, the Receiver has been selected for a toggle latching Output (the first transmission activates the output and the output will remain activated until a successful second transmission).

## **Trouble Shooting for No Operation or Poor Operation:**

- \* Check that the Transmitter Battery is good.
- \* Check that the Receiver is being powered by the correct voltage.
- \* Make sure the Receiver is not placed inside a metal cabinet, the antenna is straight and not curled, there is no local electromagnetic or RF interference and that it is not being used in a location where a large amount of metal or dense brick is used in the construction of the walls or ceiling.
- \* Ensure the Transmitter has actually been learnt to the Receiver.
- \* Check that the outputs have not been overloaded.
- \* Check the system for any loose wiring.

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