

## **Repeater** **(Firewall Range Extender)**



## **Installation Guide**

## Circuit power supply:

The circuit is powered by two components, a 15V 1.5A adapter and a 12V 1.2A battery. When the adapter is connected, it not only supplies power to the circuit but is also responsible for charging the battery. In the event of a power outage in the adapter, the battery automatically takes over and powers the circuit.

## AUX terminal:

For utilizing wired sensors, power is supplied from the AUX terminal, which provides +12 volts at a constant rate.

## Wired terminal zones:

This device has three terminals designed for connecting wired sensors. Each sensor's alarm wires are connected to one of these terminals.

## Display LEDs:

This device is equipped with two LEDs which indicate various operational modes of the device.

## Red LED function:

Upon connection to the power supply and with the correct power provision in place, the red LED begins flashing at two-second intervals. Pushing the S1 key causes the red LEDs to flash twice per second.

## Yellow LED function:

When the device receives codes from a remote, a wirelessly coded sensor, or a wired sensor connected to the device is triggered, the yellow LED begins flashing at a rate of three times per second. The yellow LED turns off following the conclusion of the code transmission.



### Clearing device memory:

To reset the device's memory, press and hold the S1 key for 10 seconds. During this time, the red LED flashes twice per second. Following memory clearance, both the red and yellow LEDs flash rapidly for 2 seconds, and then the red LED begins flashing regularly.

### Coding the remote and wireless equipment on the repeater:

When using the repeater for the first time and intending to code remote and wireless equipment, it's advisable to reset the repeater first. First, ensure that all wired zones of the repeater are closed (not triggered). Next, press and hold the S1 key for 2 seconds, and then release it. The red LED will flash twice per second, from this moment a 6-second window exists to press and hold a remote key or trigger the wireless equipment. This action causes the repeater to receive and store the remote code and wireless equipment signal.

If the steps are successfully completed, the red LED turns on for one second and then turns off for one second, this is followed by a rapid 2-second flashing. If the steps are completed incorrectly, the LED will flash normally after the coding duration.

If the remote and wireless equipment are already stored in the repeater's memory, the red LED will remain off for 3 seconds after the coding duration before flashing normally.

When coding, it's imperative to ensure that all zones are closed and that the wires inside the connector zones are secure. Otherwise, the remote and the wireless equipment will be coded as a sensor on an open wired zone within the repeater and as long as the repeater zone remains open, the device will detect it as a trigger and will transmit codes constantly.

### Converting wired sensor to wireless with repeater:

First, acquire a wireless motion sensor with a unique code that is not coded on the central alarm device. Adjust jumpers AO to A7 and DO to D3 in accordance with the central alarm's specifications. Then, set the desired repeater zone to open mode and press and hold the sensor test key, next, press and release the S1 key for 2 seconds. If the steps are successfully completed, the red LED turns on for 1 second and turns off for one second, this is followed by a rapid 2-second flashing.

In the next stage, position the sensor terminal accordingly and define the wireless zone within

### Clearing device memory:

the central alarm device. For this task, you must trigger the wired sensor installed in the repeater. The repeater then transmits the signal to the central device, which causes the sensor to be coded in the central device.

### Determining the duration of code transmission by the device:

Under normal conditions, the repeater transmits received or trigger codes for a duration of 2 seconds. However, if the receiving device intended to receive the repeater codes is weak or if it is likely that interference signals in the operating area are preventing the receiver from reliably receiving the repeater codes, place the jumper in 3S, or adjust it to 4.5S to extend the transmission duration. This adjustment increases the transmission time from the default 2 seconds, increasing the transmission duration thus ensuring the reception of the codes by the receiver.

