



# Owner's Manual

# Combined 520 Hz Horn and Bed Shaker

- Physically Shakes the Bed While Alarming
- Low Frequency, Bed Level Alarm Sound
- Easy to Reach Silence Feature
- Proprietary Wireless Connectivity



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Exigent Sensors recommends a combination of early-detecting Smoke Alarms, CO Alarms and reliable Heat Alarms installed in their appropriate locations throughout the home.

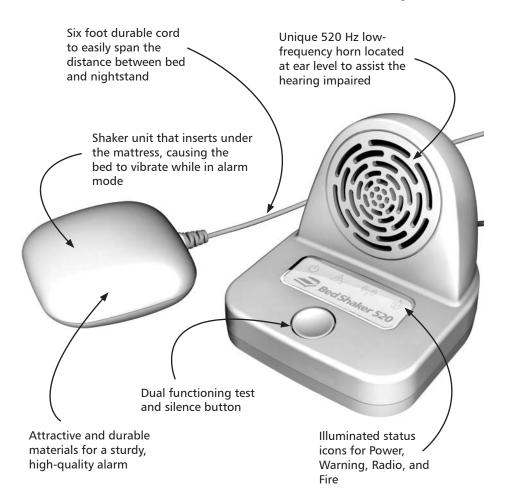
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Heat and Smoke Alarms are not a substitute for an adequate homeowner's fire insurance policy.

# **About Your New Bed Sharker 520 Alarm Accessory**

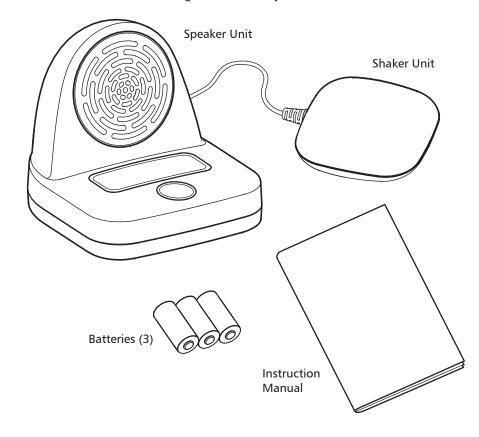
Thank you for purchasing the Crossfire CFBS520 Bed Shaker 520. The Bed Shaker can play an important role in protecting your loved ones from the dangers of fire. Please carefully read and follow the information in this booklet to ensure that your Bed Shaker is setup and installed properly.

# What Makes the Crossfire Bed Shaker 520 Special?



#### **Contents of Your Kit**

Please make sure the following is included in your Bed Shaker 520 kit:



# **Key Features**

- The latest low-frequency, high volume horn technology.
- Shaker unit to vibrate the bed to help wake deep sleepers, children or the hearing impaired.
- Radio communication that connects all Crossfire units into a unique home network.
- Powered by three, long-life Lithium Manganese Duracell batteries.
- Four illuminated icons to demonstrate alarm status.
- Multi-function button to allow for testing and the silencing of unwanted alarms.
- Top quality construction to ensure beautiful appearance and durability.

# **Recommended Locations for your Bed Shaker 520**



**Bedrooms.** A major threat from fire occurs at night when people are sleeping. Smoke alarms are required protection in all sleeping rooms.

The Bed Shaker 520 offers additional help waking the elderly, children, people with hearing impairments, and heavy sleepers.

This unit is to be installed in a room occupied for sleeping.

#### **National Fire Protection Association Standards**

This equipment should be installed in accordance with the National Fire Protection Association's Standard 72 (National Fire Protection Association, Batterymarch Park, Quincy, MA 02269).

For your information, the National Fire Protection Association's Standard 72, 2013 Edition, Section 29.5.1 covering required protection in One- and Two-Family Dwelling Units, reads as follows:

**29.5.1.1 Required Detection.** Where required by other governing laws, codes, or standards for a specific type of occupancy, approved single- and multiple-station smoke alarms shall be installed as follows:

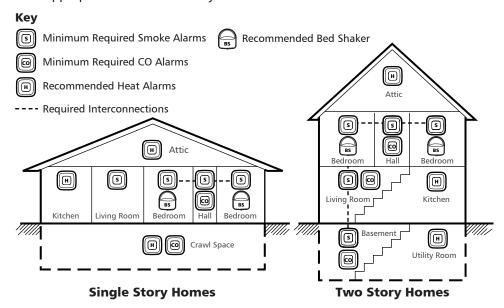
- (1) In all sleeping rooms and guest rooms.
- (2) Outside each separate dwelling unit sleeping area, within 21 ft (6.4 m) of any door to a sleeping room, with the distance measured along a path of travel.
- (3) On every level of the dwelling unit, including basements.
- (4) On every level of a residential board and care occupancy (small facility), including basements and excluding crawl spaces and unfinished attics.
- (5) In the living area(s) of a guest suite.
- (6) In the living areas(s) of a residential board and care occupancy (small facility).

A.29.5.1 (NFPA 72 2013 Edition) "Are More Smoke Detectors Desirable? The required number of smoke detectors might not provide reliable early warning protection for those areas separated by a door from the areas protected by the required smoke detectors. For this reason, it is recommended that the householder consider the use of additional smoke detectors for those areas for increased protection. The additional areas include the basement, bedrooms, dining room, furnace room, utility room, and hallways not protected by the required smoke detectors. The installation of smoke detectors in kitchens, attics (finished or unfinished), or garages is not normally recommended as these locations occasionally experience conditions that can result in improper operation."

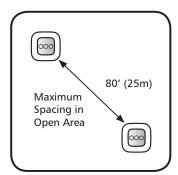
**Note:** Applicable building codes or other local laws may require the installation of additional fire alarms in addition to the minimum recommended by the NFPA.

### **Complete Home Fire Protection**

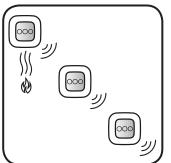
Exigent Sensors recommends complete home fire protection. This can be achieved by installing a combination of Crossfire alarms and products in their appropriate locations in every room of the house.



## **Acceptable Crossfire Radio Network Unit Spacing**



The Crossfire proprietary network communicates using radio frequencies 905.2MHz - 913.2MHz (920.0MHz - 927.2MHz in Australia). The range of the radio has been tested to 80 feet (25m) in open area distance testing.



Each Crossfire product will also act as a repeating station, so any signal received by an alarm will be rebroadcast.

After final installation, test all units for proper radio inter-connection. Simply press and release the test button of an alarm while having a helper observe the remote alarms.

#### **Bed Shaker Features and Functions**



# **Power Indicator Light (Green)**

On the CFBS520, the POWER icon will briefly flash every 56 seconds when the batteries are installed.



### Warning Light (Yellow)

WARNING will flash yellow every 56 seconds, accompanied by a horn chirp, if the Shaker unit (under mattress) is not functioning properly.



# Warning Light (Red)

WARNING will flash red every 56 seconds accompanied by the horn chirp, for a minimum of 7 days, to indicate **Low Battery**. Replace the batteries only with Duracell DL123.

WARNING can also be activated by a remote signal from a Crossfire **CO Alarm**. In this case, WARNING will be solid red accompanied by 4 beeps of the born



## **Radio Networking Light (Blue)**

RADIO will flash once per second to indicate the radio network is open to accept additional units into the network.

RADIO will cease to flash one minute after the last unit has been added to the network or immediately after the button has been pressed.

Note: The Bed Shaker 520 will flash RADIO and chirp every 56 seconds if not connected to a Crossfire radio network.



## **Fire Warning Light (Red)**

FIRE will stay on **continuously** when the Bed Shaker 520 is triggered remotely by another alarm on your radio network that has detected a fire.

A Bed Shaker cannot directly detect a fire in the home, therefore it can only go into fire alarm mode by a signal from a Crossfire Alarm.

Because the Bed Shaker 520 is remotely triggered, it will exit alarm mode after 5 minutes to prevent battery depletion.

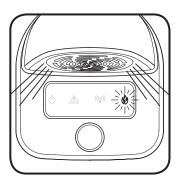
#### **Crossfire Features and Functions**

### **Testing the Bed Shaker 520**

Every Crossfire alarm or product should be tested weekly to ensure proper operation.



To test the Bed Shaker 520 or any Crossfire alarm, press and release the button on the front face of the unit.



The unit will beep three times, the FIRE light will flash, and the shaker will vibrate.

All four icons will strobe to indicate a successful test.

The Bed Shaker will then send out a network test command and all other alarms on the network will perform the same self test.

If the unit fails, the horn will emit a steady honk. Check the batteries. If the unit still fails, contact the manufacturer.

## **Silencing Nuisance Alarms**

The Crossfire family of products is equipped with a silence feature that will decrease the sensitivity of an alarm and silence nuisance alarms.



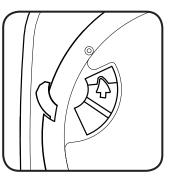
If in the course of normal activity, cooking smoke, steam or other gases cause the alarm to activate, the alarm can be silenced for ten minutes by pressing the button on the front face of the alarm.

Due to its convenient placement in the home, the Bed Shaker 520 can be easily used to silence alarm warnings. Because the Bed Shaker is not an alarm itself, only remotely activated alarms will be silenced. The initiating alarm must be silenced directly.

If the quantity of smoke is too great, the alarm will not silence until the air has cleared sufficiently.

### **Creating Your Radio Network**

The Crossfire product line communicates on its own private radio network. This network is created simply by powering up new units one at a time.



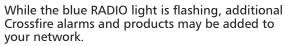
Activate your first alarm by moving the slide switch located on the back side of the alarm in the direction indicated by the arrow.

The slide switch will lock into place when fully positioned.

**Note:** This switch is connected to a lock-out mechanism that will prevent installation on the bracket until activated.

**General Note:** It is easiest to first create the radio network while all alarms are located together, such as on a table.

The blue RADIO light will begin to flash slowly.

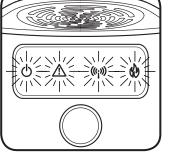


At any time during this period, the Bed Shaker 520 may be added.



Simply install the (3) supplied Duracell CR123 batteries as indicated on the underside of the Speaker unit.

The blue RADIO light will flash briefly, then the alarm will chirp twice and all four of the lighted icons will strobe on in succession.

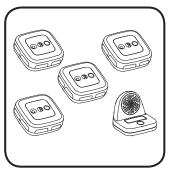


# The Bed Shaker has been added to your network!

Continue activating each new unit, one alarm at a time, until all alarms have been added to the network. This should include smoke, CO and heat alarms as well.

One minute after activating the last alarm, the RADIO light will stop flashing on the original alarm, and it will join the network. The network is now closed.

**General Note:** The radio network is limited to 18 total units. Only 12 of these units may be smoke alarms, the remaining units can be CO and heat alarms.



### Adding a Bed Shaker 520 to Your Radio Network

To add a Bed Shaker(s) to an existing home network, perform the following steps.

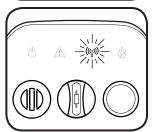


Select any alarm/unit on the existing network. **Press and hold** the button on the front cover of the alarm. The red FIRE light (WARNING if CO alarm)will flash rapidly and the alarm will sound three tones.

Continue holding the button down.

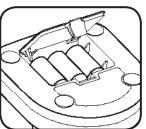


Next, the yellow WARNING light will flash slowly. Count to **5 flashes** of the yellow WARNING light and release the button.



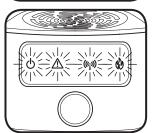
If done correctly, the blue RADIO light will now slowly pulse, indicating the network is again ready to receive additional alarms.

If not, wait about 15 seconds and carefully repeat these steps.



To add the Bed Shaker 520, simply install the supplied (3) Duracell DR123 into the unit. Open the battery door on the underside of the speaker unit, and place the batteries as indicated.

If the unit being added was previously used, follow the steps on Page 14 to erase its network data. Then re-open this alarm's radio function using steps 1-2 in this section.



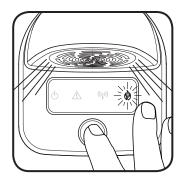
The blue RADIO light will flash briefly, then the alarm will chirp twice and all four of the lighted icons will strobe on in succession.

# The unit has been successfully added to your network!

Press the button on the original alarm and the RADIO light will stop flashing, or after one minute the RADIO light will stop flashing automatically and the network will close.

## Removing a BedShaker 520 from a Radio Network

In the event that a Crossfire alarm or product must be removed from your network, the alarm's network data must be erased from its memory.



Press and hold the button on the front cover of the unit. The red FIRE light will flash rapidly and the alarm will sound three tones.

Continue holding the button down.



Next, the WARNING light will begin to flash yellow. Count **10 flashes** of the yellow WARNING light and release the button.



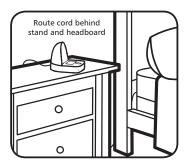
The alarm will chirp twice and all four of the lighted icons will strobe on.

Warning: At this point, all network data has been erased from the Bed Shaker 520. The Bed Shaker 520 performs NO FUNCTION unless it is connected to a Crossfire radio network.

The Bed Shaker will chirp once every 56 seconds and flash the blue RADIO light as a reminder that it must be connected to a network.

## **Setting Up Your Bed Shaker 520**

If you have not already done so, install the batteries and join the Bed Shaker 520 into your Crossfire radio network (see Pages 10-11).



Place the Speaker unit on your night stand or table. The Speaker is ideally set at ear level and directed towards the sleeping person.

Be sure and route the Bed Shaker's cord to minimize entanglements, or interference while making the bed or changing the sheets.

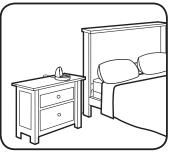
Note: In order to ensure that the batteries are installed, the Bed Shaker's battery door cannot be closed without all (3) batteries installed.



The Shaker unit is to be inserted between the mattress and box springs of the bed. If there is no box spring, the Shaker should be placed between the mattress and the wooden support.

The best placement location is directly under the sleeping person's back.

Be sure the Shaker is well positioned and will not be dislodged while it is shaking the bed.



If there are to be two people sharing the bed, test the Shaker to ensure that it is suffient to wake both sleepers. If not, two Bed Shakers might be required.

Press and release the Test button the verify the unit is working properly and is sufficiently powerful to wake the sleeper.

Certain mattress types might not work well with the shaker device. Always test for suitability!



# **Cleaning Your Bed Shaker 520**

Gently vacuum all the outside surfaces carefully or wipe with a clean cloth.

Never submerge the Bed Shaker unit in water or any other liquid, as this could permanently damage the unit.

## **Alarm Specifications**

#### **Operating Voltage**

CFCFBS520/CFBS520C 9 VDC

**Standby Current** 

CFBS520/CFBS520C less than 10uA

Alarm Current

CFBS520/CFBS520C 2A (max.)

(3) Duracell DL123 Lithium Manganese **Battery Type** 

Sound

**Operating Ambient Temperature** 

**Operating Humidity** 

**Speaker Unit Dimensions** 

(10 cm x 11.4 cm x 10 cm)

40°F - 100°F (4.4°C - 38°C)

0 - 95% Non-condensing

4.0" x 4.5" x 4.0"H

520 Hz (mixed), 75dB at 10FT

**Shaker Dimensions** 3.75" x 3.75" x 1.5"H

(9.5 cm x 9.5 cm x 3.8 cm)

Weight 0.9 lbs (0.41 kg) - with Shaker

Listings

# **FCC Compliance Statement and IC Notice:**

This device complies with part 15 of the FCC Rules. Per RSS-Gen, Section 8.4 This device complies with Industry Canada licence-exempt RSS standard(s). Operation is subject to the following two conditions: (1) This device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

Par RSS - Gen , Section 8.4 Cet appareil est conforme avec Industrie Canada exempts de licence standard RSS (s). Son fonctionnement est soumis aux deux conditions suivantes: (1) ce dispositif ne doit pas causer d'interférences et (2) cet appareil doit accepter toute interférence, y compris les interférences qui peuvent causer un mauvais fonctionnement de l'appareil.

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 quarantee 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 this equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

(1) Reorient or relocate the units. (2) Increase the separation between the equipment and receiver. (3) Connect the equipment into a different circuit from that to which the receiver is connected. (4) Consult the dealer or an experienced technician for help.

FCC Caution and IC Caution: Any Changes or modifications not expressly approved by the manufacturer could void the user's authority to operate the equipment.

## **Important Fire/Emergency Safety Information**

Be prepared for fire emergencies:

#### **Plan Your Escape**

- Draw a floor plan of your home.
- Show two ways out of each room.
- Discuss escape routes with everyone in your home.
- Agree on an outside meeting place where you'll gather after escaping.

#### **Be Prepared**

- Familiarize every member of the household with the sound of the smoke, CO and heat alarms.
- Have everyone in the home memorize the fire department's emergency phone number.
- Instruct each person to call the emergency number from a neighbor's phone or a mobile phone used outside the home.
- Teach everyone to unlock and open all windows, and release security bars.
- Make sure security bars are equipped with quick-release devices.
- Keep exits clear and free from furniture and clutter.

#### Practice!

• Hold home fire drills at least twice a year.

#### **Get Out and Stay Out**

- Once you've escaped from a fire, do not go back inside for any reason.
- Make fire drills realistic by pretending some escape paths are blocked by smoke or fire.

#### If you live in an apartment building

- Learn and practice your building's evacuation plan.
- If you hear a fire alarm, react immediately.
- Know the location of all building exits and fire alarm boxes.
- Use the stairs ... never use an elevator during a fire.
- If exits are locked or blocked, report the problem to your building's management.

#### **Escape Tips**

- Close doors behind you as you escape to slow the spread of fire and smoke.
- If you have to escape through smoke, crawl on your hands and knees, keeping your head one to two feet above the floor, where the air will be clearest.
- Test the doorknob and spaces around the door with the back of your hand. If the door is warm, try another escape route. If the door is cool, open it slowly. Close it quickly if smoke pours through.

# **Warning! Limitations of Smoke Alarms**

Wireless smoke alarms have been proven to be both effective and reliable, but they may not be effective under all conditions. No alarm design can offer total protection of life and property. A smoke alarm is not a substitute for an adequate homeowner's fire insurance or life insurance policy.

Smoke alarms will not work without a source of power. The alarm will not operate and the alarm will not sound if the batteries have died or been deactivated. Or in the case of an AC powered alarm, the wiring has not been properly connected.

Radio communication between alarm units may fail to take place if significant changes to the home have occurred since installation and testing. Moving large objects such as a refrigerator or metal cabinet could impede alarm radio performance.

The alarm warning signal may not be heard. A deep sleeper, hearing-impaired person, young child or someone impaired by drugs or alcohol may not awaken in response to an alarm activation. This can occur even when an alarm is located inside the individual's bedroom. Be sure fire drills are practiced that take this possibility into account.

Current studies have shown smoke alarms may not awaken all sleeping individuals, and that it is the responsibility of individuals in the household that are capable of assisting others to provide assistance to those who may not be awakened by the alarm sound, or to those who may be incapable of safely evacuating the area unassisted.

Smoke alarms may not always activate and provide early enough warning. A smoke alarm will only activate when it is maintained in working order and sufficient smoke reaches the unit. Certain fires can originate inside of walls, attics or on the other side of closed doors. This may prevent smoke from reaching the alarm.

Smoke alarms may not be effective in certain situations, such as: Fires where the victim is intimate with a flaming fire; for example, when a person's clothes catch fire while cooking; Fires where the smoke is prevented from reaching the alarm due to a closed door or other obstruction; Incendiary fires where the fire grows so rapidly that an occupant's egress is blocked even with the properly located alarms.

A Bed Shaker can not guarantee that a hearing impaired person will wake up during a fire.

SMOKE ALARMS CAN NOT GUARANTEE THAT YOU WILL NEVER SUFFER ANY DAMAGE OR INJURY FROM A FIRE.

## **Limited Warranty**

For a period of 24 months from the date of purchase, Exigent Sensors LLC warrants to you, the original purchaser, that your Crossfire Bed Shaker 520 will be free from defects in workmanship, materials, and construction under normal use and service. If a defect in workmanship, materials, or construction should cause your Crossfire Bed Shaker 520 to become inoperable within the warranty period, Exigent Sensors LLC will repair your Crossfire Bed Shaker 520 or furnish you with a new or rebuilt replacement Crossfire Bed Shaker 520 without charge to you except for your costs of shipping the Crossfire Bed Shaker 520 to Exigent Sensors LLC for warranty coverage. Your repaired or replacement Crossfire Bed Shaker 520 will be returned to you without charge and will be covered under this warranty for the balance of the warranty period.

This warranty will not apply if inspection of your Crossfire BedShaker 520 shows that the damage or failure was caused by abuse, misuse, abnormal usage, faulty installation, improper maintenance, or work other than that performed by authorized service personnel.

Any warranties implied under any State law, including implied warranties of merchantability and fitness for a particular purpose, are limited in duration to the period of this limited warranty. Some states do not allow limitations on how long an implied warranty lasts, so the above limitation may not apply to you. Neither the Crossfire manufacturer nor Exigent Sensors LLC will be liable for any loss, damage, incidental or consequential damages of any kind arising in connection with the sale, use, operation, inoperability, malfunction, or repair of your Crossfire Bed Shaker 520. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you.

If a defect in workmanship, materials, or construction should cause your Crossfire Bed Shaker 520 to become inoperable within the warranty period, to obtain warranty coverage you must ship the Crossfire Bed Shaker 520 to Exigent Sensors LLC, with shipping costs prepaid by you. You must also pack the Crossfire Bed Shaker 520 to minimize the risk of it being damaged in transit. You must also enclose a return address. Crossfire Bed Shaker 520s returned for warranty service should be sent to: Exigent Sensors LLC, 11331 Markon Dr, Garden Grove, CA 92841 USA, accompanied by proof of purchase.

If Exigent Sensors LLC receives a Crossfire Bed Shaker 520 in a damaged condition as the result of shipping, you will be notified and you may need to file a claim with the shipper.

This Limited Warranty gives you specific legal rights, and you may also have other rights which vary from state to state. This is your copy of the Limited Warranty on your Crossfire Bed Shaker 520. Please retain it, along with proof of purchase showing the date of purchase and the identity of the purchaser, in a safe place.

## **Lifetime Product Replacement Guarantee**

In addition to the above Limited Warranty has expired, commencing on the first day of the 25th month and extending through the lifetime of customer, the manufacturer of the Crossfire Bed Shaker 520 guarantees to repair or replace the Bed Shaker 520 at a preferred owner discounted price which includes shipping and handling and is adjusted annually. This Product Replacement Guarantee does not create any obligations or liabilities on the part of Exigent Sensors LLC.

This guarantee is extended only to the original purchaser and is available when the Bed Shaker 520 is sent to the manufacturer, with a description of any problem and proof-of-purchase. This replacement guarantee will not apply if the manufacturer's inspection reveals that the damage or failure is a result of abuse, misuse, improper maintenance, abnormal usage, or work performed by unauthorized service personnel. At least an annual cleaning (according to the directions supplied in this owner's manual or set forth at www.crossfirealarms. com) is recommended to prolong the useful life of your Crossfire Bed Shaker 520.

To obtain a replacement under this guarantee, contact the manufacturer at www.crossfirealarms.com or at 1 (714) 895-8477, to receive information regarding current pricing and for the address to which you should send your Crossfire Bed Shaker 520 along with payment for your replacement alarm. Be sure to enclose your return address and daytime telephone number. The Crossfire manufacturer will ship the new replacement unit to you upon receipt of all of the foregoing materials and information.

This Product Replacement Policy does not alter or affect your Limited Warranty, set forth above.

# **Lifetime Fire Replacement Guarantee**

The Crossfire Bed Shaker 520 manufacturer guarantees to replace at no cost to the original owner any Crossfire Bed Shaker 520 that has been materially damaged or destroyed by an accidental fire. To obtain a replacement alarm under this Lifetime Fire Replacement Guarantee, you must return the damaged or destroyed Bed Shaker 520 to the manufacturer within 90 days of the fire, accompanied by a complete activation report and verification report from the applicable fire department. To obtain a replacement under this guarantee, contact the manufacturer at www.crossfirealarms.com or at 1 (714) 895-8477, to receive information as to the address to which you should send your damaged or destroyed Crossfire Bed Shaker 520 and accompanying information.

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Exigent Sensors LLC 11331 Markon Drive Garden Grove, CA 92841 USA www.crossfirealarms.com

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