

AC POWERED CARBON MONOXIDE ALARM WITH BATTERY BACK-UP

Battery Back-Up
120VAC – 60Hz, 0.09 A



IMPORTANT! PLEASE READ CAREFULLY AND SAVE.
This user's manual contains important information about your CO Alarm's operation. If you are installing this CO Alarm for use by others, you must leave this manual—or a copy of it—with the end user.

Printed in Mexico M08-0051-153446-C05120BNA-CA K1 9/16
 CERTIFIED TO CSA 6.19-01 Model C05210BNA
 © 2016 BRK Brands, Inc. All rights reserved. Distributed by BRK Brands, Inc. - BRK Brands, Inc. is a subsidiary of Newell Brands Inc. (NYSE:NWL). First Alert® is registered trademark of The First Alert Trust - 3001 Liberty Street Road, Aurora, IL 60004-8122. Consumer Affairs: (800) 323-9005 - www.firstalert.ca - www.brkelectronics.com

INTRODUCTION
Thank you for choosing BRK Brands, Inc. for your Carbon Monoxide Alarm needs. You have purchased a state-of-the-art Carbon Monoxide Alarm designed to provide you with early warning of carbon monoxide. Key features include:
Most Accurate Carbon Monoxide Sensor - Advanced electrochemical CO sensor technology.
Intelligent Sensing Technology is designed to help reduce unwanted or nuisance alarms.
Two Silence Features - Temporarily silence low battery chirp for up to eight hours before replacing low battery or silence an unwanted alarm for several minutes.
Two Latching Features, Alarm Latch: Easily identifies initiating alarm even after alarm condition has subsided. **Low Battery Latch:** Identifies which unit is in low battery condition.
Smart Interconnect interconnects with most First Alert® and BRK brand smoke, CO and heat alarms. When interconnect with alarming smoke alarms, unit will sound smoke horn pattern.
Dust Cover is included to keep the alarm clean during construction.

Easy Installation/Maintenance features include a large opening in the mounting bracket for easy access to wiring. **A battery pull tab** allows the battery fresh until the home is occupied. **A wide Load Battery Drawer** allows for easy battery replacement without removing the alarm from the ceiling or wall.
End of Life Signal. Provides audible and visual confirmation alarm needs to be replaced.

BASIC SAFETY INFORMATION

IMPORTANT!

- Dangers, Warnings, and Cautions alert you to important operating instructions or to potentially hazardous situations. Pay special attention to these items.
- THIS IS NOT A SMOKE ALARM!** This CO Alarm is designed to detect carbon monoxide from ANY source of combustion. It is NOT designed to detect smoke, fire, or any other gas.
- This CO Alarm is approved for use in single-family residences. It is NOT designed for marine or RV use.

CAUTION!

- This CO Alarm will only indicate the presence of carbon monoxide gas at the sensor. Carbon monoxide gas may be present in other areas.

WARNING!

- This unit does not work without power. If the AC power fails, the battery back-up will power the alarm for at least 7 days provided the 9V battery is fresh and correctly installed.
- The Silence Feature is for your convenience only and will not correct a CO problem. Always check your home for a potential problem after any alarm. Failure to do so can result in injury or death.
- This CO Alarm should receive continuous 120VAC, 60 Hz, pure sine wave electrical power. (The battery is meant for battery back-up only). Do not use in an extension cord or outlet controlled by a dimmer or switch.

NEVER ignore any alarm. See "If Your CO Alarm Sounds" for more information on how to respond to an alarm. Failure to respond can result in injury or death.

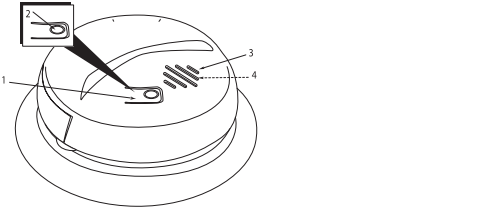
Test this Carbon Monoxide Alarm once a week. If it ever fails to test correctly, have it replaced immediately!

This device is intended for use in ordinary indoor residential areas. It is not designed to measure compliance with commercial and industrial standards. This device is designed to protect individuals from the acute effects of carbon monoxide exposure. It will not fully safeguard individuals with specific medical conditions. If in doubt consult a medical practitioner.

HOW YOUR CO ALARM WORKS

THE COVER OF YOUR CO ALARM

- Test/Silence Button or
- POWER/ALARM Light (RED)
- Air Vents
- (Behind the Cover) Alarm Horn: BS dB audible alarm for test, alarm, and unit malfunction warning.



UNDERSTANDING THE LIGHT AND HORN PATTERNS

CONDITION	LED (RED LIGHT)	HORN
POWER UP	On continuously with AC Flash a minute with battery	Horn is silent
USING TESTING	LED flashes approximating the horn pattern.	Horn pattern: 4 beeps, pause, 4 beeps, pause.
LOW OR MISSING BATTERY	Low battery Latch Pattern	Horn "chirps" once a minute
WARNING! When the CO Alarm is Off, if the battery is dead or missing, the CO Alarm cannot work.		
ALARM CONDITION (SINGLE CO ALARM)	LED flashes approximating the horn pattern.	Horn pattern: 4 beeps, pause, 4 beeps, pause, repeating
ALARM CONDITION (INTERCONNECTED SERIES OF CO ALARMS)	LED flashes rapidly on the unit(s) that triggered the alarms. LEDs on the other Alarms in the series will not flash.	Horn pattern: 4 beeps, pause, repeating on all CO Alarms
ALARM SILENCE	LED flashes approximating the horn pattern	Horn stays quiet for 4 minutes
LOW BATTERY SILENCE	LED flashing approximately every minute	Horn is silent for up to 8 hours
ALARM LATCH	Audio off and LED flashing 2 seconds on, 2 seconds off after local alarm unless reset by Test/Silence button.	Horn is silent
LOW BATTERY LATCH	LED flashing 4 seconds on, 2 seconds off	Horn is silent
NOTE: Latching features are not active during battery backup mode operation.		
MALFUNCTION	LED flashes 3 times synchronized with 3 chirps	Horn sounds 3 chirps every minute
END OF LIFE	LED flashes 3 times synchronized with 3 chirps	Horn sounds 3 chirps every minute

SMART INTERCONNECT FEATURE

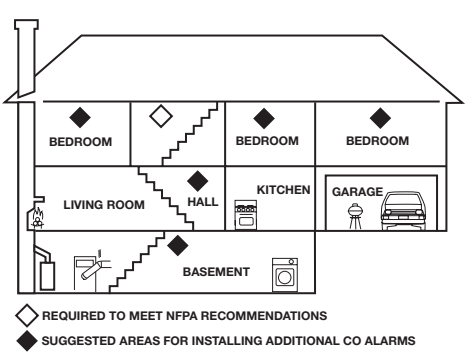
This CO Alarm includes "Smart Interconnect" which enables the Alarm to be inter-connected with other BRK Smoke and CO Alarms. When inter-connected to Smoke Alarms that go into alarm, this CO Alarm will sound the smoke horn pattern.

INSTALLATION

WHERE TO INSTALL CO ALARMS

The National Building Code of Canada requires carbon monoxide alarms to be installed inside each bedroom or outside each bedroom within 5 meters (16.4 feet) of each door. Provincial and local requirements may also apply. Contact the Authority Having Jurisdiction if you have questions regarding the requirements in your area.
 If your bedroom hallway is longer than 40 feet (12 meters), install a CO Alarm at BOTH ends of the hallway.

INSTALLATION - WHERE TO INSTALL CO ALARMS



◆ REQUIRED TO MEET NFPA RECOMMENDATIONS
 ◆ SUGGESTED AREAS FOR INSTALLING ADDITIONAL CO ALARMS

In a Single-level Home:

- Install at least one CO Alarm near or within each separate sleeping area.
- For added protection, install an additional CO Alarm at least 20 feet (6 meters), away from the furnace or fuel burning heat source.

In a Multi-level Home—(name as above plus):

- Install at least one CO Alarm near or within each separate sleeping area.
- For added protection, install at least one CO Alarm on each level of the home. If you have a basement, install that CO Alarm at the top of the basement stairs.
- For added protection, install an additional CO Alarm at least 20 feet (6 meters) away from the furnace or fuel burning heat source.

WHERE CO ALARMS SHOULD NOT BE INSTALLED

DO NOT LOCATE THIS CO ALARM:

- Kitchens, kitchens, furnace areas, or in an extremely dusty, dirty or greasy areas.
- Where combustion particles are produced. Combustion particles form when something burns. Areas to avoid include poorly ventilated kitchens, garages, and furnace rooms. Keep units at least 20 feet (6 meters) from the sources of combustion particles (stove, furnace, water heater, space heater if possible). In areas where a 20-foot (6 meters) distance is not possible—in modular, mobile, or smaller homes, for example—it is recommended the CO Alarm be placed as far from these fuel-burning sources as possible. The placement recommendations are intended to keep the alarm at a reasonable distance from a fuel-burning source, and thus reduce "unwanted" alarms. Unwanted alarms can occur if a CO Alarm is placed directly next to a fuel-burning source. Ventilate these areas as much as possible.
- Within 5 feet (1.5 meters) of any cooking appliance.
- In extremely humid areas. This Alarm should be at least 10 feet (3 meter) from a bath or shower, sauna, humidifier, vaporizer, dishwasher, laundry room, utility room or other source of high humidity.
- In areas where temperature is colder than 4.4°C (40°F) or hotter than 37.8°C (100°F). These areas include non-air-conditioned crawl spaces, unfinished attics, uninsulated or poorly insulated cellars, porches, and garages.
- In turbulent air, like near ceiling fans, heat vents, air conditioners, fresh air returns, or open windows. Blowing air may prevent CO from reaching the sensors.
- In direct sunlight.
- For any outside employing a battery, constant exposure to high or low humidity may reduce battery life.

WARNING!

- This CO Alarm is designed for use inside a single-family home or apartment. It is not meant to be used in common lobbies, hallways, or basements of multi-family buildings unless working CO Alarms are also installed in each family living unit. CO Alarms in common areas may not be heard from inside individual family living units.
- This CO Alarm alone is not a suitable substitute for complete detection systems in places which house many people, like hotels or dormitories, unless a CO Alarm is also placed in each unit.
- DO NOT use this CO Alarm in warehouses, industrial or commercial buildings, special purpose non-residential buildings, CO boats, or airplanes. This CO Alarm is specifically designed for residential use, and may not provide adequate protection in non-residential applications.

IF THE CO ALARM SOUNDS

WARNING!

Activation of this device indicates the presence of carbon monoxide (CO) which can kill you. If the CO Alarms sounds 4 beeps:

- Immediately move to fresh air — outdoors or by an open door or window. Check that all persons are accounted for. Do not re-enter the premises or move away from the open door/window until the emergency services responders have arrived, the premises have been aired out, and your alarm remains in its normal condition.
- Call your local emergency services, fire department, or 911.

NEVER ignore any alarm. See "If Your CO Alarm Sounds" for more information on how to respond to an alarm. Failure to respond can result in injury or death.

TEST THIS CARBON MONOXIDE ALARM ONCE A WEEK. IF IT EVER FAILS TO TEST CORRECTLY, HAVE IT REPLACED IMMEDIATELY!

THIS DEVICE IS INTENDED FOR USE IN ORDINARY INDOOR RESIDENTIAL AREAS. IT IS NOT DESIGNED TO MEASURE COMPLIANCE WITH COMMERCIAL AND INDUSTRIAL STANDARDS. THIS DEVICE IS DESIGNED TO PROTECT INDIVIDUALS FROM THE ACUTE EFFECTS OF CARBON MONOXIDE EXPOSURE. IT WILL NOT FULLY SAFEGUARD INDIVIDUALS WITH SPECIFIC MEDICAL CONDITIONS. IF IN DOUBT CONSULT A MEDICAL PRACTITIONER.

HOW YOUR CO ALARM WORKS

"ALARM-MOVE TO FRESH AIR"

If you hear the CO alarm horn and the CO red light is flashing, move everyone to a source of fresh air. DO NOT recharge the batteries!

USING THE SILENCE FEATURES

WARNING!

NEVER disconnect the power to your CO Alarm to silence the horn—use the silence feature. Disconnecting the CO Alarm removes your protection! See previous page for details on responding to an alarm.

The Silence Feature is intended to temporarily silence your CO Alarm's alarm horn while you correct the problem—it will not correct a CO problem. While the Alarm is silenced, it will continue to monitor the air for CO. When CO reaches alarm level, the unit will sound—repeating horn pattern: 4 beeps, a pause, 4 beeps, etc. Press and hold the Test/Silence button until the horn is silent. The Silence cycle will last approximately 4 minutes.

To silence an inter-connected series of Alarms, you must press the Test/ Silence button on the initiating alarm (the unit with the flashing red light). If you press the Test/Silence on any other Alarm, it will only silence that unit, not the whole inter-connected series.

NOTE: After the 4-minute silence cycle, the CO Alarm re-evaluates present CO levels and responds accordingly. If CO levels remain potentially dangerous—or start rising higher—the horn will start sounding again.

SILENCING THE LOW BATTERY WARNING

This silence feature can temporarily quiet the low battery warning "chirp" for up to 8 hours if AC power is present. Press the Test/Silence button on the alarm cover. Once the low battery warning "chirp" silence feature is activated, the unit continues to flash the red light once a minute for 8 hours. After 8 hours, the low battery "chirp" will resume. Replace the battery as soon as possible, to maintain protection in the event of a power outage.

SILENCING THE END OF LIFE SIGNAL

This silence feature can temporarily quiet the end of life warning "chirp" for up to 2 days. You can silence the End of Life Warning "chirp" by pressing the Test/Silence button. The horn will chirp, acknowledging that the End of Life silence feature has been activated. After approximately 2 days, the End of Life "chirp" will resume.

LATCHING FEATURES

Alarm Latch is activated after an Alarm is exposed to alarm levels of carbon monoxide. This feature will only work with AC power. After CO levels return to below alarm levels, the Red LED will begin to flash On for 2 seconds and Off for 2 seconds. It will continue to flash or "latch" until you clear it by testing the Alarm.

This feature helps emergency responders, investigators, or service technicians identify which unit(s) in your home were exposed to alarm levels of carbon monoxide. This can help investigators pinpoint the source of CO.

Inter-connected Alarms. Latching Alarm Indicator shows which Alarm(s) in the series were exposed to alarm levels of carbon monoxide.

The Latching Alarm Indicator stays On until you clear it, so it can alert you to a CO Alarm that occurred while you were away from home, even though CO present in the air has dropped below alarm levels.

Low Battery Latch is activated when the Alarm is in the "low battery condition". When this occurs, the red LED flashes 4 seconds On/2 seconds Off. This feature is designed to help you identify which Alarm needs to have the battery replaced. Although, the Alarm will sound the low battery chirp approximately once every minute, sometimes during the initial stages of "low battery", the Alarm will chirp in greater intervals than one minute, sometimes up to several hours, until the battery reaches a steady low battery level. This innovative feature eliminates the frustration of waiting for and/or identifying which unit is chirping.

WEEKLY TESTING

WARNING!

Push and hold the Test/Silence button until you hear an acknowledge chirp and a loud alarm sounds — 4 beeps, pause, 4 beeps. This sequence should last for 10 seconds. If the Alarm ever fails to test properly, replace it immediately. If the Alarm is not working properly, refer to "Limited Warranty".

- If the Alarm ever fails to test properly, replace it immediately. Products under warranty may be returned to the manufacturer for replacement. See "Limited Warranty" at the end of this manual.
- DO NOT stand close to the Alarm when the alarm is sounding. Exposure at close range may be harmful to your hearing. When testing, step away from horn starts sounding.
- NEVER use vehicle exhaust! Exhaust may cause permanent damage and voids your warranty.

INSTALLATION, CONTINUED

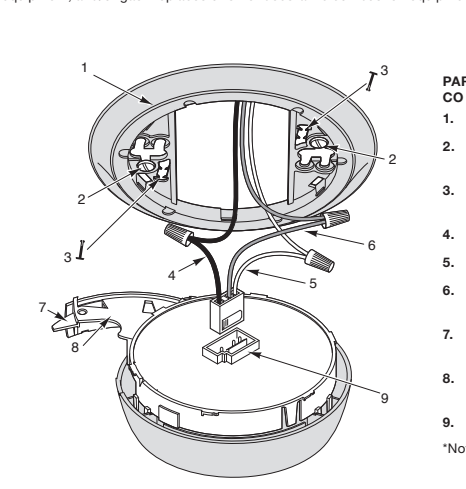
BEFORE YOU BEGIN INSTALLATION

This unit is designed to be mounted on any standard wiring junction box up to 4-inch (10 cm) size, on either the ceiling or wall. Read "Where to Install CO Alarms" and "Where Not To Install CO Alarms" before you begin installation.

WARNING!

- This Alarm must have AC or battery power to operate. If the AC power fails, the battery back-up will power the Alarm for a short time if the 9V battery is fresh and correctly installed. If AC power fails, and the battery is dead or missing, the Alarm cannot operate.
- Make sure the alarm is not receiving excessive noisy power. Examples of noisy power could be major appliances on the same circuit, power from a generator or solar power, light dimmer on the same circuit or mounted near fluorescent lighting. Excessive noisy power may cause damage to your Alarm.

NOTE: A qualified appliance technician is defined as "a person, firm, corporation or company that either in person or through a representative, is engaged in and responsible for the installation, testing, servicing, or replacement of heating, ventilation, air conditioning (HVAC) equipment, combustion appliances and equipment, and/or gas fireplaces or other decorative combustion equipment."



HOW TO INSTALL YOUR CO ALARM

Tools you will need: Standard Flathead screwdriver.

DANGER!

ELECTRICAL SHOCK HAZARD. Turn off power to the area where you will install this unit at the circuit breaker or fuse box before beginning installation. Failure to turn off the power before installation may result in serious electrical shock, injury or death.

TO INSTALL THIS UNIT:

- Remove the mounting bracket from the base. Position the screw slots on the mounting bracket over the screws in the junction box. Tighten the screws.
- Using wire nuts, connect the power connector to the AC power.

WARNING!

Improper wiring of the power connector or the wiring leading to the power connector will cause damage to the Alarm and may lead to a non-functioning Alarm.

- Connect the white wire on the power connector to the neutral wire in the junction box.
- Connect the black wire on the power connector to the hot wire in the junction box.
- Tuck the orange wire inside the junction box. It is used for interconnect only.

INTERCONNECTED ALARMS ONLY:

Strip off about 1/2" of the plastic coating on the orange interconnect wire on the power connector.

- Connect the white wire on the power connector to the neutral wire (usually white) in the junction box.
- Connect the black wire on the power connector to the hot wire (usually black) in the junction box.
- Connect the orange wire on the power connector to the interconnect wire in the junction box. Repeat for each unit you are interconnecting. Never connect the hot or neutral wires in the junction box to the orange interconnect wire.

- Plug the power connector into the back of the CO Alarm.
- Position the base of the Alarm over the mounting bracket and turn. The Alarm can be positioned over the bracket every 60°. Turn the unit clockwise (right) until the unit is in place.
- Check all connections.

STAND ALONE ALARM ONLY:

- Connect the white wire on the power connector to the neutral wire in the junction box.
- Connect the black wire on the power connector to the hot wire in the junction box.
- Tuck the orange wire inside the junction box. It is used for interconnect only.

USING THE LOCKING FEATURES

The optional locking features are designed to prevent unauthorized removal of the battery or alarm. It is not necessary to activate the locks in single-family households where unauthorized battery or alarm removal is not a concern.

These CO Alarms have two separate locking features: one locks the battery compartment and the other locks the alarm horn. To activate the battery lock, you can choose to use either feature independently, or use them both.

Tools you will need: Needle-nose pliers, Standard Flathead screwdriver.

Both locking features use locking pins, molded into the mounting bracket. Using needle nose pliers remove one or both pins, depending on which locking features you use.

THE BATTERY COMPARTMENT LOCK

TO LOCK THE BATTERY COMPARTMENT:

Do not lock the battery compartment until you have activated the battery and tested the battery back-up.

- Activate the battery back-up by removing the "Pull to Activate Battery Back-Up" tab. Push and hold the test button on the CO Alarm's cover until you hear an acknowledge chirp and the alarm sounds: 4 beeps, pause, 4 beeps, pause.

If the unit does not alarm during testing, DO NOT lock the battery compartment! Install a new battery and test again. If it still does not alarm, replace the CO Alarm immediately.

- Using needle-nose pliers, detach one locking pin from the mounting bracket.
- Push the locking pin through the black dot on the label on the back of the CO Alarm.

TO UNLOCK THE BATTERY COMPARTMENT:

Once the CO Alarm is installed, you must disconnect it from the AC power before unlocking the battery compartment.

DANGER!

ELECTRICAL SHOCK HAZARD. Turn off the power to the area where the CO Alarm is installed before removing it from the mounting bracket. Failure to turn off the power first may result in serious electrical shock, injury or death.

- Remove the CO Alarm from the mounting bracket. If the unit is locked to the bracket, see the section "To Deactivate the Locking Features".
- Disconnect the power connector by gently prying it away from the back of the CO Alarm.

- Insert a flathead screwdriver under the head of the locking pin, and gently pry it out of the battery compartment lock. (If you plan to relock the battery compartment, save the locking pin.)

- To relock the battery compartment, close the battery door and reinsert the locking pin in the lock.

- Reconnect the power connector to the back of the CO Alarm, reattach the CO Alarm to the mounting bracket, and restore the power.

IMPORTANT!

When replacing the battery, always test the CO Alarm before relocking the battery compartment.

REGULAR MAINTENANCE

- Test it every week as described in "Weekly Testing."
- Vacuum the CO Alarm cover at least once a month, using the soft brush attachment. Never use water, cleaners, or solvents since they may damage the unit. Test the Alarm again after vacuuming.
- Replace the battery immediately when you see/hear the "Low Battery Warning".

REPLACING THE BATTERY

Choosing a replacement battery: This unit requires one standard 9V alkaline battery. The following alkaline batteries are acceptable as replacements: Duracell® MN1604 or MX1604; Eveready® "Enerizer" 522. These replacement batteries are commonly available at local retail stores.

IMPORTANT!

Use only the alkaline replacement batteries listed. The unit may not operate properly with other batteries. Never use rechargeable batteries since they may not provide a constant charge.

STAND ALONE ALARM ONLY:

- If you are only installing one unit, restore power to the junction box.

INTERCONNECTED ALARMS ONLY:

- If you are interconnecting multiple Alarms, repeat Step 1-5 for each Alarm in the series. When you are finished, restore power to the junction box.

! DANGER!

ELECTRICAL SHOCK HAZARD. Do not restore power until all Alarms are completely installed. Restoring power before installation is complete may result in serious electrical shock, injury or death.

- Make sure the CO Alarm is receiving AC power. Under normal operation, the red indicator light will shine continuously. If the red power indicator light does not light, TURN OFF POWER TO THE JUNCTION BOX and recheck all connections. If all connections are correct and the red power indicator still does not light when you restore the power, the unit should be replaced immediately.

ACTIVATING THE BATTERY BACK-UP

IMPORTANT!

- Activate the battery back-up by removing the "Pull to Activate Battery Back-Up" tab. Do not need to open the battery compartment and reposition the battery during installation. DO NOT remove the battery activation tab until AC power is turned on to conserve battery power.

- Test the CO Alarm. Press and hold the test button on the cover until the alarm sounds: 4 beeps, pause, 4 beeps, pause. In a series of inter-connected Alarms, you must test each Alarm separately by pressing and holding the test button. Make sure all units alarm when each one is tested.

IMPORTANT!

If any unit in the series does not alarm during testing, TURN OFF POWER and recheck connections. If it does not alarm when you restore power, replace it immediately.

SPECIAL REQUIREMENTS FOR INTERCONNECTED CO ALARMS

WARNING!

- Failure to meet any of the above requirements could damage the units and cause them to malfunction, removing your protection.

AC and AC/DC CO Alarms can be inter-connected. Under AC power, all units will alarm when one senses CO. When power is interrupted, only the AC/DC units in the series will continue to send and receive signals. AC powered CO Alarms will not operate.

Interconnected units can provide earlier warning of a CO problem than stand-alone units, especially if the problem starts in a remote area of the dwelling. If any unit in the series senses CO, all CO and Smart Interconnect units will alarm. To determine which CO Alarm initiated an alarm, refer to the table.

On Initiating CO Alarm	Red LED Flashes the alarm pattern
On All Other CO Alarms	Red LED Does Not Flash the alarm pattern

IMPORTANT!

Interconnect units within a single family residence only. Otherwise all households will experience unwanted alarms when you test any unit in the series. Interconnected units will only work if they are wired to compatible units and all requirements are met. This unit is designed to be compatible with: BRK Electronics® and First Alert® Models SC7010BA, SAS201CA, SCS201CA, SC301CA, C05120BNA and BRK Auxiliary Device Model RM4(Relay module).

Interconnected units must meet ALL of the following requirements:

- A maximum of 18 compatible Smoke, Heat or CO Alarms may be inter-connected.
- More than 12 of the 18 can be Smoke Alarms per NFPA 72.
- The same fuse or circuit breaker must power all inter-connected units.
- The total length of wire interconnecting the units should be less than 1000 feet. This type of wire is commonly available at Hardware and Electrical Supply stores.
- All wiring must conform to all local electrical codes and the Canadian Electrical Code CSA 22.1.

STAND ALONE ALARM ONLY:

- Connect the white wire on the power connector to the neutral wire in the junction box.
- Connect the black wire on the power connector to the hot wire in the junction box.
- Tuck the orange wire inside the junction box. It is used for interconnect only.

INTERCONNECTED ALARMS ONLY:

Strip off about 1/2" of the plastic coating on the orange interconnect wire on the power connector.

- Connect the white wire on the power connector to the neutral wire (usually white) in the junction box.
- Connect the black wire on the power connector to the hot wire (usually black) in the junction box.
- Connect the orange wire on the power connector to the interconnect wire in the junction box. Repeat for each unit you are interconnecting. Never connect the hot or neutral wires in the junction box to the orange

