# Wireless Outdoor Bell Box (BX-15 / BX-15-F1)

The Outdoor Bell is used to attract attention when alarm signal is received from Control Panel, by activating its siren and strobe light.

The Bell Box has built-in tamper protection and low battery detection to monitor its operation status.

## Parts Identification

### 1. Mounting Holes x 4

### 2. Tamper Switch

The tamper switch protects the device from being opened or from being removed from mounting surface.
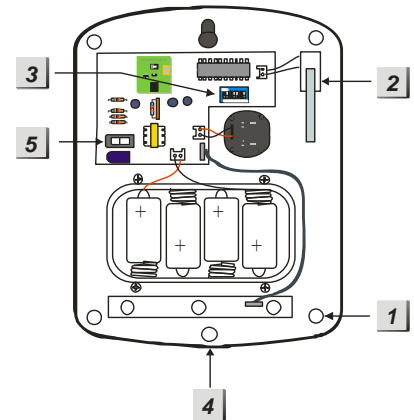
### 3. Function Switch Block

Contains 7 DIP Switches to enable the learning mode and to set the alarm period of siren and strobe light.

### 4. Securing Screw

To secure the cases from being open.

### 5. Power Switch

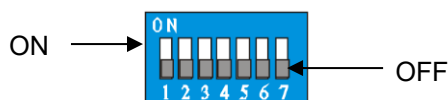To enable/disable the power supply

## Accessories included

In addition to the Bell Box, 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.

## DIP Switch Position Table

Remove the cover by unscrewing the single screw located at the bottom. In the middle of the L-shaped PCB board, you can see a Jumper Switch Block which consists of 7 DIP Switches. The function of each DIP Switch is listed in the table on the right.

The DIP Switch is either ON or OFF. Top position indicates ON and bottom position indicates OFF. All DIP switch are set to **OFF** by factory default.

| SW1 | | Siren Learning |
|---|---|---|
| OFF | | Normal operation |
| ON | | Learn-in mode |
| SW2 | | Strobe Activation |
| OFF | | only during siren alarm period |
| ON | | until alarm is disarmed |
| SW3 | SW4 | Alarm Length |
| OFF | OFF | 3 min. |
| ON | OFF | 5 min. |
| OFF | ON | 10 min. |
| ON | ON | 1 second (test) |
| SW5 | | Reserved |
| SW6 | | Memory Reset |
| OFF | | Normal |
| ON | | Clear Memory |
| SW7 | | Supervision |
| OFF | | Supervision function disable |
| ON | | Supervision function enable |

∗ For further detail please see section **Function Overview.**

## Power Supply

The Bell Box is powered by 4 D-cell alkaline batteries. It also features low battery voltage detection. When low battery is detected, a low battery signal will be sent to the Control Panel along with regular signal transmissions for the Control Panel to display the status accordingly. The Bell Box will also emit 5 beeps when armed/disarmed to notify the user of low battery condition.

## Supervision Function

When the Dip Switch #7 is slid to ON position, the Bell Box will conduct a Self-test Periodically by transmitting a supervisory signal once every 30-50 mins in normal operation mode.

If this signal is not received, the Control Panel will determine the particular Bell Box is out-of-order and report the event accordingly.

## Function Overview

● **Siren Audible Performance**

The siren produces a minimum of 104 dBA sound pressure at 1 meter range when activated.   ·

For Burglar and Panic Alarm, the Bell Box gives a continuous alarm sound.

For Fire / Water alarm, the Bell Box gives an intermittent alarm sound of 2-sec siren followed by a 1 sec interval.

The siren is silenced when either the programmed siren length expires or when the Control Panel is disarmed to turn off the siren. Please refer to Dip Switch table above to set your desired alarm length through Dip Switch SW3 and SW4 setting.

- **Strobe (LED) Light**

  When the Bell Box is activated, the LED strobe light will also flash to indicate the Bell Box is alarming. The duration of strobe light flash is determined by Dip Switch SW2 setting. When set to OFF, the strobe light will flash according to the alarm length set by Dip Switch SW3 and SW4. When set to ON, the strobe light will flash after the alarm length has expired until the control panel is disarmed.

- **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**

  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.

  The Bellbox's own alarm length setting, which is set by Dip Switch SW3&4, determines how long the Bellbox should activate alarm if no stop signal is received from Control Panel:

  For example:

  1. If the Panel alarm length is set longer than Bellbox alarm length, 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.

  2. 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 since the panel is under disarm mode and will not activate alarm from tamper trigger.

- **Tamper Protection**

  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 temporaily from the Control Panel using Siren Tamper control function. The Bellbox will stop tamper detection temporarity 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 Table**

  The Bell Box will activate its siren and strobe light to notify the user of system status, please refer to the table on the right:

  <NOTE>
  ☞ Siren Audio indication will be affected by the Confirmation ON/OFF setting in your Control Panel settings.

|  | Siren Audio | Strobe light indication |
|---|---|---|
| Arm/Home | 1 beep* | 3 LED flashes once |
| Disarm | 2 beeps* | Sequentially flashes for 1 cycle |
| Arm (Low Battery) | 5 beeps | 3 LED flashes for three times |
| Disarm (Low Battery) | 5 beeps | Sequentially flashes for 2 cycles |
| Arm (Tamper) | 5 beeps | 3 LED flashes for three times |
| Disarm (Tamper) | 2 beeps* | Sequentially flashes for 2 cycles |
| Previous alarm warning | 3 secs beep | Sequentially flashes for 2 cycles |
| Entry/Exit Sound | Count-down beeps | None |

- **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   Remove the Bell Box front cover.

Step 4   Slide the power switch to Off position, and then press the tamper switch once for discharging.

Step 5   Set DIP SW 6 to ON position and put the power switch to ON position. The siren will produce a short confirmation tone.

Step 6   Slide DIP SW 6 to OFF position. The Bell Box returns to normal mode.

<NOTE>
☞ Whenever the Bellbox is removed from the Control Panel, it should be put to factory reset as well to clear its Control Panel memory.

# Getting Started

## Learning the Bell Box

Step 1   Release the screws at the bottom of the Bell Box and pull the outer case out carefully. Locate the Function Switch Block.

Step 2   Use a sharp object to slide Dip SW3 & SW4 on the Bell Box function switch block for your desired alarm length.

Step 3    Put the Control Panel into the learning mode, refer to Control Panel manual for detail.

Step 4    Slide Dip SW1 on the Bell Box function switch block to ON position. The LED 1 & 3 flash once with a short beep. The Bell Box is now in learning mode. After 3 seconds, the Bell Box will send out a learning code indicated by all 3 LED flashing.

Step 5    If the Control Panel fails to receive a learning code, slide Dip SW1 back to OFF and then ON position to enable Bell Box to enter the learning mode again. Repeat the rest of the learning process.

Step 6    If the Control Panel receives the learning code, it will display Bell Box information accordingly. Refer to Control Panel manual to complete learning process.

Step 7    After learning is completed, an acknowledgement signal will be sent to the Bell Box.   When the acknowledgment is received, the Bell Box sounds a short beep with LED 1&3 flashing once to indicate that learning process is successful.

*<NOTE>*

☞    If the learning process fails, please remove the Bell Box from the control panel and repeat the step 3-7 again.

Step 8    Slide Dip SW1 on the Bell Box to OFF position. The Bell Box leaves learning mode. If you don't slide Dip SW1 back to OFF position, the Bell Box will automatically leave the learning mode one hour after it enters the learning mode.

### 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:    Slide Dip SW1 on Bellbox to ON, Bellbox will emit a beep and flash LED 1 & 3 once.

Step 3:    The Bellbox will send signal to panel after a couple second, to update setting info, it will emit a beep and flash all 3 LED once.

Step 4:    When the Bellbox receives acknowledgement signal from panel, it will emit a beep and flash LED 1&3 again to indicate the setting has been updated.

Step 5:    Slide Dip SW1 to OFF to return to normal operation. The Bellbox will emit a beep and flash LED 2 once.

### Programming the Bell Box

Use thee Control Panel "**Program Siren**" function to adjust Bellbox settings:

● **General Siren Function:**

Changing general siren function will affect the setting of all learned in siren/Bellbox:

**Siren Tamper**

- If it is set to "**ON**", the Bell Box will ativate alarm when the tamper switch is triggered.

- If it is set to "**OFF**", the Bell Box will remain silent when the tamper switch is triggered.

*<NOTE>*

☞    If the siren tamper is set as disabled (**OFF**), it will automatically revert to enable (**ON**) after about an hour if it is not switched back manually.

**Confirm**

- If it is set to "**ON**", the Bell Box will sound beeps when the system is armed or disarmed.

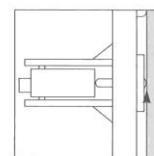- If it is set to "**OFF**", the Bell Box will remain silent when the system is armed or disarmed.

**Entry Sound**

- If it is set to "**ON**", the Bell Box will sound beeps when the Entry timer is activated.

- If it is set to "**OFF**", the Bell Box will remain silent when the Entry timer is activated.

## Installing the Bell Box

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

Step 1    Find the location where the Bell Box is to be mounted.

Step 2    Using the large screws and wall plugs provided, mount on wall through the 4 x mounting holes.

Step 3    Fix the Bell Box cover with the securing screw.

Step 4    Enable tamper switch by selecting the tamper enable/disable menu on the Control Panel (please refer to the Manual of Control Panel for details).

Step 5    Check if the installation is successful by arming and disarming the Control Panel.

*<NOTE>*

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

Step 6    The installation is now completed.



Tamper switch plunger must be pressed in fully by wall surface

## Changing the Battery

Step 1    Find the Control Panel's Program Siren menu and disable the Siren Tamper function. The Bell Box will emit a beep when the tamper is disabled.

Step 2    Release the screws at the bottom of the Bell Box and pull the outer case out carefully.

Step 3    The battery compartment is a large box in the Bell Box with a lid secured with 4 screws.

Step 4    Remove the four screws and take off the compartment lid.

Step 5    Remove the old batteries and press the Tamper Switch twice to discharge.

Step 6    Insert the new D cell alkaline batteries into the battery compartment. Orient the batteries according to the correct polarity.

Step 7    The Bell Box will emit beeps and flash when the last battery is inserted.

Step 8    Replace the battery compartment lid with the four screws taking care not to over tighten.

Step 9    Enable the Siren Tamper funciton in Control Panel menu. The Bell Box will sound a beep to indicate the tamper protection is now activated.