Secure-a-Link Wireless Relay - WLR121KIT v2

The Secure-a-Link wireless relay is a point-to-point relay transceiver that allows to separate inputs to wirelessly trigger to remote relays in both directions.

The wireless relay units will transmit up to a maximum 125 meters with line-of-sight however environmental factors can greatly reduce this distance, for best results mount away from metal objects.

The WLR will only work as a single kit of two units, however once paired having multiple kits will work separately in proximity.

The unit must be powered from 12Vdc and requires a maximum of 150mA. Relay outputs rated up to 2A.

Set up

All kits a paired in the factory before despatch. If repairing is required:

1. With power off, set S1 to "PAIR" and S2 to "B" on both units, apply power and the red LED on both units should illuminate.

2. Press the "Function" button on both units, the yellow LED will start to flash.

3. When the unit has paired the green LED will illuminate.

4. When both green LEDs are illuminated move S1 on both units to "A".

5. Pairing is complete.

6. S3 configures the inputs; NO = Normally open, NC = Normally closed.

7. S4 configures the outputs.

    a. LAT = Latching: when an input is triggered the corresponding relay will energise for as long as the input is held on.
    b. COM = Commutating: every time there is a momentary input the corresponding relay will change state.

Range test

Set S2 on both units to "TEST" to put the units into range test mode. The strength of the signal will be indicated by the LEDs in close proximity all three LEDs should be illuminated. As the units get further away the green LED will extinguish, then the yellow finally the red LED will be illuminated steady then at the very edge of the range will flash or extinguish when out of range.

It is not recommended to install the units where the red LED is not constantly illuminated when performing a range test.

In normal operation the green LED will illuminate whilst the units are in communication with one another.

Operation

There are two inputs; Input 1 consists of 1A and 1B, Input 2 consists of 2A and 2B.

There are two single pole relay outputs, Relay 1, and Relay 2.

- 1A to 1B on the first unit will trigger Relay 1 on the second unit.
- 2A to 2B on the first unit will trigger Relay 2 on the second unit.
- 1A to 1B on the second unit will trigger Relay 1 on the first unit.
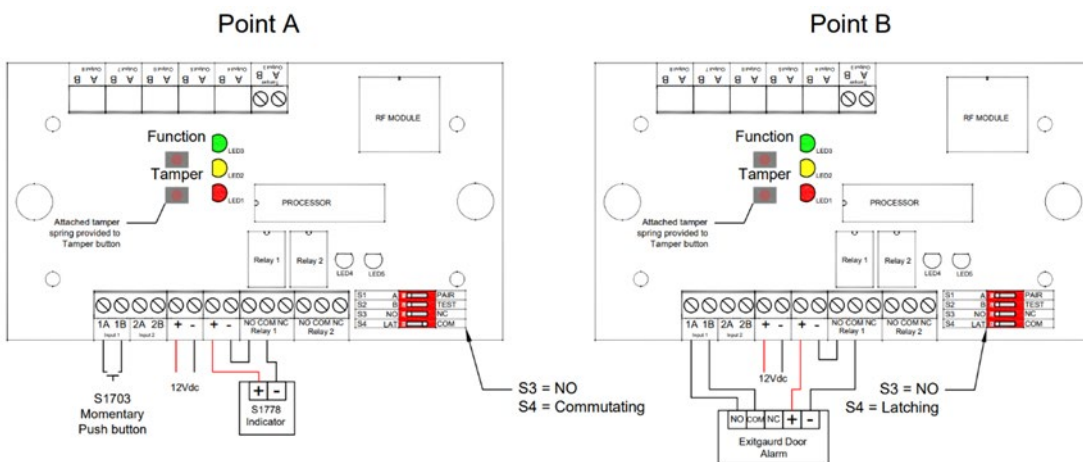- 2A to 2B on the second unit will trigger Relay 2 on the first unit.

Tamper

Output 3 follows the state of the tamper, if the switch is open on either unit, then Output 3 A & B will be open on both units, if the tamper switch is closed on both units, then Output 3 A & B on both units will be closed.

Wiring
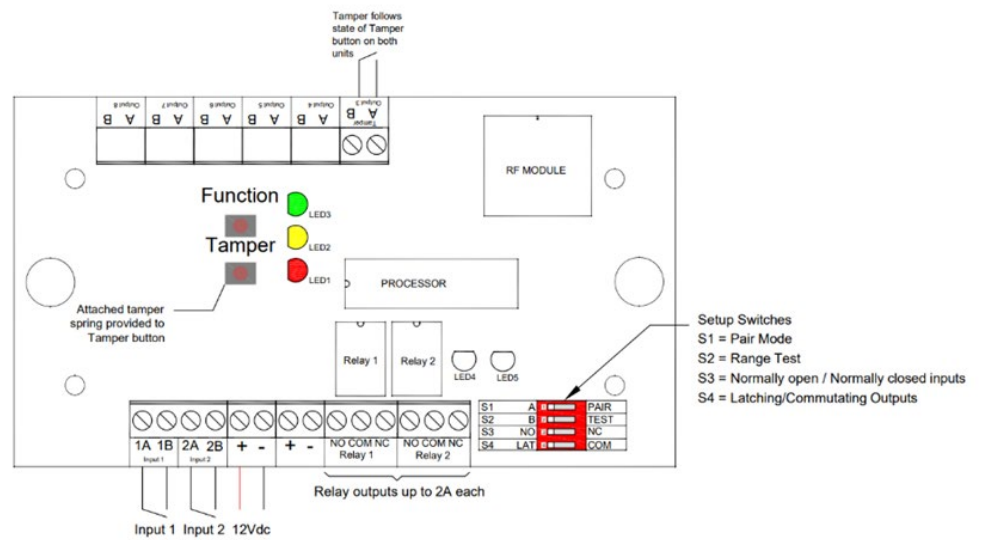
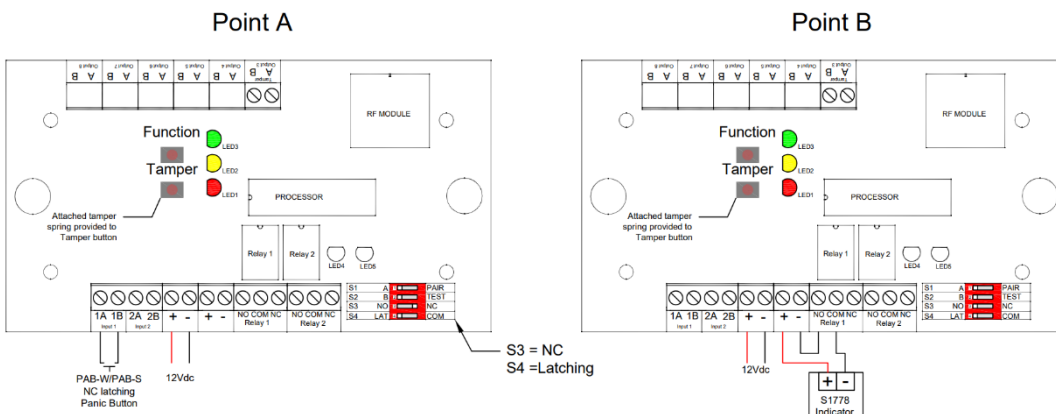**Example Applications**

Door Alarm

In this scenario a momentary push button at point A would wirelessly arm the Exitgaurd door alarm at point B.

When the Exitgaurd goes into alarm the indicator would energise at point A and de-eneergise when the alarm condition is cleared.

When the momentary push button is pressed again it would disarm the Exitgaurd.

Panic button

In this scenario a latching panic button at point A would wirelessly trigger and indicator at point B.

When the panic button is reset the indicator would also reset