

# Wireless Outdoor Bell Box (BX-23)

The Outdoor Bell Box is used to attract attention when alarm signal is received from Control Panel, by activating its siren and strobe light. The Bell Box can also alert you to tamper violation, and low battery status. With its two-way radio communication, the Outdoor Bell Box guarantees successful transmissions sent to the Control Panel. If the Control Panel receives the signal from the Bell Box, it will transmit an acknowledgment back to the Bell Box.

## Identifying the Parts

1. **Mounting Holes**
2. **Power Switch**  
The switch includes 3 positions:  
BT4: The Bellbox is powered by the 4 Alkaline batteries configuration.  
Off: The Bellbox is not powered by any battery.  
BT2: This configuration is currently reserved.
3. **LED Group 3**
4. **LED Group 2**
5. **LED Group 1**
6. **Learn Button**
7. **Battery Compartment**
8. **Tamper Switch**

## Accessories included

In addition to the BX-23 itself, the following accessories are also included in the package:

- a. 4 x large wall plugs.
- b. 4 x 4 mm x 30 mm cross head fixing screws.
- c. 4 x 1.5V D alkaline cells (pre-inserted)

## Power Supply

The Bellbox is powered by 4 alkaline D-cells. Switch the power switch to the BT4 position to use battery power. If low battery condition is detected, the Bellbox will send a low battery signal to the Control Panel.

### <NOTE>

- ☞ The Power switch position BT2 is currently reserved.

## Supervision

The Bellbox will transmit a supervisory signal every 15-18 minutes in normal operation mode. If this signal is not received, the Control Panel will indicate that the particular BX-23 is experiencing an out-of-order problem.

## Function Overview

### ● Alarm Memory

If an alarm was triggered in your absence and the system was not disarmed before alarm length expiry, the Bellbox will sound a short alarm when the system is disarmed to warn the user that an alarm has been triggered when he is away. This suggests that the intruder could still be within the premises.

### ● Alarm Length

The Bellbox alarm length is 15 minutes.

When an alarm is activated by Control Panel, the Control Panel will notify the Bellbox to start alarming according to the panel's own alarm length setting. When the Panel's alarm length expires, it will notify the Bellbox to stop alarm.

If the Panel alarm length is set longer than Bellbox alarm length (15 minutes), after an alarm is activated, instead of waiting panel alarm length to expire, the Bellbox will stop alarming upon expiry of its own alarm length.

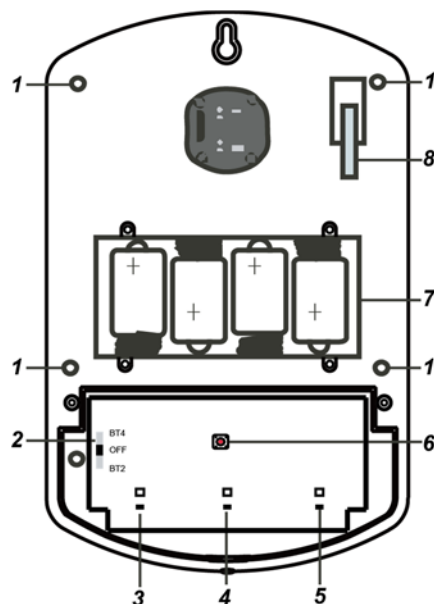
If the panel is under disarm mode and the Bellbox tamper switch is triggered, the Bellbox will activate alarm according to its own alarm length setting (15 minutes) since the panel is under disarm mode and will not activate alarm from tamper trigger.

### ● Siren Tamper

The Bellbox is protected against any attempt to open the lid or to detach the bellbox from its mounting surface.

If the Bellbox detects a tamper condition, it will activate the siren & strobe light for the programmed alarm period. A tamper signal will be sent to the Control Panel along with regular signal transmissions for the Control Panel to display the status accordingly. If the tamper condition persists, the Bellbox will sound a series of five beeps either every time the system is armed or when the tamper is enabled, to indicate a fault.

Tamper feature can be disabled temporarily from the Control Panel using Siren Tamper control function. The Bellbox will stop tamper detection temporarily for one hour. This function is mainly designed for replacing battery or changing Bellbox installation location. After one hour, the



Control Panel will automatically turn the function back ON after the duration. The tamper detection can also be enabled again manually using the Siren Tamper function.

## ● Audio & Visual Status Indication

While arming / disarming the system, the BX-23 uses different methods to distinguish various statuses for the user, as listed in the table.

	Siren Audio	Strobe light indication
Arm/Home	1 beep*	3 LED groups flash once
Disarm	2 beeps*	Sequentially flashes for 1 cycle
Arm (Low Battery)	3 beeps	3 LED groups flash for three times
Disarm (Low Battery)	3 beeps	Sequentially flashes for 3 cycles
Arm (Tamper)	5 beeps	3 LED groups flash for 5 times
Disarm (Tamper)	5 beeps	Sequentially flashes for 5 cycles
Entry/Exit Sound	Count-down beeps	

\* The Siren Audio indication will be affected by the Confirmation ON / OFF setting. When setting Confirmation to OFF, the confirmation sound will not be available. Refer to Control Panel Siren setting for Confirmation function.

## Getting Started

### Learning

- Step 1: Release the bottom screw of the Bellbox using a Philips screwdriver and remove the top cover.
- Step 2: Release the 4 screws securing the LED cover using a Philips screwdriver and remove the LED cover.
- Step 3: Put the Control Panel into learning mode (refer to Control Panel's user manual for details).
- Step 4: Power up the Bellbox by sliding the power switch to BT4 position. All the LED will flash once and the buzzer will emit 1 beep.
- Step 5: Press the Learn button once. The Bellbox will emit a short beep and LED groups 1 & 3 will turn on briefly. The Bellbox is now in learning mode and will transmit a learning code to the Control Panel.
- Step 6: If the Control Panel did not receive a learning code, press the learn button again (the Bellbox will not sound a beep this time).
- Step 7: If the Control Panel receives the learning code, it will list the device information accordingly, follow Control Panel manual instruction to complete the learning procedure. An acknowledgement will be sent to the Bellbox. When the acknowledgment is received, the Bellbox will sound two short beeps with LED group 2 flashing once to indicate that learning process is successful. The Bellbox will then leave learning mode.
- Step 8: Refer to the Control Panel manual and use Edit Device function to check Bellbox settings. You can edit the operation area, zone number, and device name for the Bellbox.

### <NOTE>

- ☞ If the learning process fails, please repeat steps 3-7 again.
- ☞ If the bellbox does not receive the confirm code from the Control Panel within one minute, the bellbox will leave learning mode and the LED groups 1 & 3 will turn off.

### Edit Bellbox Operation Area

Follow instruction below to change Bellbox Operation Area in the Control Panel

- Step 1: Use the panel Edit Device function to change Bellbox area setting.
- Step 2: Press the learn button on the Bellbox to send signal to panel, the Bellbox will emit a beep and flash LED 1 & 3 once.
- Step 3: When the Bellbox receives acknowledgement signal from panel, it will emit a beep and flash LED 2 once to indicate the setting has been updated. The Bellbox will return to normal operation.

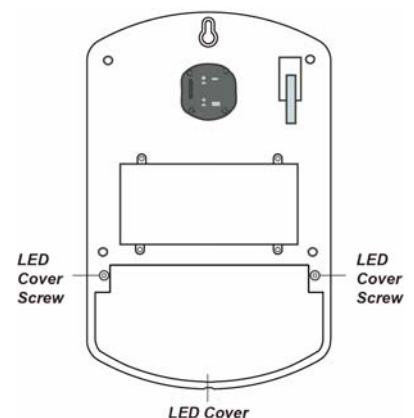
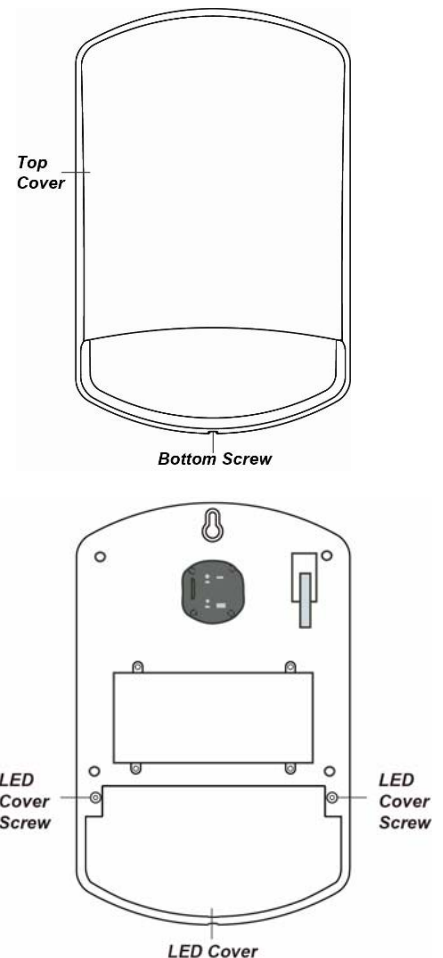
## Installation

Proceed to installation after complete learning.

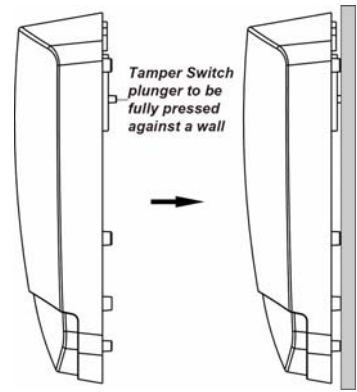
- Step 1. Disable the Siren Tamper function on the Control Panel (please refer to the Control Panel instruction manual). The bellbox will sound a beep to indicate the tamper switch is now disabled.

### <NOTE>

- ☞ The function Siren Tamper will only be OFF for a duration of one hour. The Control Panel will automatically turn the function back ON after the duration.



- Step 2. Find the location where the Bellbox is to be mounted.
- Step 3. Remove the Top cover by releasing the bottom screw using a Philips screwdriver and pulling the outer case out carefully.
- Step 4. Remove the LED cover by releasing the 2 screws securing the cover using a Philips screwdriver and removing the cover.
- Step 5. Hold the Bellbox at the position where it will be mounted, supply power to Bellbox.
- Step 6. Check whether BX has a strong enough signal with the Control Panel by putting the Control Panel into **Walk Test** mode (please refer to Control Panel manual). Press the **Learn Button** check whether the signal is strong enough (please refer to Control Panel manual for signal strength).
- Step 7. If you are satisfied with the signal strength, remove the Bellbox from mounting location. Replace the LED cover and secure it with the 4 LED cover screws using a Philips screwdriver.
- Step 8. Identify the 4 mounting holes, mount and fix the Bellbox on the wall using the large screws and wall plugs provided. Secure the screws using a Philips screwdriver. Make sure the Tamper Switch is fully depressed against the wall.



**<NOTE>**

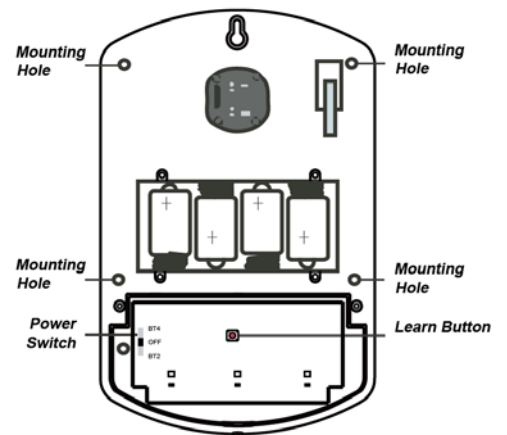
The tamper switch protrudes through the back of the unit. When the siren is pulled off from the wall, the alarm will be activated. Ensure it is fully depressed when the siren is mounted. If there is a gap, pack with a suitable spacing material.

- Step 9. Replace the Top cover by hooking the top of the Top cover onto the top of the base. Push the bottom of the Top cover onto the base and tighten the bottom screw using a Philips screwdriver.
- Step 10. Enable Siren Tamper function on the Control Panel (Please refer to the Control Panel instruction manual)
- Step 11. Check if the installation is successful by testing from the Control Panel by arming and disarming function.  
Successful arming/disarming is indicated by the table provided in **Audio & Visual Status Indication.**

**<NOTE>**

If 5 short-beeps are noticed while arming/disarming, it means the tamper is not fully depressed. Check to ensure that tamper is properly set and then test from Control Panel again.

- Step 12. The installation is now completed.



## Changing the Battery

- Step 1: Disable the Siren Tamper function on the Control Panel (please refer to the Control Panel instruction manual). BX-23 will sound a beep to indicate the tamper switch is now disabled.
- Step 2: Release the cover-fixing screw at the bottom of BX-23 using a Philips screwdriver and pull the outer case out carefully.
- Step 3: Remove the LED cover by releasing the 4 screws securing the cover using a Philips screwdriver and removing the cover.
- Step 4: Slide Power switch to the off position.
- Step 5: The battery compartment is a large box in the BX-23 with a lid secured with 4 screws. Release the four screws using a Philips screwdriver and take off the compartment lid.
- Step 6: Remove the old batteries and press the Tamper Switch twice to discharge.
- Step 7: Insert new batteries into the battery compartment.
- Step 8: After inserting all batteries, slide the power switch to the BT4 terminal. All the LED will flash once and the buzzer will emit 1 beep as the bellbox powers on.
- Step 9: Replace the LED cover and secure it with the 4 screws securing the cover using a Philips screwdriver.
- Step 10: Replace the battery compartment lid and secure it with the four screws using a Philips screwdriver. Please do not over tighten.
- Step 11: Replace the Top cover by hooking the top of the Top cover onto the top of the base. Push the bottom of the Top cover onto the base and tighten the bottom screw using a Philips screwdriver.
- Step 12: Enter the Control Panel Program Siren webpage again to enable the Siren Tamper function again. The BX-23 will sound a beep to indicate the tamper switch is now activated.

## Factory Reset

The Bellbox can be reset and memory contents cleared. Whenever the Bellbox is removed from the Control Panel, it should be put to factory reset to clear its Control Panel memory, otherwise the Bellbox will still raise alarm if it receives alarm signal from panel.

- Step 1: Disable the Siren Tamper function on the Control Panel (please refer to the Control Panel instruction manual). The Bellbox will sound a beep to indicate the tamper switch is now disabled.
- Step 2: Remove the Bellbox from Control Panel device list (please refer to the Control Panel instruction manual).
- Step 3: Release the bottom screw of the Top cover using a Philips screwdriver, remove the top cover..

- Step 4: Remove the LED cover by releasing the 4 screws securing the cover using a Philips screwdriver and removing the cover.
- Step 5: Slide the Power switch to the OFF terminal and (where applicable) disconnect the power adapter.
- Step 6: Insert batteries into battery compartment.
- Step 7: Press and hold the Learn Button for 7 seconds and slide the Power switch to BT4 terminal. The Bellbox will emit two beeps followed by one long beep.
- Step 8: Release the Learn Button when you hear the long beep. The previous parameters in the Bellbox will be cleared and it will return to normal mode.

## **Federal Communication Commission Interference Statement**

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation.

This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one of the following measures:

- . Reorient or relocate the receiving antenna.
- . Increase the separation between the equipment and receiver.
- . Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- . Consult the dealer or an experienced radio/TV technician for help.

***FCC Caution:*** To assure continued compliance, any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment. (Example - use only shielded interface cables when connecting to computer or peripheral devices).

### ***FCC Radiation Exposure Statement***

This equipment complies with FCC RF radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with a minimum distance of 20 centimeters between the radiator and your body.

This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

The antennas used for this transmitter must be installed to provide a separation distance of at least 20 cm from all persons and must not be co-located or operating in conjunction with any other antenna or transmitter.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) This device must accept any interference received, including interference that may cause undesired operation.